

# The Clean Development Mechanism (CDM) Toolkit

a resource for citizens, activists and NGOs









# Introduction



This second edition of the Clean Development Mechanism (CDM) Toolkit is designed for NGOs, activists and citizens who have little or no prior experience with the CDM. Like the first CDM Toolkit that was released by CDM Watch in 2003, it is a Guide that provides an explanation of how the CDM and its tools for public participation work.

Note that this Guide is not designed as a critique of the CDM, but rather as a tool for use by those who confront CDM projects in their country, and want to know more about the mechanism and how to assess projects.

This toolkit has been designed to bring clarity to key requirements when assessing CDM projects during the public commenting period and beyond. It begins by providing a general overview of the CDM and its history. It then explains the process a CDM project has to go through to obtain approval and be able to generate carbon credits. The focus is on explaining the key issues for civil society and identifying the opportunities for public input. This Guide also gives details about exceptional rules for certain project types, such as sinks projects and programmes of activities.

The CDM involves a lot of jargon and acronyms that we have tried to avoid as much as possible. But to give you an accurate picture of how the CDM works, we had to use some. To make it easier, key terms and acronyms in the text are explained in more detail in the glossary at the end of the toolkit.

You can also download other language versions of the CDM Toolkit from http://www.cdm-watch.org

CDM Watch would like to take this opportunity to thank Ben Pearson and his colleagues for the efforts they put into the first edition of CDM Watch that operated from 2001-2005. From the very beginning of the CDM, they provided a much-needed critical voice from civil society regarding the development of the CDM.

CDM Watch was re-established in April 2009 to carry on the task of providing a critical perspective on CDM projects, methodologies and the work of the CDM Executive Board. At a time where a reformed mechanism post-2012 is being negotiated, the ultimate goal of CDM Watch is to expose the flaws of the current CDM and to provide a voice for civil society in the CDM process. Lessons learnt must be taken into account in any mechanism post-2012 so as to put a stop to fake emission reductions and environmentally or socially harmful emission reduction projects in the future.

This Toolkit is sponsored by the International Climate Protection Initiative of the Federal Environment Ministry of Germany If you would like more information, contact CDM Watch at: info@cdm-watch.org http://www.cdm-watch.org



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# 1. The CDM and its origins – a brief overview

At the 1992 Rio Earth Summit, countries agreed to the United Nations Framework Convention on Climate Change (UNFCCC) in response to growing evidence that human activity was contributing to global warming. The UNFCCC contained a nonbinding commitment by industrialised countries (listed in Annex I of the Convention) that they would reduce their emissions of greenhouse gases to 1990 levels by the year 2000. It soon became clear that this was not enough to avoid dangerous climate change. That's why at the first Conference of Parties (COP) in 1995 after the Convention entered into force, Parties began to negotiate a Protocol that would set tighter and legally binding targets for reducing greenhouse gas emissions for certain countries.

At the 3rd COP to the Convention in Japan in 1997, Parties agreed on the Protocol that set targets for industrialised countries<sup>1</sup> to reduce their domestic emissions by an average of 5% below 1990 levels in the period 2008-2012, known as the first commitment period. The Protocol was given the name of the city in which it was negotiated – Kyoto. To help reduce the cost of meeting these reduction commitments three market-based "flexible mechanisms" were designed: Emissions Trading (ET), Joint Implementation (JI) and the Clean Development Mechanism (CDM).

While different in operation, these three mechanisms are based on the same principle: to allow industrialised countries to reduce emissions wherever in the world those reductions are cheapest, and then count those reductions towards their national target. JI and the CDM are called "project-based" mechanisms because they fund actual projects; JI generally funds projects in Eastern Europe and the former Soviet Union, while CDM projects can only happen in developing countries which do not have an emissions reduction target under the Kyoto Protocol. As such, the CDM is the only part of the Kyoto Protocol that directly involves developing countries in reducing greenhouse gas emissions. The CDM is also different in that emission reduction credits that have been generated by CDM projects since 2000 can be counted as reductions in the period 2008-2012. Lastly, the CDM has an explicit mandate to promote sustainable development, unlike JI or Emissions Trading.

## 1.1 The Marrakesh Accords

At the 7th COP to the UNFCCC in 2001, most of the rules for the CDM were agreed and enshrined in the so-called Marrakesh Accords. These served as the foundation for CDM rules. Parties have since developed that set of rules within the context of the so-called "CDM Reform." The Marrakesh Accords also established the CDM Executive Board to supervise the CDM, under the authority and guidance of the Meetings of the Parties to the Kyoto Protocol<sup>2</sup>. The Board was given the task of elaborating and improving existing rules, and providing guidance on how certain rules should be interpreted<sup>3</sup>. The Board also makes the final decision on whether to register a CDM project - which allows it to start generating carbon credits - and approves the issuance of credits. The Marrakesh Accords place no restrictions on the type of technology that can be used in a CDM project except for the exclusion of nuclear power<sup>4</sup>, and limits on the type of sinks projects on page 16). While the CDM is meant to promote sustainable development in the host countries, the decision on whether a specific project does this is left to the host country itself. That is to say, host countries have no general criteria or mandatory tests that they must use.

- Technically the countries that have commitments are listed, together with their commitments, in Annex B to the Protocol, but these industrialised countries are commonly referred to as Annex I Parties
- <sup>2</sup> CMP/2005/8/Ad1, p8 para5
- <sup>3</sup> Marrakesh Accords, Guidelines for the implementation of Article 6 of the Kvoto Protocol. p56
- <sup>4</sup> CP/2001/13/Ad2, p20
- 5 CP/2001/13/Ad2, p22 para7(a)

- <sup>6</sup> The Kyoto Protocol entered into force on the 90th day after the date on which not less than 55 Parties to the UNFCCC. incorporating Annex I Parties which accounted in total for at least 55% of the total CO2 emissions for 1990 of the Annex I Parties, have deposited their instruments of ratification, acceptance, approval or accession. As of 30 June 2009, 186 countries and one regional economic integration organization (the EEC) have deposited instruments of ratifications, accessions, approvals or acceptances and 63.7% of the total CO2 emissions for 1990 of the Annex I Parties have ratified the Protocol.
- <sup>8</sup> UNFCCC press release "Clean Development Mechanism passes 2000th registered project milestone in less than two years", 6 January 2010
- <sup>9</sup> Deutsche Bank analysis "It's Tough at the COP: After the Confusion, Uncertainty..." on the impact of COP-15 on EU-offsetting, 20 December 2009
- <sup>10</sup> ClimateStrategies "Would preferential access to the EU ETS be sufficient to overcome current barriers to CDM projects in LDCs?", Paula Castro & Axel Michaelowa, March 2009

<sup>11</sup> Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom

<sup>12</sup> Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Poland, Romania, Russian Federation, Slovakia, Slovenia, Ukraine

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- <sup>13</sup> Canada, Australia, Japan, Monaco, Iceland, New Zealand, Norway, Switzerland, Liechtenshtein
- <sup>14</sup> Antigua and Barbuda, Argentina, Armenia, Azerbaijan, Bahamas, Bangladesh, Barbados, Belize, Bhutan, Benin, Bolivia, Botswana, Brazil, Burundi, Cambodia, Cameroon, Chile, China, Colombia, Cook Islands, Costa Rica, Cuba, Cyprus, Djibouti, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, Fiji, Gambia, Georgia, Ghana, Grenada, Guatemala, Guinea, Guyana, Honduras, India, Israel, Jamaica, Jordan, Kenya, Kiribati, Kyrgyzstan, Lao, Lesotho, Liberia, Madagascar, Malawi, Malaysia, Maldives. Mali. Malta. Marshall

# 1.2. CDM: a billion-dollar market

The Kyoto Protocol entered into force in February 2005<sup>6</sup>. It has been ratified by all Annex I countries except the United States of America. The first CDM project was registered on 18 November 2004, and the next ones followed rapidly. On 6 January 2010, the 2000th project was registered. So far, all registered projects have generated more than 365 million certified emission reductions (CERs). Each CER corresponds to 1 tonne of CO2 reduction. Now, with another 2,500 projects at the validation stage, the mechanism is expected to generate more than 2.9 billion CERs in the first commitment period of the Kyoto Protocol<sup>8</sup>.

## 1.3. Uncertain future for the CDM beyond 2012

As the Kyoto Protocol is set to expire in 2012, Parties are currently discussing what will happen after 2012 in the socalled second commitment period (2013-2020) of the Kyoto Protocol. But the future is still unclear. The climate summit in Copenhagen in December 2009 aimed at an international agreement on climate change to serve as the successor of the Kyoto Protocol. However, Parties did not agree on any legally binding outcome. The next Conference of Parties (COP-16) to the UNFCCC will take place in Mexico in November/December 2010, where the architecture for a deal to curb global warming should be fleshed out. This potential agreement will be decisive for the future of the CDM: if there is no agreement on the Kyoto Protocol beyond 2012, the CDM will cease to exist.

However, the odds are that the CDM will continue beyond 2012 for a number of reasons. Carbon credits are not only being used for compliance with the Kyoto Protocol targets, but also qualify for compliance with national targets which often are more ambitious that the Kyoto Protocol targets. The European Union, which is the biggest purchaser of CDM carbon credits, has already for example secured demand of CERs beyond 2012<sup>9</sup>. Further to a commitment to reduce its overall emissions to at least 20% below 1990 levels by 2020, and to 30% below 1990 levels if a new global climate change agreement with comparable efforts by other developed countries is reached, the EU launched its climate and energy package in December 2008. The measures to reach these goals include an expansion of the European Emissions Trading Scheme (EU ETS), as well as stricter emissions reductions for sectors not included in the EU ETS. Most importantly for the CDM, this climate package foresees that about 50% of the reductions required by the scheme will be allowed to be imported from CDM and JI projects<sup>10</sup>.

# 1.4. Participant Countries in the CDM

- The European Union (EU-15)<sup>11</sup>: EU Member States that joined the European Union before 1996 are Annex I countries that are part of the EU ETS and are usually net buyers of emission permits.
- **Countries undergoing the process of transition to a market economy**<sup>12</sup> **:** These countries have emission caps and are usually net sellers in the carbon market. JI projects are hosted mostly in these countries. All of these countries, except Russia, Ukraine and Croatia, are members of the European Union and thus are part of the EU ETS.
- Annex I non-EU countries that ratified the Kyoto Protocol <sup>13</sup>: These countries have ratified the Kyoto Protocol and have compliance targets, but are not part of the EU, or are not economies in transition. Australia was the last country to ratify the Protocol, in December 2007.
- Annex I Parties that have not ratified the Kyoto Protocol: Among the Annex I countries that signed the Kyoto Protocol in 1997, only the USA has not ratified it.
- Non-Annex I countries having ratified the Kyoto Protocol <sup>14</sup>: The non-Annex I countries do not have emission caps, are not forced to commit to any reduction targets and are potential host countries of CDM projects.

Islands, Mauritius, Mexico, Micronesia, Mongolia, Morocco, Myanmar, Namibia, Nauru, Nicaragua, Niger, Niue, Palau, Panama, Papua New Guinea, Paraguay, Peru, Phillipines, Republic of Korea, Republic of Moldova, Rwanda, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Senegal, Seychelles, Solomon Islands, South Africa, Sri Lanka, Sudan, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkmenistan, Tuvalo, Uganda, United Republic of Tanzania, Democratic People's Republic Uruguay, Uzbekistan, Vanuatu, Viet Nam, Yemen



#### <sup>15</sup> For the purposes of explaining the CDM "emission reductions" will be used, however the CDM does allow for socalled sinks projects that store carbon in vegetation and biomass, and thus store or sequester already emitted carbon.

## 2. How the CDM works in practice – an example

In theory the CDM works like this: an investor from an industrialised country, or an industrialised country government, can invest in, or provide finance for, a project in a developing country that reduces<sup>15</sup> greenhouse gas emissions, so that they are lower than they would have been without the extra investment – i.e. compared to what would have happened without the CDM under a business-as-usual outcome. The investor then gets credits – carbon credits - for the reductions and can use those credits to meet their Kyoto target. If the CDM works perfectly, it will not result in more or less emission reductions being achieved than were agreed under the Kyoto Protocol—it will simply change the location in which some of the reductions will happen.

An example: a French company needs to reduce its emissions as part of its contribution to meeting France's emission reduction target under the EU Emissions Trading Scheme. Instead of reducing emissions from its own activities in France, the company provides funding for the construction of a new biomass plant in India that would not have been able to go ahead without this investment. This, they argue, prevents the construction of new fossil fuel plants in India, or displaces consumption of electricity from existing ones, leading to a reduction in greenhouse gas emissions in India. The French investor gets credit for those reductions and can use them to help meet their reduction target in France.

Obviously, such a neat example is unlikely in the real world. In particular, estimating what would have happened if the French-funded biomass plant did not go ahead requires predicting something that is inherently unknowable, in that it will never happen so we will never know if our prediction was correct. Frequently there is more than one possible scenario for what would have happened, which makes it even more difficult. The actual pattern of CDM investment and crediting is much more complex than the above example portrays. In many cases, the carbon credits are traded many times and commonly involve intermediaries such as the World Bank or other carbon credit procurement agencies investing money on behalf of industrialised country governments and corporations. In other cases, project developers are self-financing CDM projects and then seeking a buyer for the emissions reductions. However, the fundamental premise remains the same: industrialised country governments and companies provide the finance to make possible a project that results in fewer emissions than would have happened otherwise. The credit for reducing those emissions is claimed by the industrialised country investor, and can be used to meet his or her own reduction target.

The process by which individual projects are developed and approved is explained in the next section.

 CDM Executive Board Annual Report 2009, p8
 For a list of accredited DOEs, see



http://cdm.unfccc.int/DOE/list/index.html

# 3. The CDM project cycle: from project design to the issuing of carbon credits

The Marrakesh Accords created a set of requirements for CDM projects. In order

to confirm that all necessary CDM requirements have been satisfied, third-party

validators are hired by project developers to act as the extended arm of the

CDM Executive Board<sup>16</sup>. In UNFCCC jargon, these validators are called Designated

Operational Entities (DOEs)<sup>17</sup> but we will call them validators and verifiers in this

Guide. See box on the left for more information . If the validator determines that

the Marrakesh Accords' requirements have been met, then they recommend to

the CDM Executive Board that the project be registered, which constitutes final

approval. If the Board does not disagree with this recommendation within 8

weeks, the project is automatically registered and can begin monitoring and

claiming credits for the reduction of emissions. This means that the CDM Executive

Board trusts the recommendations of the validators in principle, but there is a

"checks-and-balances" option enabling the EB to have the last word in case of

disagreement. The better the validators do their job, the fewer the requests for

review by the Board. However, the performance of validators has been heavily

criticised and three validators were suspended in the past for having failed to

#### A Designated Operational Entity under the CDM is usually a private company that is accredited and designated by the UNFCCC to:

• Validate and subsequently request registration of a proposed CDM project activity which will be conside red valid after 8 weeks if no request for review was made. In that function, we will call the DOE "validator" in this Guide.

Verify emission reductions of a registered CDM project activity, certify them
as appropriate and request that the Board issue Certified Emission Reductions
accordingly. The issuance will be considered final 15 days after the request is
made unless a request for a review is made. In that function, we will call the DOE
"verifier" in this Guide.

#### Large accredited validators are:

- > TÜV SÜD Industrie Service GmbH (TÜV SÜD)
- > SGS United Kingdom Ltd. (SGS)
- > Det Norske Veritas Certification AS (DNV)
- > Bureau Veritas Certification Holding SAS (BVCH)
- > Korea Energy Management Corporation (KEMCO)
- > TÜV NORD CERT GmbH (TÜV Nord)

For a full list of validators, see http://cdm.unfccc.int/DOE/list/index.html

<sup>16</sup> CDM Executive Board Annual Report 2009, p8

<sup>17</sup> For a list of accredited DOEs, see http://cdm.unfccc.int/DOE/list/index.html

<sup>18</sup> CMP/2005/8/Ad1, p17 para49;

comply with minimum key requirements. Therefore it is important to keep a close eye on the work of the validators and raise concerns if appropriate.

Before the CDM Executive Board can issue CERs, i.e. carbon credits, the reductions must be verified by another Designated Operational Entity - not the same one that carried out the validation. The procedures of monitoring, verification and issuance of carbon credits continue for the entire period during which the project claims credits for reducing emissions<sup>18</sup>. Overall, the CDM process cycle can be divided into seven steps which you find explained in more detail below:

- 1. Preparing the Project Design Document (PDD)
  - a. Local stakeholder consultation
  - b. Environmental impact assessment (EIA)
  - c. Methodologies to estimate the baseline
  - d. Demonstrating additionality
- 2. Getting approval from each country involved
- 3. Validation and the 30 day public comment period
- 4. Registration by the CDM Executive Board
- 5. Monitoring emission reductions
- 6. Verification, certification and issuance of emission reduction credits
- 7. Renewal of the crediting period

There are opportunities throughout this process for the public to have input. As part of the explanation of the CDM process cycle, the key opportunities for input are marked with a . There is also a review of these opportunities at the end of this section.

Crediting period can either be a maximum of 7 years which may be renewed at most 2 times or a maximum of 10 years with no option of renewal. Note that the lifetime of the CDM project can be different from the lifetime of the actual project. A dam for example may have an operational lifetime of over 50 years yet only generate carbon credits as a CDM project for 10.



# THE CDM PROJECT CYCLE

# PROJECT IDEA NOTE · PIN·



CDM application is considered for the first time

# VALIDATION

PROJECT DESIGN DOCUMENT (PDD)



HOST COUNTRY APPROVAL OF CDM PROJECT

Country's Designated National

Authority gives formal approval



## 30 DAY PUBLIC COMMENT PERIOD



Possibility for civil society to submit comments

the developer or a hired consultant

Presentation of information on the

aspects of the project, prepared by

essential technical and organizational

# REGITRATION

## REQUEST FOR REGISTRATION



PDD and validation report are submitted to the CDM Secretariat



Review and Rejection if project fails

to meet requirements of the CDM

W / JECT

CDM EXECUTIVE BOARD

Project is registered

# **VERIFICATION & CERTIFICATION**

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## MONITORING



Project participant must collect and archive all data required by the PDD monitoring plan to calculate the number of credits to be generated by the project VERIFICATION



DOE conducts a periodic independent review and ex post determination of the monitored GHG emission reductions CERTIFICATION OF MONITORING REPORT



DOE assures that a project activity achieved the reductions in GHG emissions as verified

## **ISSUANCE**





Monitoring and Verification & Certification reports are submitted to the CDM secretariat REVIEW / REJECTION OF ISSUANCE REQUEST

Potential rejection of issuance if project fails to prove reduction of verified amount of GHG emission reductions



## CDM EXECUTIVE BOARD APPROVAL



Certified Emissions Reductions (CERs) are issued and distributed to project participants



# 3.1. Step 1: Preparing the Project Design Document (PDD)

#### What's in a Project Design Document?

- A general description of the project
- A baseline derived from an approved baseline methodology (see page 11)
- The estimated lifetime of the project and the crediting period (see page 19)
- A demonstration of how the project generates emission reductions that are additional to what would have occurred without the CDM (see page 11)
- An analysis of the environmental impacts (see page 10)
- A discussion of the stakeholder consultation process and how stakeholder comments were taken into account (see page 10)
- A monitoring and verification plan (see above)

Before a developer can submit a project for validation, they need to prepare a socalled Project Design Document (PDD).

The PDD is a sort of pre-formatted checklist that the project developer must complete, showing the design of the project and how it meets the validation requirements of the CDM. It is the main document that the validator will assess when deciding whether to approve the project, and the document that will be made available during the 30-day public comment period, making this a very significant step in starting a CDM project.

Before deciding which PDD-form to use, the type of CDM project activity needs to be identified. The type of activity matters for the set of rules that will be applicable throughout the process. The following are key criteria:

- Is the project large-scale or small-scale<sup>19</sup>?
- Does the project reduce emissions or remove emissions through afforestation and reforestation (A/R) project activities<sup>20</sup>?
- Is the project eligible for a programme of activities<sup>21</sup>?

See page 15 for more information about these different project activities. All different PDD forms<sup>22</sup> as required for the different project activities are available in English only at the UNFCCC website: http://cdm.unfccc.int/Reference/PDDs\_Forms/PDDs/ index.html. Evidence and information of the project should be appended to the PDD, but the key information can definitely be reported in the PDD.

Of all the things that must be done when designing a CDM project and preparing the PDD, the most important for you are:

- 1) The local stakeholder consultation;
- 2) The environmental impact assessment;
- 3) Methodologies to estimate the baseline; and
- 4) Demonstrating additionality.

# 3.1.1. Local stakeholder consultation

Ahead of the preparation of the PDD, the project developer must consult local stakeholders<sup>23</sup> "that can reasonably be considered relevant for the proposed CDM project activity"<sup>24</sup> about the planned project. In practice this means that the project developer has to inform people living in the vicinity of the project activity about the planned CDM project. A meeting has to be organised where the purpose of the project and its impacts are explained. Even though in some remote areas there might not be easy ways to spread the word about a planned project, the project developer has to make sure that concerned people are invited to the meeting. The obligation to inform people can even mean that mobile text messages have to be sent, or that people have to be informed orally. After the meeting, the project developer has to show how "due account" was taken of the comments made during this consultation meeting in the PDD. You should check the PDD to see whether your comments have been taken into account. Please contact us if the PDD does not reflect the outcome of the meeting. The report on how the developer has taken stakeholder comments into account is found in section E of the PDD.

## 3.1.2. Environmental impact assessment (EIA) 🕒

The CDM rules also require that the developer analyze the project's environmental impacts and, if required, prepare an EIA. This must be included in, or appended to, the PDD. Whether or not a full EIA has to be done is decided by the host country. If your national and/or regional environmental regulations require an EIA that includes a public comment period, then this may be another opportunity for you to have input. The assessment of the project's environmental impacts is found in section D of the PDD.

of 15 MW, 60 GWh per year or less than 60 kt CO2 equivalent annually, simplified modalities and procedures are applicable <sup>20</sup> Rules and procedures regarding A/R

<sup>19</sup> For projects with a maximum output

- CDM project activities are similar to those of GHG emission reduction CDM project activity.
- <sup>21</sup> Policies can qualify for the CDM under the so called Programme of Activities. PDD for small-scale activities, PDD for afforestation/reforestation activities,
- <sup>22</sup> PDD for programme of activities etc.

<sup>23</sup> According to the UNFCCC glossary of CDM terms, stakeholders mean "the public, including individuals, groups or communities affected, or likely to be affected, by the proposed CDM project activity or actions leading to the implementation of such an activity." In practice, this term is rather used for project participants than civil society actors. Therefore CDM Watch avoids this term throughout its communication and uses "civil society" instead.

<sup>24</sup> Clean Development Mechanism Validation and Verification Manual p25;



#### Your input on new methodologies

If there is no approved methodology for a planned project, the validator, on behalf of the project developer, sends a proposal for a new methodology to the Executive Board. The Board does not look at the proposed methodology straight away but gives it to the Methodology Panel first to make a recommendation about whether it should be approved. As the name suggests, the Methodology Panel is a panel of experts who advise the Board on issues relating to baseline and monitoring methodologies. The Panel can seek input from a roster of experts and must also make the new methodology available for a 15-day comment period, which is announced on the official UNFCCC official website. There is also an email notification system to which you can subscribe at http:// cdm.unfccc.int/NewUser.html. Your Designated National Authority (DNA) should also know whether projects in your country are submitting new methodologies. Based on the public comments and input from experts, the Methodology Panel makes its recommendation to the Executive Board who must decide whether to accept the recommendation at their next meeting. If a methodology is rejected, it can be resubmitted. If it is approved, then the validator can go ahead with validation.

#### An example to illustrate a baseline:

A developer claims that he needs carbon credits to finance the construction of a biomass plant. Without the credits, the plant will not go ahead, so the business-as -usual outcome is that a power plant using oil for fuel will be constructed to meet local electricity needs. Here, the oil plant is the baseline. If that plant would have emitted 50,000 tonnes of carbon dioxide a year, then the biomass plant can claim that it will reduce emissions by that amount. Analysing the baseline and determining whether it really represents what will happen in the absence of the CDM is essential for civil society actors. If the baseline is not credible, then neither is the project and it should not be approved. The baseline is found in section B of the PDD.

#### Approved methodologies:

As of February 2010, there are 96 approved and published large-scale baseline methodologies and 55 small-scale baseline methodologies. Another 29 methodologies are being reviewed. You can access them at http://cdm.unfccc.int/methodologies/index.html

- <sup>25</sup> CMP/2005/8/Ad1, p16 para44
- <sup>26</sup> Marrakesh Accords paragraph 48
- <sup>27</sup> See [EB08 Anx1 para4-5] for quidance

methodology was created and how it was applied to the situation in which the project is being developed is explained in section B.1 and B.2 of the PDD.

#### **Additionality:**

A CDM project activity is additional if GHG emissions are reduced below those

that would have occurred in the absence of the registered CDM project activity<sup>30</sup>. This means that a non-additional project will generate fake carbon credits that an Annex I country can use to avoid making real emission reductions domestically. This would ultimately lead to an increase in global emissions.

## 3.1.3. Methodologies to estimate the baseline

Every project must choose a methodology approved by the Executive Board for calculating the emissions reduced by a project. Each PDD is structured around a methodology appropriate for that project type. There are a large number of different approved methodologies depending on the sector (e.g. waste, hydropower, wind). In addition to standard projects, there are separate methodologies for small-scale projects and sinks projects. However, if there is no approved methodology to establish a baseline applicable to the project, a new methodology can be submitted for approval before the project as a whole can be validated (see the text box on the left for ways to influence new methodologies). The baseline established in the approved methodology predicts the scenario that would most likely occur in the absence of the CDM project (i.e. what will happen under business-as-usual) and the likely greenhouse gas emissions that will occur in that scenario<sup>25</sup>. Comparing the baseline to the project provides an estimate of how many emission reductions the project is expected to achieve. Developing a baseline is also critical for deciding whether a CDM project is additional, because testing for additionality involves asking whether the CDM project is the baseline (i.e. whether the project itself is the business-as-usual outcome). If it is, then it is not additional, because it would have happened anyway (see below for more information about this essential concept of additionality). All information about the baseline of the project is found in Section B.1 and B.4. of the PDD.

Simply stated, the baseline methodology is used to establish the baseline (which, from our example, would be the emissions of an oil plant). The methodology is created using one of the following general approaches<sup>26</sup>:

1) Existing actual or historical emissions, as applicable; or

2) Emissions from a technology that represents an economically attractive course of action, taking into account barriers to investment; or

3) 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 percent of their category<sup>27</sup>.

It is then applied to the specific situation in which the project will be developed, so establishing the baseline. What general approach was chosen, how the

The methodology also includes criteria for the monitoring plan once the project is registered. The monitoring plan is explained in section B.7 of the PDD.

## 3.1.4. Demonstrating additionality

The question of whether a project is additional is a key challenge to the environmental integrity of the CDM. Additionality is about filtering out businessas-usual, or "non-additional," projects. The CDM should only generate carbon credits from activities beyond business-as-usual, i.e. from projects that were built



- <sup>28</sup> Non-additional credits also have a huge impact on other national targets that allow CERs to qualify for compliance, such as the EU ETS.
- Barbara Haya: "Measuring Emissions Against an Alternative Future: Fundamental Flaws in the Structure of the Kyoto Protocol's Clean Development Mechanism", December 2009
   CMP/2005/8/Ad1, p16 para43

only because of the extra income from selling carbon credits. Each business-as-usual project that is allowed to generate carbon credits under the CDM will permit an industrialized country to emit more than their Kyoto targets<sup>28</sup> by paying developers in developing countries to do what they were doing anyway rather than actually reducing emissions<sup>29</sup>. That's why determination of additionality must always be made with conservative assumptions after careful analysis of all data necessary to test a project applicant's assertions. The demonstration of why the project is additional is in section B.5 of the PDD.

## 3.2. Step 2: Getting approval from each country involved

For a project to be validated the developer must obtain written confirmation from the country that is hosting the project (non Annex I country) and the country that is planning to purchase CERs from that project (Annex I country) that their involvement is voluntary. The registration of a project activity can also take place without an Annex I country being involved at the stage of registration. This is a so called "unilateral CDM project". However, before an Annex I Party acquires CERs from a unilateral project activity from an account within the CDM registry<sup>31</sup>, it has to submit a letter of approval to the CDM Executive Board in order for the CDM Registry administrator to be able to forward CERs from the CDM registry to the Annex I national registry.

<sup>31</sup> EB18 Rep, para57

<sup>32</sup> The Marrakesh Accords, FCCC/ CP/2001/13/Add.2, http://unfccc.int The host country must also confirm that "the project activity assists in achieving sustainable development". The decision about what constitutes sustainable development<sup>32</sup> is left to individual host countries. Again, no standards or criteria are mandated in the CDM rules.

The confirmation is provided by the DNA for the CDM. The DNA is an agency or department in your government that handles all matters relating to the development of CDM projects in your country. A listing of existing DNAs is available at http://cdm. unfccc.int/DNA/index.html. Contacting the DNA and finding out how it approves projects and which projects are coming through the pipeline is an essential step for NGOs which want to influence the implementation of the CDM in their country. In some countries, such as Brazil, NGOs are involved in the project approval process—something you should definitely demand of your government. Some governments, such as Armenia, also provide translated versions of the PDDs.

 <sup>33</sup> CMP.5 - Further guidance relating to the clean development mechanism, para...
 <sup>34</sup> The Gold Standard Foundation certifies emission reduction projects within the CDM and the voluntary offset market according to these criteria www. cdmgoldstandard.org

<sup>35</sup> As of February 2010, only 147 projects were rejected. For more details see http://cdm.unfccc.int/Projects/rejected. html

36 EB25 Rep, para92-93

There is no harmonised set of sustainable development criteria. But the recent decision on further guidance relating to the clean development mechanism adopted in Copenhagen<sup>33</sup> encourages DNAs to publish the criteria they use in assessing the contribution of project activities to sustainable development.

If you want to lobby for the adoption of sustainable development criteria, you can advocate the set of sustainable development criteria used by the Gold Standard at http://www.cdmgoldstandard.org/Current-GS-Rules.102.0.html34 .

# 3.3. Step 3: Validation and the 30-day public comment period $^{igodymbol{B}}$

The developer now has a baseline and monitoring plan derived from approved methodologies, confirmation of voluntary participation from the countries involved and host country approval that the project contributes to sustainable development, and a finalised PDD. Now the project is ready to be validated. Validation is essentially the point where the validator, after an assessment of all requirements, recommends the approval of a project to the CDM Executive Board. While in previous years, this recommendation almost guaranteed the registration by the Executive Board, recent concerns about the performance of validators have caused a stark increase in reviews of these recommendations and even the ultimate rejection of some projects requesting registration<sup>35</sup>.

Before the validator assesses whether the project developer has complied with the key requirements set out in the PDD, the public has the chance to make submissions during a 30-day public comment period. If the applied methodology changes for one reason or another after the PDD has been made available to the public, the validator has to make the updated PDD available again for a period of 30 days<sup>36</sup>. During this period, you can raise your concerns with the validator about whether the project meets the validation requirements and thus whether it should be approved. That is why validation is a crucial point in the project approval process for civil society actors.

#### **Commenting Checklist**

 Were you consulted by the project developer when they were designing the project? If so, does the summary of your comments that appears in the PDD accurately reflect what you said, and does it address the concerns you had?
 Is the environmental assessment of the project adequate?

• Is the baseline an accurate and credible estimation of what will happen in the absence of the project being registered as a CDM project?

- Will this project go ahead anyway if it is not registered as a CDM project that is, is it additional?
- · Has the CDM authority in your country approved this project?
- Does the project contribute to sustainable development in your country?

One way to write a public comment is to clearly state how the project is not in compliance with the rules of the CDM. In the box on the left, you will find a checklist with key conditions to consider when assessing a CDM project. You should make a submission during the 30-day public validation period if the project has not met either one or more of these conditions.

On page 17 of this Guide, the key validation requirements are explained in detail and cross-referenced to the relevant sections of the PDD. Bear in mind that the validator of the project has to publicly respond to all comments made during this commenting period and has to double-check whether the project developer has fulfilled the CDM requirements. He can do this based on the documents if sufficiently available or has to conduct interviews with local stakeholders. The

<sup>37</sup> If the DOE rejects the project they don't do a report but must provide the developer with an explanation for why the project was not approved. Note that the project may then be reconsidered for validation and subsequent registration, after revisions. project can only proceed when the validator can prove that the project fulfils all CDM requirements despite your claims. If the validator ultimately believes that the project should be approved, he or she submits a validation report to the Executive Board, which constitutes a recommendation that the project be registered<sup>37</sup>. The validation report must be made public when it is sent to the Board and must include an explanation of how comments are taken into account. If you have submitted a comment to a project, it is worth checking the validation report whether and how your comments were taken into account.

Note that any comments you make do not have to be long and do not have to address all of the validation requirements or the technical specifications of the project. Your submission can be a one-paragraph email or fax addressing only one of the requirements. Go to the website of CDM Watch (http://www.cdm-watch.org/?page\_id=711) to see examples of some submissions that we have made.

Notification of the beginning of a 30-day public comment period is only made public on the UNFCCC website http://cdm. unfccc.int/Projects/Validation/index.html. Unfortunately, the UNFCCC does not provide a notification service for the start of the public commenting periods of CDM projects. However, please send an email to info@cdm-watch.org if you are interested in receiving updates of new CDM projects up for public commenting period and we will keep you up to date. It is also a good idea to contact your DNA and find out which projects are being developed and when they will be available for public comments.

## 3.4. Step 4: Registration by the CDM Executive Board

Registration by the Executive Board automatically occurs eight weeks after the validation report has been received, unless one of the countries involved in the project, or at least 3 members of the Executive Board request a review. This theoretically provides civil society actors with a last chance to influence a project's approval. If you believe a project in your region should not be approved, you should lobby your local government to request a review  $\bigcirc$ . In reality, they are unlikely to do so if they have already approved the project, but it is nevertheless important to raise your concerns. Since the amount of projects requesting registration can range from 30-70 projects per month, a number of problematic projects have slipped through the process. Therefore, it is always advisable to raise awareness about problematic CDM projects. If you know about a harmful project, you should contact CDM Watch at info@cdm-watch.org to create political pressure against the registration of a harmful and/or non-additional CDM project.

## 3.5. Step 5: Monitoring emission reductions

Once a project is registered, the developer begins to monitor the reduction of emissions in accordance with the monitoring plan written in the PDD. The project operators must collect and archive all relevant data necessary for calculating the emission reductions and write a monitoring report.



#### <sup>38</sup> Minus 2% which are kept for the adaptation fund. See glossary for details

# 3.6. Step 6: Verification, certification and issuance of emission reductions

Before the project can claim credits, a Designated Operational Entity (which has to be different from the one that did the validation) has to verify that the reductions claimed in the monitoring report are taking place and compile a verification report. This verification is undertaken periodically ex-post, i.e. every two months for the crediting period. The verification report and the monitoring report must be made public. If the verifier's assessment concludes that the reductions have occurred, then they certify this in writing to the Executive Board. This document must also be made public. The verification can involve on-site visits and interviews with local stakeholders, although this is not mandatory.

Certification leads to credits being issued. The certification takes the form of a request to the Executive Board to issue carbon credits - CERs - equal to the amount of emissions that they verify have been reduced. If 15,000 tonnes of CO2e has been verified as having been reduced, then 15,000 CERs are issued<sup>38</sup>. The issuing of these credits will occur 15 days after the Board receives the certification. Similar to the review process at registration stage, the process for issuance also foresees that a project participant, one of the governments involved or three members of the Executive Board can request a review. This means that the verification and issuance process also allows for an opportunity to influence a CDM project after registration. If you believe that the project is not reducing emissions in the way it claimed it would, you can contact the verifier and CDM Watch with that information <sup>14</sup>. The information about which Designated Operational Entity is verifying emissions from a particular project is always stated together with the information about the project activity. You can search projects at http:// cdm.unfccc.int/Projects/projsearch.html.

The process of verification, certification and issuance will continue for the entire period during which the project is claiming credits.

# 3.7. Step 7: Renewal of the crediting period

<sup>39</sup> CP/2001/13/Ad2, p23 para13]
 <sup>40</sup> EB43 Anx13

The project operator can chose between two different approaches to decide upon the length of the crediting period:

- A maximum of 7 years which may be renewed at most 2 times.
- A maximum of 10 years with no option of renewal.

#### Overview for renewal of crediting period (for 7 years only)

- A new PDD with updated baseline, estimated emission reductions and the monitoring plan is needed
- This new PDD and the intention to request a renewal of a crediting period has to be sent to the UNFCCC secretariat, within 9 to 6 months prior to the date of expiration of the current crediting period
- The new PDD must be made public for a period of 4 weeks
- The validation opinion must assess the validity of the original baseline or its update through an assessment of the following issues:
  - An impact of new relevant national and/or sectoral policies and
  - circumstances on the baseline taking into account relevant EB guidance; and - The correctness of the application of a methodology for the determination of the continued validity of the baseline or its update, and the estimation of emission reductions for the applicable crediting period. - The UNFCCC makes a completeness check
- If there is no request for review, the crediting period will be renewed.

The crediting period can already start before the date of registration and can even go back to emission reductions since 2000 to claim CERs<sup>39</sup>. That's why several CDM projects that chose the renewable 7 year approach have been able to renew their crediting period and are already in their second round.

The renewal of the crediting period requires an updated PDD that confirms that the original project baseline is still valid or has been updated. The renewal procedure is similar to the one of requesting registration and does not entail official opportunities for your input. The updated PDD is uploaded to the UNFCCC website for a period of 4 weeks before the validator must assess the validity of the original baseline or its update<sup>40</sup>. Unless there is a request for review within 4 weeks after the publication of the request for renewal, the crediting period of the registered CDM project activity is renewed for another 7 years. For more information about the process of renewal of the crediting period see the box on the left.



# 4. Review of opportunities for input from civil society

	_	
PROJECT CYCLE	PHASE	PUBLIC INPUT
Preparing the project design document (PDD)	1	• During the preparation of a project, the developer must consult you on the design of the project.
		• The developer must provide an assessment of the project's environmental impacts. Depending on your national and/or regional laws, this may require an Environmental Impact Assessment involving a public comment period.
		<ul> <li>If the project uses a new baseline and/or monitoring methodology, these must be approved before the project can be validated, which involves a 15-day public comment period</li> </ul>
Getting approval from each country involved	2	<ul> <li>If you are in the host country, your DNA must approve the project and confirm that it contributes to sustainable development. You should be able to input in to this decision.</li> </ul>
Validation and the 30-day public comment period	3	• Before validating the project, the PDD is made available for a 30-day public comment period.
Registration by the CDM Executive Board	4	<ul> <li>If you believe a project in your region should not be approved, you should lobby your local government to request a review and inform CDM Watch</li> </ul>
Monitoring Emission reductions	5	
Verification, certification and issuance of emission reductions	6	<ul> <li>If you believe a project in your region should not be approved, you should lobby your local government to request a review and inform CDM Watch</li> </ul>
Renewal of the crediting period	7	<ul> <li>If you believe a project in your region should not be renewed, you should lobby your local government to request a review and inform CDM Watch.</li> </ul>

<sup>41</sup> CP/2001/13/Ad2, p20

<sup>42</sup> CP/2001/13/Ad2, p22 para7(a)

# 5. Overview of special types of project activities

In principle, any CDM project activity, with the exception of nuclear energy<sup>41</sup> and the limitation of land use, land-use change and forestry project activities to afforestation and reforestation<sup>42</sup>, can qualify as a CDM project. These flexible rules have resulted in a large variety of different project activities of different sizes. As a response, CDM rules have been adapted over time and foresee specific rules for certain types of project activities:

# 5.1. Small Scale Projects (SSC)

- <sup>43</sup> http://cdm.unfccc.int/methodologies/ SSCmethodologies/index.html
- <sup>44</sup> CMP/2005/8/Ad1, p45 para9
   <sup>45</sup> CMP/2005/8/Ad1, p48 para24
- 46 http://cdm.unfccc.int/methodologies/
   SSCmethodologies/AppB\_SSC\_\_\_\_\_\_
   AttachmentA.pdf
- 47 http://cdm.unfccc.int/Panels/ssc\_wg

The Marrakesh Accords created a separate category for projects up to a certain size. These so-called "small-scale projects" are defined as:

- Renewable energy projects with a capacity of less than 15 MW; or
- Energy efficiency projects that reduce consumption by the equivalent of 15 GWh/year; or
- Projects that both reduce emissions by sources and directly emit less than 15 kilotonnes of CO2/year.

Small-scale projects use a different project design document, separate small-scale methodologies<sup>43</sup> and simpler rules and procedures for validation.

### Main differences include:

- The same validator may undertake validation, and verification and certification
   (2 different validators for large-scale projects)<sup>44</sup>;
- The registration by the EB shall be deemed final 4 weeks (or 8 for large) after the date of receipt of the request for registration<sup>45</sup>;
- Simplified additionality testing<sup>46</sup>.

However, the public participation and environmental assessment requirements of a small-scale project are the same as for a standard project. If you are assessing a small-scale project, you can still use this Guide. For more technical information, have a look at the website of the "small-scale working group"<sup>47</sup> established by the Executive Board to review proposed methodologies and project categories for small-scale CDM project activities.

## 5.2. Sinks Projects

Afforestation<sup>48</sup> and reforestation<sup>49</sup> projects (A/R) are different to other CDM project activities since they do not reduce GHG emissions but only remove them for a certain period of time. Therefore, A/R rules address in particular the following differences:

#### Additional concerns about sinks project activities

- Is the project likely to trigger or exacerbate land use changes outside the
- immediate area covered by the project or even conflicts?
- Will the project result in displacement of people or customary local activities?
  Will the project remove any agricultural activities from the project site?
- Does the project coincide with or contradict local needs and priorities
- regarding land use?
  If the project in its own right is beneficial for the local community and

biodiversity conservation, which alternatives to carbon finance exist?

• Non-permanence: CO2 once sequestered in trees could be released back into the atmosphere if the tree dies for example in a forest fire. To address this problem, different types of certified emission reductions were created, namely temporary CERs (tCERs) and long-term CERs (ICERs).But these tCERs and ICERs are only valid for a certain period of time<sup>50</sup> and have to be replaced with other – permanent – offsets at some point.

• Longer crediting period<sup>51</sup>: project developers may chose between a crediting period of 20 years that may be renewed twice (total 60 years maximum), or a maximum of 30 years can be chosen. (For other project activities it is 7 years that can be renewed 2 times, or a maximum of 10 years non-renewable).

Other rules and procedures regarding A/R CDM project activities are similar to

- <sup>49</sup> Planting of new forests on lands that historically have not contained forests, UNFCCC glossary of climate change acronyms
- <sup>49</sup> Replanting of forests on lands that have previously contained forests but that have been converted to some other use, UNFCCC glossary of climate change acronyms
- 50 CMP/2005/8/Ad1, p71 para42

those of GHG emission reduction CDM project activities. For projects that expect net GHG removals of less than 16,000 t-CO2/ year<sup>52</sup> and projects that are developed or implemented by low-income communities and individuals , specific small-scale A/R rules apply. Specific methodologies apply for both, small-scale and standard A/R projects . The public participation and environmental assessment requirements of A/R projects are the same as for a standard project. If you are assessing an A/R project, you can still use this Guide. However, due to the specific implications of forestry activities, you should ask the questions listed in the box on the right/left if you confront a carbon sinks project.



#### A Programme of Activities (PoA):

- Is a voluntary coordinated action by a private or public entity;
- · Coordinates and implements any policy/measure or stated goal, i.e. incentive schemes and voluntary programmes;
- · Leads to GHG emission reductions or removal by sinks;
- Does this via an unlimited number of CDM program activities.

#### A CDM program activity (CPA):

- · Is a project activity under a programme of activities;
- in the form of a single, or a set of interrelated measure(s);
- To reduce GHG emissions or result in net removals by sinks, applied within
- a designated area defined in the baseline methodology:

• The applied methodology shall define whether the CDM program activity is undertaken in a single facility/installation/land or undertaken in multiple facilities/installations/land;

· Small-scale methodologies may also be used.

### <sup>51</sup> CMP/2005/8/Ad1, p67 para23

- <sup>52</sup> CP/2004/10/Ad2, p26 para1(b)
- <sup>53</sup> CMP/2005/8/Ad1, p62 para1(i) 54 http://cdm.unfccc.int/methodologies/
- ARmethodologies/index.html
- 55 CDM Project 2535: CUIDEMOS Mexico (Campana De Uso Intelegente De Energia Mexico) – Smart Use of Energy Mexico, registered in July 2009

5.3. Programme of Activities (PoAs)

Usually, policies or standards cannot be considered as CDM project activities. However, in the form of a so-called Programme of Activities, also policies that incentivize GHG reduction or removal by sinks, can also qualify for the CDM. The idea was to broaden the CDM field and spread GHG emissions reduction activities that would have been difficult and time-consuming to develop on a project-byproject basis. In practice, this works as follows:

The programme of activities CUIDEMOS Mexico<sup>55</sup>, for example involves the distribution of energy efficient light bulbs to households across Mexico. In this case, setting the policy framework that will potentially result in transforming the energy efficiency of Mexico's residential lighting stock is the Programme of Activity. However, the policy framework alone does not yet reduce any emissions. Therefore, each Programme of Activities can reduce emissions via an unlimited number of CDM programme activities (activities that are implemented based on the policy framework = specific light bulbs for households).

## 6. Key validation requirements in the Project Design Document (PDD)

When writing a comment on a CDM project it is very useful to refer to official validation requirements. If you have the right guidelines and tools handy, it is easy to verify whether the provided information is sufficient or whether key requirements are missing.

Below you will find a list of key guidelines and tools that provide the right kind of information for each section of the PDD:

- Clean development mechanism validation and verification manual (CDM VVM) 56
- Guidelines for completing the project design document (CDM-PDD) and the proposed new baseline and monitoring methodologies (CDM-NM)57
- Tools for the demonstration and assessment of additionality 58
- Combined tools to identify the baseline scenario and demonstrate additionality 59
- Guidelines on the assessment of investment analysis <sup>60</sup>
- Guidelines on the demonstration and assessment of prior consideration of the CDM 61

To give you an overview of validation requirements, we have highlighted specific key requirements for important parts of the PDD in the extracted sections of the PDD-Form below. You will find the official text from the guidelines marked in *italic* and the source of the requirements in a footnote. Our additional comments are added in a box next to the text.

Please note that we have deleted parts of the original PDD-Form but you can view original samples of all different PDDs at http://cdm.unfccc.int/Reference/PDDs Forms/PDDs/index.html.

#### SECTION A. General description of project activity

#### A.4.5. Public funding of the project activity

In case public funding from Parties included in Annex 1 is involved, information has to be provided in Annex 2 on sources of public funding for the project activity from Parties included in Annex 1, which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties<sup>62</sup>.

that public funding does not result in a diversion of ODA and is separate from not counted towards the financial obligations of those Parties.

62 PDD Guidelines, p9

- 56 http://cdm.unfccc.int/Reference/Manuals/accr man01.pdf
- <sup>57</sup> http://cdm.unfccc.int/Reference/Guidclarif/pdd/PDD\_guid04\_v07.pdf
- 58 http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v5.2.pdf 70 http://cdm.unfccc.int/Reference/Guidclarif/reg/reg\_guid04.pdf
- 59 http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-02-v2.2.pdf
- 60 http://cdm.unfccc.int/Reference/Guidclarif/reg/reg\_guid03.pdf

It is important that projects within the CDM are not

supported twice at the same

time. Therefore, Annex I Parties must provide an affirmation

SECTION B. Application of a baseline and monitoring methodology

#### B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario:

To identify the baseline scenario, the PDD must compare the proposed project to "realistic and credible alternative(s) available to the project participants or similar project developers that provide outputs or services comparable with the proposed CDM project activity."<sup>63</sup> All scenarios that are reasonable in the context of the proposed CDM project activity must be considered and reasonable alternative scenarios must not have been excluded<sup>64</sup>.

# B.5. 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 (assessment and demonstration of additionality):

References to the following four steps of the additionality tool are crucial in assessing whether the PDD is fulfilling the basic requirements :

1) **Realistic and credible alternative scenario(s)** to the project activity that are in compliance with mandatory legislation and regulations need to be identified. If the proposed project activity is the only alternative amongst the ones considered by the project participants that is in compliance with mandatory regulations, then the proposed CDM project activity is not additional<sup>65</sup>.

2) **The investment analysis** is used to determine that the proposed project activity is not the most economically or financially attractive or feasible, without the revenue from the sale of CERs. This analysis shows that the project's expected financial returns are below a benchmark for what is considered good investment for that particular type of project. The investment analysis is very complicated. Therefore, the Executive Board has issued guidance which should be used when assessing a project that applies this method<sup>66</sup>. The guidance also foresees for example that the investment analysis has to be presented in such a way that the reader can reproduce the analysis and obtain the same results<sup>67</sup>.

3) **The barrier analysis** is used to show that there are barriers, most often expressed as risks, which prevent the potential CDM project activity from going forward but do not prevent the implementation of alternatives. Under this analysis, the additional revenues generated by the sale of carbon credits offsets that risk. If the CDM does not alleviate the identified barriers that prevent the proposed project activity from occurring, then the project activity is not additional.

4) **The common practice** analysis is a credibility check to complement the investment or barrier analysis and is used to demonstrate that the project type has NOT been diffused in the relevant sector and region. If similar activities to the project activity can be observed and essential distinctions between the project activity and similar activities cannot reasonably be explained, the proposed CDM project activity is not additional.

Prior consideration of the CDM: If the start date of the project activity is before the date of validation, provide evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity. This evidence shall be based on (preferably official, legal and/or other corporate) documentation that was available at, or prior to, the start of the project. In such cases project proponents shall provide an implementation timeline of the proposed CDM project activity. The timeline should include, where applicable, the date when the investment decision was made, the date when construction works started, the date when commissioning started and the date of start-up (e.g. the date when commercial production started). In addition to this implementation timeline of events and actions, which have been taken to achieve CDM registration, with description of the evidence used to support these actions. These timelines will allow the validator to assess the serious consideration of the CDM in the project decision-making process and project implementation (EB 41, Para 68)<sup>68</sup>.

As explained above, emission reductions since 2000 can be eligible to generate carbon credits. Therefore, when assessing additionality, another important exceptional rule has to be complied with if the starting date of the project activity is before the date of validation. In that case, project developers have to undergo stricter rules to convince that the CDM revenue was seriously considered when starting the project activity. If you know that a proposed CDM project would have happened anyway, ie. it will go ahead regardless of whether it is registered as a CDM project, then it is non-additional. This happens especially often in the case that the starting date of the project activity is before the dates when contracts were signed etc.

for deciding whether a CDM project is additional, because testing for additionality involves asking whether the CDM project is the baseline – i.e. whether the project itself is the business as usual outcome. When assessing the PDD it is therefore worthwhile checking whether all alternative scenarios have been considered. Project developers often tend to "forget" alternative scenarios, i.e. renewable energy sources, imported electricity etc.

Developing a baseline is critical

The project developer has to describe how the proposed CDM project activity is additional. Most projects use the "Tool for the demonstration and assessment of additionality" to explain how and why this project activity is additional and therefore not the baseline scenario in accordance with the selected baseline methodology. All projects must either do the investment or the barrier analysis. Many do both. All need to prove that the project is not "common practice". But first of all, all alternatives to the project activity consistent with current laws and regulations have to be identified.

- <sup>63</sup> Tool for the Demonstration and Assessment of Additionality, Annex 10, Version 5.2, EB 39, 4
- <sup>63</sup> Clean Development Mechanism Validation and Verification Manual, p15
- <sup>65</sup> Additionality Tool, Step1, p5
- <sup>66</sup> The Guidance on the Assessment of Investment Analysis is annexed to the Additionality Tool
- <sup>67</sup> Additionality Tool, Guidance on the Assessment of Investment Analysis, para 8
- <sup>68</sup> PDD Guidelines, p12; see also Guidelines on the demonstration and assessment of prior consideration of the CDM



#### SECTION C. Duration of the project activity / crediting period

#### SECTION D. Environmental impacts

Documentation of the environmental impact assessment has to be attached to the CDM-PDD so that you can verify what is being stated

The project developer must show how stakeholder comments were taken into account. If you are a stakeholder and you have not been consulted then the project has not met the validation requirements. If you comments are not summarised accurately or if it is not stated how your comments were taken into account, then the project developer has not fulfilled the validation requirements.

<sup>69</sup> Clean Development Mechanism Validation and Verification Manual, p26

<sup>70</sup> Clean Development Mechanism Validation and Verification Manual p25; See also Guidelines for completing the project design document (CDM-PDD) and the proposed new baseline and monitoring methodologies (CDM-NM), p20 N D. Environmental impacts

Project participants shall submit documentation to the validator on the analysis of the environmental impacts of the project activity in accordance with paragraph 37(c) of the CDM modalities and procedures <sup>69</sup>.

### SECTION E. Stakeholders' comments

All local stakeholders that can reasonably be considered relevant for the proposed CDM project activity shall be invited by the project developer to comment on the proposed CDM project activity. This consultation meeting has to be conducted prior to the publication of the PDD on the UNFCCC website. In the PDD, the project participant has to demonstrate how due account was taken of the comments received and has to provide a summary<sup>70</sup>.

## 7.Further information on the CDM

- http://www.cdm-watch.org: You can follow the work of CDM Watch on our website. We upload relevant studies, reports, comments, letters sent to the CDM Executive Board and policy makers, presentations of workshops, press releases etc.
- http://cdm.unfccc.int/index.html: The official UNFCCC webpage for the CDM. This website contains information about
  all CDM project activities including comments received on them. You can sign up for the UNFCCC newsletter service that
  will alert you to public calls for inputs and new proposed methodologies. However, there is no alert system for new
  projects under public commenting period or new projects seeking approval.
- http://cdmrulebook.org/: The CDM Rulebook is an online database of the CDM rules. It has been developed by Baker & McKenzie and is freely available to the public.
- http://www.iges.or.jp/en/cdm/report\_kyoto.html: "CDM in CHARTS" is a booklet provided by Global Environmental Strategies in the Asia-Pacific Region. It provides a straightforward and easy-to-understand description of the Clean Development Mechanism (CDM). The booklet is regularly updated according to new decisions and is available in Indonesian, Persian, Portuguese, Mongolian, Spanish, Russian and Japanese.
- http://cdmpipeline.org/: The UNEP Risoe CDM/JI Pipeline Analysis and Database contains all CDM/JI projects that have been sent for validation/determination. It also contains the baseline & monitoring methodologies, a list of validators/ verifiers and several analyses.
- http://www.carbontradewatch.org/: Carbon Trade Watch provides comprehensive critical research on the carbon market
  and a series of publications.
- http://www.internationalrivers.org/cdm\_comments/date: the website of International Rivers focuses on hydro projects included in the CDM. There is also an extensive list of comments submitted to CDM projects.
- http://www.sinkswatch.org: SinksWatch tracks and scrutinises carbon sinks projects in the Kyoto Protocol with particular focus on tree plantation sinks projects in areas where land tenure and land use rights are in dispute. The initiative, created by the World Rainforest Movement, is hosted by FERN. The coordinator of SinksWatch is Jutta Kill who can be contacted at jutta@fern.org.
- http://www.thecornerhouse.org.uk/: A campaign to support democratic and community movements for environmental
  and social justice. The Corner House has been highly critical of the carbon market and the CDM.
- http://www.cdmgoldstandard.org/: Website of the CDM Gold Standard.
- http://www.redd-monitor.org/: REDD-Monitor critically analyses the problems related to REDD and "avoided deforestation" including sinks projects within the CDM.
- http://www.helio-international.org: The Helio Institute has developed CDM indicators to assess the contribution of CDM
  projects to the sustainable and equitable development of host countries. The indicators were also the basis for the work
  of SouthSouthNorth and the international Gold Standard.



## - Newsletter services:

• The GTZ Climate Protection Programme on behalf of BMZ compiles a regular newsletter providing an overview of decisions taken at CDM Executive Board meetings. You can subscribe at climate@gtz.de

• CDM Watch issues regular Newsletters ahead of CDM Executive Board meetings to expose critical items on the agenda and to provide recommendations. You can subscribe at info@cdm-watch.org

# 8. The CDM – key terms and acronyms

А	Assigned Amount Units (AAUs)	Assigned Amount Units (AAUs): Assigned amount units (AAUs) are units issued by Parties to the Kyoto Protocol into their national registry up to their assigned amount. They correspond to one of the three mechanisms defined by the Kyoto Protocol as criteria for Annex I countries to achieve emission reduction targets. The offset types of the other two mechanisms are called Emission Reduction Units (ERU) from JI projects and Certified Emission Reductions (CER) from CDM projects.
	Adaptation Fund	Adaptation Fund: Two percent of the CERs from every CDM project are deposited in a special registry run by the Executive Board. Revenues from their sale will be used to fund climate change adaptation projects in developing countries. Projects in Least Developed Countries are exempt.
	Additionality	A project is additional if it was built only because of the extra income from selling CERs. If a project would have happened anyway, then its offsets do not represent any reduction in total emissions. This means that a non-additional project will generate fake carbon credits that an Annex I country can use to avoid making real emission reductions domestically, and ultimately leads to an increase in global emissions above what is laid down in the Kyoto Protocol.
	Annex I countries	The industrialised countries that have specific commitments to reduce greenhouse gas emissions under the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. The only exceptions are Turkey and Belarus which are in Annex I but do not have reduction commitments under the Kyoto Protocol.
В	Baseline / Business-as-usual (BaU)	Baseline emissions are calculated to estimate how many emissions would be generated in absence of a given CDM project. The baseline concept is critical to assess whether the project meets additionally criteria, and how many CERs can be issued.
С	Certified Emission Reductions (CERs)	There are many types of credits under the Kyoto Protocol, and CERs specifically refer to the credits generated by CDM projects. 1 CER is equivalent to a reduction of 1 tonne of carbon dioxide. Sinks projects under the CDM generate temporary credits that need to be replaced with permanent credits after a certain period of time.
	Clean Development Mechanism (CDM)	The Clean Development Mechanism (CDM) is one of the three flexible mechanisms contained in the Kyoto Protocol. It allows entities from Annex I (developed) Parties to develop emission-reducing projects in non-Annex I (developing) countries, and generate tradable credits corresponding to the volume of emission reductions achieved by that project.
	Crediting period	The crediting period is the length of time during which the project will generate carbon credits. Under the Marrakesh Accords, projects can choose between a 7-year period which can be renewed twice to make a total of 21 years, or a one-off 10-year period. If they chose the former, they must renew the baseline after every 7-year period. There are longer periods for sinks projects (up to 60 years). The crediting period is different from the project lifetime of a project: a dam, for example, may have an estimated lifetime of 50 years, but only be a CDM project and generate credits for 10 of those years.



	Conference of Parties (COP)	COP refers to the annual meeting of all countries which ratified the UNFCCC. At every meeting, delegates discuss how to change and improve the UNFCCC, including which reduction commitments should be made. Another term that is often associated with COP is MOP or CMP (Meeting of the Parties to the Protocol). This is a similar meeting held in parallel with COP, but for those who ratified Kyoto Protocol. Currently, the CMP and MOP discuss what will happen after the Kyoto Protocol expires in 2012. It is important to note that MOP does not include United States.
D	Designated National Authority (DNA)	A DNA is a governmental organization of a country, and is a focal point for any issues related to CDM in the host country. DNAs are usually connected to the Environment Ministry of a country. The DNA of a CDM host country is also responsible for "approving" the CDM project before the proposal can be submitted to the UNFCCC and for confirming that it complies with the sustainable development criteria of the host country. This means that DNA can reject any CDM projects if it decides the project does not meet their expectations.
		A DOE is the independent auditor that (1) Verifies that a proposal meets all CDM eligibility criteria (2) Monitors the reduction of greenhouse gas and makes sure that the reduction is happening as stated in the Project Design Document.
E	Executive Board (EB)	The Executive Board is the supreme decision making body responsible for oversight of the CDM. Every CDM project proposal is sent by EB for the final decision regarding registration, acceptance or rejection.
	International Emissions Trading (IET)	The trading of emission allowances between Parties which have a reduction commitment under the Kyoto Protocol. There are also national and regional Emissions Trading Schemes that may be connected in the future.
J	Joint Implementation (JI)	Joint Implementation is one of the three so-called flexible mechanisms of the Kyoto Protocol, and like the CDM, is project based – i.e. industrialised countries get reduction credits for investing in emission reducing projects in another country. In the case of JI projects, however, both countries have to have a reduction commitment under the Kyoto Protocol, unlike under the CDM where the projects happen in countries without a reduction commitment. JI will mostly involve projects in Eastern European countries and those of the former Soviet Union.
L	Leakage	Leakage refers to the increased greenhouse gas emissions that occur outside the project boundary. For example, an energy efficiency project may reduce the price of electricity, thereby increasing electricity consumption. Such leakage should be deducted from the calculation of total greenhouse gas reduction.
Μ	Marrakesh Accords	The Marrakesh Accords set out the rules for CDM projects. The Accords are named after the meeting at which they were agreed – the 7th Conference of Parties to the Climate Convention in Marrakesh, Morocco, in 2001.
	Methodology	A methodology is a set of requirements that states how greenhouse gas should be reduced and measured in CDM projects. A CDM project must employ one of the methodologies. They vary in employment depending on the project type and size. There are many methodologies designed for different project types and sizes. As of February 2010, there are 96 approved and published large- scale baseline methodologies and 55 small-scale baseline methodologies.

CDM Watch Scrutinizing Carbon Offsets

Monitoring	Monitoring is the process which ensures that the greenhouse gas reduction is happening as stated in the Project Design Document. It is carried out by the project operator – not the validator - , typically by installing monitoring equipment for energy production and fuel inputs. A detailed monitoring plan must be included in the Project Design Document.
Project Boundary	Each CDM project has to identify a "project boundary". The project boundary encompasses all of the increases and reductions in greenhouse gases that are reasonably attributable to the project so that total reductions can be calculated. For example, a biomass plant utilising agricultural waste that displaces coal-fired electricity can claim credit for the reduction in emissions that results from its operations. But it may also have to account for the greenhouse gas emissions that result from the transporting of biomass to the plant. See also Leakage.
Programme of Activities (PoA)	Originally, policies or standards could not be considered as CDM project activities. With the new design of PoAs, implementing a policy, measure or stated goal that results in emission reductions or removals that are additional, can now be registered as a single CDM project activity. A PoA is made up of CDM Programme Activities (CPAs) which can be a single, or a set of interrelated measure(s). Multiple CPAs can be included under a PoA at the time of registration and additional CPAs can be added at any point in the lifetime of the PoA. A PoA can also involve CPAs being run in multiple countries. Currently, there are two registered PoAs.
Project Design Document (PDD)	The PDD is the key document in the CDM process as it includes all relevant information about the project. As soon as this document is uploaded to the UNFCCC website, the public consultation period starts. All the assessments by the Designated National Authority, Designated Operational Entity and the Executive Board will be based on this document.
Registration	Registration is a formal process by which the Executive Board accepts a CDM proposal. It requires a registration fee to be paid. After registration, greenhouse gas reduction will be monitored and verified, and CERs will be issued.
Sinks	Generally, a sink refers to something that absorbs carbon dioxide, such as a forest or an ocean. In the context of the current CDM, the term sink refers to reforestation and afforestation projects, which are the only project type that incorporate carbon sinks. However, this may be expanded in the future to include other types, such as Carbon Capture and Storage (CCS) and forest conservation.
Small-scale CDM (SSC)	SSC CDM is a project with a relatively small amount of greenhouse gas reduction. It is often the case that such small projects are not economically feasible, as the prospective revenue is low and transac- tion costs are high. To avoid bias, towards large-scale projects, there are simplified methodologies for SSC. It is hoped that these simplified methodologies attract investment to more rural and underdeve- loped countries and regions, where large-scale CDM is often unfeasible.
Stakeholders	Stakeholders are defined in the Marrakesh Accords as "the public, including individuals, groups or communities affected, or likely to be affected, by the proposed clean development mechanism project activity".
Target	Under the Kyoto Protocol, industrialized countries agreed to reduce their emissions. The amount they agreed to reduce their emissions by corresponds to their target. The targets are expressed as a percentage reduction of greenhouse gas emissions compared to 1990 emission levels, which has to

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be achieved in the period 2008-2012. For example, Japan has a target of 6%, which means that in the period 2008-2012 its emissions must be 6% below what they were in 1990. Currently, UNFCCC delegates are battling over targets for the third commitment period, from 2012-2020 i.e. after the expiry date of the Kyoto Protocol.

saction costs are the costs involved in developing a CDM project and then monitoring and
ying the emission reductions or sequestration that it achieves during the crediting period.
notion includes expenses such as preparing a PDD, which is usually done by a consultant, and
line studies.

Unilateral CDM In general, a CDM project is supposed to have a project participant from Kyoto Protocol Annex 1 countries to obtain additional funding and technology. However, a decision by the Executive Board states that a project does not need to have a participant from Annex 1 countries at the stage of registration. This means that Non-Annex 1 countries, or developing countries, can run a CDM project on their own.

United Nations Framework Convention on Climate Change (UNFCCC) The UNFCCC is an international treaty that was agreed in 1992 in Rio de Janeiro to stabilize the concentration of greenhouse gasses in the atmosphere. The UNFCCC itself does not state which countries should reduce greenhouse gasses and by when. That is why Kyoto Protocol was agreed in 1997, in order to make the reduction legally-binding. The UNFCCC has a secretariat in Bonn, Germany, so many UNFCCC-related meetings are held in Bonn.

Validation

For a project to be approved under the CDM, it must be validated by one of the entities that are registered as validators (technically, they are called "Designated Operational Entities" or DOE). These validators make sure the CDM project meet eligibility criteria, such as additionality.

Verification

Verification is a process which ensures that a CDM project is reducing greenhouse gas emissions as stated in the Project Design Document. Like validation, this process is carried out by a Designated Operational Entity.

