

PTT EXPLOR & PROD

THAILAND / OIL & GAS

PTTEP TB

BUY

UNCHANGED

TARGET PRICE	THB162.00
CLOSE	THB127.00
UP/DOWNSIDE	+27.6%
PRIOR TP	THB158.00
CHANGE IN TP	+2.5%
TP vs CONSENSUS	+12.9%

Mozambique impairment hurt 4Q21

- 4Q21 NP was THB10.6b (+12% q-q, +321% y-y) due to a higher ASP that was partly offset by impairment loss and hedging gain.
- Strong NP growth expected in 2022-23, driven by 1) higher sales volumes; 2) a higher ASP; and 3) its low-cost structure.
- Maintain BUY and lift our TP from THB158 to THB162

Strong core but weak reported net profit in 4Q21

PTTEP's 4Q21 net profit (NP) was THB10.6b (+12% q-q, +321% y-y) due to a higher average selling price (ASP) that was partly offset by a USD183m impairment loss from the LNG Mozambique Area 1 project and Yetagun in Myanmar, along with a hedging gain (USD5m). Core NP rose to THB17.1b in 4Q21 (+51 q-q, +240% y-y), beating Bloomberg consensus by 6% and our forecast by 3%. Key drivers were 1) a 6% q-q higher ASP at USD46.9/boe from the higher liquid price (+10% q-q to USD76.2/boe) and higher gas price (+1% q-q to USD5.81/mmbtu); and 2) a higher sales volume of 421kboed (+1% q-q, +10% y-y) due to the higher sales volume in Malaysia and MTJDA to offset the lower sales volume from Zawtika on the planned shutdown. The total cost in 4Q21 rose to USD29.5/boe (+0.4% q-q, -5% y-y) on higher operating expenses.

Southeast Asia is now PTTEP's key growth engine

PTTEP's assets in Southeast Asia, mainly its Murphy oil and gas assets in Malaysia and the gas fields in Myanmar, reported a 4Q21 NP of USD546m, up 69% q-q due to the higher sales volume in Malaysia. The NP from its Middle East assets jumped to USD37m in 4Q21 due to the higher ASP. PTTEP's guidance for 2022 is 1) a sales volume targeted at 467kboed, up from 416kboed in 2021 on higher sales volumes from Bongkot, Malaysia and Oman; 2) a gas price at USD5.9/mmbtu in 2022; and 3) a unit cost of USD27-28/boe, lower y-y by USD1/boe.

Volume growth in Malaysia to offset the downsides in Myanmar

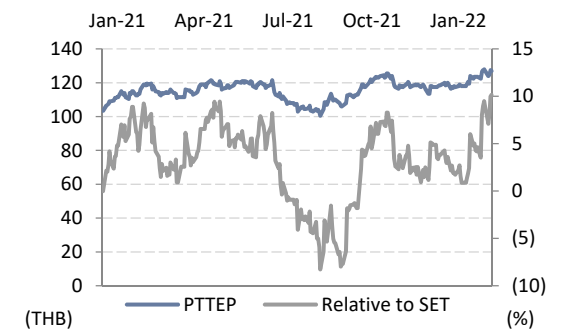
PTTEP's 2022-23E NP should be driven by 1) higher sales volumes from Oman 61 and Sabah H, reflected in PTTEP's higher guided sales volumes; 2) a higher ASP due to higher liquid and gas prices; and 3) its low-cost structure at USD27-28/boe. PTTEP's recent gas exploration discoveries in Malaysia should help offset the potential sales volume downsides in Myanmar after the withdrawal of TotalEnergies from the Yadana gas field and the delay of gas production at G1 in Thailand.

Still a top pick for the best oil play in Thailand

We maintain BUY and lift our TP from THB158, based on 6.1x 2021E EV/BITDA, to THB162, based on 5.3x 2022E EV/EBITDA, as we rollover to 2022.

KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	219,068	269,145	276,764	276,842
Net profit	38,864	45,757	45,166	47,802
EPS (THB)	9.79	11.53	11.38	12.04
vs Consensus (%)	-	11.2	(11.0)	(0.2)
EBITDA	113,647	141,023	132,982	140,480
Core net profit	48,531	45,757	45,166	47,802
Core EPS (THB)	12.22	11.53	11.38	12.04
Chg. In EPS est. (%)	nm	(0.7)	(1.3)	nm
EPS growth (%)	104.9	(5.7)	(1.3)	5.8
Core P/E (x)	10.4	11.0	11.2	10.5
Dividend yield (%)	4.9	5.8	5.7	6.1
EV/EBITDA (x)	4.5	4.3	4.4	4.1
Price/book (x)	1.2	1.2	1.1	1.1
Net debt/Equity (%)	2.5	24.0	19.5	15.1
ROE (%)	12.6	10.8	10.3	10.5



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	7.6	4.5	15.5
Relative to country (%)	7.8	4.1	5.8
Mkt cap (USD m)	15,170		
3m avg. daily turnover (USD m)	34.7		
Free float (%)	35		
Major shareholder	PTT Plc. (65%)		
12m high/low (THB)	129.50/100.50		
Issued shares (m)	3,969.99		

Sources: Bloomberg consensus; FSSIA estimates



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Investment thesis

PTTEP could see a negative impact from declining gas prices in 2021, reflecting the low oil prices in 2020, as PTTEP's gas price is linked to the average past 6-month oil price.

We believe PTTEP's ASP 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 constitutes 70% of its total sales volume but only 50% of its revenue.

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

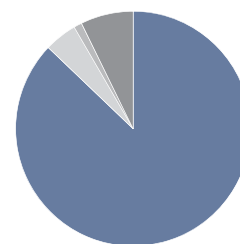
Company profile

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)

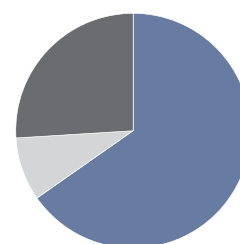
- Exploration and production - 101.9 %
- Pipeline - 5.3 %
- Others - 1.3 %
- Inter company eliminations - -8.5 %



Source: PTT Explor & Prod

Major shareholders

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



Source: PTT Explor & Prod

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
Apr 2022	4Q21/2021 results announcement

Key assumptions

	2022E	2023E	2024E
Brent oil price (USD/bbl)	70	70	70
Sales volume (boed)	513,890	533,890	534,040
ASP (USD/boe)	42.9	42.5	42.5
Gas price (USD/mmbtu)	5.6	5.5	5.5

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in Dubai oil price, we project 2021 earnings would rise 1.3%, and vice versa, all else being equal.
- For every 1% increase in gas price, we estimate 2021 earnings would rise 1.2%, and vice versa.
- For every 1% increase in sales volume, we estimate 2021 earnings would rise 1.1%, and vice versa.

Source: FSSIA estimates

Exhibit 1: Summary of 4Q21/2021 operations

	4Q20	3Q21	4Q21			2020	2021	Change
	(THB m)	(THB m)	(THB m)	(q-q %)	(y-y %)	(THB m)	(THB m)	(y-y %)
Revenue	39,554	57,417	62,313	8.5	57.5	160,401	219,068	36.6
Operating costs	(9,808)	(14,691)	(17,737)	20.7	80.8	(14,793)	(23,710)	60.3
EBITDA	29,746	42,726	44,576	4.3	49.9	70,603	113,647	61.0
EBITDA margin (%)	75.2	74.4	71.5	nm	nm	44.0	51.9	nm
Depn & amort.	(16,774)	(19,949)	(14,041)	(29.6)	(16.3)	(26,100)	(28,118)	7.7
EBIT	12,972	22,777	30,535	34.1	135.4	44,503	85,530	92.2
Interest expense	(2,046)	(1,712)	(1,696)	(0.9)	(17.1)	(7,956)	(6,472)	(18.7)
Interest & invt inc	(4,109)	457	3,033	564.3	(173.8)	1,150	532	(53.8)
Associates' contrib	777	228	109	(52.2)	(86.0)	1,307	489	(62.6)
Exceptionals	(2,613)	(1,459)	(6,417)	nm	nm	3,444	9,981	nm
Pretax profit	4,981	20,291	25,564	26.0	413.3	41,428	80,392	94.1
Tax	(2,454)	(10,746)	(14,919)	38.8	507.9	(18,764)	(41,528)	121.3
Tax rate (%)	49.3	53.0	58	nm	nm	45.3	51.7	nm
Minority interests	0	0	0	nm	nm	0	0	nm
Net profit	2,527	9,545	10,645	11.5	321.3	22,664	38,864	71.5
Non-recurring	(2,520)	(1,818)	(6,499)	257.5	157.9	(1,021)	(9,667)	847.3
Core profit	5,047	11,363	17,144	50.9	239.7	23,685	48,531	104.9
EPS (THB)	0.64	2.40	2.68	11.5	321.3	5.71	9.79	71.5
Core EPS (THB)	1.27	2.86	4.32	50.9	239.7	5.97	12.22	104.9

Sources: PTTEP; FSSIA estimates

Exhibit 2: 4Q21/2021 results – key drivers

	Unit	4Q20	3Q21	4Q21	Change		2020	2021	Change
					(q-q %)	(y-y %)			(y-y %)
Sales volume	boed	381,285	417,167	420,965	0.9	10.4	354,052	416,141	17.5
ASP	USD/boe	36.9	44.3	46.9	5.9	27.2	39	43	11.7
Total cost	USD/boe	31.1	29.4	29.5	0.4	(5.1)	30.5	28.5	(6.5)
Cash cost	USD/boe	15.5	13.6	15.7	15.1	1.2	14.4	13.3	(8.0)
Operating expenses	USD/boe	6.7	5.7	7.1	23.9	6.4	6.1	5.7	(7.7)
Exploration expenses	USD/boe	0.8	1.3	0.5	(61.1)	(32.9)	0.8	0.5	(32.5)
Petroleum royalties	USD/boe	3.0	3.4	3.7	7.3	24.7	3.2	3.5	10.1
SG&A	USD/boe	3.2	1.8	3.1	71.3	(3.8)	2.3	2.2	(4.7)
Depreciation, depletion & amortisation	USD/boe	15.6	15.8	13.9	(12.2)	(11.3)	16.1	15.3	(5.2)
Tax	USD/boe	2.2	8.7	11.9	37.6	450.6	4.3	8.3	93.0
Interest	USD/boe	1.9	1.4	1.3	(3.0)	(31.4)	2.0	1.3	(32.1)
Net profit	THB m	2,527	9,545	10,645	11.5	321.3	22,664	38,864	71.5
Core earnings	THB m	5,047	11,363	17,144	50.9	239.7	23,685	48,531	104.9

Sources: PTTEP; FSSIA estimates

Exhibit 3: 4Q21/2021 net profit by segment (USD m)

	4Q20	3Q21	4Q21	Change		2020	2021	Change
	(USD m)	(USD m)	(USD m)	(q-q %)	(y-y %)	(USD m)	(USD m)	(y-y %)
Exploration and production	215	366	401	9.6	86.5	868	1,698	95.6
Southeast Asia	207	324	546	68.5	163.8	944	1,576	66.9
- Thailand	204	271	372	37.3	82.4	799	1,220	52.7
- Other Southeast Asia	3	53	174	228.3	5,700.0	145	356	145.5
Middle East	(0)	32	37	15.6	nm	(13)	426	nm
Australia	(16)	(1)	7	nm	nm	(28)	5	nm
America	(5)	(2)	(23)	1,050.0	360.0	(56)	(175)	212.5
Africa	32	9	(169)	nm	nm	23	(147)	nm
Others	(3)	3	3	-	nm	(2)	13	nm
Head office and others	(134)	(74)	(80)	8.1	(40.3)	(148)	(487)	229.1
Total	81	292	321	9.9	296.3	720	1,211	68.2

Sources: PTTEP; FSSIA estimates

Exhibit 4: Key changes in assumptions

	Current			Previous			Change		
	2022E (THB m)	2023E (THB m)	2024E (THB m)	2022E (THB m)	2023E (THB m)	2024E (THB m)	2022E (%)	2023E (%)	2024E (%)
Revenue	269,145	276,764	276,842	261,837	260,318	276,842	2.8	6.3	0.0
Gross profit	208,309	202,173	209,691	176,877	178,493	209,691	17.8	13.3	0.0
Operating profit	108,196	97,698	103,151	79,599	79,137	103,151	35.9	23.5	0.0
Net profit	45,757	45,166	47,802	46,059	45,782	47,802	(0.7)	(1.3)	0.0
EPS (THB/shr)	11.53	11.38	12.04	11.60	11.53	12.04	(0.7)	(1.3)	0.0
Key assumptions									
Brent oil price (USD/bbl)	70	70	70	65	60	70	7.7	16.7	0.0
Sales volume (boed)	513,890	533,890	534,040	513,890	533,890	534,040	0.0	0.0	0.0
ASP (USD/boe)	42.9	42.5	42.5	41.5	39.8	42.5	3.3	6.8	0.0
Gas price (USD/mmbtu)	5.6	5.5	5.5	5.6	5.5	5.5	0.0	0.0	0.0

Sources: PTTEP; FSSIA estimates

Financial Statements

PTT Explor & Prod

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Revenue	160,401	219,068	269,145	276,764	276,842
Cost of goods sold	(14,793)	(23,710)	(60,836)	(74,592)	(67,151)
Gross profit	145,607	195,358	208,309	202,173	209,691
Other operating income	-	-	-	-	-
Operating costs	(75,004)	(81,710)	(67,286)	(69,191)	(69,211)
Operating EBITDA	70,603	113,647	141,023	132,982	140,480
Depreciation	(26,100)	(28,118)	(32,826)	(35,284)	(37,329)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	44,503	85,530	108,196	97,698	103,151
Net financing costs	(5,987)	(7,253)	(15,534)	(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	0
Profit before tax	41,428	80,392	94,651	93,428	98,882
Tax	(18,764)	(41,528)	(48,894)	(48,262)	(51,080)
Profit after tax	22,664	38,864	45,757	45,166	47,802
Minority interests	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	22,664	38,864	45,757	45,166	47,802
Non-recurring items & goodwill (net)	1,021	9,667	0	0	0
Recurring net profit	23,685	48,531	45,757	45,166	47,802
Per share (THB)					
Recurring EPS *	5.97	12.22	11.53	11.38	12.04
Reported EPS	5.71	9.79	11.53	11.38	12.04
DPS	4.25	6.25	7.36	7.26	7.69
Diluted shares (used to calculate per share data)	3,970	3,970	3,970	3,970	3,970
Growth					
Revenue (%)	(16.0)	36.6	22.9	2.8	0.0
Operating EBITDA (%)	(27.5)	61.0	24.1	(5.7)	5.6
Operating EBIT (%)	(38.4)	92.2	26.5	(9.7)	5.6
Recurring EPS (%)	(46.8)	104.9	(5.7)	(1.3)	5.8
Reported EPS (%)	(53.6)	71.5	17.7	(1.3)	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	51.9	52.4	48.0	50.7
Operating EBIT margin (%)	27.7	39.0	40.2	35.3	37.3
Net margin (%)	14.8	22.2	17.0	16.3	17.3
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	63.8
Interest cover (X)	8.1	13.4	7.1	15.9	16.8
Inventory days	248.2	186.5	85.2	71.2	80.2
Debtor days	58.4	33.7	52.6	76.6	73.0
Creditor days	475.6	621.6	184.2	59.6	67.2
Operating ROIC (%)	8.6	16.1	16.2	12.9	(9.3)
ROIC (%)	5.5	10.4	10.1	8.5	(6.0)
ROE (%)	6.7	12.6	10.8	10.3	10.5
ROA (%)	4.1	7.2	7.1	6.4	6.0

* Pre-exceptional, pre-goodwill and fully diluted

Revenue by Division (THB m)	2020	2021	2022E	2023E	2024E
Exploration and production	155,181	223,260	273,337	280,956	281,034
Pipeline	11,513	11,513	11,513	11,513	11,513
Others	2,875	2,875	2,875	2,875	2,875
Inter company eliminations	(9,168)	(18,579)	(18,579)	(18,579)	(18,579)

Sources: PTT Explor & Prod; FSSIA estimates

Financial Statements

PTT Explor & Prod

Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	23,685	48,531	45,757	45,166	47,802
Depreciation	26,100	28,118	32,826	35,284	37,329
Associates & minorities	-	-	-	-	-
Other non-cash items	35,065	35,066	35,066	35,066	35,067
Change in working capital	21,694	(13,587)	(27,633)	5,026	(20)
Cash flow from operations	106,543	98,127	86,015	120,541	120,178
Capex - maintenance	-	-	-	-	-
Capex - new investment	(115,506)	(115,506)	(114,807)	(81,807)	(81,807)
Net acquisitions & disposals	176	457	838	1,301	1,301
Other investments (net)	1	0	0	0	0
Cash flow from investing	(115,329)	(115,049)	(113,969)	(80,506)	(80,506)
Dividends paid	(20,986)	(19,325)	(29,213)	(28,836)	(30,519)
Equity finance	0	0	0	0	0
Debt finance	3,457	(2,275)	12,259	(20,000)	0
Other financing cash flows	52,451	12,793	(35,923)	5,025	7,756
Cash flow from financing	34,923	(8,807)	(52,877)	(43,811)	(22,763)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	26,136	(25,729)	(80,831)	(3,776)	16,909
Free cash flow to firm (FCFF)	(830.97)	(10,450.60)	(21,162.94)	46,825.48	46,461.50
Free cash flow to equity (FCFE)	47,121.85	(6,404.27)	(51,617.25)	25,060.21	47,428.23
Per share (THB)					
FCFF per share	(0.21)	(2.63)	(5.33)	11.79	11.70
FCFE per share	11.87	(1.61)	(13.00)	6.31	11.95
Recurring cash flow per share	21.37	28.14	28.63	29.10	30.28
Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	1,100,534	1,255,645	1,370,452	1,452,259	1,534,066
Less: Accumulated depreciation	(805,044)	(875,338)	(957,403)	(1,045,613)	(1,138,936)
Tangible fixed assets (net)	295,491	380,307	413,049	406,646	395,130
Intangible fixed assets (net)	0	0	0	0	0
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	13,523	14,408	13,596	12,783	11,971
Cash & equivalents	111,257	85,528	4,697	922	17,831
A/C receivable	23,752	16,715	60,785	55,353	55,368
Inventories	10,156	14,069	14,347	14,753	14,757
Other current assets	7,551	23,272	23,272	23,272	23,272
Current assets	152,716	139,584	103,102	94,300	111,229
Other assets	213,908	249,237	235,830	239,135	242,438
Total assets	675,637	783,536	765,575	752,865	760,769
Common equity	354,411	415,350	431,895	448,225	465,506
Minorities etc.	0	0	0	0	0
Total shareholders' equity	354,411	415,350	431,895	448,225	465,506
Long term debt	85,016	82,741	95,000	75,000	75,000
Other long-term liabilities	179,953	180,943	172,855	164,767	156,679
Long-term liabilities	264,969	263,684	267,855	239,767	231,679
A/C payable	31,356	49,398	12,014	12,354	12,357
Short term debt	13,208	13,208	13,208	13,208	13,208
Other current liabilities	11,693	41,897	39,986	38,075	36,164
Current liabilities	56,257	104,502	65,207	63,636	61,729
Total liabilities and shareholders' equity	675,637	783,536	764,957	751,628	758,913
Net working capital	(1,591)	(37,239)	46,405	42,949	44,876
Invested capital	521,330	606,713	708,879	701,514	694,416
* Includes convertibles and preferred stock which is being treated as debt					
Per share (THB)					
Book value per share	89.27	104.62	108.79	112.90	117.26
Tangible book value per share	89.27	104.62	108.79	112.90	117.26
Financial strength					
Net debt/equity (%)	(3.7)	2.5	24.0	19.5	15.1
Net debt/total assets (%)	(1.9)	1.3	13.5	11.6	9.3
Current ratio (x)	2.7	1.3	1.6	1.5	1.8
CF interest cover (x)	28.2	16.0	5.1	18.1	21.7
Valuation	2020	2021	2022E	2023E	2024E
Recurring P/E (x) *	21.3	10.4	11.0	11.2	10.5
Recurring P/E @ target price (x) *	27.2	13.3	14.1	14.2	13.5
Reported P/E (x)	22.2	13.0	11.0	11.2	10.5
Dividend yield (%)	3.3	4.9	5.8	5.7	6.1
Price/book (x)	1.4	1.2	1.2	1.1	1.1
Price/tangible book (x)	1.4	1.2	1.2	1.1	1.1
EV/EBITDA (x) **	7.0	4.5	4.3	4.4	4.1
EV/EBITDA @ target price (x) **	8.9	5.8	5.3	5.5	5.1
EV/invested capital (x)	0.9	0.8	0.9	0.8	0.8
* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income					

Sources: PTT Explor & Prod; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICHI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PCSGH	PDJ	PG	PHOL	PLANB	PLANET
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TSC	TSR	TSTE	TSTH	TTA
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSI	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T	TAE	TAKUNI	TBSP
TCC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
TMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
UPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIJK	WP	XO
YUASA	ZEN	ZIGA	ZMICO							

GOOD LEVEL										
7UP	A	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
B52	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
GSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
OCEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TIPIPP	TPLAS
TTI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		

Description	Score Range
Excellent	90-100
Very Good	80-89
Good	70-79

Disclaimer:

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.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey results may be changed after that date. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; ** delisted

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAH	AP	AQUA	ARROW
ASK	ASP	AYUD	B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG
BGC	BGRIM	BJCHI	BKI	BLA	BPP	BROOK	BRR	BSBM	BTS	BWG
CEN	CENTEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT	CM	CMC
COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET
DRT	DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS
FTE	GBX	GC	GCAP	GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL
HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS	INET	INSURE	INTUCH	IRPC
ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP	KSL
KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO
MALEE	MBAX	MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG
MPG	MSC	MTC	MTI	NBC	NEP	NINE	NKI	NMG	NNCL	NSI
NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB	PCSGH	PDG	PDI
PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J
SABINA	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	SORKON	SPACK
SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC
TAE	TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM
THIP	THRE	THREL	TIP	TIPCO	TISCO	TKT	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									
DECLARED										
7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD
BM	BROCK	BUI	CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW
ESTAR	ETE	EVER	FSMART	GPI	ILINK	IRC	J	JKN	JMART	JMT
JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK	PK	PLE
ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY
SUPER	SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA

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

Disclaimer:

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June 24, 2019) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

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

GENERAL DISCLAIMER

ANALYST(S) CERTIFICATION

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

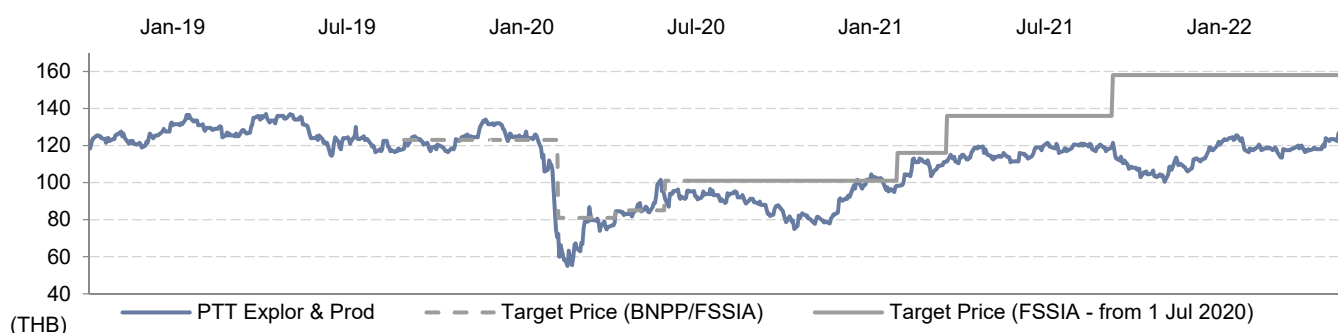
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

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History of change in investment rating and/or target price

PTT Explor & Prod (PTTEP TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
29-Oct-2019	HOLD	123.00	30-Apr-2020	BUY	85.00	11-Feb-2021	BUY	136.00
11-Mar-2020	HOLD	81.00	12-Jun-2020	BUY	101.00	05-Jul-2021	BUY	158.00
26-Mar-2020	BUY	81.00	30-Dec-2020	BUY	116.00			

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

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
PTT Explor & Prod	PTTEP TB	THB 127.00	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.

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 27-Jan-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as $(\text{target price}^* - \text{current price}) / \text{current price}$.

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.