



## PTT E&P

PTT Exploration and Production  
Public Company Limited

## PTTEP

Bloomberg PTTEP TB  
Reuters PTTEP.BK

### Expect better 3Q20F QoQ expected

**PTTEP share price (+0.3%) did better than the SET (-0.4%) and Dubai crude oil price (-1.5%) over the past month. Its good earnings in 3Q20F – higher oil price, ST weather disruptions in the US – are likely to be a ST share price catalyst; global oil price has a correlation of 94% with PTTEP share price. We rate “Outperform” with TP of Bt114, based on DCF-based valuation.**

**Net profit up 29% QoQ in 3Q20F.** We expect 29% QoQ growth in net profit to Bt5.6bn in 3Q20F on better sales volume and average selling price (ASP), with YoY weak (-49.5%) on lower product price and sales volume on lower gas nomination from PTT. This estimate includes the THB impact on its deferred tax assets and liabilities (DTA and DTL), but this should be the last time, as it is now allowed to file with the Revenue Department in its functional currency, USD.

**Higher oil price drives 3Q20F.** PTTEP's 3Q20F average selling price is US\$38.9/BOE (+11% QoQ but -16% YoY) thanks to higher oil price in the quarter, with a 45% QoQ rise in liquid product (crude and condensate) selling price to US\$42/bbl, in line with the 35% QoQ rise in average oil price (Dubai) to US\$42.5/bbl. Average gas price is expected to slip 3% QoQ to US\$6.2/mmBTU due to the lag before price adjustment to incorporate a lower oil price for the past 3-6 months. This will be slightly better than management's guidance last July of US\$6.1/mmBTU.

**Sales volume inching up QoQ.** We estimate a 3.5% QoQ increase in sales volume to 338kBOED in 3Q20, slightly below guidance (340kBOED). This is down 4% YoY on PTT's drop in gas nomination to below daily contracted quantity (DCQ) at some gas fields in the Gulf of Thailand. The gas sales agreement allows PTT to offtake the carried-forward gas but at no more than 10% of the agreed DCQ. This reflects lower demand for gas in Thailand for electricity generation as economic activities slowed during COVID-19. Further, demand for natural gas by PTT in 2Q20 was also hurt by PTT's planned shutdown of gas processing plants.

**Higher unit cost QoQ but still in line.** PTTEP's unit cost is expected to rise 3% QoQ but fall 3% YoY to US\$31/BOE, mainly for royalty expense on higher ASP and depreciation due to more complete assets. This lines up with guidance. Hence it should be able to maintain its EBITDA margin of 70% vs. guidance of 65-70%.

**2020 volume guidance implies strong bounce in 4Q20F.** PTTEP stands by its full-year target sales volume of 355kBOED, implying sales volume of 390kBOED in 4Q20 (+14% QoQ). This will be driven by sales volume from Block H project in Malaysia with capacity of 270mmcf/d, whose startup was delayed from 3Q20. There will be some offset by lower gas price, expected to soften to around US\$5/mmmtu.

**DCF-based TP stays at Bt114.** Our DCF-based TP at Bt114/share is based on LT Dubai of US\$43/bbl and Brent of US\$45/bbl from 2021F. At our TP the stock trades at 0.9x PBV for 2021F or -0.6SD of 5-year average. Key risks: 1) volatile crude oil price, 2) higher unit cost, and 3) the risk of more asset impairments.

#### Forecasts and valuation

Year to 31 Dec	Unit	2018	2019	2020F	2021F	2022F
Revenue	(Btmn)	171,809	191,053	154,322	183,796	204,808
EBITDA	(Btmn)	127,315	139,517	105,089	125,791	139,222
Core profit	(Btmn)	36,291	48,844	19,358	28,912	31,033
Reported profit	(Btmn)	36,206	48,803	23,481	28,912	31,033
Core EPS	(Bt)	9.14	12.30	4.88	7.28	7.82
DPS	(Bt)	5.00	6.00	3.00	3.50	3.75
P/E, core	(x)	9.0	6.7	16.9	11.3	10.5
EPS growth, core	(%)	(5.5)	34.6	(60.4)	49.4	7.3
P/BV, core	(x)	0.8	0.9	0.9	0.9	0.8
ROE	(%)	9.5	13.1	5.3	7.7	7.9
Dividend yield	(%)	6.1	7.3	3.6	4.3	4.6
FCF yield	(x)	(0.3)	33.5	(0.3)	(3.5)	(2.9)
EV/EBIT	(x)	5.1	3.7	4.4	9.1	7.4
EBIT growth, core	(%)	44.1	30.5	13.6	(48.6)	31.1
EV/CE	(x)	0.6	0.5	0.6	0.6	0.6
ROCE	(%)	8.8	8.0	9.2	4.0	5.6
EV/EBITDA	(x)	1.9	2.4	3.4	3.0	2.8
EBITDA growth	(%)	(1.4)	18.2	9.6	(24.7)	19.7

Source: PTTEP, SCBS Investment Research

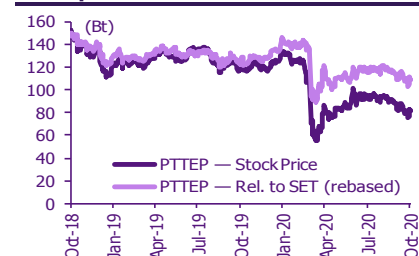
### Tactical: OUTPERFORM (3-month)

#### Stock data

Last close (Oct 12) (Bt)	82.25
12-m target price (Bt)	114.00
Mkt cap (Btbn)	326.53
Mkt cap (US\$mn)	10,484

Beta	H
Mkt cap (%) SET	2.37
Sector % SET	21.58
Shares issued (mn)	3,970
Par value (Bt)	1.00
12-m high / low (Bt)	136 / 50.5
Avg. daily 6m (US\$mn)	44.59
Foreign limit / actual (%)	40 / 9
Free float (%)	35.2
Dividend policy (%)	≤ 30

#### Price performance



Source: SET, SCBS Investment Research

#### Share performance

(%)	1M	3M	12M
Absolute	0.3	(10.4)	(32.9)
Relative to SET	0.8	(5.5)	(14.3)

Source: SET, SCBS Investment Research

#### Analyst

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**Value proposition**

PTTEP is a leading E&P operator in the Gulf of Thailand with 35% share of the country's natural gas production. The current sales volume of 345kBOED in 6M20 will continue to increase to 464kBOED (3-year CAGR of 10%) in 2022-23 when the new Production Sharing Contracts for project G1/61 (Erawan) and G2/61 (Bongkot) start in 2022 and 2023, respectively. The Gas Sales Agreements (GSA) for these two projects are expected to complete by 2Q21. PTTEP's proved reserves of 1,140mmBOE as of end-2019 implies 7.5 years of production. Including probable reserve, the 2P reserve implies 10.9 years of production. This is expected to be upped by several projects under exploration. PTTEP's petroleum product price is less volatile than market oil price due to the 6-12-month lag for price adjustment, mainly for gas (65-70% of total production).

**Business outlook**

PTTEP's sales volume will continue to increase, not only in Thailand but in strategic countries in ASEAN where it has solid experience. It plans to accelerate exploration in 2020-21, focusing on Malaysia and Myanmar, though this could be slower than previously planned due to COVID-19. These two countries are expected to be growth drivers for sales volume, apart from two gas fields in Thailand under new PSCs. Its Malaysian subsidiary announced the discovery of a large gas field with its first well in the SK410B block offshore Sarawak. More appraisal drilling will take place during 2020-21 for further development and the first gas is expected in 2025. This will add to the assets in Malaysia – plus operating assets acquired from Murphy Oil – which include the Block H project (currently under development), scheduled to start production in 4Q20 at 270mmcf/d. In Myanmar, PTTEP is working on appraisal wells in M3 which will be drilled for further development of the gas-to-power (G2P) project in Myanmar. The company also has exposure to the LNG business in Malaysia and Mozambique via which it can get in on opportunities for growth in the current market trend for gas business.

<b>Bullish views</b>	<b>Bearish views</b>
1. PTTEP is a proxy play on oil price, which could improve in the next 6-12 months when demand recovers following the successful development of a vaccine for COVID-19.	1. PTTEP's product price remains at risk from a lower gas price in 4Q20 given the 6-12-month lag before adjustment to reflect lower oil price.
2. PTTEP's sales volume is expected to gradually increase in the medium term due to continuing development of new projects both domestically and internationally.	2. Lower gas nomination by PTT could cause PTTEP's gas sales volume to miss target for 2020.
3. Earnings bottomed in 2Q20 when the oil price war and COVID-19 pandemic were at their peak. We expect to see earnings improvement in 3Q20F onwards.	3. Unexciting earnings growth outlook

**Key catalysts**

<b>Factor</b>	<b>Event</b>	<b>Impact</b>	<b>Comment</b>
Oil price movement	OPEC plus has agreed to reduce production cut further from 7.7mb/d to 5.8mb/d during Jan-Apr 2021	Negative	Despite higher oil supply, we believe oil demand growth could more than offset this and drive oil price in 2021F. The near-term oil price drop will inevitably hurt sentiment on PTTEP's share price given high correlation.
Near-term earnings outlook	3Q20F earnings momentum	Positive QoQ but still weaker YoY	We expect 3Q20F earnings to improve QoQ as oil price shot up, offsetting lower gas price. Sales volume will continue to reflect lower gas nomination from PTT due to a slowdown of demand.
Factors to watch in 2021	Oil price environment and abundant cash on hand open room for more M&As	Positive/Negative	PTTEP's strategy to focus more on familiar regions, mainly in Southeast Asia could increase its sales volume growth.

**Key catalysts**

<b>Factor</b>	<b>Earnings impact</b>	<b>TP impact</b>
L/T crude oil price (+US\$1/bbl)	+4.6%	+Bt2/share

## Financial statement

### Profit and Loss Statement

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Total revenue	(Btmn)	184,411	150,217	147,725	171,809	191,053	154,322	183,796	204,808
Cost of goods sold	(Btmn)	136,518	108,964	91,374	97,350	106,881	107,710	122,346	138,647
<b>Gross profit</b>	<b>(Btmn)</b>	<b>47,893</b>	<b>41,253</b>	<b>56,351</b>	<b>74,459</b>	<b>84,172</b>	<b>46,612</b>	<b>61,449</b>	<b>66,160</b>
SG&A	(Btmn)	9,584	7,895	8,459	9,405	11,870	8,575	10,447	11,817
Other income	(Btmn)	2,641	2,528	3,827	4,338	4,405	1,368	677	392
Interest expense	(Btmn)	8,582	8,274	7,676	7,707	7,291	7,803	7,618	7,433
<b>Pre-tax profit</b>	<b>(Btmn)</b>	<b>32,368</b>	<b>27,612</b>	<b>44,042</b>	<b>59,799</b>	<b>69,415</b>	<b>31,602</b>	<b>44,061</b>	<b>47,302</b>
Corporate tax	(Btmn)	17,085	10,040	5,987	23,764	20,952	12,644	15,568	16,710
Equity a/c profits	(Btmn)	311	301	329	256	380	399	419	440
Minority interests	(Btmn)	0	0	0	0	0	0	0	0
<b>Core profit</b>	<b>(Btmn)</b>	<b>15,593</b>	<b>17,873</b>	<b>38,384</b>	<b>36,291</b>	<b>48,844</b>	<b>19,358</b>	<b>28,912</b>	<b>31,033</b>
Extra-ordinary items	(Btmn)	(47,184)	(5,014)	(17,804)	(85)	(42)	4,123	0	0
<b>Net Profit</b>	<b>(Btmn)</b>	<b>(31,590)</b>	<b>12,860</b>	<b>20,579</b>	<b>36,206</b>	<b>48,803</b>	<b>23,481</b>	<b>28,912</b>	<b>31,033</b>
EBITDA	(Btmn)	133,771	109,254	107,702	127,315	139,517	105,089	125,791	139,222
<b>Core EPS</b>	<b>(Bt)</b>	<b>3.93</b>	<b>4.50</b>	<b>9.67</b>	<b>9.14</b>	<b>12.30</b>	<b>4.88</b>	<b>7.28</b>	<b>7.82</b>
Net EPS	(Bt)	(7.96)	3.24	5.18	9.12	12.29	5.91	7.28	7.82
DPS	(Bt)	3.00	3.25	4.25	5.00	6.00	3.00	3.50	3.75

### Balance Sheet

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Total current assets	(Btmn)	169,642	185,973	188,400	186,783	142,125	109,440	86,213	75,552
Total fixed assets	(Btmn)	539,222	490,917	439,721	445,473	529,866	536,500	559,076	581,884
<b>Total assets</b>	<b>(Btmn)</b>	<b>708,864</b>	<b>676,890</b>	<b>628,121</b>	<b>632,256</b>	<b>671,990</b>	<b>645,940</b>	<b>645,289</b>	<b>657,437</b>
Total loans	(Btmn)	108,455	101,459	81,946	49,932	99,448	99,448	94,448	94,448
Total current liabilities	(Btmn)	50,804	39,443	52,330	80,663	61,841	44,876	40,496	41,200
Total long-term liabilities	(Btmn)	249,248	229,463	199,416	162,020	253,090	232,424	221,135	216,434
<b>Total liabilities</b>	<b>(Btmn)</b>	<b>300,053</b>	<b>268,906</b>	<b>251,747</b>	<b>242,683</b>	<b>314,932</b>	<b>277,300</b>	<b>261,631</b>	<b>257,634</b>
Paid-up capital	(Btmn)	3,970	3,970	3,970	3,970	3,970	3,970	3,970	3,970
<b>Total equity</b>	<b>(Btmn)</b>	<b>408,811</b>	<b>407,984</b>	<b>376,375</b>	<b>389,573</b>	<b>357,059</b>	<b>368,640</b>	<b>383,658</b>	<b>399,803</b>
<b>BVPS</b>	<b>(Bt)</b>	<b>102.98</b>	<b>102.77</b>	<b>94.81</b>	<b>98.13</b>	<b>89.94</b>	<b>92.86</b>	<b>96.64</b>	<b>100.71</b>

### Cash Flow Statement

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Core Profit	(Btmn)	15,593	17,873	38,384	36,291	48,844	19,358	28,912	31,033
Depreciation and amortization	(Btmn)	92,822	73,368	55,983	59,809	62,811	65,684	74,112	84,488
Operating cash flow	(Btmn)	108,393	80,188	85,357	105,704	102,878	60,729	87,099	107,301
Investing cash flow	(Btmn)	(73,029)	(96,000)	(86,474)	3,755	(103,769)	(72,318)	(96,688)	(107,296)
Financing cash flow	(Btmn)	(56,821)	(19,211)	(22,540)	(55,685)	(17,181)	(11,899)	(18,895)	(14,887)
<b>Net cash flow</b>	<b>(Btmn)</b>	<b>(21,457)</b>	<b>(35,023)</b>	<b>(23,657)</b>	<b>53,774</b>	<b>(18,072)</b>	<b>(23,488)</b>	<b>(28,483)</b>	<b>(14,883)</b>

### Key Financial Ratios

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Gross margin	(%)	26.0	27.5	38.1	43.3	44.1	30.2	33.4	32.3
Operating margin	(%)	20.8	22.2	32.4	37.9	37.8	24.6	27.7	26.5
EBITDA margin	(%)	72.5	72.7	72.9	74.1	73.0	68.1	68.4	68.0
EBIT margin	(%)	22.2	23.9	35.0	39.3	40.1	25.5	28.1	26.7
Net profit margin	(%)	(17.1)	8.6	13.9	21.1	25.5	15.2	15.7	15.2
ROE	(%)	3.8	4.4	9.8	9.5	13.1	5.3	7.7	7.9
ROA	(%)	2.1	2.6	5.9	5.8	7.5	2.9	4.5	4.8
Net D/E	(x)	(0.0)	(0.1)	(0.2)	(0.2)	0.0	0.1	0.1	0.2
Interest coverage	(x)	15.6	13.2	14.0	16.5	19.1	13.5	16.5	18.7
Debt service coverage	(x)	15.6	13.2	14.0	16.5	19.1	8.2	16.5	18.7
Payout Ratio	(%)	(37.7)	100.3	82.0	54.8	48.8	50.7	48.1	48.0

### Main Assumptions

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Sales volume	(kBOED)	322	320	299	306	351	350	391	437
- Liquid product	(% of total)	30.4	30.7	30.1	28.1	29.0	33.0	31.0	33.0
- Gas product	(% of total)	69.6	69.3	69.9	71.9	71.0	67.0	69.0	67.0
Dubai crude oil price	(US\$/bbl)	51.2	41.3	53.1	69.7	63.2	38.0	43.0	43.0
Avg selling price	(US\$/BOE)	45.3	35.9	39.2	46.7	47.2	37.2	39.7	39.5
CAPEX	(US\$m)	1,740	998	1,331	1,081	1,197	2,647	3,011	3,342

## Financial statement

### Profit and Loss Statement

FY December 31	Unit	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Total revenue	(Btmn)	45,088	47,263	42,860	47,495	46,805	53,893	46,986	34,028
Cost of goods sold	(Btmn)	26,469	26,119	22,923	25,280	27,264	31,414	27,977	24,900
<b>Gross profit</b>	<b>(Btmn)</b>	<b>18,619</b>	<b>21,144</b>	<b>19,937</b>	<b>22,215</b>	<b>19,541</b>	<b>22,479</b>	<b>19,009</b>	<b>9,129</b>
SG&A	(Btmn)	2,297	3,431	2,049	2,931	2,885	4,006	2,051	1,980
Other income	(Btmn)	1,003	1,451	1,256	1,361	864	924	686	633
Interest expense	(Btmn)	1,893	2,193	1,804	1,760	1,837	1,890	2,029	1,945
<b>Pre-tax profit</b>	<b>(Btmn)</b>	<b>15,432</b>	<b>15,084</b>	<b>17,340</b>	<b>18,885</b>	<b>15,684</b>	<b>17,507</b>	<b>14,978</b>	<b>5,837</b>
Corporate tax	(Btmn)	3,483	9,636	3,377	5,889	5,961	5,725	14,106	(2,173)
Equity a/c profits	(Btmn)	75	56	86	79	25	191	439	(53)
Minority interests	(Btmn)	0	0	0	0	0	0	0	0
<b>Core profit</b>	<b>(Btmn)</b>	<b>12,024</b>	<b>5,504</b>	<b>14,049</b>	<b>13,075</b>	<b>9,748</b>	<b>11,972</b>	<b>1,310</b>	<b>7,957</b>
Extra-ordinary items	(Btmn)	(1,623)	3,330	(1,570)	609	1,271	(352)	7,302	(3,634)
<b>Net Profit</b>	<b>(Btmn)</b>	<b>10,401</b>	<b>8,834</b>	<b>12,479</b>	<b>13,684</b>	<b>11,019</b>	<b>11,620</b>	<b>8,612</b>	<b>4,323</b>
EBITDA	(Btmn)	33,691	33,179	33,668	35,714	33,239	36,896	33,783	23,358
<b>Core EPS</b>	<b>(Bt)</b>	<b>3.03</b>	<b>1.39</b>	<b>3.54</b>	<b>3.29</b>	<b>2.46</b>	<b>3.02</b>	<b>0.33</b>	<b>2.00</b>
Net EPS	(Bt)	2.62	2.23	3.14	3.45	2.78	2.93	2.17	1.09

### Balance Sheet

FY December 31	Unit	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Total current assets	(Btmn)	164,567	186,783	203,619	158,643	112,682	142,125	164,443	135,767
Total fixed assets	(Btmn)	457,957	445,473	437,387	418,573	494,180	529,866	566,225	536,671
<b>Total assets</b>	<b>(Btmn)</b>	<b>622,525</b>	<b>632,256</b>	<b>641,007</b>	<b>577,216</b>	<b>606,862</b>	<b>671,990</b>	<b>730,668</b>	<b>672,438</b>
Total loans	(Btmn)	63,087	63,140	62,384	62,900	67,214	99,999	97,131	108,612
Total current liabilities	(Btmn)	72,412	80,663	97,817	40,032	49,603	61,841	87,644	41,443
Total long-term liabilities	(Btmn)	168,457	162,020	161,602	171,422	191,362	253,090	265,275	269,864
<b>Total liabilities</b>	<b>(Btmn)</b>	<b>240,869</b>	<b>242,683</b>	<b>259,419</b>	<b>211,454</b>	<b>240,965</b>	<b>314,932</b>	<b>352,919</b>	<b>311,308</b>
Paid-up capital	(Btmn)	3,970	3,970	3,970	3,970	3,970	3,970	3,970	3,970
<b>Total equity</b>	<b>(Btmn)</b>	<b>381,656</b>	<b>389,573</b>	<b>381,588</b>	<b>365,762</b>	<b>365,897</b>	<b>357,059</b>	<b>377,749</b>	<b>361,131</b>
<b>BVPS</b>	<b>(Bt)</b>	<b>96.14</b>	<b>98.13</b>	<b>96.12</b>	<b>92.13</b>	<b>92.17</b>	<b>89.94</b>	<b>95.15</b>	<b>90.97</b>

### Cash Flow Statement

FY December 31	Unit	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Core Profit	(Btmn)	12,024	5,504	14,049	13,075	9,748	11,972	1,310	7,957
Depreciation and amortization	(Btmn)	16,366	15,901	14,524	15,070	15,718	17,499	16,776	15,577
Operating cash flow	(Btmn)	33,225	33,009	27,890	8,121	34,421	32,447	38,095	2,208
Investing cash flow	(Btmn)	(123)	(20,272)	(12,009)	(1,826)	(67,767)	(22,167)	(9,435)	(19,330)
Financing cash flow	(Btmn)	(18,200)	(2,458)	(438)	(28,882)	(9,391)	21,529	(14,210)	(2,447)
<b>Net cash flow</b>	<b>(Btmn)</b>	<b>14,903</b>	<b>10,280</b>	<b>15,443</b>	<b>(22,587)</b>	<b>(42,737)</b>	<b>31,809</b>	<b>14,450</b>	<b>(19,569)</b>

### Key Financial Ratios

FY December 31	Unit	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Gross margin	(%)	41.3	44.7	46.5	46.8	41.7	41.7	40.5	26.8
Operating margin	(%)	36.2	37.5	41.7	40.6	35.6	34.3	36.1	21.0
EBITDA margin	(%)	74.7	70.2	78.6	75.2	71.0	68.5	71.9	68.6
EBIT margin	(%)	39.3	37.3	45.6	44.5	38.2	36.5	36.8	23.4
Net profit margin	(%)	23.1	18.7	29.1	28.8	23.5	21.6	18.3	12.7
ROE	(%)	12.5	5.7	14.6	14.0	10.7	13.2	1.4	8.6
ROA	(%)	7.6	3.5	8.8	8.6	6.6	7.5	0.7	4.5
Net D/E	(x)	(0.2)	(0.2)	(0.2)	(0.1)	0.0	0.0	(0.0)	0.0
Interest coverage	(x)	17.8	15.1	18.7	20.3	18.1	19.5	16.7	12.0
Debt service coverage	(x)	6.5	6.0	6.6	20.3	16.8	18.2	11.2	8.2

### Main Assumptions

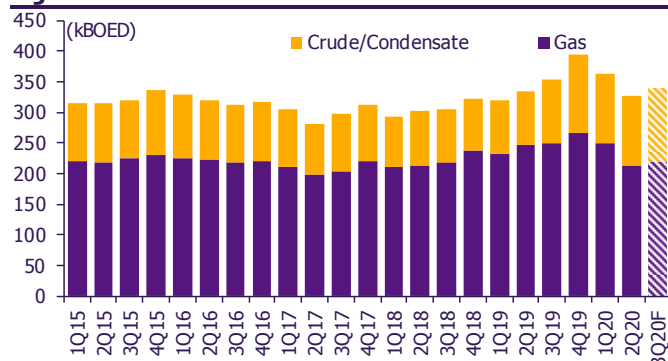
FY December 31	Unit	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Sales volume	(kBOED)	305	321	319	335	353	395	363	327
- Liquid product	(% of total)	28.8	25.9	27.2	26.3	29.6	32.6	31.2	34.9
- Gas product	(% of total)	71.2	74.1	72.8	73.7	70.4	67.4	68.8	65.1
Dubai crude oil price	(US\$/bbl)	74.2	68.3	63.1	67.3	61.3	62.0	50.4	31.6
Avg selling price	(US\$/BOE)	47.7	47.8	46.2	48.3	46.0	48.3	44.8	35.0

**Figure 1: 3Q20F preview**

(Btmn)	3Q19	2Q20	3Q20F	%YoY	%QoQ
Sales	45,901	33,232	37,915	(17.4)	14.1
EBITDA	33,239	23,358	27,686	(16.7)	18.5
Recurring profit	9,309	4,086	2,427	(73.9)	(40.6)
<b>Net profit</b>	<b>11,019</b>	<b>4,323</b>	<b>5,560</b>	<b>(49.5)</b>	<b>28.6</b>
<b>EPS (Bt/share)</b>	<b>2.78</b>	<b>1.09</b>	<b>1.40</b>	<b>(49.5)</b>	<b>28.6</b>
Sales volume (kBOED)	353	327	338	(4.1)	3.5
ASP (US\$/BOE)	46.03	34.97	38.88	(15.5)	11.2
Unit cost (US\$/BOE)	31.99	30.25	31.03	(3.0)	2.6

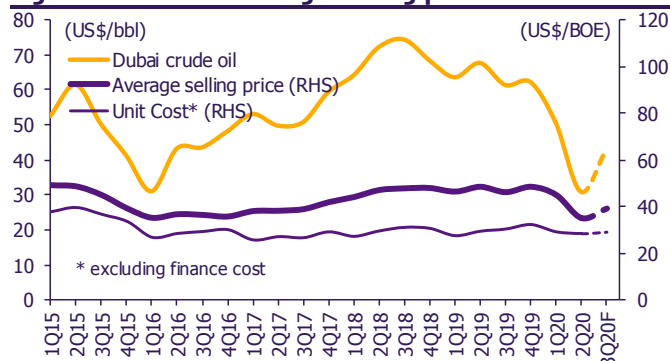
Source: PTTEP, SCBS Investment Research

**Figure 2: PTTEP – sales volume**



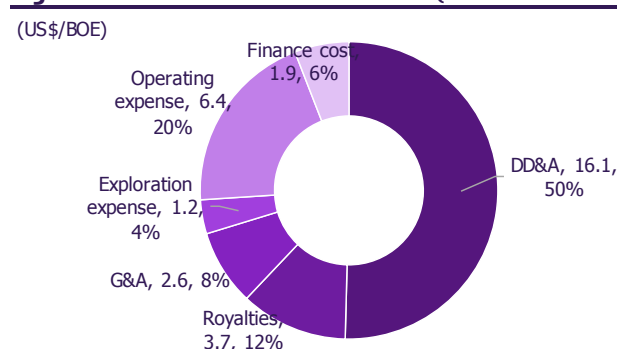
Source: PTTEP, SCBS Investment Research

**Figure 3: PTTEP – average selling price vs. unit cost**



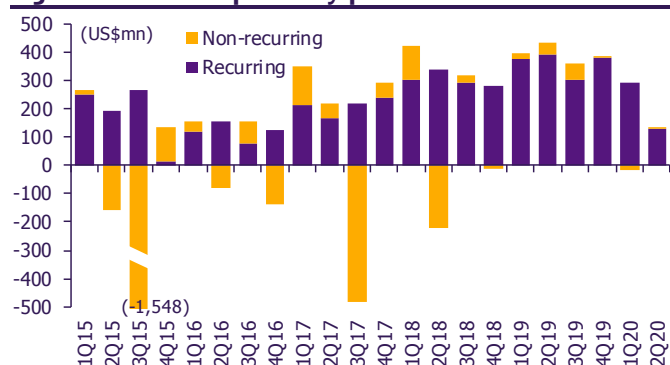
Source: PTTEP, SCBS Investment Research

**Figure 4: PTTEP – cost breakdown (last 12 months)**



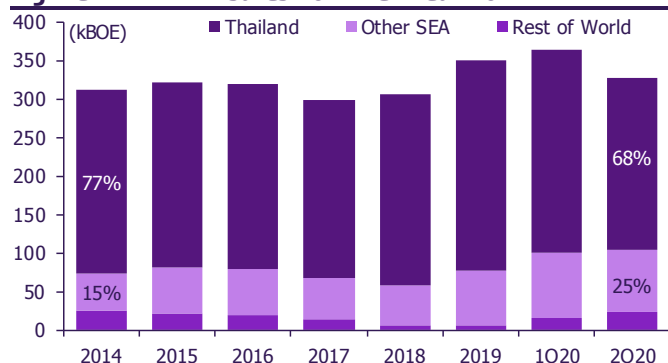
Source: PTTEP, SCBS Investment Research

**Figure 5: PTTEP's quarterly profit**



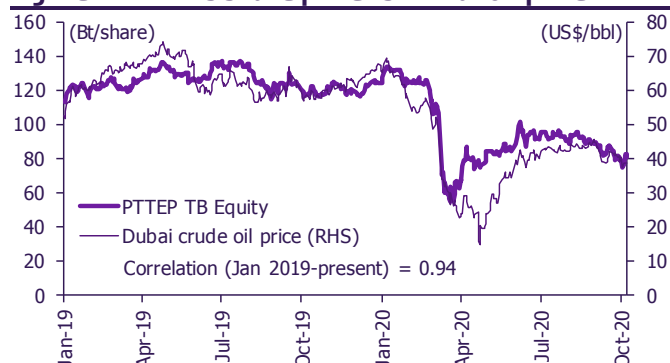
Source: PTTEP, SCBS Investment Research

**Figure 6: PTTEP – sales volume breakdown**



Source: PTTEP, SCBS Investment Research

**Figure 7: PTTEP's share price vs. Dubai oil price**



Source: Bloomberg Finance LP, SCBS Investment Research

**Figure 8: Sensitivity of oil price to profit and TP**

Brent oil price (US\$/bbl)	30	35	40	45	50
2020 Net profit (Btmn)	12,760	18,120	23,481	28,841	34,202
% change from the current forecast	-46%	-23%	0%	23%	46%
LT Brent oil price (US\$/bbl)	30	35	40	45	50
Target price (Bt/sh)	83	94	104	114	124
% change from the current TP	-27%	-18%	-9%	0%	9%

Source: SCBS Investment Research

**Figure 9: Valuation summary** (price as of Oct 12, 2020)

	Rating	Price (Bt/Sh)	Target (Bt/Sh)	ETR (%)	P/E (x)			EPS growth (%)			P/BV (x)			ROE (%)			Div. Yield (%)			EV/EBITDA (x)		
					19A	20F	21F	19A	20F	21F	19A	20F	21F	19A	20F	21F	19A	20F	21F	19A	20F	21F
BCP	Outperform	15.70	30.0	94.3	21.8	n.m.	4.5	(64)	n.m.	n.m.	0.4	0.5	0.4	2	(6)	10	5.1	3.2	11.5	7.6	14.1	4.3
ESSO	Underperform	6.30	5.1	(19.0)	n.m.	n.m.	7.0	n.m.	(2)	n.m.	1.0	1.1	1.0	(13)	(15)	15	0.0	0.0	6.3	(26.8)	(18.5)	6.5
IRPC	Neutral	2.12	2.8	32.1	n.m.	n.m.	12.0	n.m.	(42)	n.m.	0.5	0.6	0.6	(5)	(8)	5	4.7	0.0	3.8	20.6	40.7	6.2
PTT	Outperform	34.25	44.0	32.8	12.6	14.7	10.9	(31)	(14)	35	1.1	1.1	1.0	6	5	7	5.8	4.4	5.1	4.4	4.5	3.3
PTTEP	Outperform	82.25	114.0	42.2	6.7	16.9	11.3	35	(60)	49	0.9	0.9	0.9	13	5	8	7.3	3.6	4.3	2.4	3.4	3.0
SPRC	Underperform	6.00	5.2	(12.7)	n.m.	n.m.	12.4	n.m.	(31)	n.m.	0.8	1.0	0.9	(11)	(18)	8	3.0	0.0	4.2	(14.2)	(7.4)	5.1
TOP	Outperform	36.50	50.0	41.9	18.0	7.9	8.0	(60)	128	(2)	0.6	0.6	0.5	3	7	7	4.1	4.9	5.2	8.6	12.2	8.4
<b>Average</b>					<b>14.8</b>	<b>13.1</b>	<b>9.5</b>	<b>(1)</b>	<b>35</b>	<b>(25)</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>(1)</b>	<b>(4)</b>	<b>8</b>	<b>4.3</b>	<b>2.3</b>	<b>5.8</b>	<b>0.4</b>	<b>7.0</b>	<b>5.3</b>

Source: SCBS Investment Research

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**Corporate Governance Report**

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To recognize well performers, the list of companies attaining "Good", "Very Good" and "Excellent" levels of recognition

(Not including listed companies qualified in the "no announcement of the results" clause from 1 January 2019 to 25 October 2019) is publicized.

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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, PPM, 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, SEAOL, SE-ED, SELIC, SENA, SGP, SIRI, SITHAI, SMIT, SMK, SMP, 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, TMB, TMD, TMILL, TMT, TNITY, TNL, TNP, TNR, TOG, TOP, TPA, TPCORP, TPP, TRU, TRUE, TSC, TSTH, TTCL, TU, TVD, TVI, TVO, TWPC, U, UBIS, UEC, UKEM, UOBKH, UWC, VGI, VIH, VNT, WACOAL, WHA, WHAUP, WICE, WIJK, XO, ZEN

**Declared (ประกาศเจตนาสมัคร)**

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

**N/A**

A, A5, AAV, ABM, ACAP, ACC, ACE, ACG, ADB, AEC, AEONTS, AFC, AGE, AH, AHC, AIT, AJ, AJA, AKR, ALL, ALLA, ALUCON, AMC, AOT, APCO, APCS, APEX, APP, AQ, ARIN, ARIP, AS, ASAP, ASEFA, ASIA, ASIAN, ASIMAR, ASN, ATP30, AU, AUCT, AWC, BA, BAM, 3K-BAT, BC, BCT, BDMS, BEAUTY, BEC, BEM, BFIT, BGT, BH, BIG, BIZ, BJC, BLAND, BLISS, BOL, BR, BSM, BTNC, BTW, CAZ, CBG, CCET, CCP, CGD, CHARAN, CHAYO, CHG, CITY, CK, CKP, CMAN, CMO, CMR, CNT, COLOR, COMAN, CPH, CPL, CPR, CPT, CPW, CRANE, CRC, CRD, CSP, CSR, CSS, CTW, CWT, D, DCON, DV8, DOD, DOHOME, DTIC, EASON, ECF, EE, EKH, EMC, EPG, ESSO, ETC, F&D, FANCY, FLOYD, FMT, FN, FORTH, FVC, GENCO, GIFT, GL, GLAND, GLOBAL, GLOCON, GRAMMY, GRAND, GREEN, GSC, GTB, GULF, GYT, HFT, HPT, HTECH, HUMAN, HYDRO, ICN, IFEC, IHL, IIG, III, ILM, IMH, INGRS, INOX, INSET, IP, IRCP, IT, ITD, JAS, JCK, JCKH, JCT, JUBILE, JUTHA, JWD, KAMART, KC, KCM, KDH, KIAT, KK, KCC, KOOL, KTIS, KUMMEL, KUN, KWM, KYE, LALIN, LEE, LH, LIT, LOXLEY, LPH, LST, MACO, MANRIN, MATCH, MATI, MAX, M-CHAI, MCS, MDX, MEGA, METCO, MGT, MICRO, MIDA, MILL, MITSIB, MJD, MK, ML, MM, MODERN, MORE, MPIC, MVP, NC, NCH, NDR, NER, NETBAY, NEW, NEWS, NEX, NFC, NPK, NRF, NTV, NUSA, NVD, NYT, OHTL, OISHI, OSP, OTO, PACE, PAE, PAF, PERM, PF, PICO, PIMO, PJW, PMTA, POLAR, POMUI, PORT, POST, PPM, PR9, PRAKIT, PRAPAT, PRECHA, PRIME, PRIN, PRO, PROUD, PTL, RAM, RBF, RCI, RCL, RICHY, RJH, ROCK, ROH, RP, RPC, RPH, RS, RSP, S, S11, SAFARI, SALEE, SAM, SAMART, SAMCO, SAMTEL, SANKO, SAUCE, SAWAD, SAWANG, SCM, SCP, SDC, SEAFCO, SEG, SF, SFLEX, SFP, SGF, SHR, SIAM, SICT, SIMAT, SIS, SISB, SK, SKE, SKN, SKY, SLM, SLP, SMART, SMT, SO, SOLAR, SONIC, SPA, SPCG, SPG, SPVI, SQ, SR, SSC, STAR, STARK, STC, STEC, STGT, STHAI, STI, STPI, SUC, SUN, SUTHA, SVH, SVOA, SWC, SYMC, T, TACC, TAPAC, TC, TCC, TCCC, TCJ, TCOAT, TEAM, TEAMG, TGPRO, TH, THANA, THE, THG, THL, THMUI, TIGER, TITL, TIW, TK, TKN, TM, TMC, TMI, TMW, TNDT, TNH, TNPC, TOA, TPAC, TPBI, TPCH, TPIPL, TPIPP, TPLAS, TPOLY, TPS, TQM, TR, TRC, TRT, TRUBB, TSE, TSE, TSI, TSR, TSTE, TTI, TTT, TTW, TVT, TWP, TWZ, TYCN, UAC, UMI, UMS, UNIQ, UP, UPA, UPOIC, UREKA, UT, UTP, UVAN, VARO, VCOM, VI, VIBHA, VL, VNG, VPO, VRANDA, W, WAVE, WG, WINNER, WORK, WORLD, WP, WPH, WR, YCI, YGG, YUASA, ZMICO

**Explanations**

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: companies that have declared their intention to join CAC, and companies certified by CAC.