



Monitoring report form
(Version 04.0)

MONITORING REPORT	
Title of the project activity	CFL lighting scheme – “Bachat Lamp Yojana”
Reference number of the project activity	PoA 3223
Version number of the monitoring report	1.6
Completion date of the monitoring report	19/09/2014
Registration date of the project activity	29/04/2010
Monitoring period number and duration of this monitoring period	First Monitoring Period Duration: 30/05/2010 to 31/12/2012 (both days inclusive);
Project participant(s)	Bureau of Energy Efficiency C- Quest Capital Malaysia Limited
Host Party(ies)	India
Sectoral scope and selected methodology(ies), and where applicable, applied standardized baseline(s)	Sectoral Scope 3 : Energy demand; Applied Methodology: AMS-II.J. , Version 03
Estimated amount of GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period in the registered PDD	987,224 tCO ₂ e
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period	867,045 tCO ₂ e
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved during the period up to 31 December 2012(if applicable)	867,045 tCO ₂ e
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved during the period from 1 January 2013 onwards (if applicable).	NA

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

The purpose of the Bachat Lamp Yojana (BLY) project activity is to replace the conventional incandescent lamps (ICLs) by compact fluorescent lamps (CFLs) in the residential grid connected households. Under the BLY scheme, up to four, long-life quality CFLs¹ were distributed to grid-connected residential households in exchange of one ICL and INR 15 for one CFL. The reduction in total power demand through the energy saving achieved has resulted a reduction of greenhouse gases (GHG) emissions that would otherwise being emitted during production of the equivalent amount of power in grid connected mostly fossil fuel based power plants.

In CFLs, the electrical current from the ballast flows through the gas, causing it to emit ultraviolet radiations. The phosphor coating converts the ultraviolet radiation emitted to visible light spectrum. CFLs are much more energy efficient than ICLs. The efficiency of ballast-integrated CFL typically ranges from 51 to 56 lumen/ Watt, which is 4 to 5 times higher than an equivalent ICL. Consequently, CFLs consume only 1/4th to 1/5th of the energy used by ICLs to provide the same level of light output.

The CFLs distributed under the project activity is 14 W, with rated lumen output of 760 and rated life time of 6000 hours which would deliver the same lumen output of the replaced 60W ICL as derived from the Indian national standard IS 418:2004 for ICLs. Also, the technical specifications of the CFLs conform to IS 15111:2002.

The distribution of CFLs and replacement of previously used ICLs in households in the CPA area was using the following methods:

- ICL collection and CFL distribution through dedicated distribution points as advertised by the CPA owner in the local media e.g. local DISCOM offices, retail outlets, resident association offices, schools etc.

The implementation chronology is presented in section B.1 of this monitoring report.

The implementation of the CPAs (under this PoA) covering this monitoring period has resulted in achieving 867,045 tonnes of CO₂ equivalent of greenhouse gas emission reductions.

A.2. Location of project activity

The political/geographical boundary of India is the PoA boundary.

The country latitude of 22° 00' N and longitude of 77° 00' E. (referred from http://www.mapsofworld.com/lat_long/india-lat-long.html).

The geographical location of the individual CPAs included under this PoA is listed in [Annexure 1](#).

The unique geographic location of the applied measure (CFLs) in household is determined using the household consumer number provided by utility and/or the household physical address.

A.3. Parties and project participant(s)

Party involved ((host) indicates a host Party)	Private and/or public entity(ies) project participants (as applicable)	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
India (host)	Bureau of Energy Efficiency (Public entity)	No
Netherlands	C- Quest Capital Malaysia Limited (Private Entity)	No

A.4. Reference of applied methodology and standardized baseline

Applied Methodologies –

¹ In India IS 15111 standard specifies a minimum 6000 hours rated life time. Long life quality CFLs in BLY context thus meet IS 15111 requirements and have an average rated life of 6000 hours and above.

AMS-II.J. "Demand-side activities for efficient lighting technologies" (Version 3.0)

AMS-I.D. "Grid connected renewable electricity generation" (Applicable version at the time of inclusion of individual CPA-DDs)

Applied Tool-

"Tool to calculate the emission factor for an electricity system" (Applicable version at the time of inclusion of individual CPA-DDs)

A.5. Crediting period of project activity

Type: Fixed Crediting Period for each CPA under the PoA.

PoA Life time: 20/11/2007 to 19/11/2035 (28 years)

Start Date: The CPA(s) specific crediting period start date is listed in [Annexure 2](#).

Length: The CPA(s) specific crediting period length is listed under [Annexure 2](#).

PoA monitoring period duration: 30/05/2010 to 31/12/2012. The CPA(s) specific monitoring period is listed under [Annexure 2](#).

A.6. Contact information of responsible persons/ entities.

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SECTION B. Implementation of project activity

B.1. Description of implemented registered project activity

Under this Monitoring Report, twenty (20) CPAs have been included as of end date of the present monitoring period. All CPAs are implemented. The implementation of the project activity involves the distribution of two (2) long life quality CFLs per household to the grid connected residential households of the CPA area. One CFL is distributed in exchange of one ICL and INR 15. The CPA specific implementation chronology is presented in [Annexure 3](#).

The DISCOM (Distribution Company) maintains a database of domestic users identifiable on the basis of a unique connection number and/or address used for billing purposes. The distribution activities were carried out by first accessing this consumer database of the grid connected residential consumers from the CPA area.

Individual project activity involved installation of self-ballasted CFLs to replace existing ICLs used in the household. The electronic ballast integrated in the CFL is a non-removable part. The table below shows the lumen output and rated lifetime of the CFLs installed in the individual project activity against the replaced ICLs. The project CFLs meet or exceed the rated normal lumen output of the replaced ICL.

	ICL (baseline)	CFL (project)
Wattage (W)	60	14
Lumen output (lm)	620*	760**
Rated Lifetime (hours)	1,000	6000

*Rated normal Lumen output for 60 W ICL as per IS 418:2004.

** Rated normal Lumen output for 14 W CFL as per IS 15111:2002 (Part 2)

The project CFLs are in compliance with Indian Standard IS 15111:2002, which is the national standard for self-ballasted compact CFLs. The specifications of the project CFLs are as below:

- a) Self-ballasted type
- b) Rated lifetime of 6000 hours
- c) Embossed or laser printed with project logo for clear unique identification
- d) BC/B22 base
- e) Power factor of greater than 0.85
- f) Lumen output of 760 or more for 14 W CFL

The potential recipient households were educated to install the CFL in high-usage areas, such as outdoors, common areas, living room area and kitchen to maximize the energy savings. The distribution of CFLs and replacement of previously used ICLs in households in the CPA area was done using the following method:

- Dedicated distribution points as advertised by the CPA investor in the local media e.g. local DISCOM offices, retail outlets, resident association offices, schools etc.

B.2. Post registration changes

B.2.1. Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline

The details of the temporary deviation are described as follows:

The Q_{PJ} survey was initially planned on 10/03/2011 for the CPAs 3223-0002 to 3223-0007, 01/04/2011 for the CPAs 3223-0016 to 3223-0021 and 15/04/2011 for the CPAs 3223-0008 to 3223-0015. EMC is involved as a CPA implementer and investor for CDM BLY PoA. However, the approval for the investment required in conducting the Q_{PJ} survey has to be sanctioned by Power Department of Kerala. As the investment for the Q_{PJ} survey involved in the project is huge, the Power Department of Kerala delayed the approval for one year from the date of registration. Otherwise the Q_{PJ} survey would have been conducted as per the initial plan. The period of deviation in the Q_{PJ} survey is mentioned in the below table

CPA UNFCCC Ref. No.	CFL distribution end date	Date completion of one year	Q _{PJ} Survey End date	Period of deviation in days
3223-0002	30/06/2010	29/06/2011	31/07/2011	32
3223-0003	30/06/2010	29/06/2011	31/07/2011	32
3223-0004	15/07/2010	14/07/2011	26/10/2011	104
3223-0005	15/07/2010	14/07/2011	09/08/2011	26
3223-0006	30/06/2010	29/06/2011	01/02/2012	217
3223-0007	30/06/2010	29/06/2011	02/12/2011	156
3223-0008	15/09/2010	14/09/2011	08/08/2011	-
3223-0009	15/09/2010	14/09/2011	08/08/2011	-
3223-0010	15/09/2010	14/09/2011	05/10/2011	21
3223-0011	15/09/2010	14/09/2011	15/01/2012	123
3223-0012	15/09/2010	14/09/2011	21/12/2011	98
3223-0013	15/09/2010	14/09/2011	05/10/2011	21
3223-0014	15/09/2010	14/09/2011	05/10/2011	21
3223-0015	15/09/2010	14/09/2011	21/12/2011	98
3223-0016	31/07/2010	30/07/2011	28/07/2011	-
3223-0017	31/07/2010	30/07/2011	18/12/2011	141
3223-0018	31/07/2010	30/07/2011	27/11/2011	120
3223-0019	31/07/2010	30/07/2011	09/08/2011	10
3223-0020	31/07/2010	30/07/2011	18/12/2011	141
3223-0021	31/07/2010	30/07/2011	01/10/2011	63

By considering the fact that Q_{PJ} survey of MP 1 was conducted in a delayed manner, we had already taken precautionary measures to complete the Q_{PJ} survey of MP 2 as per the scheduled time frame and in compliance with the Para 14 (i) of the methodology AMS.II.J version 03. In this case, we are requesting a

temporary deviation for the first Q_{pj} survey dates as per para 3 of Appendix 1 of Project Standard, version 06. In accordance with the para 3, the Lamp Failure Rate " $LFR_{i,y}$ " for the entire monitoring period has been conservatively considered as higher value among CPA-DD and ex-post monitoring survey for each year. This approach is in compliance with para 15 of the applied methodology and clarification given by EB in SSC 354 and does not aim to reduce the LFR, but considers the higher value among the ex-ante and ex-post LFR values for all the three years.

B.2.2. Corrections

This section is left blank intentionally

B.2.3. Permanent changes from registered monitoring plan, applied methodology or applied standardized baseline

This section is left blank intentionally.

B.2.4. Changes to project design of registered project activity

This section is left blank intentionally.

B.2.5. Changes to start date of crediting period

Changes to start date of crediting period of CPAs were communicated to UNFCCC by CME and the same was approved. The approved crediting period start dates are given in Annexure 2 below.

B.2.6. Types of changes specific to afforestation or reforestation project activity

This section is left blank intentionally

SECTION C. Description of monitoring system

As per applied methodology AMS-II.J., the monitoring for the SSC-CPA would be carried out at the following levels:

1. CFL distribution
2. Ex-post Monitoring Survey
3. ICL destruction
4. CFL Destruction

1. CFL Distribution

The CFLs were distributed by the SSC-CPA owner with support from DISCOM, using the following methods:

- ICL collection and CFL distribution through dedicated distribution points as advertised by the SSC-CPA owner in the local media e.g. local DISCOM offices, retail outlets, resident association offices, schools etc.

2. Ex-post Monitoring Survey

Random Selection of households

For any proposed SSC-CPA area, the database listing all residential households eligible under the SSC-CPA were randomly selected under the monitoring survey. The sampling is as per following criteria:

Sampling Criteria

1. The survey covered the SSC-CPA area, covering the residential sector only,
2. Random sample were determined using statistical tools as representing the households falling under the SSC-CPA area. Survey sample sizes were determined to have at-least 90% confidence level with 10 % maximum margin of error².

Ex-post Monitoring Survey

² As per AMS-II.J ver03 methodology

In addition to the survey requirements as stated in Annexure 4, the following should be included:

1. Visit identified households and assess the following for each household:

- a. Does the installed CFL carry BLY logo : Yes / No
- b. Is the installed CFL operating : Yes / No

The data will be collected and collated centrally by the SSC-CPA.

3. ICL Destruction

Replaced ICLs were collected from dedicated CFL distribution points as advertised by the SSC-CPA owner in the local media e.g. local DISCOM offices.

The collected ICLs were stored in respective DISCOM circles.

The ICL collected were destroyed.

The destruction of ICLs are documented and the number and power of the ICLs recorded to allow for random verification by the DOE.

SSC-CPA owner verified the number of distributed CFLs and ICLs collected and destroyed in the SSC-CPA area.

4. CFL Destruction

At the beginning of each monitoring interval, SSC-CPA will compile and update record of the number of fused project CFLs collected from households.

For safe disposal of the CFL, CPA implementer has invited tenders for the preparation of DPR for the safe disposal of CFL and the work is already awarded.

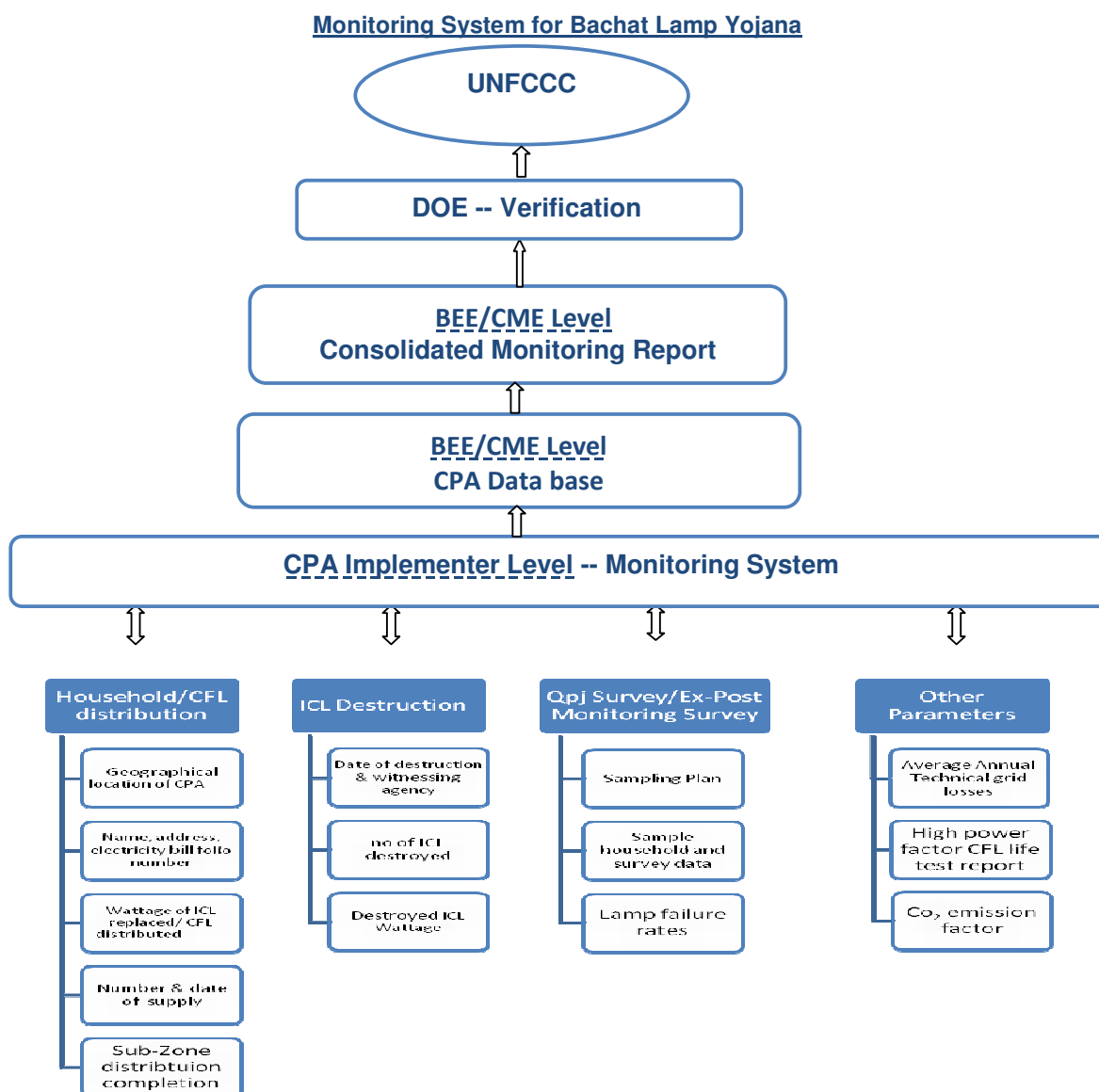
The details of CFLs collected are documented and the number and power of the CFLs recorded. These records would be accessible to the DOE

The overall supervision is maintained by the BEE as PoA Coordinating and Managing Entity (CME), whereas on-ground implementation takes place by the CPA implementer(s) in association with DISCOM. This is as per the tri-partite agreement in-between BEE, CPA-implementer(s) and the DISCOM operating in the CPA area. The broad overview of monitoring responsibilities envisaged under the CPA is tabulated below.

Step	Description	Responsibility		
		BEE*	DISCOM	SSC-CPA Implementer
1	Determination of the SSC-CPA area		√	√
2	Establishment of the SSC-CPA implementation plan		√	√
3	Selection of households to be included in the monitoring survey		√	√
4	CFL distribution to the households		√	√
5	Establishment of the SSC-CPA database	√		√
6	Monitoring surveys		√	√
6	Verification of the number of 'destroyed ICLs' and 'distributed CFLs'	√	√	√
7	Reports for estimation of emission reductions	√		√

* Supervisory responsibility.

The overall monitoring system is outlined as under. This summarizes the key elements of the hierarchy and data monitoring plan for CPAs, highlighting responsible entities and their tasks, interaction channels among them, and the key monitoring parameters.



As shown in the above diagram, the monitoring system comprises of four data streams managed by the CPA implementer(s) to determine the emission reductions attributable to each CPA. These are described as under;

Household data/CFL distribution data base :

- Project database: A list of households participating in each CPA including name, address, electricity bill folio number, number and wattage of ICL exchanged and CFL distributed, date of distribution and completion of distribution. The project database will record the start and end dates of each monitoring period and the emission reductions attributable for the monitoring period.
- Double counting prevention: Distributed CFL unique identification list, CFL dispatch records

ICL Destruction data base

The ICLs collected at the time of the CFLs distribution in the CPA area were stored safely in appropriate boxes. The ICL is considered destroyed if it is rendered non-functional. The destruction method(s) followed were:

- Crushing
- Separating ICL shell and cap

The method of ICL destruction and disposal was as per the applicable national standards/requirements. The records of the ICL destruction duly verified by the responsible witness are submitted to the CME. These records are maintained by CME under the BLY database.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante or at renewal of crediting period

Data/Parameter:	EF _{CO2,ELEC,y}					
Unit:	tCO _{2e} /MWh					
Description:	CO ₂ emission factor for displacement of electricity in the grid serving the household consumers that participate in the SSC-CPA during the monitoring interval y, calculated according to the applied version of AMS-I.D. (tCO _{2e} /MWh)					
Source of data:	CDM baseline CO ₂ emission database by Central Electricity Authority (CEA) (versions 4.0, 5.0 and 6.0), India as stated in respective included CPA-DD.					
Value(s) applied:	<table><tr><th>SSC-CPA UNFCCC Ref No</th><th>Value applied</th></tr><tr><td>3223-0002 to 3223-0021</td><td>0.9027</td></tr></table>		SSC-CPA UNFCCC Ref No	Value applied	3223-0002 to 3223-0021	0.9027
SSC-CPA UNFCCC Ref No	Value applied					
3223-0002 to 3223-0021	0.9027					
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)					
Additional comment:	CDM baseline CO ₂ emission database by Central Electricity Authority (CEA) (versions 5.0) is used for all the CPAs mentioned in this MR.					

Data/Parameter:	O _i
Unit:	Hours / day
Description:	Average daily operating hours of the baseline ICLs of the group of "i",
Source of data:	AMS-II.J. version 03 default value
Value(s) applied:	3.5 hours per 24 hours period
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	--

Data/Parameter:	X _i
Unit:	Hours / year
Description:	Operating hours per year for CFL type i
Source of data:	Calculated value
Value(s) applied:	1,277.5 hours per 365 day year; 1,281 hours for leap year
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	--

Data/Parameter:	NTG
Unit:	--
Description:	Net-to-gross adjustment factor
Source of data:	Default AMS-II.J. value
Value(s) applied:	0.95
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	--

Data/Parameter:	L_i				
Unit:	Hours				
Description:	rated average operating hours for CFL type i (i.e. CFL rated lifetime)				
Source of data:	Life test reports of CFLs				
Value(s) applied:	<table border="1"> <thead> <tr> <th>SSC-CPA UNFCCC Ref No</th><th>Value applied</th></tr> </thead> <tbody> <tr> <td>3223-0002 to 3223-0021</td><td>6,000</td></tr> </tbody> </table>	SSC-CPA UNFCCC Ref No	Value applied	3223-0002 to 3223-0021	6,000
SSC-CPA UNFCCC Ref No	Value applied				
3223-0002 to 3223-0021	6,000				
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)				
Additional comment:	--				

Data/Parameter:	High PF CFL life test report and test curves				
Unit:	--				
Description:	Life test reports of CFLs				
Source of data:	Obtained from accredited manufacturer or laboratory				
Value(s) applied:	<table border="1"> <thead> <tr> <th>SSC-CPA UNFCCC Ref No</th><th>High PF CFL Curves Provided</th></tr> </thead> <tbody> <tr> <td>3223-0002 to 3223-0021</td><td>Provided at the time of SSC-CPA inclusion. Again provided to the verifying DOE</td></tr> </tbody> </table>	SSC-CPA UNFCCC Ref No	High PF CFL Curves Provided	3223-0002 to 3223-0021	Provided at the time of SSC-CPA inclusion. Again provided to the verifying DOE
SSC-CPA UNFCCC Ref No	High PF CFL Curves Provided				
3223-0002 to 3223-0021	Provided at the time of SSC-CPA inclusion. Again provided to the verifying DOE				
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)				
Additional comment:	----				

D.2. Data and parameters monitored

Data/Parameter:	Q_{PJ}						
Unit:	Number						
Description:	Number of CFLs of the group of “ i ” CFLs (e.g. 14W CFL) in operation during the first 12 months of distribution						
Measured/ Calculated/ Default:	Calculated from survey data						
Source of data:	SSC-CPA database						
Value(s) of monitored parameter:	<table border="1"> <tbody> <tr> <td>No of grid connected household consumers numbers in project area</td><td>Annexure 4</td></tr> <tr> <td>Actual number of CFLs distributed per household consumer number (2 per household)</td><td>Annexure 4</td></tr> <tr> <td>Q_{PJ}</td><td>Annexure 4</td></tr> </tbody> </table>	No of grid connected household consumers numbers in project area	Annexure 4	Actual number of CFLs distributed per household consumer number (2 per household)	Annexure 4	Q_{PJ}	Annexure 4
No of grid connected household consumers numbers in project area	Annexure 4						
Actual number of CFLs distributed per household consumer number (2 per household)	Annexure 4						
Q_{PJ}	Annexure 4						
Monitoring equipment:	-						
Measuring/Reading/ Recording frequency:	Once in the crediting period (within 1 year from end date of distribution of CFLs) – Please refer section B.2.2 for temporary deviation						
Calculation method (if applicable):	<p>The Q_{PJ} value for the 14 W CFL has been calculated from the results of Q_{PJ} survey, as follows:</p> <ul style="list-style-type: none"> Obtain the ratio of the number lamps of type i with BLY logo found installed & operating in the sample households and the number of lamps of type i claimed to be distributed in the sample households Multiply the ratio obtained by the total number of lamps of type i claimed to be distributed in the CPA area The lower of the values in between claimed number of CFLs and the number of ICLs destroyed has been considered for ER calculation. 						
QA/QC procedures:	Use of standardized data forms and compliance protocols of SSC-CPA.						
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)						
Additional comment:	-						

Data/Parameter:	$LFR_{i,y}$
Unit:	%
Description:	Lamp Failure Rate for CFL type i in year y (fraction)
Measured/ Calculated/ Default:	Calculated based on survey results
Source of data:	Ex-post monitoring survey
Value(s) of monitored parameter:	$LFR_{i,y}$ = Refer Annexure 5
Monitoring equipment:	-
Measuring/ Reading/ Recording frequency:	Once for every 30% of the elapsed rated lifetime of the lamp
Calculation method (if applicable):	<p>Ex post $LFR_{i,y}$ has been determined by dividing the number of fused CFLs determined at the first ex post monitoring survey, by the number of CFLs distributed by the project activity ($Q_{PJ,i}$). The calculated LFR value is compared with the <i>ex-ante</i> LFR which is calculated using the formula provided in methodology^{B01/}. Considering the clarification given by EB in SSC-354, in absence of mortality rate, PP has compared the ex-ante and ex-post LFR values applicable for the current monitoring period.</p> <p>There is also a temporary deviation in the current monitoring period as explained in section B.1 above. Considering both these, the higher value of LFR among both ex-post monitoring survey and CPA-DD values has been considered for emission reduction calculation. This approach is in compliance with para 15 of the applied methodology and clarification given by EB in SSC 354 and does not aim to reduce the LFR, but considers the higher value among the ex-ante and ex-post LFR values for all the three years.</p>
QA/QC procedures:	Use of standardized data forms and compliance protocols of SSC-CPA.
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	Ex post survey are compared with the ex-ante LFR value from linear failure rate curve (for type i) and conservative are considered for emission reduction calculation.

Data/Parameter:	Lamp distribution data					
Unit:	--					
Description:	The start and completion date of CFL distribution, Utility consumer number of CFL recipient households under the SSC-CPA entered into the SSC-CPA database.					
Measured/ Calculated/ Default:	Measured (and recorded in CPA database)					
Source of data:	SSC-CPA Database					
Value(s) of monitored parameter:	<table><tr><td>Distribution of CFLs-Start date</td><td>Refer <u>Annexure 3</u></td></tr><tr><td>Distribution of CFLs- Completion date</td><td>Refer <u>Annexure 3</u></td></tr></table>		Distribution of CFLs-Start date	Refer <u>Annexure 3</u>	Distribution of CFLs- Completion date	Refer <u>Annexure 3</u>
Distribution of CFLs-Start date	Refer <u>Annexure 3</u>					
Distribution of CFLs- Completion date	Refer <u>Annexure 3</u>					
Monitoring equipment:	-					
Measuring/ Reading/ Recording frequency:	Once in the crediting period					
Calculation method (if applicable):	-					
QA/QC procedures:	Use of standardized data forms and compliance protocols of SSC-CPA.					
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)					
Additional comment:	-					

Data/Parameter:	N
Unit:	--
Description:	Sample size of Monitoring Survey
Measured/ Calculated/ Default:	Calculated
Source of data:	Calculated value as per statistical analysis provided in PoA-DD and CPA-DD Annexure 4
Value(s) of monitored parameter:	Number of households: Refer Annexure 5
Monitoring equipment:	-
Measuring/ Reading/ Recording frequency:	Once at the time of each survey.
Calculation method (if applicable):	Calculated as mentioned in the Annexure 4 of respective CPA-DDs.
QA/QC procedures:	The SSC-CPA determined the representative sample size with minimum 90% confidence interval and 10% maximum error margin. The actual number of households to be surveyed arrived at by dividing the value of "N" with the average number of CFLs distributed per household. The SSC-CPA implementer(s) has chosen a sample size higher than the one calculated.
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	Also refer "N" parameter table under section B.6.1 of respective CPA –DDs.

Data/Parameter:	P _{i, BL}
Unit:	W
Description	Rated power of the baseline ICLs of the group of "I"
Measured/ Calculated/ Default:	Measured / Calculated
Source of data:	Weighted average calculated using rated power of the baseline ICLs as recorded in SSC-CPA database
Value(s) of monitored parameter:	60 W ICL have been considered for replacement. The SSC-CPA specific applicable values may be referred at Annexure 9
Monitoring equipment:	-
Measuring/ Reading/ Recording frequency:	Once in the crediting period
Calculation method (if applicable):	Weighted average
QA/QC procedures:	Use of standardized data forms and compliance protocols of SSC-CPA.
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	-

Data/Parameter:	$P_{i,PJ}$
Unit:	W
Description:	Rated power of the CFLs of the group of “i” lighting devices (Watts)
Measured/Calculated/Default:	Calculated
Source of data:	Weighted average calculated using rated power of the CFLs as recorded in SSC-CPA database
Value(s) of monitored parameter:	14 watts CFL have been considered for distribution .Values may be referred at Annexure 9
Monitoring equipment	
Measuring/Reading/Recording frequency:	Once in the crediting period
Calculation method (if applicable):	Weighted average
QA/QC procedures:	Use of standardized data forms and compliance protocols of SSC-CPA.
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	-

Data/Parameter:	$N_{Destroyed}$
Unit:	Number
Description:	Number of ICLs collected and destroyed
Measured/ Calculated/Default:	Measured (recorded)
Source of data:	SSC-CPA database
Value(s) of monitored parameter:	Refer Annexure 6 for the CPAs in which destruction of ICLs have been carried out.
Monitoring equipment:	--
Measuring/Reading/Recording frequency:	Once in the crediting period
Calculation method (if applicable):	--
QA/QC procedures:	The destruction records of baseline ICLs are documented and verifiable by DOE.
Purpose of data:	--
Additional comment:	--

Data/Parameter:	TD_y
Unit:	%
Description:	Average annual technical grid losses
Measured/Calculated /Default:	--
Source of data:	Published DISCOM data by an official governmental body Kerala State Electricity Board (KSEB) filing of Aggregate Revenue Requirement (ARR) and Expected Revenue from Charges (ERC) for the year 2011-2012 to Kerala State Electricity Regulatory Commission (KSERC). The link for the document given below http://www.erckerala.org/userFiles/634329591805310000_ARR%202011-12.pdf
Value(s) of monitored parameter:	Refer <u>Annexure 7</u>
Monitoring equipment:	-
Measuring/Reading/Recording frequency:	Yearly
Calculation method (if applicable):	-
QA/QC procedures:	This value is not including any non-technical losses such as commercial losses (e.g., theft/pilferage).
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	

D.3. Implementation of sampling plan

Under this PoA sampling is required for determining the number of CFLs placed in service and operating (*ex-post* Q_{PJ} , survey) and CFL failure rate (*ex-post monitoring surveys for* LFR_{iy}).

All CPAs under this monitoring period carried out first ex post monitoring survey integrating “ Q_{PJ} ,” survey and the “ LFR_{iy} ” survey.

Sampling Criteria adopted

1. Participating households under the CPA area
2. Random sample group determined using statistical tools as representing the households falling under the CPA area. Survey sample size was determined to have at-least 90% confidence interval and 10 % maximum margin of error³.

The distributed CFLs in the CPA project area surveyed as per the applied methodology AMS-II.J. for the following two(2) monitoring parameters:

- 1) “ Q_{PJ} ,” (number of CFLs with BLY logo, installed and operating), where the Q_{PJ} number is fixed for the entire crediting period;

Sampling Design –

The sampling is carried out as per the sampling plan design described in the Annexure 4 of the included SSC-CPA-DD. The survey records are maintained under the BLY database. The monitoring surveys were carried out by third parties. The survey procedures were established and implemented to ensure that the field data collection is performed properly and any potential intentional errors or unintentional errors are minimized and documented.

Considering that from a BLY scheme point of view, each of the households holds an equal probability of being identified from a DISCOMs active residential household customer base, hence simple random sampling was used.

³ As per AMS-II.J. ver03 methodology

To ensure random selection, random number generators were applied. Each household was allotted a unique CPA serial number starting at 1 and up to the total number of households in CPA area. Using random number generators, the serial number were randomly chosen. The random number thus obtained is correlated with the utility provided residential customer code.

Data Collection –

The following activities were done before collecting the data from households as per the section E.7.2 of registered PoA –DD

- Detailed instructions were given to the survey agency/surveyor(s) on data collection procedures and determination of household sample size.
- Standardized data forms were developed and were used for the data collection during Survey(s).

Accordingly, an appropriate statistically robust sample size for conducting the monitoring survey has been used (Refer [Annexure 5](#) for summary of data collected during survey).

Data Analysis -

The data collected through the standard forms through the surveys was compiled and collated. CPA Baseline, Survey Baseline and Survey findings were determined after conducting survey as follows:

CPA Baseline: From the CPA household database for all the CPA households, the total number of CFLs distributed with BLY logo was taken for each wattage type ‘i’.

Survey Baseline: From the CPA household database for the selected sample of households, the total number of CFLs distributed with BLY logo was taken for each wattage type ‘i’.

Survey Findings: From the survey findings for the selected sample of households, the total number of BLY logo CFLs installed and operating was found for each wattage type ‘i’.

The Q_{PJ} value for each type of CFL type ‘i’ is calculated as presented in Q_{PJ} table of section D.2

= Ratio of (Survey Findings/Survey Baseline) x CPA Baseline, for each wattage type.

To be conservative, the calculated Q_{pj} is compared with the number of ICLs destroyed and minimum of the two is taken as the final Q_{pj} value. The claimed number of lamps is capped by the number of ICLs destroyed.

The calculated Q_{PJ} values are presented in [Annexure 4](#).

Confidence/ Precision -

The applied methodology AMS-II.J. ver03 requires a minimum 90% confidence interval and the 10% maximum error margin. Annexure 4 of respective CPA-DDs has been followed to achieve this level of precision.

2) “LFR_{i,y}” (lamp failure rate of type i) in the CPA area.

Sampling Design –

The CPA follows the sampling approach described in the Annexure 4 of the respective CPA -DDs.

The surveyor appointed by the CPA implementer shall -

- a. Randomly select a sample of households from CPA household database. The number of households to be included in the sample should be equal to or more than the calculated values mentioned in Annexure 4 of the included CPA-DDs.
- b. For the identified households the survey shall identify the number of CFLs for each type of wattage ‘i’ with BLY logo which are installed and not operating
- c. CFLs replaced as a part of regular maintenance or warranty program can be counted as operating. However CFLs cannot be replaced as part of this survey and counted as operating.

Data Collection –

The following activities were done before collecting the data from households as per the section E.7.2 of registered PoA -DD

- Detailed instructions were given to the survey agency/surveyor(s) on data collection procedures and determination of household sample size.
- Standardized data forms were developed and were used for the data collection during Survey(s).

Accordingly, an appropriate statistically robust sample size for conducting the monitoring survey has been used (Refer [Annexure 5](#) for summary of data collected during survey).

Data Analysis –

The data collected through the standard forms through the surveys was compiled and collated centrally.

Survey Baseline and Survey findings were determined after conducting survey as follows:

Survey Baseline: From the CPA household database for the selected sample of households, the total number of CFLs distributed with BLY logo was taken for each wattage type.

Survey Findings: From the survey findings for the selected sample of households, the total number of BLY logo CFLs installed and operating was found for each wattage type.

The Lamp Failure Rate is calculated as

$$= 1 - (\text{Survey Findings} / \text{Survey Baseline}), \text{ for each wattage type } i.$$

The value of the $LFR_{i,y}$ considered for the calculation of the emission reductions is higher of the value obtained from:

- The life test curve submitted by CFL manufacturer/ accredited laboratory for the CFLs distributed in the CPA area
- The ex-post monitoring survey results.

The calculated LFR values are presented in [Annexure 5](#).

The subsequent linear failure rate curve shall be reconstructed for the remaining crediting period based on the slope determined from step (a) and (b) above. This reconstructed curve shall be valid for credit issuance for either 3 years or 30% of the elapsed rated life of the lamp, selected as the minimum frequency of the ex-post monitoring survey in the section B.5.2 of the included CPA-DDs.

Confidence / Precision -

The applied methodology AMS-II.J. ver03 requires a minimum 90% confidence interval and the 10% maximum error margin. Annexure 4 of respective CPA-DDs has been followed to achieve this level of precision.

SECTION E. Calculation of emission reductions or GHG removals by sinks

To calculate the emission reductions from a CPA area, the equations under the CPA-DD section B.5.2 are applied as per project values. This is illustrated below for the data values of the SSC-CPA UNFCCC ref no 3223-0021. For emission reduction values of individual CPAs, refer Annexure 8

Q_{pi} Calculation

The Q_{pi} value is obtained from the findings of the Q_{pi} survey as follows:

i	1	2	3	Parameter Description
D _i	0	849,592	0	Total no. of ICLs of type "i" destroyed, as per ICL destruction records
Z _i	0	849,592	0	Total no. of CFLs of type "i" claimed to be distributed, as per CPA household database

C_i	0	849,592	0	Minimum of CFLs claimed 'Z' and ICLs destroyed 'D'.
S_i	0	2,500	0	No. of CFLs of type "i" distributed in sample households identified for Qpj survey, as per CPA household database
F_i	0	2,003	0	No. of BLY logo CFLs of type "i" found installed and operating in the sample households during Qpj survey

$$Q(pj, i) = \frac{F(i)}{S(i)} \times C(i)$$

i	1	2	3	
$Q_{pj, i}$	0	680,693	0	No. of CFLs of type "i" in operation during the first 12 months of distribution

The values for all CPAs are presented in [Annexure 4](#).

Lamp Failure Rate Calculation

The LFR value is calculated from the findings of the ex-post monitoring survey as follows:

i	1	2	3	
B_i	0	2,500	0	No. of CFLs of type "i" distributed in the sample households selected for ex-post monitoring survey, as per the CPA household database
A_i	0	2,003	0	No. of BLY logo CFLs of type "i" found installed and operating in the sample households during the monitoring survey

$$LFR1_{i,y} = \frac{B_i - A_i}{B_i}$$

i	1 (2010-11)	2 (2011-12)	3 (2012-13)	LFR rate is considered as per the monitoring intervals specified for year 1 & 2 in the CPA DD of 3223-0021.
$LFR1_{i,y}$	0.00%	19.88%	0.00%	Lamp Failure Rate for CFL of type "i" in year y calculated from survey findings (Applicable from 2 nd year as there is a delayed start up of survey)
$LFR2_{i,y}$	10.65%	21.29%	31.94%	Lamp Failure Rate for CFL of type "i" in year y as per section B.5.2 of CPA-DD
$LFR_{i,y}$	19.88%	21.29%	31.94%	For Year 1: As the Q_{pj} survey is not conducted within one year the LFR for the first year is considered as the maximum in comparison with the latest Q_{pj} survey result. For Year 2&3: Maximum of LFR1 and LFR2

The values for all CPAs are presented in [Annexure 7](#).

Estimated Annual Energy Savings

i	Year 1 (For the Monitoring Interval – 09/05/2011 to 30/07/2011 & 31/07/2011 to 08/05/2012)	Year 2 (For the Monitoring Interval- 09/05/2012 to 30/07/2012 & 31/07/2012 to 31/12/2012)	Monitoring intervals for year 1 & 2 are considered as per the frequency mentioned in the CPA DD of 3223-0021.
$P_{i,BL}$	60	60	Rated power of the baseline ICLs of type "i" (Watts)
$P_{i,PJ}$	14	14	Rated power of the project CFLs of type "i" (Watts)
O_i	3.5	3.5	Average daily operating hours of the baseline ICLs of type "i" (hrs)

$$ES_i = (P_{i,BL} - P_{i,PJ}) \times O_i \times \frac{365}{1000}$$

I	Year 1 of crediting period		Year 2 of crediting period		
	09/05/2011 to 30/07/2011	31/07/2011 to 08/05/2012	09/05/2012 to 30/07/2012	31/07/2012 to 31/12/2012	Monitoring intervals for year 1 & 2 are considered as per the frequency mentioned in the CPA DD of 3223-0021.
ES_i	13.36	45.56	13.36	24.79	Estimated annual electricity savings for lamp of type "i" (kWh)

The values for all CPAs are presented in Annexure 7.

Net Energy Savings

i	Year 1		Year 2		
	09/05/2011 to 30/07/2011	31/07/2011 to 08/05/2012	09/05/2012 to 30/07/2012	31/07/2012 to 31/12/2012	
$LFR_{i,y}$	19.88%	21.29%	21.29%	31.94%	LFR rate is considered as per the monitoring intervals specified for year 1 & 2 in the CPA DD of 3223-0021.
$Q_{PJ,i}$	680,693				No. of CFLs of type "i" in operation during the monitoring period (
TD_y	17.71%	17.71%	17.71%	17.71%	Average annual technical grid losses (%)
NTG	0.95	0.95	0.95	0.95	Net-to-gross adjustment factor

$$NES_y = \sum_i Q_{PJ,i} \times (1 - LFR_{i,y}) \times ES_i \times [1 / (1 - TD_y)] \times NTG$$

i	Year 1		Year 2		
	09/05/2011 to 30/07/2011	31/07/2011 to 08/05/2012	09/05/2012 to 30/07/2012	31/07/2012 to 31/12/2012	

NES _{i,y}	8,413.42	28,181.29	8,265.18	13,261.18	Net electricity saved in year y (kWh)
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The values for all CPAs are presented in Annexure 7.

Emission Reductions

i	Year 1		Year 2		
	09/05/2011 to 30/07/2011	31/07/2011 to 08/05/2012	09/05/2012 to 30/07/2012	31/07/2012 to 31/12/2012	
NES _y	8,413.42	28,181.29	8,265.18	13,261.18	Net electricity saved in year y (kWh)
EF _{CO₂,ELEC,y}	0.9027		0.9027		CO ₂ emission factor for displacement of electricity in the grid serving the household consumers (tCO ₂ e/MWh)
ER _{i,y}	33,034		19,431		
ER _y	52,465				

$$ER_y = NES_y \times EF_{CO2,ELEC,y}$$

The values for all CPAs are presented in Annexure 8.

The implementation of this PoA resulted in greenhouse gas emission reduction of 867,045 tCO₂ equivalent during the current monitoring period.

E.1. Calculation of baseline emissions or baseline net GHG removals by sinks

Not Applicable

E.2. Calculation of project emissions or actual net GHG removals by sinks

Not Applicable

E.3. Calculation of leakage

Not Applicable

E.4. Summary of calculation of emission reductions or net anthropogenic GHG removals by sinks

Item	Baseline emissions or baseline net GHG removals by sinks (t CO ₂ e)	Project emissions or actual net GHG removals by sinks (t CO ₂ e)	Leakage (t CO ₂ e)	Emission reductions or net anthropogenic GHG removals by sinks (t CO ₂ e)
Total	-	-	-	867,045

E.5. Comparison of actual emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Item	Values estimated in ex-ante calculation of registered PDD	Actual values achieved during this monitoring period
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Item	Values estimated in ex-ante calculation of registered PDD	Actual values achieved during this monitoring period
Emission reductions or GHG removals by sinks (t CO ₂ e)	987,224	867,045

E.6. Remarks on difference from estimated value in registered PDD

The actual emission reduction achieved during this monitoring period is 12.17% lesser than the value estimated in the CPA DDs. The difference in the emission reductions is due to the difference in ex-post lamp failure rate than the ex-ante lamp failure rate.

E.7. Actual emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Item	Actual values achieved up to 31 December 2012	Actual values achieved from 1 January 2013 onwards
Emission reductions or GHG removals by sinks (t CO ₂ e)	867,045	-

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Appendix 1. Contact information of project participants and responsible persons/ entities

Project participant and/or responsible person/ entity	<input type="checkbox"/> Project participant <input checked="" type="checkbox"/> Responsible person/ entity for completing the CDM-MR-FORM
Organization name	Energy Management Centre -Kerala
Street/P.O. Box	Sreekariyam
Building	
City	Thiruvananthapuram
State/Region	Kerala
Postcode	695017
Country	India
Telephone	+91-471-2594922 / 2594924
Fax	+91-471-2594923
E-mail	emck@keralaenergy.gov.in
Website	www.keralaenergy.gov.in
Contact person	K. M. Dharesan Unnithan
Title	Director
Salutation	Mr.
Last name	Unnithan
Middle name	
First name	K. M. Dharesan
Department	
Mobile	+91-9447064618
Direct fax	+91-471-2594923
Direct tel.	+91-471-2594922 / 2594924
Personal e-mail	kmd@keralaenergy.gov.in

Annexure 1 - Geographical location of the SSC-CPAs included under the BLY-PoA (refer MR Section A.2)

CME CPA Identification No.	UNFCCC CPA Ref No.	State	DISCOM	Circle	District	Division	Latitude (Decimal)	longitude (Decimal)
021-EMC-KL	3223-0002	KL	Kerala State Electricity Board	Thiruvananthapuram Urban Circle	Thiruvananthapuram	Thiruvananthapuram, Kazhakuttam, Attingal	8.5033	76.9516
020-EMC-KL	3223-0003	KL	Kerala State Electricity Board	Thiruvananthapuram Rural Circle	Thiruvananthapuram	Neyyatinkara, Nedumangad	8.5033	76.9516
019-EMC-KL	3223-0004	KL	Kerala State Electricity Board	Pathanamthitta	Pathanamthitta	Pathanamthitta, Adoor, Thiruvalla	9.24	76.815
018-EMC-KL	3223-0005	KL	Kerala State Electricity Board	Kottayam	Kottayam	Pallom, Changanssery, Vaikom	9.5866	76.5216
017-EMC-KL	3223-0006	KL	Kerala State Electricity Board	Kottarakkara	Kottarakkara	Kundra, Kottarkara, Punalur	8.9966	76.775
016-EMC-KL	3223-0007	KL	Kerala State Electricity Board	Kollam	Kollam	Chathanoor, Kollam, Karunagapally	8.88	76.5883
012-EMC-KL	3223-0008	KL	Kerala State Electricity Board	Palakkad	Palakkad	Palakkad, Chittur, Alathur	10.766	76.466
013-EMC-KL	3223-0009	KL	Kerala State Electricity Board	Shornur	Palakkad	Shornur, Mannarkad	10.766	76.2833
014-EMC-KL	3223-0010	KL	Kerala State Electricity Board	Tirur	malappuram	Tirur, Thirurangadi, Ponnani	10.15	76.5166
011-EMC-KL	3223-0011	KL	Kerala State Electricity Board	Manjeri	malappuram	Manjeri, Perinthalmanna, Nilambur	11.1166	76.1166
008-EMC-KL	3223-0012	KL	Kerala State Electricity Board	Kannur, Kalpetta	Kanur, Wayanad	Kannur, Thalassery, Mananthavady, Kalpetta	Kannur-11.8666 Kalpetta- 11.1	Kannur-75.4166 Kalpetta- 76.0166

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010-EMC-KL	3223-0013	KL	Kerala State Electricity Board	Kozikhode	Kozikhode	Kozikhode, Feroke, Balussery	11.25	75.8166
015-EMC-KL	3223-0014	KL	Kerala State Electricity Board	Vadakara	Kozikhode	Vadakara, Nadapuram	11.6092	75.5797
009-EMC-KL	3223-0015	KL	Kerala State Electricity Board	Kasargod, Sreekandapuram	Kasargod, Kannur	Kasargod, Kanhangad, payyannur, Iritty	Kasargod - 12.5 Sreekandapuram - 11.8666	Kasargod-75.00 Sreekandapuram-75.4166
007-EMC-KL	3223-0016	KL	Kerala State Electricity Board	Thrissur	Thrissur	Thrissur(east), Thrissur(west), Kunnamkulam, Wadakkanchery	10.5166	76.2016
003-EMC-KL	3223-0017	KL	Kerala State Electricity Board	Ernakulam	Ernakulam	Ernakulam, Mattancherry, Thripunithura	10.015	76.3033
004-EMC-KL	3223-0018	KL	Kerala State Electricity Board	Irinjalakkuda	Thrissur	Irinjalakkuda, Chalakkudy, Kodungalloor	10.333	76.215
005-EMC-KL	3223-0019	KL	Kerala State Electricity Board	Pala & Thodupuzha	Kottayam, Idukki	Pala, Ponnukunnam, Thodupuzha, Kattappana, Peerumade, Adimalay	Pala - 9.71 Thodupuzha - 9.8933	Pala - 76.68 Thodupuzha - 76.68
006-EMC-KL	3223-0020	KL	Kerala State Electricity Board	Perumbavoor	Ernakulam	Moovattupuzha, Aluva, Perumbavoor, North Parur	10.1	76.4733
002-EMC-KL	3223-0021	KL	Kerala State Electricity Board	Allappuzha	Allappuzha	Allappuzha, Mavelikkara, Chenganoor, Cherthala	9.41	76.41

Annexure 2 – Crediting and Monitoring period of SSC-CPA(s) under BLY PoA (refer MR Section A.5, B.2.5)

CME -Unique Identification No.	UNFCCC Ref. No.	Monitoring / Crediting Period start date dd/mm/yyyy	Monitoring period end date dd/mm/yyyy	Monitoring Interval in days	Monitoring Period Length in years
021-EMC-KL	3223-0002	01/05/2011	31/12/2012	611	1.67
020-EMC-KL	3223-0003	09/05/2011	31/12/2012	603	1.65
019-EMC-KL	3223-0004	09/05/2011	31/12/2012	603	1.65
018-EMC-KL	3223-0005	09/05/2011	31/12/2012	603	1.65
017-EMC-KL	3223-0006	09/05/2011	31/12/2012	603	1.65
016-EMC-KL	3223-0007	09/05/2011	31/12/2012	603	1.65
012-EMC-KL	3223-0008	09/05/2011	31/12/2012	603	1.65
013-EMC-KL	3223-0009	09/05/2011	31/12/2012	603	1.65
014-EMC-KL	3223-0010	09/05/2011	31/12/2012	603	1.65
011-EMC-KL	3223-0011	09/05/2011	31/12/2012	603	1.65
008-EMC-KL	3223-0012	09/05/2011	31/12/2012	603	1.65
010-EMC-KL	3223-0013	09/05/2011	31/12/2012	603	1.65
015-EMC-KL	3223-0014	09/05/2011	31/12/2012	603	1.65
009-EMC-KL	3223-0015	09/05/2011	31/12/2012	603	1.65
007-EMC-KL	3223-0016	09/05/2011	31/12/2012	603	1.65
003-EMC-KL	3223-0017	09/05/2011	31/12/2012	603	1.65
004-EMC-KL	3223-0018	09/05/2011	31/12/2012	603	1.65
005-EMC-KL	3223-0019	09/05/2011	31/12/2012	603	1.65
006-EMC-KL	3223-0020	09/05/2011	31/12/2012	603	1.65
002-EMC-KL	3223-0021	09/05/2011	31/12/2012	603	1.65

Annexure 3: Chronology of SSC CPA implementation (refer MR section B.1)

CME Unique Identification No.	UNFCCC Ref No	Start date of CFL distribution	End date of CFL distribution	Start Date of ICL destruction	End date of ICL destruction	Start Date of Qpj survey	End Date of Qpj survey	Start Date of Monitoring survey	End Date of Monitoring Survey
		dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy
021-EMC-KL	3223-0002	16/03/2010	30/06/2010	16/04/2014	26/04/2014	01/07/2011	31/07/2011	01/07/2011	31/07/2011
020-EMC-KL	3223-0003	16/03/2010	30/06/2010	10/03/2014	20/03/2014	01/07/2011	31/07/2011	01/07/2011	31/07/2011
019-EMC-KL	3223-0004	20/03/2010	15/07/2010	30/04/2014	08/05/2014	26/09/2011	26/10/2011	26/09/2011	26/10/2011
018-EMC-KL	3223-0005	16/03/2010	15/07/2010	04/04/2014	12/05/2014	10/07/2011	09/08/2011	10/07/2011	09/08/2011
017-EMC-KL	3223-0006	16/03/2010	30/06/2010	26/04/2014	05/05/2014	02/01/2012	01/02/2012	02/01/2012	01/02/2012
016-EMC-KL	3223-0007	20/03/2010	30/06/2010	21/04/2014	30/04/2014	02/11/2011	02/12/2011	02/11/2011	02/12/2011
012-EMC-KL	3223-0008	26/05/2010	15/09/2010	23/05/2014	29/05/2014	09/07/2011	08/08/2011	09/07/2011	08/08/2011
013-EMC-KL	3223-0009	27/05/2010	15/09/2010	21/05/2014	31/05/2014	09/07/2011	08/08/2011	09/07/2011	08/08/2011
014-EMC-KL	3223-0010	04/06/2010	15/09/2010	26/05/2014	03/06/2014	05/09/2011	05/10/2011	05/09/2011	05/10/2011
011-EMC-KL	3223-0011	07/06/2010	15/09/2010	28/05/2014	05/06/2014	16/12/2011	15/01/2012	16/12/2011	15/01/2012
008-EMC-KL	3223-0012	05/06/2010	15/09/2010	02/06/2014	12/06/2014	21/11/2011	21/12/2011	21/11/2011	21/12/2011
010-EMC-KL	3223-0013	12/06/2010	15/09/2010	02/06/2014	10/06/2014	05/09/2011	05/10/2011	05/09/2011	05/10/2011
015-EMC-KL	3223-0014	16/06/2010	15/09/2010	02/06/2014	13/06/2014	05/09/2011	05/10/2011	05/09/2011	05/10/2011
009-EMC-KL	3223-0015	21/06/2010	15/09/2010	11/06/2014	20/06/2014	21/11/2011	21/12/2011	21/11/2011	21/12/2011
007-EMC-KL	3223-0016	06/05/2010	31/07/2010	24/05/2014	26/05/2014	28/06/2011	28/07/2011	28/06/2011	28/07/2011
003-EMC-KL	3223-0017	28/04/2010	31/07/2010	09/05/2014	19/05/2014	18/11/2011	18/12/2011	18/11/2011	18/12/2011
004-EMC-KL	3223-0018	10/05/2010	31/07/2010	14/05/2014	23/05/2014	28/10/2011	27/11/2011	28/10/2011	27/11/2011
005-EMC-KL	3223-0019	26/03/2010	31/07/2010	09/05/2014	17/05/2014	10/07/2011	09/08/2011	10/07/2011	09/08/2011
006-EMC-KL	3223-0020	05/05/2010	31/07/2010	12/05/2014	20/05/2014	18/11/2011	18/12/2011	18/11/2011	18/12/2011
002-EMC-KL	3223-0021	25/03/2010	31/07/2010	03/04/2014	14/05/2014	01/09/2011	01/10/2011	01/09/2011	01/10/2011

Annexure 4: Q_{pi} Survey Sample size and calculations (refer MR section D.2)

CME CPA Reference No	UNFCCC CPA Ref No	Grid connected HHs participating under the CPA	Average CFLs distributed per household	Qpj Sample size	Start Date of Qpj Survey	End Date of Qpj survey	No. of CFLs of type "i" actually distributed in sample households identified for Qpj survey	BLY logo CFLs of type "i" found installed and operating in the sample households during Qpj survey	Qpj (No. of CFLs of type "i" in operation) fixed for crediting period
		H		N	dd/mm/yyyy	dd/mm/yyyy			
021-EMC-KL	3223-0002	350751	2	1250	01/07/2011	31/07/2011	2500	2108	591,506
020-EMC-KL	3223-0003	347883	2	1250	01/07/2011	31/07/2011	2500	2143	596,410
019-EMC-KL	3223-0004	250396	2	1250	26/09/2011	26/10/2011	2500	2455	491,777
018-EMC-KL	3223-0005	249960	2	1250	10/07/2011	09/08/2011	2500	1938	387,537
017-EMC-KL	3223-0006	265954	2	1250	02/01/2012	01/02/2012	2500	2280	485,100
016-EMC-KL	3223-0007	299295	2	1250	02/11/2011	02/12/2011	2500	2123	508,322
012-EMC-KL	3223-0008	300418	2	1250	09/07/2011	08/08/2011	2500	2398	576,321
013-EMC-KL	3223-0009	221379	2	1250	09/07/2011	08/08/2011	2500	2258	399,899
014-EMC-KL	3223-0010	276130	2	1250	05/09/2011	05/10/2011	2500	2345	518,019
011-EMC-KL	3223-0011	354270	2	1250	16/12/2011	15/01/2012	2500	2293	649,872
008-EMC-KL	3223-0012	394160	2	1250	21/11/2011	21/12/2011	2500	2455	774,130

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010-EMC-KL	3223-0013	315608	2	1250	05/09/2011	05/10/2011	2500	2118	534,766
015-EMC-KL	3223-0014	238834	2	1250	05/09/2011	05/10/2011	2500	2408	460,089
009-EMC-KL	3223-0015	406189	2	1250	21/11/2011	21/12/2011	2500	2420	786,381
007-EMC-KL	3223-0016	337767	2	1250	28/06/2011	28/07/2011	2500	2028	547,993
003-EMC-KL	3223-0017	226810	2	1250	18/11/2011	18/12/2011	2500	2058	373,419
004-EMC-KL	3223-0018	290730	2	1250	28/10/2011	27/11/2011	2500	2130	495,403
005-EMC-KL	3223-0019	363328	2	1250	10/07/2011	09/08/2011	2500	2043	593,823
006-EMC-KL	3223-0020	392352	2	1250	18/11/2011	18/12/2011	2500	1970	618,346
002-EMC-KL	3223-0021	424796	2	1250	01/09/2011	01/10/2011	2500	2003	680,693

Annexure 5: 1st Monitoring Survey and Lamp Failure Rate (LFR) calculations (refer MR section D.2)

CME CPA Ref No	UNFCCC CPA Ref No	Sample size	Start Date of Monitoring Survey	End Date of Monitoring Survey	No. of CFLs of type "i" actually distributed in sample households B_i	No. of CFLs with BLY logo of type "i" found installed and operating in the sample households (A_i)
		N_{M1}	dd/mm/yyyy	dd/mm/yyyy		
021-EMC-KL	3223-0002	1250	01/07/2011	31/07/2011	2500	2108
020-EMC-KL	3223-0003	1250	01/07/2011	31/07/2011	2500	2143
019-EMC-KL	3223-0004	1250	26/09/2011	26/10/2011	2500	2455
018-EMC-KL	3223-0005	1250	10/07/2011	09/08/2011	2500	1938
017-EMC-KL	3223-0006	1250	02/01/2012	01/02/2012	2500	2280
016-EMC-KL	3223-0007	1250	02/11/2011	02/12/2011	2500	2123
012-EMC-KL	3223-0008	1250	09/07/2011	08/08/2011	2500	2398
013-EMC-KL	3223-0009	1250	09/07/2011	08/08/2011	2500	2258
014-EMC-KL	3223-0010	1250	05/09/2011	05/10/2011	2500	2345
011-EMC-KL	3223-0011	1250	16/12/2011	15/01/2012	2500	2293
008-EMC-KL	3223-0012	1250	21/11/2011	21/12/2011	2500	2455
010-EMC-KL	3223-0013	1250	05/09/2011	05/10/2011	2500	2118
015-EMC-KL	3223-0014	1250	05/09/2011	05/10/2011	2500	2408
009-EMC-KL	3223-0015	1250	21/11/2011	21/12/2011	2500	2420
007-EMC-KL	3223-0016	1250	28/06/2011	28/07/2011	2500	2028
003-EMC-KL	3223-0017	1250	18/11/2011	18/12/2011	2500	2058
004-EMC-KL	3223-0018	1250	28/10/2011	27/11/2011	2500	2130
005-EMC-KL	3223-0019	1250	10/07/2011	09/08/2011	2500	2043
006-EMC-KL	3223-0020	1250	18/11/2011	18/12/2011	2500	1970
002-EMC-KL	3223-0021	1250	01/09/2011	01/10/2011	2500	2003

UNFCCC CPA Ref No	Ex-Post Lamp Failure Rate for CFL of type "i" in year y calculated from survey findings (LFR1 _i)	Ex-ante Lamp Failure Rate for CFL of type "i" in year y calculated from AMS-II.J. (LFR2 _i)			Maximum of Ex-ante or Ex-post Lamp Failure Rate for CFL of type "i" in year y (LFR _i)		
		Year 1	Year 2	Year 3	LFR (Year 1)	LFR (Year 2)	LFR (Year 3)
	LFR1 ₆₀						
3223-0002	15.68%	10.65%	21.29%	31.94%	15.68%	21.29%	31.94%
3223-0003	14.28%	10.65%	21.29%	31.94%	14.28%	21.29%	31.94%
3223-0004	1.80%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0005	22.48%	11.24%	22.48%	33.72%	22.48%	22.48%	33.72%
3223-0006	8.80%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0007	15.08%	10.65%	21.29%	31.94%	15.08%	21.29%	31.94%
3223-0008	4.08%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0009	9.68%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0010	6.20%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0011	8.28%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0012	1.80%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0013	15.28%	10.65%	21.29%	31.94%	15.28%	21.29%	31.94%
3223-0014	3.68%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0015	3.20%	10.65%	21.29%	31.94%	10.65%	21.29%	31.94%
3223-0016	18.88%	10.65%	21.29%	31.94%	18.88%	21.29%	31.94%
3223-0017	17.68%	10.65%	21.29%	31.94%	17.68%	21.29%	31.94%
3223-0018	14.80%	10.65%	21.29%	31.94%	14.80%	21.29%	31.94%
3223-0019	18.28%	10.65%	21.29%	31.94%	18.28%	21.29%	31.94%
3223-0020	21.20%	10.65%	21.29%	31.94%	21.20%	21.29%	31.94%
3223-0021	19.88%	10.65%	21.29%	31.94%	19.88%	21.29%	31.94%

Note: Ex ante LFR for CPA 3223-0005 has been estimated by linear failure rate curve prepared based on the ex post LFR (i.e. 22.48%) observed during LFR survey conducted in year 2 by PP. Refer ER Spreadsheet for the estimation.

Annexure 6: ICL Destruction data (refer MR section D.2)

CME CPA Ref No	UNFCCC CPA Ref No	No of ICLs collected of each wattage type "i"	No of ICLs destroyed of each wattage type "i"	"Ci" Minimum of Z_i and $N_{Destroyed}$
		D_{60}	$N_{Destroyed}$	C_{60}
021-EMC-KL	3223-0002	701502	701502	701502
020-EMC-KL	3223-0003	695766	695766	695766
019-EMC-KL	3223-0004	500792	500792	500792
018-EMC-KL	3223-0005	499920	499920	499920
017-EMC-KL	3223-0006	531908	531908	531908
016-EMC-KL	3223-0007	598590	598590	598590
012-EMC-KL	3223-0008	600836	600836	600836
013-EMC-KL	3223-0009	442758	442758	442758
014-EMC-KL	3223-0010	552260	552260	552260
011-EMC-KL	3223-0011	708540	708540	708540
008-EMC-KL	3223-0012	788320	788320	788320
010-EMC-KL	3223-0013	631216	631216	631216
015-EMC-KL	3223-0014	477668	477668	477668
009-EMC-KL	3223-0015	812378	812378	812378
007-EMC-KL	3223-0016	675534	675534	675534
003-EMC-KL	3223-0017	453620	453620	453620
004-EMC-KL	3223-0018	581460	581460	581460
005-EMC-KL	3223-0019	726656	726656	726656
006-EMC-KL	3223-0020	784704	784704	784704
002-EMC-KL	3223-0021	849592	849592	849592

Annexure 7: Net Energy Savings Calculations (refer MR section D.2)

UNFCCC CPA Ref No	Monitoring Period												
	Year 1 (year 1 of crediting period)				Year 2 (year 2 of crediting period)				Monitoring Interval (Year 1)		Monitoring Interval (Year 2)		Monitoring Period Length
	dd/mm/yyyy				dd/mm/yyyy				in days		in days		in years
3223-0002	01/05/2011	29/06/2011	30/06/2011	30/04/2012	01/05/2012	29/06/2012	30/06/2012	31/12/2012	60	306	60	185	1.67
3223-0003	09/05/2011	29/06/2011	30/06/2011	08/05/2012	09/05/2012	29/06/2012	30/06/2012	31/12/2012	52	314	52	185	1.65
3223-0004	09/05/2011	14/07/2011	15/07/2011	08/05/2012	09/05/2012	14/07/2012	15/07/2012	31/12/2012	67	299	67	170	1.65
3223-0005	09/05/2011	14/07/2011	15/07/2011	08/05/2012	09/05/2012	14/07/2012	15/07/2012	31/12/2012	67	299	67	170	1.65
3223-0006	09/05/2011	29/06/2011	30/06/2011	08/05/2012	09/05/2012	29/06/2012	30/06/2012	31/12/2012	52	314	52	185	1.65
3223-0007	09/05/2011	29/06/2011	30/06/2011	08/05/2012	09/05/2012	29/06/2012	30/06/2012	31/12/2012	52	314	52	185	1.65
3223-0008	09/05/2011	14/09/2011	15/09/2011	08/05/2012	09/05/2012	14/09/2012	15/09/2012	31/12/2012	129	237	129	108	1.65
3223-0009	09/05/2011	14/09/2011	15/09/2011	08/05/2012	09/05/2012	14/09/2012	15/09/2012	31/12/2012	129	237	129	108	1.65
3223-0010	09/05/2011	14/09/2011	15/09/2011	08/05/2012	09/05/2012	14/09/2012	15/09/2012	31/12/2012	129	237	129	108	1.65
3223-0011	09/05/2011	14/09/2011	15/09/2011	08/05/2012	09/05/2012	14/09/2012	15/09/2012	31/12/2012	129	237	129	108	1.65
3223-0012	09/05/2011	14/09/2011	15/09/2011	08/05/2012	09/05/2012	14/09/2012	15/09/2012	31/12/2012	129	237	129	108	1.65
3223-0013	09/05/2011	14/09/2011	15/09/2011	08/05/2012	09/05/2012	14/09/2012	15/09/2012	31/12/2012	129	237	129	108	1.65
3223-0014	09/05/2011	14/09/2011	15/09/2011	08/05/2012	09/05/2012	14/09/2012	15/09/2012	31/12/2012	129	237	129	108	1.65
3223-0015	09/05/2011	14/09/2011	15/09/2011	08/05/2012	09/05/2012	14/09/2012	15/09/2012	31/12/2012	129	237	129	108	1.65
3223-0016	09/05/2011	30/07/2011	31/07/2011	08/05/2012	09/05/2012	30/07/2012	31/07/2012	31/12/2012	83	283	83	154	1.65
3223-0017	09/05/2011	30/07/2011	31/07/2011	08/05/2012	09/05/2012	30/07/2012	31/07/2012	31/12/2012	83	283	83	154	1.65
3223-0018	09/05/2011	30/07/2011	31/07/2011	08/05/2012	09/05/2012	30/07/2012	31/07/2012	31/12/2012	83	283	83	154	1.65
3223-0019	09/05/2011	30/07/2011	31/07/2011	08/05/2012	09/05/2012	30/07/2012	31/07/2012	31/12/2012	83	283	83	154	1.65
3223-0020	09/05/2011	30/07/2011	31/07/2011	08/05/2012	09/05/2012	30/07/2012	31/07/2012	31/12/2012	83	283	83	154	1.65
3223-0021	09/05/2011	30/07/2011	31/07/2011	08/05/2012	09/05/2012	30/07/2012	31/07/2012	31/12/2012	83	283	83	154	1.65

	Net Energy Saving Calculation										
UNFCCC CPA Ref No	Transmission & Distribution losses (%)	Energy Saving by project CFL _i (in KWh)				Net Energy Saved by Project CFL _i (in MWh)					
	Year 1&2	ES ₆₀				NES ₆₀				Year 1 ⁴	Year 2 ⁵
3223-0002	17.71%	9.66	49.27	9.66	29.79	5,562.16	26,479.13	5,191.99	13,843.35	32,041.29	19,035.34

⁴ LFR for year 1 and year 2 applied⁵ LFR for year 2 and year 3 applied

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3223-0003	17.71%	8.37	50.55	8.37	29.79	4,941.20	27,396.67	4,537.03	13,958.12	32,337.87	18,495.15
3223-0004	17.71%	10.79	48.14	10.79	27.37	5,472.18	21,511.10	4,820.21	10,576.15	26,983.27	15,396.36
3223-0005	17.71%	10.79	48.14	10.79	27.37	3,741.14	16,695.54	3,741.14	8,116.09	20,436.68	11,857.23
3223-0006	17.71%	8.37	50.55	8.37	29.79	4,189.40	22,283.53	3,690.27	11,353.07	26,472.93	15,043.34
3223-0007	17.71%	8.37	50.55	8.37	29.79	4,172.10	23,350.26	3,866.92	11,896.55	27,522.36	15,763.47
3223-0008	17.71%	20.77	38.16	20.77	17.39	12,347.28	19,981.86	10,876.20	7,874.06	32,329.14	18,750.26
3223-0009	17.71%	20.77	38.16	20.77	17.39	8,567.56	13,865.06	7,546.81	5,463.67	22,432.62	13,010.47
3223-0010	17.71%	20.77	38.16	20.77	17.39	11,098.20	17,960.45	9,775.94	7,077.50	29,058.65	16,853.44
3223-0011	17.71%	20.77	38.16	20.77	17.39	13,923.06	22,531.98	12,264.24	8,878.96	36,455.04	21,143.20
3223-0012	17.71%	20.77	38.16	20.77	17.39	16,585.20	26,840.18	14,609.21	10,576.65	43,425.38	25,185.86
3223-0013	17.71%	20.77	38.16	20.77	17.39	10,862.80	18,541.09	10,091.99	7,306.31	29,403.89	17,398.29
3223-0014	17.71%	20.77	38.16	20.77	17.39	9,857.09	15,951.93	8,682.70	6,286.02	25,809.03	14,968.72
3223-0015	17.71%	20.77	38.16	20.77	17.39	16,847.67	27,264.94	14,840.41	10,744.03	44,112.61	25,584.44
3223-0016	17.71%	13.36	45.56	13.36	24.79	6,857.78	22,687.39	6,653.90	10,675.94	29,545.17	17,329.84
3223-0017	17.71%	13.36	45.56	13.36	24.79	4,742.23	15,459.88	4,534.17	7,274.91	20,202.10	11,809.08
3223-0018	17.71%	13.36	45.56	13.36	24.79	6,511.47	20,510.12	6,015.34	9,651.39	27,021.59	15,666.72
3223-0019	17.71%	13.36	45.56	13.36	24.79	7,486.28	24,584.79	7,210.38	11,568.79	32,071.07	18,779.17
3223-0020	17.71%	13.36	45.56	13.36	24.79	7,516.89	25,600.07	7,508.15	12,046.55	33,116.96	19,554.69
3223-0021	17.71%	13.36	45.56	13.36	24.79	8,413.42	28,181.29	8,265.18	13,261.18	36,594.71	21,526.37

Annexure 8: Comparison Actual Emission reductions and estimated value in included SSC-CPA (refer MR section E)

CME CPA Ref No	UNFCCC CPA Ref No	Actual Emission Reduction (tCO₂e)	Projected Emission Reduction as per CPA-DD (tCO₂e)	Remarks on difference between estimated and actual emission reductions
021-EMC-KL	3223-0002	46,106	54,814	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
020-EMC-KL	3223-0003	45,886	53,550	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
019-EMC-KL	3223-0004	38,255	38,765	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
018-EMC-KL	3223-0005	29,151	38,698	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
017-EMC-KL	3223-0006	37,476	40,938	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
016-EMC-KL	3223-0007	39,073	46,071	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
012-EMC-KL	3223-0008	46,108	47,608	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
013-EMC-KL	3223-0009	31,993	35,084	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
014-EMC-KL	3223-0010	41,444	43,760	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
011-EMC-KL	3223-0011	51,992	56,143	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
008-EMC-KL	3223-0012	61,935	62,464	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
010-EMC-KL	3223-0013	42,247	50,015	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
015-EMC-KL	3223-0014	36,809	37,849	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
009-EMC-KL	3223-0015	62,915	64,371	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
007-EMC-KL	3223-0016	42,313	52,611	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
003-EMC-KL	3223-0017	28,896	35,328	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
004-EMC-KL	3223-0018	38,534	45,284	The difference is because the survey resulted in a large discount

				factor than anticipated due to field conditions
005-EMC-KL	3223-0019	45,901	56,592	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
006-EMC-KL	3223-0020	47,546	61,113	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions
002-EMC-KL	3223-0021	52,465	66,166	The difference is because the survey resulted in a large discount factor than anticipated due to field conditions

Annexure 9: Rated power of the baseline ICLs of the group of “I” and Rated power of the CFLs of the group of “I” lighting devices

UNFCCC Ref. No.	Equivalent wattage of ICLs collected against each type "I" (14W) of project CFLs	Equivalent wattage of CFLs distributed against each type "I" (60W) of baseline ICLs	Actual CFL distributed for each wattage type "I" (60W)	Weighted Average ICL Wattage (W)	Weighted Average CFL Wattage (W)
	$P_{60, BL}$	$P_{60, PJ}$	Z_{60}	$P_{I, BL}$	$P_{I, PJ}$
3223-0002	60	14	701502	60	14
3223-0003	60	14	695766	60	14
3223-0004	60	14	500792	60	14
3223-0005	60	14	499920	60	14
3223-0006	60	14	531908	60	14
3223-0007	60	14	598590	60	14
3223-0008	60	14	600836	60	14
3223-0009	60	14	442758	60	14
3223-0010	60	14	552260	60	14
3223-0011	60	14	708540	60	14
3223-0012	60	14	788320	60	14
3223-0013	60	14	631216	60	14
3223-0014	60	14	477668	60	14
3223-0015	60	14	812378	60	14
3223-0016	60	14	675534	60	14
3223-0017	60	14	453620	60	14
3223-0018	60	14	581460	60	14
3223-0019	60	14	726656	60	14
3223-0020	60	14	784704	60	14
3223-0021	60	14	849592	60	14

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
04.0	25 June 2014	Revisions to: <ul style="list-style-type: none"> • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from <i>F-CDM-MR</i> to <i>CDM-MR-FORM</i>; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net anthropogenic GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01	28 May 2010	EB 54, Annex 34. Initial adoption.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: monitoring report		