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
01/04/2017 - 31/12/2017	(1)	$EC_{PJ,i,p}$	Power consumption of project air compressor *i* during the period *p*	-	MWh/p	Option C	Monitored data	Data is measured by measuring equipments in the factory. - Specification of measuring equipments: 1) Electrical power meter is applied for measurement of electrical power consumption of project air compressor. 2) Meter is certified in compliance with national/international standards on electrical power meter. - Measuring and recording: 1) Measured data is recorded and stored in the measuring equipments. 2) Recorded data is checked its integrity once a month by responsible staff. - Calibration: The electrical power meter is calibrated by the manufacturer at the time of factory shipment, and the performance of meter is guaranteed by the manufacturer for ten years without a calibration. - Measuring and recording: The data monitored and required for verification and issuance will be kept and archived electronically for two years after the final issuance of credits.	Continuously	Input on "MRS (input_separate)"
-	(2)	$FC_{PJ,p}$	The amount of fuel input for power generation during monitoring period *p*	-	mass or weight/p	-	-	Data is collected and recorded from the invoices by the fuel supply company.	-	-
-	(3)	$EG_{PJ,p}$	The amount of electricity generated during the monitoring period *p*	-	MWh/p	-	-	Data is measured by measuring equipments in the factory. - Specification of measuring equipments: 1) Electrical power meter is applied for measurement of electrical power consumption of project air compressor. 2) Meter is certified in compliance with national/international standards on electrical power meter. - Measuring and recording: 1) Measured data is recorded and stored in the measuring equipments. 2) Recorded data is checked its integrity once a month by responsible staff. - Calibration: In case a calibration certificate issued by an entity accredited under national/international standards is not provided, such measuring equipment is required to be calibrated.	-	-

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}	[For grid electricity] CO_2 emission factor for consumed electricity	0.566	tCO_2/MWh	The most recent value available at the time of validation is applied and fixed for the monitoring period thereafter. The data is sourced from "Grid Emission Factor (GEF) of Thailand", endorsed by Thailand Greenhouse Gas Management Organization unless otherwise instructed by the Joint Committee.	
EF_{elec}	[For captive electricity] CO_2 emission factor for consumed electricity **Option a**	0.000	tCO_2/MWh	Power generation efficiency obtained from manufacturer's specification.	Calculated
EF_{elec}	[For captive electricity] CO_2 emission factor for consumed electricity **Option b**	0.000	tCO_2/MWh	The power generation efficiency calculated from monitored data of the amount of fuel input for power generation and the amount of electricity generated.	Calculated
EF_{elec}	[For captive electricity] In case the captive electricity generation system meets all of the following conditions; - The system is non-renewable generation system - Electricity generation capacity of the system is less than or equal to 15 MW	-	tCO_2/MWh	[Captive electricity with diesel fuel] CDM approved small scale methodology: AMS-I.A. [Captive electricity with natural gas] 2006 IPCC Guidelines on National GHG Inventories for the source of EF of natural gas. CDM Methodological tool "Determining the baseline efficiency of thermal or electric energy generation systems version02.0" for the default efficiency for off-grid power plants.	
$SP_{RE,sc,i}$	Specific power (SP) of reference air compressor *i* under the specific conditions	-	$kW \cdot min/m^3$	Selected from the default values set in the methodology	Input on "MPS (input_separate)"
$SP_{PJ,i}$	Specific power (SP) of project air compressor *i* under the project specific conditions	-	$kW \cdot min/m^3$	Specifications of project air compressor i prepared for the quotation or factory acceptance test data by manufacturer	Input on "MPS (input_separate)"
$P_{d,PJ,i}$	Discharge pressure of project air compressor *i* under the project specific conditions	-	MPa(Gauge pressure)	Specifications of project air compressor i prepared for the quotation or factory acceptance test data by manufacturer	Input on "MPS (input_separate)"
$T_{s,PJ,i}$	Suction temperature of project air compressor *i* under the project specific conditions	-	K	Specifications of project air compressor i prepared for the quotation or factory acceptance test data by manufacturer	Input on "MPS (input_separate)"
m_i	Number of compression stages of project air compressor *i*	-	-	Catalogues or specifications of project air compressor i	Input on "MPS (input_separate)"
$SP_{PJ,sc,i}$	Specific power (SP) of project air compressor *i* calculated under the specific conditions	-	$kW \cdot min/m^3$	Calculated with the following equation; SPPJ,sc,i = SPPJ,i ×(Ts,PJ,sc,i/Ts,PJ,i) × [(Pd,PJ,sc,i / Ps,PJ,sc,i)^{(k-1)/mik} - 1] / [((Pd,PJ,i + 0.101) / (Ps,PJ,sc,i))^{(k-1)/mik} - 1] k: Heat capacity ratio (Dried Air) = 1.4 mi: number of compression stages of project air compressor i Ps,PJ,i: Suction pressure of project air compressor i under the project specific conditions [MPa(abs)] (Default value is set at atmospheric pressure = 0.101[MPa(abs)]) Ps,PJ,sc,i: Suction pressure of project air compressor i under the specific conditions [MPa(abs)] (Default value is set at atmospheric pressure = 0.101[MPa(abs)]) Ts,PJ,i: Suction temperature of project air compressor i under the project specific conditions [K] (Value from the product catalogue or manufacturer's specification) Ts,PJ,sc,i: Suction temperature of project air compressor i under the specific conditions [K] (Default value is set at 293.0[K]) Pd,PJ,i: Discharge pressure of project air compressor i [MPa(Gauge pressure)] (Value from the product catalogue or manufacturer's specification) Pd,PJ,sc,i: Discharge pressure of project air compressor i under the specific conditions [MPa] (= 0.101[MPa(abs)] + 0.7 [MPa(Gauge pressure)] = 0.801[MPa(abs)])	
η_{elec}	Power generation efficiency	-	%	Specification of the captive power generation system provided by the manufacturer	
NCV_{fuel}	Net calorific value of consumed fuel	-	GJ/mass or weight	In order of preference: 1) values provided by the fuel supplier; 2) measurement by the project participants; 3) regional or national default values; 4) IPCC default values provided in table 1.2 of Ch.1 Vol.2 of 2006 IPCC Guidelines on National GHG Inventories. Lower value is applied.	
EF_{fuel}	CO_2 emission factor of consumed fuel	-	tCO_2/GJ	In order of preference: 1) values provided by the fuel supplier; 2) measurement by the project participants; 3) regional or national default values; 4) IPCC default values provided in table 1.4 of Ch.1 Vol.2 of 2006 IPCC Guidelines on National GHG Inventories. Lower value is applied.	

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

Monitoring Period	CO_2 emission reductions	Units
1/April/2017 - 31/December/2017	38	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 Spreadsheet: JCM_TH_AM002_ver02.0

Reference Number: TH004

		Parameters monitored *ex post*			Project-specific parameters fixed *ex ante*													*Ex-post* calculation of emissions		
Parameters	*i*	$EC_{PJ,i,p}$	$FC_{PJ,p}$	$EG_{PJ,p}$	EF_{elec}	EF_{elec}	EF_{elec}	EF_{elec}	$SP_{RE,sc,i}$	$SP_{PJ,i}$	$P_{d,PJ,i}$	$T_{s,PJ,i}$	m_i	$SP_{PJ,sc,i}$	η_{elec}	NCV_{fuel}	EF_{fuel}	$RE_{i,p}$	$PE_{i,p}$	$ER_{i,p}$
Description of data	Project air compressor No.	Power consumption of project air compressor *i* during the period *p*	The amount of fuel input for power generation during monitoring period *p*	The amount of electricity generated during the monitoring period *p*	[For grid electricity] CO_2 emission factor for consumed electricity	[For captive electricity] CO_2 emission factor for consumed electricity **Option a**	[For captive electricity] CO_2 emission factor for consumed electricity **Option b**	[For captive electricity] CO_2 emission factor for consumed electricity	Specific power (SP) of reference air compressor *i* under the specific conditions	Specific power (SP) of project air compressor *i* under the project specific conditions	Discharge pressure of project air compressor *i* under the project specific conditions	Suction temperature of project air compressor *i* under the project specific conditions	Number of compression stages of project air compressor *i*	Specific power (SP) of project air compressor *i* calculated under the specific conditions	Power generation efficiency	Net calorific value of consumed fuel	CO_2 emission factor of consumed fuel	Reference emissions of project air compressor *i* during the period *p*	Project emissions of project air compressor *i* during the period *p*	Emissions reductions by the project air compressor *i* during the period *p*
Units	-	MWh/p	mass or weight/p	MWh/p	tCO_2/MWh	tCO_2/MWh	tCO_2/MWh	tCO_2/MWh	$kW \cdot min/m^3$	$kW \cdot min/m^3$	MPa(Gauge pressure)	K	-	$kW \cdot min/m^3$	%	GJ/mass or weight	tCO_2/GJ	tCO_2/p	tCO_2/p	tCO_2/p
Monitored values	1	480.3	-	-	0.566	0.000	0.000	-	6.00	5.77	0.75	293.2	2	5.58	-	-	-	292.64	272.05	20.59
	2	422.7	-	-	0.566	0.000	0.000	-	6.00	5.77	0.75	293.2	2	5.58	-	-	-	257.57	239.44	18.12
	3		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	4		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	5		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	6		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	7		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	8		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	9		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	10		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	11		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	12		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	13		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	14		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	15		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	16		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	17		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	18		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	19		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	20		-	-	0.566	0.000	0.000	-	0.00	0.00	0.00	0.0	0	#DIV/0!	-	-	-	0.00	0.00	0.00
	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550.21	511.49	38.71

Monitoring Spreadsheet: JCM_TH_AM002_ver02.0

Reference Number: TH004

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	38.71	tCO_2/p	ER_p
2. Selected default values, etc.				
-	-	-	-	-
3. Calculations for reference emissions				
Reference emissions during the period *p*	N/A	550.21	tCO_2/p	RE_p
Reference emissions	N/A	550.21	tCO_2/p	RE_p
4. Calculations of the project emissions				
Project emissions during the period *p*	N/A	511.49	tCO_2/p	PE_p
Project emissions	N/A	511.49	tCO_2/p	PE_p

[List of Default Values]

$SP_{RE,sc,i}$ = 55 kW	5.73	-
$SP_{RE,sc,i}$ = 75 kW	6.00	-
$SP_{RE,sc,i}$ = 110 kW	5.67	-
$SP_{RE,sc,i}$ = 132 kW	5.84	-
$SP_{RE,sc,i}$ = 145 kW	6.14	-
$SP_{RE,sc,i}$ = 160 kW	5.65	-
$SP_{RE,sc,i}$ = 200 kW	5.49	-

Monitoring Report Sheet (Input Sheet) [For Verification]

Table 1: Parameters monitored *ex post*

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Monitoring period	Monitoring point No.	Parameters	Description of data	Monitored Values	Units	Monitoring option	Source of data	Measurement methods and procedures	Monitoring frequency	Other comments
01/04/2017 - 31/12/2017	(1)	$EC_{PJ,i,p}$	Power consumption of project chiller *i* during the period *p*	-	MWh/p	Option C	Monitored data	Data is measured by measuring equipments in the factory. - Specification of measuring equipments: 1) Electrical power meter is applied for measurement of electrical power consumption of project chiller. 2) Meter is certified in compliance with national/international standards on electrical power meter. - Measuring and recording: 1) Measured data is recorded and stored in the measuring equipments. 2) Recorded data is checked its integrity once a month by responsible staff. - Calibration: The electrical power meter is calibrated by the manufacturer at the time of factory shipment, and the performance of meter is guaranteed by the manufacturer for ten years without a calibration. - Measuring and recording: The data monitored and required for verification and issuance will be kept and archived electronically for two years after the final issuance of credits.	Continuously	Input on "MRS (input_separate)"
-	(2)	$FC_{PJ,p}$	The amount of fuel input for power generation during monitoring period *p*	-	mass or weight/p	-	-	Data is collected and recorded from the invoices by the fuel supply company.	-	-
-	(3)	$EG_{PJ,p}$	The amount of electricity generated during the monitoring period *p*	-	MWh/p	-	-	Data is measured by measuring equipment in the factory. - Specification of measuring equipment: 1) Electrical power meter is applied for measurement of electrical power consumption of project chiller. 2) Meter is certified in compliance with national/international standards on electrical power meter. - Measuring and recording: 1) Measured data is recorded and stored in the measuring equipment. 2) Recorded data is checked its integrity once a month by responsible staff. - Calibration: In case a calibration certificate issued by an entity accredited under national/international standards is not provided, such measuring equipment is required to be calibrated.	-	-

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

(a)	(b)	(c)	(d)	(e)	(f)
Parameters	Description of data	Estimated Values	Units	Source of data	Other comments
EF_{elec}	[For grid electricity] CO_2 emission factor for consumed electricity	0.566	tCO_2/MWh	The most recent value available at the time of validation is applied and fixed for the monitoring period thereafter. The data is sourced from "Grid Emission Factor (GEF) of Thailand", endorsed by Thailand Greenhouse Gas Management Organization unless otherwise instructed by the Joint Committee.	
EF_{elec}	[For captive electricity] CO_2 emission factor for consumed electricity **Option a**	0.000	tCO_2/MWh	Power generation efficiency obtained from manufacturer's specification	Calculated
EF_{elec}	[For captive electricity] CO_2 emission factor for consumed electricity **Option b**	0.000	tCO_2/MWh	The power generation efficiency calculated from monitored data of the amount of fuel input for power generation and the amount of electricity generated	Calculated
EF_{elec}	[For captive electricity] **In case the captive electricity generation system meets all of the following conditions;** - The system is non-renewable generation system - Electricity generation capacity of the system is less than or equal to 15 MW	-	tCO_2/MWh	[Captive electricity with diesel fuel] CDM approved small scale methodology: AMS-I.A. [Captive electricity with natural gas] 2006 IPCC Guidelines on National GHG Inventories for the source of EF of natural gas. CDM Methodological tool "Determining the baseline efficiency of thermal or electric energy generation systems version02.0" for the default efficiency for off-grid power plants.	
$T_{cooling\text{-}out,i}$	Output cooling water temperature of project chiller *i* set under the project specific condition	-	degree Celsius	Specifications of project chiller i prepared for the quotation or factory acceptance test data by manufacturer	Input on "MPS (input_separate)"
$T_{chilled\text{-}out,i}$	Output chilled water temperature of project chiller *i* set under the project specific condition	-	degree Celsius	Specifications of project chiller i prepared for the quotation or factory acceptance test data by manufacturer	Input on "MPS (input_separate)"
$COP_{RE,i}$	COP of reference chiller *i* under the standardizing temperature conditions	-	-	Selected from the default values set in the methodology	Input on "MPS (input_separate)"
$COP_{PJ,i}$	COP of project chiller *i* under the project specific conditions	-	-	Specifications of project chiller i prepared for the quotation or factory acceptance test data by manufacturer	Input on "MPS (input_separate)"
$COP_{PJ,tc,i}$	COP of project chiller *i* calculated under the standardizing temperature conditions	-	-	Calculated with the following equation; COPPJ,tc,i= COPPJ,i × [(Tcooling-out,i - Tchilled-out,i + TDchilled + TDcooling) ÷ (37 - 7 + TDchilled + TDcooling)]	
η_{elec}	Power generation efficiency	-	%	Specification of the captive power generation system provided by the manufacturer	
NCV_{fuel}	Net calorific value of consumed fuel	-	GJ/mass or weight	In order of preference: 1) values provided by the fuel supplier; 2) measurement by the project participants; 3) regional or national default values; 4) IPCC default values provided in table 1.2 of Ch.1 Vol.2 of 2006 IPCC Guidelines on National GHG Inventories. Lower value is applied.	
EF_{fuel}	CO_2 emission factor of consumed fuel	-	tCO_2/GJ	In order of preference: 1) values provided by the fuel supplier; 2) measurement by the project participants; 3) regional or national default values; 4) IPCC default values provided in table 1.4 of Ch.1 Vol.2 of 2006 IPCC Guidelines on National GHG Inventories. Lower value is applied.	

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

Monitoring period	CO_2 emission reductions	Units
1/April/2017 - 31/December/2017	77	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 equipment (Data used: commercial evidence such as invoices)
Option C	Based on the actual measurement using measuring equipment (Data used: measured values)

Monitoring Spreadsheet: JCM_TH_AM003_ver01.0
Reference Number: TH004

		Parameters monitored *ex post*			**Project-specific parameters fixed *ex ante***												***Ex-post* calculation of emissions**		
Parameters	Chiller *i*	$EC_{PJ,i,p}$	$FC_{PJ,p}$	$EG_{PJ,p}$	EF_{elec}	EF_{elec}	EF_{elec}	EF_{elec}	$T_{cooling\text{-}out,i}$	$T_{chilled\text{-}out,i}$	$COP_{RE,i}$	$COP_{PJ,i}$	$COP_{PJ,tc,i}$	η_{elec}	NCV_{fuel}	EF_{fuel}	$RE_{i,p}$	$PE_{i,p}$	$ER_{i,p}$
Description of data	Project chiller No.	Power consumption of project chiller *i* during the period *p*	The amount of fuel input for power generation during monitoring period *p*	The amount of electricity generated during the monitoring period *p*	[For grid electricity] CO_2 emission factor for consumed electricity	[For captive electricity] CO_2 emission factor for consumed electricity **Option a**	[For captive electricity] CO_2 emission factor for consumed electricity **Option b**	[For captive electricity] CO_2 emission factor for consumed electricity	Output cooling water temperature of project chiller *i* set under the project specific condition	Output chilled water temperature of project chiller *i* set under the project specific condition	COP of reference chiller *i* under the standardizing temperature conditions	COP of project chiller *i* under the project specific conditions	COP of project chiller *i* calculated under the standardizing temperature conditions	Power generation efficiency	Net calorific value of consumed fuel	CO_2 emission factor of consumed fuel	Reference emissions of project chiller *i* during the period *p*	Project emissions of project chiller *i* during the period *p*	Emissions reductions by the project chiller *i* during the period *p*
Units	-	MWh/p	mass or weight/p	MWh/p	tCO_2/MWh	tCO_2/MWh	tCO_2/MWh	tCO_2/MWh	degree Celsius	degree Celsius	-	-	-	%	GJ/mass or weight	tCO_2/GJ	tCO_2/p	tCO_2/p	tCO_2/p
Monitored /estimated values	1 (U-R-1/1	609.5	-	-	0.566	0.000	0.000	-	37.0	7.0	5.69	6.15	6.15	-	-	-	373.11	345.20	27.91
	2 (U-R-2/1	637.1	-	-	0.566	0.000	0.000	-	37.0	7.0	5.69	6.15	6.15	-	-	-	390.02	360.84	29.17
	3 (U-R-3/1	441.1	-	-	0.566	0.000	0.000	-	37.0	7.0	5.69	6.15	6.15	-	-	-	270.03	249.83	20.20
	4		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	5		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	6		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	7		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	8		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	9		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	10		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	11		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	12		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	13		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	14		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	15		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	16		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	17		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	18		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	19		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	20		-	-	0.566	0.000	0.000	-	0.0	0.0	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00
	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,033.16	955.88	77.28

Monitoring Spreadsheet: JCM_TH_AM003_ver01.0
Reference Number: TH004

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	77.28	tCO_2/p	ER_p
2. Calculations for reference emissions				
Reference emissions during the period *p*	N/A	1,033.16	tCO_2/p	RE_p
Reference emissions during the period *p*	N/A	1,033.16	tCO_2/p	RE_p
3. Calculations of the project emissions				
Project emissions during the period *p*	N/A	955.88	tCO_2/p	PE_p
Project emissions during the period *p*	N/A	955.88	tCO_2/p	PE_p

[List of Default Values]

$COP_{RE,i}$ for inverter type

$COP_{RE,i}$ (300≤x<450USRt)	5.59	-
$COP_{RE,i}$ (450≤x<550USRt)	5.69	-
$COP_{RE,i}$ (550≤x<825USRt)	5.85	-
$COP_{RE,i}$ (825≤x≤1,500USRt)	6.06	-

$TD_{cooling}$	1.5	degree Celsius
$TD_{chilled}$	1.5	degree Celsius