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Investor Presentation Credit Suisse ASEAN Arising – Back in Business Singapore 24 May 2022

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Cautionary Statement



Forward-looking Information

The information, statements, forecasts and projections contained herein reflect the Company's current views with respect to future events and financial performance. These views are based on assumptions subject to various risks. No assurance is given that these future events will occur, or that the Company's assumptions are correct. Actual results may differ materially from those projected.

Petroleum Reserves Information

In this presentation, the Company discloses petroleum reserves that are not included in the Securities Exchange and Commission of Thailand (SEC) Annual Registration Statement Form 56-1 under "Supplemental Information on Petroleum Exploration and Production Activities". The reserves data contained in this presentation reflects the Company's best estimates of its reserves. While the Company periodically obtains an independent audit of a portion of its proved reserves, no independent qualified reserves evaluator or auditor was involved in the preparation of reserves data disclosed in this presentation. Unless stated otherwise, reserves are stated at the Company's gross basis.

This presentation may contain the terms "proved reserves" and "probable reserves". Unless stated otherwise, the Company adopts similar description as defined by the Society of Petroleum Engineers.

Proved Reserves - Proved reserves are defined as those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations.
 Probable Reserves - Probable reserves are defined as those unproved reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable.



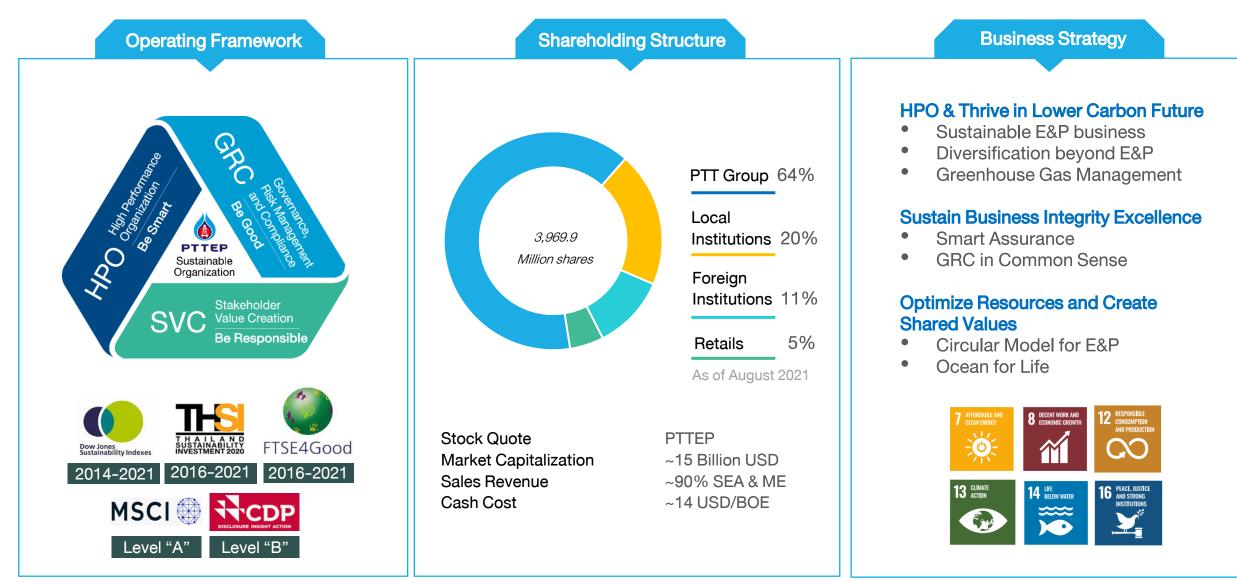
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Company Introduction

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PTTEP Overview | E&P Flagship of PTT Group





Projects | Diversified portfolio

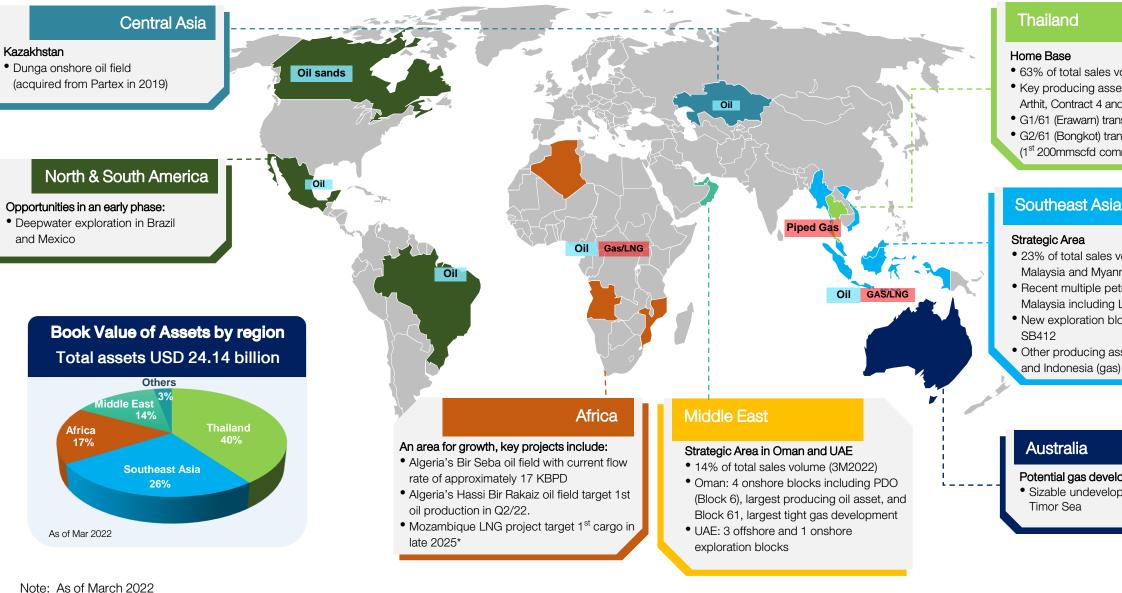
* Subject to local security situation



- 63% of total sales volume (3M2022)
- Key producing assets include Bongkot, Arthit. Contract 4 and S1
- G1/61 (Erawarn) transition completed
- G2/61 (Bongkot) transition in process
- (1st 200mmscfd commenced in Apr 2022)

- 23% of total sales volume, mainly from Malaysia and Myanmar (3M2022)
- Recent multiple petroleum discoveries in Malaysia including Lang Lebah
- New exploration block in Malaysia, Sabah SB412
- Other producing assets in Vietnam (oil) and Indonesia (gas)

- Potential gas development
- Sizable undeveloped gas resources in Timor Sea





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Business Update

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Key Focus Areas 2022

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|------------------------|--|
| G1/61 & G2/61 < | Safe transition & accelerate ramp-up activities |
| Assets Monetization < | LLB FEED for FID in 2023 Sarawak Clusters |
| Exploration < | 21 exploration and appraisal wells in 4 countries |
| GHG & CCS | Emission intensity reduction and CCS rollout |
| Net Zero | To achieve Net Zero GHG Emissions by 2050 |
| Diversification | ARV, G2P, CCU, Renewables, H2 study |

Transition of G1/61 and G2/61

Note: ARAA : Asset Retirement Access Agreement ATA : Asset Transfer Agreement OTA : Operations Transfer Agreement PSC : Production Sharing Contract SAA : Site Access Agreement

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G1/61 - Erawan

Operatorship transfer completed

- Initial production rate 200–250 mmscfd
- Sole Investment 100%

G2/61 - Bongkot

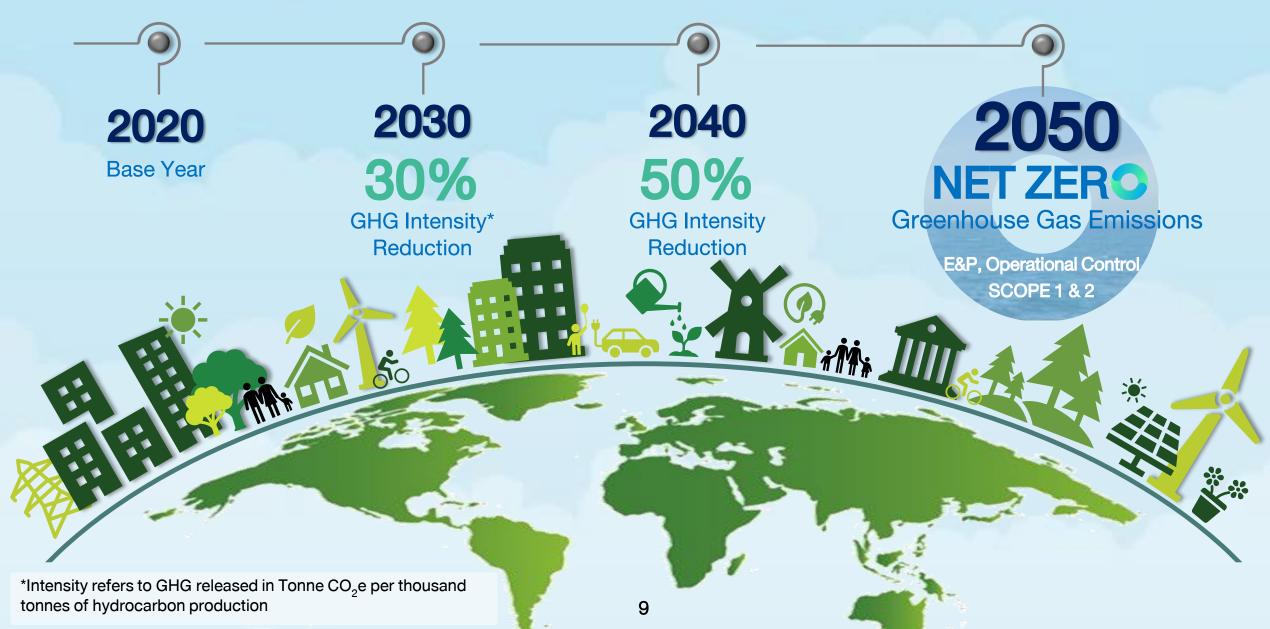
- Transition of 200mmscfd completed
- Proceed for additional 500mmscfd in Mar 2023
- Production rate 700mmscfd



-----G1/61 Site Access Delay -----><----G1/61 Preparation and Production Ramp-up -------->

Our Net Zero Ambition





Business Update | E&P





Transition and Operatorship transfer completed 24 APR 2022. Proceed to ramp-up activities to achieve 800MMSCFD in 24 months

<u>G2/61</u>

Transition of 200MMSCFD completed On track for additional 500 MMSCFD in Mar 2023



<u>SB412</u>

Obtained new block SB412 from MY Bid Round 2021. PSC signed in March 2022.

<u>SK410B</u>

Prepare to drill 1 more exploration well in 2022 For LLB - FID expected in 2023



Yadana

Become new operator with 37% interest by 20 July 2022



Sharjah Onshore Area C

25% stake acquisition completed 1 March 2022 On progress of seismic activity



1st Cargo expected in 2025 awaiting local security situation



HBR-Phase I 1st Oil expected in Q2/2022 at 4 KBOED



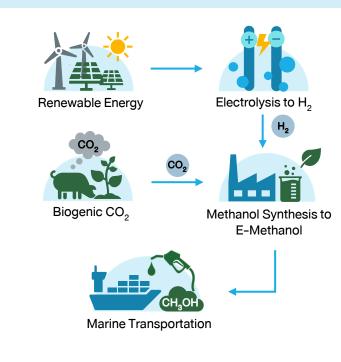
Business Update | Beyond E&P



Green Methanol

24 Jan 2022 : Signed a MOU with multiple international firms to explore Green Methanol value chain, with plan of 50KTPA methanol production plant in Singapore

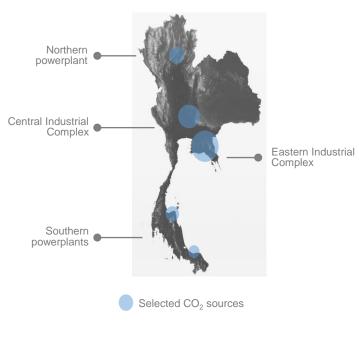
What is Green Methanol?



CCS

12 January 2022 : Established Thailand CCS Project Task Force to develop CCS initiatives

25 April 2022 : Signed a MOU with INPEX and JGC to explore on CCS project in Thailand



Solar Farm

- 1st Pilot Solar energy project of PTTEP
- ~10 MWp, FID mid 2022 and COD early 2023
- 100% owned by FST, 100% offtake by S1
- Completed FEED and started application of permits and licenses





- 21 April 2022 : Establishment of B-Med X, a JV between Cariva, a subsidiary of ARV, and BJC Healthcare, subsidiary of BJC
- To develop an aesthetic marketplace application and expand to healthcare business such as remote healthcare system





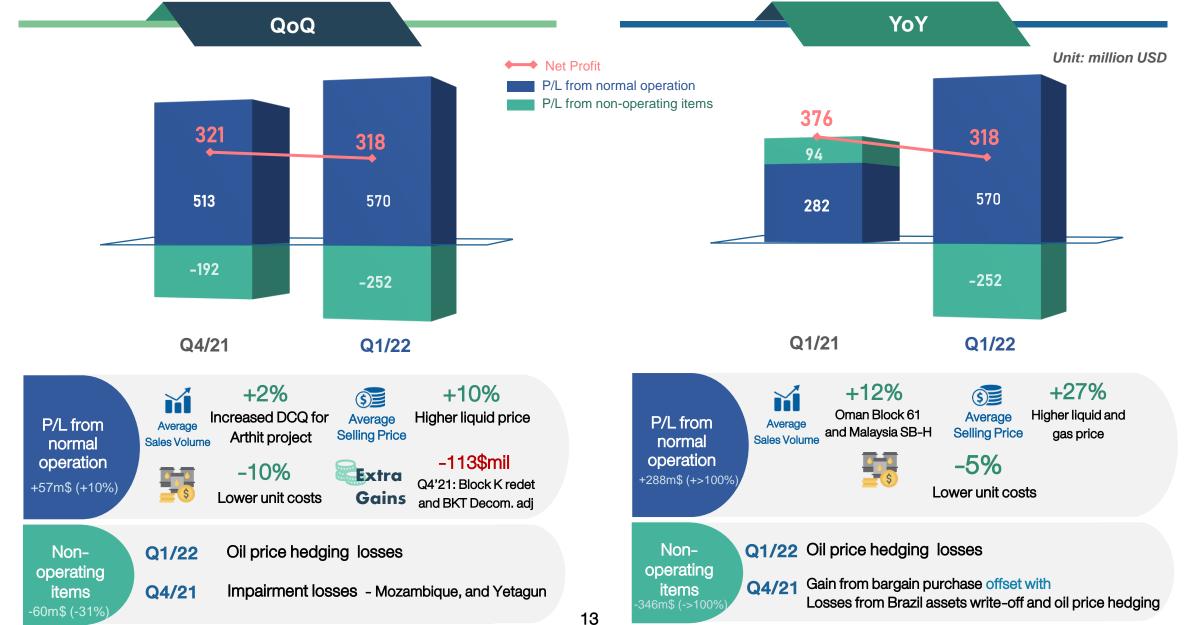


Financial Results & Guidance

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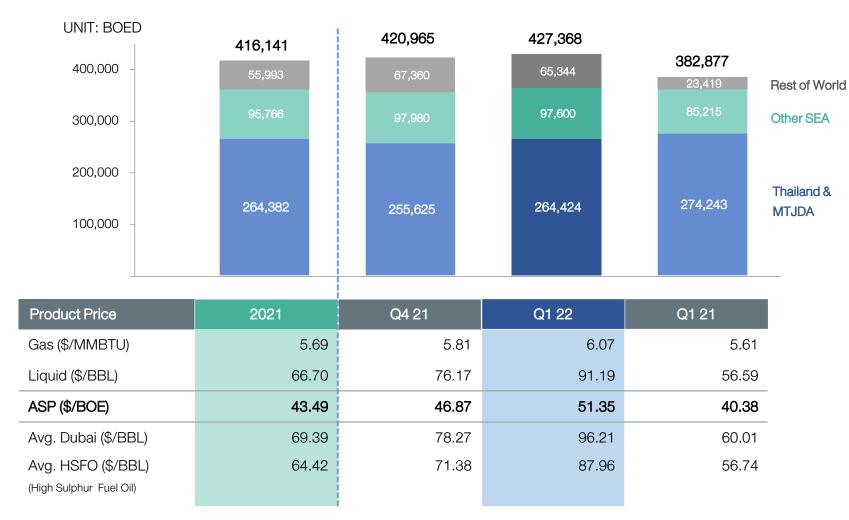
Results | Q1/22 Profit and Loss

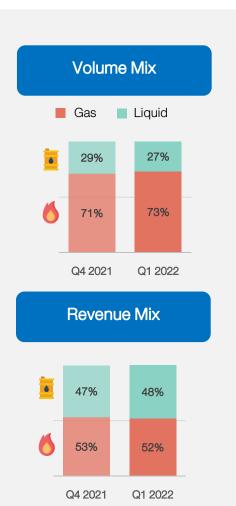




Results | Sales Volume and Product Price





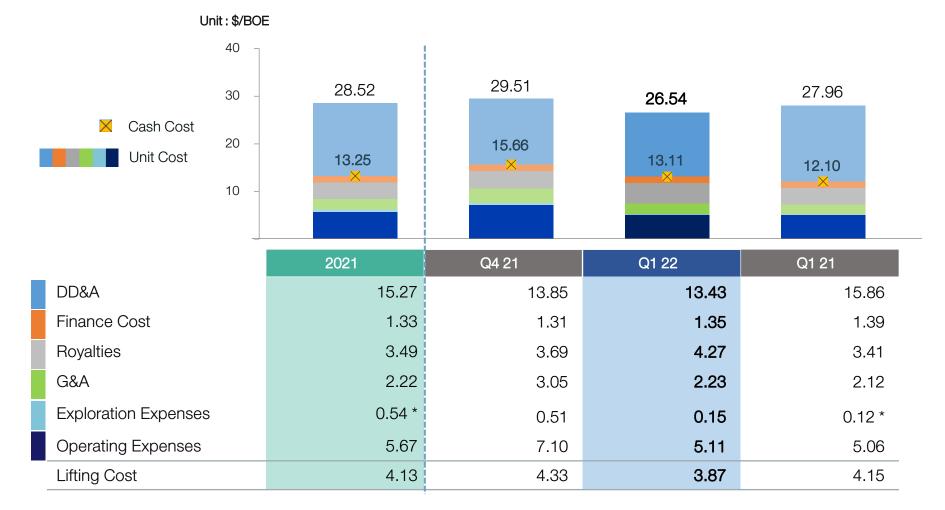


Note: Include sales volume from ADNOC Gas Processing (AGP)

Exclude Oman Block 61 deemed sales volume from tax payment by government ASP: Average Selling Price

Results | Unit Cost





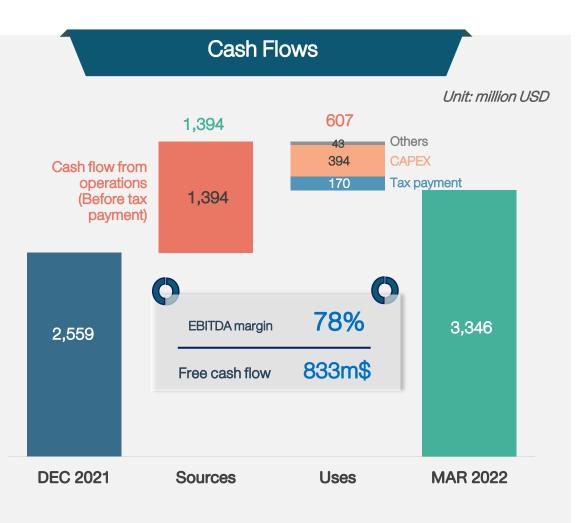
Note: * Exclude Exploration assets write-off in Brazil for Q1 21

All Unit Cost shown above <u>exclude</u> costs related to new business

The formulas for calculating ratios are provided in the supplementary section for your reference

Results | Cash Flows and Financial Position

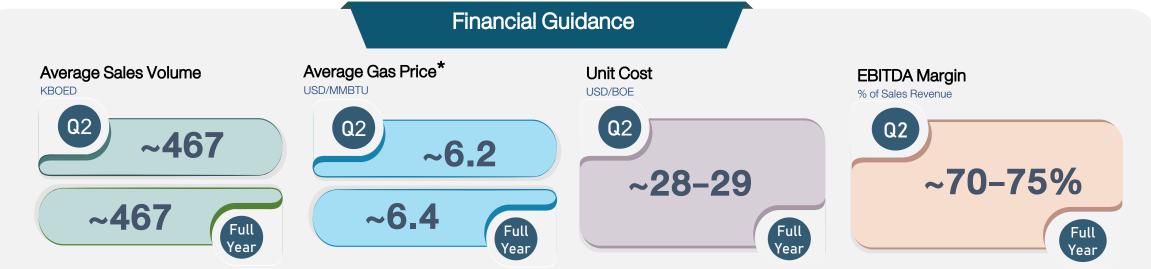






Results | Guidance





* Based on average Dubai oil price in 2022 at 96 \$/BBL, with sole investment in G1/61 (Erawan)

| | Debt Profile | |
|----------------------------------|--------------|----------|
| | 2021 | Q1 2022 |
| Debt to Equity | 0.33 | 0.33 |
| Debt to EBITDA | 0.80 | 0.72 |
| Average Cost of Debt | 3.38% | 3.38% |
| Average Loan Life | 12.7 Yrs | 12.4 Yrs |
| Interest Rate (Fixed : Float) | 83:17 | 83:17 |



Note: Debt excludes Hybrid bonds



Thank you and Q&A



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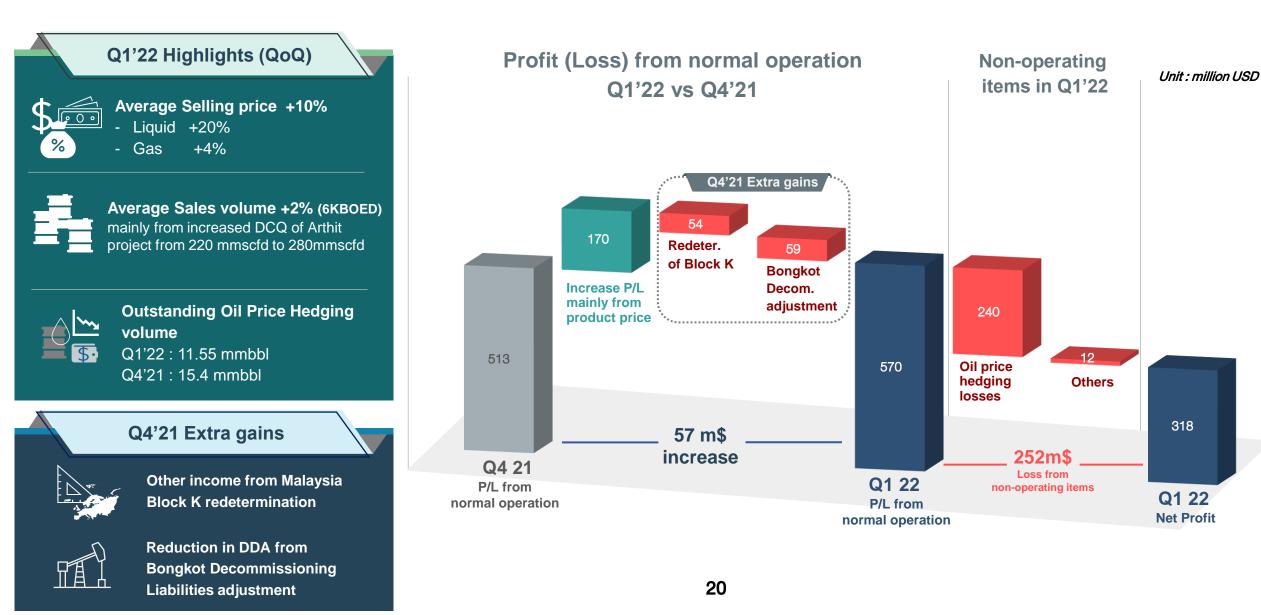
Supplementary information



A Comments

Finance | Q1/22 Highlights





Finance | Profit and Loss Statement

| | Q1 22 | Q4 21 | %QoQ | Q1 21 | %YoY | FY2021 |
|---|---------|---------|---------|---------|---------|---------|
| Total Revenues | 2,083 | 1,989 | 5% | 1,779 | 17% | 7,314 |
| Sales ⁽¹⁾ | 2,030 | 1,867 | 9% | 1,391 | 46% | 6,731 |
| Sales Volume (BOED) ⁽²⁾ | 427,368 | 420,965 | 2% | 382,877 | 12% | 416,141 |
| Sales Price (US\$/BOE) | 51.35 | 46.87 | 10% | 40.38 | 27% | 43.49 |
| Gain from a bargain purchase | - | - | - | 350 | (100%) | 342 |
| Others ⁽³⁾ | 53 | 122 | (57%) | 38 | 39% | 241 |
| Total Expenses | 1,776 | 1,671 | 6% | 1,405 | 26% | 6,118 |
| Major Expenses: | | | | | | |
| Operating Expenses | 197 | 275 | (28%) | 174 | 13% | 861 |
| Exploration Expenses | 6 | 20 | (70%) | 149 | (96%) | 226 |
| G&A | 93 | 125 | (26%) | 75 | 24% | 355 |
| DD&A | 517 | 420 | 23% | 547 | (5%) | 2,202 |
| Loss on Financial Instruments | 245 | 7 | >100% | 98 | >100% | 234 |
| Impairment Loss on Assets | - | 183 | (100%) | - | - | 183 |
| Income Tax Expenses | 497 | 448 | 11% | 192 | >100% | 1,287 |
| Share of profit (loss) from associates and JV | 11 | 3 | >100% | 2 | >100% | 15 |
| Net Profit | 318 | 321 | (1%) | 376 | (15%) | 1,211 |
| Profit (Loss) from normal operation | 570 | 513 | 11% | 282 | >100% | 1,479 |
| Profit (Loss) from non-operating items | (252) | (192) | (31%) | 94 | (>100%) | (268) |
| Non-operating items breakdown: | | | | | | |
| Oil Price Hedging | (240) | 5 | (>100%) | (107) | (>100%) | (284) |
| Tax from Effect of FX | (2) | 1 | (>100%) | (9) | 78% | (10) |
| Effect from FX and others | (10) | (15) | 33% | 5 | (>100%) | 12 |
| Impairment Loss on Assets | - | (183) | 100% | - | - | (183) |
| Exploration assets write-off | - | - | - | (145) | 100% | (145) |
| Gain from a bargain purchase | - | _ | - | 350 | (100%) | 342 |

Unit: million USD

PTTEP

(1) Include Oman Block 61 deemed sales revenues from tax payment by government

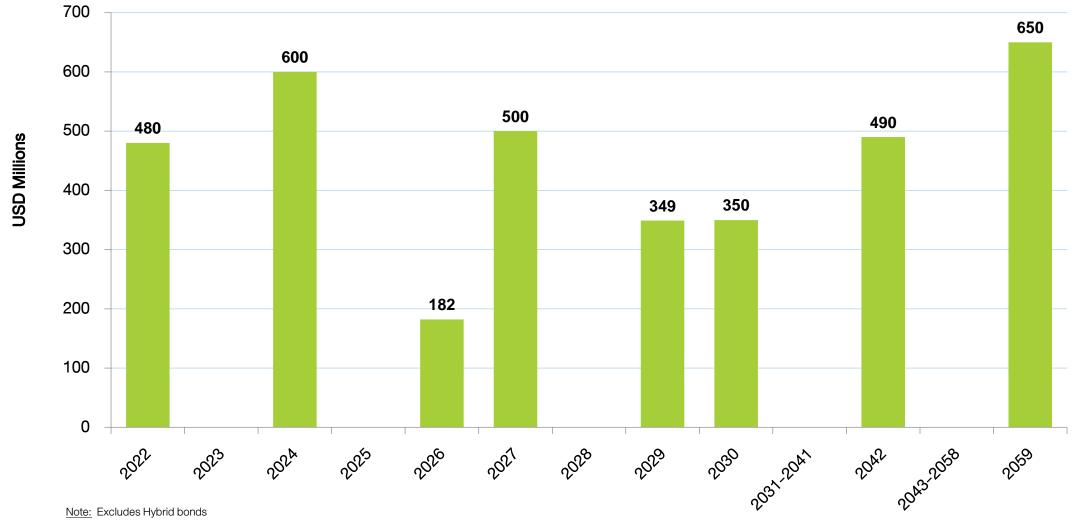
(2) Exclude Oman Block 61 deemed sales volume from tax payment by government

Note:

21 (3) Consisted of Revenue from Pipeline, Gain from FX, Forward Contract, and Gain from Oil price Hedging, and Malaysia Block K redetermination of participating interest in Q4'21

Finance | Debt Maturity Profile

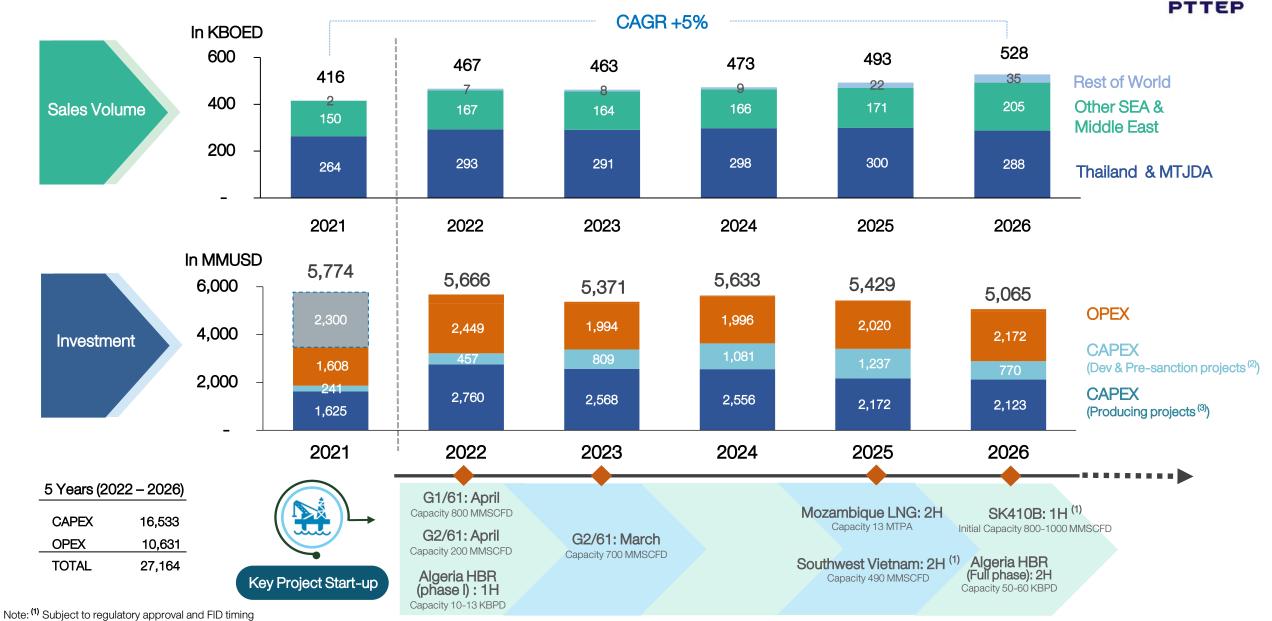




Unit: USD Millions or equivalent after cross currency swap

Not included Sole Investment in G1/61 (Erawan)

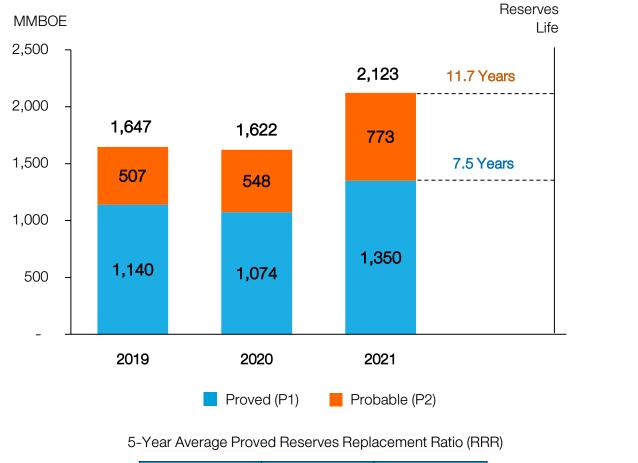
Finance | 5-year Investment Plan



⁽²⁾ Development & Pre-sanction projects include Mozambique LNG, Algeria HBR, SK410B and Southwest Vietnam ⁽³⁾ Including exploration and appraisal in all projects and head office CAPEX, and new businesses

Petroleum Reserves





| 55% | | | | | | | | | | |
|----------------------|--|---------|--|--|--|--|--|--|--|--|
| 45% | | 46% | | | | | | | | |
| P1 | | P1 + P2 | | | | | | | | |
| 2021 by Product Type | | | | | | | | | | |
| Gas Liquid | | | | | | | | | | |
| | | 2,123 | | | | | | | | |
| 1,350 | | 30% | | | | | | | | |
| 26% | | | | | | | | | | |
| 74% | | 70% | | | | | | | | |
| P1 | | P1 + P2 | | | | | | | | |

2021 by Geography

Domestic International

1,350

2,123

54%

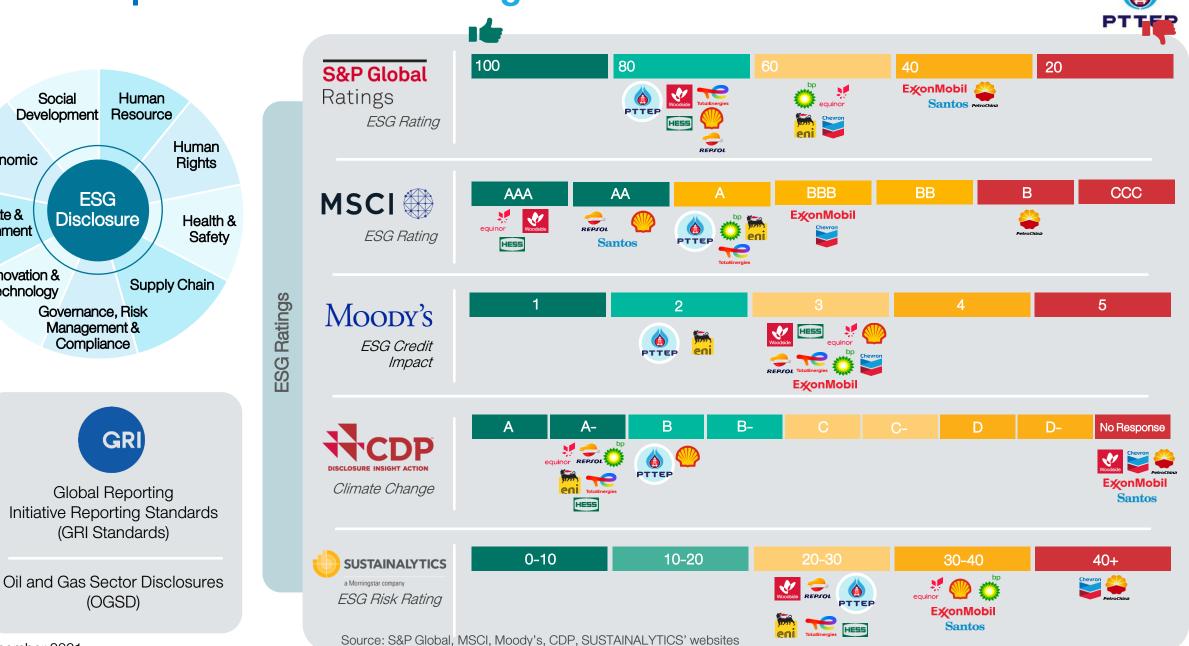
| 2019 | 2020 | 2021 |
|------|------|------|
| 1.5X | 1.5X | 1.9X |

• Based on total production of natural gas, condensate, and crude oil (including LPG) of 495 KBOED for the year ended December 31, 2021

• Figures include reserves from equity method

As of December 2021

SD & ESG | Disclosure and Ratings



ESG Climate & Disclosure Environment Innovation & Supply Chain Technology Governance, Risk Management & Compliance GR

Global Reporting

(GRI Standards)

(OGSD)

Social

Economic

Development Resource

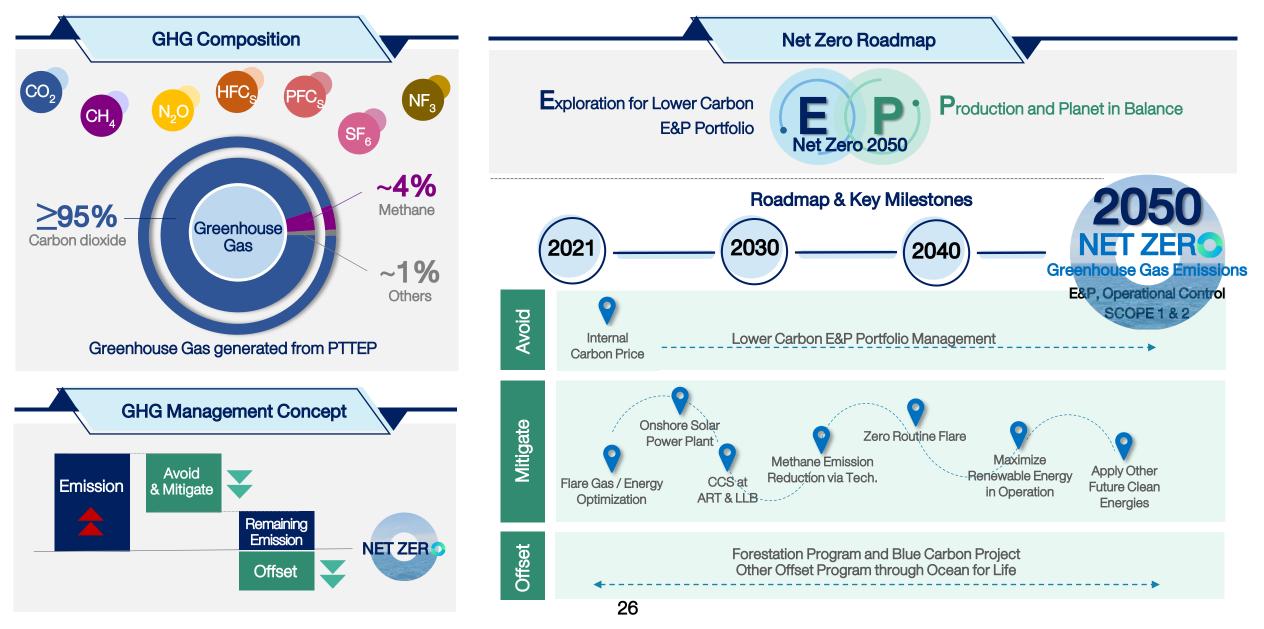
Human

ESG Standards

As of December 2021

SD & ESG | Net Zero & GHG Management





SD & ESG | Progress Q1/2022



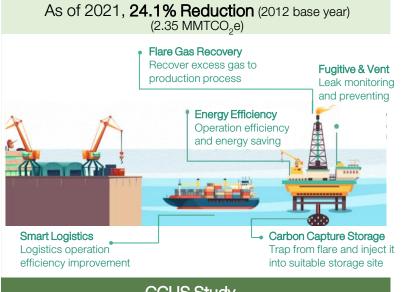
GHG Management

GHG Intensity Reduction Target **25%** By 2030 (2012 base year)

Net Zero By 2050

PROGRESS

Reduction of GHG Emission Intensity



CCUS Study

CNT from flare gas: Ongoing FEED Study for CNT Pilot Unit at S1

CO2 to carbonate-based product: Ongoing to fabricate prototype testing unit



CCS : Ongoing CCS Pre-FEED at ART and LLB



Circular Model

Zero Waste to Landfill by 2030

≥50% of Main Structure Reuse by 2030

PROGRESS

2020 2025 2030 Zero Hazardous Zero Industrial Zero waste waste to landfill Vaste to landfill Vaste

Upcycling High Volume Waste

Sand to Zeolite: Successfully synthesized prototype zeolite from nano-silica and further identify potential use case (moisture absorbent)



Oil sludge conversion to Graphene: Complete prototype unit fabrication









Net Positive Impact of Biodiversity & Ecosystem Services in Offshore Operations vs baseline by 2030



Increase in Local community income vs baseline by 2030

PROGRESS

Ocean Health & Biodiversity Monitoring Pilot Project of Seagrass

Plantation at Koh Samui and Koh Taen, Surat Thani

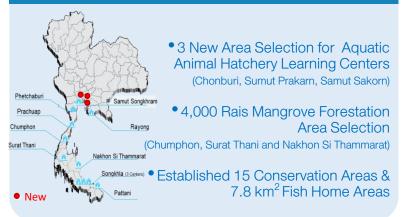


PTTEP



Develop Meteorological & Oceanographic (Met-Ocean) Data Station at ART

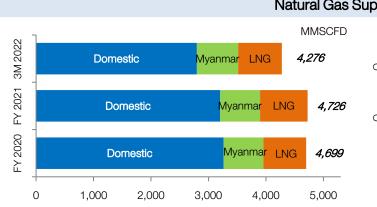
Ramp Up CSR around Ocean Flagship Projects



Thailand | Market Update



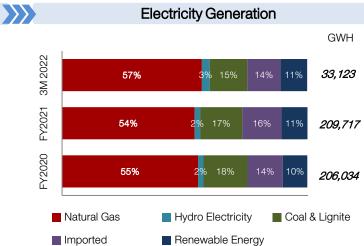
Thailand Energy Overview

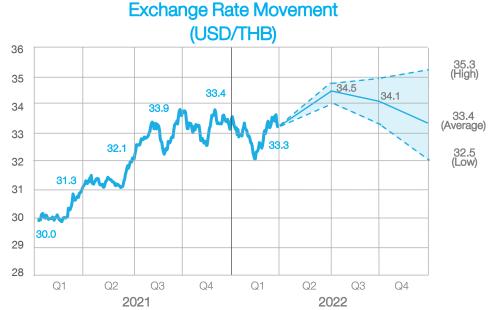


Natural Gas Consumption MMSCFD 3M 2022 4,309 Electricity Industry GSP FY 2021 4.395 Electricity Industrv GSP GV FY 2020 Electricity Industry GSP 4,368 **NGV** 2,000 0 1,000 3,000 4.000 5,000

Natural Gas Supply

- o Stable energy demand, while the energy prices continue to soar
- As of March 2022, compared with the same period of last year: significantly declined in domestic supply, while gas from Myanmar and LNG imports remained constant.





Consensus on the exchange rate mostly depends on

- Thailand economic recovery in particular the tourism sector
- o Bank of Thailand and Federal Reserve monetary policy tightening schedule
- o Geopolitical tensions and uncertainty from the Russia-Ukraine war

Source: Bank of Thailand, Bloomberg

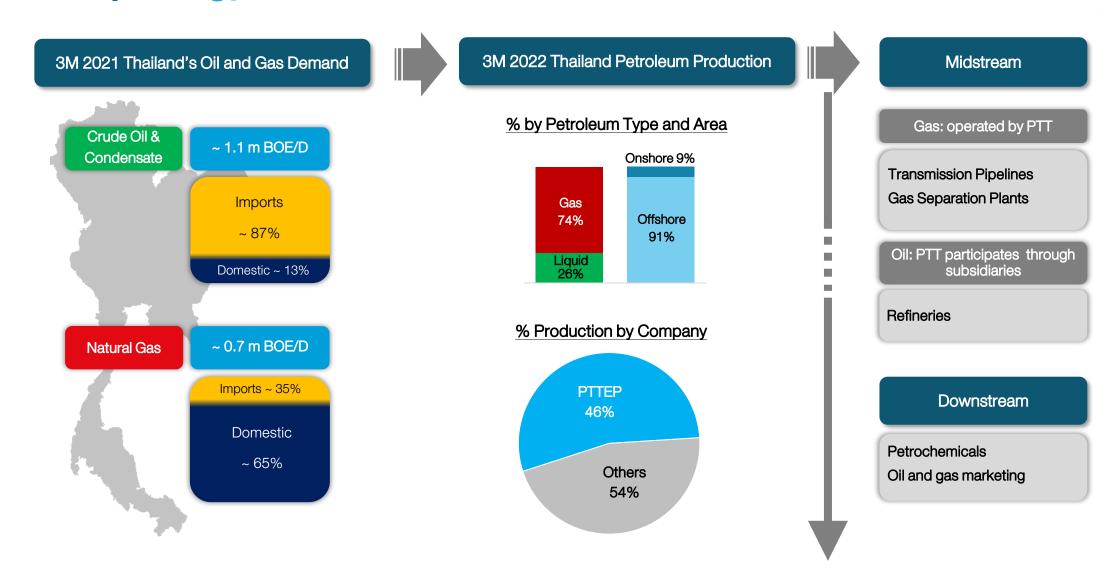
Forecast based on Bloomberg Consensus as of 31 March 2022

Source: Energy Policy and Planning Office (EPPO)

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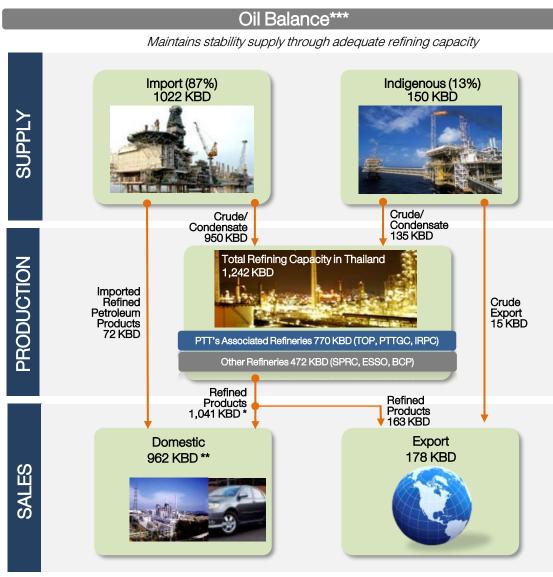
Thailand | Energy Value Chain

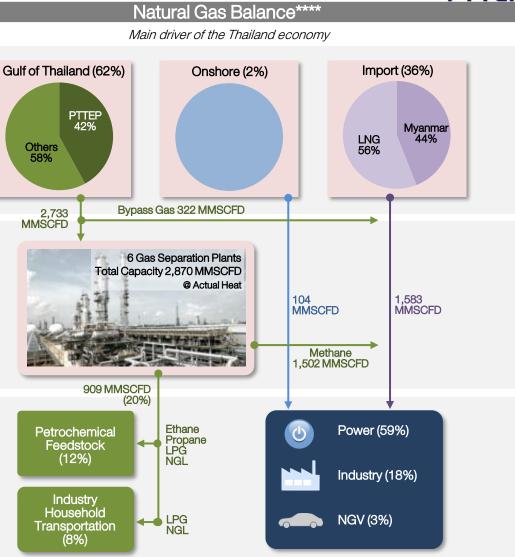




Thailand | Oil and Gas Balance







Source: PTT Note: *

* Refined product from refineries = 958 KBD, including domestic supply of LPG from GSPs and Petrochemical Plants = 83 KBD

** Not included Inventory

*** Information as of 2M 2022

**** Information as of Year 2021

MMSCFD @ Heating Value 1,000 Btu/ft³

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Projects | Thailand, Myanmar and Malaysia



Myanmar

Production

Three producing offshore gas fields supplying gas to both Thailand and Myanmar: Zawtika, Yadana and Yetagun

One field under development plan – M3 (100% WI)

Zawtika (80% WI) - PTTEP is operator

Yadana (25.5% WI) – PTTEP to be operator and stake will increase to 37.1% in July 2022

Yetagun (19.3% WI) – Approaching the end of field. Submitted notice to withdraw.

Thailand

Production / Ramp-up Projects

Bongkot (66.6667% WI)

Average natural gas and condensate sales volume of 819 MMSCFD and 22 KBPD in 3M2022

S1 (100% WI)

The largest onshore crude oil production field in Thailand with 3M2022 average crude oil sales volume of 25 KBPD Arthit (80% W/)

Average sales volume in 3M2022 was 277 MMSCFD of natural gas and 15 KBPD of condensates

Contract 4 (60% WI)

Average sales rate of 403 MMSCFD for natural gas and 16 KBPD for condensate in 3M2022

G1/61 (60% WI)

Operatorship transfer completed. Current production rate of 250-300MMSCFD. Sole investment 100%

G2/61 (100% WI)

GBS transition completed at production rate of 200 MMSCFD



Malaysia

Production

Block K Project

Kikeh (56% WI), Siakap North-Petai (SNP) (22.4% WI) and Gumusut-Kakap (GK) (7.2% WI)

 Average production volume in 3M2022 was 32* KBPD of crude oil and 27* MMSCFD of natural gas

SK309 and SK311 Project (59.5% WI)

For East Patricia field (42% WI)

 Average production volume in 3M2022 was 193* MMSCFD of natural gas and 20* KBPD of condensates and crude

Block H Project

Rotan field (56% WI) Remaining Area (42% WI)

- First gas early February 2021 with average production volume in 3M2022 at 275 MMSCFD of natural gas
- Full capacity at 270 MMSCFD

For Block K, gross production is net off utilization

Exploration

Sarawak SK410B Project (42.5% WI)

- Multi TCF gas discovery in Lang Lebah Field
- Expected to reach Final Investment Decision (FID) in 2023

Sarawak SK417 and Sarawak SK405B projects

• New Petroleum discoveries with additional well drilling to assess upside potential

Sabah SB412

New block awarded from 2021 Malaysia Bid Round
 The project is under preparation for Exploration activities

Note: WI – working interest

Projects | Vietnam and Indonesia





Vietnam



Vietnam 16-1 (28.5% WI)

- Average sales volume of crude oil was 13 KBPD in 3M2022
- In 2022, the project has plan to drill
 2 development wells in Q3 Q4/2022.



Southwest Vietnam

- Vietnam B & 48/95 *(8.5% Wl)*
- Vietnam 52/97 *(7% Wl)*
- Field Development Plan was approved by Government
- The project is currently in the negotiation process on commercial terms to put forward FID, with production capacity approximately 490 MMSCFD

Indonesia

Natuna Sea A (11.5% WI)

• Average sales volume of natural gas was 199 MMSCFD in 3M2022



Projects | Middle East



Abu Dhabi Offshore 1,2 and 3

UAE

- High potential prospective resources with significant sizeable discoveries
- Located North-west of Abu Dhabi Emirates, United Arab Emirates
- Granted the award for exploration in January 2019 2020
- Operated by Eni Abu Dhabi B.V. (70% interest)

Sharjah Onshore Area C

- High gas & condensate potential with the possibility of integrating with surrounding fields
- Located in the central part of Sharjah Emirate , United Arab Emirates
- Operated by Eni Abu Dhabi B.V. (50% interest)

ADNOC Gas Processing (AGP)

• One of the largest gas processing complexes in the world (total capacity of 8 BCFD)

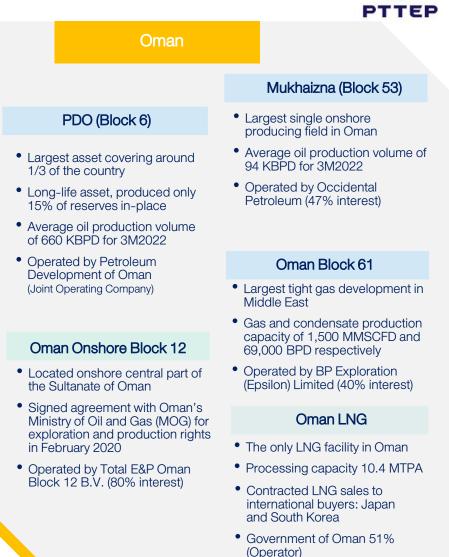
JV: 3 plants with capacity of 1.2 BCFD ADNOC: 2 plants with capacity of 6.9 BCFD

- Essential to Abu Dhabi and UAE's economy
- Sizeable volumes of Propane, Butane and Naphtha offtake
- Operated by ADNOC (68% interest)



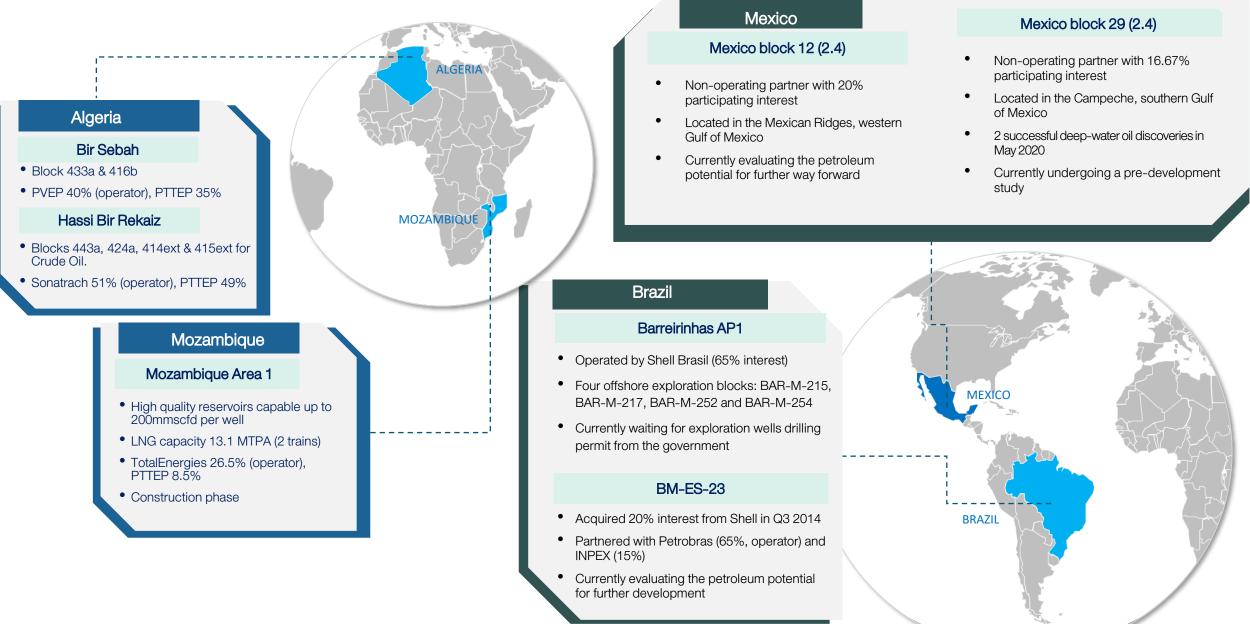
Abu Dhabi offshore 3 Sharjah AGP Onshore Area C Abu Dhabi PDO Offshore 1 U.A.E. (Block 6) \bigcirc OLNG Abu Dhabi OMAN Block 61 Offshore 2 Mukhaiza (Block 53) **Oman Onshore** block 12 *Block awarded in 2019 **Block awarded in 2020

- Production phase
 Exploration phase
- Midstream



Projects | Rest of the World





Projects Details | Thailand



| | Project Name | Status | Phase | Participating Intere | Participating Interest* (%) | | Sales Vol Liquid (KBPD) | Latest Status |
|---|---------------------------|----------|------------|--|---|-----|----------------------------|---|
| 1 | Arthit | Operator | Production | PTTEP Chevron MOECO | 80% 20% 4% | 277 | 15 | Increase Sales Gas DCQ from 220 to 280 MMSCFD in Feb'22 |
| 2 | B6/27 | Operator | Production | PTTEP | 100% | - | - | Prepare for decommissioning activities |
| 3 | B8/32 and 9A | JV | Production | PTTEP Chevron MOECO KrisEnergy Palang Sophon | 25.01% 51.66% 16.71% 4.63% 2% | 50 | 11 | Ensure gas deliverability level at DCQ Drill development wells Preparation for wellhead platform reuse in 2022-23 |
| 4 | Bongkot | Operator | Production | PTTEP TotalEnergies | 66.67% 33.33% | 819 | 22 | Infills drilling for BKT Sole investment Maintain production level as planned Carry out wells plug and abandonment, Pipeline cleaning and Hg decontamination Wellhead platform & sealine and FSO1 PLEM Decommissioning (Non-transferred asset) |
| 5 | CT3 (formerly Unocal III) | JV | Production | PTTEP Chevron MOECO | 5% 71.25% | 206 | 13 | Decommissioning activities |
| 6 | CT4 (formerly Pailin) | JV | Production | PTTEP Chevron MOECO | 60% 35% 5% | 403 | 16 | Ensure gas deliverability level at DCQ Drill development wells Topside reuse |
| 7 | E5 | JV | Production | PTTEP EXXON MOBIL | 20% 80% | 8 | - | Ensure gas deliverability level at DCQ |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022

*** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship / JV = PTTEP Joint Venture Partner

**** DCQ = Daily Contractual Quantity

Projects Details | Thailand



| | | | | | | | | PTTEP |
|----|-----------------|--------|------------|--|------------------------------------|---------------------------|-------------------------------------|---|
| | Project Name | Status | Phase | Participating I | nterest* (%) | Sales Vol Gas (MMSCFD) | Sales Vol Liquid (KBPD) | Latest Status |
| 8 | G4/43 | VL | Production | PTTEP Chevron MOECO Palang Sophon | 21.375% 51% 21.25% 6.375% | 1 | 2 | Deliver production volumes as nominated from the buyer and oil production as planned |
| 9 | G4/48 | JV | Production | PTTEP Chevron MOECO | 5% 71.25% 23.75% | 1 | 0.1 | Decommissioning activities |
| 10 | L53/43 & L54/43 | OP | Production | PTTEP | 100% | - | 0.5 | On-going 5th drilled well Plan to complete 6 wells around mid of Apr'22 and commence 1st oil by Jul'22 Plan for production facilities debottlenecking and relocation projects to handle additional gross production from new wells. |
| 11 | PTTEP1 | OP | Production | PTTEP | 100% | - | 0.2 | Maintain production plateau Relocate facilities from PTTEP1 to L54/43 to be minimized CAPEX cost |
| 12 | S1 | OP | Production | PTTEP | 100% | 8 | Crude: 25 KBPD LPG: 183 MTon/Day | Production optimization and long-term development plan are on-going for business plan and work activities identification according to 10 years strategy |
| 13 | Sinphuhorm | OP | Production | PTTEP Apico EXXON MOBIL | 55% 35% 10% | 95 | 0.3 | Ensure gas deliverability Preparing the drilling campaign for 2 wells during Q2 - Q4 2022 |
| 14 | L22/43 | OP | Production | PTTEP | 100% | - | - | On-going execution plan of total 5 drilling wells scheduled in Q4 2022. Plan to prepare for the resume production or exit strategy in future after drilling results confirmed. |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022

*** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship / JV = PTTEP Joint Venture Partner

Projects Details | Thailand



| | Project Name | Status | Phase | Participating Interest* (%) | | Sales Vol Gas (MMSCFD) | Sales Vol Liquid (KBPD) | Latest Status |
|----|-----------------|--------|-------------|-----------------------------|------------|---------------------------|----------------------------|--|
| 15 | MTJDA | JOC | Production | PTTEP Petronas Carigali | 50% 50% | 260 | 10 | • Facility Readiness for Additional Gas to DP1 (Thailand) for 30-50 MMSCFD |
| 16 | G9/43 | OP | Exploration | PTTEP | 100% | - | - | Activity suspended |
| 17 | G1/61 (Erawan) | OP | Exploration | PTTEP Mubadala | 60% 40% | - | - | Successful transition to become operator on 24 April 2022. Initial production rate at 376 MMSCFD |
| 18 | G2/61 (Bongkot) | OP | Exploration | PTTEP | 100% | - | - | Normal operations |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022

*** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship / JV = PTTEP Joint Venture Partner

Projects Details Myanmar, Malaysia, Other SEA



| | Project Name | Status | Phase | Participating Interest* (%) | | Sales Vol GasSales Vol Liquid(MMSCFD)(KBPD) | | Latest Status |
|---|---|-----------------------------|-------------|--|---|---|-------|--|
| 1 | Block K [Malaysia] - Kikeh - Siakap-North Petai field (SNP) - Gumusut-Kakap field (GK) | OP (Kikeh & SNP) JV (GK) | Production | PTTEP | Kikeh 56% SNP 22.4% GK 7.17% | 32 ** | 27 ** | SNP Phase 2 development well commenced production. GK Phase 3 development drilling commenced by Unit Operator. |
| 2 | Sarawak SK309 and SK311 [Malaysia] | OP | Production | PTTEP | 42 - 59.5% | 193 ** | 20 ** | Pemanis Gas Development and South Acis Satellite infill oil development drilling completed and commenced production |
| 3 | Block H [Malaysia] | OP | Production | PTTEP | 42 – 56% | 275 ** | - | Normal operations |
| 4 | Malaysia – Other projects | OP | Exploration | PTTEP | 42.5 - 80% (varied by permits) | - | - | <u>SK410B</u>: Plan to drill 1 exploration well and expected FID in 2023 for LLB <u>SK417, SK405B, SK438</u>: Planning and preparing for the drilling of appraisal and exploration wells in 2022 exploration campaign <u>SB412</u>: Preparing for exploration activities |
| 5 | Yadana [Myanmar] | JV | Production | PTTEP TotalEnergies Chevron MOGE | 25.5% 31.24% 28.26% 15% | 732 | - | Appointed to be Operator with effective in Jul'22 Under process of operatorship transfer |
| 6 | Yetagun [Myanmar] | JV | Production | PTTEP Petronas- Carigali MOGE Nippon Oil | 19.3178% 40.91018% 20.4541% 19.3178% | 44 | - | Submitted notice to withdraw, effective May 2022 |
| 7 | Zawtika (M9 & a part of M11) [Myanmar] | OP | Production | PTTEP Myanma Oil and Gas Enterprise (MOGE) | 80% 20% | 326 | - | Maintain operations. Some activities are delayed due to COVID-19 and political situation. |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022 except Malaysia (Production volume 100%)/ For Block K, gross production is net off unitization
 *** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship/JV = PTTEP Joint Venture Partner

Projects Details | Myanmar, Malaysia, Other SEA



| | Project Name | Status | Phase | Participating Interest* (%) | | Sales Vol GasSales Vol Liquid(MMSCFD)(KBPD) | | | Latest Status |
|----|-----------------------------|--------|-------------|---|---|---|----|---|---|
| 8 | M3 [Myanmar] | OP | Exploration | PTTEP | 100% | - | - | • | Waiting for approval of PSC Supplementary |
| 9 | MD-7 [Myanmar] | OP | Exploration | PTTEP TotalEnergies | 50% 50% | - | - | • | Termination process in progress |
| 10 | 9-2 [Vietnam] | JOC | Production | PTTEP Vietnam Oil and Gas Group Pharos Energy | 25% 50% 25% | 12 | 4 | | Maintain production level Procurement for drilling campaign of 1 development well |
| 11 | 16-1 [Vietnam] | JOC | Production | PTTEP Vietnam Oil and Gas Group Pharos Energy OPECO | 28.5% 41% 28.5% 2% | 2 | 13 | | Maintain production level Procurement for drilling campaign of 2 development wells |
| 12 | B & 48/95 [Vietnam] | JV | Exploration | PTTEP Vietnam Oil and Gas Group MOECO | 8.5% 65.88% 25.62% | - | - | • | Monitoring Power Plants progress Negotiation process on commercial terms in order to push forward the Final Investment Decision (FID) The first production target at the end of 2025 |
| 13 | 52/97 [Vietnam] | VL | Exploration | PTTEP Vietnam Oil and Gas Group MOECO | 7% 73.4% 19.6% | - | - | • | Monitoring Power Plants progress Negotiation process on commercial terms in order to push forward the Final Investment Decision (FID) The first production target at the end of 2025 |
| 14 | Natuna Sea A [Indonesia] | JV | Production | PTTEP Premier Oil KUFPEC Petronas Pertamina | 11.5% 28.67% 33.33% 15% 11.5% | 199 | 1 | • | Maintain production level |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022

*** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship / JV = PTTEP Joint Venture Partner

Projects Details | Middle East



| | Project Name | Status | Phase | Participating Intere | Participating Interest* (%) | | Sales Vol Liquid (KBPD) | Latest Status |
|---|---------------------------------|--------|-------------|--|--------------------------------|---|----------------------------|--|
| 1 | Abu Dhabi Offshore 1 [UAE] | VL | Exploration | PTTEP Eni Abu Dhabi | 30% 70% | - | - | • Being evaluated for petroleum potential to support future exploration, including G&G report |
| 2 | Abu Dhabi Offshore 2 [UAE] | VL | Exploration | PTTEP Eni Abu Dhabi | 30% 70% | - | - | Continued drilling the first exploration well |
| 3 | Abu Dhabi Offshore 3 [UAE] | JV | Exploration | PTTEP Eni Abu Dhabi | 30% 70% | - | - | G&G study is on-going |
| 4 | Sharjah Onshore Area C [UAE] | VL | Exploration | PTTEP Eni Abu Dhabi SNOC | 25% 50% 25% | - | - | Completed the acquisition of 25% interest on 1 March 2022 Seismic activity is in progress |
| 5 | PDO Block 6 [Oman] | JOC | Production | PTTEP Government of Oman Shell TotalEnergies | 2% 60% 34% 4% | - | 660 ** | Normal operations |
| 6 | Mukhaizna [Oman] | ΥL | Production | PTTEP Occidental OOCEP Indian Oil Mubadala | 1% 47% 20% 17% 15% | - | 94 ** | Normal operations |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022 except for PDO Block 6 and Mukhaizna (Production volume 100%)
 *** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship/JV = PTTEP Joint Venture Partner

Projects Details | Middle East



| | Project Name | Status | Phase | Participating Interest* (%) | | Sales Vol Gas (MMSCFD) | Sales Vol Liquid (KBPD) | | Latest Status |
|---|--------------------|--------|-------------|---|--------------------------|---------------------------|----------------------------|---|--|
| 7 | Block 12 [Oman] | JV | Exploration | PTTEP Total E&P Oman Block 12 B.V. | 20% 80% | - | - | • | 3D seismic reprocessing (original 3D) in progress 3D seismic acquisition (new 3D) is in process for tendering |
| 8 | Block 61 [Oman] | JV | Production | PTTEP BP Makarim Gas Development LLC PC Oman Ventures Limited (PETRONAS) | 20% 40% 30% 10% | 1,471 | 61 | • | Full production capacity of natural gas and condensate in according to the Sales and Purchase Agreement |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022

*** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship / JV = PTTEP Joint Venture Partner

Projects Details | Rest of the World



| | Project Name | Status | Phase | Participating Int | erest* (%) | Sales Vol Gas (MMSCFD) | Sales Vol Liquid (KBPD) | Latest Status |
|---|-----------------------------------|--------|-------------|---|---|---------------------------|----------------------------|---|
| 1 | PTTEP Australasia [Australia] | OP | Exploration | PTTEP | 90%-100% | - | - | Cash Maple (AC/RL7) and Oliver (AC/RL12) : Defining proper direction in order to increase development opportunities Tenacious and Oliver : Well abandonment in progress Other exploration projects: G&G studies |
| 2 | Mozambique Area 1 [Mozambique] | JV | Development | PTTEP TotalEnergies, Mitsui, ENH, OVL OVRL & Oil India , Bharat | 8.5% 26.5%,20% 15%, 10% 10%, 10% | - | - | First Cargo is expected by 2025, subject to local security situation 1st Debt drawdown in project Finance Force Majeure was declared by the operator for safety reason due to the security incident in Palma. Plan to resume construction activities after security and safety restored |
| 3 | Bir Seba 433a & 416b [Algeria] | JOC | Production | PTTEP PetroVietnam Sonatrach | 35% 40% 25% | - | 17 ** | Drilling of 2 development wells are on-going in Q1 2022 Target to tie-in and produce 2 new wells in 2022 Existing wells intervention Production respect OPEC+ policy |
| 4 | Hassi Bir Rekaiz [Algeria] | OP | Development | PTTEP Sonatrach | 49% 51% | - | - | Continue drilling development wells Expected 1st oil production for the initial phase of around 10,000-13,000 BPD in Q2 2022 Groupement (JOC) establishment in Q2 2022 |
| 5 | Mariana Oil Sands [Canada] | OP | Exploration | PTTEP | 100% | - | - | The Project is underway for reclamation activities according to government's conditions |
| 6 | Barreirinhas AP1 [Brazil] | JV | Exploration | PTTEP Shell Brasil Mitsui E&P Brasil | 25% 65% 10% | - | - | • Pending exploration wells drilling permit from the government |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022 except for Algeria 433a & 416b (production volume)

*** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship/ JV = PTTEP Joint Venture Partner

Projects Details | Rest of the World



| | Project Name | Status | Phase | Participating Inte | erest* (%) | Sales Vol Gas (MMSCFD) | Sales Vol Liquid (KBPD) | | Latest Status |
|----|----------------------------|--------|-----------------|--|---|---------------------------|----------------------------|-----|---|
| 7 | BM-ES-23 [Brazil] | JV | Exploration | PTTEP Petrobras INPEX | 20% 65% 15% | - | - | • | Evaluating petroleum potential for development consideration |
| 8 | Block 12 (2.4) [Mexico] | JV | Exploration | PTTEP PC Carigali Mexico Ophir Mexico | 20% 60% 20% | - | - | • | Evaluating petroleum potential for development consideration |
| 9 | Block 29 (2.4) [Mexico] | VL | Exploration | PTTEP Repsol Mexico PC Carigali Mexico Wintershal DEA | 16.67% 30% 28.33% 25% | - | - | • | Pre-development study in progress |
| 10 | Block 17/06 [Angola] | VL | Pre-development | PTTEP TotalEnergies Sonangol SSI Acrep Falcon Oil | 2.5% 30% 30% 27.5% 5% 5% | - | - | • | FID plan in the mid 2022 for the eastern area Finalized Internal committees and Stakeholders alignment leading to Begonia FID Launched Forsythia and Gardenia development study on 18 January 2022 |
| 11 | Dunga [Kazakhstan] | JV | Production | PTTEP TotalEnergies OOCEP | 20% 60% 20% | 2 | 11 | • • | Procurement process Compression package and Gathering Lines Engineering of Separation Upgrade, Flare package and facilities Facilities modification works |

Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022

*** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship/ JV = PTTEP Joint Venture Partner

Projects Details | Mid-stream

Note: PTTEP denotes respective PTTEP subsidiaries participating in the project

Sales volume represent average volume for 100% of the project during Q1/2022



| | Project Name | Status | Phase | Participating I | nterest* (%) | Sales Vol Gas (MMSCFD) | Sales Vol Liquid (KBPD) | Latest Status |
|---|-------------------------------|-------------|------------|---|--|---------------------------|----------------------------|-------------------|
| 1 | Oman LNG [OMAN] | Shareholder | Production | PTTEP Government of Oman Shell TotalEnergies Korea LNG Mitsubishi Mitsubishi Itochu | 2% 51% 30% 5.54% 5% 2.77% 2.77% 0.92% | - | - | Normal Operations |
| 2 | ADNOC Gas Processing [UAE] | νL | Production | PTTEP ADNOC Shell TotalEnergies | 2% 68% 15% 15% | - | - | Normal Operations |

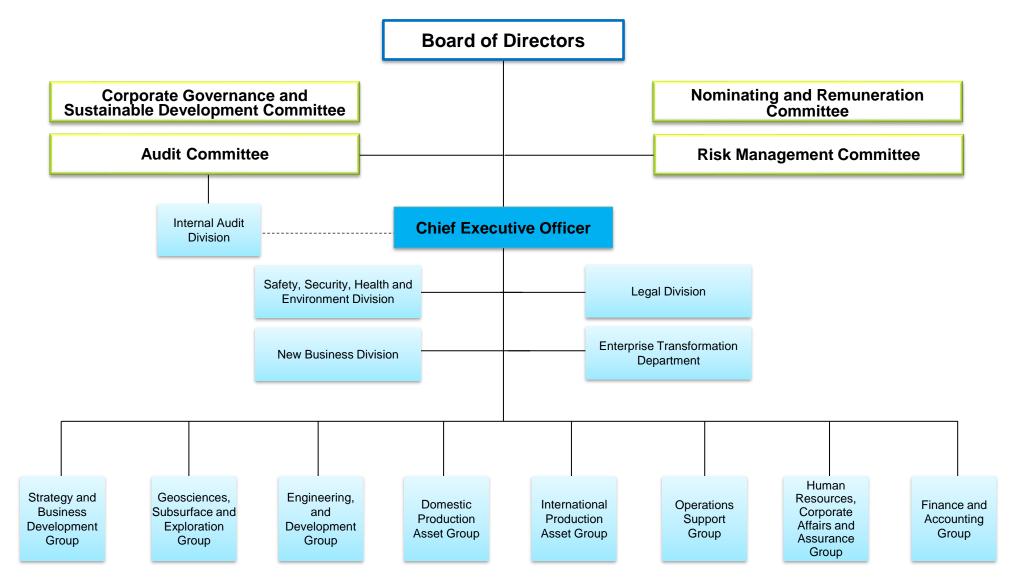
Note: * PTTEP denotes respective PTTEP subsidiaries participating in the project

** Sales volume represent average volume for 100% of the project during Q1/2022

*** Status: OP = PTTEP operatorship / JOC = PTTEP joint operatorship / JV = PTTEP Joint Venture Partner

Organization Chart





Ratio and Formula

| | | λ | | | |
|---|---|---|---|---|--|
| 7 | | A | | 1 | |
| | (| R | | | |
| | | - | 2 | - | |

| Lifting Cost (\$/BOE) | (Operating Exp. – Transportation Cost – Stock Variation – Other expenses not related to lifting) / Production Volume |
|-------------------------------|---|
| Cash Cost (\$/BOE) | (Operating Exp. + Exploration Exp. + G&A + Royalties + Finance Cost) / Sales Volume |
| Unit Cost (\$/BOE) | (Operating Exp. + Exploration Exp. + G&A + Royalties + Finance Cost + DD&A) / Sales Volume |
| Reserves Replacement Ratio | 5-Yr Additional Proved Reserves / 5-Yr Production Volume |
| Reserves Life Index (Year) | Proved Reserves / Production Volume |
| Success Ratio | Number of wells with petroleum discovery / Total number of exploration and appraisal wells |
| Sales Revenue | Sales + Revenue from pipeline transportation |
| EBITDA | (Sales + Revenue from pipeline transportation) - (Operating expenses + Exploration expenses + Administrative expenses + Petroleum royalties and remuneration + Management's remuneration) |
| EBITDA Margin | EBITDA / Sales Revenue |
| Return on Equity | Trailing-12-month net income / Average shareholders' equity between the beginning and the end of the 12-month period |
| Return on Capital Employed | (Trailing-12-month net income + Trailing-12-month Interest Expenses & Amortization of Bond Issuing Cost) / (Average shareholders' equity and average total debt between the beginning and the end of the 12-month period) |
| Simple Effective | Income tax expenses / Income before income taxes |
| Tax Rate | |
| Total debt | Short-term loans from financial institution + Current portion of long-term debts + Bonds + Long-term loans from financial institution |

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| Net debt | Total debt – Liqu | iidity | | | | |
|--|---|---|--|--|---|---|
| Debt to Equity | Total debt / Shar | eholders' equity | | | | |
| Net Debt to Equity | Net debt / Share | holders' equity | | | | |
| | | | | | | |
| Total Debt to | | al debt + Sharehold | ders equity) | | | |
| Capital | | | | | | |
| Total Debt to | Total debt / Traili | ing-12-month EBI ⁻ | TDA | | | |
| EBITDA | | | | | | |
| Net Debt to | Net debt / Trailin | g-12-month EBIT[| AC | | | |
| EBITDA | | .9 | | | | |
| | | | | | | |
| EBITDA Interest | Trailing-12-mon | th EBITDA / Trailing | g–12–month Ir | nterest Expe | nses & Amor | tization o |
| Coverage Ratio | Bond Issuing Co | st | | | | |
| Crude oil | | | To convert | | | |
| | | | | | | |
| | | | | | | |
| From | Tonnes (metric) | Kilolitres | Barrels | US gallons | Tonn | es/year |
| | | | Multiply by | - | Tonn | es/year |
| Tonnes (metric) | 1 | 1.165 | Multiply by 7.33 | 307.86 | Tonn | es/year - |
| Tonnes (metric) Kilolitres | 1 0.8581 | 1.165 1 | Multiply by 7.33 6.2898 | 307.86 264.17 | Tonn | es/year - - |
| Tonnes (metric) Kilolitres Barrels | 1 | 1.165 | Multiply by 7.33 | 307.86 | Tonn | es/year - - - |
| Tonnes (metric) Kilolitres Barrels US gallons | 1 0.8581 0.1364 | 1.165 1 0.159 | Multiply by 7.33 6.2898 1 | 307.86 264.17 42 | | es/year - - - - 9.8 |
| Tonnes (metric) Kilolitres Barrels US gallons Barrels/day | 1 0.8581 0.1364 0.00325 | 1.165 1 0.159 0.0038 | Multiply by 7.33 6.2898 1 0.0238 | 307.86 264.17 42 | | - |
| Tonnes (metric) Kilolitres Barrels US gallons Barrels/day | 1 0.8581 0.1364 0.00325 | 1.165 1 0.159 0.0038 | Multiply by 7.33 6.2898 1 0.0238 - | 307.86 264.17 42 | | - |
| Tonnes (metric) Kilolitres Barrels US gallons Barrels/day | 1 0.8581 0.1364 0.00325 - | 1.165 1 0.159 0.0038 - | Multiply by 7.33 6.2898 1 0.0238 - To convert | 307.86 264.17 42 1 - | 4 | - - - - 19.8 |
| Tonnes (metric) Kilolitres Barrels JS gallons Barrels/day Natural gas and LNG | 1 0.8581 0.1364 0.00325 - Billion cubic | 1.165 1 0.159 0.0038 - | Multiply by 7.33 6.2898 1 0.0238 - To convert Million tonnes oil | 307.86 264.17 42 1 - Million tonnes | 4 | - - - - 19.8 |
| Fonnes (metric) Kilolitres Sarrels JS gallons Barrels/day Natural gas and LNG | 1 0.8581 0.1364 0.00325 - Billion cubic | 1.165 1 0.159 0.0038 - | Multiply by 7.33 6.2898 1 0.0238 - To convert Million tonnes oil equivalent | 307.86 264.17 42 1 - Million tonnes | 4 | - - - - 19.8 |
| Fonnes (metric) Kilolitres Sarrels JS gallons Sarrels/day Natural gas and LNG From From 1 billion cubic metres NG | 1 0.8581 0.1364 0.00325 - Billion cubic Metres NG | 1.165 1 0.159 0.0038 - Billion cubic feet NG | Multiply by 7.33 6.2898 1 0.0238 - To convert Million tonnes oil equivalent Multiply by | 307.86 264.17 42 1 - Million tonnes LNG | 2 Trillion BTU | - - - 19.8 MBOE |
| Tonnes (metric) Kilolitres Barrels JS gallons Barrels/day Natural gas and LNG From From 1 billion cubic metres NG 1 billion cubic feet NG | 1 0.8581 0.1364 0.00325 - Billion cubic Metres NG 1.000 | 1.165 1 0.159 0.0038 - Billion cubic feet NG 35.315 | Multiply by 7.33 6.2898 1 0.0238 - To convert Million tonnes oil equivalent Multiply by 0.860 | 307.86 264.17 42 1 - - Million tonnes LNG 0.735 | Trillion BTU 34.121 | - - - !9.8 MBOE 5.883 |
| Tonnes (metric) Kilolitres Barrels US gallons Barrels/day Natural gas and LNG From 1 billion cubic metres NG 1 billion cubic feet NG 1 petajoule NG | 1 0.8581 0.1364 0.00325 - Billion cubic Metres NG 1.000 0.028 | 1.165 1 0.159 0.0038 - Billion cubic feet NG 35.315 1.000 | Multiply by 7.33 6.2898 1 0.0238 - To convert Million tonnes oil equivalent Multiply by 0.860 0.024 | 307.86 264.17 42 1 - - Million tonnes LNG 0.735 0.021 | Trillion BTU 34.121 0.966 | - - - !9.8 MBOE 5.883 0.167 |
| Tonnes (metric) Kilolitres Barrels US gallons Barrels/day Natural gas and LNG From 1 billion cubic metres NG 1 billion cubic feet NG 1 petajoule NG | 1 0.8581 0.1364 0.00325 - Billion cubic Metres NG 1.000 0.028 0.028 | 1.165 1 0.159 0.0038 - Billion cubic feet NG 35.315 1.000 0.981 | Multiply by 7.33 6.2898 1 0.0238 - To convert Million tonnes oil equivalent Multiply by 0.860 0.024 0.024 | 307.86 264.17 42 1 - Million tonnes LNG 0.735 0.021 0.021 | 4 Trillion BTU 34.121 0.966 0.952 | - - - !9.8 MBOE 5.883 0.167 0.164 |
| 1 billion cubic feet NG 1 petajoule NG 1 million tonnes oil equivalent | 1 0.8581 0.1364 0.00325 - Billion cubic Metres NG 1.000 0.028 0.028 1.163 | 1.165 1 0.159 0.0038 - Billion cubic feet NG 35.315 1.000 0.981 41.071 | Multiply by 7.33 6.2898 1 0.0238 - To convert Million tonnes oil equivalent Multiply by 0.860 0.024 0.024 1.000 | 307.86 264.17 42 1 - Million tonnes LNG 0.735 0.021 0.021 0.021 0.855 | 4 Trillion BTU 34.121 0.966 0.952 39.683 | - - - !9.8 MBOE 5.883 0.167 0.164 6.842 |