Monitoring Report Sheet (Input Sheet) [For Verification]

Table 1: Parameters monitored *ex post*

(a) Monitoring period	(b) Monitoring point No.	(c) Parameters	(d) Description of data	(e) Monitored Values	(f) Units	(g) Monitoring option	(h) Source of data	(i) Measurement methods and procedures	(j) Monitoring frequency	(k) Other comments
2015/8/6-2016/10/31	1	$EC_{PJ,1,p}$	Electricity consumption by project RACs group 1 during the period p	407	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	2	$EC_{PJ,2,p}$	Electricity consumption by project RACs group 2 during the period p	293	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	3	$EC_{PJ,3,p}$	Electricity consumption by project RACs group 3 during the period p	424	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	4	$EC_{PJ,4,p}$	Electricity consumption by project RACs group 4 during the period p	79	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	5	$EC_{PJ,5,p}$	Electricity consumption by project RACs group 5 during the period p	174	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	6	$EC_{PJ,6,p}$	Electricity consumption by project RACs group 6 during the period p	174	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	7	$EC_{PJ,7,p}$	Electricity consumption by project RACs group 7 during the period p	118	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	8	$EC_{PJ,8,p}$	Electricity consumption by project RACs group 8 during the period p	114	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	9	$EC_{PJ,9,p}$	Electricity consumption by project RACs group 9 during the period p	168	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/8/6-2016/10/31	10	$EC_{PJ,10,p}$	Electricity consumption by project RACs group 10 during the period p	303	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC

2015/8/6-2016/10/31	11	$EC_{PJ,11,p}$	Electricity consumption by project RACs group 11 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	12	$EC_{PJ,12,p}$	Electricity consumption by project RACs group 12 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	13	$EC_{PJ,13,p}$	Electricity consumption by project RACs group 13 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	14	$EC_{PJ,14,p}$	Electricity consumption by project RACs group 14 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	15	$EC_{PJ,15,p}$	Electricity consumption by project RACs group 15 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	16	$EC_{PJ,16,p}$	Electricity consumption by project RACs group 16 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	17	$EC_{PJ,17,p}$	Electricity consumption by project RACs group 17 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	18	$EC_{PJ,18,p}$	Electricity consumption by project RACs group 18 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	19	$EC_{PJ,19,p}$	Electricity consumption by project RACs group 19 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	20	$EC_{PJ,20,p}$	Electricity consumption by project RACs group 20 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/8/6-2016/10/31	21	$EC_{PJ,21,p}$	Electricity consumption by project RACs group 21 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi

2015/8/6-2016/10/31	22	$EC_{PJ,22,p}$	Electricity consumption by project RACs group 22 during the period p		MWh	Option C	Monitored data	NA	monitored continuously, recorded monthly	if n<22, then the parameter is 0
2015/8/6-2016/10/31	23	$EC_{PJ,23,p}$	Electricity consumption by project RACs group 23 during the period p		MWh	Option C	Monitored data	NA	monitored continuously, recorded monthly	if n<23, then the parameter is 0
2015/8/6-2016/10/31	24	$EC_{PJ,24,p}$	Electricity consumption by project RACs group 24 during *the* period p		MWh	Option C	Monitored data	NA	monitored continuously, recorded monthly	if n<24, then the parameter is 0
2015/8/6-2016/10/31	25	$EC_{PJ,25,p}$	Electricity consumption by project RACs group 25 during the period p		MWh	Option C	Monitored data	NA	monitored continuously, recorded monthly	if n<25, then the parameter is 0
2015/8/6-2016/10/31	26	η_{REF}	Highest energy efficiency (CSPF) of reference RACs	3.2	Dimensionless	Option A	test report	Determined at a third party testing facility which is equipped with a calorimeter capable of determining CSPF in line with ISO5151, following the testing procedures and conditions outlined in the latest version of Vietnamese National Standard TCVN 7831 at the time of CSPF determination. Choose the highest value measured.	once during the project life	fixed ex-post
2015/8/6-2016/10/31	27	η_{PJ}	Lowest energy efficiency (CSPF) of project RACs	5.0	Dimensionless	Option A	test report	Determined at a third party testing facility which is equipped with a calorimeter capable of determining CSPF in line with ISO5151, following the testing procedures and conditions outlined in the latest version of Vietnamese National Standard TCVN 7831 at the time of CSPF determination. Choose the highest value measured.	once during the project life	fixed ex-post

Table 2: Project-specific parameters fixed *ex ante*

(a) Parameters	(b) Description of data	(c) Estimated Values	(d) Units	(e) Source of data	(f) Other comments
EF_{elec}	CO_2 emission factor of the electricity consumed by project RACs When captive power generation is not available at the project site, then the most recent Vietnamese national grid emission factor [EF_{grid}] available at the time of validation is applied as [EF_{elec}] and fixed for the monitoring period thereafter. When captive power generation is available at the project site, then [EF_{elec}] is conservatively selected as below and fixed for the monitoring period thereafter: EF_{elec} = min (EF_{grid}, $EF_{captive}$) $EF_{captive}$ = 0.8 tCO_2/MWh* * The most recent emission factor available from CDM approved small scale methodology AMS-I.A at the time of validation is applied.	0.560	tCO_2/MWh	[EFgrid] Ministry of Natural Resources and Environment of Vietnam (MONRE), Vietnamese DNA for CDM unless otherwise instructed by the Joint Committee. [EFcaptive] CDM approved small scale methodology: AMS-I.A	CM value for 2012, published by MONRE in 2014
n	Number of RACs groups whose aggregate electricity consumption are measured by one electricity meter	21	Dimensionless	The project proponent selects an integer between 1 and 25 in line with the number of RACs groups included in the project.	1 to 10 : 115 Hospital in HCMC 11 to 21: Viet Duc Hospital in Hanoi

Table3: *Ex-post* calculation of CO_2 emission reductions

Monitoring period	CO_2 emission reductions	Units
2015/8/6-2016/10/31	726	tCO_2/p

[Monitoring option]

Option A	Based on public data which is measured by entities other than the project participants (Data used: publicly recognized data such as statistical data and specifications)
Option B	Based on the amount of transaction which is measured directly using measuring equipments (Data used: commercial evidence such as invoices)
Option C	Based on the actual measurement using measuring equipments (Data used: measured values)

Monitoring Report Sheet (Calculation Process Sheet) [For Verification]

1. Calculations for emission reductions	Fuel type	Value	Units	Parameter
Emission reductions during the period p	N/A	726.3	tCO_2/p	ER_p
2. Selected default values, etc.				
3. Calculations for reference emissions				
Reference emissions during the period p	N/A	1,989.4	tCO_2/p	RE_p
CO_2 emission factor of the electricity consumed by project RACs	electricity	0.560	tCO_2/MWh	EF_{elec}
4. Calculations of the project emissions				
Project emissions during the period p	N/A	1,263.1	tCO_2/p	PE_p
Electricity consumption by project RACs during the period p	electricity	2,254	MWh/p	$\Sigma EC_{PJ,i,p}$
CO_2 emission factor of the electricity consumed by project RACs	electricity	0.560	tCO_2/MWh	EF_{elec}

Monitoring Report Sheet (Input Sheet) [For Verification]

Table 1: Parameters monitored *ex post*

(a) Monitoring period	(b) Monitoring point No.	(c) Parameters	(d) Description of data	(e) Monitored Values	(f) Units	(g) Monitoring option	(h) Source of data	(i) Measurement methods and procedures	(j) Monitoring frequency	(k) Other comments
2015/10/13-2016/10/31	1	$EC_{PJ,1,p}$	Electricity consumption by project RACs group 1 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	2	$EC_{PJ,2,p}$	Electricity consumption by project RACs group 2 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	3	$EC_{PJ,3,p}$	Electricity consumption by project RACs group 3 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	4	$EC_{PJ,4,p}$	Electricity consumption by project RACs group 4 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	5	$EC_{PJ,5,p}$	Electricity consumption by project RACs group 5 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	6	$EC_{PJ,6,p}$	Electricity consumption by project RACs group 6 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	7	$EC_{PJ,7,p}$	Electricity consumption by project RACs group 7 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	8	$EC_{PJ,8,p}$	Electricity consumption by project RACs group 8 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	9	$EC_{PJ,9,p}$	Electricity consumption by project RACs group 9 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC
2015/10/13-2016/10/31	10	$EC_{PJ,10,p}$	Electricity consumption by project RACs group 10 during the period p		MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	115 Hospital, HCMC

2015/10/13-2016/10/31	11	$EC_{PJ,11,p}$	Electricity consumption by project RACs group 11 during the period p	9	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	12	$EC_{PJ,12,p}$	Electricity consumption by project RACs group 12 during the period p	43	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	13	$EC_{PJ,13,p}$	Electricity consumption by project RACs group 13 during the period p	30	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi
2015/10/13-2016/10/31	14	$EC_{PJ,14,p}$	Electricity consumption by project RACs group 14 during the period p	29	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	15	$EC_{PJ,15,p}$	Electricity consumption by project RACs group 15 during the period p	117	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	16	$EC_{PJ,16,p}$	Electricity consumption by project RACs group 16 during the period p	155	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	17	$EC_{PJ,17,p}$	Electricity consumption by project RACs group 17 during the period p	85	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	18	$EC_{PJ,18,p}$	Electricity consumption by project RACs group 18 during the period p	76	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	19	$EC_{PJ,19,p}$	Electricity consumption by project RACs group 19 during the period p	78	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	20	$EC_{PJ,20,p}$	Electricity consumption by project RACs group 20 during the period p	68	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)
2015/10/13-2016/10/31	21	$EC_{PJ,21,p}$	Electricity consumption by project RACs group 21 during the period p	25	MWh	Option C	Monitored data	Electricity consumption is measured by an electricity meter (accuracy class: 0.5S). Measurement is recorded either manually or electronically. QA/QC procedures: Electricity meters for billing in Vietnam are calibrated in line with the national standard DLVN 39 2012. Although the electricity meters installed by the project are not used for the billing purpose, to ensure accuracy of the measurement, all electricity meters in project used for monitoring will be calibrated either every three years, which is the frequency specified in the standard for 3 phase static meter, or replaced by a calibrated meter. Monitored data will be kept and archved for two years after final issuance of credits.	monitored continuously, recorded monthly	Viet Duc Hospital, Hanoi (Period excluded : 10 Dec 2015 to 6 March 2016)

2015/10/13-2016/10/31	22	EC$_{PJ,22,p}$	Electricity consumption by project RACs group 22 during the period p		MWh	Option C	Monitored data	NA	monitored continuously, recorded monthly	if n<22, then the parameter is 0
2015/10/13-2016/10/31	23	EC$_{PJ,23,p}$	Electricity consumption by project RACs group 23 during the period p		MWh	Option C	Monitored data	NA	monitored continuously, recorded monthly	if n<23, then the parameter is 0
2015/10/13-2016/10/31	24	EC$_{PJ,24,p}$	Electricity consumption by project RACs group 24 during *the* period p		MWh	Option C	Monitored data	NA	monitored continuously, recorded monthly	if n<24, then the parameter is 0
2015/10/13-2016/10/31	25	EC$_{PJ,25,p}$	Electricity consumption by project RACs group 25 during the period p		MWh	Option C	Monitored data	NA	monitored continuously, recorded monthly	if n<25, then the parameter is 0
2015/10/13-2016/10/31	26	η$_{REF}$	Highest energy efficiency (CSPF) of reference RACs	3.2	Dimensionless	Option A	test report	Determined at a third party testing facility which is equipped with a calorimeter capable of determining CSPF in line with ISO5151, following the testing procedures and conditions outlined in the latest version of Vietnamese National Standard TCVN 7831 at the time of CSPF determination. Choose the highest value measured.	once during the project life	fixed ex-post
2015/10/13-2016/10/31	27	η$_{PJ}$	Lowest energy efficiency (CSPF) of project RACs	4.4	Dimensionless	Option A	test report	Determined at a third party testing facility which is equipped with a calorimeter capable of determining CSPF in line with ISO5151, following the testing procedures and conditions outlined in the latest version of Vietnamese National Standard TCVN 7831 at the time of CSPF determination. Choose the lowest value measured.	once during the project life	fixed ex-post

Table 2: Project-specific parameters fixed *ex ante*

(a) Parameters	(b) Description of data	(c) Estimated Values	(d) Units	(e) Source of data	(f) Other comments
EF$_{elec}$	CO_2 emission factor of the electricity consumed by project RACs When captive power generation is not available at the project site, then the most recent Vietnamese national grid emission factor [EF$_{grid}$] available at the time of validation is applied as [EF$_{elec}$] and fixed for the monitoring period thereafter. When captive power generation is available at the project site, then [EF$_{elec}$] is conservatively selected as below and fixed for the monitoring period thereafter: EF$_{elec}$ = min (EF$_{grid}$, EF$_{captive}$) EF$_{captive}$ = 0.8 tCO$_2$/MWh* * The most recent emission factor available from CDM approved small scale methodology AMS-I.A at the time of validation is applied.	0.560	tCO$_2$/MWh	[EFgrid] Ministry of Natural Resources and Environment of Vietnam (MONRE), Vietnamese DNA for CDM unless otherwise instructed by the Joint Committee. [EFcaptive] CDM approved small scale methodology: AMS-I.A	CM value for 2012, published by MONRE in 2014
n	Number of RACs groups whose aggregate electricity consumption are measured by one electricity meter	21	Dimensionless	The project proponent selects an integer between 1 and 25 in line with the number of RACs groups included in the project.	1 to 10 : 115 Hospital in HCMC 11 to 21: Viet Duc Hospital in Hanoi

Table3: *Ex-post* calculation of CO$_2$ emission reductions

Monitoring period	CO$_2$ emission reductions	Units
2015/10/13-2016/10/31	152	tCO$_2$/p

[Monitoring option]

Option A	Based on public data which is measured by entities other than the project participants (Data used: publicly recognized data such as statistical data and specifications)
Option B	Based on the amount of transaction which is measured directly using measuring equipments (Data used: commercial evidence such as invoices)
Option C	Based on the actual measurement using measuring equipments (Data used: measured values)

Monitoring Report Sheet (Calculation Process Sheet) [For Verification]

1. Calculations for emission reductions	Fuel type	Value	Units	Parameter
Emission reductions during the period p	N/A	152.6	tCO_2/p	ER_p
2. Selected default values, etc.				
3. Calculations for reference emissions				
Reference emissions during the period p	N/A	552.7	tCO_2/p	RE_p
CO_2 emission factor of the electricity consumed by project RACs	electricity	0.560	tCO_2/MWh	EF_{elec}
4. Calculations of the project emissions				
Project emissions during the period p	N/A	400.2	tCO_2/p	PE_p
Electricity consumption by project RACs during the period p	electricity	714	MWh/p	$\Sigma EC_{PJ,i,p}$
CO_2 emission factor of the electricity consumed by project RACs	electricity	0.560	tCO_2/MWh	EF_{elec}