



# **Geopolitics and Myanmar's Petroleum Sector**

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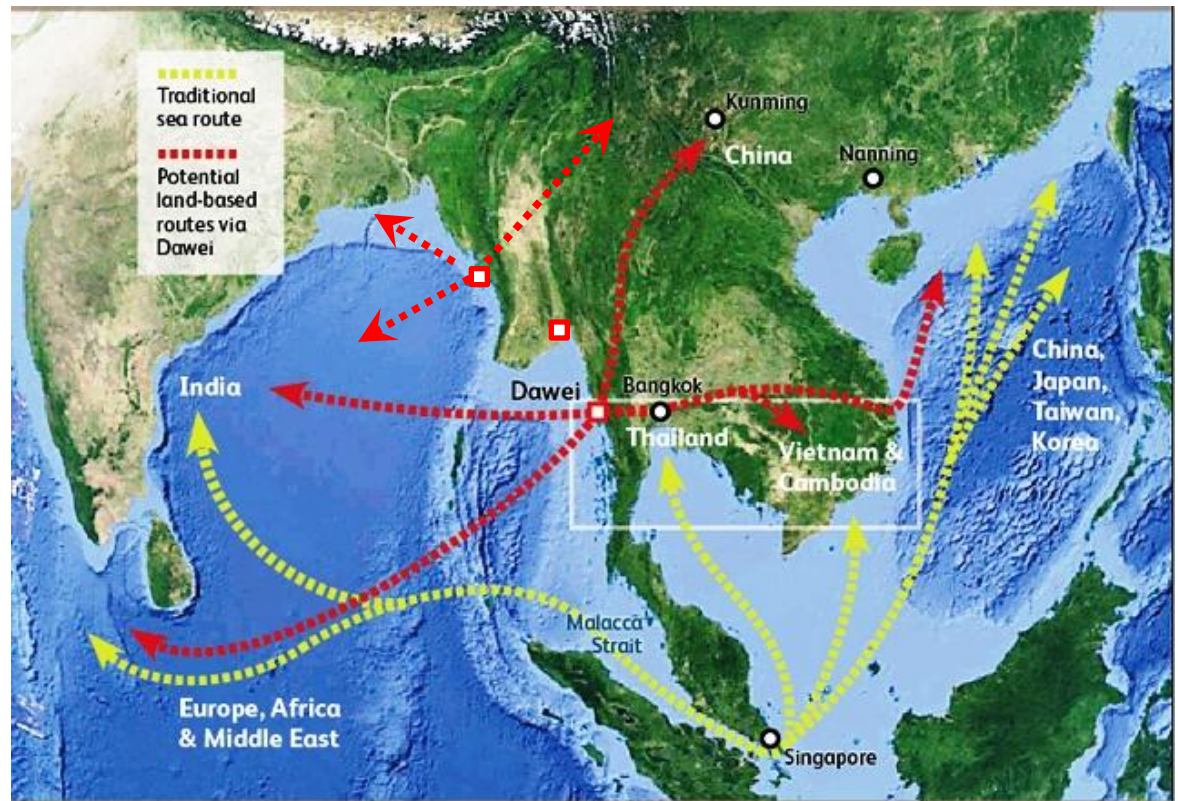
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## Geostrategic Location of Myanmar

- Between populated countries, 3 billion population
- Position the Gateways; Linking India-China-Europe-East Asian Country
- 60 million population inhabit a land area
- Latest frontier market of Asia!
- East-West & North-South Corridors of ASEAN & others
- East-West Competition Spot in Asia



# Geostrategic Landmarks

- Located between most populated countries, China and India, 3 billion population
- Position conduit to the Indian Ocean, Europe, Africa and Middle East
- Emerging economic with 60 million population inhabit a land area
- Have opportunity to develop its arable land for exports
- Self sufficient in food and significant natural resources
- The Gateways, SEZs are planned in Thilawa (near Yangon), Dawei in Southern coast, and Kyaukphyu in Western Coast
- Designed Projects are becoming by FDI and favourable FIL 2012
- Immense, area, population, resources, market and relatively undeveloped economy
- Face with the high demand of products and services
- Job creations expands to labour-intensive manufacturing sector
- Skill and unskilled labor in role of industries
- Pace of reform in Politic and Economic is implementing wide-reaching
- Guarantees of International Institutions to support essential entity

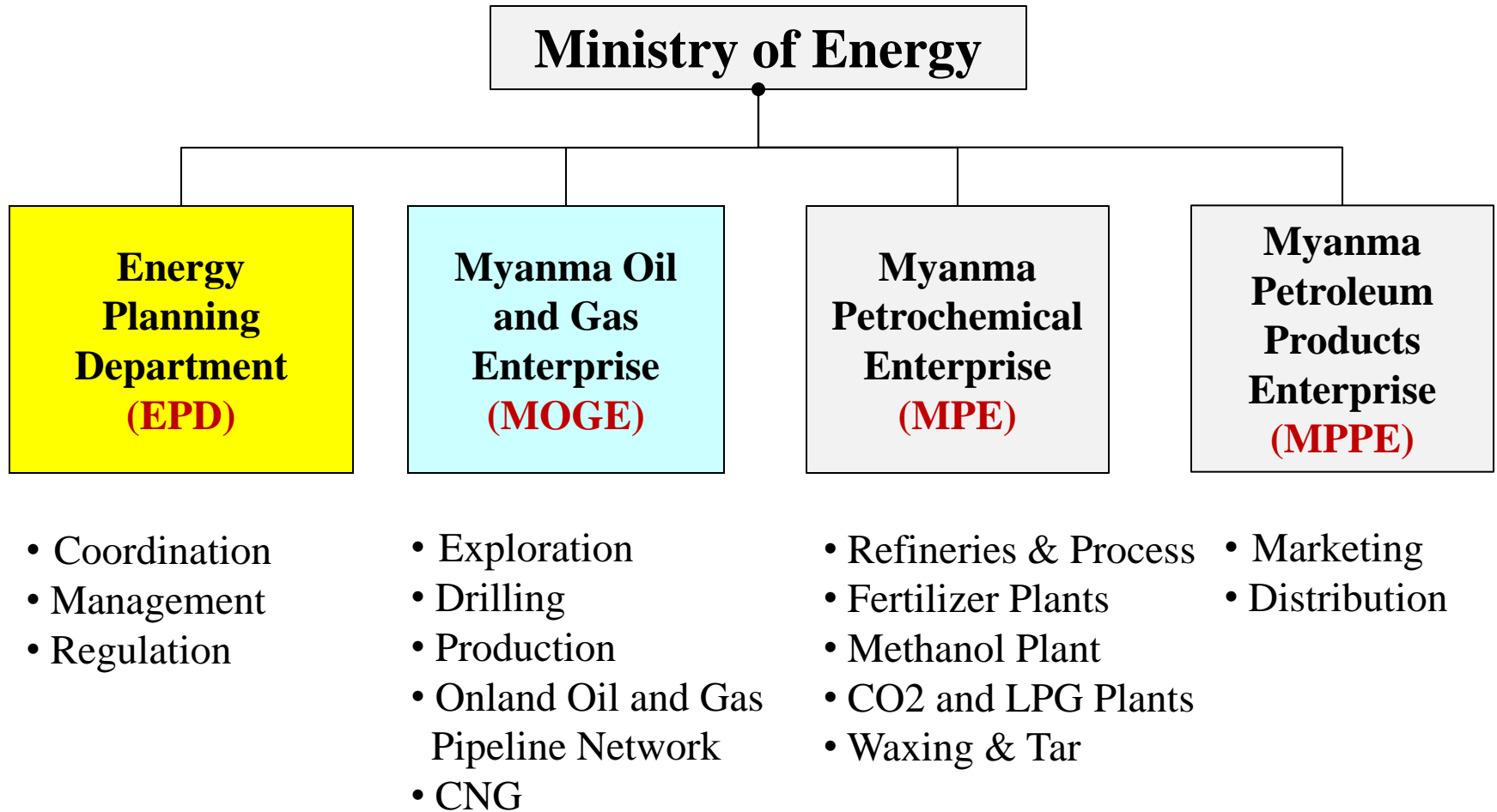
# Underline Petroleum Sectors

- Seik-Thar-Kun-Htauk, former name of Ye-nan-gyaung (The City of Crude Oil Stream)
- Major natural gas exporter and others of natural resources
- Account for 55% of exports and 86% of FDI in Energy and Mining Sectors
- 29% of export earnings by natural gas
- Untapped petroliferous onshore and offshore basins
- Myanmar Oil and Gas Enterprise (MOGE), has the sole right to explore, extract for upstream Sectors
- MOGE enter into JV on behalf of the government with private domestic and foreign entities for the exploration, development, production
- JV for Existing Oil Field, and reactivate to Suspended fields!



# Ministry of Energy

Organizations and Respective Responsibilities



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

# Legislative Records

Petroleum Act, 1934 (Amended on 2011)

Myanmar Oil Fields Act, 1918 (Amended on 2011)

The Petroleum Rules, 1937

The Myanmar Carbide of Calcium Rules, 1937

Petroleum Resources (development and regulation) Act-55, 1957

Oil field employees welfare, Act-21, 1951

# National Energy Management Committee (NEMC)

- Dated on 9th January 2013
- Patron - Vice President (2)
- Chairman - Union Minister for Energy
- Vice Chairman - Union Minister for Electric Power
- Members (9) - 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 are as follow:-

- Formulating National Energy Policy and Energy Regulation
- To encourage private sectors in Energy Development
- Plan short terms to fulfill requirements
- 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 adapt National Energy Security Strategy and so on!



# Energy Development Committee (EDC)

- Chairman - Union Minister for Energy
- Members (12) - Ministers, Dy. Minister, High authorities personnel from Agriculture, Energy, Forest, Mines, National Planning and Industries and former experienced retired personnel from ministries and NGO's organizations
- Secretary - Director General, Energy Planning Department

\*\*\* Some key tasks of EMC are;-

- To lay down Energy Development Policy
- To concern for changing ratio between state-owned and private-owned sectors
- Estimate demand of energy and energy developing policy for short terms to long terms
- 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

# Chronological Events of Myanmar Petroleum Industry

- 18 Century, under British colony, accounts speak of several hand-dug wells in Yenangyaung oil field
- 1871, Rangoon oil co. set the first refinery in Yangon, Danitaw area.
- 1880, Australian oil co. and Boronga oil co. being operated in Rakhine Coastal Area.
- 1886, established a modern petroleum industry by London based Burmah Oil Co.
- 1969: Surveyed by Japanese firm in Gulf of Martaban, Bay of Bengal
- 1970-1976: Seismic survey and offshore exploration wells for Myanma Oil Corporation (MOC) by Prakla German Co.; (Cities Service Co., Petrolas, Esso Exp & Prod., Japanese consortium)
- **1978**: MOC invited to foreign companies; no one interested!
- 1982: MOC signed Cooperation Agreement with Myanmar Development Co. Ltd. (BPDC) of Japan
- **1989-2000**, launched onshore and offshore blocks and 23 foreign companies entered in 29 onshore blocks, and 10 offshore blocks being awarded to 9 foreign companies
- **2011**, international bidding round, 9 blocks being awarded to 7 foreign companies
- Direction negotiation to take part Petroleum E&P before Mid of 2012 in offshore blocks
- **2013**, launching Onshore International Bidding Round for 18 blocks

# International Assessment on Myanmar Petroleum Industries

## Situation with Sanction by US and EU

- 1990, Bans on the importation of Myanmar products to US and EU, and the export of financial services from them to Myanmar-> reflected to US self-inflicted wounds!
- May, 1997, Prohibition related to petroleum-related contracts
- Unocal's positive impact-> developing offshore gas field, Yadana, JV with Total of France and partners
- Two western groups with a long-term presence in Myanmar, Total and Chevron
- Yadana and Yetagun gas fields, benefits for the Myanmar in a number of way
- More cooperative policy have been encouraged with ASEAN and alliance
- Isolated!, very limited investment->Mostly Asian companies but US & EU companies harmed the interests
- Weakened technology and a policy of economic self-sufficiency.
- Weak of public infrastructure (especially in rural areas)
- Limited industrialization
- Exports dominated by non-processed products.
- Challenging the Sanctions Mentality

# International Assessment on Myanmar Petroleum Industries

## After Reforming Process and Sanction being lifted

- July 2012, easing restrictions to allow US Co. to responsibly do business
- Credential actions are significantly appear in Energy Sectors
- Reduce the chance of oil giants monopolizing territory.
- Currently, dominated by Asian companies, reason – geography and sanction of US/EU
- World's major energy firms have been eyeing the potentially oil-and-gas sector
- “Action-for-Action” strategy to respond to the reforms and incentivize further progress.
- Supporting the normal country program from UNDP
- Broad range of nonprofit activities from democracy building to health and education
- Helping economic growth, encourage political reform to be continue
- Western oil and gas firms are tipped to upcoming Offshore Bidding Round 2013
- Australia, Canada and EU move more swiftly than the US
- East-West competition integrate to Myanma into the regional system and the global economy
- Transparency is more popular as part of “the path to democracy” with accountability
- Raise labor and environmental practices and corporate social responsibility

# International Assessment on Myanmar Petroleum Industries

## Perception

- Reserves have not been sufficiently explored using modern technology, marking it an exciting prospective exploration target -> **Bidding Round 2013**
- Very little information! for Lucrative risks! -> **Previous data if available**
- Few Legitimate Local Energy companies- weak of capacity, not familiar regulation / standards -> **Improving with participating with international O/G companies**
- Practical and legal reforms are required to be comfortable with making significant investment-> **Proved by FIL**
- Legal framework to support the fiscal regime in oil and gas exploration and development-> **Adapting the existing structure**
- Nascent for international practices with high competitions-> **Giant Leading Co.**
- Gradual, potentially difficult process-> **Adapting the financial assessment with Intl. Std.**
- Calibrated and responsible manner in engaging Petroleum Sector-> **NEMC, EDC**
- US and Western firms look for Sustainable investment -> **Offshore Bidding 2013**
- US Co. with more than US\$ 500,000 in aggregate new investment will be asked to file an annual report disclosing their procedure on human rights, land acquisitions, the environment and payments to Myanmar government entities !

# International Assessment on Myanmar Petroleum Industries

## Opportunities

- Rare country in the world that has not been fully surveyed and “there is huge interest in exploring in frontier basins
- Offshore reserves remain largely unexplored!
- Offshore reserve of natural gas are more promising than onshore
- Prospects are wide open in onshore basins, medium to deeper portion
- Have chance in latest frontier market of Asia!
- Technology, new markets and management skill for all sectors!
- Local market to Global markets
- Low cost economy
- 2013 Onshore International Bidding Round and will be followed Offshore
- International Bidding Rounds 2013 will be improved the foreign investment destination





# Exploration and Development of Petroleum

## Summary, of Onshore, Offshore and Infrastructure

### Oil and Gas Fields (onshore)

Discovered (28)	- 28 oil and gas fields
Producing (23)	- 18 oil fields and 5 gas fields
Tested/Suspended (5)	- 1 tested and 4 suspended oil fields
Appraisal (1)	- <b>Southern Chindwin Basin</b>

### Gas Fields (offshore)

Producing (2)	- <b>Yadana</b> and <b>Yetagun</b>
Ongoing (2) to 2013	- <b>Shwe A-1 &amp; A-3, Zawtika</b> Project M-9
Plan (1)	- A Project for domestic use in Block <b>M-3</b>
Appraisal (1)	- Block <b>A-6</b>

### Domestic Crude Pipeline Network

#### Domestic Gas Pipeline Network

Onshore (4" to 20")	- 2339 km (Pre 1988; 468 km & Post 1871 km)
Offshore, Yadana to Yangon (24")	- 441 km (offshore 286.5+ onshore 149.7)

### Export Gas Pipeline to Thailand (PTTEPI)

Yadana to Metering Station (36")	- 410 km
Yetagun to Metering Station (24")	- 274 km

### Myanmar –China Pipeline (Ongoing)

Crude Pipeline (32")	- 741 km
Gas Pipeline (40")	- 736 km

# Status of Onshore and Offshore Blocks

Type	Description	Total	Optg.	Under Termn.	Open
<b>Onshore Blocks</b>					
PSC	Production Sharing Contract	23	9	1	13
EP	Exploration and Production	5	2		3
RSF	Reactivation of Suspended Fields	10	3		7
IOR	Improved Oil Recovery	7	1		6
MOGE	MOGE's oil and gas field areas	8	2		6
<b>Total Onshore Blocks</b>		<b>53</b>	<b>17</b>	<b>1</b>	<b>35</b>

## Offshore Blocks (Shallow)

A	Arakan (Rakhine) Coastal Area	7	5	1	1
M	Mottaban & Taninthayi	20	13	1	6
		<b>27</b>	<b>18</b>	<b>2</b>	<b>7</b>

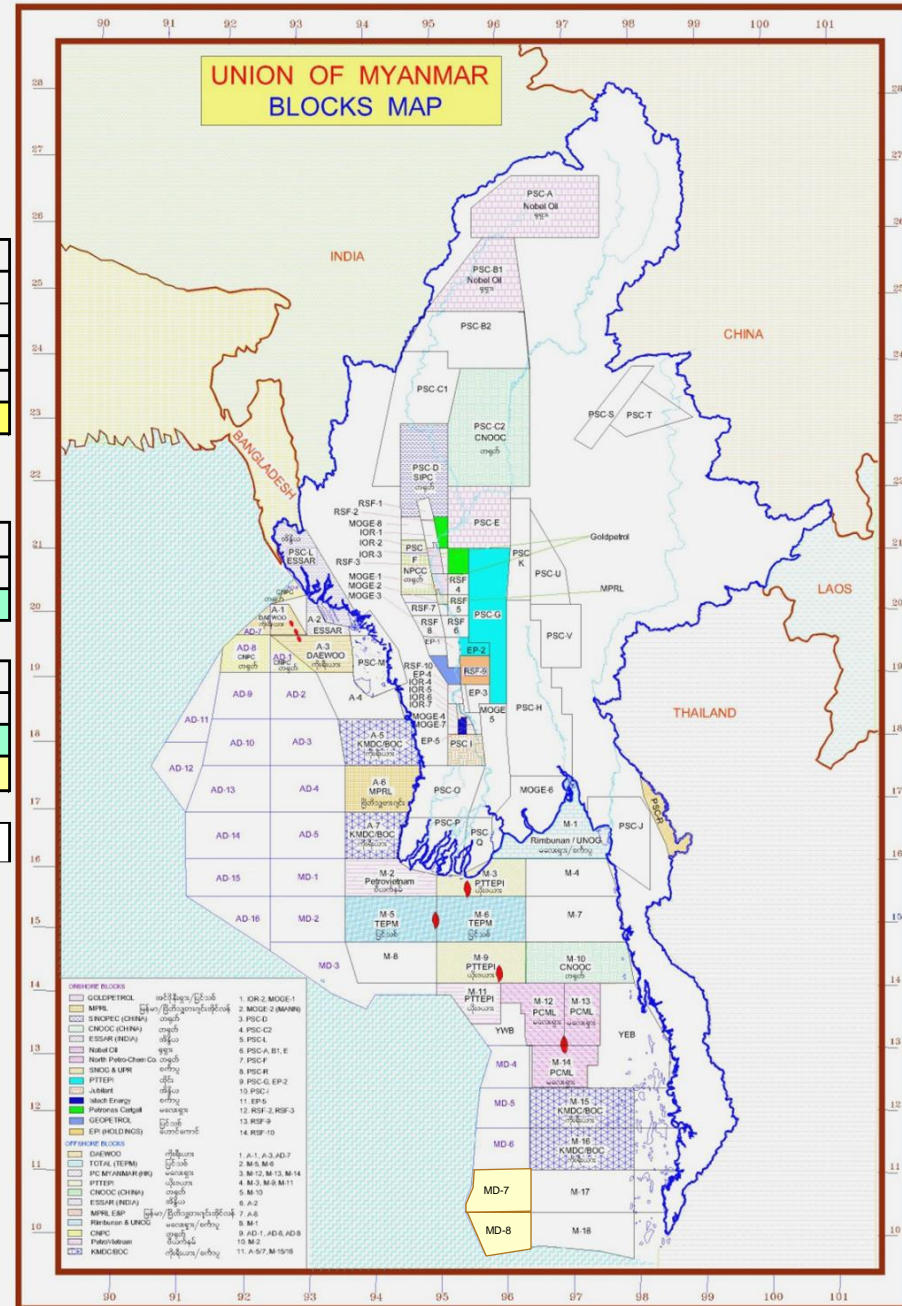
## (Deep)

AD	Arakan Offshore Area (Deep)	16	4		12
MD	Mottama/ Taninthayi (Deep)	8	2		6
<b>Total Offshore Coastal Blocks</b>		<b>24</b>	<b>6</b>	<b>0</b>	<b>18</b>
<b>OFFSHORE TOTAL</b>		<b>51</b>	<b>24</b>	<b>2</b>	<b>25</b>

<b>Block Total</b>	<b>104</b>	<b>41</b>	<b>3</b>	<b>60</b>
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## Status of Blocks

- 17 onshore blocks and 22 offshore blocks are operating by multi companies.
- Some of available offshore blocks are ready for International Bidding Round 2013.
- Some of onshore and offshore blocks are progressing under termination process



# Production Sharing Contract (PSC) 2011

## Onshore and Offshore

### General Terms and Condition of PSCs

Technical Evaluating Agreement (TEA), 2 Years only for Offshore deep water blocks

Exploration Period (Initial term) - 3 years (*contractor will have the option to back-off*)

- 1<sup>st</sup>. Extension - 2 years (*contractor will have the option to back-off*)

- 2<sup>nd</sup>. Extension - 1 year (*contractor will have the option to back-off*)

Production Period - 20 years (*or based on reserve*)

Royalty - 12.5%

*(Royalty is available Petroleum depend on water depth for deep water offshore blocks)*

Income Tax - 25% on CONTRACTOR's Net Profit

***(3 years Tax Holiday starting from the Production)***

Domestic requirement - 20% of Crude Oil and 25% of Natural Gas of CONTRACTOR's share of profit petroleum at 90% Fair Market Price

State Participation - 15 % of undivided interest and MOGE has the option to extend up to 25% at its own discretion.

Governing Law - Laws of the Republic of the Union of Myanmar

Arbitration - Myanmar Arbitration Act 1944, UNCITRAL Arbitration Rules

# Outlook of Foreign Investment & Opportunities in Petroleum-Upstream Sectors

- E&P in Petroliferous Onshore & Offshore basins.
- E&P in unconventional oil and gas (tight sand gas and shale gas etc.).
- EOR projects in declined oil and gas fields
- Experiences more than 100 PSCs with multi countries
- Favourable incentives in PSC and IPR contracts for investors
- Prosperities of untapped non conventional petroleum resources

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# Conclusion

- ✓ Highly prominence in Petroleum Upstream and Downstream
- ✓ The proliferation of private sectors beyond 2011
- ✓ Getting higher Cooperation, Coordination and J-V
- ✓ Identical Outlook on all Overseas Parties
- ✓ Witnessing dynamic economic growth, and playing an increasingly more important role as future economic arena in region
- ✓ Extending networks with Regional and International Institutions
- ✓ Beyond the momentum of International Bidding Round 2013

## **Contract Focal Point for Energy Business**

Person: Director General  
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**Thank For Your Time & Attention**