EQUITY RESEARCH - COMPANY REPORT

PTT EXPLOR & PROD

THAILAND / OIL & GAS

Black gold continues to shine

- We project PTTEP to record a strong 2Q22 NP of THB22.9b; core NP is expected to jump to THB25.9b (+36% q-q and 132% y-y).
- Key drivers are a higher ASP to USD57/boe, higher sales volume to 470kboed, and a lower hedging loss on a lower hedging volume.
- Maintain BUY but lift our TP from THB176 to THB180.

Solid as a rock for 2Q22 net profit of THB22.9b

We project PTTEP to record a strong 2Q22 net profit of THB22.9b, up 118% q-q and 221% y-y. Core net profit is expected to jump to THB25.9b, up 36% q-q and 132% y-y. Key drivers are 1) a higher average selling price (ASP) to USD57/boe, up from USD51.4/boe in 1Q22 and USD42.2/boe in 2Q21, mainly due to the higher liquid and gas prices; 2) a higher sales volume at 470kboed, up from 427kboed, driven by higher sales volumes from its oil field in Oman and the Sabah K gas field in Malaysia; 3) a higher cost per unit to USD30/boe, up from USD26.5/boe in 1Q22, due to the higher production and investment costs for Erawan (G1) under the new production service contract (PSC) since Apr-22; and 4) a lower hedging loss of THB1.5b, down sharply from THB8.1b, due to a lower hedging volume.

Strong outlook ahead

In 2H22-2023, we project PTTEP's net profit growth to continue, driven by higher ASPs for both liquid (28-30% of total sales volume) and gas, and adjusted prices to reflect the lagging impact of higher oil prices in the past 6-12 months. Meanwhile, we project PTTEP's production cost to be at USD30/boe, in line with the company's guidance, as PTTEP needs to invest a significant amount at Erawan to boost its gas production from 250mmscfd in 3Q22 to 400mmscfd in 4Q22, 600mmscfd in 4Q23, and 800mmscfd – its contracted target amount – by mid-2024, based on the company's guidance.

Hedging loss risk is now substantially subsiding

Unlike its sister companies in PTT group (PTTGC, TOP, IRPC), PTTEP's new policy limits its hedging exposure to 7.7m bbls by the end of 2Q22. We think this should allow PTTEP to better capture the benefit of higher oil and gas prices as it raises production volumes via M&A and organic expansion toward its target of 490kboed in 4Q22, up from 427kboed in 1Q22.

The best oil play in the Thai energy sector

We prefer PTTEP over PTT as a direct oil play on the global uptrends in oil and gas prices, driven by tight supplies and rising demand. We think PTTEP's strong growth momentum should continue in 2H22-2023.



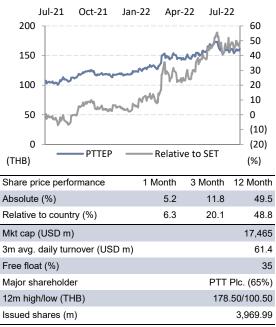
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TARGET PRICE	THB180.00
CLOSE	THB161.50
UP/DOWNSIDE	+11.5%
PRIOR TP	THB176.00
CHANGE IN TP	+2.3%
TP vs CONSENSUS	+1.2%

KEY STOCK DATA

PTTEP TB

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	219,068	319,977	311,971	312,059
Net profit	38,864	54,880	51,174	54,146
EPS (THB)	9.79	13.82	12.89	13.64
vs Consensus (%)	-	(29.3)	(30.4)	(16.9)
EBITDA	113,647	161,457	145,410	153,602
Core net profit	48,531	54,880	51,174	54,146
Core EPS (THB)	12.22	13.82	12.89	13.64
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	104.9	13.1	(6.8)	5.8
Core P/E (x)	13.2	11.7	12.5	11.8
Dividend yield (%)	3.9	5.5	5.1	5.4
EV/EBITDA (x)	5.7	4.7	5.0	4.6
Price/book (x)	1.5	1.5	1.4	1.4
Net debt/Equity (%)	2.5	25.8	19.7	14.8
ROE (%)	12.6	12.9	11.5	11.7



Sources: Bloomberg consensus; FSSIA estimates

PREPARED BY FSS INTERNATIONAL INVESTMENT ADVISORY SECURITIES CO LTD (FSSIA). ANALYST CERTIFICATION AND IMPORTANT DISCLOSURES CAN BE FOUND AT THE END OF THIS REPORT

Investment thesis

PTTEP's net profit growth should remain sanguine in 2022 based on its strong sales volume growth and the oil and gas price uptrend.

We believe PTTEP's average selling price will rise in tandem with the higher oil price, given PTTEP's high exposure to the oil price via its liquid price, which accounts for 30% of its production volume and 50% of its revenue. Gas currently constitutes 70% of its total sales volume but only 50% of its revenue.

PTTEP's cost structure remains highly competitive compared with its regional peers due to its low-cost gas fields and strict cost control strategy implemented in 2015.

Company profile

Established by PTT Plc (formerly Petroleum Authority of Thailand) in 1985, PTTEP is Thailand's premier oil & gas exploration and production company. Most of its petroleum assets are in the Gulf of Thailand. It was listed on the Stock Exchange of Thailand in 1992.

www.pttep.com

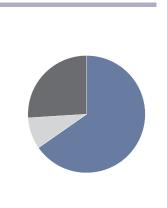
Principal activities (revenue, 2021)

- Exploration and production 101.9 %
- Pipeline 5.3 %
- Others 1.3 %
- Inter company eliminations -8.5 %

Source: PTT Explor & Prod

Major shareholders

- PTT Plc. 65.3 %
- Thai NDVR 8.7 %
- Others 26.0 %



Catalysts

Potential catalysts for PTTEP are rising oil and gas prices and potential M&A that could further drive its production and reserves higher.

Risks to our call

Risks our TP, which is based on EV/EBITDA, are a sharp decline in oil price and a potential earnings downside from government intervention.

Event calendar

 Date
 Event

 Aug 2022
 2Q22 results announcement

Key assumptions

Source: PTT Explor & Prod

	2022E	2023E	2024E
Dubai oil price (USD/bbl)	120	110	110
Sales volume (boed)	513,890	533,890	534,040
ASP (USD/boe)	51.0	47.9	47.9
Gas price (USD/mmbtu)	5.6	5.5	5.5
Cost (USD/boe)	28.0	27.0	27.0

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in the Dubai oil price, we project 2022 earnings would rise 1.3%, and vice versa, all else being equal.
- For every 1% increase in the gas price, we estimate 2022 earnings would rise 1.2%, and vice versa, all else being equal.
- For every 1% increase in sales volume, we estimate 2022 earnings would rise 1.1%, and vice versa, all else being equal.

Source: FSSIA estimates



Expect strong 2Q22 results

We project PTTEP to record a strong 2Q22 net profit of THB22.9b, up 118% q-q and 221% y-y. Core net profit is expected to jump to THB25.9b, up 36% q-q and 132% y-y. Key drivers and expectations are:

- A higher ASP to USD57/boe, up from USD51.4/boe in 1Q22 and USD42.2/boe in 2Q21, mainly due to higher liquid and gas prices.
- A higher sales volume of 470kboed, up from 427kboed, driven by the additional sales volumes from its Oman field and the Sabah K gas field in Malaysia.
- A higher cost per unit at USD30/boe, up from USD26.5/boe in 1Q22, due to the higher production and investment costs for Erawan (G1) under the new PSC in effect since Apr-22. The higher cost is in line with PTTEP's guidance of USD29-30/boe in 2022.
- A lower hedging loss of THB1.5b, down sharply from THB8.1b, due to a lower hedging volume.

Exhibit 1: 2Q22 results preview

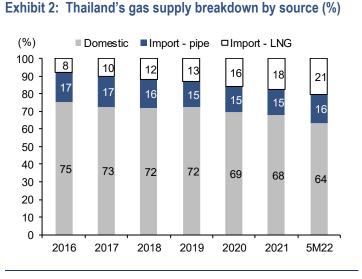
	2Q21	1Q21		2Q22E		6M21	6M22E	Change	2022E
	(THB m)	(THB m)	(THB m)	(q-q%)	(y-y%)	(THB m)	(THB m)	(y-y%)	(THB m)
Revenue	54,209	67,145	91,989	37.0	69.7	96,345	159,134	65.2	319,977
Operating costs	(12,460)	(14,086)	(13,358)	(5.2)	7.2	(33,541)	(27,444)	(18.2)	(78,526)
EBITDA	41,750	53,059	78,631	48.2	88.3	62,804	131,690	109.7	161,457
EBITDA margin (%)	77.0	79.0	85.5	nm	nm	65.2	82.8	nm	50.5
Depn & amort.	(19,747)	(17,087)	(19,563)	14.5	(0.9)	(36,304)	(36,650)	1.0	(32,826)
EBIT	22,003	35,972	59,068	64.2	168.5	26,500	95,040	258.6	128,631
Interest expense	(1,611)	(1,718)	(1,798)	4.7	11.6	(3,064)	(3,516)	14.8	(6,790)
Interest & invt inc	793	742	463	(37.6)	(41.6)	12,073	1,205	(90.0)	532
Associates' contrib	88	350	312	(10.9)	256.1	152	662	336.4	489
Exceptionals	(4,070)	(8,392)	(3,254)	nm	nm	(1,124)	(11,646)	nm	(9,338)
Pretax profit	17,203	26,955	54,791	103.3	218.5	34,537	81,746	136.7	113,523
Тах	(10,063)	(16,436)	(31,856)	93.8	216.6	(15,864)	(48,292)	204.4	(58,643)
Tax rate (%)	58.5	61.0	58	nm	nm	45.9	59.1	nm	51.7
Minority interests	0	0	0	nm	nm	0	0	nm	0
Net profit	7,140	10,519	22,935	118.0	221.2	18,673	33,454	79.2	54,880
Non-recurring	(4,046)	(8,462)	(2,961)	(65.0)	(26.8)	(1,350)	(11,423)	746.1	
Core profit	11,185	18,981	25,896	36.4	131.5	20,023	44,877	124.1	54,880
EPS (THB)	1.80	2.65	5.78	118.0	221.2	4.70	8.43	79.2	13.82
Core EPS (THB)	2.82	4.78	6.52	36.4	131.5	5.04	11.30	124.1	13.82

Sources: PTTEP; FSSIA estimates

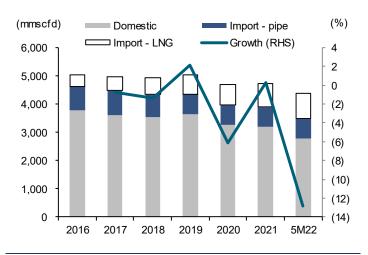
Shortfall from Erawan should be overcome by PTTEP's inorganic growth

To compensate for declining gas production at Erawan, Thailand has imported more LNG, mostly at a high spot price, as the country's contract LNG import volume of 5.2mtpa has already been included in the gas supply plan by PTT (PTT TB, BUY) and Thailand's Energy Regulatory Commission (ERC).

In 5M22, gas from domestic sources dropped to only 64% of the total gas supply in Thailand, the lowest level since 2016, thanks to the decline in gas production from Erawan, Thailand's largest gas field, which produced an average of 1,200mmscfd of gas in 2016-20.







Sources: Department of Mineral Fuels (DMF); Energy Policy & Planning Office (EPPO)

Sources: DMF; EPPO

PTTEP, as the new PSC operator for both Erawan (G1) and Bongkot (G2, including Bongkot Tai and Bongkot), has stepped up investments aimed at boosting gas production at Erawan to its targeted volume of 800mmscfd by 2024. During 2022-24, PTTEP also plans to increase gas production from the Bongkot, Arthit, and MTJDA fields to partly compensate for the gas supply shortfall from Erawan.

Exhibit 4: Gas production from major fields

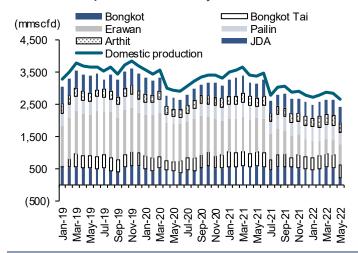
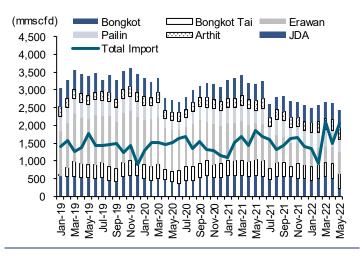


Exhibit 5: Gas production from major fields vs imports



Sources: DMF: EPPO

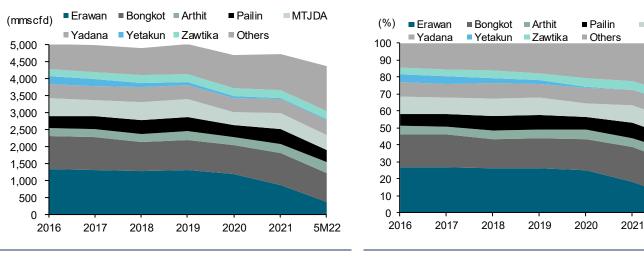
Sources: DMF; EPPO

MTJDA

5M22

In addition to the gas production shortfall from Erawan, gas production at Yetakun, one of three major gas fields in Myanmar whose gas is imported via pipelines to Thailand, is now in structural decline and could be depleted by 2024, based on our estimates.

Exhibit 6: Thailand's gas production by field



Source: DMF

Source: DMF

In response to the gas production shortfalls from both Erawan and its fields in Myanmar, PTTEP acquired multiple assets in 2019-21, including gas field assets in Malaysia, an oil field in Oman, and additional stakes in the Yadana gas field in Myanmar after the exit of key operators due to sanctions.

In 2022-26, based on PTTEP's guidance, we think PTTEP's production volume will grow from 416kboed in 2021 to 472kboed in 2022, before rising to 533kboed in 2026. The main drivers include:

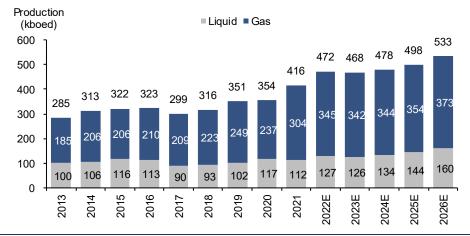
2022: G1 production growth from 300mmscfd on average in 2022 to 800mmscfd by mid-2024; G2 production growth of 200mmscfd starting in 2Q22; and oil production from Algeria's HBR phase 1 in 1H22 at 10-13kbpd.

2023: 700mmscfd of gas production from G2.

2025: LNG production from its 8.5%-owned Mozambique project with a total capacity of 13mtpa in 2H25, and gas production of 490mmscfd from Southwest Vietnam in 2H22.

2026: 800-1,000mmscfd of gas from SK410B in 1H26 in Malaysia, and 50-60kbpd of oil production from Algeria's HBR phase 2 in 2H26.

Exhibit 8: Production volume breakdown by gas and liquid



Sources: PTTEP; FSSIA estimates

Exhibit 7: Thailand's gas production by field (%)

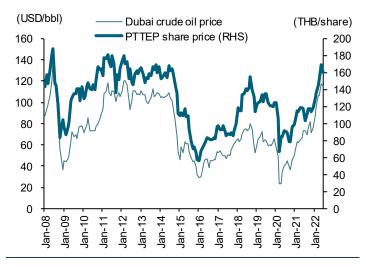
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A good oil play on both margin and volume growth

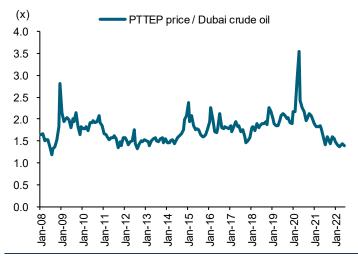
Exhibit 9: Dubai crude oil price and PTTEP's share price

Despite its strong quarterly net profit outlook, PTTEP's share price has significantly underperformed the oil price spike, as reflected in the ratio of PTTEP's share price over the Dubai crude oil price, which now stands at only 1.3x as of 26 Jul-22, far below its 14-year average of 1.7x.

We believe this is unjustified given 1) PTTEP's strong earnings growth outlook in 2022-23 based on higher projected ASPs for both liquid and gas and rising production and sales volumes thanks to M&A in 2019-21; and 2) PTTEP's high leverage on the oil price rise, which we estimate could result in a 1.3% increase in its net profit in 2023.







Source: Bloomberg

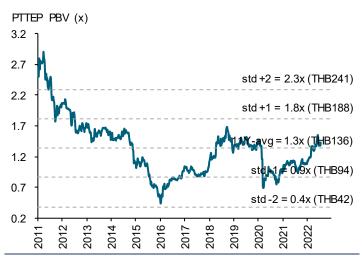
Source: Bloomberg

In terms of valuation, we maintain BUY but lift our TP from THB176 to THB180 to reflect our valuation rollover to 2023. PTTEP is now trading at only 5.0x 2023E EV/EBITDA (-0.5SD), lower than its 12-year average of 6.5x. Similarly, PTTEP's 2022E P/BV at 1.5x is still stuck at its 12-year average level, even with its strong earnings outlook on both endemic drivers (volume growth and low cost) and external drivers (high prices for oil and gas).

Exhibit 11: Prospective EV/EBITDA band



Exhibit 12: Prospective P/BV band



Sources: Bloomberg, FSSIA estimates

Sources: Bloomberg, FSSIA estimates

Financial Statements

PTT Explor & Prod

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	20248
Revenue	160,401	219,068	319,977	311,971	312,059
Cost of goods sold	(14,793)	(23,710)	(78,526)	(88,569)	(80,442
Gross profit	145,607	195,358	241,451	223,402	231,617
Other operating income	-	-	-	-	
Operating costs	(75,004)	(81,710)	(79,994)	(77,993)	(78,015
Operating EBITDA	70,603	113,647	161,457	145,410	153,602
Depreciation	(26,100)	(28,118)	(32,826)	(35,284)	(37,329
Goodwill amortisation	0	0	0	0	(
Operating EBIT	44,503	85,530	128,631	110,126	116,273
Net financing costs	(5,987)	(7,253)	(17,096)	(6,259)	(6,258
Associates	1,307	489	489	489	489
Recurring non-operating income	3,933	11,782	1,989	1,989	1,989
Non-recurring items	(1,021)	(9,667)	0	0	.,
Profit before tax	41,428	80,392	113,523	105,856	112,004
Tax				(54,682)	
	(18,764)	(41,528)	(58,643)	,	(57,858
Profit after tax	22,664	38,864	54,880	51,174	54,146
Minority interests Preferred dividends	0	0	0	0	(
	0	0	0	0	(
Other items	-	-	-	-	
Reported net profit	22,664	38,864	54,880	51,174	54,140
Non-recurring items & goodwill (net)	1,021	9,667	0	0	
Recurring net profit	23,685	48,531	54,880	51,174	54,14
Per share (THB)					
Recurring EPS *	5.97	12.22	13.82	12.89	13.64
Reported EPS	5.71	9.79	13.82	12.89	13.64
DPS	4.25	6.25	8.83	8.23	8.7
Diluted shares (used to calculate per share data)	3,970	3,970	3,970	3,970	3,97
Growth					
Revenue (%)	(16.0)	36.6	46.1	(2.5)	0.0
Operating EBITDA (%)	(27.5)	61.0	42.1	(9.9)	5.0
Operating EBIT (%)	(38.4)	92.2	50.4	(14.4)	5.6
Recurring EPS (%)	(46.8)	104.9	13.1	(6.8)	5.8
Reported EPS (%)	(53.6)	71.5	41.2	(6.8)	5.8
Operating performance	()			()	
Gross margin inc. depreciation (%)	74.5	76.3	65.2	60.3	62.3
Gross margin of key business (%)	74.5	76.3	65.2	60.3	62.3
Operating EBITDA margin (%)	44.0		50.5	46.6	49.2
		51.9			
Operating EBIT margin (%)	27.7	39.0	40.2	35.3	37.3
Net margin (%)	14.8	22.2	17.2	16.4	17.4
Effective tax rate (%)	45.3	51.7	51.7	51.7	51.7
Dividend payout on recurring profit (%)	71.2	51.1	63.8	63.8	63.
nterest cover (X)	8.1	13.4	7.6	17.9	18.9
nventory days	248.2	186.5	72.3	69.4	75.
Debtor days	58.4	33.7	50.8	78.8	73.
Creditor days	475.6	621.6	148.0	58.1	63.3
Operating ROIC (%)	8.6	16.1	19.0	14.2	(10.3
ROIC (%)	5.5	10.4	11.8	9.4	(6.7
ROE (%)	6.7	12.6	12.9	11.5	11.
ROA (%)	4.1	7.2	8.3	7.0	6.
Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)	2020	2021	2022E	2023E	2024
Exploration and production	155,181	223,260	324,169	316,163	316,25
Pipeline	11,513	11,513	11,513	11,513	11,51
Dthers	2,875	2,875	2,875	2,875	2,87
nter company eliminations					
nter company cilininations	(9,168)	(18,579)	(18,579)	(18,579)	(18,579

Sources: PTT Explor & Prod; FSSIA estimates

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Financial Statements

PTT Explor & Prod

cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024
ecurring net profit	23,685	48,531	54,880	51,174	54,14
epreciation	26,100	28,118	32,826	35,284	37,32
sociates & minorities	-	-	-	-	
her non-cash items	35,065	35,066	35,066	35,066	35,06
hange in working capital	21,694	(13,587)	(41,823)	10,298	(22
ash flow from operations	106,543	98,127	80,949	131,821	126,51
apex - maintenance	- (115 506)	- (115 506)	- (114 907)	- (91 907)	(01 007
apex - new investment et acquisitions & disposals	(115,506) 176	(115,506) 457	(114,807) 838	(81,807) 1,301	(81,807) 1,30
ther investments (net)	1/0	437	0	1,301	1,50
ash flow from investing	(115,329)	(115,049)	(113,969)	(80,506)	(80,506
ividends paid	(20,986)	(19,325)	(35,038)	(32,672)	(34,569
quity finance	(,,,,)	0	0	0	(-,
lebt finance	3,457	(2,275)	27,259	(20,000)	(15,000
ther financing cash flows	52,451	12,792	(33,654)	4,328	7,75
ash flow from financing	34,923	(8,808)	(41,433)	(48,344)	(41,812
on-recurring cash flows	-	-	-	-	
ther adjustments	0	0	0	0	(
et other adjustments	0	0	0	0	
lovement in cash	26,136	(25,730)	(74,453)	2,971	4,20
ree cash flow to firm (FCFF)	(830.97)	(10,450.16)	(26,229.24)	58,105.21	52,802.40
ree cash flow to equity (FCFE)	47,121.85	(6,404.83)	(39,414.55)	35,642.94	38,770.13
er share (THB)					
CFF per share	(0.21)	(2.63)	(6.61)	14.64	13.3
CFE per share	(0.21) 11.87	(1.61)	(9.93)	8.98	9.7
Recurring cash flow per share	21.37	28.14	30.93	30.61	31.8
alanco Shoot (THR m) Year Ending Doo	2020	. 2021	2022E		2024
alance Sheet (THB m) Year Ending Dec		2021		2023E	2024
angible fixed assets (gross)	1,100,534	1,255,645	1,370,452	1,452,259	1,534,06
ess: Accumulated depreciation	(805,044)	(875,338)	(957,403)	(1,045,613)	(1,138,936
angible fixed assets (net) Itangible fixed assets (net)	295,491 0	380,307 0	413,049 0	406,646 0	395,13
ong-term financial assets	U	U	U	U	
vest. in associates & subsidiaries	- 13,523	- 14,408	- 13,596	- 12,783	11,97
ash & equivalents	111,257	85,528	11,075	14,046	18,24
/C receivable	23,752	16,715	72,266	62,394	62,41
iventories	10,156	14,069	17,056	16,629	16,63
ther current assets	7,551	23,272	23,272	23,272	23,27
urrent assets	152,716	139,584	123,669	116,342	120,56
ther assets	213,908	249,237	235,211	237,899	240,58
otal assets	675,637	783,536	785,525	773,670	768,24
common equity	354,411	415,350	435,194	453,696	473,27
linorities etc.	0	0	0	0	
otal shareholders' equity	354,411	415,350	435,194	453,696	473,27
ong term debt	85,016	82,741	110,000	90,000	75,00
ther long-term liabilities	179,953	180,943	172,855	164,767	156,67
ong-term liabilities	264,969	263,684	282,855	254,767	231,67
/C payable	31,356	49,398	14,282	13,925	13,92
hort term debt	13,208	13,208	13,208	13,208	13,20
ther current liabilities	11,693	41,897	39,986	38,075	36,16
urrent liabilities	56,257	104,502	67,476	65,208	63,30
otal liabilities and shareholders' equity	675,637	783,536	785,525	773,670	768,24
et working capital	(1,591)	(37,239)	58,325	50,296	52,22
vested capital	521,330	606,713	720,181	707,624	699,90
Includes convertibles and preferred stock which is bei	ng treated as debt				
er share (THB)					
ook value per share	89.27	104.62	109.62	114.28	119.2
angible book value per share	89.27	104.62	109.62	114.28	119.2
inancial strength			<u></u>		
et debt/equity (%)	(3.7)	2.5	25.8	19.7	14.
et debt/total assets (%)	(1.9)	1.3	14.3	11.5	9.
urrent ratio (x)	2.7	1.3	1.8	1.8	1.
F interest cover (x)	28.2	16.0	5.4	19.8	20.
aluation	2020	2021	2022E	2023E	2024
ecurring P/E (x) *	27.1	13.2	11.7	12.5	11.
ecurring P/E @ target price (x) *	30.2	14.7	13.0	14.0	13.
eported P/E (x)	28.3	16.5	11.7	12.5	11.
ividend yield (%)	2.6	3.9	5.5	5.1	5.4
rice/book (x)	1.8	1.5	1.5	1.4	1.4
rice/tangible book (x)	1.8	1.5	1.5	1.4	1.4
V/EBITDA (x) **	8.9	5.7	4.7	5.0	4.
V/EBITDA @ target price (x) **	9.9	6.4	5.1	5.5	5.
V/invested capital (x)	1.2	1.1	1.0	1.0	1.0

Sources: PTT Explor & Prod; FSSIA estimates



Corporate Governance report of Thai listed companies 2021

	ti unichemanicali in valueurocemanicali valueurocem	EX	CELLENT LE	VEL – Score	range 90-100					
AV	BCPG	CPALL	GCAP	K	MSC	PLANET	SAMART	SPI	THRE	TVD
	BDMS	CPF	GFPT	KBANK	MST	PLAT	SAMTEL	SPRC	THREL	TVI
F	BEM	CPI	GGC	KCE	MTC	PORT	SAT	SPVI	TIPCO	TVO
Н	BGC	CPN	GLAND	KKP	MVP	PPS	SC	SSSC	TISCO	TWPC
RA	BGRIM	CRC	GLOBAL	KSL	NCL	PR9	SCB	SST	TK	U
KP	BIZ	CSS	GPI	KTB	NEP	PREB	SCC	STA	TKT	UAC
٢R	BKI	DDD	GPSC	KTC	NER	PRG	SCCC	STEC	TMT	UBIS
Т	BOL	DELTA	GRAMMY	LALIN	NKI	PRM	SCG	STI	TNDT	UV
MA	BPP	DEMCO	GULF	LANNA	NOBLE	PROUD	SCGP	SUN	TNITY	VGI
MATA	BRR	DRT	GUNKUL	LH	NSI	PSH	SCM	SUSCO	TOA	VIH
MATAV	BTS	DTAC	HANA	LHFG	NVD	PSL	SDC	SUTHA	TOP	WACOAL
NAN	BTW	DUSIT	HARN	LIT	NWR	PTG	SEAFCO	SVI	TPBI	WAVE
DT	BWG	EA	HMPRO	LPN	NYT	PTT	SEAOIL	SYMC	TQM	WHA
0	CENTEL	EASTW	ICC	MACO	OISHI	PTTEP	SE-ED	SYNTEC	TRC	WHAUP
RIP	CFRESH	ECF	ICHI	MAJOR	OR	PTTGC	SELIC	TACC	TRU	WICE
ROW	CHEWA	ECL	III	MAKRO	ORI	PYLON	SENA	TASCO	TRUE	WINNER
SP	СНО	EE	ILINK	MALEE	OSP	Q-CON	SHR	TCAP	TSC	ZEN
JCT	CIMBT	EGCO	ILM	MBK	ото	QH	SIRI	TEAMG	TSR	
NC	CK	EPG	INTUCH	MC	PAP	QTC	SIS	TFMAMA	TSTE	
YUD	CKP	ETC	IP	мсот	PCSGH	RATCH	SITHAI	TGH	TSTH	
AFS	CM	FPI	IRPC	METCO	PDG	RS	SMK	THANA	TTA	
		FPT			PDG PDJ	S				
	CNT COM7		ITEL	MFEC			SMPC	THANI	TTB	
AY	COM7	FSMART	IVL	MINT	PG	S&J	SNC	THCOM	TTCL	
BL	COMAN	GBX	JSP	MONO	PHOL	SAAM	SONIC	THG	TTW	
P	COTTO	GC	JWD	MOONG	PLANB	SABINA	SPALI	THIP	TU	
islowind mislowind				EVEL – Score						
S	ASIMAR	CHOW	FLOYD	IT	LOXLEY	000	RPC	SKY	TCC	TVT
JP	ASK	CI	FN	ITD	LRH	OGC	RT	SLP	TCMC	TWP
BICO	ASN	CIG	FNS	J	LST	PATO	RWI	SMIT	TEAM	UEC
ЗМ	ATP30	CMC	FORTH	JAS	Μ	PB	S11	SMT	TFG	UMI
CE	В	COLOR	FSS	JCK	MATCH	PICO	SA	SNP	TFI	UOBKH
CG	BA	CPL	FTE	JCKH	MBAX	PIMO	SAK	SO	TIGER	UP
DB	BAM	CPW	FVC	JMART	MEGA	PJW	SALEE	SORKON	TITLE	UPF
EONTS	BC	CRD	GEL	JMT	META	PL	SAMCO	SPA	TKN	UPOIC
GE	BCH	CSC	GENCO	KBS	MFC	PM	SANKO	SPC	TKS	UTP
HC T	BEC	CSP	GJS	KCAR	MGT	PMTA	SAPPE	SPCG	TM	VCOM
Т	BEYOND	CWT	GYT	KEX	MICRO	PPP	SAWAD	SR	TMC	VL
.L	BFIT	DCC	HEMP	KGI	MILL	PPPM	SCI	SRICHA	TMD	VPO
_LA	BJC	DCON	HPT	KIAT	MITSIB	PRIME	SCN	SSC	TMI	VRANDA
LUCON	BJCHI	DHOUSE	HTC	KISS	MK	PRIN	SCP	SSF	TMILL	WGE
MANAH	BLA	DOD	HYDRO	KOOL	MODERN	PRINC	SE	STANLY	TNL	WIIK
MARIN	BR	DOHOME	ICN	KTIS	MTI	PSG	SFLEX	STGT	TNP	WP
PCO	BROOK	DV8	IFS	KUMWEL	NBC	PSTC	SFP	STOWER	TOG	XO
PCS	CBG	EASON	IMH	KUN	NCAP	PT	SFT	STPI	TPA	XPG
PURE				KWC	NCAP		SGF	SUC		YUASA
	CEN	EFORL	IND			QLT			TPAC	IUASA
AUQ	CGH	ERW	INET	KWM	NETBAY	RBF	SIAM	SWC	TPCS	
SAP	CHARAN	ESSO	INSET	L&E	NEX	RCL	SINGER	SYNEX	TPS	
SEFA	CHAYO	ESTAR	INSURE	LDC	NINE	RICHY	SKE	TAE	TRITN	
SIA	CHG	ETE	IRC	LEO	NRF	RML	SKN	TAKUNI	TRT	
SIAN	CHOTI	FE	IRCP	LHK	NTV	ROJNA	SKR	TBSP	TSE	
University National Concession	nn unvirlaumszeren Here Valual CC Canadian	GC	DOD LEVEL -	Score range	70-79					
	BGT	CITY	GIFT	JTS	MDX	PK	SGP	SUPER	TQR	YGG
	BH	CMAN	GLOCON	JUBILE	MJD	PLE	SICT	SVOA	TTI	ZIGA
E	BIG	CMO	GREEN	KASET	MORE	PPM	SIMAT	TC	TYCN	2.0/
	BLAND	CMR	GSC	KCM	MUD	PRAKIT	SISB	TCCC	UKEM	
PHAX	BM	CPT	GTB	KK	NC	PRAPAT	SK	THMUI	UMS	
ИС	BROCK	CRANE	HTECH	KKC	NDR	PRECHA	SMART	TNH	UNIQ	
P	BSBM	CSR	HUMAN	KWI	NFC	PTL	SOLAR	TNR	UPA	
2	BSM	D	IHL	KYE	NNCL	RJH	SPACK	TOPP	UREKA	
RIN	BTNC	EKH	IIG	LEE	NOVA	RP	SPG	TPCH	VIBHA	
5	BYD	EMC	INGRS	LPH	NPK	RPH	SQ	TPIPL	W	
J	CAZ	EP	INOX	MATI	NUSA	RSP	SSP	TPIPP	WIN	
52	CCP	F&D	JAK	M-CHAI	PAF	SABUY	STARK	TPLAS	WORK	
	001	IGD								
EAUTY	CGD	FMT	JR	MCS	PF	SF	STC	TPOLY	WPH	

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The disclosure of the survey results of the Thai Institute of Directors Association ('IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

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Sources: Thai Institute of Directors Association (IOD); FSSIA's compilation; data as of 26 October 2021

Anti-corruption Progress Indicator

CERTIFIED										
2S	BCH	CPALL	GC	к	MFC	PE	QLT	SNP	THCOM	TU
7UP	BCP	CPF	GCAP	KASET	MFEC	PG	QTC	SORKON	THIP	TVD
ADVANC	BCPG	CPI	GEL	KBANK	MILL	PHOL	RATCH	SPACK	THRE	TVI
AF	BE8	CPN	GFPT	KBS	MINT	PK	RML	SPALI	THREL	TVO
AI	BEYOND	CSC	GGC	KCAR	MONO	PL	RWI	SPC	TIDLOR	TWPC
AIE	BGC	DCC	GJS	KCE	MOONG	PLANB	S & J	SPI	TIPCO	U
AIRA	BGRIM	DELTA	GPI	KGI	MSC	PLANET	SAAM	SPRC	TISCO	UBE
AKP	BJCHI	DEMCO	GPSC	KKP	MST	PLAT	SABINA	SRICHA	TKS	UBIS
ALPHAX	BKI	DIMET	GSTEEL	KSL	MTC	PM	SAPPE	SSF	TKT	UEC
AMA	BLA	DRT	GUNKUL	KTB	MTI	PPP	SAT	SSP	TMD	UKEM
AMANAH	BPP	DTAC	HANA	KTC	NBC	PPPM	SC	SSSC	TMILL	UOBKH
AMATA	BROOK	DUSIT	HARN	KWC	NEP	PPS	SCB	SST	TMT	UPF
AMATAV	BRR	EA	HEMP	KWI	NINE	PR9	SCC	STA	TNITY	UV
AP	BSBM	EASTW	HENG	L&E	NKI	PREB	SCCC	STOWER	TNL	VGI
APCS	BTS	ECL	HMPRO	LANNA	NMG	PRG	SCG	SUSCO	TNP	VIH
AQUA	BWG	EGCO	HTC	LH	NNCL	PRINC	SCN	SVI	TNR	WACOAL
ARROW	CEN	EP	ICC	LHFG	NOBLE	PRM	SEAOIL	SYMC	TOG	WHA
AS	CENTEL	EPG	ICHI	LHK	NOK	PROS	SE-ED	SYNTEC	TOP	WHAUP
ASIAN	CFRESH	ERW	IFEC	LPN	NSI	PSH	SELIC	TAE	TOPP	WICE
ASK	CGH	ESTAR	IFS	LRH	NWR	PSL	SENA	TAKUNI	TPA	WIIK
ASP	CHEWA	ETE	ILINK	М	000	PSTC	SGP	TASCO	TPP	XO
AWC	CHOTI	FE	INET	MAKRO	OGC	PT	SINGER	TBSP	TRU	ZEN
AYUD	CHOW	FNS	INSURE	MALEE	ORI	PTG	SIRI	TCAP	TRUE	
В	CIG	FPI	INTUCH	MATCH	PAP	PTT	SITHAI	TCMC	TSC	
BAFS	CIMBT	FPT	IRC	MBAX	PATO	PTTEP	SKR	TFG	TSTE	
BAM	CM	FSMART	IRPC	MBK	PB	PTTGC	SMIT	TFI	TSTH	
BANPU	CMC	FSS	ITEL	MC	PCSGH	PYLON	SMK	TFMAMA	TTA	
BAY	COM7	FTE	IVL	MCOT	PDG	Q-CON	SMPC	TGH	ттв	
BBL	сотто	GBX	JKN	META	PDJ	QH	SNC	THANI	TTCL	
DECLARED										
AJ	CHG	DDD	ETC	JR	MAJOR	NUSA	RS	SSS	TQM	YUASA
ALT	CPL	DHOUSE	FLOYD	JTS	NCAP	NYT	SAK	STECH	TSI	ZIGA
APCO	CPR	DOHOME	GULF	KEX	NCL	OR	SCGP	STGT	VARO	
B52	CPW	ECF	Ш	KUMWEL	NOVA	PIMO	SCM	TKN	VCOM	
BEC	CRC	EKH	INOX	LDC	NRF	PLE	SIS	ТМІ	VIBHA	

Level

Certified This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already

Declared

passed examination to ensure independence from external parties. This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

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Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of 26 October 2021) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Sources: The Securities and Exchange Commission, Thailand; * FSSIA's compilation



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Suwat Sinsadok, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

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History of change in investment rating and/or target price



Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 12-Jun-2020

Price and TP are in local currency

Source: FSSIA estimates

PTT PCL (PTT TB)



Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 12-May-2020

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
PTT Explor & Prod	PTTEP TB	THB 161.50	BUY	Risks our TP, which is based on EV/EBITDA, are a sharp decline in oil price and a potential earnings downside from government intervention.
PTT PCL	PTT TB	THB 34.50	BUY	Risks to our SoTP-based valuation are the oil price and potential earnings downsides from government intervention.

Source: FSSIA estimates



Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

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All share prices are as at market close on 26-Jul-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as (target price* - current price) / current price.

BUY (B). The upside is 10% or more.

HOLD (H). The upside or downside is less than 10%.

REDUCE (R). The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

Industry Recommendations

Overweight. The analyst expects the fundamental conditions of the sector to be positive over the next 12 months. **Neutral.** The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months. **Underweight.** The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

Country (Strategy) Recommendations

Overweight (O). Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Neutral (N). Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

Underweight (U). Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

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