Monitoring Report Sheet (Input Sheet) [For Verification]

Table 1: Parameters monitored *ex post*

(a)	Monitoring period	01/07/2017–31/12/2017	01/07/2017–31/12/2017
(b)	Monitoring point No.	1	2
(c)	Parameters	$PP_{j,p}$	$EC_{PJ,j,p}$
(d)	Description of data	Paper production measured at the PM line connected to the project OCC line *j* during the period *p*	Electricity consumption by the project OCC line *j* during the period *p*
(e)	Units	ton/p	MWh/p
(f)	Monitoring option	Option C	Option C
(g)	Source of data	Monitored data	Monitored data
(h)	Measurement methods and procedures	Measuring equipment is installed to the PM line connected to the project OCC line j—*for this project, the project line is unique, so the suffix j is omitted*— to measure volume of paper production. Measurement is conducted as follows: - Measured data is automatically transmitted to the remote server/PC for recording. - Data recorded in the remote server/PC is reported and double-checked by a responsible staff on a monthly basis to prevent missing data. 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 base on the national regulation or manufacturer's recommendations.	Measuring equipment is installed to the project OCC line j—for this project, the project line is unique, so the suffix j is omotted—to measure electricity consumption. Electricity consumption of the OCC line is measured with measuring equipments. - Measured data is automatically transmitted to the remote server/PC for recording. - Data recorded in the remote server/PC is reported and double-checked by a responsible staff on a monthly basis to prevent missing data.
(i)	Monitoring frequency	Monitored hourly and recorded monthly for aggregation.	Monitored hourly and recorded monthly for aggregation.
(j)	Other comments	Compiled data is to be stored electronically after 2 years beyond the end of the JCM project. "ton" implies "BDt (Bone Dry ton)". Weight bridge is to be calibrated as specified in its certificate. It is to be calibrated in accordance with the International Recommendation (OIML R 76-1: 2006).	Compiled data is to be stored electronically after 2 years beyond the end of the JCM project. Electricity meter does not require additional calibration as specified in its specs.
(k)	Monitored Value		
	j=1	109,777.0	11,914.2
	j=2		
	j=3		
	j=4		
	j=5		
	j=6		
	j=7		
	j=8		
	j=9		
	j=10		

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

(a)	Parameters	EF_{elec}	SEC_{RE}
(b)	Description of data	CO_2 emission factor for consumed electricity	Reference specific electricity consumption of the OCC line
(c)	Units	tCO_2/MWh	MWh/ton
(d)	Source of data	[Grid electricity] The most recent value available at the time of validation is applied and fixed for the monitoring period thereafter. The data is sourced from “Emission Factors of Electricity Interconnection Systems”, National Committee on Clean Development Mechanism (Indonesian DNA for CDM), based on data obtained by Directorate General of Electricity, Ministry of Energy and Mineral Resources, Indonesia, unless otherwise instructed by the Joint Committee." [Captive electricity] Specification of the captive power generation system including co-generation system provided by the manufacturer. Net calorific value (NCVfuel [GJ/mass or weight]) and CO2 emission factor (EFfuel [tCO2/GJ]) of the fuel (EFfuel [tCO2/GJ]) from IPCC as follows. 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.	Data of daily electricity consumption by the OCC line and daily weight of paper product at the PM line connected to the OCC line within two years from the timing of validation of the existing OCC lines at the same factory where the project OCC line(s) is installed.
(e)	Other comments	Grid and a gas-based captive power supplies electricity to the facility. Base on the historical (2014) data of ratio of both sources and technical specification of the latter are used to calculate the combined CO2 emission factor of the electricity which is fixed ex ante as per the methodology.	The Line 5 historical data (2016) are used for calculation. The relevant calculation is given by another file.
(f)	Estimated Value		
	j=1	0.666	0.188
	j=2		
	j=3		
	j=4		
	j=5		
	j=6		
	j=7		
	j=8		
	j=9		
	j=10		

[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)

Table 3: *Ex-post calculation* of each CO_2 emission reduction

(a)	Parameters	$RE_{j,p}$	$PE_{j,p}$	$ER_{j,p}$
(b)	Description of data	Reference emissions of the OCC line *j* during the period *p*	Project emissions of the OCC line *j* during the period *p*	Emission reductions of the OCC line *j* during the period *p*
(d)	Units	tCO_2/p	tCO_2/p	tCO_2/p
(c)	Estimated Value			
	j=1	13,742.5	7,934.8	5,807.7
	j=2	0.0	0.0	0.0
	j=3	0.0	0.0	0.0
	j=4	0.0	0.0	0.0
	j=5	0.0	0.0	0.0
	j=6	0.0	0.0	0.0
	j=7	0.0	0.0	0.0
	j=8	0.0	0.0	0.0
	j=9	0.0	0.0	0.0
	j=10	0.0	0.0	0.0

Table 4: *Ex-post* calculation of CO_2 emission reductions

Monitoring period	CO_2 emission reductions	Units
01/07/2017-31/12/2017	5,807	tCO_2/p

Monitoring Spreadsheet: JCM_ID_AM012_ver01.0

Reference Number: ID011

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

1. Calculations for emission reductions	Fuel type	Value	Units	Parameter
Emission reductions during the period *p*		5,807.7	tCO_2/p	ER_p
Emission reductions during the period *p*		5,807.7	tCO_2/p	ER_p
2. Selected default values, etc.				
3. Calculations for reference emissions				
Reference emissions during the period *p*		13,742.5	tCO_2/p	RE_p
Reference emissions during the period *p*	N/A	13,742.5	tCO_2/p	RE_p
4. Calculations of the project emissions				
Project emissions during the period *p*		7,934.8	tCO_2/p	PE_p
Project emissions during the period *p*	N/A	7,934.8	tCO_2/p	PE_p

Monitoring Report Sheet (Input Sheet) [For Verification]

Table 1: Parameters monitored *ex post*

(a)	Monitoring period	01/01/2018–31/08/2018	01/01/2018–31/08/2018
(b)	Monitoring point No.	1	2
(c)	Parameters	$PP_{j,p}$	$EC_{PJ,j,p}$
(d)	Description of data	Paper production measured at the PM line connected to the project OCC line *j* during the period *p*	Electricity consumption by the project OCC line *j* during the period *p*
(e)	Units	ton/p	MWh/p
(f)	Monitoring option	Option C	Option C
(g)	Source of data	Monitored data	Monitored data
(h)	Measurement methods and procedures	Measuring equipment is installed to the PM line connected to the project OCC line j—*for this project, the project line is unique, so the suffix j is omitted*— to measure volume of paper production. Measurement is conducted as follows: - Measured data is automatically transmitted to the remote server/PC for recording. - Data recorded in the remote server/PC is reported and double-checked by a responsible staff on a monthly basis to prevent missing data. 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 base on the national regulation or manufacturer's recommendations.	Measuring equipment is installed to the project OCC line j—for this project, the project line is unique, so the suffix j is omotted—to measure electricity consumption. Electricity consumption of the OCC line is measured with measuring equipments. - Measured data is automatically transmitted to the remote server/PC for recording. - Data recorded in the remote server/PC is reported and double-checked by a responsible staff on a monthly basis to prevent missing data.
(i)	Monitoring frequency	Monitored hourly and recorded monthly for aggregation.	Monitored hourly and recorded monthly for aggregation.
(j)	Other comments	Compiled data is to be stored electronically after 2 years beyond the end of the JCM project. "ton" implies "BDt (Bone Dry ton)". Weight bridge is to be calibrated as specified in its certificate. It is to be calibrated in accordance with the International Recommendation (OIML R 76-1: 2006).	Compiled data is to be stored electronically after 2 years beyond the end of the JCM project. Electricity meter does not require additional calibration as specified in its specs.
(k)	Monitored Value		
	j=1	172,090.0	16,775.8
	j=2		
	j=3		
	j=4		
	j=5		
	j=6		
	j=7		
	j=8		
	j=9		
	j=10		

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

(a)	Parameters	EF_{elec}	SEC_{RE}
(b)	Description of data	CO_2 emission factor for consumed electricity	Reference specific electricity consumption of the OCC line
(c)	Units	tCO_2/MWh	MWh/ton
(d)	Source of data	[Grid electricity] The most recent value available at the time of validation is applied and fixed for the monitoring period thereafter. The data is sourced from "Emission Factors of Electricity Interconnection Systems", National Committee on Clean Development Mechanism (Indonesian DNA for CDM), based on data obtained by Directorate General of Electricity, Ministry of Energy and Mineral Resources, Indonesia, unless otherwise instructed by the Joint Committee." [Captive electricity] Specification of the captive power generation system including co-generation system provided by the manufacturer. Net calorific value (NCVfuel [GJ/mass or weight]) and CO2 emission factor (EFfuel [tCO2/GJ]) of the fuel (EFfuel [tCO2/GJ]) from IPCC as follows. 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.	Data of daily electricity consumption by the OCC line and daily weight of paper product at the PM line connected to the OCC line within two years from the timing of validation of the existing OCC lines at the same factory where the project OCC line(s) is installed.
(e)	Other comments	Grid and a gas-based captive power supplies electricity to the facility. Base on the historical (2014) data of ratio of both sources and technical specification of the latter are used to calculate the combined CO2 emission factor of the electricity which is fixed ex ante as per the methodology.	The Line 5 historical data (2016) are used for calculation. The relevant calculation is given by another file.
(f)	Estimated Value		
	j=1	0.666	0.188
	j=2		
	j=3		
	j=4		
	j=5		
	j=6		
	j=7		
	j=8		
	j=9		
	j=10		

[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)

Table 3: *Ex-post calculation* of each CO_2 emission reduction

(a)	Parameters	$RE_{j,p}$	$PE_{j,p}$	$ER_{j,p}$
(b)	Description of data	Reference emissions of the OCC line *j* during the period *p*	Project emissions of the OCC line *j* during the period *p*	Emission reductions of the OCC line *j* during the period *p*
(d)	Units	tCO_2/p	tCO_2/p	tCO_2/p
(c)	Estimated Value			
	j=1	21,543.2	11,172.7	10,370.5
	j=2	0.0	0.0	0.0
	j=3	0.0	0.0	0.0
	j=4	0.0	0.0	0.0
	j=5	0.0	0.0	0.0
	j=6	0.0	0.0	0.0
	j=7	0.0	0.0	0.0
	j=8	0.0	0.0	0.0
	j=9	0.0	0.0	0.0
	j=10	0.0	0.0	0.0

Table 4: *Ex-post* calculation of CO_2 emission reductions

Monitoring period	CO_2 emission reductions	Units
01/01/2018–31/08/2018	10,370	tCO_2/p

Monitoring Spreadsheet: JCM_ID_AM012_ver01.0

Reference Number: ID011

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

1. Calculations for emission reductions	Fuel type	Value	Units	Parameter
Emission reductions during the period *p*		10,370.5	tCO_2/p	ER_p
Emission reductions during the period *p*		10,370.5	tCO_2/p	ER_p
2. Selected default values, etc.				
3. Calculations for reference emissions				
Reference emissions during the period *p*		21,543.2	tCO_2/p	RE_p
Reference emissions during the period *p*	N/A	21,543.2	tCO_2/p	RE_p
4. Calculations of the project emissions				
Project emissions during the period *p*		11,172.7	tCO_2/p	PE_p
Project emissions during the period *p*	N/A	11,172.7	tCO_2/p	PE_p