



Oil and Gas Investment Event

Jakarta, June 12, 2021

The upstream oil and gas industry still hold a significant role as the key driving force in the Indonesian economy. The growth of the upstream oil and gas industry however, has been relatively declining due to the maturing of assets. Furthermore, the current COVID-19 pandemic and the rapid development of alternative energy have made the situation much more challenging.

In addition, the emerging global and local trends such as the shale oil revolution in the US, energy transition, and low oil prices have created a very competitive market for investments in the upstream oil and gas business. We must build awareness and a sense of urgency that we are in competition with other oil producing countries around the world in terms of investment and therefore we must improve our investment climate.

According to analysis by oil and gas consulting companies such as Wood Mackenzie, IHS or Rystad, Indonesia is still considered as an attractive place for investment. However, the attractiveness is driven more from the prospect of oil and gas resources. On the investment climate perspective and the fiscal system and oil and gas risk however, there is much room for improvement.

To improve investment attractiveness, it is necessary to accelerate the policy formulation process to expedite the launching of more effective fiscal policies that are able to encourage investors to increase production and exploration activities in Indonesia, in order to meet the target of 1-million-barrel oil per day and 12 billion standard cubic feet of gas per day by 2030. These processes are being spearheaded by the Ministry of Energy and Mineral Resources, the Ministry of Finance, and SKK Migas.

With the spirit of synergize collaboration, please allow me to share with you the achievement and deliverability of the Indonesia Upstream Oil and Gas Investment Climate.

MAHAKAM FISCAL INCENTIVE

Improvement of fiscal terms has been viewed by Government of Republic Indonesia as one of the key answers to revitalize investment in oil and gas exploration and production activities and boost national petroleum reserves and production. In that spirit, Government of Republic Indonesia has approved fiscal incentive proposal submitted by Mahakam Block Operator, PT Pertamina Hulu Mahakam (PHM), the first ever incentive package given to Indonesian block in production phase. The approval of this incentive package will enable PHM to execute pending development projects, maximize resources recovery, and assure continuity of business and operation of Mahakam Block until end of contract in 2037.

Mahakam Incentive Package is granted in accordance to the provisions set up in the Government Regulation PP 27/2017 and comprises of the following instruments:

- Relaxation of first tranche petroleum
- Investment credit
- Acceleration of capital depreciation
- Non collectible VAT facility and LBT reduction for subsurface
- BMN usage fee (lease) holiday



The new fiscal terms have been registered through Mahakam PSC amendment, with applicability as of effective date 1 January 2021.

The incentive discussion process started in February 2020 with series of validation by SKK Migas of Mahakam reserves and resources figures, development plan and cost estimation, commercialization plan, and block valuation. Further process continued with incentive scheme alignment in September 2020. Staging submission process of incentive proposal based on PP 27/2017 and Ministry of Finance Regulation PMK 122/2019, from PHM to SKK Migas then continued with SKK Migas to Ministry of Energy and Mineral Resources, was smoothly concluded by the approval of incentive package by Minister of Energy and Mineral Resources on 6 January 2021.

Economic recommendation to qualify for tax break facility was issued by MESDM on March 2021, followed by finalization of PSC amendment in May and issuance of Tax Facility Letter (SKFP) by Tax Office on behalf of Minister of Finance in the same month.

We convey our highest appreciation to the Ministry of Finance, who has made possible issuance of PMK 140/2020 during ongoing due diligence process of Mahakam incentive proposal, that rendered one of the outstanding issues (BMN utilization fee) resolved in time.

The efficiency of the due diligence process and the clarity of regulations in place demonstrate the commitment and support of the government for the industry.

With approval of this incentive package, Mahakam partners will be able to execute projects previously considered as marginal, with estimated impact of 213 MBOE additional resources, 3.3 billion USD of planned investment, and 8 billion USD revenue from Mahakam block until end of PSC. Continuity of Mahakam business and operation will also deliver multiplier effects in term of supply certainty for power generation, midstream, downstream, and petrochemical industries based in East Kalimantan (PT Badak NGL, Pertamina Refinery Unit V, Kaltim Fertilizer Plant, PLN), business continuity of national oil and gas service companies, contractors, and suppliers, as well as local economy and employment opportunity.

The efficient process and approval of Mahakam incentive package, once again, is a demonstration of commitment and continuous support of Government of Republic Indonesia to revitalize investment climate of oil and gas sector in Indonesia.

The First POD using the Gross Split scheme for Coal Bed Methane (CBM) Production

In 2008, Indonesia started its exploration activities in the Coal Bed Methane (CBM) Reservoirs, part of the Non-Conventional Hydrocarbon. Exploration in the CBM reservoir is full of risks due to the young coal reservoir, brittleness character and Dewatering time needed in order to achieve gas peak production. With courage and consistency from all the parties involved, we were able to find Non-Conventional Hydrocarbon.

The GMB Tanjung Enim PSC was first signed in 2009. The PSC Contractors of the GMB Tanjung Enim PSC now consists of the Operator, Dart Energy (Tanjung Enim) Pte. Ltd. ("Dart Energy") and its Partners, PT Bukit Asam Metana Enim (BAME) & PT PHE Metra Enim.



Until 2018 the GMB Tanjung Enim PSC has executed several exploration activities, 3 exploratory wells, 6 core drilling and 7 production test. Based on the exploration data and subsurface evaluation, Area A and B has a CBM reserve of 127.93 BSCF from the Muara Enim Formation.

The Proposal for the first POD in the GMB Tanjung Enim PSC, Field A&B Area will produce 97.42 BSCF (sales gas) starting from 2022 until 2039, with the following scope of work:

- Drilling 209 Development wells in Area A & B.
- Building Well Head Cluster include Pipe.
- Building Gathering Station in Area A and B
- Building Central Processing Facilities (CPF) and Sales Gas Line.

Dart Energy as the Operator for the GMB Tanjung Enim PSC, is well experienced in exploring and developing CBM Reservoirs in other countries, such as China and Australia, and is confident that it will be able to accelerate and optimize the development project to achieve on stream in 2022.

Since the 2018 Proposal for First POD, Dart Energy and the Government of Indonesia has discussed the use of the Gross Split Scheme to Produce Gas from the GMB Tanjung Enim PSC, with an economic parameter of IRR : 15.4 % and GOI 30.3 %.

The PSC Amandment from a Cost Recovery scheme to a Gross Split scheme was approved on 4 May 2021 by the Minister of Energy and Mineral Resources and the process for finalization by internal contractor and partner will finish on June 2021, concurrently the first POD will be approved by the Minister of Energy and Mineral Resources.

The Upstream Oil & Gas Exploration Cooperation, between Eni Indonesia and SKK Migas

In order to achieve the production target of 1 million BOPD and 12 BSCFD in 2030, SKK Migas made several efforts to increase exploration activities, including technology collaboration with world-class companies. With this technology collaboration, SKK Migas hopes to have a different angle of subsurface understanding, as part of the effort to discover the next giant field.

Eni in recent years has had a number of exploration successes resulting in the discovery of significant volumes of hydrocarbons due to its innovative approach to exploration through cutting-edge technologies which proved to be a key instrument to achieve successful results in advanced layer fluid dynamics modelling. Such modelling is based on calculations made by the Green Data Centre at Ferrera Erbognone, Italy through the use of sophisticated proprietary algorithms for seismic imaging which allows for more accurate subsoil models, helping to reduce risks during the exploration and development stages.

The purpose of this MOU is to identify and evaluate potential collaboration through the exchange of information, data and ideas, and to define a dedicated framework for possible implementation in Indonesia. Hopefully, the results of this technology cooperation will lead for more exploration activities and finding giant fields in Indonesia.

Indonesia's Upstream Significant Milestone – *The Signing of Six Memorandum of Understanding*



Today we will also witness another Indonesia's Upstream significant milestone, which are the signing of 6 (six) *Memorandum of Understanding* with: Genting Oil Kasuri Pte. Ltd and PT Pupuk Indonesia; Petrochina International Jabung Ltd., PT Pupuk Sriwidjaja Palembang and PT Pertamina Hulu Rokan; Repsol Sakakemang B.V. With PT Pupuk Sriwidjaja Palembang and PT Pertamina Hulu Rokan; and also Kangean Energy Limited and PT Petrokimia Gresik.

The *Memorandum of Understanding* between Genting Oil Kasuri Pte. Ltd. and PT Pupuk Indonesia signifies great support from the Government of Indonesia on the development of Natural Gas in the eastern area especially in Papua Region. This agreement will secure the natural gas utilization roughly 1.66 TCF from Asap, Kido and Merah field for the Ammonia, Urea and Methanol Plant established by PT Pupuk Indonesia and its subsidiary. Moreover, this agreement will increase revenue from gas around \$5.7 billion. This project will boost West Papua province regional economic development from the multiplier effect such as new job creations, development of local businesses, and accelerate other investment opportunities.

The other signings of MOU which involve several parties, are part of the Indonesia Upstream Oil & Gas Milestone to support the development of fertilizer plant and oil lifting in several areas:

1. The MOU between PetroChina International Jabung Ltd (PIJL) with:
 - a. PT Pupuk Sriwidjaja (Pusri) for the development of Pusri-3B Project
 - b. Pertamina Hulu Rokan (PHR) on the gas supply for Steam Flood operation in Rokan Block
2. The MOU between Sakakemang and PHR and MOU between Sakakemang and PT Pupuk Sriwidjaja (Pusri).
3. The MOU between Kangean Energy Indonesia (KEI) and PT Petrokimia Gresik (PKG).

Joint Study Agreement and collaboration between PT Pertamina Hulu Energi and POSCO International Corporation

Joint Study Agreement and collaboration between PT Pertamina Hulu Energi and POSCO International Corporation is based on the same spirit to look for an opportunity in hydrocarbon exploration potential in the open area where Pertamina conducted 2D seismic survey for fulfilling PHE Jambi Merang firm commitment.

PT Pertamina Hulu Energi and POSCO International Corporation together proposed a Joint Study for the area as of 11.515 km² where a suite of hydrocarbon occurrences have been identified during 1980s to early 1990s through previous exploration activities.

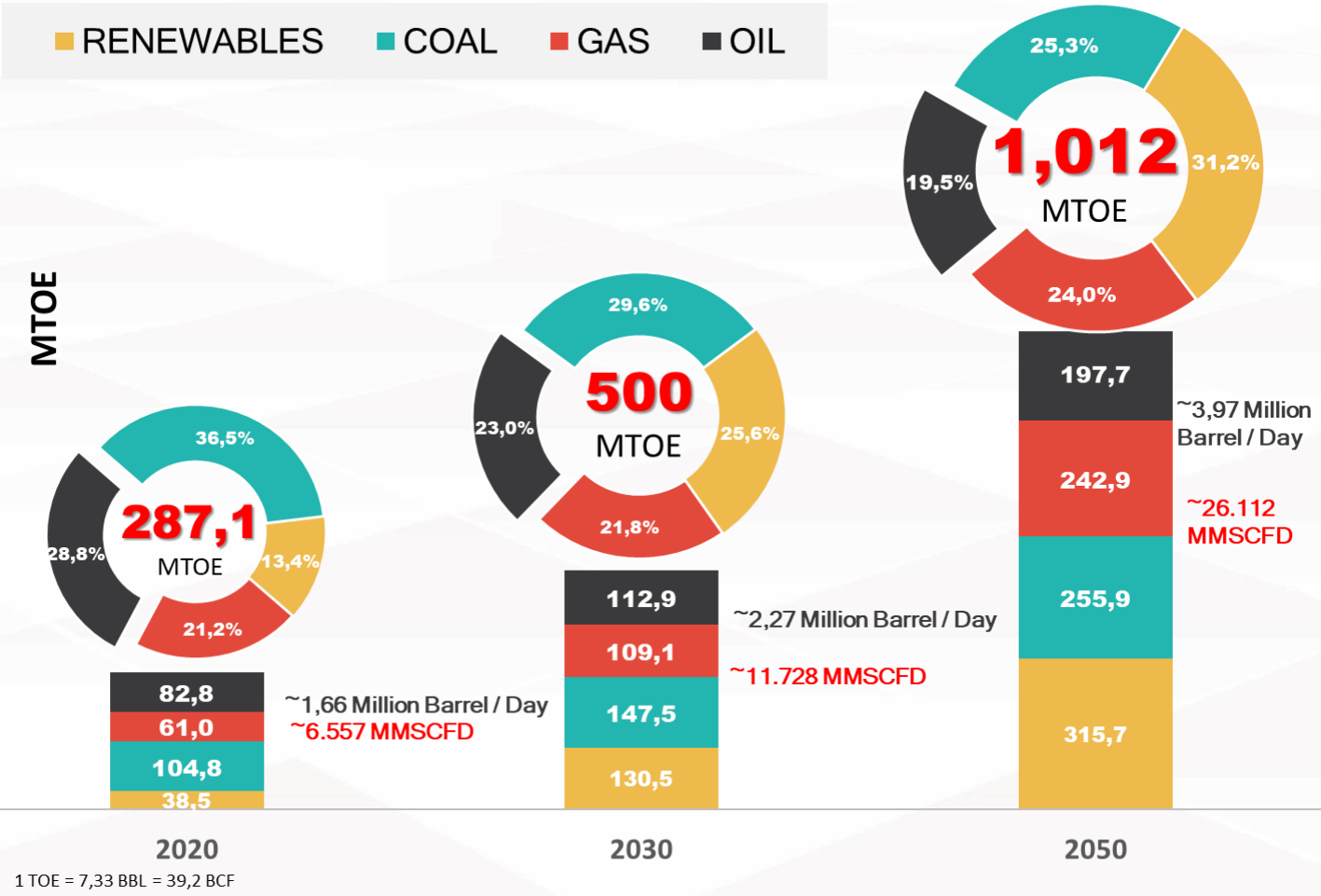
Collaboration between PT Pertamina Hulu Energi and POSCO International Corporation is expected to contribute in increasing Indonesian Oil & Gas Reserves and Energy Sustainability in the future.



OIL & GAS INVESTMENT EVENT

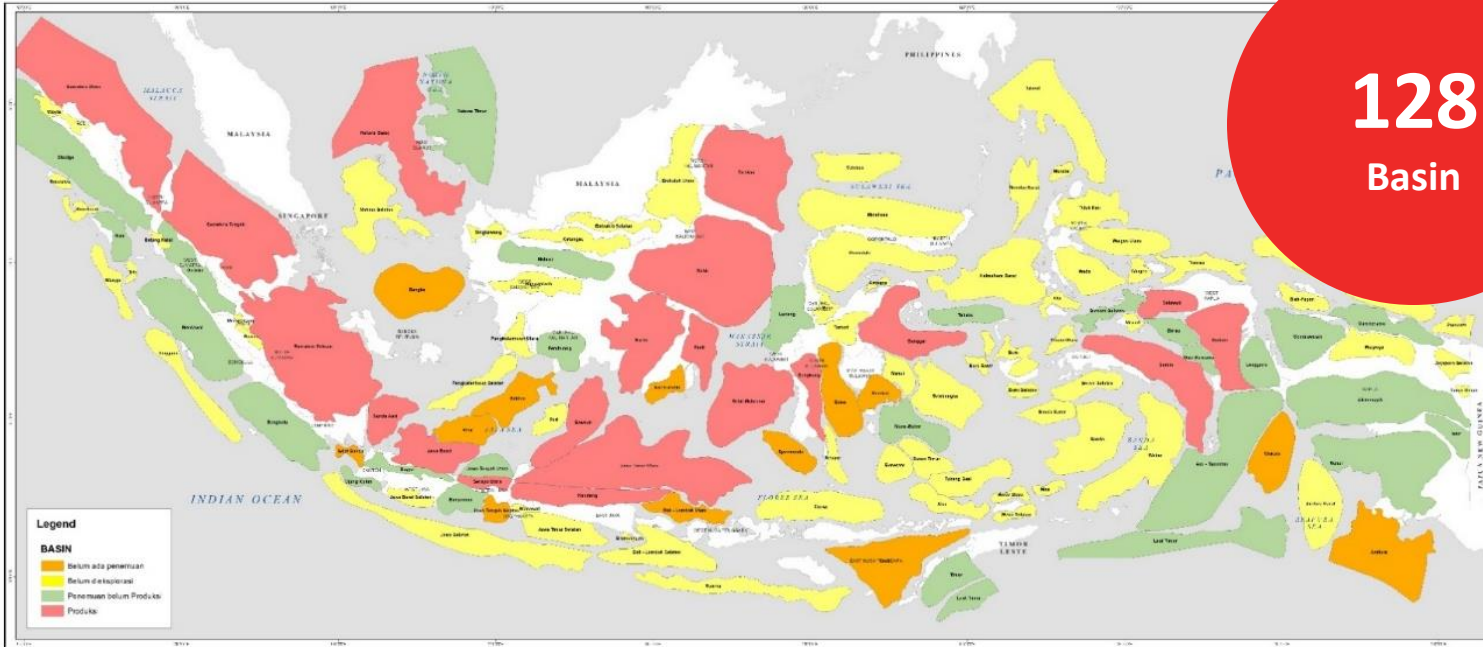
Jakarta, June 17th 2021

Setting New Production Target



- Indonesia economy is growing
- Energy demand is ever increasing to support Indonesia economic growth
- Energy transition will increase share of renewables but demand for oil will increase too.
- SKK Migas sets to produce 1 Million BOPD by 2030

Indonesia Oil and Gas Facts



128
Basin

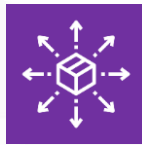
- ± **1000** O&G Fields
- ± **30.000** Wells
- 126** Proven Play
- 832** Field/Structure, and
- 113 BBOE** Discovered Vol. Inplace

- **Production** **20 Basin**
- **Non Production** **27 Basin**
- **Undiscoveries** **13 Basin**
- **Not Drilled Yet** **68 Basin**



23.000
National worker in
Oil Company

Rp 841 Trillion
Total Upstream Assets



750.000 km²
Working Area
5X Oil Palm Plant



630 Platform

Operation Offshore Platform	522 unit
Not Operated	102 unit
Already Abandonment	6 unit
Total	630 unit



3 LNG Plant
5 LPG Plant
26 FPSO/FSO/FPU



~20.300 km
Pipeline

Strategic Plan to transform the industry

Background

Pres. Regulation 36/2018

Law Number 22 of 2001

UUD 1945 Article 33

Nawacita II

RPJMN 2020 - 2024

Ambition

Achieving level best production, national capabilities, and sustainable environment

Target

Producing 1 MMBOPD oil and 12 BSCFD gas by 2030

Increasing multiplier effect

Ensuring environmental sustainability

Strategic Pillars

Improving Existing Asset Value

Resources to Production (R to P) Acceleration

EOR

Exploration

Supplier Competitiveness

Decommissioning

1

2

3

4

5

6

Enablers

People

SKK Migas Roles & Capabilities

10

Process

Investment & Commercialization model

9

Technology

Digitalization
Technology Adoption










7

8

Note:

1. Strategic pillars output is directly related to Target achievement
2. Enablers output is not directly related to Target achievement but provides support to strategic pillar. It consists of people, process and tools.

9 Stimulus Packages Proposals to Improve Investment Climate

No	Stimulus Packages	
1.	Postponement of Abandonment and Site Restoration (ASR) provision	 <div style="background-color: #90EE90; border-radius: 10px; padding: 5px;"> Temporary Postponement for Reservation due to Pandemic in 2020 </div>
2.	Tax holiday for income tax to be applicable for all oil and gas working areas.	 <div style="background-color: #FF0000; color: white; border-radius: 10px; padding: 5px;"> There will be further discussions involving DGOG, Fiscal Policy Body, DG Tax and DG Finance </div>
3.	Postponement or exclusion of VAT for LNG	 <div style="background-color: #90EE90; border-radius: 10px; padding: 5px;"> GR 48/2020 Jo. GR 81/2015 had been issued </div>
4.	Exemption of rental fees for state-owned assets to be utilized by upstream oil and gas activities.	 <div style="background-color: #90EE90; border-radius: 10px; padding: 5px;"> MoF Regulation No. 140/2020 Jo. PMK 89/2019 has been issued. </div>
5.	Elimination of Badak LNG Utilization Plant Fee of USD 0.22/ MMBTU	 <div style="background-color: #FF0000; color: white; border-radius: 10px; padding: 5px;"> Further discussions will be held among SKK Migas, LMAN and the assessment team of DG State Assets </div>
6.	Postponement or reduction of the indirect taxes up to 100 %	 <div style="background-color: #90EE90; border-radius: 10px; padding: 5px;"> As part of GR 27/2017 implementation </div>
7.	Gas can be sold at a discounted price for all scheme above above Take or Pay (TOP) and DCQ	 <div style="background-color: #90EE90; border-radius: 10px; padding: 5px;"> The implementation of certain tariff schemes above the TOP can be considered, especially for gas supplies which have no alternative buyer </div>
8.	Provide incentives of investment such as accelerated depreciation, split adjustment, full price DMO.	 <div style="background-color: #90EE90; border-radius: 10px; padding: 5px;"> This has been implemented to support the economics of PSC Companies </div>
9.	Support from the ministry that fosters the upstream oil and gas support industries (steel, rig, service and service industries) in supporting upstream oil and gas activities.	 <div style="background-color: #FF0000; color: white; border-radius: 10px; padding: 5px;"> Need to be coordinated with the relevant Ministries/Agencies (including the Ministry of Industry) </div>

Oil & Gas Investment Milestones



Upstream Oil and Gas Exploration Cooperation between ENI Indonesia and SKK Migas



Gross Split PSC for CBM development at Tanjung Enim Working Area



Joint Study Agreement for exploration cooperations between PHE and POSCO International Cooperations



6 MoU Signing between Gas Producers & Buyers



Fiscal Incentives for PHM