

 CDM: Form for Submissions on Small Scale Methodologies and Procedures (version 03) <i>(To be used for presenting questions/proposals/amendments related to the simplified methodologies for small-scale CDM project activity categories)</i>	
Name:	Institution: Ernst and Young, Kingdom of Bahrain
Affiliation ¹ :	<input type="checkbox"/> DNA <input type="checkbox"/> DOE <input checked="" type="checkbox"/> PP <input type="checkbox"/> Stakeholder
Title/Subject (max. 200 characters):	Clarification on the methodology applicability in case of "Replacement of multiple low efficiency equipments with a single high energy efficient equipment"
Purpose of the submission:	<input checked="" type="checkbox"/> Query on an approved SSC methodology or small scale procedures ² (Fill in field 1. below) <input type="checkbox"/> Request for Revision of an approved SSC methodology (Fill in fields 2. and 3. below) <input type="checkbox"/> Proposal for a new SSC methodology (Fill in fields 4. and 5. below)
Approved SSC methodologies ² to which your submission relates to, if applicable.	<i>AMS II.C. Demand-side energy efficiency activities for specific technologies- version 13</i>
Contact Information (e-mail addresses to which the answers are to be delivered and phone contacts for possible dialogue on the submission).	dinesh.aggarwal@bh.ev.com amjad.rihan@bh.ev.com
Information for completing the form Describe the questions related to the SSC Methodologies, Modalities and Procedures below. If the questions are related to a project under development or implementation, you may describe the context in which they arose.	
Query on an approved SSC methodology or SSC procedures	
1. If you have questions relating to the application of an approved small-scale methodology (AMS) please specify and provide reference to the exact technology/measure below. If you have questions related to procedures for SSC project activities please clarify below:	

¹ Designated National Authority (DNA); Designated Operational Entity (DOE); Project Participant (PP), and Stakeholder.

² The list of all approved small-scale methodologies (AMS) can be found at <http://cdm.unfccc.int> and go to CDM: small scale CDM methodologies.

>> Background

The project activity involves the replacement of inefficient decentralized 100 odd chilling/cooling units of smaller capacities varying between 5 Tons of Refrigeration (TR) to 200 TR capacity totalling around 25000 TR, with a central high energy efficient common chilling unit, for a process industry (covering all the sections such as process line, shop floor, offices, administration and other sections). The new centralized chilling unit will comprise of 5-6 chilling units of 5000 TR each (one stand by) and the total active capacity will be around 25,000TR.

At the central unit, the chilled water will be produced by high-efficiency water cooled electric-driven chillers and supplied to the outgoing Energy Transfer Stations (ETS's) installed in all the connected buildings. Each section in the manufacturing facility will have chilled water supply from the ETS through a network of pipes, supported by Air Handling Units (AHUs) for use in comfort cooling and process cooling, thus eliminating the need for separate systems in individual plants and buildings. To achieve feeding each building with the required chilled water to meet the users demand requirements, all the equipment in the central plant shall be controlled and monitored by a SCADA system located in the control room at the plant.

The common chilling unit consists of three primary components:

- Central cooling plant
- Distribution network
- Energy transfer stations

The reduction in electricity consumption and the associated greenhouse gas (GHG) emissions are anticipated on two fronts:

- 1) High efficiency of the new common chilling unit compared to the old ones
- 2) Better efficiency output due to the higher scale of operation for the common unit compared to the individual smaller capacity chilling/cooling units.

Anticipated GHG emission reduction is expected to be within the prescribed limit of 60 GWh per year.

The refrigerant to be used in the project activity will be CFC free. Though there would be emission reductions on account of reduction in release of refrigerant, the PP will claim credits only due to the reduction in electricity consumption from use of more efficient equipment/appliance, in line with criteria #3 of the methodology. Also, the project emissions from the baseline refrigerant and/or project refrigerants shall be considered in accordance with the guidance of the Board (EB 34, paragraph 17).

Accordingly, the project activity may meets the methodology AMS-II.C (Ver 13) applicability criteria #1 (as it is adoption of energy-efficient equipment/appliance (air conditioners/chilling units) at many sites and the electrical energy savings will not exceed the equivalent of 60 GWh per year) and #3 (as the refrigerant used in the project case will be CFC free), however the clarification is sorted regarding applicability of criteria #2, as mentioned below:

#2. For each replaced appliance/equipment/system the rated capacity or output or level of service (e.g., light output, water output, room temperature and comfort, the rated output capacity of air-conditioners etc.) is not significantly smaller (maximum - 10%) than the baseline or significantly larger (maximum + 50%)³ than the baseline.

>>Clarification is sorted from the Small-scale Working Group if the above condition is applicable to the project activity involving replacement of multiple low capacity low efficiency equipments, with common/ centralized high capacity high energy efficient equipment(s), where though it is not a case of one to one replacement, but the total rated capacities of the old system and the new system are equivalent.

³ Project activities involving increase in output level compared to the baseline scenario are only eligible if they comply with the related and relevant guidance in the General Guidance for SSC methodologies which require a demonstration that the baseline scenario for the increased amount of output is the same as the baseline scenario defined by this methodology. Otherwise, in the event project output in year y is greater than the average historical output (average of three most recent years +/-10%) before the implementation of the project activity, the value of the output in year y is capped at the value of the historical average output level.

Request for revision of an approved SSC methodology	
2. If you are proposing an amendment/revision to an approved small-scale methodology (AMS), please provide justifications below:	
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3. If you are proposing an amendment/revision to an approved small-scale methodology (AMS) please provide the draft methodology with changes highlighted.	
<p>The following documents have been attached to this form:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Draft methodology with changes highlighted in Word and PDF formats <input type="checkbox"/> PDD in PDF format (optional) <input type="checkbox"/> Additional information (please specify if you are providing any information note, published paper or a report in support of the request for revision of the SSC methodology) 	
Proposal for a new SSC methodology	
4. If you are proposing a new small scale methodology, please provide justifications below:	
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5. For submitting a new small scale methodology a filled in form "CDM: form for proposed new small scale methodologies (F-CDM-SSC-NM)" is required.	
<p>The following documents have been attached to this form:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Completely filled in form "CDM: form for proposed new small scale methodologies (F-CDM-SSC-NM)" in Word and PDF formats⁴ <input type="checkbox"/> A draft PDD (with sections A to C completed): <ul style="list-style-type: none"> <input type="checkbox"/> Relevant annexes to the PDD are provided <input type="checkbox"/> Additional information (please specify if you are providing any information note, published paper or a report in support of the new SSC methodology) 	
Date you are delivering the contribution:	
Information to be completed by the secretariat	
SSC-Submission number	

⁴ The current version of the form (F-CDM-SSC-NM) is available on the UNFCCC CDM website (<http://cdm.unfccc.int>).