PHILIPS

Eindhoven, June 24, 2010

Attention: Chair CDM Executive Board, UNFCCC

Subject: Call for public input "Consideration of fossil fuel replacement methodology,

Dear Sirs,

With reference to the public call for input, please find below the comments on behalf of Philips Lighting. Philips is a leading manufacturer of lighting products, including LED and off grid lighting technology.

Philips offers to participate in a discussion, together with other stakeholders, on what the hampering factors are for the successful development of CDM fossil fuel replacement projects. This should be the base, together with further research on the establishment of default values, to develop the new methodology.

See below a summary of our answers to the questions raised in the public call.

In case of any further inquiries, feel free to contact us,

Kind regards

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	Request for specific input	**Input**
a)	Are kerosene or other fossil fuel lamp replacement projects viable CDM projects or POAs?	In order to have a viable CDM programme a certain scale is required. It is suggested that countrywide approach of a POA is required for the effective set-up of a CDM project with a viable size. It is (almost) not possible to fully finance the replacement lamp from carbon revenues. In most of the other cases additional revenue streams are required. In any case a contribution from the household is required. The smaller the project the more additional revenue streams are to be included in the financial model. The 1:1 solutions for households are currently the main important stream. The methodology should also include the possibility for a project where lanterns can be charged at a central PV panel or other centrally powered unit (hydropower, wind) or from grid-based charging.
b)	Is it better to use existing methodologies for fossil fuel lamp replacement projects and POAs or would be it better to develop a technology specific methodology?	It would be preferable to have a methodology based on deemed emission savings. For each distributed light solution a fixed amount of CERs can be claimed over the years. The use of default values greatly simplifies the development of these projects as: 1) It presents certainty to financiers 2) Monitoring efforts (and hence development costs) decrease significantly No technology specific requirements should be included. The fossil fuel replacement technologies are a rapidly evolving field. As almost all of the technologies have a greater output compared to a kerosene lamp it is conservative to focus on CO_2 saving per fossil fuel fired lamp displaced.
c)	Would a methodology that allows for a conservative value for default emissions savings be viable? What if it only allowed a CER crediting period of 2 or 3 years? Should the	It would be preferable to have a methodology based on deemed savings. For each distributed light solution a fixed amount of CERs can be claimed over the years. The use of default values greatly simplifies the

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	methodology allow for a monitoring option for development of emission reduction values and persistence of savings	development of these projects as: 3) It present certainty to financiers 4) Monitoring (and hence development costs) decrease significantly The methodology should not limit the crediting period of a project. Expected lifetime of a device should be considered, however due to the large variance (in technology, lifetime) between light solutions it is not desirable to limit the crediting period to the worst performing technology. Furthermore project participants should have the option to establish a maintenance programme for battery or lamp replacement as part of the project. The methodology should include an option to deviate from the default values by using project specific data. This to allow project participants to use superior local data.
d)	In Annex 1 to this document are a summary of issues (form the report referenced in footnote 1) that arise from estimating baseline and project emissions for projects involving the replacement of kerosene lamps with LED lamps. Please provide comments on each of the issues identified in Annex 1 with respect to how (i) they should be addressed in a methodology and (ii) how they could be used for determining a conservative savings default value. These issues are:	
i) Pre-existing fuel-based technology:		
	Fuel lamp types;	It is important to establish the average CO_2 emissions resulting from fossil fuel lighting per household. It is of lesser important which technology is used in the baseline.
	Fuel use rate (liters/hour);	The default value should be based on specific research (e.g. Lighting Africa provides useful data).
	Utilization (hours/day and days/year);	The possibility to use a default value (hours/day) should be included. However it is important that the methodology has

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		an opportunity to use superior local data. No comments on the suggested default value of 365 (days/year).
	Fuel emissions factor (kg CO2 /liter);	No comments on the suggested value of 2.4 kg CO_2/liter.
	Suppressed demand factor	As there is a vast suppressed demand for illumination in the developing world the inclusion of suppressed demand is applauded. The light solution usually produces far more lumens compared to the fossil fuel light. It is recommended to use regional default values for suppressed demand.
	Changes in lamp usage due to factors such as oil price increases/decreases/subsidies, numbers of people per household, income, and electrification;	No comments on these factors.
ii) Project Technology		
	Which new technologies and characteristics should be included (LED lamps with or with grid charging);	The methodology should consider both PV solutions and grid charging solutions. No technology specific requirements should be included. The fossil fuel replacement technologies are a rapidly evolving field. As almost all of the technologies have a greater output compared to a kerosene lamp (in lumens or lux) it is conservative to focus on baseline determination
	Leakage (destruction or not of replaced lamps modes (such as PV or grid charging);	It sounds fair to take them into account, however the suggest value of 50% is too high. A value of 10 to 20% seems to more appropriate, based on our experience. The rationale for replacement is that the money saved for the fossil fuel lamp is used for the light solution distributed under the project. The household can keep the kerosene lamp, however there will be less money available for

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		kerosene.
	Number of lamps replaced per new technology (e.g., LED) lamps;	Most of the light solutions consider 1:1 replacement.
	Service life;	A default service life should not be included. The project participants will select the best suitable solution. PV panels have a lifetime of at least 10 years. Maintenance programmes can be implemented for replacements of batteries or lamps.
	Net to gross ratios for free ridership;	No comment, other than the lamps under the programme, should not be discounted based on the penetration rate of fossil fuel replacement technologies in the market place.
	Power conversion losses for grid charging;	No comments
	Quality standards;	Please do not include a quality standard in the methodology. Currently there are several initiatives ongoing that focus on development of a quality standard for off-grid lighting (a.o. Lighting Africa). The UNFCCC should not develop a quality standard for lighting solutions eligible under the CDM.
	Allowable operating;	No comments
	Please provide comments on the calculation of conservative emission reduction default factors as indicated in the tables located near the end of Annex 1, these begin with the table titled "Proposed Carbon-accounting methodology, with examples. Values are strictly hypothetical";	• It is clear how under Table A the lifetime emission default values are calculated. • The intention and usage of Table B is not clear. • It is not clear how Table C: "Adjusted performance carbon valuation" is calculated and applied.
f)	Please provide other comments that me be helpful to the SSC WG of CDM EB to further work in this area	

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Other input:		
A	The new methodology should focus on the of the displaced CO_2 emissions. It should incorporate default values based on the research executed on behave of the SSC-WG but also take into account other relevant initiative such as the Lighting Africa initiative from the World Bank.	
B	The deemed savings approach is preferred as it will be difficult to establish databases with the buyers of the light solution. For CFL-iCDM projects a detailed database is kept based on identification of the household and an electricity bill. This data level will be difficult to maintain for example on the African continent and significantly increases the monitoring costs of such projects. A suggestion is to use aggregated data on lighting solution volume sales per distributor/dealer/retailer in region of interest. In Lighting Africa program this kind of data is pursued to establish, in countries where this program functions, the effectiveness of the program.	
C	The methodology should not include specifications on the technology. However it should be open to both PV based solutions and grid re-chargeable solutions.	