

UNFCCC

EB 43 Proposed Agenda - Annotations Annex 1 page 1

# CALL FOR PUBLIC INPUTS ON THE PROPOSAL FOR AN ENHANCED BARRIER TEST FOR PROJECT ACTIVITIES THAT HAVE A POTENTIALLY HIGH PROFITABILITY WITHOUT CER REVENUES

1. The Board, at its forty-first meeting considered a draft proposal prepared by the Methodologies Panel on the enhanced barrier test for project activities that have a potential for high profitability without CER revenues and only use a barrier analysis to demonstrate additionality. The Board agreed to invite public comments on the draft for the period from 6 August to 3 September 2008. The Board requested the secretariat to compile these comments for consideration by the Board at its forty-third meeting. The Board also agreed to have a detailed discussion on the document at its forty-third meeting.

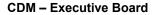
- 2. The draft proposal is available at <u>http://cdm.unfccc.int/Panels/meth/033/mp\_033\_an11.pdf</u>.
- 3. The public was invited to provide comments in particular on the following:
  - (a) What are the criteria for a highly profitable project activity?
  - (b) What project activity types can potentially be highly profitable without CER revenues and as such should be subject to an enhanced barrier test?
  - (c) How project participants can demonstrate that their project activity with a potential for high profitability without CER revenues still faces barriers?

4. 26 public inputs were received before the deadline of 3 September 2008 and 3 public inputs arrived after the deadline.

5. In addition to responses to the above three questions, stakeholders provided comments on the text of the draft proposal as prepared by the Methodologies Panel as well as views and opinions on the idea of introducing an enhanced barrier test for potentially profitable project activities and general issues of the application of barrier analysis and the demonstration of additionality.

6. This documents contains a consolidation of the public inputs received in response to the call.







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# CONSOLIDATION OF COMMENTS RECEIVED IN RESPONSE TO THE CALL FOR PUBLIC INPUT ON THE PROPOSAL FOR AN ENHANCED BARRIER TEST FOR PROJECT ACTIVITIES THAT HAVE A POTENTIALLY HIGH PROFITABILITY WITHOUT CER REVENUES

Issue	Public inputs	
	Response to questions of the Board	
(a) What are the criteria for a highly profitable project activity?	→ Many CDM already benefice from Voluntary market (VERs) additional revenues. In fact, claiming that CDM is a slow procedure, they sell VERs to the voluntary carbon offset market, arising from pre-issuance of CERs. In this way some project benefice both from CERs and VERs (double counting: for every CER exist also a VER). These projects should loose their status of additionality because they are implemented even in the absence of CDM (in fact Voluntary Carbon market VERs will give even higher prices for tonCO2 eq. than CERs!!!) The first criteria should be to EXCLUDE from CDM all projects who claim also VERs. Besides, A control from already registered project activities should be made. Energy sector is now leading to extra-profits (fuel price rise, energy value rise, etc) using standard technologies. Carbon market should help technology transfer and improvements. So the second criteria should be to allow to CDM only energy project who prove to have a positive technology transfer and/or improvement. (Gian Claudio Faussone)	
	→ The terminology itself can create problem of interpretation-how does one distinguish between marginal and highly profitable projects. At the CDM development stage, it was generally understood that the projects have to be otherwise viable and sustainable-CDM was meant for covering decision risks. I think this issue needs discussions and objective clearly defined-my suggestion would be to maintain the original understanding-The project has to be viable without CDM and PPs should be asked to do a detailed risk analysis of the project and illustrate how CDM is helping partly or fully covering the risk and therefore, the project decision process. <i>(G C Datta Roy)</i>	
	<ul> <li>In order to determine criteria for highly profitable project activities, the first step is to state if the measure of profitability would be in absolute terms or as a percentage of the baseline scenario profits to classify it as highly profitable. In our opinion, this needs to be determined as a percentage of the baseline profits or in terms of payback of the investment required to be made in the total project of which the project activity forms a part, with the exception of waste energy and renewable energy projects. This is based on the following premise:</li> <li>1) Every organization has a cost of management, and it would be focused on optimizing the opportunity cost for the management time. Management includes all operating people from the top level to the shop floor level who are/will be associated with the project of which the project activity is a part.</li> <li>2) Projects can be of two broad categories: (a) Retrofit Projects (PA is a part of a retrofit project with an implementation time less than or equal to 1 year; or PA is a part of retrofit project with an implementation time of more than 1 year.), (b) New Projects.</li> </ul>	



Issue	Public inputs
	3) All projects which have a payback period equal to or less than 18 months may be defined as highly profitable. The payback period is to be calculated after including the cost of capital (debt and equity) to the total investment in nominal terms.
	4) This measure has been chosen over the IRR for the following reasons:
	<ul> <li>i) CDM is a methodology for promoting sustainable development in the developing and under developed countries.</li> <li>ii) In these countries, the financial markets are not developed enough to provide true measures of risk premia to be factored in the decision criterion. Even in India, where the financial markets are significantly developed, the debt market does not have depth or width. The equity markets have depth only in select securities.</li> </ul>
	iii) Risk premia development is based on statistical analysis of pricing of instruments. Statistics is the science of large numbers hence the market has to have depth and width to arrive at true reflections. Simulations models have an inherent bias limited by the definition on which simulations is modeled. TO our understanding, simulations merely eases out the bumps in the assumptions and creates smooth curves to
	<ul> <li>enable mathematics to proceed.</li> <li>iv) Thus defining a risk premia based on this criterion would not be representative of the actual risk profile of the project activity.</li> <li>v) Even for the select companies, whose equity has a developed market, the risk premia is based on the normal business of the company – except in the case of energy efficiency, other areas would not be normal areas of business for the company. Hence the risk profile of such projects would not be reflecting the true risk premium that should be attached to the PA. (Kanwal Jit Singh, Surbhi Financial Technologies)</li> </ul>
	→ It could be calculated an indicator as WAC or CAPM by an external expert to the project and compare with a economic indicator of the project ( <i>Camilo Rojas</i> )
	→ The definition of high profitably is extremely variable, and depends on time and place conditions (the period of analysis, the specific circumstances of the region and country in which an investment is undertaken, perceived risk, etc.). As it stands, it is not possible to operationalize a "high-profit" concept for the CDM, given the diversity of countries and conditions in which project activities are proposed to the CDM. As we understand the intention of this proposed analysis was to give an option to project activities with an IRR so high that the investment analysis in the additionality tool makes them the first option with regards to its financial viability but that still confront barriers important enough to prevent its implementation. So the correct denomination would not be "highly profitable projects", but something along the way of "first-financial option projects confronting barriers of implementation". <i>(Sergio Jáuregui, AES Climate Solution)</i>
	→ As the cost of project implementations in developing countries are much cheaper, it may appear that there is high profitability. This is the general reason for a lot of out sourcing of non-CDM business / industry to developing countries from developed countries. Further among non-Annx 1 countries also what is profitable in one country need not be a profitable in another. Hence there can not be meaningful comparison on profitability.





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Issue	Public inputs
	Considering the uncertainties and the time taken for CDM registration of a project, I do not think that any PP at the time of conceiving a project activity would ever take into account the CDM revenues . CDM revenues are only additional incentive for the contribution of the PP in GHG mitigation. Further a number of PPs who venture into GHG mitigating projects, they do so on their own volition. In India they implement such projects even though the National laws do not require them to do so. In such a situation, additional screening for categorizing projects based on their profitability, may, more than helping Non-annex 1 countries in going green, can lead to a negative effect . That is PPs may not be willing to establish GHG mitigation projects. This will only work against the objectives of KP. Already there is an opinion that CDM Registration is a very
	difficult process. The statistics on Indian CDM Projects appears to support this opinion. (P.Ananthanarayanan)
	<ul> <li>We would also like to point out the impracticality of identifying criteria by which to determine if projects will be highly profitable.         <ol> <li><i>National discrepancies in inflation rates/interest rates/exchange rates</i></li> </ol> </li> <li>Inflation and interest rates differ from one country to another and in reaction to varying exchange rates and country international credit ratings. These inflation and interest rates have a strong impact on the profitability of a project, which is often not easy to identify <i>ex ante</i>. An extreme example of this has occurred in Zimbabwe, where a 1,000,000% per annum IRR today would still not mean the project was very profitable.         </li> <li><i>(2) Commodity Market Risk (Volatility)</i></li> <li>The profitability of many CDM project activities is also dependent on highly volatile commodity prices. Any project, upon inception, makes a number of assumptions about what will be the future price of its main input, e.g. coal or steel, as well as the prices that it will be able to charge for output, e.g. electricity. In order to stifle the risk associated with these "bets" on future prices, firms would typically "hedge" these risks by acquiring expensive coverages, e.g. futures contracts or options. The high-costs of hedging reduce the profitability of a project to a degree that can be unknown <i>ex ante</i>, because the effectiveness of the hedging strategy is unknown. With the current rise in commodity prices, however, the ability of using hedging strategies to minimize firm exposure to the risks associated with commodity-price volatility is becoming exponentially more costly than in previous years. Costs are now so high that firms are finding it difficult to hedge beyond a three-year horizon, even on projects that last for decades. Long-term investments today, therefore, tend to be unprotected from commodity price volatility, making the profitability of these types of projects</li> </ul>
	even more unpredictable. (3) Political Risks
	The profitability of many CDM project activities is also dependent the political and institutional stability of a country. Even CDM projects developed in areas considered to be relatively stable (e.g. Kenya) may lose profitability quickly as a result of political or macro-economic developments in a country.
	<ul> <li>(4) Effects of Governmental Interventionism on Energy Sector Projects</li> <li>The profitability of many projects is ultimately determined by government energy pricing policies, such as subsidies and price controls on inflows and outflows. Such intervention is a factor entirely exogenous to the project itself.</li> <li>(5) Financing techniques</li> </ul>





Issue	Public inputs
	Finally, the financial techniques implemented for a project can create huge swings in a project's profitability, regardless of the inclusion of CERs. Namely, the ratio of debt to equity in an investment (also referred to as a project's financial leverage) has significant, though un-predictable effects on a project's profitability. The higher the percentage of financing through a creditor's funds (debt) as opposed to financing through the project owner's own funds (equity), the higher the level of financial risk due to increased volatility of profits. <i>(Henry Derwent, IETA)</i>
	→ Profitability of projects depends on a large number of very complex factors, and can only realistically be assessed on a project-by-project basis. Profitability is dependent on technology, but also on location, and the type of entity developing the project. Profitability can be understood based on 2 aspects: the rate of return of a project, and the risk associated with developing it (which influences the benchmark or hurdle rate). Rates of return differ greatly from project to project, even amongst projects using the same technology in the same country: for example a waste to energy project that supplies captive power to a facility may have a higher return than one which supplies energy to a grid, since the captive power plant will offset electricity imports (normally at a higher price than the tariff the grid company buys electricity at). Risks vary enormously from project to project, and include country risk, technology risk, equity risk and financing risks. A project with a perceived 'high' return may be attractive in one location, and not attractive in another, due to the differing levels of risk. Similarly even within the same country, a project may be attractive to one developer (e.g. a government entity which has a low expected return on investment), and not to another (e.g. a private company). <i>(Martin Enderlin, EcoSecurities)</i>
	→ CMIA believes that there is no simple approach to defining and assessing project profitability that can reflect on-the-ground reality and be applicable to selected sectors in different countries that can be combined in one tool. Defining one limited set of criteria to identify highly profitable projects in all sectors and geographic regions is very difficult. This is because investment landscapes vary greatly between areas and regions and through time; what appeared to be a profitable project at inception may not be by the time of project implementation, and vice versa for seemingly marginal projects. CMIA therefore suggests avoiding any sort of IRR threshold mechanism. A better method would be to develop an approved list of technology specific project types by country or region and to constantly monitor this list as sectors evolve. (Adam Nathan, Carbon Markets and Investors Association)
	$\rightarrow$ CDM – EB can entrust the PP/DOE to undertake an investment analysis for all the projects which are requesting for registration barring projects submitted from the below Under Developed Countries /Least Developed Countries , projects employing Energy efficiency methodologies and also projects falls under the Renewable energy category (in particular wind, hydro, geothermal etc). Prepare a comparative chart on the number of projects which are having a return on investment (IRR) more than double the prevalent benchmark returns (IRR) in the host country for an investment in the sector. List down all identified projects based on the analysis done as above; publish the results of the same in the public domain. In general any project that cannot apply a simple cost analysis method in the additionality tool should under take these tests. <i>(A. K. Perumal)</i>
	→ Fuel switching. (Gian Claudio Faussone)



# UNFOOD

Issue	Public inputs
(b) What project activity types can potentially be highly profitable without CER	→ It is also important to identify the risks/barrier profiles -for example for technologies like waste heat recovery or energy efficiency, it can be dominantly investment and technology failure risks-risk on revenue front is relatively low whereas for renewable energy technologies based on resources like biomass, the revenue risk is much higher due to unforeseen price and cost escalation. While, listing of projects, therefore, some distinctions may be made to factor these variabilities. ( <i>G C Datta Roy</i> )
revenues and as such should be subject to an enhanced barrier test?	→ The type of projects for enhanced barrier analysis includes biomass based power generation projects. In my view the analysis should also bring- in technology considerations, as the technologies for biomass based power generation are not matured in India, be it fluidized bed combustion or gasification. The project may seem to be financially viable but in an overall package, in comparison to financial risks, the projects involve more of operation, maintenance and performance risks. I also hope that the enhanced barrier analysis also limits to industrial plants only, as many of the upcoming CDM biomass based power projects in India targets electrification of rural areas where there is no access to electrical energy and CDM benefits can be a motivation factor to the power producers to bring light to such villages. (Dr Kusum Lata)
	<ul> <li>We believe that any Executive Board work on an enhanced barrier test should exclude the retrofit market. This is because retrofit projects always face additional cost, financial &amp; related risk barriers, which the CDM (via investment or CER revenues) can help to overcome, including:</li> <li>Capital cost of new equipment purchase (baseline would be continued use of existing equipment with no new equipment purchase cost);</li> <li>Project identification (e.g., audit), engineering and procurement related costs that would not accrue under the baseline;</li> <li>Lost revenue from plant downtime during installation of new equipment;</li> </ul>
	• Performance risks associated with discretionary retrofits (plant managers are extremely reluctant to make modifications to properly functioning systems unless absolutely necessary, as there is always the risk that the new systems will not work optimally from the outset, leading to potential problems with product quality or delivery obligations,
	additional system engineering expense, etc.) In other words, even if retrofit projects have relatively short payback periods, they still face additional cost, financial and risk barriers not faced in the baseline scenario that the CDM can help to overcome. <i>(Anne Arquit Niederberger, Policy Solutions)</i>
	Limiting the test to Greenfield projects is an extremely timid action, which will bring little help. (A. Ricardo J. Esparta, Ecoinv Global)
	→ Maybe could be include energy efficiency (Camilo Rojas)
	→ We are concerned at the use of the word 'Greenfield' in the description of applicable project activities. This may be interpreted to prevent development or re-development of processes in industrial or 'Brownfield' sites. We are concerned that the use of the phrase 'producing a product or



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Issue	Public inputs
	energy' will exclude projects that have no product, such as the flaring of methane. Methane capture and destruction projects have a very high return in terms of global environmental impact The IPCC has reasonably selected a 100 year scenario for methane to give a factor of 21 for calculation of CERs however short term destruction of methane actually has a very high 'early years' return (63 on a 10 year scenario). The removal of financial additionality requirements from methane capture projects would provide a significant boost to smaller projects. <i>(Adrian Loening, Carbon Trade Ltd)</i>
	→ We feel that the types of projects included in the proposal constitute only a small proportion of the projects that are nowadays confronting problems due to the difficulty in proving additionality on behalf of their high IRR. There are more strategic sectors/scopes in which projects are not being implemented, in spite of their high profitability, because of the mentioned difficulty. We firmly believe that at least the following sectors/scopes should be included in a guidance of this type:
	• Renewable energy (hydro, wind, solar, tidal, etc.), which sometimes confront technological and institutional barriers strong enough to hinder their implementation;
	• Demand-side energy efficiency, which, on top of the above barriers, confronts prevailing practice barriers and even cultural ones, in developing countries;
	<ul> <li>Transport;</li> <li>Fugitive emissions from fuels <i>(Sergio Jáuregui, AES Climate Solution)</i></li> </ul>
	→ If the wish of the EB is to start gradually, with a subset of project activity types, then the one proposed—greenfield industrial activities—are well chosen. ( <i>Francesco N. Tubiello</i> )
	→ We agree that the demonstration of additionality is difficult for CDM projects incorporated in the design of a Greenfield project activity. Usually these types of projects are considered by the PPs after the investment decision of the full project (e.g. construction of cement plant) is taken. If the proposed guidance is accepted it would be good to start with this category of project activities (Greenfield). If funding is available by UNFCCC a consultant who can work dedicated on this topic can give more insight in potentially affected project types. However the outcomes will not be exclusive for all projects (e.g. 'blacklist') this given the project specific circumstances (there can be projects with strong contributions to sustainable development, one of the CDM objectives). It might be possible to identify a category of projects based on type and region which require a stricter validation. Specific criteria could be developed which are 'on top' of the current additionality tool (e.g. for the cement industry the use of blending materials). <i>(Geert-Jan Eenhoorn, Ecofys)</i>
	→ The CDM EB recognizes that there are many highly profitable potential CDM projects that do not get developed; a key example being end-use energy efficiency. In fact, the enhanced barrier proposal does not include this activity precisely because it is widely recognized that there is a market failure in terms of end-use energy efficiency and that CDM, along with other actions (i.e. education) and incentives, can spur highly profitable





Issue	Public inputs
	investment that would not otherwise occur. (Henry Derwent, IETA)
	→ It seems problematic to use a sector-based approach to classify potentially highly profitable/attractive projects. Providing a top-down listing of profitable technologies does not take into account the project specific context in which they are developed. A classification could perhaps be workable if it took location-specific factors into consideration, principally prices (of grid electricity, raw materials, fossil fuels etc). Project activities using certain technologies and being developed in a region in which high prices prevail can be considered as more profitable than others in regions in which relatively low prices apply. However, such an approach still only addresses the rate of return and does not address the specific risks as discussed above. If the Board decides to go in the direction of top-down additionality determination, then an alternative option would be to consider the common practice and market penetration rates of clean technologies in certain regions as a more objective way of determining both additionality and baseline, rather than considering the profitability of projects which is more subjective and does not address the issue of baseline determination. <i>(Martin Enderlin, EcoSecurities)</i>
	<ul> <li>→ - Retrofit of existing plant where there is no imperative to implement the project. The rationale behind including this type of project is that there is generally a resistance to change in industrial operating environments. If a plant is operating well and making profits using a carbon intensive technology, there is no incentive to switch to a less carbon intensive technology, even if such a switch can be proved to be more profitable. People tend to view the stable operation of an existing plant operating at a profit is preferable to changing technology even if it can lead to increased profitability. The risk associated with "fixing something that is not broken" represents a significant barrier that needs to be overcome.</li> <li>Projects with a significant development potential. The goals of the CDM are both to implement emission reduction and aid in the economic development of the Non Annex I countries. The challenges of economic development can represent significant barriers to project implementation. Examples of such projects could include energy infrastructure such as wind farms, etc.</li> <li>Projects based on new technology, where new technology is defined as technology that cannot be bought from established technology suppliers with sufficient guarantees to satisfy the requirements of financial institutions for the provision of project finance. As an example: A project that is based on the conversion of a gas turbine to combined cycle using equipment from companies like Siemens or GE can easily be financed because of the quality of the guarantee provided by the equipment supplier. On the other hand, a large power plant based on biomass gasification cannot be financed in the same way because there is no equipment supplier that can give the same quality of guarantee as GE or Siemens. The point here is that the test for new technology should not lie in "Is this the first of its type?", but rather in "Can this technology be financed based on the guarantees offered by the equipment supplier?" (<i>R</i></li></ul>
	→ In principle, CMIA does not believe that it is appropriate or necessary to add a further step in the process of proving project additionality nor to single out certain project types which deserve to be subjected to such a further step. Projects which utilise "waste" streams – for example, industrial waste gas, waste heat and associated gas projects - often appear to be profitable on paper, but this is not universally the case and projects that appear





Issue	Public inputs
	profitable at inception can under-deliver on both profitability and greenhouse gas savings. Therefore blanket inclusion of these project types would not be appropriate without specific regional and temporal assessment. Likewise, although some energy efficiency projects appear to offer negative cost and excellent net present value and potential profitability at inception, it is a well-known phenomenon around the world that many efficiency projects are not implemented due to intrinsic non-financial barriers. Rather than deciding which types of projects to include under an Enhanced Barrier analysis test, CMIA recommends that the EB provide further guidance on how all projects should utilise the existing barrier analysis approach under the combined tool for demonstrating additionality or develop a more sectoral approach for specific technologies, as has been taken in ACM0013. <i>(Adam Nathan, Carbon Markets and Investors Association )</i>
	→ Green field waste to energy projects and cement blending, biomass power (depends mainly on the local policies on tariff), fuel switch projects can be classified under this category. (A.K.Perumal)
	→ These comments herein come from an understanding that almost every project, additional and non-additional, faces barriers of some sort, and therefore that the existence of barriers is not a good indicator of project additionality. We have seen many clearly non-additional projects register for the CDM by simply listing project barriers. I suggest that all projects using the barrier test (not just all projects that are profitable without CERs) should be required to demonstrate how barriers prevented the project from going forward, and are overcome by the CDM, through one of the three options listed in section two of the Proposal. (Barbara Haya, International Rivers)
	→ <u>Greenfield industrial plants</u> - Industrial projects that generate electricity and/or heat from the burning of biomass is a good choice for testing the enhanced barriers test. I am familiar with a number of biomass residue projects in India (bagasse cogeneration in sugar mills and a rice husk plant in a rice factory) that used the barriers test and are registered under the CDM but are non-additional. <u>Hydro projects</u> - It is my understanding that large numbers of profitable hydro projects are registered and applying for registration under the CDM.
	<ul> <li>→ In the event that a tighter barrier analysis was imposed to highly profitable projects, this additional barrier should not be applied to project categories that clearly contribute to the sustainable development of the corresponding host country. This applies for example to project categories such as energy efficiency and all sorts of renewable (carbon neutral) energy generation. Considering the current world energy demand growth rate figures observed in the last years, it is not reasonable to reduce or restrict the incentives to these types of project categories. Bio-power generation in OECD (developed) countries account on average to a mere 2% of the total power mix. This figure already considers -in many cases- incentives provided by the local governments to these kind of power generating technologies. Since these incentives are not always present in non-Annex 1 countries, it does not seem reasonable to restrict the potential benefit of the CDM to these kinds of projects in developing countries. As mentioned before, this does not seem to go in the lines of the CDM principles. (Christian A. Patrickson)</li> </ul>





Issue	Public inputs
(c) How project participants can demonstrate that their project activity with a potential for high	→ If an agreement of sharing revenues can be provided, international carbon market is back again as a requisite for the implementation of the project. In fact, the possibility to claim CERs revenues from international market can overcome barriers due to host country instability, host country market risk, etc Other valid demonstration could be that the project proponents or developer is a small or medium company. Many countries worldwide use this criteria to support some activities: in this way, even if the project if highly profitable without CERs, the size of the company do not allow to profit from this condition as small companies have more difficulties in foreign markets, etc Besides, small companies usually have better impact of host countries in term of technology transfer, capacity building, entrepreneurship. Multinational do not need carbon market aids. <i>(Gian Claudio Faussone)</i>
profitability without CER revenues still	➔ The barriers to adopting new technologies have been identified as Market barriers constrain adoption of win-win options hence the proposed additionality concept changes are not in tune with the ground situation in adopting new technologies (relative to the user) for the following reasons: <ul> <li>Comparative energy use information is unavailable</li> </ul>
faces barriers?	- First cost is higher than those of energy-inefficient options
	- Costs and benefits accrue to different people
	- Uncertainty of operating costs, performance and reliability, especially of new technologies and practices, deters investments by users and
	financiers. Market barriers:
	- Low priority of energy issues - Access to capital
	- Incomplete markets for energy efficiency.
	- Incomplete markets for energy enciency. Market failures:
	- Split incentives (PA problems)
	- Insufficient and inaccurate information
	- Distortionary fiscal and regulatory policies
	- Unpriced costs (externalities)
	- Unpriced (public) goods. <i>(Kanwal Jit Singh, Surbhi Financial Technologies )</i>
	- Onpriced (public) goods. (Kanwai Ju Singh, Suroni Financiai Technologies)
	Energy efficiency projects in existing plants with potentially high profitability should be able to (indirectly) demonstrate the existence of barriers, by showing that the potential had existed for a long period and, nevertheless, the project was either never studied or was proposed but rejected. (A. Ricardo J. Esparta, Ecoinv Global)



Issue	Public inputs
	→ Financial models are both difficult to construct and difficult for the Validators to interpret. While Project Participants provide this information in good faith many projects are first of their type in the region and therefore large uncertainty must exist in the financial model. (Adrian Loening, Carbon Trade Ltd)
	→ The following response assumes that project activities which are included in the project types defined under a) are considered. PPs tend to use the barrier analysis for this type of projects since this reflects the problems encountered during the decision to construct the project activity. For the demonstration of additionality based on a barrier analysis the Meth Panel suggest to ask for more (or detailed) evidence. However we think the suggested guidance is not innovative, or 'on top' of the current guidance on a proper barrier test. In its current form it is an emphasis to perform a proper analysis. This would not contribute to an 'enhanced' test but in a 'test according to the rules'. <i>(Geert-Jan Eenhoorn, Ecofys)</i>
	→ The first-of-a-kind analysis, although effective, is essentially no different to the current barrier analysis integrated within the additionality tool. Furthermore, the proposal to require project developers to prove that without CER revenues they cannot raise debt finance is, as we have seen, very difficult to carry out in some countries. In effect this would require a negative response from every suitable bank in the region and this is an unrealistic requirement, especially as banks in certain countries will not even issue a negative response letter. CMIA recommends that a number of options be provided as means to prove that insurmountable barriers exist, and that project developers would be required to provide evidence that satisfies one or more of these options. Paramount among these would be lack of technology penetration in the region in question. A central database could be developed to track penetration of technology types relevant to CDM on an updateable basis. This will provide a robust measure of the level of adoption of a technology and could be used by project developers as a clear demonstration of technological barrier. This could even be used in the future to discount CER issuance according to level of penetration. Other options could include reports of difficulties with demonstration projects, large passage of time since initial demonstration projects without passage to commercial projects, or local government support or financing refusals. <i>(Adam Nathan, Carbon Markets and Investors Association )</i>
	→ Bagasse cogeneration in India is highly cost effective, but still, many sugar mills have not yet implemented the technology. A key barrier is access to capital. The sugar mills that have implemented bagasse cogeneration are mostly privately owned mills in relatively good standing such that they have access to the equity and debt needed to implement a project of this size. Some of the bagasse cogeneration plants in India currently registered under the CDM are well established private plants that had already gone ahead with the technology on their own before applying to the CDM. Other plants have not been helped by the CDM, because the CDM largely does not provide the upfront capital they need, and generally does not convince banks that they are a good investment. This example implies that for projects that are already profitable without the CDM, an analysis of the specific way that the CDM will enable the project to go forward is helpful in weeding out non-additional projects (option 2 under section 2 of Proposal). For example, if a bagasse cogeneration plant in India was unable to go forward because of lack of access to equity, it would probably need an ERPA or other CER-related agreement that involves upfront capital for the CDM to alleviate this barrier. If the project has already started

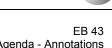




Issue	Public inputs
	construction at the time it requests registration, it should be considered non-additional unless the upfront capital promised was provided regardless of whether the project was successfully registered under the CDM. We should assume a project that is profitable without CERs is non-additional unless we can see clearly how the CDM directly helps overcome specific barriers, such as described in the example above. (Barbara Haya, International Rivers)
(	Comments on the possible introduction of an enhanced barrier test for projects with a potential for high profitability without CERs
	<ul> <li>→ The objective of CDM is global emission reduction. Economic principles would demand that this should be achieved at the lowest cost possible, as the cost involved is not individual cost, but social cost. If there are no disputes on these two maxims, then the proposal and the solution seem to suffer from serious flaws. In the first place, the proposal seeks to stipulate enhanced barrier test to certain projects (based on sector or technology used), which are highly profitable even without CDM benefits. Introduction of such enhanced barrier would only render these projects non-additional. To start with, the proposal seeks to place Greenfield industrial plants, which include CDM activity in the list. This is not desirable for the following reasons:</li> <li>a) Such a classification would result in project developers either opting out of such investment totally or deferring it to a future period so that they become eligible for CDM benefit. It would give rise a paradoxical situation, where on the one hand while the UNFCCC is striving to bring down the global emission, it would be contributing to global GHG emission on the other, although unconsciously, for whatever the duration may be.</li> <li>b) This proposal would lead to increase in social costs. There are two aspects to it.</li> <li>ii) Irrespective of whether the project developer opts out or defers the investment, it is the society which bears the cost in the interregnum and not the project developer.</li> <li>iii) The CERs are purchased by GHG emitting companies. It is a common knowledge and well accepted principle that the buyers would eventually pass on the cost to the ultimate consumer. Therefore, in the chain, it is the society and it is the society that would eventually bear the cost.</li> <li>c) The proposal, by universalizing the concept of financial or economic profitability of projects, seems to overlook the basic financial principle. The project's profitability depends not only on the sector in which it is in or the technology which it</li></ul>
	→ The very basic purpose of CDM is to encourage the projects which will lead to decrease in the GHG emissions. There may be many projects which are financially viable without CDM revenues but if they are facing any one of the barriers out of technical, common practice or regulatory(other) barriers, then these should be considered additional and given the CDM benefits. This will in the long run encourage people to







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Issue	Public inputs
	invest in similar projects activities which will also give them CDM revenues and ultimately lead to reduction of GHG emissions. (Sanjay Agarwal)
	→ In general we approve of the principle of enhanced barrier analysis. We would support the inclusion of this text, as modified resulting from the public inputs, in the main text of the Additionality Tool. (Adrian Loening, Carbon Trade Ltd)
	<ul> <li>Two issues must be taken into account, previous to any recommendation on barriers analysis for these "highly profitable" activities:</li> <li>The discussion should have a starting point the necessity of a specific barrier test for highly lucrative activities, thus pointing them out as special cases, or for a clarification on how the existing barrier analysis in the additionality tool applies to activities with a high financial return;</li> <li>In whichever analysis, one real possibility has been excluded: when investor companies (potential PP) that have several operations in two or more countries and/or two or more sectors, they invest in the alternative which is the most financially attractive among these; the additionality test does not consider this possibility; an investor could be driven to invest in a CDM CpA in a developing country, given the expectations of return from CER, rather than making a more lucrative investment (without the CDM) in another country; this is a perfectly common situation for big corporations or holding, and should be included in the analysis. (Sergio Jáuregui, AES Climate Solution)</li> </ul>
	→ I welcome the proposed changes to assessing additionality of a potentially profitable project activity. I think that, in particular, the three options offered to PPs under section 2 of the proposed text are very appropriate (yet see more text below). My preferences would be to have a stronger process than currently proposed. I think that all project activities should be asked, when using the Additionality Tool, to go through STEP 2 (financial analysis) first. How can they otherwise be identified objectively as being "high-return" projects? If STEP 2—as per current or future guidance in the tool—shows that the returns of the project are lower than an appropriate benchmark, STEP 3 can be skipped and PPs can go directly to STEP 4. If STEP 2 shows higher returns than an appropriate benchmark, then PPs MUST go to STEP 3 in order to show additionality of their project activities. Given that STEP 2 showed a high return, PPs should be asked to also demonstrate additionality via one of the three options offered in the current proposal, under point 2. Asking all projects to go through STEP 2 may seem like a lot of additional work, but I would submit that it is not, given that most projects are bona-fide business activities, and that most PPs "do their math" beforehand. Therefore, filling in a few more PDD pages with numbers they very likely already have, should not be a big burden. It does increase the burden of the DOE, but demonstrating additionality—among other things—is what they signed up for. Alternatively, in cases where CDM project activities cannot be "quantified" economically for whatever reason—due to the nature of either the PPs or of the project activity iself, including likely many PoAs—the DOE should be asked to validate such impossibility and "allow" PPs to go to STEP 3 directly. ( <i>Francesco N. Tubiello</i> )
	→ It is clear from the above that the KP is more concerned with mitigating GHGs. and assisting Annex 1 countries to meet their commitments and in the process help Non-annx 1 countries with incentives like carbon credits through CERs. There are no indications in any of the discussions anywhere preceding or during the signing of the KP that the signatories of KP in general and Annex 1 countries in particular ever discussed or



# EB 43

Issue	Public inputs
	concerned on the profitability ( whether high or low) of projects implementing GHG mitigation with or without CER benefits. Their main concern was to meet their commitments to agreed levels between 2008 and 2012. When such an intention of the KP is very clear, it is surprising that EB has initiated discussion for issuing guidelines on the subject of high profitability. It is possible that there may be a few industries which are highly profitable even without CER benefits. As per published information available there are no data available on the high profitability of CDM Projects without CDM revenue. If the EB team has done a study and analysis on the subject of high profitability even without CDM revenues, then it would have been better that the same have also been published while soliciting public comments. This would help to remove subjective element (high profitability ) in such a serious discussion like this. There are estimates given out in a number of CDM seminars / publication , that indicate that it will be a very costly proposition to implement similar projects for GHG mitigation in Annex 1 countries ( as high as six to seven times the cost in non-Annx1 country). Is there any data available with EB to compare the profitably of a project without CER revenues vis-à-vis cost of implementation in Annex 1 countries. I am of the opinion that so long as the project activities meet the requirements of CDM and generate GHG reduction and help the KP objectives , their being a highly profitable organization should not be a subject of any discussion in the CDM process. <i>(P.Ananthanarayanan)</i>
	→ While IETA understands that the development of this test is motivated by genuine concern that the environmental integrity of the Mechanism is threatened by nonadditional projects securing registration, IETA does not believe that an enhanced barrier test is an effective means of addressing this concern. First and foremost, IETA would like to reiterate that such a test runs counter to the Marrakech Accords, which stipulates that the reduction of greenhouse gases below those that would have occurred in the absence of the CDM project activity is the key determinant of additionality, not the profitability of a project. Moreover, it is IETA's strong opinion that attempting to identify the <i>potential</i> for profitability, <i>ex ante</i> , is an extremely impractical endeavor and is likely to erroneously restrict truly additional projects, thereby discouraging further project investment and significantly lowering the environmental benefit of the CDM. Profitability does not equate to non-additionality. In fact, it is a principle of the market that the pursuit of profit will lead to additionality: entrepreneurs will undertake projects that would not have been undertaken if the prospect of profit did not exist. IETA suggests that the Board move towards the increased usage of standardized baselines, rather than complex, non-objective tests, to ensure the environmental integrity of the CDM. ( <i>Henry Derwent, IETA</i> )
	→ The critical issue that IETA would like to express is that expected profitability is not the only determinant of an investment decision, but that it may be (and should be allowed to be) a very important one, without which a CDM project would never be developed. Indeed, the overall financial outline of a project activity must be attractive, and potentially highly attractive, so that project developers and financiers are willing to assume the risks specific to individual project activities as well as those inherent in the CDM registration and issuance process. Project-specific risks— related to host country, technology employed, financing structure, and project partners— often prevent project implementation, even in the case of potentially high financial attractiveness. Without further incentives, such as CERs issuance and the increased visibility that comes with being associated with the CDM, many highly profitable projects would never be developed. The right to decide the constraints of commercial profitability, until now, has



Issue	Public inputs
	always remained with Party governments, not the CDM EB. Indeed, some Parties have already chosen to tax the revenues of highly profitable projects (e.g. Vietnam and China) and recycle them back into the emission reduction activities of the country. It is IETA's opinion that this prerogative should remain with host governments, except where due processes of international law have established a fiscal or quasi-fiscal instrument. <i>(Henry Derwent, IETA)</i>
	→ IETA believes that endeavoring to identify highly profitable project activities <i>ex ante</i> is almost impossible, and certainly not a useful way by which to go about ensuring the environmental integrity of the CDM. Given this understanding, the following three suggestions are put forth: <i>1. At a Minimum, Multiple Tests are Required</i>
	The board should also be reminded that the ability to prove barriers differs by project type and country and that CDM project activities are implemented in countries where the data required to prove barriers is often difficult or impossible to attain. For these reasons, IETA believes that, if the Board continues down the path of developing an enhanced barrier test, this test must be developed on a country-by-country and project type-by-project type basis. Such an approach is the only way to ensure that such a test does not restrict a large number of excellent projects from CDM financing, thereby decreasing the environmental benefit of the mechanism. <i>2. A More Appropriate and Workable Solution: Standardized Baselines</i>
	Given the numerous problems related to the development of an enhanced barrier test for highly profitable projects (as well as for <i>multiple</i> tests), IETA suggests, in lieu of the approach taken in the draft proposal, that the Board consider the increased usage of standardized baselines as a means of ensuring additionality and identifying appropriate crediting baselines for project types around which concerns have arisen. The Board has already embraced this approach with its approval of methodology ACM0013, "Consolidated baseline and monitoring methodology for new grid connected fossil fuel power plants using a less GHG intensive technology." Taking this approach will allow the Board to bypass any messy and arbitrary attempts to identify projects with the <i>potential</i> of being highly profitable and narrow in on what really matters for the CDM, the additionality of projects and the over-all environmental integrity of the mechanism.
	3. Grace Period is Vital Whatever decision the Board takes on this issue, it is essential that any new test or approach towards addressing additionality and/or the environmental integrity of the CDM must be accompanied by a grace period of at least one year from the date of its acceptance by the Board. Such a grace period is vital if the Board is to avoid jeopardizing the fate of projects already submitted for validation. (Henry Derwent, IETA)
	$\Rightarrow$ It is our view that the current proposal for a separate enhanced barrier analysis for certain project activities which have the potential for high profitability is neither an efficient nor an effective approach to take as part of efforts to enhance the CDM. We believe that there are more effective ways in which the process for testing the additionality of CDM projects could be simultaneously both strengthened and streamlined. <i>(Adam Nathan, Carbon Markets and Investors Association )</i>





Issue	Public inputs	
	Adoption of this test/tool is indicating or providing an impression to the external world that projects without investment barrier would not be registered as CDM projects. I am of the opinion similar to that of the EB 22 Annex 3 decision on NATIONAL AND/OR SECTORAL POLICIES this proposal also can be a clarification document to remove the unnecessary fear in the minds of the project participants. <i>(A.K.Perumal)</i>	
	→ The current additionality criterion includes a "common practice barrier analysis" which tests whether the prospective CDM project constitutes the common practice in the corresponding host country. With this in mind, the inclusion of an additional barrier to highly profitable projects would be unnecessary to screen out non-additional projects and would rather restrict the potential benefits of the CDM rather than enhance its environmental integrity because:	
	<ul> <li>Highly profitable projects that would occur anyway and therefore would not be additional would inevitably become the common practice in the host country and therefore would be screened out by the "common practice" barrier present in the existing additionality tools.</li> <li>Highly profitable projects that despite their high profitability prospects face significant barriers and therefore do not constitute the common practice in the corresponding host countries are truly additional projects, since they reduce GHG emission below to those that would have taken place in the absence of the registered project activity. These projects should quality as CDM projects.</li> </ul>	
	Imposing additional barriers to projects that appear to be very attractive from a financial perspective tend to exclude these projects from the CDM, even if they do not correspond to the common practice in the corresponding host countries. According to the Marrakesh Accords, this is clearly not in line with the CDM principles, which ultimately purse the clean (sustainable) development of non-Annex 1 countries. If a highly profitable project is not common practice in a host country, it is a clear indication that this project faces barriers that are not entirely overcome by its high profitability. These barriers are not always easy to describe and / or demonstrate in developing countries. In addition, it must be also noted that a high profitability ex-ante always implies a certain degree of uncertainty, particularly in developing countries. The CDM brings additional incentives to these projects (financial, environmental, reputational, etc) that will be eliminated if additional barriers are levied to screen out these kinds of projects. This will restrict the benefit potential of the CDM as a clean development tool for developing countries rather than enhance its environmental integrity. <i>(Christian A. Patrickson)</i>	
	→ In the event that a tighter barrier analysis was imposed to highly profitable projects, it should be considered the circumstances under which the prospective highly profitable CDM project is taking place. Usually highly profitable projects in developing countries are not carried out simply because they do not belong to the core business of the company that has the option to implement the project. In the unfortunate event that an enhanced barrier test is established for these types of projects, it should not be applied for projects that do not correspond to the core business of the owning company. (Christian A. Patrickson)	
	Comments on the text of the draft proposal	
In case of demo	In case of demonstrating additionality for project activities on the list through a barrier test only, the PP shall provide specific information that substantiates the validity	





Issue	Public inputs
	view of the project activity being potentially highly attractive financially without revenues from the CDM. PPs can choose between the following
options:	
Demonstrate that the project activity is a first-of-its-kind	➤ We could use two different approaches. For the project of first of its kind, the simple barrier test should suffice. For projects not falling under common practice (25% test as is being applied now), barrier test with more liberal financial additionality approach can be considered-this would mean accepting PPs submission on financial additionality considerations should be accepted. (G C Datta Roy)
in the relevant region or country concerned	<ul> <li>The first option relates to demonstrating the project activity is a first-of-its-kind in the relevant region or country concerned. If this is strictly interpreted, then only one project can come up in the region or country concerned. It is very difficult, if not impossible, for the PP and DOE, particularly in a vast country in like India, Brazil or China, where more than one DOE are accredited to do validation, to ensure that no other project developers are setting up a project in the same sector or with the same technology. It is quite possible that EB could receive more than one project from a country/region for registration. EB will have only three options, viz.,</li> <li>to reject all but one project,</li> <li>accept all projects received up to a cut-off date and</li> </ul>
	- accept all projects. If the EB decides to reject all but one project, then the question is which one. If it is based on the date of submission, then unconsciously a conflict is created between PP and the DOE, as submission for registration depends as much on DOE as on PP. An overburdened and/or lethargic DOE can jeopardize the chances of a project from getting registered. This could give rise to unpalatable situations. On the other hand, if EB accepts all the proposals upto a cut off date, then also a rift is created between PP and DOE, where the DOE fails to act fast. The only alternative is to accept all projects irrespective of when it is submitted. Then, the very essence of 'first-of-its-kind in the relevant region/country' is diluted; it tantamount to common practice analysis. Hence, a strict interpretation of the wordings is not workable. <i>(J V Murthy )</i>
	<ul> <li>This would appear to be already an element of the required "common practice test", so perhaps the common practice test should be integrated into the barrier analysis.</li> <li>"First-of-a-kind" is too restrictive and other benchmarks should also be accepted (e.g., codes and standards; market penetration rate below a more reasonable threshold; key performance indicators). Market transformation is certainly not achieved by a single demonstration project – and the concept of "first-of-a-kind" is almost impossible to apply to anything but single technologies (not to systems, which would lend themselves to key performance indicator benchmarking). (Anne Arquit Niederberger, Policy Solutions)</li> </ul>
	→ Option is already included in the additionality tool and would need only clarification from the EB that high profitability does not invalidate this argument. (Sergio Jáuregui, AES Climate Solution)

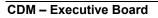




# UNFCCC

Issue	Public inputs
	→ This concept needs to be further clarified. If there hasn't been any other project using a similar technology at a similar scale in the region, then the CDM project activity should be considered as a 'first-of-its-kind'. Furthermore, any project which was developed with support from development aid money should be excluded from the analysis because it cannot be said to have been developed under similar circumstances. (Martin Enderlin, EcoSecurities)
	<ul> <li>Being the first of its kind should not be the only criterion for new technology. The biggest barrier faced by project developers in the clean energy industry is the inability of suppliers of new and less commonly implemented technology to supply process and other guarantees required by financial institutions to project finance these projects. This barrier can be mitigated by carbon revenue. We have also found that the need of financial institutions to participate in carbon finance projects acts as mitigation.</li> <li>Another barrier related to technology introduced into a geographical region relates to the support infrastructure skills base in that region. Until such time as the technology in a region reaches critical mass, the projects in which such technology is used faces significant risks. These risks include issues such as the availability of spares, skills to perform maintenance, the ability of the developer to recruit and retain suitably qualified personnel. (<i>Robbie Louw</i>)</li> </ul>
	→ Exclude project activities registered with CDM until technology penetration is less than 20%, once the implementation exceeds the 20% value it should be classified that the project is no longer a first of its kind in the region, until 20% penetration the CDM- EB may consider an option similar to the national policies consideration, i.e. all the installation happened after 2001 or Feb. 2005 are only happening because of the CDM. (A.K.Perumal)
Demonstrate that at least one barrier cannot be directly alleviated or otherwise affected by the potentially higher financial	→ The second option pertains to the project developer demonstrating that at least one barrier cannot be directly alleviated or otherwise affected by the potentially higher financial revenues of the project activity but will be alleviated by the CDM. CDM benefits are financial benefits. Finance cannot alleviate any non-financial barrier – it cannot increase the rain; it cannot stop earthquake; it cannot stop landslide; and it cannot stop flash floods. But a common denominator in all these cases is the occurrence of loss. All that the CDM benefit does is to alleviate the loss likely to be suffered by the project developer. Since all these acts get manifested in the investment analysis by way of sensitivity analysis (such as reduction in PLF, increase in material cost etc), what CDM tackles, in essence, is only investment barrier. Therefore, a barrier which cannot be alleviated or affected by the potentially higher financial revenue can never possibly be alleviated by CDM. Hence, this option is also unworkable. (J V Murthy)
revenues of the project activity but will be	to use this approach, since the foundation of this is already included in the Additionality Tool, or if it only needs EB clarification on any element of this option to which PP proposing high benefit activities should give special attention. We would rather believe that the second line of action would be more practical and appropriate. <i>(Sergio Jáuregui, AES Climate Solution)</i>





Issue	Public inputs
alleviated by the	
alleviated by the CDM	<ul> <li>In practice, in order to demonstrate that a barrier "cannot be directly alleviatedby the potentially higher financial revenues of the project activity but will be alleviated by the CDM", one has to show that the CDM is not only bringing even higher financial revenues, but can also bring other non-monetary co-benefits such as:         <ol> <li>Prestige benefits: CDM projects act as highly visible flagship projects with national and UN approval. This brings added prestige and enhanced communication of the co-benefits, and is a major motivation for many project developers (e.g. local/national governments/state companies, private companies with strong corporate social responsibility agenda) who are not only motivated by financial reasons but also by environmental concerns and other development benefits. In some cases, even projects which may be highly profitable would not happen without these additional prestige benefits; which are greatly increased by CDM registration and UN recognition.</li> <li>Involvement of carbon market actors; many projects have been made possible (technically or commercially) by a carbon market actor who wouldn't have been involved in the absence of the CDM. For instance, some landfill gas to electricity projects could be profitable in absence of CDM but are not undertaken either by the landfill owners (e.g. because they are not familiar with the technology or do not have a strong commercial oriented culture) or by other landfill/electricity operators (because of lack of information/market failure, or perceived risks that outweigh any financial incentive). On the other hand, carbon market actors are primarily interested in carbon credits, and understand the market in high-risk technologies, and thus are often more willing to take on risky projects. They may also in some cases have the most technical expertise in a particular project type, having replicated it elsewhere.</li> <li><u>Senhanced revenue stream;</u> CDM money is a different type of reve</li></ol></li></ul>
	<ul> <li>Diversifies and hedges conventional project revenues, therefore decreasing overall project risk.         <u>4. Increasing investor confidence:</u> eligibility of a project under the CDM, and the involvement of international carbon market actors increase investor confidence. In many cases, loans or investment can only be obtained after investors are assured of progress towards CDM registration. Sometimes loans/investments can only be obtained because of involvement of a carbon market actor (e.g. acting as guarantor or simply as a trustworthy partner).         (<i>Martin Enderlin, EcoSecurities</i>)     </li> <li>The methodology panel can create a set of barrier matrix to help the PP by providing them with list of various barriers that PP can encounter</li> </ul>
	other than the investment barrier like the technology, management, operational, institutional, market etc., provide a guidance on what sort of documents is required by the RIT/EB to support barriers claimed as listed by the panel. So then for each type of barriers provide list of three different set of document requirements and rank them starting from low to high in terms of the influence of the document. <i>(A.K.Perumal)</i>
Explain and	→ This would be non-workable. No bank would appraise a project if it is unviable as it is. Banks consider CDM benefit only as a risk mitigation





Issue		Public inputs
support with	tool. As suc	h, if the project is not appraised, it would also not be possible to get any communication from banks. Such provision is likely to
credible	encourage o	levelopment of mal-practice apart from raising the cost of transaction significantly. (G C Datta Roy)
independent		
evidence that	➔ Third o	ption also suffers from three flaws:
bank loans,	(i)	Bank loans are secured and they have first charge not only on the assets, but also on the cash flows. Therefore, their main concern is
other debt or		whether project activity is capable of servicing the loan and not whether the project is additional. Hence, they rely more on the Debt
equity financing		Service Coverage Ratio (DSCR), which unfortunately is not recognized as an acceptable financial indicator in the Additionality Tool,
could only be		than on any thing else. A project yielding an IRR of 20% but with a DSCR of less than 1.5:1 would be unacceptable to the banks.
obtained after	(ii)	Secondly, any argument on the part of the project developer that the loan was sanctioned only after considering the CDM benefits in the
the benefits of		cash flow should also be evidenced by the fact that the project implementation is awaiting the registration. This is because banks in
the CDM were		such cases will invariably stipulate a condition that the project should get registered with UNFCCC before seeking disbursement. If the
taken into		project has gone ahead with the implementation then, it reveals that CDM is 'one of the considerations' and not the 'main
account.		consideration' for sanctioning the loan. The bank's letter, therefore, does not evidence additionality. In reality, implementation of no
Credible		project is held up for want of registration, which proves that the banks are not unduly concerned about CDM benefits. They have some
verifiable		other collateral. In other words, a mere letter could satisfy the EB; but in reality, it has no value.
balance sheets	(iii)	Finally, this option would only lead to unhealthy practices of project developers getting letters from amenable banks, para-banking
and bank		institutions and their own sister concerns, which may satisfy the EB in terms of 'letter', but that certainly is not the 'spirit'.
statements and		(J V Murthy)
sectoral		
financial	➔ Option	c) is clearly not reasonably practicable; as some banks could deny evidence and the sheer volume of credit application could in any case
information	make the ta	sk of gathering evidence impossible. In actual project implementation, for the reasons mentioned, this option would only be rarely used.
may help to	(Sergio Jáu	regui, AES Climate Solution)
support claims		
on limited	➔ More f	easible option could be analysis of published balance sheet of the company, assess the present return on capital employed (ROCE)-all
access to capital	projects, wl	hich can pull down the ROCE without CDM can be considered to pass the additionality tool. For companies, which have written down
in the sector	capital inve	stment policy and a formal system of project screening mechanism, projects, which have been screened out otherwise can be considered
	to have pass	sed the additionality tool. (G C Datta Roy)
		e that the three points in section 2 are necessary to show additionality under the sub-case discussed. However, I would make option 3
	mandatory,	as this seems to be the crux that makes or breaks the argument of additionality. The option should only be between the current options 1
	and 2. (Fra	ncesco N. Tubiello)







Issue	Public inputs
	→ Comment about fundability of projects: Many companies have limited capital budgets, constrained by the ability of the company to raise equity funding and balance sheet constraints. Projects are approved based on investment criteria ranking. The projects that score best are implemented first while other projects may not be implemented even if they may be extremely profitable. In some cases CDM projects may be profitable and offer returns that are higher than the company's hurdle rate, but the available capital have all been allocated to other projects that offer higher profit abilities than the CDM project. In such cases the addition of carbon revenue to a project may elevate the CDM project in the profitability ranking list to a point where it replaces another project. In such a case a project that is profitable even without carbon revenue needs the improved profitability offered by the CERs in order to qualify for limited capital available in a company. ( <i>Robbie Louw</i> )
	→ This is again leaning towards the investment issues and more over getting a statement from bank like a credit appraisal notes etc are confidential and will not be provided to the PP, under such circumstances does a letter from bank stating that the disbursement /allotment of loan for the project is issued based on the CDM consideration would suffice the requirement. (A.K.Perumal)
How to implement the guidance	→ The options presented by the Meth Panel involve a specific guidance for highly profitable activities; if a more practical approach is adopted, we would like to see some clarification from the EB first, inserted in the relevant EB meeting report, and after that, the clarification integrated in the Additionality Tool. <i>(Sergio Jáuregui, AES Climate Solution)</i>
	→ I would suggest incorporating the proposed text in to the main body of the Additionality Tool, therefore option (a) in section 3. However, what happens for those methodologies that do not require usage of the "tool"? ( <i>Francesco N. Tubiello</i> )
	→ If accepted it would be good to incorporate the text as Annex to the 'Tool for the demonstration and assessment of additionality'. (Geert-Jan Eenhoorn, Ecofys)
	→ In the Additionality tool (AT) remove the option's of selecting one among the step 2 or step 3 to prove additionality, instead propose adoption of both the steps and the projects which fail to qualify as additional under step 2 and have a IRR twice than the benchmark should be pushed to adopt the enhanced barrier test (EBT) for project activities that have a potentially high profitability without CER revenues. Add this guidance as an addendum to the existing additionality tool and clearly instruct under what condition this EBT needs to be followed by PP. Once the outcomes of the public comments on selection of sectors are available then add those sectors as annex in the EBT document. Even if the results are greater than the benchmark by two times the projects coming from the following are to be excluded from undertaking the EBT test, the projects that are to be exempted are as follows renewable energy projects, energy efficiency projects and project submitted LDC, UDC and African region. (A.K.Perumal)
	Comments/proposals on handling potentially profitable project activities



# UNFCCC

Issue	Public inputs
	→ Introduce a CDM multiplication factor to decrease CERs – The concept is similar to the Option 3.14 Introduction of multiplication factors to
	decrease the certified emission reductions issued for specific project types of the UNFCCC document FCCC/TP/2008, 6 August 2008. A CDM
	project activity could receive CERs equal to the emission reductions multiplied by the GWPs of the gases and then multiplied by a factor based on
	the project activity type. The project activity types would first need to be identified and multiplication factors for each would then need to be agreed.
	Profitable project activity types could have their total number of CERs 'discounted' by a multiplication factor of less than 1.
	Sustainable Investment Scheme (SIS) – If the project were able to prove that CDM provided additional incentive to implement the project, despite it
	making financial sense without CDM, and CDM was considered at the time of planning the project, the CERs from the project would need to go through a Sustainable Investment Scheme (SIS). The concept is similar to the Green Investment Scheme for AAUs under the Kyoto agreement.
	AAUs from many countries are not truly additional, however they can be used for compliance subject to them being "greened" via a Green
	Investment Scheme (GIS). We may adopt a similar scheme for CERs from project that do not qualify the financial barrier test, are profitable without
	CER revenues but show that CERs have incentivized implementation of the project. These CERs will be eligible to use as Kyoto compliance units
	subject to them investing the excess money from CER sale into sustainable activities. This will involve the project proving that the excess cash flows
	will be utilized for demonstrable sustainable development in the local/host community. These CERs may be labelled as SIS-CERs and would need to
	prove sustainable development benefits from excess CER cash flow in order to be eligible for compliance. (Nitin Tanwar)
	General comments on additionality demonstration and barrier analysis
	→ We recommend that the CDM Executive Board develop with expert input a dedicated tool to demonstrate the additionality of Greenfield end-use
	efficiency projects/programs using barrier analysis for integration into large-scale methodologies, and exclude end-use efficiency projects from any
	requirement to apply a generic enhanced barrier test. Fewer than 20 Sectoral Scope 3 ("energy demand") projects (only 10 of which are large scale)
	have been registered to date, despite their huge cost-effective potential – and one of the major barriers has been the difficulty of demonstrating to the
	satisfaction of the CDM authorities that such projects are additional. Instead of making it even more difficult for end-use efficiency projects to be registered, the Board should provide specific guidance on demonstration of additionality tailored to the on-the-ground practicalities of such projects.
	Such a tool might include the following elements:
	• A Checklist of relevant, generic barriers to end-use energy efficiency. The Checklist should include a description/justification of each barrier,
	drawing on the extensive documentation available in the published literature. This would mean that common barriers would be well
	documented/justified once from the top down and that each project would then only need to provide evidence that a barrier selected from the
	Checklist applies in the specific project context (without having to justify each time that the barrier is real, which is a large source of inefficiency and
	inconsistency in the current framework).
	• Top-down pre-determination of additionality, based on barrier analysis for important large-scale project types (e.g., utility DSM programs, ESCO
	or leasing schemes, energy efficiency financing facilities, government procurement and municipal infrastructure investment programs,
	rebate/financial incentive programs, incentives under voluntary agreements) - or specific guidance on how to demonstrate barriers for such



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	programs. Some initial considerations regarding demonstration of additionality of utility DSM programs have already been elaborated (Arquit Niederberger & Fry, 2007).
	• Specific documentation requirements for barrier analysis of other project types that can be met without new analysis (e.g., documentation on use of government or GEF funds to provide incentives for such types of projects/programs would indicate additionality; market research that demonstrates that the project technology has a higher up-front capital cost than the baseline technology; official documents that show that the technology to be used in the project activity is more efficient than a mandatory standard, voluntary label or other widely used benchmark level would demonstrate additionality). <i>(Anne Arquit Niederberger, Policy Solutions)</i>
	<ul> <li>Going through strictly as per "Tool for demonstration and assessment of additionality" (Version 05), a contradiction appears between foot note 2 (Project participants can use either investment analysis or barrier analysis) and the flow chart. If the PP enters Step-2 (Investment analysis) in the flow chart, and the answer is 'no', i.e., the project is likely to be the most financially attractive or is likely to be financially attractive (presumably without CDM benefits), the PP has to enter Step-3 (Barrier analysis) and test whether there is at least one barrier preventing the implementation of the project activity without the CDM. The choice is optional only if the answer to Step-2 is 'yes'. This resolves the issue with the following modifications in the tool:         <ul> <li>to remove foot note 2.</li> <li>to amend flow chart and text by disallowing direct entry to Step-3. (Kalidas Choudhury)</li> </ul> </li> </ul>
	→ The additionality tool should not be changed. The common practice analysis would cover the spread of the technology in the country/region, and the current level of the reach of the technology reaching 25% of the industry is a good level to term it as the technology becoming common practice. Illustratively, the blending of flyash with cement has been termed by EB as common practice when it breached this level in India. The spread of tapping waste heat in sponge iron industry has lead to the spread of the use of this technology to the Industry in India, and the Government has made the implementation of the technology mandatory for sponge iron plants with capacity of 200 tpd or more. (Kanwal Jit Singh, Surbhi Financial Technologies)
	→ We would like to say that a Tool for Common Practice Analysis should be there, as in the case of Financial Barrier. ( <i>Sanjay Agarwal</i> )
	→ According to the Institute for Global Environmental Strategies (IGES) today 80% of the registered projects base their additionality on a successful barrier analysis partly in combination with a financial analysis. The barrier analysis is an important element namely for projects that are frontrunners in a process of low-carbon technology diffusion to developing countries. However profitable, these projects often face an array of socio-economic barriers. Recognising this fact a number of regulations dealing with the implementation of barrier tests already have been adopted by the COP and the EB. Despite these regulations, we observe that the barrier test has become increasingly difficult to be accepted as prove for additionality







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	by the DOEs and the EB. Today the investment analysis seems to be becoming de facto mandatory for projects. Rather than adopting new rules, we therefore advocate a practicable approach that founds on the existing ones. For this the EB would be required to provide : - Clear guidance for all projects using barrier test, and not just for an arbitrary subset of project types considered highly profitable.
	<ul> <li>Clear guidance for an project using barrier test, and not just for an arbitrary subset of project types considered nighty profitable.</li> <li>Clear guidance on how to determine whether a project is "first of its kind" and how "prevailing practice" is to be operationalised. This could be by establishing country and technology specific thresholds by the EB, e.g. number of installed units or their market share.</li> </ul>
	If this guidance is unambiguous it likely will be able to reduce the revision rate and release the work of the DOEs. (Mischa Classen, First Climate)
	→ The author propose that to reduce subjectivity in barrier analysis, certain key questions be answered in the PDDs (the list of questions is contained in the submitted input). Further, the author suggests the use of the Bayesian approach to evaluate additionality of a project based on the (preferably numerical) evaluation of these answers (description of the approach is contained in the submitted input). (Abhijit Parashar, Indian Youth Climate Network)
	. → I think it is better to ask for a modified procedure of all project types, in order to avoid arbitrary distinctions and unnecessary negative reactions by the selected project types. ( <i>Francesco N. Tubiello</i> )
	→ It would be good to give more guidance on the barrier test; however this would be applicable to all project activities using a barrier test and not only to this category. (Geert-Jan Eenhoorn, Ecofys)
	→ Due to the possibility to choose between the investment and the barrier test, the barrier test will generally be used by project developers who think that they would not pass the investment test. Essentially this means that projects using the barrier test will be highly profitable, regardless of the project type. Despite repeated changes in the barrier test that tried to make it more objective, comparability of barrier assessments remains difficult and practice of barrier assessment during validation is showing serious flaws, especially regarding evaluation of the prohibitive character of the barriers and how the CDM is able to remove/alleviate the barrier sufficiently. The barrier test should be applied consistently to all project types, not just waste heat recovery. To avoid arbitrary assessments, comparable indicators should be used. Ideally, an external justification for the existence of a prohibitive barrier should be provided. Barriers that can also be monetized <i>should not be accepted</i> ; they could be taken into account in the context of the investment test.
	Definition of investment barriers         The current specification of the investment barrier is that similar activities have only been implemented with grants or other non-commercial finance terms and that no private capital is available from domestic or international capital markets. These definitions are sensible, but need to be complemented with methods to prove the non-availability of capital. I thus propose that the project developer has to provide letters from the three largest commercial banks in the host country and one international commercial bank that they are not willing to provide a loan or other financing to



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	<i>the project despite its high IRR</i> . Moreover, the financing agent of the project has to provide a letter with a detailed explanation <i>why they became interested in funding the project under CDM</i> . It is likely that due to differing risk aversion of banks, the argumentation regarding the possibility of financing will differ from bank to bank. Only if it is clear that none of the financial institutions that provide a letter would have financed the project under the investment parameters prevailing without the CDM, the project passes the investment barrier test. <i>Lack of skilled labour barrier</i>
	The current definitions for technological barriers do not allow to assess whether these barriers are prohibitive. Regarding the labour availability barrier, local non-availability of skilled labour can normally be overcome by hiring expatriates at high salaries. It will always be possible to find an expatriate if the salary is high enough and the personal security of staff can be protected by the project developer (see e.g. oil industry in countries with bad governance). I thus propose that the project proponent has to provide proof that no education/training institution in the host country provides the needed skill <i>and</i> that <i>no expatriate workers with these qualifications could reasonably be hired in that host country due to security reasons</i> . This has to be shown by proof that no applications of suitable candidates were received on job advertisements offering internationally competitive salaries commensurate to the qualification required and a security package commensurate to the personal safety risk in the host country.
	Moreover, the project developer has to describe how the CDM allows to overcome the security risk for its expatriates. <u>Infrastructural barriers</u> Regarding lack of infrastructure barrier, I propose the project developer has to show that the infrastructure is not there and that the project would not pass the investment test if the project developer had to provide the infrastructure himself. Technology risk barrier
	Even if process/technology failure risk in the local circumstances is significantly greater than for other technologies, the project can still be the most economically attractive alternative, as a significant increase of the failure risk can be offset by an even higher difference in mean profitability compared to the low-risk technologies. Therefore, the technological risk has to be combined with the investment analysis to be credible. I would propose the following procedure: The project developer provides a statement by an <i>internationally accredited technical certification body</i> about the <i>process /technology failure risk</i> in the circumstances of the host country in terms of downtime during the crediting period. On the basis of this downtime and the resulting loss of output, the investment test is applied. Regarding the non-availability of the technology in the region, this is not an absolute barrier. If one is willing to pay enough money, a technology can be installed anywhere on the globe; the challenge is whether it can be operated properly for the whole crediting period. This leads me back to the technological failure risk barrier. Thus, the barrier claiming non-availability of the technology in the region should be deleted. <i>(Axel Michaelowa, Perspectives GmbH)</i>
	→ IETA would like to reiterate our enduring concerns about the Board's tendency to make the determination of additionality more dependent on financial additionality, a move that directly contradicts the Marrakech Accords (i.e. 17/CP.7. Para 43), which states, "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." Requiring financial additionality was explicitly debated and rejected at Marrakech, and the agreed definition makes





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	it clear that profitability is not, per se, a determinant of additionality. Further, subsequent decisions by the Parties have reiterated the 17/CP.7. Para 43 decision, and given guidance to the CDM EB making it clear that means for demonstration of additionality should be expanded, rather than narrowed. For example, in 2005, para 28 of Decision 7/CMP.1 confirmed that the use of the "tool for the demonstration and assessment of additionality" is not mandatory for project participants and that in all cases the project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board, including those cases where the "tool for the demonstration and assessment of additionality" is attached to an approved methodology. Notwithstanding this clear guidance, the CDM EB is considering explicitly narrowing the scope of the Additionality Tool, and implicitly narrowing the operational definition of additionality to financial additionality. <i>(Henry Derwent, IETA)</i>
	→ The CMIA shares the belief of the Board that the historic approach to barrier analysis has demonstrable shortfalls which have needed to be addressed for some time. At present barrier analysis is unsatisfactory both for rule-makers and for those seeking to follow the rules. Barrier analysis can be effectively applied for first-of-a-kind projects. But a lack of guidance as to what constitutes a prohibitive barrier to a project (and how this should be demonstrated) and the impracticality of such guidance where it does exist, has led to market participants (as advised by DOEs) opting overwhelmingly to seek to demonstrate project additionality through investment analysis – since 1st January 2007, only 22% of large-scale projects have used solely a barrier analysis to demonstrate additionality. This has had negative consequences for the CDM, both in the effective exclusion (and therefore abandonment) of potential mitigation projects which should qualify and in the over reliance on one approach to demonstrating additionality, thereby weakening the system as a whole. In the short term, more guidance is needed on how barrier analysis can be applied in practice for all projects. A detailed elaboration on the applicable barrier analysis should be further pursued, including barriers to investment that are well known and researched today in the economic science literature but not considered in the Tool presently. <i>(Adam Nathan, Carbon Markets and Investors Association )</i>
	→ CMIA therefore suggests that the proposal be considered in the context of wider reform of the CDM and that, rather than moving towards ever increasingly complex tests on individual projects, focus should be on developing sectoral region-specific benchmarks that will allow pre-judgment of additionality of projects prior to significant time and money investment from project developers and DOEs. Alternatively, the general guidance on the use of barrier analysis for all projects should be addressed in the present tool or the issue could be addressed at methodology level, through adding specific guidance on the additionality test for selected methodologies as is being done with ACM0013 for Greenfield grid-connected fossil fuel fired power plants. (Adam Nathan, Carbon Markets and Investors Association)
	→ <u>Post-2012</u> : It is also my understanding that even if such evidence is given, it is still difficult for an external auditor to assess the accuracy of this evidence. The judgments of the importance of a barrier in preventing a project from going forward, and of the importance of the CDM in overcoming that barrier, are very subjective, and therefore difficult for an auditor to test with any level of accuracy. The proposed enhanced barrier test, if applied to all projects using the barrier analysis, could help screen out clearly non-additional projects. But I am skeptical if we can develop an additionality





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	test to an acceptable degree of accuracy, given the subjectivity involved in barriers claims, and vulnerability to storytelling. The investment analysis is also vulnerable to manipulation. As I have written in other comments, I believe that in the post-2012 regime, the CDM needs to be restructured so that additionality is no longer tested on a project-by-project basis, which is necessarily based on subjective assessments of the motivations of project
	participants. (Barbara Haya, International Rivers)