CDM Watch
Scrutinizing Carbon Offsets

UNFCCC Secretariat
Martin-Luther-King-Strasse 8
D 53153 Bonn
Germany

October 15, 2012

Anja Kollmuss
CDM Watch
Rue d'Albanie 117
1060 Brussels
Belgium

Subject: Call for public input on the "Draft guidelines for determination of baseline and additionality thresholds for standardized baselines using the performance-penetration approach"

Dear Madam or Sir,

CDM Watch would like to thanks the CDM Executive Board for the opportunity to provide inputs on the "Draft guidelines for determination of baseline and additionality thresholds for standardized baselines using the performance-penetration approach". Please find our input on the following pages.

Sincerely yours,

Anja Kollmuss

GENERAL COMMENTS

CDM Watch welcomes the opportunity to provide comments on the draft guidelines. We believe that the guidelines provide an interesting approach for some project types and sectors but that they are not suitable for many project types, including the proposed application to fuel switch projects. In addition, the proposed guidelines used in combination with the "Guidelines for the establishment of sector-specific standardized baselines" raise a number of concerns that could result in the registration of many "common practice" projects which would be declared as automatically additional or inflate the baseline emissions. According to a preliminary assessment by CDM Watch, the specific proposal for fuel switch projects could result in the issuance of non-additional CERs in the magnitude of hundreds of millions of CERs. CDM Watch is therefore concerned that the proposal as it stands would seriously undermine the environmental integrity of the mechanism.

CDM Watch therefore recommends that the current approach and concepts towards standardized baseline are re-considered and that the "Guidelines for the establishment of sector-specific standardized baselines" are put on hold and subsequently entirely redrafted, with involvement of experts in the field and relevant stakeholders. Specific comments, including on the issues raised in the call, are provided below. They explain in more details the concerns.

In the light of the serious potential impacts of the proposed guidelines, CDM Watch also recommends that future proposals are accompanied by a quantitative impact assessment. Impact assessments are a useful feature to understand the implications of new proposals. Conducting impact assessments is also common practice in many national and international organizations that develop regulatory frameworks.

THE USE OF A PERFORMANCE PENETRATION APPROACH IS NOT APPROPRIATE FOR SEVERAL PROJECT TYPES, INCLUDING THE SWITCH TO A LESS CARBON INTENSIVE FUEL

The use of a market performance-penetration approach is promising for some sectors with newly emerging technologies that have not yet penetrated in the market. In such cases, costs are reduced and barriers are overcome with increasing penetration of the technology in the market. With increasing market share, the technologies further innovate. This applies, for example, to energy efficient appliances, such as efficient lightening (e.g. CLFs and LEDs).

However, for most fuel switch projects other factors than technological innovation are the driver or barrier for their implementation. For example, the technologies using natural gas or hydro power resources are well established. The same holds for many (but not all) biomass technologies. The key factor determining their use are the costs compared to conventional technologies and the availability of the fuel. For example, the share of hydro power in countries depends largely on the availability of hydro power resources and not on the question whether the technology has already innovated and penetrated in the market. The same holds true for natural gas and to a large extent for the use biomass. In other words, the fuel mix in a country depends largely on the availability of fuels and their costs but not on issues related to performance or innovation.

For this reason, a performance penetration approach is inappropriate to determine additionality or baseline emissions for fuel switch project types. Using this approach can lead to absurd results as shown in the following examples:

- Many countries use significant amounts of biomass for energy generation. However, the biomass potential is limited and hence the share of biomass in the overall fuel mix is relatively low (globally on average about 10%). However, even if the potential of biomass availability is limited, its use can be economically attractive in captive power plants although the costs per unit of output are higher than the costs for coal power plants. With the proposed market penetration performance approach and the comparison of costs per unit of output (rather than considering the specific circumstances of the industry), in most countries all new biomass projects would be declared as automatically additional, even if biomass has been used for decades without CDM revenues in the relevant sectors without any carbon market incentives.
- In coal dominated countries like China or India, in sectors such as power, cement or iron and steel, all projects using a less carbon intensive fuel may be declared automatically additional, although many such fuel switches may occur because of changes in fuel prices or availability and not because of incentives from the CDM. For example, in many cases the unit cost of output of gas power plants are higher than for coal power plants, however, gas power plants are used as peak load plants whereas coal power plants are used as baseline load plants. This could result in a massive supply of non-additional fuel switch projects.
- On the other hand, in hydro power dominated countries, such as Brazil, no project switching from coal to a less carbon intensive fuel (e.g. biomass) may be considered additional even if such projects face significant barriers or costs, as hydro power would be identified as the common practice technology.

In conclusion, the examples show that an approach that is based on market penetration and/or performance does not lead to meaningful results for projects that intend to use a less carbon intensive fuel. It is likely that many projects that are clearly BAU and that have been implemented on a large scale without CDM incentives would be declared additional. On the other hand, in some countries no projects at all may be eligible. Establishing standardized baseline for fuel switch projects may be particularly challenging or even impossible. We therefore recommend to focus first on sectors where performance is mainly driven by technological innovation and diffusion and not geographical factors (e.g. resource availability) or the relative costs of different existing and new plants.

THE USE OF STATUS-QUO DATA DOES NOT REFLECT TRENDS AND CHANGES IN THE INDUSTRY

The proposed approach, in combination with the "Guidelines for the establishment of sector-specific standardized baselines", implies that status quo data in the sector from recent historic years is used to determine whether new projects are additional and to calculate their baseline emissions. In this way, recent trends in an industry are not reflected but the data is largely based on an (old) stock of already built plants in the sector. As a consequence, the determined thresholds could be meaningless and projects may be declared as additional, although they would be clearly implemented without the incentives from the CDM.

This is illustrated with an example from the power sector which reflects the circumstances in a number of countries, including China and India. Power plants are usually operated for 20 to 40 years, depending on the technology. Many developing countries have a very large stock of coal power plants. However, in a number of countries natural gas was recently made available and new natural gas power plants are being constructed. These natural gas power plants can make up a significant share of newly constructed power plants in a particular region;

however, their share in the overall stock of power plants may remain low for decades due to the long lifetime of the plant stock. The proposed guidelines would not reflect the new availability of gas, even if natural gas power plants have recently become "common practice". Natural gas power plants would be on the right hand side of the proposed performance penetration curve.

In conclusion, the use of data on the total stock of plants in a sector with long life times is not appropriate to reflect ongoing trends and changes in the sector. Trend data or data on plants under construction would be better suited to reflect recent trends and practices in the industry.

HOST COUNTRY LEVEL APPLICATION IS IN SOME CASES NOT APPROPRIATE

The Guidelines propose that the analysis to determine thresholds be conducted for an entire host country. This does not seem in line with the "Guidelines for the establishment of sector specific standardized baselines" which specify that in case not all fuels are available on a national level, the analysis should be conducted for specific regions. Indeed, undertaking the analysis at host country level may not lead to meaningful results. For example, in mountainous areas of a country the use of hydro power may be common practice, while at national level the market share could be relatively low. In such cases, all new hydro power plants could be declared automatically additional, although they do not face significant barriers in the specific region where hydro power is available. A similar situation often applies to the use of natural gas. In many countries, such as China or India, natural gas is available in some regions and provinces but the share is relatively low on a national level.

In conclusion, using a single country approach is inappropriate given the vastly different conditions that may be found in different regions of large countries. Also in small countries, many technologies may have very low penetration rates or not be used at all. This may be solely due to the small size of a country and not due to barriers.

DATA AVAILABILITY

The proposed approach requires relatively detailed data including on the stock of plants, their fuel use as well as their performance. This data may often not be available or not sufficiently accurate to conduct a proper analysis. The report of the Methodologies Panel on ACM0013 highlighted that in many cases the project developers did not use the required data but derived key data indirectly from other data. For example, the performance data on power plants was sometimes derived from regulations on coal supply. In this regard, the approach may be very challenging to apply in practice, in particular in sectors where performance data is not publicly available and where competitiveness issues may arise.

DATA VINTAGE

An important aspect in establishing standardized baselines is the vintage of data. The data vintage depends on the sector involved. In many cases, relevant data becomes available only with a vintage of 1 or 2 years. Developing and approving a standardized baseline may take another year. Only then can projects undertake validation and request registration. This may take another year. In conclusion, once a standardized baseline is used to assess additionality and quantify the baseline emissions, the underlying data may already have a vintage of at least 3 to 4 years.

In addition, in some sectors, projects require considerable lead times until they start commercial operation. For example, in the case of large industrial facilities in sectors such as electricity, cement, iron and steel, the process from the feasibility study where the design and technology is fixed to the start of commercial operation of the plant can take 3 to 10 years. For example, in the analysis by the Methodologies Panel on ACM0013 an average lead time of about 7 years for new coal power plants was observed based on information provided in PDDs. If data on commercially operating plants is used to derive the standardized baseline, this could add several years to the data vintage.

For the proposed performance penetration rate approach this could imply that the data used is actually based on plants that were planned about 10 years ago. This again implies that recent developments, such as the exploration of new gas fields or the construction of LNG terminals, cannot be reflected in the data. In some cases, this may lead to a situation where the performance curves used to determine additionality and baselines do not reflect reality at the time when project participants make their investment decision. This could either lead to the registration of clearly non-additional projects or the rejection of clearly additional projects because they would not qualify as additional under the outdated baseline (e.g. if recently coal became more important in the fuel mix). This provides further reason to why the use of historical fuel mix data is inappropriate for establishing standardized baselines for fuel switch projects.

"PICK AND CHOOSE" COULD FURTHER UNDERMINE THE INTEGRITY OF THE APPROACH

The Board decided that the use of standardized baselines is voluntary. This implies that project developers can pick and choose between a project-specific and a standardized baseline. In practice, project developers will use standardized baselines mainly if they award them more emission reductions or make the assessment of additionality more lenient, while projects that have higher project-specific baseline emissions or which may not pass the standardized additionality test will use the project specific approach.

With the proposed approach, all projects using a low GHG intensive fuel may potentially be regarded as automatically additional, while the projects with a GHG intensive fuel may simply use an approved methodology instead of the standardized baseline to claim emission reductions (e.g. coal power projects). An approach which renders some projects as automatically additional but does not exclude projects from the CDM that are above the performance threshold may further corroborate the integrity of the mechanism.

CDM Watch therefore recommends that all standardised baselines be mandatory.

IMPACTS OF THE PROPOSED APPROACH

As highlighted in the general comments above, an impact assessment is vital in order to objectively assess the appropriateness of new proposals on standardized baselines.

CDM Watch conducted a simple impact assessment for hydro power plants in China.[1] The electricity sector in China is dominated by coal power and a coal power would be within 50% / 20% band proposed in the guidelines.

[1] Information is based on energy statistics published by the U.S. Energy Administration Information

This means that the performance threshold for the determination of additionality and baseline emissions would be coal power. Existing coal power plants also have relatively low costs per unit of output which may be on average lower than the costs for new hydro, biomass or natural gas power plants. Consequently, all hydro, biomass and natural gas power plants could potentially be regarded as automatically additional.

The emission factor for efficient coal power plants (e.g. top 20% performers) would be in the magnitude of 0.8 t CO_2 / MWh. Over the period 2000 – 2009 China added on average 13 GW of new hydro power capacity per year. Hydro power plants in China operated with an average plant utilization of about 36%.

If the historical trends continue, this implies that each year hydro power projects in China with a CER volume of about 80 million CERs or more could qualify as automatically additional, even if the construction of new hydro power is economically attractive and has been undertaken historically to a significant extent without any incentives from the CDM. Taking into account the hydro power development in many other countries and considering natural gas, oil and biomass projects, the potential inflow of CERs from business as usual projects would likely be significantly larger and could easily range in the hundreds of millions of CERs per year and accumulated in the order of several billion CERs.

CDM Watch therefore recommends that the current approach and concepts towards standardized baseline are re-considered and that the "Guidelines for the establishment of sector-specific standardized baselines" are put on hold and subsequently entirely redrafted, with involvement of experts in the field and relevant stakeholders.

In the light of the serious potential impacts of the proposed guidelines, CDM Watch also recommends that future proposals are accompanied by a quantitative impact assessment.