

# Thailand Energy Sector

## Semi-lockdown impact

Sector Valuation			Current price	Target price	Market Cap	Norm EPS grw		— Norm PE —		— P/BV —		— Div. yield —	
Company	BBG Code	Rec.	(Bt)	(Bt)	(US\$ m)	2021F (%)	2022F (%)	2021F (x)	2022F (x)	2021F (x)	2022F (x)	2021F (%)	2022F (%)
Bangchak Corp.	BCP TB	SELL	24.00	21.00	1,003	na	na	na	22.0	0.7	0.7	0.0	2.5
Esso (Thailand)	ESSO TB	SELL	7.75	6.90	814	na	na	na	142.0	2.0	2.0	0.0	0.4
PTG Pcl	PTG TB	BUY	15.40	22.00	781	(3.6)	11.8	14.4	12.8	2.9	2.6	3.5	3.9
PTT Pcl	PTT TB	BUY	35.00	48.00	30,351	177.8	3.4	9.5	9.1	1.1	1.0	5.3	5.5
SUSCO Pcl	SUSCO TB	BUY	3.04	4.80	102	3.0	23.4	14.2	11.5	0.8	0.8	3.6	4.3

Source: Thanachart estimates, Based on 2 August 2021 closing prices

**We maintain our Neutral weighting on Thai Energy, though we think many stocks now look more attractive after the recent correction. In particular, we believe the market is too concerned with lockdown impacts on oil retailers, and we see this as a BUYING opportunity. In our view, PTG and SUSCO offer the best exposure to this segment.**

### BUY the dip

We believe the recent correction in energy stocks in general, and oil retailer stocks in particular, offer buying opportunities for select names. While oil retailers are likely to be hit most by the current semi-lockdown measures in Thailand, we believe they will remain profitable. We also see current valuations as attractive. Our picks among names with exposure to the retail segment are PTG (PTG TB, Bt15.4, BUY) and SUSCO (SUSCO TB, Bt3.04, BUY). PTG is trading at just a 13x 2022F PE multiple, which is below its historical average. Similarly, SUSCO continues to offer compelling value, in our view, at 12x 2022F PE with the potential for more share buybacks as catalysts.

### Oil demand decline likely not as severe as in 2Q20

We expect 3Q21F to see oil demand decline given the current (and recently expanded) semi-lockdown measures imposed by the government. Still, we do not believe the impact on demand will be as severe as in 2Q20. First, movements of people and goods, as measured by Google Mobility data, remain far above levels seen in April-May of last year. We also note that compared to other countries, Thailand's measures are less stringent, resulting in higher mobility compared to other countries during their respective lockdowns. Secondly, jet fuel demand has continued to recover thanks to the partial reopening of tourist destinations (Phuket, Koh Samui). Lastly, with vaccinations gaining momentum, we expect a demand recovery in 4Q21F.

### High marketing margin a big help

While volume is declining, the high marketing margin is helping to shore up profitability for the oil retailers. On our estimate, the marketing margin has expanded from Bt1.84/liter in 1Q21 to about Bt1.9/liter in 2Q21. So far in 3Q21, the margin has likely trended slightly higher q-q. Given that we do not expect runaway oil prices (which would put significant pressure on the margin at the pump), we believe the industry can sustain the current high margins for the remainder of this year.

### Limited impact on other segments

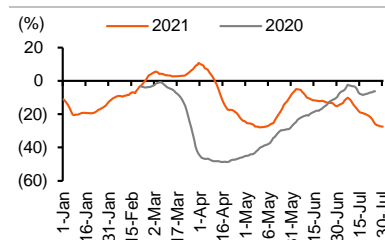
We see a limited impact from Thailand's semi-lockdown on other energy stocks as they are driven much more by the global demand recovery than local demand. Our picks among these are Banpu Pcl (BANPU TB, Bt13.40, BUY) and PTT Global Chemical (PTTGC TB, Bt58.00, BUY).



CHAK REUNGSINPINYA

662-779-9104  
chak.reu@thanachartsec.co.th

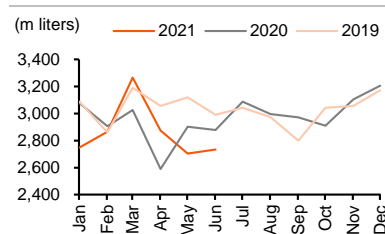
### Mobility To Retail & Recreation



Sources: Google Mobility data

Note: 7-day moving average, % vs baseline median value of mobility during 3 Jan – 6 Feb 2020)

### Thailand Gasoline & Diesel Sales



Sources: DOEB, Thanachart estimates

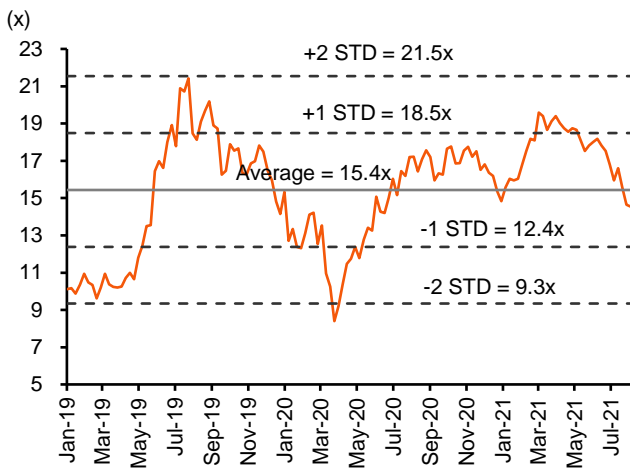


**BUY the dip**

*We view Thailand oil retail stocks as attractive, especially PTG and SUSCO*

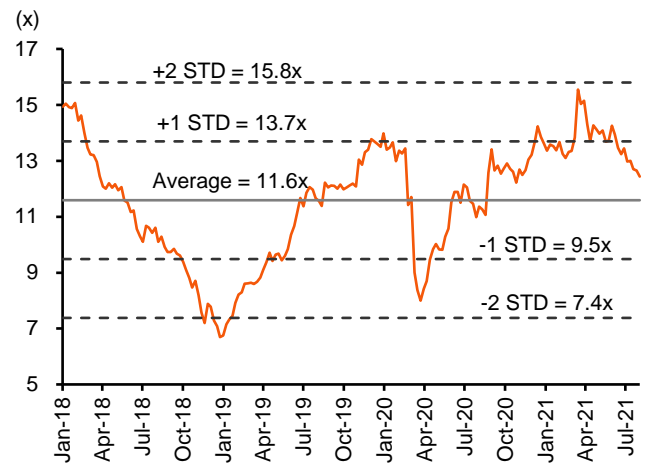
We believe the recent correction in energy stocks in general, and oil retailer stocks in particular, offers buying opportunities. While oil retailers are likely to be hit most by the current semi-lockdown measures in Thailand, we believe they will remain profitable. We also see current valuations as attractive. Our picks among names with exposure to the retail segment are PTG and SUSCO. PTG is trading at just a 13x 2022F PE multiple, which is below its historical average of 15.4x. Similarly, SUSCO continues to offer compelling value, in our view, at 12x 2022F PE with the potential for more share buybacks as catalysts.

**Ex 1: PTG's PE**



Sources: Bloomberg, Thanachart estimates

**Ex 2: SUSCO's PE**



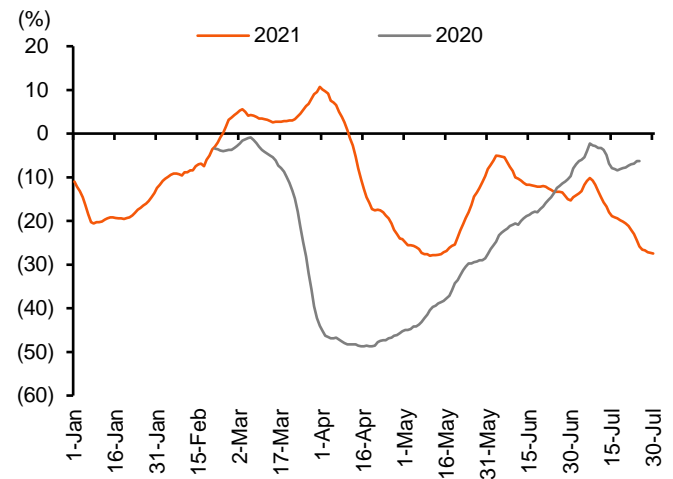
Sources: Bloomberg, Thanachart estimates

**Mobility still higher than in April-May 2020**

*The current semi-lockdown will likely have a more limited impact vs. last year's*

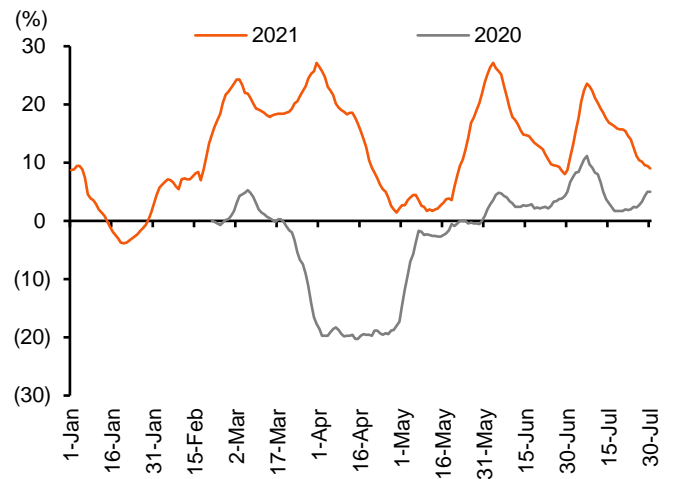
We do not believe the current semi-lockdown measures in Thailand will result in movement restrictions that were as severe as those seen during April-May of last year. We base our conclusion on Google Mobility data which compares current movements to the “baseline” level (defined as the median mobility value from 3 January – 6 February 2020). For instance, trips to retail and recreational places (such as shopping malls) fell as much as 50% last year compared to the base line. Now, trips to these places are only down by less than 30%. Based on the same data, trips to groceries and pharmacies seem to be even higher than the baseline level. This is because people have to find alternative places to shop for their essentials or even make these trips recreational ones.

**Ex 3: Mobility To Retail & Recreational Places (7D MA)**



Source: Google Mobility data  
 Note: % vs baseline (median value of mobility during 3 Jan – 6 Feb 2020)

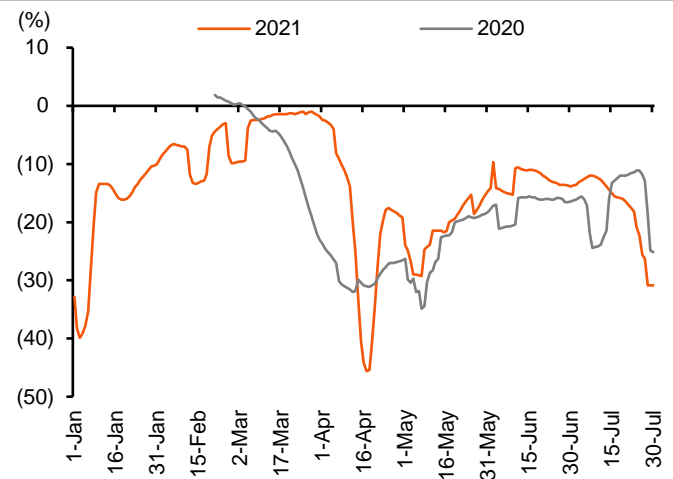
**Ex 4: Mobility To Groceries & Pharmacies (7-day MA)**



Source: Google Mobility data  
 Note: % vs baseline (median value of mobility during 3 Jan – 6 Feb 2020)

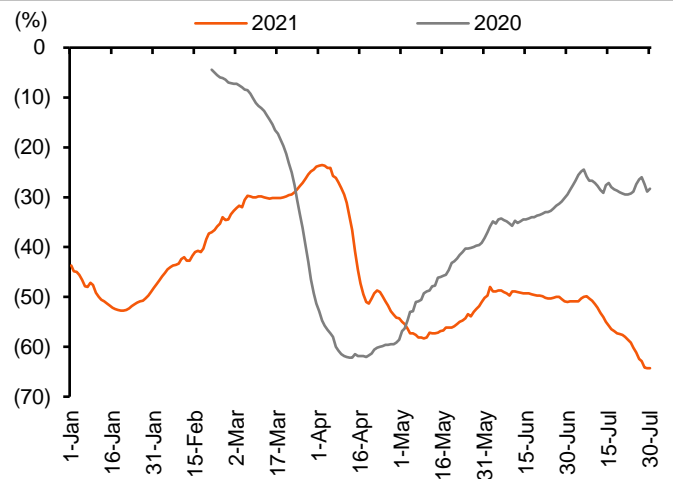
Two places where Thais seem to be going to less these days are workplaces and transit stations. Trips to workplaces are down by 30% compared to the baseline level which is comparable to the reduction seen in April-May 2020. Trips to transit stations are now down by some 65%, vs. the baseline level, lower than levels seen at any point last year.

**Ex 5: Mobility To Workplaces (7D MA)**



Source: Google Mobility data  
 Note: % vs baseline (median value of mobility during 3 Jan – 6 Feb 2020)

**Ex 6: Mobility To Transit Stations (7D MA)**



Source: Google Mobility data  
 Note: % vs baseline (median value of mobility during 3 Jan – 6 Feb 2020)

We see three main reasons why the mobility data so far seems to be holding up much higher now than during April-May 2020.

**Lockdown fatigue could be a reason behind the high mobility despite government measures**

First, the current semi-lockdown measures only apply to 13 provinces. While they have been recently expanded to 29 provinces, the measures are now less stringent overall. For example, restaurants in shopping malls are now allowed to open for takeaways whereas they were closed over the past few weeks.

Secondly, we believe lockdown fatigue has now become a significant factor, driving people to go out even though many usual hangout places (shopping malls, recreational areas, restaurants) are now closed.

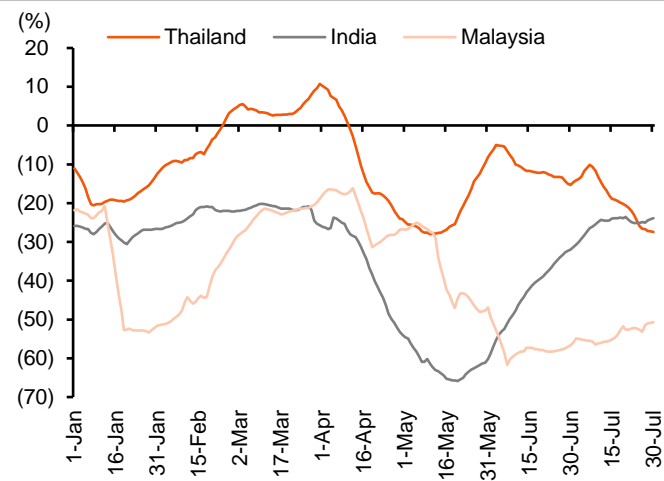
Lastly, there are nearly half a million people who have to travel to get their vaccinations every day. While these numbers fluctuate, we believe the pace of vaccination will increase as the country receives more vaccine supplies. As such, these trips to vaccination centers and hospitals will likely keep overall mobility higher than last year.

**Mobility much higher than other countries during lockdowns**

*Thailand lockdowns are much less severe vs other countries such as India or Malaysia*

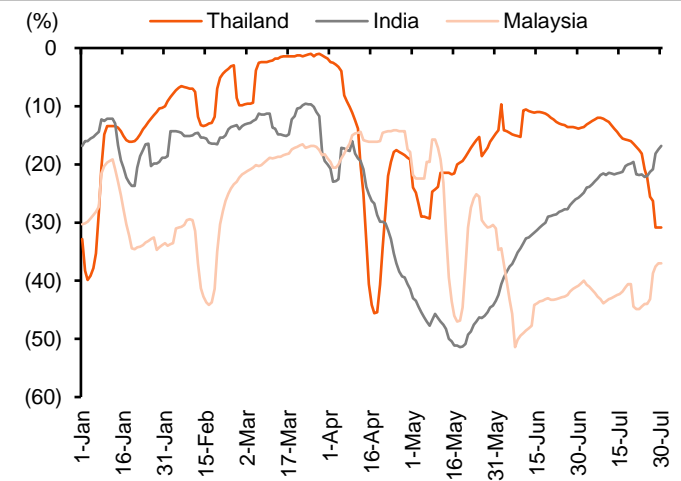
We also note that mobility in Thailand during this semi-lockdown state remains noticeably higher than other countries during their respective lockdowns. For example, during India’s lockdowns in May and June 2021, trips to retail and recreational areas fell by as much as 65% compared to the baseline level. Similarly in Malaysia, trips to these places fell by as much as 60% and they are still down by over 50%. By contrast, Thailand’s mobility data suggests trips to retail and recreational places are now down by less than 30%. We can look at mobility data for other categories and they still show the same trends: that Thailand’s semi-lockdowns are nowhere near as severe as those seen in many other countries during their respective lockdowns. This suggests that the government measures (or the public’s compliance with such measures) are much less restrictive. As such, we believe the impact on overall oil demand here will be much less severe as well.

**Ex 7: Mobility To Retail & Recreational Places (7D MA)**



Source: Google Mobility data  
 Note: % vs baseline (median value of mobility during 3 Jan – 6 Feb 2020)

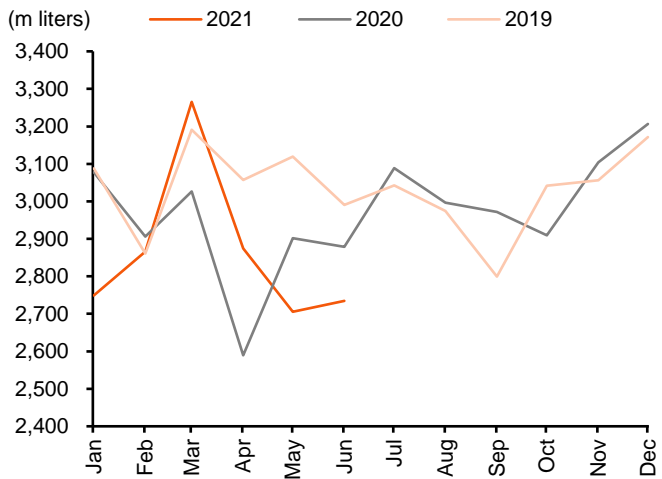
**Ex 8: Mobility To Workplaces (7D MA)**



Source: Google Mobility data  
 Note: % vs baseline (median value of mobility during 3 Jan – 6 Feb 2020)

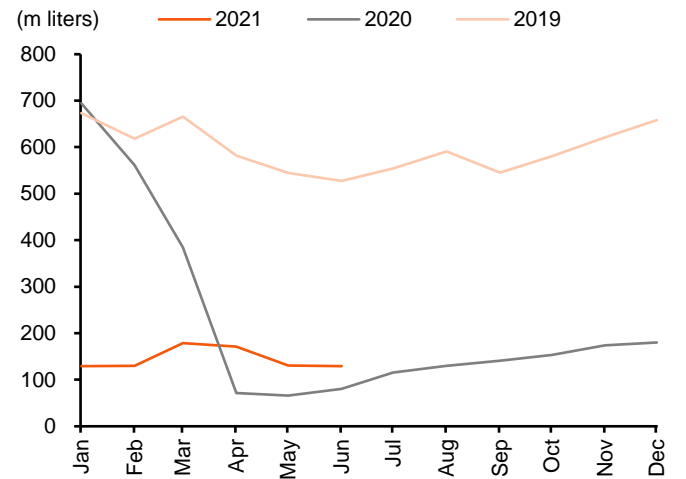
The data on Thailand oil demand so far points to a more contained impact vs. last year, though admittedly we still lack data for July which is when most of the lockdown measures were imposed. Still, we do not expect it to be as bad as April 2020 given the reasons we discussed above. We also think the small recovery in jet fuel demand will continue to pick up pace as more tourist destinations, such as Phuket and Koh Samui, open to inbound traffic.

**Ex 9: Thailand Gasoline And Diesel Demand**



Sources: DOEB, Thanachart estimates

**Ex 10: Thailand Jet Fuel Demand**

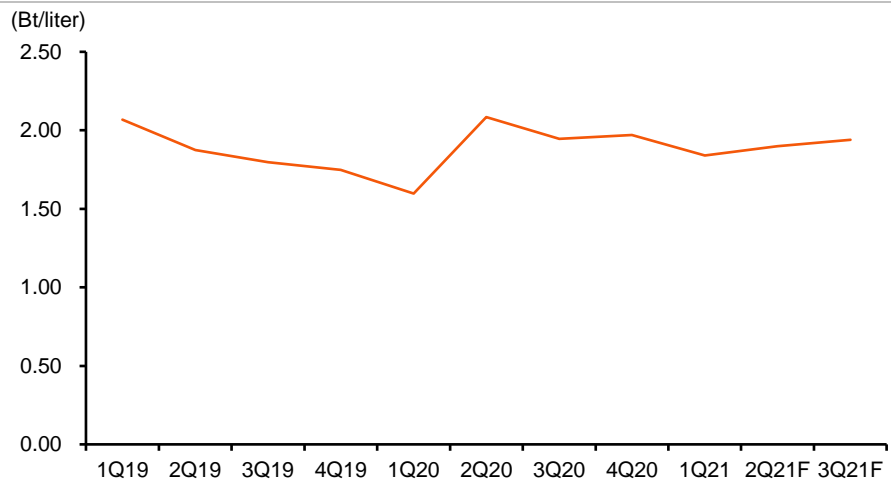


Sources: DOEB, Thanachart estimates

**High marketing margins help to partially offset lower sales volume**

Helping to offset lower volume is the high marketing margin. We estimate the current marketing margin at Bt1.9-1.95/liter, which we see as an attractive level. Given that we do not expect runaway oil prices (which could lead to a margin squeeze for oil retailers), we expect marketing margins to remain elevated for the foreseeable future.

**Ex 11: Marketing Margin Remains At Elevated Levels**



Sources: Company data, Thanachart estimates

**Risks**

**Higher domestic margins and a spike in global oil prices are swing factors**

The key upside risk to our Neutral sector weighting would be a higher domestic margin than we expect. The key downside risk to our call would be a sharp rise in global oil prices.

## Ex 12: Sector Valuation Comparison

		BCP	ESSO	PTG	PTT	SUSCO	Industry
<b>Rating</b>		<b>SELL</b>	<b>SELL</b>	<b>BUY</b>	<b>BUY</b>	<b>BUY</b>	
<b>Target price (Bt)</b>	<b>Thanachart</b>	<b>21.00</b>	<b>6.90</b>	<b>22.00</b>	<b>48.00</b>	<b>4.80</b>	
	Consensus	30.75	8.75	24.30	49.00	4.00	
<b>Consensus rec.</b>	BUY	10	3	11	25	3	
	HOLD	4	1	0	1	0	
	SELL	1	4	0	0	0	
<b>Sales (Bt m)</b>	2020	136,450	126,672	104,666	1,615,665	16,673	2,000,126
	2021F	180,768	193,882	140,273	2,339,258	21,270	2,875,451
	2022F	202,438	195,433	151,626	2,424,838	25,030	2,999,366
	2023F	206,659	198,200	159,903	2,471,396	27,830	3,063,988
<b>Norm profits (Bt m)</b>	2020	(4,450)	(7,911)	1,857	38,053	218	27,766
	2021F	(77)	(896)	1,790	105,716	219	106,752
	2022F	1,502	189	2,001	109,325	264	113,281
	2023F	2,037	2,264	2,069	122,517	302	129,189
<b>Sales growth (%)</b>	2020	(28.4)	(25.2)	(13.0)	(27.2)	(40.4)	(26.8)
	2021F	32.5	53.1	34.0	44.8	27.6	38.4
	2022F	12.0	0.8	8.1	3.7	17.7	8.4
	2023F	2.1	1.4	5.5	1.9	11.2	4.4
<b>Norm EPS growth (%)</b>	2020	na	na	19.0	(51.0)	(42.6)	(24.9)
	2021F	na	na	(3.6)	177.8	3.0	59.1
	2022F	na	na	11.8	3.4	23.4	12.9
	2023F	35.6	1,098.7	3.4	12.1	14.5	232.9
<b>Operating margin (%)</b>	2020	(2.1)	(7.9)	2.9	4.3	1.3	(0.3)
	2021F	0.9	(0.5)	2.7	7.4	1.2	2.3
	2022F	1.7	0.1	2.6	7.7	1.3	2.7
	2023F	1.9	1.4	2.5	8.4	1.3	3.1
<b>ROE (%)</b>	2020	(9.1)	(43.4)	25.6	4.3	5.8	(3.4)
	2021F	(0.2)	(6.4)	21.5	11.6	5.9	6.5
	2022F	3.2	1.4	21.4	11.2	7.1	8.9
	2023F	4.3	15.7	19.9	11.8	7.8	11.9
<b>Dividend yield (%)</b>	2020	1.7	0.0	3.2	2.9	3.6	2.3
	2021F	0.0	0.0	3.5	5.3	3.6	2.5
	2022F	2.5	0.4	3.9	5.5	4.3	3.3
	2023F	3.4	4.2	4.0	6.1	5.0	4.5
<b>P/BV (x)</b>	2020	0.7	1.9	3.3	1.1	0.9	1.6
	2021F	0.7	2.0	2.9	1.1	0.8	1.5
	2022F	0.7	2.0	2.6	1.0	0.8	1.4
	2023F	0.7	1.8	2.4	0.9	0.8	1.3
<b>Norm PE (x)</b>	2020	na	na	13.8	26.3	14.7	18.3
	2021F	na	na	14.4	9.5	14.2	12.7
	2022F	22.0	142.0	12.8	9.1	11.5	39.5
	2023F	16.2	11.8	12.4	8.2	10.1	11.7
<b>EV/EBITDA (x)</b>	2020	18.6	na	5.8	6.3	5.8	9.1
	2021F	8.4	36.8	7.0	4.5	6.1	12.5
	2022F	6.5	20.8	6.6	4.1	4.9	8.6
	2023F	5.8	10.2	6.4	3.6	4.3	6.1
<b>Net D/E (x)</b>	2020	0.7	1.9	1.1	0.3	0.0	0.8
	2021F	0.6	2.2	2.5	0.3	0.3	1.2
	2022F	0.6	1.9	2.4	0.3	0.2	1.1
	2023F	0.5	1.6	2.3	0.2	0.1	0.9

Sources: Company data; Thanachart estimates

## Valuation Comparison

### Ex 13: Comparison With Regional Peers

Company	Code	Country	EPS Growth		PE		P/BV		EV/EBITDA		Div. Yield		ROE	
			21F	22F	21F	22F	21F	22F	21F	22F	21F	22F	21F	22F
			(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)	(%)	(%)
<b>Refining &amp; Marketing</b>														
Caltex Australia	CTX AU	Australia	87.6	16.0	na	na	na	na	na	na	na	na	12.6	15.0
BPCL	BPCL IN	India	121.2	(11.2)	9.8	11.0	2.1	1.8	7.8	8.6	4.6	4.4	24.7	17.3
HPCL	HPCL IN	India	160.5	(16.0)	5.1	6.1	1.1	1.0	5.4	6.8	6.8	5.7	24.1	17.1
IOCL	IOCL IN	India	129.5	6.5	6.5	6.1	0.9	0.8	6.1	5.8	7.8	7.5	14.6	13.7
Reliance Industries	RIL IN	India	(0.6)	22.9	29.9	24.3	2.3	1.8	19.0	14.1	0.4	0.4	8.5	7.8
SK Energy	096770 KS	S.Korea	na	72.9	34.9	20.2	1.5	1.4	10.4	9.5	0.6	1.1	4.8	7.0
S-OIL	010950 KS	S.Korea	na	(11.8)	8.4	9.5	1.7	1.5	5.9	6.6	3.4	3.2	21.2	17.1
Petron	PCOR PM	Philippines	na	134.5	21.2	9.0	0.7	0.4	8.1	7.3	3.3	na	2.4	6.1
Formosa Petrochemical	6505 TT	Taiwan	na	(8.0)	20.0	21.7	2.7	2.6	11.8	13.1	3.5	3.2	14.1	12.3
Bangchak *	BCP TB	Thailand	na	na	na	22.0	0.7	0.7	8.4	6.5	0.0	2.5	na	na
ESSO (Thailand) *	ESSO TB	Thailand	na	na	na	142.0	2.0	2.0	36.8	20.8	0.0	0.4	na	na
IRPC Pcl *	IRPC TB	Thailand	na	9.6	12.6	11.5	0.9	0.9	8.4	7.7	4.7	5.2	na	na
PTG Pcl *	PTG TB	Thailand	(3.6)	11.8	14.4	12.8	2.9	2.6	7.0	6.6	3.5	3.9	21.5	21.4
PTT Global Chemicals *	PTTGC TB	Thailand	219.4	(1.2)	10.7	10.9	0.9	0.9	6.6	6.4	5.6	5.5	8.5	8.0
Star Petroleum Refining *	SPRC TB	Thailand	na	na	na	116.2	1.3	1.2	21.1	15.5	0.0	0.3	na	na
SUSCO Pcl	SUSCO TB	Thailand	3.0	23.4	14.2	11.5	0.8	0.8	6.1	4.9	3.6	4.3	5.9	7.1
Thai Oil *	TOP TB	Thailand	na	6.1	22.7	21.4	0.8	0.8	16.3	17.2	2.0	2.1	3.4	3.6
<b>Average</b>			<b>89.6</b>	<b>18.3</b>	<b>16.2</b>	<b>28.5</b>	<b>1.5</b>	<b>1.3</b>	<b>11.6</b>	<b>9.8</b>	<b>3.1</b>	<b>3.3</b>	<b>12.8</b>	<b>11.8</b>
<b>Integrated oils</b>														
PetroChina	857 HK	China	na	(13.9)	7.8	9.1	0.5	0.5	3.6	3.7	6.4	6.0	5.9	5.1
Sinopec	386 HK	China	82.5	(1.5)	6.8	6.9	0.5	0.5	3.6	3.4	9.1	8.8	8.2	7.9
Total	FP	France	na	6.3	na	na	na	na	na	na	na	na	11.4	11.8
Eni	ENI IM	Italy	na	28.6	12.4	9.6	0.9	0.9	3.5	3.2	7.8	8.0	7.5	9.2
RD/Shell A	RDSA NA	Netherlands	na	14.3	7.2	6.3	0.8	0.7	4.2	4.0	4.5	4.9	10.9	10.9
Repsol	REP SM	Spain	na	13.3	7.3	6.5	0.7	0.6	3.9	3.6	6.5	6.6	9.2	9.8
Chevron Texaco	CVX US	USA	na	15.2	15.6	13.5	1.5	1.4	6.3	5.8	5.2	5.4	8.5	9.5
Exxon Mobil	XOM US	USA	na	15.8	14.0	12.1	1.5	1.4	6.7	6.0	6.1	6.1	10.1	11.6
Conoco Phillips	COP US	USA	na	7.9	12.6	11.7	1.7	1.6	5.1	4.9	3.1	3.3	14.4	12.8
PTT Pcl *	PTT TB	Thailand	177.8	3.4	9.5	9.1	1.1	1.0	4.5	4.1	5.3	5.5	11.6	11.2
<b>Average</b>			<b>130.2</b>	<b>8.9</b>	<b>10.3</b>	<b>9.4</b>	<b>1.0</b>	<b>1.0</b>	<b>4.6</b>	<b>4.3</b>	<b>6.0</b>	<b>6.1</b>	<b>9.8</b>	<b>10.0</b>
<b>Exploration and Production</b>														
Santos	STO AU	Australia	189.9	20.6	16.1	13.4	1.7	1.6	5.1	4.7	1.7	1.8	11.0	11.5
Woodside	WPL AU	Australia	157.9	4.6	16.4	15.7	1.6	1.6	5.2	5.0	4.3	4.3	9.7	10.0
Suncor Energy	SU US	Canada	na	18.0	6.6	5.6	0.8	0.7	4.4	4.0	4.4	4.9	10.0	9.4
CNOOC	883 HK	Hong Kong	148.6	6.0	5.7	5.3	0.7	0.7	2.1	2.0	7.6	8.2	13.0	13.0
ONGC	ONGC IN	India	(46.2)	110.5	11.9	5.6	0.7	0.6	5.3	3.9	2.7	5.8	6.1	11.2
RIL	RIL IN	India	(0.6)	22.9	29.9	24.3	2.3	1.8	19.0	14.1	0.4	0.4	8.5	7.8
Cairn India	CAIR IN	India	na	na	na	na	na	na	na	na	na	na	na	na
Apache	APA US	USA	na	(9.9)	5.9	6.5	na	44.3	4.0	4.2	0.5	0.6	(72.2)	3.9
Devon Energy	DVN US	USA	na	40.1	9.9	7.1	2.1	1.2	4.9	4.0	3.7	5.5	28.8	26.9
PTTEP *	PTTEP TB	Thailand	68.1	15.8	11.6	10.1	1.1	1.1	3.7	3.3	5.2	6.0	9.9	11.0
<b>Average</b>			<b>86.3</b>	<b>25.4</b>	<b>12.7</b>	<b>10.4</b>	<b>1.4</b>	<b>5.9</b>	<b>6.0</b>	<b>5.0</b>	<b>3.4</b>	<b>4.2</b>	<b>2.8</b>	<b>11.6</b>

Sources: Bloomberg, \* Thanachart estimates  
Based on 2 August 2021 closing prices

## STOCK PERFORMANCE

	Absolute (%)				Rel SET (%)			
	1M	3M	12M	YTD	1M	3M	12M	YTD
<b>SET INDEX</b>	<b>(3.4)</b>	<b>(3.7)</b>	<b>15.4</b>	<b>5.2</b>	—	—	—	—
<b>Energy</b>	<b>(8.3)</b>	<b>(13.6)</b>	<b>18.2</b>	<b>0.5</b>	<b>(4.9)</b>	<b>(9.9)</b>	<b>2.8</b>	<b>(4.7)</b>
BCP TB	(2.8)	(6.8)	24.4	16.5	0.5	(3.1)	8.9	11.3
ESSO TB	(5.5)	(9.4)	2.6	4.7	(2.1)	(5.7)	(12.8)	(0.5)
IRPC TB	(8.3)	(14.5)	41.6	(4.8)	(4.9)	(10.8)	26.2	(10.1)
IVL TB	(9.6)	(21.4)	51.6	2.0	(6.2)	(17.7)	36.2	(3.2)
PTG TB	(14.4)	(23.4)	(21.0)	(3.1)	(11.1)	(19.7)	(36.5)	(8.4)
PTT TB	(9.7)	(12.5)	(9.1)	(17.6)	(6.3)	(8.8)	(24.5)	(22.9)
PTTEP TB	(10.6)	(11.3)	18.5	7.4	(7.2)	(7.7)	3.1	2.2
PTTGC TB	(3.3)	(14.4)	24.1	(0.9)	0.0	(10.7)	8.6	(6.1)
SPRC TB	(4.3)	(4.8)	30.7	11.2	(0.9)	(1.1)	15.2	6.0
SUSCO TB	(5.6)	(6.7)	28.8	4.1	(2.2)	(3.1)	13.4	(1.1)
TOP TB	(17.1)	(24.5)	7.8	(13.9)	(13.7)	(20.8)	(7.6)	(19.2)

Source: Bloomberg

## SECTOR - SWOT ANALYSIS

**S — Strength**

- Synergies within the PTT group could help lower costs and increase competitiveness via integration.
- Strong balance sheets should enable Thai energy companies to take advantage of low oil prices in M&As.

**O — Opportunity**

- Thai refineries, i.e., TOP, IRPC and PTTGC have room for further downstream expansion into higher value-added plastic pellets.
- Overseas acquisitions that could drive growth and value.

**W — Weakness**

- High-cost E&P operation in Thailand.
- Earnings and cash flows are highly volatile, following fluctuations in global oil prices.

**T — Threat**

- Cheap imported LNG is a major threat to local gas producers, including PTTEP.
- Regulatory risk, i.e., price caps.

## REGIONAL COMPARISON

Name	—EPS growth—		— PE —		— P/BV —		— EV/EBITDA —		— Div. Yield —	
	21F (%)	22F (%)	21F (x)	22F (x)	21F (x)	22F (x)	21F (x)	22F (x)	21F (%)	22F (%)
Australia	145.1	13.7	16.3	14.5	1.7	1.6	5.2	4.9	3.0	3.1
China	82.5	(7.7)	7.3	8.0	0.5	0.5	3.6	3.6	7.7	7.4
India	60.7	22.6	15.5	12.9	1.6	1.3	10.4	8.9	3.7	4.0
S.Korea	na	30.5	21.6	14.8	1.6	1.4	8.2	8.0	2.0	2.2
USA	na	13.8	11.6	10.2	1.7	10.0	5.4	5.0	3.7	4.2
Thailand	105.0	7.4	13.5	34.7	1.3	1.2	11.5	9.2	3.0	3.5
<b>Average</b>	<b>98.3</b>	<b>13.4</b>	<b>14.3</b>	<b>15.8</b>	<b>1.4</b>	<b>2.7</b>	<b>7.4</b>	<b>6.6</b>	<b>3.9</b>	<b>4.1</b>

Sources: Bloomberg Consensus

Note: \* Thanachart estimate – using normalized EPS



## Bangchak Petroleum

## INCOME STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Sales	190,489	136,450	180,768	202,438	206,659
Cost of sales	180,257	132,122	172,899	192,589	196,201
<b>Gross profit</b>	<b>10,232</b>	<b>4,328</b>	<b>7,869</b>	<b>9,849</b>	<b>10,458</b>
% gross margin	5.4%	3.2%	4.4%	4.9%	5.1%
Selling & administration expenses	7,614	7,141	6,221	6,411	6,596
<b>Operating profit</b>	<b>2,618</b>	<b>(2,813)</b>	<b>1,649</b>	<b>3,438</b>	<b>3,862</b>
% operating margin	1.4%	-2.1%	0.9%	1.7%	1.9%
Depreciation & amortization	5,032	6,821	6,604	6,964	7,087
<b>EBITDA</b>	<b>7,650</b>	<b>4,008</b>	<b>8,253</b>	<b>10,402</b>	<b>10,949</b>
% EBITDA margin	4.0%	2.9%	4.6%	5.1%	5.3%
Non-operating income	495	533	876	903	919
Non-operating expenses	147	0	0	0	0
Interest expense	(1,701)	(1,969)	(2,010)	(1,920)	(1,771)
<b>Pre-tax profit</b>	<b>1,558</b>	<b>(4,250)</b>	<b>515</b>	<b>2,421</b>	<b>3,010</b>
Income tax	68	(1,589)	72	339	421
<b>After-tax profit</b>	<b>1,491</b>	<b>(2,661)</b>	<b>443</b>	<b>2,082</b>	<b>2,589</b>
% net margin	0.8%	-2.0%	0.2%	1.0%	1.3%
Shares in affiliates' Earnings	404	(592)	33	33	33
Minority interests	(757)	(1,197)	(553)	(613)	(586)
Extraordinary items	593	(2,517)	0	0	0
<b>NET PROFIT</b>	<b>1,732</b>	<b>(6,967)</b>	<b>(77)</b>	<b>1,502</b>	<b>2,037</b>
<b>Normalized profit</b>	<b>1,138</b>	<b>(4,450)</b>	<b>(77)</b>	<b>1,502</b>	<b>2,037</b>
EPS (Bt)	1.3	(5.1)	(0.1)	1.1	1.5
Normalized EPS (Bt)	0.8	(3.2)	(0.1)	1.1	1.5

## BALANCE SHEET

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
<b>ASSETS:</b>					
Current assets:	37,621	47,296	39,457	42,505	43,075
Cash & cash equivalent	7,564	21,651	10,000	10,000	10,000
Account receivables	9,038	6,402	7,429	8,319	8,493
Inventories	15,835	16,162	18,948	21,106	21,502
Others	5,184	3,080	3,080	3,080	3,080
Investments & loans	21,142	15,586	15,586	15,586	15,586
Net fixed assets	52,584	54,567	47,769	44,893	41,962
Other assets	16,441	30,874	30,443	32,370	32,371
<b>Total assets</b>	<b>127,788</b>	<b>148,323</b>	<b>133,255</b>	<b>135,354</b>	<b>132,994</b>
<b>LIABILITIES:</b>					
Current liabilities:	27,083	25,502	17,779	19,366	19,242
Account payables	13,447	12,277	11,842	13,191	13,438
Bank overdraft & ST loans	5,051	3,975	0	0	0
Current LT debt	5,198	5,174	2,302	2,008	1,630
Others current liabilities	3,387	4,076	3,634	4,167	4,173
<b>Total LT debt</b>	<b>37,792</b>	<b>54,095</b>	<b>43,737</b>	<b>42,625</b>	<b>39,127</b>
Others LT liabilities	4,098	10,409	13,193	13,086	12,699
<b>Total liabilities</b>	<b>68,973</b>	<b>90,006</b>	<b>74,709</b>	<b>75,077</b>	<b>71,067</b>
Minority interest	7,211	11,950	12,504	13,117	13,703
Preferred shares	0	0	0	0	0
Paid-up capital	1,377	1,377	1,377	1,377	1,377
Share premium	11,157	11,157	11,157	11,157	11,157
Warrants	0	0	0	0	0
Surplus	11,338	10,732	10,732	10,732	10,732
<b>Retained earnings</b>	<b>27,732</b>	<b>23,100</b>	<b>22,776</b>	<b>23,894</b>	<b>24,958</b>
Shareholders' equity	51,604	46,366	46,043	47,160	48,224
<b>Liabilities &amp; equity</b>	<b>127,788</b>	<b>148,323</b>	<b>133,255</b>	<b>135,354</b>	<b>132,994</b>

Sources: Company data, Thanachart estimates

## Bangchak Petroleum

## CASH FLOW STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Earnings before tax	1,558	(4,250)	515	2,421	3,010
Tax paid	(68)	1,589	(72)	(339)	(421)
Depreciation & amortization	5,032	6,821	6,604	6,964	7,087
Chg In working capital	3,997	1,139	(4,247)	(1,700)	(322)
Chg In other CA & CL / minorities	(5,684)	5,873	(408)	566	40
<b>Cash flow from operations</b>	<b>4,836</b>	<b>11,173</b>	<b>2,392</b>	<b>7,912</b>	<b>9,394</b>
Capex	(8,186)	(8,804)	925	(3,343)	(3,395)
Right of use	0	(11,087)	(300)	(300)	(300)
ST loans & investments	0	0	0	0	0
LT loans & investments	(1,080)	5,556	0	0	0
Adj for asset revaluation	0	(190)	0	0	0
Chg In other assets & liabilities	(5,168)	(414)	2,784	(2,479)	(849)
<b>Cash flow from investments</b>	<b>(14,433)</b>	<b>(14,939)</b>	<b>3,409</b>	<b>(6,122)</b>	<b>(4,545)</b>
Debt financing	(1,809)	15,935	(17,205)	(1,406)	(3,876)
Capital increase	0	0	0	0	0
Dividends paid	(1,760)	(743)	(247)	(384)	(973)
Warrants & other surplus	8,917	2,661	0	0	0
<b>Cash flow from financing</b>	<b>5,349</b>	<b>17,854</b>	<b>(17,452)</b>	<b>(1,790)</b>	<b>(4,849)</b>
<b>Free cash flow</b>	<b>(3,350)</b>	<b>2,368</b>	<b>3,317</b>	<b>4,569</b>	<b>5,999</b>

## VALUATION

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Normalized PE (x)	29.0	na	na	22.0	16.2
Normalized PE - at target price (x)	25.4	na	na	19.3	14.2
PE (x)	19.1	na	na	22.0	16.2
PE - at target price (x)	16.7	na	na	19.3	14.2
EV/EBITDA (x)	9.6	18.6	8.4	6.5	5.8
EV/EBITDA - at target price (x)	9.1	17.6	7.9	6.1	5.4
P/BV (x)	0.6	0.7	0.7	0.7	0.7
P/BV - at target price (x)	0.6	0.6	0.6	0.6	0.6
P/CFO (x)	6.8	3.0	13.8	4.2	3.5
Price/sales (x)	0.2	0.2	0.2	0.2	0.2
Dividend yield (%)	3.3	1.7	0.0	2.5	3.4
FCF Yield (%)	(10.1)	7.2	10.0	13.8	18.2
<b>(Bt)</b>					
Normalized EPS	0.8	(3.2)	(0.1)	1.1	1.5
EPS	1.3	(5.1)	(0.1)	1.1	1.5
DPS	0.8	0.4	0.0	0.6	0.8
BV/share	37.5	33.7	33.4	34.3	35.0
CFO/share	3.5	8.1	1.7	5.7	6.8
FCF/share	(2.4)	1.7	2.4	3.3	4.4

Sources: Company data, Thanachart estimates

**Bangchak Petroleum****FINANCIAL RATIOS**

<b>FY ending Dec</b>	<b>2019A</b>	<b>2020A</b>	<b>2021F</b>	<b>2022F</b>	<b>2023F</b>
<b>Growth Rate</b>					
Sales (%)	(0.8)	(28.4)	32.5	12.0	2.1
Net profit (%)	(29.7)	na	na	na	35.6
EPS (%)	(29.7)	na	na	na	35.6
Normalized profit (%)	(52.0)	na	na	na	35.6
Normalized EPS (%)	(52.0)	na	na	na	35.6
Dividend payout ratio (%)	63.6	(7.9)	75.0	55.0	55.0
<b>Operating performance</b>					
Gross margin (%)	5.4	3.2	4.4	4.9	5.1
Operating margin (%)	1.4	(2.1)	0.9	1.7	1.9
EBITDA margin (%)	4.0	2.9	4.6	5.1	5.3
Net margin (%)	0.8	(2.0)	0.2	1.0	1.3
D/E (incl. minor) (x)	0.8	1.1	0.8	0.7	0.7
Net D/E (incl. minor) (x)	0.7	0.7	0.6	0.6	0.5
Interest coverage - EBIT (x)	1.5	na	0.8	1.8	2.2
Interest coverage - EBITDA (x)	4.5	2.0	4.1	5.4	6.2
ROA - using norm profit (%)	0.9	na	na	1.1	1.5
ROE - using norm profit (%)	2.4	na	na	3.2	4.3
<b>DuPont</b>					
ROE - using after tax profit (%)	3.2	na	1.0	4.5	5.4
- asset turnover (x)	1.6	1.0	1.3	1.5	1.5
- operating margin (%)	1.7	na	1.4	2.1	2.3
- leverage (x)	2.6	2.8	3.0	2.9	2.8
- interest burden (%)	47.8	186.4	20.4	55.8	63.0
- tax burden (%)	95.7	na	86.0	86.0	86.0
WACC (%)	8.5	8.5	8.5	8.5	8.5
ROIC (%)	3.1	(3.1)	1.6	3.6	4.1
NOPAT (Bt m)	2,504	(2,813)	1,418	2,957	3,321
invested capital (Bt m)	92,081	87,959	82,081	81,793	78,981

Sources: Company data, Thanachart estimates

## Esso (Thailand)

## INCOME STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Sales	169,348	126,672	193,882	195,433	198,200
Cost of sales	167,344	131,408	189,607	190,016	190,255
<b>Gross profit</b>	<b>2,004</b>	<b>(4,736)</b>	<b>4,275</b>	<b>5,418</b>	<b>7,945</b>
% gross margin	1.2%	-3.7%	2.2%	2.8%	4.0%
Selling & administration expenses	6,110	5,217	5,235	5,277	5,252
<b>Operating profit</b>	<b>(4,106)</b>	<b>(9,953)</b>	<b>(960)</b>	<b>141</b>	<b>2,693</b>
% operating margin	-2.4%	-7.9%	-0.5%	0.1%	1.4%
Depreciation & amortization	2,019	2,568	2,497	2,378	2,268
<b>EBITDA</b>	<b>(2,087)</b>	<b>(7,385)</b>	<b>1,538</b>	<b>2,519</b>	<b>4,960</b>
% EBITDA margin	-1.2%	-5.8%	0.8%	1.3%	2.5%
Non-operating income	90	70	122	124	125
Non-operating expenses	0	0	0	0	0
Interest expense	(322)	(360)	(357)	(389)	(387)
<b>Pre-tax profit</b>	<b>(4,337)</b>	<b>(10,243)</b>	<b>(1,194)</b>	<b>(124)</b>	<b>2,430</b>
Income tax	(893)	(2,048)	0	0	486
<b>After-tax profit</b>	<b>(3,445)</b>	<b>(8,195)</b>	<b>(1,194)</b>	<b>(124)</b>	<b>1,944</b>
% net margin	-2.0%	-6.5%	-0.6%	-0.1%	1.0%
Shares in affiliates' Earnings	380	285	299	314	321
Minority interests	(1)	(1)	(1)	(1)	(1)
Extraordinary items	0	0	0	0	0
<b>NET PROFIT</b>	<b>(3,066)</b>	<b>(7,911)</b>	<b>(896)</b>	<b>189</b>	<b>2,264</b>
<b>Normalized profit</b>	<b>(3,066)</b>	<b>(7,911)</b>	<b>(896)</b>	<b>189</b>	<b>2,264</b>
EPS (Bt)	(0.9)	(2.3)	(0.3)	0.1	0.7
Normalized EPS (Bt)	(0.9)	(2.3)	(0.3)	0.1	0.7

## BALANCE SHEET

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
<b>ASSETS:</b>					
Current assets:	31,978	22,921	30,777	30,916	31,118
Cash & cash equivalent	277	262	401	404	409
Account receivables	6,464	5,083	5,312	5,354	5,430
Inventories	19,085	13,144	18,182	18,221	18,244
Others	6,152	4,432	6,883	6,938	7,034
Investments & loans	3,708	5,649	5,649	5,649	5,649
Net fixed assets	25,600	24,750	23,000	21,385	19,894
Other assets	4,957	8,058	8,111	8,178	8,255
<b>Total assets</b>	<b>66,243</b>	<b>61,378</b>	<b>67,537</b>	<b>66,128</b>	<b>64,916</b>
<b>LIABILITIES:</b>					
Current liabilities:	36,676	35,446	34,966	34,839	32,541
Account payables	5,020	4,452	6,753	6,768	6,776
Bank overdraft & ST loans	6,488	16,703	19,627	16,937	15,730
Current LT debt	16,289	5,167	0	0	0
Others current liabilities	8,878	9,125	8,587	11,135	10,034
<b>Total LT debt</b>	<b>4,167</b>	<b>6,333</b>	<b>10,568</b>	<b>9,120</b>	<b>8,470</b>
Others LT liabilities	3,282	5,239	8,538	8,609	8,693
<b>Total liabilities</b>	<b>44,125</b>	<b>47,019</b>	<b>54,073</b>	<b>52,568</b>	<b>49,704</b>
Minority interest	7	7	9	10	11
Preferred shares	0	0	0	0	0
Paid-up capital	17,075	17,075	17,075	17,075	17,075
Share premium	4,032	4,032	4,032	4,032	4,032
Warrants	0	0	0	0	0
Surplus	173	325	325	325	325
<b>Retained earnings</b>	<b>831</b>	<b>(7,080)</b>	<b>(7,976)</b>	<b>(7,882)</b>	<b>(6,231)</b>
Shareholders' equity	22,110	14,352	13,456	13,550	15,201
<b>Liabilities &amp; equity</b>	<b>66,243</b>	<b>61,378</b>	<b>67,537</b>	<b>66,128</b>	<b>64,916</b>

Sources: Company data, Thanachart estimates

## Esso (Thailand)

## CASH FLOW STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Earnings before tax	(4,337)	(10,243)	(1,194)	(124)	2,430
Tax paid	893	2,048	0	0	(486)
Depreciation & amortization	2,019	2,568	2,497	2,378	2,268
Chg In working capital	(2,818)	6,754	(2,965)	(67)	(90)
Chg In other CA & CL / minorities	(4,043)	1,909	(2,590)	2,808	(876)
<b>Cash flow from operations</b>	<b>(8,287)</b>	<b>3,034</b>	<b>(4,252)</b>	<b>4,995</b>	<b>3,245</b>
Capex	(1,619)	(1,718)	(500)	(500)	(500)
Right of use	0	(4,287)	(300)	(300)	(300)
ST loans & investments	0	0	(100)	0	0
LT loans & investments	(976)	(1,941)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(274)	3,486	3,299	41	30
<b>Cash flow from investments</b>	<b>(2,869)</b>	<b>(4,461)</b>	<b>2,399</b>	<b>(759)</b>	<b>(770)</b>
Debt financing	11,599	1,259	1,992	(4,138)	(1,856)
Capital increase	0	0	0	0	0
Dividends paid	(346)	0	0	(94)	(613)
Warrants & other surplus	(302)	153	0	0	0
<b>Cash flow from financing</b>	<b>10,950</b>	<b>1,411</b>	<b>1,992</b>	<b>(4,232)</b>	<b>(2,469)</b>
<b>Free cash flow</b>	<b>(9,906)</b>	<b>1,316</b>	<b>(4,752)</b>	<b>4,495</b>	<b>2,745</b>

## VALUATION

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Normalized PE (x)	na	na	na	142.0	11.8
Normalized PE - at target price (x)	na	na	na	126.5	10.5
PE (x)	na	na	na	142.0	11.8
PE - at target price (x)	na	na	na	126.5	10.5
EV/EBITDA (x)	na	na	36.8	20.8	10.2
EV/EBITDA - at target price (x)	na	na	34.9	19.7	9.6
P/BV (x)	1.2	1.9	2.0	2.0	1.8
P/BV - at target price (x)	1.1	1.7	1.8	1.8	1.6
P/CFO (x)	(3.2)	8.8	(6.3)	5.4	8.3
Price/sales (x)	0.2	0.2	0.1	0.1	0.1
Dividend yield (%)	0.0	0.0	0.0	0.4	4.2
FCF Yield (%)	(36.9)	4.9	(17.7)	16.8	10.2
<b>(Bt)</b>					
Normalized EPS	(0.9)	(2.3)	(0.3)	0.1	0.7
EPS	(0.9)	(2.3)	(0.3)	0.1	0.7
DPS	0.0	0.0	0.0	0.0	0.3
BV/share	6.4	4.1	3.9	3.9	4.4
CFO/share	(2.4)	0.9	(1.2)	1.4	0.9
FCF/share	(2.9)	0.4	(1.4)	1.3	0.8

Sources: Company data, Thanachart estimates

**Esso (Thailand)****FINANCIAL RATIOS**

<b>FY ending Dec</b>	<b>2019A</b>	<b>2020A</b>	<b>2021F</b>	<b>2022F</b>	<b>2023F</b>
<b>Growth Rate</b>					
Sales (%)	(15.7)	(25.2)	53.1	0.8	1.4
Net profit (%)	na	na	na	na	1,098.7
EPS (%)	na	na	na	na	1,098.7
Normalized profit (%)	na	na	na	na	1,098.7
Normalized EPS (%)	na	na	na	na	1,098.7
Dividend payout ratio (%)	0.0	0.0	50.0	50.0	50.0
<b>Operating performance</b>					
Gross margin (%)	1.2	(3.7)	2.2	2.8	4.0
Operating margin (%)	(2.4)	(7.9)	(0.5)	0.1	1.4
EBITDA margin (%)	(1.2)	(5.8)	0.8	1.3	2.5
Net margin (%)	(2.0)	(6.5)	(0.6)	(0.1)	1.0
D/E (incl. minor) (x)	1.2	2.0	2.2	1.9	1.6
Net D/E (incl. minor) (x)	1.2	1.9	2.2	1.9	1.6
Interest coverage - EBIT (x)	na	na	na	0.4	6.9
Interest coverage - EBITDA (x)	na	na	4.3	6.5	12.8
ROA - using norm profit (%)	na	na	na	0.3	3.5
ROE - using norm profit (%)	na	na	na	1.4	15.7
<b>DuPont</b>					
ROE - using after tax profit (%)	na	na	na	na	13.5
- asset turnover (x)	2.6	2.0	3.0	2.9	3.0
- operating margin (%)	na	na	na	na	1.4
- leverage (x)	2.7	3.5	4.6	4.9	4.6
- interest burden (%)	108.0	103.6	142.6	(47.0)	86.2
- tax burden (%)	na	na	na	na	80.0
WACC (%)	7.7	7.7	7.7	7.7	7.7
ROIC (%)	(10.1)	(20.4)	(1.8)	0.3	5.5
NOPAT (Bt m)	(4,106)	(9,953)	(768)	113	2,154
invested capital (Bt m)	48,778	42,293	43,250	39,203	38,992

Sources: Company data, Thanachart estimates

## PTG Energy Pcl

## INCOME STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Sales	120,252	104,666	140,273	151,626	159,903
Cost of sales	110,127	93,824	128,386	138,889	146,575
<b>Gross profit</b>	<b>10,125</b>	<b>10,842</b>	<b>11,887</b>	<b>12,737</b>	<b>13,329</b>
% gross margin	8.4%	10.4%	8.5%	8.4%	8.3%
Selling & administration expenses	7,907	7,820	8,147	8,765	9,362
<b>Operating profit</b>	<b>2,218</b>	<b>3,023</b>	<b>3,740</b>	<b>3,971</b>	<b>3,966</b>
% operating margin	1.8%	2.9%	2.7%	2.6%	2.5%
Depreciation & amortization	3,011	2,880	3,104	3,517	3,906
<b>EBITDA</b>	<b>5,229</b>	<b>5,903</b>	<b>6,844</b>	<b>7,488</b>	<b>7,873</b>
% EBITDA margin	4.3%	5.6%	4.9%	4.9%	4.9%
Non-operating income	0	0	0	0	0
Non-operating expenses	0	0	0	0	0
Interest expense	(335)	(1,104)	(1,856)	(1,823)	(1,732)
<b>Pre-tax profit</b>	<b>1,883</b>	<b>1,919</b>	<b>1,883</b>	<b>2,149</b>	<b>2,235</b>
Income tax	359	425	377	430	447
<b>After-tax profit</b>	<b>1,524</b>	<b>1,494</b>	<b>1,507</b>	<b>1,719</b>	<b>1,788</b>
% net margin	1.3%	1.4%	1.1%	1.1%	1.1%
Shares in affiliates' Earnings	40	376	300	300	300
Minority interests	(3)	(12)	(16)	(18)	(19)
Extraordinary items	0	37	0	0	0
<b>NET PROFIT</b>	<b>1,561</b>	<b>1,894</b>	<b>1,790</b>	<b>2,001</b>	<b>2,069</b>
<b>Normalized profit</b>	<b>1,561</b>	<b>1,857</b>	<b>1,790</b>	<b>2,001</b>	<b>2,069</b>
EPS (Bt)	0.9	1.1	1.1	1.2	1.2
Normalized EPS (Bt)	0.9	1.1	1.1	1.2	1.2

## BALANCE SHEET

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
<b>ASSETS:</b>					
Current assets:	4,850	3,859	5,105	5,525	5,853
Cash & cash equivalent	1,038	942	753	818	887
Account receivables	1,222	503	1,537	1,662	1,752
Inventories	2,217	2,088	2,814	3,044	3,213
Others	373	326	1	1	1
Investments & loans	2,207	1,810	2,310	2,810	3,310
Net fixed assets	11,458	10,853	12,957	14,116	14,988
Other assets	4,136	25,515	42,645	43,701	44,310
<b>Total assets</b>	<b>22,652</b>	<b>42,037</b>	<b>63,018</b>	<b>66,152</b>	<b>68,461</b>
<b>LIABILITIES:</b>					
Current liabilities:	11,614	8,486	19,141	19,841	19,848
Account payables	5,779	3,920	7,387	7,991	8,433
Bank overdraft & ST loans	3,050	1,850	6,799	6,108	5,161
Current LT debt	2,490	1,464	3,966	4,581	5,161
Others current liabilities	296	1,252	990	1,160	1,092
<b>Total LT debt</b>	<b>3,857</b>	<b>6,282</b>	<b>11,898</b>	<b>13,744</b>	<b>15,484</b>
Others LT liabilities	474	19,289	23,057	22,575	22,066
<b>Total liabilities</b>	<b>15,944</b>	<b>34,057</b>	<b>54,096</b>	<b>56,160</b>	<b>57,399</b>
Minority interest	60	96	113	130	149
Preferred shares	0	0	0	0	0
Paid-up capital	1,670	1,670	1,670	1,670	1,670
Share premium	1,185	1,185	1,185	1,185	1,185
Warrants	0	0	0	0	0
Surplus	(63)	(55)	(55)	(55)	(55)
<b>Retained earnings</b>	<b>3,855</b>	<b>5,083</b>	<b>6,008</b>	<b>7,062</b>	<b>8,113</b>
Shareholders' equity	6,648	7,884	8,809	9,862	10,914
<b>Liabilities &amp; equity</b>	<b>22,652</b>	<b>42,037</b>	<b>63,018</b>	<b>66,152</b>	<b>68,461</b>

Sources: Company data, Thanachart estimates

## PTG Energy Pcl

## CASH FLOW STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Earnings before tax	1,883	1,919	1,883	2,149	2,235
Tax paid	(274)	(314)	(377)	(430)	(447)
Depreciation & amortization	3,011	2,880	3,104	3,517	3,906
Chg In working capital	(1,079)	(1,011)	1,707	250	183
Chg In other CA & CL / minorities	136	1,950	38	470	232
<b>Cash flow from operations</b>	<b>3,677</b>	<b>5,425</b>	<b>6,355</b>	<b>5,956</b>	<b>6,109</b>
Capex	(3,444)	(2,275)	(4,207)	(3,655)	(3,737)
Right of use	0	(23,662)	(500)	(500)	(500)
ST loans & investments	(358)	45	325	0	0
LT loans & investments	0	397	(500)	(500)	(500)
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	5	20,432	(13,863)	(2,058)	(1,659)
<b>Cash flow from investments</b>	<b>(3,796)</b>	<b>(5,064)</b>	<b>(18,745)</b>	<b>(6,713)</b>	<b>(6,396)</b>
Debt financing	505	201	13,066	1,770	1,374
Capital increase	0	0	0	0	0
Dividends paid	(334)	(668)	(865)	(948)	(1,018)
Warrants & other surplus	(23)	10	0	0	0
<b>Cash flow from financing</b>	<b>147</b>	<b>(457)</b>	<b>12,201</b>	<b>822</b>	<b>356</b>
<b>Free cash flow</b>	<b>234</b>	<b>3,149</b>	<b>2,148</b>	<b>2,301</b>	<b>2,372</b>

## VALUATION

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Normalized PE (x)	16.5	13.8	14.4	12.8	12.4
Normalized PE - at target price (x)	23.5	19.8	20.5	18.4	17.8
PE (x)	16.5	13.6	14.4	12.8	12.4
PE - at target price (x)	23.5	19.4	20.5	18.4	17.8
EV/EBITDA (x)	6.5	5.8	7.0	6.6	6.4
EV/EBITDA - at target price (x)	8.6	7.7	8.6	8.1	7.8
P/BV (x)	3.9	3.3	2.9	2.6	2.4
P/BV - at target price (x)	5.5	4.7	4.2	3.7	3.4
P/CFO (x)	7.0	4.7	4.0	4.3	4.2
Price/sales (x)	0.2	0.2	0.2	0.2	0.2
Dividend yield (%)	3.2	3.2	3.5	3.9	4.0
FCF Yield (%)	0.9	12.2	8.4	8.9	9.2
<b>(Bt)</b>					
Normalized EPS	0.9	1.1	1.1	1.2	1.2
EPS	0.9	1.1	1.1	1.2	1.2
DPS	0.5	0.5	0.5	0.6	0.6
BV/share	4.0	4.7	5.3	5.9	6.5
CFO/share	2.2	3.2	3.8	3.6	3.7
FCF/share	0.1	1.9	1.3	1.4	1.4

Sources: Company data, Thanachart estimates



## PTG Energy Pcl

## FINANCIAL RATIOS

FY ending Dec	2019A	2020A	2021F	2022F	2023F
<b>Growth Rate</b>					
Sales (%)	11.2	(13.0)	34.0	8.1	5.5
Net profit (%)	149.8	21.4	(5.5)	11.8	3.4
EPS (%)	149.8	21.4	(5.5)	11.8	3.4
Normalized profit (%)	149.8	19.0	(3.6)	11.8	3.4
Normalized EPS (%)	149.8	19.0	(3.6)	11.8	3.4
Dividend payout ratio (%)	53.5	44.1	50.0	50.0	50.0
<b>Operating performance</b>					
Gross margin (%)	8.4	10.4	8.5	8.4	8.3
Operating margin (%)	1.8	2.9	2.7	2.6	2.5
EBITDA margin (%)	4.3	5.6	4.9	4.9	4.9
Net margin (%)	1.3	1.4	1.1	1.1	1.1
D/E (incl. minor) (x)	1.4	1.2	2.5	2.4	2.3
Net D/E (incl. minor) (x)	1.2	1.1	2.5	2.4	2.3
Interest coverage - EBIT (x)	6.6	2.7	2.0	2.2	2.3
Interest coverage - EBITDA (x)	15.6	5.3	3.7	4.1	4.5
ROA - using norm profit (%)	7.2	5.7	3.4	3.1	3.1
ROE - using norm profit (%)	25.8	25.6	21.5	21.4	19.9
<b>DuPont</b>					
ROE - using after tax profit (%)	25.2	20.6	18.1	18.4	17.2
- asset turnover (x)	5.5	3.2	2.7	2.3	2.4
- operating margin (%)	1.8	2.9	2.7	2.6	2.5
- leverage (x)	3.6	4.5	6.3	6.9	6.5
- interest burden (%)	84.9	63.5	50.4	54.1	56.3
- tax burden (%)	80.9	77.9	80.0	80.0	80.0
WACC (%)	7.0	7.0	7.0	7.0	7.0
ROIC (%)	13.5	15.7	18.1	10.3	9.5
NOPAT (Bt m)	1,795	2,353	2,992	3,177	3,173
invested capital (Bt m)	15,005	16,539	30,719	33,478	35,834

Sources: Company data, Thanachart estimates

## PTT Public Co Ltd

## INCOME STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Sales	2,219,739	1,615,665	2,339,258	2,424,838	2,471,396
Cost of sales	1,967,529	1,437,093	2,060,780	2,127,051	2,158,744
<b>Gross profit</b>	<b>252,210</b>	<b>178,572</b>	<b>278,478</b>	<b>297,788</b>	<b>312,652</b>
% gross margin	11.4%	11.1%	11.9%	12.3%	12.7%
Selling & administration expenses	110,458	109,389	105,083	110,209	106,136
<b>Operating profit</b>	<b>141,751</b>	<b>69,183</b>	<b>173,395</b>	<b>187,579</b>	<b>206,516</b>
% operating margin	6.4%	4.3%	7.4%	7.7%	8.4%
Depreciation & amortization	133,204	139,880	150,094	160,103	166,386
<b>EBITDA</b>	<b>274,955</b>	<b>209,063</b>	<b>323,489</b>	<b>347,681</b>	<b>372,902</b>
% EBITDA margin	12.4%	12.9%	13.8%	14.3%	15.1%
Non-operating income	19,980	20,579	29,796	30,886	31,479
Non-operating expenses	0	0	0	0	0
Interest expense	(27,971)	(28,536)	(37,703)	(44,385)	(45,075)
<b>Pre-tax profit</b>	<b>133,760</b>	<b>61,225</b>	<b>165,488</b>	<b>174,079</b>	<b>192,919</b>
Income tax	32,989	25,166	33,098	34,816	38,584
<b>After-tax profit</b>	<b>100,771</b>	<b>36,059</b>	<b>132,390</b>	<b>139,264</b>	<b>154,336</b>
% net margin	4.5%	2.2%	5.7%	5.7%	6.2%
Shares in affiliates' Earnings	6,008	4,178	2,541	2,547	2,554
Minority interests	(29,141)	(2,184)	(29,215)	(32,486)	(34,372)
Extraordinary items	15,313	(287)	0	0	0
<b>NET PROFIT</b>	<b>92,951</b>	<b>37,766</b>	<b>105,716</b>	<b>109,325</b>	<b>122,517</b>
<b>Normalized profit</b>	<b>77,638</b>	<b>38,053</b>	<b>105,716</b>	<b>109,325</b>	<b>122,517</b>
EPS (Bt)	3.3	1.3	3.7	3.8	4.3
Normalized EPS (Bt)	2.7	1.3	3.7	3.8	4.3

## BALANCE SHEET

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
<b>ASSETS:</b>					
Current assets:	717,099	720,930	853,197	868,319	876,152
Cash & cash equivalent	330,806	416,921	416,921	416,921	416,921
Account receivables	167,641	110,528	160,029	165,883	169,068
Inventories	152,126	129,779	186,102	192,087	194,949
Others	66,526	63,703	90,145	93,428	95,214
Investments & loans	87,657	85,312	73,312	73,312	73,312
Net fixed assets	1,294,979	1,292,717	1,430,318	1,493,842	1,486,236
Other assets	387,230	445,224	608,220	623,357	629,436
<b>Total assets</b>	<b>2,486,965</b>	<b>2,544,183</b>	<b>2,965,047</b>	<b>3,058,830</b>	<b>3,065,137</b>
<b>LIABILITIES:</b>					
Current liabilities:	379,785	298,026	462,361	474,354	457,938
Account payables	160,669	108,189	155,142	160,131	162,517
Bank overdraft & ST loans	44,441	4,223	43,044	42,120	37,240
Current LT debt	50,440	73,778	122,675	120,041	106,134
Others current liabilities	124,236	111,837	141,500	152,063	152,047
<b>Total LT debt</b>	<b>562,746</b>	<b>664,732</b>	<b>695,158</b>	<b>680,231</b>	<b>601,423</b>
Others LT liabilities	243,394	295,579	427,463	436,129	438,731
<b>Total liabilities</b>	<b>1,185,925</b>	<b>1,258,338</b>	<b>1,584,982</b>	<b>1,590,714</b>	<b>1,498,092</b>
Minority interest	422,436	403,805	433,020	465,506	499,878
Preferred shares	0	0	0	0	0
Paid-up capital	28,563	28,563	28,563	28,563	28,563
Share premium	29,211	29,211	29,211	29,211	29,211
Warrants	0	0	0	0	0
Surplus	(52,287)	(49,116)	(49,116)	(49,116)	(49,116)
<b>Retained earnings</b>	<b>873,117</b>	<b>873,383</b>	<b>938,388</b>	<b>993,952</b>	<b>1,058,509</b>
Shareholders' equity	878,604	882,040	947,046	1,002,610	1,067,167
<b>Liabilities &amp; equity</b>	<b>2,486,965</b>	<b>2,544,183</b>	<b>2,965,047</b>	<b>3,058,830</b>	<b>3,065,137</b>

Sources: Company data, Thanachart estimates

## PTT Public Co Ltd

## CASH FLOW STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Earnings before tax	133,760	61,225	165,488	174,079	192,919
Tax paid	(49,340)	(36,073)	(22,527)	(34,741)	(37,493)
Depreciation & amortization	133,204	139,880	150,094	160,103	166,386
Chg In working capital	9,335	26,980	(58,871)	(6,850)	(3,661)
Chg In other CA & CL / minorities	(32,924)	(16,034)	(6,127)	9,752	(339)
<b>Cash flow from operations</b>	<b>194,035</b>	<b>175,977</b>	<b>228,057</b>	<b>302,343</b>	<b>317,813</b>
Capex	(314,009)	(137,617)	(282,716)	(218,632)	(153,771)
Right of use	0	(70,831)	(300)	(300)	(300)
ST loans & investments	(886)	951	1,318	0	0
LT loans & investments	(8,109)	2,345	12,000	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(14,705)	55,243	(35,792)	(11,165)	(8,187)
<b>Cash flow from investments</b>	<b>(337,709)</b>	<b>(149,909)</b>	<b>(305,490)</b>	<b>(230,097)</b>	<b>(162,257)</b>
Debt financing	129,304	94,377	118,144	(18,485)	(97,595)
Capital increase	0	0	(0)	0	0
Dividends paid	(81,351)	(51,624)	(40,710)	(53,760)	(57,961)
Warrants & other surplus	(8,079)	17,295	0	0	0
<b>Cash flow from financing</b>	<b>39,874</b>	<b>60,047</b>	<b>77,433</b>	<b>(72,246)</b>	<b>(155,555)</b>
<b>Free cash flow</b>	<b>(119,973)</b>	<b>38,360</b>	<b>(54,659)</b>	<b>83,711</b>	<b>164,042</b>

## VALUATION

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Normalized PE (x)	12.9	26.3	9.5	9.1	8.2
Normalized PE - at target price (x)	17.7	36.0	13.0	12.5	11.2
PE (x)	10.8	26.5	9.5	9.1	8.2
PE - at target price (x)	14.8	36.3	13.0	12.5	11.2
EV/EBITDA (x)	4.8	6.3	4.5	4.1	3.6
EV/EBITDA - at target price (x)	6.2	8.1	5.6	5.2	4.6
P/BV (x)	1.1	1.1	1.1	1.0	0.9
P/BV - at target price (x)	1.6	1.6	1.4	1.4	1.3
P/CFO (x)	5.2	5.7	4.4	3.3	3.1
Price/sales (x)	0.5	0.6	0.4	0.4	0.4
Dividend yield (%)	5.7	2.9	5.3	5.5	6.1
FCF Yield (%)	(12.0)	3.8	(5.5)	8.4	16.4
<b>(Bt)</b>					
Normalized EPS	2.7	1.3	3.7	3.8	4.3
EPS	3.3	1.3	3.7	3.8	4.3
DPS	2.0	1.0	1.9	1.9	2.1
BV/share	30.8	30.9	33.2	35.1	37.4
CFO/share	6.8	6.2	8.0	10.6	11.1
FCF/share	(4.2)	1.3	(1.9)	2.9	5.7

Sources: Company data, Thanachart estimates

## PTT Public Co Ltd

## FINANCIAL RATIOS

FY ending Dec	2019A	2020A	2021F	2022F	2023F
<b>Growth Rate</b>					
Sales (%)	(5.0)	(27.2)	44.8	3.7	1.9
Net profit (%)	(22.3)	(59.4)	179.9	3.4	12.1
EPS (%)	(22.3)	(59.4)	179.9	3.4	12.1
Normalized profit (%)	(31.5)	(51.0)	177.8	3.4	12.1
Normalized EPS (%)	(31.5)	(51.0)	177.8	3.4	12.1
Dividend payout ratio (%)	61.5	75.6	50.0	50.0	50.0
<b>Operating performance</b>					
Gross margin (%)	11.4	11.1	11.9	12.3	12.7
Operating margin (%)	6.4	4.3	7.4	7.7	8.4
EBITDA margin (%)	12.4	12.9	13.8	14.3	15.1
Net margin (%)	4.5	2.2	5.7	5.7	6.2
D/E (incl. minor) (x)	0.5	0.6	0.6	0.6	0.5
Net D/E (incl. minor) (x)	0.3	0.3	0.3	0.3	0.2
Interest coverage - EBIT (x)	5.1	2.4	4.6	4.2	4.6
Interest coverage - EBITDA (x)	9.8	7.3	8.6	7.8	8.3
ROA - using norm profit (%)	3.2	1.5	3.8	3.6	4.0
ROE - using norm profit (%)	8.9	4.3	11.6	11.2	11.8
<b>DuPont</b>					
ROE - using after tax profit (%)	11.5	4.1	14.5	14.3	14.9
- asset turnover (x)	0.9	0.6	0.8	0.8	0.8
- operating margin (%)	7.3	5.6	8.7	9.0	9.6
- leverage (x)	2.8	2.9	3.0	3.1	3.0
- interest burden (%)	82.7	68.2	81.4	79.7	81.1
- tax burden (%)	75.3	58.9	80.0	80.0	80.0
WACC (%)	9.0	9.0	9.0	9.0	9.0
ROIC (%)	10.9	3.4	11.5	10.8	11.6
NOPAT (Bt m)	106,791	40,745	138,716	150,063	165,212
invested capital (Bt m)	1,205,425	1,207,853	1,391,002	1,428,081	1,395,043

Sources: Company data, Thanachart estimates

## SUSCO Pcl

## INCOME STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Sales	27,952	16,673	21,270	25,030	27,830
Cost of sales	26,318	15,220	19,718	23,365	26,089
<b>Gross profit</b>	<b>1,634</b>	<b>1,452</b>	<b>1,552</b>	<b>1,665</b>	<b>1,741</b>
% gross margin	5.8%	8.7%	7.3%	6.7%	6.3%
Selling & administration expenses	1,318	1,228	1,291	1,330	1,366
<b>Operating profit</b>	<b>316</b>	<b>225</b>	<b>261</b>	<b>335</b>	<b>375</b>
% operating margin	1.1%	1.3%	1.2%	1.3%	1.3%
Depreciation & amortization	240	352	398	424	439
<b>EBITDA</b>	<b>556</b>	<b>577</b>	<b>659</b>	<b>759</b>	<b>814</b>
% EBITDA margin	2.0%	3.5%	3.1%	3.0%	2.9%
Non-operating income	193	105	89	93	95
Non-operating expenses	0	0	0	0	0
Interest expense	(15)	(52)	(77)	(98)	(92)
<b>Pre-tax profit</b>	<b>494</b>	<b>278</b>	<b>274</b>	<b>330</b>	<b>377</b>
Income tax	101	55	55	66	75
<b>After-tax profit</b>	<b>393</b>	<b>222</b>	<b>219</b>	<b>264</b>	<b>302</b>
% net margin	1.4%	1.3%	1.0%	1.1%	1.1%
Shares in affiliates' Earnings	(4)	(5)	0	0	0
Minority interests	0	0	0	0	0
Extraordinary items	0	0	0	0	0
<b>NET PROFIT</b>	<b>388</b>	<b>218</b>	<b>219</b>	<b>264</b>	<b>302</b>
<b>Normalized profit</b>	<b>388</b>	<b>218</b>	<b>219</b>	<b>264</b>	<b>302</b>
EPS (Bt)	0.4	0.2	0.2	0.3	0.3
Normalized EPS (Bt)	0.4	0.2	0.2	0.3	0.3

## BALANCE SHEET

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
<b>ASSETS:</b>					
Current assets:	2,072	1,365	1,510	1,761	1,964
Cash & cash equivalent	284	302	339	379	425
Account receivables	801	594	699	823	915
Inventories	639	416	405	480	536
Others	348	53	67	79	88
Investments & loans	1,251	1,150	1,150	1,150	1,150
Net fixed assets	1,605	1,675	1,812	1,772	1,725
Other assets	746	1,811	3,059	3,073	3,088
<b>Total assets</b>	<b>5,674</b>	<b>6,001</b>	<b>7,532</b>	<b>7,757</b>	<b>7,927</b>
<b>LIABILITIES:</b>					
Current liabilities:	1,675	1,176	2,308	2,346	2,322
Account payables	1,334	770	972	1,152	1,287
Bank overdraft & ST loans	172	100	1,236	1,083	923
Current LT debt	99	114	0	0	0
Others current liabilities	70	192	100	111	113
<b>Total LT debt</b>	<b>149</b>	<b>234</b>	<b>0</b>	<b>0</b>	<b>0</b>
Others LT liabilities	237	1,137	1,853	1,896	1,929
<b>Total liabilities</b>	<b>2,061</b>	<b>2,547</b>	<b>4,161</b>	<b>4,242</b>	<b>4,252</b>
Minority interest	(151)	(281)	(281)	(281)	(281)
Preferreds shares	0	0	0	0	0
Paid-up capital	1,100	1,100	1,000	1,000	1,000
Share premium	289	249	160	160	160
Warrants	27	27	27	27	27
Surplus	125	102	102	102	102
<b>Retained earnings</b>	<b>2,222</b>	<b>2,256</b>	<b>2,362</b>	<b>2,505</b>	<b>2,666</b>
Shareholders' equity	3,764	3,735	3,653	3,796	3,956
<b>Liabilities &amp; equity</b>	<b>5,674</b>	<b>6,001</b>	<b>7,532</b>	<b>7,757</b>	<b>7,927</b>

Sources: Company data, Thanachart estimates

## SUSCO Pcl

## CASH FLOW STATEMENT

FY ending Dec (Bt m)	2019A	2020A	2021F	2022F	2023F
Earnings before tax	494	278	274	330	377
Tax paid	(84)	(55)	(55)	(66)	(75)
Depreciation & amortization	240	352	398	424	439
Chg In working capital	142	(134)	108	(19)	(14)
Chg In other CA & CL / minorities	(534)	315	(106)	(1)	(6)
<b>Cash flow from operations</b>	<b>258</b>	<b>757</b>	<b>618</b>	<b>668</b>	<b>721</b>
Capex	(193)	(412)	(520)	(369)	(377)
Right of use	0	(1,637)	0	0	0
ST loans & investments	0	0	0	0	0
LT loans & investments	57	101	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	21	1,428	(548)	15	3
<b>Cash flow from investments</b>	<b>(115)</b>	<b>(520)</b>	<b>(1,068)</b>	<b>(354)</b>	<b>(374)</b>
Debt financing	(112)	28	788	(153)	(160)
Capital increase	0	(40)	(189)	0	0
Dividends paid	(172)	(136)	(112)	(121)	(141)
Warrants & other surplus	(28)	(70)	0	0	0
<b>Cash flow from financing</b>	<b>(312)</b>	<b>(218)</b>	<b>486</b>	<b>(273)</b>	<b>(302)</b>
<b>Free cash flow</b>	<b>66</b>	<b>345</b>	<b>98</b>	<b>299</b>	<b>344</b>

## VALUATION

FY ending Dec	2019A	2020A	2021F	2022F	2023F
Normalized PE (x)	8.4	14.7	14.2	11.5	10.1
Normalized PE - at target price (x)	13.3	23.2	22.5	18.2	15.9
PE (x)	8.4	14.7	14.2	11.5	10.1
PE - at target price (x)	13.3	23.2	22.5	18.2	15.9
EV/EBITDA (x)	6.1	5.8	6.1	4.9	4.3
EV/EBITDA - at target price (x)	9.5	9.0	8.8	7.3	6.5
P/BV (x)	0.8	0.9	0.8	0.8	0.8
P/BV - at target price (x)	1.3	1.3	1.3	1.3	1.2
P/CFO (x)	12.7	4.2	5.0	4.6	4.2
Price/sales (x)	0.1	0.2	0.2	0.1	0.1
Dividend yield (%)	6.3	3.6	3.6	4.3	5.0
FCF Yield (%)	2.0	10.8	3.1	9.8	11.3
<b>(Bt)</b>					
Normalized EPS	0.4	0.2	0.2	0.3	0.3
EPS	0.4	0.2	0.2	0.3	0.3
DPS	0.2	0.1	0.1	0.1	0.2
BV/share	3.6	3.6	3.7	3.8	4.0
CFO/share	0.2	0.7	0.6	0.7	0.7
FCF/share	0.1	0.3	0.1	0.3	0.3

Sources: Company data, Thanachart estimates

**SUSCO Pcl****FINANCIAL RATIOS**

<b>FY ending Dec</b>	<b>2019A</b>	<b>2020A</b>	<b>2021F</b>	<b>2022F</b>	<b>2023F</b>
<b>Growth Rate</b>					
Sales (%)	(0.5)	(40.4)	27.6	17.7	11.2
Net profit (%)	36.8	(43.9)	0.6	20.5	14.5
EPS (%)	40.0	(42.6)	3.0	23.4	14.5
Normalized profit (%)	36.8	(43.9)	0.6	20.5	14.5
Normalized EPS (%)	40.0	(42.6)	3.0	23.4	14.5
Dividend payout ratio (%)	51.4	53.1	50.0	50.0	50.0
<b>Operating performance</b>					
Gross margin (%)	5.8	8.7	7.3	6.7	6.3
Operating margin (%)	1.1	1.3	1.2	1.3	1.3
EBITDA margin (%)	2.0	3.5	3.1	3.0	2.9
Net margin (%)	1.4	1.3	1.0	1.1	1.1
D/E (incl. minor) (x)	0.1	0.1	0.4	0.3	0.3
Net D/E (incl. minor) (x)	0.0	0.0	0.3	0.2	0.1
Interest coverage - EBIT (x)	21.7	4.4	3.4	3.4	4.1
Interest coverage - EBITDA (x)	38.2	11.2	8.6	7.8	8.8
ROA - using norm profit (%)	6.7	3.7	3.2	3.4	3.8
ROE - using norm profit (%)	10.6	5.8	5.9	7.1	7.8
<b>DuPont</b>					
ROE - using after tax profit (%)	10.7	5.9	5.9	7.1	7.8
- asset turnover (x)	4.8	2.9	3.1	3.3	3.5
- operating margin (%)	1.8	2.0	1.6	1.7	1.7
- leverage (x)	1.6	1.6	1.8	2.1	2.0
- interest burden (%)	97.1	84.3	78.1	77.1	80.3
- tax burden (%)	79.5	80.0	80.0	80.0	80.0
WACC (%)	9.9	9.9	9.9	9.9	9.9
ROIC (%)	6.9	4.6	5.4	5.9	6.7
NOPAT (Bt m)	251	180	209	268	300
invested capital (Bt m)	3,900	3,881	4,550	4,500	4,454

Sources: Company data, Thanachart estimates

### General Disclaimers And Disclosures:

This report is prepared and issued by Thanachart Securities Public Company Limited (TNS) as a resource only for clients of TNS, Thanachart Capital Public Company Limited (TCAP) and its group companies. Copyright © Thanachart Securities Public Company Limited. All rights reserved. The report may not be reproduced in whole or in part or delivered to other persons without our written consent.

This report is prepared by analysts who are employed by the research department of TNS. While the information is from sources believed to be reliable, neither the information nor the forecasts shall be taken as a representation or warranty for which TNS or TCAP or its group companies or any of their employees incur any responsibility. This report is provided to you for informational purposes only and it is not, and is not to be construed as, an offer or an invitation to make an offer to sell or buy any securities. Neither TNS, TCAP nor its group companies accept any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

The information and opinions contained herein have been compiled or arrived at from sources believed reliable. However, TNS, TCAP and its group companies make no representation or warranty, express or implied, as to their accuracy or completeness. Expressions of opinion herein are subject to change without notice. The use of any information, forecasts and opinions contained in this report shall be at the sole discretion and risk of the user.

TNS, TCAP and its group companies perform and seek to perform business with companies covered in this report. TNS, TCAP, its group companies, their employees and directors may have positions and financial interest in securities mentioned in this report. TNS, TCAP or its group companies may from time to time perform investment banking or other services for, or solicit investment banking or other business from, any entity mentioned in this report. Therefore, investors should be aware of conflict of interest that may affect the objectivity of this report.

Note: Thanachart Securities Public Company Limited act as a Market Maker and Derivative Warrants Issuer. At present, TNS has issued 78 Derivative Warrants which are ACE16C2111A, ADVA16C2110A, AEON16C2108A, AOT16C2109A, BAM16C2110A, BANP16C2109A, BANP16C2110A, BCH16C2111B, BCH16C2111A, BCH16C2109A, BCPG16C2111A, BDMS16C2109A, BGRI16C2110A, BH16C2109A, CBG16C2108A, CBG16C2109A, CBG16C2109B, CHG16C2111A, COM716C2110A, CPAL16C2111A, CPAL16C2109A, CPF16C2108A, CPN16C2109A, DELT16C2108A, DELT16C2109A, DOHO16C2111A, EA16C2108A, EA16C2110A, EGCO16C2110A, EPG16C2109A, GPSC16C2109A, GPSC16C2110A, GUNK16C2108A, GUNK16C2110A, IRPC16C2108A, IRPC16C2110A, IVL16C2111A, IVL16C2109A, IVL16C2110A, JMAR16C2111A, JMT16C2110A, KBAN16C2111B, KBAN16C2111A, KBAN16C2108A, KBAN16C2109A, KCE16C2109A, KCE16C2110A, KTC16C2110A, KTC16C2110B, MINT16C2109A, MTC16C2108A, MTC16C2109A, OR16C2108A, OR16C2109A, PRM16C2109A, PTG16C2109A, PTT16C2109A, PTTG16C2111A, PTTG16C2108A, PTTG16C2110A, RBF16C2110A, RS16C2108A, RS16C2109A, S5016C2109D, S5016C2112A, S5016P2112A, S5016C2109C, S5016C2109A, S5016C2109B, S5016P2109A, S5016P2109B, SCGP16C2109A, STEC16C2110A, STGT16C2111A, TASC16C2109A, TQM16C2108A, TU16C2111A, TU16C2110A (underlying securities are ACE, ADVANC, AEONTS, AOT, BAM, BANPU, BCH, BCPG, BDMS, BGRIM, BH, CBG, CHG, COM7, CPALL, CPF, CPN, DELTA, DOHOME, EA, EGCO, EPG, GPSC, GUNKUL, IRPC, IVL, JMART, JMT, KBANK, KCE, KTC, MINT, MTC, OR, PRM, PTG, PTT, PTTGC, RBF, RS, SET50, SCGP, STEC, STGT, TASCO, TQM, TU). Since TNS covers those underlying securities in research report, consequently TNS incurs conflicts of interest. Moreover, Investors are advised to carefully review the details and information in the prospectus before making investment decisions.

**Note:** Thanachart Securities has an indirect financial interest in Ratchthani Leasing Pcl (THANI). Thanachart Securities Pcl is a subsidiary of Thanachart Capital Pcl (TCAP) which holds more than 56% of the shareholding in Ratchthani Leasing Pcl (THANI).

**Note:** Thanachart Capital Public Company Limited (TCAP), TMBThanachart Bank Public Company Limited (TTB), are related companies to Thanachart Securities Public Company Limited (TNS). Thanachart Securities Pcl is a subsidiary of Thanachart Capital Pcl (TCAP) which holds 20.1% of the shareholding in TMBThanachart Bank Pcl.

Thanachart Capital Public Company Limited (TCAP), Ratchthani Leasing Public Company Limited (THANI), TMB Public Company Limited, MBK PUBLIC COMPANY LIMITED (MBK) and PATUM RICE MILL AND GRANARY PUBLIC COMPANY LIMITED (PRG ) are related companies to Thanachart Securities Public Company Limited (TNS) . Since TNS covers those securities in research report, consequently TNS incurs conflicts of interest.

### Disclosure of Interest of Thanachart Securities

#### Investment Banking Relationship

Within the preceding 12 months, Thanachart Securities has lead-managed public offerings and/or secondary offerings (excluding straight bonds) of the securities of the following companies: Saksiam Leasing Pcl. (SAK TB), SCG Packaging Pcl (SCGP TB)

### Recommendation Structure:

Recommendations are based on absolute upside or downside, which is the difference between the target price and the current market price. If the upside is 10% or more, the recommendation is BUY. If the downside is 10% or more, the recommendation is SELL. For stocks where the upside or downside is less than 10%, the recommendation is HOLD. 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 the market price and the formal recommendation.

For sectors, an "Overweight" sector weighting is used when we have BUYs on majority of the stocks under our coverage by market cap. "Underweight" is used when we have SELLs on majority of the stocks we cover by market cap. "Neutral" is used when there are relatively equal weightings of BUYs and SELLs.



**Thanachart Securities Pcl.**

Research Team

19 Floor, MBK Tower

444 Phayathai Road, Pathumwan Road, Bangkok 10330

Tel: 662 - 779-9119

Email: thanachart.res@thanachartsec.co.th

**Pimpaka Nichgaroon, CFA**

Head of Research

Tel: 662-779-9199

pimpaka.nic@thanachartsec.co.th

**Pattarawan Wangmingmat**

Senior Technical Analyst

Tel: 662-779-9105

pattarawan.wan@thanachartsec.co.th

**Phannarai Tiyapittayarut**

Property, Retail

Tel: 662-779-9109

phannarai.von@thanachartsec.co.th

**Sarachada Sornsong**

Bank, Finance, Insurance

Tel: 662-779-9106

sarachada.sor@thanachartsec.co.th

**Sittichet Rungrassameephat**

Analyst, Quantitative

Tel: 662-483-8303

sittichet.run@thanachartsec.co.th

**Adisak Phupiphathirungul, CFA**

Retail Market Strategy

Tel: 662-779-9120

adisak.phu@thanachartsec.co.th

**Nuttapop Prasitsuksant**

Telecom, Utilities

Tel: 662-483-8296

nuttapop.pra@thanachartsec.co.th

**Rata Limsuthiwanpoom**

Auto, Industrial Estate, Media, Prop. Fund

Tel: 662-483-8297

rata.lim@thanachartsec.co.th

**Siriporn Arunothai**

Small Cap, Healthcare, Hotel

Tel: 662-779-9113

siriporn.aru@thanachartsec.co.th

**Thaloengsak Kucharoenpaisan**

Analyst, Retail Market

Tel: 662-483-8304

thaloengsak.kuc@thanachartsec.co.th

**Chak Reungsinpinya**

Energy, Petrochemical, Paper

Tel: 662-779-9104

chak.reu@thanachartsec.co.th

**Pattadol Bunnak**

Electronics, Food &amp; Beverage, Shipping

Tel: 662-483-8298

pattadol.bun@thanachartsec.co.th

**Saksid Phadthananarak**

Construction, Transportation

Tel: 662-779-9112

saksid.pha@thanachartsec.co.th

**Witchanan Tambamroong**

Technical Analyst

Tel: 662-779-9123

witchanan.tam@thanachartsec.co.th