Annex 3

Draft consolidated tools for demonstration of additionality

(Note: Brackets are used to flag the outstanding issues from the point of view of the Methodologies Panel)

1. This annex contains a recommendation by the Meth Panel for a consolidation of tools that can be used to demonstrate that a proposed project activity is additional, i.e. is not (part of) the baseline scenario. This consolidation was prepared on the basis of proposed new methodologies approved by the Executive Board as well as methodologies under consideration by the Methodologies Panel. References to the specific methodologies have been left in the text to facilitate cross-references to the original methodologies.

2. This annex provides for a step-wise approach to assess additionality. A summary of the steps is provided in a graphic at the end of the paper. The annex provides a general framework for assessing additionality and should be applicable to a wide range of project types. Particular project types might require adjustments to this framework.

3. The Meth Panel recommends that, once agreed by the Board, project participants proposing new baseline methodologies could incorporate this consolidated tool in their proposal. Project participants may propose other additionality tools provided that they are no less conservative than the consolidated tool provided here.

Step 0. Preliminary screening of projects started after 1 January 2000 and prior to 31 December 2005

The Marrakech Accords and COP 9 decisions provide guidance on the eligibility of proposed CDM project activities started before registration[1]. Eligibility shall be demonstrated following the steps shown in attached flowchart. Assuming project construction started during the eligible time frame, evidence should be publicly provided that the incentive provided by the CDM was seriously considered in the decision to proceed with the project activity. This evidence shall be based on (preferably official) documentation clearly showing that the CDM incentive played a role at or before the moment of decision making. Without any such evidence, the authenticity of which can be verified by the DOE, the project is not additional. If the project participants can provide adequate evidence, the project activity shall proceed through the steps below.

[1] In accordance with decisions 17/CP.7 and 18/CP.9, the crediting period of a proposed project activity may only start after the date of its registration as a CDM project activity. In exceptional cases a crediting period that starts before the date of project activity registration may be considered, i.e. project activities starting between 1 January 2000 and the date of the registration of a first CDM project activity. These project activities have to provide however documentation, at the time of registration, showing that the starting date fell within this period, if the project activity is submitted for registration before 31 December 2005. (For more information see documents FCCC/CP/2001/13/Add.2, FCCC/CP/2003/6/Add.2 and the Glossary of CDM terms contained in the guidelines for completing the project design document (CDM-PDD) available in the UNFCCC CDM web site: unfccc.int/cdm).

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

(Note: In accordance with guidance by the Executive Board, consistency should be ensured between "baseline scenario" and "baseline emissions"[2])

Define realistic and credible alternatives to the project activity(s) that can be (part of) the baseline scenario through the following sub-steps:

Sub-step 1a. Define alternatives to the project activity:

1. Identify realistic and credible alternative(s) [for the project participants] that provide outputs or services comparable with the proposed CDM project activity[3]. These alternatives should include:

- The proposed project activity not undertaken as a CDM project activity;
- All other plausible and credible alternatives to the project that deliver similar outputs and services in a comparable service area; and,
- Continuation of the current situation (no project activity or other alternatives undertaken)

Sub-step 1b. Compliance with applicable laws and regulations (See NM0032, NM0010 rev):

2. The alternative(s) should be in compliance with all applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution.[4] (This sub-step does not consider national and local policies that do not have legally-binding status.[5]).

3. If an alternative does not comply with all applicable regulations and legislation, then do (i) and (ii) [every time the project is monitored/verification/certification is made][every time the crediting period is renewed]:

(i) Show, based on an examination of current practice in the country or region in which the law or regulation applies, that the non-complying element of the alternative is currently widespread. Provide documented evidence. If it cannot be shown that the non-compliance is widespread, then eliminate the alternative from further consideration;

(ii) Include, in the monitoring methodology, a component that monitors whether the non-complying element of the alternative continues to be widely implemented or widely occurs.

4. If applicable regulations can reasonably be expected to change in a way that might render any alternatives non-compliant (See NM0010):

- Include in the monitoring methodology a component that monitors applicable regulations to determine if they change in a manner that would render emission reductions achieved by the project activity no longer additional, from the time of such determination onward.

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[2] Please refer to paragraph 2 of Annex 3 of report of the Executive Board at its ninth meeting, see: http://cdm.unfccc.int/EB/Meetings/009/eb09repa3.pdf.

[3] For example, the outputs of a cogeneration project could include heat for on-site use, electricity for on-site use, and excess electricity for export to the grid. In the case of a proposed landfill gas capture project, the service provided by the projects includes operation of a capped landfill.

[4] For example, an alternative consisting of an open, uncapped landfill would be non-complying in a country where this scenario would imply violations of safety or environmental regulations pertaining to landfills.

[5] This aspect may be modified based on forthcoming EB guidance on national and local policies.

5. If the proposed project activity is the only alternative that is in compliance with all regulations with which there is general compliance, then the proposed CDM project activity is not additional.

→ ***Proceed to Step 2 (Investment Analysis) or Step 3 (Barrier Analysis). (Project participants may also select to complete both Steps 2 and 3.)***

Step 2. Investment Analysis

If this step is used, determine whether the proposed project activity is economically or financially attractive without the revenue from sale of CERs. To conduct the investment analysis, use the following sub-steps *(see AM0003)*:

Sub-step 2a. Determine appropriate analysis method

1. Determine whether to apply simple cost analysis, investment comparison analysis or benchmark analysis (sub-step 2b). If the CDM project activity generates no financial or economic benefits other than CDM related income, then apply the simple cost analysis (Option I). Otherwise, if the plausible alternative(s) include(s) investments of comparable scale to the project activity, then use the investment comparison analysis (Option II). If the proposed project and plausible baseline alternative do not involve investments of comparable scale [or timing], use the benchmark analysis (Option III).

Sub-step 2b – Option I. Apply simple cost analysis

2. Document the costs associated with the CDM project activity and demonstrate that the activity produces no or negligible revenues other than those related to registration as a CDM project. Proceed to sub-step 2d (sensitivity analysis).

Sub-step 2b – Option II. Apply investment comparison analysis

3. Identify the financial indicator, such as IRR[6], NPV, cost benefit ratio, or unit cost of service (e.g., levelized cost of electricity production in $/kWh or levelized cost of delivered heat in $/GJ) most suitable for the project type and decision context.

Sub-step 2b – Option III. Apply benchmark analysis

4. Identify the financial indicator, such as IRR NPV, cost benefit ratio, or unit cost of service (e.g., levelized cost of electricity production in $/kWh or levelized cost of delivered heat in $/GJ) most suitable for the project type and decision context. Identify the relevant benchmark value, such as the required rate of return (RRR) on equity. The benchmark should represent standard returns in the market, considering the specific risk of the project type, but not linked to the subjective profitability expectation or risk profile of a particular project developer. Benchmarks can be derived from:

- Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial) expert, or

[6] IRRs can be calculated either as project IRRs or as equity IRRs. Project IRRs calculate a return based on project cash outflows and cash inflows only, irrespective the source of financing. Equity IRRs calculate a return to equity investors and therefore also consider amount and costs of available debt financing. The decision to proceed with an investment is based on returns to the investors, so an equity IRR will be more appropriate in many cases. However, there will also be cases where a project IRR may be appropriate.

- Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees required for the country and the type of project concerned), based on bankers views and private equity investors/funds' required return on comparable projects.

Sub-step 2c. Calculation and comparison of financial indicators:

5. Calculate the suitable financial indicator for the proposed CDM project activity and, in the case of Option II above, for the other alternatives. Include all relevant costs (including, for example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but including subsidies/fiscal incentives where appropriate), and, as appropriate, non-market cost and benefits in the case of public investors.

6. Present the investment analysis in transparent manner and provide all the relevant assumptions in the CDM-PDD, so that a reader can reproduce the analysis and obtain the same results. Clearly present critical techno-economic parameters and assumptions (such as capital costs, fuel prices, lifetimes, and discount rate or cost of capital). Justify and/or cite assumptions in a manner that can be validated by the DOE. In calculating the financial indicator, the project's risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions. By applying conservative assumptions, one can incorporate the project risks[7].

7. The financial indicator is calculated conservatively if assumptions tend to make the CDM project's indicator more attractive and if assumptions tend to make the alternatives' indicators less attractive. Conservatism of such assumptions can be ensured or confirmed by obtaining expert opinions. Assumptions and input data for the investment analysis should not differ across the project and its alternatives, unless differences can be well substantiated.

8. Present in the CDM-PDD submitted for validation a clear comparison of the financial indicator for the proposed CDM activity and

(a) the alternatives, if Option II (investment comparison analysis) is used. If one of the other alternatives has the best indicator (e.g. highest IRR), then the CDM project activity can not be considered as the most financially attractive. If all alternatives that are more financially attractive emit less than the proposed project activity then the project activity is not additional;

(b) the financial benchmark, if Option III (benchmark analysis) is used. If the CDM project activity has a lower indicator (e.g. lower IRR) than the benchmark, then the CDM project activity can not be considered as financially attractive.

Sub-step 2d. Sensitivity Analysis

9. Include a sensitivity analysis that shows whether the conclusion regarding the financial attractiveness is robust to reasonable variations in the critical assumptions. The investment analysis provides a valid argument in favour of additionality only if it consistently supports (for a realistic range of assumptions) the conclusion that the project activity is unlikely to be the most financially attractive (as per step 2(c)7(a)) or is unlikely to be financially attractive (as per step 2(c)7(b)).

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[7] For example, conservative wind speed data could be used for a wind plant to provide equal footing to a guaranteed gas supply contract for a gas fired power plant. For the proposed CDM project these risks are generally well known. If the risks of all the alternatives (including the CDM project) could be considered being equal, a direct comparison of calculated financial indicators is possible

→ If after the sensitivity analysis it is concluded that the proposed CDM project activity is unlikely to be the most financially attractive (as per step 2 c 7 (a)) or is unlikely to be financially attractive (as per step 2 c 7 b), then proceed to Step 4 (impact of CDM registration).

→ Otherwise, unless barrier analysis below is undertaken and indicates that the proposed project activity faces barriers that do not prevent the baseline scenario(s) from occurring, the project is considered not additional.

Step 3. Barrier Analysis

If this step is used, determine whether the proposed project activity faces barriers that do not prevent the baseline scenario(s) from occurring. Use the following sub-steps *(see AM0005)*:

Sub-step 3a. Identify barriers that would prevent the proposed project from being carried out:

1. Establish that there are barriers that would prevent the proposed project activity from being carried out if the project were not registered as a CDM activity. Such barriers may include, among others:

Investment barriers, other than the economic/financial barriers in Step 2 above, e.g.:
- Real and/or perceived risks associated with the unfamiliar technology or process are too high to attract investment
- Funding is not available for innovative projects.

Technological barriers, e.g.:
- Skilled and/or properly trained labour to operate and maintain the technology is not available, leading to equipment disrepair and malfunctioning.

Barriers due to prevailing practice, e.g.:
- There is little willingness to change the current operating practice in the country or region.
- Developers lack familiarity with state-of-the-art technologies and are reluctant to use them.
- The project is the “first of a kind”.

Other barriers, e.g.:
- Management lacks experience using state-of-the-art technologies, so that the project receives low priority by management.
- The local community may fail to see the environmental benefits of the project and so may oppose project.

The identified barriers are sufficient grounds for additionality only if they would prevent potential project proponents from carrying out the proposed project activity were it not registered as a CDM activity.

2. Provide transparent and documented evidence, and offer conservative interpretations of this documented evidence, as to how it demonstrates the existence and significance of the identified barriers. Anecdotal evidence can be included, but alone is not sufficient proof of barriers.

Sub-step 3 b. Show that the identified barriers would not also prevent all of the alternative(s) as identified in step 1a (excepted the proposed project activity already considered in step 3a). (See NM0055):

3. If the identified barriers also affect other alternatives, explain how they are affected less strongly than they affect the proposed CDM project activity. In other words, explain how the identified barriers are not prohibitive to these alternatives. Any alternative that would be prevented by the barriers identified in Sub-step 3a is not a viable alternative, and should be eliminated from consideration. At least one viable alternative shall be identified.

→ If both Sub-steps 3a – 3b are satisfied, proceed to Step 4

→ If one of the Sub-steps 3a – 3b is not satisfied, the project is not additional.

Step 4. Impact of CDM Registration

Explain how the approval and registration of the project 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 to be undertaken. The benefits and incentives can be of various types, such as:

- The financial benefit of the revenue obtained by selling the CO_2-equiv emissions reductions.
- 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.

Step 5. Common Practice Analysis

The above generic additionality tests shall be complemented with an analysis of the extent to which the proposed project type (e.g. technology or practice) has already diffused in the relevant sector and region. This test is a credibility check to complement the investment analysis (Step 2) or barrier analysis (Step 3). Identify and discuss the existing common practice through the following sub-steps (See *AM0005*):

Sub-step 5a. Analyse other activities similar to the proposed project:

1. Provide a comprehensive analysis of any other activities implemented previously or currently underway that are similar to the proposed project activity. Projects are considered similar if they are in the same country and/or rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing, etc. Provide quantitative information where relevant.

Sub-step 5b. Discuss any similar options that are occurring:

2. If similar activities are widely observed and commonly carried out, it calls into question the claim that the proposed project activity is financially unattractive (as contended in Step 2) or faces prohibitive barriers (as contended in Step 3). Therefore, if similar activities are identified above, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially unattractive or subject to prohibitive barriers. This can be done by comparing the proposed project to the other similar activities, and pointing out and documenting

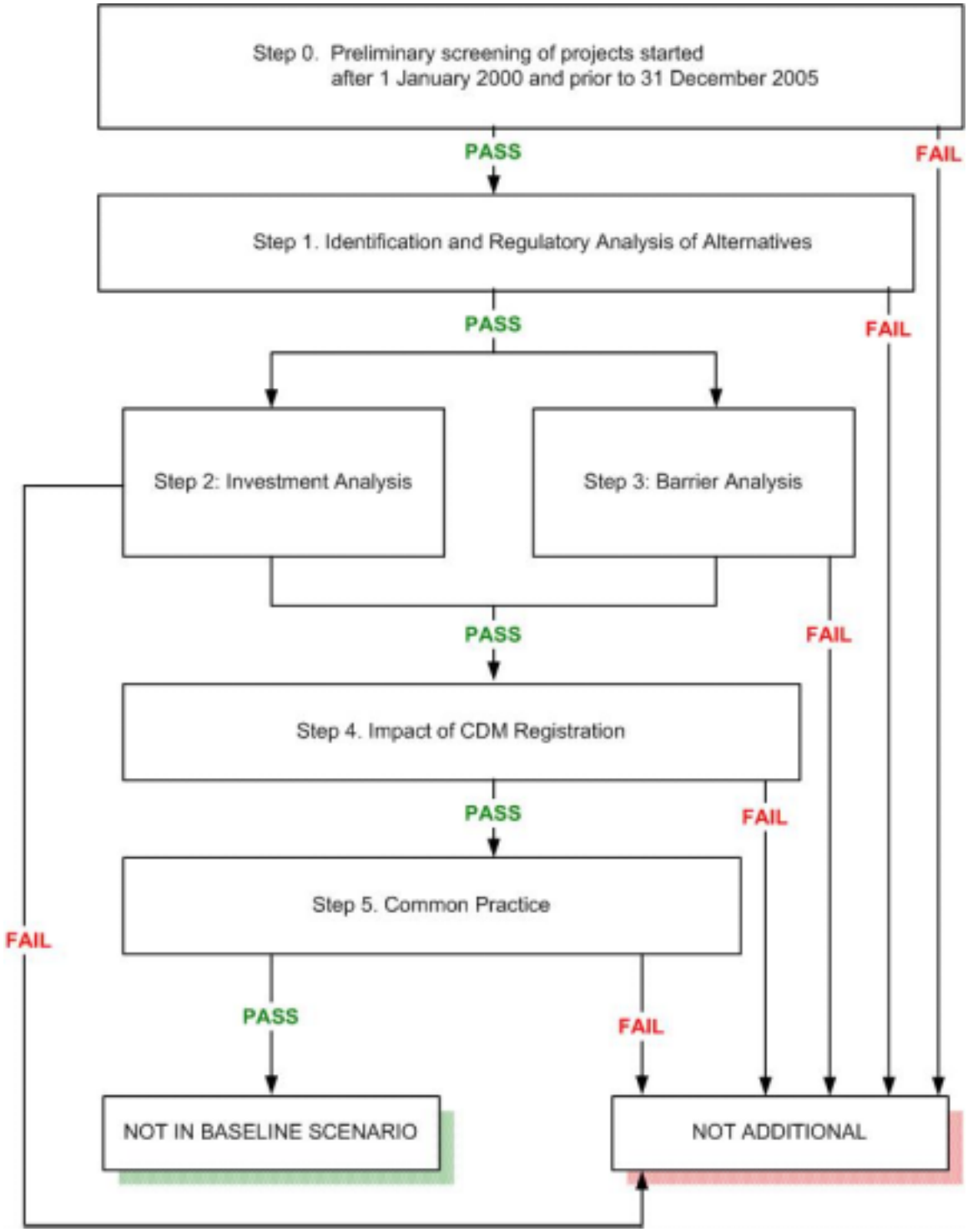
essential distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially attractive (e.g., subsidies or ODA resources) or did not face the prohibitive barriers to which the proposed project is subject.

3. Essential distinctions may include a serious change in circumstances under which the proposed CDM project will be implemented when compared to circumstances under which similar projects where carried out. For example, new barriers may have arisen, or promotional policies may have ended, leading to a situation in which the proposed CDM project would not be implemented without the incentive provided by the CDM. The change must be fundamental and verifiable.

→ If Sub-steps 5.a and 5.b are satisfied, the proposed CDM project activity is not the baseline scenario .

→ If Sub-steps 5.a and 5.b are not satisfied, the proposed CDM project activity is not additional.

Flowchart (1): Additionality Scheme



Flowchart (2): Scheme for demonstrating eligibility of projects already started. (See step 0.)