

New CDM Methodology Study



Kyoto Protocol

MARRAKESH ACCORDS



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Survey

Are you familiar with the details about---

1. UNFCCC→Kyoto Protocol→Marrakesh accords ----- Background
2. CDM modalities and procedures. ----Guidelines
3. what is CDM methodology? How to determine the baseline and monitoring method of the project according to the international treaties referred above? ----- My Topic

Abbreviation of my presentation

- Conference of Parties(COP)
- CDM Project participants(PP)
- **CDM modalities and procedures(CMP*)**
- Executive Board (EB)

*It is only my temporary abbreviation in this presentation for convenience.

What is new baseline methodology

- The baseline for a CDM project activity is the scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases (GHG) that would occur in the absence of the proposed project activity.
- A methodology is an application of an approach as defined in paragraph 48 of the CDM modalities and procedures, to an individual project activity, reflecting aspects such as sector and region.
- project participants have the opportunity to propose a Methodology, which can be an approved methodology or a new one---This is new methodology, here I mainly discuss about new baseline methodology.

Guidelines for proposed a new methodology

- CDM Modalities and Procedures (Extract of Decision 17/CP.7)
- Report of the EB recent meeting
- Procedures for submission and consideration of a proposed new methodology
- Procedures for registration of a proposed CDM project activity

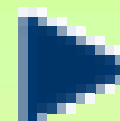
All the materials referred above can be found on the website of UNFCCC
<http://www.unfccc.int>

Key issues in proposed new baseline methodology*

1. **Select which approach to determine the baseline and justify the appropriateness of their choice**
2. **How to verify the additionality of the CDM project**
3. **How to define the project boundary and how to estimate the leakage?**

* I will discuss these three key issues using a recent case.

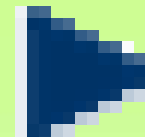
Basic Principle for the key issues(1)



- **Select which approach to determine the baseline and justify the appropriateness of their choice:**
 - (a) **Existing** actual or **historical** emissions, as applicable; or
 - (b) Emissions from a technology that represents an **economically attractive course of action**, taking into account barriers to investment; or
 - (c) The **average emissions** of similar project activities undertaken in the previous five years, in similar social, economic, environmental and technological circumstances, and whose performance is among the top 20 per cent of their category.

Basic Principle for the key issues(2)

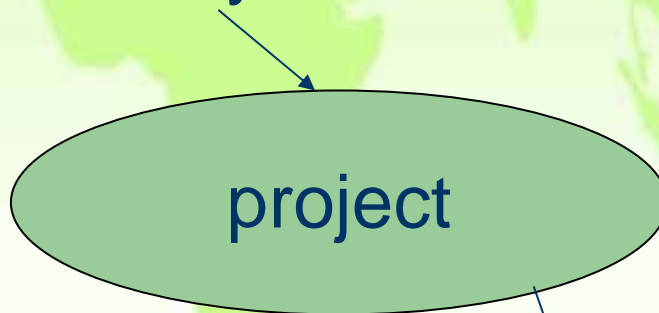
- How to verify the additionality of the CDM project.
- What is additionality? Using accurate words is a difficult and controversial things. Simply, it can be illustrated by showing the barriers of the proposed project, which makes it impossible without CDM, including:
 1. Investment barrier
 2. Technological barrier
 3. Other barrier, and so on



Basic Principle for the key issues(3)

- How to define the **project boundary** and how to estimate the **leakage**?

boundary



project

GHG emissions caused by the project,
but out of the boundary (leakage)

Case Study

- In this section, we will think about the three key issues in an example, which is coming from the website of UNFCCC, NM0036, a new methodology raised recently.
- The project related to this methodology is **Zafarana Wind Power Plant Project in the Arab Republic of Egypt**

Basic description of the project related the methodology

- The Zafarana Project is a **120MW(capacity,)** wind power generation project located in Egypt.
- The plant, located in an area with favourable wind conditions, has an expected capacity factor of 42%, resulting in 441,504MWh of electricity annually. The project is to be developed by the New and Renewable Energy Authority (NREA). The minimum plant operating life is **20** years.
- The Project is a wind power project that is connected to a predominantly natural gas-fuelled grid, which is likely to affect the **operating margin**, and in the long term, the **build margin**

issue1: What is the baseline?

- This methodology proposes to compute the combined margin emissions as the baseline emissions, under the condition that the project can be seen to **affect both the operating and build margins.**

Operating margin: an accurate operating margin can be derived through historical dispatch data or operating costs of each plan .

Building margin: The build margin is selected from the most recent five (5) plants built. Why is it appropriate? Approximate, Proper

issue2:Select which approach to determine the baseline and justify the appropriateness of their choice



- Type A: Existing actual or historical emissions, as applicable;
- Why? The determination process depends on the history data.
- I think Type B is also proper. Because the project is a new one. If it does not exist, the project occurred is possible the one that represents an economically attractive course of action, taking into account barriers to investment;
- Of course, Type A is reasonable from some view in the PDD.

issue3:How to verify the additionality of the CDM project.

- What is the meaning for Additionality?
- In the Project Design Document, the PP show four type barriers
 - (a) Investment barrier
 - (b) Technological barrier
 - (c) Barrier due to prevailing practice
 - (d) Other barriers

I think it is enough to illustrate the additionality of the proposed project.

issue4:How to define the project boundary and how to estimate the leakage?



- Grid electricity generation is the project boundary
- Do you think whether there is **any potential leakage in the proposed project?**
- **Yes. In the construction process of the wind power facilities, some energy consumption occurred, maybe emitting some GHGs.**
- But at the same time the baseline have the same question, the calculation of emission reduction is accurate without thinking about this leakage. **Right?**

Useful hints for proposed a new methodology:

- The methodology can be applicable to other potential projects instead of specific project. This must be confirmed by PP.
- The methodology must fit the demand of “Procedures for submission and consideration of a proposed new methodology” by EB.
- You can get some detailed information on the UNFCCC website

Any Questions?

Thank You!

Website related to my presentation

<http://cdm.unfccc.int/>

the complete information about CDM, such as history, procedure, form and so on.