IETA
INTERNATIONAL EMISSIONS TRADING ASSOCIATION

23 April 2010

CDM Executive Board
UNFCCC Secretariat
Martin Luther King Strasse 8
P.O. Box 260124
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Germany

Dear Mr. Mahlung,

I write to you on behalf of the International Emissions Trading Association (IETA) and our over 170 member companies to respond to the call for input issued at EB 53 for comments on the Draft "Tool to calculate the weighted average cost of capital (WACC)". Due to the significance of the WACC calculation and the varied impacts that this draft tool could have on IETA members, we have provided a few high level concerns and suggestions below, and then we have included an in-depth explanation of those and additional concerns and suggestions in an annex to this letter.

High-Level Concerns and Suggestions

IETA does not believe that it is possible to over-emphasize the importance of the determination of WACC in the use of the NPV and IRR calculations for the proof of additionality. These tools are widely used and significantly impact the outcomes of requests for registration. Above all, we believe that it is crucial that project participants continue to have access to a range of methodologies and sources of information that can be used in these calculations.

In this respect IETA members view the following as significant, over-arching problems with the tool as currently written:

a) The DRAFT WACC Tool is highly prescriptive;
b) It is not clear how it integrates with the existing guidance in the Additionaity Tool and EB Guidance on Financial Analysis (indeed, we see some contradictions); and

c) It may result in un-necessarily conservative determination of the WACC, under-estimating the real cost of capital and leading to the rejection of truly additional projects.

In the past, IETA members have successfully used a different method known in the financial industry as the Capital Asset Pricing Modal (CAPM) to determine the WACC. The Draft WACC Tool is notably different and, in our view, is not as effective as the CAPM in addressing the multiple risks that project developers face. We suggest that the Meth Panel look closely at the CAPM before developing a second draft of this tool.

IETA would also like to ensure that the Meth Panel and the EB is in agreement with us on the following: The Draft WACC Tool is for use in conjunction with the Additionality Tool. As such, **IETA requests that the Draft WACC Tool is not required to be applied to Small Scale CDM projects and strongly recommends that the EB defines simplified rules for determining a WACC for SSC projects, such as reference to published WACC data.**

Further, considering the time taken to develop a PDD using Financial Analysis Options II or III, **IETA strongly requests that when the WACC Tool is finalized and published, the EB grant a grace period of 3 months during which PDDs can continue to be uploaded for GSP without reference to the WACC Tool.** Further, we seek reassurance that the concepts defined in the WACC Tool will not be applied to any projects that have been uploaded for GSP prior to or during this grace period.

In conclusion, and bearing in mind the proportion of CDM projects that use Financial Analysis Option II or III, **IETA strongly recommends that the Draft WACC Tool be substantially revised and/or complemented with alternative approaches to the determination of WACC.** The resulting tool should:

a) Better reflect the structure of the existing guidance in the Additionality Tool, clarifying how and when project participants may determine a WACC using defined models or use a company internal benchmark, a Government approved benchmark, publicly available benchmarks or another approach if the above are not suitable;
b) Specify that the WACC can be determined by a recognised methodology such as CAPM. In providing guidance on the calculation of the WACC, emphasis should be placed on the importance of justifying the approach adopted, ensuring that risk premiums are not double counted, sourcing publicly available references for data

variables, and allowing the use of realistic default values when no specific values are available.

c) Specify that publicly available data which is already utilized in the investment community can also serve as a source of the WACC, for example, Ibbotson & Assoc 2009 International Cost of Capital Report, which is available (for a fee) from: https://secure.morningstar.net/mstarstore/PurchaseOptions/CapitalCostReports.aspx

IETA believes that both these brief comments and suggestions as well as those in the annex attached to this letter are important and deserving of your attention, and we urge you to consider the entirety of our submission.

Sincerely,

Henry Derwent
President and CEO

Annex 1:
In-Depth Comments on the Draft WACC Tool

Upon review of the proposed tool for determining the weighted average cost of capital (WACC), we find that the concepts used to define the WACC are not necessarily in concert with generally used or accepted financing principles and there are also a number of specific issues with individual steps in the tool. We are of the opinion that the tool is not well suited to application in developing countries. While the proposed tool may work with certain project types and geographies, the lack of consistency with accepted financial practices would create new problems rather than address the existing consistency concerns essential to ensuring environmental integrity. We note the following points:

General issues:

- The proposed tool bases cost of equity on one study using developed country data. As a result, the tool is not applicable outside properly working developed market economies and so by default is not applicable to any CDM host country. The use of a developed country cost of equity fails to recognise the very wide range of additional risks associated with investments in developing countries.
- The draft tool relocates the consideration of risk from the WACC to cash flows. We anticipate that this will be extremely problematic. Whilst risk premiums for sectors and countries are available from published sources, the inclusion of risk in cash flows is much more subjective. It is unlikely that insurance premiums are available for many of the risks which project developers in the CDM may face; in the event that such policies are available, they may be subjective and reflect the insurers understanding of the risks, not the developers. In short, the tool suggests moving from the use of independent published risk factors to subjective and less verifiable means of assessing risk.
- The excessively restrictive division into scenarios and sub-scenarios under which the various assumptions and/or calculations need to be made probably results in more, rather than less subjectivity in the calculations.
- Methodologies in finance literature regarding the calculation of WACC are numerous and subjective. The application of a certain methodology often depends on the specific conditions surrounding the project. The draft WACC tool proposes a defined method based on certain criteria, which might not be appropriate for the situation (see examples in Annex 1). PPs should be allowed reasonable flexibility to select and apply the most appropriate methodology, along with supporting justification and documentation.

- While several of the financial concepts that are being defined are proposed to be calculated based on standard formula and principles, the proposed draft tool tends to depart from the generally accepted principles and definitions for certain of these concepts as can be found in the reference literature and publication from authoritative authors on this topics. As a result, the draft WACC Tool has the potential to miss several key categories of risk that may apply to a project.
- One of the key challenges with the paper and the proposed definitions would be its application to (i) the specific context of emerging markets and in particular LDCs for which parameters and data are often not available and/or representative and (ii) the specific activities undertaken under the proposed CDM project which by definition would not be business as usual and may have little precedent to draw from.
- Restricting PPs to the use of this model alone will have an adverse impact upon the demonstration of financial additionality and could result in additional projects appearing non-additional as the actual cost of capital is not reflected by the WACC tool.
- Whilst we appreciate the need to conservativeness, it is essential that the derived WACC represents as close to the actual cost of capital for that project in that sector and that country. Conservativeness is addressed through the selection of parameters and the sensitivity analysis. The WACC should not be derived so conservatively that it rules out additional projects.

Specific issues:

1) Step 1: We would request more guidance on how to determine whether the project activity can only be implemented by the PPs. Some cases are clear but in other cases, such as where there are multiple parties involved in the management of an asset, it is less clear. In some cases the activity may be open to other parties in theory but only one party (the incumbent) may be able to implement the activity in practice.

2) The multiple scenarios described throughout the draft tool are likely to be difficult to apply in practice and will lead to increased subjectivity.

3) Step 3: The logic behind the description of the scenarios seems to be flawed. Should this perhaps be related to Case II?

4) In Step 3, Option 3A, PPs are asked to document the source of debt financing. If documentation for external loans is required, this will delay the PDD until rather late in the project's development. Furthermore, it is not uncommon that the final terms of the

loan are different from those stated in the letter of intent, which may end up delaying the finalization of the PDD even further. This conflicts with the principle of relying on information, which is available at the time of the decision to invest.

5) In the same step, if a parent company loan is used, the documentation is only valid if the parent company's bond is in the same country as the project. This may not be the case. In other situations, the parent company may have raised multiple tranches of debt with different seniority and hence different rates.

6) In Step 3, Option 3b, the draft WACC Tool introduces commercial lending rates. These should not be confused with project lending rates.

7) Use the cost of government bond rates as cost of debt under Option 3C:

> This option can be used if:
>
> "The government of the host country has issued at least one bond."
>
> "The parameter k can be assumed as the yield of a 10 years bond issued by the government country or, if this is not available, the bond with the maturity which is closest to 10 years."

We would like to point out that in emerging markets (in particular, in most parts of Asia), the issued government bonds are often not listed on exchanges (and hence are illiquid and typically often traded over-the-counter ("OTC")). It is not always simple to get the latest yield-to-maturity ("YTM") of a non-traded government bond. The only source of YTM information would come from brokers in OTC market, which would be difficult to verify from the DOE's perspective. In addition, the YTM might incorporate a "liquidity' discount for a non-traded bond.

In addition, if the currency of the project cash flows in USD, then the appropriate government bond to use is a host country liquid government bond (denominated in USD), however this "ideal" government bond is not always available in emerging markets.

A good proxy can be used with a US government bond which is very liquid, traded on an exchange and denominated in USD. However, in order for this to be used appropriately, there has to be a risk premium incorporated in the WACC to account for country risk. In finance firms, the country risk premium is often incorporated as an adjustment to the

equity risk premium (please refer to our comments on Step 4 below for further discussion of the incorporation of country-specific risk). Such risks cannot be addressed through the project cash flow.

Lastly, the usage of a 10 year bond is not necessarily appropriate for a CDM project activity which must have a longer lifetime than the anticipated crediting period (typically 10 or 21 years). The timeline of the bond's lifecycle should materially match the life of the project's cash flows but longer life bonds, if available, may be less liquid than 10 year bonds.

Therefore, we suggest that language be incorporated in Step 3 of the Draft WACC Tool to allow the usage of USD government bonds, in situations whereby the host country's government bond might not accurately reflect the true cost of risk-free debt and that the lifetime of a bond should be 10 years or longer if a suitable value is available

8) Step 4: The proposed tool bases cost of equity on one study using developed country data. This is not appropriate for CDM projects taking place in emerging markets. The use of a developed country cost of equity fails to recognise the very wide range of additional risks associated with investments in developing countries.

9) Step 4: We note that Step 4 of the tool excludes the consideration of a risk premium in the determination of the WACC, and relocates the consideration of risk to the cash flow which is an option provided in the Additionality Tool:

> "Note: The project risk is not included in this equation because project participants can reflect the project specific risks in the cash flow analysis in the investment comparison or benchmark analysis as laid out in the Sub-step 2C, paragraph 8 of "Tool for the demonstration and assessment of additionality". This tool may include some guidance on project risk measurement in future versions." (Step 4, Option 4A).

Sub-step 2C para 8 reads of the Additionality Tool reads:

> "In calculating the financial/economic indicator, the project's risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions (e.g. insurance premiums can be used in the calculation to reflect specific risk equivalents)."

We anticipate that this will be extremely problematic. Whilst risk premiums for sectors and countries are available from published sources, the inclusion of risk in cash flows is much more subjective. It is unlikely that insurance premiums are available for many of the risks which project developers in the CDM may face; in the event that such policies are available, they may be subjective and reflect the insurers understanding of the risks, not the developers. In short, the tool suggests moving from the use of independent published risk factors to subjective and less verifiable means of assessing risk. Furthermore, we think that the DOEs would have significant difficulties in verifying these risks in the cash flow. Even if insurance policies were available to cover such risks, verifying them would be difficult unless PPs actually enter into such contracts. In our opinion, such insurance cover is not widely available and therefore it becomes impossible to address risks in this manner. As such, this tool will effectively exclude the consideration of technology, project host, sector and a large proportion of country risk.

10) Step 4: Determine the average cost of equity financing (ke)

Estimating the average cost of equity from any combination of the four parameters as specified[1] inevitably ignores several layers of risk.

These equations do not take into consideration the additional layers of risk associated with new or established technologies, well regulated or un-regulated sectors, small scale or large scale projects, liquid or illiquid assets and, very importantly, widely differing investment conditions in different countries.

We would highlight, by way of example, the following issues:

1. **The "Beta"**
   The equity risk premium must be adjusted to reflect the sensitivity of the given industry sector to market risk as a whole (in other words the sensitivity of the investment to *systemic* risk). This is measured by an investment's "beta", which is incorporated into the CAPM approach referred to our previous correspondence, but omitted from the Draft WACC Tool.

2. **Country-Specific Risk**

[1] Namely: RF = Risk free rate, GBi = Yield of a government bond issued by the host country, CDS = Country Default Spread, PEg = General or global equity risk premium.

Given the emerging market-focus of the CDM, country-specific risks are a key component of overall investment risk. Equations (2), (3) and (4) attempt to quantify country specific risk by reference to government bond default spreads. However, government bond default risk is only one component of overall country-risk and, on its own, is not a comprehensive measure of such risk in private investments. Equity country risk is likely to be greater than the country's default spread – Aswath Damodaran of New York University, for instance, estimates local equity market risk to be approximately 1.5 times greater than risk measured by comparable government bond default spreads.[2] Furthermore, there may be additional country specific reasons why the sovereign credit risk of a country may be a misleading indicator of the total risk in investing in a specific sector in that country.[3] We would suggest therefore that the tool is revised to allow a range of approaches to country-specific risks, including the modification of default-spreads to reflect the extra risk of equity investments, in addition to referencing third party estimates of risk specific to given countries.

3. **Currency**
   The consideration of the underlying currencies in emerging market investment analysis is critical. It is necessary, for instance, to distinguish between functional currencies (i.e. the currencies of the physical cash flows) and reporting currencies (the currency in which the analysis is presented). A cost of equity calculation (and a cost of debt calculation) should be consistent with the currency of the cash flows which are discounted. This is particularly important when a mixture of "hard" currencies (such as the US Dollar) and emerging market local currencies are incorporated into the analysis in various ways. However, the Draft WACC Tool does not give consideration to these issues.

IETA notes that this list of issues may not be comprehensive.

We acknowledge that there are subjectivities involved in these considerations and that it is extremely difficult to prescribe an exact methodology to deal with all risks, for all proposed projects. However, we ask that the draft WACC Tool is revised to give greater

[2] Refer to:
http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html
[3] Refer, for instance, to *Opening Doors in Emergy Markets*, Citigroup, March 2008 – specifically Section 3 – Calculating the Cost of Capital for Emerging Markets.

flexibility for PPs to adopt appropriate methodologies, given the range of issues that are relevant.

11) In Step 4, Option 4B, the Draft WACC Tool also states that under certain scenarios

> "For PEg a default value of 4.1% is used"

We would request clarification as to why this input (the "*General* Equity Risk Premium") is set at 4.1%, whereas on page 4 the PEg (the *Global* Equity Premium) is set at 4.7%The LBS paper referenced concludes that the "annualized equity premium for the world index was 4.7%" (see page 1 of the LBS report), though elsewhere the paper does refer to a risk premium of 4.1% for the world excluding the US (page 17), so we infer that the "General Equity Risk Premium" in Option 4B proposed is set by reference to the equity risk premium for the world excluding the US, while the "Global Equity Risk Premium" is set by reference to the relevant premium for the world as a whole – but this is not explained in the Draft WACC Tool. We would ask for clarification of this specific point.

Furthermore, we see no justification for utilizing one general equity risk premium as a proxy for equity risk in all kinds of projects. It should be possible to used a country specific risk permium.

This treatment of equity risk premium will act to discourage CDM development in countries which lack a stable investment environment – i.e. many of those countries which should otherwise be hosting CDM projects and benefitting from the sustainable development aspects of carbon finance.
Therefore, we propose that the Draft WACC Tool reconsiders the definition of the general equity risk premium and also allows the use of a country specific risk permium.

12) Step 5: Determine the percentage of debt financing (wd), and equity financing (we)

> "Option 5A: Use the latest balance sheet under local fiscal/accounting standards and rules"

For the calculation of the debt-equity ratio, the latest balance sheet is appropriate only in situations whereby the project has already achieved its ideal capital structure defined at financial closure.

However, in situations whereby the PDD is written before the ideal capital structure for the project is defined, then the targeted debt-equity ratio is more appropriate to be used. Forcing PPs to utilize a debt equity ratio of 50/50 is un-realistic because in most CDM projects, such high proportions of debt are typically difficult to obtain until the project has achieved stable cash flows (typically after registration, implementation and delivery of revenues).

Therefore we propose that Step 5 is amended to allow the use of a targeted debt-equity ratio. This can be used when the capital structure has not been defined either by the time of financial closure or in advance of financial closure. Furthermore, in some countries, data on industry average debt equity ratios is publicly available or can be calculated from actual company data available from data providers such as Yahoo Finance, Capitaline, Rediff money or Bloomberg. Such data would be a better approach than an arbitrary value of 50/50.

13) Step 6: Determine the applicable tax rate (T) pre tax was permitted or indeed preferred

> "The applicable tax rate will be the official value of the corporate tax rate as issued by the internal revenues service agency or similar institution in the host country of the CDM project. If the Government has differentiated values according to the revenues levels of legal entity; document and justify this scale."

The usage of applicable tax rate is a highly subjective issue. For example the choice of of *marginal* tax (being the corporate tax rate applicable to the "top band" of income earned – in other words the highest applicable corporation tax rate) versus *effective* tax rate (being the average corporate tax rate paid, but additionally encompassing all tax and tax reliefs applicable to the project) to calculate the tax shield impact may vary on a case-by-case basis.

The marginal corporate tax rate is often used as a proxy, as in most cases the effective tax rate is difficult to predict (tax incentives, tax leakages between entities, etc need to be incorporated). However, in cases where the future effective tax rate on debt can be reasonably estimated, it is arguably more appropriate to use the effective tax rate i.e. the tax shield calculation impact would be more accurate.

In addition, the paragraph above makes the material assumption that the debt used in the project is obtained in the host country (hence applying the host country tax rate).

However, this situation is not necessarily true in all cases e.g. the debt could be raised in a different country by the parent company (of the project owner). The appropriate tax rate to use would then be the tax rate applicable to the parent company.

Therefore we propose that the Draft WACC Tool is revised to make the language in this paragraph less restrictive, and allow projects the discretion to use the appropriate tax rate relevant to the type of debt used in the project (with suitable justification and documentation).

14) The Draft WACC Tool is not fully consistent the EB guidance. In the current Tool for the Demonstration and Assessment of Additionality, paragraph 6 provides several different options for establishing a WACC and it must be clear that the Draft Tool only addresses the situation where the PPs calculate their WACC using publicly available information. The use of an internal company WACC or a Government approved WACC or an alternative approach still remain valid. Furthermore, paragraphs 6 a) reads as follows:

> (6) Discount rates and benchmarks shall be derived from:
>
> (a) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial) expert or documented by official publicly available financial data;

This guidance specifically states that "Government bond rates are to be increased by a suitable risk premium…" whereas the Draft WACC Tool addresses a significant element of the risks via the cash flow. The section of Additionality Tool quoted in the Draft WACC Tool (Sub step 2c Paragraph 8) states "the project's risks can be included through the cash flow pattern" which indicates that this is not a mandatory requirement and risks can be addressed in other ways.

The guidance in the Additionality Tool also leaves it open for other methods to be utilized but overall, it is not clear when the Draft WACC Tool should be applied or when other methods can be utilized.

The EB's Guidelines on the Assessment of Investment Analysis paragraph 11 state "Due to the impact of loan interest on income tax calculations it is recommended that when a project IRR is calculated to demonstrate additionality a pre-tax benchmark be applied." This tool describes a post tax approach.