

PTT EXPLORATION AND PRODUCTION PLC

No. 29/2019
13 March 2019

CORPORATES

Company Rating:	AAA
Issue Ratings:	
Senior unsecured	AAA
Hybrid	AA
Outlook:	Stable

Last Review Date: 29/03/18

Company Rating History:

Date	Rating	Outlook/Alert
16/03/06	AAA	Stable
12/07/04	AA+	Positive
28/11/01	AA+	-
21/11/00	AA	-

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RATIONALE

TRIS Rating affirms the company rating on PTT Exploration and Production PLC (PTTEP) and the ratings on PTTEP's senior unsecured debentures at "AAA". TRIS Rating also affirms the rating of "AA" on PTTEP's subordinated capital debentures. The two notches below the company rating reflect the deferability and subordinated nature of the subordinated capital debentures.

PTTEP's ratings reflect the company's leading position in the petroleum exploration and production (E&P) industry in Thailand, low market risk due to long-term gas sale agreements with PTT PLC (PTT), low production cost from legacy assets, conservative financial policy, and strong financial profile.

KEY RATING CONSIDERATIONS

Leading position in the Thai E&P industry

PTTEP has been the largest petroleum producer in Thailand. For 2018, PTTEP's petroleum production of 359,386 barrels of oil equivalent per day (BOED), accounted about 32% of all petroleum produced in Thailand. Natural gas made up about 72% of PTTEP's sales volume. In terms of petroleum reserves, PTTEP's proved reserves at the end of 2018 was 677 million barrels of oil equivalent (MMBOE). Approximately 70% of its reserves were natural gas located in the Gulf of Thailand.

PTTEP is the core subsidiary of PTT, the Thai national oil and gas company. PTT is the sole supplier of natural gas in Thailand. PTT is a major customer, accounting for about 85% of PTTEP's sales. PTT owns 65.3% of PTTEP. Both PTT and PTTEP are state enterprises of the Thai Government; therefore, PTTEP faces low credit risk from its major customer.

The company's business strategies fit with PTT's to secure the nation's energy source. PTTEP is responsible for finding and producing petroleum in Thailand and abroad in order to satisfy the energy needs of the country.

As the E&P arm of PTT and the Thai government, PTTEP can participate in petroleum exploration and development projects in Thailand and abroad.

Winning the Bongkot and Erawan fields strengthen business profile

PTTEP won bids on the Bongkot and Erawan projects in December 2018. The recent winning bids for Bongkot and Erawan fields have strengthened PTTEP's leading position. The Production Sharing Contract (PSC) was signed in February 2019.

PTTEP will hold a 100% stake in the Bongkot field and 60% stake in the Erawan field. TRIS Rating estimates the production volume to increase by approximately 96,000 BOED in 2024 when both fields contribute for a full year. By 2024, PTTEP is expected to supply about half of the petroleum produced in Thailand, after it assumes full responsibility for operating both projects.

Reserves are expected to rise

PTTEP's reserves life is expected to increase from 5 years to 7-8 years within 2020. The Bongkot and the Erawan field are required by the PSC to produce at least 1,500 million standard cubic feet per day (MMscfd) of natural gas for at least 10 years. With this condition, both fields will gradually add petroleum reserves of more than 600 MMBOE to the company, compared with the

existing reserve of 677 MMBOE at the end of 2018.

The investment decision of the Mozambique Rovuma offshore Area 1 is nearly be finalized as the project has secured a gas purchase agreement covering more than 70% of total capacity for the first phase. Ongoing projects, such as the Southwest Vietnam, the Algeria HBR, and the Ubon (Contract 4) will push up reserves, as soon as PTTEP finalizes the investment decisions.

Long-term GSAs with PTT stabilizes cash flow

PTTEP has long-term, take-or-pay gas sales agreements or GSAs with PTT. The pricing formula stipulated in the GSAs limits PTTEP's exposure to oil price fluctuations. As a result, the selling price of natural gas is relatively stable and helps stabilize PTTEP's average selling price. The price of gas in the GSAs is indexed to fuel oil prices of about 30%-50%. The pricing formula includes adjustments for inflation and foreign exchange rate fluctuations. The pricing formulas carry time lags from three months to one year.

A buyer has to take the minimum annual contracted quantity of natural gas indicated in the GSA or pay the equivalent amount. This contractual arrangement secures of about 70% of PTTEP's sales volume every year.

Production costs stay low

PTTEP has demonstrated its ability to keep production cost low even when the price of crude oil changes rapidly. Although the oil price increased about 31% in 2018, the company's total cash cost increased by only 8% to about US\$15 per barrel of oil equivalent (BOE), up from about US\$14 per BOE in 2017. The lifting cost (cost to produce petroleum for one barrel) has stayed around US\$4-US\$5 per BOE for the past eight years. As a result of careful cost control, the earnings before interest, tax, depreciation, and amortization (EBITDA) margin has stayed over 70% since the second half of 2014.

Profitability is still healthy

PTTEP's revenue climbed in 2018, rising by 22% to US\$5,361 million in 2018, from US\$4,412 million in 2017. Revenue increased because oil prices increased and PTTEP bought an additional of 22% interest in the Bongkot field.

Profits have stayed healthy. The operating margin (operating income before depreciation and amortization as a percentage of total operating revenues) was 73.9%. EBITDA improved to US\$3,975 million, from US\$3,264 million in 2017. This level of EBITDA is sufficient to cover PTTEP's outstanding debts of US\$1,946 million. EBITDA is forecast to range between US\$3,500-US\$4,000 million per year during 2019-2021.

Solid liquidity profile

PTTEP's liquidity is very strong. At the end of 2018, sources of funds comprised cash on hand of US\$4,001 million and undrawn credit facilities of US\$901 million, of which US\$616 million was a committed credit line. PTTEP has only US\$413 million in debt coming due in 2019. The company's planned capital expenditures will be around US\$1,840 million in 2019. The company's cash on hand plus funds from operations (FFO) will be sufficient to cover capital expenditures and the debt repayments.

BASE-CASE ASSUMPTIONS

- The price of Dubai crude will be in a range of US\$60-US\$65 per barrel during 2019-2021;
- Total cash cost of PTTEP will hold at around US\$15-US\$16 per barrel over the forecast period; and
- PTTEP's capital spending will total around US\$5,800 million over 2019-2021.

RATING OUTLOOK

The "stable" outlook reflects TRIS Rating's expectation that PTTEP will maintain its strong financial position amid challenging market conditions. Ample liquidity and the ability to rationalize capital expenditures will help PTTEP weather any downturn in the petroleum industry.

RATING SENSITIVITIES

The credit downside case may arise if crude oil prices stay below US\$30 per barrel for a prolonged period or if the financial leverage increases significantly due to any large debt-funded acquisitions.

COMPANY OVERVIEW

PTTEP is the leading petroleum E&P company in Thailand. The company was established in 1985 to hold petroleum concession rights on behalf of the Thai government. As of February 2019, PTT, the national oil and gas company, held a 65.3% shareholding in PTTEP. Both PTT and PTTEP are state enterprises. As of December 2018, the company had 40 E&P

projects in 11 countries. Twenty-two projects are in the production phase while the remaining 18 projects are in the exploration phase.

At the end of 2018, PTTEP owned proved reserves of 677 MMBOE. About 76% of proved reserves were natural gas and the remaining 24% were crude oil and condensate. PTTEP is the largest petroleum producer in Thailand, with a production rate of 359,386 BOED in 2018, accounting for about 32% of total petroleum production in Thailand. The company's revenue of US\$5,361 million came from Thailand (81%), South-east Asia, mainly Myanmar (17%), and the rest of the world (2%).

KEY OPERATING PERFORMANCE

Table 1: Key Operating Data

	Unit	Year Ended 31 December				
		2018	2017	2016	2015	2014
Proven reserves	MMBOE	677	631	695	738	777
Yearly production	MMBOE	131	127	135	136	131
Reserve life	Years	5	5	5	5	6
Five-year reserve replacement ratio	Times	0.7	0.6	0.6	0.5	0.5
Lifting costs	US\$/BOE	4.3	4.2	4.2	4.6	5.3
Average sales volume	BOED	305,522	299,206	319,521	322,167	312,569
Average selling price	US\$/BOE	46.66	39.20	35.91	45.29	63.71

Source: PTTEP

Table 2: Bongkot and Erawan Profile

Existing Profile under Concession Thailand I & III	Unit	Bongkot	Erawan	Total
100% Natural gas production in 2018	MMscfd	839	1,291	2,130
PTTEP interest in fields	%	66.67	3	
Production contributed to PTTEP	MMscfd	559	39	598
	BOED	93,579	6,754	100,333
Profile under PSC (Beginning in 2022-2023)	Unit	Bongkot	Erawan	Total
Minimum natural gas production per year	MMscfd	700	800	1,500
PTTEP interest in fields	%	100	60	
Production contributed to PTTEP	MMscfd	700	480	1,180
	BOED	116,667	80,000	196,667

Sources: Energy Policy and Planning Office, Department of Mineral Fuels, PTTEP's data, and TRIS Rating's estimation

Note: Calculation is based on the heating value of 1,000 BTU/ft³ for natural gas and 6 MMBTU/BBL for crude oil.

FINANCIAL STATISTICS AND KEY FINANCIAL RATIOS*

Unit: US\$ million

	-----Year Ended 31 December -----				
	2018	2017	2016	2015	2014
Total operating revenues	5,361	4,412	4,298	5,450	7,580
Operating income	3,962	3,147	3,016	4,246	5,914
Earnings before interest and taxes (EBIT)	2,100	1,567	930	1,288	3,009
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	3,975	3,264	3,063	4,213	5,891
Funds from operations (FFO)	2,965	2,822	2,499	3,419	4,510
Adjusted interest expense	277	262	279	298	287
Capital expenditures	1,154	1,361	1,023	1,876	2,583
Total assets	19,571	19,220	18,891	19,642	23,271
Adjusted debt	1,364	2,451	2,372	3,040	3,834
Adjusted equity	11,443	10,939	10,810	10,752	11,972
Adjusted Ratios					
Operating income as % of total operating revenues (%)	73.91	71.33	70.18	77.90	78.02
Pretax return on permanent capital (%)	12.43	9.27	5.52	7.01	16.04
EBITDA interest coverage (times)	14.36	12.45	10.99	14.14	20.52
Debt to EBITDA (times)	0.34	0.75	0.77	0.72	0.65
FFO to debt (%)	217.42	115.14	105.32	112.47	117.62
Debt to capitalization (%)	10.65	18.30	18.00	22.04	24.26

* Consolidated financial statements

RELATED CRITERIA

- Hybrid Securities Rating Criteria, 12 September 2018
- Key Financial Ratios and Adjustments, 5 September 2018
- Rating Methodology – Government-Related-Entity, 6 June 2017
- Group Rating Methodology, 10 July 2015
- Rating Methodology – Corporate, 31 October 2007

PTT Exploration and Production PLC (PTTEP)

Company Rating:	AAA
Issue Ratings:	
PTTEP195A: Bt5,000 million senior unsecured debentures due 2019	AAA
PTTEP196A: Bt8,200 million senior unsecured debentures due 2019	AAA
PTTEP296A: Bt11,400 million senior unsecured debentures due 2029	AAA
PTTEP12PA: Bt5,000 million subordinated capital debentures	AA
Rating Outlook:	Stable

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