



Proposal regarding barrier testing

Submission regarding call for public inputs on the proposal for an enhanced barrier test for project activities that have a potentially high profitability without CER revenues

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Note: This submission takes up some elements from a submission made in July 2007 regarding best practice in additionality testing, which have not been taken up by the EB so far.

1. When will project developers use the barrier test?

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.

2. Problems with the current barrier test

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.

3. Proposal for improvement of the barrier test

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 *should not be accepted*; they could be taken into account in the context of the investment test.

3.1. 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 the project despite its high IRR. Moreover, the financing agent¹ of the project has to provide a letter with a detailed explanation ***why they became interested in funding the project under CDM.*** 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

Box 1: Investment barrier assessment

Despite a projected IRR of 22%, hydro power company AquaPower has not been able to get a loan for a run-of river hydro project of 10 MW. It provides letters by the local banks InduFinance, DevelopCorp and MoneySafe as well as international bank CrownInvestment that due to the 50% interannual variability of streamflow in the catchment of the hydro plant, the IRR would have to reach at least 30% before they would give a loan. GoldSilver, a financial institution which gives a loan to the CDM project developer, provides a letter that the CDM component has increased IRR by 5% and thus crossed the IRR threshold of 25% that would have prevented financing. GoldSilver is thus less risk averse than the other banks but still would not have financed the CDM project at its original IRR of 22%. Therefore, none of the financial institutions would have financed the project without the CDM component.

3.2. Lack of skilled labour barrier

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 ***and that no expatriate workers with these qualifications could reasonably be hired in that host country due to security reasons.*** 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.

Box 2: Lack of skilled labour barrier assessment

Power company AquaPower wants to introduce a decision making system for optimal operation of its hydro power plants in a very dangerous host country. None of the host country's technical universities is covering such decision making systems in its curriculum for electrical engineering. Due to a high security risk for foreigners, no foreign specialist engineer is willing to work for AquaPower, as shown by the lack of response to job advertisements that offered an internationally competitive salary. Only the hiring of a security squad and the building of a secure housing compound on the project site financed by CER revenues mobilized a sufficient number of foreign software engineers to apply.

¹ If the project is financed by 100% equity, this has to be done by the project developer himself.

3.3 Infrastructural barriers

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*.

Box 3: Lack of infrastructure barrier assessment

Project developer WindForce wants to build a wind power plant. In the host country, there are no cranes available to set up 100 m high wind turbines. Moreover, a road of 20 km needs to be built to the site. If WindForce were to buy and import a crane and build the access road, the IRR of the wind project would fall from 15% to 10%; the most economically attractive alternative would have an IRR of 13%. CER revenues would increase the IRR to 14% and thus allow WindForce to finance the infrastructure.

3.4 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 *internationally accredited technical certification body* about the *process /technology failure risk* 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.

Box 4: Technological risk barrier assessment

Cement company StrongBuilding’s coal-operated 6-stage preheater CDM project reaches an IRR of 30%. However, StrongBuilding provides a certificate by ISO certification body Sure-N-Safe that under the variable coal quality available in the host country, the failure risk of the 6-stage pre-heater is 50% of operation time throughout the crediting period. Thus, cement output reaches only half of the projected level and the IRR is reduced to 15%. As the IRR benchmark reaches 20% in this host country, the project is additional.

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.