

19 MAY 2021

THAILAND / OIL & GAS

THAI OIL TOP TB

BUY
UNCHANGED

TARGET PRICE	THB74.00
CLOSE	THB60.00
UP/DOWNSIDE	+23.3%
PRIOR TP	THB74.00
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+19.7%

กลับสู่จุดสูงสุด

จากการขยายกิจการผ่าน CFP และธุรกิจโอเลฟินสู่การฟื้นตัวของค่าการกลั่นในระยะสั้น

ในระหว่างการประชุมทางโทรศัพท์ ผู้บริหารของ TOP ได้พูดอย่างชัดเจนถึง 3 ประเด็นสำคัญที่ กำลังสร้างความกังวลให้แก่นักลงทุนในปัจจุบัน ประการแรกการลงทุนเป็นจำนวนมากถึง USD4.1 พันล้านของ TOP ใน Clean Fuel Project (CFP) ยังมีความเหมาะสมในด้านการเงิน ด้วย IRR ที่คาดว่าจะสูงกว่า 10% แม้ว่าความต้องการน้ำมันอาจลดลงจากการใช้ยานยนต์ไฟฟ้า (EV) ที่เพิ่มขึ้น ประการที่สองในทางกลยุทธ์แนวทางการเติบโตของ TOP จะอยู่ในธุรกิจโอเลฟินที่เปลี่ยนผ่านการควบรวมและซื้อกิจการในต่างประเทศ รวมถึงการใช้ประโยชน์จากวัตถุดิบส่วนเกินที่ได้จาก CFP ประการที่สามในปี 2021-22 โอกาสที่ค่าการกลั่นของ TOP จะฟื้นตัวมีสูงจากเศรษฐกิจโลกและที่ยาวบินนานาชาติที่กลับมาเปิดดำเนินการใหม่ พร้อมการเดินทางและการท่องเที่ยวที่เพิ่มขึ้น

CFP: เหมาะสมในทางการเงินและสำคัญในทางกลยุทธ์

การลงทุนขนาดใหญ่ถึง USD4.1 พันล้านของ TOP ใน CFP ควรยังมีความเหมาะสมในทางการเงิน เนื่องจากเราคาดว่าช่องว่างระหว่างราคาน้ำมันดิบชนิดเบาและหนักที่ USD10/bbl และระหว่างดีเซลกับน้ำมันเตาซัลเฟอร์สูง (HSFO) ที่ USD20-25/bbl จะกว้างขึ้นสู่ระดับปกติภายในปี 2023 ซึ่งเป็นปีที่เราคาดว่าเศรษฐกิจโลกจะกลับสู่ระดับก่อน Covid นอกจากนี้ CFP จะเพิ่มความสามารถในการกลั่นของ TOP อีก 45% เป็น 400ktpd ซึ่งอาจช่วยเพิ่มค่าการกลั่นอีก USD2-4/bbl หลังหักต้นทุนเพิ่มเติมสำหรับ CFP ที่ USD2/bbl ยิ่งกว่านั้นโครงการดังกล่าวจะทำให้ TOP สามารถเข้าไปแข่งในธุรกิจโอเลฟินที่เปลี่ยนผ่านการควบรวมและซื้อกิจการที่มี LPG 0.6mtpa Light Naphtha 0.7mtpa และ Heavy Naphtha 0.9mtpa

ไม่น่าจะเพิ่มทุนแม้ว่าจะมีการควบรวมและซื้อกิจการโอเลฟินเพื่อการเติบโต

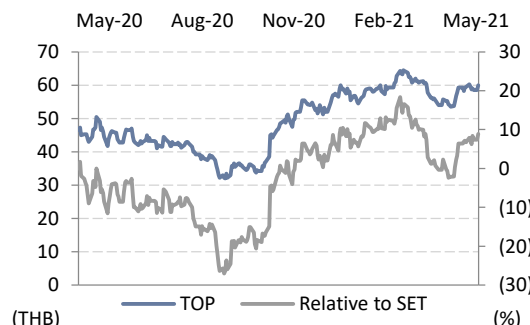
จากทางเลือกในด้านเงินทุนที่มีอยู่อย่างหลากหลายของ TOP เราเชื่อว่าบริษัท ไม่น่าที่จะเลือกเพิ่มทุนเพื่อหาเงินสนับสนุนแผนการขยายกิจการไปสู่ธุรกิจโอเลฟินผ่านการลงทุนในกิจการที่กำลังดำเนินการในปัจจุบันหรือกำลังก่อสร้างอยู่ ซึ่งจะทำให้ TOP สามารถบรรลุเป้าหมายระยะยาวในการได้ 40% ของกำไรสุทธิจากธุรกิจปิโตรเคมี เพิ่มขึ้นจาก 28% ที่คาดว่าจะได้ในปี 2021

หุ้นลงทุนระยะสั้นจากการฟื้นตัวของค่าการกลั่น

เราคาดว่าแนวโน้มที่ราคาเป้าหมาย 74 บาทซึ่งคิดจาก 8.3x ของค่า 2021E EV/EBITDA เพื่อสะท้อนการพลิกฟื้นอย่างเห็นได้ชัดของกำไรสุทธิในปี 2021E และแนวโน้ม Refinery Margin ที่ดีขึ้นในตลาด เราเห็นว่าความกังวลของนักลงทุนเกี่ยวกับการลงทุนใน CFP มีมากเกินไปเมื่อพิจารณาถึงฐานะทางการเงินที่ดีของ TOP พร้อมแผนการหาเงินทุนที่เพียงพอสำหรับโครงการเพื่อการเติบโตและการควบรวมและซื้อกิจการ ในขณะที่การลงทุนใน CFP จะให้ผลตอบแทนคิดเป็น IRR ที่ 13.4% จากประมาณการในสถานการณ์ที่ดีที่สุดของเราเมื่อ CFP เริ่มดำเนินการในเชิงพาณิชย์ในปี 2024

KEY STOCK DATA

YE Dec (THB m)	2020	2021E	2022E	2023E
Revenue	242,840	250,912	265,408	265,816
Net profit	(3,301)	13,643	15,989	16,246
EPS (THB)	(1.62)	6.69	7.84	7.96
vs Consensus (%)	-	113.9	100.0	72.8
EBITDA	(7,556)	33,771	37,860	38,772
Core net profit	(3,301)	13,643	15,989	16,246
Core EPS (THB)	(1.62)	6.69	7.84	7.96
Chg. In EPS est. (%)	nm	-	-	-
EPS growth (%)	nm	nm	17.2	1.6
Core P/E (x)	(37.1)	9.0	7.7	7.5
Dividend yield (%)	3.3	5.0	5.9	6.0
EV/EBITDA (x)	(28.4)	7.5	7.1	7.3
Price/book (x)	1.1	1.0	0.9	0.9
Net debt/Equity (%)	73.6	98.8	103.5	105.8
ROE (%)	(2.8)	11.4	12.5	11.9



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	8.6	3.0	29.7
Relative to country (%)	9.2	(1.4)	8.5
Mkt cap (USD m)	3,894		
3m avg. daily turnover (USD m)	20.7		
Free float (%)	45		
Major shareholder	PTT plc. (49%)		
12m high/low (THB)	66.00/31.75		
Issued shares (m)	2,040.03		

Sources: Bloomberg consensus; FSSIA estimates



Suwat Sinsadok

suwat.sin@fssia.com
+66 2611 3558

Siriluck Pinthusoonthorn

siriluck.pin@fssia.com
+66 2611 3562

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

บทวิเคราะห์ฉบับนี้แปลมาจากบทวิเคราะห์ของ FSSIA ฉบับวันที่ 19 พฤษภาคม 2021

Investment thesis

Since IMO 2020 regulations came into force mandating the use of low sulphur fuel oil (LSFO) by the global shipping industry, we think TOP has stood out as one of the potential refinery winners in Asia to capture the projected widening diesel-fuel oil spreads. TOP has sustained its earnings improvement since 2009, thanks to its well-diversified earnings portfolio. We expect 40-50% of its 2021-22 earnings to be derived from its non-refinery businesses, including aromatics (20%), lube (10%), power (10%) and marine transportation (3%). We believe TOP's Clean Fuel Project (CFP) will allow it to employ its capital more efficiently and position itself to benefit from the projected USD2-4/bbl higher market gross refining margin (GRM) from the widening diesel-Dubai spread. This is because TOP intends to convert all its loss-making fuel oil capacity to produce diesel post completion and start-up of CFP in 2024.

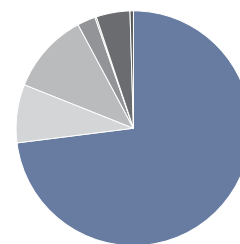
Company profile

TOP operates Thailand's largest single-site refinery, which is one of the most complex refineries in the Asia Pacific region with a nameplate capacity of 220,000 bopd. It also undertakes power generation, petrochemical production and oil and petrochemical product transportation.

www.thaioilgroup.com

Principal activities (revenue, 2020)

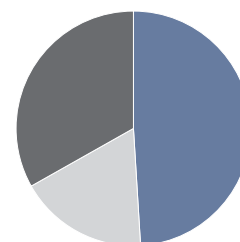
- Oil refinery - 73.0 %
- Lubed-based oil refinery - 8.0 %
- Petrochemical - 11.1 %
- Power generation - 2.5 %
- Marine transportation services - 0.2 %



Source: Thai Oil

Major shareholders

- PTT plc. - 49.0 %
- Thai NVDR - 17.8 %
- Others - 33.2 %



Source: Thai Oil

Catalysts

A key potential catalyst for TOP would be a higher-than-expected recovery in market GRM due to stronger-than-expected diesel cracks and a lower-than-expected crude premium.

Risks to our call

Downside risks to our EV/EBITDA-based TP are a sharp rise in oil price and weak demand for refined oil products.

Event calendar

Date	Event
Aug 2021	2Q21 results announcement

Key assumptions

	2021E	2022E	2023E
	(USD/bbl)	(USD/bbl)	(USD/bbl)
Dubai oil price	50.0	50.0	50.0
Refining margin	5.8	6.2	6.2
Crude premium	1.5	2.0	2.0
Diesel-Dubai margin	12.0	15.0	15.0
Jet-Dubai margin	10.0	15.0	15.0
Gasoline-Dubai margin	10.0	15.0	15.0
HSFO-Dubai margin	(3.0)	(5.0)	(5.0)

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in average Dubai oil price, we project 2021 earnings to rise by 2.4%, and vice versa, all else being equal.
- For every 1% increase in market GRM, we estimate 2021 earnings will rise by 2%, and vice versa, all else being equal.
- Stability in crude oil price, rising diesel cracks and a low crude premium are key for earnings growth.

Source: FSSIA estimates

Return to the top

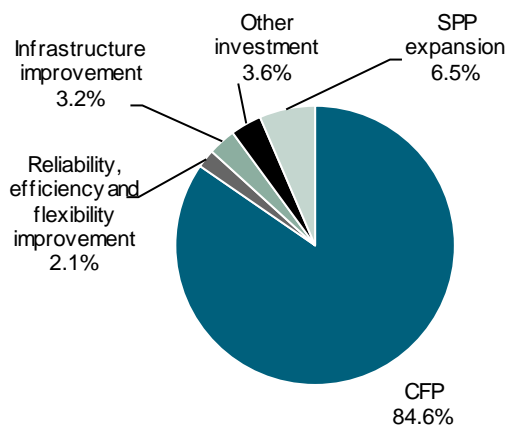
During TOP's conference call, management clearly indicated three key issues that are currently major concerns for investors.

First, TOP's USD4.1b large-scale investment, CFP, remains financially sound with a projected IRR of over 10%, even with the potentially lower oil demand caused by higher EV adoption rates. We believe the market is overly concerned about TOP's CFP financial returns. We expect an improving margin for CFP as a result of the wider price gaps of light-heavy crude and diesel-HSFO normalising by 2023.

Second, TOP's strategic growth path will take it into the downstream olefins business via M&A overseas, leveraging the excess feedstock produced from CFP. We think the company's diversification into the downstream petrochemical business is both strategically essential and financially sound for TOP to sustain its competitiveness and enhance its earnings sustainability amid the highly uncertain oil demand outlook.

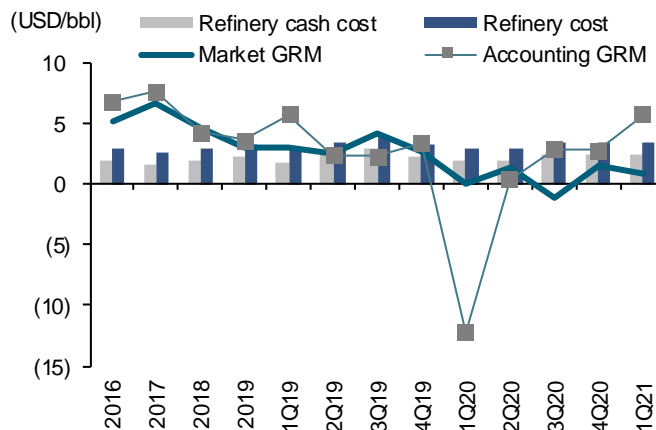
Third, in 2021-22, the potential for TOP's GRM to recover looks strong, driven by the reopening of global economies and international flights, along with an increase in travel and tourism activities. We expect TOP's market GRM to gradually rise by 1-2/bbl to drive up its market GRM to USD3-4/bbl in 3Q21.

Exhibit 1: Capex plan (USD2.25b) in 2021-24



Source: TOP

Exhibit 2: TOP's refinery cash cost and accounting cost vs market GRM and accounting GRM



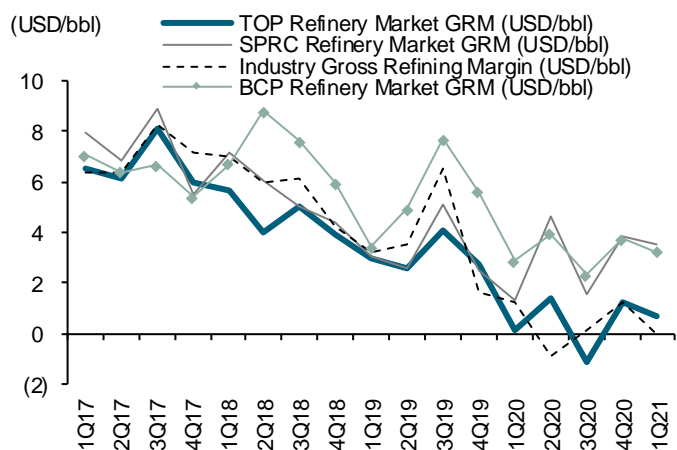
Source: TOP

CFP is strategically critical for TOP's long-term survival, growth, and competitiveness. In the past nine quarters since 1Q19, despite TOP's low-cost structure of a USD1.8-2.9/bbl cash cost and a USD3.5-3.8/bbl accounting cost, including depreciation expenses, TOP has suffered from multiple net losses. This resulted from the market GRMs being below the cash cost and accounting GRMs being negative in some quarters due to large inventory losses.

The depressed market GRMs in 2019-1Q21 were driven by the impact of the changes in the refinery market's structure – the International Maritime Organization (IMO)'s ban on HSFO in 2019, the demand collapse from the Covid-19 pandemic, and the oil war among Saudi Arabia, the US, and Russia in 2020. These events led to the highly unfavourable environment in the refinery industry, both on the demand and supply sides, which includes the high oil price and crude oil premium, which is the difference between the price of light, sweet crude (Brent and WTI) over heavy crude (Dubai).

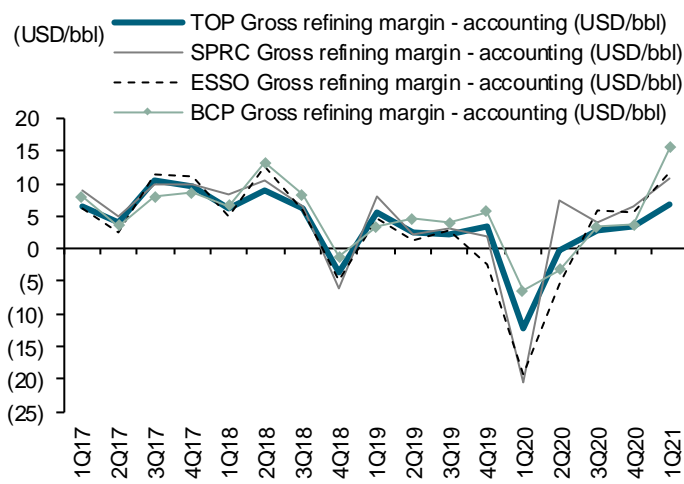
Given the highly unpredictable changes in the refinery industry environment, TOP's quarterly market GRMs have consistently underperformed its Thai refinery peers – SPRC, ESSO, and BCP – during 2019-1Q21.

Exhibit 3: TOP, SPRC, BCP – market GRM



Source: Company data

Exhibit 4: TOP, SPRC, ESSO, BCP – gross refining margin



Source: Company data

This reflects the lower flexibility of TOP’s upstream crude distillation unit (CDU) and downstream refinery upgrading units, which includes TOP’s larger-than-peers’ hydrocracking unit (HCU) to convert HSFO into diesel and a smaller-than-peers’ fluid catalytic cracking unit (FCC) to convert HSFO into gasoline.

Hence, TOP lacks both the capability to consume heavy crude due to its aging CDU 1 and CDU 2, at over 50 years old, and the ability to produce more gasoline to capture the strong gasoline-Dubai margin on the back of the highly resilient demand recovery and zero jet fuel demand during the Covid-19 pandemic – which led to a depressed jet-Dubai margin due to the demand collapse on the global ban for international flights and tourism.

Accordingly, we strongly believe that to enhance or at least maintain TOP’s refinery competitiveness and achieve a high crude intake flexibility and production yield elasticity, TOP needs to invest in CFP. CFP could potentially not only improve its refinery competitiveness to be on par with or surpass its regional or global peers but also increase its cost competitiveness via the economies of scale and scope via the downstream petrochemical production plants using the feedstocks produced from TOP’s CFP refinery complex.

Exhibit 5: Thai refiners’ capacity and complexity

(’000 bbl/day)	ESSO	IRPC	PTTGC	SPRC	TOP (pre-CFP)	TOP (post-CFP)
Crude distillation unit (CDU)	177.0	215.0	280.0	175.0	275.0	400.0
Upgrading unit						
Catalytic reforming (CCR)	10.0	14.4	88.0	19.0	50.0	50.0
Hydrocracking	-	-	53.0	20.0	50.0	128.0
Fluid catalytic cracking (FCC)	42.0	-	-	42.0	10.4	10.4
Deep catalytic cracking (DCC)	27.0	48.1	-	-	-	-
Thermal cracking unit	-	-	-	-	19.3	19.3
Isomerisation	-	3.5	-	-	20.0	20.0
Lube base oil unit	-	5.8	-	-	6.0	6.0
Residue hydrocracking unit (RHCU)	-	-	-	-	-	78.0
Complexity ratio (%)	44.6	29.1	50.4	46.3	47.2	71.4
Nelson complexity index (only refinery)	6.6	5.1	6.5	6.3	6.8	NA
Nelson complexity index (including chemical and lube)	6.6	8.6	10.2	6.3	9.8	12.0

Sources: Company data; FSSIA estimates

CFP investment – a plunder or wonder for TOP?

Since 2020, investors have been increasingly doubtful of the USD4.1b investment for CFP, starting in 2019 and running until 2024 when CFP is projected to commence its commercial operation date (COD), thanks to the 2-year depressed GRM as a result of the structural impact of the ban on HSFO for use by global shippers by the IMO since Jan-20 and the demand disruption by the global Covid-19 pandemic in 2020 to date.

Exhibit 6: Financial analysis of CFP upgrading and expansion project – worst case scenario

Project: CFP upgrading and expansion	Fuel oil (bpd)	Capacity (bpd)	Capacity (m bbls)	% fuel oil yield
Existing capacity	19,250	275,000	100	7%
Incremental capacity	8,750	125,000	46	7%
Total	28,000	400,000	146	
Assumptions				
Diesel-fuel oil spread*	10.0	10.0	USD/bbl	
TOP's existing crude premium	3.0	3.0	USD/bbl	
Light-super heavy crude premium*	8.0	8.0	USD/bbl	
Average net crude savings	2.5	2.5	USD/bbl	
% heavy crude consumption pre-CFP expansion	0%	0%		
% heavy crude consumption post-CFP expansion	50%	50%		
Net gross profit increase				
	Existing (275kbpd)	Expansion (125kbpd)	Total	
#1 Product margin improvement (HSFO-to-diesel)	70.3	31.9	102	USD m
#1 Product margin improvement (HSFO-to-diesel)	2,178	990	3,168	THB m
#2 Crude cost savings (from 0% to 50% heavy crude)	250.94	114.06	365	USD m
#2 Crude cost savings (from 0% to 50% heavy crude)	7,779	3,536	11,315	THB m
Total benefit #1 plus #2	321	146	467	USD m
Total benefit #1 plus #2	9,957	4,526	14,483	THB m
	USD m	THB m		
Total benefit	467	14,483		
Additional opex	(44)	(1,358)		
Interest expense	(129)	(4,262)		
Net benefit before tax and depreciation	294	8,863		
Investment cost	4,100	135,300		
Payback period (year)	13.93	13.93		
IRR	9.5%	9.5%		
Est. net incremental earnings				
	USD m	THB m		
Net incremental EBITDA	423	13,125		
Depreciation expense	(137)	(4,510)		
Interest expense	(129)	(4,262)		
EBT	158	4,353		
Tax at 20%	(32)	(871)		
Net additional profit	126	3,483		
TOP's normalised earnings	323	10,000		
As % of TOP's normalised earnings	39%	35%		

* key assumption for our worst case scenario

Sources: TOP; FSSIA estimates

However, we believe that in long run, post-2024, TOP's USD4.1b large-scale investment in CFP should remain financially sound, as we expect the price gaps between light and heavy crude (USD10/bbl gap) and diesel and high sulphur fuel oil (HSFO) (USD20-25/bbl gap) to widen to normality by 2023 when we project the global economy to return to its pre-Covid level.

In addition, CFP will increase TOP's refinery capacity by 45% to 400kbpd, potentially boosting its GRM by USD2-4/bbl after deducting the USD2/bbl additional CFP cost, and, most importantly, allow TOP to competitively move into downstream olefins using CFP's excess feedstocks of naphtha and LPG.

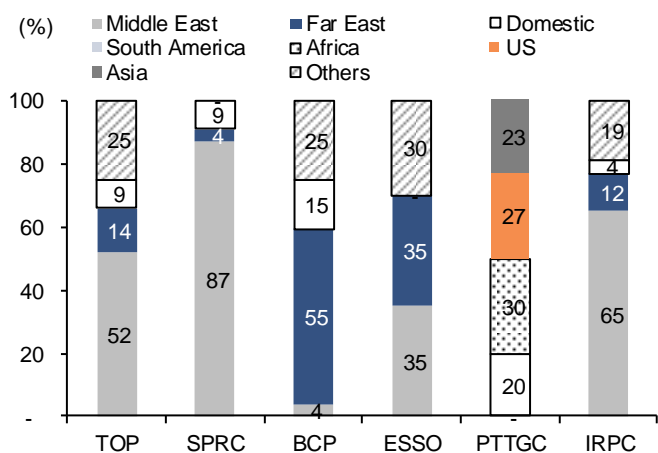
Exhibit 7: CFP's financial returns under different assumptions for the spreads between diesel-HSFO and light-heavy crude

	Scenario 1 (Worst case)	Scenario 2	Scenario 3	Scenario 4 (Base case)	Scenario 5
Diesel-HSFO margin	10	10	20	15	20
Light-super heavy crude premium	8	10	10	10	12
IRR (%)	9.5	12.4	14.4	13.4	17.2
Payback (year)	13.9	9.3	7.6	8.3	6.0
CFP's net profit contribution (THB b)	3.5	7.1	9.6	8.4	13.3

Source: FSSIA estimates

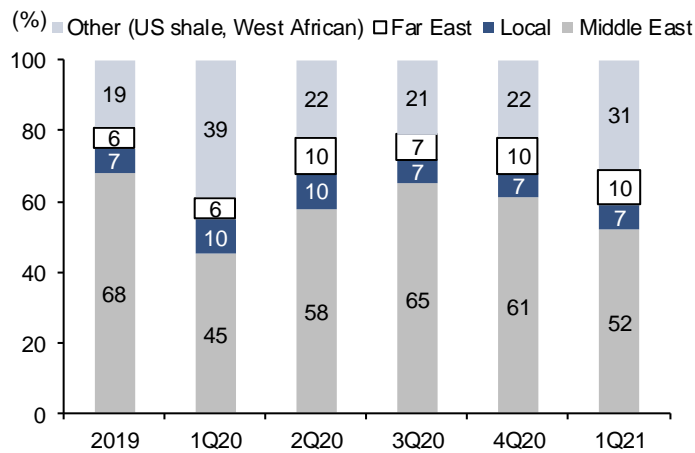
13.9-year payback period and 9.5% IRR under our worst-case scenario. Under our worst-case scenario, assuming that the price spread of light-heavy crude is USD8/bbl (vs the current USD7/bbl as of 17 May-21) and diesel-HSFO is at USD10/bbl (vs the current USD12/bbl), we estimate that CFP will generate an IRR of 9.5% and EIRR of 12.3%, with a payback period of 13.9 years and an annual net profit contribution of THB3.5b to TOP.

Exhibit 8: Crude mix breakdown as of 1Q21



Source: Company data

Exhibit 9: TOP's crude mix



Source: TOP

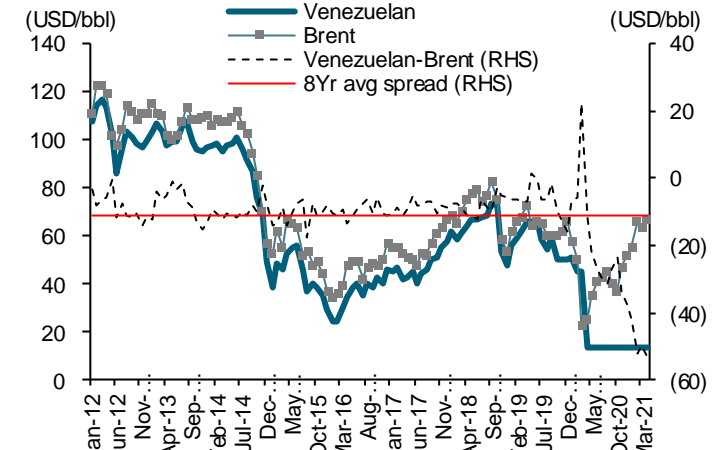
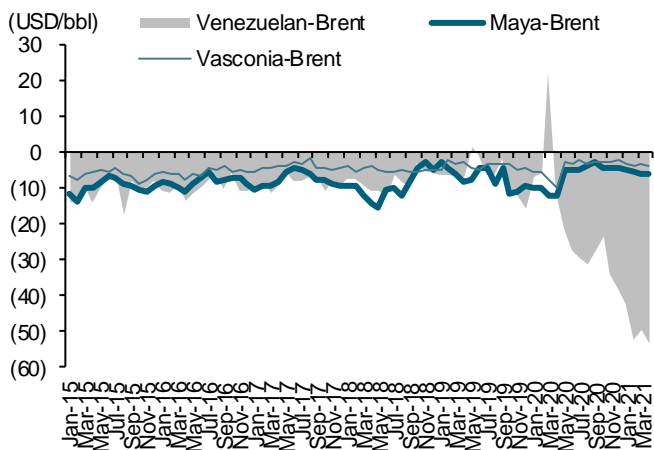
However, we think that it is less likely that the spreads of light-heavy crude and diesel-HSFO will remain at their currently depressed levels, based on our projected wider margins for the light-heavy crude price and diesel-HSFO to return to their historical levels after the impact of the Covid-19 pandemic subsidies post-2021.

Wider spread for the light-heavy crude price. In the short term, the price spread of light-heavy crude has significantly narrowed from USD15-20/bbl down to USD5-10/bbl since 2020, thanks to the sharp drops in heavy crude oil production from Venezuela and Iran (from US sanctions) and OPEC (to balance the global oil demand-supply as a result of demand collapse from the Covid-19 pandemic).

Venezuela, one of the world's largest producers of heavy crude, has seen its crude oil production and price sharply decline since 2019 due to the US sanctions and its internal political and economic problems. The heavy oil production level from OPEC also plunged by over 2mbpd in 2019-20, mainly due to the voluntary cuts by Saudi Arabia and other OPEC members and the production disruptions in Libya and Iraq.

Exhibit 10: Heavy-light crude spread, represented by Venezuelan and Mexico's Maya crude prices over Brent price

Exhibit 11: Venezuelan crude price sharply collapsed in 2020 due to the impacts of US sanctions and internal political and economic disturbances

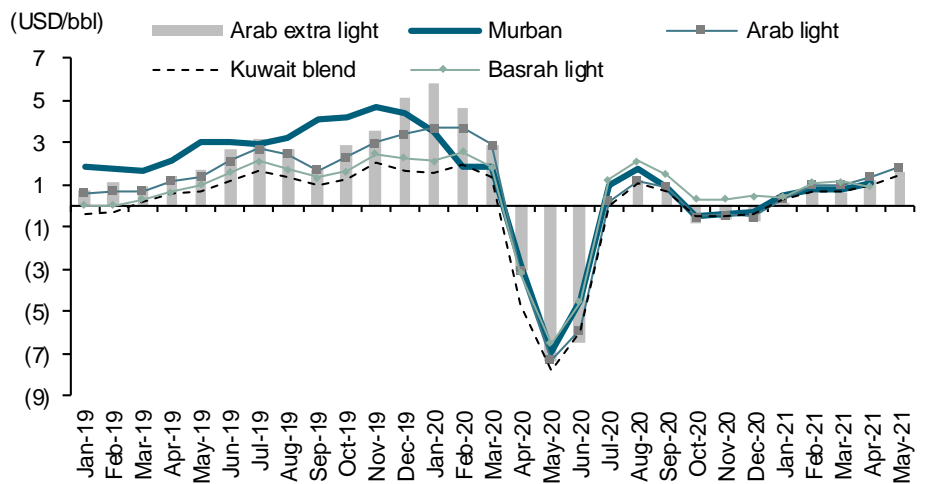


Source: Bloomberg

Source: Bloomberg

Given that both Venezuela and OPEC are key providers of heavy crude to the US and global refiners, the price of global heavy crudes has strengthened (Venezuelan, Maya, and Vasconia crude) while the price of global light crudes has weakened (Arab light, Arab extra light, Murban). This has led to a much narrower price spread between light-heavy crude.

Exhibit 12: Crude premiums for key OPEC producers

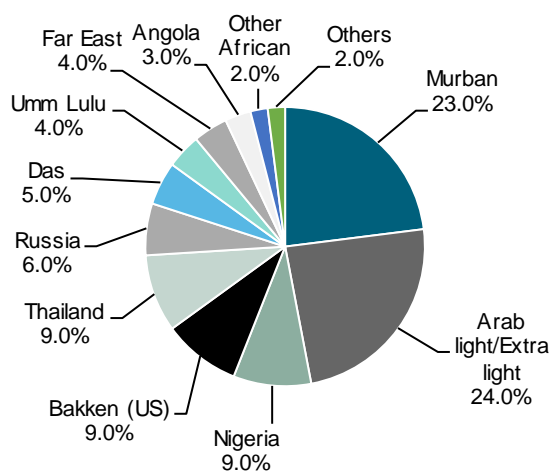


Source: TOP

TOP has suffered from the globally narrower light-heavy crude spread. In 2019-20, TOP suffered from a series of poor quarterly market GRMs, partly as a result of its refinery's incapability to consume a greater variety of heavier crude types. We estimate that TOP has seen USD1-2/bbl lower market GRMs due to its less-than-peers' crude intake capability.

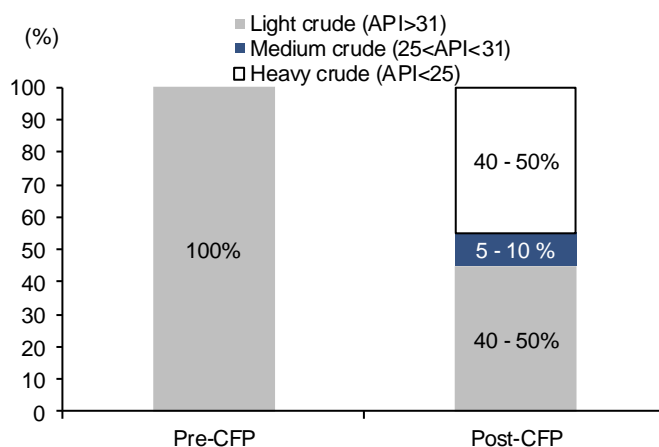
However, with CFP, we estimate that TOP's crude intake capability would significantly improve, with the capability to consume up to 50% heavy crude out of the total crude intake vs zero currently. In 1Q21, TOP consumed only light crude types, including Murban, Arab light, Arab extra light, Nigerian crude, Bakken (US shale oil), Thailand's crude, Far East, Angola, and other African crudes. We think it is mandatory, not a choice, for TOP to proceed with its CFP investment to transform its refinery facility to become a much more crude-flexible complex in order to remain competitive and ensure its business survival.

Exhibit 13: TOP's crude mix



Source: TOP

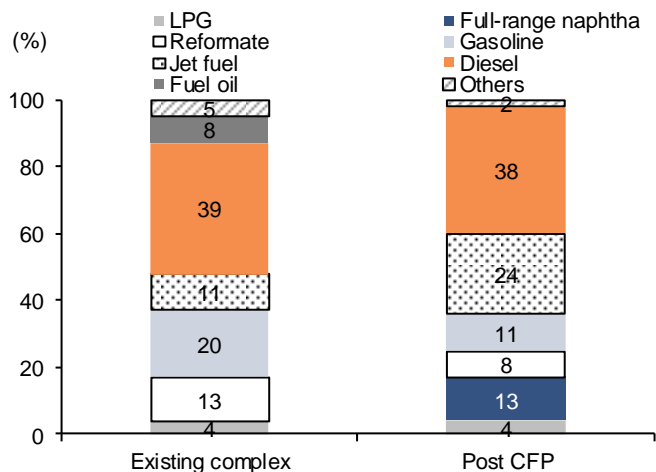
Exhibit 14: TOP – heavier crude mix after CFP completion



Source: TOP

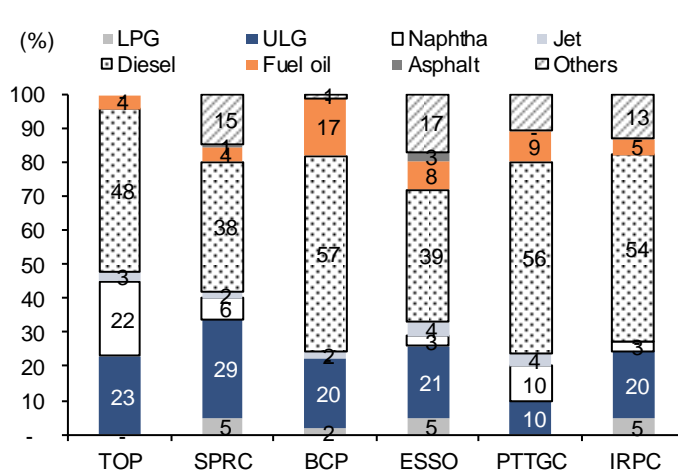
Wider spread of diesel-HSFO in 2022 onward. We project that the higher demand for diesel, jet and gasoline after the global easing of lockdowns should propel the product margins and market GRM by 2-4/bbl from the currently depressed level of USD1-3/bbl, depending on each refiner's refinery complexity. In addition, we think the continued lower demand for HSFO from global shippers should gradually reduce the HSFO-Dubai margin to a more negative level toward its historical level of USD7-10/bbl. As a result, we project that in the long run the margin of diesel-HSFO will widen to USD15-20/bbl.

Exhibit 15: TOP's product yield



Source: TOP

Exhibit 16: Product yield breakdown as of 1Q21



Source: Company data

In 2019-20, TOP's market GRM had also been eroded by its lower production capability to cut its jet production to zero to avoid the net loss on the depressed jet-Dubai margin. CFP would allow TOP to convert all loss-making HSFO into diesel and other light products, such as heavy and light naphtha and short and long residue, which would not only enhance TOP's overall market GRM but also allow TOP to create higher value via its downstream petrochemical production value chains.

Exhibit 17: TOP's refinery complex after CFP completion

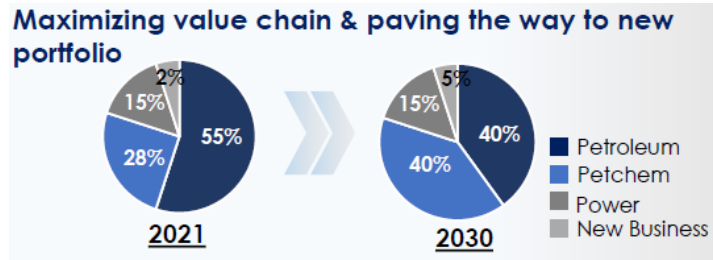
Unit	Capacity ('000 bbl/day)	Feedstock	Product
Crude distillation unit (CDU)	400.0	Crude oil	LPG, gasoline, reformat, diesel/jet fuel, fuel oil
Upgrading unit			
Catalytic reforming (CCR)	50.0	Heavy naphtha	Reformat and hydrogen-rich gas
Hydrocracking	128.0	Heavy vacuum gas oil	LPG, naphtha, diesel
Catalytic cracking (FCC)	10.4	Long residue	LPG, benzene, diesel, fuel oil
Thermal cracking unit	19.3	Short residue	Benzene, diesel, fuel oil
Isomerisation	20.0	Light naphtha	Isomerase, LPG
Lube base oil unit	6.0	Long residue, hydrocracker bottom	Base oil, TDAE, bitumen
Residue hydrocracking unit (RHCU)	78.0	Fuel oil/bitumen	Diesel, jet fuel, full-range naphtha

Sources: TOP; FSSIA estimates

Expansion into downstream olefins chain is critical to TOP's value creation

With TOP's strategic growth plan to enter into the downstream olefins business via M&A overseas and leveraging the excess feedstocks produced from CFP, we think the diversification into the downstream petrochemical business is both strategically essential and financially sound for TOP to sustain its competitiveness and enhance its earnings sustainability amid the highly uncertain oil demand outlook.

Exhibit 18: Strategic growth plan into olefins



Source: TOP

Exhibit 19: TOP's funding choices

Short term	
Crude credit term extension for oil procurement by 60 days	1.0
Long term	
New debt via hybrid bond (perpetual bond)	1.0
Long-term facilities (bank loan)	0.5
Asset monetisation (infrastructure fund for jetty and port)	0.5
Total	3.0

Source: TOP

According to management, TOP plans to expand into the downstream olefins business via investments in currently operating assets or under construction, but not for greenfield assets, as TOP believes that greenfield investments could generate a mismatch between the cash inflows from the acquired assets and the cash outflows for the investments.

TOP's long-term target to generate net profits from its petrochemical business at 40% of its total net profit, up from the 28% expected in 2021, could be achieved via its investments in and acquisitions of olefins assets overseas. After CFP, we estimate that TOP would have feedstocks of 0.6mtpa of LPG, 0.7mtpa of light naphtha, and 0.9mtpa of heavy naphtha, to be used to produce petrochemical products.

Exhibit 20: Potential olefins projects that TOP could consider co-investment in

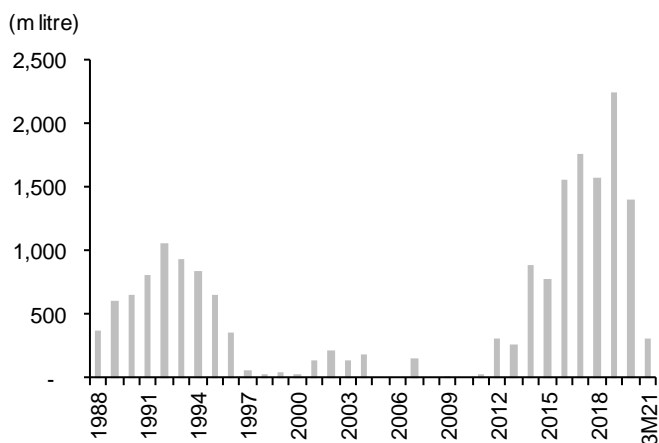
Operator	Location	Ethylene capacity	Feedstock	Target start-up date
SCC	Longson, Vietnam	1,050	Naphtha/ LPG/ Ethane	2023
Hengyi Petrochemical	Palau Muara Besar, Brunai	1,650	Naphtha/ LPG	2024
Lotte Chem Titan	Cilegon, Indonesia	1,000	Naphtha	2024
Chandra Asri	Merek, Indonesia	1,100	Naphtha	2025

Sources: Company data; FSSIA estimates

Improving market GRM outlook in 2H21

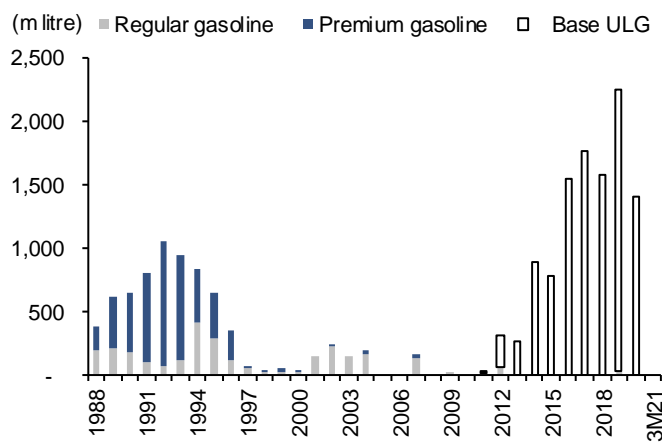
In 2021-22, the potential for TOP's GRM to recover looks strong, driven by the reopening of global economies and international flights, along with an increase in travel and tourism activities. We expect TOP's market GRM to gradually rise by 1-2/bbl to drive up its market GRM to USD3-4/bbl in 3Q21.

Exhibit 21: Total gasoline imports



Source: Department of Energy Business (DOEB)

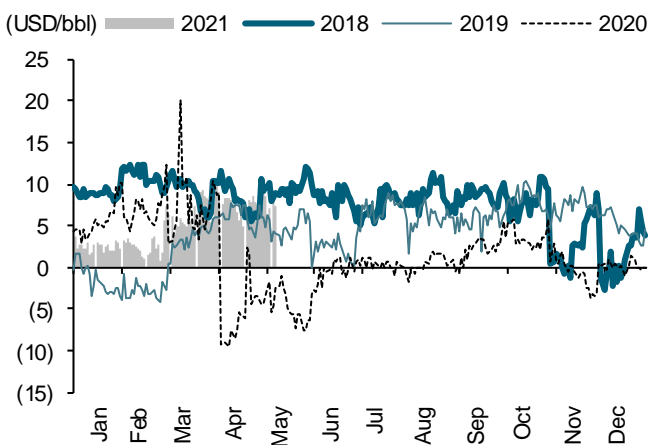
Exhibit 22: Total gasoline imports – breakdown by product type



Source: DOEB

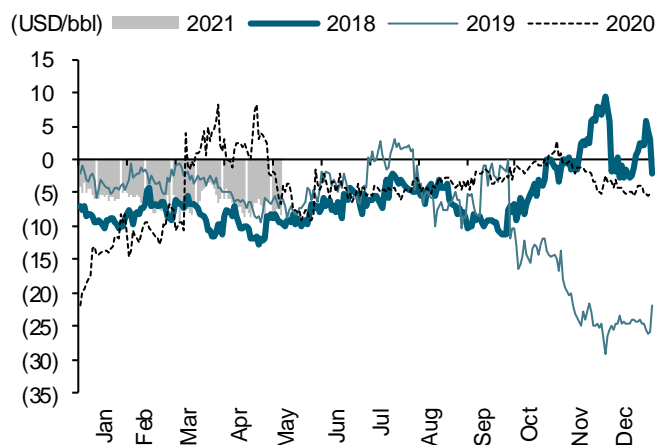
In particular, Thailand has imported high gasoline quantities to meet the rising domestic demand. Comparing the most resilient margin of gasoline-Dubai against the margins of diesel and jet over Dubai, we believe TOP's market GRM should improve by at least over USD1/bbl q-q to USD2-3/bbl in 2Q21, up from USD0.8/bbl in 1Q21.

Exhibit 23: 92 Octane Gasoline fob Spot Price - Dubai crude oil price



Source: Bloomberg

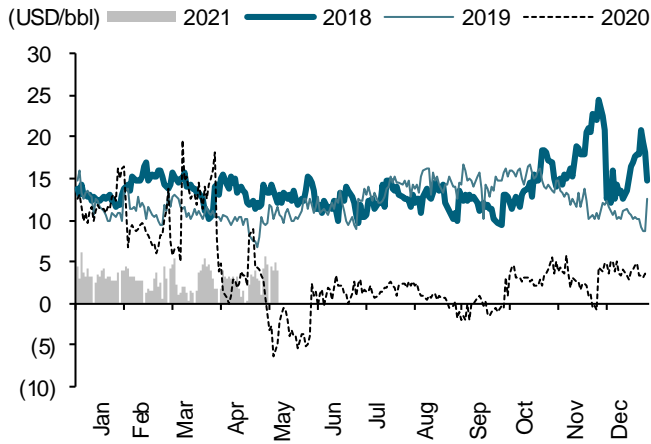
Exhibit 24: High-sulphur fuel oil Spot fob Singapore - Dubai crude oil price



Source: Bloomberg

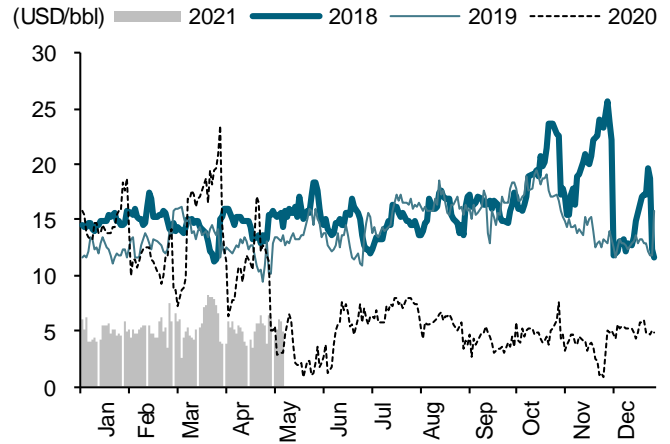
While the jet and diesel-Dubai margins have remained weak at USD4-6/bbl in 4Q21 due to the continued oversupply and weak demand, we think that by end-3Q21 the margins of diesel and jet-Dubai will rise by USD2-3/bbl, driven by the higher jet demand for international flights and tourism activities and the rising diesel demand from the higher economic activities once the full reopening of the global economy occurs by end-4Q21, based on our estimate.

Exhibit 25: Jet Kerosene fob Spot Price - Dubai crude oil price



Source: Bloomberg

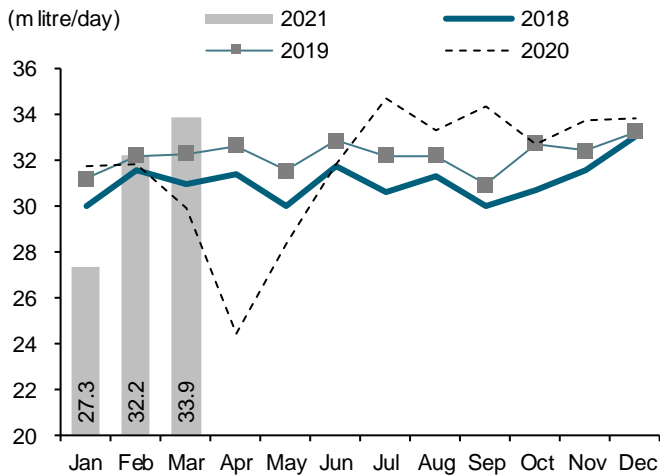
Exhibit 26: Gasoil (diesel) 0.5% Sulphur fob SG Spot Price - Dubai crude oil price



Source: Bloomberg

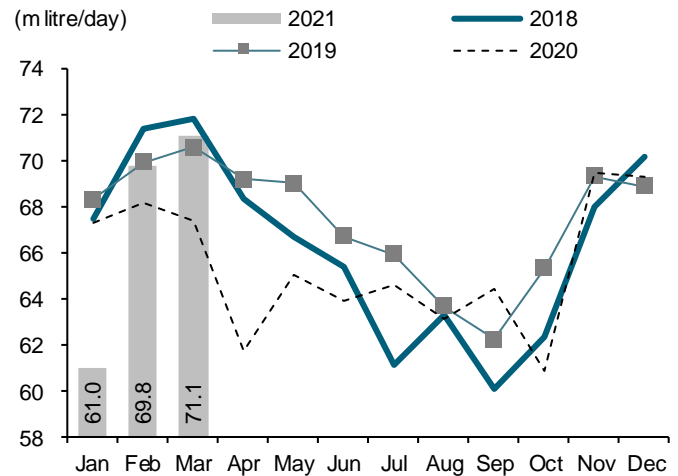
In Thailand, the oil demand has remained highly resilient, despite the ongoing lockdowns due to the resurgence of Covid-19. The gasoline and diesel demand had risen y-y in Feb-Mar after weakening y-y in Jan-21 due to the lockdown. We think the demand for gasoline and diesel could drop in Apr-Jun due to the third wave of Covid-19, while the demand could recover sharply in 3Q21 after the gradual reopening of the country in some tourism-focused provinces, like Phuket.

Exhibit 27: Gasoline consumption in Thailand



Source: DOEB

Exhibit 28: Diesel consumption in Thailand

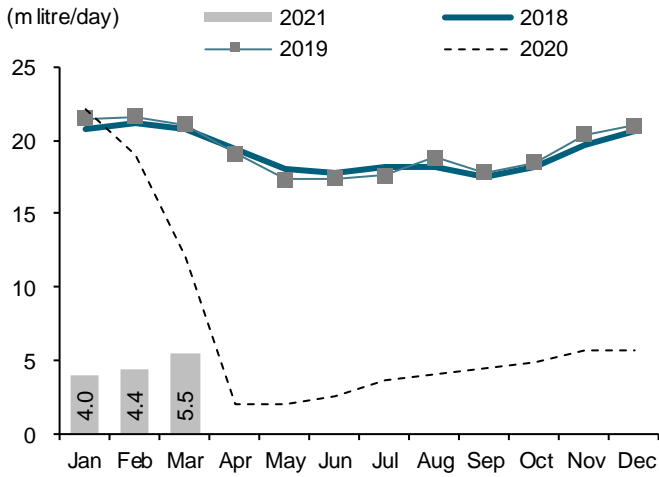


Source: DOEB

We believe the Thai government will continue to open up the country for international flights by 3Q21, given the rising rate of vaccinations nationwide, leading to a higher demand for jet fuel, which has remained depressed in 3M21 due to the ongoing ban on international tourism and flights.

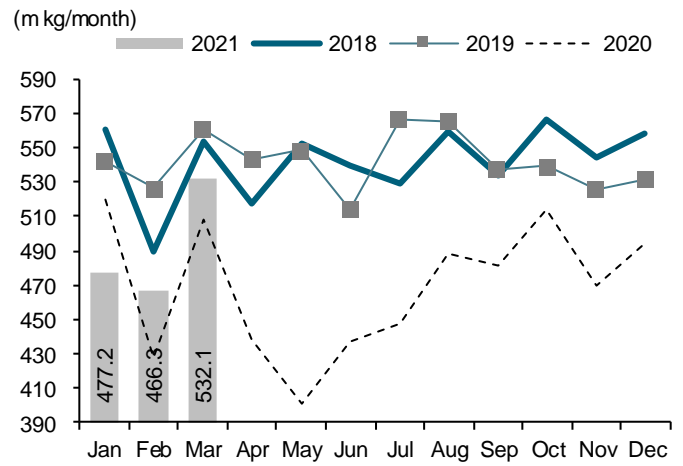
We also expect the LPG demand to recover by 3Q21 following the potential economic reopening, along with most economic activities recovering close to their pre-Covid-19 levels.

Exhibit 29: Jet consumption in Thailand



Source: DOEB

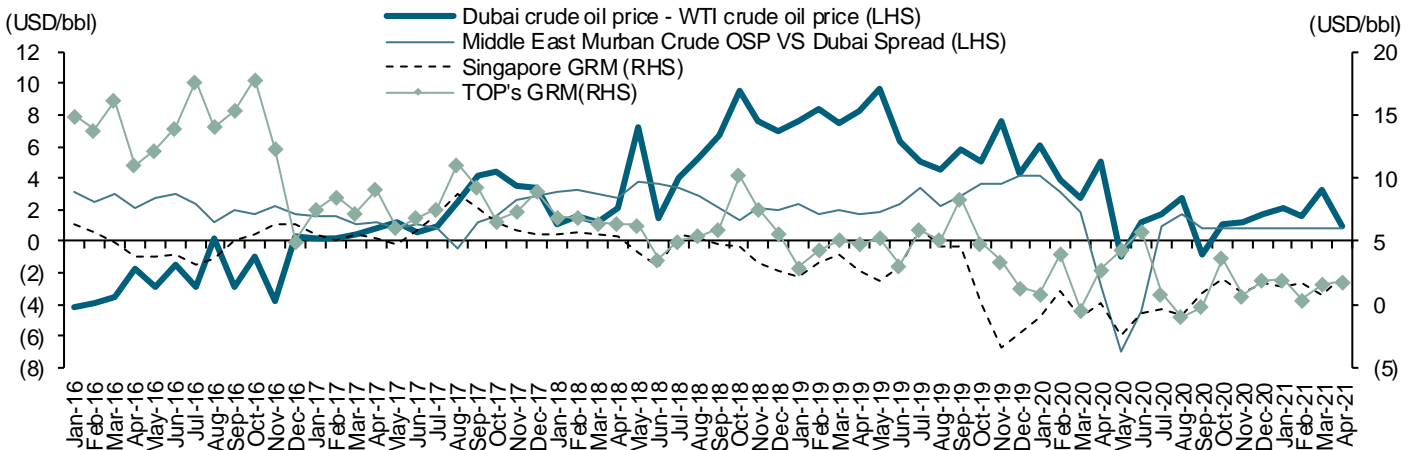
Exhibit 30: LPG consumption in Thailand



Source: DOEB

We project TOP's GRM to recover to USD4-5/bbl by 3Q21, driven by the higher margins of gasoline, diesel, and jet-Dubai, a higher utilisation rate by 10 ppt to 110% that should result in a lower cost per bbl by USD0.5/bbl, and relatively favourable crude premiums in the range of USD1-2/bbl, thanks to the higher supply of heavy crude from OPEC.

Exhibit 31: Dubai-WTI crude premium, Singapore GRM and TOP's GRM



Source: Bloomberg

Valuation

We maintain BUY and our TP of THB74, based on 8.3x 2021E EV/EBITDA, to reflect TOP's strong 2021E net profit turnaround and improving industry refinery margin outlook that has already started in 1Q21. We believe TOP's well-diversified business portfolio, improving crude strategy, and strong jet-Dubai margin should be key catalysts for its strong earnings in 2021.

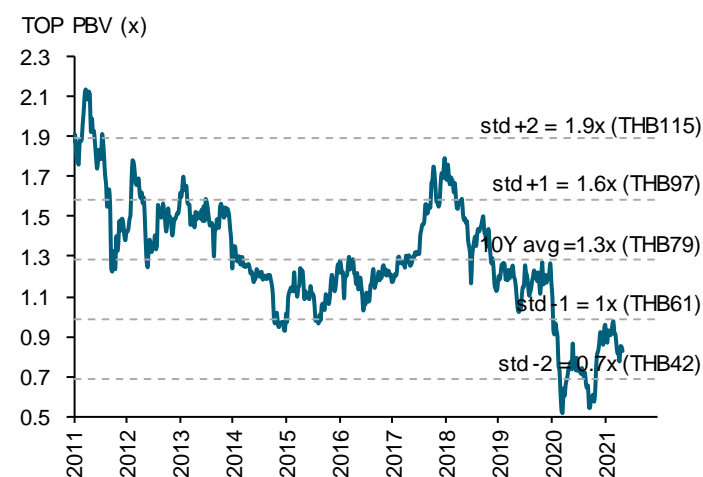
We think investors' concerns over the CFP investment are overdone, given TOP's strong balance sheet with its sufficient funding plan for its growth projects and M&A, while its CFP investment could yield an IRR of 13.4%, based on our base case scenario, once CFP commences its COD in 2024.

Exhibit 32: Peers comparison

Company	BBG	Rec	Share price		Upside	Market Cap	21E-23E EPS CAGR	PE		ROE		PBV		EV/EBITDA	
			Current (LCY)	Target (LCY)				(%)	(USD m)	21E (x)	22E (x)	21E (%)	22E (%)	21E (x)	22E (x)
THAILAND															
Thai Oil	TOP TB	BUY	58.50	74.00	26	3,798	6.0	8.7	7.5	11.4	12.5	1.0	0.9	7.4	7.0
Star Petro	SPRC TB	BUY	9.50	12.00	26	1,311	10.2	8.0	6.2	18.4	21.4	1.4	1.3	4.7	3.6
Bangchak	BCP TB	BUY	24.80	38.00	53	1,071	28.4	13.0	6.0	5.6	11.5	0.7	0.7	9.2	7.1
Esso Thailand	ESSO TB	BUY	8.35	14.30	71	920	4.0	6.6	6.4	26.3	22.2	1.5	1.3	5.0	4.4
Ptt Global Cheml	PTTGC TB	BUY	67.00	86.00	28	9,565	9.4	15.6	12.1	6.9	9.0	1.1	1.1	10.1	8.7
Irpc	IRPC TB	BUY	4.08	5.30	30	2,653	33.3	15.8	7.4	6.9	13.6	1.1	1.0	7.7	5.1
Tipco Asphalt	TASCO TB	BUY	19.40	22.50	16	974	0.8	13.7	10.0	14.8	19.1	2.0	1.8	10.6	7.5
Thailand avg						20,292	8.9	13.2	9.5	9.7	12.3	1.1	1.1	8.7	7.3
INDIA															
Bharat Petro	BPCL IN	NA	443.65	NA	NA	13,172	2.5	10.1	10.6	24.6	19.2	2.1	1.9	9.0	9.4
Hindustan Petro	HPCL IN	NA	251.85	NA	NA	5,027	(3.1)	4.8	6.0	24.1	17.4	1.1	1.0	4.4	5.4
Indian Oil	IOCL IN	NA	102.00	NA	NA	13,300	6.3	6.7	6.3	14.6	13.9	0.9	0.9	5.7	5.6
India avg						31,499	1.9	7.8	8.1	20.3	16.7	1.4	1.3	6.9	7.2
TAIWAN															
Formosa Petro	6505 TT	NA	99.00	NA	NA	33,785	(1.4)	21.1	21.5	12.1	12.1	2.8	2.7	13.3	13.5
Taiwan avg						33,785	(1.4)	21.1	21.5	12.1	12.1	2.8	2.7	13.3	13.5
SOUTH KOREA															
Sk Innovation	096770 KS	NA	278,000	NA	NA	22,799	30.5	45.9	25.6	3.6	6.7	1.6	1.5	11.6	10.2
Gs Holdings	078930 KS	NA	49,100	NA	NA	4,046	4.4	6.0	6.1	8.4	7.7	0.5	0.5	8.7	8.2
S-Oil	010950 KS	NA	99,900	NA	NA	9,975	(0.7)	11.8	12.3	16.4	14.2	1.8	1.6	7.4	7.9
South Korea avg						36,820	18.6	32.3	19.8	7.6	8.8	1.5	1.4	10.2	9.4
Refinery under coverage						20,292	8.9	13.2	9.5	9.7	12.3	1.1	1.1	8.7	7.3
Average (all)						122,395	15.57	19.75	15.57	12.47	12.31	1.79	1.69	9.94	9.60

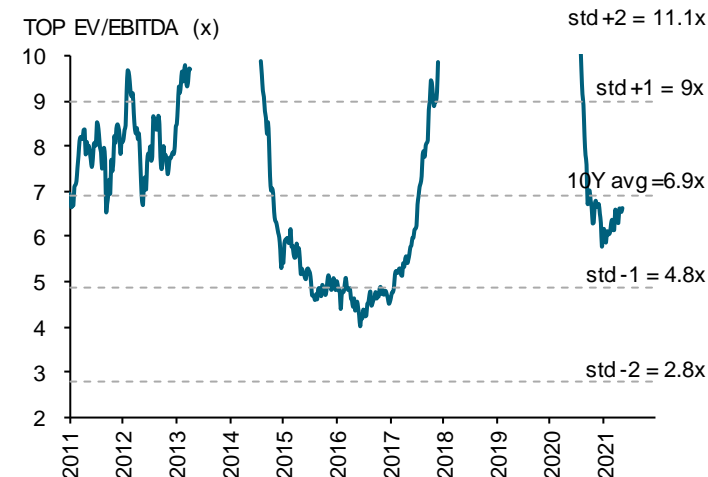
Share prices as of 17 May 2021
Sources: FSSIA estimates

Exhibit 33: Prospective P/BV band



Sources: Bloomberg; TOP

Exhibit 34: Prospective EV/EBITDA band



Sources: Bloomberg; TOP

Financial Statements

Thai Oil

Profit and Loss (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Revenue	361,768	242,840	250,912	265,408	265,816
Cost of goods sold	(348,029)	(247,746)	(214,402)	(224,652)	(224,144)
Gross profit	13,740	(4,906)	36,510	40,756	41,673
Other operating income	-	-	-	-	-
Operating costs	(2,546)	(2,650)	(2,738)	(2,897)	(2,901)
Operating EBITDA	11,193	(7,556)	33,771	37,860	38,772
Depreciation	(7,085)	(7,554)	(15,690)	(17,085)	(17,922)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	4,109	(15,110)	18,081	20,775	20,850
Net financing costs	2,372	9,016	(3,198)	(3,093)	(2,989)
Associates	1,276	2,566	2,694	2,829	2,970
Recurring non-operating income	1,276	2,566	2,694	2,829	2,970
Non-recurring items	0	0	0	0	0
Profit before tax	7,757	(3,529)	17,577	20,510	20,831
Tax	(1,240)	647	(3,515)	(4,102)	(4,166)
Profit after tax	6,516	(2,882)	14,062	16,408	16,665
Minority interests	(240)	(419)	(419)	(419)	(419)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	6,277	(3,301)	13,643	15,989	16,246
Non-recurring items & goodwill (net)	0	0	0	0	0
Recurring net profit	6,277	(3,301)	13,643	15,989	16,246
Per share (THB)					
Recurring EPS *	3.08	(1.62)	6.69	7.84	7.96
Reported EPS	3.08	(1.62)	6.69	7.84	7.96
DPS	1.50	2.00	3.01	3.53	3.58
Diluted shares (used to calculate per share data)	2,040	2,040	2,040	2,040	2,040
Growth					
Revenue (%)	(7.1)	(32.9)	3.3	5.8	0.2
Operating EBITDA (%)	(45.9)	nm	nm	12.1	2.4
Operating EBIT (%)	(69.4)	nm	nm	14.9	0.4
Recurring EPS (%)	(38.2)	nm	nm	17.2	1.6
Reported EPS (%)	(38.2)	nm	nm	17.2	1.6
Operating performance					
Gross margin inc. depreciation (%)	1.8	(5.1)	8.3	8.9	8.9
Gross margin of key business (%)	1.8	(5.1)	8.3	8.9	8.9
Operating EBITDA margin (%)	3.1	(3.1)	13.5	14.3	14.6
Operating EBIT margin (%)	1.1	(6.2)	7.2	7.8	7.8
Net margin (%)	1.7	(1.4)	5.4	6.0	6.1
Effective tax rate (%)	16.0	18.3	20.0	20.0	20.0
Dividend payout on recurring profit (%)	48.8	(123.6)	45.0	45.0	45.0
Interest cover (X)	(2.3)	1.4	6.5	7.6	8.0
Inventory days	31.0	38.9	44.1	49.1	50.6
Debtor days	23.6	26.4	22.0	24.9	25.5
Creditor days	26.6	25.4	26.3	35.7	36.8
Operating ROIC (%)	2.2	(7.9)	7.4	8.1	8.1
ROIC (%)	2.4	(5.1)	6.1	5.8	5.5
ROE (%)	5.2	(2.8)	11.4	12.5	11.9
ROA (%)	1.6	(3.5)	4.8	4.5	4.1
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Oil refinery	298,325	177,280	185,352	199,848	200,256
Lubed-based oil refinery	18,096	19,501	19,501	19,501	19,501
Petrochemical	28,390	27,070	27,911	27,670	27,670
Power generation	5,519	6,071	5,230	5,471	5,471

Sources: Thai Oil; FSSIA estimates

Financial Statements

Thai Oil

Cash Flow (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Recurring net profit	6,277	(3,301)	13,643	15,989	16,246
Depreciation	7,085	7,554	15,690	17,085	17,922
Associates & minorities	-	-	-	-	-
Other non-cash items	-	-	-	-	-
Change in working capital	(361)	2,096	51	(1,479)	(42)
Cash flow from operations	13,000	6,349	29,384	31,595	34,126
Capex - maintenance	-	-	-	-	-
Capex - new investment	(27,467)	0	(37,099)	(15,889)	(15,905)
Net acquisitions & disposals	-	-	-	-	-
Other investments (net)	49,798	(4,375)	(35,623)	(35,623)	(35,623)
Cash flow from investing	22,331	(4,375)	(72,722)	(51,512)	(51,528)
Dividends paid	(12,750)	(3,060)	(6,139)	(7,195)	(7,311)
Equity finance	0	0	0	0	0
Debt finance	(2,300)	(2,363)	24,568	58,404	18,404
Other financing cash flows	20,533	(18,161)	13,113	13,248	13,389
Cash flow from financing	5,482	(23,584)	31,541	64,457	24,483
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	40,813	(21,610)	(11,796)	44,540	7,080
Free cash flow to firm (FCFF)	38,554.74	6,265.67	(39,139.80)	(15,813.68)	(13,393.56)
Free cash flow to equity (FCFE)	53,563.05	(18,550.29)	(5,656.81)	51,735.50	14,391.03
Per share (THB)					
FCFF per share	18.90	3.07	(19.19)	(7.75)	(6.57)
FCFE per share	26.26	(9.09)	(2.77)	25.36	7.05
Recurring cash flow per share	6.55	2.08	14.38	16.21	16.75
Balance Sheet (THB m) Year Ending Dec					
Tangible fixed assets (gross)	233,349	279,568	316,668	332,557	348,462
Less: Accumulated depreciation	(126,789)	(134,343)	(150,034)	(167,119)	(185,040)
Tangible fixed assets (net)	106,559	145,225	166,634	165,438	163,422
Intangible fixed assets (net)	0	0	0	0	0
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	32,442	24,521	27,214	30,043	33,013
Cash & equivalents	74,854	53,244	41,448	85,988	93,069
A/C receivable	22,466	12,702	17,564	18,579	18,607
Inventories	30,292	22,461	29,359	31,055	31,103
Other current assets	7,064	25,822	25,822	25,822	25,822
Current assets	134,676	114,229	114,193	161,444	168,601
Other assets	9,767	22,213	77,714	98,948	119,898
Total assets	283,445	306,188	385,755	455,873	484,934
Common equity	119,973	116,229	123,732	132,526	141,462
Minorities etc.	3,951	3,889	4,091	4,291	4,491
Total shareholders' equity	123,924	120,118	127,824	136,818	145,953
Long term debt	119,873	135,958	162,121	222,121	242,121
Other long-term liabilities	981	21,491	56,926	56,926	56,926
Long-term liabilities	120,854	157,449	219,047	279,047	299,047
A/C payable	25,015	9,517	21,328	22,560	22,594
Short term debt	2,912	5,665	5,556	5,447	5,339
Other current liabilities	10,740	13,438	12,000	12,001	12,001
Current liabilities	38,667	28,620	38,884	40,008	39,934
Total liabilities and shareholders' equity	283,445	306,188	385,755	455,873	484,934
Net working capital	24,067	38,030	39,417	40,895	40,936
Invested capital	172,836	229,989	310,979	335,324	357,270
* Includes convertibles and preferred stock which is being treated as debt					
Per share (THB)					
Book value per share	58.81	56.97	60.65	64.96	69.34
Tangible book value per share	58.81	56.97	60.65	64.96	69.34
Financial strength					
Net debt/equity (%)	38.7	73.6	98.8	103.5	105.8
Net debt/total assets (%)	16.9	28.9	32.7	31.1	31.8
Current ratio (x)	3.5	4.0	2.9	4.0	4.2
CF interest cover (x)	(33.2)	3.1	10.8	22.9	11.1
Valuation					
Recurring P/E (x) *	19.5	(37.1)	9.0	7.7	7.5
Recurring P/E @ target price (x) *	24.1	(45.7)	11.1	9.4	9.3
Reported P/E (x)	19.5	(37.1)	9.0	7.7	7.5
Dividend yield (%)	2.5	3.3	5.0	5.9	6.0
Price/book (x)	1.0	1.1	1.0	0.9	0.9
Price/tangible book (x)	1.0	1.1	1.0	0.9	0.9
EV/EBITDA (x) **	15.6	(28.4)	7.5	7.1	7.3
EV/EBITDA @ target price (x) **	18.1	(32.2)	8.3	7.8	8.0
EV/invested capital (x)	1.0	0.9	0.8	0.8	0.8
* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income					

Sources: Thai Oil; 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	PHOL	PLANB	PLANET
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SE-ED	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	TMB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TSC	TSR	TSTE	TSTH	TTA
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	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	TMB	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 FSS International Investment Advisory Securities Co., Ltd

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Company	Ticker	Price	Rating	Valuation & Risks
Thai Oil	TOP TB	THB 60.00	BUY	Downside risks to our EV/EBITDA-based TP are a sharp rise in oil price and weak demand for refined oil products.
Star Petroleum Refining	SPRC TB	THB 9.70	BUY	TP is based on EV/EBITDA. Downside risks are a sharp rise in oil price and weak demand for refined oil products.
Bangchak Corp	BCP TB	THB 26.25	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.
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.
PTT Global Chemical	PTTGC TB	THB 66.75	BUY	The key downside risks to our EV/EBITDA-based TP are the weaker-than-expected HDPE price and HDPE-naphtha margin.
IRPC PCL	IRPC TB	THB 4.04	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.
Tipco Asphalt	TASCO TB	THB 19.40	BUY	Downside risks to our EV/EBITDA multiple based TP include 1) a lower asphalt margin due to a oversupply in Asia on the back of faster recovery of utilisation rate for global refiners; and 2) a lower-than-expected supply of alternative crudes and asphalt.

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 18-May-2021 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

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

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

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

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

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

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

Industry Recommendations

Overweight. The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

Neutral. The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

Underweight. The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

Country (Strategy) Recommendations

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

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

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