

New SKK Migas Roles in Decarbonization and Energy Transition

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CHAIRMAN OF SKK MIGAS
(Special Task Force for Upstream Oil and Gas Activities
of Republic of Indonesia)
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Global Trend: Dynamic and Challenging

World Economy



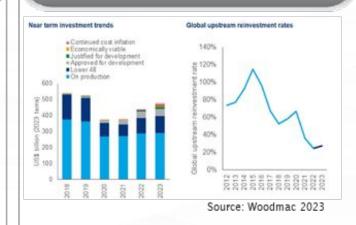
- Economic Rebound
- Geopolitic Russia - Ukraine
- US response: Inflation Reduction Act

Energy Trilemma



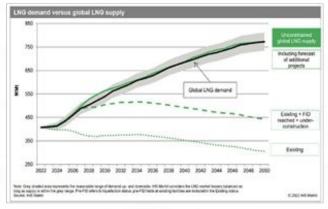
Priority to Energy security and affordability

Investment Trends



- Global Investments increase by 6,5%
- Cost Inflation by 5% FID
 + Supply Chain Challenge
- Exploration Opportunity: Low Cycle Time, low Emission and Low Cost Resources

Gas as Transition Energy



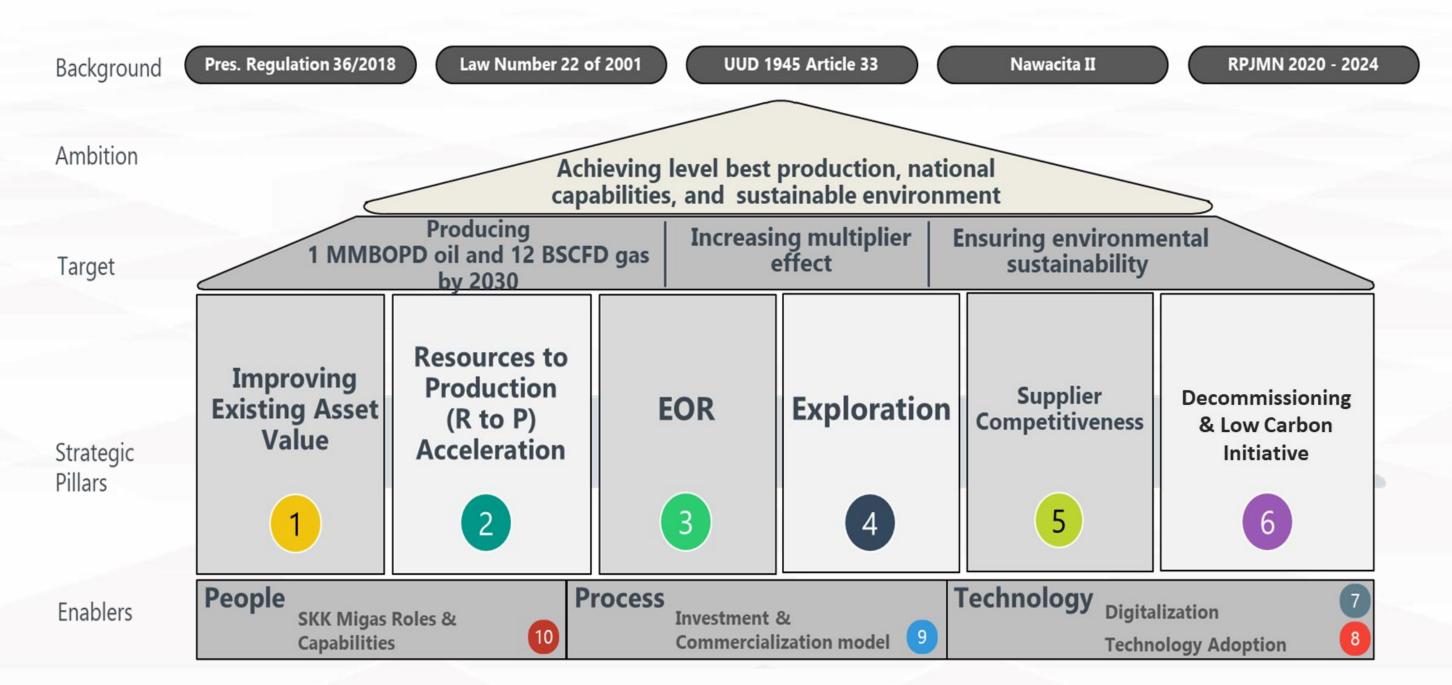
Source: IHS Markit

- Increase global gas demand
- Unlock Gas Projects
- Tech Trend: FLNG & Modular LNG





Upstream Indonesia Oil & Gas Strategic Plan (IOG) 4.0





Low Carbon Initiatives

CO₂ SEQUESTRATION (CCS-CCUS)

☐ INTERNAL ASSESSMENT Zelda (OSES), Mudi (TEJ), Kawengan, Raja, Tambun, Tanjung Tiga Barat, Wasian,

X-Ray (PEP)

STUDY

Air Serdang, Guruh, Sukowati, Ramba, Bajubang (PEP), Bekapai (PHM)

☐ HUFF & PUFF 🏈

Jatibarang (PEP), Gemah (Petrochina)

□ ccs-ccus (v)

UCC (Ubadari, BPBL) CCS (Abadi, IML)

ENERGY MANAGEMENT (ENERGY CONSERVATION.

(ENERGY CONSERVATION, FUEL SUBSTITUTIONS)

☐ NEW & REN. ENERGY

Photovoltaic (PHR). Reduce CO2, 23 thousand Ton Per Annum

GAS TO WIRE CONVERSION

5 Projects mainly in Badak. Saving: 39 MMSCFD gas.

ENERGY CONSERVATION

9 Fuel Gas Efficiency Project. Saving: 7.5 MMSCFD gas.

FUGITIVE EMISSIONS

METHANE INVENTORY

Calculations based

FUGITIVE EMISSIONS

Calculations based

ZERO ROUTINE FLARING (FLARE/ EMISSION REDUCTION)

FLARE UTILIZATION

- 10 Ongoing Project with potential reduction 14 MMSCFD.
- EMCL develops associated gas treatment projects with potential reduction: 10 MMSCFD.

REFORESTATION

(OFFSET CARBON, NATURE BASED SOLUTIONS)

☐ Planting 2 Million Tree Each Year

POLICY AND REGULATIONS

☐ SKK MIGAS - PSC

Develop Guideline (PTK) on CCS-CCUS as part of POD and Carbon Management

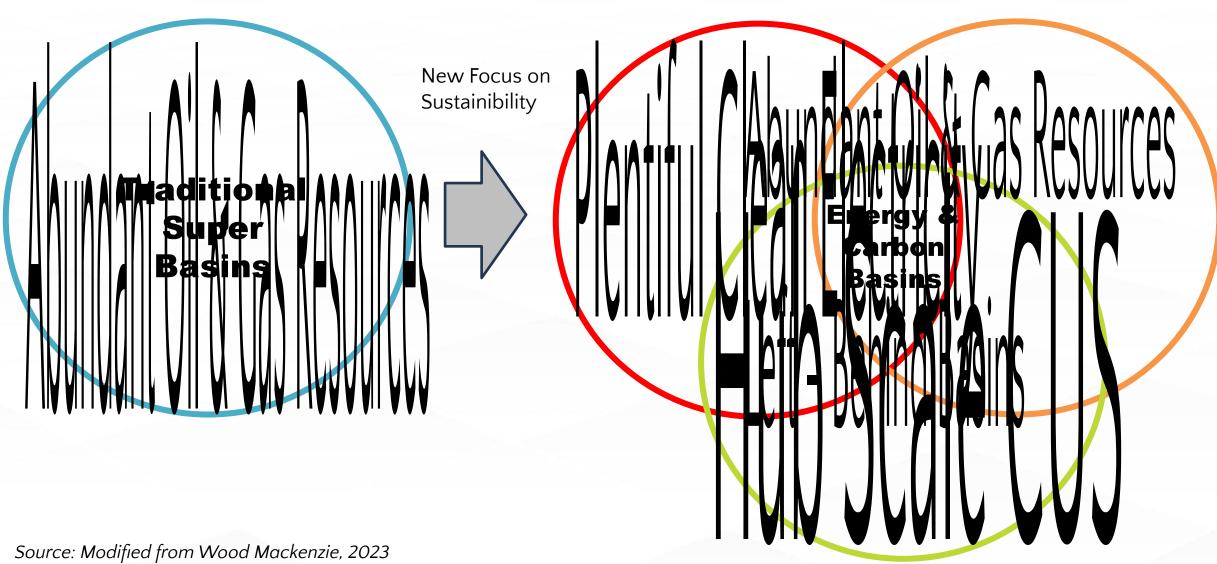
□ GOVERNMENT REGULATIONS

Ministerial ESDM Decree no 2./2023 on CCS/CCUS

Develop Presidential Decree on CCS/CCUS and Revise Government Decree no 27 and 53.



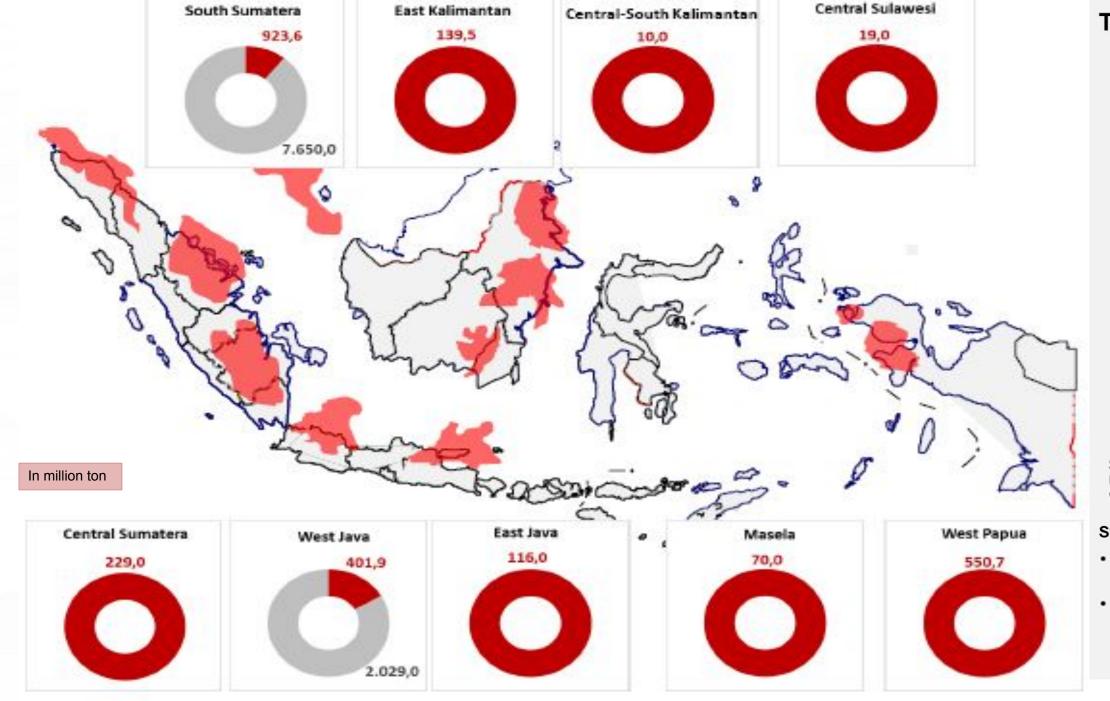
Indonesia Energy & Carbon Basins



"Changing
Paradigm of Basin
Management From
Just Oil and Gas
Basin into Energy &
Carbon Basins"



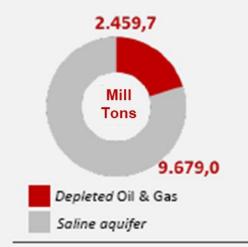
Identifying Carbon Storage Potential Capacity



Total Potential CO₂ Storage:

12.2 Billion tons CO₂

- Depleted Oil & Gas:
 - 2.5 Billion tons CO₂
- Saline Aquifers:
- 9.7 Billion tons CO₂



Source

LEMIGAS 2009 Study; LEMIGAS-ADB 2012 Study; LEMIGAS-World Bank 2015 Study; Ditjen Migas, 15 ongoing-porject

Study from International Institution:

- ExxonMobile:
- ~80 Giga Ton CO2 in saline aquifers
- Rystad Energy: >400 Giga Ton CO₂ Oil & Gas Reservoir and Saline Aquifers

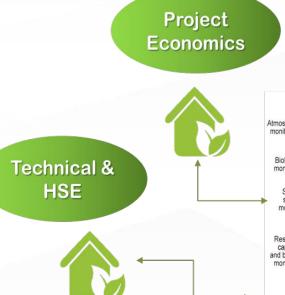


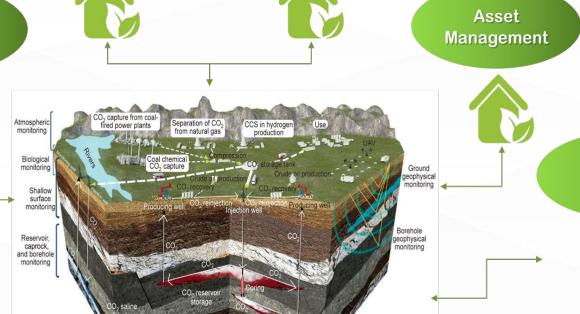
Regulation and Guideline on CCS/CCUS on Oil and Gas Working Area

Energy and Mineral Resources Decree No. 2 / 2023 on CCS and CCUS for Oil and Gas

Drafting Guideline
("PTK") of SKK
Migas on
CCS/CCUS for Oil
and Gas
Upstream
Activities

Commercial Accounting







- Oil and gas production is still priority
- Align with other regulations, such as Carbon Trading, MRV, etc
- Business concept between PSC and other parties

Legal

Detailed guidelines on technical aspects



Thank You









Humas SKK Migas

