

# BANGCHAK CORP

## BCP TB

THAILAND / OIL & GAS

# BUY

UNCHANGED

## Confluence of growth drivers

- We project BCP's NP from E&P to see solid growth driven by the structural changes in the global crude oil market.
- Three drivers to boost BCP's refinery EBITDA – higher market GRM, rising UCO production yield, competitive crude premiums.
- Maintain BUY with a new higher SoTP-based TP of THB40.

TARGET PRICE	THB40.00
CLOSE	THB30.25
UP/DOWNSIDE	+32.2%
PRIOR TP	THB38.00
CHANGE IN TP	+5.3%
TP vs CONSENSUS	+15.0%

## KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	199,417	256,235	240,700	238,596
Net profit	7,624	6,830	6,887	7,022
EPS (THB)	5.54	4.96	5.00	5.10
vs Consensus (%)	-	33.8	45.5	21.8
EBITDA	17,928	20,978	21,538	22,386
Core net profit	3,401	6,830	6,887	7,022
Core EPS (THB)	2.47	4.96	5.00	5.10
Chg. In EPS est. (%)	-	18.0	19.5	17.1
EPS growth (%)	nm	100.8	0.8	2.0
Core P/E (x)	12.2	6.1	6.0	5.9
Dividend yield (%)	6.6	8.2	8.3	8.4
EV/EBITDA (x)	5.7	5.2	5.4	5.4
Price/book (x)	0.8	0.7	0.7	0.6
Net debt/Equity (%)	65.0	68.3	71.9	73.7
ROE (%)	6.8	12.3	11.7	11.2

## BCP hits the sweet spot for growth in 2022

We believe BCP is now well-positioned to capture the high industry market GRM with its high utilisation rate, superior production yields of unconverted oil (UCO), and its lower-than-peers crude cost in the form of lower crude premiums despite its higher-than-peers logistics cost. We estimate that BCP could save up to USD1-2/bbl alone from its crude mix with its high proportion of domestic and Far East crudes. We project BCP's net profits from E&P to see solid growth driven by the structural changes in the global crude oil market as a result of Russia's invasion of Ukraine. Non-oil EBITDA growth should rise after its shift in retail strategy from a licensing deal (under SPAR) to a JV with Central Retail Group to operate "Tops daily" and "Family Mart" convenience stores since Aug-20.

## Three drivers to boost refinery earnings in 2022

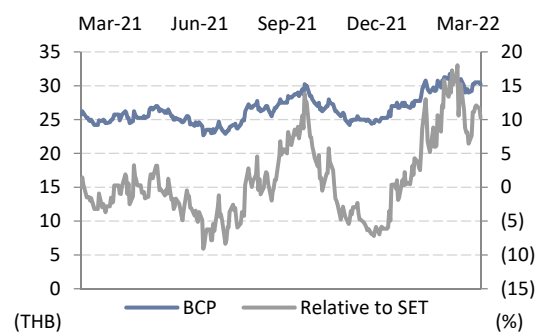
We see three drivers boosting BCP's refinery EBITDA to over THB11b in 2022 – higher market GRM, a rising production yield of UCO, improving utilisation rates to 100%, and its competitive crude premiums vs peers. Unlike other local refiners, BCP has a unique production yield with higher production of UCO, a type of low sulphur fuel oil (LSFO) used as a key feedstock for producing lube groups II and III. With the price at a premium over diesel, BCP plans to produce a 13% yield of UCO in 2022, up from 9% in 2021.

## Up to THB7.9b-THB8.5b in earnings upsides from OKEA in 2022

With its higher production volumes and an oil production ratio of 60% in 2022, we estimate that OKEA could contribute up to USD239m-259m in earnings to BCP in 2022 based on 1) an 18.5-20.0kboed production level; 2) Brent oil at USD105/bbl and gas at USD25/mmbtu; 3) its ASP discount of 5% less than benchmark; 4) cash cost of USD25/bbl for liquid and USD4.1/mmbtu for gas; 5) depreciation cost of USD14/bbl for liquid and USD4.9/mmbtu for gas; and 6) its E&P tax rate of 50%.

## TP rises to THB40; BCP is our top pick in the energy sector

We raise our SoTP-based target price from THB38 to THB40 to reflect our EPS upgrades. We think BCP is an attractive refinery play thanks to its multiple growth drivers in 2022, including the higher price of oil & gas, rising demand for domestic oils, improving margins and sales volumes of its non-oil business, and potential earnings upsides from its E&P unit.



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(2.4)	19.8	15.2
Relative to country (%)	(2.7)	17.5	8.4
Mkt cap (USD m)	1,278		
3m avg. daily turnover (USD m)	7.4		
Free float (%)	62		
Major shareholder	Ministry of Finance (25%)		
12m high/low (THB)	32.75/22.60		
Issued shares (m)	1,376.92		

Sources: Bloomberg consensus; FSSIA estimates



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## Investment thesis

BCP's earnings sustainability has continued to improve thanks to its well-diversified earnings portfolio, with 50-60% of its EBITDA coming from less cyclical non-refinery businesses, including oil stations (20%), power (25%), bio-based products (10%), and exploration & production (E&P) (1%) as of 2019.

We believe BCP's growth strategy to increase the number of its oil stations by 330 stations (+30% from 1,080 stations in 2017) from 2017 to 2023 will allow the company to not only improve its overall profitability but also position it as the second-largest oil station operator in Thailand. This growth strategy would allow BCP to become a self-sufficient refiner with 100% captive demand for refined oil products from its downstream oil stations by 2023.

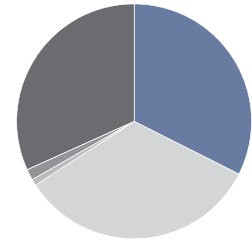
## Company profile

BCP is Thailand's sixth largest refiner and second largest gas station operator. The company's Suboar refinery has a nameplate capacity of 120kbpd. It also runs 1,140 oil stations (as at end-2Q18) and biodiesel plants.

[www.bangchak.co.th](http://www.bangchak.co.th)

## Principal activities (revenue, 2021)

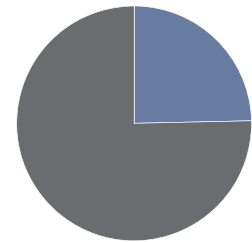
- Refinery and oil trading - 88.9 %
- Marketing - 91.6 %
- Electricity - 2.4 %
- Bio based product - 4.1 %
- Natural resource - 0.0 %
- Eliminations - -87.0 %



Source: Bangchak Corp

## Major shareholders

- Ministry of Finance - 24.6 %
- Others - 75.4 %



Source: Bangchak Corp

## Catalysts

A stronger-than-expected recovery in market GRM on wider-than-expected diesel cracks and lower-than-expected crude premiums is a key potential catalyst.

## Risks to our call

The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) higher crude premiums; and 3) unplanned shutdowns of the company's refinery plants.

## Event calendar

Date	Event
May 2022	1Q22 results announcement

## Key assumptions

	2022E	2023E	2024E
	(USD/bbl)	(USD/bbl)	(USD/bbl)
Dubai oil price	100.0	90.0	90.0
Market GRM	15.52	15.64	13.84
Crude premium	2.00	2.00	2.00
Diesel-Dubai	24	22	20
Jet-Dubai	23	22	20
Gasoline-Dubai	20	18	16
LSFO-Dubai	8	8	8
HSFO-Dubai	(15)	(12)	(12)

Source: FSSIA estimates

## Earnings sensitivity

- For every 1% increase in average Dubai oil price, we project 2022 earnings will rise by 1.2%, and vice versa.
- For every 1% increase in market GRM, we estimate 2022 earnings will rise by 1.4%, and vice versa.
- Stability in crude oil price, rising diesel cracks, and low crude premiums are key for earnings growth.

Source: FSSIA estimates

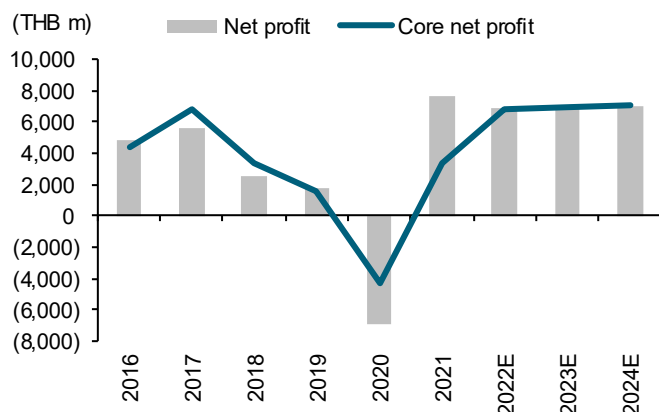
## Confluence of growth drivers in 2022

Since 2021, BCP has continued to see an improvement in its net profit, with its core and net profits turning around from net losses in 2020 due to inventory gains, sharp rises in its market GRM and the strong net profit from its upstream exploration and production (E&P) thanks to the rising crude oil price.

At the same time, earnings from biofuels and its power plants were relatively stagnant in 2020-21 due to the impact of Covid-19 that led to multiple lockdowns and lower demand.

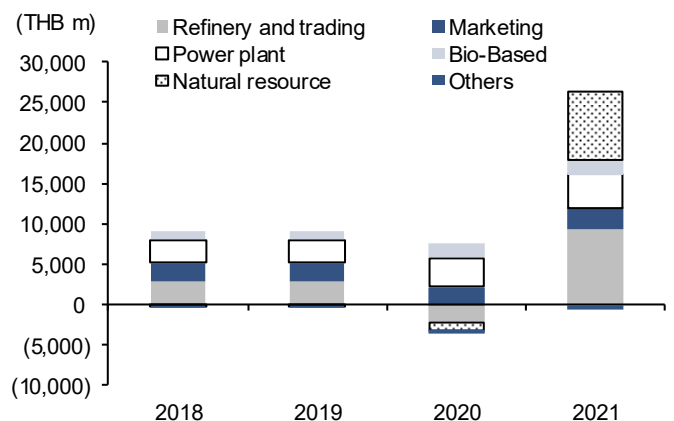
However, starting in 2022, we project BCP's net profits from power and E&P to witness solid growth driven by structural changes in the global crude oil market as a result of Russia's invasion of Ukraine and the projected strong demand recovery for both oil post-pandemic and non-oil EBITDA growth after BCP's shift in its retail strategy from a licensing agreement (under SPAR) to a JV with Central Retail Group (CRC TB, BUY) to operate "Tops daily" and Family Mart" convenience stores (CVS) since Aug-20.

**Exhibit 1: Net profit and core net profit**



Sources: BCP; FSSIA estimates

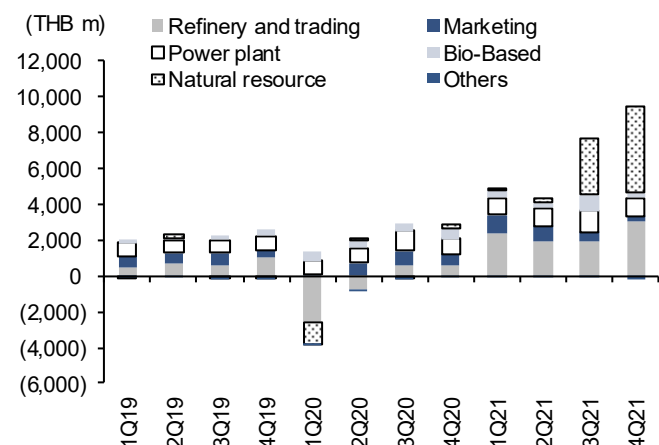
**Exhibit 2: EBITDA breakdown by business**



Sources: BCP; FSSIA estimates

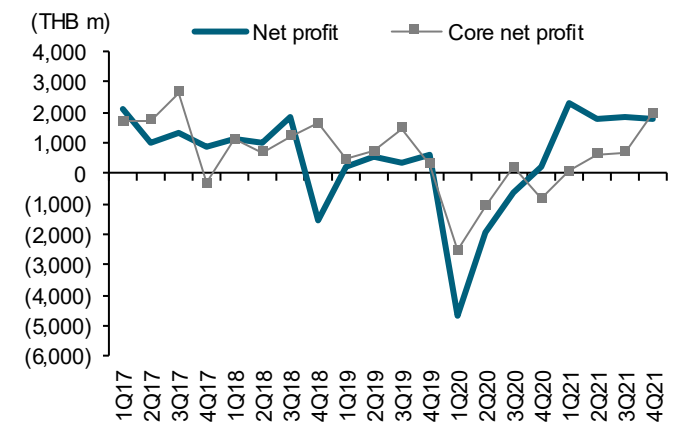
On a quarterly basis, BCP has similarly seen manifest growth in net profit since posting a net loss in 1Q20 due to the weak market GRM and inventory losses. Earnings growth from its refinery, power, and particularly E&P, have more than offset the weak net profits from marketing, which was caused by weak demand and its poor marketing margin (MM), and the declining earnings from its bio-based ethanol and methyl ester (ME or B100) businesses during the Covid-19 pandemic in 2020-21.

**Exhibit 3: Accounting EBITDA breakdown**



Sources: BCP; FSSIA estimates

**Exhibit 4: Net profit and core net profit, quarterly**

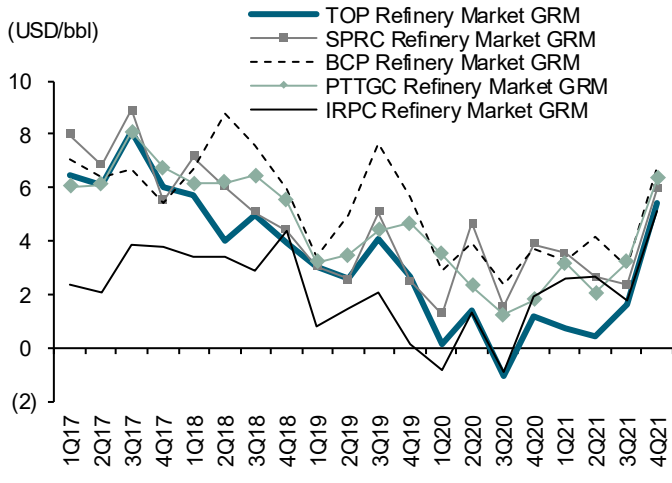


Sources: BCP; FSSIA estimates

### Refinery EBITDA is at the turning point for growth in 2022

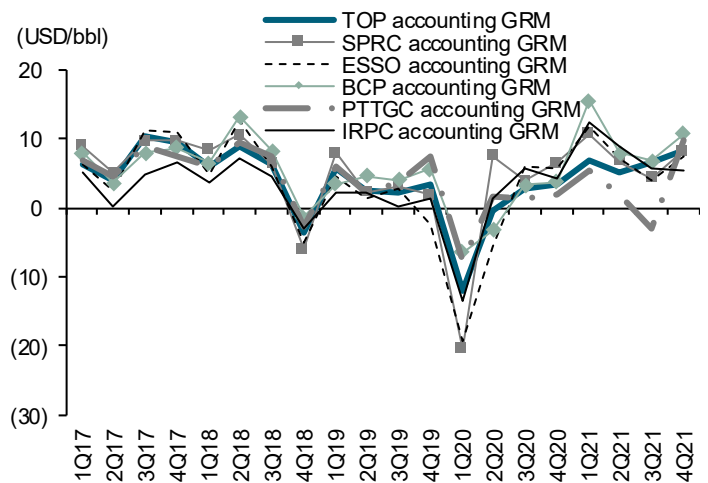
Since 2017, BCP has posted a stronger-than-peers market and accounting GRM thanks to its superior crude intake and sourcing, and the high captive demand from its downstream oil stations, which have continued to expand in number to reach 1,277 stations as of Dec-21.

**Exhibit 5: BCP has outperformed its local peers in terms of market GRM since 2017 due to its superior crude intake and procurement**



Source: Companies

**Exhibit 6: Even with inventory gains/losses, BCP's accounting GRM has outperformed its local peers since 2017**

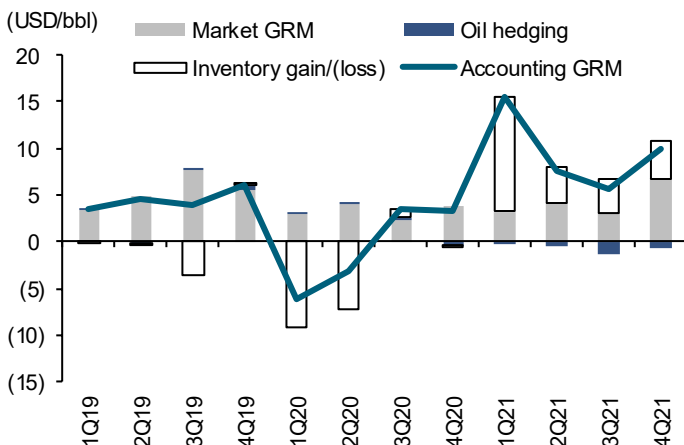


Source: Companies

We see three drivers to boost BCP's EBITDA from its refinery and trading businesses from THB9.8b in 2021 to over THB11b in 2022 – higher market GRM, a rising production yield of UCO, improving utilisation rates, and its more favorable and competitive crude premiums vs peers.

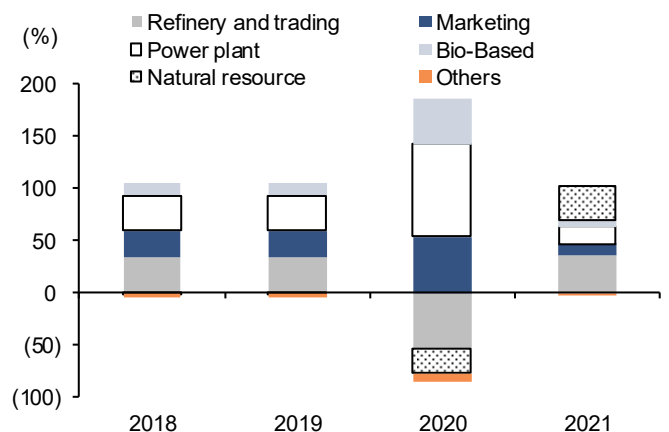
**Higher market GRM.** We project BCP's market GRM to rise from USD6.8/bbl in 2021 to USD15.5/bbl in 2022, driven by its higher product margins over the Dubai crude oil price as a result of strong demand and tight supplies caused by Russia's invasion of Ukraine which has led to lower refinery supplies in Europe and China. We project the accounting GRM to jump from USD10/bbl in 2021 to USD17/bbl in 2022, driven by a USD2/bbl inventory gain.

**Exhibit 7: Accounting GRM and its components**



Source: BCP

**Exhibit 8: EBITDA breakdown by business**

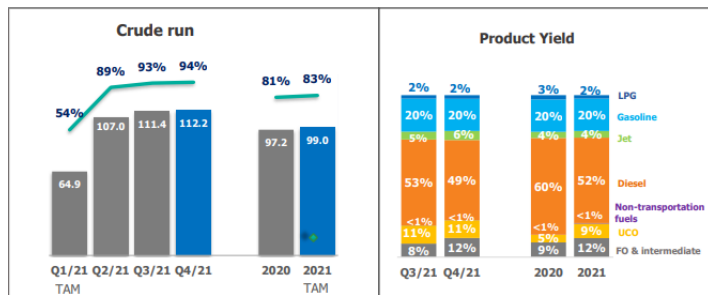


Source: BCP

**Higher sales of high-margin unconverted oil.** Unlike other local refiners, BCP has a unique production yield with a high proportion of UCO, a type of LSFO used as a key feedstock for producing the lube groups II and III and other petroleum products such as diesel and jet fuel via the upgrading units of its refinery plant. With the price at a premium over diesel, UCO is in high demand and is expected to command high margins in 2022-24.

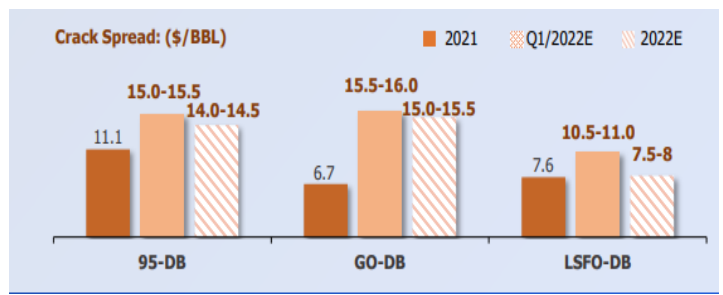
BCP produced a 9% and 11% yield of UCO in 2021 and 4Q21, up from 5% in 2020. Despite the higher fuel oil (FO) and other intermediate heavy oils produced as by-products of UCO production, the high margin of UCO (LSFO) over high sulphur fuel oil (HSFO) in the range of USD10-20/bbl has more than offset the negative impact of the higher amount of FO and intermediates produced.

**Exhibit 9: Refinery crude run and product yield**



Source: BCP

**Exhibit 10: BCP's estimated product margins over the Dubai crude price**



Source: BCP

Hence, in 2022, BCP plans to raise its production yield of UCO to 13% vs 9% in 2021 and 5% in 2020, and is on track to achieve a 16% yield of UCO by 2024. BCP's management projects that the margins of UCO-Dubai should stay high at over USD15/bbl for the next five years due to higher demand for LSFO from the shipping industry following the ban on HSFO use by the shipping industry imposed by the International Maritime Organization (IMO) since Jan-20.

**Higher crude run at a 100% utilisation rate or 120kbpd.** After successfully increasing its refinery utilisation rate from 81% (97.2kbpd) in 2020 to 83% (99kbpd) in 2021, BCP plans to further improve its utilisation rate to 100% (120kbpd).

**Exhibit 11: BCP's plan for a higher utilisation rate and UCO yield in 2022**



Source: BCP

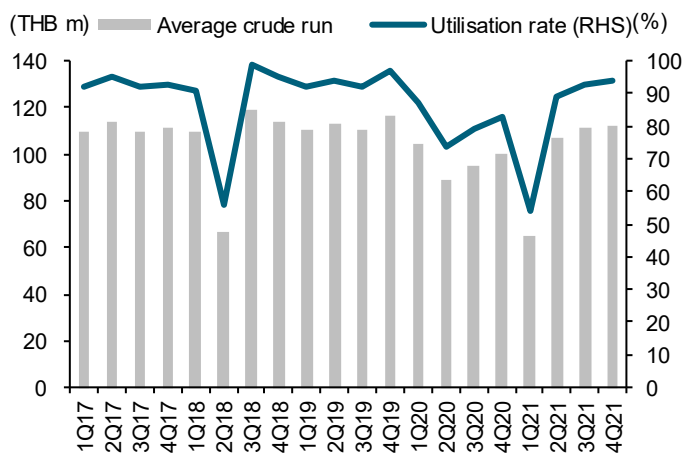
According to management, in 1Q22, BCP expects to achieve a 120kbpd running rate as planned and maintain a 100% utilisation rate throughout 2022 with no major shutdowns of its refinery until 2024. The higher UCO yield, which not only produces a higher GRM, has also made it possible for BCP's refinery to maintain a 100% utilisation rate.

As BCP expands the number of its oil stations in tandem with the higher utilisation rate of its refinery plant, we think BCP will benefit from a higher margin and lower risk due to its integrated upstream refinery and downstream oil station business model.

In 2021, BCP sold 58% of its 99kbpd refinery production through its oil stations. This captive demand should not only greatly reduce BCP's refinery demand risk but also enhance the integrated margin of its refinery oil station value chain as the margins for both refineries (GRM) and oil stations (diesel and gasoline) are normally higher than those for exported refined oils and other channels such as wholesale.

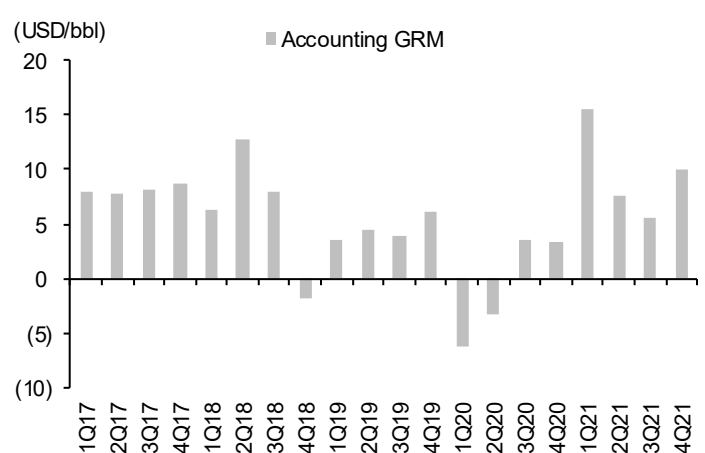
After completing its turnaround and upgrading investments in 2021, BCP will now be required to conduct a major shutdown every three years, instead of every two years.

**Exhibit 12: Refinery average crude run and utilisation rate**



Source: BCP

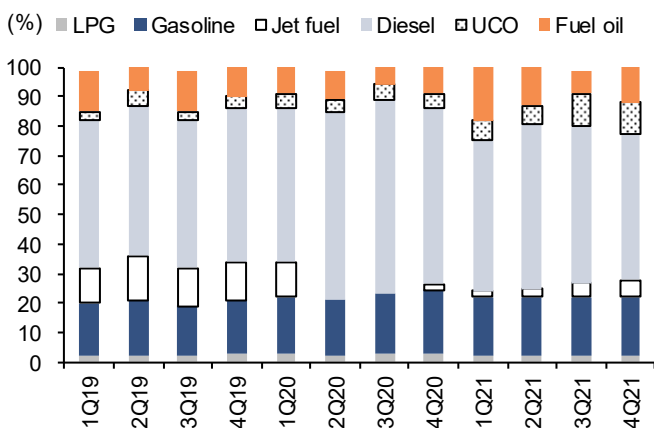
**Exhibit 13: Accounting gross refining margin**



Source: BCP

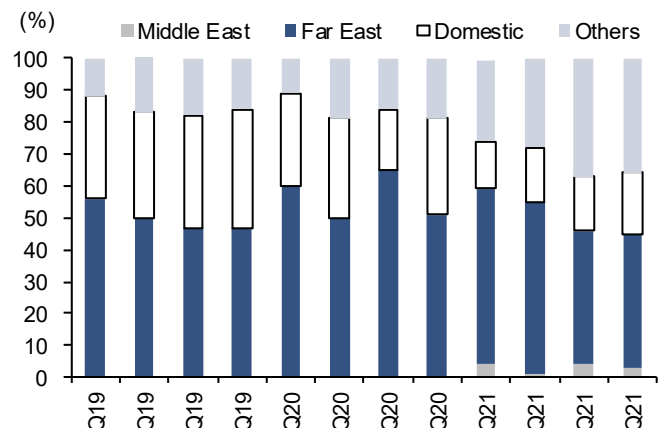
**Superior crude mix and product yield.** Unlike other local refiners, BCP has long benefited from its high procurement of local crudes. Over the past 10 years, it has secured over 30kbpd as the legacy of its unfavourable refinery plant location in a city area and far from the port vs other local refineries located next to or near seashores.

**Exhibit 14: Quarterly product yield**



Source: BCP

**Exhibit 15: Quarterly crude mix**



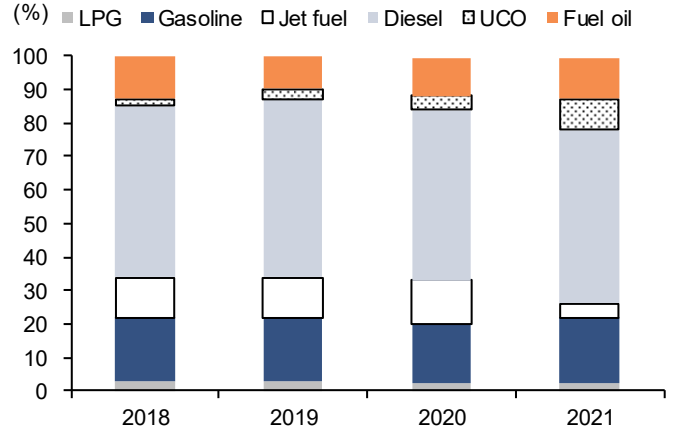
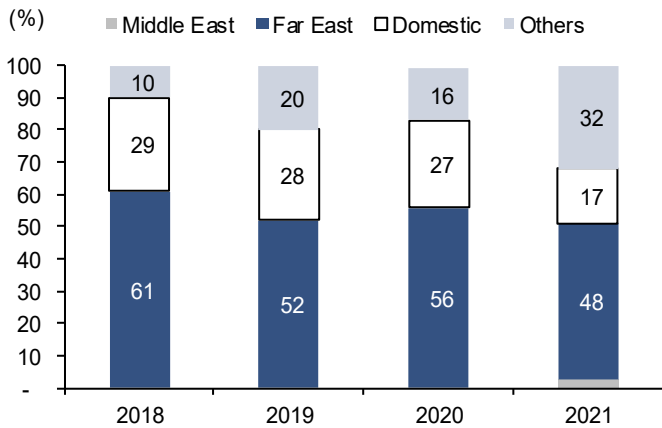
Source: BCP

Historically, BCP procures its crudes from three major sources, mostly from the Far East (light, sweet), domestic (light, sour), and others (light, sour) as BCP's refinery plant has a more limited capability to consume heavy and sour crudes as feedstocks. Also, logistics via train, trucks, and barges along the Chao Phraya River to its refinery plant has long been a key obstacle to securing other imported crudes from the Middle East (ME), North America, West Africa, and even Russia due to the excessive transportation difficulty and costs.

As a result, BCP's product yields have always favoured a high proportion of diesel (50% in 2021), gasoline (20%), jet (10-15%), and UCO (9%). However, since 1Q21, BCP began to import crudes from the ME to leverage its improved refinery capability to consume heavier and more sour crude types in order to achieve optimal profitability.

**Exhibit 16: Annual crude mix**

**Exhibit 17: Annual production yield**



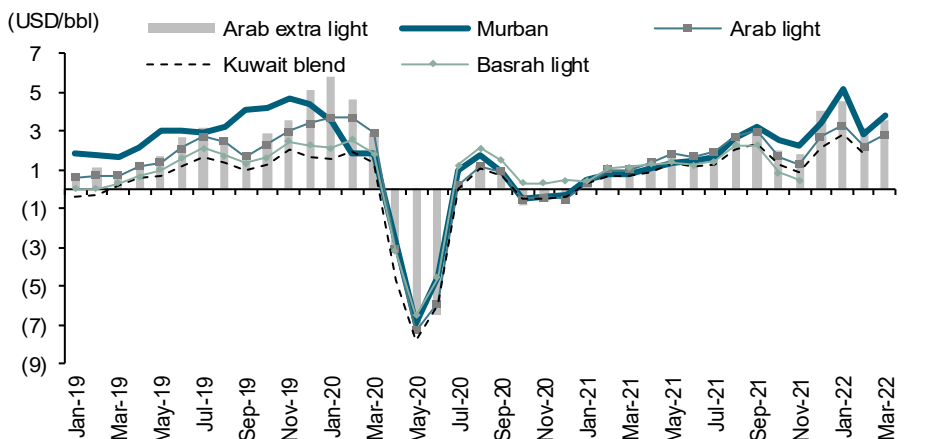
Source: BCP

Source: BCP

We believe that in 2022 BCP is likely to see an impact from the higher crude premiums of ME crudes given that Saudi Arabia raised its Official Selling Price (OSP) or crude premium for Arab Light crude to be delivered to Asian markets in Apr-22 in response to the higher supply risks of Russian crudes due to the sanctions imposed by the US and its allies in Europe.

Hence, we believe BCP is now well-positioned to capture the high industry market GRM with its higher utilisation rate, superior UCO product yield, and its lower-than-peers crude cost in the form of lower crude premiums despite its higher-than-peers logistics cost for trains, trucks, and barges. We estimate that BCP could save up to USD1-2/bbl alone based on its crude mix, which features a higher proportion of domestic and Far East crudes with only 3-5% imported from the ME, based on our estimate.

**Exhibit 18: Crude premiums of ME producers**



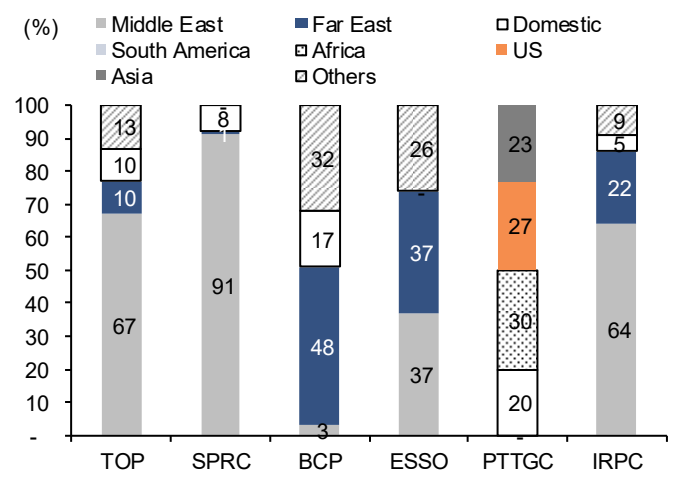
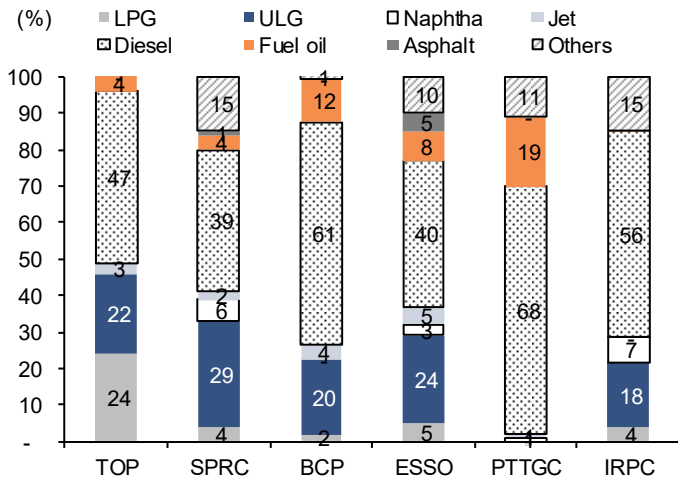
Source: TOP

As most Thai refiners, except BCP and PTT Global Chemical (PTTGC TB, HOLD), consume crudes imported from ME producers in the range of 64% (IRPC Pcl (IRPC TB, BUY)) to 91% (Star Petroleum Refining (SPRC TB, BUY)), the higher Saudi OSP could lead to higher crude costs that might offset the positive impact of their higher product margins.

However, we estimate an increase in the crude cost of USD0.9/bbl for BCP (3% ME crude) compared to a USD0.7/bbl increase for Esso Thailand (ESSO TB, BUY) (37% ME crude) and USD2/bbl for SPRC (91% ME crude), which should be more than offset by USD3-6/bbl higher market GRMs, based on our projections of USD10-20/bbl higher margins for refined oil products over crude prices in 2022.

**Exhibit 19: Production yields of Thai refiners as of 2021**

**Exhibit 20: Crude mix breakdown of Thai refiners as of 2021**



Source: Companies

Source: Companies

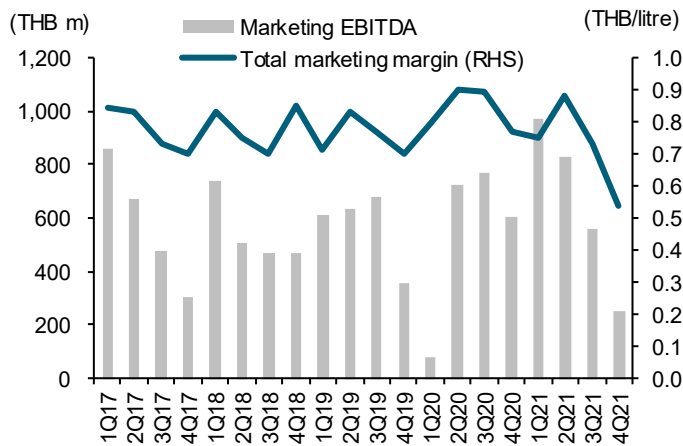


### Marketing EBITDA is at a turning point for growth in 2022

Over the past four quarters in 2021, BCP has witnessed weaker-than-expected EBITDA from its downstream retail oil stations, with quarterly EBITDA plunging from THB1.0b in 1Q21 down to THB0.2b in 4Q21 due to the lockdowns and the government’s diesel price cap policy at THB30/litre.

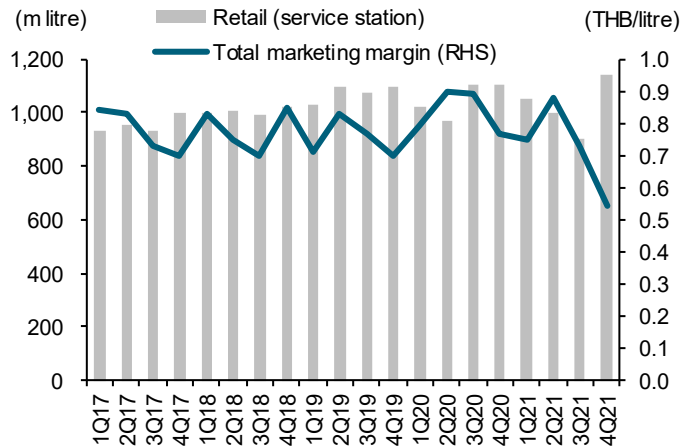
The MM has plunged from THB0.88/litre in 2Q21 to THB0.55/litre in 4Q21. However, we project the MM to improve to THB0.8/litre in 2022, up from THB0.72/litre in 2021, as we expect BCP to use its economies of scale to lower the fixed cost per litre for its Company-Owned, Company-Operated (COCO) model.

**Exhibit 21: Marketing EBITDA vs marketing margin**



Source: BCP

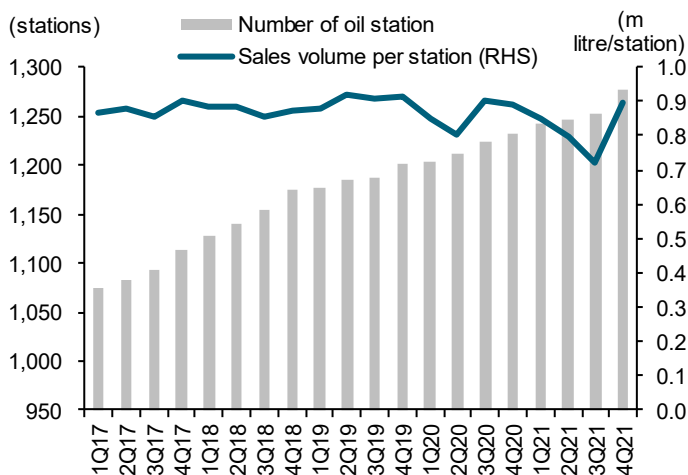
**Exhibit 22: Retail sales volume vs marketing margin**



Source: BCP

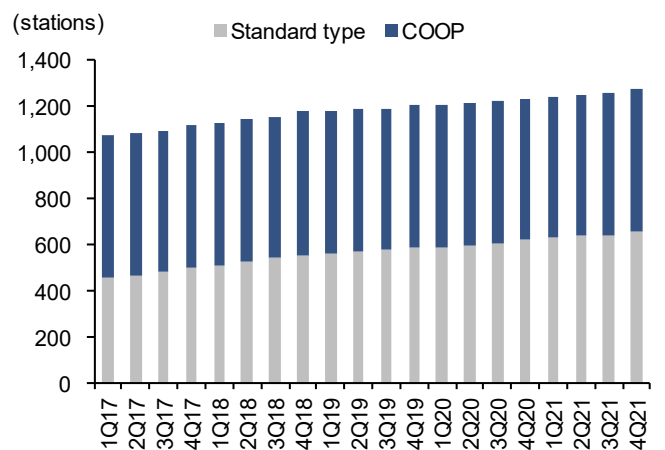
Despite the pandemic and intermittent lockdowns in 2021, BCP successfully increased its number of oil stations by 44 to 1,277 as of Dec-21, comprising 662 standard stations, and 615 small-sized co-operative stations. In 2022, BCP plans to increase its number of oil stations by 80-100, bringing its total number of oil stations to over 1,350, based on our estimate.

**Exhibit 23: Number of oil stations and oil sales volume per station**



Source: BCP

**Exhibit 24: Number of oil stations, breakdown by station type**



Source: BCP

## Non-oil EBITDA turnaround has BCP poised for growth in 2022

After almost four years of struggle, in Aug-20, BCP decided to exit its licensed CVS business model with the Netherlands-based SPAR, replacing its “SPAR” CVS and “SPAR Express” with two formats of “Tops daily” and “Family Mart”, both operated via its JV with Central Food Retail, a subsidiary of CRC. According to management, some of the closed SPAR CVS outlets at BCP’s oil stations will be replaced by “Inthanin Garden”, the company’s own CVS brand.

After the licensing changes to its CVS business model from SPAR to the JV with CRC, we think that BCP can ensure that its CVS outlets do not incur further operating losses and instead generate recurring profits via its new “profit sharing” model. Hence, we project that BCP will transform its non-oil CVS into a profitable unit in 2022 based on our projected annual EBITDA of THB0.3-0.5b from its non-oil businesses.

### Exhibit 25: Previous licensed-based SPAR CVS format



Source: [Prachachart](#)

### Exhibit 26: Current JV-based “Tops daily” CVS format with CRC



Source: [Prachachart](#)

**CVS turnaround was already underway in 2021.** As of 2021, we estimate that of BCP’s almost 300 CVS outlets, almost 200 of them are using the “Mini Big C” format, followed by 40 “Tops daily” and “Family Mart” stores operated by CRC. The remaining CVS outlets will operate under BCP’s own “Inthanin Garden” brand and other CVS brands, according to management.

Around 44% of BCP’s standard-sized oil stations (662 at end-2021) will have a CVS, while most of the smaller-sized co-op oil stations will either have a small or no CVS attached inside their oil stations, according to management.

With the change in business model to a blend of rental fee income under its rental-only model, and profit-sharing income under its JV, we believe BCP is unlikely to face operating losses for its CVS business and could generate EBITDA in the range of THB0.2-0.3b, based on our estimate.

### Food & beverage sales are a key growth engine for its non-oil business.

According to management, BCP's strategy for its non-oil business will be to grow its EBITDA from food & beverages (F&B), leveraging its own well-established brand of "Inthanin" cafes. In 2021, BCP had 817 Inthanin branches in total. It plans to increase that number to 1,000 by the end of 2022.

#### Exhibit 27: Inthanin and Food Trucks



Source: BCP

BCP plans to grow its F&B sales in 2022 via four strategies that we think should add THB0.3-0.5b to its EBITDA by 2023:

**Strategy #1: Product supplementation.** BCP's F&B business will be strengthened by its acquisition of the "Dakasi" tea brand, which has 15 stores in operation. It plans to increase the number of stores to over 20 by end-2022.

**Strategy #2: Sales volume intensity.** In addition, BCP plans to enhance its cup sales per store by 20% y-y to drive its non-oil F&B revenue higher by 18% y-y.

**Strategy #3: Expanding sales channels to include more deliveries.** Besides on-site in-store sales, BCP plans to raise its F&B sales volume by 185% y-y via delivery channels.

**Strategy #4: Initiating food trucks.** In 2021, BCP initiated its new sales channel of Food Trucks (FT) at nine of its oil stations, with plans for hosting FTs at 26 stations in 2022.

**EV charging stations.** In response to the government's electric vehicle (EV) promotion policy in Thailand, BCP has adopted a proactive policy of adapting its oil stations to accommodate the growing demand for EV chargers. In 2022, BCP plans to install EV chargers at up to 246 stations or 19% of its total 1,277 stations as of 2021, covering 37 provinces and major routes nationwide.

While we think the EV charging business will not generate a profit for BCP in 2022, we think this move is for "strategic" rather than "economic" reasons that target retaining the competitiveness of its oil stations, in our view.

**Exhibit 28: EV charger target in 2022**

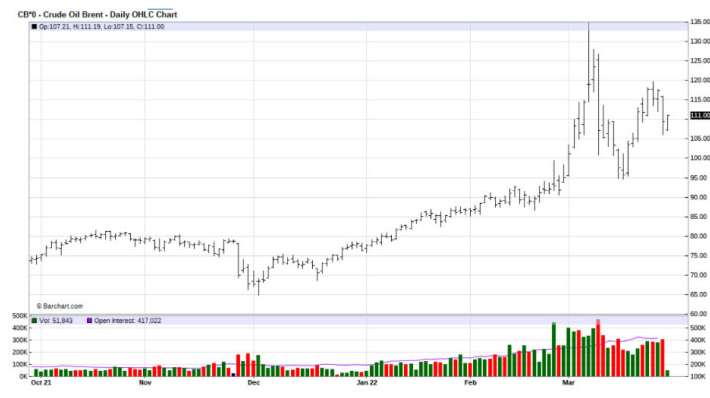


Source: BCP

**E&P EBITDA to surge in 2022**

In the past few months, the prices of European oil (Brent) and gas (Title Transfer Facility or TTF) have shot up significantly due to strong demand and most recently the higher supply risk caused by Russia's invasion of Ukraine.

**Exhibit 29: Brent crude oil price**



Source: [Barchart](#)

**Exhibit 30: European TTF gas price**



Source: [Barchart](#)

BCP is the largest shareholder of the Oslo-based E&P company OKEA (OKEA ASA). The share price of OKEA has risen continuously since Sep-21 in tandem with the higher Brent crude oil price.

**Exhibit 31: OKEA ASA (OKEA.OL) share price**



Source: Yahoo

In 2021, OKEA contributed THB9.25b to BCP, comprising a one-time gain of THB120m from the change in OKEA's investment status from an associated company to a subsidiary since 1 Jul-21, when BCP gained "full control" over OKEA via its 46% stake in OKEA.

However, in Jul-21 BCP started to consolidate OKEA into its financial statements, effectively inflating its EBITDA by over THB4b, based on our estimate. In 2021, OKEA contributed THB4b to BCP. We think this figure is likely to increase significantly in 2022 due to OKEA's higher production and higher average selling price (ASP).

### Exhibit 32: OKEA's asset locations



Source: [OKEA](#)

OKEA currently owns and operates four oil & gas assets, including:

- 1) Gjoa gas field (12%), producing mostly gas;
- 2) Draugen oil field (44.56%) is OKEA’s most important growth driver, according to OKEA’s website. On a 100% basis, Draugen produces 20,000 barrels of oil equivalent (boe);
- 3) Ivar Assen oil field (2.777%);
- 4) Yme oil field (15%).

Prior to Yme’s commercial operation date in 4Q21, OKEA’s production volume was roughly split equally between oil and gas. However, with Yme in production, the sales volume proportion has changed to 60% oil and 40% gas, further enhancing OKEA’s leverage over the oil price trend.

**Exhibit 33: OKEA’s four key E&P assets in the North Sea**



**Draugen**

Ownership: **44.56%**  
Operator: **OKEA ASA**

**Gjøa**

Ownership: **12%**  
Operator: **Neptune Energy Norge AS**

**Ivar Aasen**

Ownership: **2.777%**  
Operator: **Aker BP ASA**

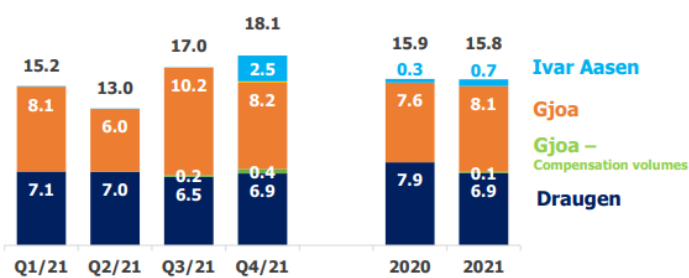
**Yme**

Ownership: **15%**  
Operator: **Repsol Norge AS**

Source: [OKEA](#)

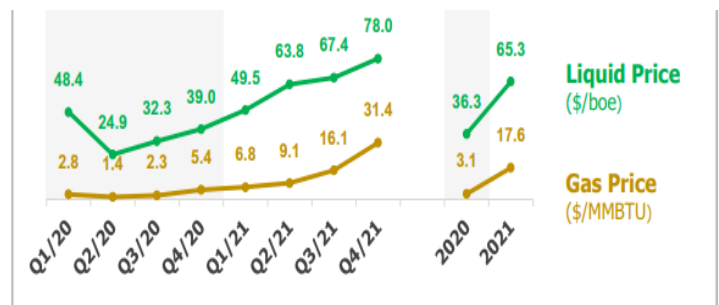
**Oil & gas ASP and margin.** In 2021, OKEA generated a sales volume of 15.8kboed, comprising 8.2kboed from Gjoa (12% stake), 6.9kboed from Draugen (44.56%), and 0.7kboed from Ivar Aasen (2.777%). The ASP for liquid is USD65.3/bbl and the ASP for gas is USD17.6/mmbtu, which shows slight discounts to Brent and gas prices in European markets. We believe the small ASP discounts reflect the high quality of both the liquid and gas production volumes from OKEA.

**Exhibit 34: Sales volume – net to OKEA (kboed)**



Sources: BCP; OKEA

**Exhibit 35: Realised selling prices of OKEA**



Sources: BCP; OKEA

In 2022, according to management, OKEA is projected to produce a total of 18.5-20.0kboed from its four fields, up 17% y-y (18.5kboed) or 26.6% y-y (20.0kboed). The main driver for the volume growth is the start-up of Yme in 4Q21.

### Exhibit 36: OKEA's oil & gas projections in 2022

	% stake owned by OKEA (%)	2021	2021	2022E	
		100% stake (kboed)	OKEA's stake (kboed)	OKEA's stake (kboed)	
Gjoa	12.0	68.3	8.2	8.2	8.4
Draugen	44.6	15.5	6.9	6.9	7.0
Ivar Aasen	2.8	25.2	0.7	0.7	0.7
Yme	15.0	18.0	0.0	2.7	3.9
<b>Total</b>		<b>127.0</b>	<b>6.6</b>	<b>18.5</b>	<b>20.0</b>

Sources: OKEA; BCP; FSSIA estimates

**Up to THB7.9b (USD239m) and THB8.5b (USD259m) in earnings upsides to BCP from OKEA in 2022.** With its higher production volumes and higher oil production ratio (from 50% in 2021 to 60% of total production in 2022), we estimate that OKEA could generate up to USD239m to USD259m based on:

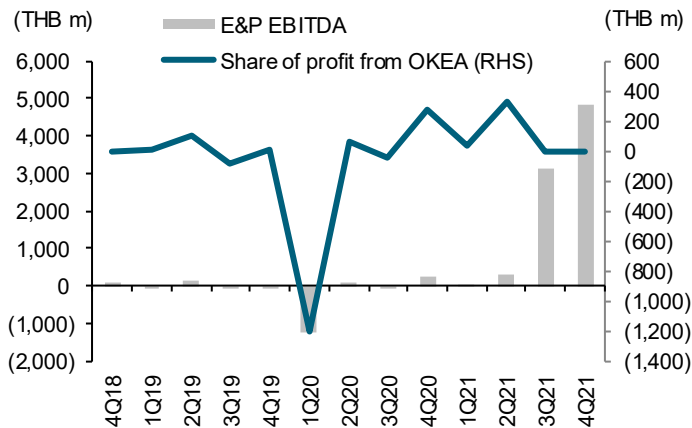
- 1) Our low case of 18.5kboed and high case of 20.0kboed production volumes;
- 2) Brent crude oil price of USD105/bbl and gas price of USD25/mmbtu in 2022;
- 3) ASP discount at 5% to benchmark prices;
- 4) Cash cost of USD25/bbl for liquid and USD4.1/mmbtu for gas;
- 5) Depreciation cost of USD14/bbl for liquid and USD4.9/mmbtu for gas;
- 6) E&P and corporate tax rate of 50% in Norway;
- 7) 360 days of operations.

### Exhibit 37: Analysis of potential net profit upsides from OKEA to BCP in 2022

2022E	Oil (USD/bbl)	Gas (USD/mmbtu)	Blended (USD/boe)
<b>ASP</b>	<b>99.8</b>	<b>23.8</b>	<b>116.9</b>
Brent/Gas	105	25	
Production volume (%)	60	40	
ASP discount (%)	5.0	5.0	
ASP	99.8	23.8	
<b>Cost structure</b>	<b>39.2</b>	<b>9.0</b>	<b>45.0</b>
Cash cost	25.2	4.1	25.0
Depreciation	14.0	4.9	20.0
<b>Margin</b>	<b>60.6</b>	<b>14.8</b>	<b>71.9</b>
Margin after tax	30.3	7.4	35.9
<b>Sale volumes</b>	<b>(boed)</b>	<b>(boed)</b>	<b>(boed)</b>
Low case	11,100	7,400	18,500
High case	12,000	8,000	20,000
<b>Net profit per day</b>	<b>(USD)</b>	<b>(USD)</b>	<b>(USD)</b>
Low case	672,105	657,120	1,329,225
High case	726,600	710,400	1,437,000
<b>Annual before-tax net profit</b>	<b>(USD m)</b>	<b>(USD m)</b>	<b>(USD m)</b>
Low case	242	237	479
High case	262	256	517
<b>Annual after-tax net profit 950% tax rate)</b>	<b>(USD m)</b>	<b>(USD m)</b>	<b>(USD m)</b>
Low case	121	118	239
High case	131	128	259

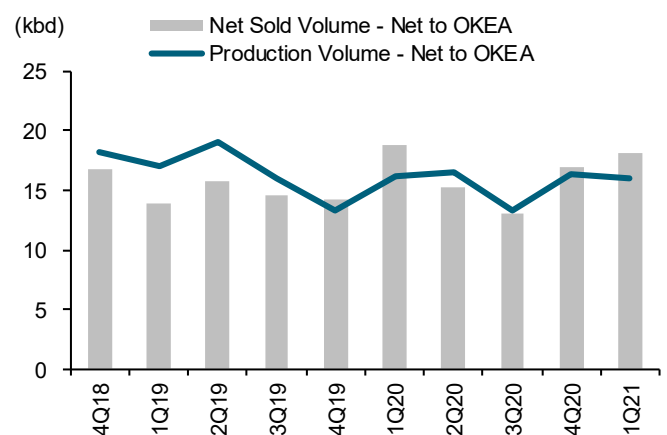
Sources: BCP; FSSIA estimates

Exhibit 38: OKEA's share of profit and EBITDA



Source: BCP

Exhibit 39: Production share and net sales volume from OKEA



Source: BCP

## EPS and target price revisions

We raise our EPS forecasts in 2022-24 by 72.5-79.6% to incorporate 1) our 29-33% higher oil price estimates in 2022-24; 2) our higher product margin assumptions for diesel and jet but lower margins for gasoline; 4) the higher margins for LSFO; and 5) the lower margins for HSFO-Dubai.

Exhibit 40: 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	256,235	240,700	238,596	211,521	205,260	205,639	21.1	17.3	16.0
Gross profit	29,946	31,648	29,544	26,372	28,241	28,621	13.6	12.1	3.2
Operating profit	11,820	11,652	11,771	10,354	10,070	10,332	14.2	15.7	13.9
Net profit	6,830	6,887	7,022	3,861	3,835	4,072	76.9	79.6	72.5
EPS (THB/shr)	5.0	5.0	5.1	2.8	2.8	3.0	76.9	79.6	72.5
<b>Key assumptions (USD/bbl)</b>									
Dubai oil price	100.0	90.0	90.0	75.0	70.0	70.0	33.3	28.6	28.6
Market GRM	15.52	15.64	13.84	13.42	13.5	13.52	15.6	15.7	2.4
Crude premium	2.00	2.00	2.00	1.00	1.0	1.00	100.0	100.0	100.0
Diesel-Dubai	24	22	20	18	18.0	18	33.3	22.2	11.1
Jet-Dubai	23	22	20	18	18	18	27.8	22.2	11.1
Gasoline-Dubai	20	18	16	20	20	20	-	(10.0)	(20.0)
LSFO-Dubai	8	8	8	5	5	5	60.0	60.0	60.0
HSFO-Dubai	(15)	(12)	(12)	(5)	(5)	(5)	200.0	140.0	140.0

Source: FSSIA estimates

We raise our SoTP-based target price from THB38 to THB40 to reflect our EPS upgrades. We think BCP is one of the most attractive refinery plays in the Thai equity market thanks to its multiple growth drivers in 2022, including the higher prices of oil & gas, rising demand for domestic oils, the improving margins and sales volumes of its non-oil businesses, and potential earnings upsides from its E&P unit.

Exhibit 41: SoTP target price

BCP valuation	(THB m)	(THB/shr)	Comments
Refinery	50,447	37	At 4x FY22E EV/EBITDA
Oil station	29,314	21	At 14x FY22E P/E
Biodiesel	1,106	1	At 10x FY22E P/E
BCPG	25,091	18	SOTP target price after capital increase
Net debt	(50,578)	(37)	FY22E net debt
<b>Total value</b>	<b>55,380</b>	<b>40</b>	

Sources: BCP; FSSIA estimates



## Financial Statements

Bangchak Corp

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Revenue	136,450	199,417	256,235	240,700	238,596
Cost of goods sold	(125,301)	(167,670)	(226,289)	(209,052)	(209,052)
<b>Gross profit</b>	<b>11,150</b>	<b>31,747</b>	<b>29,946</b>	<b>31,648</b>	<b>29,544</b>
Other operating income	-	-	-	-	-
Operating costs	(7,682)	(13,819)	(8,968)	(10,109)	(7,158)
<b>Operating EBITDA</b>	<b>3,467</b>	<b>17,928</b>	<b>20,978</b>	<b>21,538</b>	<b>22,386</b>
Depreciation	(6,821)	(8,075)	(9,158)	(9,886)	(10,614)
Goodwill amortisation	0	0	0	0	0
<b>Operating EBIT</b>	<b>(3,354)</b>	<b>9,853</b>	<b>11,820</b>	<b>11,652</b>	<b>11,771</b>
Net financing costs	(1,237)	(2,289)	(2,611)	(2,388)	(2,388)
Associates	(592)	1,042	30	0	0
Recurring non-operating income	(59)	2,321	1,373	1,410	1,480
Non-recurring items	(2,708)	4,223	0	0	0
<b>Profit before tax</b>	<b>(7,359)</b>	<b>14,108</b>	<b>10,581</b>	<b>10,674</b>	<b>10,864</b>
Tax	1,589	(4,263)	(3,051)	(3,087)	(3,141)
<b>Profit after tax</b>	<b>(5,770)</b>	<b>9,845</b>	<b>7,530</b>	<b>7,587</b>	<b>7,722</b>
Minority interests	(1,197)	(2,221)	(700)	(700)	(700)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
<b>Reported net profit</b>	<b>(6,967)</b>	<b>7,624</b>	<b>6,830</b>	<b>6,887</b>	<b>7,022</b>
<b>Non-recurring items &amp; goodwill (net)</b>	<b>2,708</b>	<b>(4,223)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Recurring net profit</b>	<b>(4,259)</b>	<b>3,401</b>	<b>6,830</b>	<b>6,887</b>	<b>7,022</b>
<b>Per share (THB)</b>					
Recurring EPS *	(3.09)	2.47	4.96	5.00	5.10
Reported EPS	(5.06)	5.54	4.96	5.00	5.10
DPS	0.60	2.00	2.48	2.51	2.55
Diluted shares (used to calculate per share data)	1,377	1,377	1,377	1,377	1,377
<b>Growth</b>					
Revenue (%)	(28.4)	46.1	28.5	(6.1)	(0.9)
Operating EBITDA (%)	(54.7)	417.0	17.0	2.7	3.9
Operating EBIT (%)	nm	nm	20.0	(1.4)	1.0
Recurring EPS (%)	nm	nm	100.8	0.8	2.0
Reported EPS (%)	nm	nm	(10.4)	0.8	2.0
<b>Operating performance</b>					
Gross margin inc. depreciation (%)	3.2	11.9	8.1	9.0	7.9
Gross margin of key business (%)	3.2	11.9	8.1	9.0	7.9
Operating EBITDA margin (%)	2.5	9.0	8.2	8.9	9.4
Operating EBIT margin (%)	(2.5)	4.9	4.6	4.8	4.9
Net margin (%)	(3.1)	1.7	2.7	2.9	2.9
Effective tax rate (%)	37.4	28.9	28.9	28.9	28.9
Dividend payout on recurring profit (%)	(19.4)	81.0	50.0	50.2	50.0
Interest cover (X)	(2.8)	5.3	5.1	5.5	5.5
Inventory days	46.6	37.7	35.1	41.9	40.3
Debtor days	23.4	19.8	29.8	48.4	65.1
Creditor days	37.5	30.4	29.7	35.5	34.1
Operating ROIC (%)	(3.7)	9.7	9.8	8.6	7.9
ROIC (%)	(2.2)	6.8	6.2	5.8	5.6
ROE (%)	(8.7)	6.8	12.3	11.7	11.2
ROA (%)	(1.6)	4.1	4.5	4.3	4.3
* Pre-exceptional, pre-goodwill and fully diluted					
<b>Revenue by Division (THB m)</b>					
Refinery and oil trading	114,820	177,268	233,536	217,420	214,698
Marketing	172,369	182,711	193,674	205,295	217,612
Electricity	4,790	4,790	4,790	4,790	4,790
Bio based product	8,212	8,212	8,212	8,212	8,212

Sources: Bangchak Corp; FSSIA estimates

## Financial Statements

### Bangchak Corp

Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	(4,259)	3,401	6,830	6,887	7,022
Depreciation	6,821	8,075	9,158	9,886	10,614
Associates & minorities	533	1,279	1,343	1,410	1,480
Other non-cash items	-	-	-	-	-
Change in working capital	5,115	(2,578)	(10,237)	(10,943)	(10,645)
<b>Cash flow from operations</b>	<b>8,210</b>	<b>10,177</b>	<b>7,094</b>	<b>7,240</b>	<b>8,472</b>
Capex - maintenance	(6,758)	(7,014)	(8,453)	(9,126)	(9,798)
Capex - new investment	-	-	-	-	-
Net acquisitions & disposals	-	-	-	-	-
Other investments (net)	2,640	(14,045)	103	998	1,671
<b>Cash flow from investing</b>	<b>(4,119)</b>	<b>(21,059)</b>	<b>(8,350)</b>	<b>(8,127)</b>	<b>(8,127)</b>
Dividends paid	(1,377)	(1,790)	(3,084)	(3,437)	(3,485)
Equity finance	0	0	0	0	0
Debt finance	14,019	15,167	0	0	0
Other financing cash flows	(2,646)	7,876	(1,031)	(1,292)	(1,392)
<b>Cash flow from financing</b>	<b>9,996</b>	<b>21,253</b>	<b>(4,115)</b>	<b>(4,729)</b>	<b>(4,877)</b>
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
<b>Net other adjustments</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Movement in cash</b>	<b>14,087</b>	<b>10,371</b>	<b>(5,371)</b>	<b>(5,616)</b>	<b>(4,532)</b>
Free cash flow to firm (FCFF)	6,060.50	(8,342.84)	1,355.26	1,500.72	2,732.86
Free cash flow to equity (FCFE)	15,463.81	12,161.08	(2,286.82)	(2,179.40)	(1,047.27)

#### Per share (THB)

FCFF per share	4.40	(6.06)	0.98	1.09	1.98
FCFE per share	11.23	8.83	(1.66)	(1.58)	(0.76)
Recurring cash flow per share	2.25	9.26	12.59	13.21	13.88

Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	96,466	111,132	119,871	128,610	137,349
Less: Accumulated depreciation	(41,899)	(41,899)	(51,057)	(60,943)	(71,557)
<b>Tangible fixed assets (net)</b>	<b>54,567</b>	<b>69,233</b>	<b>68,814</b>	<b>67,667</b>	<b>65,792</b>
<b>Intangible fixed assets (net)</b>	<b>13,309</b>	<b>15,613</b>	<b>15,613</b>	<b>15,613</b>	<b>15,613</b>
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	15,713	14,196	14,196	14,196	14,196
Cash & equivalents	21,651	32,022	26,650	21,034	16,502
A/C receivable	6,402	15,234	26,582	37,242	47,809
Inventories	16,162	18,497	24,964	23,062	23,062
Other current assets	3,080	3,620	4,651	4,369	4,331
<b>Current assets</b>	<b>47,296</b>	<b>69,372</b>	<b>82,847</b>	<b>85,707</b>	<b>91,704</b>
Other assets	17,438	33,370	33,370	33,370	33,370
<b>Total assets</b>	<b>148,323</b>	<b>201,785</b>	<b>214,841</b>	<b>216,554</b>	<b>220,675</b>
Common equity	46,366	53,467	57,213	60,693	64,231
Minorities etc.	11,950	16,092	16,792	17,492	18,192
<b>Total shareholders' equity</b>	<b>58,316</b>	<b>69,559</b>	<b>74,005</b>	<b>78,186</b>	<b>82,423</b>
Long term debt	54,095	69,787	69,787	69,787	69,787
Other long-term liabilities	10,409	28,334	28,334	28,334	28,334
<b>Long-term liabilities</b>	<b>64,504</b>	<b>98,121</b>	<b>98,121</b>	<b>98,121</b>	<b>98,121</b>
A/C payable	12,277	15,651	21,123	19,514	19,514
Short term debt	7,966	7,441	7,441	7,441	7,441
Other current liabilities	5,259	11,014	14,152	13,294	13,177
<b>Current liabilities</b>	<b>25,502</b>	<b>34,105</b>	<b>42,715</b>	<b>40,248</b>	<b>40,132</b>
<b>Total liabilities and shareholders' equity</b>	<b>148,323</b>	<b>201,785</b>	<b>214,841</b>	<b>216,554</b>	<b>220,675</b>
Net working capital	8,108	10,686	20,922	31,866	42,511
Invested capital	109,135	143,099	152,917	162,713	171,482

\* Includes convertibles and preferred stock which is being treated as debt

#### Per share (THB)

Book value per share	33.67	38.83	41.55	44.08	46.65
Tangible book value per share	24.01	27.49	30.21	32.74	35.31

#### Financial strength

Net debt/equity (%)	69.3	65.0	68.3	71.9	73.7
Net debt/total assets (%)	27.2	22.4	23.5	25.9	27.5
Current ratio (x)	1.9	2.0	1.9	2.1	2.3
CF interest cover (x)	13.5	6.3	0.1	0.1	0.6

Valuation	2020	2021	2022E	2023E	2024E
<b>Recurring P/E (x) *</b>	<b>(9.8)</b>	<b>12.2</b>	<b>6.1</b>	<b>6.0</b>	<b>5.9</b>
<b>Recurring P/E @ target price (x) *</b>	<b>(12.9)</b>	<b>16.2</b>	<b>8.1</b>	<b>8.0</b>	<b>7.8</b>
Reported P/E (x)	(6.0)	5.5	6.1	6.0	5.9
Dividend yield (%)	2.0	6.6	8.2	8.3	8.4
Price/book (x)	0.9	0.8	0.7	0.7	0.6
Price/tangible book (x)	1.3	1.1	1.0	0.9	0.9
EV/EBITDA (x) **	27.1	5.7	5.2	5.4	5.4
EV/EBITDA @ target price (x) **	31.0	6.5	5.8	6.0	6.0
EV/invested capital (x)	0.9	0.7	0.7	0.7	0.7

\* Pre-exceptional, pre-goodwill and fully diluted \*\* EBITDA includes associate income and recurring non-operating income

Sources: Bangchak Corp; 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	ICI	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	PAP	PCSGH	PDJ	PG	PHOL	PLANB
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	TRC	TSC	TSR	TSTE	TSTH
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	MITSIB	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	TIPIP	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	AMANAHA	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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Company	Ticker	Price	Rating	Valuation & Risks
Bangchak Corp	BCP TB	THB 30.25	BUY	The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) higher crude premiums; and 3) unplanned shutdowns of the company's refinery plants.
Central Retail Corp	CRC TB	THB 38.75	BUY	The key downside risks to our DCF-based TP include 1) new waves of Covid-19; and 2) lower-than-expected sales from the high-margin fashion business.
PTT Global Chemical	PTTGC TB	THB 51.50	HOLD	The key upside/downside risks to our EV/EBITDA-based TP are a stronger or weaker-than-expected HDPE price and HDPE-naphtha margin.
IRPC PCL	IRPC TB	THB 3.60	BUY	Key risks to our positive view and EV/EBITDA-based target price are weaker-than-expected oil product demand growth and lower-than-expected PP-naphtha and SM-benzene margins.
Star Petroleum Refining	SPRC TB	THB 10.20	BUY	TP is based on EV/EBITDA. Downside risks are a sharp rise in oil price and weak demand for refined oil products.
Esso Thailand	ESSO TB	THB 8.50	BUY	The downside risks to our SoTP-based TP on ESSO include 1) lower-than-expected demand for petroleum products; 2) a higher crude premium; and 3) unplanned shutdowns of its refinery and petrochemical plants.

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

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finansia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 29-Mar-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.