The Brunei Darussalam Mission Report



PaSTI- JAIF phase 1 project on development of facility/company level measurement, reporting and verification (MRV) to support carbon pricing in ASEAN member states (AMS)

01. Project Description

Project Type	Development and implementation of facility/company level Monitoring, Reporting and Verification (MRV) systems for Greenhouse Gas (GHG) emissions in ASEAN Member States (AMS) Objective of this assignment under Phase I of the project is to provide technical assistance for the development of a pilot project plan and preparation of a road map for regional facility level measurement and reporting guideline.	
Objectives of the mission	 To collect and validate the information on facility level GHG measurement and reporting (M&R) To identify the priority sector to develop regional facility level M&R guideline for ASEAN 	
Locations	 Land Transport Department, Ministry of Transport and Info communications Hengyi Industries at Ministry of Development Department of Electrical Services Petroleum Authority Brunei Shell Petroleum Brunei LNG Ministry of Development 	
Dates	5 th -6 th February 2020	

02. Participating Organizations

- Ministry of Transport and Info communications
- Hengyi Industries at Ministry of Development
- Department of Electrical Services
- Ministry of Energy and Manpower
- Brunei Shell Petroleum
- Brunei LNG
- Ministry of Development









• Participants

(Omitted)

03. Matters Discussed with Hengyi Industries at Ministry of Development

Agenda Item	Matters Discussed	Remarks
1	Objective of the	 To explore the experience of facility level M&R guideline in state and non-state levels To identify National requirement to develop the
1.	missions	 facility level M&R guideline To identify the priority sector to develop facility level M&R guideline
	Key benefits for private sector	Improvement of capacity building in M&R systems
2.	companies while implementing facility	Capability to improve plant efficiency and estimation of GHG emissions through proper and simple methods
	level M&R for GHG emissions	Share the experience in calculation of GHG emissions from other countries like Singapore and Malaysia.
3.	Emission factors used to estimate GHG emissions in common facility level M&R	Emission factors published by API compendium are used for facility level GHG emissions calculations. Application of facility level or inbuilt emission factors developed by the company is more accurate than basic emission factors published by IPPU.
4.	Verification process	PaSTI phase I is only considered with Monitoring and Reporting, not focusing on verification. Verification can be done by state a sector agency or a third-party agency.
3.	Emission reduction targets	There are no internal emission reduction targets, but national strategies such as BNCP (Brunei National Climate Policy) are followed.
4.	Reporting information to government ministries	Air emission data should be reported to government agencies, according to the WHO air quality guideline & government regulations. Further, petrochemical and power plants should follow IFC EHS guideline. However, there is no voluntary requirement to quantify GHG emissions.









5.	Preferred sectors for developing regional facility level M&R guideline	Petrochemical industry
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04. Matters Discussed with Department of Electrical Services (DES)

Agenda Item	Matters Discussed	Remarks	
1.	Objective of the missions	 To explore the experience of facility level M&R guideline 	
		To identify National requirement to develop the facility level M&R guideline	
		To identify the priority sector to develop facility level M&R guideline	
2.	Key benefits for the country by implementing facility level M&R guideline	Improve capacity building for M & R in different stages	
3.	Data collection templates	DES has data collection templates for electricity consumption.	









05. Matters Discussed with Ministry of Energy and Manpower (BCCS)

Agenda Item	Matters Discussed	Remarks	
		To explore the experience of facility level M&R guideline in state and non-state levels	
1.	Objective of the missions	 To identify National requirement to develop the facility level M&R guideline 	
		To identify a sector to develop facility level M&R guideline	
2.	Data collection from industries	 Only electricity data is collected, but diesel, petrol, coal or other fuel consumption data are not reported. There is no regulation to report. Fugitive emissions in energy sector are collected at facility level under tier 3 approach. However, data in other sub sectors are collected at national level. There is no legal mandate for industries to submit data. 	
3.	Preferred sectors for developing regional facility level M&R guideline	• Energy and AFOLU are the preferred main sectors. Energy industry, Forest and Petro chemical are the preferred sub sectors.	
4.	Improve capacity building in M & R	 They Proposed to have capacity building for Company staff, Local expert and Staff of BCCS at all the levels on common facility level GHG M&R development. 	
5.	Actions taken by Brunei	 A new climate change policy target for 2025 is being drafted. It will be published in 2020. A climate change governance including private sectors was developed for 1.5 years ago. Development of a strong connection between Brunei Government and Industries. 	









06. Matters Discussed with Brunei Shell Petroleum

Agenda Item	Matters Discussed	Remarks
1.	Objective of the missions	To explore the experience of facility level M&R guideline in state and non-state level;
		To identify National requirement to develop the facility level M&R guideline
		To identify a sector to develop facility level M&R guideline
2.	Environment activities following by Brunei shell petroleum	 BSP is pursuing reduced flaring, venting, fuel gas use and power consumption due to operation and maintenance. BSP has an internal CH₄ reduction target (Annual target is to achieve less than 1%) BSP has targets related to GHG emissions on reducing flare and vent intensity to less than 1%. BSP has ASEAN level GHG reduction targets but not have facility level (BSP)
3.	Tools, guidelines and methodologies which are familiarized when quantifying GHG emissions	 BSP follows shell's control framework, which requires the use of a tiered approach aligned with IPCC methodologies and API compendium of GHG emissions methodologies for M&R. Data collection is conducted very comprehensively using excel sheets.
4.	Laws and Regulations	There is no law or regulation to report GHG emissions to the government but flare performance has to be reported.









07. Matters Discussed with Brunei LNG SENDIRIAN BERHAD

Agenda Item	Matters Discussed	Remarks
	Objective of the missions	To explore the experience of facility level M&R guideline in state and non-state levels The interval of
1.		 To identify National requirement to develop the facility level M&R guideline
		• To identify a sector to develop facility level M&R guideline
2.	Environment activities following by Brunei LNG	 Brunei LNG is continually working to improve and reduce their emissions from flaring, fuel consumption and unmeasured loss.
3.	Reporting and measuring of GHG emissions	 GHG emission data are reported to Brunei LNG stakeholders as part of Management Information Report (MIR). Reporting is done monthly /quarterly.
4.	Improve capacity building in M & R	 They Proposed to have capacity building for Company staff, Local expert and Staff of BCCS at all the levels on common facility level GHG M&R development. Also, Brunei LNG requested to conduct technical trainings and workshops regarding the facility level M&R
5.	Preferred sectors for developing regional facility level M&R guideline	• Energy industry and forestry are the preferred sectors to develop common facility level M&R.









08. Matters Discussed with Brunei Petroleum Authority

Agenda Item	Matters Discussed	Remarks
1.	Objective of the missions	To explore the experience of facility level M&R guideline in state and non-state level;
		To identify National requirement to develop the facility level M&R guideline
		To identify a sector to develop facility level M&R guideline
2.	Role of petroleum authority in Brunei	 PA has been established in 2019 PA regulates upstream and downstream petroleum operators. Petroleum Brunei regulator and ministry of energy were the regulators before establishing petroleum authority.
3.	Reporting and measuring of GHG emissions	 PA not measure and report GHG related data but they measure production data and daily price of petroleum products. Current data collection is mainly focused on health and safety.
4.	Improve capacity building in M & R	• PA needs capacity building for petroleum industry operators to train them on GHG related data collections
5.	Preferred sectors for developing regional facility level M&R guideline	Petrochemical industry is the preferred sector to develop common facility level M&R.









01. Actions to be taken

No	Action	Responsible organization/person
1	Share the questionnaire for development of facility level M&R	Department of Electrical Services
2	Provide capacity building to Ministry of Energy and Manpower	OECC, ClimateSI
3	Provide capacity building for facilities in Brunei	OECC, ClimateSI
4	Share the data collection templates	Brunei LNG SENDIRIAN BERHAD Brunei Shell Petroleum Brunei Petroleum authority







