

**THE CLEAN DEVELOPMENT MECHANISM (CDM):
A BRAZILIAN IMPLEMENTATION GUIDE**

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In spite of the fact that many rules regarding the Clean Development Mechanism have been widely discussed within the international community, these rules have not yet been applied. Considering the institute's own nature, while there have not been enough experiences consolidating the interpretation of its rules, no attempt to elaborate an exhaustive guide interpreting the institute could be intended. Moreover, regarding the activities related to the removal of CO₂ (forestry, land use and land-use change), the modalities and applicable rules have not yet been defined and, therefore, the present guide does not contemplate, with respect to the regulatory aspect, these activities. This document serves only as an initial consulting guide, being insufficient for the effective implementation of project activities in the ambit of the Clean Development Mechanism. It is recommended that those who are interested in project activities, and want to apply for the Clean Development Mechanism, should consult the official regulation of the Conference of the Parties to the United Nations Framework Convention on Climate Change, the Kyoto Protocol, the Marrakech Accords and other pertinent official documents, additionally defined by the Executive Board or by the Meeting of the Parties – CoP/MoP, or another official entity of the Conference of the Parties to the United Nations Framework Convention on Climate Change or the Kyoto Protocol. This document was based on the Marrakech Accords from November, 2001. It is important to mention that the rules regarding the Clean Development Mechanism are being constantly updated, and should be followed by those who are interested in the CDM project activities. The authors, coordinators and the entities directly or indirectly involved in the elaboration of this Guide are not liable, by any means, for any action based on its use.

FOREWORD

This Guide to the Clean Development Mechanism is published by Getulio Vargas Foundation, with the support of the National Bank for Social and Economic Development (BNDES) and the United Nations Conference on Trade and Development (UNCTAD), and with the assistance of the Brazilian Ministry of Science and Technology, and legal advice from the law firm Motta, Fernandes Rocha - Advogados (MFRA).

The purpose of this publication is to serve as a guide to anyone interested in project activities related to the CDM in Brazil. In a simple and concise manner, it addresses the most important rules and procedures related to the CDM. The guide is based on the Kyoto Protocol and the Marrakech Accords, agreed to during the Seventh Session of the Conference of the Parties (CoP-7), that took place in November 2001 in Morocco. The guide also contains the model for the Project Design Document and the modalities and procedures for small scale projects approved at CoP-8, which took place from October 23rd through November 1st, 2002 in New Delhi.



ORGANIZATION OF THIS DOCUMENT

This document is based on (i) the Marrakech Accords regarding CDM projects (ii) the document entitled “A Laypersons’s Guide to the CDM: Rules from Marrakech”, prepared by UNCTAD and the Earth Council Carbon Market Program and (iii) the handbook prepared by BNDES “The Greenhouse Effect and the United Nations Convention on Climate Change.”

This document is organized in the following sections: (i) Background; (ii) The Clean Development Mechanism (CDM), with 4 subsections: (ii.1) Introduction; (ii.2) Institutional Framework; (ii.3) Project Cycle); and (ii.4) Questions and Answers;

The Guide contains 7 appendices: (i) List of acronyms, (ii) Glossary of terms referring directly or indirectly to CDM; (iii) Recommended reading; (iv) a check list for the Project Design Document and Monitoring Plan; (v) A Worksheet for CO₂ Equivalent Calculation; (vi) Annex I of the United Nation Framework Convention on Climate Change; and (vii) The Project Design Document model approved at the Eighth Session of the Conference of the Parties (CoP-8).

I. BACKGROUND

Global climate change has become an issue of major concern to the environment of this century. In the last one hundred years an increase of around one degree in the global average temperature has been observed. This problem is a result of the intensification of the greenhouse effect, which in turn is related to the increased concentration of certain types of gases in the earth's atmosphere, especially carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O).

Greenhouse gas¹ emissions resulting from human activities, also called anthropogenic, are generated by combustion of fossil fuels (coal, oil and natural gas), in thermoelectric plants, industries, vehicles in circulation, domestic heating systems, land-use systems and waste disposal, to mention the main sources.

To give an idea of the order of magnitude of the observed changes, the levels of carbon dioxide (CO₂) in the atmosphere have increased from 280 parts per million in volume (unit of gas concentration in the atmosphere) in the period prior to the Industrial Revolution, to around 360 parts per million in volume today. Although climate changes have occurred historically, the rate and the magnitude of observed climate change during this recent period are incompatible with the time necessary for the natural adaptation capacity of biodiversity and ecosystems.

The United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1992 at the "Earth Summit" in Rio de Janeiro and has since been ratified by more than 185 countries plus the European Union. The UNFCCC is an international legal framework with the ultimate objective of stabilizing greenhouse gases (GHG) in the atmosphere at a level that would prevent dangerous anthropogenic adverse interference in the global climate system. The manner in which this objective is to be met was not defined at the Convention, but it established a framework for continuing the negotiation process and to define the mechanisms to achieve it.

¹ For the purposes of this Guide are the gases listed in Annex A of the Kyoto Protocol and include: (i) carbon dioxide (CO₂); (ii) methane (CH₄); (iii) nitrous oxide (N₂O); (iv) sulfur hexafluoride (SF₆); (v) hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs) gas families.

At the third meeting of the Parties, in December 1997, the Kyoto Protocol to the Convention was adopted. Established as the first step towards meeting the ultimate objective of UNFCCC, the Protocol set legally binding GHG reductions targets for industrialized countries so that emissions are reduced by at least 5.0%, on average, in relation to 1990 levels.

The emission reduction targets vary between Parties, according to the principle of common but differentiated responsibilities adopted by the UNFCCC and are to be reached in the period of 2008 to 2012 – the first commitment period. The emission reduction targets apply exclusively to the Parties listed in Annex I of the UNFCCC, known as the Annex I Parties², who assumed at the Convention a number of exclusive commitments based on their historical responsibilities. These Parties assumed responsibility for taking the initiative to modify the long term trend of their anthropogenic emissions, and returning to below 1990 levels.

Countries that do not have emission reduction commitments are, in general, developing countries and are referred to as Non Annex I Parties.

Besides establishing emission targets, the Kyoto Protocol identified additional mechanisms that participating countries can use to meet their greenhouse gas (GHG) reduction targets, allowing investments in emission reductions and/or increasing removal of CO₂ to take place, partially, outside national borders.

The Clean Development Mechanism (CDM), the main focus of this Guide, is one of three additional mechanisms of implementation, along with Joint Implementation and Emissions Trading. Of these mechanisms, the CDM is the only one that allows the participation of developing countries like Brazil.

The Kyoto Protocol and the additional implementation mechanisms, particularly the CDM, required complementary regulations which were provided by the Marrakech Accords, agreed upon in November 2001, during the Seventh Conference of the Parties (CoP-7). It is worth noting that the MDL is derived from a Brazilian proposal.

² Annex I of the Convention lists Parties that in 1990 belonged to the OCDE as well as the industrialized countries of the ex-Soviet Union and Eastern Europe.

The Kyoto Protocol enters into force when at least 55 countries ratify the treaty and these countries represent at least 55% of total Annex I countries' 1990 emissions levels.

II. CLEAN DEVELOPMENT MECHANISM (CDM)

II.1 INTRODUCTION

The purpose of CDM is to provide support to Non-Annex I Parties in achieving sustainable development through the implementation of project activities and to contribute to the ultimate objective of the Climate Convention (UNFCCC), and at the same time, to assist Annex I Parties in meeting their GHG emission reduction commitments.

The objective of mitigating climate change is achieved through the implementation of project activities in developing countries that result in the reduction of greenhouse gases emissions or removal of CO₂, through investments in more efficient technologies, in the replacement of fossil fuel use by renewable sources, in more rational use of energy, forestation, etc.

For the purpose of CDM, project activities are defined as activities that are part of a project undertaken for the purpose of reducing greenhouse emissions or removals of CO₂. According to the Kyoto Protocol, projects activities that qualify are those related to specific greenhouse gases types, and to the sources and sectors responsible for the majority of emissions, as established in Annex A of the Kyoto Protocol (see Table 1).

Table 1: Sectors/Source Categories

Greenhouse Gases Emissions Reductions			
Energy	Industrial Processes	Agriculture	Waste
CO ₂ - CH ₄ - N ₂ O	CO ₂ - N ₂ O - HFCs - PFCs - SF ₆	CH ₄ - N ₂ O	CH ₄
Fuel combustion <ul style="list-style-type: none"> ✓ Energy industries ✓ Manufacturing industries ✓ Construction ✓ Transport ✓ Other sectors 	<ul style="list-style-type: none"> ✓ Mineral products ✓ Chemical industry ✓ Metal production ✓ Production and consumption of halocarbons and sulphur hexafluoride ✓ Solvent use ✓ Others 	<ul style="list-style-type: none"> ✓ Enteric fermentation ✓ Manure management ✓ Rice cultivation ✓ Agricultural soils ✓ Prescribed burning of savannas (cerrado) ✓ Field burning of agricultural residues 	<ul style="list-style-type: none"> ✓ Solid waste disposal ✓ Wastewater handling ✓ Waste incineration
Fugitive emissions from fuels <ul style="list-style-type: none"> ✓ Solid fuels ✓ Oil and natural gas 			
CO ₂ Removals			
Forestation / Reforestation			
Remove: CO ₂		Emit: CH ₄ - N ₂ O - CO ₂	
<ul style="list-style-type: none"> • Removals by sinks can be used to meet the commitments assumed, as authorized by Decision 17/CP.7 of the Marrakech Accords. Even though there are greenhouse gas emissions, the net result is removal. 			

Annex I Parties, Non-Annex I Parties and public and private entities of those parties are eligible to participate in CDM project activities, provided they are duly authorized. CDM project activities can be implemented through partnerships with the public or private sector.

The private sector has a significant opportunity to participate in the CDM due to the potential for considerable emissions reduction in this sector. The private sector is also a major recipient of increasing investment flows that can be used for CDM projects. The CDM is a market-based mechanism designed for the active participation of the private sector.

In order to be eligible under the CDM, the project activities must contribute to the ultimate objective of the UNFCCC and comply with some basic criteria such as additionality, which means the project activity must demonstrably result in reduction of

emissions and/or removal of CO₂ additional to any that would occur in the absence of the CDM activity. In other words projects must contribute to emissions reductions above-and-beyond business-as-usual.

Another criteria is that the project activity must contribute to the sustainable development of the country in which it is implemented.

The verified amounts of greenhouse gas emission reductions or removals of CO₂ attributed to a CDM project activity result in Certified Emission Reductions (CERs), measured in metric tons of carbon dioxide equivalent (CO₂ equivalent).³

In the case of project activities related to the removal of CO₂ a process of regulation was created under Decision 17/CP.7 designed to develop definitions and modalities for project activities related to forestation and afforestation, the only activities permitted under the Marrakech Accords. The Subsidiary Body for Scientific and Technological Advice is in charge of this process and is scheduled to conclude its work in 2003 during CoP-9. This work will define the unit to be attributed to removals of CO₂, which could be CER, RMU or a specific unit to be defined by the work.

The CERs represent credits that can be used by Annex I Parties that have ratified the Kyoto Protocol as a means to meet partially their greenhouse gas reduction commitments. The benefits to the foreign participant are the possibility for complying with its emission reduction targets at a lower marginal cost.

It is expected that as Annex I Parties ratify the Kyoto Protocol and it enters into force they may adopt domestic policies and measures designed to induce companies and economic sectors to reduce emissions and/or remove CO₂ in order to meet their commitments.

The additional mechanisms of implementation will stimulate the development of a new international market, where the commodity is credits for certified GHG reductions or

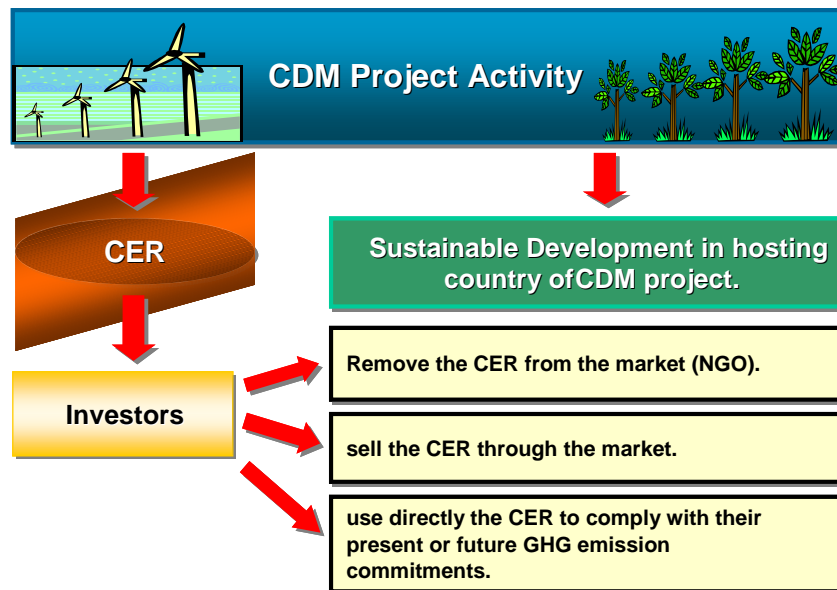
³ One unit of CER is equal to one metric ton of carbon dioxide equivalent, calculated according with the Global Warming Potential (GWP), based on an index announced by the International Panel on Climate Change (IPCC) allowing expression of the quantities of different GHGs in terms of carbon dioxide equivalent and making it possible to add up the reductions of different gases. The GWP to be used in the first commitment period (2008 to 2012) is the one published in the Second Assessment Report of the IPCC.

removal of CO₂. Annex I Parties that have reduction targets will be the main participants in this market from the demand side, seeking CERs to offset their commitments. In the particular case of the CDM, developing countries will play a significant role in this market, especially in the supply of GHG certified emission reductions and/or removals of CO₂.

For developing countries like Brazil the interest in this market lies in the project activities that can be eligible under the CDM. Despite the possibility of investments originated in the country (unilateral projects) it is expected that a great majority of investments related to MDL projects will come from foreign countries, enhancing foreign flows of direct investment.

Also, with respect to Brazil, it is worth mentioning that the country is already engaged in the development of a n operational model designed to facilitate access to the CDM by eligible project activities and to encourage both Brazilian and foreign investors to engage actively in the opportunities made possible by the MDL mechanism.

Annex I Parties can use the CERs generated to assist in compliance with their existing or future GHG reduction commitments. The participants in CDM project activities may also have the objective of selling their CERs in the expectation of benefiting from future appreciation and profit gains, as a result of the increased demand from Parties that have emission reduction commitments. In addition, NGOs may seek to purchase CERs in order to simply remove them from the market, for strictly environmental purposes.



Non Annex I Parties that have ratified the Kyoto Protocol may participate voluntarily in CDM project activities.

Only those Annex I Parties who meet the following criteria are eligible to participate in CDM Project activities:

- have their assigned amounts properly calculated and registered;
- have a national accounting system of GHG gases in place;
- have created a National Registry; and
- have submitted a national GHG gas inventory to the UNFCCC.

In order to be able to use CERs to meet part of their emission limitation or reduction commitments, in addition to the above requirements, Annex I Parties must have ratified the Kyoto Protocol.

II.2 INSTITUTIONAL STRUCTURE

The greenhouse gas emission reductions and removals of CO₂ attributed to CDM project activities must undergo a process of evaluation and verification through institutions and procedures established at the Seventh Conference of the Parties in Marrakech (CoP-7). The main institutions related to MDL are described as follows:

CDM EXECUTIVE BOARD

The Executive Board will supervise the CDM. The main responsibilities of this Board are: (i) the accreditation of the Designated Operational Entities; (ii) registry of CDM project activities; (iii) the emission of CERs (iv) the development and maintenance of the CDM registry; (v) establishment and improvement of methodologies related to baselines, monitoring and leakage.

Governments in developing countries need to designate under the UNFCCC a national authority for CDM projects. The Designated National Authority (DNA) certifies that the country participation is voluntary and, in the case of countries where the activities will be implemented (host country), that those activities contribute to its sustainable development. It is the sole prerogative of the country to decide in a sovereign manner if this objective is being accomplished by the CDM activity. The DNA must approve MDL project activities.

DESIGNATED NATIONAL AUTHORITY IN BRAZIL

The Designated National Authority in Brazil is the Interministerial Committee for Global Climate Change (Comissão Interministerial de Mudança Global do Clima – CIMGC), established by Presidential Decree on July 7th 1999. The Decree states that the CIMGC must take into consideration “the concern with the regulation of Kyoto Protocol mechanisms and, in particular, among other responsibilities, establishes that the Committee will be the designated national authority

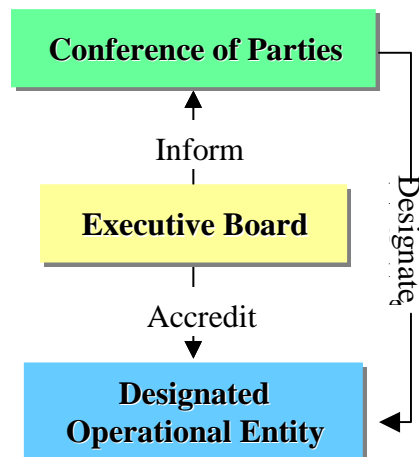
to approve project activities eligible for CDM and is also responsible for the definition of additional eligibility criteria beyond those rules established under the Kyoto Protocol”.

CIMGC is chaired by the Minister of Science and Technology and the vice-chair is the Minister of the Environment. It is also composed of members of the following ministries: Foreign Relations; Agriculture, Livestock and Supply; Transportation; Mines and Energy; Development, Industry and Foreign Trade, and the Chief of Staff (*Casa Civil*) of the Presidency of the Republic. The Executive Secretariat of the Commission is under the responsibility of the Ministry of Science and Technology. It is worth noting that the Commission represents all sectors of activities described in Annex A of the Kyoto Protocol, where all sectors of activities and categories of sources of greenhouse gas emissions are listed.

Designated Operational Entities

Operational entities are domestic or international entities accredited by the Executive Board and designated by the Conference of the Parties (CoP/MoP) that will ratify or not the accreditation by the Executive Board. The responsibilities of the Designated Operational Entities (DOEs) are:

- To validate CDM project activities according with the Marrakech decisions;
- To verify and certify emission reductions and removals of CO₂;
- To maintain a public list of CDM project activities;
- To submit an annual report to Executive Board;
- To make information about CDM projects publicly available, unless deemed proprietary or confidential by project participants.



II.3 PROJECT CYCLE

For project activities related to the removal of CO₂ (land use, land use change and forest - LULUCF), due to their own peculiarities and complexities, the modalities and applicable rules have not been defined yet. Decisions on these definitions and modalities will be taken in the Ninth Session of the Conference of the Parties (CoP-9), to be held in 2003.

Project activities related to emission reduction that meet the following eligibility requirements are eligible under the CDM:

- participation is voluntary;
- host country approval is obtained;
- meets the sustainable development goals defined by the country where the the project activities will be implemented;
- reduce GHG emissions in a manner additional to what would occur in the absence of the CDM activity;
- CDM projects account for GHG emissions that occur outside the project boundary that are attributable to the project;

- projects include the participation of all stakeholders⁴ and their opinions are taken into consideration;
- projects do not have negative collateral impacts on the local environment;
- projects are able to show quantified real long-term climate change mitigation benefits;
- projects are related to the gases and sectors defined in Annex A of the Kyoto Protocol or related to afforestation and reforestation.⁵

In addition, public financing for CDM project activities by Annex I Parties must not be diverted from other official development assistance and must be separate from and not counted towards the financial obligations assumed by those Parties under the Climate Change Convention (UNFCCC). It is also recommended that Annex I Parties refrain from using certified emission reductions generated from nuclear facilities.

It is allowed to transfer CERs to future periods, within the limit for the first commitment period of 2.5% of the quantities attributed to each Annex I Party.

To be able to result in CERs, the CDM project activities must necessarily go through all the following steps of the Project Cycle:

- (1) Preparation of the Project Design Document (PDD);
- (2) Validation/Approval;
- (3) Registration;
- (4) Monitoring;
- (5) Verification/Certification
- (6) Issuance and approval of the CERs

⁴ Stakeholders are the communities, groups, or individuals affected, or likely to be affected, by the proposed CDM project activity

⁵ Under the CDM, the development of definitions and modalities of afforestation and reforestation for the first commitment period must take into consideration the issues of non-permanence, leakage, uncertainties and socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems. Decisions about

STEP 1: PREPARATION OF THE PROJECT DESIGN DOCUMENT

In addition to describing the project activities and participants, the PDD must include a description of the methodology for the baseline; the methodologies for calculation of GHG emission reductions and for the establishment of project activity boundaries and calculation of leakages. It must also include a statement of the operational lifetime and the crediting period, a monitoring plan, a justification for the additionality of the project activity, an environmental impact report, a report on stakeholder comments and information on additional sources of project funding.

- Methodology for Baseline of CDM project activities

A baseline of a CDM project activity is a scenario that represents in a reasonable manner the GHG emissions by sources that would occur without the CDM project, or that represents business-as-usual. It includes all sectors and sources listed in Annex A of the Kyoto Protocol that occur within the project boundary. It also serves as a basis for verifying additionality and for quantifying the CERs resulting from the project activity. The CERs will be calculated exactly by the difference between the baseline emissions and the verified emissions that result from the CDM project activity, adjusted for leakages. The baseline is quantified and justified based on a reference, or Reference Scenario.

To establish a project activity baseline, the participants must adopt from among the methodologies listed below the one deemed most appropriate for the particular project activity, taking into account any guidance by the Executive Board, and must include a justification for the appropriateness of their selection;

- **Status Quo Emissions:** Assumes a baseline from existing or historical emissions, as applicable; or

these definitions and modalities will be taken during the ninth session of the Conference of the Parties, scheduled for the end of 2003.

- **Market Conditions:** Assumes emissions from a technology that represents an economically attractive course of action taking into account barriers to investment; or
- **Best Available Technology:** Assumes the most efficient technology, based on 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% (twenty per cent) of their category.

Participants may alternatively propose new methodological approaches but they will have to be approved by the Executive Board.

- **Calculation Methodology**

To evaluate emissions related to CDM project activities, the calculation methodology must contain:

1. description of the formulas used to calculate and estimate anthropogenic greenhouse gas emissions from the CDM project activity, by source, within the project boundary, as well as a description of the formulas used to calculate and anticipate leakages. The result of these calculations represent the emissions from the CDM project activity.

For calculation of baseline emissions:

2. description of formulas used to calculate and anticipate anthropogenic greenhouse gas emissions for baseline by source; and a description of the

formulas used to calculate and anticipate leakages. The result of these calculations represents the baseline emissions.

The difference between the results obtained through calculations (1) and (2) represents the emissions reductions of the CDM project activities.

- Project Boundary

The project boundary shall encompass all emissions of greenhouse gases under the control of the participants in project activities that are significant and can be reasonably attributed to the project activities.

- Leakage

Leakage corresponds to the increase in greenhouse gas emissions that occur outside of the project boundary, and at the same time is measurable and attributable to the CDM project. Leakages are deducted from the total amount of CERs obtained from the CDM project activity. This takes into account all possible negative impacts in terms of greenhouse gas emissions.

- Definition of the Crediting Period

The crediting period may have the following duration: (i) a maximum of seven years which may be renewed at most two times, for a total of 3 periods of 7 years, provided that, for each renewal, the baseline is still valid or has been revised and updated; (ii) a maximum of ten years with no option of renewal.

- Monitoring Plan

The monitoring plan includes the collection and storage of all relevant data necessary for determining the greenhouse gases emission reductions according to the baseline methodology established in the PDD, that have occurred within the project boundary, and outside these boundaries where attributable to the project activities, during the crediting period.

- Justification for additionality of project activity

The justification for additionality of the project consists of demonstrating how the project activities reduce greenhouse gas emissions beyond what would have occurred in the absence of the registered CDM project activity.

- Documentation and references on environmental impacts

Refers to the documents and references about the impacts of project activities considered significant by the project participants, including a report on environmental impact and the terms of reference of the environmental impact assessment.

- Summary of Stakeholder Comments

Includes the summary of comments received and a report on how the comments were taken into consideration in the CDM project activities.

- Information on Additional Financing Sources

This is information on the sources of public financing for the project activity from Annex I Parties, demonstrating that such funding does not result from diversion of Official Development Assistance (ODA) and that it is separated from and is not counted towards the financial obligations of those Annex 1 Parties participating in the project activities.

STEP 2: VALIDATION AND APPROVAL

Based on the project design document (PDD), the Designated Operational Entity will evaluate and validate the proposed CDM project, confirming that the following points are included and addressed in the PDD:

- ❑ The CDM project activity is voluntary and is approved by the country in which it is implemented;
- ❑ The project complies with the eligibility criteria;
- ❑ GHG emissions reductions are in fact additional to business-as-usual;
- ❑ stakeholder comments are included and taken into account in some manner;
- ❑ an environmental impact analysis, if it is the case, conducted according to methodology of the country's environmental regulatory framework;
- ❑ greenhouse gas emissions outside of the project boundary and reasonably attributable to the CDM project (leakages) have been considered;
- ❑ That the new methodology for the proposed baseline, where applicable, is in accordance with the procedures and modalities for the proposal of new methodologies;
- ❑ That a crediting period was chosen.

Before submitting the PDD to the Executive Board, the Designated Operational Entity needs to receive from each project participant a formal approval from the respective DNAs confirming voluntary participation. For the country where the project will be implemented a confirmation is required from the DNA that the project contributes to the sustainable development of the country. This confirmation must be made public and be open for comments.

STEP 3: REGISTRATION

The Executive Board will formally accept the CDM project activity based on the Operational Entity's validation report. This process is called registration, and it becomes final eight weeks after the report is received by the Executive Board. The Executive Board may require a review of the validation report if it is considered that the validation procedures and requirements have not been met and in this case will communicate the decision to the participants and make it public. A rejected project can be reconsidered after it has been revised in accordance with all procedures required for validation. Registration is necessary to continue with the verification, certification, and issuance of CERs. A project can only receive CERs for a crediting period that begins after the date of registration of a CDM project activity.

STEP 4: MONITORING

A monitoring plan must be included in the PDD. The method for monitoring must conform to a previously approved methodology or, if a new methodology is used, it must be approved or its application must have proven successful in some other location.

Responsibility for implementation of the monitoring plan lies with the project participants and any revision to the monitoring plan must be justified and newly submitted for validation.

The implementation of the registered monitoring plan is a condition for verification/certification and issuance of the CERs, and it must therefore be submitted in advance to the Designated Operational Entity in order to proceed to the fifth stage – verification/certification.

STEP 5: VERIFICATION/CERTIFICATION

The Designated Operational Entity (DOE) will verify the monitored emissions reductions that have occurred as a result of the CDM project activity and provide written assurance, or certification, that the project achieved the stated reductions the specified period. The formal certification will be based on this verification report and is considered final fifteen days after being received by the Executive Board. This certification ensures that GHG emission reductions were in fact additional to what would have occurred in the absence of the project. The statement of certification is delivered to the project participants, Parties involved, and the Executive Board, and then made public (unless deemed proprietary or confidential)

The Designated Operational Entity –(DOE) will:

- Verify the methodologies used;
- Make sure the methodology and documentation are complete, and if necessary, recommend changes;
- Determine GHG emission reductions;
- Inform project participants of any changes necessary;
- Provide a verification report to the project participants.

The DOE will also:

- Make on-site inspections;
- Interview project participants and stakeholders;
- Collect data and measurements;

- Observe established practices;
- Test the accuracy of monitoring equipment.

STEP 6: ISSUANCE OF CERs

The certification report will include a request that the Executive Board issues CERs equal to the verified amount of GHG emission reductions realized by the CDM project. The issuance is final 15 (fifteen) days after receiving the request for issuance, unless one of the Parties 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 is limited to questions of fraud, malfeasance, or incompetence of the Designated Operational Entities. In such cases the Executive Board shall complete its review within 30 days following the decision to perform the review.

The CDM registry administrator, working under the authority of the Executive Board, promptly deposits the specified quantity of CERs into the pending accounts in this same Registry, in accordance with the request in the PDD on behalf of the Parties and project participants. A part equivalent to 2% of the total amount of CERs is deducted to contribute to an adaptation fund designed to assist more vulnerable countries in meeting costs of adaptation to the negative effects of climate change. Another amount, to be determined by the Conference of the Parties, on the recommendation of the Executive Board, will be deducted to cover administrative expenses of the CDM.

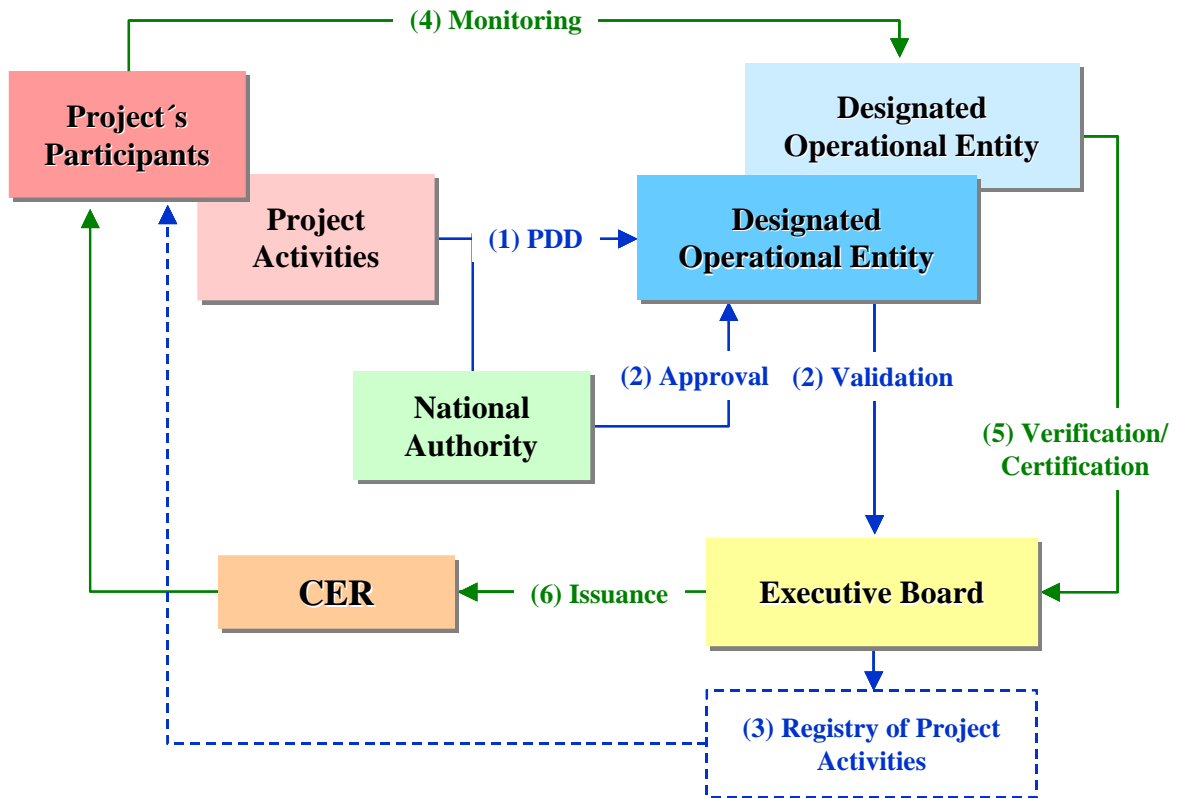


Table 2: CDM Project Cycle

Step	Definition	Responsible Entity
1. Project Design Document (PDD)	The preparation of the PDD is the first step of a CDM project cycle. All necessary information for validation and registration, verification and certification must be taken into account. The PDD must contain, amongst other elements, the description of: project activities; participants of project activities; baseline methodology; methodology to estimate GHG emissions, to define project boundary and leakage; and the monitoring plan. It must also contain the definition of crediting period, the justification for the additionality of the project activity, the environmental impact assessment, the stakeholder comments and information on the utilization of any additional source of funding.	Project participants
2. Validation and Approval	Validation is the process of independent evaluation of a CDM project by a Designated Operational Entity with respect to CMD requirements, based on the PDD. Approval is the process through which the Designated National Authority (DNA) of each Party involved confirm their voluntary participation and the DNA of the country where CMD activities will be implemented attest that such activity contributes to the sustainable development of the country.	Designated Operational Entity (DOE) Designated National Authority (DNA)
3. Registration	Registration is the formal acceptance, by the Executive Board, of a valid CDM project activity. The register is a pre-requisite to the verification, certification and emission of CERs related to a CDM project activity.	CDM Executive Board
4. Monitoring	Monitoring process of the project activity, including the collection and archiving of all relevant data necessary for calculating the reduction of GHG emissions, according to the baseline methodology established in the PDD, achieved within the project activity boundary, or outside those limits that are reasonably related to the project activity, and during the crediting period.	Project participants
5. Verification and certification	Verification is the periodic independent review of the estimates of GHG reductions that have occurred as a result of a CDM project activity sent to the Executive Board by means of the PDD. This process is performed in order to verify ex-post emission reductions and/or removals that effectively occurred. Only registered CDM project activities are verified and certified. Certification is the written assurance that a project activity achieved a certain level of GHG reductions stated during the specified time period.	Designated Operational Entity (DOE) Designated Operational Entity (DOE)
6. Issuance	Final stage, when the Executive Board is sure that after completion of all stages, the GHG reductions due to the project activities are real, long term and measurable, and therefore can originate CERs. The CERs are issued by the Executive Board and credited to the participants of a project activity in a proportion defined by them. In certain cases, CERs can be used to comply partially with the reduction commitments for GHG emissions.	Executive Board

- Small Scale Project Activities

Small scale project activities go through a more rapid cycle. The Executive Board has developed simplified modalities and procedures for certain types of small scale project activities that were approved at CoP-8.

The following project activities are classified as small scale:

- Renewable energy project activities with maximum production capacity of 15 MW (or equivalent);
- Project activities that improve energy efficiency, that reduce supply or demand side energy consumption by up to 15 GWh/year;
- Other project activities that reduce anthropogenic emissions by sources and that, simultaneously, emit directly less than 15,000 tons of carbon dioxide equivalent per year.

II.4 QUESTIONS AND ANSWERS

WHAT IS THE MOTIVATION FOR PARTICIPATION IN CDM?

MDL project activities offer many opportunities for various actors, as summarized in the table below. In general, CDM projects offer a new opportunity for attracting foreign investment to developing countries and, at the same time, providing a cost-effective way for Annex I Parties to meet their GHG emission reduction commitments.

Table 3: Potential Actors and Reasons for Participation in CDM Projects

Actor	Reason for participation
Developing country	Promote sustainable development and contribute to climate change mitigation
Annex I Parties	Cost-effectiveness in complying with emission reduction targets
Non-governmental organizations	Promote sustainable development and contribute to climate change mitigation
Corporations	Offset emissions; investment opportunity; competition gains, institutional marketing, social responsibility.
Niche company	Commercial opportunity; diffuse technology
Industry associations	New opportunities for members
Brokers	Commercial opportunity
Development banks	Promote sustainable development and promote climate change mitigation; create new markets
Institutional investors	Portfolio diversification; socially responsible investing

WHAT ARE THE BENEFITS FOR PARTICIPANTS FROM CDM PROJECT ACTIVITIES?

The potential benefits to the participants in CDM project activities will depend on the success in attracting a flow of foreign investments, which in turn will be a function not only of the interaction between the supply and demand for CERs, but also of the specific institutional and operational framework provided by the Non Annex I Party where the project activities will be implemented and that, consequently, will receive the investment. In general, the expected results from CDM project activities include:

- ☒ more resources to pursue sustainable development goals;
- ☒ increased foreign investment to make new projects possible or to remove market barriers, if it is the case;
- ☒ increase in company's competitive advantage over their competitors.

WHY SHOULD CDM PROJECT ACTIVITIES TAKE PLACE?

Entities in Annex I Parties will be able to invest in MDL project activities, since this option is a prerogative of those Parties in complying with their GHG emission reduction targets. If the cost of implementing project activities is lower in developing Non Annex I countries, the objective of reduction of emissions can be achieved there more cost-effectively.

In order to cope with emission reduction targets assumed under the Kyoto Protocol, governments of Annex I Parties will tend to put in place policies and domestic measures to undertake reduction of greenhouse gas emissions in several ways. Either using economic instruments, such as taxes and subsidies, combined or not with more conventional command and control measures, such as establishing emission standards and quotas, or through the direct implementation of mitigation projects. Governments of Annex I Parties will have to restrict GHG emissions within their borders or ensure that these emissions become more costly, thus enhancing their reduction.

These national policies and measures will stimulate entities of the public and private sectors in Annex I Parties to seek lower-cost ways to mitigate GHG emissions through projects in other countries, especially those projects eligible under the Kyoto Protocol. If governments in Annex I Parties adopt emission reduction targets for a particular sector and accepts as valid the use of certified emission reductions (CERs, URMs, ERUs, and AAU) to comply with the targets, economic entities of these sectors will consider the possibility of reducing emissions directly or indirectly by acquiring reduction credits considered valid under the Kyoto Protocol.

WHAT ACTIONS HAVE BEEN TAKEN BY THE BRAZILIAN GOVERNMENT TO IMPLEMENT THE CDM?

Governments will play a key role in enabling and promoting CDM projects.

Some important measures have already been undertaken by the Brazilian government:

- ☒ it has ratified the Kyoto Protocol;

- ☒ it has encouraged other countries to ratify it;
- ☒ it has established the National Authority to supervise the MDL in the country;

Governments can also develop measures aiming at:

- ☒ ensuring that the activities of projects of the MDL contribute to sustainable development;
- ☒ identifying specific project activities that meet the criteria established under the Marrakech Accords:
 - ☒ improving/strengthening the existing regulatory framework for environmental issues;
 - ☒ providing incentives to promote MDL opportunities for emission reduction project activities that reduce GHG emissions or increase the removal of CO₂;
 - ☒ building national capacity and infrastructure for CDM project activities;
 - ☒ setting up integrated national procedures and infrastructure for CDM project activities;
 - ☒ encouraging CDM project activities and participating in them;
 - ☒ facilitating investments in the CDM;
 - ☒ coordinating activities with industry to identify CDM opportunities.

WHAT WILL INFLUENCE DEMAND FOR THE CDM?

As the Kyoto Protocol enters into force it will create an growing demand for the CERs. Annex I Parties will be the main forces behind the demand for certified emissions reduction, seeking lower-cost ways to meet their commitment targets defined by the Protocol. The demand for CERs will be affected by the specific rules and procedures of CDM, that are still in the process of consolidation. Another factor that will affect demand is the marginal cost of mitigation project activities, taking into account transaction costs,

compared to the marginal costs of projects activities implemented within the borders of Annex I Parties, since this is one of the alternatives to the CDM.

WHAT CAN AFFECT THE CAPACITY OF NON ANNEX I PARTIES TO ATTRACT FOREIGN INVESTMENT THROUGH CDM?

As with any commercial venture, there can be many reasons to determine the capacity of a country to successfully attract foreign investment through CDM. The tax structure, infrastructure, openness to foreign investment, labor availability and costs, and political and macroeconomic stability are all important factors. In the particular case of project activities that reduce GHG emissions or increase CO₂ removal, the attractiveness of investment will be strongly influenced by the cost of the particular mitigating project activity, expressed in monetary unit per quantity of greenhouse gases, as well as the transaction costs involved in the project cycle steps.

WHY CAN GHG EMISSION REDUCTIONS BE IMPLEMENTED IN ONE COUNTRY AND ACCOUNTED FOR IN ANOTHER?

The effects of greenhouse gas emission are global, and not regional or local like the effects of oxides of nitrogen (NO_x) and sulphur (SO_x), for example, whose emissions are already being traded in the market. For this reason, from the point of view of mitigating the problems caused by the effect of greenhouse gases, like the intensification of emissions and climatic change, it does not matter where on the planet the GHG emissions are reduced. This fact allows countries pursuing GHG reductions to do so outside its national borders, thereby increasing flexibility and reducing costs of emission control.

WHAT ARE ANNEX I PARTIES AND WHY ARE THEY CLASSIFIED AS SUCH

Annex I of the United Nation Framework Convention on Climate Change (UNFCCC) contains a list of the signatory Parties who in 1990 were OECD members, as well as industrialized countries of the ex-Soviet Union and Eastern Europe. The division between Annex I Parties and Non Annex I Parties has the purpose of separating the Parties according to some criteria, especially their responsibility for the increase in atmospheric concentration of greenhouse gases.

The Parties with the greatest responsibility – Annex I Parties - assumed commitments to quantified limitation or reduction of greenhouse gases emissions. The quantified reduction are defined in Annex B of the Kyoto Protocol. Annex I includes 41 Parties, listed in Table 4 below.

Table 4 – Parties Listed in Annex I of UNFCCC

Australia	EU	Latvia	Romania
Austria	Finland	Liechtenstein	Russian Federation
Belarus	France	Lithuania	Slovakia
Belgium	Germany	Luxembourg	Slovenia
Bulgaria	Greece	Monaco	Spain
Canada	Hungary	Netherlands	Sweden
Croatia	Iceland	New Zealand	Switzerland
Czech	Ireland	Norway	Turkey
Denmark	Italy	Poland	UK
Estonia	Japan	Portugal	Ukraine
			USA

WHAT IS THE DIFFERENCE BETWEEN ANNEX I AND ANNEX B?

Annex I is a part of the UNFCCC, which is already in effect, while Annex B, is part of the Kyoto Protocol. Annex B of the Kyoto Protocol defines the quantified GHG emission reduction targets. All Parties listed in Annex I are also listed in the Annex B, with the exception of Turkey and Belarus. Within the framework of the CDM, only parties that appear in Annex B and that have ratified the Kyoto Protocol are allowed to use CERs as a contribution to meeting their GHG emission reduction targets.

Appendix I – LIST OF Acronyms

AAU (*Assigned Amount Unit*)

CERs (*Certified Emission Reductions*)

COP (*Conference of the Parties*)

COP/MOP (*Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol*)

DNA (*Designated National Authority*)

DOE (*Designated Operational Entity*)

ERU (*Emission Reduction Unit*)

GHG (*Greenhouse Gases*)

GWP (*Global Warming Potential*)

IPCC (*Intergovernmental Panel on Climate Change*)

ODA (*Official Development Assistance*)

PDD (*Project Design Document*)

RMU (*Removal Unit*)

UNFCCC (*United Nations Framework Convention on Climate Change*)

Appendix II – Glossary

Additional Implementation Mechanisms - They confer a certain degree of flexibility and help Annex I Parties to accomplish their GHG reduction targets. There are three implementation mechanisms: the Joint Implementation, as defined in Article 6 of the Kyoto Protocol, the Clean Development Mechanism (CDM), as defined in Article 12, and the Emissions Trade, as defined in Article 17.

Additionality - An essential criteria for a project activity to be eligible under the Clean Development Mechanism (CDM). It refers to the additional reduction of greenhouse gases (GHG) emissions or enhancement of CO₂ removals compared to a baseline of what would occur in the absence of the CDM project activity.

Annex B – An Annex to the *Kyoto Protocol* listing the GHG reduction targets that are exclusive to the Annex I Parties of the United Nations Framework Convention on Climate Change (UNFCCC). There are 39 Annex B Parties, which are the same 41 parties listed under the UNFCCC’s Annex I, less Turkey and Belarus.

Annex I Parties – Group of countries listed in Annex I to the United Nations Framework Convention on Climate Change (UNFCCC), including all the developed countries that in 1990 belonged to the Organization for Economic Cooperation and Development (OECD), and industrialized countries from the former Soviet Union and Eastern Europe. The division between Annex I Parties and Non-annex I Parties has the purpose of separating the parties according to their contribution to increasing atmospheric concentration of GHG. The Annex I Parties have targets to limit or reduce emission. Currently there are 41 parties listed under Annex I.

Approval by the Designated National Authority – For the purpose of this Guide, this is the approval given by the DNA of the country where the CDM project activities will be implemented, attesting that such activity contributes for the sustainable development of this country.

Assigned Amount Unit (AAU) – Applicable under the Article 17 of the Kyoto Protocol, which deals with the mechanism informally called “emissions trading.” The AAU is expressed in metric tons of carbon dioxide equivalent, and one unit equals one ton of

carbon dioxide. The calculation of carbon dioxide equivalent is carried out using the Global Warming Potential (GWP). The AAUs can be used by Annex I Parties to partially meet their greenhouse gas emission targets or be partially transferred to the second commitment period. The amount attributed to each Annex I Party is equal to a percentage constant listed in Annex B of the Kyoto Protocol of its anthropogenic CO₂ equivalent emissions as listed under Annex A in 1990 (or in other year or base period for the economies in transition), multiplied by 5 (five).

Banking – The act of transferring Certified Emission Reductions (CERs), Assigned Amount Units (AAUs) and Emission Reduction Units (ERUs) from the first to the second commitment period.

Baseline - A baseline of a CDM project activity is a scenario that represents in a reasonable way GHG emissions by sources that would occur without the CDM project activity, including all sectors and sources listed in Annex A of the Kyoto Protocol that occur within the project boundary. It serves equally as a basis to verify additionality and as a basis to quantify the CERs resulting from the project activity. The CERs will be calculated exactly by the difference between the baseline emissions and the verified emissions that result from the CDM project activity, adjusted for leakages. The baseline is qualified and quantified based on a Reference Scenario.

CDM Registry - Established and supervised by the CDM Executive Board to ensure the accurate accounting of the issuance, ownership, transfer and acquisition of CERs. The CDM registry must be a standardized electronic database that contains, *inter alia*, common data elements related to the issuance, ownership, transfer and acquisition of CERs. It should not be confused with the registration of a CDM project activity, one of the Project Cycle steps.

Certification - One of the steps of the Project Cycle. The Designated Operational Entity (DOE) will verify the monitored emissions reductions that have occurred as a result of the CDM project and provide written assurance, or certification, that the project achieved the stated reductions in the specified period.

Certified Emission Reduction (CERs) - The reductions of emissions of GHGs from CDM project activities that have passed all Project Cycle steps (validation/registration; monitoring and verification/certification), which culminates precisely with the *ex post* emission of CERs. The CERs are expressed in metric tons of carbon dioxide equivalent, calculated accordingly to the Global Warming Potential (GWP). One unit of CER is equal to one metric ton of carbon dioxide equivalent. The CERs can be used by Annex I Parties to partially meet their GHG emissions reduction targets.

Clean Development Mechanism (CDM) - One of three additional mechanisms in the Kyoto Protocol. It is defined by Article 12 of the Protocol and regulated by the Marrakech Accords. It defines project activities which will reduce GHG emissions or increase CO₂ removals, implemented in Non-Annex I Parties (host countries), and that will generate Certified Emissions Reductions (CERs).

Conference of the Parties (CoP) - The supreme body of the United Nations Framework Convention on Climate Change (UNFCCC), comprising all countries that have ratified or acceded to the UNFCCC. The CoP meets annually and there have already been eight meetings: CoP-1 (Berlin); CoP-2 (Geneva); CoP-3 (Kyoto); CoP-4 (Buenos Aires); CoP-5 (Bonn); CoP-6 (The Hague, then convoked again in Bonn); CoP-7 (Marrakech) and CoP-8 (New Delhi)

Conference of the Parties serving as the Meeting of the Parties (CoP/MoP) - The supreme body of the *Kyoto Protocol* that will come into existence only when the Protocol enters into force. Some of the decisions taken by the CDM Executive Board will have to be endorsed by the CoP/MoP.

Crediting Period - Period when the reductions of GHG emissions resulting from CDM project activities can count towards the calculation of CERs. The reduction of emissions can only be accounted for in the calculation of CER after the registration of the project activity with the CDM Executive Board.

Designated National Authority (DNA) – Governments in developing countries need to designate to the UNFCCC a national authority for CDM projects. The Designated National Authority (DNA) certifies that the country participation is voluntary and, in the

case of countries where the activities will be implemented (host country), that the project activities contribute to the sustainable development goals of the host country.

Designated Operational Entity (DOE) - Entities accredited by the Executive Board of the CDM and later ratified by the CoP/MoP. The responsibilities of the Designated Operational Entities (DOEs) are: (i) validate proposed CDM project activities and (ii) verify and certify GHG emissions reductions and/or CO₂ removals.

Emission Reduction Unit (ERU). Applicable under Article 6 of the Kyoto Protocol, that deals with the Joint Implementation. The ERU is expressed in metric tons of carbon dioxide equivalent. One unit equals one metric ton of carbon dioxide. The calculation of carbon dioxide equivalents is carried out using the Global Warming Potential (GWP). ERUs can be used by Annex I Parties to partially fulfill their greenhouse gas emissions reduction goals or can be partially transferred to the second commitment period.

Emissions trading – One of the mechanisms of the Kyoto Protocol. This mechanism allows Annex I Parties to participate in emissions trading with other Annex I Parties to fulfill their emissions reduction and limitation commitments. The applicable unit for this mechanism is the assigned amount units (AAU).

Executive Board - It oversees operations of the CDM. Its responsibilities include certification of Designated Operational Entities (DOE); validation and registration of CDM project activities; issuance of CERs; development and operation of CDM registry, and establishment and improvement of baseline, monitoring and leakage methodologies.

First Commitment Period - The period of 2008-2012.

Global Warming Potential (GWP) - Index announced by the IPCC allowing express the quantities of various greenhouse gases in terms of carbon dioxide equivalent, and making it possible to add up the reductions of different gases. The GWP to be used in the first commitment period (2008 to 2012) is that published in the Second Assessment Report of the IPCC.

Greenhouse Gases (GHGs) - For the purpose of this Guide, GHGs are the gases listed in Annex A of the Kyoto Protocol, which are: (i) carbon dioxide (CO₂); (ii) methane (CH₄); (iii) nitrous oxide (N₂O); (iv) sulfur hexachloride (SF₆); (v) hydrofluorocarbon (HFCs) and Perfluorocarbon (PFCs) gas families. The reductions of these gases can generate, according to the Kyoto Protocol, CERs, AAUs and ERUs, and in the case of CO₂, its removal can generate MRUs.

Intergovernmental Panel on Climate Change - IPCC – Panel of scientists from various countries and areas of knowledge, with the objective to give scientific support and to interact with the UNFCCC. It is responsible for the announcement of the Global Warming Potential - GWP) and for the methodological revisions of this calculation.

Interministerial Committee for Global Climate Change (ICGCC) - Established by Presidential Decree on July 7th, 1999, the ICGCC is Brazil's DNA. It evaluates and approves project activities eligible for CDM, and is also responsible for the definition of additional eligibility criteria beyond those agreed upon under the Kyoto Protocol.

Issuance of Certified Emissions Reductions (CERs) - Final step of the project activity cycle, when the Executive Board is certain that after completion of all stages, the GHG reductions due to the project activities are real, measurable, and long term, and thus can justify issuance of CERs.

Joint Implementation – Another Kyoto Protocol mechanism, through which Annex I Parties can transfer to or acquire from any other Annex I Party Emissions Reduction Units (ERUs), in order to meet their greenhouse gas emissions limitation and reduction commitments.

Kyoto Protocol - The legal instrument linked to the United Nations Framework Convention on Climate Change that sets GHG emissions limitation or reduction targets, set out in Annex B, and provides for additional implementation mechanisms, including the CDM.

Leakage - Leakage is the increase of emissions of greenhouse gases that occurs out of the project boundary, and at the same time is measurable and attributable to the CDM project activity. Leakage is subtracted from the total amount of CERs obtained by a

CDM project activity. Thus all possible negative impacts in terms of GHG emissions from CDM project activities are considered.

Marrakech Accords – Agreements finalized during the Seventh Conference of the Parties to the United Nations Framework Convention on Climate Change (CoP-7) in Marrakech. They represent the decisions related to the rules for the Kyoto Protocol and its implementation mechanisms, including the CDM.

Monitoring - Third step of the Project Cycle. Monitoring plan includes the collecting and archiving of all relevant data necessary for determining the greenhouse gases emission reductions according with the baseline methodology established in the PDD, that have occurred within the project boundary during the crediting period. The Monitoring Plan must be part of the PDD and the participants of the project activity will carry the monitoring process.

Monitoring Plan – Although the monitoring process belongs to the third step of the Project Cycle, the Monitoring Plan, which defines the methodology for the process, must be defined during the first step, as an integral part of the PDD.

Non-Annex I Parties – All parties to the UNFCCC not listed under Annex I, including Brazil. These parties do not have emissions reduction targets.

Official Development Assistance (ODA) – Financial aid provided by the government of industrialized countries to developing countries with the objective, *inter alia*, of fostering sustainable development and assisting in the implementation of Agenda 21. According to commitments established in Rio-92, each country must transfer annually to the developing countries 0.7% of its GDP in the form of Official Development Assistance (ODA).

Parties - Can be countries or economic blocks, as for example, the European Union.

Project Activities - Activities from an undertaking or project to be submitted to the CDM that reduce GHG emissions.

Project Boundaries - The project boundary shall encompass all greenhouse gas emissions under the control of the participants in project activities that are significant

and reasonably attributed to the project and accounted for in the baseline. The methodology for defining the project boundary is part of the PDD. Emissions that are outside the project boundary and are attributed to the project are classified as leakage.

Project Cycle – All the steps that a CDM project activity must necessarily go through to be able to result in CERs, which is the final step of the Project cycle.

Project Design Document (PDD) – Preparation of the PDD is the first step of the CDM activity cycle. All necessary information for validation and registration, verification and certification must be included.

Project Participants - Can be Annex I Parties, Non-Annex I Parties or private and public entities from these Parties, who are involved in duly authorized project activities.

Recipient of CDM project investment (Host country for CDM project) – Non-Annex I Parties where CDM project activities will be implemented.

Reference or Business-as-usual Scenario (BAU) – Scenario that characterizes and quantifies the greenhouse gas emissions that would result in the absence of a CDM project

Reforestation/Afforestation – Reforestation is the human-induced conversion of non-forested land into forested land through planting, seeding and/or the induced promotion by man of natural sources of seeds, in areas that had been forested but were converted into non-forested land. For the first commitment period, reforestation activities are limited to reforestation that occurs in land that did not have forests on December 31, 1989. Forestation is the induced conversion of land that was not forested by a period of at least 50 years, into forested land through planting, seeding and/or the induced promotion by man of natural sources of seeds. For the CDM, the definitions and the modalities of reforestation and forestation for the first commitment period will have to be developed taking into account the issues of non-permanence, additionality, leakage, uncertainties, and social-economic and environmental impacts, including, in this case, the impacts on biodiversity and natural ecosystems. Decisions on these definitions and modalities will be taken in the Ninth Session of the Conference of the Parties (CoP-9), to be held in 2003.

Registration - Part of the third step of the Project Cycle (Validation/Registration). It is the formal acceptance, by the Executive Board, of a validated project as a CDM activity project. The register is a pre-requisite to the verification, certification and emission of CERs relative to the CDM project activity. Not to be confused with the CDM registry.

Removal Unit (RMU) - Represents removals of GHG by sequestration. The RMUs are expressed in metric tons of carbon dioxide equivalent, where one unit is equal to one ton of carbon dioxide. The calculation of carbon dioxide equivalent is carried out using the Global Warming Potential. RMUs can be used by Annex I Parties to partially fulfill their GHG reduction targets, with respect to Article 3, paragraphs 3 and 4 of the Kyoto Protocol. RMUs cannot be transferred to the second commitment period.

Second Commitment Period - Not yet defined. The CoP/MoP should begin consideration of such commitments at least seven years before the end of the first commitment period, which means by 2005. CERs, AAUs and ERUs can be transferred from the first to the second commitment period.

Small-Scale Project Activities - smaller scale CDM project activities, which go through a simplified project cycle with lower transaction costs.

Stakeholders - Stakeholders are the communities, groups, or individuals affected, or likely to be affected, by the proposed CDM project activity.

Transaction Costs - In the specific case of the CDM, they are costs related to the Project Cycle and CER transactions.

United Nations Framework Convention on Climate Change (UNFCCC) – Convention negotiated under the auspices of the United Nations and adopted in 1992 at the Rio "Earth Summit", the main objective of which is to stabilize GHG levels in the atmosphere in a level that avoids dangerous anthropogenic interference in the climate system. The Kyoto Protocol is a complementary legal instrument linked to the UNFCCC.

Validation - Part of the second step of the Project Cycle (Validation and Registration). It is the process of independent evaluation of a CDM project by a Designated Operational Entity (DOE) with respect to CDM requirements, based on the PDD.

Verification – Part of the fifth step of the Project Cycle (Verification and Certification). It is the periodic independent audit by a DOE to review the calculations of GHG reductions that have occurred as a result of a CDM project activity sent to the Executive Board by means of the PDD. This process is performed as an *ex post* verification that emission reductions effectively occurred as previously defined in the PDD, and to make corrections in cases of discrepancies. Only registered CDM project activities are verified and certified.

Appendix III –Suggested Readings

Convenção sobre Mudança do Clima, jointly translated by the Ministry of Science and Technology (MCT) and the Ministry of Foreign Relations (MRE), also available at: <http://www.mct.gov.br/clima/convencao/texto.htm>

Convenção-Quadro das Nações Unidas sobre Mudança do Clima: um guia para iniciantes, jointly translated by the Ministry of Science and Technology (MCT) and the Ministry of Foreign Relations (MRE).

Also available at: <http://www.mct.gov.br/clima/convencao/guia.htm>

Efeito Estufa e a Convenção sobre Mudança do Clima, Ministry of Science and Technology (MCT) and the National Bank for Economic and Social Development (BNDES), also available at: <http://www.mct.gov.br/clima/quioto/bndes.htm>

Protocolo de Quioto à Convenção sobre Mudança do Clima, joint translation by the Ministry of Science and Technology (MCT) and the Ministry of Foreign Relations (MRE), also available at: <http://www.mct.gov.br/clima/quioto/protocol.htm>

Os Acordos de Marraqueche, joint translation by the Ministry of Science and Technology (MCT) and the Ministry of Foreign Relations (MRE), also available at: <http://www.mct.gov.br/clima/negoc/cop7.htm>

7ª Conferência das Partes – COP-7 – Os Acordos de Marraqueche, Fórum Brasileiro de Mudanças Climáticas (FBMC), also available at: <http://www.forumclimabr.org.br/acordos.htm>

Do Fundo ao Mecanismo: Gênese, Características e Perspectivas para o Mecanismo de Desenvolvimento Limpo; ao Encontro ou de Encontro à Equidade?, André Santos Pereira, M.S thesis, Energy Planning Program, PPE/COPPE/UFRJ, also available at: <http://www.ppe.ufrj.br/>

A Layperson's Guide to the CDM: Rules form Marrakech, Jon Rosales and Gao Pronove, UNCTAD-Earth Council Carbon Market Program, July, 2002, also available at www.unctad.org/ghg

Appendix IV: Checklists

Checklist 1: Project Design Document - PDD

Project description should include	
<input type="checkbox"/>	The project activity's purpose
<input type="checkbox"/>	A technical explanation of the project activities;
<input type="checkbox"/>	If technology will be transferred, an explanation of how this transfer will occur;
<input type="checkbox"/>	A description and justification of the project's boundary;
<input type="checkbox"/>	A statement of how long the project activity will last;
<input type="checkbox"/>	Identify the crediting period that is being applied for:
<input type="checkbox"/>	a maximum of seven years, that can be renewed twice, adding up to three periods of seven years, with the baseline being revised or updated, or;
<input type="checkbox"/>	a maximum of 10 years with no renewal
<input type="checkbox"/>	A description of how this project reduces GHGs above-and-beyond business-as-usual;
<input type="checkbox"/>	Documentation and references to impacts of project activities that are considered significant to the participants of the project activities and by the country where activities will be implemented. Impacts should include social and environmental analysis beyond project boundaries;
<input type="checkbox"/>	Information on any source of public funding for the project and demonstration that this funding is not diverted from official development assistance (ODA), and is not part of the financial obligations before UNFCCC;
<input type="checkbox"/>	Summary of stakeholder comments, including a description of the stakeholder process, and how these comments were considered in the project activities.
Monitoring Plan should:	
<input type="checkbox"/>	Identify data needs and data quality, with respect to accuracy, comparability, completeness, and validity;
<input type="checkbox"/>	State what methodologies will be used to collect the data and monitor the project activities, including measures to ensure quality control in monitoring, data collection and reporting.
<input type="checkbox"/>	If new monitoring methodologies are being proposed:
<input type="checkbox"/>	Describe the new monitoring methodology;
<input type="checkbox"/>	Assess its strengths and weaknesses;
<input type="checkbox"/>	State whether the methodology has been applied successfully elsewhere.

Checklist 1: Project Design Document – PDD (continued)

Baseline Methodology	
	If using an approved methodology, the PDD should provide:
	A statement of which methodology was chosen
	Status Quo Emissions
	Market Conditions
	Best Available Technology
	A statement of how this methodology will be used;
	If using a new methodology the PDD should provide:
	A description and justification of this new baseline methodology;
	An assessment of its strengths and weaknesses;
	Description of key parameters, data sources, and assumptions used in the baseline estimation and assessment of uncertainties;
	Baseline emissions projections
	How this methodology will address 'leakage'
	How this baseline considers national or sectoral circumstances and how the baseline was established in a transparent and conservative manner;
Calculations (include references, if any, to support your calculations)	
	A. Describe formulas used to calculate and devise baseline GHG emissions by sources;
	B. Describe formulas used to calculate and devise leakages from baseline emissions;
	Sum A and B to determine the CDM project emissions;
	C. Describe and calculate or estimate GHG emissions by source within the CDM project boundary;
	D. Describe and calculate project leakage;
	Sum C and D to calculate baseline emissions of CDM project activity
	Subtract net CDM project emissions (C+D) from net baseline emissions (A+B) to calculate the net emission reductions of the CDM project $[(A+B) - (C+D)]$;

Note: all calculations should be converted into carbon dioxide equivalent (CO₂e) based on the GWP.

Checklist 2: Monitoring Plan

Monitoring Plan	
<input type="checkbox"/>	Emission data necessary for estimating or measuring GHG emissions within the project boundaries and crediting period;
<input type="checkbox"/>	Data that identifies and measures leakages;
<input type="checkbox"/>	Data quality and control procedures;
<input type="checkbox"/>	Procedures for the calculation of GHG reductions for crediting period and leakages;
<input type="checkbox"/>	Emission reductions must be calculated by the registered methodology, accounting for leakages;
<input type="checkbox"/>	Provide supporting documentation of all steps above;

Note: Small-scale CDM projects may use the simplified modalities and procedures being developed by the Executive Board and approved by the CoP.

Appendix V: CO₂ Equivalent Calculation Worksheet MODEL

All units should be converted to metric tonnes before being inserted into this worksheet.

GHG	Baseline Emissions (t)		CDM Project Emissions (t)	=	Net Reduction (t)	×	GWP ^a	=	CO ₂ e (t)
CO ₂		-		=		×	1	=	
CH ₄		-		=		×	21	=	
N ₂ O		-		=		×	310	=	
HFC-23		-		=		×	11,700	=	
HFC-125		-		=		×	2,800	=	
HFC-134 ^a		-		=		×	1,300	=	
HFC-152 ^a		-		=		×	140	=	
CF ₄		-		=		×	6,500	=	
C ₂ F ₆		-		=		×	9,200	=	
SF ₆		-		=		×	23,900	=	
Sub-total		-		=			Total		

^a Global warming potential as related to CO₂.expressed in terms of mass for a 100-year period defined according to the IPCC Second Assessment Report (1995).

Appendix VI: ANNEX I of United Nations Framework Convention on Climate Change

Annex I

United Nations Framework Convention on Climate Change

Australia	Liechtenstein *
Austria	Lithuania a/
Belarus a/	Luxembourg
Belgium	Monaco *
Bulgaria a/	Netherlands
Canada	New Zealand
Croatia/ *	Norway
Czech a/ *	Poland a/
Denmark	Portugal
Estonia a/	UK
EU	Romania a/
Finland	Russian Federation a/
France	Slovakia a/ *
Germany	Slovenia *
Greece	Spain
Hungary a/	Sweden
Iceland	Switzerland
Ireland	Turkey
Italy	Ukraine a/
Japan	USA
Latvia a/	

Source: Ministry of Science and Technology (Ministério da Ciência e Tecnologia – MCT) – Climate Convention – Annex I (www.mct.gov.br/clima/convencao/anexo1.htm)

a/ - Countries under transition process to market economies.

* N.E.: Countries that are now listed in Annex I after amendment that entered into force on August 13, 1998, in compliance with decision n. 4/CP.3 adopted at CoP-3

Appendix VII: Project Design Document model approved by CoP-8

This appendix contains the Project Design Document (PDD) which is the basic instrument necessary to submit eligible project activities to CDM. The present version was approved at the eighth Conference of the Parties (CoP-8) held in New Delhi in October 2002.

**CLEAN DEVELOPMENT MECHANISM
PROJECT DESIGN DOCUMENT (CDM-PDD)
Version 01 (in effect as of: 29 August 2002)**

Introductory Note

1. This document contains the clean development mechanism project design document (CDM-PDD). It elaborates on the outline of information in Appendix B "Project Design Document" to the Modalities and Procedures (decision 17/CP.7 contained in document FCCC/CP/2001/13/Add.2).
2. The CDM-PDD can be obtained electronically through the UNFCCC CDM web site (<http://unfccc.int/cdm>), by e-mail (cdm-info@unfccc.int) or in printed form from the UNFCCC secretariat (Fax: +49-228-8151999).
3. *Explanations* for project participants are in italicized font.
4. The Executive Board may revise the project design document (CDM-PDD), if necessary. Revisions shall not affect CDM project activities validated at and prior to the date at which a revised version of the CDM-PDD enters into effect. Versions of the CDM-PDD shall be consecutively numbered and dated.
5. In accordance with the CDM M&P, the working language of the Board is English. The CDM-PDD shall therefore be submitted to the Executive Board filled in English. The CDM-PDD format will be available on the UNFCCC CDM web site in all six official languages of the United Nations.
6. The Executive Board recommends to the CoP (CoP/MoP) to determine, in the context of its decision on modalities and procedures for the inclusion of afforestation and reforestation activities in the CDM (see also paragraph 8-11 of decision 17/CP.7), whether the CDM-PDD shall be applicable to this type of activities or whether modifications are required.
7. A glossary of terms may be found on the UNFCCC CDM web site or from the UNFCCC secretariat by e-mail (cdm-info@unfccc.int) or in print (Fax: +49-228-815 1999).

CONTENTS

- A. General description of project activity
- B. Baseline methodology
- C. Duration of the project activity / Crediting period
- D. Monitoring methodology and plan
- E. Calculations of GHG emissions by sources
- F. Environmental impacts
- G. Stakeholders comments

Annexes

Annex 1: Information on participants in the project activity

Annex 2: Information regarding public funding

Annex 3: New baseline methodology

Annex 4: New monitoring methodology

Annex 5: Table: Baseline data

A. General description of project activity

A.1 Title of the project activity:

A.2. Description of the project activity:

(Please include in the description

- the purpose of the project activity

- the view of the project participants of the contribution of the project activity to sustainable development (max. one page).)

A.3. Project participants:

(Please list Party(ies) and private and/or public entities involved in the project activity and provide contact information in Annex 1.)

(Please indicate at least one of the above as the contact for the CDM project activity.)

A.4. Technical description of the project activity:

A.4.1. Location of the project activity:

A.4.1.1 Host country Party(ies):

A.4.1.2 Region/State/Province etc.:

A.4.1.3 City/Town/Community etc:

A.4.1.4 Detail on physical location, including information allowing the unique identification of this project activity *(max one page)*:

A.4.2. Category(ies) of project activity

(Using the list of categories of project activities and of registered CDM project activities by category

available on the UNFCCC CDM web site, please specify the category(ies) of project activities into which this project activity falls. If no suitable category(ies) of project activities can be identified, please suggest a new category(ies) descriptor and its definition, being guided by relevant information on the UNFCCC CDM web site.)

A.4.3. Technology to be employed by the project activity:

(This section should include a description on how environmentally safe and sound technology and know-how to be used is transferred to the host Party, if any.)

A.4.4. Brief explanation of how the anthropogenic emissions of anthropogenic greenhouse gas (GHGs) by sources are to be reduced by the proposed CDM project activity, including why the emission reductions would not occur in the absence of the proposed project activity, taking into account national and/or sectoral policies and circumstances:

(Please explain briefly how anthropogenic greenhouse gas (GHG) emission reductions are to be achieved (detail to be provided in section B.) and provide the total estimate of anticipated reductions in tonnes of CO₂ equivalent as determined in section E. below.)

A.4.5. Public funding of the project activity:

(In case public funding from Parties included in Annex 1 is involved, please provide in Annex 2 information on sources of public funding for the project activity, including 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.)

B. Baseline methodology

B.1 Title and reference of the methodology applied to the project activity:

(Please refer to the UNFCCC CDM web site for the title and reference list as well as the details of approved methodologies. If a new baseline methodology is proposed, please fill out Annex 3. Please note that the table “Baseline data” contained in Annex 5 is to be prepared parallel to completing the remainder of this section).

B.2. Justification of the choice of the methodology and why it is applicable to the project activity

B.3. Description of how the methodology is applied in the context of the project activity:

B.4. 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 (i.e. explanation of how and why this project is additional and therefore not the baseline scenario).

B.5. Description of how the definition of the project boundary related to the baseline methodology is applied to the project activity:

B.6. Details of baseline development

B.6.1 Date of completing the final draft of this baseline section (*DD/MM/YYYY*):

B.6.2 Name of person/entity determining the baseline:

(Please provide contact information and indicate if the person/entity is also a project participant listed in Annex 1.)

C. Duration of the project activity / Crediting period

C.1 Duration of the project activity:

C.1.1. Starting date of the project activity:

(For a definition by the Executive Board of the term “starting date”, please refer to UNFCCC CDM web site. Any such guidance shall be incorporated in subsequent versions of the CDM-PDD. Pending guidance, please indicate how the “starting date” has been defined and applied in the context of this project activity.)

C.1.2. Expected operational lifetime of the project activity: *(in years and months, e.g. two years and four months would be shown as: 2y-4m)*

C.2 Choice of the crediting period and related information:

(Please underline the appropriate option (C.2.1 or C.2.2.) and fill accordingly)

(Note that the crediting period may only start after the date of registration of the proposed activity as a CDM project activity. In exceptional cases, the starting date of the crediting period can be prior to the date of registration of the project activity as provided for in paras. 12 and 13 of decision 17/CP.7 and through any guidance by the Executive Board, available on the UNFCCC CDM web site)

C.2.1. Renewable crediting period (at most seven (7) years per period)

C.2.1.1. Starting date of the first crediting period (*DD/MM/YYYY*):

C.2.1.2. Length of the first crediting period *(in years and months, e.g. two years and four months would be shown as: 2y-4m)*:

C.2.2. Fixed crediting period (at most ten (10) years):

C.2.2.1. Starting date (*DD/MM/YYYY*):

C.2.2.2. Length (max 10 years): *(in years and months, e.g. two years and four months would be shown as: 2y-4m)*

D. Monitoring methodology and plan

(The monitoring plan needs to provide detailed information related to the collection and archiving of all relevant data needed to

- estimate or measure emissions occurring within the project boundary;*
- determine the baseline; and;*
- identify increased emissions outside the project boundary.*

The monitoring plan should reflect good monitoring practice appropriate to the type of project activity. Project participants shall implement the registered monitoring plan and provide data, in accordance with the plan, through their monitoring report.

Operational entities will verify that the monitoring methodology and plan have been implemented correctly and check the information in accordance with the provisions on verification. This section shall provide a detailed description of the monitoring plan, including an identification of the data and its quality with regard to accuracy, comparability, completeness and validity, taking into consideration any guidance contained in the methodology.

Please note that data monitored and required for verification and issuance are to be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whatever occurs later.)

D.1. Name and reference of approved methodology applied to the project activity:

(Please refer to the UNFCCC CDM web site for the name and reference as well as details of approved methodologies. If a new methodology is proposed, please fill out Annex 4.)

(If a national or international monitoring standard has to be applied to monitor certain aspects of the project activity, please identify this standard and provide a reference to the source where a detailed description of the standard can be found.)

D.2. Justification of the choice of the methodology and why it is applicable to the project activity:

D.5. Relevant data necessary for determining the baseline of anthropogenic emissions by sources of GHG within the project boundary and identification if and how such data will be collected and archived.

(Depending on the methodology used to determine the baseline this table may need to be filled. Please add rows to the table below, as needed.)

ID number <i>(Please use numbers to ease cross-referencing to table D.6)</i>	Data type	Data variable	Data unit	Will data be collected on this item? (If no, explain).	How is data archived? (electronic/paper)	For how long is data archived to be kept?	Comment

D.6. Quality control (QC) and quality assurance (QA) procedures are being undertaken for data monitored. *(data items in tables contained in section D.3., D.4. and D.5 above, as applicable)*

Data <i>(Indicate table and ID number e.g. D.4-1; D.4-2.)</i>	Uncertainty level of data (High/Medium/Low)	Are QA/QC procedures planned for these data?	Outline explanation why QA/QC procedures are or are not being planned.

D.7 Name of person/entity determining the monitoring methodology:

(Please provide contact information and indicate if the person/entity is also a project participant listed in Annex 1 of this document.)

E. Calculation of GHG emissions by sources

E.1 Description of formulae used to estimate anthropogenic emissions by sources of greenhouse gases of the project activity within the project boundary: *(for each gas, source, formulae/algorithm, emissions in units of CO₂ equivalent)*

E.2 Description of formulae used to estimate leakage, defined as: the net change of anthropogenic emissions by sources of greenhouse gases which occurs outside the project boundary, and that is measurable and attributable to the project activity: *(for each gas, source, formulae/algorithm, emissions in units of CO₂ equivalent)*

E.3 The sum of E.1 and E.2 representing the project activity emissions:

E.4 Description of formulae used to estimate the anthropogenic emissions by sources of greenhouse gases of the baseline: *(for each gas, source, formulae/algorithm, emissions in units of CO₂ equivalent)*

E.5 Difference between E.4 and E.3 representing the emission reductions of the project activity:

E.6 Table providing values obtained when applying formulae above:

F. Environmental impacts

F.1. Documentation on the analysis of the environmental impacts, including transboundary impacts

(Please attach the documentation to the CDM-PDD.)

F.2. If impacts are considered significant by the project participants or the host Party: *please provide 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.*

G. Stakeholders comments

G.1. Brief description of the process on how comments by local stakeholders have been invited and compiled:

G.2. Summary of the comments received:

G.3. Report on how due account was taken of any comments received:**ANNEX 1****CONTACT INFORMATION ON PARTICIPANTS IN THE PROJECT ACTIVITY***(Please copy and paste table as needed)*

Organization:	
Street/P.O.Box:	
Building:	
City:	
State/Region:	
Postfix/ZIP:	
Country:	
Telephone:	
FAX:	
E-Mail:	
URL:	
Represented by:	
Title:	
Salutation:	
Last Name:	
Middle Name:	
First Name:	
Department:	
Mobile:	
Direct FAX:	
Direct tel:	
Personal E-Mail:	

ANNEX 2

INFORMATION REGARDING PUBLIC FUNDING

ANNEX 3

NEW BASELINE METHODOLOGY

(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 of the Kyoto Protocol within the project boundary. The general characteristics of a baseline are contained in para. 45 of the CDM M&P.

For guidance on aspects to be covered in the description of a new methodology, please refer to the UNFCCC CDM web site.

Please note that the table "Baseline data" contained in Annex 5 is to be prepared parallel to completing the remainder of this section.)

1. Title of the proposed methodology:

2. Description of the methodology:

2.1. General approach (*Please check the appropriate option(s)*)

- Existing actual or historical emissions, as applicable;
- Emissions from a technology that represents an economically attractive course of action, taking into account barriers to investment;
- 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.

2.2. Overall description (other characteristics of the approach):

3. Key parameters/assumptions (including emission factors and activity levels), and data sources considered and used:

4. Definition of the project boundary related to the baseline methodology:

(Please describe and justify the project boundary bearing in mind that it 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 project activity. Please describe and justify which gases and sources included in Annex A of the Kyoto Protocol are included in the boundary and outside the boundary.)

5. Assessment of uncertainties:

(Please indicate uncertainty factors and how those uncertainties are to be addressed)

6. Description of how the baseline methodology addresses the calculation of baseline emissions and the determination of project additionality:

(Formulae and algorithms used in section E)

7. Description of how the baseline methodology addresses any potential leakage of the project activity:

(Please note: 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.)

(Formulae and algorithms used in section E.5)

8. Criteria used in developing the proposed baseline methodology, including an explanation of how the baseline methodology was developed in a transparent and conservative manner:

9. Assessment of strengths and weaknesses of the baseline methodology:

10. Other considerations, such as a description of how national and/or sectoral policies and circumstances have been taken into account:

3. Potential sources of emissions which are significant and reasonably attributable to the project activity, but which are not included in the project boundary, and identification if and how data will be collected and archived on these emission sources

(Please add rows to the table below, as needed.)

ID number <i>(Please use numbers to ease cross-referencing to table 5)</i>	Data type	Data variable	Data unit	Measured (m), calculated (c) or estimated (e)	Recording frequency	Proportion of data to be monitored	How will the data be archived? (electronic/paper)	For how long is archived data kept?	Comment

4. Assumptions used in elaborating the new methodology:

(Please list information used in the calculation of emissions which is not measured or calculated, e.g. use of any default emission factors)

5. Please indicate whether quality control (QC) and quality assurance (QA) procedures are being undertaken for the items monitored. (see tables in sections 2 and 3 above)

Data <i>(Indicate table and ID number e.g. 3.-1; 3.-2.)</i>	Uncertainty level of data (High/Medium/Low)	Are QA/QC procedures planned for these data?	Outline explanation why QA/QC procedures are or are not being planned.

6. What are the potential strengths and weaknesses of this methodology? *(please outline how the accuracy and completeness of the new methodology compares to that of approved methodologies).*

7. Has the methodology been applied successfully elsewhere and, if so, in which circumstances?

After completing above, please continue filling sub-sections D.2. and following.

ANNEX 5

2 TABLE: BASELINE DATA

(Please provide a table containing the key elements used to determine the baseline (variables, parameters, data sources etc.). For approved methodologies you may find a draft table on the UNFCCC CDM web site. For new methodologies, no predefined table structure is provided.)
