

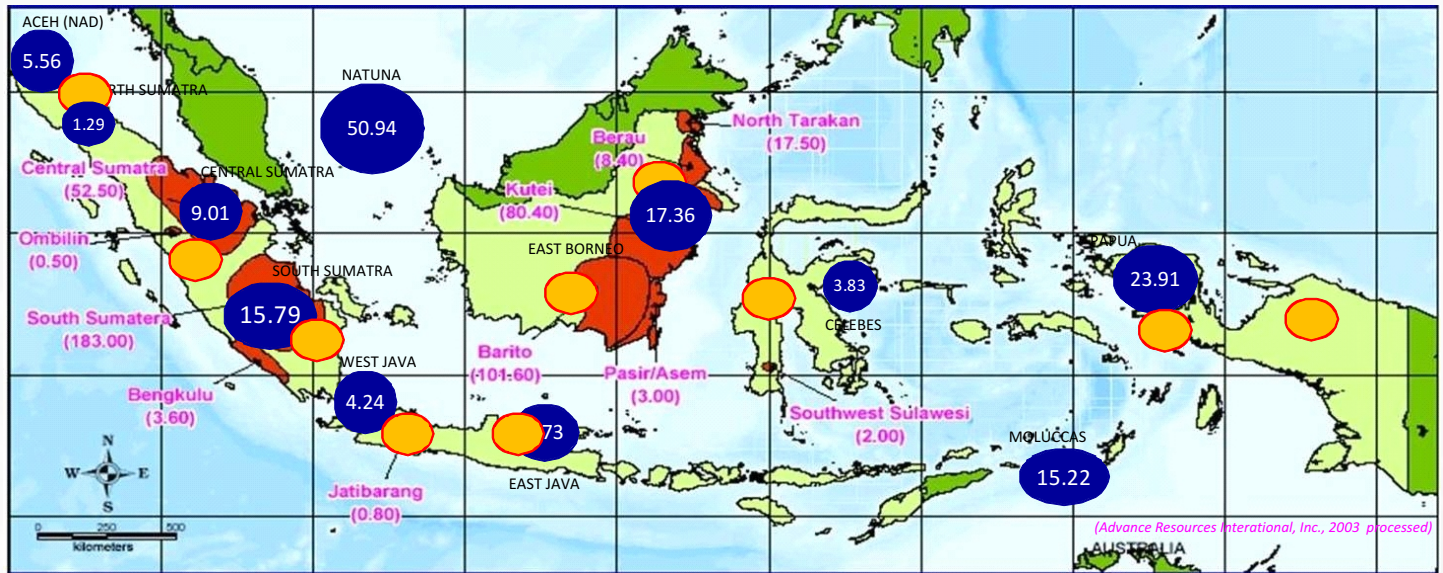


INDONESIA UNCONVENTIONAL OIL AND GAS BIDDING ROUND 2016



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

NATURAL GAS RESERVES, CBM RESOURCES & SHALE GAS POTENTIAL



GAS RESERVES

PROVEN	=	104.71 TSCF
POTENTIAL	=	48.18 TSCF
TOTAL	=	152.89 TSCF

(As of January 1st 2014)

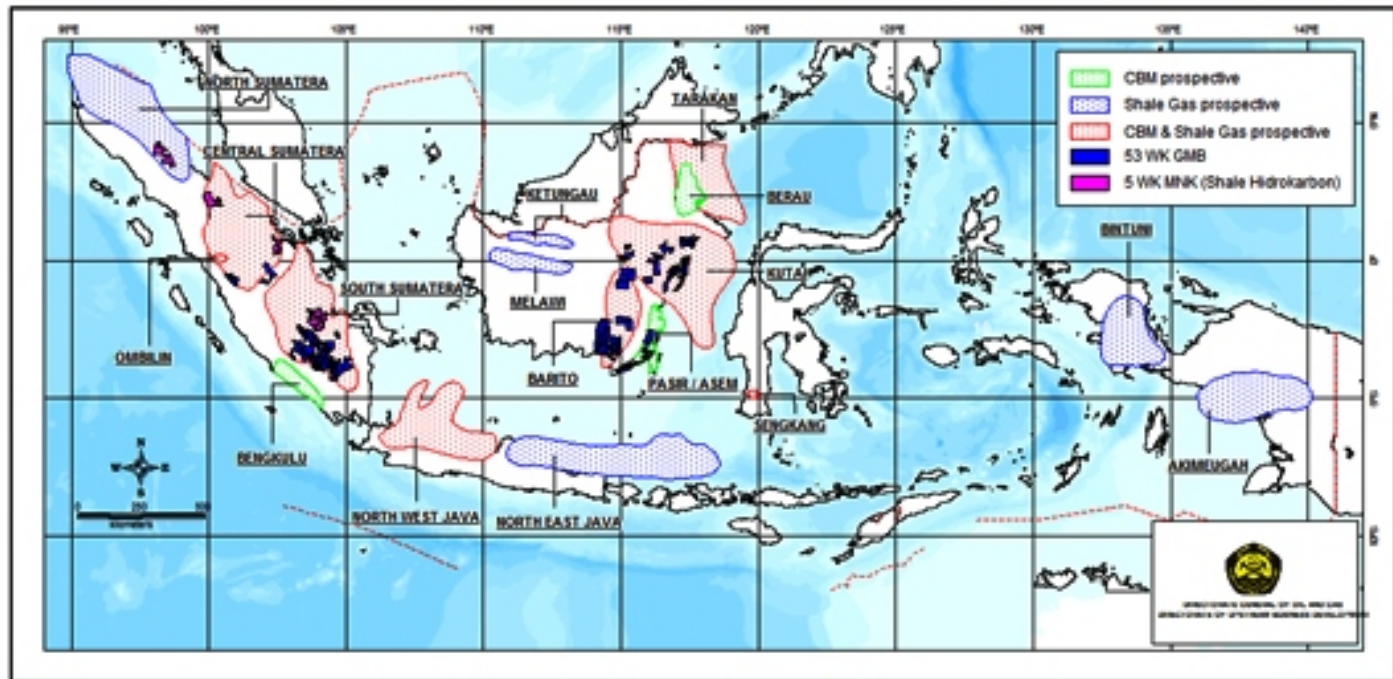
CBM RESOURCES = 453.30 TCF

Total CBM Basin= 11
(Advance Resources International, Inc., 2003)

SHALE GAS POTENTIAL= 574 TCF

Total Shale Gas Basin = 14
(Geology Agency, 2010)

UNCONVENTIONAL RESOURCES AND PSC



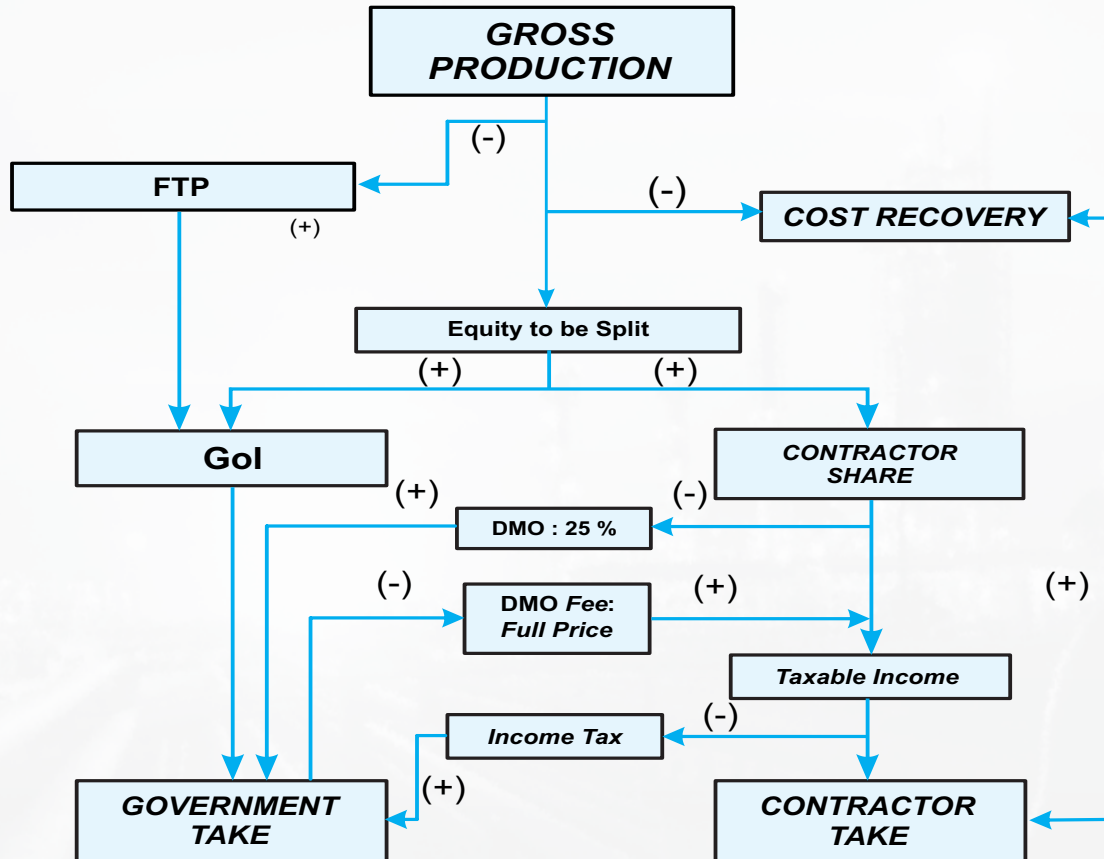
Unconventional Resources

□ Coalbed Methane	: 453.3 TCF
□ Shale Gas	: 574.07 TCF

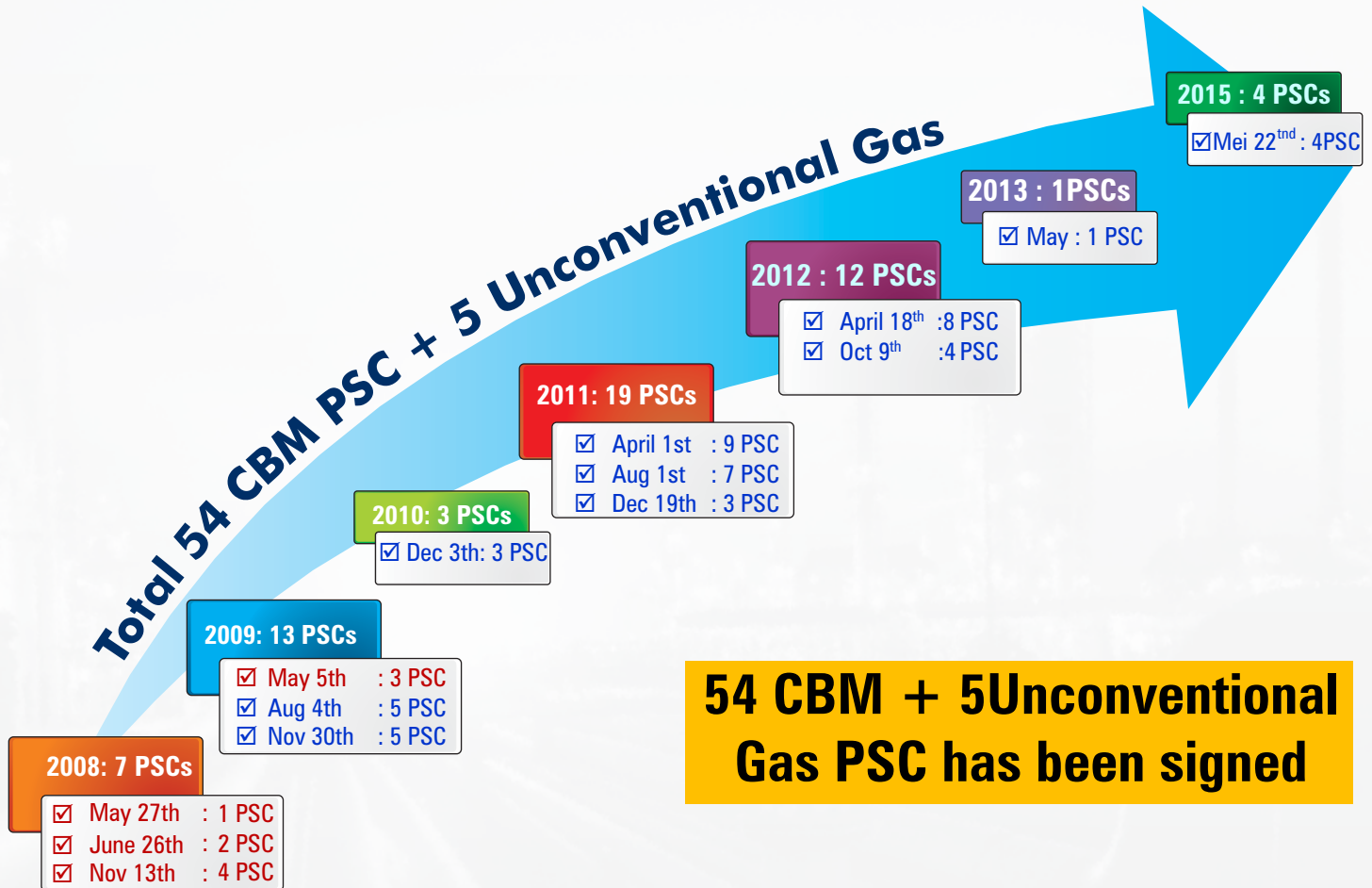
Unconventional PSC

□ Coalbed Methane	: 54 PSC
□ Shale Gas	: 5 PSC

FLOWCHART OF UNCONVENTIONAL OIL & GAS PSC

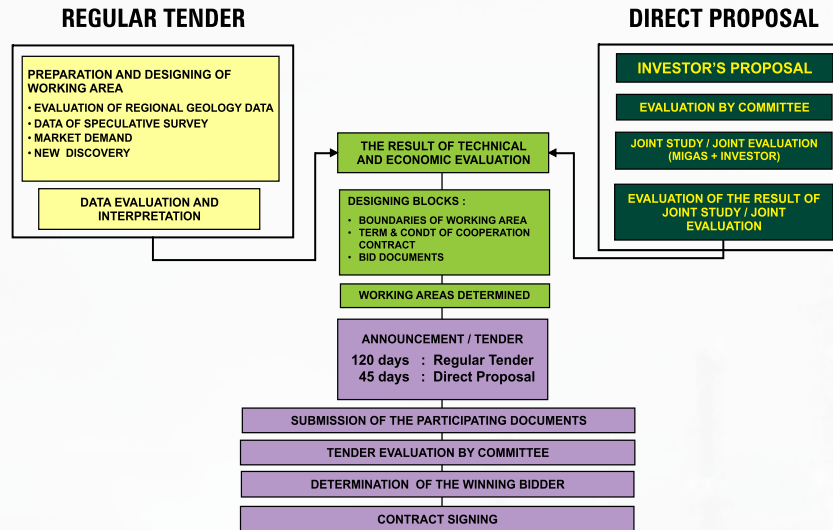


Total 54 CBM PSC + 5 Unconventional Gas



54 CBM + 5 Unconventional Gas PSC has been signed

TENDER PROCESS



UNCONVENTIONAL OIL & GAS (SHALE HYDROCARBON) OFFERING PROCEDURE

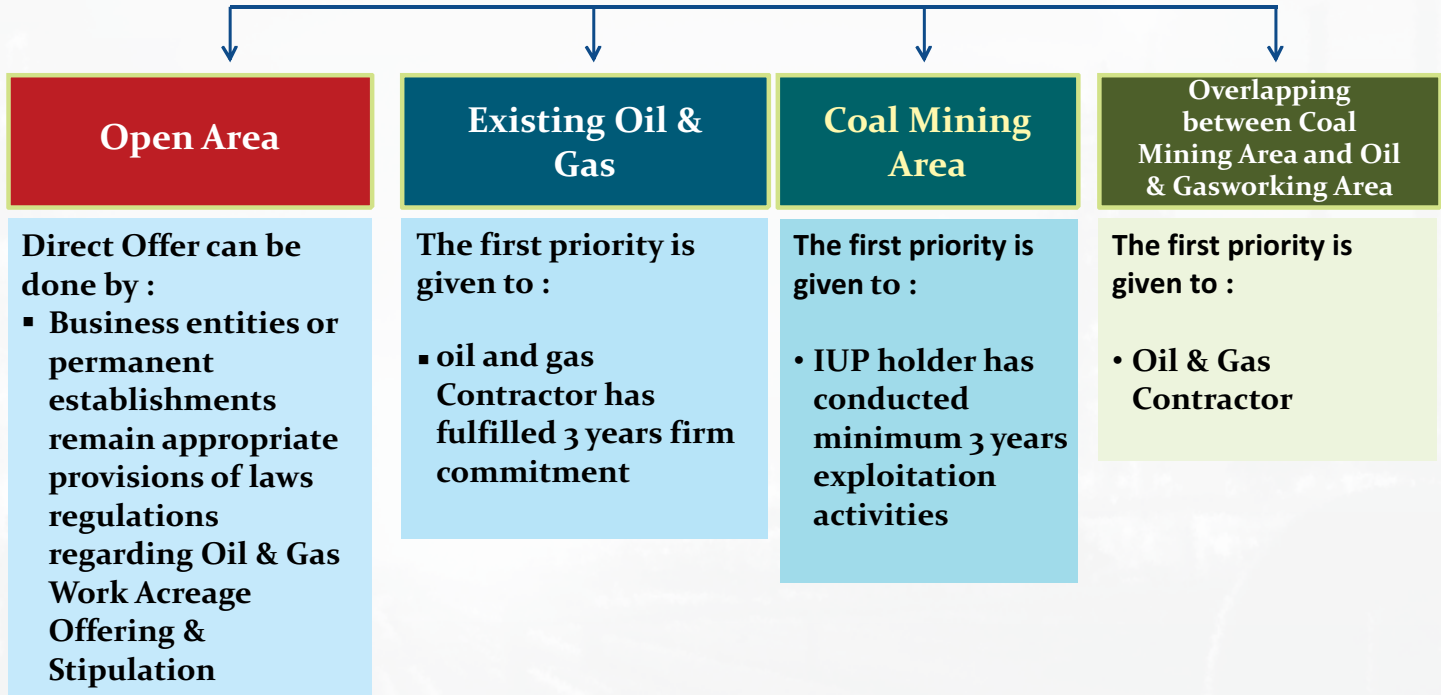
A. REGULAR TENDER

- Planning and preparing Unconventional Oil & Gas acreage by Directorate General of Oil and Gas (MIGAS)
- Stipulation of Unconventional Oil & Gas operational areas and Terms & Conditions by Ministry of Energy and Mineral Resources
- Unconventional Oil & Gas working acreage to be offered by tender (120 days)

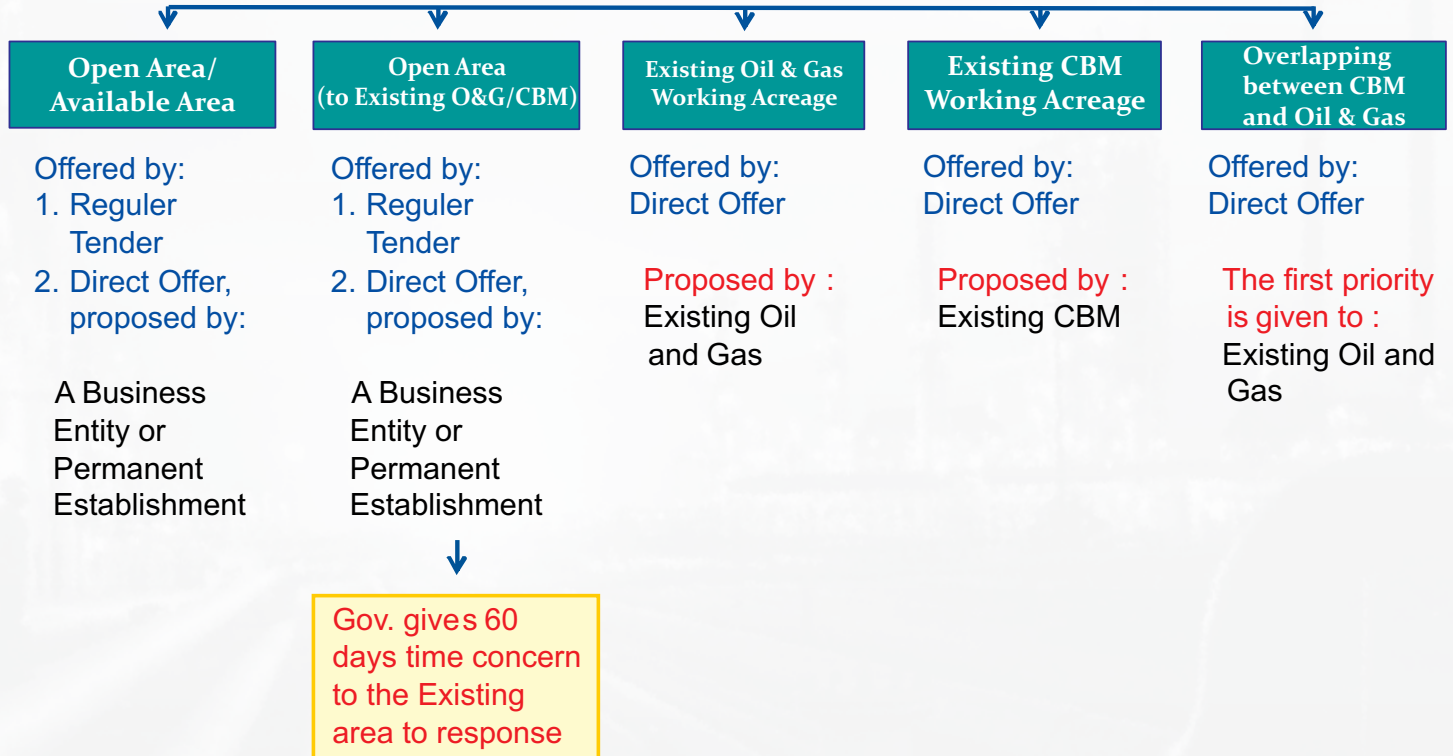
B. DIRECT PROPOSAL TENDER

- Joint Study (for open areas, existing Conventional Oil & Gas Block, existing CBM Block)
- Stipulation of Unconventional Oil & Gas operational areas and Terms & Conditions by Ministry of Energy and Mineral Resources
- Unconventional Oil & Gas working acreage to be offered by tender (45 days)
- Company's conduct the Joint Study will get right to match in tender process.

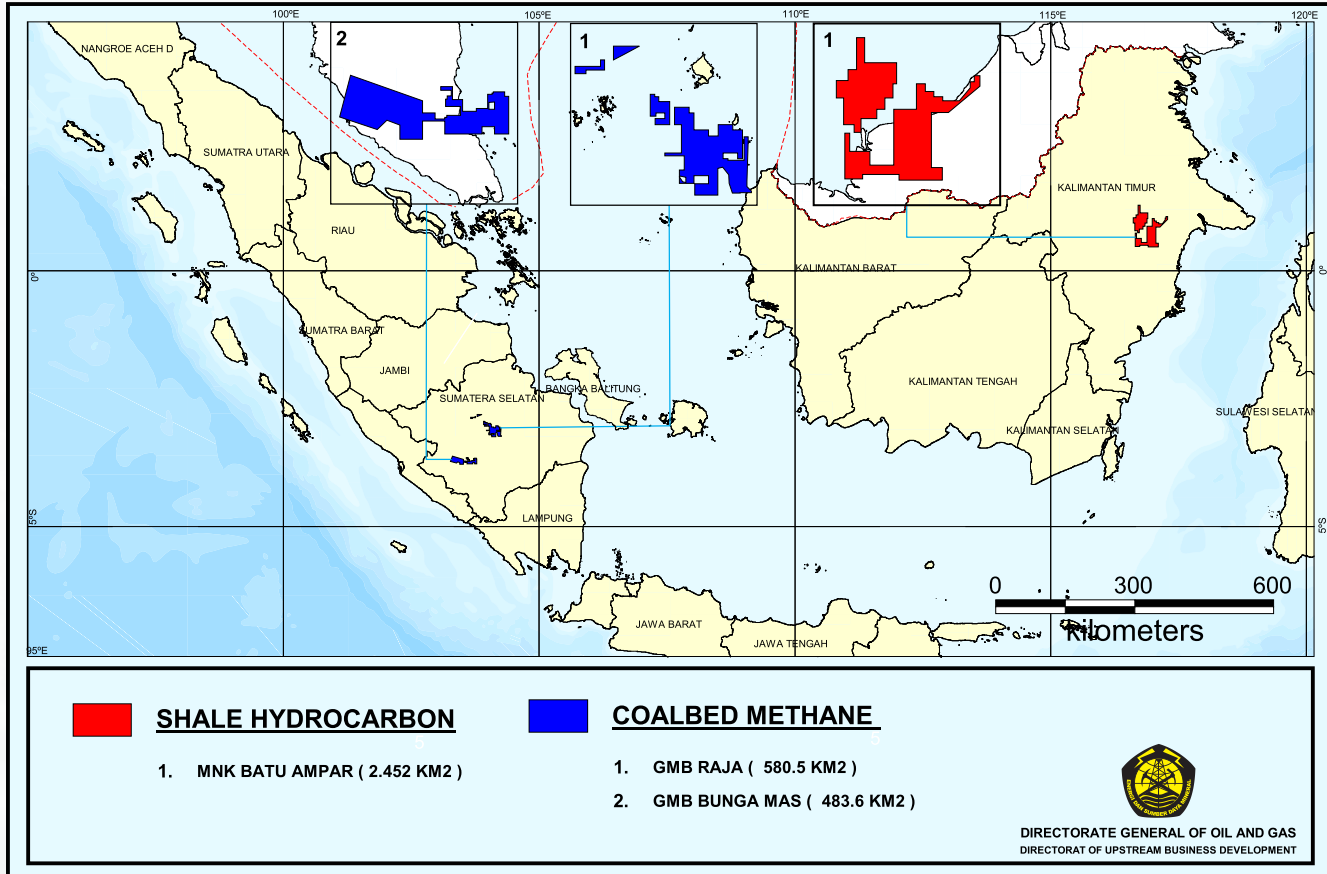
Coal Bed Methane Working Acreage



Shale Gas Working Acreage



INDONESIA UNCONVENTIONAL OIL AND GAS BIDDING ROUND 2016 (TENTATIVE)



CONDITIONS FOR PARTICIPATING IN TENDERS

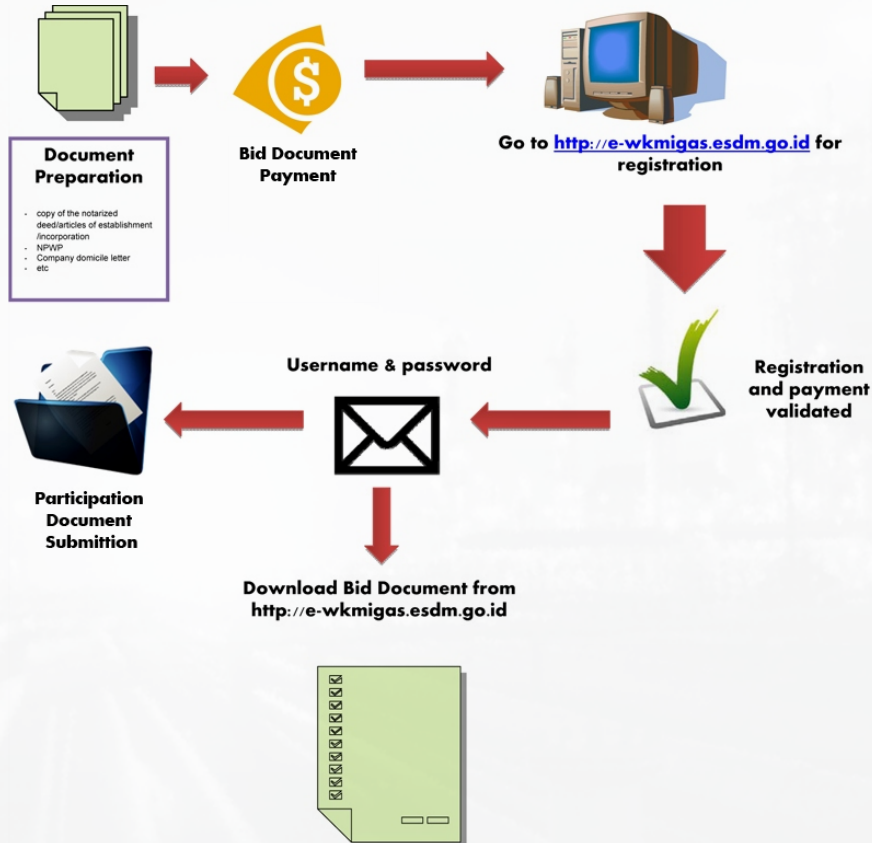
Each company participating in Tender (hereinafter called “Tender Participant ”), whether participating as an individual company or as a group of companies, is required to register as a participant by obtaining individually official Bid Document (which is correspond to 1 (one) block) issued by MIGAS.

The Bid Document which correspond to 1 (one) block shall be purchased in the amount of Five Thousand US Dollars (US\$ 5,000). Payment shall be made to the account of **"Kegiatan Pelaksanaan Pengelolaan (KPP) Wilayah Kerja Minyak dan Gas Bumi number 122.00.0110899-5, Bank Mandiri Cabang Jakarta Kebon Melati"** (Swift Code BMRIIDJA).

This fee is non-refundable.

BID DOCUMENT ACCESS

- Bidding process is using “e-lelang Wilayah Kerja” application at <http://e-wkmigas.esdm.go.id>.
- Guidance booklet should be read first before make any payment for Bid Document. You may download the guidance from the website.
- Steps for accessing Bid Document



ACCESSING DATA

Bid Participants can access data, which will be used for technical evaluation of the exploration work program.

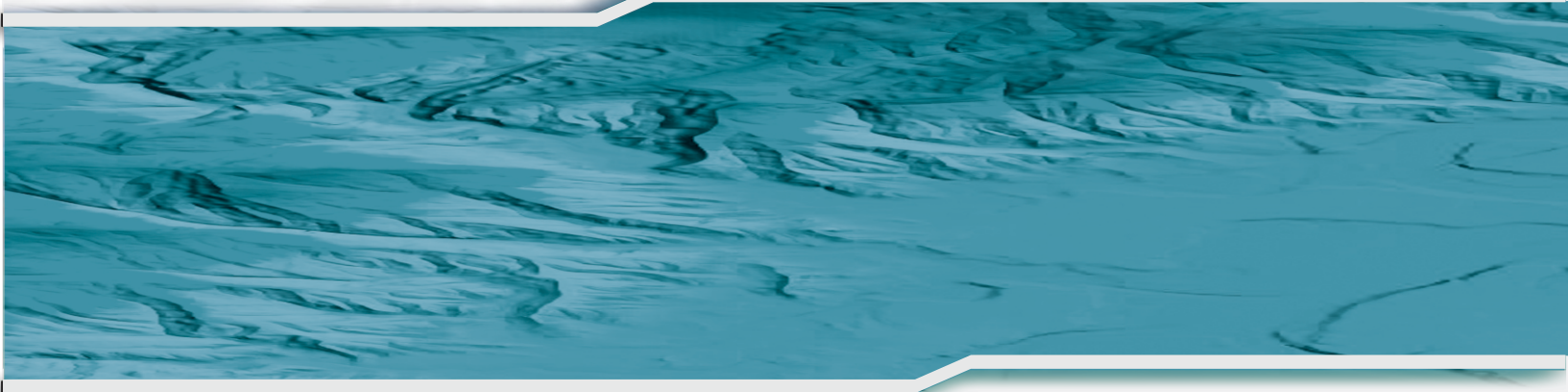
- A. Data Package consists of geological & geophysical data and outside which are directly related to the Block. The Data Package is mandatory, it shall be access at:

Pusat Data dan Informasi (PUSDATIN) DESDM
Executing Agency MIGAS Data Management (MDM)
PT. Patra Nusa Data
Graha Elnusa 5th Floor
Jl. TB Simatupang Kav.1B
Jakarta 12560 (Ph.62-21-7816770-74 Ext.15, Fax.62-21-7816775)
Data Package : US\$ Account Number: 127.00.048.4264.5
Vat : Rp Account Number: 127.00.970.1636.2, Bank Mandiri Graha Elnusa
Jl. TB. Simatupang Kav. 1B Jakarta 12560, Swift Code BMRIIDJA.

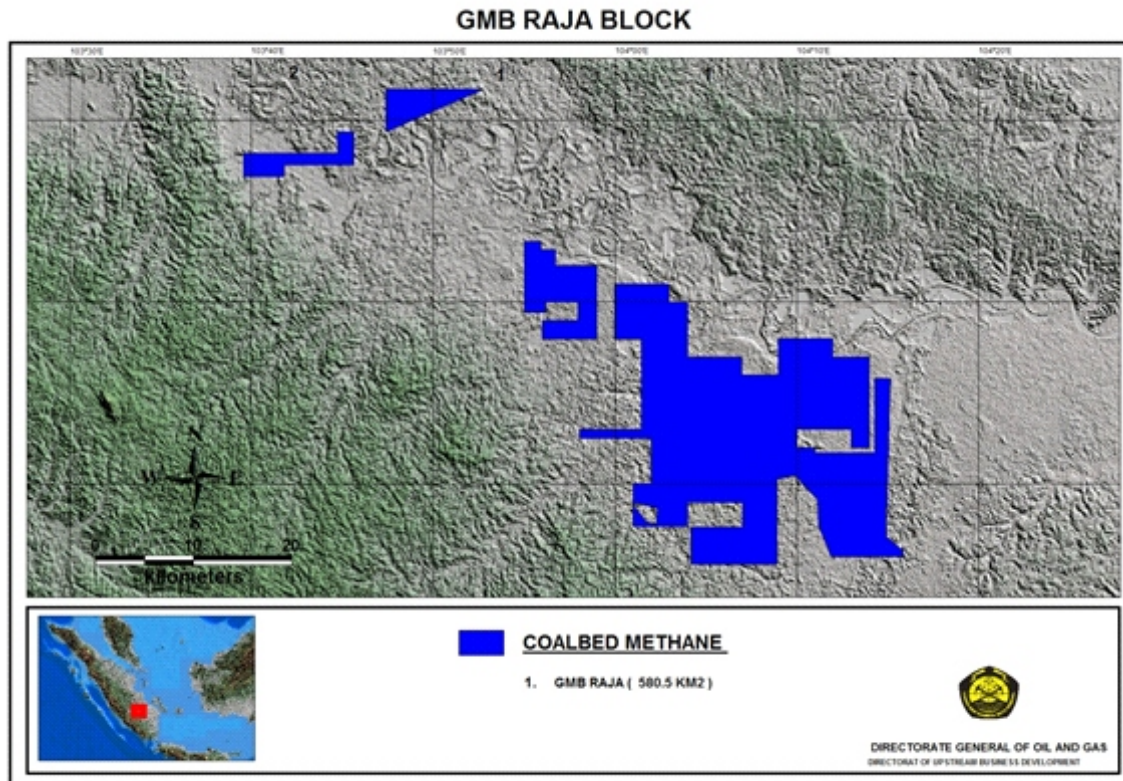
- B. Auxiliary Data: consists of geological & geophysical data related to areas but not covered on the Data Package. The auxiliary data is optional (not mandatory) it can be accessed from legal sources:

1. PT Patra Nusa Data
2. Speculative Survey Companies
3. PPPTMGB "LEMIGAS"
Jl. Ciledug Raya Kav.109, Cipulir Kebayoran Lama
Jakarta Selatan 12230
contact : Koordinator Kelompok Riset Teknologi Eksplorasi
4. Badan Geologi
Jl. Diponegoro 57, Bandung 40122
contact : Sekretaris Badan Geologi

GEOLOGICAL SYNOPSIS



GMB RAJA BLOCK

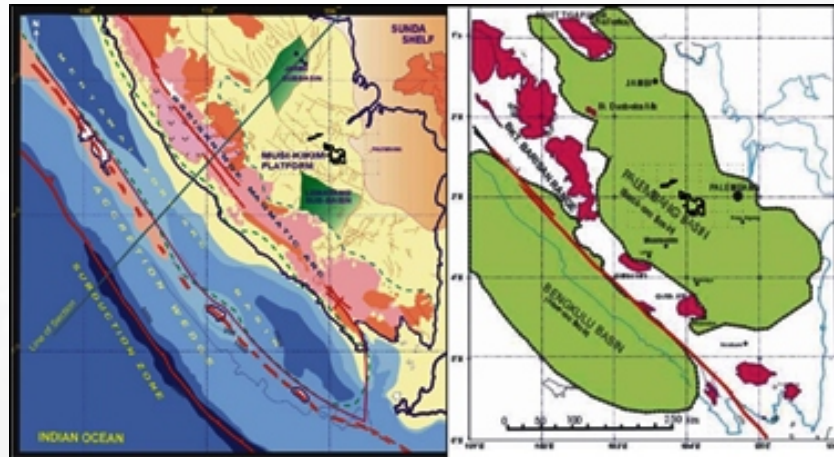


GMB RAJA BLOCK

The GMB Raja area consist of four different block which is located in the west side Palembang district South Sumatra. These GMB Raja blocks has 580.9 sq km of coverage area located at Raja area. This block is located in South Sumatra basin with nine major formations as a stratigraphy regional.

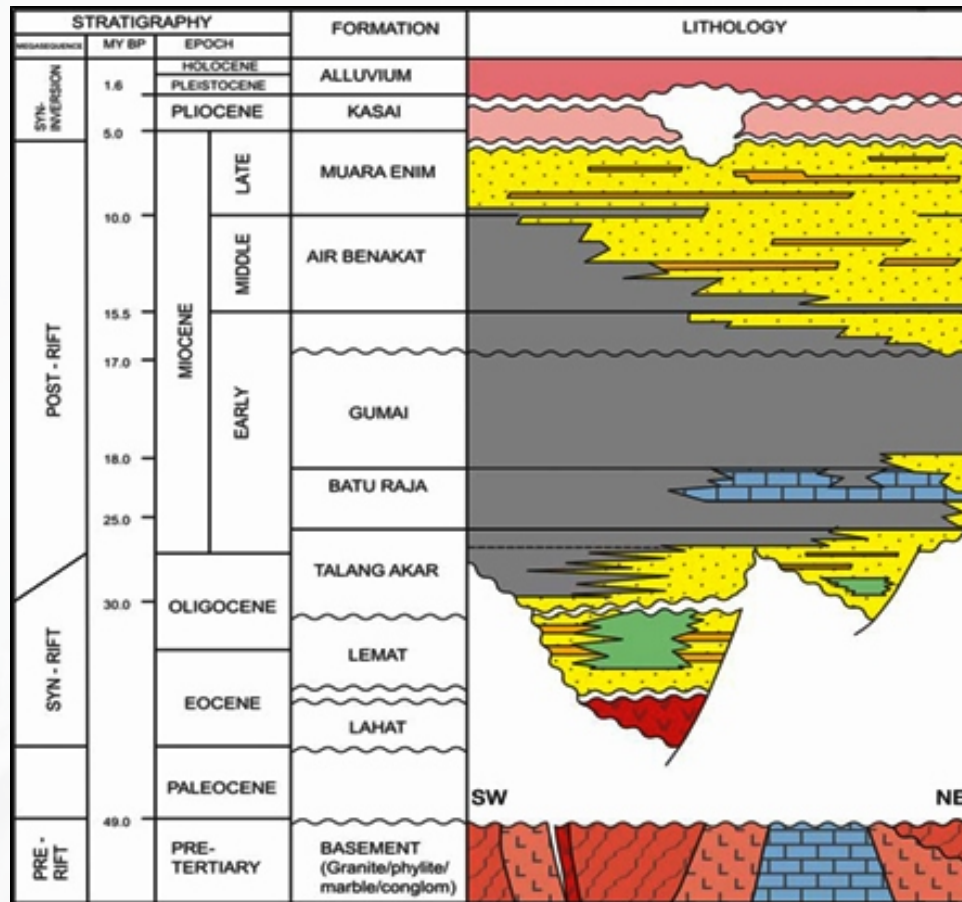
GEOLOGICAL SETTING

The South Sumatra Basin is located to the east of the Barisan Mountains and extends into the offshore areas to the northeast and is regarded as a back-arc basin, which is bounded by the Barisan Mountains to the southwest, and the pre-Tertiary of the Sunda Shelf to the northeast (de Coster, 1974). The South Sumatra Basin was formed during east-west extension at the end of the pre-Tertiary to the beginning of Tertiary times (Daly et al., 1987). Orogenic activity during the Late Cretaceous to Eocene cut the basin into four sub-basins.

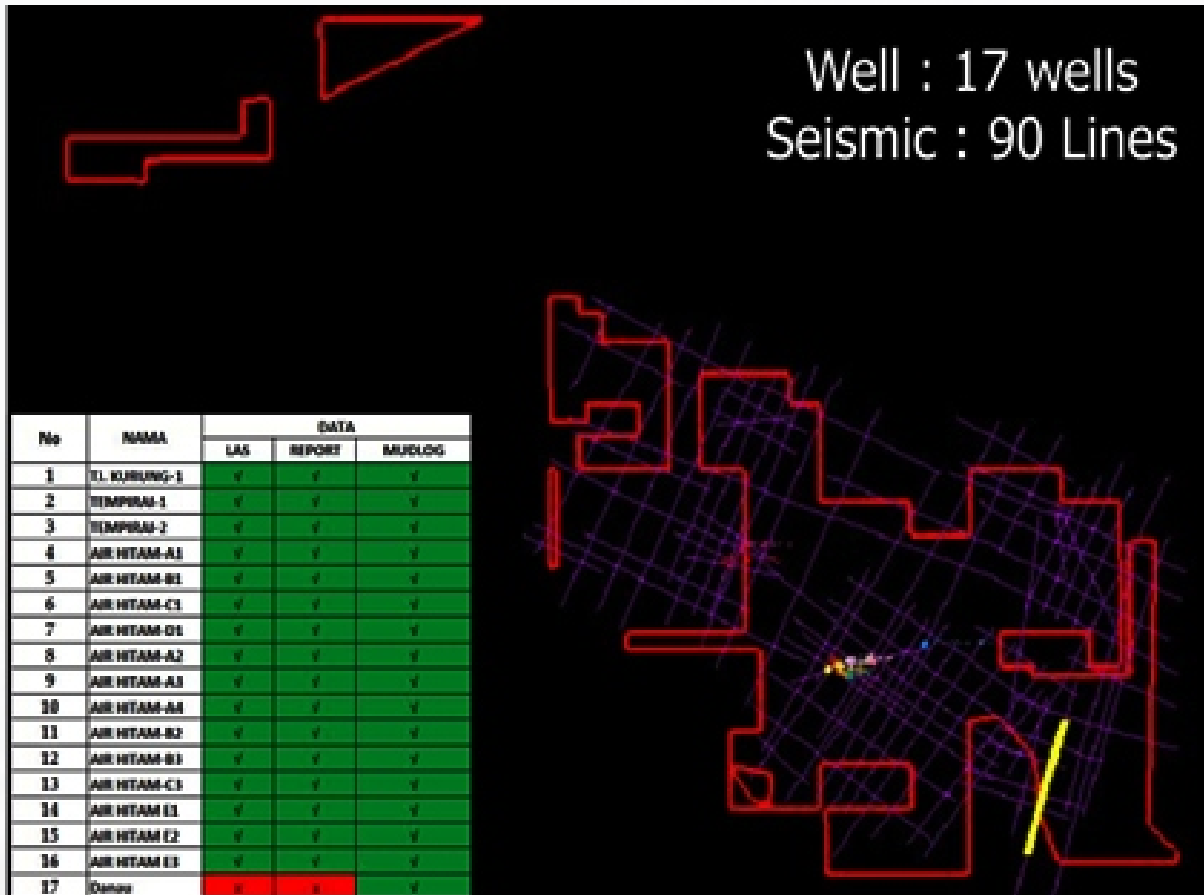


Regional geology of South Sumatra Basin.

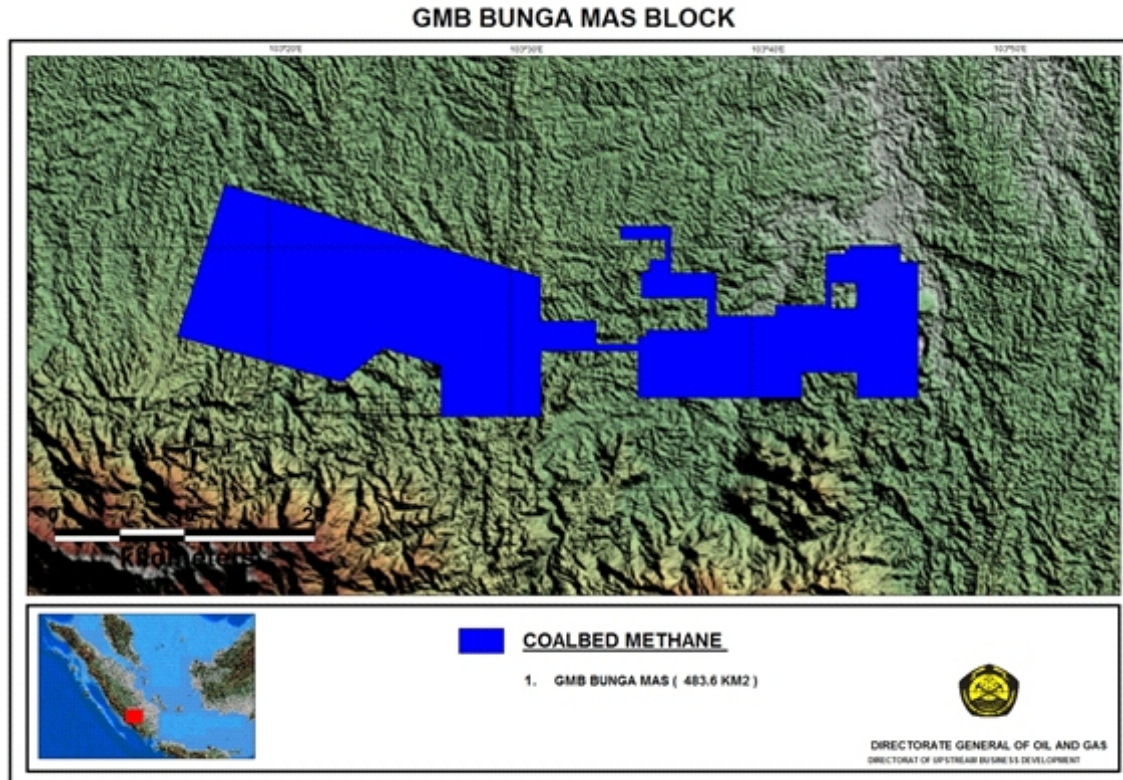
STRATIGRAPHY



DATA AVAILABILITY



GMB BUNGAMAS BLOCK

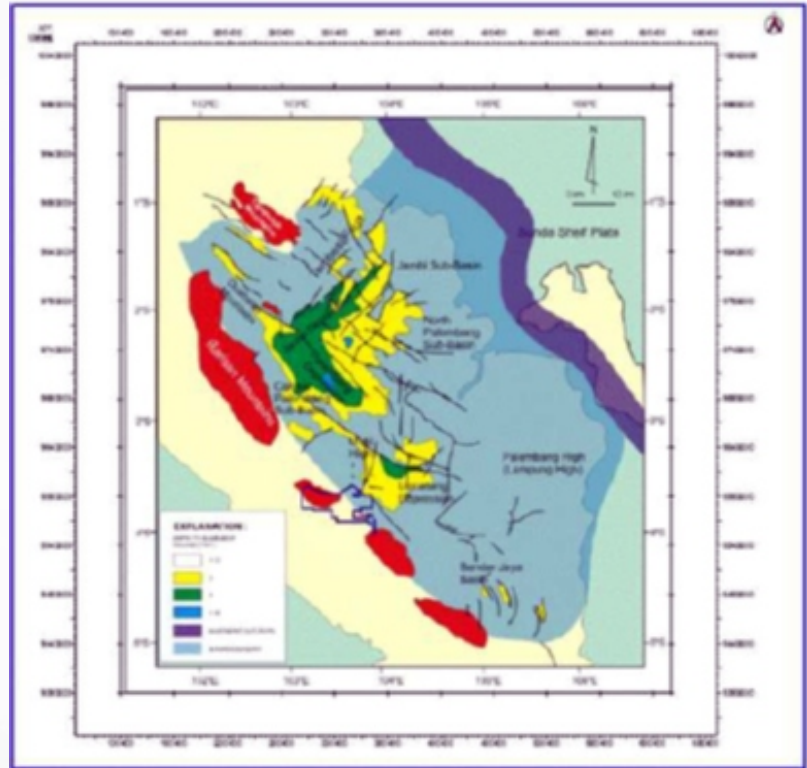


GMB BUNGAMAS BLOCK

GMB Bungamas Block is located in South Sumatra Basin, with total acreage of 482.4 square kilometres. Administratively, Bungamas Area located in Lahat and Muara Enim District, Lematang River, South Sumatra Province.

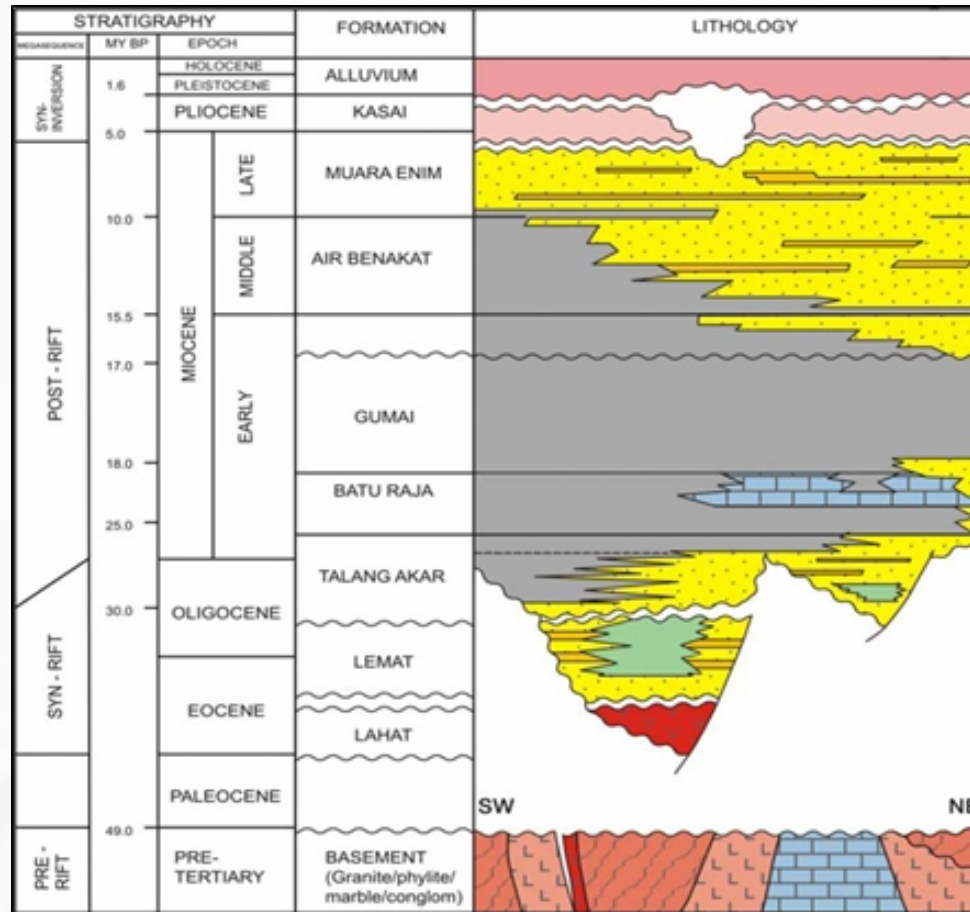
GEOLOGICAL SETTING

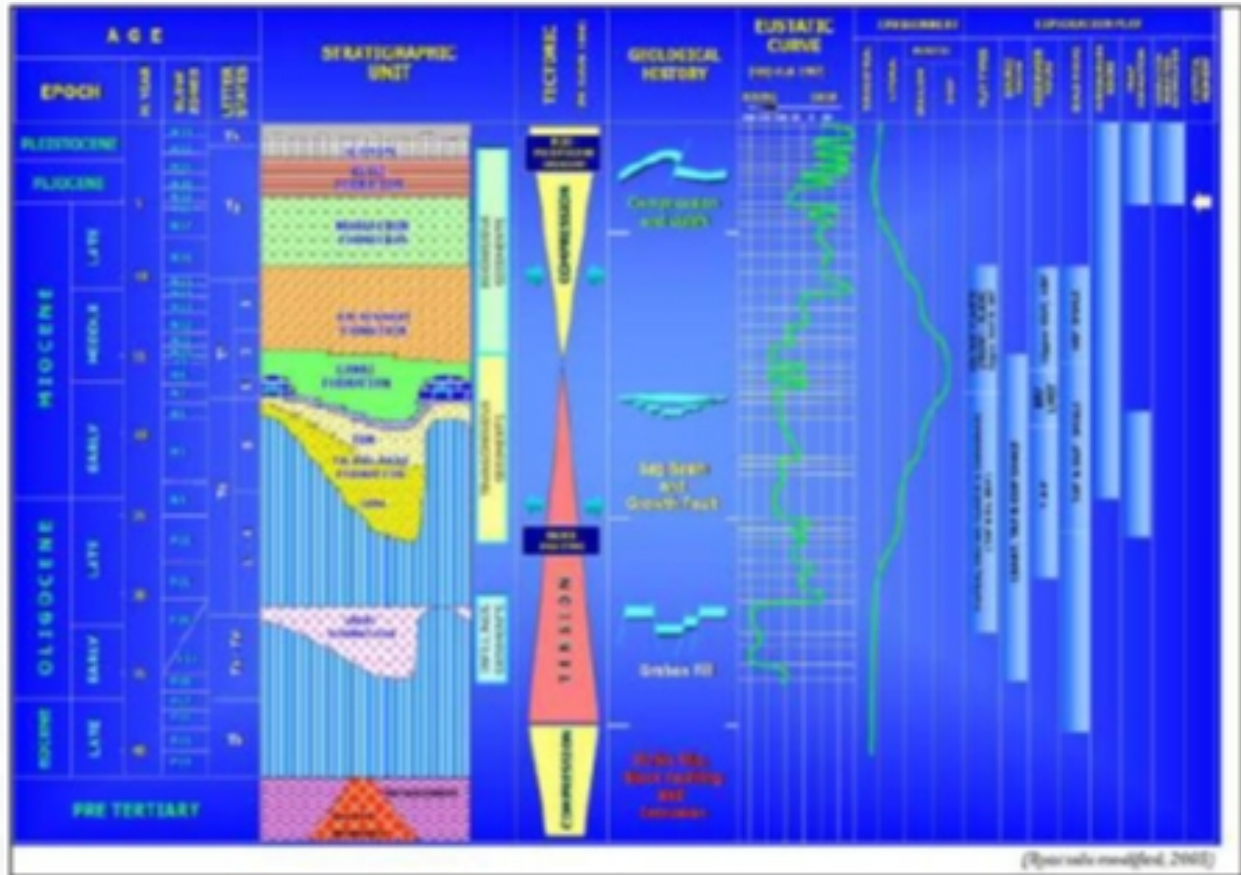
Geological history of the South Sumatra Basin is closely related to tectonic activity of the South East Asia region and controlled by interactions of Indo-Australia oceanic plate that moves northward; Westward moving Philippine - Pacific oceanic plate and the relatively stable Eurasian plate. The South Sumatra Basin is an area at the present, considered to be a back-arc basin, bordered by the Sunda craton on the North and on the East, the Tigapuluh mountain range is on the Northwest, the Barisan mountain range in the west and the Lampung High in the Southeastern.



Three Main Sub-Basin in South Sumatra Basin.

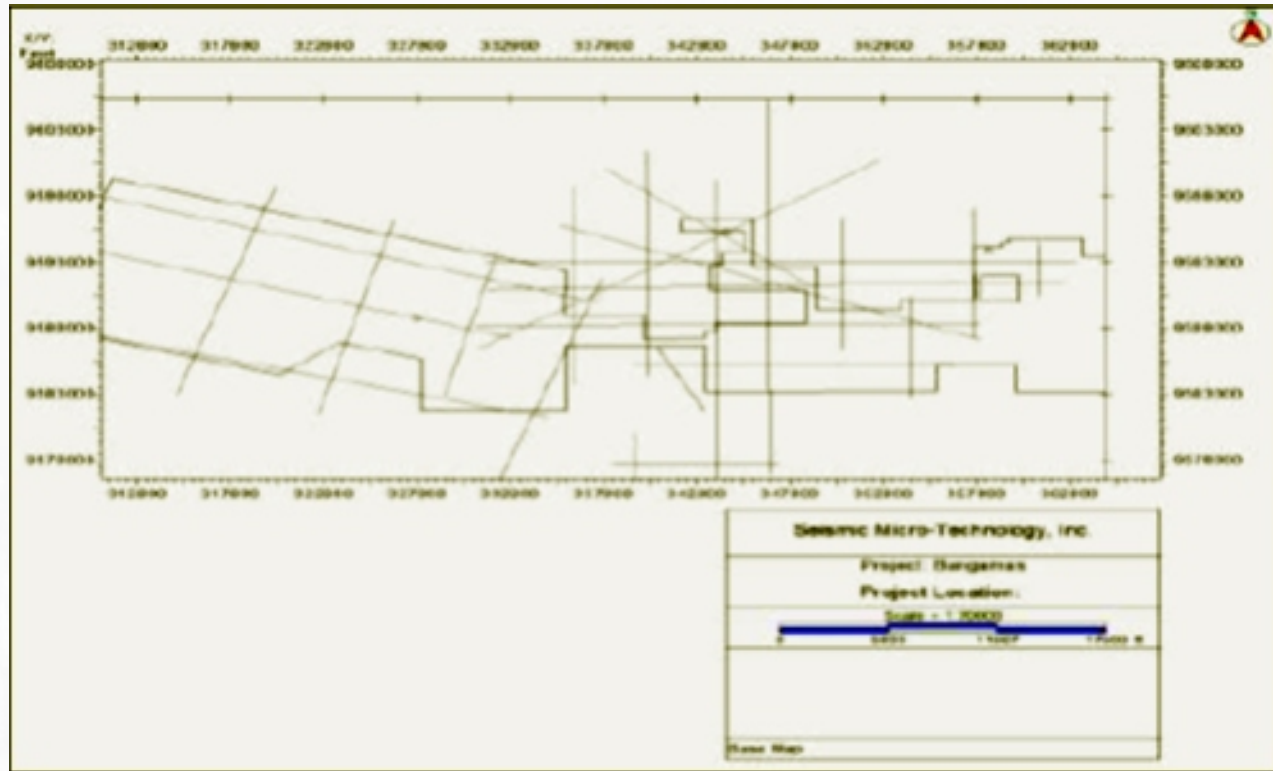
STATIGRAPHY



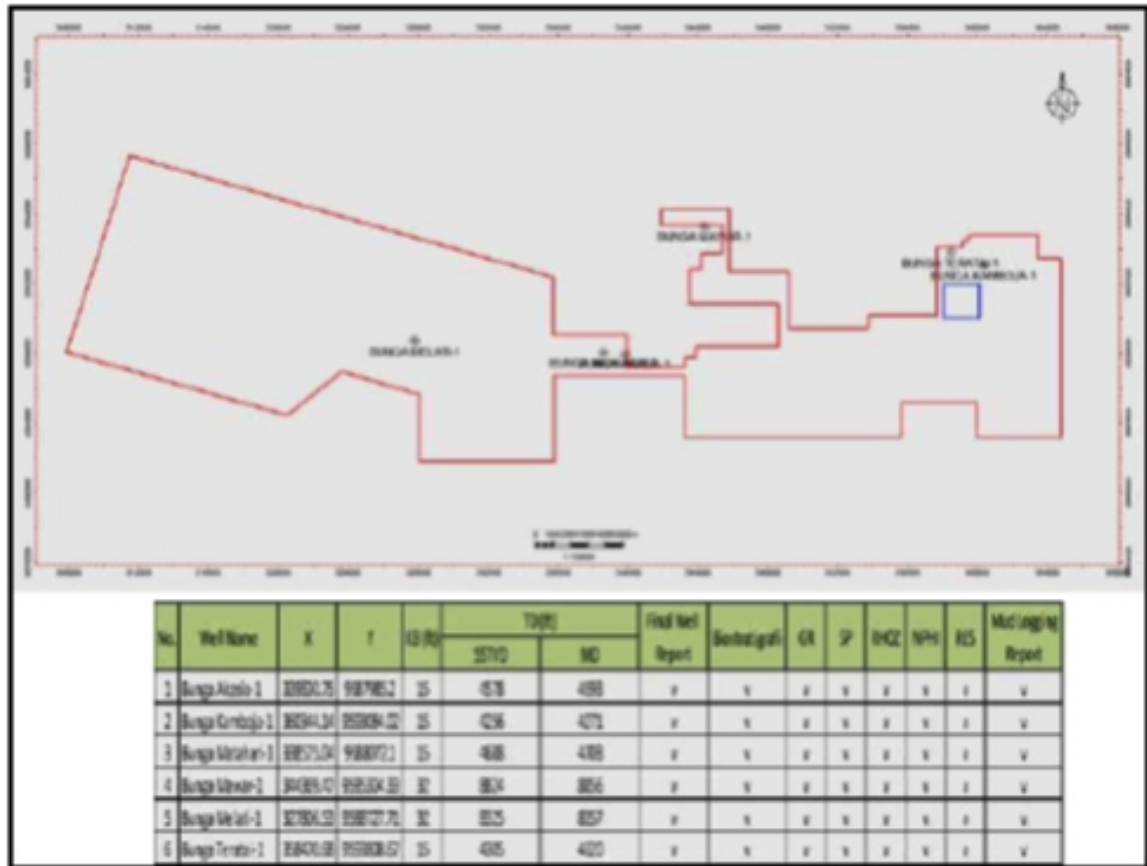


Stratigraphic nomenclatures of the East Gumai Area (Ryacudu modified 2005)

DATA AVAILABILITY



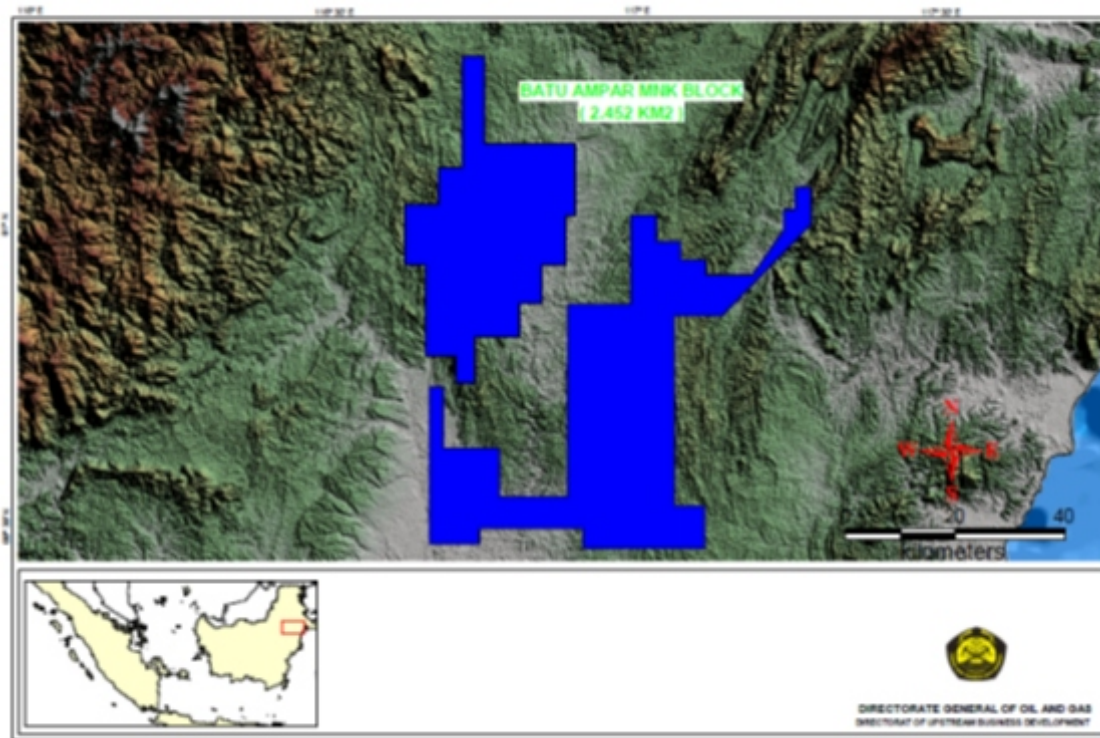
Seismic data availability of Bungamas area



Seismic data availability of Bungamas area

BATU AMPAR BLOCK

GMB BATU AMPAR BLOCK

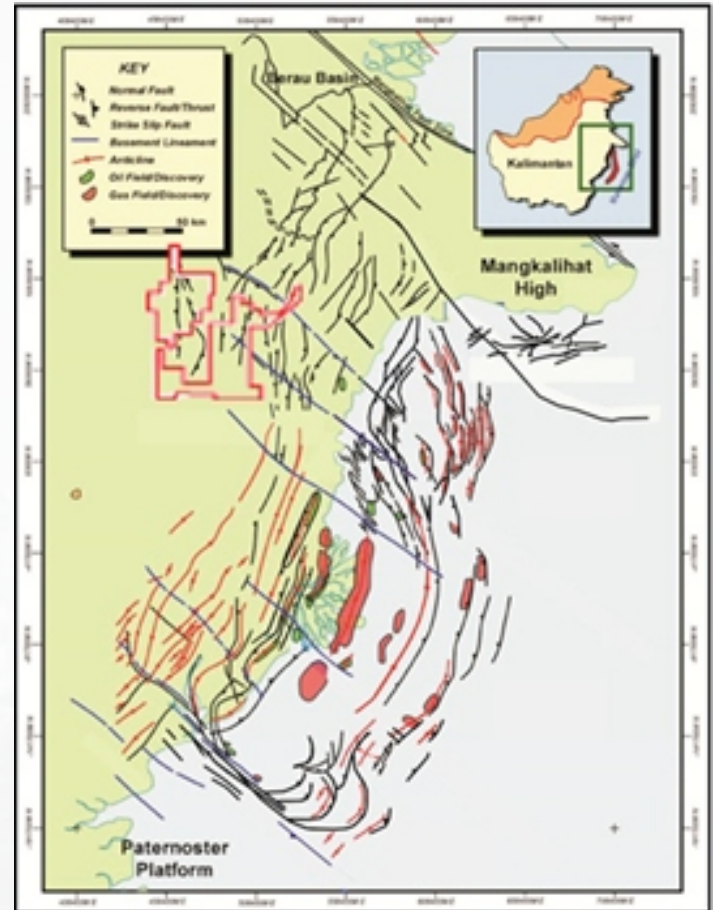


BATU AMPAR BLOCK

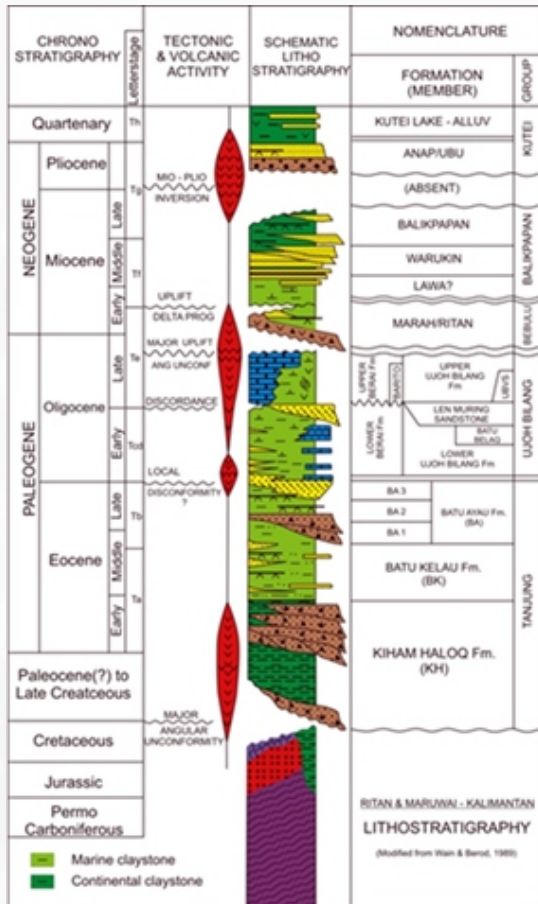
Batu Ampar Area is located in East Kalimantan Province, included administratively in Samarinda and Kutai Kartanegara Regency and covers about 2452 km² onshore. Geologically, area of Batuampar is located at Upper of Kutai Basin

GEOLOGICAL SETTING

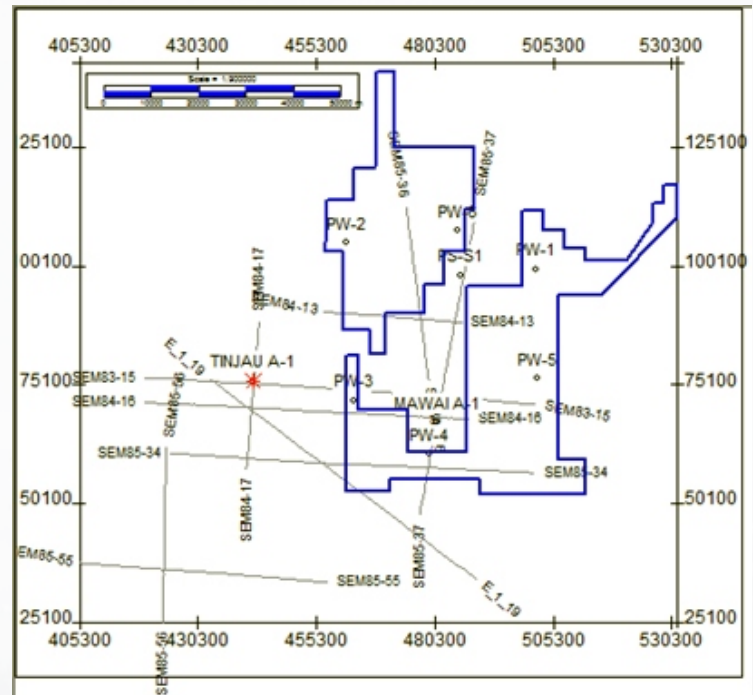
Batu Ampar area is situated in Eastern part of Kutai Basin, East Kalimantan, bounded by Kucing High to the West and Northwest which is consist of pre-Tertiary basement and Mangkalihat Ridge to the Northeast and Paternoster Ridge to the south. Kutai Basin is the extensional half graben. The sedimentation can be divided into an overall transgressive Palaeogene depositional phase and an overall regressive Neogene depositional phase.



STATIGRAPHY



DATA AVAILABILITY



SHALE HYDROCARBON SYSTEM

Target formation for shale hydrocarbon in Batuampar area are Lower Ujoh Bilang, Batu Ayau Fm, and Tanjung Fm that are located. Prospect Area of the Lower Ujoh Bilang, Batu Ayau Fm, and Tanjung Fm for shale hydrocarbon development is mainly in the north part of the area.



**DIRECTORATE GENERAL OF OIL AND GAS
DIRECTORATE OF UPSTREAM BUSINESS DEVELOPMENT**

For Further Information, please contact :

Secretariat of Tender Committee/Evaluation Committee/

Oil and Gas Unconventional Investment Center

Directorate General of Oil and Gas

Plaza Centris 1st Floor

Jl. H.R. Rasuna Said Kav. B-5, Jakarta 12910, Indonesia

Phone. 62-21-5268963, 62-21-5268910 ext. 145, Fax. +62-21-5269151