The UNEP project CD4CDM

Legal Issues Guidebook to the Clean Development Mechanism

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BAKER & McKENZIE

June 2004

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Legal Issues Guidebook
to the Clean Development Mechanism

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ISBN 87-550-3340-7

Graphic design:
Finn Hagen Madsen, Graphic Design, Denmark

Disclaimer

This Guidebook is intended as a starting point for developing country governments, project developers or financiers who are considering undertaking a Clean Development Mechanism project to reduce Greenhouse Gas emissions. It provides a high level analysis of the legal and risk issues involved in CDM Projects, with practical examples and suggestions. However, this Guidebook should in no way be relied upon as legal advice for project stakeholders, as the appropriate means to structure a CDM Project and sell CERs from that project will very much depend on the particular project and the nature and interests of the Project Participants. Independent legal advice should always be sought when undertaking a CDM Project or entering into the types of contracts described herein. The example contractual provisions provided and model contracts are examples only. They should be carefully considered and modified to suit the particular circumstances of an individual CDM Project and should not be considered as legal advice.

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PREFACE

The preparation and structuring of Clean Development Mechanism (CDM) projects is a process in which developed and developing countries engage into with the objective of achieving mutual, and ultimately global, environmental, social and economic benefits. For this process to advance in a smooth manner and in a way where the benefits are maximized for both parties, certain level of awareness and understanding of the various aspects of the mechanism should be established. Building capacities in the legal and contractual areas surrounding CDM project preparation and implementation is a key ingredient for the closure of successful and equitable CDM projects. With this in mind, the purpose of this guidebook is to raise awareness, especially among developing country CDM stakeholders, towards the intricacies of legal and contractual issues pertaining to the CDM process. The guidebook presents various types of CDM project-related risks, the project implementation stage at which each risk is associated and the possible means for mitigation or management of these risks. It also presents other critical legal issues in CDM projects including different types of project contracts and clauses used to cover different project implementation elements. This guidebook is intended to act merely as an eye opener for developing country CDM stakeholders with respect to the legal and contractual pitfalls into which they might fall when entering the CDM sector. It should in no way be viewed as a tool for providing legal advice since that would require the hiring of project-specific, professional legal expertise.

This Guidebook was produced by the UNEP RISØ Centre (URC: www.uneprisoe.org), Denmark, as part of the activities of the project entitled Capacity Development for the CDM (www.cd4cdm.org), which is being implemented by URC for UNEP through funding from the Ministry of Foreign Affairs, the Netherlands.

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The production of this Guidebook was coordinated and managed by Sami Kamel, URC. Special thanks go to Kirsten Halsnaes, Jørgen Fenhann, and Myung-Kyoon Lee at URC, Kamyla da Cunha at University of Campinas, Marcos de Castro at CORDELIM, Ecuador, and Thomas Heller at Stanford University, USA, for their insightful comments and suggestions.

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June 2004

Executive Summary

This Guidebook has been drafted to assist developing country stakeholders to understand some of the key legal issues and risks involved in developing a CDM Project and selling CERs. There are obviously a broad range of developing countries and while some countries may have limited or no experience with the concepts discussed in this Guidebook others may have significant legal expertise with regards to CDM Projects. Whilst it is impossible to replace the value of practical experience with the CDM, this Guidebook endeavours to provide some guidance to developing country stakeholders with little or no experience in the CDM and to raise issues which they should consider in developing CDM Projects and transacting CERs.

This Guidebook has been written in an evolving and rapidly changing legal and political environment. Stakeholders entering into CDM Projects should seek advice as to recent developments surrounding the CDM and how these may impact on a particular project. In addition, the market for CERs may develop significantly beyond the current market, which has largely comprised a small number of governmental and multilateral purchasers such as the World Bank and the Netherlands investing in CDM Projects on a "learn by doing" basis. The current common contracts and CDM Project structures have been shaped by the nature of these purchasers and their requirements. However, as the CDM develops, more private investors may consider becoming involved in CDM Projects, who will apply risk considerations and contract negotiations in a different (and potentially more stringent) manner to the early purchasers. This Guidebook sets out the risk considerations of commercial investors in a CDM project as well as a discussion of the various risk mitigation and allocation techniques that developing country stakeholders can use when implementing a CDM Project to protect their interests.

This legal Guidebook also provides a discussion of the rules of the CDM and various Host Country regulatory frameworks which should be considered by CDM Project proponents and investors. The CDM has evolved out of an international agreement (the Kyoto Protocol) between sovereign states but has created a type of project (the CDM Project) and a trading market for project commodities (CERs) which private entities are eligible to participate in. Developing country stakeholders must therefore have an understanding of the international CDM requirements and the national rules in their Host Country which will affect CDM Projects, including laws on foreign direct investment, environment, securities and development. While this Guidebook focuses primarily on the international legal system surrounding the CDM, it also points out major areas of law in the Host Country which should be considered by potential CDM Project Participants and Host Country governments seeking to attract investment in the CDM.

Glossary

A&R	Afforestation and Reforestation
Additionality	The reduction in Greenhouse Gas emissions by sources or removals by sinks that is additional to any that would occur in absence of the CDM Project activity. The Marrakech Accords state that a project activity is additional if anthropogenic emissions of Greenhouse Gases are reduced below those that would have occurred in the absence of the CDM project.
Afforestation	The direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources.
Allocation Statement	The statement which may be provided by Project Participants to the CDM Executive Board
Annex B Countries	Those countries listed in Annex B to the Kyoto Protocol, being a list of Annex I Countries that have committed to a quantitative emission reduction target under Article 3.1 of the Kyoto Protocol.
Annex I Countries	Countries that have committed to emission restraints under Article 4.2 (a) and (b) of the UNFCCC as listed in Annex I of the UNFCCC (generally developed countries and countries undergoing the process of transition to a market economy).
Assigned Amount	Amount of Greenhouse Gases emissions that an Annex B Party can emit during the Commitment Period taking into account the quantified emission limitations reduction commitments of Annex B of the Kyoto Protocol.
AAU	Assigned Amount Unit - A unit issued pursuant to the relevant provisions on registries in decision – CPM.1 of the Marrakech Accords and is equal to one metric ton of carbon dioxide equivalent.
Baseline	The scenario that reasonably represents the anthropogenic emissions by sources of Greenhouse Gases that would occur in the absence of the proposed project activity.

CO2e	Carbon Dioxide Equivalent - The unit of measurement used to indicate the global warming potentials defined in decision 2/CP.3 of the Marrakech Accords or as subsequently revised in accordance with Article 5.
CDM	Clean Development Mechanism – flexible mechanism under Article 12 of the Kyoto Protocol with the purpose to (1) assist non-Annex I Parties in achieving sustainable development; (2) contribute to the ultimate objective of the UNFCCC; and (3) assist Parties included in Annex I achieve compliance with their quantified emission limitation and reduction commitments.
CDM Executive Board	The formal governance body established under Article 12 to oversee the implementation and administration of the CDM, under the authority and guidance of the COP/MOP.
CDM Project	An emission reduction project which is intended to be registered with the CDM Executive Board and ultimately realise the delivery of CERs.
CDM Registry	Standard electronic database to be established and maintained by the CDM Executive Board which will contain common data elements relevant to the issuance, holding, transfer and acquisition of CERs.
CER	Certified Emission Reduction - A unit issued under the CDM mechanism pursuant to Article 12 of the Kyoto Protocol and all other relevant requirements and which is equal to one metric ton of CO2e.
Certification	The written assurance by the DOE to confirm that, during a specified time period, a CDM Project activity achieved the reductions in Greenhouse Gas emissions as verified.
COP	Conference of Parties to the UNFCCC, held on a regular basis to establish the rules to implement the UNFCCC.
COP/MOP	Conference of the Parties serving as the meeting to the Parties to the Kyoto Protocol, being the Kyoto Protocol's supreme body. The sessions of the COP and COP/MOP will be held during the same period.

Crediting Period	The period for which the CDM Project can generate CERs.
DNA	Designated National Authority – The national authority for CDM designated by Party to the Protocol.
DOE	Designated Operational Entity – An independent legal entity accredited by CDM Executive Board that can validate proposed CDM Projects and verify and certify Greenhouse Gas emission reductions.
ERU	Emission Reduction Unit – A unit issued under the JI mechanism pursuant to Article 6 and all other relevant Kyoto Protocol requirements and which is equal to one metric ton of carbon dioxide equivalent.
ERPA	Emission Reduction Purchase Agreement
First Commitment Period	The period between 2008-2012 during which Annex I countries are required to reduce their emissions of Greenhouse Gases to the levels established in the Kyoto Protocol.
GHG Reduction	A reduction in emissions of Greenhouse Gases or unit of sequestered Greenhouse Gases equivalent to one metric ton of carbon dioxide equivalent.
Greenhouse Gas	One or more of the six gases listed in Annex A to the Kyoto Protocol that trap heat when released into the atmosphere, being carbon dioxide (CO2), methane, nitrous oxide, ozone, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6). They occur through natural and human-induced activities.
Host Country	The non-Annex I country in which a CDM Project is based.
JI	Joint Implementation Mechanism – flexible mechanism under Article 6 of the Kyoto Protocol with the purposes (1) to assist Annex I Parties in achieving sustainable development and (2) to contribute to the ultimate objective to the UNFCCC and (3) to assist Annex I Parties to achieving compliance with their quantified emission limitation and reduction commitments.

Kyoto Protocol	The Protocol to the UNFCCC signed at the third COP meeting, establishing binding Annex I Greenhouse Gas emission reduction targets of 5.2% below 1990 levels by 2008-2012. For the Kyoto Protocol to enter into force, it must be ratified by 55 parties representing 55% of industrial nations' Greenhouse Gas emissions.
Leakage	The net change of anthropogenic emissions by sources of Greenhouse Gases that occurs outside the project boundary and is measurable and attributable to the CDM Project activity.
Letter of Approval	A letter issued by the Designated National Authority of the Host Country to a CDM Project confirming that the project, as proposed, will assist the Host Country to achieve its goals of sustainable development.
LULUCF	Land Use, Land-Use Change and Forestry as defined under the Kyoto Protocol and Marrakech Accords particularly decision 11/CP.7.
Marrakech Accords	Decisions 2/CP.7 through to Decision 24/CP.7 (inclusive) of the seventh session of the COP/MOP.
non-Annex I Countries	Countries which are not listed in Annex I of the UNFCCC (generally, developing and least developed countries).
ODA	Official Development Assistance - Annually disbursed official bilateral government assistance from Annex I to non-Annex I countries.
Organization Identifier	The Party for which an account within the CDM Registry is maintained, using the two letter country code defined by the International Organization for Standardization (ISO 3166).
Party	A country that has ratified the Kyoto Protocol.
Project Boundary	The notional boundaries surrounding an actual or proposed CDM Project within which Greenhouse Gas emission impacts and effects are considered and quantified.
Project Design Document	The document to be prepared and submitted by Project Participants to an accredited DOE for validation of a proposed project activity.

Project Participants	The legal entity (both public and private entities) that develop and implement CDM Project activities.
PCF	World Bank's Prototype Carbon Fund.
Registration	The formal acceptance by the CDM Executive Board of a validated project as a CDM Project. Registration is the prerequisite for verification, certification and issuance of CERs related to that project.
Reforestation	The direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the First Commitment Period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989.
RMU	A Removal Unit (from carbon sequestration by 'sink' activities) issued pursuant to the relevant provisions on registries in decision – CMP 1, equal to one metric ton of CO2e.
SBSTA	The Subsidiary Body for Scientific and Technological Advice.
Sequestration	Removal of carbon from the atmosphere by carbon 'sinks', such as forests.
Transaction Log	Under the Marrakech Accords, a transaction log will be established by the secretariat to the UNFCCC to verify the validity of all transactions involving Kyoto Protocol rights including CERs within or between registries (including between a national registry and the CDM registry). The log will cover the issuance, transfer, acquisition, cancellation, retirement or carry-over into the next commitment period of any Kyoto Protocol rights.
UNFCCC	United Nations Framework Convention on Climate Change, signed at the 'Earth Summit' in Rio de Janeiro in May 1992.
Unilateral CDM	A Clean Development Mechanism project developed and implemented by a developing country (non-Annex I) party and/or entity.

Validation	The process of independent evaluation of a project activity by a designated DOE against the requirements of the CDM as set out in the Marrakech Accords on Article 12 and on the basis of the Project Design Document.
Verification	The periodic independent review and ex post determination by the designated DOE of the monitored reductions in anthropogenic emissions by sources of Greenhouse Gases that have occurred as a result of a registered CDM Project activity during the verification period.
Verified Emission Reduction	A GHG Reduction from a CDM Project which has been independently verified by an entity such as a Designated Operational Entity.

1. Introduction

1.1 Guidebook Overview

The United Nations Framework Convention on Climate Change ("**UNFCCC**"), the Kyoto Protocol and subsidiary agreements (namely the Marrakech Accords) have established a new legal framework of rules governing the global reduction of Greenhouse Gases and the creation and trading of legal rights derived from the reduction, abatement or sequestration of Greenhouse Gas emissions. As a "new area of law", the international climate change regime introduces new concepts and terminologies which in practice must be implemented within existing legal systems.

This Guidebook, "Legal Issues in the CDM", has been produced by the UNEP RISOE Centre, Denmark, as part of the activities of the Capacity Development for CDM project (www.cd4cdm.org) to assist stakeholders in non-Annex I (developing) countries to understand the legal issues involved in pursuing Clean Development Mechanism ("CDM") projects under the Kyoto Protocol. Many of the CDM terms and the specifics of the international rules will be unfamiliar to government officials, project developers or financiers who do not deal with the CDM on a daily basis and this Guidebook endeavours to explain those simply and with reference to the practical difficulties or opportunities they present, particularly for developing country stakeholders.

This Guidebook should be read in conjunction with the information provided in two other UNEP RISOE Centre previous guidebooks entitled "Clean Development Mechanism: Introduction to the CDM" and "CDM Information and Guidebook".[1] This third Guidebook adds to the information previously provided by UNEP RISOE Centre in the previous guidebooks by focusing primarily on legal issues including:

(i) the requirements of CDM Projects under the international rules;

(ii) the interaction with domestic and international law in implementing a CDM Project;

(iii) the role of Project Participants;

(iv) creating and transferring Certified Emission Reductions from CDM Projects;

(v) identifying and managing CDM Project risks;

1 The United Nations Framework Convention on Climate Change has also produced some useful material to explain the Kyoto Protocol and the CDM, available from http://unfccc.org

(vi) types of contracts to invest in CDM Projects and purchase carbon rights; and

(vii) key legal issues to be addressed in contracting for CDM Projects.

An understanding of the legal requirements and implications of CDM Projects is crucial to enable developing country stakeholders to become active participants in the CDM and, hopefully, to achieve sustainable development and investment from industrialised countries and companies through the opportunities provided by projects under the Kyoto Protocol.

It is important to appreciate that this Guidebook has been produced in an interim period where the Kyoto Protocol is yet to enter into force but the CDM Executive Board has been mandated to undertake a "prompt start" of the CDM by registering projects and issuing CERs. Uncertainties still exist with regards to how the CDM will be practically implemented, including the ability of developing parties to hold registry accounts and trade CERs, the evolving guidance issued by the CDM Executive Board, the absence of an International Transaction Log ("**ITL**") and the interaction between the Kyoto Protocol and other legal regimes such as the European Union emissions trading scheme. The challenge is to adequately manage the risks presented by such uncertainties through appropriate project and CER sale contractual arrangements. This Guidebook is designed to assist developing country stakeholders to do this.

1.2 Key Issues for Host Country Project Developers

Early experience in the development of CDM Projects has presented a range of challenges that need to be understood in pursuing CDM Projects. These include the following issues:

(i) The legal, practical and administrative requirements of the climate change regime and the CDM are extremely complex and detailed, requiring a broad understanding of the international climate change framework and its interaction with domestic legal systems. The rules of the international climate change framework are also in a constant state of development. Such rules are not ones that general project developers can be expected to be familiar with and, as such, there is limited knowledge and expertise available on a Host Country level to assist Project Participants to understand the CDM and the way in which it is to be implemented. As a consequence this has on occasion inhibited acceptance of the CDM as a potential mechanism of assistance to developing countries and in some circumstances has resulted in opposition towards the CDM. CDM capacity building in non-Annex I countries must therefore continue to be a priority, particularly in least developed countries where resources to commit to the CDM are often limited.

(ii) In many developing countries where CDM Projects are being pursued, Designated National Authorities ("DNAs") have not yet been or are only in the process of being established. While some countries have interim arrangements in place, in general there is an absence of fully operational CDM DNAs, as well as an absence of any domestic law framework to accommodate the CDM.

(iii) A CDM Project must be financially viable with an attractive rate of return to attract investment in the underlying project. Project developers often have significant difficulties attracting traditional underlying project finance, given the perceived sovereign risks in some non-Annex I countries. In addition, the status of many sectoral institutions, remains uncertain in some non-Annex I countries. As a consequence, early CDM investment has focussed on South America and Asia with Africa being largely bypassed.

(iv) CDM Projects themselves take significant time to be built and commence operation, averaging between three and four years. As such, while an increasing number of CDM Projects are being pursued, it will be sometime before significant CER flows commence.

(v) CDM Projects can also incur significant transaction costs, which are relatively higher (in terms of cost per CER) for smaller scale projects. The CDM Executive Board has attempted to encourage smaller scale projects through the simplification of registration procedures and baseline assessment for such projects, and the ability to "bundle" similar projects to share the associated transaction costs. However, in order for smaller scale projects to be competitive on a cost basis with large scale CDM Projects, it may be necessary to develop infrastructure to support such projects, such as the use of intermediary firms or organisations to aggregate smaller projects and realise scale efficiencies.

(vi) A CER is a new legal right under international law which will be transacted through an electronically tagged transaction between the CDM Executive Board registry and the national registries of the Annex I Parties that purchase CERs from CDM Projects. The basis of a CER is the reduction or sequestration of one tonne of carbon dioxide equivalent by a CDM Project, as confirmed by the report of an independent Designated Operational Entity ("DOE") to the CDM Executive Board. It is critical for CDM Project Participants to legally document their relationship so as to decide exactly who will be entitled to the CERs arising from the project and how they will be transacted.

(vii) As at the date of this Guidebook, the CDM Executive Board has

not yet developed a functioning registry from which to issue CERs, nor have many Annex I countries implemented their own national registries. The required by the Kyoto Protocol rules has also not been established, which means there is some uncertainty remaining about how CERs will in practice be transacted. In particular, it is still unclear whether Host Country companies which are CDM Project Participants will be able to hold or transfer CERs and, if so, how this will occur in practice.

This Guidebook is intended to assist CDM Project developers and Host Country Governments to understand these challenges and over time address them.

1.3 How to Use This Guidebook

Chapter Two of this Guidebook begins by explaining the nature of the CDM and how it arose in the international negotiations on the Kyoto Protocol. This is designed to give developing party stakeholders an understanding of the history behind the CDM and what it is ultimately designed to achieve. **Appendices A and B** provide the text of the international rules around which the CDM is based (Article 12 of the Kyoto Protocol and the Marrakech Accords).

Chapter Three sets out the key entities involved in a CDM Project, while **Chapter Four** outlines the practical steps involved in implementing such a project. It explains the legal steps which must be taken by Project Participants, the CDM Executive Board and other entities at the various stages of the project cycle before CERs can be issued and sold.

Chapter Five discusses the key legal requirements for a CDM Project including the types of projects which are eligible, the Validation requirements for a CDM Project (including a discussion of Baselines and Additionality) and a discussion of Host Country legal issues which will impact on CDM Projects.

Chapter Six discusses the major asset of a CDM Project - Certified Emission Reductions. It describes what they are, how they are issued and how they are transferred through the CDM registry system.

Chapter Seven provides a brief outline of the way in which individual CDM Projects can be structured and financed. The nature of such structures will depend upon the extent to which Annex I countries or private entities actually invest in a project or simply contract to purchase CERs.

Chapter Eight explains the various types of risk involved in implementing a CDM Project and gives practical examples of the way in which such risks can be minimised or shared between the entities involved in a CDM Project. Again much will depend upon whether the situation is one of actual investment in a CDM Project or simply the entry into a contract to purchase CERs. This Chapter

is focussed on the perspective of a CDM Project developer in a Host Country and explains the risks for developing country participants as well as the types of risks that potential project financiers or investors in CDM Projects or purchasers of CERs will consider at the outset when deciding whether to become involved in the project. Investors or CER purchasers will only engage in CDM Projects if the project risks are adequately managed or mitigated.

Risks must be managed or mitigated not only through project management practices, but also through contracts between the participants and investors in CDM Projects and purchasers of CERs. **Chapter Nine** therefore outlines the major considerations which CDM Project developers should take into account when seeking to sell any CERs from a CDM Project. It also explains the different interests that project developers will be looking to protect in comparison to CER purchasers and provides alternative negotiating positions. The Chapter then goes on to provide a summary of the contracting approaches of two of the major early purchasers of CERs from CDM Project (the World Bank and the Netherlands Government). **Appendices C and D** provide examples of alternative contracting approaches. These contracts are shell documents only which must be carefully examined and modified to suit the circumstances of a CDM Project and should not be considered legal advice.

This Guidebook should generally be read as a whole by stakeholders who are interested in undertaking a CDM Project. The issues discussed in each of the Chapters will be relevant to any CDM transaction and it is only with an overall knowledge of the background and legal requirements of CDM Projects that Project Participants can adequately represent their position when they are seeking to obtain investment in the project and ultimately in contractual negotiations to sell CERs. However, Project Participants should always seek advice on the current status of the CDM rules in relation to a particular project and obtain legal advice on structuring a CDM Project and contracting to sell CERs from that project.

2. Chapter Two: Background to the CDM

The CDM is a legal mechanism within the Kyoto Protocol, an international treaty between sovereign states which provides rights and obligations for national governments. However, the CDM explicitly provides for the participation of private entities who, in developing CDM Projects, will need to manage both the legal rules as they exist for the CDM and any domestic laws that the development of CDM Projects will involve. It is therefore important for Project Participants to have an understanding of the development of the CDM at the international level so that they can adequately manage the risks and opportunities that the developing international legal framework presents for their own individual CDM Project. This Chapter sets out a brief history of the CDM and a summary of its primary requirements.

2.1 International Negotiations on the Kyoto Protocol and the CDM

In May 1992, the UNFCCC was opened for signature at the 'Earth Summit' in Rio de Janeiro. It entered into force on March 21, 1994 with 166 signatures. The aim of the UNFCCC is to stabilize concentrations of Greenhouse Gases in the atmosphere at safe levels. Under the terms of the UNFCCC, Annex I countries, which essentially comprise developed countries and economies in transition, agreed to reduce their emissions of six Greenhouse Gases to a safe level that would prevent interference with the climate system. In order to do so it was agreed that Annex I countries would work to adopt national plans with the aim of reducing Greenhouse Gas emission levels back to 1990 levels by the year 2000. Negotiations concerning how this obligation should be implemented continued at subsequent Conferences of the Parties ("**COPs**").

At COP 3, held in Kyoto, Japan in December 1997, the Parties to the UNFCCC signed the Kyoto Protocol, under which the Parties agreed to improve upon the emission reduction targets set out in the UNFCCC. The Parties to the UNFCCC agreed that countries listed in Annex B to the Kyoto Protocol (essentially the same countries listed in Annex I to the UNFCCC) would reduce or limit their greenhouse gas emissions based on their 1990 emissions levels by the conclusion of the first compliance period (from 2008 until 2012). Each Annex B country agreed to accept a specific binding emission reduction target to achieve during this period. Those countries not listed in Annex B also agreed to the emission limitation and reduction objectives of the Kyoto Protocol, but, under the principle of "common but differentiated responsibilities", did not undertake binding obligations to achieve set emission reduction targets.

To assist the Annex I countries to achieve their emission reduction targets, the Kyoto Protocol incorporated three mechanisms - Joint Implementation ("**JI**"

- Article 6), the CDM (Article 12) and Emissions Trading (Article 17).

Decisions on several issues, most notably the Kyoto mechanisms, remained outstanding for several years while the Parties continued negotiations. The Parties finalised the substance of these decisions at COP 7 in Marrakech in October and November 2001. The agreement reached at Marrakech (the "**Marrakech Accords**"), provides a comprehensive agreement on the development and operation of the UNFCCC and Kyoto Protocol.

The Marrakech Accords, in particular, establish detailed operational guidelines for the CDM, which will be further refined through the workings of the CDM Executive Board and the Conference of Parties. The significant decisions reached at COP 7 include the establishment of the CDM Executive Board, which, as discussed further in Section 3.1, will be the ultimate authority for approving CDM Projects and issuing CERs.

To be legally binding, 55 Annex B parties that account for 55% of the Annex I 1990 carbon dioxide emissions must ratify the Kyoto Protocol. As at the date of this guidebook, this could occur upon the ratification of Russia or the United States.

However, although the Protocol has not yet entered into force, the Conference of Parties to the UNFCCC has given the CDM Executive Board the authority to take early action by registering CDM Projects, accrediting independent auditors of projects and Greenhouse Gas emissions reductions (DOEs), establishing the CDM registry and issuing CERs. In recognition that the First Commitment Period of the Protocol is approaching in 2008 and that it can take several years to get an emission reduction project operational, many Kyoto Protocol Parties have begun to implement carbon offset projects, which are expected to be validated and registered once the CDM is operational, in advance of the entry into force of the Protocol. Provided a project meets the criteria for registration as a CDM Project and is registered before 31 December 2005, CERs will be issued for emission reductions generated since the "starting date" of the project.[2] These CERs will be able to be used to meet Annex I country Kyoto Protocol targets during the First Commitment Period (from 2008-2012). This creates a driver for early action in the CDM to get CDM Projects operational in time for the First Commitment Period and to meet future demand for CERs by liable Annex I Parties to the Kyoto Protocol.

2 Providing this starting date occurred after 1 January 2000.

2.2 *Introduction to the CDM*

Article 12, the CDM provision of the Kyoto Protocol, emerged late in the COP 3 negotiations in Kyoto, following the development of Brazil's proposal for a Clean Development Fund compliance mechanism. The CDM has two basic objectives. The first objective is to assist developing countries achieve sustainable development and the second is to assist Annex I parties achieve compliance in a more cost-effective manner.

In summary, the CDM established under Article 12 of the Kyoto Protocol allows carbon offset projects in non-Annex I Parties (essentially developing countries) to create Certified Emission Reductions ("**CERs**") which can ultimately be used towards the national compliance obligations of Annex I Parties under the Kyoto Protocol. Article 12 also allows private companies to participate in CDM Projects. Once a CDM Project is registered by the CDM Executive Board, CERs from that project can be generated from 1 January 2000 and banked for use by Annex I Parties in the First Commitment Period.

To qualify as a CDM Project activity and receive CERs, a project must satisfy the criteria set out under Article 12, the Marrakech Accords and other decisions of the Conference of Parties/Meeting of Parties and the CDM Executive Board. Specifically:

(i) the project activity must be undertaken in a non-Annex I country (i.e. a developing country) that is a Party to the Kyoto Protocol;

(ii) the participation of all participants must be voluntary and approved by the party authorising their participation (the Host Country or any Annex I Party involved in the project);

(iii) the project activity must be of a type that results in emission reductions by producing real, measurable and long-term benefits related to the mitigation of climate change;

(iv) the emission reductions must be additional to any emission reductions that would occur in the absence of the certified project activity; and

(v) the project activity must contribute to the goal of national sustainable development for the Host Country.

In addition, the project must also meet the further requirements established in the Marrakech Accords and as subsequently determined by the CDM governance body, the CDM Executive Board. A more complete discussion of the CDM Executive Board is provided below in Section 3.1. The project requirements laid out in the Marrakech Accords are discussed throughout this Guidebook.

CDM Projects are particularly important as they are designed to assist the flow of cleaner technologies into developing countries in circumstances where such flows would not otherwise occur. It will be up to the Host Country of the project to ensure that any project and investment for which CDM status is being pursued is one that meets its goals of sustainable development.

3. Chapter Three: Role of the Key Entities Involved in a CDM Project

The CDM requires the establishment of a range of new organisations, both at the international level and at the national level. Each of these has various responsibilities, although the exact extent of these responsibilities will depend on the circumstances of a particular project and the Host Country in which it is being implemented. Set out below is a diagram of the entities which will have some involvement in a CDM Project and a brief description of their roles and responsibilities as well as the major risks that these responsibilities present for CDM Project Participants. The following sections set out an analysis of some of these organisations in more detail.

1. Project Participants (could include CER Purchaser)

Role	Risks for CDM Project
• Develop Project Design Document (including Additionality assessment and monitoring provisions) for the purposes of the CDM • Implement CDM Project • Monitor emission reductions • Deliver CERs to CER Purchaser • Role will vary depending on way in which project is structured	• Failure to comply with rules and requirements for Validation and Registration under the CDM • Failure to comply with international or national laws and applicable contracts • Failure to correctly monitor emission reductions • Failure to generate sufficient Greenhouse Gas emission reductions • Failure to deliver CERs to CER Purchaser

2. CDM Executive Board

Role	Risks for CDM Project
• Develop rules and procedures for CDM operation • Accredit Designated Operational Entities • Review Validation Reports • Register Projects • Review Certification Reports • Issue CERs	• Failure to register project despite positive Validation Report • Review and/or rejection of Verification and Certification Reports • Incorrect allocation of CERs owing to registry error or dispute incorrect instructions from Project Participants

3. Designated National Authority (Host Country Government)

Role	Risks for CDM Project
• Decide sustainable development criteria • Confirm voluntary participation of Project Participants • Confirm SD contribution of the project and issue Letter of Approval for the purposes of validation & registration under the CDM	• Refusal to approve the project • Policy or regulation unclear or administratively burdensome • Change in DNA policy • Nationalisation of project assets (e.g. power plant) by Host Country Government • Host Country Government claiming title to CERs • Host Country non-compliance with Kyoto Protocol

4. Designated Operational Entity

Role	Risks for CDM Project
• Validate project for registration • Verify emission reductions • Certify emission reductions	• Inaccurate Validation (for example, validated predicted calculation of emission reductions is too low or baseline incorrect) • Inaccurate Verification or Certification so that too few CERs are issued • Accreditation is revoked during the crediting period of the project • Failure to comply with Host Country regulation or requirements

5. CER Purchaser

Role	Risks for CDM Project
• Purchase CERs from project • Potentially provide underlying debt or equity finance to project • Could be project participant	• Failure to negotiate favourable or equitable terms and conditions for Project Participants in an ERPA • Breach of contract owing to fall in market prices for CERs • Failure to pay for CERs • Failure to honour terms of finance agreement if applicable e.g. provide ongoing finance

3.1 The Role of the CDM Executive Board

Article 12 establishes an independent governance body, the CDM Executive Board, to oversee the implementation and administration of the CDM. The CDM Executive Board will be the ultimate point of contact for CDM Project Participants to arrange for the registration of projects and the issuance of CERs. The Parties have given the CDM Executive Board a number of specific tasks and powers that will significantly influence how the CDM develops. The CDM Executive Board is to:

(i) develop procedures for the CDM;

(ii) approve new methodologies related to baselines and monitoring plans;

(iii) accredit DOEs;

(iv) register projects (in accordance with specific procedures);

(v) issue CERs (in accordance with specific procedures);

(vi) make publicly available information on proposed CDM Project activities in need of funding and investors seeking opportunities;

(vii) maintain a public database of CDM Project activities containing

information on registered Project Design Documents, comments received, Verification Reports, CDM Executive Board decisions and information on all CERs issued; and

(viii) develop and maintain the CDM registry.

The CDM Executive Board has been given authority to progress with the procedures required for registration of CDM Projects and issuance of CERs in the interim period before the Kyoto Protocol enters into force.

3.2 The Role of the Host Country Government

3.2.1 Establishing a Designated National Authority

The CDM Executive Board is responsible for monitoring the CDM on behalf of the UNFCCC. However, the implementation of CDM Projects must also be approved and should be monitored at a domestic level by the individual Party governments of countries undertaking CDM Projects. Each Party to the Kyoto Protocol must designate an authority which is granted responsibility for authorising and approving participation in CDM Projects. This authority is termed the "Designated National Authority" ("**DNA**"). The role of the DNA is particularly important in Host Countries of CDM Projects, where experience with or an understanding of the CDM may be limited. It is important to ensure that the DNA is adequately staffed with individuals who have an understanding of the Kyoto Protocol rules as well as expertise in general project structuring, project finance, foreign investment, sustainable development considerations and environmental laws.

The Kyoto Protocol or the Marrakech Accords provide only limited guidance as to what the requirements for establishing a DNA are, or what the role or function of the DNA is to be. Largely, this is a matter for each individual Host Country to decide and different countries have pursued different approaches as detailed further below. Nonetheless, at a minimum the rules provide that:

(i) CDM Projects must be approved by the Host Country of a proposed project. It is anticipated this will occur through the DNA, with a practice having been established of issuing Host Country "Letters of Approval";

(ii) CDM Projects must assist in achieving sustainable development in the Host Country, as determined by the Host Country; and

(iii) where environmental impacts of the project are considered significant by the Host Country, an environmental impact assessment, undertaken in accordance with the procedures of the Host Country, will be required.

Each country Party to the Kyoto Protocol is likely to structure their DNAs differently, depending on the existing institutions and allocations of responsibility within that country.

The approaches taken by countries to date have seen DNAs established:

(i) within an existing Government Department or Ministry (particularly those responsible for dealing with direct foreign investment and trade, environment or energy);

(ii) within the existing UNFCCC focal point for the CDM, to be found on the UNFCCC web site;

(iii) as an independent and new office; or

(iv) through a specific Government Minister.

Whichever approach is adopted it is important that:

(i) there exists a clear point of contact in the DNA for entities wishing to pursue a CDM Project; and

(ii) the DNA can facilitate effective and efficient CDM Project approval; and

(iii) the DNA can facilitate whole of government co-ordination so that any inter-government requirements and approvals necessary to enable the issue of Host Country Letters of Approval can be obtained without delay.

The decision as to how the DNA is to be established is likely to be influenced by the allocation of existing responsibilities for UNFCCC, environmental or foreign affairs matters within the Host Country. As the CDM is a mechanism designed to achieve sustainable development through foreign investment, the ministries responsible for direct foreign investment will have an important role to play.

There has been some difficulty in many developing countries deciding which government agency should be responsible for the role of the DNA and where the funding should be drawn from. As the Kyoto Protocol does not provide an exclusive list of functions of the DNA, there has also been some debate as to the appropriate role of a DNA in the CDM process.

3.2.2 Principal Functions of a DNA

To proceed with Validation of a CDM Project, the DNA is required to affirm that the project will contribute to sustainable development in the Host Country. This is generally done through the issuance of a Host Country Letter of Approval for the project.

(a) Legal Nature and Scope of Host Country Approval Letter

The Host Country Letter of Approval is required as part of the Validation process to enable a CDM Project to be registered. As with other aspects of the CDM, it will be up to the Host Country to determine the exact form of the Letter of Approval. Nonetheless, it is advisable for such letters to include:

(i) confirmation that the CDM Project activity assists in achieving the Host Country's goals for sustainable development;

(ii) confirmation that participation in the CDM Project is voluntary;

(iii) a statement that the DNA is the authorised body within the Host Country to issue CDM Letters of Approval; and

(iv) some supporting statement that the Host Country has signed and is committed to the Kyoto Protocol.

Where CDM Projects involve a sale of CERs to a foreign government (e.g. under the Netherlands CERUPT Program) or an institution such as the World Bank's Prototype Carbon Fund or are to be on-sold to such institutions, such purchasers may have their own requirements for Letters of Approval. Other issues which may be suggested by purchasers for inclusion in a Letter of Approval include:

(i) that the DNA authorises the participation of the Project Participants in the CDM Project;

(ii) that the transfer of CERs will be free of any taxes or levies by the Host Country;

(iii) that the Host Country endorses the further development of the CDM Project and commits itself to cooperate with the Project Participants and the CDM Executive Board to provide necessary assistance for Validation, Registration, Verification, Certification and issuance of CERs;

(iv) that the Project, as proposed, is in compliance with all relevant Host Country national laws;

(v) that the Host Country recognises the Project Participants' rights to all of the CERs created by the Project; or

(vi) that the Host Country authorises the transfer of CERs to the CER Purchaser (e.g. from the Host Country project participant or the Host Country's CDM Executive Board registry account).

The extent to which a particular DNA is able to give such confirmations depends largely on where the DNA is placed within the Host Country government and whether it consults with other government entities in the CDM Project approval process. For example, if a DNA's role with regards to a proposed CDM Project is limited to checking whether the proposed project meets the Host Country's sustainable development criteria and it is not required to consult with other government departments (for example, in relation to foreign direct investment, securities trading or property rights), then it will not be in a position to make confirmations about the legality of the CDM Project. On the other hand, if the DNA is closely linked with the other relevant government departments from whom approval would be required for the project (e.g. if the issue of a Letter of Approval only occurs after the Project Participants have received the relevant government consents to actually develop the project), then the DNA may feel more comfortable making assertions about the project such that it complies with relevant national laws.

If there is a perception of sovereign risk within the Host Country, a CER Purchaser is likely to seek as much assurance from the Host Country government as possible that the project will not be hindered by Host Country regulation or policy in the terms of the Letter of Approval. A letter indicating the Host Country's support for a particular CDM Project may also enable Project Participants to more easily source finance for the underlying project, as it may be seen to mitigate the level of regulatory risk associated with the project. However, the DNA should not circumvent the domestic regulatory and approval processes through the Letter of Approval if it has not consulted with other government departments in relation to the project, and particularly in relation to environmental consents, foreign direct investment and the implications under domestic law of the transfer of CERs (e.g. whether such transfer could be considered securities trading).

(b) Institutional Arrangements for a DNA or Other CDM Authority

In addition to the DNA functions mandated by the Marrakech Accords, it may also be expedient for the DNA to undertake other functions. This is ultimately a decision for the Host Country and will depend on the structure and administrative capacity of the nominated DNA.

Ideally, DNAs are likely to function as facilitators for Project Participants and potential investors in CDM Projects within a Host Country. Functions which

DNAs could be involved in include:

(i) issuing Host Country Letters of Approval (as discussed above, this is a function which must be performed by a DNA to enable CDM Projects to be registered);

(ii) ensuring all stakeholders have a clear point of contact that is familiar with national policies and procedures relating to the CDM;

(iii) developing procedures and criteria to assess if a particular CDM Project activity assists in achieving the Host Country's sustainable development (if this is not already the responsibility of another government department);

(iv) working with potential investors in CDM Projects to assist them to understand and navigate the Host Country rules in relation to particular sectors (for example, the energy or forestry sectors) and in relation to other rules such as foreign direct investment and taxation;

(v) undertaking some type of monitoring process to ensure that approved CDM Projects continue to meet established sustainable development criteria;

(vi) providing eligibility criteria which DOEs must comply with in order to conduct Verification and Certification of CDM Projects within the Host Country jurisdiction;

(vii) reporting on national CDM programmes and providing recommendations to the Host Country government entity which attends international meetings of the Conference of Parties/Meeting of Parties to the Kyoto Protocol on changes or additions that should be made to CDM procedures; and

(viii) developing a portfolio of priority CDM Projects and networking information that can be used for marketing CDM Project activities.

3.3 The Role of the Designated Operational Entity

Designated Operational Entities effectively function as independent auditors of a CDM Project Design Document or monitoring of Greenhouse Gas emission reductions. The CDM Executive Board accredits DOEs in relation to particular sectors depending on their areas of expertise.

Under the Marrakech Accords, DOEs can be responsible for either Validation or Verification and Certification of a CDM Project activity, although the CDM Executive Board can give permission for the same DOE to perform all tasks.

The Marrakech Accords also provide that a DOE is responsible for complying with applicable national laws in CDM Host Countries in the performance of its functions.

A Validation Report submitted to the CDM Executive Board by a DOE can only be reviewed at the request of a Party involved or at least 3 members of the CDM Executive Board. Such a review must be on issues related to Validation requirements. A Certification Report submitted to the CDM Executive Board by a DOE will contain a request for the issuance of a number of CERs equivalent to the amount of greenhouse gas emissions reduced by the CDM Project. Again, a Certification Report can only be reviewed at the request of a Party involved or at least 3 members of the CDM Executive Board. However, in the case of a Certification Report, the ability to review is limited to "issues of fraud, malfeasance or incompetence" of the DOE.

The CDM Executive Board is granted a specific power to "spot check" the performance of a DOE to ensure that it is in compliance with the Kyoto Protocol and Marrakech Accords. If a review indicates that a DOE does not comply with the accreditation standards (discussed below), the CDM Executive Board has the power to suspend or withdraw the accreditation of the DOE in question.

However, the Marrakech Accords provide that, should the accreditation of a DOE be revoked, validated projects will not be affected, unless "significant deficiencies" are identified in the Validation of a project or the Verification of emission reductions created by that project. In this case, the CDM Executive Board can appoint a separate, independent DOE to review the relevant decision and correct any deficiencies, if necessary.

If such a review indicates that excess CERs have already been issued for a CDM project as a result of a significantly deficient report by a DOE, it would be necessary to cancel an equivalent number of validly created rights, to maintain the environmental integrity of the CDM Project. The Marrakech Accords specifically provide that it will be the responsibility of the DOE to source these rights and provide them to a CDM Executive Board account to be cancelled. The DOE whose accreditation has been withdrawn is also responsible for covering the costs of the review. Project Participants should ensure that this legal responsibility of the DOE is clearly reflected in any contractual arrangements with them.

The costs of replacing the incorrectly verified CERs and the costs of the necessary review could be substantial. The requirements for accreditation (discussed below) provide that a DOE must have sufficient insurance or other arrangements arising from the costs of its activities. However, to some extent the Verification process depends on the accuracy of the monitoring reports provided to the DOE by Project Participants.

It is likely therefore that in the negotiations surrounding the contracts between Project Participants and a DOE in relation to Verification services, a DOE will insist on obtaining an assurance from Project Participants that they will indemnify it for any costs incurred by the DOE as a result of incorrect monitoring reports provided to it. Project Participants should carefully consider the appropriate apportionment of risk in this circumstance when drafting and negotiating contracts with a DOE.

The Marrakech Accords contain a substantial amount of detail on the specific requirements for the CDM Executive Board to accredit a DOE. These requirements should therefore be incorporated as guarantees into any contracts that Project Participants enter into DOEs who will be responsible for validating projects or verifying emission reductions. Relevant standards include that the DOE must:

(i) be a legal entity employing a sufficient number of persons, with the necessary competence to validate projects or verify emissions reductions, under a responsible senior executive;

(ii) have the financial stability, insurance coverage and other resources required to conduct the relevant activities;

(iii) have sufficient arrangements to cover legal and financial liabilities arising from its activities;

(iv) have documented and public internal governance procedures and a management structure with overall responsibility for its functions;

(v) have the necessary expertise, particularly regarding the Kyoto Protocol rules, environmental issues and technical expertise in baselines and GHG accounting; and

(vi) demonstrate that no actual or potential conflicts exist and have adequate conflict management procedures in place, particularly if it is part of a larger organisation which may have a financial interest in the underlying project.

The Marrakech Accords provide that Project Participants must enter into contractual arrangements with DOEs to undertake Validation. Project Participants should seek to ensure that any contract which they enter into with a DOE contains warranties that the DOE will continue to meet the accreditation standards established in the Marrakech Accords and by the CDM Executive Board and that it will indemnify the Project Participants for any loss caused to the CDM Project from events such as the revocation of the DOE's accreditation or incorrect Verification and Certification.

4. Chapter Four: The Legal Steps in Developing a CDM Project

4.1 Legal Steps in Registering a CDM Project and Issuing CERs

4.1.1 Introduction

The Marrakech Accords provide the international legal requirements to establish a CDM Project and further rules have been provided by later Conferences of Parties to the UNFCCC. As a general summary, under the international rules the implementation of a CDM Project involves:

(i) obtaining formal written approval from the DNA of the Host Country for the proposed project and an affirmation that the project will assist the Host Country to achieve sustainable development;

(ii) obtaining formal written authorisation from the Party to the Kyoto Protocol of the voluntary participation of the proposed Project Participants (although not specified, this will generally be based on assessment of project information such as a preliminary Project Design Document);

(iii) creation of a Project Design Document in the form required by the CDM Executive Board, containing details of the project activity, the proposed monitoring methodology and baseline, the crediting period of the project, the Project Participants and the method by which the participants will communicate with the CDM Executive Board;

(iv) review and Validation of the Project Design Document by a DOE;

(v) Registration of the project as a CDM Project with the CDM Executive Board;

(vi) operating the project in a manner which reduces, abates or sequesters Greenhouse Gases;

(vii) monitoring the emission reductions achieved by the project in accordance with the monitoring plan;

(viii) periodic review and Verification of the achieved emission reductions by another DOE;

(ix) Certification to the CDM Executive Board by the second DOE that the

project has achieved the number of emission reductions verified and a request to the CDM Executive Board to issue CERs for the amount of Greenhouse Gas abatement which occurred during the Verification period; and

(x) issuance of CERs by the CDM Executive Board for the Verification period.

The emission reductions of the project continue to be verified and certified, and CERs continue to be issued until the end of the total crediting period of the project.

Special rules and guidelines have been developed to allow the "fast-tracking" of small-scale emission reduction projects.

Certain purchasers of CERs or investors in CDM Projects may also impose their own requirements for CDM Projects such as compliance with environmental or social safeguards or accepted standards. Such requirements are issues to be explored and negotiated with the particular purchaser rather than legal requirements for the CDM.

4.1.2 Prerequisites for CDM Projects in a Host Country

Before a CDM project can be registered with the CDM Executive Board, the Host Country for the proposed project must have become a party to the Kyoto Protocol through an act of ratification, acceptance or accession, and established a Designated National Authority with responsibility for approving CDM projects from the perspective of the Host Country

4.1.3 Summary of the CDM Project Cycle

Set out below is a summary of the steps required under the Kyoto Protocol and the Marrakech Accords to implement a CDM Project and have CERs issued.

PROJECT PARTICIPANTS COMPLETE A PROJECT DESIGN DOCUMENT (PDD)
The PDD must be in accordance with the requirements of the CDM Executive Board. It functions to describe the project activity, the proposed baseline methodology and the Project Participants. It must also explain how the Additionality requirements will be met and how the emission reductions will be monitored. The PDD must also establish a "crediting period", for the project, which (for standard projects other than sinks projects) can be either seven years (with the possibility of 2 renewals) or ten years with no renewal option.[3] Issues to be considered: • The Project Participants must prove that the CDM Project will reduce or sequester Greenhouse Gases in accordance with the Additionality requirements of the Marrakech Accords • Baseline and monitoring methodologies must be approved by CDM Executive Board. • What is the "starting date" of the project? (i.e. for what period can CERs be created?) • Who will be the Project Participants and who is entitled to the CERs from the project?

DESIGNATED NATIONAL AUTHORITY ISSUES
LETTER OF APPROVAL

The Host Country must confirm (generally through its DNA) that it approves a CDM Project for the purposes of the Kyoto Protocol and that the project assists it to achieve its sustainable development goals.

DESIGNATED OPERATIONAL ENTITY
VALIDATES PROJECT ACTIVITY

DOE reviews the PDD to confirm that the project activity meets the following requirements:

- participation is voluntary and Parties have established a DNA for the CDM;
- any non-Annex I countries participating in the project are parties to the Kyoto Protocol;
- stakeholder views have been considered;
- environmental impacts have been analysed;
- baseline methodology and monitoring plan are appropriate and comply with those approved by the CDM Executive Board;
- PDD contains provisions for monitoring, Verification and reporting in accordance with Article 12; and
- project activity conforms to all other requirements for CDM Projects.

After inviting and considering stakeholder comments on the PDD, the DOE determines whether to Validate the project.

Issues to be Considered;

- Choosing a DOE - Who should bear the costs of Validation?
- To what extent will stakeholder comments be taken into account?

REGISTRATION BY THE EXECUTIVE BOARD

Registration will automatically occur within 8 weeks after the DOE has submitted the request to the CDM Executive Board, unless a Party involved in the project or three members of the CDM Executive Board request a review in relation to the Validation requirements.

MONITORING BY PROJECT PARTICIPANTS

Project Participants are required to implement the monitoring plan in the PDD. This will require:

- collection and archiving of all data needed for the measurement and estimation of Greenhouse Gas emissions or sequestration;
- identification and attribution of the emissions to the project activity;
- assessment of environmental impacts; and
- quality assurance and control procedures for monitoring and calculating Greenhouse Gas emission reductions (simplified monitoring procedures can be used for small scale CDMs).

Issues to be Considered;

- Project Participants must comply with monitoring plan to provide DOE with sufficient information to undertake Verification (although DOE can also seek its own information)

VERIFICATION AND CERTIFICATION BY DESIGNATED OPERATIONAL ENTITY
Periodic independent review and written assurances by a DOE of the monitored enhanced reductions in emissions during the verification period. This requires the DOE to: • make the monitoring reports publicly available; • calculate the enhanced Greenhouse Gas reductions; • ensure the project complies with the PDD and CDM rules; and • complete a Verification Report to confirm the amount of Greenhouse Gas emission reductions, and a Certification Report that certifies to the CDM Executive Board that the project activity actually achieved those reductions. Issues to be Considered; • Which DOE should undertake Verification and Certification? Who will bear the costs? • Will the DOE indemnify the Project Participants from any liability owing to inaccurate Verification or Certification?

ISSUANCE OF CERs BY THE CDM EXECUTIVE BOARD
The CDM Executive Board will automatically issue CERs within 15 days after it receives the Certification Report (unless there is a request for review). CERs will be issued by electronic registry created and maintained by the CDM Executive Board. The CDM Executive Board registry administrator will: • issue the CERs and distribute them to the relevant national registries and/or accounts of the Project Participants as requested in the signed statement contained in the PDD; and • deduct a share of proceeds to cover administration costs and meet the costs of adaptation. Issues to be Considered; • How will CERs be delivered? • Do the Host Country participants have access to a registry account?

4.1.4 Completing a Project Design Document

The first step in the process of undertaking a CDM Project requires Project Participants to complete a Project Design Document, which describes in detail the project activity. The CDM Executive Board has developed standard requirements for completing a Project Design Document and guidance on the various inclusions required. The Project Design Document must include descriptions of the technical aspects of the project, the project purpose, its contribution to sustainable development, the Project Boundaries and the proposed baseline methodology, a statement of the estimated operational life of the project, stakeholder comments, an analysis of environmental impacts for the project, an explanation of how the project activity meets CDM Additionality requirements, and a proposed formula for the calculation of the Greenhouse Gas emissions to be reduced and project leakage. The Project Design Document will also need to include a monitoring plan incorporating data needed for the project

3 The crediting period for sinks projects is different from other CDM Projects, as discussed further in Section 5.3.2.

performance indicators, and assessment of data quality and methodologies to be used for data collection and monitoring.

Generally the Project Design Document is created by Project Participants in conjunction with a DOE – one issue of particular significance is drafting the Project Design Document so that the baseline methodology satisfies the Executive Board's requirements of Additionality.

4.1.5 Validation by Designated Operational Entities

Validation is the process of independent evaluation of a project activity by a DOE against the requirements of the CDM. The process of Validation will initially involve the Project Participants selecting and entering into a contractual arrangement with a DOE to review the Project Design Document and any supporting documentation to confirm that the following requirements are met:

(i) participation in the CDM Project activity is voluntary;

(ii) the Host Country and any Annex I Parties participating in the project (or authorising Project Participants) have created a Designated National Authority for the CDM;

(iii) the Host Country and Annex I Parties are Parties to the Kyoto Protocol;

(iv) comments by stakeholders (defined as the public, including individuals, groups or communities affected, or likely to be affected, by the proposed CDM Project activity) have been considered;

(v) the project activity has undergone an analysis of environmental impacts;

(vi) the project activity is expected to result in an overall reduction of Greenhouse Gases from eligible CDM Project activities that are additional to any that would have occurred in the absence of the proposed project activity;

(vii) the baseline methodology and monitoring plan comply with CDM Executive Board requirements;

(viii) provisions for monitoring, Verification and reporting are in accordance with the Kyoto Protocol rules and the Marrakech Accords; and

(ix) the project activity conforms to all other requirements in the Kyoto Protocol rules and the Marrakech Accords.

The DOE must make the Project Design Document publicly available for comment on elements relating to, for example, baseline methodology, the adequacy of the monitoring plan and other issues relating to Additionality and leakage.

After the deadline for receipt of comments, which is 30 days after making the document publicly available, the DOE will make a determination as to whether, on the basis of the Project Design Document and taking into account the comments received, the project should be Validated. At this stage, the DOE will inform Project Participants of its determination on the Validation of the project activity, and Project Participants will also need to provide a formal Letter of Approval from the DNA of the Host Country, including confirmation that the project assists the Host Country in achieving sustainable development.

If the DOE determines that the proposed project activity is valid, it then submits to the CDM Executive Board a request for registration of the validated project in the form of a Validation Report, which must be made publicly available. The validation report will need to include the Project Design Document and an explanation as to how the DOE has taken into account any comments received.

The CDM Executive Board has provided 15 sectoral areas for which DOEs can be authorised to conduct Validation or Verification and Certification.[4]

4.1.6 Registration by the CDM Executive Board

Registration is the formal acceptance by the CDM Executive Board of a validated project as a CDM Project activity. Registration is a prerequisite for the Verification, Certification and issuance of CERs related to that project activity.

Registration of a project activity becomes final eight weeks after the CDM Executive Board receives a Validation Report from a DOE, unless a Party involved in the project activity,[5] or at least three members of the CDM Executive Board, requests a review of the proposed CDM Project activity. A review by the CDM Executive Board must relate to issues associated with the Validation requirements and must be finalized no later than at the second meeting following the request for review. A proposed project activity that is not accepted may be reconsidered for Validation and subsequent Registration,

4 These are: energy industries (renewable/non-renewable resources), energy distribution, energy demand, manufacturing industries, chemical industries, construction, transport, mining/mineral production, metal production, fugitive emissions from fuels (solid, oil and gas), fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride, solvent use, waste handling and disposal, afforestation and reforestation and agriculture.

5 The Marrakech Accords do not provide further details on who is entitled to represent a "Party involved in the project activity", but in the context of the restricted ability of the CDM Executive Board to implement a review (i.e. three members must request such a review), it is likely that only Party governments of the Host Country or any Annex I Parties involved would be eligible to challenge a Validation Report.

after appropriate revisions have been made to bring it into compliance with the requirements for Validation and Registration, including those related to public comments.

It is worth noting that increasingly many Annex I Party participants are requiring projects to be registered before contracts to purchase CERs will take effect, and increasingly Registration of a CDM Project is a condition precedent to an agreement to purchase CERs. This effectively places the onus on Project Participants to get the CDM Project registered and they thereby inherit the risk that the baseline methodology or Project Design Document may not satisfy a DOE or the CDM Executive Board.

4.1.7 Monitoring by Project Participants

Once the project activity has been Validated and Registered, the Project Participants will be required to implement the validated monitoring plan included as part of the Project Design Document. The implementation of the monitoring plan is a pre-condition for the verification, certification and issuance of CERs.

The monitoring plan itself will need to provide for the collection and archiving of all relevant data necessary for estimating or measuring Greenhouse Gas emissions, and determining baseline emissions occurring within the project boundary during the crediting lifetime. It will also need to identify all potential sources of increased Greenhouse Gas emissions outside the project boundary that are significant and reasonably attributable to the project activity, and provide for the collection and archiving of all relevant data for the assessment of environmental impacts. The monitoring plan must address quality assurance and control procedures, periodic calculation of the Greenhouse Gas emission reduction methods (including leakage effects) and must document all steps involved in such calculation.

A monitoring plan for a proposed project activity must be based on a previously approved monitoring methodology or on a new methodology that is determined by the DOE as appropriate to the circumstances of the proposed activity, has been successfully applied elsewhere and reflects good monitoring practice appropriate for the type of project activity. Any revisions to a monitoring plan will require justification by the Project Participants and will need to be validated by a DOE and approved by the CDM Executive Board.

For small-scale CDM Project activities, Project Participants may use simplified monitoring methodologies approved by the CDM Executive Board. "CDM Information and Guidebook" produced by UNEP Risø Centre provides detail on monitoring requirements for CDM Projects.

4.1.8 *Verification and Certification by Designated Operational Entities*

Verification is the periodic independent review and determination by an accredited DOE of the monitored enhanced reductions in Greenhouse Gas emissions that have occurred during the Verification period as a result of a CDM Project. The DOE audits the monitoring reports of the Project Participants and can also source additional information to confirm the accuracy of those reports. Certification is the written assurance by the DOE that, during the specific time period, the project activity achieved the enhanced reductions of Greenhouse Gas emissions as verified.

As the first step in the process of verification, the DOE contracted by the Project Participants will be required to make the monitoring plan publicly available.[6] The DOE will then need to carry out various steps to determine the additional reductions of Greenhouse Gas emissions which occurred during the Verification period in comparison with the baseline provided in the Project Design Document.[7] This will include determining whether the project documentation provided is in accordance with the requirements of the registered Project Design Document and relevant CDM rules and modalities, conducting on-site inspections,[8] using additional data from other sources, where appropriate, and reviewing monitoring results. If it is satisfied, the DOE will verify that the monitoring methodologies for the estimation of reduced Greenhouse Gas emissions have been applied correctly and that their documentation is complete and transparent.

The DOE must convey to the Project Participants any concerns related to conformity of the actual project and its operation with the registered Project Design Document and give the Project Participants the opportunity to address the concerns and supply any additional information. If necessary, the DOE can recommend to the Project Participants appropriate changes to the monitoring methodology.

As the final stage in the verification process, the DOE completes a Verification Report, which confirms the Greenhouse Gas emission reductions achieved. This report must be provided to the Project Participants, the Parties involved and the CDM Executive Board, and also made publicly available.

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6 There is no agreement as to what extent DOEs are to take into account comments by Parties, stakeholders and UNFCCC-accredited NGOs on elements relating to whether verified emissions reductions were achieved in accordance with the CDM rules and modalities.

7 The basis for the determination of CERs of a CDM Project activity during a given period is the ex-post calculation of baseline emissions less the actual Greenhouse Gas emissions less leakage, after the monitoring of emission reductions have been reported.

8 On-site inspections may comprise, inter alia, a review of performance records, interviews with the project participants and local stakeholders, collection of measurements, observation of established practices and testing of the accuracy of monitoring equipment.

At the conclusion of the specific time period for verification and based on its Verification Report, the DOE will then complete a Certification Report, which certifies that during the specified time period, the project activity achieved the enhanced reductions of Greenhouse Gas emissions as verified. The DOE must immediately notify the Project Participants, the Parties involved and the CDM Executive Board of the certification and make the report publicly available.

4.1.9 Issuance of CERs by the CDM Executive Board

A Certification Report will contain a request to the CDM Executive Board for the issuance of CERs equal to the enhanced reductions of Greenhouse Gas emissions as verified by the DOE. The issuance of CERs will automatically occur within 15 days after the date of receipt by the CDM Executive Board of the Certification Report, unless a Party involved in the project activity, or at least three members of the CDM Executive Board, requests a review of the CDM Project activity (as discussed in Section 4.1.8). In the event of a request for a review, the CDM Executive Board will be required to consider whether the proposed issuance should be approved. The CDM Executive Board must then inform the Project Participants of the outcome of its review within 30 days and make it and the reasons for it public.

As part of the application to the CDM Executive Board to register a CDM Project, Project Participants are required to provide a signed statement indicating the method by which the CDM Executive Board should communicate with them to determine how CERs are to be allocated after they have been certified and issued. It is likely that an Allocation Statement will also be provided by Project Participants together with each Certification Report clarifying how the CERs resulting from that Certification Report should be issued.

5. Chapter Five: Qualification as a CDM Project: Key Legal Requirements

5.1 Introduction

The Kyoto Protocol and Marrakech Accords also set out the specific legal requirements which individual CDM Projects must meet to be eligible for Registration. Projects will need to satisfy the CDM Executive Board that they:

(i) are undertaken in a Host Country that is a Party to the Kyoto Protocol and by Parties to the Kyoto Protocol or by private entities that have been authorised by such Parties to participate in the CDM;

(ii) comply with the eligibility requirements for a Registered project under the CDM;

(iii) assist the Host Country to achieve sustainable development;

(iv) provide real, measurable, and long-term benefits related to the mitigation of climate change;

(v) deliver reductions in emissions that are additional to any that would occur in the absence of the certified project activity; and

(vi) do not result in the diversion of ODA (see 7.2).

In addition, CDM Projects will also need to comply with any legal requirements in the Host Country.

5.2 Participation Eligibility: Who can Participate in CDM Projects?

Participation in the CDM is limited to Parties (i.e. governments) who have ratified the Kyoto Protocol and private entities authorised by those Parties.[9] Entities which are actually involved in carrying out a CDM Project are described as "Project Participants". Project Participants are defined in the Project Design Document Glossary as either a Party involved, or a private and/or public entity authorized by a Party to participate under the Party's responsibility, in CDM project activities and who take decisions on the allocation of CERs from a CDM Project.

9 Although it is unclear to what extent private entities of countries which have not ratified the Kyoto Protocol can be authorised by Parties to participate in the CDM.

The Marrakech Accords specifically provide that Project Participants can only receive or transfer CERs so long as the country which authorised their participation is a Party to the Kyoto Protocol and is in compliance with its obligations. This is a risk for Annex I companies as they will not be able to trade CERs if their authorising country is out of compliance with the Kyoto Protocol. However, Host Country companies will only be affected by this rule if they have a registry account to hold and transfer CERs which is held in the national registry account of an Annex I country. See Sections 5.3.2(c) and 6.5 for a more detailed discussion on the ability of developing country companies to hold registry accounts and receive and transfer CERs.

Other entities may have some involvement in a CDM Project but may not be formally listed as Project Participants. For example, the purchaser of CERs from a project or the financier of the underlying project may not be a project participant but will have a contractual relationship with one or more of the Project Participants.

The Registration process with the CDM Executive Board requires all Project Participants to submit a signed statement to clarify the "modalities of communicating with the Executive Board and the secretariat", particularly with regard to instructions regarding allocations of CERs at the point of issuance. The form of this statement has not yet been established. Potentially it could just direct the CDM Executive Board to communicate with one of the Project Participants at each issuance of CERs, or alternately it could set out the allocation of CERs amongst the Project Participants and CER purchasers as agreed in any ERPAs which have been entered into.

5.3 Qualifying Projects

5.3.1 What Types of Projects are Eligible?

Neither the Kyoto Protocol nor the Marrakech Accords provides a comprehensive list of the activities that will qualify as CDM Projects under Article 12 of the Protocol. However, the CDM Executive Board has since provided a list of 15 scopes from which CDM Projects can emerge, giving some guidance on the types of activities which could qualify.[10]

Potential projects could include the modernisation of existing structures, the expansion of existing plant or completely new construction projects.

10 As above, note 8.

Potential CDM Projects	
Project Type	**Example**
Renewable Energy Projects	Biomass; Geothermal; Geothermal/Hot dry rocks; Hydro; Solar; Tidal; Wind; Wave.
Power Projects	Fuel switching a coal powered plant to natural gas. Capturing land-fill methane gas to generate electricity.
Energy Efficiency Projects	Altering power station infrastructure to reduce distribution losses. Modifying processes at the demand side to reduce the amount of electricity required.
Transport Projects	Implementation of cleaner engine technologies. Fuel cell and battery vehicles upgrading existing fleets. Traffic flow controls. Mass transit substitution for private transport.
Forestry	Planting forests (Afforestation or Reforestation).
Others	Geological sequestration; Geological sequestration for enhanced oil recovery; landfill methane recovery.

Certain types of projects have also been excluded from eligibility under the CDM. With respect to nuclear energy power projects, Parties included in Annex I are to "refrain" from using CERs generated from nuclear facilities to meet their Kyoto commitments. This has been widely interpreted as a prohibition on nuclear projects within the CDM. However, the term "refrain" was adopted as a compromise after countries such as Canada had opposed an explicit prohibition on its inclusion. In any event, the widespread opposition to nuclear projects means that they are unlikely to be pursued as CDM Projects and it is unclear how the CDM Executive Board will deal with them.

For at least the first commitment period of the Kyoto Protocol, forestry projects which prevent Greenhouse Gas emissions from occurring (i.e. projects which prevent forests from being harvested) have been excluded from eligibility under the CDM. The term used to describe such projects is "Deforestation". Deforestation projects are distinguishable from Afforestation and Reforestation projects (which are permissible types of CDM projects) because whereas Afforestation and Reforestation projects sequester carbon dioxide as "sinks", Deforestation projects prevent carbon dioxide from being emitted back into the atmosphere. Afforestation and Reforestation projects are discussed further in Section 5.3.2.

The type of projects which have applied for registration with the CDM Executive Board as at the date of these Guidelines include wind electricity, methane recovery from pipeline rehabilitation, hydroelectric, landfill gas recovery and chemical oxidation processes. The World Bank carbon funds and other buyers in the carbon market have also purchased emission reductions from projects

involving fuel substitution, biomass, heating energy efficiency, Afforestation and waste incineration. This gives an indication of the breadth of projects which could be eligible for the CDM, providing they meet the requirements of the CDM rules, as discussed further below.

5.3.2 Particular Types of CDM Projects

(a) Small Scale CDM Projects

The CDM Executive Board has issued fast-track prompt start procedures for "small-scale" CDM Project activities. The objective of this fast track mechanism is to enable small scale projects to be pursued without the need for going through the rigorous and expensive approval and assessment processes as required for larger scale projects. Small-scale activities include:

(i) renewable energy project activities with a maximum output capacity equivalent of up to 15 megawatts (or an appropriate equivalent);

(ii) energy efficiency improvement project activities that reduce energy consumption on the supply and/or demand side, by up to the equivalent of 15 gigawatt hours per use;

(iii) Afforestation or Reforestation projects that are expected to result in net human-induced greenhouse removals of less than 8 kilotonnes of CO2 per year and are developed or implemented by low-income communities or individuals (as determined by the Host Country); or

(iv) other project activities that both reduce anthropogenic emissions by sources and directly emit less than 15 kilotonnes of carbon dioxide equivalent annually.

Small scale projects can take advantage of:

(i) a simplified Project Design Document;

(ii) simplified methodologies for determining a baseline and creating a monitoring plan;

(iii) the ability to bundle project activities for the Project Design Document, registration and verification to reduce administration costs;[11]

(iv) simplified provisions for environmental impact analysis;

(v) lowered registration fee; and

11 However, bundled projects may be not debundled components of "larger" projects. In other words, a small-scale project activity that is part of a large project activity is not eligible to use the simplified modalities and procedures for small-scale CDM Project activities.

(vi) an automatic ability to have the same DOE verify and certify emission reductions for a specific small scale CDM Project activity.

The CDM Executive Board has also provided a series of tests to determine whether a small scale project fulfils the Additionality criteria as discussed in Section 5.4.3.

(b) Afforestation and Reforestation Sinks Projects

The Marrakech Accords clarify the role of sinks projects within the CDM, which was a point of significant contention during past negotiations. Sinks are allowed to be used as follows:

(i) Only Afforestation and Reforestation ("A&R") projects (as defined in the Glossary) will qualify as eligible CDM Projects during the first commitment period of the Kyoto Protocol. Essentially, this means that only projects which involve the planting of land which has not been forested since 31 December 1989 will be eligible to create CERs under the CDM.[12]

(ii) Annex I Parties can only use CERs from sinks projects up to an amount equivalent to 1% of their Assigned Amount, times five.

There has been some level of controversy surrounding the inclusion of sinks in the CDM, as such inclusion raises additional issues regarding the permanence of the sequestered carbon, Additionality of projects, leakage, and social and environmental impacts.

Modalities for Afforestation and Reforestation CDM projects were established at COP9 in December 2003.[13] The rules for afforestation and reforestation projects under the CDM generally mirror those of other CDM Projects, but contain several crucial differences:

(i) there is a limit on the type of land on which an A&R CDM Project can be implemented – this land must not have been forested on 1 January 1990;

(ii) the crediting period for A&R projects is significantly longer than other CDM projects, so that Project Participants must choose a crediting period of 20 years, with the potential of up to two renewals subject to re-Validation of the baseline, or 30 years with no renewals;

12 The Conference of Parties decided in Bonn in 2001 to limit the eligibility of land-use activities in the CDM to Afforestation and Reforestation. This could include projects such as: (i) the establishment of woodlots on public lands; (ii) reforestation with native species; (iii) large-scale industrial plantations; (iv) establishment of biomass plantations for energy production and the substitution of fossil fuels; or (v) agroforestry.
13 Decision 19/CP.9

(iii) Project Participants must consider the social, economic and environmental impacts of the proposed project in accordance with Host Country requirements; and

(iv) special accounting procedures must be followed to address the fact that carbon stored by sequestration can be released through events such as harvesting or fires (the "permanence issue").

To address the permanence issue, at COP9 the Conference of Parties developed a system of temporary credits for sink projects, which must ultimately be replaced with either new temporary CERs or permanent CERs upon their expiry.

COP9 developed two alternative accounting approaches for sinks credits: temporary CERs ("**tCERs**") and long term CERs ("**lCERs**"). Project Participants are required to nominate the accounting approach to be applied for the entire nominated crediting period of the project.

In practical terms, the two types of credits are similar. Both types of credits will be issued on a five yearly basis, subject to a Verification and Certification procedure of the A&R project activity. The Annex I Party who wishes to use a tCER or lCER for compliance purposes will bear the ultimate liability for the replacement of both tCERs and lCERs. Finally, neither type of credit may be banked but must be used by Annex I Parties to meet their commitments in the commitment period which they are issued.

Although the credits are similar in many respects, key differences do exist between the two types of credits which will have practical implications. These are, namely, the period of validity, basis of issuance, the replacement process and the types of credit which can replace both sink credits.

Temporary CERs ("tCERs")	
Validity	tCERs are valid until the end of the commitment period subsequent to the one in which they issued. Commitment periods are likely to run for 5 years with a 1 year gap to achieve compliance, so, for example, the first commitment period will run from 2008 until 2012, the second is likely to run from 2013 until 2017 etc. This means that a tCER could potentially be valid for up to 9 years. For example, if issued in 2008, the tCER would only expire in 2017.
Issuance	Afforestation and Reforestation CDM Project activities will be issued with credits at the initial Verification and Certification of the project and further credits will be issued every subsequent five year Verification and Certification until the end of the crediting period of the project. A Certification Report for tCERs verifies the total carbon sequestration of the project activities since the registered project starting date. Where a project participant has nominated the tCER crediting approach, each time a Certification Report is accepted by the CDM Executive Board the Project Participants will be issued with tCERs equivalent to the verified total net carbon sequestered since the start of the project activity. The first tCER Verification and Certification (and subsequent issuance of tCERs) will occur on a date nominated by the Project Participants, and thereafter Verification and Certification will occur every five years. The fact that issuance of tCERs will occur every five years but tCERs do not expire until the end of the subsequent commitment period means, in effect, that when the second issuance of tCERs occurs, the tCERs issued at the initial certification will still be valid. It is critical for Project Participants to understand that issuance of tCERs is not synchronized with the life cycle of the tCERs: the issuance process will occur every 5 years, where as the expiration of the credits will vary according to when they were issued in relation to the end of the subsequent commitment period.
Replacement Process	tCERs expire at the end of subsequent commitment period to their issue. Prior to this expiry, each tCER which has been transferred to the retirement account of an Annex I Party (i.e. used for compliance) or to the tCER replacement account of an Annex I Party must be replaced with either a "permanent" Kyoto Protocol credit (an AAU, CER, ERU or RMU) or with another tCER. This means it will be an Annex I Party, rather than the Project Participants in an A&R CDM Project, who will generally bear the liability of replacing the tCERs. It also means that tCERs are likely to be worth much less than ordinary CERs as they are likely to be used as a "stop gap" measure for compliance purposes where permanent credits are not yet available but will be available in the future at a cheaper price. It is important to highlight that there is no requirement for the replacement tCERs to be sourced from a separate project activity. Therefore, as tCERs equivalent to the total sequestered carbon will be issued at the start of the project activity and then at the subsequent certification, when the initial tCERs are due to expire in the subsequent commitment period, the second issuance of tCERs will still be valid. In effect this means that tCERs can continually be replaced with tCERs from same project activity.

Long Term CERs ("lCERs")	
Validity	lCERs are valid until the end of the nominated crediting period of the CDM Project activity to which they issued (i.e. for 20 years or 30 years, depending on the crediting period selected).
Issuance	LULUCF CDM Project activities will be subject to Verification and Certification every 5 years and issued with credits on this basis, regardless of whether tCER or lCER crediting approach is nominated. However, where a project participant has nominated the lCER crediting approach, the project participant will be issued with lCERs equivalent only to the certified total net increase of carbon sequestration since the previous certification. This means lCERs will only be issued equivalent to the additional carbon sequestered by the trees over the five year period.
Replacement Process	lCERs will expire at the end of the nominating crediting period of the project. Prior to this expiry, each lCER which has been used for compliance (i.e. transferred to an Annex I Party retirement account) will be required to be replaced with either an AAU, CER, ERU or RMU. It cannot be replaced with an lCER or tCER. However, there are two other circumstance where an lCER will be required to be replaced: where a certification report indicates that the amount of total net carbon sequestered by the project activity has decreased since the previous Certification, or where no Certification Report is provided at all. Where either of these two events occur, each lCER must be replaced by either an AAU, CER, ERU, RMU and can also be replaced by lCER from the same project activity.

Both sink credits will incur similar associated costs. Firstly, both credits involve the five yearly maintenance cost of verifying the continuing storage of carbon stock. Secondly, a "share of proceeds" will be deducted by the CDM Executive Board each time lCERs or tCERs are issued.

In addition to the general Project Design Document required to register a CDM Project, Project Participants in a LULUCF project must submit documentation in relation to the impact of the project on local communities and the local environment. All Project Participants must submit documentation on the social, economic and environment impacts of the intended project activity, including on biodiversity, natural ecosystems and those impacts outside the project boundary area. However, Project Participants will only have to conduct an environmental impact assessment if they themselves, or the host country, consider the impacts "significant". The decision provides no further elaboration in the decision of what constitutes "significant", although the preamble does mention risks associated with the use of potentially invasive alien species by A&R project activities and potential risks associated with the use of genetically modified organisms.

As at the date of this Guidebook, the Subsidiary Body for Scientific and Technological Advice is developing simplified modalities and procedures for small-scale A&R CDM Projects.

(c) Unilateral CDM Projects

The Kyoto Protocol clearly contemplates that CDM Projects are to assist Annex I Parties to meet their emission reduction targets whilst also to achieve sustainable development for non-Annex I Host Countries. However, Annex I countries have generally been slow to invest in CDM Projects and many buyers have preferred to purchase only CERs to meet their targets, rather than becoming involved in the operation of the project itself. Therefore, some non-Annex I Parties have expressed an interest in undertaking CDM Projects without the assistance of Annex I Party participants and selling the CERs to entities other than the Project Participants. This concept has become known as a "Unilateral CDM Project".

The Parties at COP7 agreed that Unilateral CDM Projects would be possible, although this agreement was not explicitly reflected in the resulting Marrakech Accords. The CDM Executive Board's template Project Design Document clearly allows for a situation where there is only one project participant and one Party to a CDM Project (i.e. the Host Country). However, at COP9 in Milan some CDM Executive Board members questioned the concept of Unilateral CDM Projects. The CDM Executive Board has not yet issued firm guidance on the potential for Unilateral CDM Projects.

A Unilateral CDM Project would enable a non-Annex I Party to undertake a project with all participants being nationals of the Host Country and no Annex I Party direct involvement. The CERs created for this project could then later be sold to purchasers on the carbon market. Although it is clear that each non-Annex I Party government which hosts a CDM Project or requests an account will be issued with an account within the international CDM registry, it is currently unclear from the international rules whether *companies* from non-Annex I Parties will be able to hold CERs and the extent to which they will be able to participate in emissions trading. It is therefore important to resolve the issue of whether or how non-Annex I Party companies will be able to hold and transfer CERs through the international registry system.

At the date of this Guidebook the CDM Executive Board is considering the issue of the transfer of CERs from non-Annex I accounts to Annex I national registries, and there are indications that non-Annex I Parties will be able to sell CERs which they themselves have produced but that they will not be able to participate in general emissions trading.

It is worth noting that, to date, many of the purchases of CERs from potential CDM projects, such as those of the World Bank carbon funds and the Netherlands, are occurring through forward agreements with Host Country project developers. While not classified as Unilateral CDM Projects per se (as arguably such contracts provide a guaranteed financial return for the project),

the CER Purchaser nonetheless has no direct investment in the underlying project itself.

5.4 Specific CDM Project Requirements

The primary legal criteria for CDM Projects under the Kyoto Protocol are:

(i) that the project assists the Host Country to achieve sustainable development;

(ii) that the project provides real, measurable, and long-term benefits related to the mitigation of climate change; and

(iii) that the project delivers reductions in emissions that are additional to any that would occur in the absence of the certified project activity.

The Marrakech Accords and the practices that have arisen in early CDM Projects indicate how such criteria are to be determined. The rules and practice in relation to these criteria are discussed in further detail below.

5.4.1 Sustainable Development

An explicit purpose of the CDM is to assist non-Annex I countries to achieve sustainable development. The Marrakech Accords do not provide further details of what constitutes "sustainable development" and, rather, state that it is the Host Country's prerogative to determine whether a particular CDM Project assists it to achieve this goal.

Designing the CDM to achieve this goal presents a significant challenge to international policy makers because Host Countries have different economic conditions, natural resources and development priorities and, thus, have different perceptions about what is required to achieve sustainable development. The second UNEP CD4CDM Guidebook "CDM: Information and Guidebook" provides some guidance on the considerations which may be taken into account in determining the criteria of sustainable development. Ultimately, it is the Host Country Party's prerogative to confirm whether a CDM Project activity assists it in achieving sustainable development and a CDM Project can only be registered if affirmation of this is provided to the CDM Executive Board. Generally, the Designated National Authority will be responsible for affirming this in a Letter of Approval.

Although it is the Host Country's prerogative to determine whether a particular type of CDM Project helps it to achieve sustainable development, this prerogative is limited in practice by the exclusion of certain types of projects

from eligibility under the CDM, including nuclear projects and Deforestation projects. There is also a public screening process of Project Design Documents, and stakeholders are given an opportunity to comment on the project, including in relation to its impact in terms of social, economic and environmental effects. The potential to legally challenge a Host Country's determination that a CDM Project assists it to achieve sustainable development, either within the CDM registration process or externally through litigation, has not yet been tested.

5.4.2 Real, Measurable and Long-term Benefits

Another criteria for eligibility of a CDM Project under the Kyoto Protocol rules is that it must achieve "real, measurable and long-term benefits" related to climate change mitigation. This will be up to the DOE to determine in the Validation procedure in accordance with the information supplied by the Project Participants.

5.4.3 Baselines and Additionality

Baselines, the election of Baseline methodology for a given CDM project and the concept of Additionality are complex and technical issues. They are central to both the creation of CERs from CDM projects and the environmental integrity of the CDM.

Baseline and Additionality methodologies must be determined early in the development stage of any proposed CDM project as they form a core component of the Project Design Document submitted to a DOE for Validation purposes.

(a) Baselines

A project Baseline is the scenario that reasonably represents the human induced emissions by sources of Greenhouse Gases that would occur in the absence of a proposed CDM Project activity[14]. The Marrakech Accords also set out some guidance on the requirements of CDM Project Baselines and states that Baselines are to be established:

(i) in accordance with provisions for the use of approved and new methodologies (see below);

(ii) in a transparent and conservative manner regarding the choice of approaches, assumptions, methodologies, parameters, data sources, key factors and Additionality, and taking into account uncertainty;

(iii) on a project specific basis;

14 Paragraph 44, 17/COP7

(iv) in the case of small scale CDM projects on accordance with the small scale CDM procedures; and

(v) taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans and the economic situation in the power sector[15].

In selecting a Baseline methodology, Project Participants are required by the Marrakech Accords[16] to select one of three Baseline methodology approaches. However, the Marrakech Accords offer little guidance to Project Participants on the most appropriate methodology to employ in project-specific circumstances. The three approaches are :

(i) adopting the use of "existing actual or historic emissions as data". That is, the Project Participants base their Baseline calculations and methodology upon Greenhouse Gas data that exists or can be calculated with reference to known operations;

(ii) emissions from a "technology that represents an economically attractive course of action, taking into account barriers to investment". This approach requires an investment analysis approach regarding possible project alternatives utilising alternative technologies. Once the project alternative with the most attractive financial returns is identified, then the Greenhouse Gas emissions generated from that project alternative are subtracted from the anticipated Greenhouse Gas emissions of the proposed CDM Project; and

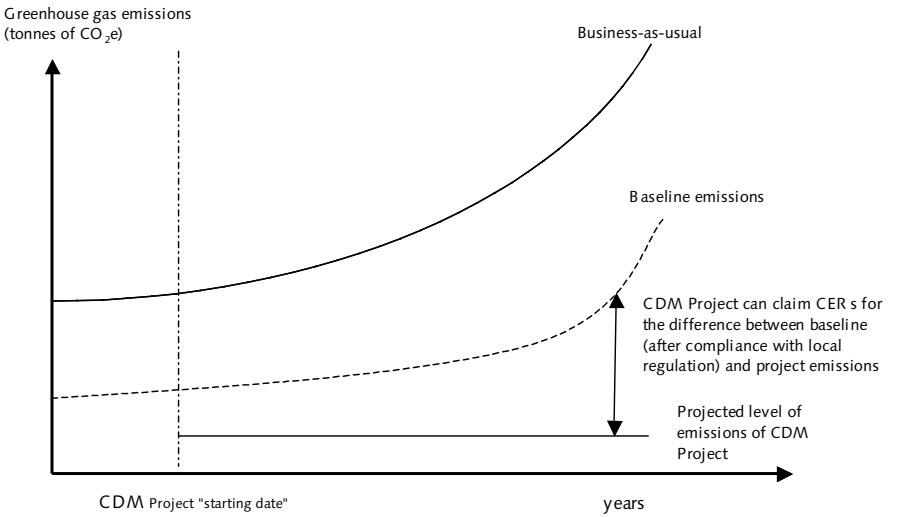
(iii) "the average emissions of similar project activities undertaken in the previous five years, in similar …circumstances, and whose performance is in the top 20% of their category". This method identifies actual plant or technology similar to the proposed CDM Project and calculates the average emissions of this control group over the most recent five year period (assuming top 20% of category status).[17]

A diagrammatic representation of a Greenhouse Gas emissions pursuant to a Baseline methodology relative to "those that would have occurred in the absence of the registered CDM project activity" is set out below.

15 Paragraph 45, 17/COP7

16 Paragraph 48, 17/COP7

17 Thomas, F & Ulrich, S (2002) Clean Development Mechanism CAPSSA Guidelines. The scope of the issues involved in an assessment of a Baseline and calculation of emission reductions achieved by a project are ultimately a technical matter and beyond the scope of this legal Guidebook.



No generic rules have been established by the CDM Executive Board for determining Baselines. The Executive Board has established a "Methodology Panel" whose task is to evaluate Baseline methodologies proposed by Project Participants on a case by case basis although over time methodologies will become standardised. Project developers are required to submit details of new Baseline methodologies to the Methodology Panel, together with their Project Design Document unless a approved Baseline Methodology already exists for that project type.[18] Each methodology submission is evaluated by two independent experts. The Methodology Panel then makes a recommendation to the CDM Executive Board which makes a final decision regarding the Baseline methodology.[19]

What happens outside the Project Boundary is also an important consideration. Any unintended Greenhouse Gas emissions which will occur outside a CDM Project Boundary ("leakage") must also be incorporated into an assessment of a Baseline methodology.

Baseline assessment procedures contained in a CDM Project Design Document must be Validated by a DOE as part of the Registration process. Once a regi-

18 UNFCCC (2003) Procedures for submission and consideration of a proposed new methodology, Annex 2, Report of the 8th meeting of the Executive Board, Bonn.

19 Michaelowa A. Determination of baselines and Additionality for the CDM; A crucial Element of Credibility of the Climate Regime. in Yamin F. (ed) The Kyoto Protocol Flexible Mechanism: Implementation and Evolution within Europe and Worldwide (2004).

stered CDM Project has been implemented, the additional emission reductions must be calculated and Verified by a Designated Operational Entity based on the approved project Baseline. The approved Baseline of a CDM project is crucial to the issue of how many CERs will be issued by the Executive Board to the Project Participants. Subsequent to the monitoring and reporting of reductions in human-induced Greenhouse Gas emissions, the appropriate number of CERs from a CDM Project activity is calculated by subtracting actual CDM project emissions from Baseline emissions and making any appropriate adjustment for emissions leakage over the Verification period. The diagram above illustrates the manner in which the predicted number of CERs might be determined in relation to a CDM project.

(b) Additionality

Emission reductions generated by the CDM must be real, measurable and additional to what would have occurred in the absence of certified project activities.

Various tests were proposed during the negotiations of the Marrakech Accords in an attempt to define "Additionality" requirements. The wording that was ultimately adopted in the Marrakech Accords[20] states:

> "A CDM Project activity is additional if anthropogenic emissions of Greenhouse Gases by sources are reduced below those that would have occurred in the absence of the registered CDM Project activity."

In order to assess whether a project meets the Additionality requirements, project developers are required to provide a factually based estimate of the Greenhouse Gas emission reductions that would be emitted in the most plausible scenario should the proposed CDM project not proceed. However, Additionality assessment criteria extends more broadly than an assessment of Greenhouse Emissions "with project" compared to that which would occur "without project". The Project Participants must also affirmatively prove that the emission reductions which it is predicted that the project will generate will be "additional" to those which would have been emitted in the Baseline scenario (i.e. the most plausible scenario without the CDM Project) and that it was not the most plausible option for the project to be implemented even in the absence of the CDM. Given the wide range of process efficiencies, technologies and industrial practices found in most sectors it has been argued that mere Greenhouse Gas friendly performance relative to the "without project" scenario will rarely be a sufficient measure of Additionality for the CDM[21]

20 Paragraph 43 of the CDM modalities.

21 Michaelowa A. Determination of baselines and Additionality for the CDM; A crucial Element of Credibility of the Climate Regime. in Yamin F. (ed) The Kyoto Protocol Flexible Mechanism: Implementation and Evolution within Europe and Worldwide (2004).

Previous submissions on Additionality criteria to the Executive Board going beyond project Greenhouse Gas related performance and outcomes have included[22]:

(i) outlining the existence of various barriers to the project, e.g. economic, financial, institutional, technological, prevailing practice etc;

(ii) indication that the project was a first-of-a-kind project or that the penetration of technology used in the proposed project activity is very low;

(iii) trend analysis, e.g. of fuel mix in the electricity – generating sector;

(iv) economic or financial arguments that the project is more costly than alternative options, and consequently would not proceed without the availability of revenues from CERs;

(v) arguments that the project exceeded relevant requirements/standards (such as for gas capture from landfills);

(vi) comparing the emissions of the project to that of a baseline (in turn determined by a specific scenario or investment analysis).

Several electricity generation– relevant Baseline methodologies previously submitted unsuccessfully to the CDM Executive Board did not include adequate Additionality procedures – this constituted a major justification for the CDM Executive Board's non–acceptance of these methodologies.[23] Following on from these early rejections, the CDM Executive Board at its 10th Meeting issued further clarifying guidance on determining project Additionality. The CDM Executive Board's examples of "tools" that may be used to demonstrate that a CDM project activity is additional and therefore not the baseline scenario, include:-

(i) A flow–chart or series of questions that lead to a narrowing of potential baseline options.

(ii) A qualitative or quantitative assessment of different potential project options and an indication of why the non – project option is more likely.

(iii) A qualitative or quantitative assessment of one or more project barriers facing the proposed project activity (such as those laid out for small – scale CDM projects).

22 Ellis, J (2003) Evaluating experience with electricity – generating GHG mitigation projects. OECD Environment Directorate/International Energy Agency
23 Ibid

(iv) An indication that the project type is not common practice in the proposed area of implementation, and not required by a Party's legislation/regulations.[24]

The Additionality assessment process is complex and full of uncertainty. This is due in part to the fact that subjective judgement is often required to be exercised to determine the most appropriate and likely Baseline scenario and whether or not an individual project would have proceeded outside the CDM structure.

(c) Case Analysis

Baseline methodologies are assessed by the CDM Executive Board (on the basis of recommendations from the Methodologies Panel) on a project by project basis on the basis of Project Design Documents submitted to the CDM Executive Board . Determinations revolve around complex technical issues which are specific to the particular project and circumstances in the Host Country. This tailored Baseline assessment makes it difficult to predict the success of a particular Baseline methodology proposal and to compare successful and unsuccessful project proposals in a meaningful way.

The table below seeks to briefly discuss two project Baseline methodologies considered by the Executive Board. One Baseline Methodology was accepted and the other was rejected. The table lists the reasons provided by the Executive Board for these decisions.

There is a large degree of uncertainty surrounding the concepts of Baseline and Additionality and the practical application of these concepts by Project Participants. This uncertainty stems in part from the imprecise wording of the Marrakech Accords in so far at they deal with these concepts. The uncertainty is also function of the limited application of Baseline and Additionality methodologies to date. Not only are there inherent problems in determining and applying the rules (such as they are currently articulated) regarding Baselines and Additionality, but there is only a small set of precedents and experiences to draw insight and learn from. This uncertainty present unique risks to CDM Project Participants in the development of CDM Projects.

24 However, the Executive Board has found that even the existence of Host Country regulation which would theoretically require a project to be implemented in comparison to a more emissions-intensive project will not negate "Additionality" if there is not general compliance with that regulation in the Host Country: Analysis of F-CDM-NM0032 Municipal Solid Waste Treatment cum Energy Generation, Lucknow, India.

El Canada hydroelectric project, Guatemala (Unsuccessful)	Incineration of HFC23 waste streams in Ulsan (Successful)
The proposed project was a hydroelectric project that had already been at least partially developed. Comments on Baseline methodology included: • the methodology should not have used the term "environmental additionality" which, the methodology stated, could often be confirmed "without a systematic projection of expected ERs". This was seen as "requiring the Executive Board to write a blank cheque". • the methodology should have contained a calculation of ex ante Baseline emission rates (rather than ex post Baseline emission rates) • the methodology had not explicitly demonstrated that the project activity was not the Baseline. In particular, the Executive Board was not satisfied that the project activity would not have been an economically attractive course of action taking into account the barriers to investment. In fact, the project had already secured a 10 year power purchase agreement and was part of the indicative generation expansion plan for Guatemala. • the project had already been partly completed before the submission to the Executive Board, which required an "explicit and strong motivation" why Project Participants did not consider that the implementation of the project was not the Baseline (i.e. the project would not have occurred anyhow in the most feasible scenario).	The proposed project was to capture HFC23 waste streams which would otherwise be released into the atmosphere from an HCFC production facility (Global Warming Potential for HFC23 is 11,700 times the Global Warming Potential of carbon dioxide). Comments on the Baseline methodology included: • the "additional" greenhouse gas emission reduction achieved would be the quantity of waste HFC23 actually destroyed by the project, less the greenhouse gas emissions generated by the destruction process, less leakage due to the destruction process (for example, emissions associated with the production of purchased energy or transport of sludge to the landfill). • the baseline for the project would be the quantity of the HFC23 waste stream required to be destroyed by applicable regulations in Ulsan or, absent regulation, the typical practice of HFC22 manufacturers in non-Annex I countries. • In the absence of regulations requiring HFC23 destruction it would typically be released into the atmosphere as a destruction facility entails significant capital and operating costs and the Host Country project developer would have no direct economic incentive to incur these costs.

5.5 *Domestic Legal Issues Which Impact the CDM*

5.5.1 *Existing Laws and Regulatory Frameworks*

While the primary rules governing CDM Projects and the trading of CERs are set out in the Kyoto Protocol, ultimately these rules will need to be implemented within Host Country domestic legal systems. For example where a project involves foreign direct investment, there are likely to be legal requirements relating to the regulation of such investment. A project will also still need to meet environmental assessment and regulatory requirements that exist in the Host Country.

Many Host Countries have complex and, sometimes, incongruous legal systems which have arisen as a result of political history and may require CDM Project developers to adhere to unwieldy administrative requirements to obtain the requisite government approvals to develop a project. This could delay commissioning of projects and impose high transaction costs, ultimately discouraging investments in the Host Country in favour of investments in other countries with a more manageable legal system. However, in the absence of

significant regulatory reform, Project Participants in Host Countries must work within the existing rules of the Host Country. To maximise the possibility of attracting CDM Projects, these criteria must strike a balance between protecting the interests of the Host Country and providing unwieldy or burdensome "red tape" which may discourage investment in such projects.

(a) Foreign Direct Investment Laws

A CDM Project may be affected by the foreign direct investment framework of a Host Country if any of the participants, financiers, controlling shareholders or owners of the project are not nationals of the Host Country. It is unlikely that CDM Projects will be affected by foreign direct investment laws if there is no direct foreign investment in the underlying project and foreign involvement is limited to the purchase of CERs. However, if a foreign company proposes to provide finance for the project, take a shareholding in or some ownership of the project, then such investments may well be affected by Host Country laws governing foreign direct investment. For example:

(i) Foreign investment may require government approval,[25] which may not always be forthcoming.

(ii) Restrictions on foreign ownership of assets (particularly land) may apply. In some countries investments are limited to a certain level of equity in a project, while in others any joint ventures must have a minimum of 50% of local ownership.

(iii) Higher tax rates for foreign investment may exist. Alternatively, some countries may not have corresponding taxation arrangements in place therefore resulting in double taxation of profits.

(iv) In some jurisdictions foreign currency controls exist thereby restricting the ability to repatriate project profits.

(v) Finally, laws governing foreign direct investment, may have "unintended consequences" for CDM Projects and CER transitions. For example, developing country laws may restrict the transfer of certain property rights to foreign investors and "property rights" may be broad enough to include CERs.

If Host Country foreign direct investment laws are likely to restrict or impose cost on foreign investment in a CDM project, this may impact on the feasibility of the project. The risk of such interference may be factored into the price that

25 For example, it is necessary to obtain authorization from the President of Brazil, through an Executive Decree if a foreign company wants to open a subsidiary in Brazil. In Malaysia, any foreign company desiring to conduct business in Malaysia must register with the Companies Commission of Malaysia, and pay a registration fee based on the authorised share capital of the parent company.

a purchaser is willing to pay for CERs or foreign direct investment approval may be a condition precedent to the contracts establishing the CDM Project and the transfer of CERs.

In developing CDM Projects it is important that foreign direct investment restrictions are managed so as not to unduly deter CDM investment which would contribute to sustainable development. For those countries where investment is less attractive, not only do such restrictions need to be limited but consideration should be given to offering incentives for CDM investment. For example some developing countries already offer foreign investors attractive tax or investment incentives.[26] In some cases these are focussed on particular industry sectors but the opportunity exists for developing countries to offer "CDM Investment Packages" through their investment agencies. Such packages could include exemptions or reductions in certain taxes.[27] Alternatively, an entity could be established (or the DNA could be given a mandate) to promote foreign investment in a Host Country for the purposes of the CDM.[28]

Such investment could be targeted at specific sectors that are aligned with the Host Country's sustainable development goals (for example, encouraging CDM Projects which would benefit communities in least developed areas of a Host Country). The Project may be caught by any foreign investment laws in place in the country and may therefore require approval from the relevant government body.

Foreign direct investment laws requiring a certain percentage of local procurement by the Annex I party ("local content requirements") or which restrict the volume or value of imports Project Participants can purchase or use to an amount related to the level of products they export ("trade balancing requirements") are required to be ultimately phased out by WTO members under the Trade Related Investment Measures treaty. The underlying social issues which such laws are designed to address in developing countries could

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26 For example, Algeria has introduced investment regulations which grant the same privileges to new foreign and Algerian investors, including various tax and customs duties exemptions. Algeria has also removed many import and export restrictions and lowered the income tax rate for foreign technical and supervisory personnel. India has also recently introduced foreign investment entry strategies enabling, for example, foreign companies to set up temporary offices in India for the purpose of executing a specific project with approval from the Reserve Bank of India. India has also dispensed with the need to seek government approval for foreign direct investment in shares of Indian companies in certain industries and circumstances (for example, power generation and transmission services are included for automatic approval for up to 74% of foreign equity).

27 For example, the Malaysian Industrial Development Authority offers various incentives for foreign direct investment in Malaysia, depending on the business structure of the investment, and provides tax incentives for environmental protection activities, together with statutory tax exemptions for investment in certain regions of the country. Companies implementing a one or more listed "high technologies" may also apply to receive tax exemptions, provided that a certain amount is spent on research and development and highly qualified scientific or technical staff is involved.

28 For example, a Foreign Investment Promotion Board has been constituted in India to assist with the expeditious clearance of foreign investment proposals, and inviting select international companies to invest in India in appropriate ventures. Indian policy appears to be gradually changing so that only large-scale or sensitive projects will need to be submitted for a foreign investment clearance by the government.

potentially be incorporated to some extent in the criteria for "sustainable development" in the Host Country approval process.

(b) Environmental Laws

As with all projects, the development of a CDM Project will most likely require project developers to undertake an appropriate environmental impact assessment. In addition, projects will also need to obtain the necessary environmental consents and licences to build and operate the project. The fact that the project is a CDM Project will not in any way avoid the need to comply with such laws.

It is, however, possible that Host Countries may look at ways of integrating the CDM environmental assessment processes for proposed CDM projects with a significant environmental impact into their existing environmental assessment processes. Adopting such approach would assist in streamlining the assessment of such projects and avoid the need for duplicate impact assessments to be undertaken.

(b) Property Laws

The nature of property laws varies greatly from country to country and, in most cases, existing legal arrangements are unlikely to cover CERs or more generic emission reductions. Experience has shown that it is difficult, though not always impossible, to utilise existing property laws to govern the allocation of legal title and ownership of such rights. As domestic legal systems develop, laws will be developed and registries put in place which specifically deal with the property aspects of CERs. In fact some countries have already introduced property laws that allow registration of such rights while in others Governments have claimed ownership over certain emission rights (see discussion in Section 6.4 on legal title to CERs).

(c) Securities and Financial Regulation

In a number of jurisdictions, the trading of emission reductions and CERs, particularly under long-term forward contracts, falls within the definition of derivatives or financial services arrangements which in turn are regulated under securities and financial laws. Such laws may require the buyers and sellers of such rights to hold licences to trade such products. In nearly all cases, such laws were developed without consideration being given to the CDM or the trading of CERs under an international emissions trading market and as such it remains unclear the extent to which such laws will be modified or will be utilised once an international emissions trading scheme is established.

In the interim, it is important that project developers are aware that, where CERs are sold under certain contractual arrangements in certain jurisdictions, there may be a legal obligation to be licensed to undertake such transactions.

In those circumstances, it will be necessary to investigate what such legal obligations are or alternatively perhaps use the services of a licensed broker to undertake the transaction if that removes the need for a licence.

(d) Tax Regulations

It is also important to be aware that the trade of CERs will in many cases attract some form of tax imposition such as Value Added Tax, consumer tax, sales tax or income tax.

5.5.2 A Role for the DNA in Facilitating CDM Investment

Although DNAs may not have the ability to bring about substantial regulatory reform, they may also be able to play an important role in assisting potential investors to understand and navigate the existing regulatory framework to enable CDM Projects to be registered. Efforts should be made to harmonise the rules governing the pursuit of CDM projects within the existing legal frameworks so as to overcome potential and perceived barriers to CDM investment. Set out below are three key barriers for CDM Projects, and various strategies which Host Countries may consider adopting to mitigate such barriers and encourage CDM investment.

Barriers	Mitigation Strategy for Host Country
No investment in CDM Projects in Host Country due to sovereign or political risks	(a) Host Country needs to prove to potential investors that the political and economical environment is stable enough to justify investment. This could include: • creating a favourable regulatory environment for the CDM • establishing an efficient and capable DNA to work with potential investors and project developers; and • inviting delegations of potential investors to the country to meet potential project developers. (b) Host Country could also provide favourable incentives for CDM Project investments such as tax incentives, Host Country guarantees for local contractors, sovereign insurance; (c) Host Country could approach multilateral organisations such as the World Bank to obtain export credit guarantees for CDM Projects; and (d) Host Country could minimise bureaucratic obstacles to investment by streamlining the DNA and foreign investment approval processes.

Barriers	Mitigation Strategy for Host Country
Difficulty in gaining approvals	Although effective mitigation strategies for project underperformance is largely a matter for Project Participants, DOEs and the CDM Executive Board, the Host Country legal and regulatory infrastructure will also impact on the performance of CDM Projects, particularly with regards to obtaining relevant approvals and resolving any disputes which arise. To create a favourable regulatory environment for CDM Project performance, a Host Country should consider the following factors: (a) Host Country should ensure that its general project development planning and approval processes are well structured; (b) It may be expedient for the Host Country to centralise the project development and planning of CDM Projects; (c) Regulatory regime of the Host Country should be effective so that if the non-performance of the project is due to a construction or contractual dispute, these can be resolved quickly; and (d) Host Country may wish to have some type of oversight (through the DNA) of the monitoring and verification regime of CDM Projects to assist project developers to ensure that CERs are created in accordance with the monitoring plan and international rules.
Difficulty in delivering expected social or economic benefits	(a) The Host Country should ensure that its sustainable development criteria (in the CDM Project approval process) are sufficiently clear and will provide environmental and development benefits for the Host Country; (b) Sustainable development criteria could potentially include social goals e.g. technology transfer or increased local capacity in CDM skills; (c) The Host Country could also establish procedures for monitoring the performance of CDM Projects in terms of sustainable development criteria; (d) The Host Country could ensure that its foreign direct investment regulatory structure aims at delivering social or economic benefits to the Host Country (e.g. through local ownership requirements);[29] and/or (e) The Host Country could work with, inter alia, multilateral institutions or NGOs to undertake capacity-building in the Host Country for project development and CDM skills.

5.6 *Additional Requirements*

Some Host Countries or purchasers of CERs may impose additional requirements on CDM projects which are not covered within the scope of the Kyoto Protocol or Marrakech Accords rules. For example, on the Host Country side, a Host Country may require all CDM Projects to undertake certain community activities. On the Purchaser side entities such as the World Bank have required that all CDM Projects from which they will purchase CERs meet certain social and environmental safeguards. In addition, organisations such as WWF have introduced more stringent CDM project requirements through their "Gold Standard".

29 Although, if it is a member of the World Trade Organisation, the Host Country should ensure that any such requirements are in compliance with the World Trade Organisation Rules including the Trade Related Investment Measures treaty ("TRIMs").

6. Certified Emission Reductions

6.1 Introduction

Each metric tonne of carbon dioxide equivalent reduced, abated or sequestered by a CDM Project and approved by the CDM Executive Board subsequent to Verification and Certification will be issued as a CER. The Marrakech rules explicitly define CERs as:

> a unit issued pursuant to Article 12 and requirements thereunder, as well as the relevant provisions in the annex to decision -/CMP.1 (Article 12), and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5.

Early contracts in the CDM market tended to transfer all rights and benefits associated with the generation of emission reductions by the CDM Project to the CER Purchaser,[30] providing the emission reductions were verified by an independent entity. This was because the CDM was only in early development stages and the Executive Board had not yet undertaken significant steps towards its prompt start. The early ERPAs, such as the World Bank ERPAs, created detailed provisions requiring verification of emission reductions and obligations for the seller to work to have Verified Emission Reductions credited as CERs when this was possible. In effect, the purchaser was paying an identical unit price for each Verified Emission Reduction and taking the risk that the Kyoto Protocol would not enter into force and that the Verified Emission Reductions would not be worth anything to them for compliance purposes.

However, at the date of writing this Guidebook, the CDM Executive Board is some way towards the "prompt start" to the CDM. Some DOEs have been accredited and it is likely that projects will be registered and CERs issued within the foreseeable future. As a result, purchasers are shifting towards contracts which only provide for the sale and purchase of CERs and not just Verified Emission Reductions. In the interim period before the CDM Executive Board actually begins to issue CERs, this is generally done by way of various condition prece-

30 For example, many ERPAs contained a "catch-all" clause providing that before CERs could be issued, generic contractual rights which had been subject to certain verification procedures would be transferred. Previous ERPAs have used the terms "Carbon Credits," "Carbon Rights," "Emission Reductions" and "Kyoto Compliance Units" – this Guidebook uses the term Verified Emission Reductions. Ultimately, the term used is not itself critical as long as it is defined in such a way as to be clear and broad enough to encompass any rights or benefits (such as emission reduction, green rights or renewable energy) that may be derived from the physical activity of reducing Greenhouse Gas emissions. Early contracts endeavoured to ensure that the Verified Emission Reductions were of such a nature that they presented the maximum opportunity for conversion into CERs, providing for detailed Verification procedures and an ongoing obligation on the seller and buyer to work towards having CERs issued for the project.

dents to a contract to the effect that a CDM Project must be registered and the requisite registry accounts established before the delivery obligations will take effect. This will mean that the Seller will not be in breach of its delivery obligations if, due to circumstances outside of its control, the CERs cannot actually be issued from the CDM Executive Board into the registry account of the purchaser.

This Guidebook therefore focuses primarily on the creation and transfer of CERs through the CDM Executive Board registry system, rather than Verified Emission Reductions.

6.2 When can CDM Projects Begin to Generate CERs?

A CDM Project can not generate CERs until it is registered. However, once a project has been registered, it will be eligible to generate emission reductions from the "starting date" of the project activity, providing that this date occurred on or after 1 January 2000 and the project applies for registration before 31 December 2005. CERs can then be issued once Verification is undertaken by a Designated Operational Entity. The ability of CDM Projects to create credits for the period between the start of the project and the date it is registered was subject to some confusion, but was clarified at COP9.

The "starting date" of a project activity has been defined by the CDM Executive Board as "the date at which the implementation or construction or real action of a project activity begins." If the project has already started and the Project Participants seek to generate CERs from activity before the date of registration, the Project Design Document must prove that the project met the Additionality requirements based on the starting date of the project.

6.3 How Long can a CDM Project Create CERs?

CDM Projects can only generate CERs in the duration of their crediting period. In a Project Design Document, Project Participants for CDM Projects (other than sink projects) must choose a defined crediting period of:

(i) a maximum of seven years, which may be renewed at most two times. A crediting period can only be renewed if a DOE confirms to the CDM Executive Board that the original project baseline is still valid or has been updated taking account of new data where applicable; or

(ii) a maximum of ten years with no option of renewal.

For a sequestration based CDM Project (a "**Land Use, Land Use Change and Forestry**" or "**LULUCF**" project), project developers must choose a defined crediting period of:

(i) a maximum of twenty years, which may be renewed up to two times, subject to a DOE's confirmation that the original project baseline is still valid; or

(ii) a maximum of thirty years with no option of renewal.

The baseline for the CDM Project will be valid for the whole crediting period, regardless of any changes during that period which may affect the Additionality of the project. Selection of an appropriate crediting period is not a legal issue, but rather a commercial decision dependent upon the project itself. The longer the operational life of a project and the likelihood that it will continue to meet the Additionality criteria, then the longer the crediting period that is likely to be chosen.

Parties will therefore need to carefully assess the best approach for the particular project, bearing in mind the associated costs of revalidation of the baseline and the expected lifetime of the project.

It is worth noting that a DOE will only be able to confirm that a project baseline is still valid if it meets the "Additionality" criteria discussed below in Section 5.4.3. This means that Project Participants may choose the longer, non-renewable crediting period option for a CDM Project if there is a risk that something will occur during the crediting period to negate the Additionality of the project. The baseline is generally fixed for the duration of the crediting period, although baseline emissions may be calculated ex post, providing that such calculation adds transparency and conservativeness to the methodology.

The choice of a longer crediting period to insure against a change in national policy (which negates the Additionality of a project) could also reduce the perverse incentive for Host Countries to delay implementing more effective environmental laws which could adversely affect the Additionality of existing CDM Projects.

6.4 Legal Ownership of CERs

The ultimate issuance of CERs by the CDM Executive Board is based on the Verification of the underlying reductions in Greenhouse Gas emissions that have been achieved by the CDM Project. In order for Project Participants to be eligible to claim title to CERs, they must also be able to claim title to the rights and benefits from the underlying Greenhouse Gas emission reductions. As it is a relatively new concept that it is possible to create a valuable commodity (CERs) from reducing Greenhouse Gases, little consideration has been given to who will be legally entitled to any benefits from Greenhouse Gas reductions (and therefore entitled to CERs).

The general approach taken to date and one adopted by the project developers and CER purchasers including Parties such as the Dutch Government and the World Bank is that in the absence of any law or contract to the contrary, the project owner who undertakes the specific CDM Project activity is the legal owner of any CERs produced and entitled to deal with them exclusively. Any other approach such as the nationalisation of CERs by a Host Country government would remove any incentive for the private sector to develop CDM projects.

Nonetheless, it must be recognised that the Kyoto Protocol is an international agreement providing rights and obligations for State governments. The Marrakech Accords do not deal with CER ownership, and the view has been expressed that the reduction of Greenhouse Gases is in effect the management of a natural resource. In many countries natural resources such as the air and water are seen to be the responsibility and property of the government. For example, water savings are often claimed to be the property of a national government and by extension this reasoning could also apply to the reduction of Greenhouse Gases. Therefore, some Host Countries may consider that CERs are sovereign rights which can only be owned and traded for profit by the government. Outside of the CDM context, the New Zealand Government has announced that all rights and obligations arising from certain carbon sequestration activities reside with the Government, and within the CDM context there have been indications that China is also considering the ownership of CERs.

Few domestic legal systems have laws in place that recognise CERs or determine the way in which legal ownership is to be allocated. It is crucial for Host Countries to consider the issue of ownership of CERs and whether they are sovereign or private rights. Government policy on this matter should be made clear to potential CDM Project Participants and investors through the DNA. If Greenhouse Gas emission reductions are considered to be a "natural resource" (and therefore the property of the government), it may be possible for the government to allow private CDM Project developers to enter into concession arrangements to manage these resources and create CERs from them. The Host Country government may charge a fee for this or take a proportion of the CERs from the project. The Host Country government could also elect to act as a "clearing house" for CERs so that all CERs from any CDM Projects in the Host Country must be cleared through the Host Country registry account before Project Participants can deal with them.

The CER Purchaser's primary concern when entering into a contract to buy CERs from a CDM Project will be to ensure that the Seller under the ERPA can prove that it has legal title to the CERs. It is likely to insist on appropriate warranties in the ERPA to this effect and provide remedies under the contract if the Seller cannot provide legal title to the CERs.

Even where the government does not claim any rights over CERs, the title to underlying Greenhouse Gas reductions may be subject to dispute between different entities involved in a CDM project. The establishment, registration and implementation of a CDM Project often results from a network of complicated legal arrangements between a variety of entities including, for example, the landowner, the lessee of the land, the project developer, the construction contractor, the project manager and the project owner. CDM Projects can also involve complex supply arrangements, multi-party joint ventures or technology agreements. It is possible that different parties may own the emission reduction process, the plant and the land, and that other parties such as banks may have underlying interests in these also. The legal title to emission reductions may be particularly unclear in carbon sequestration forestry projects where a different party may own the land, the trees and the sequestered carbon above and below the ground. Where a CDM Project involves some form of concession agreement (for example, an agreement with the government to manage a natural resource) it is important that the agreement clearly allows the project to take ownership of all the rights to emission reductions.

Before implementing a CDM Project, the Project Participants should review all legal arrangements relating to the project to ensure that the rights to emission reductions have not already been assigned to another party. For example, in an Afforestation Project, have the rights and benefits to emission reductions been reserved by the land owner in a leasehold arrangement? Have there been any contracts entered into to sell "carbon rights", "carbon offsets" or credits to another party? In Host Countries where there is limited knowledge or understanding about the CDM, it is unlikely that contracts will have specifically dealt with the issue of emission reductions or carbon credits. However, particularly in a project where a number of entities could have claims on emission reductions, the Project Participants should confirm that none of these entities will lay claim to the CERs generated by the project.

6.5 The Transfer of CERs through the Registry System

CERs are electronic rights which must be traded within an international registry system comprising of:

(i) the CDM Executive Board registry, which is responsible for initially issuing CERs in accordance with the CDM procedures discussed above; and

(ii) Annex I national registry accounts (the Kyoto Protocol rules do not provide that non-Annex I developing countries can establish national accounts).

As at the date of writing this Guidebook, the CDM Executive Board is in the process of developing a CDM registry system in accordance with the relevant UN procurement procedures. Various Annex I countries have also begun to develop their own registry systems for their own trading regimes (most notably

the European Union) which ultimately are expected to be compatible with the CDM Executive Board registry.

A CDM registry administrator will operate the registry under the authority of the CDM Executive Board. The actual registry will be a standardized electronic database that contains common data elements relevant to the issuance of CERs. The specific design and format of this registry will need to conform with further guidelines to be adopted.

When the CDM Executive Board receives a Certification Report, providing there is no request for review within a 15 day period, the CDM Executive Board will instruct the CDM registry administrator to issue the quantity of CERs specified in the Certification Report into the pending account of the CDM Executive Board in the CDM registry. The registry administrator will then issue the CERs into the national registry accounts or CDM Executive Board accounts of the Project Participants in accordance with their request. The registry administrator will also forward the quantity of CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting the costs of adaptation to an account within the CDM registry.

Apart from issuing CERs, the CDM registry will establish accounts for each non-Annex I Party that hosts a CDM Project activity or for each non-Annex I Party that requests such an account[31] Accounts will also be established by the registry for the purpose of holding and managing shares of proceeds for administrative expenses and the adaptation fund. Each account within the registry will be given an individual account number comprised of a Party identifier and a unique number.

Each CER issued will have a unique serial number made up of a number of identifying elements: the relevant commitment period for which the CER is issued, the identity of the non-Annex I Party that hosted the CDM Project activity, a number unique to the CER for the identified commitment period and Party of origin and a project identifier number unique to the CDM Project activity for the Party of origin. Each CER will only be held in one account in one registry at a time.

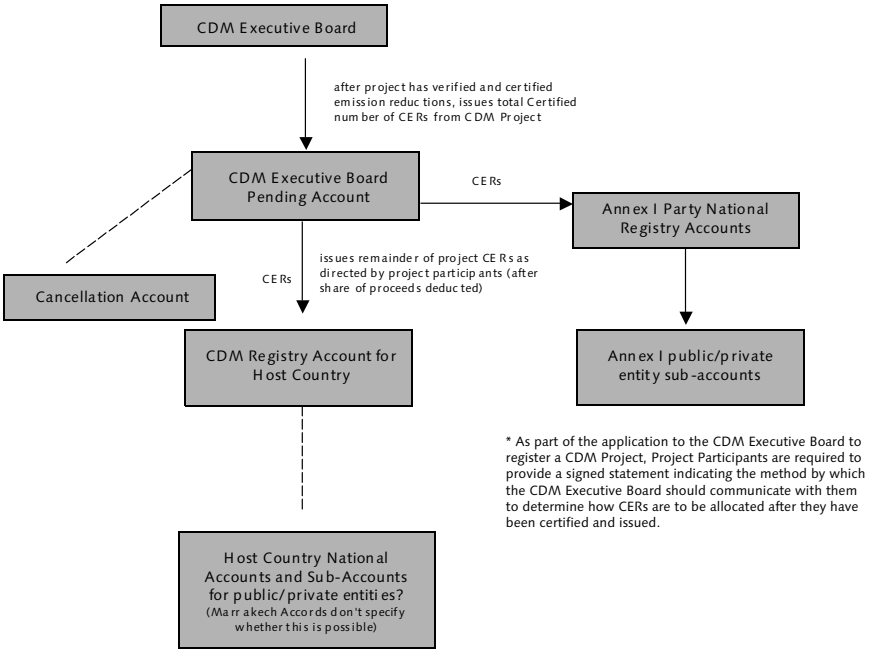
All CDM Executive Board registry information on CDM Project activities for which the registry has issued CERs will be made available through a user-friendly, publicly accessible interface. This information will include the project name, the project location (including the Party and town or region in which the CDM Project activity is located), the years in which CERs are issued, the identity of the DOEs involved in the Validation, Verification and Certification

31 These accounts will be required because without binding emission reduction targets under the Protocol, non-Annex I Parties will not be required to establish national registries.

of the CDM Project activity and downloadable electronic versions (subject to confidentiality provisions) of the various reports relating to each CDM Project activity.

The registry will also be required to make publicly available non-confidential information for each CDM account. This information will include the identity of each account holder, the name and address of the (legal entity) representative of each account holder, the CERs by serial number issued to that account, the identity of accounts and their respective national registries that have acquired CERs from the account (including the acquired CERs identified by serial number) and current CER holdings by serial number in the account.

Set out below is a diagram of the progress of CERs once they are issued for a particular CDM Project.



Once CERs have been issued by the CDM Executive Board, if Project Participants wish to trade them, they must record such trades through the, which has not yet been developed as at the date of this Guidebook.

Although the Marrakech Accords clearly set out the way in which the CDM registry accounts should be established, both the Kyoto Protocol and the Mar-

rakech Accords are silent on a number of issues which will impact on the ability of Project Participants in Host Countries to hold and transfer CERs. These issues are likely to be resolved by future decisions of the Executive Board – however, as at the date of this Guidebook, outstanding issues include:

(i) whether the CDM Executive Board registry will open sub-accounts for public and private entities of non-Annex I Parties (i.e. Host Countries);

(ii) whether CERs held in non-Annex I Party accounts can be transferred to accounts in Annex I Party national registries or other holding accounts in the CDM registry; and

(iii) whether non-Annex I Parties can acquire CERs in their accounts in the CDM registry other than receiving them from the pending account (i.e. whether developing countries will be able to effectively participate in the emissions trading regime under Article 17 of the Kyoto Protocol).

The determination of these issues will impact on the ability of Host Countries, and particularly companies within Host Countries, to develop CDM projects and sell CERs in a manner which is totally independent of Annex I Party involvement.

6.6 CER Pricing

The issue concerning the way in which CERs are priced has received considerable attention. Early trades of Verified Emission Reductions and CERs occurred at between US$2 and $10, with an average price around US$4-6. Such prices are simply reflective of the price buyers were prepared to pay in the context of an uncertain and developing regulatory framework which hinged on the Kyoto Protocol. However, a view has been expressed by a number of non-Annex I country governments and NGOs that such prices did not represent a true and fair value for CERs.

It must be understood that the early pricing of CERs has occurred in a context of uncertainty as to whether or not the Kyoto Protocol will enter into force. Pricing largely attempts to strike a balance between the concerns of purchasers and project developers. Purchasers set prices on the basis that Verified Emission Reductions or CERs may ultimately have no value, should the Kyoto Protocol or other relevant regulatory systems not enter into force while at the same time seeking to secure long term supplies of CERs at a low price, thereby hedging against future significant price increases. On the other hand, project developers are concerned to secure a fair price now for a commodity which could increase significantly in value over time should the Kyoto Protocol enter into force.

While it is impossible to accurately predict how CER pricing will develop, there is no doubt that greater regulatory certainty, coupled with clear penalties for

non compliance in an emissions trading scheme, will result in upward pressure on CER prices. The introduction of the "linking directive" under the European Union trading regime should have an immediate effect on CER prices as will the ratification of the Kyoto Protocol. Nonetheless, a number of non-Annex I country governments are investigating steps to increase bargaining power in relation to the price of CERs, for example by acting on behalf of project developers to sell CERs so that even small project developers are assured of obtaining the best price available.

Finally, whatever price project developers ultimately agree with CER purchasers, pricing structures within contracts have significant implications. In many cases the price negotiated today will be "locked in" for the term of the contract and, in the event that prices rise or fall significantly, may create an incentive for the buyer or seller to breach the contract if they believe significant financial gain could be achieved by doing so. Furthermore, where contracts adopt shortfall or non-delivery provisions that require project developers to purchase replacement CERs from the market in order to replace contracted CERs which their CDM Project has failed to deliver, project developers will be significantly exposed if the CER market price has increased in comparison to when the contract was entered into. Pricing issues will need to be managed through contractual provisions, as discussed further in Chapter Nine.

7. Structuring and Financing a CDM Project

As noted earlier, Article 12 of the Kyoto Protocol envisages that a CDM Project will benefit non-Annex I countries and that Annex I countries will be able to use CERs from CDM Project to meet their compliance obligations. There is no further discussion within Article 12 or the Marrakech Accords as to how Annex I investment in a CDM Project is to be structured. In this regard, a CDM project may be structured in any manner determined by the Project Participants, although the ultimate structure adopted will be influenced by the extent to which a project requires external finance or is to be financed from within the Host Country. While in some cases, Annex I countries or companies have provided debt financing or taken equity in a CDM Project, in general most early CDM Projects have dealt with the CDM aspects of the project (the sale of CERs) separately to the underlying project, selling the project CERs under a discrete contractual arrangement to the underlying financial loan or investment agreements for the project. Ultimately, the way in which a CDM Project is structured will depend upon the nature of the project, the number of Project Participants involved and the role the CERs are to play in attracting finance, investment or revenue to the CDM Project.

Once an appropriate structure for the project has been chosen, a crucial issue for the Project Participants (and sellers of CERs) will be to ensure that:

(i) they have carefully considered the various risks surrounding the particular CDM Project (particularly those risks relating to the developing nature of the CDM regime); and

(ii) these risks are allocated to the entity that is best able to control them under the contractual arrangements they have with other entities involved in the CDM Project (for example, construction contractors, Designated Operational Entities, fuel supply contractors, end product purchasers, CER Purchasers).

In addition, the Project Participants and CER Purchaser must consider or determine issues such as:

(i) the appropriate price per CER (for some multilateral organisations, this may incorporate a premium for additional social and environmental benefits);

(ii) the volume of emission reductions which the project will be expected to create during each Verification period (i.e. expected number of CERs to be sold); and

(iii) who will be responsible for the various transaction costs incurred in registering and operating the project (for example, the cost of commissioning a DOE to undertake Validation or Verification).

These latter types of decisions are technical and commercial decisions which will be the subject of negotiations between Project Participants and CER Purchasers. It is beyond the scope of this Guidebook to provide detailed advice on how to determine such issues, although Chapter Nine provides a discussion of the different negotiating perspectives of a CDM project participant in comparison to a CER Purchaser.

7.1 Potential Project Structures

There are many forms and combinations of investment relations through which the implementation and financing of a CDM Project can be established. There are also many permutations of the manner in which risk can be shared amongst the various entities involved in a CDM project. The sharing of risk will tend to influence the way the overall project and the transaction of CERs are structured.

What is common to all CDM Projects is that the project structure will be affected by risks, both those specific to the CDM and the Kyoto Protocol rules, and more general commercial or institutional risks involved in project development. Such risks must be assigned by way of legal contracts to the various entities involved in a CDM project, including the project developers, financiers, suppliers and offtakers or end-users of the project's output. CDM Projects will often utilise existing legal and financial contractual forms but such forms must be modified in two ways:

(i) to take into account and contractually assign CDM-specific risks (such as risks arising from proving that a project meets the Additionality requirements and risks arising from the fact that the Kyoto Protocol may not enter into force); and

(ii) to create and contractually assign the additional product created by CDM Projects – CERs.

In all CDM Projects, the price to be paid for products and services (including interest under any financial loan documents and the price for CERs) will reflect the assignment of risks amongst the various entities.

The discussion below describes some of the potential ways in which CDM Projects can be structured with reference to the way CERs from that project will be sold or assigned and what role they will play in the transaction. This list of examples is by no means exhaustive, but rather illustrative of some potential options.

Potential CDM Project structures could involve the following (or a combination of the following) options:

(a) Direct Sale of CERs from a Host Country Driven CDM Project

Many of the early CDM Projects have been implemented independently by Host Country Project Participants and the CERs sold directly to an Annex I CER Purchaser with no further involvement of that purchaser in the project. For example, a large Indian or Chinese company could develop a CDM project based on its own financial arrangements with no need for Annex I investment in the project and sell CERs discretely to one or more CER Purchasers through forward contracts (or through spot contracts once the project is registered and CERs have been issued).

A direct sale of CERs suits the Unilateral CDM Model which, as described above, occurs where the project is developed and managed by the Host Country project developer without the assistance or involvement of any Annex I project participant. In addition, many of the ERPAs entered into by the World Bank's Carbon Finance Business or on behalf of the Netherlands Government are also a direct sale of CERs, although the World Bank and the Netherlands Government have tended to be listed on the Project Design Document as Project Participants.

CERs may be sold by forward arrangements to an Annex I Party entity before they are issued. Alternatively, if the Host Country Project Participants are able to access a registry account within which they can hold CERs and are able to trade CERs from that account, CERs can be sold from a Unilateral CDM Project at any time after they have been issued. As discussed in Section 5.3 there is some uncertainty at the time of writing this Guidebook as to the ability of Host Country Project Participants to hold CERs in registry accounts and to trade those CERs into national registries of Annex I Parties. However, some non-Annex I Host Countries have nonetheless expressed an intention to develop and implement CDM projects without a forward sale of CERs, instead assuming that they will be able to retain the CERs and sell them into the market through spot transactions at a later stage.

If the Executive Board decides that it will not establish registry accounts for developing country private Project Participants, or that it will not transfer CERs from developing country accounts to Annex I national registries, developing country Project Participants may need to enlist the assistance of an Annex I Party to the Kyoto Protocol which has established a national registry. It may be possible to enter into legal arrangements with the Annex I Party whereby the Annex I Party will open accounts in its national registry on behalf of developing country Project Participants and transfer CERs as directed by those participants in a relationship similar to a trust or escrow arrangement. Whether this is possible will depend on the policies of Annex I Parties in relation to the CDM and their national registry systems.

The contractual arrangements for a Host Country driven CDM Project could involve a simple ERPA to sell the CERs through a direct sale transaction. Payment for CERs could occur upfront to enable the project to be commissioned (although this is unlikely, particularly in a highly commercial transaction), or can occur after delivery of CERs. The ERPA would generally cover issues such as the risk that the Kyoto Protocol will not enter into force or the risk that the project may not be eligible to create CERs. If the involvement of the Annex I CER Purchaser is limited to paying for CERs once they have been delivered, the Purchaser takes less risk and the price payable for CERs may be higher.

The ERPA will generally be negotiated directly with potential CER Purchasers, who will be concerned to ensure that the seller has clear legal title to any CERs arising from the project and that they have not been assigned to any third party.

In addition to a general ERPA it is also possible to enter into an option arrangement whereby a third party or a project participant is provided with an option to purchase CERs from the project at its discretion. This may be built into an existing ERPA or may simply be an independent arrangement. In such cases options are usually granted at an option price with an agreed strike price for when that option is exercised.

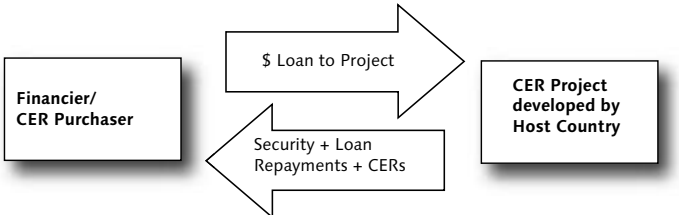
(b) Provision of Debt Finance in Return for Part Payment in CERs

Alternatively, an investor (e.g. an Annex I Project Participant) can be involved as financier to the underlying project, providing a portion of project finance in the form of a loan. For example, a British financial institution could provide finance to a large CDM project and receive CERs as part payment of a fixed proportion of the interest for that loan. The bank could then sell the CERs to liable entities in Europe under the EU Emissions Trading Scheme.

The loan will generally be secured against the assets of the project (such as land, project infrastructure, payments under supply contracts or other legal rights) and will attract interest. Contracts can be entered into so that part of the repayment for the debt is made in CERs. In this case, the obligation to transfer CERs would be structured as consideration for a partial down payment for the loan received.

Under these arrangements, the financier's interests in the project extend beyond a future interest in CERs and therefore it may be more concerned to hedge various project and credit risks in the agreement and ensure that the project is likely to be successful.

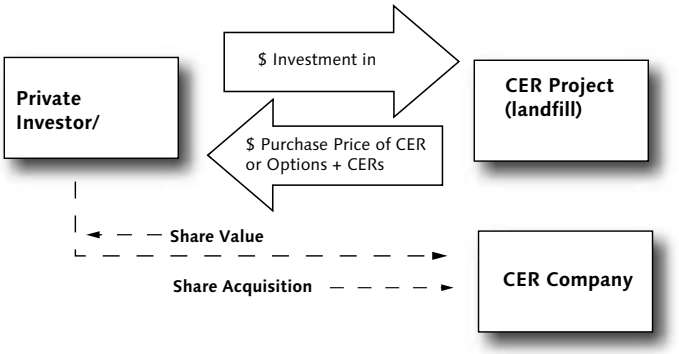
Where debt finance is provided by a financier to a CDM Project and as part payment the CERs are transferred, the legal arrangements for the transfer of CERs will be incorporated into the finance documentation as part of the repayment conditions. The financial contracts must also comply with the requirements of the laws of the Host Country, for example, with regards to foreign investment and project finance.



(c) Equity Investment in Return for Revenue Stream from CERs

Equity investment in a project can also be provided by an investor potentially in return for equity in the project and a share of the CERs arising from the project. For example, a Japanese company invests in a South African landfill project in return for a share in the South African landfill company which is developing the project or the assets of the project.

Again, the contractual structure will be based in part on investment agreements in the Host Country and must comply with all local investment law requirements. In some circumstances, the Project Participants and the investor may create a separate company to hold the CERs and the investor may take equity in the form of shares in this company. The exact nature of the corporate and equity structure will depend on the laws of the Host Country, including taxation regulations.



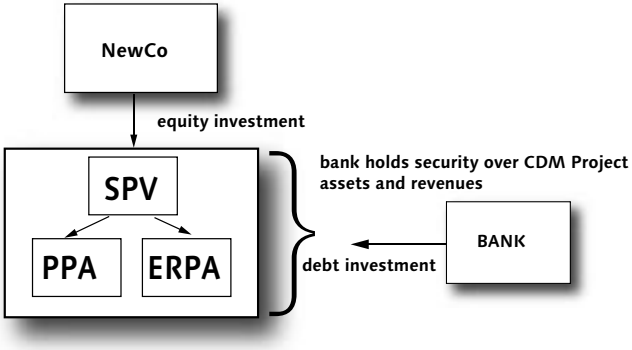
(d) Non-recourse Project Finance for a CDM Project

Non-recourse project financing involves the funding of the construction of a new CDM Project in circumstances where the debt financier's security comprises wholly of real and personal property of the project and payments due under supply contracts (including CER supply agreements). This arrangement

necessitates that supply agreements (including ERPAs) must be in a "bankable" form satisfactory to financiers. Servicing and repayment of finance for the project is based entirely upon the cash flows derived from the project. This structure means that in the event of default, financiers can only have recourse against the special purpose entity established to construct and operate the CDM and not the Project Participants themselves.

An example of a CDM Project financed on a non-recourse basis would be in circumstances where a New Zealand company (NewCo) establishes a special purpose vehicle company (SPV) in Thailand and this company implements a wind farm project. Subject to the foreign direct investment laws in Thailand, the SPV would receive the rights to CERs from the project together with any profits from electricity sold by the project. The project would be funded by a combination of NewCo's equity investment in SPV and SPV's acquiring of non-recourse debt finance from a bank. The bank would secure its loan to SPV by holding a charge over all project assets, plant, equipment, land and relevant revenue generating agreements such as the wind farm's power purchase agreement (PPA) and the ERPA to sell CERs from the project. By the bank limiting its security for its loan facility to assets and revenues of SPV, NewCo is able to allocate most project risks (including the risk of potential default under the loan agreements) to SPV. A particular attraction of this form of project finance is that NewCo is not required to account for the debt taken on by SPV. Accordingly, the debt burden for the project lies solely with SPV. The project would be "off balance sheet" for NewCo and would therefore not impact its credit rating.

A diagrammatic representation of this non-recourse project finance structure is provided below.

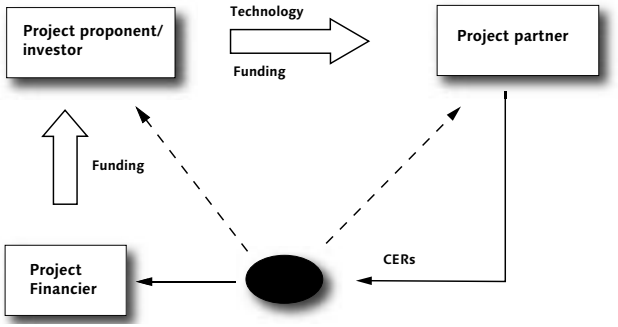


(e) Technology Swap in Return for CERs

This is an arrangement whereby an investor provides or licences technology to a project which is paid for partially with CERs from the project. For example, a

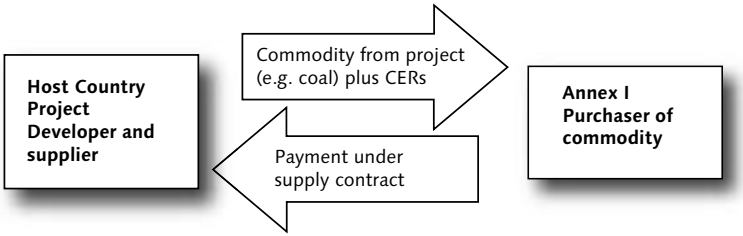
Spanish company provides new renewable energy technology to a project being developed in China, which would otherwise have incurred significant licensing fees to obtain such technology. In return, the Spanish company receives CERs which it can use for its compliance obligations under the European Union Emissions Trading Scheme.

This would involve a simple contract under which the consideration for the CERs is the provision of a particular type of technology which the Project Participants may not otherwise have access to. Appropriate warranties and indemnities would need to be included in the documentation.



(f) "Bundling" CERs with Other Commodities Through Off-Take Arrangements

In the case of CDM Projects that produce other commodities in addition to CERs, it is possible to structure off-take arrangements to bundle those products and the CERs created on the basis of emission reductions from the project. For example, a Japanese energy retailer purchases coal from a company in China which has also established a CDM Project for mining related methane avoidance. The CERs from the CDM Project are "bundled" with the coal supplied to the Japanese mining company for extra value added and to assist to offset emissions from the Japanese energy retailer's business.



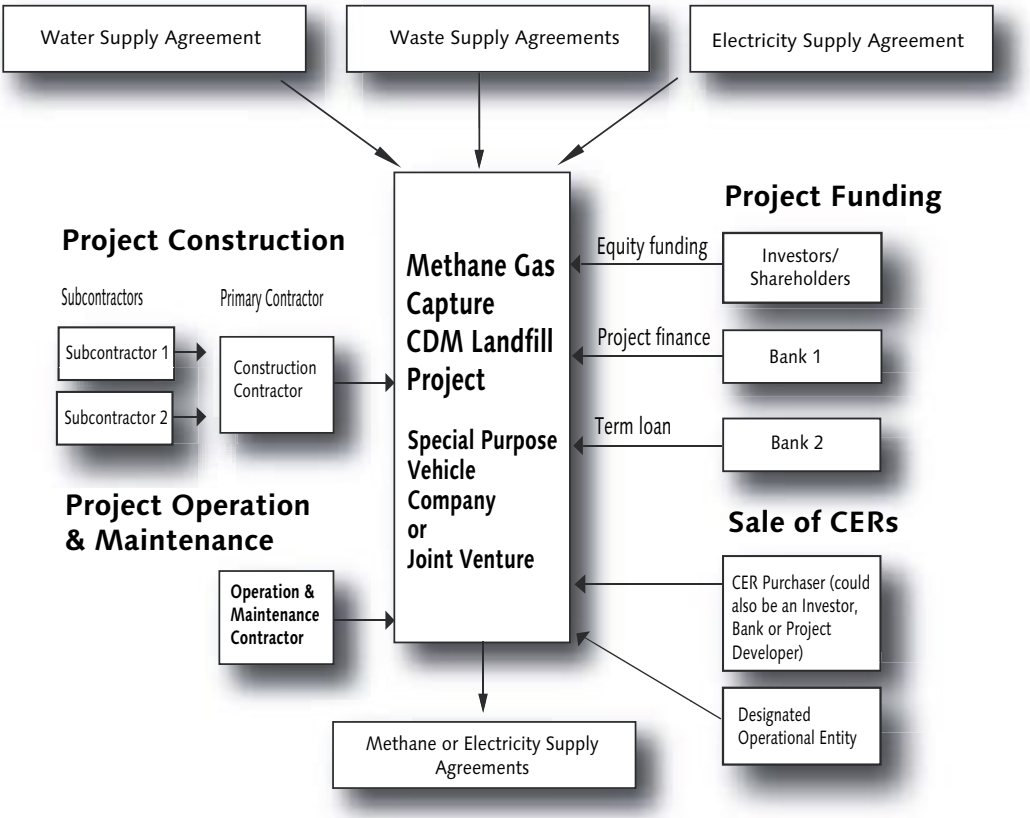
7.2 Annex I Financing Issues and ODA

The provision of any public finance for a CDM Project (e.g. finance from an Annex I country government) will be limited by the Marrakech Accords prohibition on any diversion of official development assistance resulting in CDM finance. Any finance provided to CDM Projects must also not be included in the calculation of any funds that an Annex I country is required to provide to developing countries under any provisions of the Kyoto Protocol or Marrakech Accords.

7.3 Allocation of Risks within the Project Structure

A CDM Project is implemented through a network of legal arrangements between Project Participants, investors, banks, contractors and purchasers of the ultimate products from the project (including CERs). In structuring a CDM Project it is fundamental that all legal responsibilities and risks are properly allocated among the project documents to the party relatively better able to bear those risks. The greater the number of parties involved in a CDM Project, the greater the number of risks that will need to be allocated. The diagram below sets out the network of legal arrangements involved in a hypothetical methane gas project. The project developer (which could be a joint venture or an individual company) in such a project would need to ensure that all of the risks inherent in the project, (as discussed in detail in the next chapter) are properly allocated amongst the different parties with whom it has legal arrangements.

Example CDM Project Structure



8. Managing CDM Project Risks

8.1 Introduction

Undertaking any type of project entails a multitude of risks. Identifying, allocating and assigning risk is a process which needs to be agreed commercially, but reflected in contracts through careful legal drafting. To achieve the best economic outcome for both parties, the general rule is that a risk should be contractually assigned to the party which is relatively better able to manage that risk. For risks which are beyond the control of either party (such as force majeure or governmental interference), if these risks are assigned to a party by contract, the assignment of risk should be reflected in the contract price.

The relative newness of the CDM, the constantly evolving rules and regulations, and uncertainty associated with the entry into force of the Kyoto Protocol increases the risk profile for undertaking CDM Projects in comparison to other types of projects. There are three main risk categories which a CDM Project presents for stakeholders:

(i) risks due to the fact that the project is incorporated in a developing country with certain political and regulatory uncertainties;

(ii) general project risks which are common to all projects in developing and industrialised countries; and

(iii) special risks due to the fact that a revenue stream from a CDM Project relies upon a new and developing international legal framework.

As with any general commercial transaction, the greater the risk involved in purchasing CERs, the lower the price that a purchaser will be willing to pay and the more stringent the conditions it will endeavour to place on the seller (generally the project developer).

For example, if a CER purchaser is required to provide upfront payments for CERs to provide a CDM Project to become operational, the purchaser's risk exposure is much greater than if payment is only made after CERs are delivered. The risks would include the possibility that the project may never become operational, the Kyoto Protocol registry system may not function as expected, or the Seller may become bankrupt and the purchaser may not be able to recover the money it has spent. The purchaser of CERs will factor this greater level of risk into its calculations of price and will also aim to place various obligations on the seller to mitigate this level of risk. Obligations could include the requirement that the Seller maintain a certain level of credit rating, that the Seller be required to have the project operational by a certain date and that significant penalties are imposed for breach of the agreement.

Generally, the parties will allocate the risks discussed above on the basis of which party has control over the occurrence of that particular risk. If neither party has control over a risk (such as the entry into force of the Kyoto Protocol), the assumption of this risk may be reflected in the price paid for the CERs. Alternatively, the parties may provide some flexibility in the contract in case the risk does occur (i.e. the Kyoto Protocol does enter into force) and allow for the termination of the contract in that event or the acquisition of Verified Emission Reductions in place of CERs.

Risk allocation will be dealt with through contracts between the various participants, financiers and purchasers of CERs through measures such as:

(i) conditions precedent to the entry into force of a contract (for example, the preference of some carbon buyers has been to include a condition precedent in ERPAs to the effect that the contract is conditional upon the entry into force of the Kyoto Protocol);

(ii) guarantees from parent companies or Host Country governments as to the financial stability of the project developer;

(iii) force majeure clauses covering risk contingencies such as change in law or policy in the Host Country making the project unfeasible or natural events leading to lower than expected emission reductions;

(iv) laying off particular risks to other parties such as contractors or the DOE for the project;

(v) adequate warranties and indemnities in contracts;

(vi) procuring insurance for various project and credit risks; and

(vii) providing rights of termination in certain events.

8.2 Types of Risks in a CDM Project

By their nature, CDM Projects will involve a higher degree of policy risk than other general projects as they involve a new and developing area of law and cross-jurisdictional transaction of rights. As discussed above, the types of risks inherent in a CDM Project include:

(i) risks due to the fact that the project is incorporated in a developing country with certain political and regulatory uncertainties;

(ii) general project risks which are common to all projects in developing and industrialised countries; and

(iii) special risks due to the fact that a revenue stream from a CDM Project relies upon a new and developing international legal framework.

Many project developers and banks will be accustomed to and proficient at dealing with the first two types of risk. The third type of risk is new to many market participants and requires an understanding of the legal framework behind the CDM, as discussed in the first chapters of this Guidebook. The Kyoto Protocol risks will be relevant in attracting finance and government support to the project. These risks may also impact upon the project if the international or domestic rules or politics around the Kyoto Protocol develop in an unexpected manner. They are largely managed through careful drafting of an ERPA, as discussed further in Chapter Seven. Set out below is an analysis of these three types of risks and examples of the circumstances in which they can arise. We have assumed for the purpose of this Chapter that a potential CDM Project has passed all of the regulatory criteria of the Kyoto Protocol and the Host Country.

8.2.1 Host Country Political and Sovereign Risks

From the perspective of potential investors and project developers, projects in developing countries (such as CDM Projects) will be considered to present a higher level of risk than a similar project in an industrialised country. There is a huge diversity within developing countries and generally, the less developed a country's political and legal infrastructure, the greater the perception that it may present sovereign risk for investors, particularly in relation to issues such as financial viability, currency fluctuations, creditworthiness, the possible nationalisation of project assets and an absence of an efficient legal system in which parties can enforce their contractual rights. These risks will be considered by investors and project developers when deciding whether or not to get involved in a CDM Project at all. In addition, they can be mitigated and assigned through contractual arrangements in the different contracts making up the CDM Project.

There are many Host Country policy decisions that can impact upon a CDM Project. The way in which these risks can be mitigated will depend on factors such as whether the Host Country is a participant in the CDM Project and whether a multilateral institution will issue an effective and reliable sovereign risk guarantee.

(a) Examples of Risk

Type of Risk	Examples
Change in laws of the Host Country	• The Host Country changes its foreign investment policies so that a Host Country entity must own or manage the project. • The Host Country imposes a tax on CER revenue from the project or on CERs themselves. • The Host Country nationalises aspects of the CDM Project (e.g. CERs)[32] or the project itself (e.g. an electricity substation) • The Host Country privatises aspects of the CDM Project or the Project itself (e.g. through privatisation of the electricity industry). • The Government of a Host Country is overthrown or voted out and the new Government introduces entirely different laws and regulations with impacts on the CDM Project.
Failure to approve a CDM Project	The Host Country fails to approve a CDM Project through its DNA or the project is prohibited by foreign investment or securities trading laws.
Administrative burdens	The Host Country requires a variety of administrative procedures to be followed so that undertaking the Project would involve a significant amount of time and expenditure on "red tape".
Host Country Currency Fluctuates	• The International Monetary Fund withdraws support to the Host Country, causing a drastic fall in the value of the Host Country currency. • The inflation levels of the Host Country are so high that there is not enough currency to pay project costs such as staff wages or payment for inputs such as fuel or electricity, or these become prohibitively expensive. • The Host Country places strict controls on the use of foreign currency for project payments and the amount of currency that can be transacted.

(b) Impacts and Mitigation Strategies

The higher the level of sovereign and political risk, the higher the possibility that laws or policy may change so as to make the CDM Project illegal, financially unfeasible or unprofitable. To protect their investment, potential investors will look carefully at the political and economic situation in the Host Country before investing in a particular CDM Project.

Investment in a CDM Project will only occur if an assessment is made by the investor that the levels of sovereign and political risk are acceptable in comparison to the predicted financial return from the project.

If the level of risk is perceived to be too high, investors will not become involved in the project at all. If they do decide that the level of risk is acceptable for involvement in the project, they will factor the perceived level of risk that sovereign and political events may detrimentally impact the project into the terms of their investments. For example, a CER Purchaser may seek some relief from the impacts of changes in Host Country rules or policies through the ambit of force majeure provisions in an ERPA allowing a right of termination. If

32 The New Zealand Government has retained ownership of the sequestration potential of its sink assets and this caused considerable concern for its forestry industry. It is also possible that developing countries (i.e. China) will nationalise certain CERs (for example, those created by government entities) and only conduct emissions trading on a national basis.

the definition of "force majeure" in an ERPA includes any act of a government, any change in policy of the type discussed above would be covered and would give the purchaser the right to terminate the contract without any further consequences. This effectively means that the project developer inherits the risk of regulatory change, as if it occurs the purchaser can walk away from the contract and the revenue stream for CERs from the project will cease. The project may then no longer be economically feasible. The scope of force majeure provisions and rights of termination should therefore be carefully considered by both parties, who should be comfortable with the allocation of risk of regulatory change which impacts upon the CDM Project.

If the Host Country Government is a project participant, it is in a better position to manage political and sovereign risks. As discussed above in Section 5.5, there are several actions that a Host Country may take to provide comfort to investors that the regulatory risk parameters are acceptable (for example, establishing an effective and functioning DNA or creating legislation and policies designed to recognise and support CDM Projects).

In addition, several multilateral institutions and banks such as the Asia Development Bank and the European Bank of Reconstruction and Development provide guarantees for sovereign or country risks to encourage investment into developing countries. Political risk insurance is also offered by entities such as the Multilateral Investment Guarantee Agency, the Overseas Private Investment Corporation, and private sector groups such as Lloyds of London and American International Group.[33] Such guarantees or insurance may be appropriate in some circumstances where an investor is intending to provide a loan to the underlying project as well as purchasing CERs from the Project. Coverage of such guarantees or insurance could include:

(i) currency inconvertibility or inability to transfer currency;

(ii) confiscation, expropriation, nationalisation or deprivation of project assets;

(iii) political upheaval such as strikes, civil unrest or terrorism; and

(iv) breach of contract (e.g. non-delivery by state owned entities of project inputs such as fuel supplies or non payment by state owned entities for products of the project such as electricity).

33 For example, the Multilateral Investment Guarantee Agency will insure certain eligible investments in member countries against loss from three classes of political risk, namely inconvertibility of investment proceeds or inability to transfer them out of the Host Country, expropriation of project assets or war and civil disturbances. In some circumstances MIGA will also insure against losses to an investor due to breach by the Host Country of an investment contract with it if the Host Country will not abide by certain dispute resolution procedures.

Such insurance policies may, however, contain carefully worded conditions to limit the exposure of the insurer and may only cover some circumstances. To further mitigate the perceived political risk, the Host Country may wish to provide a counter-guarantee or indemnity to the organisation to show its commitment to the CDM Project, although it may be difficult for an investor to enforce such a guarantee or indemnity in a time of crisis or after a change of government.

8.2.2 General Project Risks

In addition, CDM Projects will also face risks that are common to any project in a developing or industrialised country. Such risks include:

(i) the risk that an event beyond the parties control (e.g. a force majeure event) may impact the ability of the project to operate; and

(ii) the risk of cost overrun from the project, such as due to delayed construction.

These types of risks should be mitigated through efficient management of the CDM Project and contractual clauses between the different parties to the project.

(a) Examples of Risk

Type of Risk	Examples
Force Majeure ("Act of God")	• A fire burns down the entire plantation which is the subject of a CDM Project. • A terrorism attack destroys a power station which is the subject of a CDM Project. • An earthquake destroys the infrastructure of a CDM Project. • Riots break out in the Host Country leading to all businesses being shut down and a curfew imposed.
Risk of Project Underperformance (non- force majeure)	• The project developer miscalculated the projected performance of the project and it does not create as many CERs as expected. • A new management committee of the project developer company decides that the CDM Project is not financially profitable and decides to stop operating it.
Market Risks	• The Kyoto Protocol enters into force and CERs are suddenly worth five times what the CDM Project has sold them for. • The natural gas fuel which the CDM Project relies on increases in price so that it is no longer economically feasible to use it and it is replaced with oil.
Risk of Cost Overrun	• The clean technology required for the CDM Project does not work and requires significant expenditure to remedy. • A dispute breaks out between the parties to the CDM Project costing large amounts in legal and advisory fees. • The commissioning of the CDM Project is delayed and penalties are imposed under the construction agreement or the ERPA. • It costs a large amount to pay advisors to register the baseline methodology for the project with the CDM Executive Board. • The DOE charges much more than expected for Validation or Verification and Certification.

(b) Impacts and Mitigation Strategies

These types of risks are common to any large scale project and many project developers and potential investors will have significant experience in handling them. It is beyond the scope of this Guidebook to provide a detailed risk analysis for general projects. However, set out below is a brief discussion of these types of risks as they may apply to the legal relations surrounding a CDM Project.

(i) Force Majeure Risk

If a CDM Project is operating and encounters a force majeure event such as fire, storms, wind damage, pestilence, floods or droughts, this could potentially affect the project developer's obligations to supply both the main product of the project (e.g. electricity) and also to supply CERs to a CER Purchaser. The risk of most natural events, particularly fire, causing significant damage, are highly dependent on the individual project. Factors such as location, management practices, and structuring the project itself (e.g. spatial consolidation of the planted areas in an Afforestation or Reforestation project) will all impact on the risk of these events.

Although some of these can be mitigated by introducing performance criteria for management practices, it is wise to include carefully worded force majeure clauses in any contract. The parties should consider exactly what types of natural events will fall within the scope of force majeure. In addition, what type of government actions will fall within the scope of force majeure (so as to excuse the parties from their contractual obligations)?

The risk of an event occurring with an impact on the ability of the project to generate CERs could also be mitigated by retaining a buffer of the projected emission reductions from the project. In effect, this means that the project developer inherits the risk of force majeure, as they will offer fewer CERs for sale at all (and therefore will receive less CER revenue from the project).

(ii) Project Underperformance

It is good practice to provide scheduled performance criteria for a CDM Project, ensure management are aware of these criteria and track compliance so as to be aware as early as possible of any potential problems with the performance of a CDM Project. If an investor has a financial stake in the underlying project as well as being a purchaser of CERs, it will be particularly concerned to track the progress of the project so as to have early warning if its investment is performing below expected thresholds so that it can take steps to mitigate any problems. Common contractual mechanisms that contracts may incorporate to ensure that both parties have early warning of any project deficiencies include:

(A) setting minimum criteria for projects such as site preparation, suitability of a site for the relevant project, undertaking comprehensive due diligence prior to the project's commencement, and reliability and experience of staff used to establish and maintain the project;

(B) identifying minimum performance milestones for commissioning of the project (which enables early identification of problem areas);

(C) imposing a requirement for regular independent assessments of performance, including need for regular performance reports; and

(D) reserving a right to inspect and verify the project's performance as required.

The project developer (and seller of CERs) should be aware of the extent of its liability under its various contractual arrangements with the offtakers from the project and the CER Purchaser if the project does not perform as expected.

The seller and purchaser of CERs should carefully consider the minimum requirements for delivery of CERs and the applicable penalties in the case of underperformance of the project below this minimum level.

The Project Participants should also decide how much oversight the CER Purchaser should have over the operations of the project – an appropriate level of involvement will depend on the extent of the CER Purchaser's involvement in the CDM Project. If the CER Purchaser is also supplying underlying finance to the project, it may insist on the ability to closely monitor the project. If a CER Purchaser's involvement is limited to paying for CERs after they have been delivered, it is not appropriate for it to have such a high level of involvement in overseeing the operations of the project.

(iii) Cost Risk

An important consideration for CDM Project developers will be the allocation of the costs involved in the CDM Project, and particularly those costs involved in undertaking the processes required to have CERs issued. The project cycle mandated by the CDM rules is aimed to achieve environmental integrity of CDM Projects and requires a high level of specialist knowledge for each step, particularly in the creation of the baseline and the Verification of emission reductions. Transaction costs can therefore be higher than those of other types of projects.

For early CDM Projects where the international regime is still developing and all stakeholders involved (including, often, financial and legal advisers) are still developing their understanding of the application of the rules, costs and fees involved in a CDM Project may be significant. Costs should be carefully allocated as between the Project Participants and the

purchaser of CERs. Such costs could be built into the price paid for CERs (so that the seller will be responsible for paying the costs) or provided up front by the buyer and then deducted from the initial payments for CERs (this is a practice which has been established in some of the World Bank carbon funds and the Netherlands funds transactions). As the market develops, however, it is likely that purchasers of CERs will simply look to acquire CERs which have already been created at the seller's cost and the cost of creation will simply be reflected in the price at which the CERs are sold.

In addition, project developers must also manage the risk of cost overrun in commissioning the project. Finance providers will seek to ensure that the CDM Project can be developed on time, within budget and to performance specifications in order for it to produce the predicted revenue and to pay back the investment. Investors may consider that completion risk is higher for CDM Projects than for the development of equivalent projects in industrialised countries. The risk of unexpectedly high costs on completion of the project can be mitigated by setting realistic milestones for the commissioning of a project and working closely with project management to achieve these milestones. Cooperation from the DNA of the Host Country and other relevant government agencies will also assist to smooth the progress of project development.

Finally, both project developers and CER Purchasers would prefer to avoid excessive costs caused by litigating disputes arising under the ERPA or any other disputes arising during the commissioning and operation of the CDM Project. Such costs can be minimised through alternative dispute resolution procedures, as discussed further in Section 9.4.

8.2.3 Kyoto Protocol Risks

Finally, CDM Projects entail special Kyoto Protocol risks due to the fact that they will sell CERs, which are legal rights based on an intangible reduction in Greenhouse Gases, created under international law in a regime which has not yet entered into force. These risks include:

(i) the risk that CDM Projects may be rejected by the CDM Executive Board on the basis that the project baseline is not in compliance with the Kyoto Protocol rules (i.e. does not meet the Additionality criteria);

(ii) the risk that the parties may not be able to establish legal title to the emission reductions on which the CERs are based;

(iii) the risk that Greenhouse Gases may not be properly monitored and accounted for so that the project will not generate as many CERs as expected;

(iv) the risk that the Kyoto Protocol will not enter into force and CERs cannot ultimately be created;

(iii) the risk that the market for the CERs created by the CDM Project may rise or fall so that the contracts entered into to sell them are no longer economically beneficial; and

(v) the risk that the CDM Project may face community or NGO opposition based on differing perspectives on fluid concepts such as "Additionality" or "sustainable development".

These risks are generally specific to the sale of CERs, rather than other aspects of the project, and should be dealt with through appropriate provisions in the contract to sell CERs from the project (e.g. an ERPA).

(a) Examples of Risk

Type of Risk	Examples
International Regulatory Risk (Kyoto Protocol Risk)	• The Kyoto Protocol does not enter into force. • The CDM Executive Board does not register the project. • The UNFCCC decides upon another legal approach to climate change so that the CDM is no longer applicable.
Inaccurate Monitoring or Verification of Emission Reductions	• The project manager fails to monitor the Greenhouse Gas emissions from the project in accordance with the monitoring plan. • The DOE fails to provide an accurate verification report on the amount of emission reductions achieved.
Community or NGO Opposition to CDM Project	• NGO groups oppose a Reforestation project as it will involve replanting agricultural land and displacing a group of farmers. • NGO groups oppose a project as one of the Project Participants is from a country which has not ratified the Kyoto Protocol. • The local community opposes a wind project due to the noise and the impact on local bird life.
Dispute over legal title to CERs	• The lessor of the land on which a forest is planted for a sinks CDM Project claims title to the emission reductions from the sink. So does the land owner. So does the project developer who planted the trees. So does the CER Purchaser. • The CDM Project developer "double dips" and sells emission reductions from the project to the CER Purchaser and also as contractual rights to another corporation as contractual rights for its internal compliance program.

(b) Impacts and Mitigation Strategies

If the particular risks posed by the developing international regime eventuate so as to obstruct the commissioning of CDM Projects, potential investors will be less inclined to place their investments in CDM Projects and will look elsewhere to make profits. These risks should therefore be managed, where possible, by

careful planning and consultation between the community, project developers and other stakeholders. However, the Project Participants and CER Purchaser will generally have little, if any, influence over the ways in which the international rules and politics of the Kyoto Protocol develop. Where it is impossible to mitigate risks, the price payable under the various contracts in the CDM Project should reflect the distribution of risks as between Project Participants, suppliers and offtakers from the project, financiers and CER Purchasers.

(i) Kyoto Protocol Regulatory Risk

As discussed further in Chapter Seven, during the interim period while the Kyoto Protocol rules and processes are developing but the agreement is not yet in force, any contracts to sell CERs should make provision for the risk that the Protocol may not enter into force or that international legal regime around climate change may develop in an unexpected manner.

Although this interim regulatory period provides significant risks for potential CDM Project investors, it also offers them substantial opportunities. Those purchasers who are currently purchasing CERs from CDM Projects are doing so on the assumption that the Kyoto Protocol will enter into force and that CERs will increase in market value or that Verified Emission Reductions will have value in some other future market.

(ii) Community or NGO Opposition

The consequences of strong community or NGO opposition can include requirements to modify proposals or cause delays in the implementation of the project. Some of this risk can be mitigated by ensuring community consents are a condition precedent, and that the community (via community representatives) is consulted in all stages of the process. This is incorporated to some degree into the CDM Registration process, as the DOE is required to conduct stakeholder consultation on the proposed project and make the Project Design Document public. Such requirements should draw the attention of any community stakeholders or NGOs who object to the project prior to the Registration of the project.

(iii) Inaccurate Carbon Accounting

Project managers in Host Countries may not be accustomed to complying with the specific monitoring requirements of a CDM Project. Any CDM contracts must allocate specific responsibility for management issues, in particular the monitoring of emission reductions in accordance with the monitoring plan.

It is particularly important for a CDM Project that the monitoring plan provided to the CDM Executive Board in the Project Design Document is strictly adhered to for the crediting period of the project and that accurate calculations are made of the emission reductions achieved by the project. If the monitoring plan is not complied with, a DOE may be unable to submit a Certification Report to the CDM Executive Board and CERs will

not be issued. This will obviously affect delivery obligations under an ERPA.

Identifying appropriately trained and experienced staff in the area of CDM management is difficult, particularly since CDM Projects have only recently been introduced and can require a new set of management expertise. Once they have been recruited, the loss of key staff members may cause project delays and result in additional costs of compliance for Project Participants.

Greenhouse Gas accounting issues can arise because of the inherent difficulties in quantifying the precise amounts of emission reductions resulting from a particular project. The specific risk in a CDM Project is that accounting standards will differ between Project Participants. Although the Kyoto Protocol rules establish general accounting guidelines, there is a significant possibility that accounting methods adopted will differ between jurisdictions, in particular between developed and developing countries. Different accounting methods therefore have the potential to cause significant contractual disagreement between project partners. Accordingly, specific accounting procedures should be agreed between the parties at the commencement of negotiations and embodied within the contract.

The Greenhouse Gas Protocol Initiative was established in 1998 by the World Business Council for Sustainable Development to develop internationally agreed accounting and reporting standards to monitor emissions of Greenhouse Gases. This initiative provides step by step guides for companies to monitor their Greenhouse Gas emissions and in particular in relation to emission reduction projects such as CDM Projects. The International Organisation for Standardization is also in the process of developing guidelines for measuring, reporting and verifying entity and project-level Greenhouse Gas emissions (ISO/AWI 14064). This should help clarify a standard method for monitoring emissions for CDM Project.

Another issue arises as to liability in the event that emission reductions are incorrectly measured by the Project Participants or incorrectly verified by the DOE. This is an issue that should be clearly addressed in the contract between Project Participants and the DOE who undertakes Verification and Certification.

The CDM Executive Board may recommend to the COP/MOP to suspend or withdraw the designation of a DOE if it finds that the entity no longer meets the accreditation standards or applicable provisions in decisions of the COP/MOP. The affected Project Participants have the right to an opportunity for a hearing prior to the suspension or withdrawal of a DOE.

In this case, the CDM Executive Board may appoint a different DOE to review and, where appropriate, correct such deficiencies. Where such

a review reveals that excess CERs were issued, the DOE that has been withdrawn or suspended must acquire and transfer into a cancellation account of the CDM Executive Board in the CDM registry, an amount of CO_2 equivalent reductions equal to the number of excess CERs issued. This must be done within 30 days after the end of the review. Any costs related to the review, shall be borne by the designated DOE, whose designation has been withdrawn or suspended.

The Marrakech Accords provide that if a DOE's accreditation is revoked or suspended by the CDM Executive Board, registered project activities will not be affected unless "significant deficiencies" are identified in the relevant validation, verification or certification report for which the DOE was responsible. If an independent review indicates that the deficiencies in the report had led to excess CERs being issued, the DOE is required to acquire and transfer equivalent rights to the excess amount to a cancellation account in the CDM Executive Board.

Project Participants should ensure that any liabilities placed upon them in the ERPA for incorrect verification should be reflected in the contract with the DOE.

(iv) Legal Title Disputes

Many jurisdictions, including most Host Country jurisdictions, do not have legislation recognising emission reduction rights. Without any legal rules as to creation and ownership of CERs, disputes can arise over the legal title to "emission reductions," suppliers have the potential to sell more CERs than they produce, and buyers can be left short. This is a matter that should be expressly dealt with in any contracts to sell CERs.

For example, in the case of forestry projects, where land on which forest grows is leased and there has been no attempt to contractually or legislatively allocate carbon rights, the legal title to sequestered carbon could be the subject of dispute. Theoretically it could be possible for a different person to own the land, the trees and the sequestered carbon. While general legal principles may assist, they remain largely untested and uncertain. This is especially a problem in relation to projects involving carbon sequestration, where a significant portion of the carbon is stored in the soil and the tree root system even after the trees are felled, giving rise to potential disputes with the land owner, lease holder or owner of the physical trees or forest.

At a national level, purchasers may have no mechanism other than a contractual right to ensure that they have a valid claim to future CERs produced by a CDM Project. Contracts should therefore be carefully drafted to explicitly assign title to the emission reductions generated by the CDM Project as agreed between Project Participants and any CER purchasers.

(v) CER Market Risks

The market price of CERs will vary depending on issues such as the costs required to implement a CDM Project, the number of CDM Projects, the availability of temporary credits, the cost of domestic abatement in Annex I countries, the status of the Kyoto Protocol and other markets (i.e. the European Union emissions trading market), the prospects for the CDM after the First Commitment Period and the level of sovereign risk in the Host Country.

A major issue for both buyers and sellers of CERs is to strike a balance between arranging the sale of CERs immediately at a fixed price or waiting to see which way the market price will move in the future.

The market for CERs is still developing and it is likely that if the Kyoto Protocol entered into force, the market value of CERs would rise significantly. Purchasers of CERs are therefore anxious to create disincentives for project developers to breach an ERPA if the market price for CERs rises. On the other hand, if the Kyoto Protocol does not enter into force, CERs may be ultimately worthless. If a project developer has implemented a project on the basis of additional revenue from the sale of CERs, it will therefore also be concerned to ensure that the buyer cannot walk away from the contract if the market price of CERs drops.

Purchasers and sellers may therefore prefer to include a range of remedies in the ERPA to provide a disincentive for the other party to breach the contract if the market price for CERs moves in their favour. These are discussed further in Chapter Seven.

There are several other potential options to mitigate CER market risk, including:

(i) The use of options for the CER purchaser to purchase additional CERs to those sold under the ERPA at the market price at a later date; and

(ii) Calculating the price for each payment of CERs based on the market price so that a different price is paid upon each issuance of CERs.

As discussed above, the choice of an appropriate method to allocate price risk will depend on whether the buyer and seller would prefer to commit to a fixed price and run the risk of market fluctuation (which could potentially turn in their favour). Most of the early "learn by doing" CDM buyers have preferred to set a relatively low fixed price for the minimum delivery of CERs with the option to purchase any additional CERs provided at the market price.

As a general comment on the market for CERs, on 23 July 2003, the European Union Commission adopted a draft directive on the linking of the EU emissions trading system with JI and CDM Projects. This so-called

"linking directive" would enable European companies participating in the EU's emissions trading scheme to use credits from CDM Projects to meet their European Greenhouse Gas emissions reduction targets, potentially as early as 2005. The current version of the EU Linking Directive would enable project credits from CDM Projects to be used for compliance in the EU emissions trading scheme from 2005 even if the Kyoto Protocol does not enter into force. If this directive enters into effect, it is likely to significantly expand the market for CERs and may have a positive effect on CER prices. The penalty for non-compliance with the EU emissions trading scheme is 40 Euro per tonne of non complying emissions up to the end of 2007 and 100 Euro for the First Commitment Period. If non compliance penalties reached this magnitude, an effective compliance regime and a large market[34] (where indications are that demand will outstrip supply) it is likely that the linking directive may have a large impact on CER demand, price and the nature of penalties for non-delivery. The ability of CDM Projects to sell CERs into the EU scheme will depend on the rules of eligibility created by that scheme (i.e. whether they are more stringent than the existing rules under the Marrakech Accords) and the extent to which liable entities under the EU scheme will engage in international emissions trading to meet their compliance targets.

8.3 Overcoming Barriers to Project Implementation

The risks faced by a CDM Project will arise at different stages in the development of a CDM Project under the CDM Project cycle described in Chapter Three. While some risks are specifically related to a particular stage of project development, others may arise at any time during the life of the Project. Nonetheless, a summary of some major CDM Project risks within the context of the major steps involved in developing a project are set out below. The level of risk to which each party is exposed at the various stages of the project will be proportionate to the amount of legal commitments they have undertaken.

34 The EU emissions trading scheme will cover the existing members of the European Union and all states currently pursuing EU membership (bringing the total coverage to 28 states), and will cover 40% of total emissions.

<table>
<tr><th colspan="2">Stage One: Developing the Concept of a CDM Project</th><th>Comments</th></tr>
<tr><td>Meeting Key Requirements</td><td>• Does it qualify as a CDM Project?
• Will the Host Country approve it (i.e. does it meet sustainable development objectives)?
• Is someone willing to finance the project?
• How will the project be structured? (i.e. funded by Host Country project developer, Joint Venture between Project Participants, new company established for purpose of CDM Project)</td><td rowspan="2">The level of exposure to risk depends on how the project is structured. Generally at this stage nobody has undertaken contractual obligations to deliver, so the level of exposure is limited to:
• costs spent by the project developer in undertaking the initial analysis of the project's eligibility; and
• costs spent by the project developer in presenting the project to potential investors.
However, depending on how far the project concept has been developed and whether external consultants have been engaged, these costs can be significant for the project developer.
These costs can be mitigated by:
• the project developer having a good working knowledge of the eligibility requirements for CDM Projects, including in particular the issues involved in establishing a baseline;
• the project developer having an understanding of the types of considerations that potential investors will be taking into account. This will enable it to structure its proposals to potential investors to convince them that the project has an acceptable risk profile and will generate a sufficient level of return.

The project developer should not undertake any binding legal obligations to deliver CERs unless it is satisfied that the project will be eligible as a CDM Project and that it will have sufficient financial backing.

The project developer should also seek some guidance from the Host Country DNA as to its perspective on the potential project and whether it is likely to support it as a CDM Project.</td></tr>
<tr><td>Examples of Risks</td><td>• Project does not pass the Additionality criteria and the baseline methodology is not approved by the CDM Executive Board
• The Host Country DNA fails to approve the project under the "sustainable development" criteria of the Host Country
• The CDM Project is eligible under the CDM rules but nobody will provide finance to the project</td></tr>
</table>

Stage Two: Registering and Commissioning a CDM Project		Comments
Meeting Key Requirements	• Will a DOE validate the project to have it registered with the CDM Executive Board? • Will the CDM Executive Board register the project? • Does the project comply with the legal requirements of the Host Country and can it obtain the necessary authorisations and consents for the project (e.g. environmental licences and development consents)? • How quickly can the project be commissioned and are there any legal obligations to commission by a certain date?	At this stage, the project developer will begin to incur more costs and enter into contractual obligations. Costs include: • the costs to obtain a Validation Report from a DOE; • legal and other advisory costs • costs associated with obtaining appropriate licences and authorisations; and • construction costs. The project developer may enter into contracts with: • the construction contractor; • the DOE; • the CER Purchaser; • suppliers of goods required for the project (e.g. water, fuel); and • offtakers of goods required for the project. The project developer should ensure that it is not exposed to an unduly high level of risk. For example, if it undertakes contractual obligations to the CER Purchaser to have the project commissioned by a certain date, this obligation should be passed on to the construction contractor through the contract with them. In addition, the project developer may want to make the Registration of the project a condition precedent to the contracts which it enters into (including supply contracts for other project commodities such as electricity).
Examples of Risks	• The DOE will not validate the project due to community or NGO opposition • The technology for the project does not work as expected, leading to delay in commissioning • The construction costs are significantly more than estimated. • The project developer is in breach of contractual obligations to commission the project or deliver CERs or other products by a certain date	

<table>
<tr><th colspan="2">Stage Three: Operating a CDM Project
– Monitoring and Verification</th><th>Comments</th></tr>
<tr><td>Meeting Key Requirements</td><td>• Will the project perform as expected and generate sufficient emission reductions and other products (e.g. electricity) to make it financially sound?
• Is the project manager capable of following the monitoring plan?
• Will a DOE accurately verify and certify the CERs?
Is the underlying project operation secure (e.g. the generation of electricity)?</td><td rowspan="2">If the project does not perform as expected and generate CERs, the project developer may be in breach of its obligations to the CER Purchaser under the ERPA and may face penalties under that agreement. It should therefore ensure that:
• the project manager is contractually liable for any faulty monitoring of the project in accordance with the monitoring plan;
• the DOE is liable for any incorrect Verification or Certification;
• the ERPA does not impose harsh penalties on the project developer for events that are not within its control or the control of someone with whom it has a binding contract.

The project developer should also be certain that will be a reliable delivery of items required for the operation of the project (e.g. water, electricity, staff) and that it has a contract to sell the additional products delivered by the project (e.g. electricity). It should ensure that it will be able to recover any penalties payable for non-performance under the ERPA if such non-performance is due to a breach of a supply or delivery agreement by another party.</td></tr>
<tr><td>Examples of Risks</td><td>• Project manager does not follow monitoring plan
• DOE does not accurately verify the CERs
• In a wind farm project, the level of wind is not as high as expected and the project does not generate as much electricity or as many CERs as anticipated.
• Underlying project fails or is disbanded (e.g. due to breach of power purchase agreement or excessive fuel costs)</td></tr>
</table>

Stage Four: Entering into a Contract to Sell CERs (ERPA)		Comments
Meeting Key Requirements	• What happens if the market price for CERs moves significantly up or down so that one party has an incentive to breach the ERPA and buy or sell CERs on the market? • What is the commodity to be delivered under the ERPA – will it be CERs or just contractually Verified Emission Reductions? • Can the Project Participants and the CER Purchaser agree a price for CERs in light of the amount of risk borne by each under the ERPA? • What happens if the Kyoto Protocol does not enter into force? • What happens if there is a dispute between the parties?	Ultimately the terms of the ERPA will depend on the circumstances of the Project and the price offered for CERs. In early CDM Projects, there have only been a small number of purchasers seeking to purchase CERs (i.e. the World Bank and the Netherlands Government). Allocating risk in the contract has often depended largely on the internal policies of the purchasers and the project developers have been bound to largely standardised terms. As the market develops and more purchasers enter, there may be more flexibility for project developers to incorporate their own terms into an ERPA. If a CER Purchaser is relatively inflexible about the terms of an ERPA, the project developer should make sure that any risks which it bears under the ERPA are adequately passed on to other parties such as the construction contractor and the DOE through contracts. The ERPA should clearly provide the nature of the right being transferred. For example, does delivery only occur when CERs are actually issued into the purchaser's account, or will delivery of Verified Emission Reduction fulfil the seller's obligations? If the buyer will pay for Verified Emission Reductions before the registry system is operating or if CERs cannot be issued, it will generally insist on an obligation in the contract for the seller to assist to transform these to CERs when this is possible.
Examples of Risk	• The Kyoto Protocol fails to come into force and CERs are worth nothing in a trading market. • The ERPA agrees that the project developer will deliver Verified Emission Reductions but 1 year into the project the Kyoto Protocol enters into force and the purchaser wants to receive CERs for the delivered Verified Emission Reductions.	

9. CDM Contracts

9.1 Introduction

As with other projects and transactions, a CDM Project can be structured, and the CERs arising from that project sold, in a variety of ways. There is no universal approach to the way in which the creation and sale of CERs is documented although the nature of contracts will to some extent depend on whether the deals are spot or forward transactions. Rather, and particularly in the pre-Kyoto marketplace, contracts for the sale and purchase of CERs from CDM Projects are individually negotiated for each project, taking into account the specific circumstances of individual projects, the domestic rules of the governing law for the contract and the legal and business constraints binding each of the parties.

In some cases, CERs may be part payment on an equity investment or financial loan to a CDM Project. In others, a project developer and Annex I private entity joint venture partner may share CERs in accordance with agreed pro rata distributions. As indicated earlier, experience to date has indicated that in the majority of early CDM Projects, CERs have been sold as a separate project asset under standalone contracts or ERPAs. Only in a few cases have CERs been incorporated directly into project investments or technology supply agreements. In this respect, this Chapter therefore focuses on the sale of CERs under a standalone ERPA. However, all of the general contractual issues relating to the creation and transfer of CERs are relevant to other projects.

The sale of CERs from a CDM Project is similar to the sale of any commodity from a project (such as electricity under a power purchase agreement). However, CDM Projects present particular unique risks due to the developing nature of the international framework upon which they are based. While most of the risks are not insurmountable, they do need to be carefully identified and managed in the ERPA.

The documentation supporting CDM Projects and allowing for the sale of CERs from those projects does have common elements that will ultimately allow a large part of such contracts to be standardised, particularly once the Kyoto Protocol rules are finalised, the registry account systems established and the CDM Executive Board actually begins to issue CERs. It is likely that over time only the project-specific elements of such contractual documentation will need to be negotiated so that key commercial risks and issues such as price will continue to be the subject of direct negotiation. Even in regards to these issues, including remedies for non-performance, as more contracts are negotiated, standard approaches may be adopted by buyers and sellers in the market, thereby reducing the time and costs associated with individual contractual negotiations.

Nonetheless, attempts have been made to develop standard CER trading

contracts for the CDM, such as by the International Emissions Trading Association ("**IETA**")[35]. In addition, both CERUPT and the World Bank adopt fairly standard contractual approaches which are simply modified to take account of project specific issues. In this context, this Guidebook has developed standard example ERPAs focussed more on the perspective of a Host Country project developer. These are included in Appendix C and Appendix D.

Once the Kyoto Protocol is in operation or the CDM Executive Board is able to issue CERs, then the existence of a defined legal unit i.e. a CER, and an operating registry system within which it can be transacted, will mean that the use of standardised contracts is likely to increase. For example, draft standardised ISDA (International Swaps and Derivatives Association Inc.) documentation has been produced which allows for the trading of CERs and European Allowances.

Finally, once the market is well established, registries in place and a secondary market develops, then CERs will most likely simply be transacted across registries as facilitated by the CDM Registry administrators and the administrators of national Annex I country registries.

At present the negotiation of CDM contracts to sell CERs is occurring very much in a transition stage. The CDM rules continue to be developed and the CDM Executive Board has been instructed to initiate a prompt start for the CDM. In this regard it will shortly be possible to have projects registered and CERs issued. However, the risk remains that until the Kyoto protocol enters into force there is no implemented formal legal basis upon which CERs exist or any mechanism by which they can be actually transferred.

Indications in the European Union Emission Trading Scheme already show that some market participants wish to trade EU Allowances under standardised ISDA arrangements. Such arrangements involve the use of standard master agreements under which confirmations are then used to effect transactions. The master agreements outline all of the key agreed terms and are used primarily by sophisticated buyers who regularly trade such rights.

However a standardised ISDA document, designed for transactions between sophisticated counterparties, will not be appropriate or relevant for many large CDM Projects or small scale projects in Host Countries from which CERs are sold initially into the market place. For these transactions, other partially standardised documentation is likely to develop in the market to allow transfer of CERs which can be fine tuned for the particular circumstances of the project. However, fully standardised documents such as ISDA contracts will have an important role to play in the secondary CER trading market as it develops.

35 IETA is currently developing a standard ERPA for CDM Projects which should be available in due course from the IETA web site on http://www.ieta.org.

9.2 Contracting Approaches

9.2.1 Finding Buyers and Sellers of CERs

There have been varying approaches to date to match buyers and sellers in the CDM market. These include:

(i) major buyers implementing a competitive tender process for potential CDM Projects from which they will purchase CERs;

(ii) buyers issuing a request for CERs from the market;

(iii) sellers approaching potential buyers with a term sheet or project description to propose investment in a CDM Project;

(iv) sellers arranging with independent brokers to transact their CERs on the market.

A large number of CDM Projects which are currently seeking registration with the CDM Executive Board have been involved in the first process, where Project Participants tender to buyers such as the Netherlands Government's SENTER funds (CERUPT in the case of CDM Projects), the World Bank's carbon funds or the European Bank for Reconstruction and Development. In the case of the Dutch CERUPT funds, the tender process involves tendering against standard contractual terms and conditions, which may be negotiated to some extent once the project has been selected. However, as the market for CERs gains liquidity it is likely that some of the other approaches will become more popular.

9.2.2 Contracting to Sell CERs from a Project

Approaches to contracting for CERs have to date varied greatly. This has very much been influenced by levels of understanding of the CDM, an increasing number of sellers and buyers in the market, the gradual consolidation of the specific international rules surrounding the CDM and the "early start" of the CDM Executive Board. Over time approaches will continue to shift, as will the dynamics of contracts and the stringency of commercial clauses.

There are a range of potential ways in which CERs can be sold into the market, including:

(i) a direct and immediate sale of CERs which have been already generated by a project over a certain period (i.e. a spot transaction);

(ii) a direct sale of CERs from a future activity of a CDM Project (either all of the CERs from the project or a certain amount each Verification period) (i.e. a forward sale); and

(iii) a sale of options to purchase agreed volumes of CERs at a later date (i.e. an option agreement).

The sale of CERs can occur through a combination of the above structures (i.e. a sale of CERs already generated by the project, plus a fixed amount of those which will be generated for 5 years in the future plus options to purchase additional CERs at the market price). CER clauses can also be incorporated into broader contracts such as power purchase arrangements or investment contracts.

As competition in the market place increases, it is likely that there will be a greater number of buyers seeking to secure CERs from reliable CDM Projects. As the lead time to develop a CDM Project (particularly in a developing country which may not have extensive experience in developing such projects) may be lengthy, buyers are likely to seek at an early stage to obtain exclusive rights to secure CERs from projects which meet the eligibility criteria for a CDM Project.

As CDM Projects often take several years to become operational and none have been registered as at the date of writing of this Guidebook, most ERPAs are in the form of forward contracts which seek to purchase future streams of CERs from a project. The agreed price for each CER will vary depending on whether the ERPA provides for up-front finance (generally higher risk for the buyer, so lower price for the CERs) or whether payment only becomes due when the CERs are actually delivered (less risk for the buyer).

Once a potential CDM Project is identified, generally both the project developer and the purchaser of CERs are eager to enter into binding legal arrangements to purchase the CERs at a certain price. This is because:

(i) project developers may rely on the projected revenue from CERs to make their business case to the party which will provide finance to the project; and

(ii) purchasers of CERs realise that the market price for CERs is likely to rise quickly as the Kyoto Protocol rules develop and particularly once the European Union Emission Trading Scheme becomes operational, which may allow CERs to be traded into the scheme.

However, as discussed, generally ERPAs are negotiated in accordance with the particular circumstances of the project and such negotiations can take significant time to finalise. Therefore, and particularly in cases where projects are at an early stage of development, the parties generally tend to enter into binding legal relations through a simpler agreement which simply secures an arrangement between the buyer and seller to deal exclusively between themselves for a defined period or which fixes the CERs at a certain price and gives them sufficient time to negotiate the final agreement. The early agreement could include one or all of the following:

(i) an Exclusivity Agreement under which the parties agree only to negotiate with each other for a fixed period; or

(ii) a binding Letter of Intent setting out the basic agreement between buyer and seller for the transaction of CERs; and/or

(iii) a Term Sheet providing a summary of the major terms that will ultimately be contained in the ERPA.

The terms of the Exclusivity Agreement can be incorporated into the Letter of Intent.

Although there will be a desire to obtain some certainty in these early agreements as to the final terms of the ERPA, the buyer and seller will also need to manage the risk that there could be two or more significant rounds of negotiations (which may entail legal or advisory costs at all rounds).

9.2.3 Approaches to Contracting by Major CER Purchasers from Early CDM Projects

(a) Introduction

The World Bank's Prototype Carbon Fund ("**PCF**") and the Netherlands Government's ERUPT and CERUPT funds have been the primary purchasers of emission reductions in the early carbon trading market. These funds operate through a tender procurement process. Due to the fact that these early transactions occurred in a developing legal framework, both the World Bank and the Netherlands Government have attempted to manage the uncertainties in the market through the contractual arrangements with their fund participants and project developers.

The World Bank and the Netherlands have attempted to ensure that the projects they purchase emission reductions from are consistent with the CDM procedure Kyoto Protocol rules, in the expectation that these projects will ultimately be eligible to create CERs. However, the ERPAs for the PCF and the Netherlands Government initially tended to purchase contractually based "Emission Reductions" before CERs are being issued by the CDM Executive Board.

(b) Key Characteristics of the World Bank Carbon Funds

Opportunities for Host Country Project Developers	Risks for Host Country Project Developers
• Some World Bank funds (e.g. the Community Development Carbon Fund) will purchase CERs from projects in least developed countries which otherwise would not receive finance from traditional investors due to high level of risk • ERPAs are relatively benign for developing country Project Participants, as stringent penalties will only be invoked in the case of intentional breach. • Assists CDM Projects to prepare and submit Project Design Document • Bears upfront costs of CDM Project registration, which are then deducted from payments • World Bank takes risk that Kyoto Protocol will not enter into force or that the Project will not be registered as a CDM Project	• World Bank has been reluctant to adopt a "governing law" clause for its contracts • As an international organisation, the World Bank has immunity under most legal systems and it expressly reserves this immunity in its contracts

The PCF, the first fund established by the World Bank, is comprised of participants from a number of countries and companies, who invest in the fund under the agreement that their investments will be managed on their behalf by the World Bank as Trustee of the PCF and used to purchase emission reductions in a "learn by doing" approach. Since the PCF, the World Bank has also developed and continues to develop other funds including the Community Development Carbon Fund ("**CDCF**"), the BioCarbon Fund and funds to purchase CDM and JI credits on behalf of the Dutch Government. Traditionally the World Bank has contracted to purchase Emission Reductions at between US$3 and US$4 per tonne of carbon dioxide equivalent.

The funds are established upon the basis of a fund instrument supported by participation agreements between the World Bank (as Trustee of the funds) and the fund participants. The management procedures of the fund and the acquisition of emission reductions are based upon the rules set out by the fund documentation.

Project developers are invited to submit Project Idea Notes ("**PINs**") to the World Bank's Carbon Finance Business ("**CFB**") (which is the unit of the World Bank responsible for managing the carbon funds) through an internet form. If a project is selected as being appropriate, a commercial negotiation process will take place to see if the World Bank and the project developer can agree on commercial terms.

The CFB has traditionally sought to purchase all legal rights to physical reductions of emissions by Projects with a view to working with the Buyer so with

the Seller to having such emission reductions converted into CERs once this is possible. In effect, the CFB has taken the sovereign risk that the Kyoto Protocol will not enter into force and that the emission reductions it has purchased will not have significant value in an operating carbon market. However, as the market develops and the CDM Executive Board progresses in its prompt start, it is expected that the CFB will shift to purchasing CERs only which can be used to meet compliance obligations of its fund participants.

The World Bank ERPAs require the Seller to follow the procedures established in the Kyoto Protocol and the Marrakech Accords, particularly in relation to preparing monitoring plans and reports, collecting data, producing annual emission reduction reports and organising for the verification of these reports by an independent third party. The CFB generally works with the Seller and bears the upfront costs to develop the CDM Project baseline and monitoring plan, to prepare the Project Design Document and undertake validation of the project (although these costs are generally capped). The total cost for these tasks is then deducted from the payments due for Emission Reductions delivered under the ERPA. This approach enables the project developer to prepare a project with minimal upfront costs by effectively providing an interest free "loan" from the future payments due under the ERPA.

The CFB generally offers a fixed unit price for Emission Reductions which is stable for the life of the ERPA. The duration of the ERPA will depend on the natural life of the project, but the CFB does not generally contract past the First Commitment Period (2008-2012). The CFB has also tended to seek options to purchase additional Emission Reductions generated by the project above those that are the subject of the ERPA.

As the World Bank is a multilateral institution comprised of member states, the World Bank ERPAs differ in several respects from more purely commercial contracts to purchase CERs. For example, the World Bank is reluctant to adopt a governing law clause to determine the legal basis on which the ERPA will be interpreted. Disputes under the CFB ERPAs are therefore ultimately dealt with in accordance with the international UNCITRAL rules of arbitration rather than by the courts or dispute resolution bodies of one particular country. The CFB ERPAs also require Project Participants to comply with certain social and environmental safeguards established by the World Bank which are additional to any legal requirements for the CDM.

In recognition of the fact that developing country Project Participants may face a range of obstacles in operating a CDM Project, the World Bank ERPAs generally provide for a large amount of flexibility in the case that a project developer fails to deliver the agreed minimum number of Emission Reductions to the World Bank in a given period. In this scenario, the CFB will work with the Seller to remedy the shortfall and establish alternative delivery arrangements. In the case of persistent delivery shortfall or an event occurring making it highly unlikely

that the project will be able to provide the contracted amount of Emission Reductions, the CFB has the right to terminate the ERPA or seek damages. The CFB ERPAs specifically identify that the CFB will seek to recover damages in the case of fraud, gross negligence or wilful misconduct on the part of the Seller. The Seller has a reciprocal right to terminate the ERPA if the CFB does not fulfil its primary obligation to make timely payments for the delivery

As the World Bank is a multilateral institution, it has been granted immunities and privileges similar to the United Nations or diplomatic organisations under the domestic law of many countries. The ERPAs specifically reserve these immunities and privileges, which mean that the seller under an ERPA must rely on the World Bank to cooperate and cannot enforce the ERPA in a domestic legal framework.

As discussed above, one of the major risk management issues in contracting to purchase CERs is to ensure the legal ownership of the underlying Greenhouse Gas emission reductions and that such ownership is securely transferred through contractual arrangements. The World Bank ERPAs therefore require the Seller to provide general warranties as to the ownership of the underlying Greenhouse Gas emission reductions to guarantee clear and unencumbered legal title.

Once a Project Idea Note has been approved, the general CFB contracting approach is to commence negotiations with a Letter of Intent ("**LOI**") between the World Bank and the project developer, followed by the preparation of a general term sheet before the drafting of a final ERPA.

Generally the World Bank's fund contracts are designed to assist Host Country project developers to undertake emission reduction projects by providing upfront coverage of the initial Kyoto Protocol related project establishment costs, with the ability to deduct these costs from future payments once the project actually gets off the ground. In addition, the World Bank will only tend to impose the more stringent penalties provided in the ERPA or seek damages where a Seller has deliberately breached the contract. Finally, as discussed, the sovereign risks due to the developing nature of the Kyoto Protocol rules are borne purely by the World Bank.

(c) Key Characteristics of the Netherlands Government's Funds

Opportunities for Host Country Project Developers	Risks for Host Country Project Developers
• Netherlands has generally paid slightly higher unit price for CERs (although this has more been a function of exchange rate fluctuations rather than a specific desire to do so) • Netherlands governed by Dutch law with obligations of fairness and reasonableness towards contractual counterparties	• Contracts are generally of a commercial nature – CERUPT tender documents incorporate stringent penalties for non-delivery • Seller is obliged to ensure that CERs are actually delivered into Netherlands registry account

The Netherlands Government has established a fund titled "Certified Emission Reduction Unit Procurement Tender" (known as "**CERUPT**") to purchase CERs from the market to be used by the Netherlands for its Kyoto Protocol compliance obligations. This fund is managed by the Netherlands Ministry of Spatial Planning, Housing and the Environment ("**VROM**") by the programme manager, a government agency called Senter. The Netherlands Ministry of Economic Affairs has been appointed Designated National Authority for the Netherlands.

The fund first called for public tenders on 1 November 2001 and tender submissions closed on 31 January 2002. Since that time, there have been no further tender processes run through the Netherlands Government. Rather, the Netherlands has sought to establish separate funds managed by appointed organisations to purchase CERs. These organisations are:

(i) the World Bank (the International Bank for Reconstruction and Development);

(ii) the International Finance Corporation

(iii) the regional development bank for the Andes (CAF); and

(iv) the Dutch bank Rabobank.

Each of these institutions has adopted their own means and techniques for contracting carbon, although they must be in compliance with VROM's guidelines and requirements and the ERPA must ultimately be approved by VROM. Such requirements are generally set out in the original CERUPT documentation, which is discussed further below.

The exact approach provided for in the contracts with each of the appointed organisations will vary, although some of the provisions from the CERUPT documents may well be included. In addition, the Netherlands Government has undertaken several tender procurement processes for its fund to purchase credits from Joint Implementation projects ("**ERUPT**"). The terms of these tenders have gradually developed towards those of a more commercially oriented contract, with stringent penalties for non-compliance. It is likely that if the new ERUPT tender documents reflect VROM's requirements in relation to purchasing Kyoto Protocol rights, VROM may insist that these more stringent requirements also be included in CER purchases by the appointed institutions.

In the CERUPT process, VROM sought to acquire CERs with a provisional fallback that if the Kyoto Protocol had not come into force and CERs were not being issued by the CDM Executive Board, it would accept contractual Emission

Reductions which had been verified by an independent party (Verified Emission Reductions). This definition of the rights transferred by the contract differs slightly to the PCF but ultimately has the same effect.

By submitting a tender response under CERUPT, potential sellers were deemed to be submitting a binding formal offer to contract with VROM on the terms of the response. The CERUPT tender contains substantial terms and conditions which Sellers are required to comply with in the implementation of a CDM Project. The terms and conditions contained in the terms of reference deal with the obligations of the parties, the delivery of CERs, payments and indemnities.

The CERUPT terms and conditions are also governed by Dutch law. Dutch law is based on a civil code which sets out the road rules for contracts and does not rely on judicial precedent for interpretation. Pursuant to the civil code a tender submitted under a procurement procedure constitutes an irrevocable offer. In doing so where a Seller made an offer based on the terms and conditions and that offer was accepted by VROM it became binding. Once VROM had accepted the offer, a short two to three page contract was drafted to cover any outstanding issues such as price and terms of payment.

The Dutch Civil Code contains a doctrine on reasonableness and fairness which is binding on all contractual relations, so that contracting parties are legally obliged to behave in a reasonable manner towards each other. In this regard a breach of a contract will be governed both by the provisions of the contract itself and also from the principles of reasonableness outlined in the Dutch Civil Code. A provision in a contract may therefore be non-applicable to the extent it would be unacceptable pursuant to the standard of reasonableness and fairness. In this regard a judge can mitigate penalties and take reasonableness into account when setting amounts for damages such as a failure by the Seller to deliver contracted CERs.

In the most recent ERUPT documentation, the Netherlands Government imposed significant penalties for failure to deliver CERs, including the requirement that the Seller pay the Netherlands up to five times the purchase price for each CER not delivered. In the context of the Dutch Civil Code, when exercising such remedies the Netherlands Government will have to carefully assess the extent to which it is reasonable to do so and it must behave in a reasonable manner towards the project company.

Under the CERUPT documentation, the Netherlands adopted the Kyoto Protocol and Marrakech Accords definitions for defining CERs, so that the ultimate obligation of the Seller will be to deliver the relevant Kyoto CERs arising from the project or to deliver the documents that would enable the Netherlands to successfully claim this CERs. The obligation to delivery CERs is fulfilled when those CERs are transferred into the national registry account of the Netherlands or a temporary account for the Netherlands held within the CDM registry.

The Netherlands also sought a first right of refusal (similar to an option arrangement) with respect to any surplus emission reductions created by the project.

The CERUPT documents provided that CERs must be verified and transferred once every two years. In the interval years, provisional payments will be made based on the number of emission reductions evidenced in the monitoring report for the project that year. The project company must deliver the first and following CERs generated by the project to the Netherlands in accordance with a delivery schedule. If there is a shortfall in CERs of more than 50% of the scheduled delivery, the agreement can be terminated.

Payments for CERs are due upon delivery. Under the CERUPT documentation, the Netherlands had an option to make advance payment of up to 50% of the total contract price.

The CERUPT and ERUPT tender documents require project developers to comply with the OECD Guidelines for Multilateral Enterprises, which are aspirational guidelines to ensure that the conduct of multilateral enterprises meets certain human rights and environmental criteria.

The CERUPT documentation is governed by Dutch law, and the dispute resolution clauses provide that any disputes arising will be ultimately determined by the District Court of the Hague, although the parties have the option to resort to arbitration as an alternative. There has been some perception that the District Court of the Hague is sympathetic towards the perspectives and processes of the Netherlands Government and that project developers may wish to have disputes resolved by a court not based within the national capital.

The CERUPT tender provides that a project developer is in breach of the contract if it fails to deliver for any reason other than force majeure (such as civil war, natural disasters or nationalisation of the project). Under Dutch law, any breach of a contract can enable the contract to be terminated if the breach is not remedied within a reasonable time frame.

As discussed above, one of the penalties under the CERUPT tender for non-delivery is particularly stringent. This penalty provides that if a delivery of CERs is not made by the date specified in the delivery schedule, a penalty applies. In the CERUPT tender this penalty was established at 2.5% of the total contract value each month that delivery remains outstanding, regardless of the amount of shortfall. However, under the later ERUPT contract this penalty was modified so that the penalty for a non-delivered credit was 120% of the market price of such a credit, with no penalty imposed if 50% of more of the credits had actually been delivered.

This penalty provides an incentive for project developers to comply with the terms of the tender and deliver CERs to the Netherlands at the agreed price, even if the market price for CERs has risen to much higher than the price under

the existing contract. However, as discussed above, the exercise of this relief would be governed by the obligations of reasonableness under the Dutch Civil Code.

9.3 Key Legal Issues in Contracts

As discussed above, contracts are generally tailored to meet the specific circumstances of the project and the parties involved. However, for any CDM Project, the major issues to be addressed in a contract will be:

(i) defining what is to be sold under the contract (i.e. CERs or Verified Emission Reductions)[36];

(ii) determining who has the legal entitlement to the CERs and ensuring that this is properly transferred to the party who is purchasing them;

(iii) determining how CERs are to be sold and transferred;

(iv) the terms of payment and purchase for the rights;

(v) appropriate warranties and indemnities;

(vi) maninging a shortfall in the delivery of CERs;

(vii) resolving disputes; and

(viii) managing the major risks discussed above in relation to the project and the international and domestic legal systems within which it is based.

The table below sets out an analysis of the issues which ERPAs are designed to address, the reason behind the inclusion of such provisions, the different perspectives of the CER seller and purchaser on the provision and potential alternative approaches which could result from negotiations. The draft ERPA contracts in Appendices C and D provide an illustration of the way in which these issues can be dealt with in a practical manner. However, these contracts are only basic shell agreements which should be modified and built upon to suit the circumstances of a particular CDM Project.

36 As noted in Chapter Six, early contracts for CDM Projects tended to acquire Verified Emission Reductions, whereas now the preference for purchasers is to purchase only CERs once they are created.

Summary of Relevant Contractual Issues and Differing Contractual Perspectives

Contractual Issue	Seller's Perspective	
1. Nature of the Rights Being Sold		
Should the contract transfer: (i) only CERs; or (ii) preferably CERs, but otherwise Verified Emission Reductions.	The Seller is likely to want more certainty that it will actually receive payment under the ERPA, so is likely to prefer that its delivery obligations are completed upon the transfer of Verified Emission Reductions through the submission of a Verification Report.	
2. Legal Title to CERs (Appropriate Parties to the Contract)		
Who is entitled to the GHG Reductions which underly the CERs (and therefore the CERs themselves)? Entitlement to the GHG Reductions will determine the appropriate Seller under an ERPA.	The Seller will need to examine all relevant existing contracts for the project and the land on which the project is based to ensure that the legal rights stemming from the GHG Reductions have not already been assigned to another party. The likelihood of this occurring will depend largely on the level of knowledge within the Host Country of the ability to create value from GHG Reductions. In most Host Countries, the entity which is most likely to claim a pre-existing right to GHG Reductions is the Host Country government. Project Participants should therefore consult with the Host Country as to whether the Host Country considers that the GHG Reductions are a government resource (a type of natural resource) and therefore cannot be sold by private entities.	
3. Transfer of Legal Title to CERs		
The contract should clearly provide that the legal title to CERs or Verified Emission Reductions is to be transferred to the Buyer and clearly provide the exact point at which such title transfers. For example, does legal title transfer upon the issuance of CERs by the CDM Executive Board or submission of a Verification Report, or is it contingent upon receipt of payment from the Buyer?	The Seller will want to ensure that the Buyer is obligated to pay for the CERs before it receives legal title to them. This way, if the Buyer fails to pay for the CERs the Seller will be able to sell them to another market purchaser without having to retrieve legal title from the Buyer.	

	Buyer's Perspective	Contractual Approaches
	The Buyer is likely to want to purchase only CERs, as these will ultimately be used for compliance purposes. It may therefore prefer for the Seller to be obliged to ensure that CERs are in fact issued by the CDM Executive Board.	During the "interim period" before the CDM Executive Board has begun to issue CERs, an ERPA could provide that CERs must be provided but Verified Emission Reductions can be provided if, for example: (i) the CDM Executive Board is not yet issuing CERs; (ii) there is no registry account into which the CERs can be issued; or (iii) the Kyoto Protocol has not entered into force by a certain date (usually to coincide with the start of the First Commitment Period). Once the CDM Executive Board actually begins to issue CERs, this will generally be a moot issues and all CDM contracts will tend to deal with CERs only. In the meantime, if the parties agree to sell Verified Emission Reductions, the contract should provide for how verification is to occur and whether the buyer will have any right to purchase CERs instead once the CDM Executive Board is issuing them.
	The Buyer will need to ensure that the Seller is entitled to the underlying GHG Reductions and satisfy itself that these have not previously been transferred to another party.	Contractual warranties should be provided in the ERPA to the effect that the Seller has full right and title to the GHG Reductions and has not sold, leased or otherwise dealt with the GHG Reductions in any way other than as contemplated in the ERPA (i.e. there is no existing encumbrance on the CERs).
	The Buyer will generally prefer to receive legal title to CERs as quickly as possible, but in accordance with general commercial practice it is likely to accept that transfer of legal title will only occur upon delivery plus payment.	The ERPA should clearly provide the point at which legal title is deemed to have passed from Seller to Buyer i.e. upon issuance into the Buyer's account and payment by the Buyer to the Seller.

Contractual Issue	Seller's Perspective	
4. Obligations to Ensure CERs are Issued to Buyer		
In order to ensure that the CERs are ultimately received by the Buyer, the contract should provide certain obligations upon the Seller to cooperate with the Buyer and the CDM Executive Board to get the CERs issued as agreed under the ERPA.	The Seller will generally only be prepared to accept obligations to perform tasks that are actually within its control. It will not want to be in a position where it will be in breach of the ERPA if, for example, the CDM Executive Board refuses to issue CERs or the Buyer's national registry cannot receive CERs.	
5. Quantity of CERs being Acquired		
The Contract should clearly specify the quantity of CERs being acquired and the timeframe in which they are to be acquired.	The Seller will want to be certain of its delivery obligations under the ERPA in order to plan the operation of the project, and should also be comfortable that its minimum delivery obligations are well within the expected project capacity.	
6. Shortfall Provisions		
Where existing registered CERs are being sold there should be a limited risk of a delivery shortfall occurring. However, where future CERs are sold in advance of their creation a shortfall may well occur.	The Seller will be concerned to ensure that it is not likely to incur significant penalties if the project does not perform exactly to expectation.	

	Buyer's Perspective	Contractual Approaches
	The Buyer will want to enlist as much cooperation from the Seller as possible to ensure that the CERs are actually issued, particularly if the Seller has delivered Verified Emission Reductions and must go back to the CDM Executive Board to request that CERs are issued for the period since the beginning of the project.	The ERPA should provide obligations to cooperate with the Buyer and the CDM Executive Board and for the Seller to use all reasonable endeavours to have the CERs issued into the Buyer's national account. The Buyer's entitlement to CERs will generally also be made clear in the Allocation Statement provided to the Executive Board. However, the Seller should ensure that it is not at risk of breaching its ERPA obligations and incurring penalties for actions (or inaction) of the CDM Executive Board which are completely out of its control.
	The Buyer will also want to be certain of the total amount it is obligated to pay under the ERPA for the CERs and the total amount of CERs which it should expect from the Seller. It may also wish to have an option to purchase further CERs from the project on either the same terms as the Contract CERs or at the contemporary market price.	The Contract should specify a delivery schedule for the CERs which accords with the expected performance of the project according to the Project Design Document and specifications. However, it may be wise to leave a "buffer" of expected GHG Reductions from the project so that any minor delay in the project will not lead to the Seller being in breach of the ERPA. This is often done by including absolute minimum delivery requirements well below the expected performance of the project so that only delivery failure beyond these shortfalls will be a breach of the ERPA. The ERPA should also clearly provide for any option rights and the price at which the option will be exercised.
	The Buyer will want to provide as much certainty as possible that shortfall will not occur and that, if it does, the Buyer will not suffer any loss as a consequence of the need to replace the CERs to meet its target.	Shortfall Contractual Provisions may include: (i) In the event of a shortfall the buyer and seller will sit down to negotiate an amended delivery schedule which is fair in the circumstances. (ii) In the event of a shortfall the Seller can substitute the contracted CERs from other CERs it produces or from third parties. (iii) In the event that alternative CERs cannot be sourced then the Seller will pay to the Buyer the cost to the Purchaser of purchasing replacement CERs or the market value of the shortfall: (iv) The Buyer may be entitled to terminate the contract if the shortfall falls below the minimum amount that the seller is required to deliver each verification period under the ERPA. (v) Some buyers have insisted on penalty provisions or indemnities vfor delivery failure to discourage the Seller from breaching the contract if the market price rises.

Contractual Issue	Seller's Perspective	
7. Purchase Price		
The Contract should clearly specify the CER unit price and whether that price is tax inclusive.	Certainty on price is desirable, although the Seller may wish to have flexibility to increase the price should the market price of CERs rise beyond a certain level.	
8. Payment of Costs		
The contract should contain provisions relating to the payment of costs leading to the creation of CERs (including monitoring validation, certification and issuance of CERs).	The Seller may be particularly sensitive to cost-blowout as the final costs of registering a CDM Project, monitoring emission reductions and hiring a DOE to undertake verification and certification may be significant. It is therefore important to clearly allocate who will be responsible for the costs at various stages of the CDM Project and to ensure that these costs are reflected in the price it receives for CERs. Ultimately this is a matter of negotiation. The Seller may consider capping the costs which it will be responsible for if it is required to pay the Buyer's costs to review documents etc.	
9. Provision of Documents and other Information		
A clause should be included in contracts that the Seller, if requested by the Buyer, will provide copies of all relevant documents relating to the creation and registration of the CERs and in particular in relation to communications with the CDM Executive Board.	It is desirable for communication between Seller and Buyer to be as open as possible, although the Seller will want to avoid any onerous reporting requirements or to provide excessive information.	
10. Liability and Indemnities		
As with other general project contracts, both parties will want to limit their liability under the agreement to the extent of their obligations, and may seek an indemnity from the other party in relation to any costs or actions brought about because of certain actions.	The Seller will want to ensure that it is not liable to the Buyer for any matters beyond its control.	

	Buyer's Perspective	Contractual Approaches
	The Buyer will also want to fix the price, as market price for CERs may well rise significantly with the commencement of the EU Emissions Trading Scheme and the Kyoto Protocol.	The contract can: (i) provide for a fixed unit price for each CER delivered; (ii) link the price to the market price for CERs at the time of delivery; or (iii) provide an agreed fixed price with an adjustment factor should the CER later be on-sold for a significantly increased price with entry into force of the Kyoto Protocol or some other agreed event.
	The Buyer is likely to only want to be ultimately responsible for the cost of the CERs themselves.	The general approach in commercial sale contracts is that the Seller would be responsible for covering all costs involved in creating the CERs and that it should factor these costs into the price it receives for CERs under the ERPA. In recognition that the Kyoto Protocol related costs may be a significant amount for a Host Country project developer to pay upfront, early CDM contracts of the World Bank and CERUPT sometimes provided that the Buyer would provide upfront payment for the CERs to the Seller to cover the Kyoto Protocol related costs. This amount would then be deducted from future payments due under the ERPA. The allocation of costs will be reflected in the price paid for CERs.
	The Buyer will want to ensure that the Seller is communicating with the CDM Executive Board in accordance with the Buyer's rights under the ERPA and may also want to check on the progress of the project from time to time.	Reasonable clauses should be drafted to require the Seller to provide the Buyer with information necessary to chart the progress of the project and with regards to communication with the CDM Executive Board.
	The Buyer will want to limit its liability to the total price it is obligated to pay under the terms of the ERPA, and ensure that it is not liable to any third parties for any actions of the Seller. This is particularly important where the Buyer is actually providing underlying finance to the project itself, as it then becomes a creditor to the Seller.	Mutual indemnities may be provided so that each party must indemnify the others for actions leading to loss or third party claims due to actions which constitute a breach of the ERPA.

Contractual Issue	Seller's Perspective	
11. Force Majeure		
The scope of the force majeure provision in the contract is an important aspect, as it will determine whether the parties will only be excused from their obligations for: (i) natural force majeure events such as fires, storms etc.; or (ii) any events beyond the control of either party including acts of governments such as passing laws to nationalise the CERs, failure to establish a registry account, failure to ratify the Kyoto Protocol etc.	The Seller will want to ensure that any potential disasters that may befall the project (such as fires or floods) will be covered by the force majeure provision, but will want the Buyer to be obligated to pay no matter what happens on the political agenda.	
12. Dispute Resolution and Choice of Law		
By their nature, CDM Projects involve cross-border transactions between entities which may not have previous business contact. Additionally, CDM contracts are being drafted in a new and developing area of law which traditional courts may not have experience with. It is therefore important to determine which legal system the contract falls under and how disputes will be dealt with if they arise. The Seller and Buyer should ensure that any choice of law and dispute resolution provisions will be enforceable in the Host Country.	The Seller will want to make sure that its legal advisors are familiar with the jurisdiction which will govern the contract (i.e. if the contract is to be governed under English law), and that the dispute resolution procedures will not be unduly time consuming or costly. It may therefore prefer that the contract is governed by local law. The seller is also likely to prefer the opportunity to use alternative dispute resolution techniques (i.e. negotiation, mediation) as a first option rather than requiring every dispute to be dealt with before a court or arbitration body.	

9.4 Dispute Resolution

Project Participants and CER Purchasers should carefully consider how any disputes arising under a CDM Project will be resolved. The purchaser of CERs is likely to be accustomed to dealing with a different legal jurisdiction and court processes to those in the Host Country and it may therefore be preferable to nominate an alternative dispute resolution process such as arbitration.

It is preferable that if a dispute arises, CDM Project developers and CER Purchasers should be obligated to sit down together to try and work out a mutually acceptable solution, rather than resorting at first instance to time consuming and potentially expensive formal dispute resolution procedures. This obligation should be reflected in the legal documentation for the sale of CERs and any other contractual arrangements with Annex I investors. However, if friendly negotiations have failed to resolve the dispute within a certain time frame, an

	Buyer's Perspective	Contractual Approaches
	The Buyer is in a position where the CERs only have value if the Kyoto Protocol enters into force and its national government participates in that regime. It may therefore want to draft the force majeure clause widely so that the contract can be terminated if something unexpected happens by an act of government.	The scope of force majeure will be a matter for negotiation, although both parties should carefully consider all the contingencies in regard tovboth the project and the international and domestic legal system.
	The Buyer will also want to ensure that its legal advisors are familiar with the choice of law and that the contract is enforceable in that jurisdiction. If the Host Country is developing the CDM Project so that the government is a party, the Buyer may prefer arbitration under international rules as a more "neutral" dispute resolution process.	It is preferable to require the Buyer and Seller to attempt to resolve any disputes through good faith negotiations and then potentially through mediation before imposing any binding dispute settlement process. Early carbon buyers have preferred arbitration as a means of dispute resolution, but international arbitrators can be very costly, particularly for developing country Sellers. However, local courts in the Host Country may not have the relevant experience to adjudicate CDM contracts. Some Host Country legal systems may provide that courts can overrule contractual provisions if they are against public policy. Additionally, it may not be possible to enforce a contract governed by foreign law within the Host Country. Buyer and Seller should both seek legal advice as to the enforceability of the chosen dispute resolution provisions and governing law in the Host Country and any implications for the CDM Project.

independent dispute resolution body should be nominated with the power to finally resolve the dispute. Contracts should also clearly provide a choice of legal rules under which the contract will be interpreted. In choosing a dispute resolution mechanism, developing country Project Participants should be comfortable that:

(i) their legal and/or financial advisors will be competent to represent them in that jurisdiction and dispute resolution forum; and

(ii) the dispute resolution mechanism is not likely to be excessively costly or hold up the CDM Project for significant amounts of time.

The table below sets out potential dispute mechanisms which could be used in commercial contracts between Annex I country investors or CER Purchasers and developing country Project Participants. It also comments on some of the risks and benefits of such procedures.

Dispute Resolution Procedure	Comments
Arbitration	Arbitration is where the parties to a contract agree that they will refer any disputes to a legally binding hearing under predetermined rules by a person or organisation other than a court. This method is often preferred in international commercial transactions because: (i) arbitral awards are enforceable in over 70 countries; (ii) the decision maker is neutral and independent of the Annex I country and Host Country governments; (iii) the proceedings are generally confidential; (iv) parties have the flexibility to appoint an arbitrator with previous expertise with CDM Projects and carbon transactions; (v) arbitration may be more appropriate where the CDM contracts involve the Host Country or Annex I country as a party, as the rights and duties of parties cannot be legally affected by unilateral action of the Host Country or Annex I country; The parties may choose to appoint ad hoc arbitrators to reduce costs, to accelerate arbitration and to structure the proceedings to suit the particular circumstances of the CDM Project. In this case they should specify all aspects of arbitration in the contractual arrangements, including applicable law, rules under which arbitration will be carried out, language, place of arbitration and arbitrable issues. Alternatively, they may specify an arbitration institution to administer the arbitration if a dispute arises. The World Bank and Netherlands carbon funds have generally tended to prefer that contracts be arbitrated under international arbitration rules such as the Arbitration Rules of the United Nations Commission on International Trade Law ("UNCITRAL"). For example: "Any dispute, controversy or claim arising out of or relating to this contract, or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force. The appointing authority shall be [name of institution or person]. The number of arbitrators shall be [one or three]. The place of arbitration shall be [place]. The arbitration shall be conducted in [language]." Additionally, many local organisations also offer arbitration services – for example, a particularly well known arbitrage institute is the London Court of Arbitration. Procedures in local institutions may be more streamlined and the rules more updated than the UNCITRAL rules, which are sometimes viewed as relatively cumbersome and outdated largely due to the practical obstacles to negotiating changes in a United Nations document. However, arbitrators' fees can be costly, particularly in comparison to the currency of the Host Country. For example, the International Chamber of Commerce Court of Arbitration estimates that a dispute over US$100,000 would attract arbitration fees and administrative costs on average of US$13,000 for 1 arbitrator and US$30,500 for three arbitrators. The responsibility of bearing such costs should be kept in mind when choosing the dispute resolution mechanisms.

Dispute Resolution Procedure	Comments
Fast Track Arbitration	Fast track arbitration follows most of the same rules and procedures as ordinary arbitration, but strict time limits are set for the submission of statement of claim, statement of defence and counterclaim and rejoinder. The arbitrator decides the time limit for hearings of the case and is expected to issue the arbitral award not later than 15 days from the close of the proceedings. If the defendant does not comply with the strict time obligations, the arbitrator may conduct proceedings without them. This is a time-efficient means of resolving disputes, but Host Country participants should consider whether their legal advisors and project managers would be in a position to gather the requisite information and prepare for arbitral proceedings in such a short time period.
Conciliation or Mediation	This is where the parties agree in advance to resolve any disputes through mutual consent achieved through facilitated discussions and negotiations. UNCITRAL has circulated "Conciliation Rules" and the UN has released guidance on the use of these rules in international commercial disputes. Generally a sole conciliator or mediator is appointed by mutual consent or by an international institution. Conciliation may be appropriate in circumstances where an adversarial process is undesirable, and the parties can appoint a conciliator with appropriate technical and legal expertise to understand the issues involved in a CDM dispute.
Dispute Review Boards	In a large commercial transaction, particularly if the Annex I country is providing finance to the underlying project and the parties are likely to have continuous business relations for the duration of the project, it may be appropriate to appoint up front a panel of representatives which will be responsible for making recommendations on dispute resolutions (the Dispute Review Board). Generally Dispute Review Boards have three members – one appointed by each party under the contract and a third independent member appointed by the mutual consent of the first two. The recommendations of the Dispute Review Board do not have to be binding, although if the parties choose they can agree that the Dispute Review Board will act as an arbitral tribunal. For example, the Standard Bidding Documents for Procurement of Works prepared by the World Bank contains provision for a Dispute Review Board.
Courts of Particular Jurisdiction	Parties may wish to nominate that any disputes arising under a CDM Project contract should be adjudicated in accordance with the legal procedures of the Host Country or the country of the Annex I investor. There are several difficulties with this approach. The choice of one legal system over another may place one party at a disadvantage if they are unfamiliar with court processes in the other jurisdiction. Language barriers may also arise. In addition, the court system of the jurisdiction may not be equipped to deal with the types of international law issues arising in a CDM Project contract. Litigation is also a potentially lengthy and expensive option for resolving commercial disputes. Even once a judgment is obtained, it may be a prolonged and cumbersome process to enforce that judgment, particularly if there is no treaty between the two countries recognising foreign judgments. It may also be practically difficult to transport evidence and witnesses and the public nature of court proceedings may not be desirable in a commercially sensitive transaction.

Appendix A

Kyoto Protocol Article 12: The Clean Development Mechanism

Kyoto Protocol Article 12

1. A clean development mechanism is hereby defined.

2. The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.

3. Under the clean development mechanism:

   (a) Parties not included in Annex I will benefit from project activities resulting in certified emission reductions; and

   (b) Parties included in Annex I may use the certified emission reductions accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments under Article 3, as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

4. The clean development mechanism shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Protocol and be supervised by an executive board of the clean development mechanism.

5. Emission reductions resulting from each project activity shall be certified by operational entities to be designated by the Conference of the Parties serving as the meeting of the Parties to this Protocol, on the basis of:

   (a) Voluntary participation approved by each Party involved;

   (b) Real, measurable, and long-term benefits related to the mitigation of climate change; and

   (c) Reductions in emissions that are additional to any that would occur in the absence of the certified project activity.

6. The clean development mechanism shall assist in arranging funding of

certified project activities as necessary.

7. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, elaborate modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of project activities.

8. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that a share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.

9. Participation under the clean development mechanism, including in activities mentioned in paragraph 3(a) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.

10. Certified emission reductions obtained during the period from the year 2000 up to the beginning of the First Commitment Period can be used to assist in achieving compliance in the First Commitment Period.

Appendix B

CDM Modalities and Procedures from the Marrakech Accords

Marrakech Accords CDM Modalities (Decision 17/CP.7)

The Conference of the Parties,

Recalling Article 12 of the Kyoto Protocol which provides that the purpose of the clean development mechanism shall be to assist Parties not included in Annex I to the Convention in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3 of the Kyoto Protocol,

Recalling also its decision 5/CP.6 containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

Aware of its decisions 2/CP.7, 11/CP.7, 15/CP.7, 16/CP.7, 18/CP.7, 19/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7, 24/CP.7 and 38/CP.7,

Affirming that it is the host Party's prerogative to confirm whether a clean development mechanism project activity assists it in achieving sustainable development,

Recognizing that Parties included in Annex I are to refrain from using certified emission reductions generated from nuclear facilities to meet their commitments under Article 3, paragraph 1,

Bearing in mind the need to promote equitable geographic distribution of clean development mechanism project activities at regional and subregional levels,

Emphasizing that public funding for clean development mechanism projects from Parties in Annex I is not to result in the diversion of official development assistance and is to be separate from and not counted towards the financial obligations of Parties included in Annex I,

Further emphasizing that clean development mechanism project activities should lead to the transfer of environmentally safe and sound technology and know-how in addition to that required under Article 4, paragraph 5, of the Convention and Article 10 of the Kyoto Protocol,

Recognizing the need for guidance for Project Participants and designated operational entities, in particular for establishing reliable, transparent and conservative baselines, to assess whether clean

development mechanism project activities are in accordance with the Additionality criterion in Article 12, paragraph 5(c), of the Kyoto Protocol,

1. Decides to facilitate a prompt start for a clean development mechanism by adopting the modalities and procedures contained in the annex below;

2. Decides that, for the purposes of the present decision, the Conference of the Parties shall assume the responsibilities of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol as set out in the annex below on modalities and procedures;

3. Invites nominations for membership in the executive board:

   (a) For facilitating the prompt start of the clean development mechanism, from Parties to the Convention to be submitted to the President of the Conference of the Parties at its present session, with a view to the Conference of the Parties electing the members of the executive board at that session;

   (b) Upon the entry into force of the Kyoto Protocol, to replace any member of the executive board of the clean development mechanism whose country has not ratified or acceded to the Kyoto Protocol. Such new members shall be nominated by the same constituencies and elected at the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

4. Decides that, prior to the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, the executive board and any designated operational entities shall operate in the same manner as the executive board and designated operational entities of the clean development mechanism as set out in the annex below;

5. Decides that the executive board shall convene its first meeting immediately upon the election of its members;

6. Decides that the executive board shall include in its work plan until the eighth session of the Conference of the Parties, inter alia, the following tasks:

   (a) To develop and agree on its rules of procedure and recommend them to the Conference of the Parties for adoption, applying draft rules until then;

   (b) To accredit operational entities and designate them, on a provisional basis, pending the designation by the Conference of the Parties at its eighth session;

(c) To develop and recommend to the Conference of the Parties, at its eighth session, simplified modalities and procedures for the following small-scale clean development mechanism project activities:

(i) Renewable energy project activities with a maximum output capacity equivalent of up to 15 megawatts (or an appropriate equivalent);

(ii) Energy efficiency improvement project activities which reduce energy consumption, on the supply and/or demand side, by up to the equivalent of 15 gigawatt/hours per year;

(iii) Other project activities that both reduce anthropogenic emissions by sources and directly emit less than 15 kilotonnes of carbon dioxide equivalent annually;

(d) To prepare recommendations on any relevant matter, including on Appendix C to the annex below, for consideration by the Conference of the Parties at its eighth session;

(e) To identify modalities for seeking collaboration with the Subsidiary Body for Scientific and Technological Advice on methodological and scientific issues;

7. Decides:

(a) That the eligibility of land use, land-use change and forestry project activities under the clean development mechanism is limited to afforestation and reforestation;

(b) That for the First Commitment Period, the total of additions to a Party's assigned amount resulting from eligible land use, land-use change and forestry project activities under the clean development mechanism shall not exceed one per cent of base year emissions of that Party, times five;

(c) That the treatment of land use, land-use change and forestry project activities under the clean development mechanism in future commitment periods shall be decided as part of the negotiations on the second commitment period;

8. Requests the secretariat to organize a workshop before the sixteenth session of the Subsidiary Body for Scientific and Technological Advice with the aim of recommending terms of reference and an agenda for the work to be conducted under paragraph 10(b) below on the basis of, inter alia, submissions by Parties referred to in paragraph 9 below;

9. Invites Parties to provide submissions to the secretariat by 1 February 2002 on the organization of the workshop referred to in paragraph 8 above, and to express their views on the terms of reference and the agenda for the work to be conducted under paragraph 10(b) below;

10. Requests the Subsidiary Body for Scientific and Technological Advice:

(a) To develop at its sixteenth session terms of reference and an agenda for the work to be conducted under subparagraph (b) below, taking into consideration, inter alia, the outcome of the workshop mentioned in paragraph 8 above;

(b) To develop definitions and modalities for including afforestation and reforestation project activities under the clean development mechanism in the First Commitment Period, taking into account the issues of non-permanence, Additionality, leakage, uncertainties and socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems, and being guided by the principles in the preamble to decision -/CMP.1 (Land use, land-use change and forestry) and the terms of reference referred to in subparagraph (a) above, with the aim of adopting a decision on these definitions and modalities at the ninth session of the Conference of the Parties, to be forwarded to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session;

11. Decides that the decision by the Conference of the Parties at its ninth session, on definitions and modalities for inclusion of afforestation and reforestation project activities under the clean development mechanism, for the First Commitment Period, referred to in paragraph 10 (b) above, shall be in the form of an annex on modalities and procedures for afforestation and reforestation project activities for a clean development mechanism reflecting, mutatis mutandis, the annex to the present decision on modalities and procedures for a clean development mechanism;

12. Decides that certified emission reductions shall only be issued for a crediting period starting after the date of registration of a clean development mechanism project activity;

13. Further decides that a project activity starting as of the year 2000, and prior to the adoption of this decision, shall be eligible for validation and registration as a clean development mechanism project activity if submitted for registration before 31 December 2005. If registered, the crediting period for such project activities may start prior to the date of its registration but not earlier than 1 January 2000;

14. Requests Parties included in Annex I to start implementing measures to assist Parties not included in Annex I, in particular the least developed and small island developing States among them, with building capacity in order to facilitate their participation in the clean development mechanism, taking into account relevant decisions by the Conference of the Parties on capacity-building and on the financial mechanism of the Convention;

15. Decides:

    (a) That the share of proceeds to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation, as referred to in Article 12, paragraph 8, of the Kyoto Protocol, shall be two per cent of the certified emission reductions issued for a clean development mechanism project activity;

    (b) That clean development mechanism project activities in least developed country Parties shall be exempt from the share of proceeds to assist with the costs of adaptation;

16. Decides that the level of the share of proceeds to cover administrative expenses of the clean development mechanism shall be determined by the Conference of the Parties upon the recommendation of the executive board;

17. Invites Parties to finance the administrative expenses for operating the clean development mechanism by making contributions to the UNFCCC Trust Fund for Supplementary Activities. Such contributions shall be reimbursed, if requested, in accordance with procedures and a timetable to be determined by the Conference of the Parties upon the recommendation of the executive board. Until the Conference of the Parties determines a percentage for the share of proceeds for the administrative expenses, the executive board shall charge a fee to recover any project related expenses;

18. Requests the secretariat to perform any functions assigned to it in the present decision and in the annex below;

19. Decides to assess progress made regarding the clean development mechanism and to take appropriate action, as necessary. Any revision of the decision shall not affect clean development mechanism project activities already registered;

20. Recommends that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt the draft decision below.

Draft decision -/CMP.1 (Article 12)

Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, Recalling the provisions of Articles 3 and 12 of the Kyoto Protocol,

Bearing in mind that, in accordance with Article 12, the purpose of the clean development mechanism is to assist Parties not included in Annex I to the Convention in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3 of the Kyoto Protocol,

Aware of its decisions -/CMP.1 (Mechanisms), -/CMP.1 (Article 6), -/CMP.1 (Article 17), -/CMP.1 (Land use, land-use change and forestry), -/CMP.1 (Modalities for the accounting of assigned amounts), -/CMP.1 (Article 5.1), -/CMP.1 (Article 5.2), -/CMP.1 (Article 7) and -/CMP.1 (Article 8), and decisions 2/CP.7 and 24/CP.7,

Cognizant of decision 17/CP.7 on modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol,

1. Decides to confirm, and give full effect to any actions taken pursuant to, decision 17/CP.7 and to any other relevant decisions by the Conference of the Parties, as appropriate;

2. Adopts the modalities and procedures for a clean development mechanism contained in the annex below;

3. Invites the executive board to review the simplified modalities, procedures and the definitions of small-scale project activities referred to in paragraph 6(c) of decision 17/CP.7 and, if necessary, make appropriate recommendations to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

4. Decides further that any future revision of the modalities and procedures for a clean development mechanism shall be decided in accordance with the rules of procedure of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, as applied. The first review shall be carried out no later than one year after the end of the First Commitment Period, based on recommendations by the executive board and by the Subsidiary Body for Implementation drawing on technical advice from the Subsidiary Body for Scientific and Technological Advice, as needed. Further reviews

shall be carried out periodically thereafter. Any revision of the decision shall not affect clean development mechanism project activities already registered.

ANNEX

Modalities and procedures for a clean development mechanism

A. Definitions

1. For the purposes of the present annex the definitions contained in Article 11 and the provisions of Article 14 shall apply. Furthermore:

   (a) An "emission reduction unit" or "ERU" is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (Modalities for the accounting of assigned amounts) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

   (b) A "certified emission reduction" or "CER" is a unit issued pursuant to Article 12 and requirements thereunder, as well as the relevant provisions in these modalities and procedures, and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

   (c) An "assigned amount unit" or "AAU" is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (Modalities for the accounting of assigned amounts) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

   (d) A "removal unit" or "RMU" is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (Modalities for the accounting of assigned amounts) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

   (e) "Stakeholders" means the public, including individuals, groups or communities affected, or likely to be affected, by the proposed clean development mechanism project activity.

B. Role of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol

2. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) shall have authority over and provide guidance to the clean development mechanism (CDM).

3. The COP/MOP shall provide guidance to the executive board by taking decisions on:

   (a) The recommendations made by the executive board on its rules of procedure;

   (b) The recommendations made by the executive board, in accordance with provisions of decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

1 In the context of this annex, "Article" refers to an Article of the Kyoto Protocol, unless otherwise specified.

   (c) The designation of operational entities accredited by the executive board in accordance with Article 12, paragraph 5, and accreditation standards contained in Appendix A below.

4. The COP/MOP shall further:

   (a) Review annual reports of the executive board;

   (b) Review the regional and subregional distribution of designated operational entities and take appropriate decisions to promote accreditation of such entities from developing country Parties.

   (c) Review the regional and subregional distribution of CDM Project activities with a view to identifying systematic or systemic barriers to their equitable distribution and take appropriate decisions, based, inter alia, on a report by the executive board;

   (d) Assist in arranging funding of CDM Project activities, as necessary.

C. Executive board

5. The executive board shall supervise the CDM, under the authority and guidance of the COP/MOP, and be fully accountable to the COP/MOP. In this context, the executive board shall:

(a) Make recommendations to the COP/MOP on further modalities and procedures for the CDM, as appropriate;

(b) Make recommendations to the COP/MOP on any amendments or additions to rules of procedure for the executive board contained in the present annex, as appropriate;

(c) Report on its activities to each session of the COP/MOP;

(d) Approve new methodologies related to, inter alia, baselines, monitoring plans and Project Boundaries in accordance with the provisions of Appendix C below;

(e) Review provisions with regard to simplified modalities, procedures and the definitions of small scale project activities and make recommendations to the COP/MOP;

(f) Be responsible for the accreditation of operational entities, in accordance with accreditation standards contained in Appendix A below, and make recommendations to the COP/MOP for the designation of operational entities, in accordance with Article 12, paragraph 5. This responsibility includes:

(i) Decisions on re-accreditation, suspension and withdrawal of accreditation;

(ii) Operationalization of accreditation procedures and standards;

(g) Review the accreditation standards in Appendix A below and make recommendations to the COP/MOP for consideration, as appropriate;

(h) Report to the COP/MOP on the regional and subregional distribution of CDM Project activities with a view to identifying systematic or systemic barriers to their equitable distribution;

(i) Make publicly available relevant information, submitted to it for this purpose, on proposed CDM Project activities in need of funding and on investors seeking opportunities, in order to assist in arranging funding of CDM Project activities, as necessary;

(j) Make any technical reports commissioned available to the public and provide a period of at least eight weeks for public comments on draft methodologies and guidance before documents are finalized and any recommendations are submitted to the COP/MOP for their consideration;

(k) Develop, maintain and make publicly available a repository of approved rules, procedures, methodologies and standards;

(l) Develop and maintain the CDM registry as defined in Appendix D below; Develop and maintain a publicly available database of CDM Project activities

(m) containing information on registered Project Design Documents, comments received, verification reports, its decisions as well as information on all CERs issued;

(n) Address issues relating to observance of modalities and procedures for the CDM by Project Participants and/or operational entities, and report on them to the COP/MOP;

(o) Elaborate and recommend to the COP/MOP for adoption at its next session procedures for conducting the reviews referred to in paragraphs 41 and 65 below including, inter alia, procedures to facilitate consideration of information from Parties, stakeholders and UNFCCC accredited observers. Until their adoption by the COP/MOP, the procedures shall be applied provisionally;

(p) Carry out any other functions ascribed to it in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP.

6. Information obtained from CDM Project Participants marked as proprietary or confidential shall not be disclosed without the written consent of the provider of the information, except as required by national law. Information used to determine Additionality as defined in paragraph 43 below, to describe the baseline methodology and its application, and to support an environmental impact assessment referred to in paragraph 37(c) below, shall not be considered as proprietary or confidential.

7. The executive board shall comprise ten members from Parties to the Kyoto Protocol, as follows: one member from each of the five United Nations regional groups, two other members from the Parties included in Annex I, two other members from the Parties not included in Annex I, and one representative of the small island developing States, taking into account the current practice in the Bureau of the Conference of the Parties.

8. Members, including alternate members, of the executive board shall:

(a) Be nominated by the relevant constituencies referred to in paragraph 7 above and be elected by the COP/MOP. Vacancies shall be filled in the same way;

(b) Be elected for a period of two years and be eligible to serve a maximum of two consecutive terms. Terms as alternate members do not count. Five members and five alternate members shall be elected initially for a term of three years and five members and five alternate members for

a term of two years. Thereafter, the COP/MOP shall elect, every year, five new members, and five new alternate members, for a term of two years. Appointment pursuant to paragraph 11 below shall count as one term. The members, and alternate members, shall remain in office until their successors are elected;

(c) Possess appropriate technical and/or policy expertise and shall act in their personal capacity. The cost of participation of members, and of alternate members, from developing country Parties and other Parties eligible under UNFCCC practice shall be covered by the budget for the executive board;

(d) Be bound by the rules of procedure of the executive board;

(e) Take a written oath of service witnessed by the Executive Secretary of the UNFCCC or his/her authorized representative before assuming his or her duties;

(f) Have no pecuniary or financial interest in any aspect of a CDM Project activity or any designated DOE;

(g) Subject to their responsibilities to the executive board, not disclose any confidential or proprietary information coming to their knowledge by reason of their duties for the executive board. The duty of the member, including alternate member, not to disclose confidential information constitutes an obligation in respect of that member, and alternate member, and shall remain an obligation after the expiration or termination of that member's function for the executive board.

9. The COP/MOP shall elect an alternate for each member of the executive board based on the criteria in paragraphs 7 and 8 above. The nomination by a constituency of a candidate member shall be accompanied by a nomination for a candidate alternate member from the same constituency.

10. The executive board may suspend and recommend to the COP/MOP the termination of the membership of a particular member, including an alternate member, for cause including, inter alia, breach of the conflict of interest provisions, breach of the confidentiality provisions, or failure to attend two consecutive meetings of the executive board without proper justification.

11. If a member, or an alternate member, of the executive board resigns or is otherwise unable to complete the assigned term of office or to perform the functions of that office, the executive board may decide, bearing in mind the proximity of the next session of the COP/MOP, to appoint another member, or an alternate member, from the same constituency to replace the said member for the remainder of that member's mandate.

12. The executive board shall elect its own chairperson and vice-chairperson, with one being a member from a Party included in Annex I and the other being from a Party not included in Annex I. The positions of chairperson and vice-chairperson shall alternate annually between a member from a Party included in Annex I and a member from a Party not included in Annex I.

13. The executive board shall meet as necessary but no less than three times a year, bearing in mind the provisions of paragraph 41 below. All documentation for executive board meetings shall be made available to alternate members.

14. At least two thirds of the members of the executive board, representing a majority of members from Parties included in Annex I and a majority of members from Parties not included in Annex I, must be present to constitute a quorum.

15. Decisions by the executive board shall be taken by consensus, whenever possible. If all efforts at reaching a consensus have been exhausted and no agreement has been reached, decisions shall be taken by a three-fourths majority of the members present and voting at the meeting. Members abstaining from voting shall be considered as not voting.

16. Meetings of the executive board shall be open to attendance, as observers, by all Parties and by all UNFCCC accredited observers and stakeholders, except where otherwise decided by the executive board.

17. The full text of all decisions of the executive board shall be made publicly available. The working language of the executive board shall be English. Decisions shall be made available in all six official languages of the United Nations.

18. The executive board may establish committees, panels or working groups to assist it in the performance of its functions. The executive board shall draw on the expertise necessary to perform its functions, including from the UNFCCC roster of experts. In this context, it shall take fully into account the consideration of regional balance.

19. The secretariat shall service the executive board.

D. Accreditation and designation of operational entities

20. The executive board shall:

    (a) Accredit operational entities which meet the accreditation standards contained in Appendix A below;

(b) Recommend the designation of operational entities to the COP/MOP;

(c) Maintain a publicly available list of all designated operational entities;

(d) Review whether each designated DOE continues to comply with the accreditation standards contained in Appendix A below and on this basis confirm whether to reaccredit each DOE every three years;

(e) Conduct spot-checking at any time and, on the basis of the results, decide to conduct the above-mentioned review, if warranted.

21. The executive board may recommend to the COP/MOP to suspend or withdraw the designation of a designated DOE if it has carried out a review and found that the entity no longer meets the accreditation standards or applicable provisions in decisions of the COP/MOP. The executive board may recommend the suspension or withdrawal of designation only after the designated DOE has had the possibility of a hearing. The suspension or withdrawal is with immediate effect, on a provisional basis, once the executive board has made a recommendation, and remains in effect pending a final decision by the COP/MOP. The affected entity shall be notified, immediately and in writing, once the executive board has recommended its suspension or withdrawal. The recommendation by the executive board and the decision by the COP/MOP on such a case shall be made public.

22. Registered project activities shall not be affected by the suspension or withdrawal of designation of a designated DOE unless significant deficiencies are identified in the relevant validation, verification or certification report for which the entity was responsible. In this case, the executive board shall decide whether a different designated DOE shall be appointed to review, and where appropriate correct, such deficiencies. If such a review reveals that excess CERs were issued, the designated DOE whose accreditation has been withdrawn or suspended shall acquire and transfer, within 30 days of the end of review, an amount of reduced tonnes of carbon dioxide equivalent equal to the excess CERs issued, as determined by the executive board, to a cancellation account maintained in the CDM registry by the executive board.

23. Any suspension or withdrawal of a designated DOE that adversely affects registered project activities shall be recommended by the executive board only after the affected Project Participants have had the possibility of a hearing.

24. Any costs related to the review referred to in paragraph 22 above shall be borne by the designated DOE whose designation has been withdrawn or suspended.

25. The executive board may seek assistance in performing the functions in paragraph 20 above, in accordance with the provisions of paragraph 18 above.

E. Designated operational entities

26. Designated operational entities shall be accountable to the COP/MOP through the executive board and shall comply with the modalities and procedures in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP and the executive board.

27. A designated DOE shall:

(a) Validate proposed CDM Project activities;

(b) Verify and certify reductions in anthropogenic emissions by sources of Greenhouse Gases;

(c) Comply with applicable laws of the Parties hosting CDM Project activities when carrying out its functions referred to in subparagraph (e) below;

(d) Demonstrate that it, and its subcontractors, have no real or potential conflict of interest with the participants in the CDM Project activities for which it has been selected to carry out validation or verification and certification functions;

(e) Perform one of the following functions related to a given CDM Project activity: validation or verification and certification. Upon request, the executive board may, however, allow a single designated DOE to perform all these functions within a single CDM Project activity;

(f) Maintain a publicly available list of all CDM Project activities for which it has carried out validation, verification and certification;

(g) Submit an annual activity report to the executive board;

(h) Make information obtained from CDM Project Participants publicly available, as required by the executive board. Information marked as proprietary or confidential shall not be disclosed without the written consent of the provider of the information, except as required by national law. Information used to determine Additionality as defined in paragraph 43 below, to describe the baseline methodology and its application, and to support an environmental impact assessment referred to in paragraph 37(c) below, shall not be considered as proprietary or confidential.

F. Participation requirements

28. Participation in a CDM Project activity is voluntary.

29. Parties participating in the CDM shall designate a national authority for the CDM.

30. A Party not included in Annex I may participate in a CDM Project activity if it is a Party to the Kyoto Protocol.

31. Subject to the provisions of paragraph 32 below, a Party included in Annex I with a commitment inscribed in Annex B is eligible to use CERs, issued in accordance with the relevant provisions, to contribute to compliance with part of its commitment under Article 3, paragraph 1, if it is in compliance with the following eligibility requirements:

    (a) It is a Party to the Kyoto Protocol;

    (b) Its assigned amount pursuant to Article 3, paragraphs 7 and 8, has been calculated and recorded in accordance with decision -/CMP.1 (Modalities for the accounting of assigned amounts);

    (c) It has in place a national system for the estimation of anthropogenic emissions by sources and anthropogenic removals by sinks of all Greenhouse Gases not controlled by the Montreal Protocol, in accordance with Article 5, paragraph 1, and the requirements in the guidelines decided thereunder;

    (d) It has in place a national registry in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder;

    (e) It has submitted annually the most recent required inventory, in accordance with Article 5, paragraph 2, and Article 7, paragraph 1, and the requirements in the guidelines decided thereunder, including the national inventory report and the common reporting format. For the First Commitment Period, the quality assessment needed for the purpose of determining eligibility to use the mechanisms shall be limited to the parts of the inventory pertaining to emissions of Greenhouse Gases from sources/sector categories from Annex A to the Kyoto Protocol and the submission of the annual inventory on sinks;

    (f) It submits the supplementary information on assigned amount in accordance with Article 7, paragraph 1, and the requirements in the guidelines decided thereunder and makes any additions to, and subtractions from, assigned amount pursuant to Article 3, paragraphs 7 and 8, including for the activities under Article 3, paragraphs 3 and 4, in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder.

32. A Party included in Annex I with a commitment inscribed in Annex B shall be considered:

(a) To meet the eligibility requirements referred to in paragraph 31 above after 16 months have elapsed since the submission of its report to facilitate the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, and to demonstrate its capacity to account for its emissions and assigned amount, in accordance with the modalities adopted for the accounting of assigned amount under Article 7, paragraph 4, unless the enforcement branch of the compliance committee finds in accordance with decision 24/CP.7 that the Party does not meet these requirements, or, at an earlier date, if the enforcement branch of the compliance committee has decided that it is not proceeding with any questions of implementation relating to these requirements indicated in reports of the expert review teams under Article 8 of the Kyoto Protocol, and has transmitted this information to the secretariat;

(b) To continue to meet the eligibility requirements referred to in paragraph 31 above unless and until the enforcement branch of the compliance committee decides that the Party does not meet one or more of the eligibility requirements, has suspended the Party's eligibility, and has transmitted this information to the secretariat.

33. A Party that authorizes private and/or public entities to participate in Article 12 project activities shall remain responsible for the fulfilment of its obligations under the Kyoto Protocol and shall ensure that such participation is consistent with the present annex. Private and/or public entities may only transfer and acquire CERs if the authorizing Party is eligible to do so at that time.

34. The secretariat shall maintain publicly accessible lists of:

(a) Parties not included in Annex I which are Parties to the Kyoto Protocol;

(b) Parties included in Annex I that do not meet the requirements in paragraph 31 above or have been suspended.

G. Validation and registration

35. Validation is the process of independent evaluation of a project activity by a designated DOE against the requirements of the CDM as set out in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP, on the basis of the Project Design Document, as outlined in Appendix B below.

36. Registration is the formal acceptance by the executive board of a validated project as a CDM Project activity. Registration is the prerequisite for the verification, certification and issuance of CERs related to that project activity.

37. The designated DOE selected by Project Participants to validate a project activity, being under a contractual arrangement with them, shall review the Project Design Document and any supporting documentation to confirm that the following requirements have been met:

(a) The participation requirements as set out in paragraphs 28 to 30 above are satisfied;

(b) Comments by local stakeholders have been invited, a summary of the comments received has been provided, and a report to the designated DOE on how due account was taken of any comments has been received;

(c) Project Participants have submitted to the designated DOE documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts and, if those impacts are considered significant by the Project Participants or the host Party, have undertaken an environmental impact assessment in accordance with procedures as required by the host Party;

(d) The project activity is expected to result in a reduction in anthropogenic emissions by sources of Greenhouse Gases that are additional to any that would occur in the absence of the proposed project activity, in accordance with paragraphs 43 to 52 below;

(e) The baseline and monitoring methodologies comply with requirements pertaining to:

(f) Provisions for monitoring, verification and reporting are in accordance with

(i) Methodologies previously approved by the executive board; or

(ii) Modalities and procedures for establishing a new methodology, as set out in paragraph 38 below;

decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

(g) The project activity conforms to all other requirements for CDM Project activities in decision 17/CP.7, the present annex and relevant decisions by the COP/MOP and the executive board.

38. If the designated DOE determines that the project activity intends to use a new baseline or monitoring methodology, as referred to in paragraph 37(e) (ii) above, it shall, prior to a submission for registration of this project activity, forward the proposed methodology, together with the draft Project Design Document, including a description of the project and identification of the Project Participants, to the executive board for review. The executive board shall expeditiously, if possible at its next meeting but not later than four months, review the proposed new methodology in accordance with the modalities and procedures of the present annex. Once approved by the executive board it shall make the approved methodology publicly available along with any relevant guidance and the designated DOE may proceed with the validation of the project activity and submit the Project Design Document for registration. In the event that the COP/MOP requests the revision of an approved methodology, no CDM Project activity may use this methodology. The Project Participants shall revise the methodology, as appropriate, taking into consideration any guidance received.

39. A revision of a methodology shall be carried out in accordance with the modalities and procedures for establishing new methodologies as set out in paragraph 38 above. Any revision to an approved methodology shall only be applicable to project activities registered subsequent to the date of revision and shall not affect existing registered project activities during their crediting periods.

40. The designated DOE shall:

(a) Prior to the submission of the validation report to the executive board, have received from the Project Participants written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party that the project activity assists it in achieving sustainable development;

(b) In accordance with provisions on confidentiality contained in paragraph 27(h) above, make publicly available the Project Design Document;

(c) Receive, within 30 days, comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available;

(d) After the deadline for receipt of comments, make a determination as to whether, on the basis of the information provided and taking into account the comments received, the project activity should be validated;

(e) Inform Project Participants of its determination on the validation of the project activity. Notification to the Project Participants will include:

(i) Confirmation of validation and date of submission of the validation report to the executive board; or

(ii) An explanation of reasons for non-acceptance if the project activity, as documented, is judged not to fulfil the requirements for validation;

(f) Submit to the executive board, if it determines the proposed project activity to be valid, a request for registration in the form of a validation report including the Project Design Document, the written approval of the host Party as referred to in subparagraph (a) above, and an explanation of how it has taken due account of comments received;

(g) Make this validation report publicly available upon transmission to the executive board.

41. The registration by the executive board shall be deemed final eight weeks after the date of receipt by the executive board of the request for registration, unless a Party involved in the project activity or at least three members of the executive board request a review of the proposed CDM Project activity. The review by the executive board shall be made in accordance with the following provisions:

(a) It shall be related to issues associated with the validation requirements;

(b) It shall be finalized no later than at the second meeting following the request for review, with the decision and the reasons for it being communicated to the Project Participants and the public.

42. A proposed project activity that is not accepted may be reconsidered for validation and subsequent registration, after appropriate revisions, provided that it follows the procedures and meets the requirements for validation and registration, including those related to public comments.

43. A CDM Project activity is additional if anthropogenic emissions of Greenhouse Gases by sources are reduced below those that would have occurred in the absence of the registered CDM Project activity.

44. The baseline for a CDM Project activity is the scenario that reasonably represents the anthropogenic emissions by sources of Greenhouse Gases that would occur in the absence of the proposed project activity. A baseline shall cover emissions from all gases, sectors and source categories listed in Annex A within the project boundary. A baseline shall be deemed to reasonably represent the anthropogenic emissions by sources that would occur in the absence of the proposed project activity if it is derived using a baseline methodology referred to in paragraphs 37 and 38 above.

45. A baseline shall be established:

(a) By Project Participants in accordance with provisions for the use of approved and new methodologies, contained in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

(b) In a transparent and conservative manner regarding the choice of approaches, assumptions, methodologies, parameters, data sources, key factors and Additionality, and taking into account uncertainty;

(c) On a project-specific basis;

(d) In the case of small-scale CDM Project activities which meet the criteria specified in decision 17/CP.7 and relevant decisions by the COP/MOP, in accordance with simplified procedures developed for such activities;

(e) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector.

46. The baseline may include a scenario where future anthropogenic emissions by sources are projected to rise above current levels, due to the specific circumstances of the host Party.

47. The baseline shall be defined in a way that CERs cannot be earned for decreases in activity levels outside the project activity or due to force majeure.

48. In choosing a baseline methodology for a project activity, Project Participants shall select from among the following approaches the one deemed most appropriate for the project activity, taking into account any guidance by the executive board, and justify the appropriateness of their choice:

(a) Existing actual or historical emissions, as applicable; or

(b) Emissions from a technology that represents an economically attractive course of action, taking into account barriers to investment; or

(c) The average emissions of similar project activities undertaken in the previous five years, in similar social, economic, environmental and technological circumstances, and whose performance is among the top 20 per cent of their category.

49. Project Participants shall select a crediting period for a proposed project activity from one of the following alternative approaches:

(a) A maximum of seven years which may be renewed at most two times, provided that, for each renewal, a designated DOE determines and informs the executive board that the original project baseline is still valid or has been updated taking account of new data where applicable; or

(b) A maximum of ten years with no option of renewal.

50. Reductions in anthropogenic emissions by sources shall be adjusted for leakage in accordance with the monitoring and verification provisions in paragraphs 59 and 62(f) below, respectively.

51. Leakage is defined as the net change of anthropogenic emissions by sources of Greenhouse Gases which occurs outside the project boundary, and which is measurable and attributable to the CDM Project activity.

52. The project boundary shall encompass all anthropogenic emissions by sources of Greenhouse Gases under the control of the Project Participants that are significant and reasonably attributable to the CDM Project activity.

H. Monitoring

53. Project Participants shall include, as part of the Project Design Document, a monitoring plan that provides for:

(a) The collection and archiving of all relevant data necessary for estimating or measuring anthropogenic emissions by sources of Greenhouse Gases occurring within the project boundary during the crediting period;

(b) The collection and archiving of all relevant data necessary for determining the baseline of anthropogenic emissions by sources of Greenhouse Gases within the project boundary during the crediting period;

(c) The identification of all potential sources of, and the collection and archiving of data on, increased anthropogenic emissions by sources of Greenhouse Gases outside the project boundary that are significant and reasonably attributable to the project activity during the crediting period;

(d) The collection and archiving of information relevant to the provisions in paragraph 37(c) above;

(e) Quality assurance and control procedures for the monitoring process;

(f) Procedures for the periodic calculation of the reductions of anthropogenic emissions by sources by the proposed CDM Project activity, and for leakage effects;

(g) Documentation of all steps involved in the calculations referred to in paragraph 53(c) and (f) above.

54. A monitoring plan for a proposed project activity shall be based on a previously approved monitoring methodology or a new methodology, in accordance with paragraphs 37 and 38 above, that:

(a) Is determined by the designated DOE as appropriate to the circumstances of the proposed project activity and has been successfully applied elsewhere;

(b) Reflects good monitoring practice appropriate to the type of project activity.

55. For small-scale CDM Project activities meeting the criteria specified in decision 17/CP.7 and relevant decisions by the COP/MOP, Project Participants may use simplified modalities and procedures for small-scale projects.

56. Project Participants shall implement the monitoring plan contained in the registered Project Design Document.

57. Revisions, if any, to the monitoring plan to improve its accuracy and/or completeness of information shall be justified by Project Participants and shall be submitted for validation to a designated DOE.

58. The implementation of the registered monitoring plan and its revisions, as applicable, shall be a condition for verification, certification and the issuance of CERs.

59. Subsequent to the monitoring and reporting of reductions in anthropogenic emissions, CERs resulting from a CDM Project activity during a specified time period shall be calculated, applying the registered methodology, by subtracting the actual anthropogenic emissions by sources from baseline emissions and adjusting for leakage.

60. The Project Participants shall provide to the designated DOE, contracted by the Project Participants to perform the verification, a monitoring report in accordance with the registered monitoring plan set out in paragraph 53 above for the purpose of verification and certification.

I. Verification and certification

61. Verification is the periodic independent review and ex post determination by the designated DOE of the monitored reductions in anthropogenic emissions by sources of Greenhouse Gases that have occurred as a result of

a registered CDM Project activity during the verification period. Certification is the written assurance by the designated DOE that, during a specified time period, a project activity achieved the reductions in anthropogenic emissions by sources of Greenhouse Gases as verified.

62. In accordance with the provisions on confidentiality in paragraph 27(h) above, the designated DOE contracted by the Project Participants to perform the verification shall make the monitoring report publicly available, and shall:

(a) Determine whether the project documentation provided is in accordance with the requirements of the registered Project Design Document and relevant provisions of decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

(b) Conduct on-site inspections, as appropriate, that may comprise, inter alia, a review of performance records, interviews with Project Participants and local stakeholders, collection of measurements, observation of established practices and testing of the accuracy of monitoring equipment;

(c) If appropriate, use additional data from other sources;

(d) Review monitoring results and verify that the monitoring methodologies for the estimation of reductions in anthropogenic emissions by sources have been applied correctly and their documentation is complete and transparent;

(e) Recommend to the Project Participants appropriate changes to the monitoring methodology for any future crediting period, if necessary;

(f) Determine the reductions in anthropogenic emissions by sources of Greenhouse Gases that would not have occurred in the absence of the CDM Project activity, based on the data and information derived under subparagraph (a) above and obtained under subparagraph (b) and/or (c) above, as appropriate, using calculation procedures consistent with those contained in the registered Project Design Document and in the monitoring plan;

(g) Identify and inform the Project Participants of any concerns related to the conformity of the actual project activity and its operation with the registered Project Design Document. Project Participants shall address the concerns and supply relevant additional information;

(h) Provide a verification report to the Project Participants, the Parties involved and the executive board. The report shall be made publicly available.

63. The designated DOE shall, based on its verification report, certify in writing that, during the specified time period, the project activity achieved the verified amount of reductions in anthropogenic emissions by sources of Greenhouse Gases that would not have occurred in the absence of the CDM Project activity. It shall inform the Project Participants, Parties involved and the executive board of its certification decision in writing immediately upon completion of the certification process and make the certification report publicly available.

J. Issuance of certified emission reductions

64. The certification report shall constitute a request for issuance to the executive board of CERs equal to the verified amount of reductions of anthropogenic emissions by sources of Greenhouse Gases.

65. The issuance shall be considered final 15 days after the date of receipt of the request for issuance, unless a Party involved in the project activity or at least three members of the executive board request a review of the proposed issuance of CERs. Such a review shall be limited to issues of fraud, malfeasance or incompetence of the designated operational entities and be conducted as follows:

(a) Upon receipt of a request for such a review, the executive board, at its next meeting, shall decide on its course of action. If it decides that the request has merit it shall perform a review and decide whether the proposed issuance of CERs should be approved;

(b) The executive board shall complete its review within 30 days following its decision to perform the review;

(c) The executive board shall inform the Project Participants of the outcome of the review, and make public its decision regarding the approval of the proposed issuance of CERs and the reasons for it.

66. Upon being instructed by the executive board to issue CERs for a CDM Project activity, the CDM registry administrator, working under the authority of the executive board, shall, promptly, issue the specified quantity of CERs into the pending account of the executive board in the CDM registry, in accordance with Appendix D below. Upon such issuance, the CDM registry administrator shall promptly:

(a) Forward the quantity of CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation, respectively, in accordance with Article 12, paragraph 8, to the appropriate accounts in the CDM registry for the management of the share of proceeds;

(b) Forward the remaining CERs to the registry accounts of Parties and Project Participants involved, in accordance with their request.

APPENDIX A

Standards for the accreditation of operational entities

1. A DOE shall:

(a) Be a legal entity (either a domestic legal entity or an international organization) and provide documentation of this status;

(b) Employ a sufficient number of persons having the necessary competence to perform validation, verification and certification functions relating to the type, range and volume of work performed, under a responsible senior executive;

(c) Have the financial stability, insurance coverage and resources required for its activities;

(d) Have sufficient arrangements to cover legal and financial liabilities arising from its activities;

(e) Have documented internal procedures for carrying out its functions including, among others, procedures for the allocation of responsibility within the organization and for handling complaints. These procedures shall be made publicly available;

(f) Have, or have access to, the necessary expertise to carry out the functions specified in modalities and procedures of the CDM and relevant decisions by the COP/MOP, in particular knowledge and understanding of:

(i) The modalities and procedures and guidelines for the operation of the CDM, relevant decisions of the COP/MOP and of the executive board;

(ii) Issues, in particular environmental, relevant to validation, verification and certification of CDM Project activities, as appropriate;

(iii) The technical aspects of CDM Project activities relevant to environmental issues, including expertise in the setting of baselines and monitoring of emissions;

(iv) Relevant environmental auditing requirements and methodologies;

(v) Methodologies for accounting of anthropogenic emissions by sources;

(vi) Regional and sectoral aspects;

(g) Have a management structure that has overall responsibility for performance and implementation of the entity's functions, including quality assurance procedures, and all relevant decisions relating to validation, verification and certification. The applicant DOE shall make available:

(i) The names, qualifications, experience and terms of reference of senior management personnel such as the senior executive, board members, senior officers and other relevant personnel;

(ii) An organizational chart showing lines of authority, responsibility and allocation of functions stemming from senior management;

(iii) Its quality assurance policy and procedures;

(iv) Administrative procedures, including document control;

(v) Its policy and procedures for the recruitment and training of DOE personnel, for ensuring their competence for all necessary functions for validation, verification and certification functions, and for monitoring their performance;

(vi) Its procedures for handling complaints, appeals and disputes;

(h) Not have pending any judicial process for malpractice, fraud and/or other activity incompatible with its functions as a designated DOE.

2. An applicant DOE shall meet the following operational requirements:

(a) Work in a credible, independent, non-discriminatory and transparent manner, complying with applicable national law and meeting, in particular, the following requirements:

(i) An applicant DOE shall have a documented structure, which safeguards impartiality, including provisions to ensure impartiality of its operations;

(ii) If it is part of a larger organization, and where parts of that organization are, or may become, involved in the identification, development or financing of any CDM Project activity, the applicant DOE shall:

(A) Make a declaration of all the organization's actual and planned involvement in CDM Project activities, if any, indicating which part of the organization is involved and in which particular CDM Project activities;

(B) Clearly define the links with other parts of the organization, demonstrating that no conflicts of interest exist;

(b) Demonstrate that no conflict of interest exists between its functions as an DOE and any other functions that it may have, and demonstrate how business is managed to minimize any identified risk to impartiality. The demonstration shall cover all sources of conflict of interest, whether they arise from within the applicant DOE or from the activities of related bodies;

(c) Demonstrate that it, together with its senior management and staff, is not involved in any commercial, financial or other processes which might influence its judgement or endanger trust in its independence of judgement and integrity in relation to its activities, and that it complies with any rules applicable in this respect;

(d) Have adequate arrangements to safeguard confidentiality of the information obtained from CDM Project Participants in accordance with provisions contained in the present annex.

APPENDIX B

Project design document

1. The provisions of this appendix shall be interpreted in accordance with the annex above on modalities and procedures for a CDM.

2. The purpose of this appendix is to outline the information required in the Project Design Document. A project activity shall be described in detail taking into account the provisions of the annex on modalities and procedures for a CDM, in particular, section G on validation and registration and section H on monitoring, in a Project Design Document which shall include the

following:

(a) A description of the project comprising the project purpose, a technical description of the project, including how technology will be transferred, if any, and a description and justification of the project boundary;

(b) A proposed baseline methodology in accordance with the annex on modalities and procedures for a CDM including, in the case of the:

(i) Application of an approved methodology:

- Statement of which approved methodology has been selected;
- Description of how the approved methodology will be applied in the context of the project;

(ii) Application of a new methodology:

- Description of the baseline methodology and justification of choice, including an assessment of strengths and weaknesses of the methodology;
- Description of key parameters, data sources and assumptions used in the baseline estimate, and assessment of uncertainties;
- Projections of baseline emissions;
- Description of how the baseline methodology addresses potential leakage;

(iii) Other considerations, such as a description of how national and/or sectoral policies and circumstances have been taken into account and an explanation of how the baseline was established in a transparent and conservative manner;

(c) Statement of the estimated operational lifetime of the project and which crediting period was selected;

(d) Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM Project activity;

(e) Environmental impacts:

(i) Documentation on the analysis of the environmental impacts, including transboundary impacts;

(ii) If impacts are considered significant by the Project Participants or the host Party: conclusions and all references to support

documentation of an environmental impact assessment that has been undertaken in accordance with the procedures as required by the host Party;

(f) Information on sources of public funding for the project activity from Parties included in Annex I which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties;

(g) Stakeholder comments, including a brief description of the process, a summary of the comments received, and a report on how due account was taken of any comments received;

(h) Monitoring plan:

(i) Identification of data needs and data quality with regard to accuracy, comparability, completeness and validity;

(ii) Methodologies to be used for data collection and monitoring including quality assurance and quality control provisions for monitoring, collecting and reporting;

(iii) In the case of a new monitoring methodology, provide a description of the methodology, including an assessment of strengths and weaknesses of the methodology and whether or not it has been applied successfully elsewhere;

(i) Calculations:

(i) Description of formulae used to calculate and estimate anthropogenic emissions by sources of Greenhouse Gases of the CDM Project activity within the project boundary;

(ii) Description of formulae used to calculate and to project leakage, defined as: the net change of anthropogenic emissions by sources of Greenhouse Gases which occurs outside the CDM Project activity boundary, and that is measurable and attributable to the CDM Project activity;

(iii) The sum of (i) and (ii) above representing the CDM Project activity emissions;

(iv) Description of formulae used to calculate and to project the anthropogenic emissions by sources of Greenhouse Gases of the baseline;

(v) Description of formulae used to calculate and to project leakage;

(vi) The sum of (iv) and (v) above representing the baseline emissions;

(vii) Difference between (vi) and (iii) above representing the emission reductions of the CDM Project activity;

(j) References to support the above, if any.

APPENDIX C

Terms of reference for establishing guidelines on baselines and monitoring methodologies

The executive board, drawing on experts in accordance with the modalities and procedures for a CDM, shall develop and recommend to the COP/MOP, inter alia:

(a) General guidance on methodologies relating to baselines and monitoring consistent with the principles set out in those modalities and procedures in order to:

(i) Elaborate the provisions relating to baseline and monitoring methodologies contained in decision 17/CP.7, the annex above and relevant decisions of the COP/MOP;

(ii) Promote consistency, transparency and predictability;

(iii) Provide rigour to ensure that net reductions in anthropogenic emissions are real and measurable, and an accurate reflection of what has occurred within the project boundary;

(iv) Ensure applicability in different geographical regions and to those project categories which are eligible in accordance with decision 17/CP.7 and relevant decisions of the COP/MOP;

(v) Address the Additionality requirement of Article 12, paragraph 5(c), and paragraph 43 of the above annex;

(b) Specific guidance in the following areas:

(i) Definition of project categories (e.g. based on sector, subsector, project type, technology, geographic area) that show common methodological characteristics for baseline setting, and/or

monitoring, including guidance on the level of geographic aggregation, taking into account data availability;

(ii) Baseline methodologies deemed to reasonably represent what would have occurred in the absence of a project activity;

(iii) Monitoring methodologies that provide an accurate measure of actual reductions in anthropogenic emissions as a result of the project activity, taking into account the need for consistency and cost-effectiveness;

(iv) Decision trees and other methodological tools, where appropriate, to guide choices in order to ensure that the most appropriate methodologies are selected, taking into account relevant circumstances;

(v) The appropriate level of standardization of methodologies to allow a reasonable estimation of what would have occurred in the absence of a project activity wherever possible and appropriate. Standardization should be conservative in order to prevent any overestimation of reductions in anthropogenic emissions;

(vi) Determination of Project Boundaries including accounting for all Greenhouse Gases that should be included as a part of the baseline, and monitoring. Relevance of leakage and recommendations for establishing appropriate Project Boundaries and methods for the ex post evaluation of the level of leakage;

(vii) Accounting for applicable national policies and specific national or regional circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the sector relevant to the project activity;

(viii) The breadth of the baseline, e.g. how the baseline makes comparisons between the technology/fuel used and other technologies/fuels in the sector;

(c) In developing the guidance in (a) and (b) above, the executive board shall take into account:

(i) Current practices in the host country or an appropriate region, and observed trends;

(ii) Least cost technology for the activity or project category.

APPENDIX D

Clean development mechanism registry requirements

1. The executive board shall establish and maintain a CDM registry to ensure the accurate accounting of the issuance, holding, transfer and acquisition of CERs by Parties not included in Annex I. The executive board shall identify a registry administrator to maintain the registry under its authority.

2. The CDM registry shall be in the form of a standardized electronic database which contains, inter alia, common data elements relevant to the issuance, holding, transfer and acquisition of CERs. The structure and data formats of the CDM registry shall conform to technical standards to be adopted by the COP/MOP for the purpose of ensuring the accurate, transparent and efficient exchange of data between national registries, the CDM registry and the independent transaction log.

3. The CDM registry shall have the following accounts:

   (a) One pending account for the executive board, into which CERs are issued before being transferred to other accounts;

   (b) At least one holding account for each Party not included in Annex I hosting a CDM Project activity or requesting an account;

   (c) At least one account for the purpose of cancelling ERUs, CERs, AAUs and RMUs equal to excess CERs issued, as determined by the executive board, where the accreditation of a designated DOE has been withdrawn or suspended;

   (d) At least one account for the purpose of holding and transferring CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation in accordance with Article 12, paragraph 8. Such an account may not otherwise acquire CERs.

4. Each CER shall be held in only one account in one registry at a given time.

5. Each account within the CDM registry shall have a unique account number comprising the following elements:

   (a) Party/organization identifier: the Party for which the account is maintained, using the two-letter country code defined by the International Organization for Standardization (ISO 3166), or, in the cases of the pending account and an account for managing the CERs corresponding to the share of proceeds, the executive board or another appropriate organization;

(b) A unique number: a number unique to that account for the Party or organization for which the account is maintained.

6. Upon being instructed by the executive board to issue CERs for a CDM Project activity, the registry administrator shall, in accordance with the transaction procedures set out in decision -/CMP.1 (Modalities for the accounting of assigned amounts):

(a) Issue the specified quantity of CERs into a pending account of the executive board;

(b) Forward the quantity of CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation, in accordance with Article 12, paragraph 8, to the appropriate accounts in the CDM registry for holding and transferring such CERs;

(c) Forward the remaining CERs to the registry accounts of Project Participants and Parties involved, in accordance with their request.

7. Each CER shall have a unique serial number comprising the following elements:

(a) Commitment period: the commitment period for which the CER is issued;

(b) Party of origin: the Party which hosted the CDM Project activity, using the two-letter country code defined by ISO 3166;

(c) Type: this shall identify the unit as a CER;

(d) Unit: a number unique to the CER for the identified commitment period and Party of origin;

(e) Project identifier: a number unique to the CDM Project activity for the Party of origin.

8. Where the accreditation of a designated DOE has been withdrawn or suspended, ERUs, CERs, AAUs and/or RMUs equal to the excess CERs issued, as determined by the executive board, shall be transferred to a cancellation account in the CDM registry. Such ERUs, CERs, AAUs and RMUs may not be further transferred or used for the purpose of demonstrating the compliance of a Party with its commitment under Article 3, paragraph 1.

9. The CDM registry shall make non-confidential information publicly available and provide a publicly accessible user interface through the Internet that allows interested persons to query and view it.

10. The information referred to in paragraph 9 above shall include up-to-date

information, for each account number in the registry, on the following:

(a) Account name: the holder of the account;

(b) Representative identifier: the representative of the account holder, using the Party/organization identifier (the two-letter country code defined by ISO 3166) and a number unique to that representative for that Party or organization;

(c) Representative name and contact information: the full name, mailing address, telephone number, facsimile number and e-mail address of the representative of the account holder.

11. The information referred to in paragraph 9 above shall include the following CDM Project activity information, for each project identifier against which the CERs have been issued:

(a) Project name: a unique name for the CDM Project activity;

(b) Project location: the Party and town or region in which the CDM Project activity is located;

(c) Years of CER issuance: the years in which CERs have been issued as a result of the CDM Project activity;

(d) Operational entities: the operational entities involved in the validation, verification and certification of the CDM Project activity;

(e) Reports: downloadable electronic versions of documentation to be made publicly available in accordance with the provisions of the present annex.

12. The information referred to in paragraph 9 above shall include the following holding and transaction information relevant to the CDM registry, by serial number, for each calendar year (defined according to Greenwich Mean Time):

(a) The total quantity of CERs in each account at the beginning of the year;

(b) The total quantity of CERs issued;

(c) The total quantity of CERs transferred and the identity of the acquiring accounts and registries;

(d) The total quantity of ERUs, CERs, AAUs and RMUs cancelled in accordance with paragraph 8 above; and

(e) Current holdings of CERs in each account.

Appendix C

Draft Contract for Direct Sale of CERs

This draft contract is designed for a straightforward transaction of CERs where: (i) the CER Purchaser has no further involvement in the project and (ii) the underlying project is financed by other means (e.g. through Host Country governments or companies or foreign direct investments).

This draft contract should be considered as guidance only and not legal advice. CDM investors and project developers should always seek legal and financial advice tailored to the particular circumstances of the CDM Project.

Certified Emission Reductions Sale Agreement

[Insert name of Seller] (Seller)

and

[Insert name of Buyer] (Buyer)

Warning: Each CER transaction is unique and will raise discrete transaction specific legal and commercial issues which must be incorporated into the CER transaction documentation, including the CER Sale Agreement. This document is a "shell" agreement and does not consider project-specific issues. The user will be required to carefully consider the risk profile to both parties before amending this document. Legal advice should be sought before finalising all CER sale transaction contracts.

Certified Emission Reductions Sale Agreement

Parties: **[Insert name of Seller] [address] [("Seller");**

and

[Insert name of Buyer] [address] ("Buyer").

Recitals

A. The Buyer seeks to purchase CERs from the Seller.

B. The Seller seeks to sell CERs to the Buyer.

C. The parties have entered into this Agreement to give effect to the objectives in (A) and (B) above.

The parties agree:

1. Definitions and Interpretation

1.1 Definitions

In this Agreement:

"Agreement" means this Certified Emission Reduction Agreement.

"**Applicable Laws**" means all legally binding constitutions, treaties, statutes, laws, ordinances, rules, regulations, orders, interpretations, permits, judgments, decrees, injunctions, writs and orders of any Governmental Authority or arbitrator that apply to any one or more of the parties or the terms of this Agreement.

"**Assigned Amount Unit**" or "**AAU**" means a unit issued pursuant to the Kyoto Protocol and is equal to one metric tonne of Carbon Dioxide Equivalent, calculated using Global Warming Potentials.

"Business Day" means a day, other than a Saturday or Sunday, on which banks are open for business in **[insert country]**.

"**Carbon Dioxide Equivalent"** or **"CO2e"** is the universal unit of measurement used to indicate the Global Warming Potential of Greenhouse Gases.

"CER Price" is **[insert price] [insert currency of contract]** for each CER sold to the Buyer under this Agreement.

"Certified Emission Reductions" or "CERs" means a unit of one metric tonne of Carbon Dioxide Equivalent calculated using Global Warming Potentials, issued pursuant to Article 12 of the Kyoto Protocol and requirements thereunder, as well as the relevant provisions in subsequent modalities and procedures and may if the parties agree be substituted with AAUs.

"Claim" means any claim to the title or any action in relation to the title or ownership of the CERs by any party other than the Buyer.

"Clean Development Mechanism" or "CDM" has the meaning given to it by Article 12 of the Kyoto Protocol.

"CDM Registry" means the registry established and maintained by the Executive Board pursuant to the International Rules to ensure the accurate accounting of CERs and the issuance, holding, transfer and acquisition of CERs.

"Confidential Information" means the following information:

(i) the existence and terms and conditions of this Agreement; and

(ii) all information provided by one party to another party in accordance with the provisions of this Agreement to the extent that the information is marked as confidential or is by its nature inherently confidential.

"Convention" means the United Nations Framework Convention on Climate Change.

"Encumbrance" means:

(i) any mortgage, charge, pledge, lien, encumbrance, assignment, security interest, title retention, preferential right, trust arrangement, contractual right of set-off or any other security agreement or arrangement in favour of any person by way of security for the payment of a debt or any other monetary obligation; or

(ii) any restriction of any kind under any regulatory or voluntary regime that may affect the ability of the Buyer to use a CER purchased under this Agreement;

"Executive Board" is the formal regulatory body established to supervise and regulate the CDM under the Kyoto Protocol.

"Force Majeure Event" means an event, circumstance or combination of events and circumstances occurring on or after the date of this Agreement

that is beyond the reasonable control of the party seeking to rely on clause 4 of this Agreement, which prevents that party from performing all or any of its obligations under this Agreement and includes, but is not limited to:

(i) failure of the Kyoto Protocol to enter into force; or

(ii) failure of the registry functions of the CDM Registry to be operative so as to enable CERs to be transferred in accordance with this Agreement.

"Global Warming Potentials" means the global warming potentials used to calculate the Carbon Dioxide Equivalence of Greenhouse Gases as accepted or subsequently revised in accordance with Article 5 of the Kyoto Protocol.

"Government Agency" means any international, national, federal, provincial, state, municipal, county, regional or local government, organisation or authority of any jurisdiction operating under any Applicable Laws or International Rules and includes, without limitation:

(i) any department, commission, bureau, board, administrative agency or regulatory body of any government;

(ii) an International Agency;

(iii) any person or corporation acting as a registrar in connection with a Greenhouse Gas emissions trading registry; and

(iv) any person or corporation acting as an agent for a Governmental Agency.

"**Government Authority**" means any international, federal, state, local, municipal or other governmental, administrative, judicial or regulatory entity having or asserting jurisdiction over a party to this Agreement and includes any relevant body established under the International Rules.

"**Greenhouse Gases**" or "**GHG**" means one or more of the six gases listed in Annex A to the Kyoto Protocol as amended from time to time.

"International Agency" means the Conference of the Parties to the Convention, the International Panel on Climate Change, the Executive Board and any other international commission, bureau, board, administrative agency or regulatory body responsible for measures to achieve objectives of the Convention.

"International Rules" means the Convention, Kyoto Protocol, the Marrakech Accords or any successor or supplementary international agreements.

"Kyoto Protocol" means the Protocol to the Convention, adopted at a Conference of the Parties in Kyoto, Japan, December 10th, 1997, as amended,

implemented or supplemented by subsequent Conferences of the Parties to the Protocol or otherwise.

"Marrakech Accords" means Decisions 2/CP.7 through to Decision 24/CP.7 inclusive of the Conference of the Parties to the Convention, in its seventh session, held at Marrakech from 29 October to 10 November 2001.

"Registry Account" means the registry account established or nominated in the CDM Registry by the Buyer and to which the CERs sold under this agreement are to be transferred and include any other registry or account under any International Rules or other international or national regimes as the Buyer may direct.

"Sale and Transfer Date" means [ ] or any other date subsequently agreed by the parties.

"Total CER Payment" is the CER Price multiplied by the number of CERs to be sold in accordance with this Agreement as set out in clause 2.2(a).

"Transfer Documentation" means any documentation produced by the Executive Board or CDM Registry relating to the transfer of the CERs sold in accordance with this Agreement.

"Warranties" means the warranties contained in clause 7 of this Agreement.

1.2 Interpretation

In this Agreement:

(a) headings are for convenience only and do not affect interpretation; and unless the context indicates a contrary intention;

(b) the expression "person" includes an individual, the estate of an individual, a corporation, an authority, an association or a joint venture (whether incorporated or unincorporated), a partnership and a trust;

(c) a reference to any party includes that party's executors, administrators, successors and permitted assigns, including any person taking by way of novation and, in the case of a trustee, includes any substituted or additional trustee;

(d) a reference to any document (including this Agreement) is to that document as varied, novated, ratified or replaced from time to time;

(e) a reference to any statute or to any statutory provision includes any statutory modification or re-enactment of it or any statutory provision substituted for

it, and all ordinances, by-laws, regulations, rules and statutory instruments (however described) issued under it;

(f) words importing the singular include the plural (and vice versa), and words indicating a gender include every other gender;

(g) references to parties, clauses, schedules, exhibits or annexures are references to parties, clauses, schedules, exhibits and annexures to or of this Agreement, and a reference to this Agreement includes any schedule, exhibit or annexure to this Agreement;

(h) where a word or phrase is given a defined meaning, any other part of speech or grammatical form of that word or phrase has a corresponding meaning;

(i) the word "includes" in any form is not a word of limitation; and

(j) [a reference to "$" or "dollar" is to US currency – **amend subject to currency of contract].**

2. Sale of CERs

2.1 Sale and Purchase of CERs

The Seller agrees to sell to the Buyer and the Buyer agrees to buy from the Seller on the Sale and Transfer Date **[insert number of CERs to be sold]** CERs in accordance with the terms and conditions set out in this Agreement.

2.2 Payment and Transfer of Legal Title

(a) The Buyer shall pay the Seller the Total CER Payment of [insert total payment] on the Sale and Transfer Date.

(b) Payment shall be made by bank cheque or by such other payment method nominated by the Seller.

(c) Legal title to the CERs to be sold under this Agreement shall pass to the Buyer upon payment of the Total CER Payment.

2.3 Transfer of CERs

(a) Upon receipt of the Total CER Payment, the Seller shall take all necessary steps to ensure that the CERs, to be sold in accordance with this Agreement, are transferred into the Registry Account in accordance with all Applicable Laws and International Rules governing such transfers.

(b) The Seller shall notify the Buyer upon the CERs being transferred into the Registry Account. The Seller shall provide a copy of any Transfer Documentation or other documentary evidence (if such documentary evidence is able to be generated) received from the CDM Registry or the Executive Board to the Buyer.

(c) The Buyer shall take all reasonable steps required to assist the Seller to transfer the CERs sold under this Agreement into the Registry Account.

2.4 Transfer Fees

The Buyer will be responsible for the payment of any fees, charges, taxes and other costs imposed on the transaction pursuant to the International Rules, by a Government Agency or otherwise associated with the transfer of CERs to the Buyer under this Agreement.

3. CER Shortfall

(a) If the Seller becomes aware that it will be unable to deliver part or all of the CERs to be sold in accordance with this Agreement, then it must inform the Buyer in writing as soon as possible of the full details of any shortfall.

(b) Upon receipt of a notice under clause (a), the Buyer will accept delivery of any CERs on the Sale and Transfer Date which the Seller is able to deliver with the Total CER Payment reduced by the CER Price for each CER not delivered.

(c) Following service of a notice under clause 3(a) the Seller will use all reasonable endeavours to deliver any shortfall of CERs to the Buyer as soon as possible at which time the Buyer will immediately pay the Seller the CER Price for any additional CERs delivered.

(d) Subject to clause 4, if the Seller is unable to make good any shortfall within 60 days of the Sale and Transfer Date, then the buyer may either:

(i) negotiate alternative arrangements with the Seller regarding a revised date upon which the outstanding CERs are to be transferred; or

(ii) terminate this Agreement in accordance with clause 6(d).

(a) If the Seller terminates the Agreement under clause 3(d)(ii), the Seller will be under no further obligation to deliver any CERs other than those delivered under clause 3(b).

4. Force Majeure

4.1 Effect of Force Majeure

(a) A party's non-performance of an obligation under this Agreement ("the Non-Performing Party") due to the occurrence of a Force Majeure Event:

(i) will be permitted during the time and to the extent that performance is prevented, wholly or in part by the Force Majeure Event; and

(ii) will not give rise to any liability to the other party ("the Performing Party") for any losses or damages arising out of, or in any way connected with such non-performance.

(a) No party will be relieved by Force Majeure from any obligation to give any notice or make any payments which may be required to be given, pursuant to this Agreement.

(b) The Non-Performing Party must provide the Performing Party with notice of the Force Majeure within 24 hours of becoming aware of the relevant Force Majeure Event and take reasonable steps to remove or mitigate the relevant effects of the Force Majeure Event, except that the Non-Performing Party will not be obliged to settle a strike, lockout, boycott or other industrial dispute.

4.2 Prolonged Force Majeure

If by reason of a Force Majeure Event the Non-Performing Party is unable to perform any obligation or condition required by this Agreement to be performed and that non-performance continues for a period of 6 months after the Sale and Transfer Date, the Non-Performing Party and the Performing Party must meet and negotiate in good faith to determine what steps may be taken by them to carry out the intentions of this Agreement.

5. Limitation of Liability

5.1 Consequential Loss

Notwithstanding any other provision in this document each party agrees that:

(a) Neither party will be liable to the other party for loss arising from any breach of this Agreement other than for loss directly resulting from that breach and which at the date of the Agreement was reasonably foreseeable as likely to occur in the ordinary course of events from that breach.

(b) Notwithstanding clause 5.1(a), neither party will be liable to the other party in respect of any breach of this Agreement or any other obligation or any duty (including any duty of care for the purposes of the tort of negligence) for:

(i) any financial or economic loss, including loss of profit, loss of revenue, loss of use, loss of contract, loss of goodwill, or increased cost of working; or

(ii) any indirect or consequential loss; or

(iii) loss resulting from liability of the other party to any third person howsoever and whensoever arising; or

(iv) negligence whenever and by whomsoever, other than where causing death or personal injury.

5.2 Cap on Liability

The amount for which a party may liable to the other party will not exceed the total amount paid pursuant to clause 2.2(a) of this Agreement.

6. Termination

Notwithstanding anything in this Agreement to the contrary, this Agreement may be terminated upon any of the following events:

(a) by mutual written consent of both of the parties;

(b) upon written notice from either party to the other if such other party is

subject to proceedings under any law relating to bankruptcy, insolvency, reorganisation, moratorium or similar laws affecting debtor's or creditor's rights;

(c) upon written notice from the Seller to the Buyer of the existence of any payment amount outstanding if, within 14 days after delivery of written notice from the Seller to the Buyer that such amount is past due, the Buyer has failed to make any payment due hereunder which is not reasonably in dispute;

(d) upon notice from either party to the other if such other party has breached any material term of this Agreement and such breach has not been remedied within 30 days following the delivery of written notice to such other party specifying such breach; and

(e) in accordance with clause 3(d)(ii).

7. Warranties and Indemnities

7.1 General Warranties

Each party warrants and represents to the other party:

(a) it has the power and authority to execute and deliver this Agreement and to perform its obligations under it;

(b) it has taken all necessary action to authorise the entry into and the observance and performance of its obligations under this Agreement; and

(c) this Agreement constitutes a legal, valid and binding obligation on it enforceable in accordance with its terms by appropriate legal remedy.

7.2 Seller Warranties

The Seller warrants to the Buyer, that:

(a) it has not sold, transferred, assigned, licensed, disposed of, granted or otherwise created any interest in the CERs other than as contemplated in this Agreement; and

(b) the Buyer will receive good title to the CERs free of any Encumbrance or Claim.

8. Confidentiality and Publicity

8.1 Confidential information not to be disclosed

A party in receipt of Confidential Information under this Agreement (the "**Disclosee**") must not:

(a) make public or disclose that Confidential Information to any third party; or

(b) make or allow to be made copies of or extracts of all or any part of the Confidential Information except for the purposes of this Agreement.

8.2 Permitted Disclosure

Nothing in clause 8.1 restricts the disclosure of Confidential Information:

(a) (Already in lawful possession): that, at the time of the first disclosure to or observation by the Disclosee, was already in the lawful possession of the Disclosee;

(b) (Public domain): that is or becomes part of the public domain (other than by an act of a party to this Agreement);

(c) (Third parties): that is disclosed to a Buyer a person who is not a party to this Agreement provided that information was not obtained directly or indirectly from any party to this Agreement;

(d) (Employees, advisers, etc): that an employee, agent or adviser of the Disclosee needs to know, but only where such employees, agents or advisers have been required to keep the information confidential on terms no less stringent than this Agreement;

(e) (Court): in proceedings before any Court or tribunal arising out of, or in connection with, this Agreement;

(f) (Regulatory body): to the extent required by lawful requirement of:

(g) any government or governmental body, authority or agency having jurisdiction over a party to this Agreement or its related bodies corporate; or

(h) any stock exchange having jurisdiction over a party to this Agreement or

its related bodies corporate;

(i) (Law): if required under any law, or administrative guidelines, directive, request or policy, whether or not having force of law; and

(j) (Consent): where the disclosure has been approved in writing by the parties, such as for the purposes of public announcements or promotion.

8.3 Clause to Continue to Bind Parties

This clause 8 will continue to bind the parties after the date of expiration or the date of termination of this Agreement, as the case may be, for a period of 3 years, or such other period as the parties may agree in writing.

9. Resolution of Disputes

9.1 Notice of Dispute

If a dispute arises between the parties out of or in relation to this Agreement, a party may notify the other party in writing of the dispute giving details of the nature of the dispute.

9.2 Meeting of Representatives

Within seven days (or such longer period as may be agreed between the parties) after written notice of the dispute has been served, the parties agree to meet or, by agreement, participate in a meeting by way of videoconference (or other mutually convenient means of communication) to discuss the subject matter of the Dispute and use all reasonable efforts in a spirit of mutual understanding and collaboration to resolve the Dispute to the parties mutual satisfaction.

10. Arbitration

Should circumstances arise where, having sought to resolve a dispute in accordance with clause 9.2, the parties are unable to resolve the dispute to their mutual satisfaction the dispute, or any matter concerning the dispute

not yet agreed shall be finally settled by arbitration in [**insert jurisdiction**] and conducted in accordance with the **[insert rules of arbitration]**. The award rendered shall be final and binding upon the parties.

11. General

11.1 Further acts

Each party will promptly do and perform all further acts and execute and deliver all further documents (in form and content reasonably satisfactory to that party) required by law or reasonably requested by any other party to give effect to this Agreement.

11.2 Notices

Any communication under or in connection with this Agreement:

(a) must be in writing;

(b) must be addressed as shown below:

Seller:

Name:
Address:
Fax no:
Attention:

Buyer:
Name:
Address:
Fax no:
Attention:

(or as otherwise notified by that party to the other party from time to time);

(c) must be signed by the party making the communication or (on its behalf) by the solicitor for, or by any attorney, director, secretary, or authorised agent of, that party;

(d) must be delivered or posted by prepaid post to the address, or sent by fax to the number, of the addressee, in accordance with clause 11.2(b); and

(e) will be deemed to be received by the addressee:

(f) (in the case of prepaid post) on the [insert number] Business Day after the date of posting to an address within [insert country], and on the [insert number] Business Day after the date of posting to an address outside [insert country];

(g) (in the case of fax) at the local time (in the place of receipt of that fax) which then equates to the time at which that fax is sent as shown on the transmission report which is produced by the machine from which that fax is sent and which confirms transmission of that fax in its entirety, unless that local time is a non Business Day, or is after 5.00 pm on a Business Day, when that communication will be deemed to be received at 9.00 am on the next Business Day; and

(h) (in the case of delivery by hand) on delivery at the address of the addressee as provided in clause 11.2(b), unless that delivery is made on a non Business Day, or after 5.00 pm on a Business Day, when that communication will be deemed to be received at 9.00 am on the next Business Day.

11.3 Expenses

Except as otherwise provided in this Agreement, each party will pay its own costs and expenses in connection with the negotiation, preparation, execution, and performance of this Agreement.

11.4 Governing law

This Agreement has been proposed by the Seller and is governed and will be construed according to the laws of **[insert country]**.

11.5 Jurisdiction

(a) Each party irrevocably submits to the non-exclusive jurisdiction of the courts in [insert country] and the courts competent to determine appeals from those courts, with respect to any proceedings which may be brought at any time relating in any way to this Agreement and to the extent it is necessary as provided under clause 11.

(b) Each party irrevocably waives any objection it may now or in the future have to the venue of any proceedings, and any claim it may now or in the future have that any proceedings have been brought in an inconvenient forum, where that venue falls within clause 11.5(a).

11.6 Amendments

This Agreement may only be varied by a document signed by or on behalf of each of the parties.

11.7 Waiver

(a) Failure to exercise or enforce or a delay in exercising or enforcing or the partial exercise or enforcement of any right, power or remedy provided by law or under this Agreement by any party will not in any way preclude, or operate as a waiver of, any exercise or enforcement, or further exercise or enforcement of that or any other right, power or remedy provided by law or under this Agreement.

(b) Any waiver or consent given by any party under this Agreement will only be effective and binding on that party if it is given or confirmed in writing by that party.

(c) No waiver of a breach of any term of this Agreement will operate as a waiver of another breach of that term or of a breach of any other term of this Agreement.

11.8 Consents

Any consent referred to in, or required under, this Agreement from any party may not be unreasonably withheld, unless this Agreement expressly provides for that consent to be given in that party's absolute discretion.

11.9 Counterparts

This Agreement may be executed in any number of counterparts and by the parties on separate counterparts. Each counterpart constitutes the agreement of each party who has executed and delivered that counterpart.

11.10 Entire agreement

To the extent permitted by law, this Agreement embodies the entire understanding of the parties and constitutes the entire terms agreed upon between the parties and supersedes any prior agreement (whether or not in writing) between the parties.

11.11 No representation or reliance

(a) The Buyer acknowledges that no party (nor any person acting on its behalf)

has made any representation or other inducement to it to enter into this Agreement, except for representations or inducements expressly set out in this Agreement.

(b) The Buyer acknowledges and confirms that it does not enter into this Agreement in reliance on any representation or other inducement by or on behalf of any other party, except for any representation or inducement expressly set out in this Agreement.

11.12 Severance

If any provision of this Agreement or any of the Confirmations or part thereof is held illegal, unenforceable or otherwise invalid, that provision or part will be deemed to be severed from this Agreement or the relevant Confirmation and the remainder of the Agreement or the relevant Confirmation will come into effect.

Signed as an agreement.

Signed for and on behalf of
[Insert Buyer Details]
by its duly authorised representative
in the presence of:

Signature of witness	Signature of authorised representative
Name of witness (please print)	Name of authorised representative (please print)

Signed for and on behalf of
[Insert Seller Details]

by its duly authorised representative
in the presence of:

Signature of witness	Signature of authorised representative
Name of witness (please print)	Name of authorised representative (please print)

Appendix D

Draft Contract for Projects where Buyer has an Underlying Interest in the Project

This draft contract provides some guidance as to the types of clauses that may be appropriate for a CDM contract where the Annex I investor has an underlying financial interest in the CDM Project (e.g. is providing finance in return for payment by way of CERs or takes equity in the project as well as CERs). The explanation boxes provide comments on the suggested clauses and why they have been included.

This draft contract should be considered as guidance only and not legal advice. It does not take into account project specific issues. CDM investors and project developers should always seek legal and financial advice tailored to the particular circumstances of the CDM Project. This contract must be tailored to take account of local and governing law requirements and the associated legal arrangements with third parties, including the underlying investment arrangements. This contract must also be significantly modified before it will be appropriate to use for an afforestation or reforestation CDM Project transferring tCERs or lCERs.

This contract has been drafted from a Host Country project developer's perspective, but contains several clauses which are often insisted on by project investors and CER Purchasers to minimise their risk exposure under the contract. It is therefore a balanced commercial contract which Host Country project developers can modify to suit the particular circumstances of their CDM Project.

Certified Emission Reductions Project Investment Agreement

[for Projects where the Buyer has an underlying interest in the CDM Project]

[Insert name of CDM Project owner(s)]

(Project Entity)

and [Insert name of Annex I investor]

(Project Investor)

Warning: Each CDM Project and each CER transaction is unique and will raise discrete project and transaction specific legal and commercial issues which will be required to be incorporated into the CDM Project and CER transaction documentation (including this CER Sale Agreement). This document is a "shell" agreement and does not consider project specific issues. The user of this contract is required to carefully consider the project and transaction risk profile of the CDM Project before amending this document. It is also very important to carefully consider how this agreement and its terms fit within the overall project structure and how its terms interact with the terms of other Project Documents. It is likely that other agreements will be required to be executed to affect a CDM Project. Legal advice is required before finalising this agreement.

Certified Emission Reductions Investment Agreement

Parties: **[insert name of project owner or developer]**
("Project Entity");

[insert name of Annex I Investor]
("Project Investor").

Recitals

(i) The Project Entity is developing the Project.

(ii) The Project Investor seeks to acquire from the Project Entity the CERs sourced from the Project.

(iii) The Project Entity seeks to source project finance from the Project Investor.

(iv) The parties have entered into this Agreement to give effect to the objectives in (i) to (iii) above.

The parties agree

1. Definitions and Interpretation

1.1 Definitions

In this Agreement:

"Agreement" refers to this agreement between [insert name of Project Entity] and [insert name of Project Investor] and includes all Schedules and attachments.

"**Applicable Laws**" means all legally binding constitutions, treaties, statutes, laws (including common law), ordinances, rules, regulations, orders, interpretations, permits, judgments, decrees, injunctions, writs and orders of

any Governmental Authority or arbitrator that apply to any one or more of the parties, the Project or the terms of this Agreement.

"**Assigned Amount Units**" or "**AAUs**" means the units issued pursuant to the Kyoto Protocol and is equal to one metric tonne of carbon dioxide equivalent, calculated using Global Warming Potentials.

"**Baseline Study**" means a study prepared in accordance with the International Rules with a sound, objective, systematical and reproducible analysis reasonably representing the anthropogenic emissions by sources of Greenhouse Gases that would occur in the absence of the Project.

"Business Day" means a day, other than a Saturday or Sunday, on which banks are open for business in [insert country].

"**Carbon Dioxide Equivalent"** or **"CO2e**" means the base reference for the measurement of Global Warming Potential of Greenhouse Gases in units of Carbon Dioxide Equivalent whereby one unit equals one metric tonne of CO2e emissions.

"**Certification**" means the written assurance by the DOE to confirm that, during a specified time period, a CDM Project activity achieved the reductions in Greenhouse Gas emissions as verified.

"Certified Emission Reductions" or "CERs" means a unit of one metric tonne of Carbon Dioxide Equivalent calculated using Global Warming Potentials, issued pursuant to Article 12 of the Kyoto Protocol and requirements thereunder, as well as the relevant provisions in subsequent modalities and procedures.

"Claim" means any claim to the title or any action in relation to the title or ownership of the CERs by any party other than the Project Investor.

"Clean Development Mechanism" or "CDM" has the meaning given to it by Article 12 of the Kyoto Protocol to the Convention.

"CDM Registry" means the registry established and maintained by the Executive Board or the relevant Annex I Kyoto Protocol Party pursuant to the International Rules to ensure the accurate accounting of the issuance, holding, transfer and acquisition of CERs.

"Confidential Information" means the following information:

(a) the existence and terms and conditions of this Agreement; and

(b) all information provided by one party to another party in accordance with the provisions of this Agreement to the extent that the

information is marked as confidential or is by its nature inherently confidential.

"Convention" means the United Nations Framework Convention on Climate Change.

"Delivery Failure" means a failure by the Project Entity to transfer the CERs into the Registry Account by the Transfer Date creating a Delivery Shortfall Amount.

"Delivery Shortfall Amount" means the shortfall in CERs resulting from a Delivery Failure.

"DOE" means an entity with a valid accreditation from the Executive Board pursuant to the accreditation standards set out in Decision 17/CP.7 of the Marrakech Accords, designated by any Conference of the Parties to the Convention as an entity or body which validate and /or verify and certify Emission Reduction in accordance with the Kyoto Protocol or any successor international agreement.

"Eligibility Failure" means the happening of an event that leads to any CERs transferred to the Registry Account to become ineligible, non-compliant, invalid, restricted or in any way defective in use for whatever reason.

"Emission Reduction(s)" or "ER(s)" means any right, credit, interest, entitlement or benefit (present or future) arising from any limitation, reduction, avoidance, sequestration or mitigation of anthropogenic Greenhouse Gas emissions into the Environment, measured in metric tonnes of CO2e, that results from or is caused, in whole or in part, by any technologies, processes, measures, commodities or products that are used in, part of or directly related to the Project and which may result in Certified Emission Reductions.

"Encumbrance" includes:

(a) any mortgage, charge, pledge, lien, encumbrance, assignment, security interest, title retention, preferential right, trust arrangement, contractual right of set-off or any other security agreement or arrangement in favour of any person by way of security for the payment of a debt or any other monetary obligation; and

(b) any restriction of any kind under any regulatory or voluntary regime that may affect the ability of the Project Investor to use a CER purchased under this Agreement;

"Executive Board" means supervisor of the CDM, under the authority and guidance of the Conference of Parties/Meeting of Parties to the Convention, and be fully accountable to the Conference of Parties/Meeting of Parties to the Convention under the International Rules.

"Force Majeure Event" means an event, circumstance or combination of events and circumstances occurring on or after the date of this Agreement that is beyond the reasonable control of the party seeking to rely on clause 4 of this Agreement, which prevents that party from performing all or any of its obligations under this Agreement and includes, but is not limited to:

(iii) failure of the Kyoto Protocol to enter into force; or

(iv) failure of the registry functions of the CDM Registry to be operative so as to enable CERs to be transferred in accordance with this Agreement.

"Global Warming Potentials" means the global warming potentials used to calculate the Carbon Dioxide Equivalence of Greenhouse Gases as accepted or subsequently revised in accordance with Article 5 of the Kyoto Protocol.

"Government Agency" means any international, national, federal, provincial, state, municipal, county, regional or local government, organisation or authority of any jurisdiction operating under any Applicable Laws or International Rules and includes, without limitation:

(a) any department, commission, bureau, board, administrative agency or regulatory body of any government;

(b) an International Agency;

(c) any person or corporation acting as a registrar in connection with a GHG Emission Reduction registry; and

(d) any person or corporation acting as an agent for a Governmental Agency.

"**Government Authority**" means any international, federal, state, local, municipal or other governmental, administrative, judicial or regulatory entity having or asserting jurisdiction over a party to this Agreement and includes any relevant body established under the International Rules.

"**Host Country**" means the country (not listed in Annex I to the Kyoto Protocol) in which jurisdiction the Project is located.

"**Greenhouse Gases**" or "**GHG**" means one or more of the six gases listed in Annex A to the Kyoto Protocol.

"International Agency" means the Conference of the Parties to the Convention, the International Panel on Climate Change, the Executive Board and any other international commission, bureau, board, administrative agency or regulatory body responsible for measures to achieve objectives of the Convention.

"International Rules" means the Convention, Kyoto Protocol, the Marrakech Accords or any successor international agreement.

"Kyoto Protocol" means the Protocol to the Convention, adopted at the meeting of the Parties in Kyoto, Japan, December 10th, 1997, as amended or implemented by subsequent Conferences of the Parties to the Protocol or otherwise.

"**Letter of Approval**" means a letter issued by the Host Country consenting to the Project being submitted as a project under the Clean Development Mechanism.

"Marrakech Accords" means Decisions 2/CP.7 through to Decision 24/CP.7 inclusive of the Conference of the Parties to the Convention, in its seventh session, held at Marrakech from 29 October to 10 November 2001.

"**Monitoring Plan**" means the monitoring plan prepared in accordance with the requirements of the International Rules.

"**Monitoring Report**" means the report provided by the Project Entity to the designated DOE in accordance with the Monitoring Plan.

"**Payment Date**" means the date upon which payment of the Project Investment Amount is to be paid/ or means [insert date Project Investment Amount is to be paid (or in accordance with the Payment Schedule in Schedule 2)].

"Permitted Purpose" means [the application of the Project Investment Amount to the development and operation of the Project.]

"Project" means the GHG emission mitigation project undertaken by Project Entity from which the CERs are created, the details of which are set out at Schedule 1.

"Project Entity" means [insert name of Host Country project owner/developer].

"Project Investment Amount" means the amount of [$] to be used by the Project Entity for the Permitted Purpose.

"Project Investor" means [insert name of Annex I Project Investor].

"Registry Account" means the relevant non-Annex I registry account established or nominated in the CDM Registry or the specified Annex I Party Kyoto Registry Account as nominated by the Project Investor;

"Replacement CERs" means CERs provided by the Project Entity at the Project Investor's request in the event of a Delivery Failure or Eligibility Failure.

"Revised Transfer Date" means a date specified by the Project Investor after

the Transfer Date when any Delivery Shortfall Amount must be transferred into the Registry Account.

"Transfer Date" means [insert date] or any other date subsequently agreed by the parties.

"Transfer Documentation" means any documents relating to the development of the Project as a Clean Development Mechanism project and includes: -

(a) a copy of the certification report from a DOE to the Executive Board for the issue of CERs;

(b) Baseline Study and Monitoring Plan;

(c) local stakeholder reports;

(d) report on environmental impacts;

(e) the Host Country Letter of Approval;

(f) Verification Report and Certification;

(g) Monitoring Report.

"Warranties" means the warranties contained in clause 8 of this Agreement.

1.2 Interpretation

In this Agreement:

(a) headings are for convenience only and do not affect interpretation; and unless the context indicates a contrary intention:

(b) the expression "person" includes an individual, the estate of an individual, a corporation, an authority, an association or a joint venture (whether incorporated or unincorporated), a partnership and a trust;

(c) a reference to any party includes that party's executors, administrators, successors and permitted assigns, including any person taking by way of novation and, in the case of a trustee, includes any substituted or additional trustee;

(d) a reference to any document (including this Agreement) is to that document as varied, novated, ratified or replaced from time to time;

(e) a reference to any statute or to any statutory provision includes any statutory modification or re-enactment of it or any statutory provision substituted for

it, and all ordinances, by-laws, regulations, rules and statutory instruments (however described) issued under it;

(f) words importing the singular include the plural (and vice versa), and words indicating a gender include every other gender;

(g) references to parties, clauses, schedules, exhibits or annexures are references to parties, clauses, schedules, exhibits and annexures to or of this Agreement, and a reference to this Agreement includes any schedule, exhibit or annexure to this Agreement;

(h) where a word or phrase is given a defined meaning, any other part of speech or grammatical form of that word or phrase has a corresponding meaning;

(i) the word "includes" in any form is not a word of limitation; and

(j) a reference to "$" or "dollar" is to [insert country] currency.

2. Project Investment

(a) The Project Investor shall pay to the Project Entity the Project Investment Amount in accordance with clause 2(b).

(b) The Project Investor shall pay the Project Investment Amount [on the Payment Date/in accordance with the Payment Schedule].

The Project Investor may provide advance payment for CERs in order to enable the project to be commissioned and start operating. If this is proposed, the Project Investor's risk exposure is increased as if the project is not commissioned it stands to lose the advance payments and not receive any CERs. Therefore, a Project Investor may wish to agree a series of Scheduled Payments with the Project Entity over an agreed period and subject to the Project Entity's performance of certain "milestones" to reduce the total exposure of the Project Investor. Established milestones may also assist the Project Entity to reach achievable goals for the CDM Project and minimise the risk of non-performance. The parties would therefore need to agree on a payment schedule and the various milestones to be achieved.

In addition, the Project Investor may take equity in the project or provide debt finance for the commissioning of the project. This should be reflected with appropriate financial or investment contracts and this agreement should be modified so that it is compatible with such arrangements.

3. Supply of CERs

3.1 Legal Title to CERs

(a) In consideration for the Project Investment Amount, the Project Entity agrees to assign all beneficial and legal title to the CERs and Emission Reductions sourced from the Project to the Project Investor, in accordance with the terms and conditions set out in this Agreement.

(b) Full beneficial and legal title to the Emissions Reductions shall pass from the Project Entity to the Project Investor once they are generated and full beneficial and legal title to the CERs shall pass from the Project Entity to the Project Investor once they are issued into a registry account as directed by the Project Investor, providing that the Project Investment Amount relating to those Emission Reductions or CERs has been paid.

(c) The parties shall notify the CDM Executive Board that the CERs to be provided to the Project Investor under this Agreement are the legal property of the Project Investor to be distributed in accordance with this Agreement.

(d) Should the ownership of, entitlement to or the ability to create or distribute the Emission Reductions or CERs in accordance with this Agreement be restricted in any way, including the ability for the Project Entity to legally transfer and assign the ownership of, or entitlement to, the Emission Reductions or CERs to the Project Investor, the Project Entity shall hold the Emission Reductions on behalf of the Project Investor to be dealt with in accordance with any direction of the Project Investor.

The amount of CERs to be acquired will need to be considered and agreed. If the Project Investor is to receive title to all CERs, it may be appropriate to state "all the total CERs created by the Project which shall not be less than [insert number]". Alternatively, if the Project Investor is not to receive all of the CERs from the CDM Project, it would be appropriate to agree upon a schedule for delivery over time and attach a yearly CER delivery schedule that the Project Entity is required to satisfy. In either of these cases it is wise for the Project Entity to leave a "buffer" of emission reductions expected to be generated by the Project. This way if the project performance is lower than expected (and less Emission Reductions or CERs are created) it will not be in breach of the Agreement as it still has a buffer of emission reductions/CERs to draw upon to meet its contractual obligations.

3.2 Creation of CERs

Before the Transfer Date the Project Entity shall, at [its/the Project Investor's] expense, do all things necessary to bring all the CERs referred to in clause 3.1 into existence including (but not limited to) satisfying all requirements of:

(a) the relevant designated DOE and the Executive Board under the International Rules; and

(b) any Government Agency.

3.3 Transfer of CERs

(a) The Project Entity shall ensure that the CERs have been transferred into the Registry Account or a registry account of a third party nominated in writing by the Project Investor by the Transfer Date.

(b) Demonstration by the Project Entity to the Project Investor that the CERs have been transferred into the registry account identified pursuant to clause 3.3 (a) constitutes effective delivery of the CERs.

3.4 Notification of Transfer

(a) The Project Entity shall notify the Project Investor immediately upon the CERs being transferred in accordance with clause 3.3 (a). The Project Entity shall provide a copy of any transfer notification received from the CDM Registry (or if no physical evidence of such notification can be obtained by the Project Entity, give notification in writing).

(b) The Project Investor shall take all reasonable necessary steps to assist the Project Entity to effect transfer in accordance with clause 3.3(a).

3.5 Fees

[The Project Entity/the Project Investor] will be responsible for the payment of all fees, charges, taxes and other costs imposed pursuant to the International Rules, by a Government Agency or otherwise associated with the creation and transfer of CERs to the Project Investor under this Agreement.

3.6 CER Security

The investment envisaged in this contract is an advance payment clause in return for the Project Entity's delivery of CERs at some later date, the Transfer Date. The payment provisions of the agreement will depend upon the nature of the agreed financing arrangements between the Project Investor and the Project Entity. If it is proposed that the Project Investor provide finance to the CDM Project in return for the CERs that are created from the Project the Project Investor is confronted with providing advance payment/financing before delivery of the CERs. The Project Investor also carries the risk that the CERs or the expected volume of CERs will not be forthcoming or that the Project Entity will become insolvent before the Transfer Date. It may therefore insist on the Project Entity providing security for the loan until it is paid off with CERs. Security could be by way of security over:

(a) the Project land and assets;

(b) other revenue streams of the Project;

(c) other Project Entity assets;

(d) payments or Bank Guarantees;

(e) other agreed Securities or insurance arrangements.

The clause would need to link into the terms of the finance documentation for the CDM Project and specify when such security could be drawn on such as in the case of default or termination. Alternatively, the Project Entity may consider obtaining a guarantee from a parent company or from the Government to underwrite its performance under the Agreement. The Project Investor may also request step in rights so that if the Project Entity is financially unable to develop the project (e.g. due to insolvency) the Project Investor can take over its obligations. This would depend on the nature of the Project Investor and its previous experience in managing projects.

This agreement needs to be tied into the terms of the Finance documents for the CDM Project.

4. Delivery Failure

4.1 Notice for Delivery Failure

Should the Project Entity, at any stage following the execution of this Agreement, know or anticipate that it will be unable to transfer CERs in

accordance with clause 3.3 by the Transfer Date, then the Project Entity shall immediately give a Notice to the Project Investor advising the Project Investor that a Delivery Failure has, will or may occur. The Notice must include the following information:

(a) details as to the Project Entity's failure (or anticipated failure as the case may be) to provide the CERs by the Transfer Date;

(b) the size of any Delivery Shortfall Amount; and

(c) the likely delay before the Delivery Shortfall Amount will be able to be transferred into the Registry Account.

4.2 Procedure Upon Delivery Failure

On receipt of a Notice from the Project Entity pursuant to Section 4.1 the Project Entity and the Project Investor will meet to negotiate a Revised Transfer Date and alternative delivery arrangements which are acceptable to both parties.

This clause provides maximum flexibility for the Project Entity to renegotiate the delivery terms of the Agreement in the case that it is unable for some reason to meet its delivery obligations. However, particularly where a Project Investor has taken equity in a project or provided debt finance, it is likely to prefer more stringent requirements for the Project Entity to deliver the CERs or to provide replacement CERs in the case of a shortfall. An alternative commercial clause could be:

The Project Investor may in its sole discretion:

(a) notify the Project Entity of a Revised Transfer Date;

(b) request delivery of the Delivery Shortfall Amount by the Revised Transfer Date; or

(c) require the Project Entity to provide Replacement CERs in the same quantity as the Delivery Shortfall Amount in accordance with Section 4.3 below.

4.1 Replacement CERs

Where the Project Investor requests the Project Entity to provide Replacement CERs in the same quantity as the Delivery Shortfall Amount because of a Delivery Failure then the Project Entity, at its expense, shall provide Replacement CERs in the same quantity as the Delivery Shortfall Amount by the Revised Transfer Date.

5. Force Majeure

5.1 Effect of Force Majeure

(a) A party's non-performance of an obligation under this Agreement ("the Non-Performing Party") due to the occurrence of a Force Majeure Event:

(i) will be permitted during the time and to the extent that performance is prevented, wholly or in part by the Force Majeure Event; and

(ii) will not give rise to any liability to the other party ("the Performing Party") for any losses or damages arising out of, or in any way connected with such non-performance.

(a) No party will be relieved by Force Majeure from any obligation to give any notice or make any payments which may be required to be given, pursuant to this Agreement.

(b) The Non-Performing Party must provide the Performing Party with notice of the Force Majeure within 24 hours of becoming aware of the relevant Force Majeure Event and take reasonable steps (including the application of reasonable resources) to remove or mitigate the relevant effects of the Force Majeure Event.

5.2 Prolonged Force Majeure

If by reason of a Force Majeure Event the Non-Performing Party is unable to perform any obligation or condition required by this Agreement to be performed and that non-performance continues for a period of 6 months after the Sale and Transfer Date, the Non-Performing Party and the Performing Party must meet and negotiate in good faith to determine what steps may be taken by them to carry out the intentions of this Agreement.

6. Insurance

6.1 Project Entity's Insurance

(a) The Project Entity must effect and maintain insurance to cover any loss, destruction or damage to the plant, equipment and infrastructure which

forms the Project (Project Infrastructure) for an amount not less than the replacement cost of the Project Infrastructure during the term of this Agreement.

(b) Upon effecting such insurance as set out above the Project Entity will immediately provide the Project Investor with documents evidencing the existence of the insurance and the payment of relevant premiums.

6.2 DOE's Insurance

The Project Entity must ensure that the designated DOE appointed for the purposes of preparing any validation or accreditation documentation for the Project has effected professional indemnity insurance with an adequate level of cover to cover all reasonably foreseeable losses to the Project Investor and the Project Entity in the event that any CERs the subject of this Agreement are invalidated or DOE loses its accreditation with Executive Board for any reason whatsoever.

7. Termination

7.1 Termination for Delivery Failure or Eligibility Failure

If a Delivery Failure (including the inability to provide Replacement CERs in accordance with this Agreement) has occurred and is not remedied to the satisfaction of the Project Investor within [90] days of the relevant Transfer Date, the Project Investor may terminate this Agreement by Notice**.**

Note: If the Project Investor has made an advance payment it will also have the right to call on its security. The Project Entity may wish to restrict the right to call upon the security to allow a longer time period to remedy the Delivery Failure.

7.2 Other Causes of Termination

Anything in this Agreement to the contrary notwithstanding, this Agreement may be terminated upon any of the following events:

(a) upon the occurrence of a Prolonged Force Majeure Event which has not been remedied within [X] months of its first occurrence;

(b) by mutual written consent of both of the parties;

(c) upon Notice from either party to the other if such other party is subject to proceedings under any law relating to bankruptcy, insolvency, reorganisation, moratorium or similar laws affecting debtor's or creditor's rights generally which is dissolved within 60 days after the commencement hereof;

(d) upon Notice from the Project Entity to the Project Investor if, within [X] days after delivery of Notice from the Project Entity to the Project Investor that such amount is past due, the Project Investor has failed to make any payment due hereunder which is not reasonably in dispute; and

(e) upon Notice from either party to the other if such other party has breached any material term of this Agreement and such breach has not been remedied within [X] days following the delivery of Notice to such other party specifying such breach.

8. Warranties and Indemnities

8.1 General Warranties

Each party warrants and represents to the other party:

(a) it has the power and authority to execute and deliver this Agreement and to perform its obligations under it;

(b) it has taken all necessary action to authorise the entry into, and the observance and performance of its obligations under this Agreement; and

(c) this Agreement constitutes a legal, valid and binding obligation on it enforceable in accordance with its terms by appropriate legal remedy.

8.2 Project Entity Warranties

The Project Entity warrants to the Project Investor, that:

(a) the Project Entity will undertake the Project in accordance with good engineering industry practice;

(b) the Project Entity will do all things necessary [at its/the Project Investor's expense] to ensure the Executive Board issues the CERs from Emissions Reductions emerging from the Project;

(c) it has not and will not sell, transfer, assign, license, dispose of, granted or otherwise, encumber or create any interest in the CERs other than as contemplated in this Agreement;

(d) all the CERs sold to the Project Investor have been validly transferred into the Registry Account in accordance with clause 3 .3; and

(e) the Project Investor will receive good title to the CERs free of any Encumbrance, Claim or Transaction;

8.3 Indemnity

In the event that:

(a) either party fails to comply with its obligations under this Agreement;

(b) the Agreement is terminated under clause 7.1 or 7.2(c); or

(c) the Project Entity breaches any of the Project Entity Warranties,

then the defaulting party shall indemnify the non-defaulting party for any ensuing liability and loss, including the non-defaulting party's related expenses, fines and penalties, which arises out of such failure or breach by the defaulting party.

9. Confidentiality and Publicity

9.1 Confidential information not to be disclosed

A party in receipt of Confidential Information under this Agreement (the "**Disclosee**") must not:

(a) make public or disclose that Confidential Information to any third party; or

(b) make or allow to be made copies of or extracts of all or any part of the Confidential Information except for the purposes of this Agreement.

9.2 Permitted Disclosure

Nothing in clause 9.1 restricts the disclosure of Confidential Information:

(a) (Already in lawful possession): that, at the time of the first disclosure to or observation by the Disclosee, was already in the lawful possession of the Disclosee;

(b) (Public domain): that is or becomes part of the public domain (other than by an act of a party to this Agreement);

(c) (Third parties): that is disclosed to a Project Investor a person who is not a party to this Agreement provided that information was not obtained directly or indirectly from any party to this Agreement;

(d) (Employees, advisers, etc): that an employee, agent or adviser of the Disclosee needs to know, but only where such employees, agents or advisers have been required to keep the information confidential;

(e) (Court): in proceedings before any Court or tribunal arising out of, or in connection with, this Agreement;

(f) (Regulatory body): to the extent required by lawful requirement of:

(g) any government or governmental body, authority or agency having jurisdiction over a party to this Agreement or its related bodies corporate; or

(h) any stock exchange having jurisdiction over a party to this Agreement or its related bodies corporate;

(i) (Law): if required under any law, or administrative guidelines, directive, request or policy, whether or not having force of law; and

(j) (Consent): where the disclosure has been approved in writing by the parties, such as for the purposes of public announcements or promotion.

9.3 Clause to Continue to Bind Parties

This clause 9 will continue to bind all parties after the date of expiration or the date of termination of this Agreement, as the case may be, for a period of 3 years, or such other period as the party may agree in writing.

10. Resolution of Disputes

10.1 Notice of Dispute

If a dispute arises between the parties out of or in relation to this Agreement, a party may notify the other party in writing of the dispute giving details of the nature of the dispute.

10.2 Meeting of Representatives

Within [fourteen] days (or such longer period as may be agreed between the parties) after written notice of the dispute has been served, the parties agree to meet or, by agreement, participate in a meeting by way of videoconference (or other mutually convenient means of communication) to discuss the subject matter of the Dispute and use all reasonable efforts in a spirit of mutual understanding and collaboration to resolve the Dispute to the parties mutual satisfaction.

11. Arbitration

Should circumstances arise where, having sought to resolve a dispute in accordance with clause 10.2, the parties are unable to resolve the dispute to their mutual satisfaction the dispute, or any matter concerning the dispute not yet agreed shall be finally settled by arbitration in [*insert jurisdiction*] and conducted in accordance with [*insert arbitration rules*]. The award rendered shall be final and binding upon the parties.

12. General

12.1 Further acts

Each party will promptly do and perform all further acts and execute and deliver all further documents (in form and content reasonably satisfactory to that party) required by law or reasonably requested by any other party to give effect to this Agreement.

12.2 Notices

Any communication under or in connection with this Agreement:

(a) must be in writing;

(b) must be addressed as shown below:

Project Entity:
Name:
Address:
Fax no:
Attention:

Project Investor:
Name:
Address:
Fax no:
Attention:
(or as otherwise notified by that party to the other party from time to time);

(c) must be signed by the party making the communication or (on its behalf) by the solicitor for, or by any attorney, director, secretary, or authorised agent of, that party;

(d) must be delivered or posted by prepaid post to the address, or sent by fax to the number, of the addressee, in accordance with clause 12.2(b); and

(e) will be deemed to be received by the addressee:

(i) (in the case of prepaid post) on the third Business Day after the date of posting to an address within [*insert country*], and on the fifth Business Day after the date of posting to an address outside [*insert country*];

(ii) (in the case of fax) at the local time (in the place of receipt of that fax) which then equates to the time at which that fax is sent as shown on the transmission report which is produced by the machine from which that fax is sent and which confirms transmission of that fax in its entirety, unless that local time is a non Business Day, or is after 5.00 pm on a Business Day, when that communication will be deemed to be received at 9.00 am on the next Business Day; and

(iii) (in the case of delivery by hand) on delivery at the address of the addressee as provided in clause 11.2(b), unless that delivery is made on a non Business Day, or after 5.00 pm on a Business Day, when that communication will be deemed to be received at 9.00 am on the next Business Day.

12.3 Expenses

Except as otherwise provided in this Agreement, each party will pay its own costs and expenses in connection with the negotiation, preparation, execution, and performance of this Agreement.

12.4 Governing law

This Agreement is governed and will be construed according to the laws of [*insert country*].

12.5 Amendments

This Agreement may only be varied by a document signed by or on behalf of each of the parties.

12.6 Waiver

(a) Failure to exercise or enforce or a delay in exercising or enforcing or the partial exercise or enforcement of any right, power or remedy provided by law or under this Agreement by any party will not in any way preclude, or operate as a waiver of, any exercise or enforcement, or further exercise or enforcement of that or any other right, power or remedy provided by law or under this Agreement.

(b) Any waiver or consent given by any party under this Agreement will only be effective and binding on that party if it is given or confirmed in writing by that party.

(c) No waiver of a breach of any term of this Agreement will operate as a waiver of another breach of that term or of a breach of any other term of this Agreement.

12.7 Consents

Any consent referred to in, or required under, this Agreement from any party may not be unreasonably withheld, unless this Agreement expressly provides for that consent to be given in that party's absolute discretion.

12.8 Counterparts

This Agreement may be executed in any number of counterparts and by the parties on separate counterparts. Each counterpart constitutes the agreement of each party who has executed and delivered that counterpart.

12.9 Indemnities

(a) Each indemnity in this Agreement is a continuing obligation, separate and independent from the other obligations of the parties, and survives termination, completion or expiration of this Agreement.

(b) It is not necessary for a party to incur expense or to make any payment before enforcing a right of indemnity conferred by this Agreement.

12.10 Entire agreement

To the extent permitted by law, this Agreement embodies the entire understanding of the parties and constitutes the entire terms agreed upon between the parties and supersedes any prior agreement (whether or not in writing) between the parties.

12.11 No representation or reliance

(a) The Project Entity acknowledges that no party (nor any person acting on its behalf) has made any representation or other inducement to it to enter into this Agreement, except for representations or inducements expressly set out in this Agreement.

(b) The Project Entity acknowledges and confirms that it does not enter into this Agreement in reliance on any representation or other inducement by or on behalf of any other party, except for any representation or inducement expressly set out in this Agreement.

12.12 Severance

If any provision of this Agreement or any of the Confirmations or part thereof is held illegal, unenforceable or otherwise invalid, that provision or part will be deemed to be severed from this Agreement or the relevant Confirmation and the remainder of the Agreement or the relevant Confirmation will come into effect.

Signed as an agreement.

Signed for and on behalf of
[insert name of Project Entity]
by its duly authorised representative
in the presence of:

Signature of witness	Signature of authorised representative
Name of witness (please print)	Name of authorised representative (please print)

Signed for and on behalf of
[insert name of Project Investor]
by its duly authorised representative
in the presence of:

Signature of witness	Signature of authorised representative
Name of witness (please print)	Name of authorised representative (please print)

Schedule 1

Project Description

[Parties to set out details of CDM Project from which the CERs are to be sourced]

Schedule 2

Payment Schedule

[Optional]

Legal Issues Guidebook to the Clean Development Mechanism targets primarily policymakers and CDM project proponents in developing countries. The Guidebook aims at providing an in-depth analysis of the various types of risks associated with the different stages of the CDM project cycle and possible legal and contractual approaches that could be adopted to minimize these risks. A review of the different CDM project contracting approaches is also presented. The first three chapters of this Guidebook include basic information on the CDM, while the later chapters present the more specialized legal and contractual issues. Users of this Guidebook will also find in the annex the proposed contract formats for CDM projects that are meant to provide some guidance regarding issues to be taken into consideration when drafting and negotiating a CDM contract.

The guidebook is produced to support the UNEP project "Capacity Development for the Clean Development Mechanism" implemented by UNEP Risø Centre on Energy, Climate and Sustainable Development. The overall objective of the project is to develop the institutional capability and human capacity for implementation of the CDM in developing countries.

The project is funded by the Netherlands Ministry of Foreign Affairs.

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