CDM Watch
Scrutinizing Carbon Offsets

Head and Members of the CDM Executive Board
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April 30, 2012

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Subject: Call for public input on "Issues included in the annotated agenda of the sixty-seventh meeting of the CDM Executive Board and its annexes"

Honorable Members of the CDM Executive Board,
Dear Mr. Duan,

CDM Watch would like to thanks the CDM Executive Board for the opportunity to comment on the annotated agenda to the 67th meeting of the CDM EB. Please find our comments on the following pages.

Sincerely yours,

Anja Kollmuss

COAL POWER IN THE CDM: ACM 0013

> **57.** ►**Action:** The Board may wish to consider:
>
> (a) The draft revision of the methodology ACM0013 "Consolidated baseline and monitoring methodology for new grid connected fossil fuel fired power plants using a less GHG intensive technology", prepared by the Meth Panel in response to the requests contained in paragraphs 91 and 38 of the reports of the sixty-fifth and sixty-sixth meetings of the Board, respectively, as contained in annex 13 of the report of the fifty-fifth meeting of the Meth Panel;
>
> (b) The inputs received to the call for public inputs launched by the Chair of the Meth Panel on the draft revised methodology mentioned above.

We welcomed the opportunity to comment on the draft revision of ACM0013. Aided by the Stockholm Environment Institute (SEI) we carefully examined the proposed changes. You will find our input in the Annex to this submission. SEI made several key observations on why the methodology revision is still problematic. For example, issues such as the small efficiency gains, the large project emissions, the impact of other variables on plant efficiency (→ signal to noise ratio issues), and the lack of data quality are still not sufficiently addressed.

Along with the technical issues, the following broader issues remain:

- Using CDM finance for large, new and long-lived coal plants directly undermines the 2°C objective. Coal plants are the highest-emitting electricity resource. Using much-needed climate finance to support construction of these plants (even if it leads to slight increases in the efficiency of some coal plants) undermines the overall objective of limiting dangerous climate change.

- The focus on incremental change and the long-term lock-in of emissions are particularly troubling as the window of limiting warming to 2°C is closing. The 45 coal projects in the CDM pipeline will lock in over 400 million tCO_2 in annual emissions – as much as the annual CO_2 emissions of developed countries such as France, Spain and South Africa. The International Energy Agency has repeatedly warned that the continued development of coal power will make it impossible to hold global warming to safe levels.

- Coal projects do not deliver sustainability benefits. Instead, they inflict severe toxic burdens on local populations and ecosystems.

→ Given that the Methodologies Panel has not yet had the opportunity to address these comments, CDM Watch urges the Board to choose option three to ensure the integrity of the participatory process and to take advantage of the knowledge of and ideas from all stakeholders.

→ CDM Watch urges the CDM Executive Board not to approve a revision of ACM0013, unless it can be proven beyond doubt that the new revisions are able to address all issues of this project type that currently undermine the goals of mitigation and sustainable development.

ADDITIONALITY

> 65. ►***Action*:** The Board may wish to provide feedback to the concept note on extension of simplified modalities for the demonstration of additionality of small-scale CDM project activities, as contained in annex 7 to these annotations.
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> 66. ►***Action*:** The Board may wish to provide feedback to the concept note on expansion of the guidelines on demonstration of additionality of micro-scale project activities, as contained in annex 8 to these annotations, including options for a more pragmatic application of the threshold in the context of distributed project activities under the guidelines and definition of the "special underdeveloped zones".

The *concept note on the extension of simplified modalities for the demonstration of additionality of small-scale CDM project activities* suggests expanding the list of technologies automatically defined as additional (positive list). The analysis given in Appendix 1 gives too little information about how the new additions to the positive list were derived. The note indicates that the list was based on an analysis of upfront costs of different technologies. It seems like the same cost of technology was used world-wide. That does not reflect reality. Local conditions greatly impact cost effectiveness. Furthermore the note indicates that current and future costs of technologies were taken into account but no information is given on how these numbers were derived and estimated.

→ CDM Watch therefore recommends that to ensure transparency and environmental integrity of a positive list, a more detailed analysis should be published before any further expansions are made.

The *concept note on the expansion of the guidelines on demonstration of additionality of micro-scale project activities* suggest three opinions on how the threshold of micro scale activities could be applied to distributed emissions reductions in the context of PoAs.

→ CDM Watch recommends that the Board choose option *3: Task the secretariat and the SSC WG to analyse the issue further*. Bundling and PoAs can turn micro or SSC projects into really big projects. It is therefore vital that such positive lists are carefully examined and any approaches modeled to see the effect such a positive list could have on the supply of CERs and on the balance of lost opportunity and free riders.

Let's put these efforts to simplify additionality in a larger context: In 2012 we can expect more projects to be registered than any year before. At a sCER price of less than 4 Eur, carbon revenue cannot make a significant contribution to the financial viability of a project (except for some industrial gas projects). This means most additional projects will no longer be viable and the projects in the CDM pipeline will have a high likelihood of not being additional.

→ CDM Watch therefore would like to caution the Board to expand the positive list and remove additionality requirements at a time when market forces already stifle projects that truly depend on carbon revenue.

→ To address the potential glut of non-additional projects, CDM Watch recommend the Board consider the introduction of an impact approach to additionality in all sectors. This approach has already a precedent in *AM0101: High speed passenger rail systems*. We recommend that the Board task the Secretariat and the SSC WG to more closely examine the broader applicability of such an approach.

SUPPRESSED DEMAND

> **24.** ►***Note:*** The Board may wish to take note that, in response to the task of improving the guidelines on suppressed demand, as contained in the 2012 workplan of the Meth Panel, the panel considered a concept note on the treatment of suppressed demand in approved methodologies and provided feedback to the secretariat. The secretariat has taken note of the feedback in finalizing the concept note for consideration by the Board.
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> ***74.*** ►***Action*****:** The Board may wish to provide feedback to the two concept notes on the treatment of suppressed demand in approved large- and small-scale methodologies, as contained in annexes 14 and 15 to these annotations.

Although CDM Watch considers suppressed demand an important topic, especially because of the discrepancy of how the issue is currently addressed, we are worried that the concept is now approached with too little care for protecting the environmental integrity of the CDM.

Suppressed demand approaches have to adequately address both of the CDM's mandates of delivering mitigation and development benefits. At the same time they must not replace or inhibit other ongoing development efforts. This is a tall order and requires careful consideration and research. We offer here a few important concepts and 'food for thought,' which we believe have to be discussed and addressed carefully before the crediting of 'avoided emissions reductions' should be implemented on a broader scale.

- Approaches to suppressed demand need to preserve the CDM's mitigation goals. Not every good development project can be a good CDM project. Project types that neither reduce nor clearly avoid emissions reductions do not belong in the CDM.
- Annex-I countries have a political and ethical obligation to pay for sustainable development with ODA, and not by reducing Annex-I targets through crediting "avoided emission reductions" that may never occur.
- The CDM must not create perverse incentives that undermine development policies /activities or shift ODA away from supporting sustainable development.
- If the concept of "minimum service level" is to be applied broadly it must be done so consistently and fairly. In the electricity sector, this would mean that all renewable energy projects could only be credited up to the defined "minimum service level." This would be a significant shift away from how such projects are currently credited. Such an approach is not currently proposed in the recommendations of the Meth Panel.[1] Leaving this issue unaddressed will perpetuate the unfair approach to suppressed demand and also likely lead to significant over crediting.
- The impacts of different levels of taking into account suppressed demand need to be modeled so that mitigation and development goals can be balanced.

[1] The Meth Panel's **CONCEPT NOTE ON THE TREATMENT OF SUPPRESSED DEMAND IN APPROVED LARGE-SCALE METHODOLOGIES** states: Methodologies related to electricity generation where the consumer is not included in the boundary are excluded from this first assessment, as it is assumed that these methodologies implicitly take into account the issue of suppressed demand.

Sustainable Development

> ***73.*** ***►Action*****:** The Board may wish to provide feedback to the analysis and proposal for voluntary measures to highlight the co-benefits of CDM projects and PoAs, as contained in annex 13 to these annotations.

CDM Watch welcomes the Boards initiative to develop guidelines to strengthen the co-benefits of CDM projects. As we have highlighted in various submissions on sustainable development, the dual goal of mitigation and sustainability has not been achieved sufficiently. Numerous studies and anecdotal evidence have shown that most CDM projects not only fail to deliver sustainability benefits but in a large number of cases, projects have caused significant harm to the local population.[2]

For this reason we believe that mandatory requirements that include continuous monitoring of the claimed sustainability benefits will be the only way to assure that the dual goals of the CDM are actually fulfilled in a meaningful way for a majority of projects. Given the political realities, such a mandatory approach is currently not feasible. Nevertheless, it is possible to implement voluntary guidelines that are stringent and meaningful.

→ CDM Watch therefore urges the Board to adopt option 4. in the "Concept note on highlighting sustainable development co-benefits of CDM project activities and programmes of activities":

> *Option 4: Initial declaration, updates and changes, subject to validation and verification, and adverse consequences: In this case, in addition to Option 3, if a DOE.s assessment with regard to the sustainable development co-benefits declaration is negative, the opinion is treated in the same manner as other CDM non-compliances. As a result, the project participant or coordinating/managing entity (having voluntarily decided to make the declaration) is required to continue to measure and assess the performance of the CDM project activity or PoA and incur consequences (i.e. sanctions) against its declaration.*

The UNFCCC released a report last year that evaluated the sustainability benefit claims of CDM projects. This research was of limited scope as it did not look at what benefits where actually delivered.

→ CDM Watch urges the Board to task the secretariat to do a follow-up study that will be comprised of a more substantial analysis including site-visits to assess which projects or projects types are able to deliver actual benefits.

[2] Schneider, L. (2007), "Is the CDM fulfilling its environmental and sustainable development objectives? An evaluation of the CDM and options for improvement" http://www.oeko.de/oekodoc/622/2007-162-en.pdf; Sutter, C., Parreño, J. C. (2007). "Does the current Clean Development Mechanism (CDM) deliver its sustainable development claim? An analysis of officially registered CDM projects." http://cleanairinitiative.org/portal/system/files/articles-72508_resource_1.pdf
Haya, B. (2007) "Failed Mechanisms: Hundreds of Hydros Expose Serious Flaws in the CDM" http://www.internationalrivers.org/en/node/2326.

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20 April 2012

Call for input on the draft revised methodology ACM0013 "Consolidated baseline and monitoring methodology for new grid connected fossil fuel fired power plants using a less GHG intensive technology — Version 4.0.0"

We welcome the opportunity to comment on the draft revision of ACM0013. We asked the Stockholm Environment Institute (SEI) to carefully examine the proposed methodology. You will find their comments on in the following table.

We would like to add the following broader points of critique of this project type to their more technical commentaries:

- Use of CDM finance for major additions of new, long-lived coal plants is inconsistent with the UNFCCC's 2°C objective. Coal plants represent major, long-lived investments using the highest-emitting electricity resource. Using much-needed climate finance to support construction of these plants, even if it leads to slight increases in the efficiency of some coal plants, undermines the overall objective of limiting dangerous climate change.

- The focus on incremental change and the long-term lock-in of emissions are particularly troubling as "the door to 2°C is closing". The coal projects in the CDM pipeline offer, at best, marginal improvements in emission rates, while locking in over 400 million tCO_2 in annual emissions – as much as the annual CO_2 emissions of countries such as France, Spain and South Africa.

- Furthermore coal projects conflict with the CDM's sustainability objectives by inflicting severe toxic burdens on local populations and ecosystems.

Although the revised methodology certainly is an improvement over the currently suspended version it does not sufficiently address the issues raised here. We urge the CDM Executive Board not to approve a revision of ACM0013 before the identified issues have been carefully evaluated and addressed.

Sincerely yours,
Anja Kollmuss

Table 1: Comments by the Stockholm Environment Institute on proposed remedies in the draft revised ACM0013 based on issues raised in SEI Policy Note (December 11) and closest corresponding issue(s) as defined by the Methodologies Panel (MP)

<table>
<tr><th colspan="3">Issue 1: Inconsistency and bias in Approach/Option 1 (most likely technology) baselines leads to underestimation of baseline plant efficiency. [MP Issue 1]</th></tr>
<tr><th>Explanation/Example</th><th>Remedy included in the Draft Revision</th><th>Adequacy of remedy / Remaining Issues</th></tr>
<tr><td rowspan="2">Approach/Option 1 baselines reflect characteristics of existing rather than new technologies, leading to lower plant efficiencies and higher emission baseline rates.

In India, technologies currently available in the market suggest emissions improvements on the order of 2-4% when moving from subcritical to supercritical technologies, but coal power project PDDs claim an average of 11%.

Subcritical technology is identified as the “most likely” alternative in all Indian and 8 of 13 Chinese projects, although both countries have transitioned away from this technology.

Poorly documented and inconsistent assumptions (see MP report).</td><td>Use of feasibility studies to determine Approach/Option 1 plant and baseline efficiencies at optimum load for project site.</td><td>A novel and promising method, but one yet to be tested. It will require engineering expertise for DOEs to effectively validate projects.</td></tr>
<tr><td>A new, standardized baseline scenario procedure that establishes minimum baseline efficiency at the 80% percentile of plants under construction.</td><td>Similarly, a yet-to-be-tested, novel and promising method that should help to limit the mis-specification of baseline technology found in many PDDs (e.g. large, subcritical units in China where none are currently built). However, the methodology:
May create a perverse incentive whereby the same plant built later might accrue more CERs, as the result of the excluding registered projects from the determination of the 80th percentile.[1]
Could make it very difficult for DOEs to verify the accuracy of the baseline scenario without full access to government permit records, and the availability of full plant specifications for plants yet built.
Does not indicate the method to be used to derive plant efficiencies from plant specifications; presumably this would be done from engineering studies based on steam pressures and temperatures.</td></tr>
</table>

[1] Imagine that a new higher-efficiency technology is proposed by a number of new project proponents, that all apply for registration, and that cumulatively they constitute 25% of the generation capacity under construction, as used to determine the 80th percentile baseline technology. This new technology would then constitute the baseline, even though none of the projects were yet built. None would be credited, even though all might be counting on CDM support. Imagine, instead, that they constitute 15% of the generation capacity. Then, the first registered projects would receive CERs/MWh representing roughly the top 5th percentile efficiency of other plant technologies under construction. Assuming all of the plants are registered, then the last of these new plants would receive credits/MWh representing roughly the top 20th percentile efficiency of other technologies, likely to be a far more generous baseline than the first plants. Thus the late adopters would receive more CERs than the early movers.

Issue 2: Use of outdated historical data in the Approach 2 baseline leads to underestimation of baseline emission rate. [MP Issue 3] [MP Issue 5]		
Explanation/Example	**Remedy included in the Draft Revision**	**Adequacy of remedy / Remaining Issues**
The gap between commissioning dates of project activity and of peer group plants is typically 5-10 years. This gap means improvements in plant efficiencies are ignored, e.g. rapid shift away from subcritical technology in India and China. Even using historical data for all vintage plants, the MP found that the top 15% plant efficiencies are higher than the value used in project PDDs for Chinese projects.	Two options (A and B) for estimating efficiency improvements, along with recalculation of Approach 2 at the first renewal of crediting period.	While efficiency improvements are not necessarily continuous over time (e.g. transition to supercritical in China occurred over a few years), this approach appears be to carefully constructed and a reasonably conservative, though somewhat complex, remedy to the data vintage issue.
Issue 3: Low signal-to-noise ratio: site-specific factors (noise) can have as great an impact on unit efficiency as the choice of boiler technology (signal), but are not accounted for. [MP Issue 2]		
Explanation/Example	**Remedy included in the Draft Revision**	**Adequacy of remedy / Remaining Issues**
Coal unit efficiency is influenced by factors such as cooling technology, pollution abatement equipment, coal quality, and ambient conditions. Together, these variables can affect relative unit efficiency by 7% or more. ACM0013 does not account for these factors, and is intended to attribute CERs only to direct improvements in boiler/plant efficiency.	Use of feasibility studies to determine Approach/Option 1 baseline and plant efficiency at optimum load for project site.	The feasibility study approach only addresses the signal-to-noise issues related to differences in site conditions, and only with respect to Approach 1. The more significant signal-to-noise concerns lie with Approach 2, and these appear to remain unaddressed.
Issue 4: Poor quality and availability of historical power plant performance data creates potential bias and added uncertainty, and further decreases signal-to-noise ratio. [MP Issue 4]		
Explanation/Example	**Remedy included in the Draft Revision**	**Adequacy of remedy / Remaining Issues**
Uncertainty and annual variation in coal unit emissions data can, in some circumstances, be quite high, reducing confidence in standardized baseline values and reported emission reductions. Required data for Approach 2 are not made available in China. In India, data are incomplete and are inconsistently used.	Greater transparency of data and data sources.	While this remedy helps in addressing concerns about inadequate documentation, it does not address the inherent uncertainties in fuel use and emissions data. While central records can be reviewed for consistency with PDD values, it remains unclear how fuel consumption could be validated at the power plant level. Given that in some cases, where difference in baseline vs. project emission rates could lie within the error bars of emissions estimation uncertainties, an uncertainty discounting or other remedy may be called for.

Issue 5: Unintended outcomes contrary to the objectives of the CDM		
Explanation/Example	**Remedy included in the Draft Revision**	**Adequacy of remedy / Remaining Issues**
The addition of sulfur and particulate emission controls to mitigate local pollution impacts, for example, can have the effect of reducing net unit efficiency. As a result, ACM0013 may inadvertently penalize projects that minimize local air pollution impacts, if plants included in the standardized baseline calculation have not implemented similar controls. Conversely, it could reward projects that do not take steps to mitigate local air pollution impacts if plants in the Option 2 baseline have generally implemented pollution controls. This perverse outcome would run contrary to the sustainability objectives of the CDM.	Use of site-specific feasibility assessment.	Would help address the concerns, but again, only with respect to Approach/Option 1. Approach/Option 2 baselines may still have the effect of penalizing plants with emissions controls (that are not present in the peer group used to determine the baseline).
Issue 6: Limitations in the investment and sensitivity analyses compromise additionality assessment [MP Issue 6] [MP Issue 7]		
Explanation/Example	**Remedy included in the Draft Revision**	**Adequacy of remedy / Remaining Issues**
Small differences in the levelized cost of electricity between the proposed project and alternative render the investment analysis highly sensitive to inputs such as construction costs, fuel costs, or load factors, creating potential for minor variations in these parameters to alter the determination of additionality. Sensitivity analyses fail to properly consider a reasonable variation in critical assumptions (e.g., fuel prices), nor independent variation of key parameters (all comparisons use the same percentage change for both the project and alternatives).	Improved specifications for investment analysis and greater reliance on substantiation through feasibility studies.	While the draft revision provides increased specificity on the factors to include in the analysis, and points to feasibility studies as a key data source, it is difficult to see a) how this resolves the potential for bias in assumptions, or b) how DOEs will be equipped to provide appropriate levels of technical scrutiny of specific assumptions.

Issue 7: Additionality: Transition to higher-efficiency coal generation already underway due to rising coal prices and government policies		
Explanation/Example	**Remedy included in the Draft Revision**	**Adequacy of remedy / Remaining Issues**
In both India and China, a number of non-CDM reasons have encouraged a shift away from subcritical technology. This transition has been largely driven by growing pressures on coal supplies, increasing reliance on imported coal, and growing exposure to rising international coal prices, and has been fostered by government policies mandating use of more efficient technologies (e.g., supercritical technology required in India's Ultra Mega Power Projects (UMPPs) and prioritizing grid access for efficient plants (e.g., in China's 2007 energy-saving approach to power dispatching).	Partly addressed by the new baseline scenario method, which better takes into more recent trends in plants construction.	See concerns in the application of this baseline scenario approach as noted above (i.e. potential for perverse incentives and challenges in verification).
Issue 8: Additionality: Common practice test is not effective in coal plant context		
Explanation/Example	**Remedy included in the Draft Revision**	**Adequacy of remedy / Remaining Issues**
Common practice analysis is intended as a credibility check to determine whether the proposed project type (e.g. technology or practice) has already diffused in the relevant sector and region. However, the common practice test excludes from consideration any project that is registered or applying for CDM approval. Nearly all supercritical and ultra-supercritical units in India and China, respectively, are excluded on this basis, and, therefore none are considered common practice. While this exclusion makes sense for project types where there are clearly decisive cost or technical barriers, that is not the case here, and a result the common practice analysis does not function as an important credibility check.	Partially addressed through the new baseline scenario method that takes into account coal plants under construction.	This revision will improve the accounting for common practice, in particular by including projects that are applying for registration. However, the exclusion of registered projects raises a possible perversity (see above), and may not be appropriate in this situation. It would be useful to revise the common practice test to enable distinction among situations where exclusion of CDM projects from consideration is warranted (decisive cost or technical barriers), and where it is not (lack of decisive barrier, where a technology shift is already and clearly underway).