



**MINISTRY OF ENERGY AND MINERAL RESOURCES
DIRECTORATE GENERAL OF OIL AND GAS**

SUNSET OF OIL AND GAS INVESTMENT IN INDONESIA: IS IT TRUE?

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AAPG September 16th - 19th 2012

OUTLINE

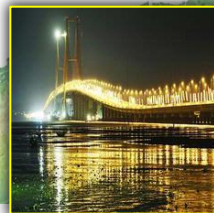
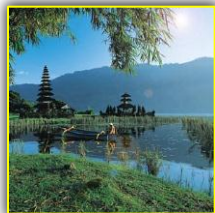
- **INTRODUCTION**
- **CONTRACT SIGNING/AWARD**
- **RESOURCES**
- **CONTRACTUAL SYSTEM**
- **DEVELOPMENT OF PSC AWARD**
- **DEVELOPMENT OF GAS INDONESIA**
- **TENTATIVE INDONESIA PETROLEUM BIDDING SECOND ROUND YEAR 2012**

INTRODUCTION

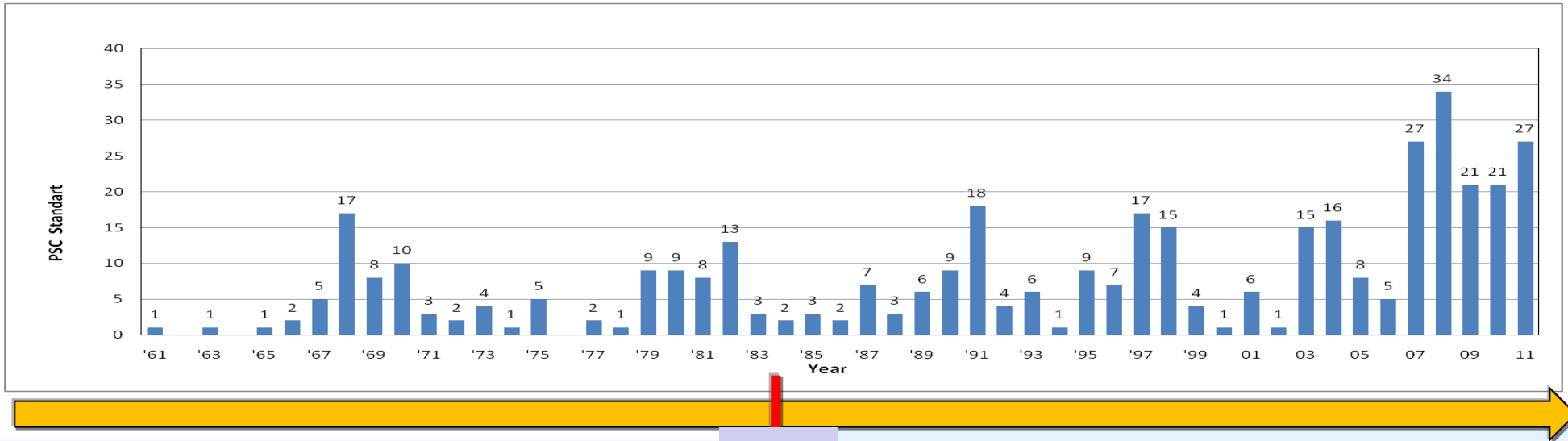


COUNTRY FACTS:

- Full Name : Negara Kesatuan Republik Indonesia
- Land Area : 1.9 million sq km
- Ocean Area : 3.2 million sq km
- Population : 237 million (2010)



CONTRACT SIGNING/AWARD



1998

BEFORE 1998

- Trend of interest and contract signing is not too many
- Low to moderate competition due to cold war
- No advanced technology
- Low costs

AFTER 1998

- Trend of interest and contract signing is going up
- High competition due to openness of political system (Russian, Africa, South East Asia)
- Tight budget allocation
- Low costs

RESOURCES



1998

BEFORE 1998

- Mostly concentrated in western Indonesia due to
 - Already well infrastructure
 - Proven for Tertiary only
 - Relatively low cost and operational activities
 - Offshore is in Relatively shallow water
 - Triggered in central, south Sumatra, and east Kalimantan
- Eastern Indonesia has not been attractive due to
 - Lack of data
 - Not well infrastructure
 - Even for onshore is expensive. Example in Papua sometimes not using full seismic activity, airborne survey
 - Pre-tertiary play
 - High costs and high risk

AFTER 1998

- Eastern Indonesia has been attractive
- Offshore is in deep water
- Speculative survey
- Proven for Triassic
- Continuation from North West Shelf
- Reserves for oil = 7,764.48 MMSTB and gas = 157.14 TSCF
- Resources for oil = 87.22 BBO and gas = 594.43 TCF

Contractual System

Follower of PSC type and many countries get successful using this PSC

Royalty and Taxes

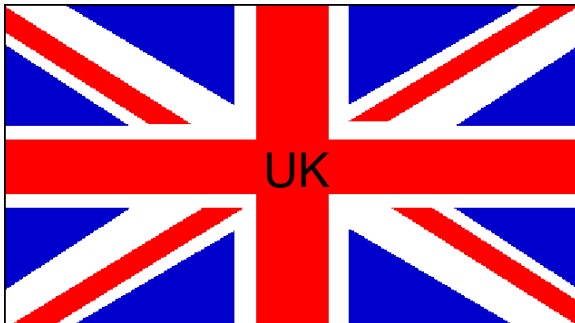
- Entitlement is 100% company's own

PSC

- Entitlement is shared between host country and company
- Cost recovery without ceiling
- Reliable guarantee for approved loan (home base loan)

Service Contract

- Entitlement is 100% host country's own



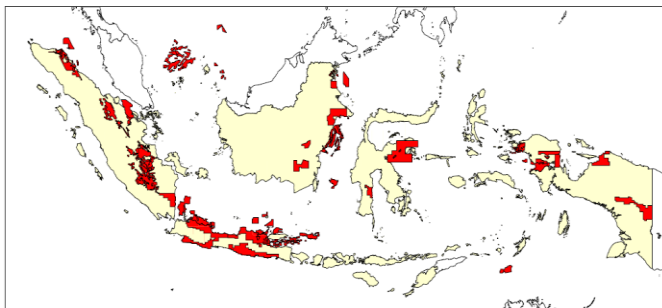
DEVELOPMENT OF AWARD PSC

1998

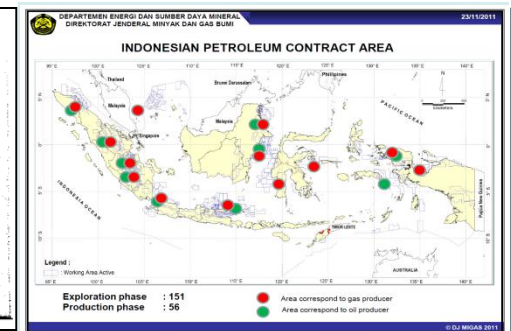
BEFORE 1998

AFTER 1998

- More transparant (tender announcement is advertised in the media - Jakarta post)
- Recognizing of joint study
 - Involving universities/outourcing
 - Data availability
 - Right to match
 - Freely selected open areas to be investor's interest
 - Encourage creativity in term of petroleum system modeling



39 PSC



DEVELOPMENT OF GAS IN INDONESIA

1998

BEFORE 1998

AFTER 1998

- Pricing (range) in USD/MMBTU
 - Australia : 3.9 – 4,5
 - Henry Hub : 1.7 – 13
 - Europe : 3.9 – 4,5
 - Indonesia : 3.0 – 14
 - Fertilizer : 2.75 – 6.37
 - PLN : 1.00 – 4.64
 - Industries : 0.74 – 6.25
 - LNG Eksport : 3.35 – 14.01

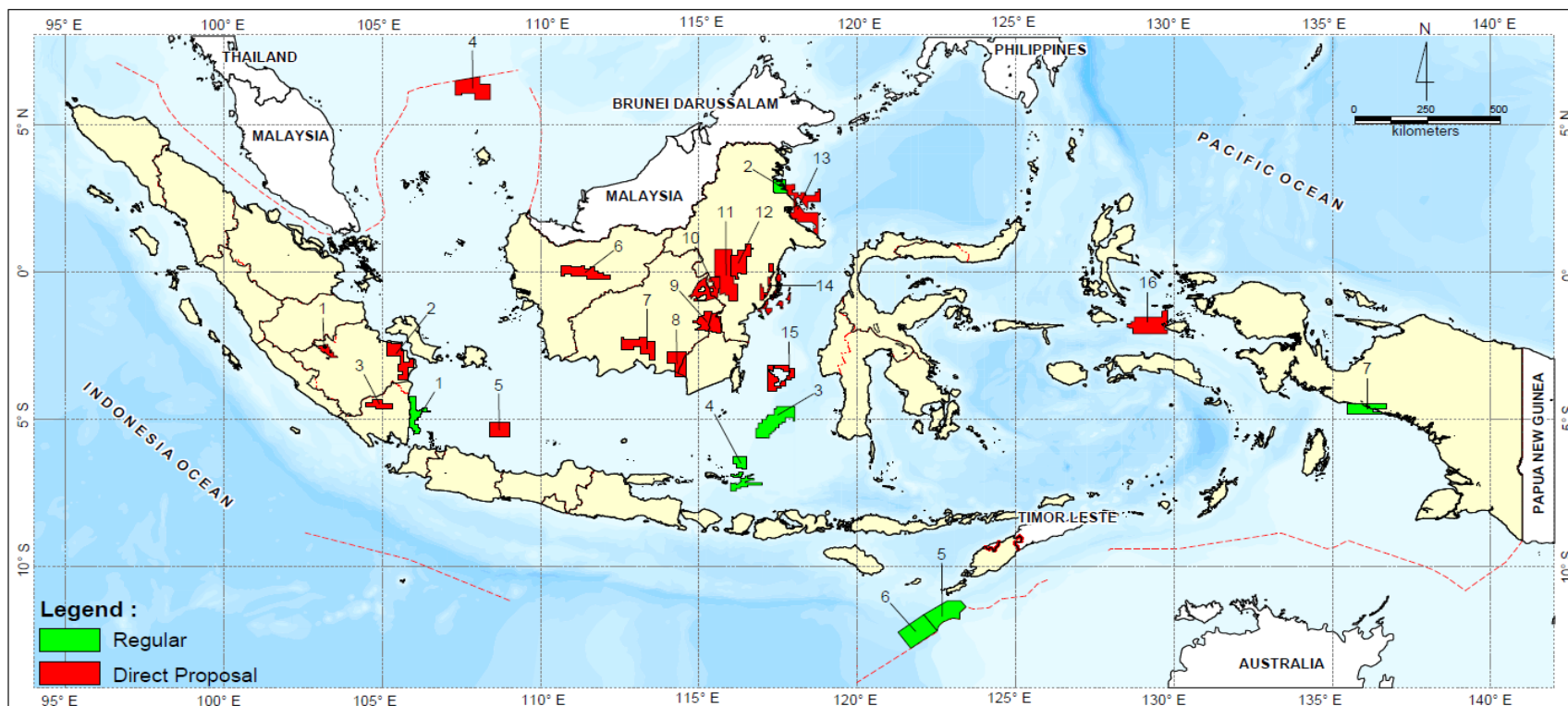


CONCLUSION



Indonesia is still promising for investment

TENTATIVE INDONESIA PETROLEUM BIDDING SECOND ROUND YEAR 2012



Direct Proposal

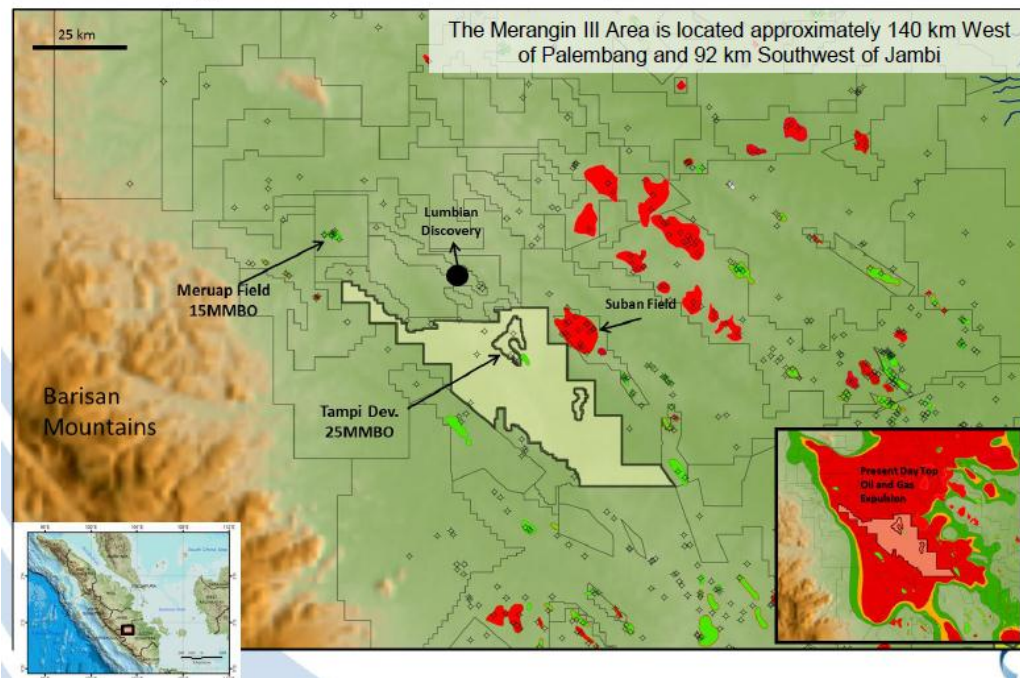
- | | | |
|-------------------------|--------------------------|-----------------|
| 1. Merangin III | 8. Kahayan | 15. West Sebuku |
| 2. Airsugihan | 9. South Tanjung | 16. West Misool |
| 3. Bima Sakti | 10. West Bangkanai | |
| 4. West Tuna | 11. Puruk Cahu | |
| 5. Offshore North X-Ray | 12. North East Bangkanai | |
| 6. Sanggau | 13. Offshore Mangkalihat | |
| 7. Menduwai | 14. Central Mahakam | |

Regular

1. West Asri
2. Bengara II
3. Masalima
4. NE Sepanjang
5. Seringapatam I
6. Seringapatam II
7. Wanapiri

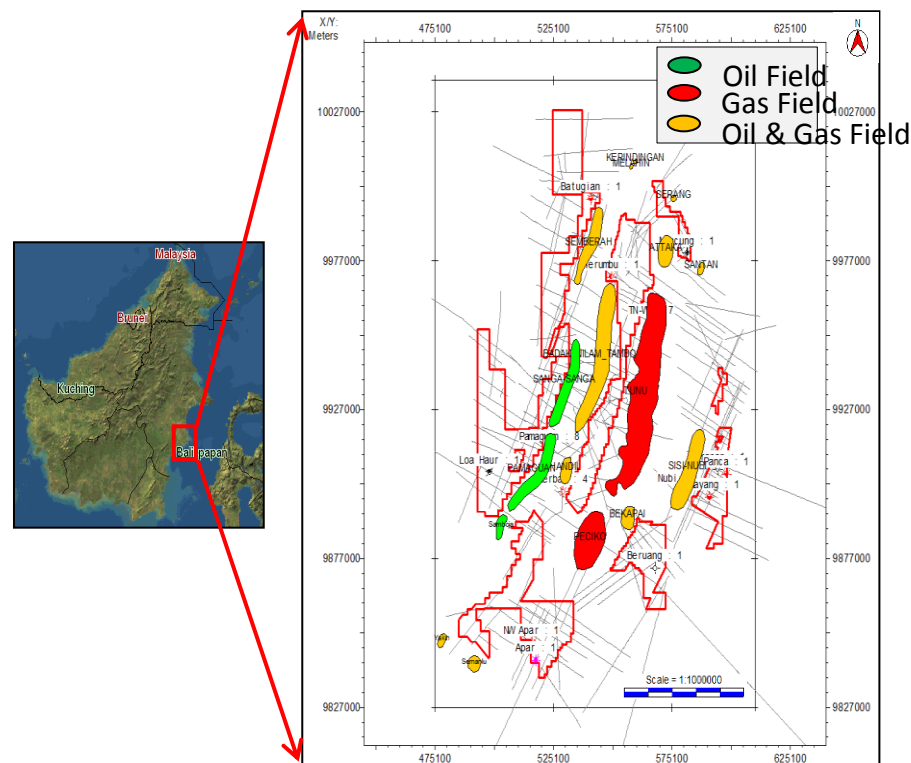
GEOLOGICAL REVIEW (HC OCCURANCE) OF SOME AREA

MERANGIN III

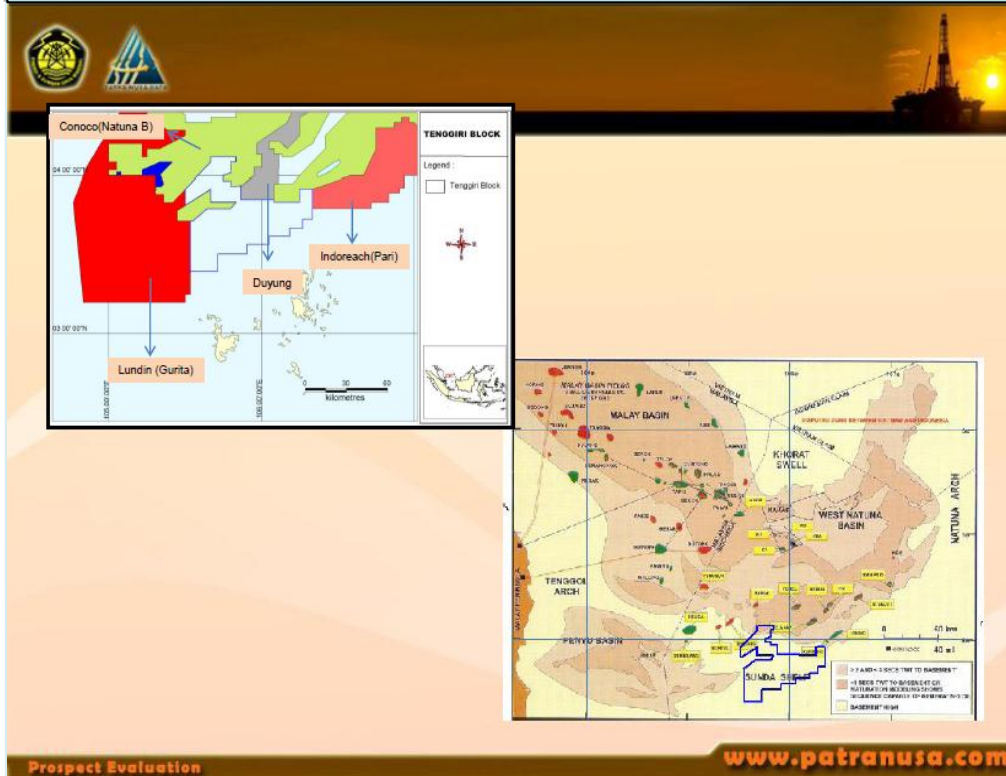


CENTRAL MAHAKAM

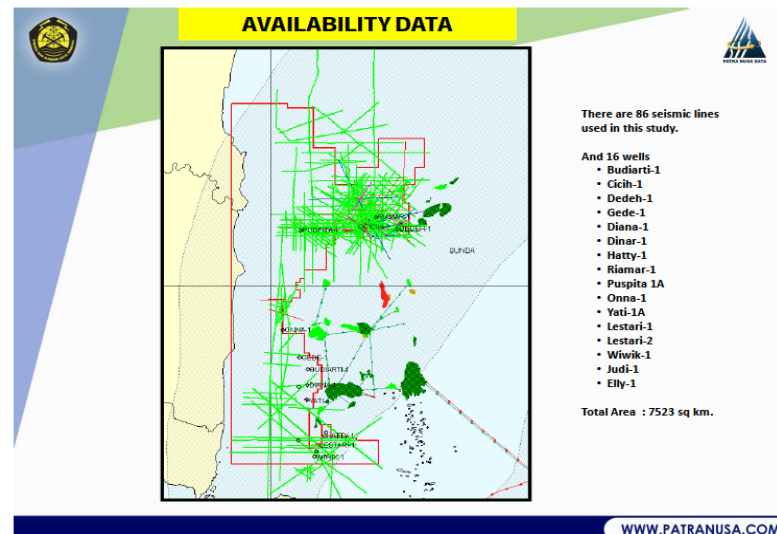
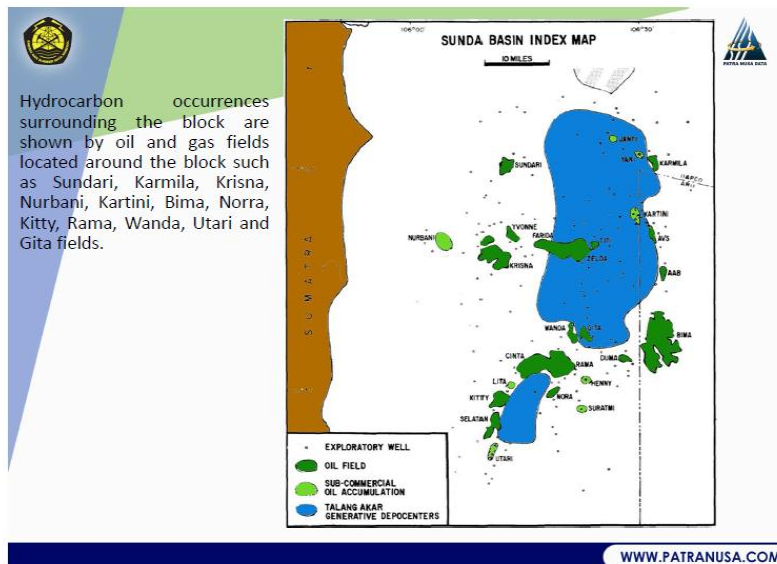
EXISTING OIL AND GAS FIELD



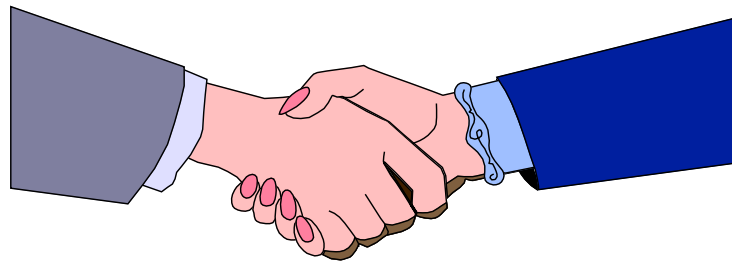
TENGGIRI



WEST ASRI



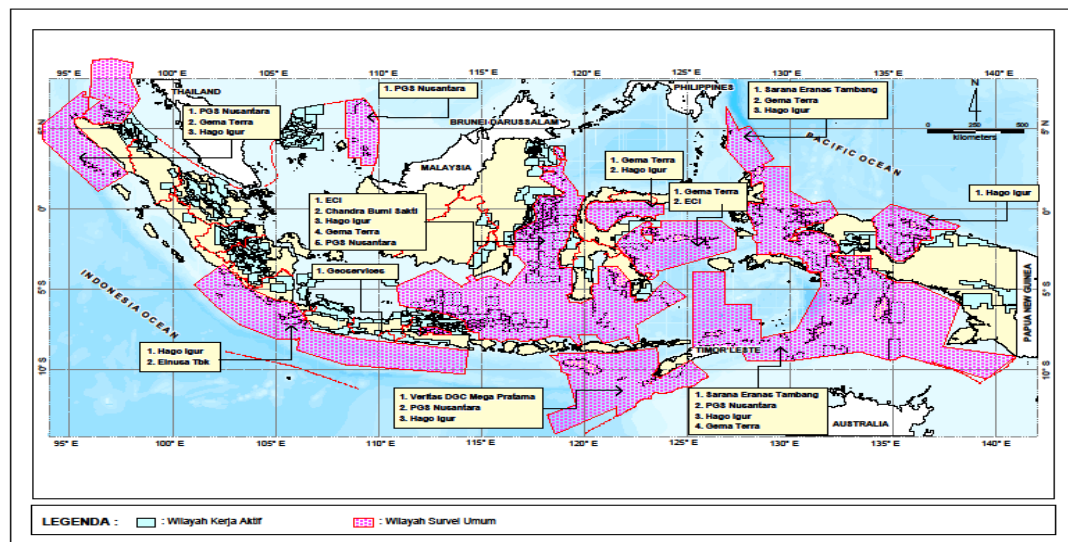
THANK YOU



www.migas.esdm.go.id

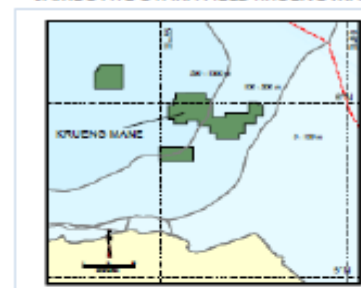
DEVELOPMENT OF EASTERN INDONESIA

GENERAL SURVEY

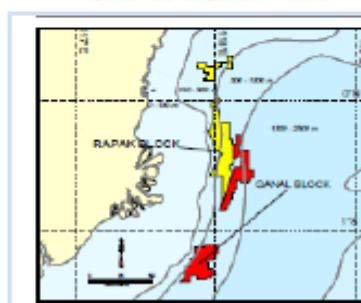


- Total seismic line:
 - 2D ➔ 214.498 Km
 - 3D ➔ 104.172 Km²

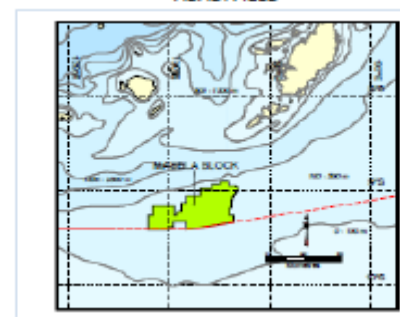
JAMBU AYE UTARA FIELD KRUENG MANE



GENDALO & GEHEM FIELDS



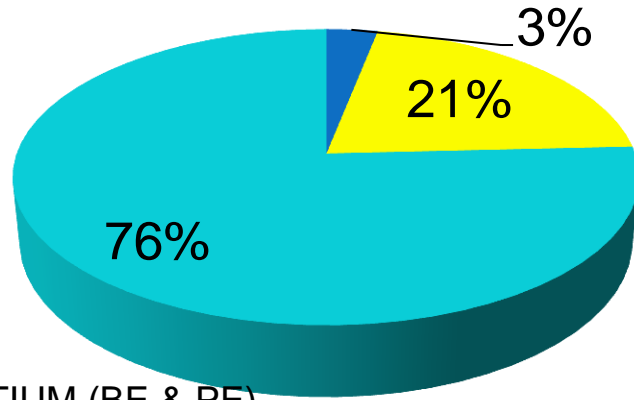
ABADI FIELD



New Discoveries:

- Jambu Aye Utara
- Gendalo & Gehem
- Abadi Field

NATIONAL COMPANY INVOLVEMENT IN UPSTREAM ACTIVITIES



- CONSORTIUM (BE & PE)
- BUSINESS ENTITY (BE)
- PERMANENT ESTABLISHMENT (PE)

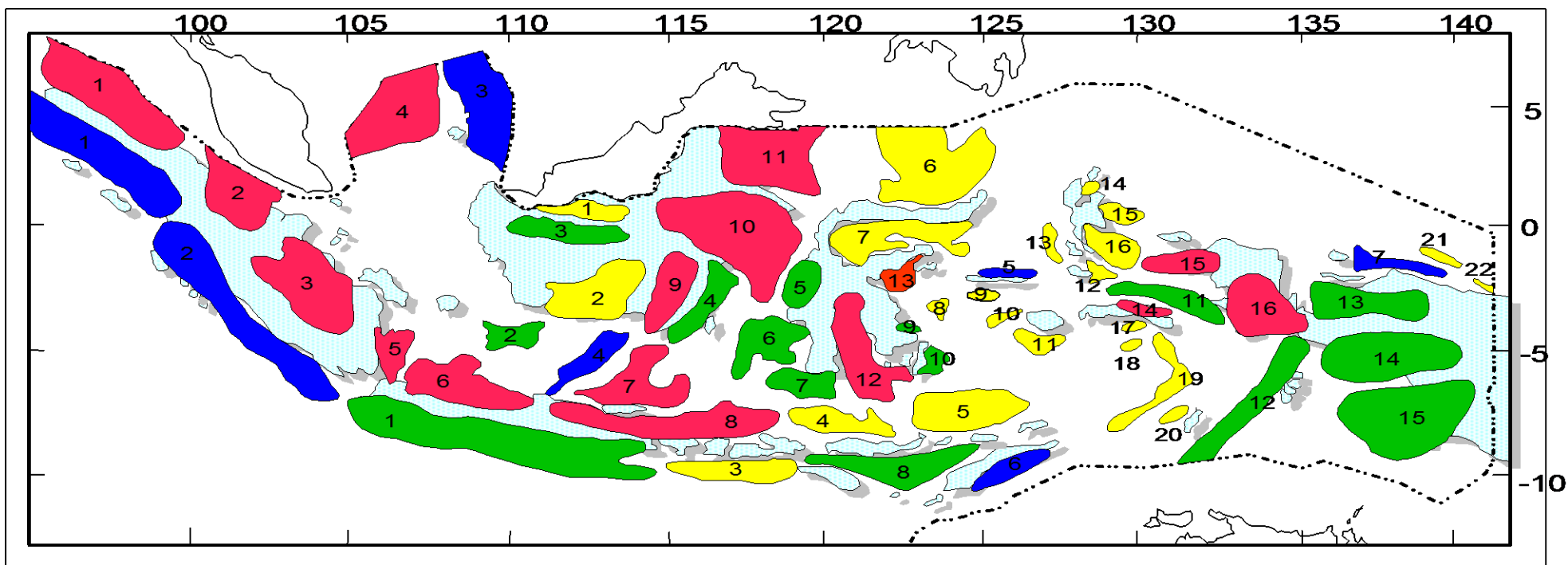
Government Regulation No.35 Year 2004 Article 34

“Commencing from the field development plan to be initially produced in an Operational Area, the Contractor shall offer 10% of its participating interests to Regional Government’s Enterprises”.

TARGET FOR 2025

- 50% national operatorship

SEDIMENTARY BASIN MAP



Producing Basin (16)

1. North Sumatera
2. Central Sumatera
3. South Sumatera
4. West Natuna
5. Sunda
6. NW. Java
7. NE. Java Sea
8. NE. Java
9. Barito
10. Kutai
11. Tarakan
12. Bone
13. Banggai
14. Seram
15. Salawati
16. Bintuni

Drilled Basin, No Discovery yet (15)

1. South Java
2. Biliton
3. Melawi
4. Asem-Asem
5. Lariang
6. South Makasar
7. Spermonde
8. Sawu
9. Manui
10. Buton
11. Misool
12. Palung Aru
13. Waipoga
14. Akimeugah
15. Sahul

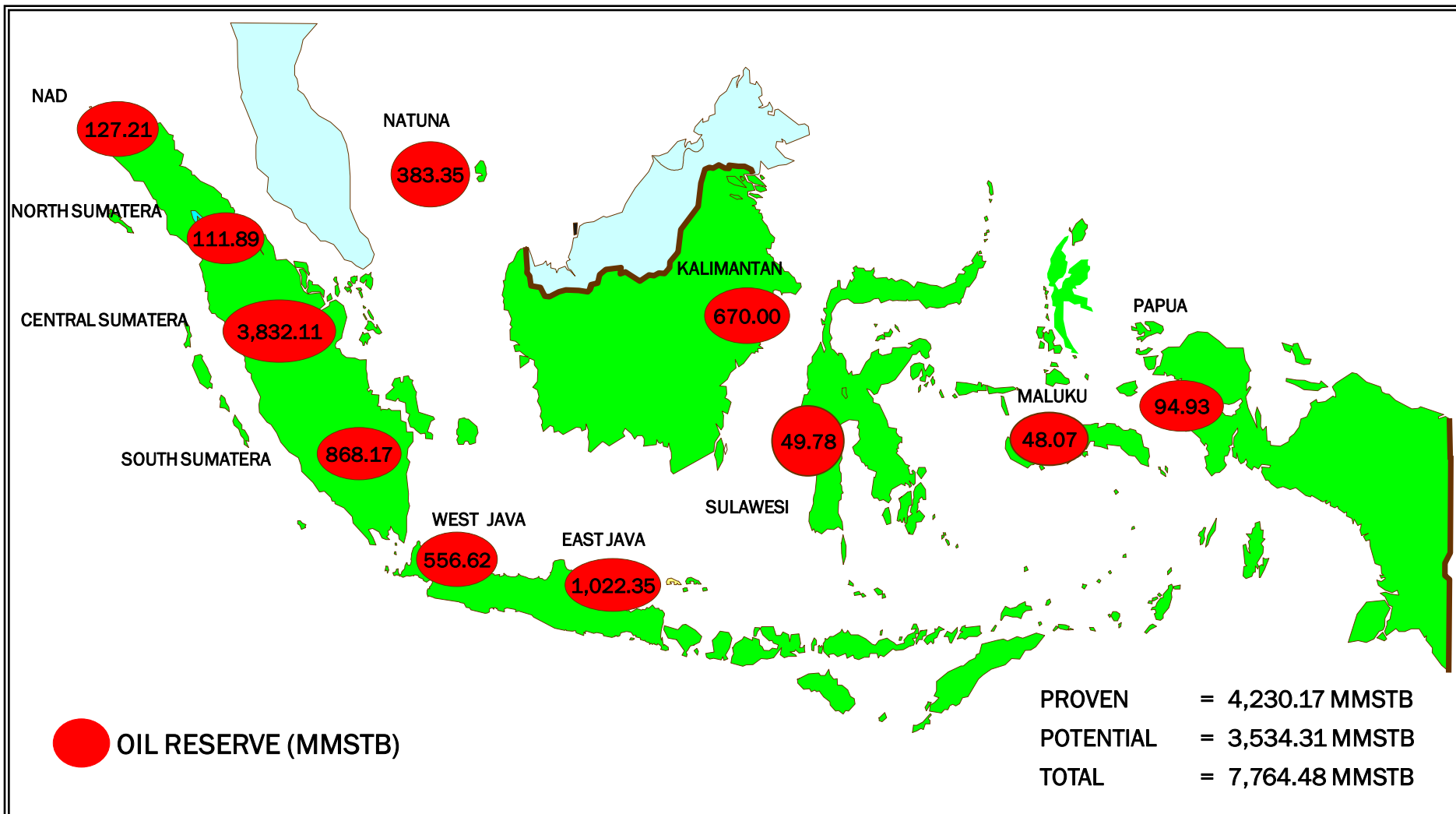
Drilled and Proven Discovery, but not Production yet (7)

1. Sibolga
2. Bengkulu
3. East Natuna
4. Pati
5. Sula
6. Timor
7. Biak

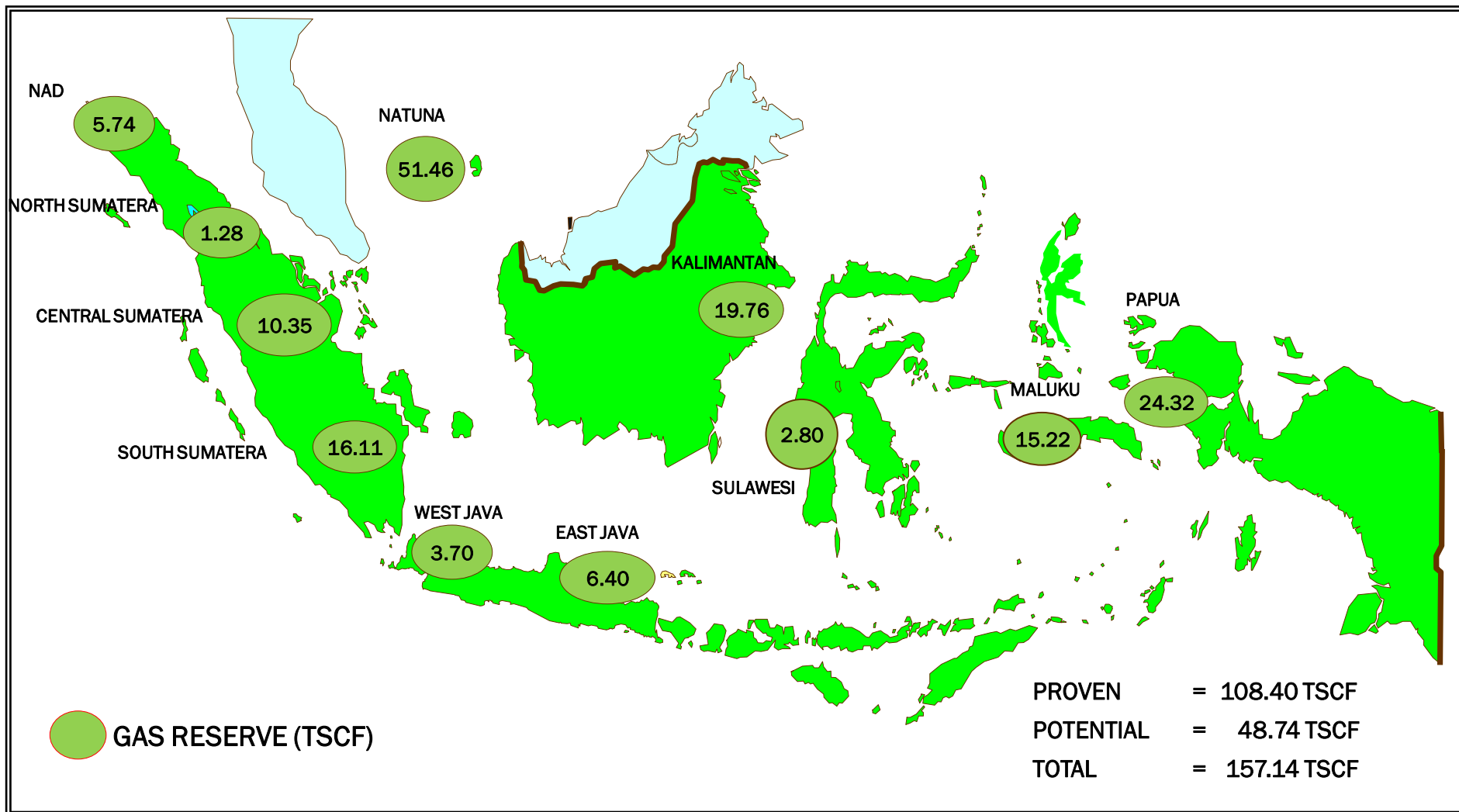
Frontier Basin (22)

- | | |
|----------------|---------------------|
| 1. Ketungau | 12. South Obi |
| 2. Pembuang | 13. North Obi |
| 3. Lombok Bali | 14. North Halmahera |
| 4. Flores | 15. East Halmahera |
| 5. Tukang Besi | 16. South Halmahera |
| 6. Minahasa | 17. South Seram |
| 7. Gorontalo | 18. West Weber |
| 8. Sala Bangka | 19. Weber |
| 9. South Sula | 20. Tanimbar |
| 10. West Buru | 21. Waropen |
| 11. Buru | 22. Jayapura |

INDONESIA OIL RESERVE (JANUARY, 2010)

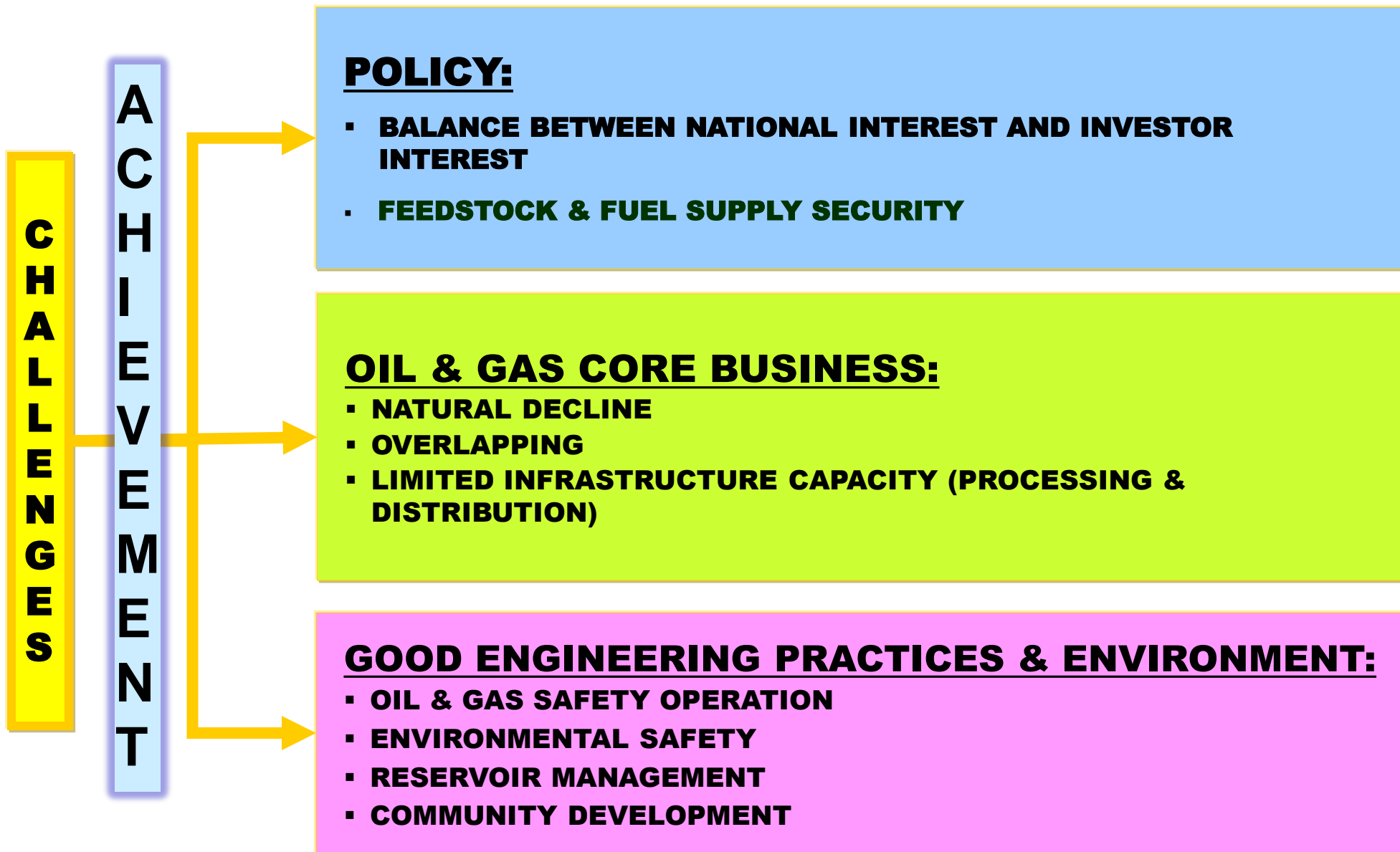


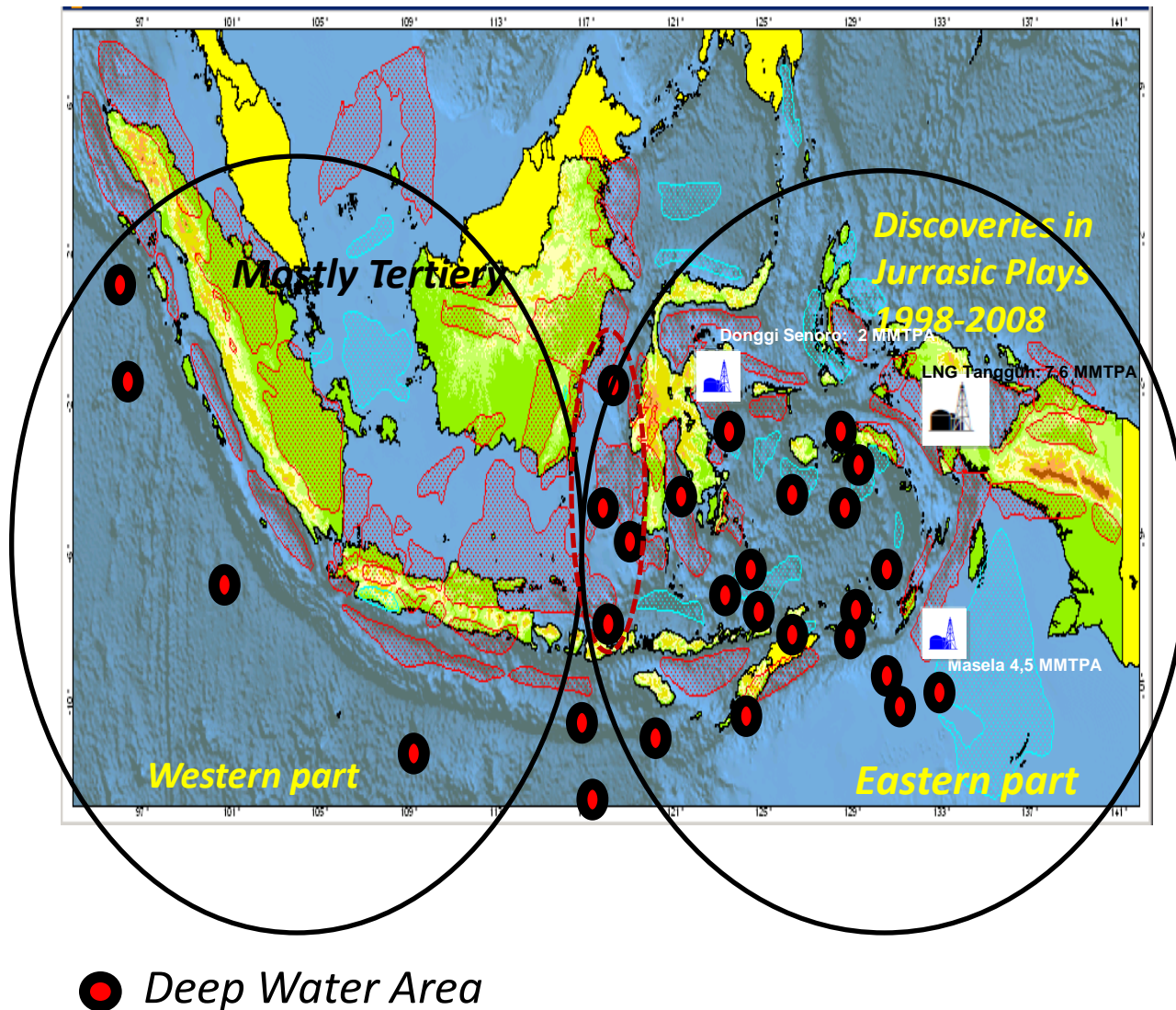
INDONESIA GAS RESERVE (JANUARY,2010)



CHALLENGES ON UPSTREAM SECTOR

CHALLENGES ON UPSTREAM SECTOR





- Most of the Big Resources/Reserves Sitting Mesozoic Play.
- Most of Deepwater exploration located in Eastern Indonesia.
- LNG development Tangguh-Masela-Donggi Senoro exist in 2009
- Potential opportunities:
 - Development of small scale LNG carrier & Receiving Terminal.
 - Supply based.
 - Resource based Industry Development