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Regarding: Comment on draft revised SWDS tool Version 6:

Background:

Balderrie initiated and designed the CDM Project "Compost from Municipal Solid Waste in Peshawar, Pakistan" following AM0025 and using the previous tool version05. During two years of intensive preparation, document design, financial engineering and successful validation, our team received unique insight into the technology, the methodology and the implications for project implementation. The Peshawar project was intended to be a pilot for establishing similar waste management plants in all large cities in Pakistan, in case it can successfully show the contribution of carbon finance. In absence of tipping fees the realisation of further projects depends on the availability of sufficient income form emissions trading. Improvements of the existing methodology and tool are therefore essential for the continuation of this projects, that would provide clean waste disposal services for millions of people in Pakistan.

Team members also collaborated with the leading waste management institute in Germany "BIFA" for the establishment of the CDM handbook for waste management commissioned by the German Ministry of the Environment.

Our company will provide the secretariat also with comments on AM0025 and the composting tool.

General statement:

The improvement of the SWDS tool is essential for the implementation of any waste management CDM project. The project team has found that many already registered CDM projects under AM0025 were using the tool in an erroneous way, leading to massive over or underestimation of the resulting CER. If calculated correctly along SWDS Version 5, many ongoing projects will face bankruptcy. The Secretariat should seek to avoid this situation having in mind that even while miscalculating, only a fraction of the achieved emission avoidance was claimed as CER.

The extreme conservativeness of the SWDS tool is a unique situation that is discriminating project participants in waste management CDM projects and does not appear in any other scope.

The Secretariat should also keep in mind that the current <u>ZERO</u>-success rate of projects under AM0025 and the low number of projects that seek registration can be mostly attributed to the extreme conservativeness of the SWDS tool.

Project developers are under time pressure to finalize project registration prior to 31st December 2012. After this date all waste management projects outside LDC are excluded form access to the EU-ETS and therefore not financially feasible. All current planned waste management CDM projects therefore depend on a simple tool that will not delay validation. The current complexity of AM0025 and the SWDS tool version 5 make it impossible to start new projects as it is unlikely that the validation can be finalized before the deadline.

List of detailed comments on suggested changes for Version 6:

Model correction factor:

It is correct that the Secretariat acknowledges the high uncertainty of the 1st order decay model by increasing the conservativeness of the correction factor. However without compensation in form of a correction of the Kj values toward "1", an additional reduction of the CER of up to 40% will effectively eliminate any new project activity.

Determination of waste type j:

Our observation is that in most developing countries there are no concrete data on past waste quantities and waste consistence. The Secretariat should make a clear statement that default values can be used for the upfront calculation to speed up validation.

The removal of the "20/95%" regulation for sample taking is a necessary improvement as the existing regulation was impossible to comply with. It would be useful to have a "real life calculation example" provided to show how the new regulation should be applied. However it would be even better to have a less complex regulation in place that gives project participants the necessary flexibility and does not create potential misunderstandings for verification. A regulation for sampling should be preferred that simply states following: "the sampling procedure has to be established to the satisfaction of the DOE". To substantially reduce the cost and time for validation, the Secretariat should state that for application A and B default values can be used for the upfront calculation of the baseline emissions. The avoidance of expensive and time intensive waste composition studies is essential to reduce time for project planning and validation to register projects before the deadline.

Determination of DOCf:

There is no reason why the individual determination of DOCf should be limited to "only residual waste". The IPCC allows the establishment of national DOCf values without this limitation.

Also the Secretariat should provide default values for BMPj as otherwise this values have to be produced in expensive laboratory tests for each individual project.

Determination of OX:

Removing the possibility to use OX=0 results in a general reduction of CER by 10%. The extreme conservativeness of the SWDS tool is further increased to the disadvantage of project participants.

Determination of MCF:

The SWDS tool does not consider the most common situation in developing countries: The addition of new capacity for waste disposal or the complete replacement of existing (outdated) waste disposal sites with a greenfield facility. In both cases the existing landfills can not be taken as a baseline as any new facilities would have to comply with the often strict environmental legislation. Therefore following comment should be added: "For greenfield projects the least-cost and legal waste disposal option is to be considered for the determination of MCF".

Example a) A city rapidly expands and the existing unmanaged waste disposal site can not be utilized further to avoid hygienic hazard for the population. The least cost legal disposal alternative according to legal practice would be a sanitary landfill.

Example b) A new private waste recycling plant is established. The organic residues have to be disposed by the private operator according to the latest legal requirements that request sanitary landfilling. Before establishment of the recycling facility, the unsorted waste was dumped in an unmanaged public owned landfill. However the private operator of the recycling plant is obliged to dispose the organic waste along the legal requirements.

In both cases the least-cost legal alternative for the disposal of the waste is not identical with the existing unmanaged landfill. In view of allowing developing countries to leapfrog to the latest available technology the special situation for greenfield projects has to be considered for determination of baselines. An other reason for a special consideration of Greenfield projects is that in case using the current outdated waste dumping practice as a baseline would not pass the additionally test in cases when this kind of practice is illegal. The issue of Greenfield projects was not addressed until now, as most projects in the waste management scope were dealing with the installation of landfill gas extraction equipment. The majority of new alternative recycling and composting plants however will completely replace or add new capacities – this implies that there are no existing landfills that can be used for sampling or establishment of a baseline.

Establishment of DOCj:

The expert team employed by Balderrie found that the currently used language for establishment of DOCj in version 5 of the tool was misleading many project participants and DOE's. Several registered CDM projects did not apply the given default values correctly. The Secretariat should find a feasible way for this project activities to avoid bankruptcy that would surely accrue in case the CER volumes would be correctly calculated along the clarification in the draft the tool version 6.

To add more clarity the Secretariat should add in the comment that the dry matter content of the waste fraction should be determined by establishment of the weight difference between "wet" and "dry" waste with an laboratory oven and scale.

Decay rate:

The single most necessary improvement was not addressed in the draft!

The postponement of CER issuance for several years does not allow any financial additional project activity.

Depriving project participants of the CER income by postponement of several years results only in the effective prevention of project activities that otherwise would be perfectly feasible and would provide showcases for sustainable development financed by the CDM. <u>Balderrie urges the Secretariat to acknowledge the positive high value impact of waste management projects for emission reduction, local pollution reduction and human development by just providing it with the issuance of CER in due time.</u>

The suggested increase of conservativeness by the model correction factor and OX factor can be easily compensated by allowing waste management projects to use TIER1. This can be achieved by simply setting Kj to "1". If the secretariat insists that Kj remains at the current value, the effect is that

projects are financially unfeasible. The only project type remaining is sanitary landfilling with landfill gas extraction, that can only capture a fraction of GHG emitted and have no positive effects on human development.

The argument that projects could "sell upfront" the expected future *massive* accumulated CER volume is not valid due to following reasons:

- The UNDP has established officially that waste composting projects have a very high likehood of technically and commercial failure
- Several waste management CDM projects already failed commercially before even applying for the first CER issuance
- Currently there is a ZERO-success rate for waste management CDM projects along AM0025
- Most projects depend on extra income from CER especially in the early years, as there are no established markets for recycled products and compost. This marketing problems have been sufficiently documented and were already subject to validation.
- Communities in developing countries have no extra funding to support modern waste management facilities. They will always go for the least cost variant landfilling.
- Most of the CER would be issued only after 7 years. However it is not clear if a second project period is allowed or if at that time a market demand for CER would still exist.

All the above arguments make it completely impossible for waste management projects to sell sufficient CER upfront. Currently waste management projects are not bankable.

Experience has shown, that under the current form of baseline calculation with the tool successful project implementation is close to impossible.

If the secretariat is serious to implement the suggested 40% discount on the already highly conservative methodology, any modern waste management project activity is virtually excluded from the CDM as sales of CER can not provide an sufficient increase of project IRR.

Further efforts to improve AM0025 and introduce a composting tool would not be able to provide any improvement if the issue of postponement of baseline methane emissions is not resolved.

Conclusions:

The proposed update of the tool failed to provide any real improvement. The already exaggerated conservativeness of the tool was further increased, removing any incentive to continue with projects in the field of waste management.

The review of the correction factor and new general default vale for OX can sum up to 40% additional reductions in CER issuance.

With no correction of the postponement of CER issuance caused by the factor Kj less than 1, the update of the tool prevents any project activity in the field of waste management with the exemption of landfill gas extraction.

Balderrie and its expert team would like to urge the Secretariat to reconsider its decision not to allow CER calculation according to Tier 1 as provided by IPCC.

We would also recommend to review the multitude of existing scientific methodologies for comparison of GHG emissions from waste management technology options used in Western Europe that all use Tier1 methodology.

It is very well documented on the UNFCCC website that stakeholders demanded this change already dozens of times before.

The meth panel and secretariat would profit from taking the advice of many experts into consideration to prevent further failure of the tool to provide support for sustainable development caused by a theoretical notion that has sufficiently proven to be impractical.

Given the suggested increase in conservativeness remains as well as the factor Kj will not be adjusted to allow in time CER issuance, Balderrie sees hardly any possibility for commercial investors to further engage in waste management CDM projects.

Best regards,

CTO Balderie Energies GmbH