



SUMMIT MEGHNAGHAT II POWER COMPANY LIMITED (SMIIPCL)

583 MW (net) (NG/R-LNG) / 534 MW (HSD) (net) Dual Fuel Combined Cycle Power Plant
Char Ramjan Sonaullah, Meghnaghat, P/S - Sonargoan, District - Narayanganj

Report on Total ton CO2 Emissions Generated Annually by the Project

Data is reported from 1st May 2024 to 31 December 2024, as the project achieved its commercial operation date (COD) on 26 April 2024.

Color Representaion

Input Data
Drop-Down Menu
Automatically Calculated

Ver.: 1.0-2022

Data for the Year	Month	
2024	From	To
	May	December

SL No.	Power Plant Name	Location	Capacity	Fuel Type	Fuel Quantity Unit	Month	Amount of Fuel Consumed	Heat Content HHV basis	Gross Electricity generation	Amount of Fuel Consumed (Natural Use)	Capacity Factor	Heat Rate (HHV basis)	CO2 Emission	**Bangladeshi average CO2 emissions per unit of electricity generated	CO2 emissions if the electricity by the Project is to be generated by Bangladeshi average CO2 emissions per unit of electricity generated	CO2 emissions avoided by the Project
							scf	Btu/scf	MWh	mmBtu	%	kJ / kWh	ton CO2	Ton CO2 / GWh	ton	ton
									C	D			H= (Dx53.06*) / 1,000	K	L=CxK / 1,000	M= L - H
1	Summit Meghnaghat II Power Co. Ltd. (SMIIPCL)	Meghnaghat, Narayanganj	583 MW	Natural Gas	SCF	January				0	0.0%	0	0	540	0	0
2						February				0	0.0%	0	0		0	0
3						March				0	0.0%	0	0		0	0
4						April				0	0.0%	0	0		0	0
5						May	1,325,680,396	1,066.09	200,460	1,413,299	46.2%	7,438	74,990		108,248	33,259
6						June	116,120,000	1,061	17,467	123,213	4.2%	7,443	6,538		9,432	2,894
7						July	0	1,059	0	0	0.0%	0	0		0	0
8						August	0	1,059	0	0	0.0%	0	0		0	0
9						September	0	1,061	0	0	0.0%	0	0		0	0
10						October	455,427,186	1,070.55	66,133	487,558	15.2%	7,778	25,870		35,712	9,842
11						November	945,341,920	1,076.20	151,489	1,017,377	36.1%	7,086	53,982		81,804	27,822
12						December	357,487,630	1076.8	60,425	384,943	13.9%	6,721	20,425		32,630	12,204
					Yearly Total		3,200,057,132	1,066	495,973	3,426,389	9.7%	7,289	181,804	540	267,825.7	86,021

*CO2 emissions factor (natural gas) 53.06 kg CO2 per mmBtu from Intergovernmental Panel on Climate Change (IPCC) guidelines

**http://bforest.portal.gov.bd/sites/default/files/files/bforest.portal.gov.bd/notices/c3379d22_ee62_4dec_9e29_75171074d885/19.%20Power_NCS.pdf

2. GHG emissions (Indirect emission)

Month	Diesel Consumed Liter	Diesel Consumed kg*	Diesel Consumed TJ-LHV**	CO2 emissions factor kg CO2/TJ-LHV***	CO2 emissions Ton CO2
			B	D	E = B x D / 1000
April, 24					
May, 24	110	92.191	0.003954072	74100	293.00
June, 24	110	92.191	0.003954072	74100	293.00
July, 24	110	92.191	0.003954072	74100	293.00
August, 24	110	92.191	0.003954072	74100	293.00
September, 24	110	92.191	0.003954072	74100	293.00
October, 24	118	98.8958	0.004241641	74100	314.31
November, 24	120	100.572	0.004313533	74100	319.63
December, 24	322	269.8682	0.011574647	74100	857.68
Total	1110			-	2956.60

* Density data used for calculation is the lab tested data of usual diesel imported to Bangladesh. Lab Test result is attached for reference.

** LHV data used for calculation is the lab tested data of usual diesel imported to Bangladesh. Lab Test result is attached for reference.

*** CO2 emissions factor (diesel oil) 74100 kg CO2/TJ-LHV from 2006 IPCC Guidelines.

3. Total Ton CO2 Emission (Direct + Indirect Emission)

Month	Direct CO2 Emission Ton	Indirect CO2 Emission Ton	Total CO2 Emission Ton
January, 24			
February, 24			
March, 24			
April, 24			
May, 24	74,990	293.00	75,283
June, 24	6,538	293.00	6,831
July, 24	0	293.00	293
August, 24	0	293.00	293
September, 24	0	293.00	293
October, 24	25,870	314.31	26,184
November, 24	53,982	319.63	54,302
December, 24	20,425	857.68	21,283

Total Ton CO2 Emission Till Date 184,761

Certificate of Analysis: SG17-02351.001

Date: 18/Apr/2017

F500101 SGS BANGLADESH LTD
110, BIR UTTAM C.R. DUTTA ROAD
DHAKA
BANGLADESH
1205

The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated. All tests have been performed using the latest revision of the methods indicated, unless specifically marked otherwise on the report. Precision parameters apply in the determination of the below results. Users of the data shown on this report should refer to the latest published revisions of ASTM D3244; IP 367 and ISO 4259 and when utilising the test data to determine conformance with any specification or process requirement. With respect to the UOP methods listed in the report below the user is referred to the method and the statement within it specifying that the precision statements were determined using UOP Method 999. This Test Report is issued under the Company's General Conditions of Service (copy available upon request or on the company website at www.sgs.com). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. This report shall not be reproduced except in full, without the written approval of the laboratory.

This laboratory is accredited under SAC-SINGLAS ISO/IEC 17025. The results reported herein have been performed in accordance with the terms of accreditation under the Singapore Accreditation Council (SAC). Test marked with an asterisk (*) in this report is not within the scope of accreditation for our laboratory.

CLIENT ID :	NA	VESSEL :	MT.MERCANTILE-19
LOCATION :	SMPCL NARAYANGONJ	PRODUCT DESCRIPTION :	HSD
SAMPLE SOURCE :	SHORELINE		
SAMPLE TYPE :	Composite	SAMPLE BY :	SGS BANGLADESH
SAMPLED :	09/Apr/2017	RECEIVED :	18/Apr/2017
ANALYSED :	18/Apr/2017	COMPLETED :	18/Apr/2017
CLIENT REF:	3000703	SAMPLE NUMBER:	1023104
SEAL NO:	SGS/I 00015744		

PROPERTY	METHOD	RESULT UNITS
Water Content	ASTM D95-13e1	<0.05 % (V/V)
Density at 15°C	ASTM D4052-15	0.8381 Kg/L
Total Sulfur Content	ASTM D4294-16e1	0.0320 %(m/m)
Lower Heating Value	ASTM D4868-17	42.89 MJ/kg
Ash	ASTM D482-13	0.002 %(m/m)
Flash Point, Procedure A (Auto)	ASTM D93-16a	86.0 °C
Trace Metals in Gas Turbine Fuels by AAS -	ASTM D3605	
Flame Emission Spectroscopy *		
Vanadium *		<0.1 mg/kg
Calcium *		<0.1 mg/kg
Nitrogen	ASTM D4629-12	100 mg/kg
** End of Analytical Results **		

REPORTED BY



Sivasegar Ponniah
Assistant Operation Manager - Pet Lab

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AUTHORISED SIGNATORY



Hong Chow Soh
Laboratory Manager

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