

Additionality

- Additionality is a requirement of both JI and CDM projects, as set out in Article 6(1b) and Article 12(5c) of the Kyoto Protocol respectively.

Reduction in emissions that are additional to any that would occur in the absence of the certified project activity.

- Additionality is demonstrated by developing a project baseline which shows that emissions without the project would be higher than emissions with the project.

Additionality

- ✚ Emission reductions should be additional to what would have occurred without the project
- ✚ The most difficult concept in Kyoto Protocol GHG auditing
- ✚ It is designed to ensure that carbon credit projects result in real reductions in the current rate of GHG accumulation in the atmosphere.

Additionality of a Project Activity

Emission reduction shall be additional to any that would occur in the absence of the certified project activity.

Kyoto Protocol, Article 12

A CDM project activity is additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity.

CDM modalities & procedures, paragraph 43

Tool for demonstration and assessment of Additionality

Executive Board's guidance on how to carry out a sound evaluation of additionality.

Provides for a step-wise approach to demonstrate and assess additionality:

- Identification of alternatives to the project activity
- Investment analysis to determine that the proposed project activity is not the most economically or financially attractive
- Barriers analysis
- Common Practice analysis
- Impact of registration of the proposed project activity as a CDM project activity

- General framework
- Applicable to a wide range of project types
- Adjustments might be required for particular project types

Step 0: Preliminary screening based on the starting date of the project activity

For crediting period to start prior to registration:

- (a) Evidence that the starting date of the CDM project activity falls between 1 Jan 2000 and the date of registration of the first CDM project.
- (b) Evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity.

Step 1: Identification of alternatives to the project activity consistent with the current laws and regulations

- *Define alternatives to the project activity*

Identify 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.
- *Enforcement of Applicable laws and regulations*

3 Options available :

 - Alternative(s) in compliance with all applicable legal and regulatory requirements.
 - Alternative does not comply with all legal requirements
 - The proposed project is the only alternative in compliance with all regulations.
- *Proceed to Step 2 (Investment Analysis) or Step 3 (Barrier Analysis)*

Step 2: Investment Analysis

Determine whether the proposed project is the economically less attractive option out of all the other alternatives, without the revenue from the sale of CERs.

Following sub-steps involved :

- **Determine appropriate analysis method**
 - Simple cost analysis
 - Investment comparison analysis
 - Benchmark analysis
- **Apply Option I, II or III**
- **Calculation and comparison of financial indicators**

Determine the Analysis Method

(I) Simple cost Analysis :

- Applied when the CDM activity produces no economic benefits other than the CDM related income.

(II) Investment Comparison analysis :

- Applied when project is expected to generate some financial benefits
- Identify the financial indicator (such as IRR, NPV etc.)
- Comparison of the Financial indicator (eg., IRR):
- $IRR \text{ for any of the alternatives} > IRR \text{ for CDM Project}$

(III) Benchmark Analysis :

- Applied when project is expected to generate some financial benefits.
- Identify the financial indicator (such as IRR, NPV etc.)
- Identify the relevant Benchmark Value
- Comparison of the Financial indicator (eg., IRR):
- $IRR \text{ for CDM Project} < \text{Financial Benchmark}$

Sensitivity Analysis

Include a sensitivity analysis that shows whether the conclusion regarding the financial attractiveness is robust to reasonable variations in the critical assumptions.

- ◆ If after the sensitivity analysis it is concluded that the proposed CDM project activity is unlikely to be the most financially attractive option (as per Option III) or be financially attractive (as per Option II), then proceed to either Step 3 (**Barrier Analysis**) or Step 4 (**Common Practice analysis**).
- ◆ Otherwise, unless the Barrier analysis is undertaken and indicates that the proposed project activity faces barriers that do not prevent the baseline scenario from occurring, the project activity is considered not additional.

Step 3: Barrier Analysis

This step used to determine whether the proposed project activity faces barriers that:

- (a) Prevent the implementation of this type of project ; and
- (b) Do not prevent the implementation of at least one of the alternatives.

➡ **Steps involved :**

Identify barriers that would prevent the implementation of type of the proposed project activity:

- Investment barriers other than the financial/economic barriers
- Technological Barriers
- Barriers due to prevailing practice

Provide transparent and documented evidence, and offer conservative assumptions as to how it demonstrates the existence and significance of the identified barriers.

Barrier Analysis (contd.)

- **Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity).**
- If the identified barriers also affect other alternatives, explain how they are affected less strongly than they affect the proposed CDM project activity.
- or explain how the identified barriers are not preventing the implementation of at least one of the alternatives.
- *If both the steps satisfied then proceed to next step – **Common Practice Analysis***
- *If any one of the steps not satisfied, the project activity is **not additional**.*

Step 4: Common Practice Analysis

The additionality tests are complemented with an analysis of the extent to which the proposed project type (ie., technology or practice) has already diffused in the relevant sector and region.

This test is credibility check to complement the investment analysis (Step 2) or barrier analysis (Step 3).

Common Practice Analysis (contd.)

Common practice analysis done in following substeps:

➤ ***Analyze other activities similar to the proposed project activity:***

- analysis of any other activities implemented previously or currently underway that are similar to the proposed project activity.
- Project considered similar if they in the same country/region and rely on a broadly similar technology, are of similar scale, and take place in a comparable environment.
- other CDM activities not to be included in this analysis.

Common Practice Analysis (contd.)

➤ *Discuss any similar options that are occurring.*

If similar activities are identified, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project is financially unattractive or subject to barriers.

Compare the proposed project activity with the other similar activities and explain essential distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially attractive or did not face the barriers to which the proposed project is subject. Examples:

- Subsidies or other financial flows,
- new barriers or end of certain promotional policies
- serious change in current circumstances

If both substeps satisfied then proceed to Step 5 (Impact of CDM Registration).

If similar activities cannot be reasonably explained, the proposed project is not additional.

Step 5: Impact of CDM registration

Explain how the approval and registration of the project activity as a CDM activity, and the attendant benefits and incentives derived from the project activity, will alleviate the economic and financial hurdles (Step 2) or other identified barriers (Step 3) and thus enable the project activity to be undertaken.

The benefits and incentives can be of various types, such as:

- ◆ Anthropogenic GHG emission reductions;
- ◆ The final benefit of the revenue obtained by selling CERs,
- ◆ Attracting new players who are not exposed to the same barriers, or can accept a lower IRR (for instance because they have access to cheaper capital),

- ◆ Attracting new players who bring the capacity to implement a new technology, and
- ◆ Reducing inflation / exchange rate risk affecting expected revenues and attractiveness for investors.

If Step 5 satisfied, the proposed CDM project is not the baseline scenario and is additional.

If step 5 not satisfied, the proposed CDM project activity is not additional.