

This report has been prepared at the request of the Multi-Stakeholder Group (MSG) in charge with the implementation of the **Extractive** Industries Transparency Initiative in Myanmar (MEITI). The opinion expressed report are those of the Independent Administrator and did not reflect the official opinion of the MEITI-MSG. This report has been prepared exclusively for use by EITI Myanmar and must not be used by other parties, nor for any purposes other than those for which it is intended.

# **TABLE OF CONTENTS**

IN <sup>-</sup>	ΓRODU	CTION	10
ı	Backgr	ound	10
(	Object	ive	11
9	Scope		11
ı	Nature	and extent of our work	11
1.	EXE	CUTIVE SUMMARY	12
	1.1	Limitations	12
	1.2	Revenues from the commodity trading	13
	1.3	Summary of the reconciliation and verifications results	15
	1.4	Comprehensiveness and reliability of data	17
	1.5	Recommendations	19
2.	APP	ROACH AND METHODOLOGY	27
	2.1	Preliminary analysis	27
	2.2	Reconciliation and investigation of discrepancies	27
	2.3	Desegregation level	27
:	2.4	Materiality	27
	2.5	Period of reporting	28
	2.6	Reliability and Credibility of Data	28
3.	CON	TEXTUAL INFORMATION ON THE MID AND DOWNSTREAM SECTOR	29
	3.1	General context of the mid and downstream Oil and Gas in Myanmar	29
	3.2	Regulatory framework of the Oil and Gas sector	34
	3.3	Oil and Gas production	39
	3.4	Contract disclosure process	47
	3.5	Buyers selection process	47
	3.6	Participation in the Oil and Gas sector	48
	3.7	Pricing and valuation process	56
	3.8	Reconciliation with the MOGE-OA	59
	3.9	Audit and assurance practices in Myanmar	60
	3.10	Beneficial ownership	62
4.	DET	ERMINATION OF THE RECONCILIATION SCOPE	65
	4.1	Overview	65
	4.2	Materiality analysis	65
	4.3	Main information to be disclosed	67
	4.4	Disaggregation level	67
	4 5	Reporting period	67

4.6	Reliability and Credibility of Data	68
5. REC	ONCILIATION RESULTS	69
5.1.	Reconciliation detailed by reporting entities	70
5.2.	Adjustments of MOGE reporting	76
	Adjustment of the purchasing entities reporting	
5.4.	Final differences	80
ANNEXES	5	85

# **LIST OF TABLES**

Table 1: Revenue from the downstream sector (MMK)	
Table 2: Details of Oil sold	
Table 3: Details of gas sales	14
Table 4: Top 5 Gas purchasers	14
Table 5: Total adjusted revenue reported by the MOGE	15
Table 6: Total adjusted revenue reported by the purchasing entities	15
Table 7: Reconciliation results in value	
Table 8: Detail of negative and positive differences	16
Table 9: Reconciliation results in volume	16
Table 10: Comprehensiveness of data	17
Table 11: Reliability of data	17
Table 12 DMO in the different type of contracts	
Table 13: Detail of DMO sold	
Table 14: Verification of the percentage applied (Gas)	
Table 15: Verification of the percentage applied (Oil)	
Table 16: Average MOGE selling prices	
Table 17: DMO buying prices	
Table 18: Detail of MOGE revenues	
Table 19: Detail of OA flows	
Table 20: Differences raised with the OA details	
Table 21: Comprehensiveness of data	
Table 22: Reliability of data	
Table 23: Oil Refineries under operation by MPE - Production Capacity	
Table 24 : Shareholders of Yadana project	
Table 25 : Percentage of shares in Yetagun project	
Table 26 : List of percentage shareholding of Shwe project	
Table 27: Main regulators in the Downstream sector	
Table 28: Oil and Gas production	
Table 29: Oil and condensate production	
Table 30: Gas production	
Table 31 : Details of in-kind payments received	40
Table 32 : Details of the DMO purchased	40
Table 33 : Domestic sales at full prices	
Table 34 : Total oil and Gas collected/purchased	
Table 35 DMO in the different type of contracts	42
Table 36: Detail of DMO sold	
Table 37: Verification of the percentage applied (Gas)	
Table 38: Verification of the percentage applied (Oil)	
• • • • • • • • • • • • • • • • • • • •	43
Table 40 : DMO buying prices	
Table 41 : Total oil and Gas collected/purchased	
Table 42 : Reconciliation of the quantity sold	
Table 43: MOGE participation in the O&G sector	
Table 44: MOGE participation in pipeline projects	
Table 45: Transfers performed by the MOGE	
Table 46: Details of the MOGE deposit	
Table 47: Details of the MOGE loans	
Table 48: price applied for the Oil sales	
Table 49: Local sales prices	
Table 50: List of buyers with a different unit price	
Table 51: Export sales prices	
Table 52: Average prices applied for Oil and Gas products sales (MPE)	
Table 53: Prices applied for Oil and Gas products sales (MPPE)	
Table 54: Detail of MOGE revenues	
Table 5 i. Detail of Mode revenues	57

Table 55: Detail of OA flows	. 59
Table 56: Differences raised with the OA details	
Table 57: Details of Gas sold by Parent Company/Organisation of the buyer	. 66
Table 58: Detail of Oil sold	. 66

# LIST OF FIGURES

Figure 1 : Revenue of the Oil and Gas sales	13
Figure 2: TOP 5 gas purchasers	15
Figure 3: Shwe project pipelines	32
Figure 4: Structure of the MOEE	35
Figure 5: MOGE organigram	48
Figure 6: MPE organigram	
Figure 7: MPPE organigram	

# **LIST OF ACRONYMS**

	abbreviations			
Bbl.	Barrel			
ВО	Beneficial Ownership			
CPI	Consumer Price Index			
DHPI	Department of Hydro Power Implementation			
DMO	Domestic Market Obligation			
DPTSC	Department of Electric Power Transmission and System Control			
EITI	Extractive Industries Transparency Initiative			
EPGE	Electric Power Generation Enterprise			
ESE	Electricity Supply Enterprise			
FOP	Fuel Oil Price			
GAAP	Generally Accepted Accounting Principles			
GOUM	Government of the Republic of the Union on Myanmar			
IA	Independent Administrator			
IG	Imperial Gallon			
INTOSAI	International Organisation of Supreme Audit Institutions			
IRD	Internal Revenue Department			
JCB	Japan Cartoon Box			
LPG	Liquefied petroleum gas			
MAC	Myanmar Accountancy Council			
MAS	Myanmar Accounting Standards			
MATA Myanmar Alliance for Transparency and Accountability				
MEC Myanmar Economic Corporation				
MEITI	Myanmar Extractive Industries Transparency Initiative			
MESC	Mandalay Electricity Supply Corporation			
MFMA	Myanmar Federation of Mining Associations			
MFRS	Myanmar Financial Reporting Standards			
MIC	Myanmar Investment Commission			
MICPA	Myanmar Institute of Certified Accountants			
MMK	Myanmar Kyats			
MMscf	million scf			
MOE	Ministry of Energy			
MOEE	Ministry of Electricity and Energy			
MOEP	Ministry of Electric Power			
MOGE	Myanmar Oil and Gas Enterprise			
MoPF	Ministry of Planning and Finance			
MPE	Myanmar Petrochemical Enterprise			
MPPE	Myanma Petroleum Products Enterprise			
MSG	Multi-Stakeholder Group			
NCS	National Coordination Secretariat			
NRGI	Natural Resource Governance Institute			
OA	Other Accounts			
OAG	Office of the Auditor General			
BDO LLP	8 Commodity Trading in Myanma			

Glossary and abbreviations				
ОТМ	Oil Tools Machinery			
PCC	Performance Compensation Contract			
PEP	Politically exposed persons			
PSC	Production Sharing Contract			
SMEs	Small and Medium Enterprises			
SOE	State-Owned Enterprise			
TPF	Tamadaw Pharmaceutical Factory			
YESC	Yangon Electricity Supply Corporation			

# INTRODUCTION

# Background

Myanmar joined EITI on instructions from its President at the end of 2012. Myanmar submitted its application to become an 'EITI Candidate' country to the EITI Board in May 2014. At its 27<sup>th</sup> meeting in Mexico in July 2014, the EITI Board approved Myanmar's candidacy application, and granted Myanmar until January 2016 to produce its first EITI Report.

In December 2015, Myanmar published its first EITI report for the period starting from April 2013 to March 2014.

On 19 December 2016, the Union Government formally appointed the Myanmar EITI Leading Committee, composed of the Minister of Planning and Finance (MoPF) as Chair, the Minister of Natural Resources and Conservation and the Minister of Energy and Electricity as members, and the Deputy Minister of MOPF as Secretary. The Renaissance Institute was appointed as the National Coordination Office. Civil society is represented by nine members of the Myanmar Alliance for Transparency and Accountability (MATA), while industry is represented by members of the Myanmar Federation of Mining Associations (MFMA) and oil and gas companies. The government has seven representatives.

On 7 March 2017, the EITI International Board approved MEITI's request for extension of deadlines, setting 31 March 2018 as the deadline for the publication of the second EITI Report, and 1 July 2018 as the commencement date for their Validation.

In 2013, the Extractive Industries Transparency Initiative (EITI) moved to require the disclosure of the State's share of production of oil, gas and minerals, and further clarified this requirement in the 2016 version of the EITI Standard. The requirement focuses on improving transparency in the sale of the State's share of production by government and State-Owned Enterprises (SOEs), which it refers to as "First Trades".

The EITI Standard includes provisions requiring disclosure of the sales of the State's share of production and other 'in-kind' revenues (EITI Requirement 4.2): "Where the sale of the State's share of production or other revenues collected in-kind is material, the government, including State Owned Enterprises, is required to disclose the volumes sold and revenues received." In accordance with Requirement 4.2, all material commodity sales by SOEs or other Government Agencies related to the government's share of production or other revenues collected in kind must be disclosed in the EITI Report, including exports as well as sales to domestic buyers and refineries. The Report should also include sales of petroleum products produced/sourced through domestic crude allocation. This would require the disclosure of the volumes of commodities sold and the revenues received broken down by buying company and by SOEs. The EITI requirements further states that "the data published must be disaggregated by individual buying companies and to levels commensurate with the reporting of other payments and revenue streams" (EITI Requirement 4.7). The Report will further break down disclosures by type of product, price, market, blend and sale volume. Where practically feasible, the multi-stakeholder group is encouraged to task the Independent Administrator with reconciling the volumes sold and revenues received by including the buying companies in the reporting process.

# Objective

The primary objective of the assignment is to produce an adequate and comprehensive Commodity Trading Report on disclosure of information regarding revenues from the sales of the State's share of oil, gas and other petroleum products, including reporting by product, price, market and sales volumes, as well as validating and reconciling the same data with data reported by Purchasing companies in accordance with the relevant EITI Requirement 4.2 of the 2016 Standard. The Report will conclude whether the Government of Myanmar receives a share of proceeds commensurate with expected market values from all commodity trade transactions and that the transfer of proceeds to the budget is transparent and accountable.

# Scope

The scope of this report, as decided by the MSG, covers sales revenues from the Oil and Gas sectors performed during the fiscal year 2017-2018.

The modalities for determining materiality thresholds and scope of reconciliation are presented in Section 4 of this report.

### Nature and extent of our work

The Commodity Trading Report covers the government's share of crude oil, gas and other petroleum products. We performed the following tasks:

- collected, reviewed and analysed data on all volumes of government equity crude oil (including condensates) and gas from all production arrangements. This included exports and domestic use;
- presentation of a clear description of the payment flows into and out of the MOGE other accounts;
- with regards to the process of pricing of crude oil and gas, we reviewed the procedures for setting prices;
- provided contextual information which include:
  - $\circ$  an assessment of the legal and regulatory framework for commodity trading in Myanmar; and
  - o a description of all production arrangements in the Industry;
- provided a description of the process and criteria for buyer/trader selection process;
- provided a description of the contract disclosure process;
- on Beneficial Owners of trading companies, we collected data on beneficial owners of trading companies in accordance with EITI Requirements;
- carried out a systems documentation of the structure, management and operations including governing laws and regulations of all relevant divisions and subsidiaries of the SOEs and other Government Agencies that are involved in the process of sales of government equity crude oil, gas and condensates; and
- made recommendations and suggested corrective actions on strengthening the process of commodity trading of equity crude oil, gas and condensate.

# 1. EXECUTIVE SUMMARY

### 1.1 Limitations

The comprehensive list of documents requested and not received to date is presented in Annex 4 of this report.

Additionally, we faced the following limitations:

### **Contracts disclosure process**

We have not received any sales agreement between the MOGE and the different purchasing entities including government to government and government to private. We only received the model of contract used for the preparations of the agreements presented in the annex 6 of the present report.

### Buyers selection criteria

We have not received any details regarding the allocation of Oil and Gas to different buyers, the process of the decision making. We have not been informed of any type of tendering process regarding the sales of Oil and Gas in Myanmar. We have only received a general description of the allocation process that we presented in the section 3.5 of the present report.

### Pricing methodology

We only received a general description of the pricing methodology applied for the valuation of the Oil and Gas sales presented in the section 3.7 of the present report. We have not been able to check the consistency of the prices applied with the methodology used.

### Legislation of the downstream sector

we have not been provided with the draft legislation, which is proposed to amend the Oil and Gas products rules of 1937.

# 1.2 Revenues from the commodity trading

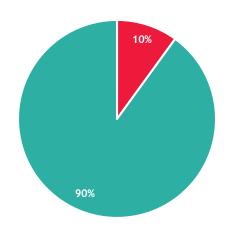
According to the data received from MOGE, the revenue from the commodity trading after reconciliation amounted to MMK 1,179,195 million and is detailed as follows:

Table 1: Revenue from the downstream sector (MMK)

Item	Total revenue	%
Revenue from Oil sales	120,828,101,772	10%
Revenue from Gas sales	1,058,366,815,806	90%
Total	1,179,194,917,578	100%

Source: MOGE data after reconciliation

Figure 1: Revenue of the Oil and Gas sales



Revenue from Oil sales

Revenue from Gas sales

### 1.2.1. REVENUES FROM OIL SALES

According to the data obtained from MOGE, the total receipts from the Oil sales amounted to MKK 120,828 million for the fiscal year 2017-2018. All the oil sales have been performed to TBGN REFINERY (a subsidiary of MPE) and can be presented as follows:

Table 2: Details of Oil sold

Project/field	Buyer	Volumes sold in IG	Volumes sold in bbl.	IG Unit price in MMK	Revenues received in MMK
YENANGYAUNG	TBGN REFINERY	16,611,888	461,441	1,697	28,183,680,727
MANN	TBGN REFINERY	14,752,788	409,800	1,697	25,029,537,090
CHAUK	TBGN REFINERY	11,458,313	318,286	1,697	19,440,140,414
HTAUKSHABIN	TBGN REFINERY	11,196,914	311,025	1,697	18,996,651,633
LETPANDO	TBGN REFINERY	9,256,192	257,116	1,697	15,704,028,349
MA- U- BIN(South)	TBGN REFINERY	2,080,778	57,799	1,697	3,530,241,886
NYAUNGDONE	TBGN REFINERY	1,760,885	48,913	1,697	2,987,512,355
THARGYITAUNG	TBGN REFINERY	963,055	26,752	1,697	1,633,916,304
PYAY	TBGN REFINERY	842,998	23,417	1,697	1,430,227,948
SHWEPYITHA	TBGN REFINERY	686,655	19,074	1,697	1,164,976,870
LANYWA	TBGN REFINERY	585,244	16,257	1,697	992,923,263
MYANAUNG	TBGN REFINERY	374,059	10,391	1,697	634,627,408

Project/field	Buyer	Volumes sold in IG	Volumes sold in bbl.	IG Unit price in MMK	Revenues received in MMK
KYAUKKWET	TBGN REFINERY	317,233	8,812	1,697	538,216,582
YENANMA	TBGN REFINERY	120,699	3,353	1,697	204,777,571
SABE	TBGN REFINERY	91,293	2,536	1,697	154,887,438
DAHATPIN	TBGN REFINERY	56,962	1,582	1,697	96,641,563
APYAUK	TBGN REFINERY	46,456	1,290	1,697	78,817,114
LUDUTWINZA	TBGN REFINERY	13,612	378	1,697	23,094,079
PA HTO LOAN	TBGN REFINERY	1,888	52	1,697	3,203,175
Grand Total		71,217,912	1,978,275		120,828,101,772

Source: MOGE data after reconciliation

We note that all the quantities of Oil sold by MOGE was purchased by the TBGN refinery, a subsidiary of MPE.

### 1.2.2. REVENUES GENERATED FROM THE GAS SALES

The value of total Gas sales after reconciliation amounted to MMK 1,058,366 million and is detailed as follows:

### a. Sales per production areas

Table 3: Details of gas sales

Item	Quantity sold in MMscf	Total revenue in MMK	%
Offshore Gas sales	115,139	1,039,069,811,958	98%
Onshore Gas sales	9,462	19,297,003,848	2%
Grand Total	124,601	1,058,366,815,806	100%

Source: MOGE data after reconciliation

The total revenue received by MOGE amounted to MMK 1,058,366 million. Offshore gas sales accounted for 98% of the total sales revenues generated by the Gas sector.

### b. Sales per purchaser

The top 5 of Gas purchasers were as follows:

Table 4: Top 5 Gas purchasers

Purchaser	Volumes sold in MMscf	Revenues received in MMK	%
EPGE	111,984	995,311,251,378	94.04%
MEC	2,723	24,398,611,897	2.31%
MPE	6,439	12,878,662,000	1.22%
MOPFI	1,359	9,589,706,881	0.91%
International Glass Co. Ltd	420	5,519,540,245	0.52%
Others	1,676	10,669,043,405	1.01%
Total	124,601	1,058,366,815,806	100.00%

14

We note that more that 94% of MOGE gas sales was proceeded to the EPGE. MEC purchased more than 2% of the total MOGE gas sales.

Others | 1.01% |
International Glass Co. Ltd | 0.52% |
MOPFI | 0.91% |
MPE | 1.22% |
MEC | 2.31% |
EPGE | 94.04% |
0% | 20% | 40% | 60% | 80% | 100%

Figure 2: TOP 5 gas purchasers

# 1.3 Summary of the reconciliation and verifications results

Total revenues received from commodity trading as declared by MOGE after reconciliation amounted to MMK 1,179,195 million in the period covered by the report is detailed as below:

Table 5: Total adjusted revenue reported by the MOGE

Figures in MMK million Data Initial Adjustments Final Oil 120,828 120,828 Gas 1,064,280 (5,913)1,058,367 Final 1,185,108 (5,913)1,179,195

Source: EITI data after reconciliation

The total purchases as reported by the reporting entities after reconciliation amounted to MMK 1,173,513 million in the period covered by the report is detailed as below:

Table 6: Total adjusted revenue reported by the purchasing entities

 Figures in MMK million

 Data
 Initial
 Adjustments
 Final

 Oil
 120,828
 120,828

 Gas
 1,052,696
 (11)
 1,052,685

 Final
 1,173,524
 (11)
 1,173,513

 Source: EITI data after reconciliation

The table and figures shown below summarise the reconciled revenues in accordance with the reconciliation scope.

Table 7: Reconciliation results in value

Figures in MMK million

Data	Purchasers data	MOGE data	Differences	%
Initial	1,173,524	1,185,108	(11,583)	-0.98%
Adjustments	(11)	(5,913)		
Final	1,173,513	1,179,195	(5,682)	-0.48%

Source: EITI data after reconciliation

The breakdown of the differences raised is presented in the table below:

Table 8: Detail of negative and positive differences

Figures in million MMK

Item Purchasin g entities		Government	Posit differe		Nega differ		Gro: differe		Net Diffe	erence
		Amount	%	Amount	%	Amount	%	Amount	%	
Oil and Gas sales	1,173,513	1,179,195	23,488	1.99%	-29,170	-2.47%	52,658	4.46%	-5,682	-0.48%

Source: EITI data after reconciliation

The total quantities of gas and Oil sold after reconciliation are 124,601 Mmscf and 1.9 million bbl respectively. The table and figures shown below summarise the reconciled quantities sold in accordance with the reconciliation scope.

Table 9: Reconciliation results in volume

Nature	Unit	Purchasers reporting	MOGE reporting	Differences	%
Initial	MMscf	386,936	125,110.00	261,619	209%
IIIILIAL	bbl	1,978,275	1,978,275	-	0%
Adjustments	MMscf	(268,147)	(508)		
Adjustments	IG	-			
Final	MMscf	118,789	124,601	(6,018)	-5%
Fillat	bbl	1,978,275	1,978,275		0%

Source: EITI data after reconciliation

# 1.4 Comprehensiveness and reliability of data

### **1.4.1. OIL SALES**

Both MPE and MOGE submitted their Oil purchases and sales which implies that 100% of MOGE Gas sales were reconciled.

### 1.4.2. GAS SALES

### Comprehensiveness of data

### **Purchasing companies**

Our conclusions regarding the comprehensiveness of data reported by the purchasing entities are detailed in the table below:

Table 10: Comprehensiveness of data

Nature	Total	%
Total entities in the scope	112	100%
Total received in MMK	1,064,279,774,315	100%
Entities submitting their RT	82	73%
Total received RT in MMK	1,059,928,431,354	99.59%

Source: EITI data before reconciliation

We noted that 82 out of 112 entities submitted their reporting templates representing more than 98% of the total gas sales. The complete follow up of the reporting entities is presented in the annex 5 of the report.

### **MOGE**

MOGE submitted its reporting template.

### Conclusion of the IA

As a result, we can reasonably conclude from the above that the 32 companies that did not submit their reporting templates did not have a material impact on the comprehensiveness of the revenue.

### Reliability of data

### **Purchasing entities**

Our conclusions regarding the reliability of data reported by the purchasing entities are set out in the table below:

Table 11: Reliability of data

Nature	Total	%
Total entities in the scope	112	100%
Total received in MMK	1,064,279,774,315	100%
Entities submitting their certified RT	47	42%
Total certified RT received in MMK	1,029,330,232,530	96.71%

Source: EITI data before reconciliation

We noted that 47 out of 112 entities submitted their certified reporting templates representing more than 95% of the total gas sales. The complete follow up of the reporting entities is presented in the annex 5 of the report. We also noted that 71 entities out of 115 submitted their reporting template signed by the legal representative of the entity representing more than 98% of the total purchases.

### **MOGE**

MOGE submitted a certified reporting template.

### Conclusion of the IA

We can reasonably conclude from the above that the total payments of the entities that did not submit signed RT represent 4.76% of the extractive revenue and has no impact on significant impact on the reliability of data. The impact of this excess is mitigated by the following facts:

- the comprehensiveness of the extractive revenues; and
- immaterial differences noted during the reconciliation.

### IA opinion regarding the comprehensiveness and the reliability of the revenue

Our overall opinion from the above is that the comprehensiveness and reliability of reconciled financial data from the purchasing entities and the MOGE is satisfactory.

### 1.5 Recommendations

### 1.5.1. REVIEW OF THE DOMESTIC MARKET OBLIGATION PERCENTAGES

Following the review of the Domestic Market obligation (DMO), we understand that it represents the proportion of production that should be sold in the domestic market by the Oil and Gas producers.

The modalities of the DMO are detailed in the exploitation contracts as follow:

Table 12 DMO in the different type of contracts

Main clause/Type of contract	Production Sharing	Performance Compensation	Improved Petroleum Recovery
	Contracts (PSCs)	Contract (PCC)	Contract (IPR)
Domestic requirements	3		10% of Crude Oil and 15% of Natural Gas of contractor's share of profit petroleum at 75% of Fair Market Prices.

According to the data provided by the MOGE, all the DMO is sold to the MOGE and can be detailed by seller as below:

Table 13: Detail of DMO sold

Producer	Nature	Quantity DMO	Value in USD
POSCO Daewoo	Gas in MMSCF	885	5,240,149
POSCO Daewoo	Oil in bbl		
Coldnotrol	Gas in MMSCF		
Goldpetrol	Oil in bbl	1,989	108,825
Goldpetrol	Gas in MMSCF		
dotapetrot	Oil in bbl	2,436	134,059

MEITI report 2017-2018

### Verification of the percentage applied:

### For Gas production

Table 14: Verification of the percentage applied (Gas)

Company	Type of contract	Total production in MMscf	Total DMO in MMscf	% applied
TEPM (*)	PSC	281,782	-	0%
POSCO Daewoo	PSC	172,023	885	1%
PTTEPI	PSC	114,492	-	0%
PCMI	PSC	81,407	-	0%

(\*) According to the explanations received from the MOGE, we understand that the TEPM don't have Domestic Market Obligation ( DMO), this means that this operator don't have any obligation to sale Oil and Gas in the local market at discounted price.

### For Oil and condensate production

Table 15: Verification of the percentage applied (Oil)

Company	Type of contract	Total production in bbl	Total DMO in bbl	% applied
Gold petrol	PCC	829,549	4,425	0.53%
PCMI	PSC	1,603,783	-	0%

We noted that the MOGE did not report quantities of DMO purchased from the producing entities. Even the quantities reported are under the percentages detailed in the contracts.

### Verification of the prices applied:

### Average prices used by the MOGE to sell O&G to buyers:

The detail of the price used by the MOGE to sell O&G to the different buyers is detailed as below:

Table 16: Average MOGE selling prices

Average sales price	total quantity	Lotal value in MMK		Average price in USD	
Oil in bbl	1,978,275	120,828,101,772	61,078	45.05	
Gas in MMSCF	124,601	1,058,366,815,807	8,494,048	6,264.88	

### The prices with which the MOGE buys O&G from producers (DMO)

The detail of the price applied for the DMO is presented in the table below:

Table 17: DMO buying prices

Producer	Contract	Nature	Quantity DMO	Value in USD	Unit price in USD
POSCO Daewoo	PSC	Gas in MMSCF	885	5,240,149	5,919.36
Goldpetrol	PCC	Oil in bbl	1,989	108,825	54.71
Goldpetrol	PCC	Oil in bbl	2,436	134,059	55.04

According to the PCC and the PSC contracts, MOGE should buy the DMO at respectively 75% and 90% of fair market prices. However, we noted that the MOGE is buying the DMO at prices **exceeding** the market prices. This mean that despite that the MOGE is supposed to buy the Oil from Goldpetrol at 75% of 45.05 USD per bbl representing 33.78 USD, MOGE is buying at 54.71 USD and 55.04 USD.

Even if we compare the price applied with the international prices<sup>1</sup>, we noted that the DMO prices exceeds the average prices calculated as follow:

Producer	Contract	International average prices in bbl	expected DMO prices (75% of market prices) (b)	Unit DMO price in USD (a)	Difference (a-b)
Goldpetrol	PCC	55.35	41.51	54.71	13.20
Goldpetrol	PCC	55.35	41.51	55.04	13.53

Also, according to the PSC contract, MOGE is supposed to buy Gas from POSCO at 90% of market price representing 90%\*6,264.88 per MMSCF equal to 5,638.392 USD. MOGE is buying the DMO at a higher price which is 5,919.36 USD.

Even if we compare the price applied with the international prices<sup>2</sup>, we noted that the DMO prices exceeds the average prices calculated as follow:

Producer	Contract	International average prices in MMSCF	expected DMO prices (90% of market prices) (b)	Unit DMO price in USD (a)	Difference (a-b)
POSCO Daewoo	PSC	3,098.56	2,788.70	5,919.36	3,130.66

### Recommendation

We recommend that the MSG invite the different stakeholders in order to clarify the situation of their DMO and explain the reasons of the gaps raised.

https://www.indexmundi.com/commodities/?commodity=crude-oil&months=60

https://www.indexmundi.com/commodities/?commodity=natural-gas&months=60 BDO LLP 20

### 1.5.2. RECONCILIATION OF THE MOGE DATA WITH THE OA FIGURES

According to the Oil and Gas breakdown provided by the MOGE and reconciled with the different buyers, the detail per type of product is detailed as below:

Table 18: Detail of MOGE revenues

Nature	Unit	Quantity	Value in MMK	Value in USD
Oil sales	bbl	1,978,275	120,828,101,772	89,118,100
Offshore Gas sales	MMscf	115,642	1,044,959,789,450	771,093,646
Onshore sales	MMscf	9,468	19,319,984,858	14,249,668
Total			1,185,107,876,080	874,461,414

Source: MOGE data before reconciliation

Following the review of the detail of the MOGE-OA, the revenue received from the Oil and Gas sales are detailed as below

Table 19: Detail of OA flows

Item	2017 - 2018 (MMK)
Total Received Amount	2,376,750,278,381
In-flow of revenues during the year	2,376,750,278,381
a) Income from Sale of Crude Oil, Natural Gas and CNG(Onshore)	180,515,936,828
b) Income from Sale of Natural Gas and Condensate (Offshore)	1,743,690,319,132
c) Income from Service Chgs Of PSC Contract	1,221,186,249
d) Miscellaneous Other	98,448,400,449
e) Receipt of Royalty and Bonus	352,874,435,723

Source: MOGE OA data

The differences raised are detailed as below:

Table 20: Differences raised with the OA details

Nature	MOGE sales Breakdown in MMK	OA details	Differences
Offshore Gas sales	1,044,959,789,450	1,743,690,319,132	(698,730,529,682)
Oil sales	120,828,101,772	180,515,936,828	(40,367,850,198)
Onshore sales	19,319,984,858	100,515,930,020	(40,307,030,190)
Total	1,185,107,876,080	1,924,206,255,960	(739,098,379,880)

According to the explanations received from the MOGE, we understand that the income which described in OA account is based on cash budget and income received within financial year which is higher than the revenue collected. This is due to the fact that it included the previous year outstanding debt balances and advance deposit payment at financial year end.

### Recommendation

We recommend that the MSG invite the MOGE in order to explain the reasons of the gaps raised and clarify the situation of the transfers to the OA.

### 1.5.3. RELIABILITY AND COMPREHENSIVENESS OF DATA

According to the instructions for Completion of Reporting Templates:

- a) For private companies: hard copies with original signatures and a copy of the audit report should be sent in sealed envelope to NCS Office; and reporting templates submitted by private companies should be signed by a person authorized to represent the company (Chief Financial Officer or Chief Executive Officer/Director); and
- b) Reporting Templates submitted by Government Agencies and SOEs should be signed by a person authorised to represent the Government Agency and certified by the Office of the Auditor General (OAG) of the Union.

We noted that 83 out of 115 entities submitted their reporting templates representing more than 98% of the total gas sales. The complete follow up of the reporting entities is presented in the annex 5 of the report.

Table 21: Comprehensiveness of data

Nature	Total	%
Total entities in the scope	112	100%
Total received in MMK	1,064,279,774,315	100%
Entities submitting their RT	82	73%
Total received RT in MMK	1,059,928,431,354	99.59%

We noted that 82 out of 112 entities submitted their reporting templates representing more than 99% of the total gas sales. The complete follow up of the reporting entities is presented in the annex 5 of the report.

Table 22: Reliability of data

Nature	Total	%
Total entities in the scope	112	100%
Total received in MMK	1,064,279,774,315	100%
Entities submitting their certified RT	47	42%
Total certified RT received in MMK	1.029.330.232.530	96.71%

We noted that 47 out of 112 entities submitted their certified reporting templates representing more than 96 of the total gas sales. The complete follow up of the reporting entities is presented in the annex 5 of the report. We also noted that 71 entities out of 115 submitted their reporting template signed by the legal representative of the entity representing more than 98% of the total purchases.

### Recommendation

We recommend that the MSG invite the various stakeholders and participants in the extractive sector to take measures in order to increase the coverage of the companies submitting their reporting templates and make sure they submit the certified RT.

# 1.5.4. INCLUDING MANDATORY BO DISCLOSURE IN THE PROCESS OF COMODITY TRADING IN MYANMAR

In Myanmar, the commodity trading award, transfer and disposal of petroleum blocks is managed by the Petroleum Act, 1934 and the Petroleum regulation.

Following the review of the downstream sector legal framework, We noted that the regulation do not include specific provisions relating to the disclosure of the Beneficial Ownership neither require BO data as mandatory filing prior to the award of selling agreement to the buyers.

### Recommendation

We recommend to the MOGE to invite the main stakeholders to consider including the disclosure of the BO data among the required disclosures for the establishment of commodity trading agreements in Myanmar. Therefore, any applicant who wishes to buy Oil and Gas will be required to disclose his Beneficial Owner. This disclosure must be compliant with the definition of BO as approved by the MSG.

# 1.5.5. INCLUDING THE DOWNSTREAM SECTOR DATA IN THE SYSTEMATIC DISCLOSURE PROCESS OF EITH INFORMATION

Extractive industry transparency should not be confined to an EITI Report, but rather be an integral part of how governments manage their extractive sector.

EITI implementing countries are increasingly making the information required by the EITI Standard available through government and corporate reporting systems (databases, websites, annual progress reports, portals etc.) - rather than relying on the EITI Report - to bring about transparency.

Mainstreaming is about encouraging and recognising countries that make transparency an integral and routine feature of their governance and management systems.

Following the review of the mainstream in Myanmar, we noted the lack of public availability of EITI data related to the downstream sector.

### Recommendation

We recommend that the MSG invite the various stakeholder in order to prepare a study on the systematic disclosure and make recommendations on public availability of downstream sector information. This would enable the MSG to shift their attention away from collecting data toward encouraging stakeholders to make effective use of this information.

### 1.5.6. DISCLOSURE AND PUBLICATION OF SALE CONTRACTS

According to the requirement 2.4 of the 2019 EITI standard: "Implementing countries are required to disclose any contracts and licenses that are granted, entered into or amended from 1 January 2021. Implementing countries are encouraged to publicly disclose any contracts and licenses that provide the terms attached to the exploitation of oil, gas and minerals."

Following the review of the mainstream of the downstream sector, we noted that all the oil and gas sales contracts between the MOGE the purchasing entities are not publicly available.

### Recommendation

We recommend that the MSG invite the different stakeholders in order to take the following steps:

- Establishing a list or a register of the sales contracts between MOGE and Oil and gas purchasing entities;
- Understanding the barriers toward the publication of the sales contracts; and
- Inviting the stakeholders in order to overcome those barriers and publish the sales contracts.

### 1.5.7. SOLVING THE LIMITATIONS IN THE NEXT COMMODITY TRADING REPORTS

Following the preparation of the current report, we faced the limitations listed below:

### Buyers selection criteria

We have not received any details regarding the allocation of Oil and Gas to different buyers, the process of the decision making. We have not been informed of any type of tendering process regarding the sales of Oil and Gas in Myanmar. We have only received a general description of the allocation process that we presented in the section 3.5 of the present report.

### Pricing methodology

We only received a general description of the pricing methodology applied for the valuation of the Oil and Gas sales presented in the section 3.7 of the present report. We have not been able to check the consistency of the prices applied with the methodology used.

### Legislation of the downstream sector

We have not been provided with the draft legislation, which is proposed to amend the Oil and Gas products rules of 1937.

This lack of information impacted this report and represented significant limitations during the preparation of this report in the sense that we were not able to set up some of our tests (such as the testing of applied prices) and prevented us from presenting the current practice for the attribution of O&G sales contracts.

#### Recommendation

We recommend that the MSG invite the main stakeholders in the downstream sector to make sure that the relevant information (the sales process, price and the selection process) should be available during the preparation of the next year's report.

Mark Henderson Partner, Head of International Institutions and Donors Assurance 55 Baker Street London, W1U 7EU

BDO LLP

30 September 2020

# 2. APPROACH AND METHODOLOGY

The reconciliation process of the commodity trading revenue consisted of the following steps:

- preliminary analysis of the commodity trading reporting process to ensure that the scope has been clearly defined, including the reporting templates and the data collection procedures;
- collection of crude oil, gas and oil products data from SOE and reporting companies which provide the basis for reconciliation;
- comparison of amounts reported by SOE and reporting companies to determine if there are discrepancies; and
- contact with SOE and reporting companies to resolve the discrepancies.

# 2.1 Preliminary analysis

Before starting the reconciliation exercise, we prepared an inception report providing information on the scope and the reporting templates that will be used for data collection and reconciliation. This report was approved by the MSG which agreed on the EITI scope for the commodity trading.

The results of our scoping study is detailed in Section 4 of this report.

# 2.2 Reconciliation and investigation of discrepancies

The process of reconciling the data and investigating discrepancies was carried out following the steps below:

- reported figures from companies were compiled against records held by MOGE. As a result, all discrepancies identified have been listed in relation to MOGE and reporting companies;
- if companies reported data which agreed with the MOGE data, the MOGE figures were confirmed, and no further action was undertaken;
- MOGE and the companies were asked to provide supporting documents and/or confirmation for any adjustments to the information provided on the original data collection templates; and
- we contacted and held meetings with the reporting entities and reviewed additional supporting documentation evidencing the data reported. In some cases, the discrepancies remained unresolved. The results of our work is presented in Section 5 of this report.

# 2.3 Desegregation level

MSG agreed that the Reporting Templates and the data were to be submitted:

- by purchasing company; and
- by Government Entity or SOE for each company selected in the reconciliation scope

The companies were also requested to provide information on their beneficial owners.

# 2.4 Materiality

MSG assumed that most first trades in oil were likely to be material and should therefore be included within the reporting scope.

# 2.5 Period of reporting

MSG decided that the reporting period should include all quantities sold/purchased during the period from April 2017 to the end of March 2018. The reporting template should also include all the payments that took place during this period even if the transfer of title takes place at a subsequent or later date.

# 2.6 Reliability and Credibility of Data

In order to comply with EITI Requirement 5 which seeks to guarantee the credibility of the data submitted by reporting entities, we made the following recommendations:

### Selected companies

The process for companies submitting their EITI Reporting Templates for commodity trading is as follows:

- the completed template should be signed by the Chief Financial Officer or Chief Executive Officer.
- the template should be stamped using the company stamp; and
- audited financial accounts should be attached to the reporting templates

### SOE

The process for SOE submitting their EITI templates is as follows:

- the reporting template should be signed by the head of the agency.
- the template should be stamped using the organisation's official stamp; and
- the OAG certifies (signs and stamps) that the government template is in line with the data included in the Annual Report, and that the annual report has been prepared to international auditing standards.

# 3. CONTEXTUAL INFORMATION ON THE MID AND DOWNSTREAM SECTOR

# 3.1 General context of the mid and downstream Oil and Gas in Myanmar

### 3.1.1. GENERAL CONTEXT OF THE DOWNSTREAM SECTOR

Downstream sector refers to the filtering of the raw materials obtained during the upstream phase. This means refining crude oil and purifying natural gas. The marketing and commercial distribution of these products to consumers and end users in a number of forms including natural gas, diesel oil, petrol, gasoline, lubricants, kerosene, jet fuel, asphalt, heating oil, LPG (liquefied petroleum gas) as well as a number of other types of petrochemicals.

The development of the downstream sector in Myanmar started with onshore gas production in the early 1970s, together with the construction of the Kyunchaung gas turbine power plant, the Kyunchaung fertilizer plant, and the Sale fertilizer plant. Before then, most of the associated gas was flared off. Later in 1985 and in the early 1990s, a few more gas processing plants—such as the Kyawzwa fertilizer plant, the Seiktha Methanol plant, and the Minbu LPG extraction plant—were constructed to make use of the natural gas. Several gas turbine plants were also constructed in the regions of Myanaung, Shwedaung and Yangon. MOGE had the peak production of onshore natural gas in the mid-1990s producing nearly 200 million cubic feet per day, supplying natural gas to fertilizer plants, LPG plants, power generation plants (60% of gas production), and various other industries.

The 3 major actor in the downstream sector are the MOGE, MPE and MPPE.

Where MOGE plays a key role in the downstream sector as its is the main supplier of crude Oil and Gas to the refineries and plants in charge of production of oil and Gas products, MPE and MPPE are mainly in charge of the production and the distribution of the oil and gas products.

Under those SOEs, the Downstream sector includes refineries, urea plants, LPG plants, methanol plant and bitumen plant operated by MPE and fuel stations operating under MPPE.

MPE operates three refineries as detailed below1:

- No.1 Refinery (Thanlyin)
- No.2 Refinery (Chauk)
- Mann (Thanbayakan) refinery : petrochemical complex

As per data collected from MPE, the production capacity of those refineries is detailed in the table below:

Table 23: Oil Refineries under operation by MPE - Production Capacity

N°	Plant Name	Location City/Township	Capacity / per day	Operation start year	Status
1	No.1 Refinery	Thanlyin	20,000 Barrel	1963	Ceased operation since 4th March 2017.
2	No.2 Refinery	Chauk	6,000 Barrel	1954	perform operation based on the availability of crude oil.
3	Group of petrol chemical Refineries	Min Hla	25,000 Barrel	1982	perform operation

Source: MPE

http://www.moee.gov.mm/en/ignite/page/439 BDO LLP

### 3.1.2. GENERAL CONTEXT OF THE MID-STREAM SECTOR:

The 'midstream' sector of the oil and natural gas industry refers to the transport and the store of crude oil and natural gas before they are refined and processed into oil and Gas products. Midstream includes pipelines and all the infrastructure needed to transport these resources.

The midstream sector in Myanmar is mainly composed of the companies created by the joint ventures in order to transport their production from the fields to the purchasers.

This section is dedicated to present the main Oil and Gas projects and the transportation companies owned by those joint venture :

### Yadana project

Total signed the Yadana production sharing contract with MOGE in July 1992 and operates the field with a 31.24% interest with the State-Owned Myanmar Oil and Gas Enterprise (MOGE) holding 15% interest.

The Yadana gas field is located in the Andaman Sea, approximately 60 kilometres offshore the nearest landfall in Myanmar. This major energy resource contains more than 5.3 trillion cubic feet (150 billion cubic metres) of natural gas, with an expected field life of 30 years. Commercial production began in the year 2000 and production averaged more than 21.5 million cubic metres per day in 2007.

The shareholding percentage hold by the partners in this project is set out below:

 Project
 Operator
 Partners
 % of interest

 The Yadana project
 TOTAL E&P
 31.24%

 Unocal Myanmar Offshore Co., Ltd
 28.26%

 PTTEP
 25.50%

 MOGE
 15.00%

 Total
 100.00%

Table 24: Shareholders of Yadana project

MEITI report 2017-2018

The gas is supplied to Thai power plants and is also sold on Myanmar's domestic market. The gas is transported onshore via a 346-kilometre subsea pipeline. A 63-kilometer onshore pipeline then takes it to the Thai border.

The Pipeline is managed by Mottama Gas Transportation Company (Yangon Branch) (MGTC), details of which are set out below:

Pipeline Length	Pipeline Diameter	Site	Location
410 Km	36"	Extending from offshore blocks M5-M6 to Myanmar-Thailand Boarder at Ban Tong	Tanintharyi
MEITI repo	rt 2017-2018		

#### Yetagun project

-The Yetagun project is a gas field is an offshore gas field in the Andaman Sea, covering an area of approximately 24,130 km<sup>2</sup>. Following the Yadana project, the US\$700 million Yetagun project was the second natural gas offshore project in Myanmar.

The field is estimated to hold three trillion cubic feet of gas and 80 million barrels of condensate in reserves.

The Yetagun field was discovered in December 1992. The field development activities started in 1996, construction of the pipeline and associated facilities were carried out in 1998 and 1999 and commercial production started in May 2000. The field is expected to continue production until 2030.

The percentage of shares held by every shareholder in this project is set out below:

Table 25: Percentage of shares in Yetagun project

Project	Operator	Partners	% of interest
	PCML		40.91%
Votogun project		MOGE	20.45%
Yetagun project		PTTEP International Limited	19.32%
		Nippon Oil Exploration	19.32%
Total			100.00%

MEITI report 2017-2018

The production of this project transported by the Taninthayi Pipeline Company (TPC). According to the data reported by This company, details of the pipeline are set out below:

	Pipeline Name	Pipeline Length	Pipeline Diameter	Location
Pipeline Information	Taninthayi Pipeline	68 km	24 inches	Yetagun Gas Field Myanma Offshore and Thai-Myanmar border

MEITI report 2017-2018

#### **Shwe Natural Gas Project**

The Shwe Natural Gas project consists of the Shwe, Shwe Phyu and Mya offshore gas fields, located in blocks A-1 and A-3 of the Bay of Bengal, Myanmar.

The project has been developed by a consortium of five companies detailed below, led by POSCO a subsidiary Daewoo International, which is also the operator of the project.

The percentage shareholding of every partner in this project is set out in the table below:

Table 26: List of percentage shareholding of Shwe project

Project	Operator	Partners	% of interest
	POSCO Daewoo		51%
The Shwe Natural		MOGE	15%
Gas project		ONGC Videsh	17%
		KOGAS	9%
		Gail India	8%
Total			100.00%
MEITI	<u> </u>		

MEITI report 2017-2018

The first production gas from the Shwe project took place in July 2013 from the Mya field and commercial production started in August the same year.

Production from the Shwe gas field started in January 2014, as a result of which, the production by the end of 2014 was expected to reach 500 million cubic feet of gas a day.

the production of this project is transported by the South East Asia Gas Pipeline Co., Ltd. (SEAGP). South East Asia Crude Oil Pipeline Co., Ltd. (SEACOP) was set up to supply oil from Kyaukphyu to oil refinery in Yunan.

### Overview of the Myanmar-China Oil & Gas Pipelines<sup>1</sup>

The Myanmar-China Oil & Gas Pipelines is an international cooperation project. The Myanmar-China Crude Oil Pipeline is jointly invested and constructed by SEAP and MOGE; their joint venture, Southeast Asia Crude Oil Pipeline Company Limited (SEAOP), is responsible for its operation and management. While the Myanmar-China Gas Pipeline Project is jointly invested and constructed by SEAP, MOGE, POSCO DAEWOO, ONGC VIDESH, GAIL and KOGAS; their joint venture, South-East Asia Gas Pipeline Company Limited (SEAGP), is responsible for its operation and management.

### • Myanmar-China Crude Oil Pipeline

<sup>1</sup> Main MEITI report 2017-2018 BDO LLP The 771-kilometer long pipeline extends from Madè Island on the west coast of Myanmar to Ruili in the south western Chinese province of Yunnan, running through Rakhine State, the Magwe region, the Mandalay region, and Shan State. The Pipeline is 813 mm in diameter and is able of delivering 12Mt/a upon completion of the Phase I project, and 22Mt/a upon the completion of the Phase II project, with a total annual delivery of 2 million tons to Myanmar. A 300,000-ton crude oil terminal has been built, with an annual capacity of 22 million tons. On 10 April 2017, the Myanmar-China Crude Pipeline project was officially launched into operation.

### • Myanmar-China Gas Pipeline:

The Myanmar-China Gas Pipeline starts at Ramree Island on the western coast of Myanmar and ends at Ruili in China's Yunnan Province. Running in parallel with the Myanmar-China Crude Oil Pipeline, the crude pipeline is 1,016 mm in diameter over 793 km in Myanmar. It can deliver 5.2 billion m3 per year upon completion of the Phase I project, and 12 billion m3 per year upon completion of the Phase II project. Pursuant to the cooperation agreement, four gas off-take stations (Kyaukphyu, Yenangyaung, Taungtha and Mandalay) were established to unload less than 20% of the pipeline's total delivery in Myanmar. On 28 July 2013, the Myanmar-China Gas Pipeline became operational and started to deliver natural gas to the Myanmar market through its off-take stations.

The map below details the itinerary of the 2 pipelines:



Figure 3: Shwe project pipelines

### Zawtika project<sup>1</sup>

The Zawtika project includes the development of the Zawtika, Kakonna and Gawthaka fields, located in Blocks M9 and Small North East Part of M11, offshore of Myanmar. The project is spread across an area of 12,306 square kilometres.

https://www.pttep.com/en/OurBusiness/Explorationandproduction/projects/Myanmar/Zawtikaproject.aspx
BDO LLP
32
Commodity Trading in Myanmar

The Petroleum Authority of Thailand Exploration and Production International (PTTEP International) is the operator of the project. PTTEP owns an 80% interest in the project, with Myanmar Oil and Gas Enterprise (MOGE) holding the remaining 20%.

The USD 2bn project initially started delivering natural gas for domestic purposes in Myanmar in March 2014 at a rate of approximately 60 million standard cubic feet per day (Mmscf/d). In August 2014, it started exporting natural gas to Thailand at a rate of 240Mmscf/d.

The offshore Zawtika (PTTEP) natural gas project started production in March 2014.

On 5 January 2012, PTTEP Offshore Investment Limited (PTTEP) with Myanmar Oil and Gas Enterprise (MOGE) entered into a Shareholder Agreement with Andaman Transportation Limited (ATL) to invest in Zawtika gas transportation project.

# 3.2 Regulatory framework of the Oil and Gas sector

### 3.2.1. LEGAL AND INSTITUTIONAL FRAMEWORK

### a. Legal framework

Downstream and midstream activities in the oil and gas sector are governed by the following legislations:

### • Petroleum and Petroleum Products Law 2017

The Petroleum and Petroleum Products Law was enacted on 1st August 2017, to repeal the 1934 Petroleum Act<sup>1</sup>. Its aim is to provide a framework for the safe handling of petroleum and petroleum products.

The Objectives of this law are as follows:

- to operate systematic petroleum and petroleum products businesses in accordance with the provisions of the law, stipulated standards, procedures and conditions.
- to safely operate petroleum and petroleum products businesses without affecting the environment.
- to create an independent and fair market competition regarding the operation of petroleum and petroleum products businesses.
- to guarantee Myanmar's energy requirement and security.
- to obtain tax revenue of the State.

### • The Petroleum Rules 1937

As amended up to 1989, the petroleum rules of 1937 states the rules for the importation of petroleum, transport of petroleum, storage of petroleum requiring licence, storage of petroleum not requiring licence, licences (application) refining and blending of petroleum, and testing petroleum.

### Notification No. 100/2013 on the import, transport, storage and distribution of petroleum products<sup>2</sup>

Issued by the Ministry of Energy in accordance with section 4 of the Essential Good and Services Law, this notification aims for the systematic performance of the import, storage, transport and distribution of petroleum products.

### New Myanmar Investment Law<sup>3</sup>

Drafted in consultation with the International Finance Corporation (IFC), the new Myanmar Investment Law (2016, Notification No. 4) was enacted on 18 October 2016. Implementing rules were passed on 30th March 2017 by Notification No. 35/2017 by the Ministry of Planning and Finance.

The objectives of this Law are as follows:

- (a) To develop responsible investment businesses which do not cause harm to the natural environment and the society for the benefit of the Union and its citizens.
- (b) To protect the investors and their investments in accordance with the law.
- (c) To create job opportunities for the people.
- (d) To develop human resources.
- (e) To develop high functioning production, service, and trading sectors.

<sup>&</sup>lt;sup>1</sup> https://www.resourcedata.org/dataset/rgi-petroleum-act-1934-

<sup>&</sup>lt;sup>2</sup> https://www.lincolnmyanmar.com/wp-content/uploads/2017/01/Ministry-of-Energy-100-2013.pdf

https://www.dica.gov.mm/sites/dica.gov.mm/files/document-files/unofficial\_translation\_mil\_20161019-e.pdf

- (f) To develop technology and the agriculture, livestock and industrial sectors.
- (g) To develop various professional fields including infrastructure across the Union.
- (h) To enable the citizens to be able to work alongside with the international community; and
- (i) To develop businesses and investments that meet international standards.

### b. Institutional framework

The Ministry of Energy (MOE) was established on 12 April 1985 through the Order No. (5/85) with the Minister Office, the Energy Administration Department, Myanma Oil Corporation, Petrochemical and Gas Corporation, Petroleum Products Corporation and Electricity Corporation. The Ministry of Electricity was established on 16 November 1997 through issuance of Letter No. (40/97 AhPhaYa 97 (3) and the Ministry of Energy was thereafter restructured with the Minister's Office, the Energy Administration Department, the Myanma Oil and Gas Enterprise (MOGE), the Myanma Petrochemical Enterprise and the Myanma Petroleum Products Enterprise. The Ministry of Electricity and Energy (MOEE) was formed on 01 April 2016 combining the Ministry of Electric Power (MOEP) and the Ministry of Energy (MOE)¹.

Minister's Office (DEPP Oil and Gas Planning Department partment of Power Transmmission a System Control (DPTSC) Department of Hydropow Implementation (DHPI) Electric Power Generation Enterprise Deputy Permanent Secretary x 2 (EPGE) Union Minister Permanent Secretary Electricity Supply Enterprise (ESE) Myanma Oil and Gas Enterprise (MOGE) Avanma Petrochemical Enterprise (MPE Myanma Petroleum Products Enterprise angon Electricity Supply Corporation Mandalay Electricity Supply Corporation

Figure 4: Structure of the MOEE

MoEE is the primary Government Agency responsible for the electricity and energy sector.

MoEE has oversight of three State Owned Enterprises:

 Myanma Oil and Gas Enterprise (MOGE): responsible for exploration/production and land transmission of oil and gas through a 2,488 km onshore transmission pipeline network and to oversee Production Sharing contracts (PSCs) entered with private investors.

http://www.moee.gov.mm/en/ignite/page/3BDO LLP

- Myanma Petrochemical Enterprise (MPE): has the oversight of three refineries, five urea fertilizer plants and a number of other processing plants; and
- Myanma Petroleum Products Enterprise (MPPE): manages retail and wholesale distribution
  of petroleum products.

In addition to these enterprises, the MoEE organisation chart includes the Oil and Gas Planning Department (OGPD) which is responsible for energy policy formulation, coordination and the discussion of Energy Development Programmes. OGPD is also responsible with MOGE for tendering oil and gas blocks (onshore, shallow water offshore, deep water offshore) in Myanmar and for managing contracts, exploration and production and sale of oil and gas.

Under the electricity sector, there are three departments, namely: The Department of Electric Power Planning (DEPP), the Department of Electric Power Transmission and System Control (DPTSC) and the Department of Hydro Power Implementation (DHPI).

There are two enterprises: Electric Power Generation Enterprise (EPGE) and Electricity Supply Enterprise (ESE).

Finally, there are two corporations: Yangon Electricity Supply Corporation (YESC) and Mandalay Electricity Supply Corporation (MESC)<sup>1</sup>.

In order to ensure the development of the energy and electricity sectors, the National Energy Management Committee was set up in January 2013 by the President's Office notification No (12/2013). It is chaired by the Minister of Energy and comprises MOGE, the Ministry of Energy and the 10 other government institutions involved in energy development and aims to streamline the country's national energy policy.

The main duties of this committee was:

- coordinate among the stake holders for the successful implementation of the Energy policy.
- To cooperate and coordinate with other relevant Ministries to draw up relevant laws, rules and regulations for the energy efficiency and conservation
- establish a dedicated department responsible for successful implantation of energy efficiency and conservation programs.

The NEMC announced the National Energy Policy on 6 January 2015 and it was based on the "Myanmar Energy Sector Policy Draft Working Paper".

This committee has been dissolved since 2016 April by the new government. It is not known whether the policies stated below or are still in force.<sup>2</sup>

**BDO LLP** 

<sup>&</sup>lt;sup>1</sup> http://www.moee.gov.mm/en/ignite/page/3

<sup>&</sup>lt;sup>2</sup> http://www.myanmarlegalservices.com/wp-content/uploads/pdf/Myanmar-Challenges-for-Independent-Power-Projects-(9Sept2016)\_(2094341\_1).PDF

### 3.2.2. MAIN REGULATORS

According to the Petroleum and Petroleum Products Law, the main regulator of the oil and gas downstream sector are detailed as follow:

Table 27: Main regulators in the Downstream sector

Regulator	Role				
	The Ministry shall, with the approval of the Union Government, form the Supervisory Committee <sup>1</sup> on petroleum and petroleum product business activities comprising with maximum 15 members, including the representatives of the ministries concerned, to systematically supervise petroleum and petroleum product business activities.				
	This committee is composed of the following members:				
	(1) Permanent Secretary Chairman MOEE (2) Director-General Member OGPD				
	(3) Managing Director Member MOGE  (4) Managing Director Member Myanmar Petrochemical Enterprise				
	(4) Managing Director - Member MyPE  (6) Deputy Permanent Secretary (Energy) - Member MOEE				
	(7) Deputy Managing Director Member MOGE (8) Deputy Managing Director - Member MPE				
	(9) Director (Planning) Secretary MOGE				
	The Committee shall carry out the following functions and duties:				
Ministry of Energy	a. prescribing functions and duties which shall be taken responsibility and carried out by Union ministry concerned;				
	b. ensuring to form the supervisory sub-committees on petroleum and petroleum product business activities in the Region or State in coordination with the Region or State Government concerned, and to determine and carry out the functions and duties, and, if necessary, issuing directives;				
	c. coordination with departments and organizations concerned to facilitate in carrying out by the persons who operate petroleum and petroleum product business activities;				
	d. supervising to enable the petroleum and petroleum product businesses activities to carry out in accordance with this law;				
	e. Supervising of the petroleum and petroleum product businesses activities to be in conformity with stipulated standard, quality and measurement;				
	f. taking action, as necessary, against the persons, who carry out the petroleum and petroleum product business activities and fail to bide by any existing law, relevant orders and directives or any terms and conditions of licence;				
	g. guiding and supervising to free from hazard and not impact environmental in carrying out the businesses activities.				
	The Ministry may, with the approval of the Union Government, reform the Committee, and amend, extend and cancel the functions and duties, if necessary.				

<sup>&</sup>lt;sup>1</sup> https://www.moee.gov.mm/en/ignite/page/99

Regulator	Role
	The Ministry of Commerce shall carry out the following functions relating to any Petroleum and Petroleum product:
	a. issuing licences relating to import or export;
	b. prohibition not to import or export from the other places except from the places stipulated for import or export;
	c. determining procedures, and conditions relating to import or export;
	d. determining period, form and conditions, means of applying licence, fees to be assessed and conditions necessary for any other matters.
	8. The Ministry shall carry out the following functions relating to any Petroleum and Petroleum product:
	a. issuing licences relating to refining, transit, transport by pipeline, sale and distribution, inspection, and testing; issuing joint licence or compound licence for carrying out more than a type of business activities;
	b. determining the period, form, conditions, means of applying licence, permitting authority and fees to be assessed for licences in subsection(a);
	c. determining procedures and conditions, relating to refining, transit, transport by pipeline, sale and distribution, inspection and testing;
Ministry of Commerce	d. determining procedures and conditions to be followed by the shippers, acceptors, transporters, storekeepers to free from hazard in carrying out petroleum and petroleum product business activities;
	e. determining standard and quality of receptacles for transport, and procedures and conditions for the pipelines;
	f. determining and prohibiting portion and volume of toxic chemicals and metal chemicals that may damage the machineries, to be contain in any petroleum and petroleum product, which do not contain in the prohibition and restrictions under the existing laws;
	g. determining procedures and conditions to have correctness in standard, quality, and measurement;
	h. seizure or deal with otherwise of any petroleum and petroleum product which is not in conformity with the stipulated quality according to testing;
	i. determining the place for refining, place for storage and procedures and conditions to be abided by in storage;
	j. determining conditions relating to possession and sale and distribution;
	k. determining procedures and conditions necessary to appropriately supervise petroleum and petroleum product business activities;
	l. adopting appropriate measures for energy sector development of the Union and ensuring for energy demand and energy security;
	m. inspecting the transport, transit, testing, sale and distribution, and refining in accordance with the procedures.
	The Ministry of Transport and Communications shall carry out the following functions relating to any petroleum and petroleum product;
	a. issuing licence to vehicles, vessels and barges that carry any petroleum and petroleum product;
The Ministry of	b. determining period, form, conditions, means of applying for licence, permitting authority and fees to be assessed, for licences under subsection (a);
Transport and Communications	c. determining and supervision on ports for vessels and barges that carry out import, export, and transport by water in accord with procedures;
	d. taking action, as necessary, in accordance with the existing laws if it occurs spill or accident in carrying out import, export, transport, and sale and distribution of petroleum and petroleum product by water;
	e. determining procedures and conditions to be abided by in carrying out transport business except transport by pipeline.

# 3.3 Oil and Gas production

The detail of Oil and gas production is presented in the table below:

Table 28: Oil and Gas production

		Volume	Unit
Offshore blocks	Condensate	1,603,783	Barrels
Offshore blocks	Gas	649,704	MMscf
Onshore blocks	Oil	1,317,039	Barrels
Olishore blocks	Gas	707	MMscf
Total			

According to data reported by MOGE, 1,603,783 barrels of condensate and 649,704 MMscf of Natural Gas were produced in offshore blocks and 1,317,039 barrels of Oil and 706.853 MMscf of Natural Gas were produced in onshore blocks during the year from April 2017 to March 2018.

### 3.3.1. OIL PRODUCTION

The detail of Oil production per producer is presented in the table below:

Table 29: Oil and condensate production

Company name	Quantity produced in bbl.
GOLDPETROL JOC. Inc.	829,549
MPRL E&P	487,490
PC Myanmar (Hongkong) Limited	1,603,783
Total	2,920,822

Source: MEITI main report 2017-2018 data

### 3.3.2. GAS PRODUCTION

The detail of gas production per producer is presented in the table below:

Table 30: Gas production

Company name	Quantity produced in MMscf
MPRL E&P	707
PC Myanmar (Hongkong) Limited	81,407
Posco Daewoo Corporation (Myanmar E&P Office)	172,023
PTTEP International Ltd.	114,492
Total E&P Myanmar	281,782
Total	650,411

Source: MEITI main report 2017-2018 data

### 3.3.3. NATURE OF THE OIL AND GAS SOLD

According to the data received from the MOGE, the nature of Oil and Gas sold is detailed as below:

- Royalties and in kind taxation;
- Domestic Market Obligation;
- Domestic sales at full price;
- MOGE own production.

Following the documents received from the MOGE, the quantity and the value of every nature of Oil and Gas received is detailed as below:

#### a. Royalties and in kind taxation:

The detail of the in kind payments received by the MOGE is presented as below:

Table 31: Details of in-kind payments received

Contract Type	Company	Entity received in-kind payment	Nature of in-kind payments	Commodity	Unit	Quantity
PCC	MPRL E&P Pte Ltd.	MOGE	Baseline payments in kind	Oil	Barrels	132,089
PCC	MPRL E&P Pte Ltd.	MOGE	Cost recovery	Oil	Barrels	316,992
PCC	MPRL E&P Pte Ltd.	MOGE	Risk compensation	Oil	Barrels	38,409
PCC	MPRL E&P Pte Ltd.	MOGE	Baseline payments in kind	Gas	MMScf	616.850
PCC	MPRL E&P Pte Ltd.	MOGE	Cost recovery	Gas	MMScf	61.138
PCC	MPRL E&P Pte Ltd.	MOGE	Risk compensation	Gas	MMScf	28.865
IPR	Gold Petrol (GJOC Inc.)	MOGE	Baseline payments in kind	Oil	Barrels	481,183
IPR	Gold Petrol (GJOC Inc.)	MOGE	Royalties in kind	Oil	Barrels	43,451
IPR	Gold Petrol (GJOC Inc.)	MOGE	State profit share in kind	Oil	Barrels	73,585
				Total Gas rec	eived	706.85
Common FITI of	opert 2017 2019			Total Oil rece	ived	1,085,709

Source: EITI report 2017-2018

### b. Domestic Market Obligation:

Domestic Market obligation represents the proportion of production that should be sold in the domestic market by the Oil and Gas producers at reduced prices.

Following the information received from the MOGE, we understand that the MOGE purchased all the all the DMO sold by the producing companies. The detail of the quantity and value of the DMO sold is presented as below:

Table 32: Details of the DMO purchased

Producer	Nature	Quantity DMO	Value in USD	Unit price in USD
POSCO Daewoo	Gas in MMSCF	885	5,240,149	5,919
POSCO Daewoo	Oil in bbl			
Goldpetrol	Gas in MMSCF			
dotapetrot	Oil in bbl	1,989	108,825	55
Goldpetrol	Gas in MMSCF			
	Oil in bbl	2,436	134,059	55

### c. Domestic sales at full prices:

The detail of the quantity purchased by the MOGE from the different producers is detailed as below  $\cdot$ 

Table 33: Domestic sales at full prices

Company	Total quantity in MMscf	Quantity in barrel	Total value in USD
TEPM	64,889		204,736,866
POSCO Daewoo	26,159		170,432,298
PTTEPI	23,571		130,955,635
Gold Petrol		226,905	12,459,199
Total	114,619	226,905	518,583,997

### d. MOGE own production:

This represents the quantity produced by the MOGE in its own gas fields. According to the data provided by the MOGE, the total quantity produced during 2017-2018 amounted to 17,879 MMscf.

We have not been informed of any other source of Oil and Gas collected/purchased by the MOGE other than those presented above. The total of the those quantities detailed by nature is presented as below:

Table 34: Total oil and Gas collected/purchased

Nature	Oil in bbl	Gas in MMSCF
In kind taxation	1,085,709	706.85
DMO	4,425	858
Domestic sales at full prices	226,905	114,619
MOGE own production	-	17,879
Total	1,317,039	134,062

### 3.3.4. DOMESTIC MARKET OBLIGATION

Domestic Market obligation represents the proportion of production that should be sold in the domestic market by the Oil and Gas producers.

The modalities of the DMO are detailed in the exploitation contracts as follow:

Table 35 DMO in the different type of contracts<sup>1</sup>

Main clause/Type of contract	Production Sharing	Performance Compensation	Improved Petroleum Recovery
	Contracts (PSCs)	Contract (PCC)	Contract (IPR)
Domestic requirements	20% of crude oil and 25% of natural gas of contractor's share of profit realised from the sale of petroleum on the domestic market, at 90% of fair market prices	10% of Crude Oil and 15% of Natural Gas of contractor's share of profit petroleum at 75% of Fair Market Prices.	10% of Crude Oil and 15% of Natural Gas of contractor's share of profit petroleum at 75% of Fair Market Prices.

According to the data provided by the MOGE, the DMO sold by the companies is detailed as below:

Table 36: Detail of DMO sold

Producer	Nature	Quantity DMO	Value in USD
POSCO Daewoo	Gas in MMSCF	885	5,240,149
POSCO Daewoo	Oil in bbl		
Coldnotrol	Gas in MMSCF		
Goldpetrol	Oil in bbl	1,989	108,825
Goldpetrol	Gas in MMSCF		
Cottapetrot	Oil in bbl	2,436	134,059

MEITI report 2017-2018

### Verification of the percentage applied:

#### For Gas production

Table 37: Verification of the percentage applied (Gas)

Company	Type of contract	Total production in MMscf	Total DMO in MMscf	% applied
TEPM (*)	PSC	281,782	-	0%
POSCO Daewoo	PSC	172,023	885	1%
PTTEPI	PSC	114,492	-	0%
PCMI	PSC	81,407	-	0%

(\*) According to the explanations received from the MOGE, we understand that TEPM has no obligation to sale in the local market at discounted price. Therefore, the operator TEPM is precisely comply and performed its contract obligations.

In accordance with 35 th MSG decision Sr. no. 3, Total E&P Myanmar, the MSG representative from private sector responded for Commodity Trading Report as New comment written in blue as follows;

#### **New comment**

(\*) According to the explanation received from the MOGE, we understand that TEPM has no obligation to sale in the local market at discounted price. Nevertheless, the operator TEPM is precisely comply and performed its contract obligations of mutual agreement by fulfilling the domestic market requirement which representing 23% of Yadana Gas Production for 2017-2018.

### For Oil and condensate production

Table 38: Verification of the percentage applied (Oil)

Company	Type of contract	Total production in bbl	Total DMO in bbl	% applied
Gold petrol	PCC	829,549	4,425	0.53%
PCMI	PSC	1.603.783	-	0%

We noted that the MOGE did not report quantities of DMO purchased from the producing entities. Even the quantities reported are under the percentages detailed in the contracts.

<sup>&</sup>lt;sup>1</sup> The nature od every type of contract is presented in the MEITI Main report section 3.2.4 https://myanmareiti.org/en/publication/5th-meiti-report

### Verification of the prices applied:

### Average prices used by the MOGE to sell O&G to buyers:

The detail of the price used by the MOGE to sell O&G to the different buyers is detailed as below:

Table 39: Average MOGE selling prices

Average sales price	total quantity	Total value in MMK	Average price in MMK	Average price in USD
Oil in bbl	1,978,275	120,828,101,772	61,078	45.05
Gas in MMSCF	124,601	1,058,366,815,807	8,494,048	6,264.88

### The prices with which the MOGE buys O&G from producers (DMO)

The detail of the price applied for the DMO is presented in the table below:

Table 40: DMO buying prices

Producer	Contract	Nature	Quantity DMO	Value in USD	Unit price in USD
POSCO Daewoo	PSC	Gas in MMSCF	885	5,240,149	5,919.36
Goldpetrol	PCC	Oil in bbl	1,989	108,825	54.71
Goldpetrol	PCC	Oil in bbl	2,436	134,059	55.04

According to the PCC and the PSC contracts, MOGE should buy the DMO at respectively 75% and 90% of fair market prices. However, we noted that the MOGE is buying the DMO at prices **exceeding** the market prices. This mean that despite that the MOGE is supposed to buy the Oil from Goldpetrol at 75% of 45.05 USD per bbl representing 33.78 USD, MOGE is buying at 54.71 USD and 55.04 USD.

Also, according to the PSC contracts, MOGE is supposed to buy Gas from POSCO at 90% of market price representing 90%\*6,264.88 per MMSCF equal to 5,638.392 USD. MOGE is buying the DMO at a higher price which is 5,919.36 USD.

# 3.3.5. RECONCILIATION OF THE QUANTITY COLLECTED BY THE MOGE WITH THE QUANTITY SOLD

According to the data received from the MOGE, the source Oil and Gas sold is detailed as below:

- Royalties and in kind taxation;
- Domestic Market Obligation;
- Domestic sales at full price; and
- MOGE own production

Following the documents received from the MOGE, the quantity and the value of every nature of Oil and Gas received is detailed as below:

Table 41: Total oil and Gas collected/purchased

Nature	Oil in bbl	Gas in MMSCF
In kind taxation	1,085,709	706.85
DMO	4,425	858
Domestic sales at full prices	226,905	114,619
MOGE own production	-	17,879
Total	1,317,039	134,062

### Reconciliation with the quantity sold:

The reconciliation of the quantity sold by the MOGE with the quantity collected (presented above) can be presented as below:

Table 42: Reconciliation of the quantity sold

Commodity	Unit	Quantity sold by MOGE	Quantity collected by MOGE	Differences	%
Gas	MMscf	125,110	134,062	(8,952)	(6.70)%
Oil	Barrels	1,978,275	1,317,039	661,236	50%

### MOGE Explanation regarding the discrepancies raised:

### • Gas sales:

According to the data provided by the MOGE, the detail of gas production is detailed as below:

Differences details	Quantity in MMscf
CNG used	6,652
Internal used	1,740
Leak	20
Total Onshore	8,412
ZTK (CNG)	320
CNG used (24")	48
Shwe domestic used	4
loss (ZTK)	143
loss (TEPM)	2
line gain	23
Offshore used	540
Differences(Onshore+Offshore)	8,952

### • Oil sales:

According to the data provided by the MOGE, we understand that the difference raised represents the stock balance at the end of the period 2017-2018. The calculation provided is detailed as below:

Quantity Collected by MOGE	IG	bbl	Note
Goldpetrol (CHK)	12,910,010.00	354,475.84	
Goldpetrol (YNG)	18,637,651.00	511,742.20	
MPRL (Mann)	16,417,954.00	450,795.00	
collected from (Chk+Yng+Mann)	47,965,615.00	1,317,013.04	(a)
Other Fields	34,670,479.00	951,962.63	(b)
Total Production MOGE	82,636,094.00	2,268,975.67	
Stock balance 2016-2017	6,056,592.00	232,945.85	(c)
Total Oil up to 2017-2018	88,692,686.00	2,501,921.52	
Total Sales 2017-2018	71,217,912.00	1,978,275.33	(d)
Stock balance 2017-2018 (a+b+c-d)	17,474,774.00	661,246.98	

The detail of the production of the other fields is presented as below :

Field	Total production in IG	Total production in bbl
Kyaukkwet	420,716	11,552
Letpando	13,219,416	362,971
Thargyitaung	1,365,981	37,506
Sabe	125,092	3,435
Ludutwinza	12,763	350
Lanywa	627,992	17,243
Yenama	127,682	3,506
Dahatpin	56,025	1,538
Htaukshabin	12,655,609	347,491
Pyay	931,277	25,570
Myanaung	388,718	10,673
Shwepyitha	720,638	19,787
Apyauk	45,394	1,246
Nyaungdone	1,788,034	49,095
M U Bin	2,183,254	59,947
Phahtoelon	1,888	52
Total	34,670,479	951,963

# 3.4 Contract disclosure process

We have not received any sales agreement between the MOGE and the different purchasing entities. We only received the model of contract used for the preparations of the agreements. This model is presented in the annex 6 of the present report.

#### Contracts disclosures in the downstream sector<sup>1</sup>

The oil and gas legislation do not include any express restrictions on the public disclosure of contracts by the government. However, we noted that signed agreements are not currently published.

However, as part of efforts to improve transparency and the publication of contracts, MEITI and NRGI held the Contract Transparency Workshop on December 16, 2019.

This workshop brought together over 60 participants from various government departments, civil society organisations and private sectors (oil & gas, mining) and aim to:

- increase knowledge of EITI stakeholders on contract transparency and to better understand the new EITI standards on contract transparency.
- explore and identify potential challenges in implementing the standard; and
- identify preparatory measures before January 2021.

The summary of the group discussion were:

- how to implement the new EITI standards 2019.
- identify possible challenges/barriers when implementing; and
- explore way to overcome those challenges/barriers.

Following this workshop, it was decided the following next steps:

- work-plan sub-committee to discuss implementation of contract disclosure and then during MSG meeting; and
- conduct another workshop in February or March 2020.

# 3.5 Buyers selection process

We have not received any details regarding the allocation of Oil and Gas to different buyers. We have not been informed of any type of tendering process regarding the sales of Oil and Gas in Myanmar. We have only received a general description of the allocation process.

Following the review of the documents received from the OGPD, we understand the following:

MOGE is establishing agreements with the different buyers, those buyers can be public or private: power plants, turbines, private companies, ministry, departments.... The priority is given to public entities.

MOGE is selling the natural gas to power plants, turbines under electricity production operation by priority plan in accordance with the natural gas requirements of those factories.

Also, The following facts are included in consideration for selection criteria:

- Whether the location of usage factory is nearby transportation pipeline exist or not.
- The gas usage volume is within the distribution condition of MOGE
- The types of goods or products which produced by factory
- Productivity of factory
- Ability to operate long run

<sup>1</sup> Main MEITI report 2017-2018 BDO LLP

47

# 3.6 Participation in the Oil and Gas sector<sup>1</sup>

The constitution of the Republic of the Union of Myanmar 2008 stipulates that the State is the ultimate owner of all-natural resources including Oil and Gas.

According to chapter 2 of the State-Owned Economic Enterprises Law (1989): "the Government as State-Owned Economic Enterprise has the sole right to carry out exploration, extraction and sale of petroleum and natural gas and production of products of the same.

Following our review of the contextual data of the oil and gas sector, we understand that the State's intervention in the sector is made primary through MOGE, MPE and MPPE.

### 3.6.1. MYANMA OIL AND GAS ENTERPRISE (MOGE)

In 1989, Myanmar enacted its State-Owned Economic Enterprise Law, identifying key areas of economic activities where the State would exercise control via SOEs. Although this law remains in effect, the Foreign Investment Law largely determines, in practical terms, how GOUM exercises its involvement in the extractive sector. For example, in contrast to the State-Owned Economic Enterprises Law, GOUM no longer exercises its right to monopolise the extraction of resources.

Created in 1963, Myanma Oil and Gas Enterprise is a national oil and gas company of Myanmar. This company is responsible for oil and gas exploration and production, as well as domestic gas transmission through 2,488 km onshore pipeline grid<sup>2</sup>. It is also responsible for overseeing Production Sharing Contracts (PSCs) entered with private investors.

### i- MOGE organisation chart:

Planning Exploration And Department Departme

Figure 5: MOGE organigram

The responsibilities of the main departments are detailed as below:

### Managing Director office of MOGE

- managing and controlling the performance of respective Oil and Gas fields.
- giving instructions to issue, review and amend departmental policy, law and regulation. To collect and manage the information and data distribution by ICT.
- performing internal auditing of the MOGE and overview the clarification of concerned department based on the Audit Report by Union Auditor General Office; and
- managing to collaborate with Local and Foreign Oil and Gas Companies and Organizations. To consolidate the statistical data or project done by concerned department under control of MOGE. To directive and supervise the administration, human resources management, oil and gas operations such as the exploration, drilling, production and distribution sectors.

<sup>&</sup>lt;sup>1</sup> Main Myanmar EITI report 2017-2018

https://web.archive.org/web/20031212060349/http://burma.total.com/en/contexte/p\_1\_2.htm

### Planning Department

- supervising the activities of foreign oil companies which are contracted by Production Sharing Contract with Myanma Oil and Gas Enterprise for the mutually beneficial cooperation.
- submitting the approval of foreign oil companies' business issues to get the approval from Steering Committee.
- reporting the weekly, monthly, quarterly, half-year and annually status of PSC companies to government office and other ministries.
- submitting the approval of foreign oil companies' period extension of the block and land lease issues to get the permission from Myanma Investment Committee.
- participating in onshore and offshore blocks' tender, to formulate National Energy Policy,
   Conducting the policy and participating to formulate and amendment the petroleum law;
- Supervising the operation of oil and gas exploration, production and distribution of Myanma Oil and Gas Enterprise.

### Exploration and Development Department

- has the career of location the position of new exploration well in virgin area and development wells in existing oil and gas fields. This responsibility includes the acquisition of surface geological, geochemical and subsurface geophysical and identifying the possible location of hydrocarbon prospects and resources by evaluation of all integrated G&G data and research work.
- deploying drilling rig position. In addition, it has to estimate initial oil & gas reserves in place and its future recoverable reserves, to lay down the short- and long-term plans of geological and geophysical surveys, to plan new drilling program and production estimates.
- avoiding the detriment to the country, E&D department steers and regulates the E&P activities of the international oil companies under PSC contracts and it has responsibility of technical cooperation together with PSC companies.
- monitoring and supervising the safety and EIA, SIA process of the test wells, fields and exploration operations; and
- demarcating the area of oil and gas fields for official submission to the State.

### Drilling Department

- taking full responsibility to reach the target depth within time frame.
- supervise and guide the way to prevent the unexpected problems during Drilling Campaign.
- has the responsibility to serve as Chairman of Technical Sub Committee. This committee have the responsibility to review and supervise for servicing jobs and tendering jobs which are operated by joint Venture Operators and the review results are reported in Management Committee Meeting to proceed in concern Offshore Work.

### ii- Evolution of MOGE participation in the Oil and Gas sector

According to the 2017-2018 MEITI report, from the information received from the MOGE, we understand that there were no changes in the MOGE participation in the Oil and gas sector between 2016-2017 and 2017-2018. The details of MOGE's interest in the different oil and gas projects are presented below:

Table 43: MOGE participation in the O&G sector

	Project	U.	Operator		77	Inter	est dis	tribution	(in %)		
	Yadana	TOTAL	31%	MOGE	15%	UNOCAL	28%	PTTEP	26%		
Offshore	Yetagun	PCML	41%	MOGE	21%	Nippon Oil	19%	PTTEP	19%		
projects	Shwe	Daewoo	51%	MOGE	15%	ONGC	17%	Gail	8%	Korea Gas Corporation	9%
	Zawtika	PTTEP	80%	MOGE	20%						

Source: MOGE data

The MOGE participation in the pipeline projects is presented as below:

Table 44: MOGE participation in pipeline projects

Pipeline Project	Operator				Ir	nterest	Distribution	ı (in %)			
SEAGP	CNPC-SEAP	51%	MOGE	7%	Posco Daewoo	25%	Caspian E&P	8%	Gail (India) limited	4% AGP Co., Ltd	4%
Moattama	TOTAL	31%	MOGE	15%	UNOCAL	28%	PTTEP	26%			
Taninthayi Pipeline Company	Petronas	30%	MOGE	20%	Nippon Oil	19%	PTTEP	19%	PCML	115	
Andaman	PTTEP	80%	MOGE	20%							

Source: MOGE data

According to MEITI report 2017-2018, based on the data reported by MOGE, it does not hold any shares in oil and gas operator companies.

### iii- Financial relationship between MOGE and GOUM

### Transfers performed by MOGE

According to MEITI report 2017-2018, MOGE transferred the following amounts to the following Government Agencies

Table 45: Transfers performed by the MOGE

Nature of transfers	Amount in million MMK	Beneficiaries	
5% Commercial Tax	233,671	IRD	
8% Specific Goods Tax	293,326	IRD	
State Contribution	114,832	Treasury department	
Income Tax	143,540	IRD	
Royalty and Bonus	352,874	OGPD	
Total	1,138,243		

Source: MOGE

We understand that in accordance with the oil and gas agreements (PSC, PCC and IPR), MOGE is responsible for the payments of all the taxes on the behalf of Oil and Gas companies except the income tax for the contracts signed before 2014. Thus, MOGE created a deposit fund at the Customs Department to support the different customs duties on the behalf of Oil and Gas companies. The movements of this deposit are detailed as below.

Table 46: Details of the MOGE deposit

Nature of transfers	Amount in million MMK
Customs deposit	31,000
Deduction from customs deposit	(539)
Net deposit in 31/03/2018	30,461

Source: MOGE

According to the data reported by the MOGE, we understand that MOGE does not distributes dividend.

### Loans contacted by MOGE

According to the MEITI report 2017-2018, details of loans contracted by MOGE as detailed in the table below:

Table 47: Details of the MOGE loans

No	Contract No/	Agreement	1000	Prophosit and	Curr	Free America	Paid up to	31.3.2018	018 Balance to be Paid		Landar / Constlant
NO	Purchase	Date	Loan	Particulars	ency	Loan Amount	Principal	Interest	Principal	Interest	Lender / Suppliers
á	PBC NO (2007)10,11,12 TOTAL NO. (031),(032), (033)	27.9.07	China Soft Loan	Four Drilling Rigs and Oil Field Equipment and Materials Project	USD in million	80.51	44.28	19.14	36.23	2.75	Export-Import of China / Central Bank of Myanmar
2	18 01 01-00 16 01(MY-C1)	15.1.13	JACA Loan	Offshore Petroleum Exploration Project	J¥ in million	11,629.72	5.84	5.78	11,623.88	23.25	Japan International Cooperation Agency
3	5300942322009591489	20.12.09	CDB (24")	Yadana-Yangon 24* Gas Pipeline Project	Euro in million	185.60	35.92	62.39	149.68	44.54	China Development Bank
4	5300942322010591241	16.12.10	CDB(EURO)	Offshore Natural Gas Development and Pipeline Project/ Onshore Natural Gas Pipeline Project	Euro in million	452.75	67.78	114.37	384.97	108.58	China Development Bank (CDB) Loan /Myanma Foreign Trade Bank
5	5300942322010591242	16.12.10	CDB(RMB)	Oil Pipeline Project	RMB in million	7,358.40	913.58	1,516.22	6,444.82	1,463.48	China Development Bank (CDB) Loan /Myanma Foreign Trade Bank

Source: MOGE

### 3.6.2. MYANMA PETROCHEMICAL ENTERPRISE (MPE)

Myanmar Petrochemical Enterprise (MPE) is a 100% State Owned Economic Enterprise responsible for Downstream Petroleum Sub-sector.

The MPE was formerly known as Petrochemical Industries Corporation in 1975 and later changed to the MPE in 1989. The MPE is also a SOE under MOEE and is responsible for downstream petroleum sector in Myanmar production of petroleum and petrochemical products, urea fertiliser from crude oil and natural gas, transportation and movement of crude oil and petroleum products and marketing of LPG, urea fertiliser, motor gasoline and high-speed diesel. Petroleum sector consists of refineries, liquefied petroleum gas plants and fertiliser plants<sup>1</sup>.

The MPE is composed of eight departments as seen in the figure below<sup>2</sup>:

Administration Planning Production Department Department Department Department Department Planning and Department Departm

Figure 6: MPE organigram

MPE has a vision of enhancing its production capacity of petroleum and petrochemical products using oil and natural gas from onshore and offshore oil blocks in an environmentally friendly production with energy saving technologies.

MPE has three refineries as detailed below3:

#### No.1 Refinery (Thanlyin)

Located in (Thanlyin), Yangon region and is operating at 20,000 barrels per operating day since 1963. It has three crude oil distillation (COD) units, one coke plant (5,200 BPSD), one candle plant (1.5 tons/day), one SBP Plant (50,000 IG/day), one lube oil blending unit (25,000 MT/year). COD (A) was constructed in 1955 and was decommissioned in 2005 due to safety requirements. Only COD (B) and COD (C) are in operations. Myanmar Liquefied Terminal (MLT) was constructed with the LPG storage capacity of 5,550 MT in 1985. In the past, No.1 Refinery (Thanlyin) previously processed local crude oil only but starting from 1990, imported crude oil is also processed. Condensate from Yetagun gas field is also processed starting from 2002. The main products are gasoline, diesel, ATF (Aviation Turbine Fuel) and SBP (Special Boiling Point). No.1 Refinery (Thanlyin) is currently operating as they are reviewing its production capacity and profitability.

### No.2 Refinery (Chauk)

Located in Chauk, Magway Region. It was built by Foster Wheeler Company from England in 1954 and it has atmospheric distillation tower, vacuum tower and wax plants. It processed only local crude oil. The main products are gasoline, kerosene, diesel, wax, fuel oil (FO), and blue oil.

### Mann (Thanbayakan) refinery

Located near Thanbayarkan village in Minhla Township, Magway Region. It was built in 1982 by Mitsubishi Heavy Industry and production was started in 1986. The products are LPG, gasoline, kerosene, ATF (Aviation Turbine Fuel), diesel, fuel oil (FO), and petroleum coke.

MPE also has 5 urea plants. No. 1 Fertiliser Factory is operating in Sa-le at 205 Tons per day, No. 2 in Kyun Chaung at 207 Tons per day, No. 3 in Kyaw Zwa at 600 Tons per day, and No. 4 in Myaungdagaand

<sup>&</sup>lt;sup>1</sup> http://www.moee.gov.mm/en/ignite/page/415

<sup>&</sup>lt;sup>2</sup> http://www.moee.gov.mm/en/ignite/page/417

http://www.moee.gov.mm/en/ignite/page/439

No. 5 in Kangyidaunt at 500 Tons per day. Only three factories, No. (1) Urea Fertiliser Factory in Sa-Le, No. (4) Urea Fertiliser Factory in Myaungdaga and No. (5) Urea Fertiliser Factory in Kangyidaunt are in operation at the total capacity of 700 Tons per day. The other two factories are shut down temporarily due to limited supply of natural gas.

In addition, there are three LPG plants, one methanol plant and one bitumen plant operating under MPE. One LPG plant is in Minbu operating at 24 MMscf per day since 1986, one in Nyaungdon operating at 10 to 16 MMscf per day and another in Kyunchaung operating at 8 to 10 MMscf per day since 2010. Of which No. (1) LPG Plant in Minbu and No. (2) LPG Plant in Nyaung Don are in operation. No. (3) LPG Plant in Kyunchaung is moved to Nyaung Don near No. (2) LPG Plant and it will resume its LPG production. They are operating at the total capacity of LPG 30 MT and Naphtha 18 MT per day to supply local demand. MPE has entered a leasing contract with Yadanasu Co., Ltd., a local company, on 25 October 2017 to lease No. (2) LPG Plant and No. (3) LPG Plant, four LPG stations in Yangon and Hmawbi for 30 years. Through increased production of LPG, LPG is planned to be used as cooking fuel.

There is a Methanol plant in Seiktha operating at 450 MT per day and bitumen plant in Thanlyin operating at 548 MT per day.

A new refinery is planning to be built near Thanbayarkan Refinery with a capacity of 2 to 5 million tons per year using crude oil from South East Asia Crude Oil Pipeline. EIA and SIA were carried out and reports were submitted to the MONREC via MOEE for the new refinery project.

MPE entered into joint venture agreement with AVA Kahyasis Investments Ptes., Ltd from Singapore and Same Sky Construction Co., Ltd and Guiding Star Group Ltd from Republic of the Union of Myanmar and set up a joint venture company called Asia AVA Gas Co., Ltd to carry our LPG businesses such as importation, storage and distribution. Project site is situated on 31.78 acres land in Bogyoke Village in Thanlyin Township and initial investment is USD 60 million and investment was permitted for 50 years. With the vision of supplying LPG as cooking fuel, MPE leased its existing LPG terminal in Thanlyin for one year to Parami Energy Services Co., Ltd who was awarded leased out of nine companies. Parami Energy Services Co., Ltd will import, store, distribute and do marketing of LPG.

### 3.6.3. MYANMA PETROLEUM PRODUCT ENTERPRISE (MPPE)

MPPE is one of the SOEs under the MOEE. It was established as Petroleum Products Corporation on 1 April 1975 under No. (2) Ministry of Industry and later changed to the MPPE on 1 April 1989.

MPPE distributes petroleum produced by Myanma Petrochemical Enterprise and is a regulator for private fuel import, storage and distribution. 261 out of 273 petrol stations run by MPPE were privatised starting from June 2010. It is destined to form a Public Private Partnership (PPP) company when there is an experienced foreign company with strong capital investment to form a joint venture.

MPPE has eight departments as seen in the figure below<sup>1</sup>:

Figure 7: MPPE organigram

There are four main petrol storage and distribution departments, 19 storage and distribution subdepartments, five storage and distribution stations, eleven jet fuel sections, 14 regional distribution offices and 12 state-owned petrol stations under the MPPE.

54

<sup>1</sup> http://www.moee.gov.mm/en/ignite/page/451 BDO LLP

260 fuel stations of the MPPE were privatised in 2010 and there were 2,065 privately-owned fuel retail stations licensed by the MPPE as of 22 February 2017. 25% of fuel retail stations are situated in Mandalay, 15% in Shan State and 10% in Bago and Ayeyarwaddy. Yangon has 7% of the total number of fuel retail stations. 2,089 licenses were granted for fuel retail stations, 8 for storage, 14 for vessels and 13 for airports by the MPPE as of 30 November 2017<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> http://www.moee.gov.mm/en/ignite/page/449 BDO LLP

# 3.7 Pricing and valuation process

### 3.7.1. PRICE METHODOLOGY OF OIL AND CONDENSATE

According to the OGPD, the Oil and condensate pricing is based on the Brent price. The department has three Dated Brent Price options. The price is fixed based on a mutual agreement.

According to the data provided by the MOGE, the average unit price applied is detailed as below:

Table 48: price applied for the Oil sales

Avera price	9	total quantity	Total value in MMK	Average price in MMK	Average price in USD
Oil in	bbl	1,978,275	120,828,101,772	61,078	45.05

Source: MOGE data

### 3.7.2. PRICE METHODOLOGY OF GAS

According to the data provided by the MOGE after reconciliation, the average selling price is detailed as below:

Average sales price	total quantity	Total value in MMK	Average price in MMK	Average price in USD
Gas in MMSCF	124,601	1,058,366,815,807	8,494,048	6,264.88

#### Local sales

We have not been able to obtain the pricing methodology used by the MOGE for the valuation of its gas sales. We have not been able to check the consistency of the prices applied with the methodology used.

According to the sales breakdown provided by the MOGE, we understand that the unit price applied is MMK 2,000,000 per MMscf. The list of those buyers is detailed below:

Table 49: Local sales prices

Buyer	B.O of the buyer	Type of Gas	Volumes sold MMscf	Revenues received en MMK	Unit price
KCG MEPE	EPGE	OnShore Gas	2,044.0970	4,088,194,000	2,000,000
YMA GT	EPGE	OnShore Gas	229.9820	459,964,000	2,000,000
PAPER MILL PALEIK	central bank of Myanmar (Mandalay Branch)	OnShore Gas	52.4170	104,834,000	2,000,000
Brick-2	MEC	OnShore Gas	3.3840	6,768,000	2,000,000
Dagon Beer	MEC	OnShore Gas	92.1660	184,332,000	2,000,000
Dairy (Hmawbi)	MEC	OnShore Gas	12.6230	25,246,000	2,000,000
Dairy (Pyinmapin)	MEC	OnShore Gas	21.1300	42,260,000	2,000,000
MDGR Steel	MEC	OnShore Gas	2.1850	4,370,000	2,000,000
KSE SLIPPER FACTORY	Private Co.,Ltd(Leased)	OnShore Gas	2.3290	4,658,000	2,000,000
TEXTILE (Paleik)(KSE)	Private Co.,Ltd(Leased)	OnShore Gas	152.3550	304,710,000	2,000,000
TEXTILE (PHU)	MOPFI	OnShore Gas	2.1430	4,286,000	2,000,000
Vast (KSE)(စွပ်ကျယ်စက်ရုံ)	MOPFI	OnShore Gas	32.5410	65,082,000	2,000,000
Paper Mill (Hmawbi)	Ministry of Education	OnShore Gas	3.0610	6,122,000	2,000,000
Paper Mill (Tharpaung)	MOPFI	OnShore Gas	51.8990	103,798,000	2,000,000
CHK REFINERY	MPE	OnShore Gas	68.1070	136,214,000	2,000,000
Fertilizer (Sale)	MPE	OnShore Gas	639.0870	1,278,174,000	2,000,000
MINBU LPG	MPE	OnShore Gas	453.7478	907,495,600	2,000,000

Buyer	B.O of the buyer	Type of Gas	Volumes sold MMscf	Revenues received en MMK	Unit price
TBGN REFINERY	MPE	OnShore Gas	296.0652	592,130,400	2,000,000
FERTILIZER NO-4	MPE	OnShore Gas	2,352.7230	4,705,446,000	2,000,000
FERTILIZER NO-5	MPE	OnShore Gas	2,241.8700	4,483,740,000	2,000,000
LPG(NDN)	MPE	OnShore Gas	387.7310	775,462,000	2,000,000
Wazi Hi	Department of Defence,	OnShore Gas	192.7430	385,486,000	2,000,000
Convalescent Hospital(MCH)	Department of Defence,	OnShore Gas	7.3000	14,600,000	2,000,000
Military Cementary (MMC)	Department of Defence,	OnShore Gas	3.6500	7,300,000	2,000,000
Mottama Ceramic (MTM)	(MOALI)	OnShore Gas	3.2750	6,550,000	2,000,000
- (DGN)	YCDC	OnShore Gas	0.5120	1,024,000	2,000,000
- (DPN)	YCDC	OnShore Gas	6.8150	13,630,000	2,000,000
Asphalt (ABC)	YCDC	OnShore Gas	8.0650	16,130,000	2,000,000

However, we noted that the MOGE applied a different unit price for some buyers which is MMK 6,060:

Table 50: List of buyers with a different unit price

Buyer	B.O of the buyer	Type of Gas	Volumes sold MMscf	Revenues received en MMK	Unit price
CF (TYWD)FUP.	Private Co.,Ltd(Leased)	OnShore Gas	15.3140	67,145,065.7300	4,384,554
Asia World Packing	Asia World Packing	OnShore Gas	1.8210	11,036,370.8100	6,060,610
AUNG Ceramic	Asia World Packing	OnShore Gas	62.7580	380,351,762.3800	6,060,610
Battery (Thetther)	Battery (Thetther)	OnShore Gas	0.6400	3,878,790.4000	6,060,610
Best Industrial Co.Ltd	Best Industrial Co.Ltd	OnShore Gas	0.6940	5,155,489.2500	7,428,658
F/Food	F/Food	OnShore Gas	1.8570	11,254,552.7700	6,060,610
Godzilla	Godzilla	OnShore Gas	0.6440	3,903,032.8400	6,060,610
JAPAN CARTOON BOX	JAPAN CARTOON BOX	OnShore Gas	12.0050	72,757,623.0500	6,060,610
TOYO Battery	TOYO Battery	OnShore Gas	0.2390	1,448,485.7900	6,060,610
YGN Metal	YGN Metal re: MOGF data	OnShore Gas	1.9910	12,066,674.5100	6,060,610

### Gas exports

According to the data provided by the MOGE related to the gas exports, pricing is calculated based on the Pricing Formula in Export Gas Sales Agreement (EGSA). Gas pricing is set according to the formula mentioned in the respective EGSAs in each project.

We have not been able to check the Export Gas Agreement to verify the consistency of the prices applied with the formula aforementioned.

Also, according to the data provided by the MOGE, Gas price depends also on the CPI (Consumer Price Index), OTM (Oil Tools Machinery) and FOP (Fuel Oil Price).

We have not been able to obtain more details about those elements to check the consistency of the prices applied with them.

The detail of average prices is presented as below:

Table 51: Export sales prices

Project	Volumes sold in MMSCF	Average of Price (USD)	Revenues received (USD)	Revenues received (MMK)
PLC project (20)	279	6.860	1,598,159	2,173,496,906
PLC project (24)	65,124	6.937	351,617,093	476,474,238,644
Shwe Project	27,131	9.045	251,641,917	341,120,182,377
Zawtika project	23,108	7.732	166,236,477	225,191,871,523
Total	115,642	7.350	771,093,646	1,044,959,789,450

Source: MOGE data

### 3.7.3. PRICE APPLIED FOR OIL AND GAS PRODUCTS

According to the data provided by the MPE, the Price applied for selling the Oil and gas products can be detailed as below:

### MPE

Table 52: Average prices applied for Oil and Gas products sales (MPE)

			Average p	rice
No	Item	Unit	Ministry of Defense	Other
1	Diesel	Gallon	2,650	2,754
2	Gasoline	Gallon	3,100	3,200
3	Fuel Oils/Blue Oil	Gallon	2,350	2,450
4	CGO (Iron tank)	Gallon	2,550	2,650
5	CGO (Thinlyin)	Gallon	2,600	2,700
6	Jet fuel	Liter	-	760
7	Octane	Liter	-	760
8	Petroleum Coke	Ton	-	250,000

Source: MPE data

### MPPE

According to the data provided by the MPPE, the Price applied for selling the Oil and gas products can be detailed as below:

Table 53: Prices applied for Oil and Gas products sales (MPPE)

			Average p	orice
No	Item	Unit	Ministry of Defense	Other
1	Diesel	Gallon	3,213	3,338
2	Gasoline	Gallon	1,025	3,279
3	Octane	Liter	1,071	0

Source: MPPE data

Following the review of the prices applied and the difference between the ministry of defence and the other buyers, we can conclude that this gap represents a quasi-fiscal expenditure awarded to the the different entities under the ministry of defence.

### 3.8 Reconciliation with the MOGE-OA

According to the Oil and Gas breakdown provided by the MOGE and reconciled with the different buyers, the detail per type of product is detailed as below:

Table 54: Detail of MOGE revenues

Nature	Unit	Quantity	Value in MMK	Value in USD
Oil sales	IG	71,217,912	120,828,101,772	89,118,100
Offshore Gas sales	MMscf	115,642	1,044,959,789,450	771,093,646
Onshore sales	MMscf	9,468	19,319,984,858	14,249,668
Total			1,185,107,876,080	874,461,414

Following the review of the detail of the MOGE-OA, the revenue received from the Oil and Gas sales are detailed as below

Table 55: Detail of OA flows

Item	2017 - 2018 (MMK)
Total Received Amount	2,376,750,278,381
In-flow of revenues during the year	2,376,750,278,381
a) Income from Sale of Crude Oil, Natural Gas and CNG(Onshore)	180,515,936,828
b) Income from Sale of Natural Gas and Condensate (Offshore)	1,743,690,319,132
c) Income from Service Chgs Of PSC Contract	1,221,186,249
d) Miscellaneous Other	98,448,400,449
e) Receipt of Royalty and Bonus	352,874,435,723

The differences raised are detailed as below:

Table 56: Differences raised with the OA details

Nature	MOGE sales Breakdown in MMK	OA details	Differences	
Offshore Gas sales	1,044,959,789,450	1,743,690,319,132	(698,730,529,682)	
Oil sales	120,828,101,772	180,515,936,828	(40,367,850,198)	
Onshore sales	19,319,984,858	160,515,930,626	(40,307,630,196)	
Total	1,185,107,876,080	1,924,206,255,960	(739,098,379,880)	

According to the explanations received from the MOGE, we understand that the income which described in OA account is based on cash budget and income received within financial year which is higher than the revenue collected. This is due to the fact that it included the previous year outstanding debt balances and advance deposit payment at financial year end.

# 3.9 Audit and assurance practices in Myanmar

#### 3.9.1 PRIVATE COMPANIES

Under the Myanmar Company Law 2017, companies must keep proper books of accounts at their registered office. Financial statements must be prepared in accordance with Myanmar Accounting Standards (MAS).

Accounting practices in Myanmar have been historically based on British accounting standards and Generally Accepted Accounting Principles (GAAP). For several years, Myanmar adopted International Accounting Standards for reporting purposes, while the Myanmar Accountancy Council (MAC), through the Myanmar Institute of Certified Accountants (MICPA) has adopted the majority of International Accounting Standards that existed in 2003 and 2004. In 2010, MAC withdrew all 30 of International Accounting Standards and replaced them with 29 new Myanmar Accounting Standards and 8 new Myanmar Financial Reporting Standards that were identical to the 2010 International Financial Reporting Standards (IFRS). Such standards were published in the Official Gazette and became effective on 4 January 2011. Public companies and financial institutions are required to apply MFRS (Myanmar Financial Reporting Standards, which are a word-for-word equivalent of IFRS). SMEs must apply MFRS for Small and Medium Enterprises (SMEs) (word-for-word equivalent of IFRS for SMEs).

Recently, the Myanmar Accountancy Council (MAC) has signed the agreement for the Supply of Data for the Adoption and Publication of IFRS Standards between Myanmar Accountancy Council and IFRS Foundation Cooperation to adopt International Financial Reporting Standards (IFRS) in Myanmar. In July 2018, MAC announced the adoption of the latest versions of IFRS standards for financial reporting periods beginning in or after the 2022-2023 financial year for both public companies, financial institutions and SMEs. Early adoption of IFRS standards is permitted.

The tax assessment year runs from 1 April to 31 March. This is mandatory even for branches of foreign companies which may have a different financial year-end. The Myanmar Internal Revenue Department (IRD) issued a Letter on 15 May 2019 confirming the change of fiscal year end from 1 April - 31 March to 1 October - 30 September that shall apply to co-operatives and private enterprises from 1 October 2019. This confirmation is in line with the provisions in the Union Taxation Law 2018 (UTL 2018) and Union Taxation Law 2018-2019 (UTL 2018-2019) stating that the fiscal year for Income Tax Law shall be the same for taxpayers including both private taxpayers and cooperative societies, starting from 1st October 2018.

The Myanmar Companies Act 1914 and subsidiary legislation (Myanmar Companies Rules 1940 and Myanmar Companies 18 Detailed Report Regulations 1957) (together, the Companies Legislation) govern the conduct of companies and company affairs in Myanmar today. The Companies Legislation contains annual reporting requirements for companies registered in Myanmar, including the preparation of statutory reports setting out the share capital and details of the receipts and payment of a company (Section 148 of the Myanmar Company Law 2017) and financial reports containing balance sheets and profit and loss statements (Section 260 of the Myanmar Company Law 2017). Such reports are required to be audited and sent to the Companies Registrar as well as members of the companies. The Companies Legislation also imposes certain auditing requirements for companies in which the Government holds shares (Section 282 of the Myanmar Company Law 2017). The Myanmar Company Law 2017 also requires companies to appoint an auditor and companies are required to submit audited financial statements to the tax authorities annually by 31 December.

Section 285 of the Myanmar Company Law 2017 requires an auditor to report to the members of a company on the financial statements examined by the auditor at the annual general meeting. The auditor's report must state, amongst others, whether or not in their opinion the balance sheet and profit and loss account referred to in the auditor's report are drawn up in accordance with law, whether or not the balance sheet gives a true and fair view of the state of affairs of the company. The opinion should also state whether the company's accounting records have been kept by the company as required by law.

In practice, however, the financial reporting and auditing provisions of the Companies Legislation are not comprehensively or consistently applied and there is limited transparency on the financial affairs of companies in Myanmar today.

Myanmar Companies Law was enacted by the Pyidaungsu Hluttaw on 6 December 2017, replacing the Myanmar Companies Act of 1914. The requirements of Financial Reports and Audit are prescribed in Division 24 of the Law. The requirement of Repeal of certain existing Regulations and continued effect of others is prescribed in Article 471,472 of the Law.

The companies selected in the Commodity trading report scope were required to submit their financial statements for the period covered by this report. Details on the confirmations received can be found in **Annex 5** of the report.

### 3.9.2 PUBLIC SECTOR AND SOE

In Myanmar there is a special Government Agency - Office of the Auditor General of the Union (OAG) - the supreme audit institution of Myanmar, which is accountable to the President and the Parliament simultaneously. This body carries out controls over the execution of the State's budget and payment of taxes and other mandatory payments, including payments from SOEs and partners.

OAGM was set up under the 2008 Constitution as an independent agency, for the appointment of the Auditor General. This was made by the President with the approval of the Parliament.

OAGM performs audits consistent with Generally Accepted Auditing standards comparable with International Organisation of Supreme Audit Institutions (INTOSAI) audit standards.

All SOEs are required to submit bi-annual financial reports which have been prepared in accordance with Generally Accepted Accounting Standards to OAGM. According to OAGM, the annual audit includes all tax and non-tax payments made by all partners to the extractive industries sector project. Other Accounts, held by the SEEs, are state fund accounts that are audited by the OAGM, as are all the state accounts held at MEB.

Union Auditor General has the authority to audit government ministries, SOEs and to give comment on the appointment of their Joint Ventures auditors. According to the amendment of Union Auditor General Law (2018), the Union Auditor General has a duty to audit the Joint Ventures companies jointly owned by the Government, if necessary. The Union Auditor General also has a duty to re audit the accounts of private companies which have been already audited by a certified public accountant and practicing accountant relating to taxes and revenues to be paid to the Union if necessary, but currently lacks the capacity and the resources to do so. OAG's effectiveness and capacity to hold government ministries, SOEs and the Parliament to account has yet to be determined, and its reports are not disclosed to the public.

OAGM sends bi-annual summary reports both to the President and the Parliament simultaneously. However, there are no penalties for delayed submissions.

The Union Auditor General is also Chairman of the Myanmar Accountancy Council which deals with accounting standards in Myanmar. Accounting standards have been developed for the commercial sector which is also applicable to SOEs in the "commercial" form of their accounts. But, to date, there are no standards or statements of practice that apply to the Government's financial statements which include SOEs activities prepared on a cash basis in parallel.

Government departments maintain their accounting system on cash basis, while SOEs maintain their accounting system on the accrual basis.

We understand that the financial statements of the SOEs are not published but the public account committe of Hluttaw published audited findings on their website<sup>1</sup>.

https://pyidaungsu.hluttaw.mm/reports/1716-report1312201802jpac BDO LLP 61

# 3.10 Beneficial ownership

#### 3.10.1 BENEFICIAL OWNERSHIP CONTEXT IN MYANMAR

Following the review of government's policy regarding the BO disclosure and the legislation regulating the publication of those data, we note that the 2017 Myanmar Company Law introduced the ownership interest concept on both direct and indirect shareholding, regulating transfer of shares relevant to overseas corporations for foreign shareholdings. The 2014 Anti-Money Laundering Law provides a definition of BO and domestic and international politically exposed persons (PEPs) that are aligned with international best practices. The 2013 Anti-Corruption Law promotes transparency of the rule of law and governance sector. DICA issues an Anti-Corruption Code of Ethics for Companies and Body Corporates, requiring all companies and body corporates that are incorporated within the Union to carry out business activities in line with the code of ethics of 03 August 2018. The 2016 Myanmar Investment Law provides conflict of interest provisions relevant to Commissioners and the PEP requirement<sup>1</sup>.

We understand that Myanmar EITI has conducted awareness-raising activities with government, companies and civil society organisations. The EITI Multi-Stakeholder Group (MSG) is adopting a phased approach to implement reforms with concrete short and long-term plans on data collection, first through EITI Reports and eventually through systematic disclosures by DICA. Details on beneficial owners have been disclosed through a pilot report published in 2018<sup>2</sup>.

We also understand the Myanmar government issued a notification on the 2 October 2019 and confirmed the mandate of the Beneficial Ownership Task Force to make decisions regarding ownership disclosures and empowers the Directorate of Investment and Company Administration (DICA) to implement them. The notification also paves the way for several companies and state-owned enterprises operating in Myanmar's oil and gas production and transportation, mineral, pearl, jade and coloured gemstone industries to disclose their beneficial owners by 1 January 2020.

### 3.10.2 DEFINITION OF BENEFICIAL OWNERSHIP

According to 2017-2018 MEITI report, the Myanmar's legal framework does not include provisions relating to the beneficial ownership definition or disclosure and considering EITI Requirement 2.5. The following definition of Beneficial Ownership is adopted by the MEITI-MSG:

### Definition of beneficial ownership:

In accordance with the EITI standard 2019, Requirement 2.5.f.i, with the decision of the MEITI Multi Stakeholder Group, a beneficial owner is defined as:

- 1. The individual holds, directly or indirectly, 5% and above of the voting rights in the public or private company or corporate entity.
- 2. The individual holds, directly or indirectly, 5% and above of the voting rights in the public or private company or corporate entity.
- 3. The individual holds the right, directly or indirectly, to appoint or remove a majority of the board of directors of the public or private company or corporate entity.
- 4. The individual has the right to exercise, or actually exercises, significant influence or control over the public or private company or corporate entity. (Reference to "ultimately owns or controls" refer to situations in which ownership/control is exercised through a chain of ownership or by means of control other than direct control. This definition should also apply to a beneficiary under a life or other investment").
- 5. For shareholding entities, which are state-owned enterprises or their subsidiaries, disclose the parent ministry and country.

<sup>&</sup>lt;sup>1</sup> BO Progress Information for Short Publication provided by NCS Technical Team

<sup>&</sup>lt;sup>2</sup> https://eiti.org/files/documents/eiti\_myanmar\_bo\_pilot\_report-final.pdf

ii. Which are publicly listed, disclose the name of the stock exchange and a web link to stock exchange filings."

The following definition of Politically Exposed Persons (PEPs) is adopted by the MSG:

**Politically exposed persons (PEPs)** within the Myanmar EITI framework are defined as individuals who are or were entrusted with prominent public functions, either domestically or international. The coverage also includes:

- 1. family members defined as individuals related to a PEP, by common ancestry, through marriage or similar forms of partnership; and
- 2. close associates defined as those who are closely connected to a PEP in their public roles, either socially or professionally.

For detailed coverage of individuals defined as PEP in Myanmar, refer to the following link: <a href="https://myanmareiti.org/sites/myanmareiti.org/files/publication\_docs/bo\_pep\_coverage\_eng\_0.pd">https://myanmareiti.org/sites/myanmareiti.org/files/publication\_docs/bo\_pep\_coverage\_eng\_0.pd</a>

### 3.10.3 BENEFICIAL OWNERSHIP DECLARATION

We understand that the Myanmar launched at the end of 2019 a BO register at the DICA website. The data was published online on 28 December 2019 at <a href="https://bo.dica.gov.mm/">https://bo.dica.gov.mm/</a> including B.O data regarding the extractive sector. This register does not include any information regarding the purchasing companies included in the scope of this report.

Only 76 out of 117 companies submitted the Beneficial Ownership reporting template, the details reported by those companies can be presented as follows:

N°	Buyer	BO of the buyer	Ν°	Buyer	BO of the buyer
1	KCG MEPE	EPGE	39	Great Myanmar (CO2)	MOPFI
2	YMA GT	EPGE	40	Hepatitis (B)Vaccine	MOPFI
3	GEG (Kyauk SE).	EPGE	41	MPF	MOPFI
4	GLass (Kyauk SE)	International Glass Co., Itd	42	Packing (MMB)	MOPFI
5	MEPE (NEW)	EPGE	43	Raw Material (PRM)	MOPFI
6	MEPE (OLD)	EPGE	44	Shoe (Ywama) Reva Co.	MOPFI
7	MEPE (AHL)	EPGE	45	TEX (9) UPC	MOPFI
8	MEPE (HLK)	EPGE	46	Textile (SDG)/FINH	MOPFI
9	MEPE (KBK)	EPGE	47	Tin Smelting (TYN)	No.2 Minining Enterprise and Ministry of Natural Resource, Environmental Conservation (MONREC)
10	MEPE (KPH)	EPGE	48	Wa Min Co., LTD	MOPFI
11	MEPE (MAG)	EPGE	49	CHK REFINERY	MPE
12	MEPE (MC 225)	EPGE	50	Fertilizer (Sale)	MPE
13	MEPE (MC)	EPGE	51	MINBU LPG	MPE
14	MEPE (MLM)	EPGE	52	TBGN REFINERY	MPE
15	MEPE (SDG)	EPGE	53	FERTILIZER NO-4	MPE
16	MEPE (THILAWA)	EPGE	54	FERTILIZER NO-5	MPE
17	MEPE (TKA U Energy)	EPGE	55	LPG(NDN)	MPE
18	MEPE (TKA)	EPGE	56	Asia World (Maltose)	Asia World
19	MEPE (YMA)	EPGE	57	Best Industrial Co. Ltd	Best Industrial Co. Ltd
20	MEPE(E-GAT)	EPGE	58	Wazi Hi	Department of Defence,
21	Sembcorp Power	EPGE	59	Convalescent Hospital (MCH)	Department of Defence,

https://myanmareiti.org/sites/myanmareiti.org/files/publication\_docs/beneficial\_ownership\_definitionupdate.pdf
 BDO LLP
 63 Commodity Trading in Myanmar

N°	Buyer	BO of the buyer	Ν°	Buyer	BO of the buyer	
22	TYRE (YMA)(MEC)	MEC	60	Military Cementary (MMC)	Department of Defence,	
23	Fire Brick (Alan)	MEC	61 Defence Ball <b>De</b> p		Department of Defence,	
24	Galvanized & Corrugated	MEC	62	Myanmar Army	Department of Defence,	
25	Glass Factory (MEC)	MEC	63	No 13 Heavy Ind	Department of Defence,	
26	Steel Mill (2) (Mgdr)	MEC	64	NO.6Defence Hospital	Department of Defence,	
27	Steel Mill (KSG)	MEC	65	Max Myanmar 500 ton	Max Myanmar	
28	Steel Mill (3) (Insein)	MEC	66	Myanmar Railway	MOCT	
29	Ton 4000 Cement	MEC	67	Myanma Suzuki Co.,	Myanma Suzuki Co	
30	Ton 900 Cement	MEC	68	New General Co.,	New General Co.,	
31	Panda Textile (Paleik) co.,ltd	Private Co., Ltd (Leased)	69	Ngwe Pin Lae (CTB)	Ngwe Pin Lae	
32	TEXTILE (PHU)	MOPFI	70	Ngwe Pin Lae (FM)	Ngwe Pin Lae	
33	CF (TYWD)FUP.	Private Co., Ltd (Leased)	71	Shwe Kyee Co.,	Shwe Kyee Co.,	
34	Paper Mill (Tharpaung)	MOPFI	72	Tet Phyo Wai (ICE)	Tet Phyo Wai	
35	Brick (DYGN)Mother	Mother Industrial Co. Ltd	73	- (DGN)	YCDC	
36	CF (TYWD)FUP	Private Co., Ltd (Leased)	74	- (DPN)	YCDC	
37	CIPCS	cooperative department and ministry of agriculture, livestock and irrigation	75	Asphalt (ABC)	YCDC	
38	GLass (Kyauk SE) (No.2 Heavy Industrial Enterprise)	International Glass Co., Itd	76	Asphalt (SPT)	YCDC	

# 4. DETERMINATION OF THE RECONCILIATION SCOPE

### 4.1 Overview

According to Requirement 4.2 of the 2019 EITI Standard:

- a) Where the sale of the state's share of production of oil, gas and/or mineral resources or other revenues collected in kind is material, the government, including state-owned enterprises, are required to disclose the volumes received and sold by the state (or third parties appointed by the state to sell on their behalf), the revenues received from the sale, and the revenues transferred to the state from the proceeds of oil, gas and minerals sold. Where applicable, this should include payments (in cash or in kind) related to swap agreements and resourcebacked loans.
- b) Implementing countries including state-owned enterprises are encouraged to disclose a description of the process for selecting the buying companies, the technical and financial criteria used to make the selection, the list of selected buying companies, any material deviations from the applicable legal and regulatory framework governing the selection of buying companies and the related sales agreements.
- c) Companies buying oil, gas and/or mineral resources from the state, including state-owned enterprises (or third parties appointed by the state to sell on their behalf), are encouraged to disclose volumes received from the state or state-owned enterprise and payments made for the purchase of oil, gas and/or mineral resources. This could include payments (in cash or in kind) related to swap agreements and resource-backed loans.
- d) Where there are concerns related to data reliability and where practically feasible, the multistakeholder group should consider further efforts to address any gaps, inconsistencies and irregularities in the information disclosed.

Additionally, according to EITI Guidance Note 26 - Reporting on first trades in oil: EITI disclosures on commodities trading should produce data that is useful to citizens and other oversight actors, so as to achieve greater accountability in the trading part of the oil value chain. To achieve this, the information should enable users to answer three relevant questions:

- 1. What oil is being sold?
- 2. Who are the buying companies?
- 3. What return did the country receive from the sale?

# 4.2 Materiality analysis

In this section, we will analyse the information received from MOGE regarding the Oil and Gas sales during the period 2017-2018 to suggest the materiality threshold to be applied for the selection of the entities in the scope of reconciliation.

# 4.2.1 Analysis of information received

According to the data received from MOGE, oil and gas sales can be presented as follows.

### a. Gas sales

The analysis of the table below shows that Gas purchased by four (4) companies from MOGE represent 99% of the total Gas sales declared by the Government Agency. The available data collected from MOGE during 2017-2018 are summarised as follows:

Table 57: Details of Gas sold by Parent Company/Organisation of the buyer

Purchaser	Volumes sold in MMscf	Revenues received in Million MMK	%	Cumulative %
Electric Power Generation Enterprise (EPGE)	111,266.19	986,670.38	92.7%	92.7%
MEC	3,109.10	27,761.70	2.6%	95.3%
MOPFI	2,822.17	26,214.63	2.5%	97.8%
MPE	6,439.33	12,878.66	1.2%	99.0%
Other companies / Department	1,472.74	10,754.40	1.0%	100.0%
Total GAS SALES	125,109.53	1,064,279.77	100%	

Source: MOGE data

Details are presented in table 8 of this report

b. Oil Sales

Table 58: Detail of Oil sold

Project/field	Buyer	B.O of the owner	Volumes sold in IG	Revenues received in MMK
YENANGYAUNG	TBGN REFINERY	MPE	16,611,888	28,183,680,727
MANN	TBGN REFINERY	MPE	14,752,788	25,029,537,090
CHAUK	TBGN REFINERY	MPE	11,458,313	19,440,140,414
HTAUKSHABIN	TBGN REFINERY	MPE	11,196,914	18,996,651,633
LETPANDO	TBGN REFINERY	MPE	9,256,192	15,704,028,349
MA- U-BIN(South)	TBGN REFINERY	MPE	2,080,778	3,530,241,886
NYAUNGDONE	TBGN REFINERY	MPE	1,760,885	2,987,512,355
THARGYITAUNG	TBGN REFINERY	MPE	963,055	1,633,916,304
PYAY	TBGN REFINERY	MPE	842,998	1,430,227,948
SHWEPYITHA	TBGN REFINERY	MPE	686,655	1,164,976,870
LANYWA	TBGN REFINERY	MPE	585,244	992,923,263
MYANAUNG	TBGN REFINERY	MPE	374,059	634,627,408
KYAUKKWET	TBGN REFINERY	MPE	317,233	538,216,582
YENANMA	TBGN REFINERY	MPE	120,699	204,777,571
SABE	TBGN REFINERY	MPE	91,293	154,887,438
DAHATPIN	TBGN REFINERY	MPE	56,962	96,641,563
APYAUK	TBGN REFINERY	MPE	46,456	78,817,114
LUDUTWINZA	TBGN REFINERY	MPE	13,612	23,094,079
PA HTO LOAN	TBGN REFINERY	MPE	1,888	3,203,175
Grand Total			71,217,912	120,828,101,772

Source: MOGE data

According to the data provided by the MOGE, all the Oil was purchased by MPE.

# 4.2.2 Materiality decided by the MSG

The MEITI-MSG decided to include all the entities purchasing Gas. This means that we should include all the entities purchasing Gas for a total value of MMK 1,064,279,774,308.

For Oil sales, MPE purchased the entire volume sold by MOGE. We will select this company for the reconciliation of Oil sales.

### 4.2.3 List of entities to be included

According to the methodology detailed below, all companies that have bought Oil and Gas are requested to report their Oil and Gas sales.

The list of entities purchased gas from "MOGE" to be included in this report is presented in the annex 1 of this report.

As "MPE" purchases the entire quantity of oil sold by MOGE, MPE is selected for the reconciliation of Oil sales.

### 4.3 Main information to be disclosed

The information to be disclosed includes:

- Identification of the seller.
- Oil grade and quality.
- Date of sale.
- Name of buyer.
- Volumes sold.
- · Revenues received; and
- Price information.
- Additional information can include information requested to facilitate the reconciliation between the reporting template submitted by Purchaser and the Seller such as dates and contract reference details.

All the information to be disclosed have been detailed in the reporting templates. 1

# 4.4 Disaggregation level

MSG decided that the Reporting Templates and the data are submitted:

- by purchaser.
- by Government Agency or SOE for each company selected in the reconciliation scope.

The Purchasing Companies were also requested to produce information on their beneficial ownership.

# 4.5 Reporting period

MSG decided that the reporting period should include all quantities sold/purchased from 01 April 2017 to 31 March 2018. The reporting template should also include all payments that took place during the fiscal year 2017-2018 even if the transfer of the commodity took place at a subsequent or later date.

<sup>&</sup>lt;sup>1</sup> See Annex 1 of this report. BDO LLP

# 4.6 Reliability and Credibility of Data

In order to comply with EITI Requirement 4.1 and 4.9 which seeks to guarantee the credibility of the data submitted by reporting entities, MSG decided to include the following information:

### For companies

The process for companies submitting their reporting templates is as follows:

- the completed template is signed by the Chief Financial Officer or Chief Executive Officer confirming that all information provided in the declaration are accurate and reliable;
- the template is stamped using the company stamp; and
- audited financial statements should be attached to the reporting templates.

### For Government Agencies

The process for Government Agencies submitting their porting templates is as follows:

- the reporting template must be signed by the Head of the Agency confirming the truthful and fair presentation of the reporting template in accordance with the reporting guidelines.
- the template is stamped using the organisation's official stamp; and
- the Auditor General certifies (signs and stamps) that the government template is in line with the data included in the Annual Report, and that the annual report has been prepared to international auditing standards.

# 5. RECONCILIATION RESULTS

We present below the detailed results of the reconciliation work as well as the discrepancies noted between the sales reported by the companies and the sales reported by MOGE.

We have highlighted the initial amounts carried forward, the adjustments we have made as a result of the reconciliation work, and the final amounts and non-reconciled differences.

In the tables below, we present a summary of the differences between the sales reported by the companies selected in the reconciliation scope and the sales reported by MOGE.

These tables include the consolidated figures based on the declarations of each company and the reporting by MOGE, the adjustments made by us based on the reconciliation work and the residual unreconciled differences.

# 5.1. Reconciliation detailed by reporting entities

The tables below summarise the differences between the sales flows reported by the companies and MOGE.

These tables include the consolidated quantities from the reporting templates of each of the companies and those of MOGE.

The initial reconciliation is detailed as follows:

#### a. Oil sales

Entity	Parent entity
TBGN REFINERY	MPE
Total	

Purchaser reporting				
Quantity	Value			
IG	MMK			
71,217,912	120,828,101,772			
71,217,912	120,828,101,772			

MOGE reporting				
Quantity Value				
IG	MMK			
71,217,912	120,828,101,772			
71,217,912	120,828,101,772			

Differe	ence
Quantity	Value
MMscf	MMK
-	-
-	

### b. Gas sales

		Compa	nies reporting
Entity	Parent entity	Quantity	Value
		MMscf	MMK
KCG MEPE	EPGE	2,044	4,091,528,000
YMA GT	EPGE	230	459,964,000
GEG (Kyauk SE)	EPGE	6,894	92,095,889,172
GLass (Kyauk SE)	International Glass Co. Ltd	0	0
MEPE (NEW)	EPGE	227	2,183,615,603
MEPE (OLD)	EPGE	2,103	20,866,931,505
MEPE (AHL)	EPGE	17,083	132,393,530,612
MEPE (HLK)	EPGE	12,938	100,407,505,089
MEPE (KBK)	EPGE	268,777	4,062,243,042
MEPE (KPH)	EPGE	5,886	66,849,174,544
MEPE (MAG)	EPGE	805	5,879,296,940
MEPE (MC 225)	EPGE	421	5,630,285,860

MOGE reporting				
Quantity	Value			
MMscf	MMK			
2,044	4,088,194,000			
230	459,964,000			
6,840	90,324,747,109			
42	563,306,710			
482	4,587,124,994			
2,013	19,496,170,212			
18,312	133,988,363,590			
13,574	99,748,993,621			
523	5,638,233,296			
5,819	65,580,838,307			
1,150	8,397,645,580			
293	3,793,424,618			

	Difference
Quantity	Value
MMscf	MMK
0	3,334,000
0	0
54	1,771,142,063
(42)	(563,306,710)
(255)	(2,403,509,391)
90	1,370,761,293
(1,229)	(1,594,832,978)
(636)	658,511,468
268,254	(1,575,990,254)
67	1,268,336,237
(345)	(2,518,348,640)
128	1,836,861,242

		Compani	es reporting	MOGE	E reporting	Difference	
Entity	Parent entity	Quantity	Value	Quantity	Value	Quantity	Value
		MMscf	MMK	MMscf	MMK	MMscf	MMK
MEPE (MC)	EPGE	13,397	172,528,078,673	13,546	173,256,017,421	(149)	(727,938,748)
MEPE (MLM)	EPGE	9,959	98,251,892,124	10,251	99,659,484,610	(292)	(1,407,592,486)
MEPE (SDG)	EPGE	2,088	17,879,424,099	2,400	17,545,941,403	(312)	333,482,696
MEPE (THILAWA)	EPGE	2,630	22,737,265,276	2,780	22,555,798,821	(150)	181,466,455
MEPE (TKA U Energy)	EPGE	133	1,357,890,157	851	8,081,997,404	(718)	(6,724,107,247)
MEPE (TKA)	EPGE	6,786	65,728,359,493	7,063	64,945,420,659	(277)	782,938,834
MEPE (YMA)	EPGE	8,594	67,523,520,965	8,944	65,431,548,224	(350)	2,091,972,741
MEPE(E-GAT)	EPGE	15,222	119,670,979,908	16,331	119,344,214,157	(1,109)	326,765,751
Sembcorp Power	EPGE	0	0	33	426,331,168	(33)	(426,331,168)
PAPER MILL PALEIK	Central Bank of Myanmar (Mandalay Branch)	194	404,000	52	104,834,000	142	(104,430,000)
Brick-2	MEC	0	0	3	6,768,000	(3)	(6,768,000)
Dagon Beer	MEC	0	0	92	184,332,000	(92)	(184,332,000)
Dairy (Hmawbi)	MEC	0	0	13	25,246,000	(13)	(25,246,000)
Dairy (Pyinmapin)	MEC	0	0	21	42,260,000	(21)	(42,260,000)
MDGR Steel	MEC	0	0	2	4,370,000	(2)	(4,370,000)
TYRE (YMA)(MEC)	MEC	48	354,319,467	64	465,053,283	(16)	(110,733,816)
Fire Brick (Alan)	MEC	6	45,746,375	6	41,273,444	0	4,472,931
Galvanized & Corrugated	MEC	12	116,915,839	12	120,616,334	0	(3,700,495)
Glass Factory (MEC)	MEC	109	1,078,926,687	110	1,065,841,621	(1)	13,085,066
Steel Mill (2) (Mgdr)	MEC	111	864,372,987	100	731,674,752	11	132,698,235
Steel Mill (KSG)	MEC	154	1,132,660,535	156	1,142,802,631	(2)	(10,142,096)
Steel Mill (3) (Insein)	MEC	117	960,334,580	123	903,348,527	(6)	56,986,053
Ton 4000 Cement	MEC	1,902	18,670,537,709	1,944	18,818,366,749	(42)	(147,829,040)
Ton 900 Cement	MEC	472	4,575,223,574	472	4,584,288,063	0	(9,064,489)
KSE SLIPPER FACTORY	Private Co. Ltd (Leased)	2	4,958,000	2	4,658,000	0	300,000

Entity	Parent entity	Companies reporting		MOGE reporting		Difference	
		Quantity	Value	Quantity	Value	Quantity	Value
		MMscf	MMK	MMscf	MMK	MMscf	MMK
Panda Textile (Paleik) co.,ltd	Private Co. Ltd (Leased)	152	304,710,000	152	304,710,000	0	0
TEXTILE (PHU)	MOPFI	0	0	2	4,286,000	(2)	(4,286,000)
Vast (KSE)	MOPFI	0	0	33	65,082,000	(33)	(65,082,000)
CF (TYWD)FUP.	Private Co., Ltd (Leased)	74	523,433,223	74	497,766,107	0	25,667,116
Paper Mill (Hmawbi)	Ministry of Education	3	6,332,000	3	6,122,000	0	210,000
Paper Mill (Tharpaung)	MOPFI	0	0	52	103,798,000	(52)	(103,798,000)
Belin Radial Tyre (AHM)	MOPFI	0	0	21	200,597,616	(21)	(200,597,616)
Brick (DYGN)Mother	Mother Industrial Co., Ltd	11	87,937,383	11	83,906,597	0	4,030,786
CIPCS	Cooperative Department and Ministry of Agriculture	9	65,202,169	11	79,186,328	(2)	(13,984,159)
GLass (Kyauk SE) (No.2 Heavy Industrial Enterprise)	International Glass Co., ltd	418	5,517,808,906	378	4,956,233,536	40	561,575,370
Great Myanmar (CO2)	MOPFI	13	92,386,150	15	106,959,461	(2)	(14,573,311)
Hepatitis (B)Vaccine	MOPFI	0	1,288,049	0	1,375,960	0	(87,911)
MPF	MOPFI	74	780,270,272	90	655,953,700	(16)	124,316,572
Packing (MMB)	MOPFI	9	84,217,902	9	85,381,055	0	(1,163,153)
Raw Material (PRM)	MOPFI	0	1,000,538	0	1,000,538	0	0
Shoe (Ywama) Reva Co.	MOPFI	4	40,895,450	6	43,167,020	(2)	(2,271,570)
TEX (9) UPC	MOPFI	8	60,711,372	8	60,551,348	0	160,024
Textile (SDG)/FINH	MOPFI	5	51,003,497	7	51,079,779	(2)	(76,282)
Tin Smelting (TYN)	MONREC	5	52,061,970	5	50,286,181	0	1,775,789
Wa Min Co., LTD	MOPFI	12	100,383,679	14	112,426,975	(2)	(12,043,296)
CHK REFINERY	MPE	68	136,214,000	68	136,214,000	0	0
Fertilizer (Sale)	MPE	639	1,278,174,000	639	1,278,174,000	0	0

		Compani	ies reporting	MOGE	reporting	Difference	
Entity	Parent entity	Quantity	Value	Quantity	Value	Quantity	Value
		MMscf	MMK	MMscf	MMK	MMscf	MMK
MINBU LPG	MPE	454	907,495,600	454	907,495,600	0	0
TBGN REFINERY	MPE	296	592,130,400	296	592,130,400	0	0
FERTILIZER NO-4	MPE	2,353	4,705,446,000	2,353	4,705,446,000	0	0
FERTILIZER NO-5	MPE	2,242	4,483,740,000	2,242	4,483,740,000	0	0
LPG(NDN)	MPE	180	359,894,000	388	775,462,000	(208)	(415,568,000)
3IN 1 COFFEE	3IN 1 COFFEE	0	0	8	82,133,058	(8)	(82,133,058)
Asia World (Maltose)	Asia World	14	138,811,041	14	138,811,041	0	0
National Paper	Asia World	0	0	0	3,450,769	0	(3,450,769)
Asia World Packing	Asia World Packing	0	0	2	11,036,371	(2)	(11,036,371)
AUNG Ceramic	Asia World Packing	0	0	63	380,351,762	(63)	(380,351,762)
Battery (Thetther)	Battery (Thetther)	0	0	1	3,878,790	(1)	(3,878,790)
Belin Spirit (BIADC)	Belin Spirit (BIADC)	0	0	0	2,044,845	0	(2,044,845)
Best Industrial Co. Ltd	Best Industrial Co. Ltd	1	6,376,514	1	6,395,197	0	(18,683)
Wazi Hi	Department of Defence	193	385,486,000	193	385,486,000	0	0
Convalescent Hospital (MCH)	Department of Defence	7	14,600,000	7	14,600,000	0	0
Military Cementary (MMC)	Department of Defence	3	6,238,000	4	7,300,000	(1)	(1,062,000)
Biscuit (Hmawbi)	Department of Defence	3	32,676,482	4	26,713,793	(1)	5,962,689
Defence Ball	Department of Defence	14	104,026,443	15	105,256,622	(1)	(1,230,179)
Tamadaw Pharamecutical Factory	Yeeshin Company Limited	0	0	17	120,383,327	(17)	(120,383,327)
Defence Tarpoulin (HT)	Department of Defence	0	2,005,326	14	167,606,374	(14)	(165,601,048)
Instant Noodle (Hmawbi)	Department of Defence	1	6,858,215	1	6,858,215	0	0
Myanmar Army	Department of Defence	0	1,638,781	0	1,990,640	0	(351,859)

BDO LLP 73 Commodity Trading in Myanmar

		Compan	ies reporting	MOGE	reporting	Difference	
Entity	Parent entity	Quantity	Value	Quantity	Value	Quantity	Value
		MMscf	MMK	MMscf	MMK	MMscf	MMK
No 13 Heavy Ind	Department of Defence	0	2,967,075	0	3,307,266	0	(340,191)
NO.6Defence Hospital	Department of Defence	2	17,867,848	3	19,165,851	(1)	(1,298,003)
Tatmadaw Metal Ware	Department of Defence	0	0	3	24,144,279	(3)	(24,144,279)
Textile (TMG)	Department of Defence	0	0	126	924,024,804	(126)	(924,024,804)
F/Food	F/Food	0	0	2	11,254,553	(2)	(11,254,553)
Godzilla Mosquito	Godzilla Mosquito	0	0	20	149,142,941	(20)	(149,142,941)
JAPAN CARTOON BOX	JAPAN CARTOON BOX	0	0	12	72,757,623	(12)	(72,757,623)
Max Myanmar 500 ton	Max Myanmar	160	1,968,827,799	167	2,048,369,868	(7)	(79,542,069)
Mottama Ceramic (MTM)	MOALI	0	0	3	6,550,000	(3)	(6,550,000)
Myanmar Railway	MOCT	2	11,952,945	2	12,317,849	0	(364,904)
MYAN MA CAN	MYAN MA CAN	0	0	1	14,553,712	(1)	(14,553,712)
Myanma Suzuki Co.,	Myanma Suzuki Co	3	30,750,025	3	35,839,091	0	(5,089,066)
New General Co.,	New General Co.	39	293,519,011	40	304,547,932	(1)	(11,028,921)
Ngwe Pin Lae (CTB)	Ngwe Pin Lae	0	0	2	16,866,102	(2)	(16,866,102)
Ngwe Pin Lae (FM)	Ngwe Pin Lae	4	28,238,496	4	27,925,591	0	312,905
Proven Technology	Proven Technology	0	0	4	31,599,951	(4)	(31,599,951)
Shwe Kyee Co.,	Shwe Kyee Co.,	5	57,711,302	6	68,005,313	(1)	(10,294,011)
Taung Pyar Dan Co.,	Taung Pyar Dan Co.	0	0	14	155,152,108	(14)	(155,152,108)
Tet Phyo Wai (ICE)	Tet Phyo Wai	5	40,528,532	7	57,214,142	(2)	(16,685,610)
Thit San (Glass)	Thit San (Glass)	0	0	8	61,968,591	(8)	(61,968,591)
TOYO Battery	TOYO Battery	0	0	0	1,448,486	0	(1,448,486)
Ve Ve Soft Drink Co.,	Ve Ve Soft Drink Co.	0	0	99	753,871,931	(99)	(753,871,931)
Yangon Crown Co., Ltd	Yangon Crown Co., Ltd	3	21,068,357	3	21,068,357	0	0
Yangon Metal	Yangon Metal	0	0	48	364,666,337	(48)	(364,666,337)

			Companies reporting		OGE reporting	Difference		
Entity	Parent entity	Quantity	Value	Quantity	Value	Quantity	Value	
		MMscf	MMK	MMscf	MMK	MMscf	MMK	
Yangon Tyre Co., (AHM)	Yangon Tyre Co., (AHM)	0	0	27	209,769,377	(27)	(209,769,377)	
- (DGN)	YCDC	1	1,024,000	1	1,024,000	0	0	
- (DPN)	YCDC	7	14,726,000	7	13,630,000	0	1,096,000	
Asphalt (ABC)	YCDC	9	17,214,000	8	16,130,000	1	1,084,000	
Asphalt (SPT)	YCDC	16	158,694,580	24	164,146,666	(8)	(5,452,086)	
Brick (Hmawbi)	YCDC	70	697,982,103	96	704,922,606	(26)	(6,940,503)	
YGN Metal	YGN Metal	0	0	2	12,066,675	(2)	(12,066,675)	
Total		386,936	1,052,696,300,250	125,110	1,064,279,774,315	261,826	(11,583,474,065)	

# 5.2. Adjustments of MOGE reporting

### a. Oil sales

We have not made any adjustments in the Oil sales.

### b. Gas sales

Details of MOGE reporting adjustments are presented as follows:

		Template or	iginally submitted	A	djustments	Final (Qu	antity/amount)
Companies	Entity owner	Quantity	Value	Quantity	Value	Quantity	Value
		(MMSCF)	(MMK)	(MMSCF)	(MMK)	(MMSCF)	(MMK)
Ton 4000 Cement	MEC	1,944.31	18,818,366,748.80	(329.69)	(3,224,154,257.60)	1,614.62	15,594,212,491.20
MEPE (KBK)	EPGE	484.04	5,211,796,240.71	39.41	(670,525,838.21)	523.45	4,541,270,402.50
MEPE (NEW)	EPGE	481.85	4,587,124,993.80	(71.39)	(627,285,067.20)	410.46	3,959,839,926.60
Max Myanmar 500 ton	Max Myanmar	166.65	2,048,369,868.10	(52.99)	(660,342,628.00)	113.66	1,388,027,240.10
Steel Mill (KSG)	MEC	155.93	1,142,802,631.00	(6.98)	(51,127,214.40)	148.96	1,091,675,416.60
Glass Factory (MEC)	MEC	110.01	1,065,841,621.00	(13.32)	(127,631,226.40)	96.69	938,210,394.60
Steel Mill (3) (Insein)	MEC	123.39	903,348,526.90	(20.57)	(150,796,596.00)	102.82	752,551,930.90
Steel Mill (2) (Mgdr)	MEC	100.04	731,674,751.80	(8.79)	(64,465,808.80)	91.25	667,208,943.00
TYRE (YMA)(MEC)	MEC	63.65	465,053,283.30	(15.04)	(110,334,814.40)	48.61	354,718,468.90
New General Co.,	New General Co.	39.70	304,547,931.70	(7.07)	(58,860,596.00)	32.63	245,687,335.70
Wa Min Co., LTD	MOPFI	14.36	112,426,974.50	(4.96)	(41,275,469.60)	9.40	71,151,504.90
Great Myanmar (CO2)	MOPFI	14.62	106,959,460.80	(1.99)	(14,573,311.20)	12.63	92,386,149.60
Defence Ball	Department of Defence,	14.88	105,256,621.90	(1.84)	(13,459,022.40)	13.05	91,797,599.50
Brick (DYGN)Mother	Mother Industrial Co., Ltd	11.46	83,906,597.30	(1.96)	(14,389,466.40)	9.50	69,517,130.90
CIPCS	CIPCS	10.82	79,186,328.40	(1.77)	(12,996,581.60)	9.05	66,189,746.80
Shwe Kyee Co.,	Shwe Kyee Co.	6.22	68,005,313.00	(0.07)	(525,286.40)	6.15	67,480,026.60
TEX (9) UPC	MOPFI	8.28	60,551,348.30	(1.37)	(10,006,023.20)	6.92	50,545,325.10
Tet Phyo Wai (ICE)	Tet Phyo Wai	7.47	57,214,141.60	(1.44)	(11,989,896.00)	6.03	45,224,245.60
BDO LLP			76			Commodity Tradi	ng in Myanmar

		Template or	iginally submitted	A	djustments	Final (Qu	uantity/amount)
Companies	Entity owner	Quantity	Value	Quantity	Value	Quantity	Value
		(MMSCF)	(MMK)	(MMSCF)	(MMK)	(MMSCF)	(MMK)
Textile (SDG)/FINH	MOPFI	6.98	51,079,778.90	(2.82)	(20,690,686.40)	4.16	30,389,092.50
Fire Brick (Alan)	MEC	5.62	41,273,443.80	(1.24)	(9,119,588.80)	4.38	32,153,855.00
Myanma Suzuki Co.,	Myanma Suzuki Co	3.28	35,839,090.80	(0.58)	(5,089,065.60)	2.70	30,750,025.20
Ngwe Pin Lae (FM)	Ngwe Pin Lae	3.67	27,925,591.10	(0.46)	(3,852,472.00)	3.21	24,073,119.10
NO.6Defence Hospital	Department of Defence,	2.62	19,165,850.60	(0.68)	(4,969,916.00)	1.94	14,195,934.60
Myanmar Railway	MOCT	1.68	12,317,849.10	(0.35)	(2,580,178.40)	1.33	9,737,670.70
Best Industrial Co. Ltd	Best Industrial Co. Ltd	0.84	6,395,197.25	(0.15)	(1,239,708.00)	0.69	5,155,489.25
No 13 Heavy Ind	Department of Defence,	0.27	3,307,265.70	(0.02)	(238,013.60)	0.25	3,069,252.10
Myanmar Army	Department of Defence,	0.27	1,990,640.40	(0.05)	(351,859.20)	0.22	1,638,781.20
Hepatitis (B)Vaccine	MOPFI	0.19	1,375,959.70	(0.01)	(87,910.40)	0.18	1,288,049.30
Total		3,783.13	36,153,104,050.26	(508.20)	(5,912,958,502.21)	3,274.93	30,240,145,548.05

The explanations of the main adjustments raised are presented in the annex 2.

# 5.3. Adjustment of the purchasing entities reporting

### a. Oil sales

We have not raised any adjustments in the Oil sales.

### b. Gas sales

The detail of the purchasing entities reporting adjustments can be presented as follows:

		Template or	riginally submitted	Adjus	stments	Final (Qu	antity/amount)
Companies	Entity owner	Quantity	Value	Quantity	Value	Quantity	Value
		(MMSCF)	(MMK)	(MMSCF)	(MMK)	(MMSCF)	(MMK)
MEPE (KBK)	EPGE	268,777	4,062,243,042	(268,351)	479,027,361	426	4,541,270,403
LPG(NDN)	MPE	180	359,894,000	208	416,640,000	388	776,534,000
Wa Min Co., LTD	MOPFI	12	100,383,679	(3)	(29,220,937)	9	71,162,742
Textile (SDG)/FINH	MOPFI	5	51,003,497	(1)	(20,614,400)	4	30,389,097
Myanmar Railway	MOCT	2	11,952,945	(0)	(2,215,274)	1	9,737,671
Best Industrial Co. Ltd	Best Industrial Co. Ltd	1	6,376,514	(0)	(1,221,024)	1	5,155,489
MEPE (MC)	EPGE	13,397	172,528,078,673	-	(159,779,363)	13,397	172,368,299,310
MEPE (AHL)	EPGE	17,083	132,393,530,612	-	(173,393,072)	17,083	132,220,137,540
MEPE (E-GAT)	EPGE	15,222	119,670,979,908	-	(81,242,316)	15,222	119,589,737,592
MEPE (HLK)	EPGE	12,938	100,407,505,089	-	(123,673,519)	12,938	100,283,831,570
MEPE (MLM)	EPGE	9,959	98,251,892,124	-	(96,491,487)	9,959	98,155,400,637
GEG (Kyauk SE).	EPGE	6,894	92,095,889,172	-	(74,016,232)	6,894	92,021,872,940
MEPE (KPH)	EPGE	5,886	66,849,174,544	-	(54,199,565)	5,886	66,794,974,979
MEPE (YMA)	EPGE	8,594	67,523,520,965	-	(81,655,576)	8,594	67,441,865,389
MEPE (TKA)	EPGE	6,786	65,728,359,493	-	(80,492,180)	6,786	65,647,867,314
MEPE (THILAWA)	EPGE	2,630	22,737,265,276	-	(24,762,348)	2,630	22,712,502,928
MEPE (OLD)	EPGE	2,103	20,866,931,505	-	(13,433,404)	2,103	20,853,498,101
Ton 4000 Cement	MEC	1,902	18,670,537,709	-	87,925,580	1,902	18,758,463,288
MEPE (SDG)	EPGE	2,088	17,879,424,099	-	(8)	2,088	17,879,424,092
MEPE (TKA U Energy)	EPGE	133	1,357,890,157	-	13	133	1,357,890,170
MEPE (MAG)	EPGE	805	5,879,296,940	-	18	805	5,879,296,958

BDO LLP 78 Commodity Trading in Myanmar

		Template o	originally submitted	Adjus	tments	Final (Q	uantity/amount)
Companies	Entity owner	Quantity	Value	Quantity	Value	Quantity	Value
		(MMSCF)	(MMK)	(MMSCF)	(MMK)	(MMSCF)	(MMK)
MEPE (NEW)	EPGE	227	2,183,615,603	-	(4)	227	2,183,615,600
Ton 900 Cement	MEC	472	4,575,223,574	-	9,064,489	472	4,584,288,063
KCG MEPE	EPGE	2,044	4,091,528,000	-	(3,334,000)	2,044	4,088,194,000
MEPE (MC 225)	EPGE	421	5,630,285,860	-	(23,895)	421	5,630,261,965
Steel Mill (KSG)	MEC	154	1,132,660,535	-	8,879,278	154	1,141,539,813
Glass Factory (MEC)	MEC	109	1,078,926,687	-	(3,650,794)	109	1,075,275,893
Steel Mill (3) (Insein)	MEC	117	960,334,580	-	1,573,662	117	961,908,242
Steel Mill (2) (Mgdr)	MEC	111	864,372,987	-	3,313,337	111	867,686,324
TYRE (YMA)(MEC)	MEC	48	354,319,467	-	1,932,410	48	356,251,877
Galvanized & Corrugated	MEC	12	116,915,839	-	3,700,495	12	120,616,334
Fire Brick (Alan)	MEC	6	45,746,375	-	108,466	6	45,854,841
Total		379,116	1,028,466,059,452	(268,147)	(11,254,290)	110,969	1,028,454,805,162

The explanations of the main adjustments raised are presented in the annex 3

### 5.4. Final differences

Following the adjustments made, the total unreconciled discrepancies amounted to MMK (5,681,769,846) representing (0.53%) of total payments reported by MOGE. These unreconciled differences are summarised below:

	F 10	•	nies reporting antity/amount)		E reporting antity/amount)	Diff	erence
Companies	Entity owner	Quantity	Value	Quantity	Value	Quantity	Value
		(MMSCF)	(MMK)	(MMSCF)	(MMK)	(MMSCF)	(MMK)
MEPE (MC)	EPGE	13,397	172,368,299,310	13,546	173,256,017,421	(149)	(887,718,110)
MEPE (AHL)	EPGE	17,083	132,220,137,540	18,312	133,988,363,590	(1,229)	(1,768,226,050)
MEPE (E-GAT)	EPGE	15,222	119,589,737,592	16,331	119,344,214,157	(1,109)	245,523,435
MEPE (HLK)	EPGE	12,938	100,283,831,570	13,574	99,748,993,621	(636)	534,837,949
MEPE (MLM)	EPGE	9,959	98,155,400,637	10,251	99,659,484,610	(293)	(1,504,083,973)
GEG (Kyauk SE).	EPGE	6,894	92,021,872,940	6,840	90,324,747,109	54	1,697,125,831
MEPE (KPH)	EPGE	5,886	66,794,974,979	5,819	65,580,838,307	67	1,214,136,671
MEPE (YMA)	EPGE	8,594	67,441,865,389	8,944	65,431,548,224	(350)	2,010,317,165
MEPE (TKA)	EPGE	6,786	65,647,867,314	7,063	64,945,420,659	(277)	702,446,654
MEPE (THILAWA)	EPGE	2,630	22,712,502,928	2,780	22,555,798,821	(150)	156,704,108
MEPE (OLD)	EPGE	2,103	20,853,498,101	2,013	19,496,170,212	90	1,357,327,889
Ton 4000 Cement	MEC	1,902	18,758,463,288	1,615	15,594,212,491	287	3,164,250,797
MEPE (SDG)	EPGE	2,088	17,879,424,092	2,400	17,545,941,403	(312)	333,482,689
MEPE (TKA U Energy)	EPGE	133	1,357,890,170	851	8,081,997,404	(718)	(6,724,107,234)
MEPE (MAG)	EPGE	805	5,879,296,958	1,150	8,397,645,580	(345)	(2,518,348,622)
MEPE (KBK)	EPGE	426	4,541,270,403	563	4,967,707,458	(137)	(426,437,055)
GLass (Kyauk SE) (No.2 Heavy Industrial Enterprise)	International Glass Co., ltd	418	5,517,808,906	378	4,956,233,536	41	561,575,370
FERTILIZER NO-4	MPE	2,353	4,705,446,000	2,353	4,705,446,000	0	0
MEPE (NEW)	EPGE	227	2,183,615,600	410	3,959,839,927	(184)	(1,776,224,327)
Ton 900 Cement	MEC	472	4,584,288,063	472	4,584,288,063	0	0
FERTILIZER NO-5	MPE	2,242	4,483,740,000	2,242	4,483,740,000	0	0
KCG MEPE	EPGE	2,044	4,088,194,000	2,044	4,088,194,000	0	0

BDO LLP 80 Commodity Trading in Myanmar

	5.00	•	es reporting ntity/amount)		eporting tity/amount)	Differ	ence
Companies	Entity owner	Quantity (MMSCF)	Value (MMK)	Quantity (MMSCF)	Value (MMK)	Quantity (MMSCF)	Value (MMK)
MEPE (MC 225)	EPGE	421	5,630,261,965	293	3,793,424,618	129	1,836,837,347
Max Myanmar 500 ton	Max Myanmar	160	1,968,827,799	114	1,388,027,240	47	580,800,559
Fertilizer (Sale)	MPE	639	1,278,174,000	639	1,278,174,000	0	0
Steel Mill (KSG)	MEC	154	1,141,539,813	149	1,091,675,417	5	49,864,397
Glass Factory (MEC)	MEC	109	1,075,275,893	97	938,210,395	13	137,065,499
Textile (TMG)	Department of Defence,	0	0	126	924,024,804	(126)	(924,024,804)
MINBU LPG	MPE	454	907,495,600	454	907,495,600	0	0
Steel Mill (3) (Insein)	MEC	117	961,908,242	103	752,551,931	14	209,356,311
LPG(NDN)	MPE	388	776,534,000	388	775,462,000	0	1,072,000
Ve Ve Soft Drink Co.,	Ve Ve Soft Drink Co.,	0	0	99	753,871,931	(99)	(753,871,931)
Steel Mill (2) (Mgdr)	MEC	111	867,686,324	91	667,208,943	19	200,477,381
Brick (Hmawbi)	YCDC	70	697,982,103	96	704,922,606	(26)	(6,940,503)
MPF	MOPFI	74	780,270,272	90	655,953,700	(16)	124,316,572
TBGN REFINERY	MPE	296	592,130,400	296	592,130,400	0	0
GLass (Kyauk SE)	International Glass Co., Itd	0	0	42	563,306,710	(42)	(563,306,710)
TYRE (YMA)(MEC)	MEC	48	356,251,877	49	354,718,469	(1)	1,533,408
YMA GT	EPGE	230	459,964,000	230	459,964,000	0	0
CF (TYWD)FUP	Private Co., Ltd (Leased)	59	430,621,041	59	430,621,041	0	0
Sembcorp Power	EPGE	0	0	33	426,331,168	(33)	(426,331,168)
Wazi Hi	Department of Defence,	193	385,486,000	193	385,486,000	0	0
AUNG Ceramic	Asia World Packing	0	0	63	380,351,762	(63)	(380,351,762)
Yangon Metal	Yangon Metal	0	0	48	364,666,337	(48)	(364,666,337)
Panda Textile (Paleik) co.,ltd	Private Co., Ltd (Leased)	152	304,710,000	152	304,710,000	0	0
New General Co.,	New General Co.,	39	293,519,011	33	245,687,336	6	47,831,676

BDO LLP 81

Companies	Entity owner	•	ies reporting antity/amount)		reporting antity/amount)	Diffe	erence
Companies	Littly Owner	Quantity (MMSCF)	Value (MMK)	Quantity (MMSCF)	Value (MMK)	Quantity (MMSCF)	Value (MMK)
Yangon Tyre Co., (AHM)	Yangon Tyre Co., (AHM)	0	0	27	209,769,377	(27)	(209,769,377)
Belin Radial Tyre (AHM)	MOPFI	0	0	21	200,597,616	(21)	(200,597,616)
Dagon Beer	MEC	0	0	92	184,332,000	(92)	(184,332,000)
Defence Tarpoulin (HT)	Department of Defence,	0	2,005,326	14	167,606,374	(14)	(165,601,049)
Asphalt (SPT)	YCDC	16	158,694,580	24	164,146,666	(7)	(5,452,086)
Taung Pyar Dan Co.,	Taung Pyar Dan Co.,	0	0	14	155,152,108	(14)	(155,152,108)
Godzilla Mosquito	Godzilla Mosquito	0	0	19	145,239,908	(19)	(145,239,908)
Asia World (Maltose)	Asia World	14	138,811,041	14	138,811,041	0	0
CHK REFINERY	MPE	68	136,214,000	68	136,214,000	0	0
Galvanized & Corrugated	MEC	12	120,616,334	12	120,616,334	0	0
Tamadaw Pharamecutical Factory	Yeeshin Company Limited	0	0	17	120,383,327	(17)	(120,383,327)
Wa Min Co., LTD	MOPFI	9	71,162,742	9	71,151,505	0	11,237
Great Myanmar (CO2)	MOPFI	13	92,386,150	13	92,386,150	0	0
Defence Ball	Department of Defence,	14	104,026,443	13	91,797,600	1	12,228,844
PAPER MILL PALEIK	CBM (Mandalay Branch)	194	404,000	52	104,834,000	142	(104,430,000)
Paper Mill (Tharpaung)	MOPFI	0	0	52	103,798,000	(52)	(103,798,000)
Packing (MMB)	MOPFI	9	84,217,902	9	85,381,055	(0)	(1,163,152)
Brick (DYGN)Mother	Mother Industrial Co., Ltd	11	87,937,383	10	69,517,131	2	18,420,252
3IN 1 COFFEE	3IN 1 COFFEE	0	0	8	82,133,058	(8)	(82,133,058)
CIPCS	CIPCS	9	65,202,169	9	66,189,747	0	(987,578)
JAPAN CARTOON BOX	JAPAN CARTOON BOX	0	0	12	72,757,623	(12)	(72,757,623)
Shwe Kyee Co.,	Shwe Kyee Co.,	5	57,711,302	6	67,480,027	(1)	(9,768,724)

BDO LLP 82

		Companies	•	MOGE re	•	Differe	nce
Companies	Entity owner	Final (Quanti		Final (Quanti		0	
		Quantity (MMSCF)	Value (MMK)	Quantity (MMSCF)	Value (MMK)	Quantity (MMSCF)	Value (MMK)
CF (TYWD)FUP.	Private Co., Ltd (Leased)	15	92,812,182	15	67,145,066	0	25,667,116
Vast (KSE)(စွပ်ကျယ်စက်ရုံ)	MOPFI	0	0	33	65,082,000	(33)	(65,082,000)
Thit San (Glass)	Thit San (Glass)	0	0	8	61,968,591	(8)	(61,968,591)
TEX (9) UPC	MOPFI	8	60,711,372	7	50,545,325	1	10,166,047
Tet Phyo Wai (ICE)	Tet Phyo Wai	5	40,528,532	6	45,224,246	(1)	(4,695,714)
Textile (SDG)/FINH	MOPFI	4	30,389,097	4	30,389,093	0	4
Tin Smelting (TYN)	MONREC	5	52,061,970	5	50,286,181	(0)	1,775,789
Shoe (Ywama) Reva Co.	MOPFI	4	40,895,450	6	43,167,020	(2)	(2,271,570)
Dairy (Pyinmapin)	MEC	0	0	21	42,260,000	(21)	(42,260,000)
Fire Brick (Alan)	MEC	6	45,854,841	4	32,153,855	1	13,700,986
Myanma Suzuki Co.,	Myanma Suzuki Co	3	30,750,025	3	30,750,025	0	0
Proven Technology	Proven Technology	0	0	4	31,599,951	(4)	(31,599,951)
Ngwe Pin Lae (FM)	Ngwe Pin Lae	4	28,238,496	3	24,073,119	1	4,165,377
Biscuit (Hmawbi)	Department of Defence,	3	32,676,482	4	26,713,793	(1)	5,962,690
Dairy (Hmawbi)	MEC	0	0	13	25,246,000	(13)	(25,246,000)
Tatmadaw Metal Ware	Department of Defence,	0	0	3	24,144,279	(3)	(24,144,279)
Yangon Crown Co., Ltd	Yangon Crown Co., Ltd	3	21,068,357	3	21,068,357	0	1
NO.6Defence Hospital	Department of Defence,	2	17,867,848	2	14,195,935	0	3,671,913
Ngwe Pin Lae (CTB)	Ngwe Pin Lae	0	0	2	16,866,102	(2)	(16,866,102)
Asphalt (ABC)	YCDC	9	17,214,000	8	16,130,000	1	1,084,000
Convalescent Hospital (MCH)	Department of Defence,	7	14,600,000	7	14,600,000	0	0
MYAN MA CAN	MYAN MA CAN	0	0	1	14,553,712	(1)	(14,553,712)
- (DPN)	YCDC	7	14,726,000	7	13,630,000	1	1,096,000
Myanmar Railway	MOCT	1	9,737,671	1	9,737,671	0	0
BDO LLP			83			Commodity Trading	g in Myanmar

			es reporting ntity/amount)		reporting	Diffe	rence
Companies	Entity owner	Quantity (MMSCF)	Value (MMK)	Quantity (MMSCF)	Value (MMK)	Quantity (MMSCF)	Value (MMK)
YGN Metal	YGN Metal	0	0	2	12,066,675	(2)	(12,066,675)
F/Food	F/Food	0	0	2	11,254,553	(2)	(11,254,553)
Asia World Packing	Asia World Packing	0	0	2	11,036,371	(2)	(11,036,371)
Military Cementary (MMC)	Department of Defence,	3	6,238,000	4	7,300,000	(1)	(1,062,000)
Instant Noodle (Hmawbi)	Department of Defence,	1	6,858,215	1	6,858,215	0	0
Brick-2	MEC	0	0	3	6,768,000	(3)	(6,768,000)
Mottama Ceramic (MTM)	MOALI	0	0	3	6,550,000	(3)	(6,550,000)
Best Industrial Co. Ltd	Best Industrial Co. Ltd	1	5,155,489	1	5,155,489	0	0
Paper Mill (Hmawbi)	Ministry of Education	3	6,332,000	3	6,122,000	0	210,000
KSE SLIPPER FACTORY	Private Co., Ltd (Leased)	2	4,958,000	2	4,658,000	(0)	300,000
MDGR Steel	MEC	0	0	2	4,370,000	(2)	(4,370,000)
TEXTILE (PHU)	MOPFI	0	0	2	4,286,000	(2)	(4,286,000)
Godzilla	Godzilla	0	0	1	3,903,033	(1)	(3,903,033)
Battery (Thetther)	Battery (Thetther)	0	0	1	3,878,790	(1)	(3,878,790)
National Paper	Asia World	0	0	0	3,450,769	(0)	(3,450,769)
No 13 Heavy Ind	Department of Defence,	0	2,967,075	0	3,069,252	(0)	(102,177)
Belin Spirit (BIADC)	Belin Spirit (BIADC)	0	0	0	2,044,845	(0)	(2,044,845)
Myanmar Army	Department of Defence,	0	1,638,781	0	1,638,781	0	0
TOYO Battery	TOYO Battery	0	0	0	1,448,486	(0)	(1,448,486)
Hepatitis (B)Vaccine	MOPFI	0	1,288,049	0	1,288,049	0	0
- (DGN)	YCDC	1	1,024,000	1	1,024,000	0	0
Raw Material (PRM)	MOPFI	0	1,000,538	0	1,000,538	0	0
Total		118,788	1,052,685,045,960	124,601	1,058,366,815,807	(5,813)	(5,681,769,846)

BDO LLP 84 Commodity Trading in Myanmar

# **ANNEXES**

# Annex 1 List of Companies/Department they have purchased gas from "MOGE"

Ν°	Buyer	Parent entity of the buyer	Total purchases
1	KCG MEPE	EPGE	4,088,194,000
2	YMA GT	EPGE	459,964,000
3	GEG (Kyauk SE).	EPGE	90,324,747,109
4	GLass (Kyauk SE)	International Glass Co., ltd	5,519,540,246
5	MEPE ( NEW)	EPGE	4,587,124,994
6	MEPE ( OLD)	EPGE	19,496,170,212
7	MEPE (AHL)	EPGE	133,988,363,590
8	MEPE (HLK)	EPGE	99,748,993,621
9	MEPE (KBK)	EPGE	5,211,796,241
10	MEPE (KPH)	EPGE	65,580,838,307
11	MEPE (MAG)	EPGE	8,397,645,580
12	MEPE (MC 225)	EPGE	3,793,424,618
13	MEPE (MC)	EPGE	173,256,017,421
14	MEPE (MLM)	EPGE	99,659,484,610
15	MEPE (SDG)	EPGE	17,545,941,403
16	MEPE (THILAWA)	EPGE	22,555,798,821
17	MEPE (TKA U Energy)	EPGE	8,081,997,404
18	MEPE (TKA)	EPGE	64,945,420,659
19	MEPE (YMA)	EPGE	65,431,548,224
20	MEPE(E-GAT)	EPGE	119,344,214,157
21	Sembcorp Power	EPGE	426,331,168
22	PAPER MILL PALEIK	central bank of Myanmar (Mandalay Branch)	104,834,000
23	Brick-2	MEC	6,768,000
24	Dagon Beer	MEC	184,332,000
25	Dairy (Hmawbi)	MEC	25,246,000
26	Dairy (Pyinmapin)	MEC	42,260,000
27	MDGR Steel	MEC	4,370,000
28	TYRE (YMA)(MEC)	MEC	465,053,283
29	Fire Brick( Alan )	MEC	41,273,444
30	Galvanized & Corrugated	MEC	120,616,334
31	Glass Factory (MEC)	MEC	1,065,841,621
32	Steel Mill (2) (Mgdr)	MEC	731,674,752
33	Steel Mill (KSG)	MEC	1,142,802,631
34	Steel Mill(3) (Insein)	MEC	903,348,527
35	Ton 4000 Cement	MEC	18,818,366,749
36	Ton 900 Cement	MEC	4,584,288,063
37	KSE SLIPPER FACTORY	Private Co.,Ltd(Leased)	4,658,000
38	Panda Textile Co.,ltd (Paliek)	Private Co.,Ltd(Leased)	304,710,000
39	TEXTILE (PHU)	MOPFI	4,286,000
40	Vast (KSE)	MOPFI	65,082,000
41	CF (TYWD)FUP.	Private Co.,Ltd(Leased)	497,766,107
42	Paper Mill (Hmawbi)	Ministry of Education	6,122,000

N°	Buyer	Parent entity of the buyer	Total purchases
43	Paper Mill (Tharpaung)	MOPFI	103,798,000
44	Belin Radial Tyre(AHM)	MOPFI	200,597,616
45	Brick(DYGN)Mother	Mother Industrial Co.,Ltd	83,906,597
46	CIPCS	cooperative department and ministry of agriculture, livestock and irrigation	79,186,328
47	Great Myanmar (CO2)	MOPFI	106,959,461
48	Hepatitis (B)Vaccine	MOPFI	1,375,960
49	MPF	MOPFI	655,953,700
50	Packing(MMB)	MOPFI	85,381,055
51	Raw Material(PRM)	MOPFI	1,000,538
52	Shoe(Ywama) Reva Co.	MOPFI	43,167,020
53	TEX(9)UPC	MOPFI	60,551,348
54	Textile (SDG)/FINH	MOPFI	51,079,779
55	Tin Smelting (TYN)	No.2 Minining Enterprise (MONREC)	50,286,181
56	Wa Min Co., LTD	MOPFI	112,426,975
57	CHK REFINERY	MPE	136,214,000
58	Fertilizer (Sale)	MPE	1,278,174,000
59	MINBU LPG	MPE	907,495,600
60	TBGN REFINERY	MPE	592,130,400
61	FERTILIZER NO-4	MPE	4,705,446,000
62	FERTILIZER NO-5	MPE	4,483,740,000
63	LPG(NDN)	MPE	775,462,000
64	3IN 1 COFFEE	3IN 1 COFFEE	82,133,058
65	Asia World (Maltose)	Asia World	138,811,041
66	National Paper	Asia World	3,450,769
67	Asia World Packing	Asia World Packing	11,036,371
68	AUNG Ceramic	Asia World Packing	380,351,762
69	Battery (Thetther)	Battery (Thetther)	3,878,790
70	Belin Spirit( BIADC)	Belin Spirit( BIADC)	2,044,845
71	Best Industrial Co.Ltd	Best Industrial Co.Ltd	6,395,197
72	Wazi Hi	Department of Defence,	385,486,000
73	Convalescent Hospital(MCH)	Department of Defence,	14,600,000
74	Military Cementary (MMC)	Department of Defence,	7,300,000
75	Biscuit (Hmawbi)	Department of Defence,	26,713,793
76	Defence Ball	Department of Defence,	105,256,622
77	Tamadaw Pharamecutical Factory	Yeeshin Company Limited	120,383,327
78	Defence Tarpoulin(HT)	Department of Defence,	167,606,374
79	Instant Noodle(Hmawbi)	Department of Defence,	6,858,215
80	Myanmar Army	Department of Defence,	1,990,640
81	No 13 Heavy Ind	Department of Defence,	3,307,266
82	NO.6Defence Hospital	Department of Defence,	19,165,851
83	Tatmadaw Metal Ware	Department of Defence,	24,144,279
84	Textile (TMG)	Department of Defence,	924,024,804
85	F/Food	F/Food	11,254,553
86	MEPE (KBK/GGC)	EPGE	426,437,055

N°	Buyer	Parent entity of the buyer	Total purchases
87	Godzilla Mosquito	Godzilla Mosquito	149,142,941
88	JAPAN CARTOON BOX	JAPAN CARTOON BOX	72,757,623
89	Max Myanmar 500 ton	Max Myanmar	2,048,369,868
90	Mottama Ceramic (MTM)	(MOALI)	6,550,000
91	Myanmar Railway	MOCT	12,317,849
92	MYAN MA CAN	MYAN MA CAN	14,553,712
93	Myanma Suzuki Co.,	Myanma Suzuki Co	35,839,091
94	New General Co.,	New General Co.,	304,547,932
95	Ngwe Pin Lae(CTB)	Ngwe Pin Lae	16,866,102
96	Ngwe Pin Lae(FM)	Ngwe Pin Lae	27,925,591
97	Proven Technology	Proven Technology	31,599,951
98	Shwe Kyee Co.,	Shwe Kyee Co.,	68,005,313
99	Taung Pyar Dan Co.,	Taung Pyar Dan Co.,	155,152,108
100	Tet Phyo Wai (ICE)	Tet Phyo Wai	57,214,142
101	Thit San (Glass)	Thit San (Glass)	61,968,591
102	TOYO Battery	TOYO Battery	1,448,486
103	Ve Ve Soft Drink Co.,	Ve Ve Soft Drink Co.,	753,871,931
104	Yangon Crown Co.,Ltd	Yangon Crown Co.,Ltd	21,068,357
105	Yangon Metal	Yangon Metal	364,666,337
106	Yangon Tyre Co.,(AHM)	Yangon Tyre Co.,(AHM)	209,769,377
107	- (DGN)	YCDC	1,024,000
108	- (DPN)	YCDC	13,630,000
109	Asphalt (ABC)	YCDC	16,130,000
110	Asphalt(SPT)	YCDC	164,146,666
111	Brick (Hmawbi)	YCDC	704,922,606
112	YGN Metal	YGN Metal	12,066,675
	Total		1,064,279,774,315

Source: MOGE data

Annex 2: Explanations of the MOGE RT. adjustments

		Ac	ljustments	
Entity	Entity owner	Quantity	Value	Nature of the adjustements
		(MMSCF)	(MMK)	
Ton 4000 Cement	MEC	-329.69	-3,224,154,257.60	Revenue and Quantity reported by MOGE but outside the period covered
MEPE (KBK)	EPGE	39.41	-670,525,838.21	1,098,801,310 MMK Revenue reported by MOGE but outside the period covered. 428,275,472 MMK relates to revenue not reported by MOGE.
MEPE ( NEW)	EPGE	-71.39	-627,285,067.20	Revenue and Quantity reported by MOGE but outside the period covered
Max Myanmar 500 ton	Max Myanmar	-52.99	-660,342,628.00	Revenue and Quantity reported by MOGE but outside the period covered
Steel Mill (KSG)	MEC	-6.98	-51,127,214.40	Revenue and Quantity reported by MOGE but outside the period covered
Glass Factory (MEC)	MEC	-13.32	-127,631,226.40	Revenue and Quantity reported by MOGE but outside the period covered
Steel Mill(3) (Insein)	MEC	-20.57	-150,796,596.00	Revenue and Quantity reported by MOGE but outside the period covered
Steel Mill (2) (Mgdr)	MEC	-8.79	-64,465,808.80	Revenue and Quantity reported by MOGE but outside the period covered
TYRE (YMA)(MEC)	MEC	-15.04	-110,334,814.40	Revenue and Quantity reported by MOGE but outside the period covered
New General Co.,	New General Co.,	-7.07	-58,860,596.00	Revenue and Quantity reported by MOGE but outside the period covered
Wa Min Co., LTD	MOPFI	-4.96	-41,275,469.60	Revenue and Quantity reported by MOGE but outside the period covered
Great Myanmar (CO2)	MOPFI	-1.99	-14,573,311.20	Revenue and Quantity reported by MOGE but outside the period covered
Defence Ball	Department of Defence,	-1.84	-13,459,022.40	Revenue and Quantity reported by MOGE but outside the period covered
Brick(DYGN)Mother	Mother Industrial Co.,Ltd	-1.96	-14,389,466.40	Revenue and Quantity reported by MOGE but outside the period covered
CIPCS	CIPCS	-1.77	-12,996,581.60	Revenue and Quantity reported by MOGE but outside the period covered
Shwe Kyee Co.,	Shwe Kyee Co.,	-0.07	-525,286.40	Revenue and Quantity reported by MOGE but outside the period covered
TEX(9)UPC	MOPFI	-1.37	-10,006,023.20	Revenue and Quantity reported by MOGE but outside the period covered
Tet Phyo Wai (ICE)	Tet Phyo Wai	-1.44	-11,989,896.00	Revenue and Quantity reported by MOGE but outside the period covered
Textile (SDG)/FINH	MOPFI	-2.82	-20,690,686.40	Revenue and Quantity reported by MOGE but outside the period covered
Fire Brick( Alan )	MEC	-1.24	-9,119,588.80	Revenue and Quantity reported by MOGE but outside the period covered

		A	djustments	
Entity	Entity owner	Quantity	Value	Nature of the adjustements
		(MMSCF)	(MMK)	
Myanma Suzuki Co.,	Myanma Suzuki Co	-0.58	-5,089,065.60	Revenue and Quantity reported by MOGE but outside the period covered
Ngwe Pin Lae(FM)	Ngwe Pin Lae	-0.46	-3,852,472.00	Revenue and Quantity reported by MOGE but outside the period covered
NO.6Defence Hospital	Department of Defence,	-0.68	-4,969,916.00	Revenue and Quantity reported by MOGE but outside the period covered
Myanmar Railway	MOCT	-0.35	-2,580,178.40	Revenue and Quantity reported by MOGE but outside the period covered
Best Industrial Co.Ltd	Best Industrial Co.Ltd	-0.15	-1,239,708.00	Revenue and Quantity reported by MOGE but outside the period covered
No 13 Heavy Ind	Department of Defence,	-0.02	-238,013.60	Revenue and Quantity reported by MOGE but outside the period covered
Myanmar Army	Department of Defence,	-0.05	-351,859.20	Revenue and Quantity reported by MOGE but outside the period covered
Hepatitis (B)Vaccine	MOPFI	-0.01	-87,910.40	Revenue and Quantity reported by MOGE but outside the period covered
Total		-508.2	-5,912,958,502.21	

Annex 3: Explanations of the purchasing entities RT. adjustments

		Adju	stments	
Entity	Entity owner	Quantity	Value	Nature of the adjustements
		(MMSCF)	(MMK)	
MEPE (KBK)	EPGE	-268,351	479,027,361	Quantities incorrectly reported.
LPG(NDN)	MPE	208	416,640,000	Amount paid not reported
Wa Min Co., LTD	MOPFI	-3	-29,220,937	20,529,755 MMK relates to revenues not reported by MOGE 10,245,042 MMK: same invoice number but different amount reported. 1,553,861 MMK relates to exchange rates differences.
Textile (SDG)/FINH	MOPFI	-1	-20,614,400	Amount reported but not Paid
Myanmar Railway	мост	0	-2,215,274	Revenue reported by the company but outside the period covered
Best Industrial Co.Ltd	Best Industrial Co.Ltd	0	-1,221,024	Revenue reported by the company but not reported by MOGE
MEPE (MC)	EPGE	-	-159,779,363	Exchange rates differences
MEPE (AHL)	EPGE	-	-173,393,072	Exchange rates differences
MEPE( E-GAT)	EPGE	-	-81,242,316	Exchange rates differences
MEPE (HLK)	EPGE	-	-123,673,519	Exchange rates differences
MEPE (MLM)	EPGE	-	-96,491,487	Exchange rates differences
GEG (Kyauk SE).	EPGE	-	-74,016,232	Exchange rates differences
MEPE (KPH)	EPGE	-	-54,199,565	Exchange rates differences
MEPE (YMA)	EPGE	-	-81,655,576	Exchange rates differences
MEPE (TKA)	EPGE	-	-80,492,180	Exchange rates differences
MEPE (THILAWA)	EPGE	-	-24,762,348	Exchange rates differences
MEPE ( OLD)	EPGE	-	-13,433,404	Exchange rates differences
Ton 4000 Cement	MEC	-	87,925,580	Exchange rates differences
MEPE (SDG)	EPGE	-	-8	Exchange rates differences
MEPE (TKA U Energy)	EPGE	-	13	Exchange rates differences
MEPE (MAG)	EPGE	-	18	Exchange rates differences
MEPE ( NEW)	EPGE	-	-4	Exchange rates differences
Ton 900 Cement	MEC	-	9,064,489	Exchange rates differences
KCG MEPE	EPGE	-	-3,334,000	Exchange rates differences
MEPE (MC 225)	EPGE	-	-23,895	Exchange rates differences
Steel Mill (KSG)	MEC	-	8,879,278	Exchange rates differences
Glass Factory (MEC)	MEC	-	-3,650,794	Exchange rates differences
Steel Mill(3) (Insein)	MEC	-	1,573,662	Exchange rates differences
Steel Mill (2) (Mgdr)	MEC	-	3,313,337	Exchange rates differences
TYRE (YMA)(MEC)	MEC	-	1,932,410	Exchange rates differences
Galvanized & Corrugated	MEC	-	3,700,495	Exchange rates differences
Fire Brick( Alan )	MEC	-	108,466	Exchange rates differences
Total		-268,147	-11,254,290	

# Annex 4 Follow up of the Request for Documents

No.	Request Documents	Entity	Received (y/n)
1	Breakdown of the revenue in kind collected by the MOGE and the utilization for 2017-2018 detailed by volume, value, and buyer	MOGE	Received
2	List of entities receiving or purchasing the Revenue in kind collected by the MOGE during 2017-2018	MOGE	Received
3	Laws and regulations related to the O&G downstream sector.	OGPD/MOGE/MPE/MMPE	Received
4	List of focal points for the MOGE/MPE/MPPE and stakeholders in the downstream sector	OGPD/MOGE/MPE/MMPE	Received
5	Updated list of State-Owned Companies in Oil & Gas sector including SOE's subsidiaries related to the downstream sector including their financial statements and their transactions with the Government of Myanmar	OGPD/MOGE/MPE/MMPE	Financial statements received
6	List of Domestic refineries (Name of the company and focal points)	OGPD/MOGE/MPE/MMPE	Received
7	Explanation of the pricing method used for the valuation of the O&G sold by the MOGE	OGPD/MOGE/MPE/MMPE	Partially received
8	List of prices used for the selling of O&G and condensate	OGPD/MOGE/MPE/MMPE	Information received for Gas, could we have the same information for Oil?
9	Procedures/Tendering process for O&G and condensate Trading contracts in effect and/or signed during 2017-2018	OGPD/MOGE/MPE/MMPE	General description received
10	List of contracts used by the MOGE for the selling of the O&G and condensate	OGPD/MOGE/MPE/MMPE	Not received
11	Detail of O&G and condensate purchased by the MOGE, MPE and MPPE during 2017-2018	OGPD/MOGE/MPE/MMPE	Not received
12	Detail of O&G and condensate products purchased by the MOGE, MPE and MPPE during 2017-2018	OGPD/MOGE/MPE/MMPE	Not received
13	List of swap/barter/exchange contract between MOGE and other entities during 2017-2018	OGPD/MOGE/MPE/MMPE	no exchange performed
14	All periodic Official Selling Prices issued by the covering the period 2017-2018 for all the different types of crude sold by the MOGE	OGPD/MOGE/MPE/MMPE	Information received
15	Prices of all refined products for the period 2017-2018	OGPD/MOGE/MPE/MMPE	Received
16	All the daily prices used for the calculation of Oil selling prices.	OGPD/MOGE/MPE/MMPE	Information received for Gas, could we have the same information for Oil?
17	A monthly summary of crude oil quantities pumped to the refineries from the related terminals for the period January 2017-2018	OAG	Received
18	the draft of the law amending the Oil and gas products rules of 1937	OGPD/MOGE/MPE/MMPE	Not received

# Annex 5 Follow up of RT reception

N°	Buyer	Parent entity of the buyer	Total purchases	%	RT received	Signed RT received	Certified RT received	Audited FS
1	KCG MEPE	EPGE	4,088,194,000	0.38%	Yes	Yes	Yes	Yes
2	YMA GT	EPGE	459,964,000	0.04%	Yes	Yes	Yes	Yes
3	GEG (Kyauk SE).	EPGE	90,324,747,109	8.49%	Yes	Yes	Yes	Yes
4	GLass (Kyauk SE)	International Glass Co., ltd	5,519,540,246	0.52%	Yes	Yes	Yes	No
5	MEPE ( NEW)	EPGE	4,587,124,994	0.43%	Yes	Yes	Yes	Yes
6	MEPE ( OLD)	EPGE	19,496,170,212	1.83%	Yes	Yes	Yes	Yes
7	MEPE (AHL)	EPGE	133,988,363,590	12.59%	Yes	Yes	Yes	Yes
8	MEPE (HLK)	EPGE	99,748,993,621	9.37%	Yes	Yes	Yes	Yes
9	MEPE (KBK)	EPGE	5,211,796,241	0.49%	Yes	Yes	Yes	Yes
10	MEPE (KPH)	EPGE	65,580,838,307	6.16%	Yes	Yes	Yes	Yes
11	MEPE (MAG)	EPGE	8,397,645,580	0.79%	Yes	Yes	Yes	Yes
12	MEPE (MC 225)	EPGE	3,793,424,618	0.36%	Yes	Yes	Yes	Yes
13	MEPE (MC)	EPGE	173,256,017,421	16.28%	Yes	Yes	Yes	Yes
14	MEPE (MLM)	EPGE	99,659,484,610	9.36%	Yes	Yes	Yes	Yes
15	MEPE (SDG) MEPE	EPGE	17,545,941,403	1.65%	Yes	Yes	Yes	Yes
16	(THILAWA)	EPGE	22,555,798,821	2.12%	Yes	Yes	Yes	Yes
17	MEPE (TKA U Energy)	EPGE	8,081,997,404	0.76%	Yes	Yes	Yes	Yes
18	MEPE (TKA)	EPGE	64,945,420,659	6.10%	Yes	Yes	Yes	Yes
19	MEPE (YMA)	EPGE	65,431,548,224	6.15%	Yes	Yes	Yes	Yes
20	MEPE(E- GAT)	EPGE	119,344,214,157	11.21%	Yes	Yes	Yes	Yes
21	Sembcorp Power	EPGE	426,331,168	0.04%	Yes	Yes	Yes	Yes
22	PAPER MILL PALEIK	central bank of Myanmar (Mandalay Branch)	104,834,000	0.01%	yes	Yes	Yes	No
23	Brick-2	MEC	6,768,000	0.00%	No	No	No	No
24	Dagon Beer	MEC	184,332,000	0.02%	No	No	No	No
25	Dairy (Hmawbi)	MEC	25,246,000	0.00%	No	No	No	No
26	Dairy (Pyinmapin)	MEC	42,260,000	0.00%	No	No	No	No
27	MDGR Steel	MEC	4,370,000	0.00%	No	No	No	No
28	TYRE (YMA)(MEC)	MEC	465,053,283	0.04%	Yes	Yes	No	No
29	Fire Brick( Alan )	MEC	41,273,444	0.00%	Yes	Yes	yes	No
30	Galvanized & Corrugated	MEC	120,616,334	0.01%	Yes	Yes	No	No
31	Glass Factory (MEC)	MEC	1,065,841,621	0.10%	Yes	Yes	No	No
32	Steel Mill (2) (Mgdr)	MEC	731,674,752	0.07%	Yes	Yes	No	No
33	Steel Mill (KSG)	MEC	1,142,802,631	0.11%	Yes	Yes	No	No
34	Steel Mill(3) (Insein)	MEC	903,348,527	0.08%	Yes	Yes	No	No
35	Ton 4000 Cement	MEC	18,818,366,749	1.77%	Yes	Yes	No	No
36	Ton 900 Cement	MEC	4,584,288,063	0.43%	Yes	Yes	No	No

N°	Buyer	Parent entity of the buyer	Total purchases	%	RT received	Signed RT received	Certified RT received	Audited FS
37	KSE SLIPPER FACTORY	Private Co.,Ltd(Lease d)	4,658,000	0.00%	Yes	No	No	No
38	Panda Textile Co.,ltd (Paliek)	Private Co.,Ltd(Lease d)	304,710,000	0.03%	Yes	Yes	No	Yes
39	TEXTILE (PHU)	MOPFI	4,286,000	0.00%	Yes	Yes	Yes	No
40	Vast (KSE)	MOPFI	65,082,000	0.01%	No	No	No	No
41	CF (TYWD)FUP.	Private Co.,Ltd(Lease d)	497,766,107	0.05%	Yes	Yes	No	No
42	Paper Mill (Hmawbi)	Ministry of Education	6,122,000	0.00%	Yes	Yes	Yes	Yes
43	Paper Mill (Tharpaung)	MOPFI	103,798,000	0.01%	Yes	Yes	Yes	No
44	Belin Radial	MOPFI	200,597,616	0.02%	No	No	No	No
45	Tyre(AHM) Brick(DYGN) Mother	Mother Industrial Co.,Ltd	83,906,597	0.01%	Yes	Yes	No	No
46	CIPCS	cooperative department and ministry of agriculture, livestock and irrigation	79,186,328	0.01%	Yes	Yes	No	Yes
47	Great Myanmar (CO2)	MOPFI	106,959,461	0.01%	Yes	Yes	No	No
48	Hepatitis (B)Vaccine	MOPFI	1,375,960	0.00%	Yes	Yes	Yes	No
49	MPF	MOPFI	655,953,700	0.06%	Yes	Yes	Yes	No
50	Packing(MM B)	MOPFI	85,381,055	0.01%	Yes	Yes	No	No
51	Raw Material(PR M)	MOPFI	1,000,538	0.00%	Yes	Yes	Yes	No
52	Shoe(Ywama ) Reva Co.	MOPFI	43,167,020	0.00%	Yes	Yes	No	No
53	TEX(9)UPC	MOPFI	60,551,348	0.01%	Yes	Yes	No	No
54	Textile (SDG)/FINH	MOPFI	51,079,779	0.00%	Yes	Yes	Yes	No
55	Tin Smelting (TYN)	No.2 Minining Enterprise (MONREC)	50,286,181	0.00%	Yes	Yes	Yes	Yes
56	Wa Min Co., LTD	MOPFI	112,426,975	0.01%	Yes	Yes	No	No
57	CHK REFINERY	MPE	136,214,000	0.01%	Yes	Yes	Yes	No
58	Fertilizer	MPE	1,278,174,000	0.12%	Yes	Yes	Yes	No
59	(Sale) MINBU LPG	MPE	907,495,600	0.09%	Yes	Yes	Yes	No
60	TBGN REFINERY	MPE	592,130,400	0.06%	Yes	Yes	Yes	No
61	FERTILIZER NO-4	MPE	4,705,446,000	0.44%	Yes	Yes	Yes	No
62	FERTILIZER NO-5	MPE	4,483,740,000	0.42%	Yes	Yes	Yes	No
63	LPG(NDN)	MPE	775,462,000	0.07%	Yes	Yes	Yes	No
64	3IN 1 COFFEE	3IN 1 COFFEE	82,133,058	0.01%	No	No	No	No
65	Asia World	Asia World	138,811,041	0.01%	Yes	Yes	No	No
66	(Maltose) National	Asia World	3,450,769	0.00%	No	No	No	No
67	Paper Asia World Packing	Asia World Packing	11,036,371	0.00%	No	No	No	No

N°	Buyer	Parent entity of the buyer	Total purchases	%	RT received	Signed RT received	Certified RT received	Audited FS
68	AUNG Ceramic	Asia World Packing	380,351,762	0.04%	No	No	No	No
69	Battery (Thetther)	Battery (Thetther)	3,878,790	0.00%	No	No	No	No
70	Belin Spirit( BIADC)	Belin Spirit( BIADC)	2,044,845	0.00%	No	No	No	No
71	Best Industrial Co.Ltd	Best Industrial Co.Ltd	6,395,197	0.00%	Yes	Yes	Yes	Yes
72	Wazi Hi	Department of Defence,	385,486,000	0.04%	Yes	Yes	No	No
73	Convalescen t Hospital(MC H)	Department of Defence,	14,600,000	0.00%	Yes	No	No	No
74	Military Cementary (MMC)	Department of Defence,	7,300,000	0.00%	Yes	Yes	No	No
75	Biscuit (Hmawbi)	Department of Defence,	26,713,793	0.00%	Yes	No	No	No
76	Defence Ball	Department of Defence,	105,256,622	0.01%	Yes	No	No	No
77	Tamadaw Pharamecuti cal Factory	Yeeshin Company Limited	120,383,327	0.01%	No	No	No	No
78	Defence Tarpoulin(H T)	Department of Defence,	167,606,374	0.02%	Yes	No	No	No
79	Instant Noodle(Hma wbi)	Department of Defence,	6,858,215	0.00%	Yes	No	No	No
80	Myanmar Army	Department of Defence,	1,990,640	0.00%	Yes	No	No	No
81	No 13 Heavy Ind	Department of Defence,	3,307,266	0.00%	Yes	Yes	No	No
82	NO.6Defenc e Hospital	Department of Defence,	19,165,851	0.00%	Yes	No	No	No
83	Tatmadaw Metal Ware	Department of Defence,	24,144,279	0.00%	No	No	No	No
84	Textile (TMG)	Department of Defence,	924,024,804	0.09%	No	No	No	No
85	F/Food	F/Food	11,254,553	0.00%	No	No	No	No
86	MEPE (KBK/GGC)	EPGE	426,437,055	0.04%	No	No	No	Yes
87	Godzilla Mosquito	Godzilla Mosquito	149,142,941	0.01%	No	No	No	No
88	JAPAN CARTOON BOX	JAPAN CARTOON BOX	72,757,623	0.01%	No	No	No	No
89	Max Myanmar 500 ton	Max Myanmar	2,048,369,868	0.19%	Yes	Yes	yes	No
90	Mottama Ceramic (MTM)	(MOALI)	6,550,000	0.00%	No	No	No	No
91	Myanmar Railway	мост	12,317,849	0.00%	Yes	Yes	Yes	No
92	MYAN MA CAN	MYAN MA CAN	14,553,712	0.00%	No	No	No	No
93	Myanma Suzuki Co.,	Myanma Suzuki Co	35,839,091	0.00%	Yes	No	No	No
94	New General Co.,	New General Co.,	304,547,932	0.03%	Yes	Yes	No	No
95	Ngwe Pin Lae(CTB)	Ngwe Pin Lae	16,866,102	0.00%	Yes	No	No	No
96	Ngwe Pin Lae(FM)	Ngwe Pin Lae	27,925,591	0.00%	Yes	Yes	No	No
97	Proven Technology	Proven Technology	31,599,951	0.00%	No	No	No	No
98	Shwe Kyee Co.,	Shwe Kyee Co.,	68,005,313	0.01%	Yes	No	No	No

N°	Buyer	Parent entity of the buyer	Total purchases	%	RT received	Signed RT received	Certified RT received	Audited FS
99	Taung Pyar Dan Co.,	Taung Pyar Dan Co.,	155,152,108	0.01%	No	No	No	No
100	Tet Phyo Wai (ICE)	Tet Phyo Wai	57,214,142	0.01%	Yes	Yes	No	No
101	Thit San (Glass)	Thit San (Glass)	61,968,591	0.01%	No	No	No	No
102	TOYO Battery	TOYO Battery	1,448,486	0.00%	No	No	No	No
103	Ve Ve Soft Drink Co.,	Ve Ve Soft Drink Co.,	753,871,931	0.07%	No	No	No	No
104	Yangon Crown Co.,Ltd	Yangon Crown Co.,Ltd	21,068,357	0.00%	Yes	yes	yes	No
105	Yangon Metal	Yangon Metal	364,666,337	0.03%	No	No	No	No
106	Yangon Tyre Co.,(AHM)	Yangon Tyre Co.,(AHM)	209,769,377	0.02%	No	No	No	No
107	- (DGN)	YCDC	1,024,000	0.00%	Yes	yes	yes	yes
108	- (DPN)	YCDC	13,630,000	0.00%	Yes	Yes	Yes	Yes
109	Asphalt (ABC)	YCDC	16,130,000	0.00%	Yes	yes	yes	Yes
110	Asphalt(SPT)	YCDC	164,146,666	0.02%	Yes	yes	yes	yes
111	Brick (Hmawbi)	YCDC	704,922,606	0.07%	Yes	Yes	yes	No
112	YGN Metal	YGN Metal	12,066,675	0.00%	No	No	No	No
	Total		1,064,279,774,315	100.00%				

### Annex 6 Model of sale agreement

လျှပ်စစ်နှင့်စွမ်းအင်ဝန်ကြီးဋ္ဌာန မြန်မာ့ရေနံနှင့်သဘာဝဓာတ်ငွေ့လုိငန်း ۑۧٛؠٙۄٙ NEW GENERAL CO., LTD တို့အကြား ရွှေဝါဆပ်ပြာစက်ရုံ (ရန်ကုန်) အတွက် သဘာဝဓာတ်ငွေ့ရောင်းချမှုစာချုပ် ရက်စွဲ။ ၂၀၁၉ ခုနှစ်၊ လ ရက်

# Annex 7 Person contacted or involved

No	Name	Position
		TOTALON
BDO L		
1	Tim Woodward	Partner
2	Ben Toorabally	Director
3	Hedi Zaghouani	Manager
4	Ahmed Zouari	Audit supervisor
5	Maher Kabsi	Audit supervisor
6	Bilel Yahyaoui	Audit Senior
7	Mohamed Ali Ghali	Audit Senior
	yanmar	
1	JOE YEW	Executive Director
2	Su Mon Swe	Senior Executive
3	Nang Hnin Thet Htwe	Senior Executive
4	Crystal Aung	Senior Executive
5	Phu Pwint Phyu	Senior Executive
	nal Coordination Secretariat (NCS)	
1	U Soe Win	National Coordinator
2	U Sein Win	Deputy National Coordinator
3	Daw Hnin Htet Htet Aung	Program Manager
4	U Htun Paw Oo	Technical Specialist
5	U Kyaw Thin Maung	Program Assistant
6	U Nay Min Maung	Technical Coordinator
7	U Hein Htet Soe	Technical Officer
8	U Zwe Sithu Aung	BO Coordinator
9	Daw Htet Nandar Aung	Senior Communication Officer
10	U Zin Ko Ko Aung	Communication Officer
11	U Soe Thiha Naing	Admin Officer
12	U Tat Tun Sai	Admin Assistant
13	U Maung Maung Myint Lwin	IT Technician
MOGE		
1	U Myo Myint Oo	Managing Director
2	U Kyaw Swar Soe	Manager (Law Department)
3	Daw Myint Myint Khaing	Manager
4	U Nay Aung	Deputy Director
5	Daw Nu Nu Yi	Deputy Director (Finance)
6	Daw Thet Thet Aung	Manager (Finance)
7	U Yan Naing Lin	Accountant -3
Oil and	d gas planning Department (OGPD)	
1	U Than Zaw	Director General
2	U Win Maw	Deputy Director General
3	Daw Win Win Kyu	Deputy Director
4	Daw Su Su Soe	Deputy Director
5	U Soe Thu Win	Staff Officer
Electr	ic Power Generation Enterprise (EF	PGE)
1	U Than Naing Oo	Managing Director
2	Daw Aye Aye Mon	General Manager (Finance)
3	Daw Kyi Kyi Kyunt	Deputy Director (Finance)
	David Mar Mar Heat	Staff Officer
4	Daw Min Min Htet	Stan Officer

No	Name	Position
1	U Aung Myint	Managing Director
2	Daw Myint Myint Win	Director (Finance)
3	Daw Khine Zin Oo	
No. 2 Mining Enterprise (ME 2)		
1	U Aye Zaw	Acting Managing Director
2	U Ye Myo Min	Manager
3	U Win Myint Naing	Focal Finance
4	Daw Ni Ni Aung	Finance Manager
No.1	Heavy Industry	
1	U Zayar Nwe	General Manager
No.2	Heavy Industry	
1	U Zaw Lin Htun	
No. 3	Heavy Industry	
1	Daw Khin Khin Cho	General Manager (Finance)
2	Daw Thet Htar	Deputy General Manager
Yangon City Development Committee		
1	U Lin Khaing	Director (Engineering Department)
2	U Kyin Ohn	Deputy Head of Department (Engineering Department)
3	U Min Nyunt	Deputy Head of Department (Production Department)
4	Daw Yi Yi Thar	Finance Manager (Engineering Department)
5	Daw Thida Oo	Manager (Production Department)
6	Daw Khin Hnin Yi	
Coop	erative Department	
1	U Aung Thura	Director General
2	Daw Khin Su Wai Phyo	Assistant Manager
Myan	mar Railways (Insein)	
1	U Ba Myint	Managing Director
2	U Thet Lwin	General Manager
3	Daw Htar Htar Nwe	Assistant Manager
	mar Pharmaceutical Industrial Enterp	
1	Daw Sandar Thein	General Manager
2	Daw Zin Mar Wai	
	mar Port Authority	
1	U Ne Aung	Managing Director
2	U Aye Lwin	Head of Department
	rtment of Research and Innovation	
1	U Win Khaing Moe	Director General
2	Dr. Zarni Aung	Deputy Director General
3	U Htan San Hein	Assistant Director
4 Contr	U Naing Htoo	Head of the department
	al Bank of Myanmar	Director (Newsitery)
1	U Kyaw Min Oo	Director (Nayyitaw)
2	Daw Khin Swe Nwet Mu	Assistant Director (Mandalay Branch)
3	U Tin Myo Linn	Staff Officer (Paleik Paper Mill Factory)