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Submission on Standardized, multi-project baseline to SBSTA

Global Wind Energy Council (GWEC)

Introduction

The project-specific nature of the CDM has been seen as an asset, ensuring the environmental integrity of the projects registered and increasing confidence in the mechanism itself. We now have some years of experience with the CDM, and with which types of projects work and which ones do not; and there is both the opportunity and the need to scale up CDM investments and thereby realize the full potential of the mechanism in terms of emissions reductions as well as its contribution to the sustainable development of Non-Annex I countries.

One such possibility is the development of multi-project baselines for certain types of projects, which would streamline and simplify the CDM process and increase its transparency and certainty. The rationale behind this is to strike the right balance between ensuring environmental integrity and minimizing transaction costs to encourage private sector investment in emission reduction projects.

Why is the standardized multi-project baseline necessary?

We can already see changes in the typology of projects in the CDM pipeline. HFC, PFC and N2O reduction projects, which currently represent 2% of registered CDM projects, account for 75% of issued CERs . However, their significance in the CDM pipeline is steadily decreasing, and by 2012 it is expected that these projects will account for only 26% of issued CERs [1].

At the same time, renewable energy and energy efficiency projects are gaining 'market share'. These represent more expensive CERs in terms of € invested per ton of CO_2, but they are also projects that contribute the most to a long-term, low-carbon infrastructure. Of the 2712 projects currently in validation, only 16 projects are HFC, PFC and N2O reduction projects (0.6% of the validation pipeline), compared to 1648 projects which belong to the renewable energy category (60.8% of the validation pipeline).

We see the introduction of standardized baseline as one way to speed the uptake of renewable energy projects, which will play a much more significant role in bringing sustainable development to host countries. This submission focuses on how the standardized baseline as a concept could be interpreted and how it could work to enhance the development of renewable energy power projects.

[1] Source: CDMPipeline.org March 2010

Should wind be included within the standardized multi-project baseline?

The contribution of wind energy towards a new, more sustainable and secure development model has become a substantial component of strategic energy planning in many OECD countries. Wind energy is the most mature of the 'new' renewable energy technologies, and is most likely to contribute in the short and medium term to the development of a sustainable energy system. OECD countries have put in place mechanisms such as feed-in tariffs, renewable portfolio systems, tradable certificates, etc., to facilitate the development of wind energy in their countries. The growing electricity demand in many developing countries means that it is essential that they need to be involved as well. A polarization between developed and developing countries should be avoided, and the climate regime should seek to help ensure that clean energy becomes available to all.

The level of financial support made available to non-OECD countries for the purpose of reaching the stated objective of keeping global mean temperature rise to below 2°C is still unclear. But one of the early success stories of the CDM has been its contribution to the development of the wind power industry in a few developing countries. Wind CDM projects have already won the confidence of investors and have proven they can increase the effectiveness and reduce the effort that developing countries need to make in order to decarbonize their electricity systems through investments in wind energy. The CDM has, to date, promoted the development of 35,741MW of wind.

Wind CDM projects		
Country	Projects	MW
India	359	6246
China	439	24902
Mexico	16	1964
Brazil	10	674
South Korea	13	354
Cyprus	6	261
Egypt	4	406
Chile	6	174
Morocco	3	92
Dominican Republic	2	165
Costa Rica	2	69
Nicaragua	1	40
Philippines	1	33
Panama	1	81
Mongolia	1	50
Jamaica	1	21
Colombia	1	20
Israel	2	34
Argentina	1	11
Vietnam	1	30
Uruguay	3	74
Sri Lanka	1	10
Cape Verde	1	28
Thailand	1	3
Ecuador	1	2
Total	877	35741

Source: http://www.cdmpipeline.org – accessed March 1, 2010

This is a good start, but at least five times as much wind power in developing countries will be required by 2020, even in order to meet the IEA's 450ppm scenario[2], even though the emissions levels in that scenario only give us a small chance of staying below 2ºC.

From the table above, it is also evident that three countries account for 93% of the wind power projects (in terms of capacity) proposed under the CDM: China (70%); India (17%); and Mexico (5%). The multi-project baseline would go a long way towards helping even out the regional distribution of projects, as it would remove barriers and reduce transaction costs associated with registering a project in a country with little experience in wind power.

This is not to say that the CDM in and of itself can incentivize wind energy development. A full suite of national policies and measures IN ADDITION to the CDM are the prerequisites for success in this area. The most successful countries in terms of renewable energy development are those who have made renewable energies a national priority, but the establishment of a multi-project baseline could help even out the field between the countries with more experience and those with less.

How would it work?

We see the standardized baseline as an opportunity to help to improve and to reform the current project-based CDM. Standardization refers to the adoption of generally accepted uniform processes, and to enable objective comparison or judgment to simplify the project development process[3]. We would like to see the "standardization" of the CDM happen at two different levels: one is the standardization of the establishment of baselines as the title implies, focusing on the adoption of uniform factors and/or procedures; and two, standardization at a broader level, in the determination of additionality. The following section elaborates how the standardization can happen at these two levels for renewable energy electricity generation projects in general, and specifically for wind energy.

a. <u>Standardization of baselines</u>: ACM0002 is the methodology designed for grid-connected renewable energy power plants. In the methodology there is a standardized baseline emission factor, called the Grid Emission Factor (GEF). GEF differs by country and region, but usually one grid system shares one common GEF. Currently, in most of the CDM Project Design Documents (PDD), the project proponents (PPs) are responsible for calculating the GEF on a project-by-project base. However, it would be much simpler if the GEF could be calculated by an authority in each country and the PPs can simply use them in PDDs.

There are practices like this going on right now in some of the CDM host countries. The Chinese DNA publishes grid emission factors every year for the seven regional grids. However, this practice is not recognized by the EB as a valid procedure for standardization of the baseline and emission reduction calculations. In reality, the

[2] WEO 2009

[3] IETA, Multi-Project, Standardized Baselines: Explaining A Key Issue in the Reform of the Clean Development Mechanism

Chinese DNA's unified calculation of the GEF has been used by PP and DOEs; but because of a lack of authorization from the EB or the COP, the PP has to do the calculation step by step following the "grid emission factor" calculation tool to calculate the emission factor for each project, This process is purely a waste of time and energy. We suggest that SBSTA recommends to the CMP a decision to authorize the utilization of these standardized GEFs in methodology ACM0002 and allow each DNA, or other central authority, to develop national and regional (where applicable) GEFs.

b. Standardized procedures for the determination of additionality: Standardization can also play a significant role in the additionality test. Although different countries have different circumstances and different renewable energy penetration rates, which should be taken into consideration when trying to standardize additionality establishment of a CDM project, a number of issues could be dealt with here which would streamline the process, reduce costs, and increase the geographic distribution of CDM project investment.

i. **Create a Positive List:** A Positive list would designate certain technologies as additional without going through the additionality test. The use of a Positive List was proposed as one of the options for renewable energy projects when the Marrakesh Accords were negotiated. It was once again on the table in the process from Bali to Copenhagen as an option for CDM reform for the post-2012 climate regime.

At present 'new' renewable energy electricity generation technologies are usually more expensive than unmitigated fossil fuel technologies. Without national support schemes, such as an RPS or feed-in tariff, renewable energy won't reach its potential in either developed or developing countries. Especially for developing countries, where the responsibility for financing renewables is in most cases shared by the whole nation's electricity system, it is difficult to argue that these renewable energy projects, with tariffs in some cases 2-3 times those of fossil fuel technologies, are not additional. In this case, we believe that all wind projects in developing countries should be granted additionality, no matter what national supporting policies are in place.

However, we understand the current debate and political concern over this issue and automatic additionality granted to all 'new' renewable energy in all developing countries is apparently not possible given the current state of negotiations. Therefore, we propose that a Positive List be established for 'new' renewable energy electricity projects in the Least Developed Countries (LDCs) and Small Island Developing States (SIDs).

The technology penetration rates in these countries are quite low, as the case of wind power illustrates. While the total global capacity of wind power reached 159GW at the end of 2009, total installations in sub-

Saharan Africa was only 29MW (.018%). While a Positive List will not rectify this imbalance in and of itself, it would help.

Most LDCs don't have a renewable energy support scheme in place and in most cases cannot raise the capital to finance new capital-intensive plant, even though the macro-economic benefits to the economy through local economic development and decreasing dependence on imported fuel may be considerable. While this would not solve that problem in itself, it would create an additional potential revenue stream which would help make potential projects attractive to investors.

A Positive List could also help improve the regional distribution issue across the LDCs as well as providing social and economic benefits through employment, investment, and technology transfer.

For all these reasons, we believe renewable electricity technologies, especially wind power, as the most mature of the 'new' RE technologies, should be put into a positive list for LDCs and Small Island Developing States (SIDs).

ii. **Promote the use of the Barrier Test for Additionality** in countries with a lower penetration of renewable energy technologies. Currently, there are two approaches for determining the additionality of a project: the investment test and the barrier test. The investment test focuses on the investment aspects of the proposed CDM project to show that the project is not financially attractive without CDM finance. The barrier test requires the PP to show that there are barriers for the project to be carried out without CDM finance, such as technology barriers, investment barriers, and common practice barriers.

Compared with the investment test, there are some advantages to using the barrier test. The barrier test is often much simpler as compared with the investment test. Moreover, in some cases, such as India, most of the projects in Public Sector Units (PSUs = state-owned enterprises), cannot pass the investment test, as their internal rules mandate a certain IRR in order to be approved by the government[4]. For a proposed CDM project to pass the financial additionality test, the project must show that is it not financially attractive, in direct contradiction to the government rules

In these cases, if the project applied the barrier test, it could be shown to be additional and be approved. However, the barrier test is currently under-utilized as it is not encouraged by the EB and DOEs. Barrier tests are only carried out in projects which are "first of its kind" projects for

[4] Michaelowa, A. Muller, B. 2009, The Clean Development Mechanism in the Future Climate Change Regime. Climate Strategies. UK.

new technologies. Once the technology has been used for several projects, the barrier test is not allowed to be used for this technology.

We can understand that rationale behind this i.e., that once a technology reaches a certain penetration rate, then it would be hard to justify the use of the barrier test to establish its additionality. However, a single, or only a few projects will generally be insufficient to overcome the real barriers, and we feel a broadening of the use of this test is justified by real circumstances on the ground in developing countries.

We propose that the CMP and the EB should encourage the use of the barrier test for determining the additionality of renewable energy projects in developing countries, or a region in a developing country, when the technologies' penetration hasn't reached a high level or become mature in that particular country or region.

We suggest using a combination of the technology penetration rate and the total installed capacity of a certain technology as the criteria to assess the maturity of this technology, and to ascertain whether or not the barriers have in fact been overcome. The reason for this is that in some countries, although certain technologies might have been installed, due to the country's huge electricity consumption, the penetration is still very low and the barriers remain. On the other hand, in some other countries, because the total electricity production and consumption is very low, when certain technologies have deployed only a project or two, the penetration rate could be substantial. Thus, we suggest using the combination of both technology penetration rate and the total installed capacity as criteria for the assessment of technology maturity.

We also suggest that an assessment could be carried out to assess the technological maturity of a technology in a country or region. In some cases the assessment should be done at the regional level (region here means regions that is within a country, such as a state or province), as in some countries, there may be regional barriers to deployment, and these circumstances should be taken into consideration.

So, for instance, SBSTA can recommend a level for both the technology penetration rate and deployment of the technology (installed capacity); beyond which projects using a particular technology could no longer use the barrier test.

The SBSTA, with the agreement of the host county, could request independent agencies such as the IEA or IRENA to do an assessment of the technology penetration rate in individual developing countries/regions, who are interested in securing CDM finance to assist with the development of renewable energy. Failing that, a methodology/protocol could be devised on how to assess the technology penetration rate/extent and the barriers to further development, perhaps

supported by technical expertise from international agencies. This rate should be periodically (e.g., every two years) reviewed and reported to the UNFCCC. Or perhaps this could be a job for the new Technical Panel envisaged in the Copenhagen Accord.

In the mean time, barrier test should be more standardized, which makes it easier for the PP to follow.

iii. **Standardization of the investment test:** For countries whose technology is deemed mature on a national and/or regional basis, the investment test should be used instead of the barrier test. This would be the case for most of the renewable energy projects in the current CDM pipeline.

However, the investment test should be further standardized. Currently, the investment test is very far away from common financial and accounting practices. The standardization of CDM should not only apply to the CDM rules, but they also need to be harmonized with real world practice.

Moreover, we have observed a tendency for the EB to increasingly scrutinize host countries' domestic policies to support renewable energy. With the recent controversy over Chinese wind CDM projects, for example, the EB has in effect used evidence from individual projects to draw conclusions, and has concluded that the government is 'gaming' the tariffs to procure CDM financing, when the reality is that an analysis of the sector as a whole shows nothing of the sort. We believe the EB, if it is going to look at policy, should examine the whole sector in question, rather than cherry picking examples to try and prove a point.

In this case, where there is a complex political issue related to a suspicion of 'gaming' related to the host country's domestic policies, we recommend wider consultation with independent agencies who are specialized in the energy sector, such as the IEA or IRENA, as well as more fully engaging with the industry as a formal stakeholder in these consultations.

Conclusion

In summary, what we propose is as follows:

1. The standardized baseline has already has some early application in the ACM0002 for renewable energy power plants. However, the grid emission factor (GEF) calculation can be much simplified by letting one central authority calculate these factors rather than on a project by project basis, and update them every year

2. Standardization of additionality testing: As representatives of the wind power industry, we naturally believe that all wind projects in developing countries should be deemed additional, as in the absence of a functional CO_2 price or the inclusion of other 'externalities', fossil fuels have an unfair advantage. However, given the political reality of the negotiations, we propose the following to simplify the additionality determination of renewable energy electricity production projects:

    a. Develop a Positive List for renewable energy technologies in LDCs and Small Island Developing States (SIDs). It would on the one hand promote renewable energy in these countries and benefit the sustainable development of local communities; and on the other hand it could help address the regional distribution of CDM projects.

    b. For countries where the technology is not mature (which should be assessed by taking into account both the penetration rate and the total deployment of the technology), encourage the use of the barrier test for renewable energy projects. The barrier test procedure should be simplified and standardized to allow a wide application of this approach.

    c. For countries with a higher level of technology penetration, improve the current investment test, and seek more harmonization between the investment test and common accounting and financial regulations. Although the CDM needs to ensure the environmental integrity of projects, it should not stray too far from common financial and accounting practices in the real world. At the same time, where major decisions are required to assess the impact of a CDM host country's national policies on CDM, the EB should involve more specialized agencies to participate into the decision making process, and the industry sector's participation should be formalized and encouraged.

We understand that the concept of the standardized multi-project baselines is still evolving. Not all technologies are equal, and not all countries have the same requirements and/or priorities, and therefore multi-project baselines should complement, rather than replace, the project-by-project approach, which will continue for many sectors. But there are many sectors and countries where the multi-project baseline may be applicable and beneficial. In conclusion, standardized multi-project baselines offer the opportunity to enhance the impact, efficiency and regional distribution of the CDM while, at the same time, maximizing its contribution to emission reductions, the sustainable development of Non Annex I countries, and the transformation of the global power sector towards decarbonisation in line with rigorous climate protection objectives.