38TH JCCP INTERNATIONAL SYMPOSIUM

30TH JANUARY,2020

TOKYO, JAPAN

"Business strategies & Technology Challenges "

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The Republic of the Union of Myanmar

ORGANIZATIONAL STRUCTURE OF MINISTRY OF ELECTRICITY AND ENERGY(MOEE)

- **Union Minister**
  - **Deputy Union Minister (Electricity)**
    - Department of Electric Power Planning (DEPP)
    - Department of Power Transmission and System Control (DPTSC)
    - Department of Hydro Power Implementation (DHPI)
    - Electric Power Generation Enterprise (EPGE)
    - Electricity Supply Enterprise (ESE)
    - Yangon Electricity Supply Corporation (YESC)
    - Mandalay Electricity Supply Corporation (MESC)
  - **Deputy Union Minister (Energy)**
    - Oil and Gas Planning Department (OGPD)
    - Myanma Oil and Gas Enterprise (MOGE)
    - Myanma Petrochemical Enterprise (MPE)
    - Myanma Petroleum Product Enterprise (MPPE)

EXISTING PRODUCTION OF CRUDE OIL & NATURAL GAS (INLAND)

SRL	NAME OF OIL FEILD	PRODUCTION (CRUDE) (BBL/DAY)	PRODYCTION (N.G) (MMSCFD)
1.	KYAUKHYET/LETPANTO/AYATAW	705	4.9488
2.	THAR GYI TAUNG/ SABEI	89	2.3473
3.	CHAUK/LANYWAR	1,494	0.000
4.	YE NAN CHAUNG	1,380	0.300
5.	MANN	1,132	1.7031
6.	THAUK SHER PIN/ KANNI/TAPIN	834	1.2006
7.	TA KAING/DA HAT PIN/ YE NAN MA	11	0
8.	PYI	112	0.0783
9.	MYAN AUNG	52	0.1021
10.	SHWE PYI THAR	13	0.040
11.	A PHYAUK	1	4.9523
12.	NYAUNG DON/MAUBIN	296	36.5078
	TOTAL	6119	52.1803

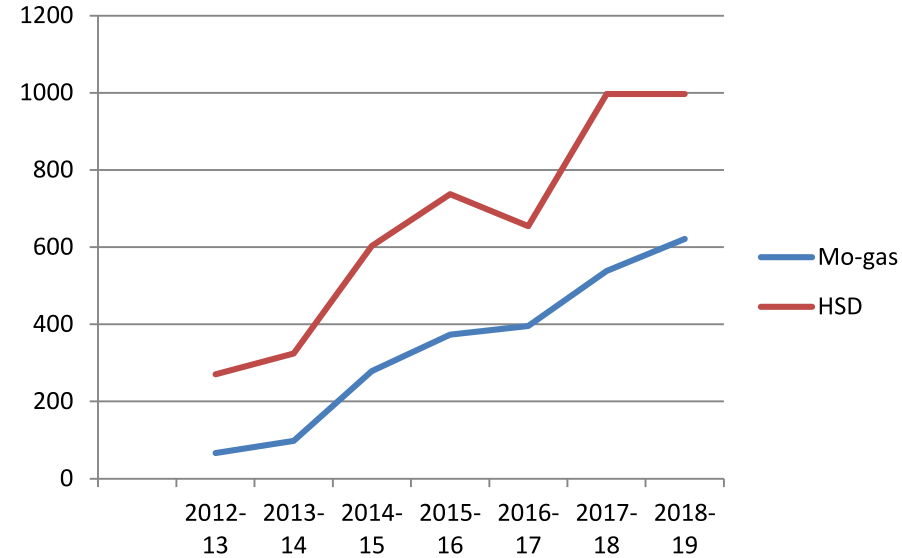
Source - MOGE

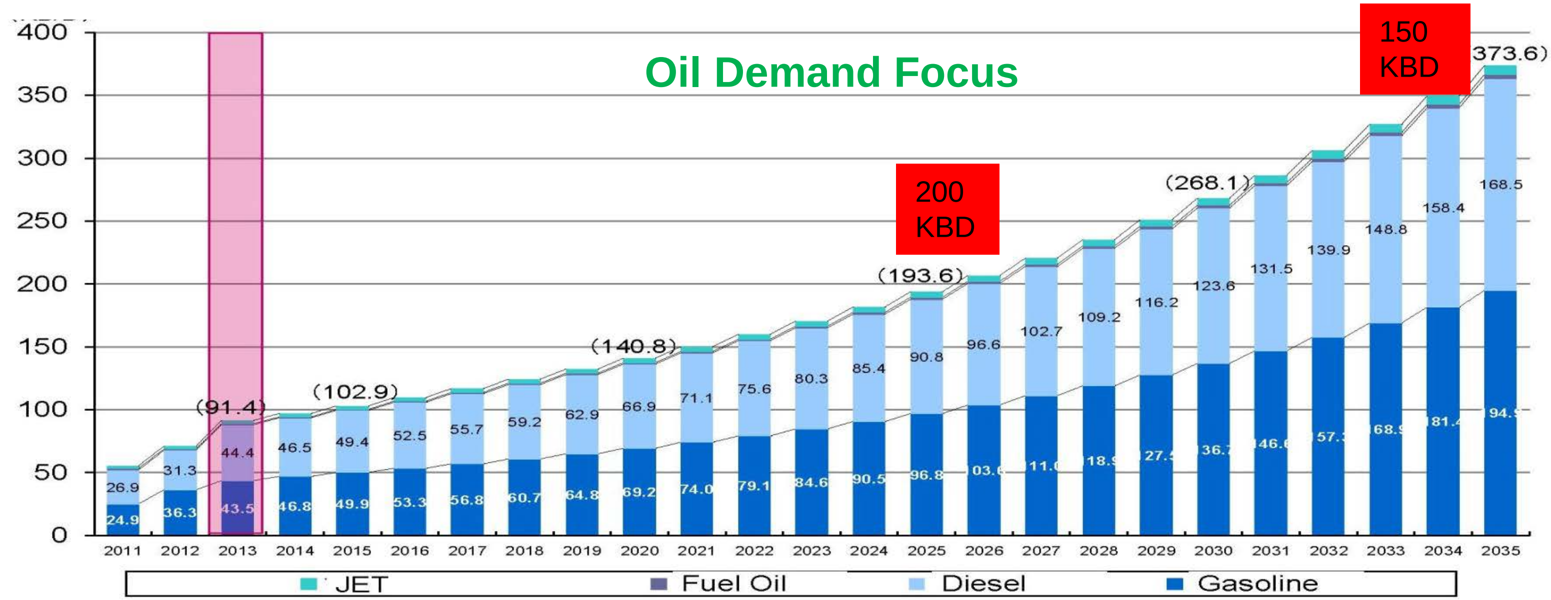
YEARLY IMPORTED OF PETROLEUM PRODUCTS (Mo-gas & HSD)

(Million IG)

Fiscal Year	MPE		MPPE+ Private Sector		Total Imported	
	Mo gas	HSD	Mo gas	HSD	Mo gas	HSD
2012-13	-	42	66	227	66	270
2013-14	1.67	11	98	289	98	324
2014-15	1.72	71	278	531	279	603
2015-16	-	-	373	737	373	737
2016-17	-	-	396	654	396	654
2017-18	-	-	538	997	538	997
2018-19	-	-	621	997	621	998

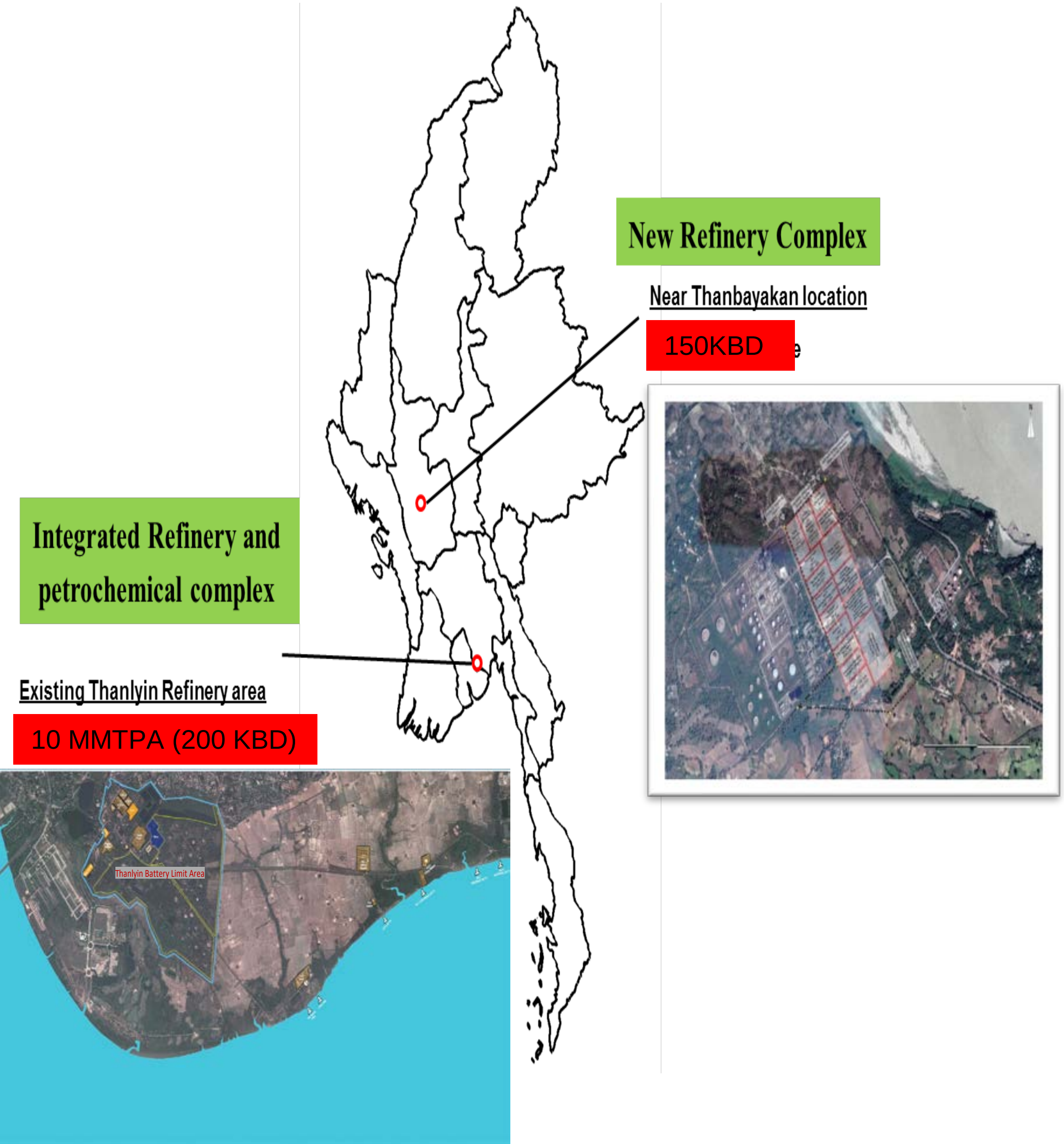
Source by MPE,MPPE





Source by NRI, Japar

FUTURE PLAN FOR NEW REFINERY



- 90% of total domestic demand of petroleum products are imported from abroad.
- Based on the Feasibility Study Result, petroleum products demand will reach 193.6 KBD in around 2025 and could be over 373.6 KBD in 2035.
- To construct a new economical and modernized Refinery Plants at existing Thanlyin area and near Thanbayakan location to satisfy the domestic demand for petroleum and petrochemical products with better quality.

CNG/NGV VEHICLES IN TRANSPORT SECTOR

LOCATIONS OF CNG/NGV STATIONS

History of NGV Sector In Myanmar

Initiated in Myanmar since 1986.

❖ **1986 – August 2004 :**

- 5 CNG Filling Stations ;

- 2 in Yangon City

- 2 in Yenangyaung Field

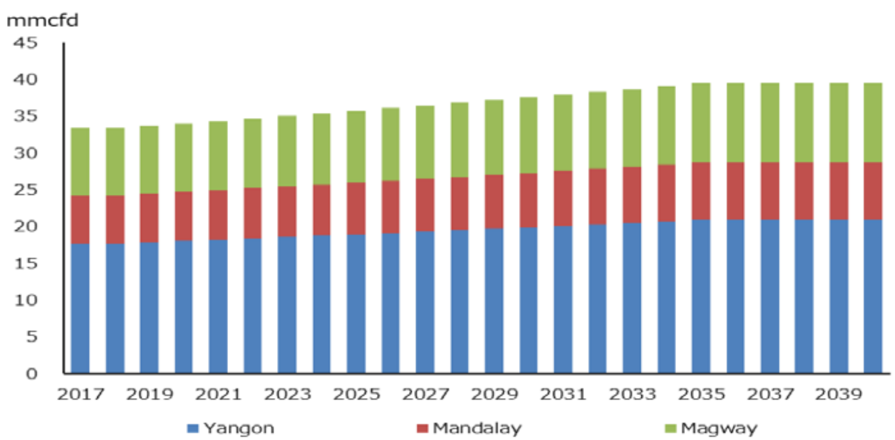
- 1 in Chauk Field

- 587 NGVs (Converted from petrol buses)

CNG

CNG/NGV VEHICLES IN TRANSPORT SECTOR

Figure 5.12: Forecast of Natural Gas Demand for Transportation in Myanmar



mmcfd = million cubic feet per day.
Source: Institute of Energy Economics, Japan estimate.

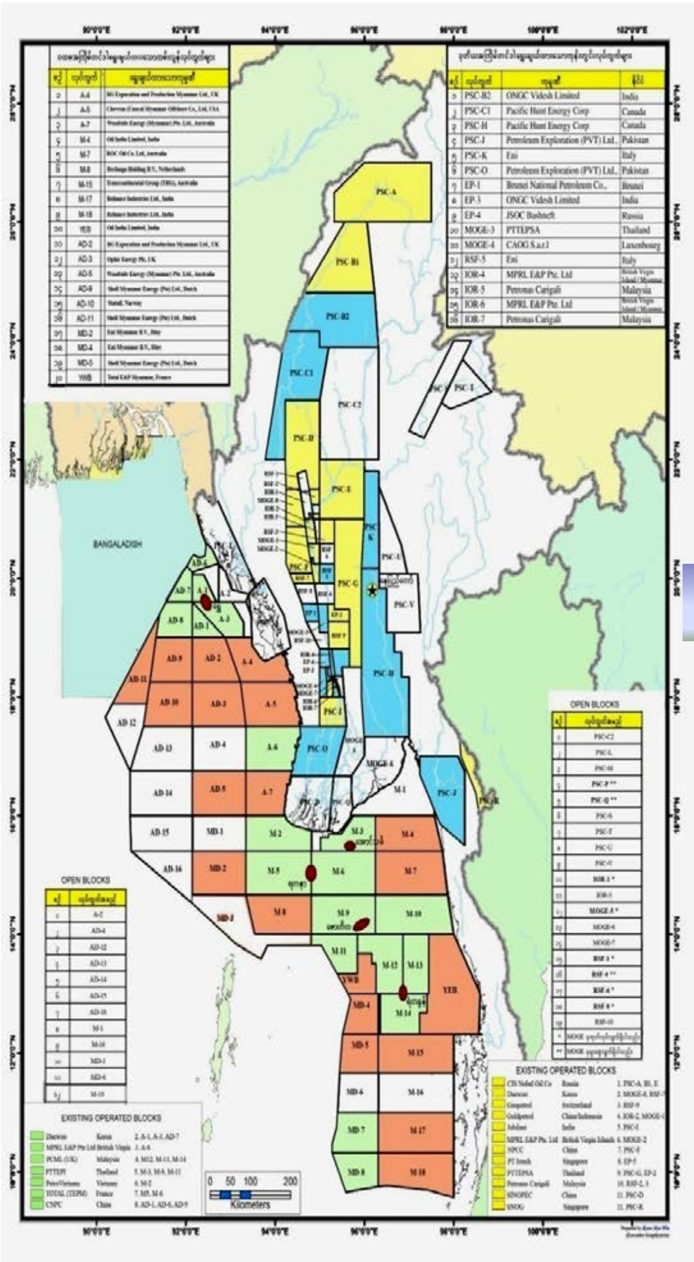
CNG STATIONS

SRI	REGION	CNG STATIONS	CNG VEHICLES
1.	YANGON	41 STATIONS	26,971 Nos
2.	MANDALAY	2 STATIONS	742 Nos
3.	MAGWE	3 STATIONS	586 Nos
	TOTAL	**46 STATIONS**	**28,299 Nos**

TYPES & QUANTITY OF CNG VEHICLES IN YANGON DIVISION

SRL	TYPES OF CNG VECHICLES	QUANTITY
1.	TRUCK/ LORRY	1,280 Nos
2.	CITY BUSS	6,172 Nos
3.	TAXY	17,103 Nos
4.	FERRY/ MINI BUS	1,070 Nos
5.	PRIVATE	1,159 Nos
6.	DEPATMENTAL	187 Nos
	TOTAL	**26,971 Nos**

COOPERATION WITH FOREGN COMPANIES IN EXPLORATION AND PRODUCTION



ASSIGNED INLAND & OFFSHORE BLOCKS

INLAND 53 BLOCKS & OFFSHOE 51 BLOCKS, TOTAL 104 BLOCKS

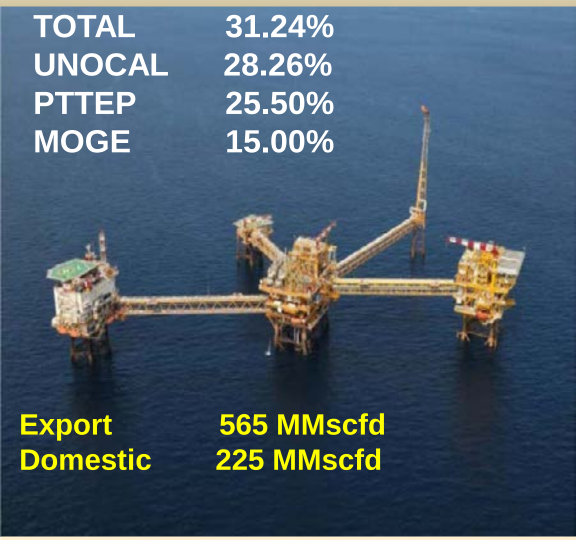
	BLOCKS	COMPANIES
WITH PSC CONTRACTS		
INLAND	21	15
OFFSHORE	36	18
WITH IRR CONTRACTS		
INLAND	3	2
WITH PCC CONTRACT		
INLAND	1	1

MOGE STAKES IN OFFSHORE GAS FIELD AND PIPE LINE COMPANIES

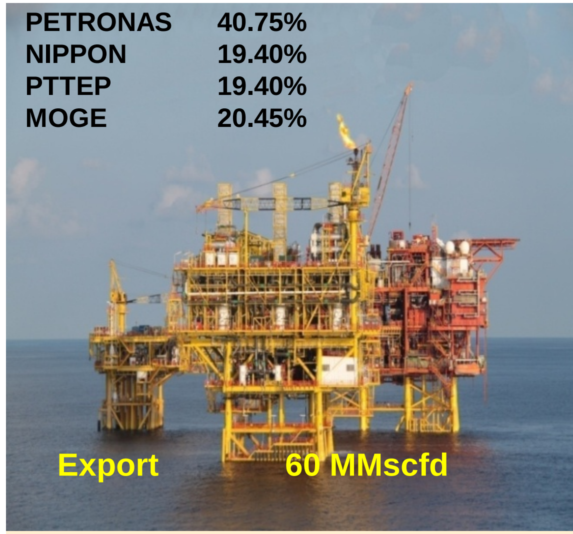
MOGE SHARE	BUSINESS	LEAD OPERATOR
15%	Yadana Gas Production	Total E & P, Myanmar
15%	Yadana Gas Transportation	Total E & P, Myanmar
20.45%	Yetagun Gas Production	PETRONAS Carigali
20.45%	Yetagun Gas Transportation	PETRONAS Carigali
20%	Zawtika Gas Production	PTT E & P Int.
20%	Zawtika Gas Transportation	PTT E & P Int.
15%	Shwe Gas Production	Daewoo E & P Int.
15%	Shwe Gas Transportation (to Landfall) Domestic	Daewoo E & P Int.
7.365%	Myanmar-PRC Gas Line	CNPC
49.1%	Myanmar-PRC Oil Line	CNPC

EXISTING PRODUCTION OF NATURAL GAS FROM OFFSHORES

YADANA PROJECT (BLOCK M5, M6)



YETAGUN PROJECT (BLOCK M12,M13,M14)



EXISTING PRODUCTION FROM OFFSHORES (MMSCFD)

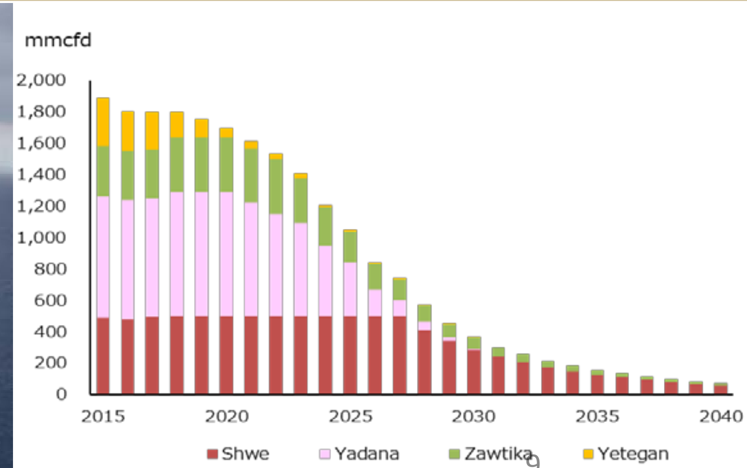
NAME	PRODUCTION	EXPORT	DOMESTIC
YADANA	790	565	225
YETAGUN	60	60	–
SHWE	500	400	100
ZAWTIKA	345	245	100
TOTAL	**1695**	**1270**	**425**

Source - MOGE

SHWE PROJECT (BLOCK A1,A3)

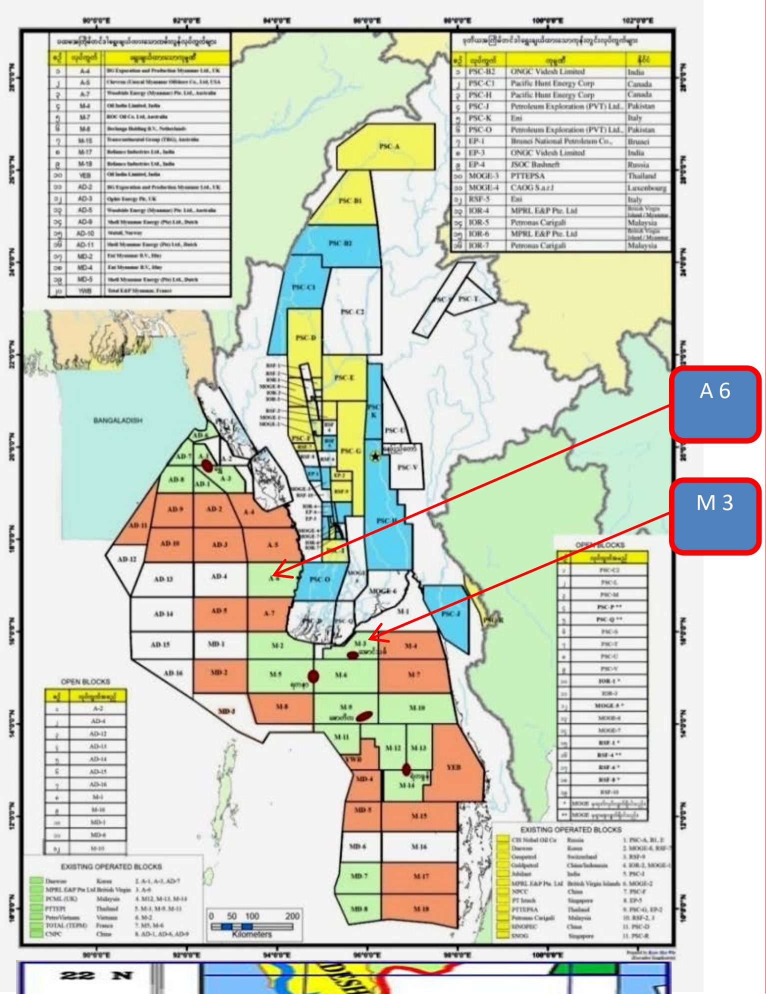
ZAWTIKA PROJECT (BLOCK M9)

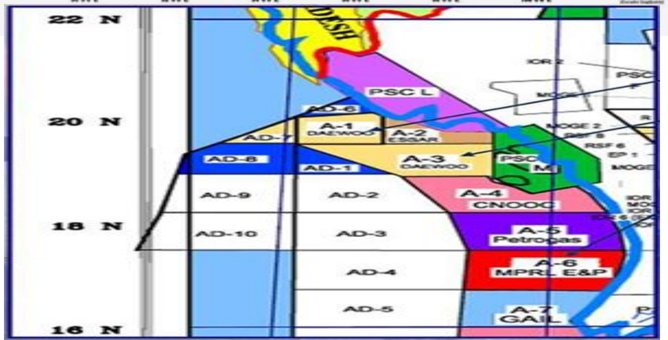
PRODUCTION OUTLOOK OF EXISTING OFFSHORES



Source - ERIA Research

NEWLY DISCOVERY AREAS - BLOCK A 6 & M 3

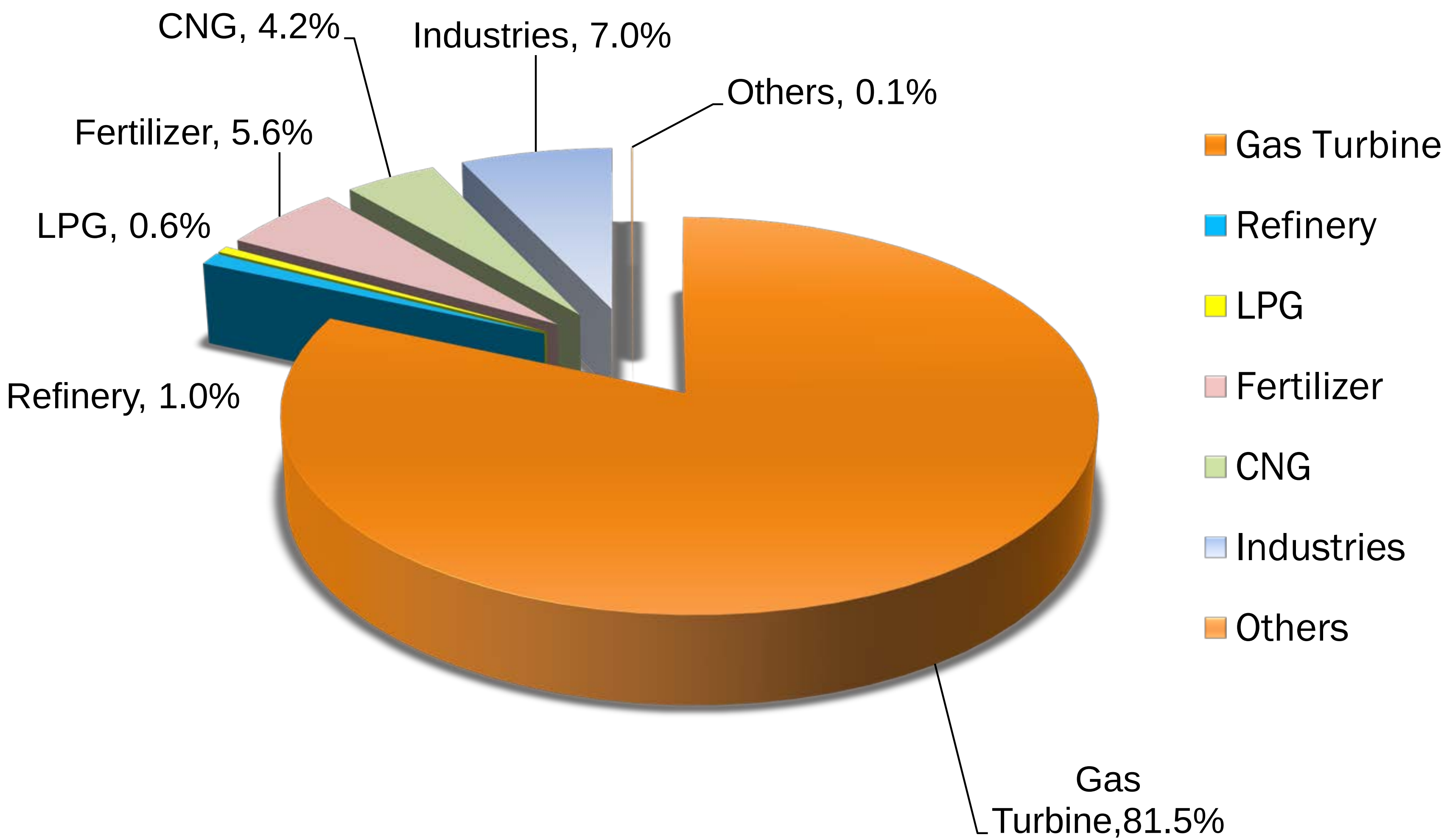




Block	Basin	Expected production (mmcfd)	Start of operation
M-3	Moattama offshore	150	2023
A-6	Rakhine offshore	60	2025

Source - ERIA Research

EXISTING SECTORWISE NATUARAL GAS SUPPLY IN MYANMAR



NATIONWIDE ELECTRIFICATION PLAN

On 14th December 2019, President U Win Myint accepts a gift commemoration the event for the achievement of 50 % nationwide electrification from Union Minister of MOEE U Win Khaing in Nay Pyi Taw.

Maximum Electricity production = 3,396 MW
on 14th December 2019

Myanmar has only fulfilled 50 % of the electricity demand in 2019. The Nationwide Electrification Plan is aim to achieve 55% in 2021-2022, 75% in 2025-2026 and the complete nationwide electrification by 2030.

Phase 1 - 40 MW Solar Plant Project in Minbu Area
- Finished in June 2019
- Cost US$ 297 Million

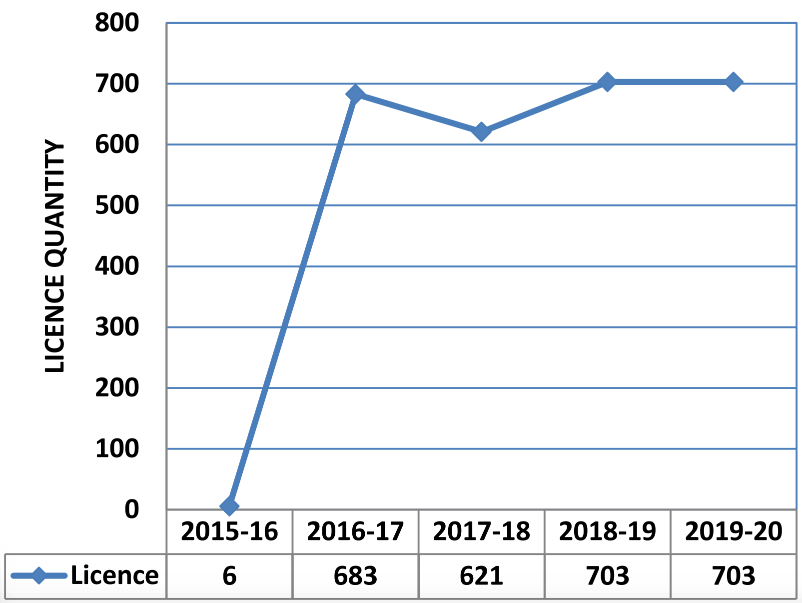
LNG TO ELECTRIC POWER - 3 NEW PROJECTS

SRL	NAME OF PROJECT	CAPACITY(MW)	PROJECT COST(USD)	TO BE ELECTRIFIED HOUSEHOLD (Million)	REMARK
1.	AHLNONE (YANGON)	356 MW	321 MMUSD	O.35	Notice To proceed JAN 2018,
2.	KANBAUK	1320 MW	2161MMUSD	1.00	Notice To proceed JAN 2018,
3.	MEE LAUNG GYAING	1390 MW	2507 MMUSD	1.10	Notice To proceed JAN 2018,
4.	KYAUK PHYU(N.G)	135 MW	180 MMUSD	0.10	Notice To proceed JAN 2018,IPP,BOT,PPA 5^{TH} NOV19,KYAUKPHYYU ELECTRIC POWER CO.,LTD.
	TOTAL	3111 MW			

TO PROMOTE THE PRVATE LPG SECTOR

GIVEN BASIC TYPES OF LPG LICENCES

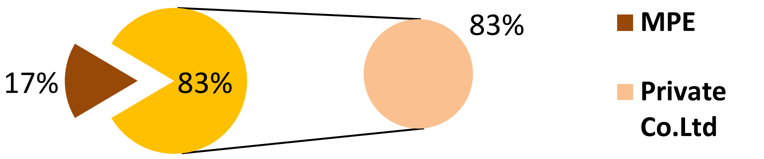
SRL	DESCRIPTION	TYPE OF LICENSE	REMARK
1.	IMPORTING (BY SEA)	1. TERMINAL	
2.	IMPORTING (BY ROAD)	1. FILLING STATION 2. CYLINDER WARE HOUSE	
3.	DISTRIBUTION	1. FILLING STATION 2. CYLINDER WARE HOUSE 3. RETAIL	



STATUS OF ANNUAL LPG CONSUMPTION IN MYANMAR

- The LPG supply ratio of Government to Private sector is about 1:6
- LPG supply is mainly rely on importation.

LPG Supply Condition



CURRENT ACTIVITIES FOR LPG REGULATION

METI
Ministry of Economy, Trade and Industry

AOTS

高圧ガス保安協会
The High Pressure Gas Safety Institute of Japan

MPE and The Association for Oversea Technical Cooperation and Sustainable Partnerships (AOTS) signed the Record of Discussion for Expert- Japan Program for Institution-building support for LP Gas Safety Policy on 26th September 2017.

The Workshop Programs on LPG Regulation and Safety Standard for Myanmar

- **Nov 2017** TKC, AOTS, Japan
- **July 2018** Naypyitaw, Myanmar
- **Sep 2018** Naypyitaw, Myanmar
- **Jan 2019** TKC, AOTS, Japan
- **May 2019** Naypyitaw, Myanmar
- **July 2019** Naypyitaw, Myanmar
- **Sep 2019** Naypyitaw, Myanmar
- **Dec 2019** Naypyitaw, Myanmar

THANK YOU