## **Explanatory Note for the draft revision of the** "Combined tool to identify the baseline scenario and demonstrate additionality"

1. The current version of the "Combined tool to identify the baseline scenario and demonstrate additionality" (the tool) provides project proponents with the procedures to identify the most likely baseline scenario and demonstrate additionality, using either a barrier analysis or an investment analysis, complemented by a common practice analysis. This proposed revision of the tool aims at expanding its applicability. Apart from providing for some additional alternative scenarios in the first step, the revision relates solely to investment analysis. It does not affect the barrier analysis or the common practice analysis.

2. Currently, the application of the tool is limited to cases where all the possible alternative scenarios are realistically available options to the project participants (i.e., reasonable options that can actually be implemented by them). The rationale for introducing this limitation in the scope of the applicability of the tool was mainly to simplify the procedures for identifying the baseline and demonstrating additionality. If the application of the tool were to be extended to cover situations in which other alternatives, that are not available options to the project participants, should be considered among the realistic and credible alternative scenarios, more procedures would have to be added to the tool, as explained in the paragraphs below. This proposed revision of the tool aims at expanding the applicability of the tool to cover such situations, and this note provides the rationale for including those additional procedures in order to cover the situations just described. It is worth noting that the proposed revision still allows the use of the barrier analysis in such cases.

3. Under Step 3 of the tool, an <u>investment comparison analysis</u> is applied to determine the most likely baseline scenario. The tool does not include an <u>investment benchmark analysis</u>. However, in some situations, an investment comparison analysis alone is not sufficient to demonstrate additionality and select the baseline scenario, and an investment benchmark analysis has also to be undertaken. This applies in many situations in which, from the perspective of the investment required for the implementation of the project activity, project participants may have the option of not implementing the project activity or any of its alternatives at all (the "doing nothing" option). In other words, project participants may have the option of not undertaking an investment to supply the service that would have been supplied by the proposed project activity. This situation frequently arises in cases whereby:

- The project participants supply services to a market and may decide not to undertake the investment in the project activity, and thus third party(ies) would undertake(s) investments or actions which provide comparable outputs or services to users of the project activity. For example: in the case of a greenfield power project, an alternative scenario may be that the project participants would not invest in a power plant but that power would be generated in existing and/or new power plants in the electricity grid;
- The project participants do not need to undertake an investment in the project activity because they do not need to provide the service that project activity produces. In such cases the continuation of the current situation, not requiring any investment or expenses to maintain the current situation, is an option. For example: the continued venting of methane from a landfill, the continued release of N2O from adipic or nitric acid production;

• The project participants do not need to undertake an investment in the project activity because they are already supplied with the services that project activity produces. In such cases the continuation of the current situation, requiring an investment or expenses to maintain the current situation, is an option. For example, the continued use of an existing boiler of lower efficiency, or the continued use of the existing fuel mix in a boiler, involving expenses for operation and maintenance.

In such situations, the comparison of the "doing nothing" alternative with other alternatives through a simple investment comparison analysis may be unreasonable, and the selection of a baseline scenario may become rather complex. Only an investment benchmark analysis can adequately handle this situation. The tool is therefore revised to include such a benchmark analysis.

4. Consider the example of a wind power company that constructs a wind power plant to generate and export electricity to the grid. The wind power company's core business is the establishment of wind farms. This company only invests in wind power generation facilities with no history of making investments in establishing coal fired power stations. The list of possible baseline scenario alternatives to the project activity may include the option of the project developer not conducting the investment in the wind farm and a third party constructing a coal power plant to supply the same level of service to the grid. In this case, if the application of the investment comparison analysis concludes that the construction of the coal power plant is more attractive than establishing a wind farm, one cannot conclude that the coal power plant is the baseline for the wind farm or that the wind farm is additional, because the project proponent is not in the business of establishing coal power plants. The coal power plant is not a realistic baseline scenario option to the project proponent in the first place, unless the project proponent changes it business strategy and investment portfolio completely. In this case, it is clear that the baseline cannot be determined with a high degree of certainty and a proxy (e.g., the combined margin) for the baseline should be used. To demonstrate additionality for the wind farm, the economic attractiveness of investing in the wind farm has to be compared with the project participant's acceptable financial benchmark for the investment.

- 5. To address this issue the tool is revised with respect to the following:
  - It is suggested that alternative scenarios are included (see Options S2, S3 and S4 in the tool) for the types of project activities mentioned in the paragraphs above, in order to cover the so-called "doing nothing" option, i.e., option whereby the project participants may decide not to undertake an investment related to the service provided by the project activity;
  - The investment analysis step is revised to include provisions for a benchmark analysis so that the "doing nothing" option can be reflected by introducing the acceptable internal financial benchmark for the project participant to spend capital on another investment (not related to the CDM project activity).

6. By extending the scope of the tool to include such cases, the issue of exclusivity of the various alternative scenarios has to be addressed. Two options are mutually exclusive if only one option can be implemented by the project participants and, then, the remaining alternatives cannot be implemented at the same time. Alternatives are not mutually exclusive if the project participants can implement at least two of the options simultaneously.

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## Examples to demonstrate the concept of exclusivity

<u>Mutually exclusive projects</u>: A set of proposed capital projects from which one is chosen, causing all the others to be rejected. An off-grid sugar mill that has to generate electricity to meet the electric demand of the plant. As is illustrated in Figure 1, several alternatives exist to the sugar mill for electricity generation, for example a low efficiency biomass residue power plant, high efficiency biomass residue plant power plant, a coal fired power plant, etc. Realistically, the sugar mill will implement only one electricity generation technology and once it is implemented, it is not realistic or practical to implement any of the other available alternatives. If the result of the investment comparison analysis shows that the low efficiency biomass residue fired power plant is the economically most attractive option, then it can be concluded that the baseline is the low efficient power plant is additional.

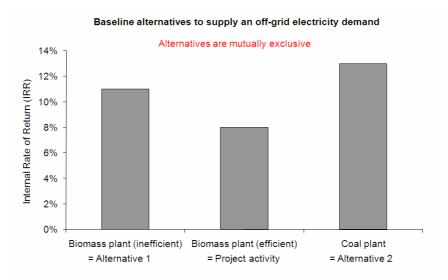


Figure 1: Example of mutually exclusive alternative baseline scenarios

Figure 1 demonstrates the three mutually exclusive baseline scenarios. In this case, Alternative 1 (less efficient power plant) is economically more attractive than Alternative 2, the higher efficiency plant, concluding that the higher efficiency plant is additional.

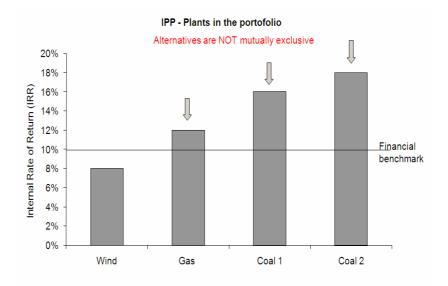
<u>Non-mutually exclusive</u>: In general, an electricity utility has a limited amount of equity to invest in a portfolio of electricity generation projects. If the proposed CDM project is the construction of a wind farm, the utility as the project developer, realistically has a number of realistically available alternatives to generate power, for example, a coal power plant and a natural gas power plant.

Figure 2 demonstrates the case where the coal power plant is the most attractive option, while a natural gas power plant is the least attractive option among available alternatives to the utility (when comparing the coal, the natural gas and the wind without the CERs revenue). However, in this particular case it cannot be concluded that the coal power plant is the baseline, because electricity

generated by the wind farm (with the revenue of CERs) will not displace electricity generated from the coal power plant, but rather that of the least attractive gas power plant.

If the wind farm including the revenue from the CERs is more attractive than natural gas power plants, it is more likely that the wind power plant with the CDM revenues will displace the natural gas power plant in the portfolio of the utility and not the most financially attractive coal power plant. Although this is a simplified approach, it demonstrates the concept. With a limited capital budget, in a specific region, it is more likely that the natural gas power plant will not be implemented but that the coal power plant would still be implemented as it is still the most financial attractive option within the portfolio. Therefore, the baseline for the CDM wind farm is the natural gas power plant and not the economically most attractive option. For these more complex cases, it may be difficult to determine the baseline without using a multifaceted approach and therefore the most conservative alternative, i.e., the least emissions, among the alternatives that are economically attractive without the CDM should be considered as the baseline.

Figure 2: Example of non-mutually exclusive alternative baseline options



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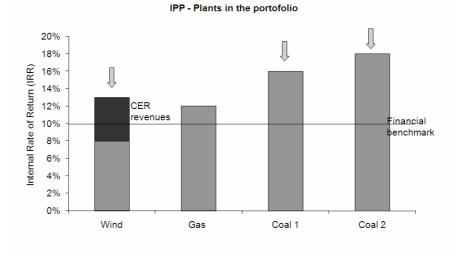


Figure 2 demonstrates the assessment of additionality for the non-mutually exclusive baseline options. The IPP has sufficient capital available to implement more than one option simultaneously, i.e., it is viable to implement Coal 2 and Coal 1 for example. The project is additional if the proposed CDM project without the income generated from the CERs does not meet the PPs acceptable investment benchmark for projects that are not related to the CDM project activity.

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