

# The Current Status and Future Vision of Oil and Gas Sector in Myanmar

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# Institutional Frameworks in Renewable and Non Renewable Energy Sectors

- (1) Ministry of Energy (MOE)
- (2) Ministry of Electric Power Thermal Electric-power, Coal and
- (3) Ministry of Mines
- (4) Ministry of Environmental Conservation & Forestry
- (5) Ministry of Agriculture & Irrigation
- (6) Ministry of Science & Technology
- (7) Ministry of Industry

- = Petroleum, Oil Shale & Fertilizer
- = Hydropower Generating,

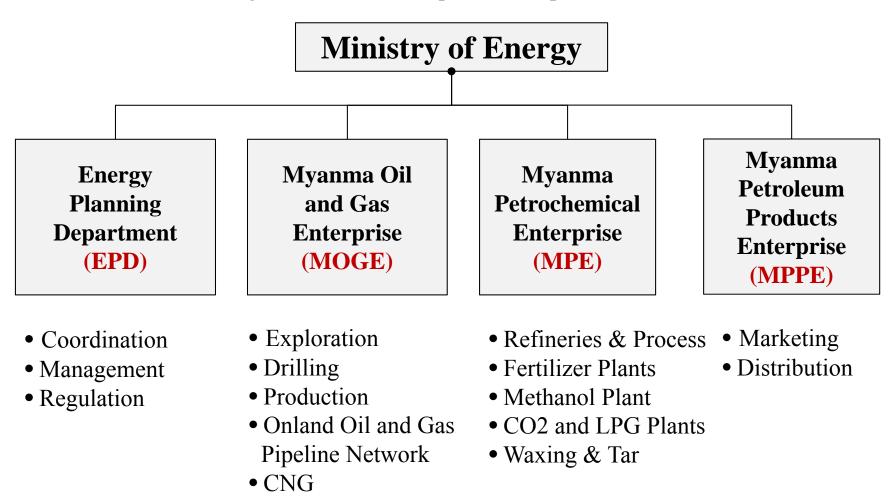
Gas Turbine Power transmission and distribution

- = Coal
- = Biomass & Fuel Wood
- = Renewable Energy
- = Energy Efficiency

<sup>\*</sup> Ministry of Energy is Focal Point for Myanmar Energy Sector Cooperation with International and Regional organizations.

# **Ministry of Energy**

Organizations and Respective Responsibilities



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# To Secure Our Own Energy for Future

- ☐ To integrate all types of Energy Sectors, Renewable Energy and Non Renewable Energy
- □National Energy Management Committee (NEMC) and Energy development Committee (EDC) were formed by President Office dated on 9th January 2013
- □NEMC, Vital Task, to compile Integrate Energy Policy for future program, short terms and long terms
- □The 3<sup>rd</sup> draft of Working Paper for Myanmar Energy Sector Policy in progress

### **National Energy Management Committee (NEMC)**

- Formed on 9th January 2013
- Patron Vice President (2)
- Chairman Union Minister for Energy
- Vice Chairman Union Minister for Electric Power
- Members Ministers from Agriculture, Forest, Mines, National Planning, Industries and representatives from NGO's Renewable Energy Organizations
- Secretary Deputy Minister for Energy
- Joint Secretary Deputy Minister for Electric Power

\*\*\* Highlighted duties and functions as:-

- To formulate National Energy Policy and Energy Regulation
- To encourage private sectors in Energy Development
- To plan short terms to fulfill requirements
- To portrait long term plans to generate electricity by coal with CCT and to meet domestic demands
- To develop three sectors: energy, industrial and electrical
- To adopt National Energy Security Strategy and so on!

## **Energy Development Committee (EDC)**

- Chairman Union Minister for Energy
- Members Ministers, Dy. Minister, High authorities personnel from Agriculture, Energy, Forest, Mines, National Planning and Industries and former retired expertise personnel from ministries and NGO's organizations
- Secretary Director General, Energy Planning Department

\*\*\* Some key tasks as:-

- To lay down Energy Development Policy
- To concern for changing ratio between state-owned and private-owned sectors
- To estimate demand of energy and energy developing policy for short terms to long terms
- To improve strategies and opportunities for energy development
- To attract the foreign and domestic investments in renewable energy projects
- To regulate energy development project
- To seek technology and management assistances
- To acquire effective information in energy sectors

# **Exploration and Development of Petroleum**

**Summary** 

#### **Onshore**

- Crude Oil **7600** bbl & Natural Gas **55** Daily Production

mmcf

Discovered - 28 oil and gas fields

- 18 oil fields and 5 gas fields (Total Producing Fields

23)

Tested/Suspended Fields - 1 tested and 4 suspended oil fields

Appraisal - 1 in Southern Chindwin Basin

Unconventional Project - Shale Gas Projects under Study Period

- 1 field by Horizontal Drilling **IPR** 

Onshore Blocks

Total Demarcated - 53 (Operating 16, awarded 16 blocks in 2013 Bidding,

Open 21)

#### **Domestic Crude Pipeline Network** - 535 km

#### **Domestic Gas Pipeline Network**

Onshore (4" to 20") - 2874.5 km

Offshore Yadana to Yangon (24") - 436 km (Offshore 286.5 km+ Onshore 149.7 km)

Myanmar – China Pipeline

### **Exploration and Development of Petroleum**

**Summary** 

#### **Offshore**

Producing Fields - Yadana, Yetagun and Shwe

Daily Production - Crude Oil 10,000 bbl & Natural Gas1400 mmcf

Yadana - 750 mmcfd (722 BTU)

Yetagun -10,000 bbl/day + 450 mmcfd (1010 BTU)

Shwe - 200 mmcfd (1012 BUT)

Export - 1100 mmcfd (Thailand) and 200 mmcfd (China)

Ongoing - Zawtika Project M-9 (year 2014)

Plan - A Project for domestic use in Block M-3

Appraisal - Block A-6

Offshore Blocks - Demarcated Ttl 51: Operating 19, Bidding 30

#### **Export Gas Pipeline to Thailand (PTTEPI)**

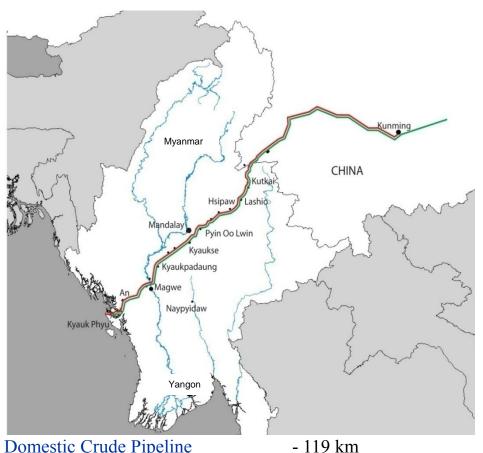
Yadana to Metering Station (36") - 410 km

Yetagun to Metering Station (24") - 274 km

Zawtika Project is undergoing in progress & 1<sup>st</sup>. Gas is estimated on February 2014!

#### MAP SHOWING OIL AND GAS FIELDS, GAS PIPE LINE, REFINERIES AND PETRO CHEMICAL PLANTS





Domestic Crude Pipeline

Domestic Gas Pipeline Network

Onshore (4" to 20") - 2874 km

Offshore, Yadana to Yangon (24") - 436 km

**Export Gas Pipeline to PTTEPI** 

Yadana to Metering Station (36") - 395 km

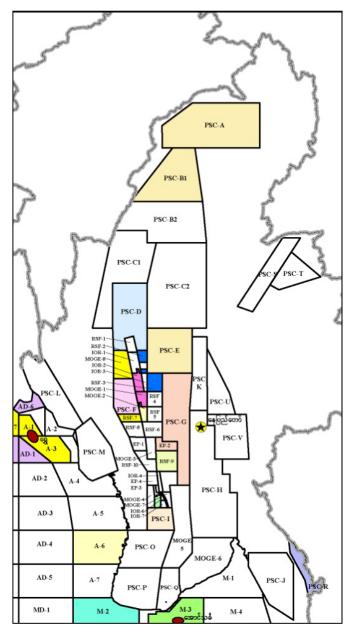
Yetagun to Metering Station (24") - 271 km

Myanmar - China Crude and Gas Pipeline (Ongoing)

Crude Pipeline (32"), Myanmar side - 760 km

Gas Pipeline (40"), Myanmar side - 782 km

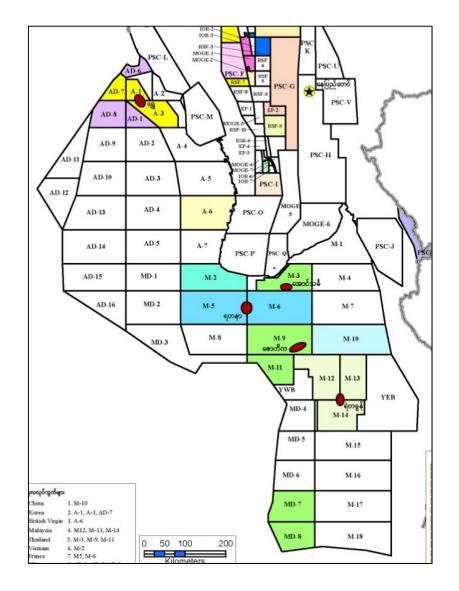
# **Current Onshore Activities (16 blocks)**



Company / Opera	tor Block	<u>Area</u>
Nobel Oil	PSC-A	(Hukaung)
	PSC-B1	(Uyu)
SIPC Myanmar	PSC-D	(Mahudaung)
<b>North Petro-Chem</b>	PSC-F	(Ngahlaingdwin)
GOLDPETROL	IOR-2	(Chauk Oil Field)
	MOGE-1	(Yenangyaung Oil Field)
MPRL E&P	<b>MOGE-2 (N)</b>	(Mann Oil Field)
SNOG, UPR	PSC-R	(Oil Shale, Kayin State)
Geopetrol Intl.	RSF-9	(Pyalo-Paukkong)
Petronas	RSF-2	(Tuyintaung, Mying S)
	RSF-3	(Gwegyo-Ngashadaung)
Jubilant Oil & Gas Pvt	t. PSC-I	(Hintada)
PTTEPI	PSC-G	(Taungdwingyi )
	EP-2	(Aung Lan)
Istech Energy Ltd.	EP-5	(Inbin-Tegyigone)
Asia Orient Intl. Ltd.	PSC-E	(Myingyan)

E&P: In onshore area, 16 Contracts are active in 16 onshore blocks with 12 foreign companies from 11 countries.

## **Current Offshore Activities (19 blocks)**



Company / Operator	<b>Block</b>
TOTAL	- M-5, M-6
	(Yatana Project)
PETRONAS	- M-12 , M-13 , M-14
	(Yetagun Project)
DAEWOO INTERNATIONAL	- A-1, A-3, AD-7
	(Shwe Project)
PTTEPI	- M-3, M-11,
	- M-9 (Zawtika Project)
	- MD-7, MD-8
CNOOC	- M-10
CNPC INTERNATIONAL LTD	- AD-1, AD-6, AD-8
MPRL E&P	- A-6
PETROVIETNAM	- M-2

In offshore area, 18 Contracts are active in 19 offshore blocks with 8 foreign companies from 8 countries.

# **Existing Petrochemical Plants Operated under Myanmar Petrochemical Enterprise (MPE)**

Crude Oil Refinery - 3 (51,000 bbl/day)

LPG Plant - 3 (50 mmscfd)

Fertilizer Plant (Urea) - 5 (Ammonia 1340 MTD & Urea 2012MTD)

Methanol Plant - 1 (450 MT/day, under rehabilitation)

CO<sub>2</sub> Recovery Plant - 1 (Liquid 24 Ton & Dry ice 6 Ton/day)

Others - Waxing and Bitumen (548 MT/day)

### **Privatization Scheme**

- Distribution of Petroleum Products including LPG
- Refineries under JV system, Initiating & Exercising to Thanlyin refinery near Yangon at present
- Promoting and Improving to Private Sectors by !

## **Improvement of Petroleum Sector for New Comers**

- EITI process by collaborating between State Own
   Enterprises and IOCs
- EIA, SIA and EMP for all movements
- Foreign Investment Law 2012
- More Institutions and Cooperation
- Regional cooperation in ASEAN and wider

#### **Role and Future Petroleum Sector**

- Key factors for National Economic growth
- To priority the demand of domestic needs
- Domestic market oriented, especially natural gas based industries
- Comprehensive roadmap for sustainable development subsequent to National Energy Policy by NEMC
- Promoting private sectors both in upstream and downstream sectors

## **Potential Opportunities**

- ✓ E&P in onshore and offshore area
- ✓ EOR and Unconventional Hydrocarbon
- ✓ New Refinery
- ✓ LPG and LNG project
- ✓ Existing Refineries: JV system
- **✓** Trading of Petroleum Products
- ✓ Research and Development, e.g. Laboratory, Process etc.
- **✓** Supply equipments spare for Factories and Plants

# **Focal Personal for Ministry of Energy**

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