



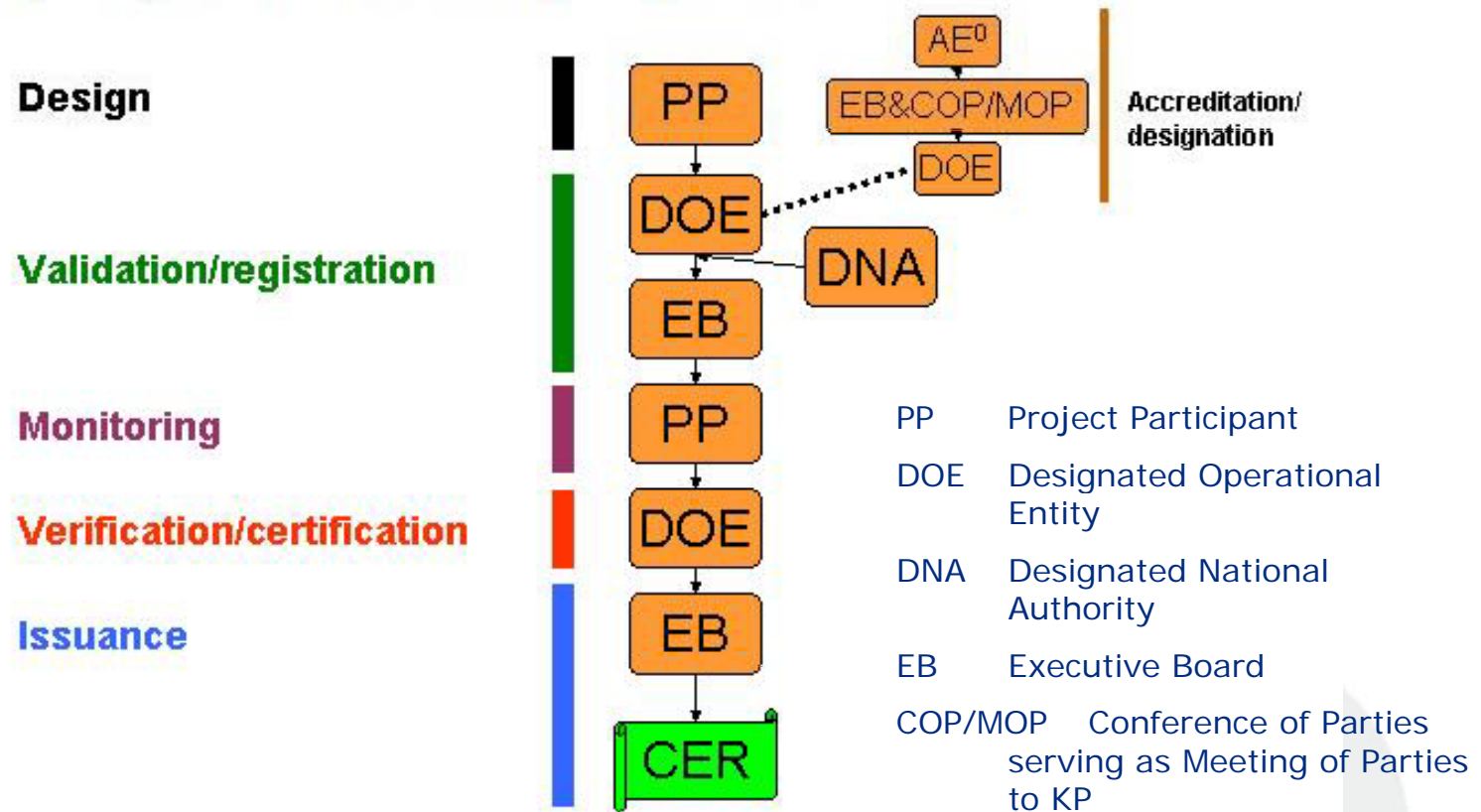
Introduction to role of DOEs

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CDM project activity cycle

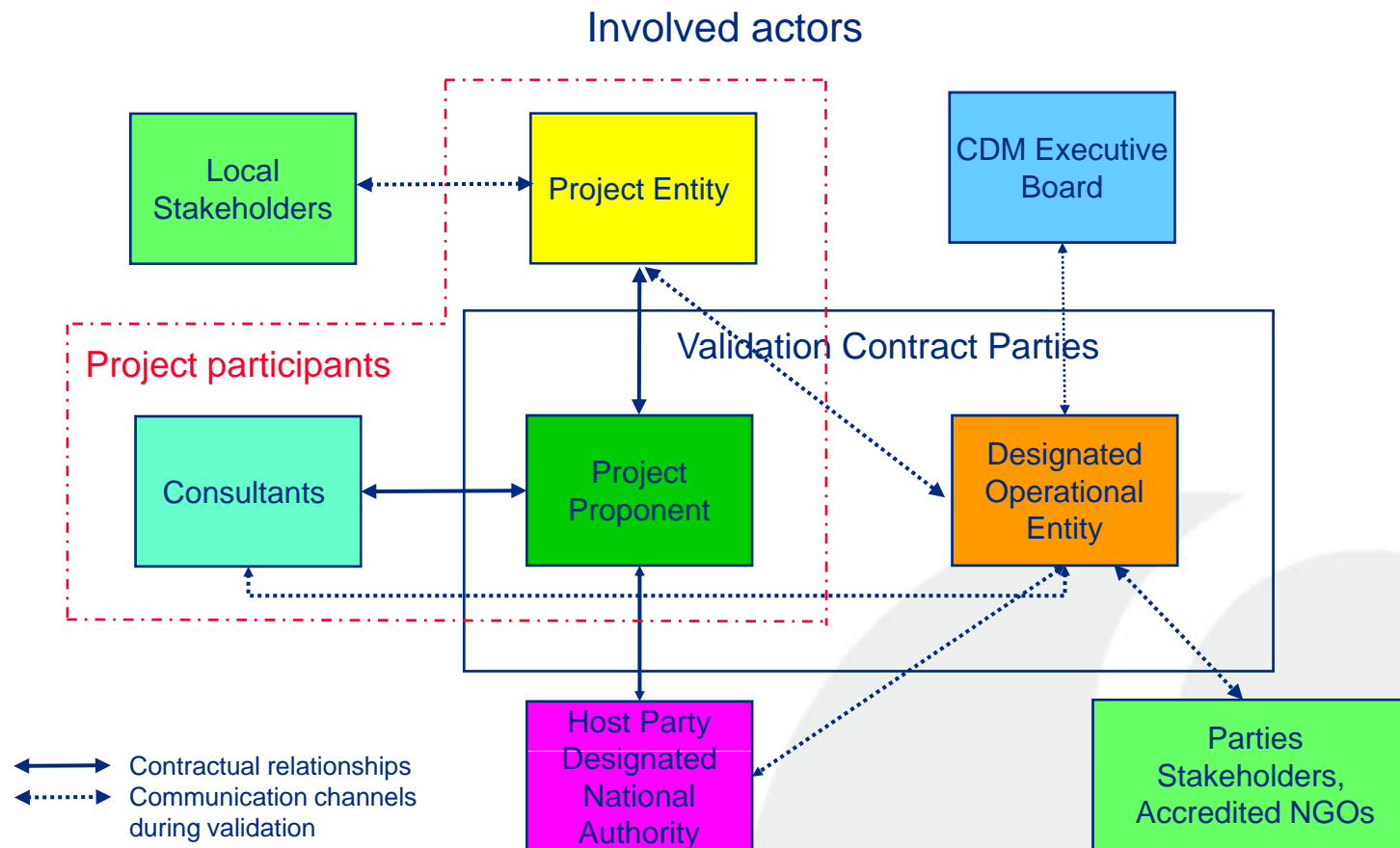


UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

What is the purpose of validation?

- Independent party assesses project design
 - Baseline
 - Monitoring plan
 - Compliance with UNFCCC and host part criteria
- provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).
- Based on KP, CDM Modalities and Procedures (M&P), Guidance from EB

Who is involved in validation?



Note: The above diagram reflects a contractual model where the project proponent is independent from the project entity. The frame for "project participants" only shows an example. Other relationships are possible, such as a direct contractual relationship between project entity and the DOE.

What does the DOE check?

- The validator must test and confirm that the project design meets the following criteria:
- UNFCCC criteria: Kyoto Protocol Article 12 criteria, CDM M&P and the relevant decisions by the CDM EB, include, but are not limited to:
 - Participation Requirements
 - Project Design Document
 - Project Additionality
 - Sustainable Development and Approval by Parties Involved
 - Baseline Methodology and Project Baseline
 - Monitoring Methodology and Plan – Coverage of Emission Sources
 - Monitoring Practice and GHG Data Management
- Host Party criteria: National approval as proof that project meets country specific priorities

Participation Requirements

- The validator shall determine whether the host Party is eligible to host a CDM project activity and verify that:
 - The host Party has ratified the Kyoto Protocol
 - The host Party has designated a national authority for the CDM
- A letter of approval from the DNA serves as evidence that the host Party voluntarily participates in the project
- Note that projects do not have to specify the investor party to be validated
- If an investor party is included, the validator checks whether the sponsor party is in compliance with Kyoto Protocol requirements for national communications and keeping national GHG inventories

Project Design Document

- PDD used as a basis for validation shall be complete and comprehensive enough to give an accurate picture of the project and its baseline.
- The documentation shall follow the structure and criteria given in the [UNFCCC CDM-PDD](#) template and be approved by the project proponent for its completeness before it is presented to the validator.
- The Project Design Document (PDD) may be supported by additional documentation, such as:
 - Baseline study
 - Monitoring plan
- This document shall also provide the validator with sufficient information of the technical features of the project, and other relevant information about the project.

Baseline Methodology and Project Baseline

- Validator shall determine whether the baseline methodology employed by the project to determine the project's baseline is previously approved by the CDM Executive Board.
- If project uses a new baseline methodology, the new methodology must be submitted for approval by the CDM Executive Board.
- Key role of validator, and most difficult one, is to determine whether the project participants have applied the baseline methodology correctly and appropriately
 - Accuracy and comprehensiveness of data
 - Reliability of data sources
 - Sufficient monitoring to ensure accurate estimates of emissions reductions

Additionality of a Project Activity

- Role of validator is to determine whether the project proponent has correctly applied that additionality testing contained in the approved methodology used by the project
- This will include checking the underlying data and assumptions used by the project participants to justify additionality (e.g. input costs and benefits used for calculating financial returns, applicability conditions of the methodology)



Additionality

The CDM EB approved tool

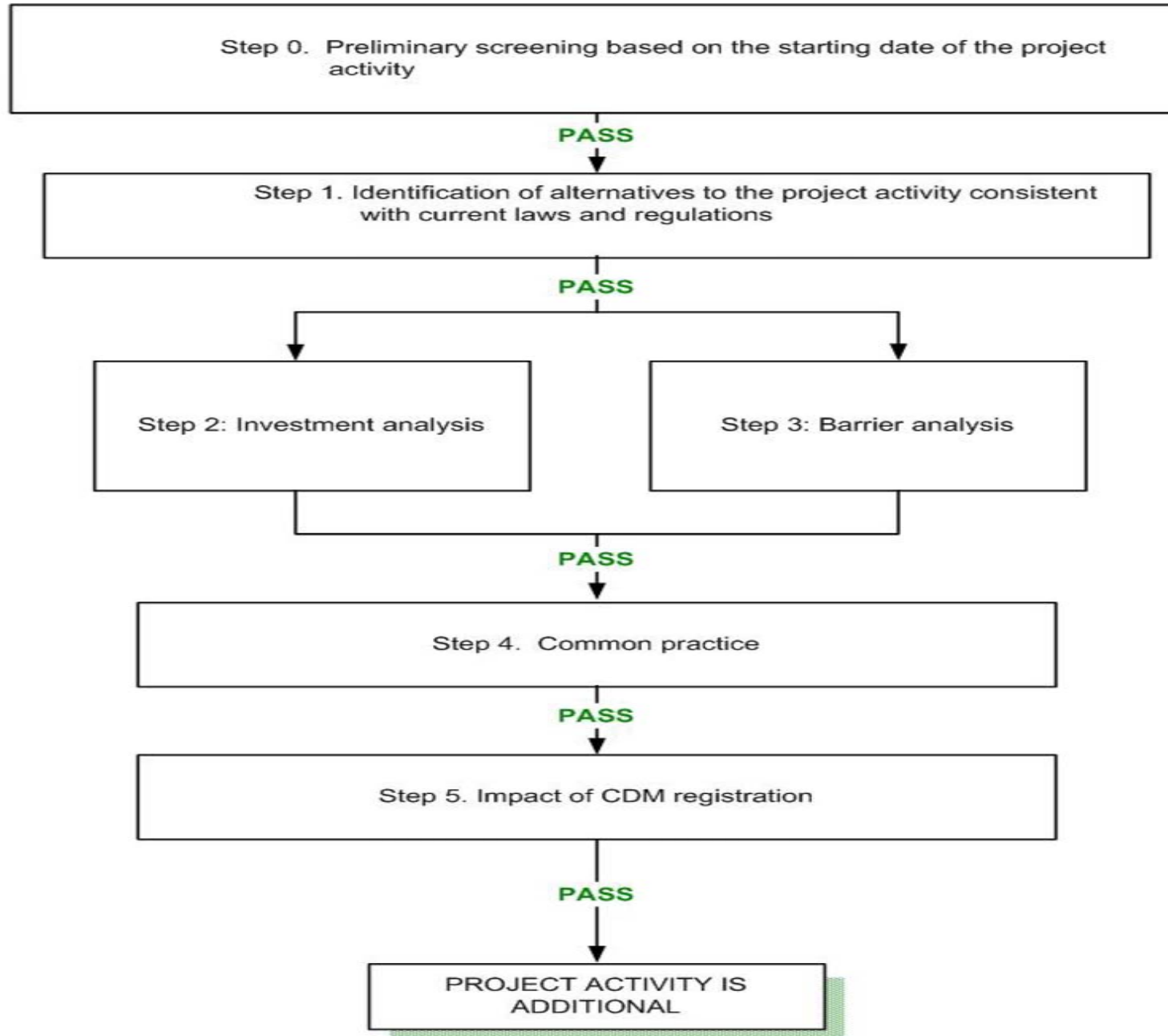
EB additionality tool steps

- Step 0. Projects wanting retroactive credits – must show intent
- Step 1. Identify alternatives that meet local regulations

(can choose either or both steps 2 and 3)

- Step 2. Investment analysis
 - Is CDM project attractive without carbon?
 - Is CDM without carbon less attractive than alternatives?
- Step 3. Barriers analysis – does project face prohibitive barriers?
- Step 4. Common practice – is CDM project technology common practice?
- Step 5. Impact of CDM Registration – will CDM remove barriers or improve economics?

Flowchart: Additionality scheme



Identify alternatives

- Should include ALL of the alternatives that could realistically provide the same service.
 - E.g. for a mini-hydro plant, could be diesel genset, grid extension or other renewable power
- The alternatives should always include:
 - the proposed project activity not undertaken as a CDM project activity; and
 - continuation of the current situation (no project activity or other alternatives undertaken).
- All alternatives must be consistent with local regulation

Investment analysis

- Investment analysis has 3 options
 - simple costs analysis – if only revenue is from CERs (e.g. methane gas destruction)
 - Investment comparison analysis– if alternatives are similar in scale
 - E.g. compare NPV, IRR of alternatives
 - benchmark analysis – if alternatives are not similar in scale
 - E.g. compare IRR to hurdle rate, compare cost of power production with tariff
- Benchmark must be “standard returns in the market...but not linked to the subjective profitability expectation or risk profile of a particular project developer...”
- But “a company internal benchmark (weighted average capital cost of the company) [can be used] if there is only one potential project developer”
- All assumptions clearly documented

Barrier analysis

- Investment barriers:
 - Debt funding not available for this type of innovative project activities.
 - No access to international capital markets due to real or perceived risks associated with domestic or foreign direct investment.
- Technological barriers:
 - Skilled and/or properly trained labor not available;
 - Lack of infrastructure for implementation of the technology.
- Barriers due to prevailing practice:
 - The project activity is the “first of its kind”
- Must show that barriers do not also prevent alternatives from being implemented

Common practice

- Show whether project type has already diffused in the relevant sector or region
 - Analyze similar activities – e.g. are there other mini-hydro plants in the country? What share of power is provided by a particular source?
 - Discuss similarities and possible distinctions between project and similar activities – e.g. do similar activities have donor support/concessionary financing?
- If no essential distinctions can reasonably be explained, the project is not additional

Impact of CDM registration

- Tools requires project developers to show,
 - “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...or other identified barriers...”
- Can provide a qualitative or quantitative explanation
- Project proponents are NOT required to show that the project would be profitable with CDM revenue

Sustainable Development and Stakeholder Comments

- The validator shall verify that the host Party has confirmed that the project assists in achieving sustainable development.
- The validator shall assess whether the social and environmental impacts of a project are sufficiently addressed
- It is NOT the role of the validator to judge whether the project supports sustainable development in the host country. This is the role of the host country government, as represented by the DNA
- The validator shall assess the appropriateness of the local stakeholder consultation process performed by the project proponent. In particular, the validator shall determine whether:
 - relevant local stakeholders have been consulted,
 - a summary of the comments received provided,
 - due account has been taken of any comments received.

Assessment of Environmental Impacts

- The validator shall determine whether an assessment of the environmental impacts of the project is required by national legislation.
- If so, the validator shall verify that the assessment of the environmental impacts has been carried out in accordance with national requirements and been approved by the relevant national authority.
- Where no legal requirements exist, the analysis of the environmental impacts of the project activity should be reviewed by the validator
 - coverage has not been formally decided
 - review that all relevant impacts have been identified and are properly taken into account in the project.

Monitoring Plan: Coverage of Emission Sources

- Assess whether the monitoring plan
 - provides for the monitoring of the relevant project and baseline GHG emission indicators
 - addresses all other factors that should be monitored over the project lifetime
- This includes an assessment of the proposed system boundary with regard to whether it includes all significant sources of GHG emissions and all relevant GHG gases.
 - A test of materiality may be used to assess to which extent important GHG emissions may be omitted.

Monitoring Plan: Practice and Data Management

- The validator shall determine whether:
 - the proposed system for monitoring reflects good monitoring practice
 - the monitoring plan provides for complete, accurate and real measurements of achieved emission reductions
 - the monitoring plan provides for conservative monitoring of baseline, when applicable, taking into account data uncertainty.
- The validator shall assess the proposed GHG data management, control and reporting systems,
 - confirm that project quality control procedures and operations reflect best practices and enable verification of GHG emission reductions

Means of Verification

- Document Review
 - Review of data and information to confirm the correctness of presented information
 - Cross-checks between information provided in the project design documentation and information from independent background investigations
- Follow-up Interviews with relevant stakeholders
 - On site
 - Via telephone
 - Via email
- Cross-check of information provided by interviewed personnel, i.e. by source check or other interviews
- Comparison with projects or technology that have similar or comparable characteristics
- Test of the correctness of critical formulas and calculations
- Witness and comparisons of similar projects in the host country
- Comparison between baseline factors and project performance factors to confirm comparability and consistency in the use of the MP

Differences between Small-Scale and other CDM Projects

- Different requirements related to the project design:
 - Simplified baseline and monitoring methodologies
 - Additionality based on qualitative assessment of barriers (e.g. Investment, technological barriers)
 - Barriers due to prevailing practice
 - Other barriers
 - Project boundary is limited to the physical project activity.
 - Leakage generally not considered
 - Simplified PDD for Small-Scale CDM Project Activities
 - Documentation on environmental impacts is only necessary if required by the host Party
 - Can propose changes to the simplified baseline and monitoring methodologies by writing to EB
- Different requirements related to the validation:
 - Ensure that the project fits SSC categories and uses correct baseline meth
 - Use of the small-scale validation protocol that takes into account the specific requirements for small scale projects
 - Can have same DOE do validation and verification