

7 JULY 2021

THAILAND / OIL & GAS

IRPC PCL IRPC TB

BUY

UNCHANGED

TARGET PRICE	THB5.30
CLOSE	THB3.90
UP/DOWNSIDE	+35.9%
PRIOR TP	THB5.30
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+23.2%

ผลิตภัณฑ์พิเศษและ UCF เป็นกุญแจสำคัญ

ปัจจัยบวก 3 ประการรออยู่ข้างหน้า

ในระหว่างการประชุมทางโทรศัพท์กับ FSSIA ผู้บริหารระดับสูงถึงปัจจัยบวก 3 ประการที่น่าจะช่วยกระตุ้นแนวโน้มการเติบโตของกำไรสุทธิของ IRPC ในปี 2021-23 ประการแรก Gross Integrated Margin (GIM) ของ IRPC ควรเพิ่มแบบก้าวกระโดดเป็นกว่า USD15/bbl ใน 2Q21 และมีแนวโน้มปรับขึ้นไปทรงตัวเหนือ USD14/bbl ในช่วง 2H21 โดยได้ปัจจัยหนุนจากการเพิ่มขึ้นของอัตรากำไรของ ABS และค่าการกลั่น (GRM) ที่ดีขึ้น ประการที่สอง อัตรากำไรควรดีขึ้นอย่างต่อเนื่องได้จากกลยุทธ์ที่เป็นรูปธรรมของ IRPC ในการเพิ่มสัดส่วนรายได้ของผลิตภัณฑ์เคมีพิเศษจาก 17% ในปี 2020 เป็น 30% ภายในปี 2024 ประการที่สาม จากการคาดการณ์ของเรา แผนการลงทุนขั้นสุดท้ายที่บริษัทฯ เพิ่งประกาศสำหรับโครงการ 'Ultra Clean Fuel' (UCF) ซึ่งเป็นโครงการปรับปรุงประสิทธิภาพการกลั่นและคุณภาพน้ำมันดีเซลให้เป็นมาตรฐานยูโร 5 ควรทำให้ GIM ดีขึ้นอีก USD1/bbl

ABS และ EPS เป็นปัจจัยบวกให้การเติบโตของ IRPC พื้นตัว

จากกำลังการผลิต ABS ที่ 180ktpa และ Expanded Polystyrene (EPS) ที่ 48ktpa ของ IRPC เราเชื่อว่าอัตรากำไรของ ABS ที่คาดว่าจะอยู่ในระดับสูงจากความต้องการที่มีมากและเหตุไฟไหม้ที่ Ming Dih Chemical (not listed) ซึ่งเป็นผู้ผลิต EPS อีกรายเดียวในประเทศไทยเมื่อไม่นานมานี้จะช่วยให้ประโยชน์แก่ IRPC อย่างมากจากอัตรากำไรระหว่าง ABS และ SM ที่ทรงตัวในระดับสูงและอุปทาน EPS ที่ลดลงในประเทศไทยในช่วง 2H21 และอาจลากยาวไปถึงปี 2022

UCF: โครงการมูลค่าเพิ่มที่จะเสริมสร้าง GRM ให้สูงขึ้น

เพื่อปฏิบัติตามนโยบายของกระทรวงพลังงานสำหรับผลิตภัณฑ์ปิโตรเลียมที่กลั่นตามมาตรฐานยูโร 5 ที่มีผลทั่วประเทศเมื่อวันที่ 1 ม.ค. 24 IRPC มุ่งมั่นที่จะทำโครงการ UCF ให้สำเร็จ โครงการซึ่งมีมูลค่า 13.3 พัน ลบ. ดังกล่าวกำหนดเริ่มดำเนินงานเชิงพาณิชย์ (COD) ในเดือน ม.ค. 24 เราคาดว่า UCF จะทำให้ GIM สุทธิของบริษัทฯ เพิ่ม USD1/bbl โดยมีสมมติฐานจาก GRM ที่เพิ่ม USD1.5/bbl จากราคาน้ำมันดีเซลมาตรฐานยูโร 5 ที่สูงขึ้น เมื่อเทียบกับต้นทุนที่เพิ่มขึ้น USD0.5/bbl ซึ่งจะก่อให้เกิดกำไรสุทธิต่อปี 2 พัน ลบ. แก่ IRPC

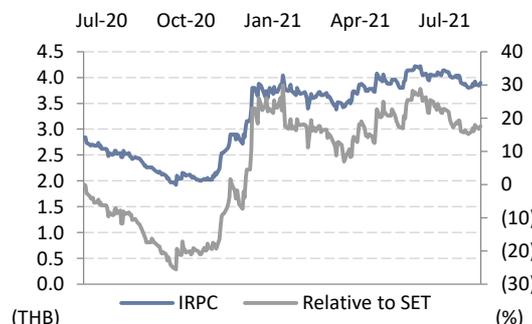
เกาะกระแสความต้องการในธุรกิจรถยนต์ เครื่องใช้ขนาดใหญ่ในครัวเรือน

(White Goods) และขนส่ง

เราคงคำแนะนำซื้อที่ราคาเป้าหมาย 5.3 บาทซึ่งคิดจากค่า 2021E EV/EBITDA ที่ 9x ซึ่งต่ำกว่าค่า One-Year Forward เฉลี่ยย้อนหลัง 11 ปีของ IRPC เราเชื่อว่า IRPC เป็นหุ้นที่ดีที่สุดในของไทยในแง่อัตรากำไรขาขึ้นของ ABS และ EPS รวมถึงการฟื้นตัวของ GRM ที่น่าจะเกิดตามการกลับมาเปิดกิจกรรมทางเศรษฐกิจของโลกใน 2H21 เรามอง IRPC เป็นผู้ที่ได้รับประโยชน์สำคัญจากการเติบโตของความต้องการรถยนต์และเครื่องใช้ไฟฟ้าภายในบ้าน (ABS และ EPS) ของโลก รวมถึง GRM ที่สูงขึ้น (ธุรกิจขนส่ง)

KEY STOCK DATA

YE Dec (THB m)	2020	2021E	2022E	2023E
Revenue	195,659	244,442	239,120	242,049
Net profit	(6,808)	5,261	11,267	12,462
EPS (THB)	(0.33)	0.26	0.55	0.61
vs Consensus (%)	-	(5.1)	154.6	145.0
EBITDA	12,458	19,114	28,654	30,940
Core net profit	(6,808)	5,261	11,267	12,462
Core EPS (THB)	(0.33)	0.26	0.55	0.61
Chg. In EPS est. (%)	nm	-	-	-
EPS growth (%)	nm	nm	114.1	10.6
Core P/E (x)	(11.7)	15.1	7.1	6.4
Dividend yield (%)	1.3	3.3	7.1	7.8
EV/EBITDA (x)	12.2	7.5	4.9	3.9
Price/book (x)	1.1	1.0	0.9	0.8
Net debt/Equity (%)	96.1	79.6	69.9	44.2
ROE (%)	(8.6)	6.9	13.6	13.7



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(5.3)	(1.5)	42.3
Relative to country (%)	(4.1)	(3.7)	22.8
Mkt cap (USD m)	2,476		
3m avg. daily turnover (USD m)	33.0		
Free float (%)	52		
Major shareholder	PTT Plc. (48%)		
12m high/low (THB)	4.32/1.92		
Issued shares (m)	20,434.42		

Sources: Bloomberg consensus; FSSIA estimates



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บทวิเคราะห์ฉบับนี้แปลมาจากบทวิเคราะห์ของ FSSIA ฉบับวันที่ 7 กรกฎาคม 2021

Investment thesis

We think IRPC's gross integrated margin will be driven by its upstream hygiene and value-added (UHV) unit, a higher refinery utilisation rate, and a favourable petrochemical product margin. With most of IRPC's upgrading and capacity expansion projects completed in 2017, we project the company's earnings to expand over 2021-22, led by: 1) y-y higher volumes for its refinery, aromatics and lube units due to the absence of major planned shutdowns; and 2) a market GRM recovery on the back of our projected diesel-Dubai spread recovery.

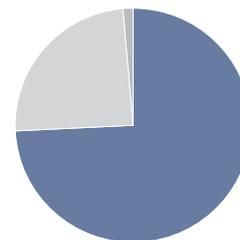
Company profile

IRPC is a fully integrated refinery and naphtha-based petrochemical producer. The company was founded in 1978 and listed in 1995.

www.irpc.co.th

Principal activities (revenue, 2020)

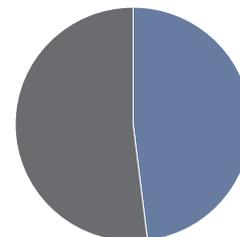
- Petroleum products - 74.2 %
- Petrochemical products - 24.4 %
- Other business - 1.4 %



Source: IRPC PCL

Major shareholders

- PTT Plc. - 48.1 %
- Others - 52.0 %



Source: IRPC PCL

Catalysts

Rising margins of PP-naphtha, SM and ABS-benzene, and market GRM are key potential earnings drivers for IRPC.

Risks to our call

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.

Event calendar

Date	Event
Aug 2021	2Q21 results announcement

Key assumptions

	2021E	2022E	2023E
Oil price (USD/bbl)	52	50	48
Olefin utilisation rate (%)	93	94	95
Refinery utilisation rate (%)	96	97	98
Market GRM (USD/bbl)	1.7	4.8	5.1
Market GIM (USD/bbl)	11.8	14.9	15.6
HDPE-naphtha (USD/t)	473	532	577
PP-naphtha (USD/t)	573	632	677

Source: FSSIA estimates

Earnings sensitivity

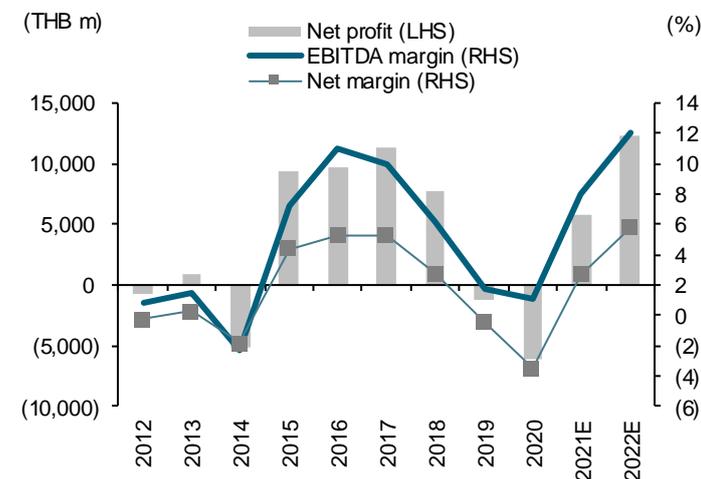
- For every 1% increase in avg. Dubai oil price, we project 2021 earnings to rise 1.4%, and vice versa, all else being equal.
- For every 1% increase in market GRM, we estimate 2021 earnings to rise 1.2%, and vice versa, all else being equal.
- Stability in crude oil price, rising diesel cracks and low crude premiums are key for earnings growth.

Source: FSSIA estimates

Thailand's best refinery turnaround and specialty growth play

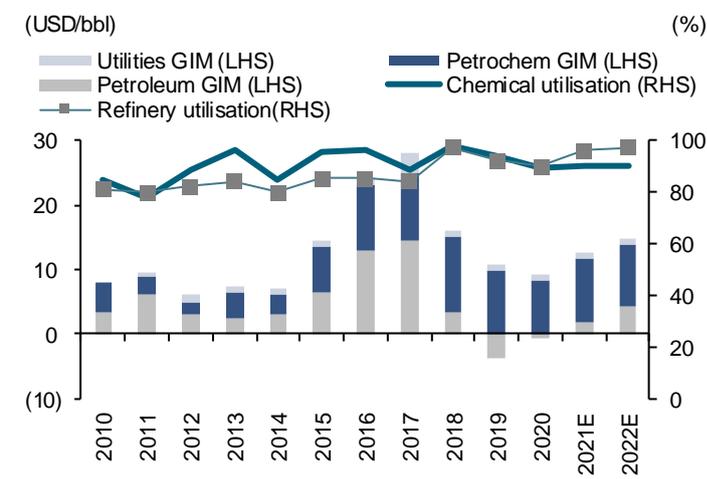
During our FSSIA conference call, management pointed out three key catalysts that should propel IRPC's net profit growth momentum in 2021-23. We project that IRPC's net profit will turn around from a net loss of THB6.8b in 2020 to a net profit of THB5.3b in 2021, THB11.3b in 2022, and THB12.5b in 2023. The key driver would come from the strong petrochemical product margins, which include polypropylene (PP) and acrylonitrile butadiene styrene (ABS), lube, and the GRM recovery that we project to start in 2H21.

Exhibit 1: Net profit, EBITDA margin, and net margin



Sources: IRPC; FSSIA estimates

Exhibit 2: GIM breakdown vs utilisation rate



Sources: IRPC; FSSIA estimates

We see three net profit catalysts in 2021-23:

First, IRPC's GIM should jump markedly to over USD15/bbl in 2Q21, and is likely to rise to stay above USD14/bbl in 2H21, backed by the margin strength of ABS and a likely windfall demand for EPS in Thailand, as well as the projected improving GRM.

Second, the margin expansion should go from strength to strength given IRPC's clear strategy to increase its revenue proportion from specialty chemical products from 17% in 2020 to 30% by 2024. IRPC's specialty chemical products mainly include ABS, polystyrene (PS), and EPS

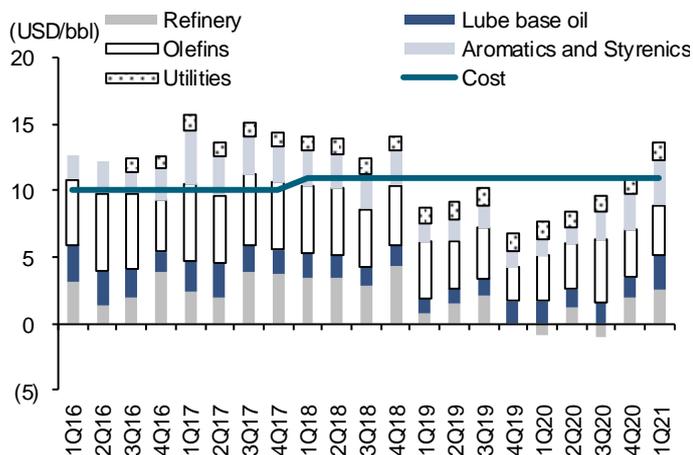
Third, the recently announced Final Investment Plan for its UCF project, a project to improve refinery efficiency and diesel quality up to Euro V standards, should further improve its GIM by USD1/bbl, based on our estimate.

Higher GIM by USD2-5/bbl in 2Q21-2H21

We project IRPC’s GIM to jump markedly to over USD15/bbl in 2Q21, likely rising to stay above USD14/bbl in 2H21, backed by the margin strength of ABS and a likely windfall demand for EPS in Thailand, along with the projected improving GRM.

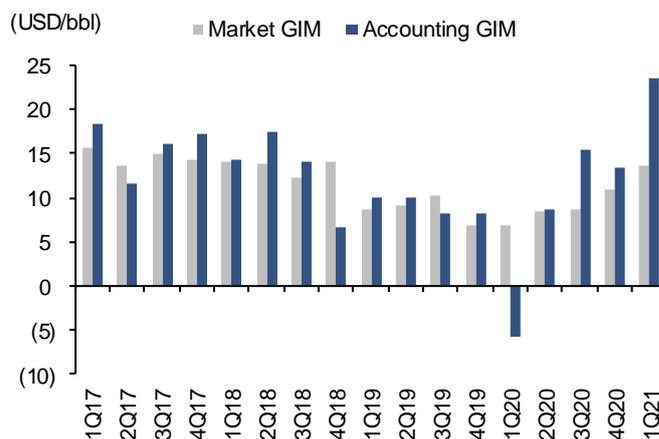
In 2019-2Q20, IRPC’s market GIM, excluding stock gain (loss), was below its estimated total cost of USD11/bbl, resulting in continued quarterly net losses in 1Q19-3Q20. However, in 4Q20, IRPC’s market GIM had surpassed its cost and returned to operating profitability in 1Q21 when its market GIM hit 13.7/bbl.

Exhibit 3: Accounting GIM breakdown vs cost



Source: IRPC

Exhibit 4: Market GIM vs accounting GIM



Source: IRPC

The key drivers to turn around IRPC’s market GIM include the stronger margins of ABS under IRPC’s aromatics and styrenics group and PP under the olefins group. We believe ABS will be IRPC’s key winning product in 2021-22, as we project the ABS-SM margin to remain high at over USD1,500/t, supported by the strong demand for automobile parts and electrical and electronics (E&E) appliances. In addition, IRPC is likely to benefit the most from ABS among the three Thai petrochemical companies that produce benzene, as only IRPC has converted its upstream benzene into downstream ABS.

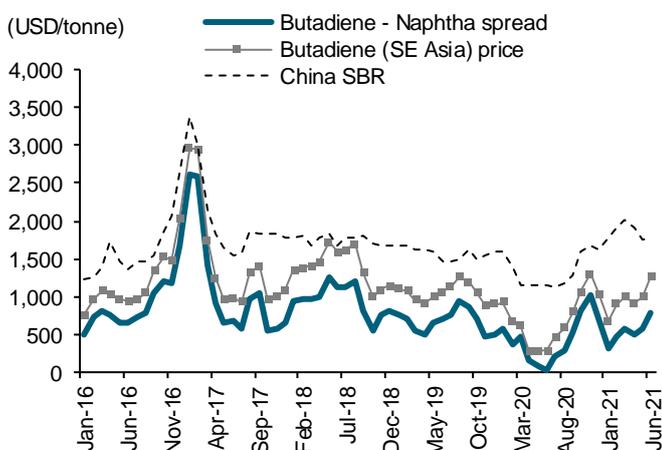
Exhibit 5: Capacity comparison of benzene and derivatives

Benzene capacity	TOP	PTTGC	IRPC	Unit
Capacity	0.26	0.70	0.14	mtpa
Production	0.25	0.60	0.14	mtpa
Internal consumption	0.04	0.42	0.14	mtpa
External sales	0.21	0.18	0.00	mtpa
Downstream capacity				
Linear Alkyl Benzene (LAB)	0.10	-	-	mtpa
Phenol	-	0.91	-	mtpa
Styrene Monomer (SM)	-	-	0.26	mtpa
Acrylonitrile Butadiene Styrene (ABS)	-	-	0.18	mtpa
Polystyrene (PS)	-	-	0.11	mtpa

Source: IRPC

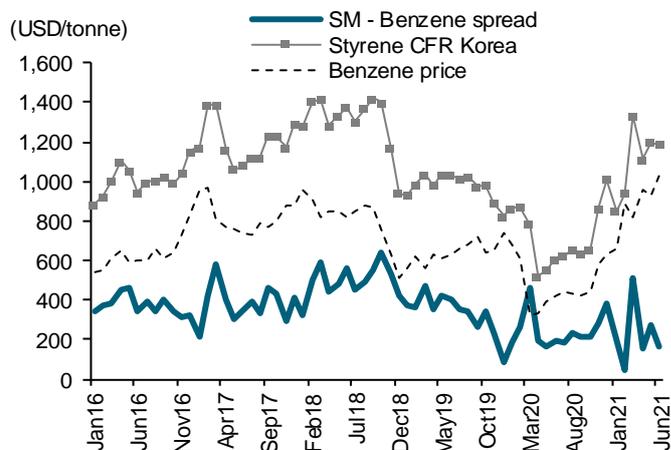
Among the three key producers in the benzene product value chain, while IRPC has the smallest capacity of upstream benzene at only 0.14mtpa, IRPC produces the largest production of benzene downstream products and uses all of its benzene produced internally.

Exhibit 6: Naptha spread – butadiene and SBR price



Source: Bloomberg

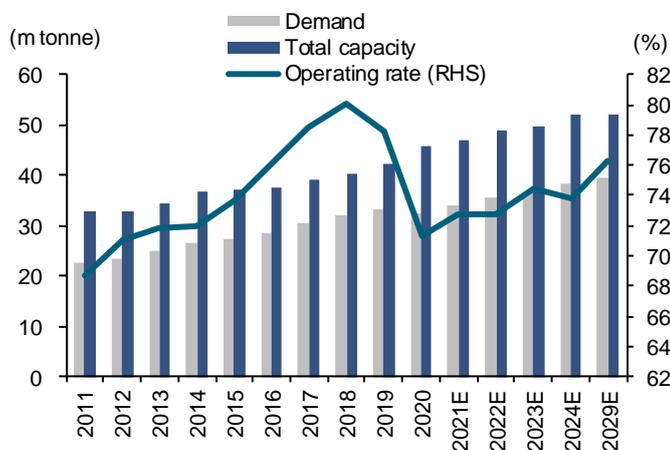
Exhibit 7: Benzene spread – styrene



Source: Bloomberg

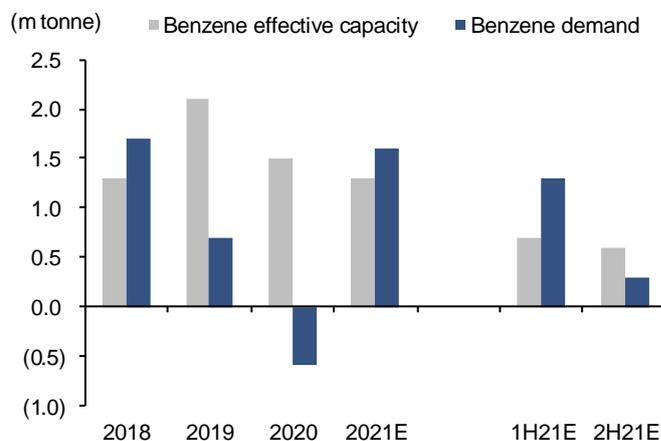
The margin of benzene and its derivatives has stayed strong in 1H21, driven by the solid demand for its downstream styrene monomer (SM)-based products, mainly for automobile parts and home E&E appliances, or white goods. ABS' applications are mainly for automobile parts and home E&E appliances that are currently witnessing strong demand and tight supply.

Exhibit 8: AP/ME benzene supply, demand, world operating rate



Source: TOP

Exhibit 9: Benzene capacity



Source: TOP

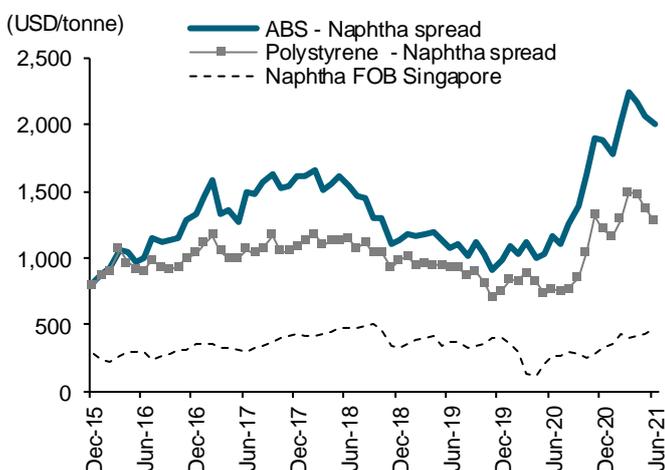
ABS is IRPC's crown jewel in 2021-22

The following paragraphs are excerpted from "Feeling the pinch from US ethane and derivatives exports", FSSIA's report on [Thailand Energy & Chemical, dated 02 July 2021](#).

ABS, a key downstream byproduct of SM and benzene for IRPC, has seen its margin jump by over 60% from its bottom at a USD1,000/t average level in 2019-20 to its USD2,400/t peak in 2Q21, and has currently softened to over USD1,800/t at end-Jun-21.

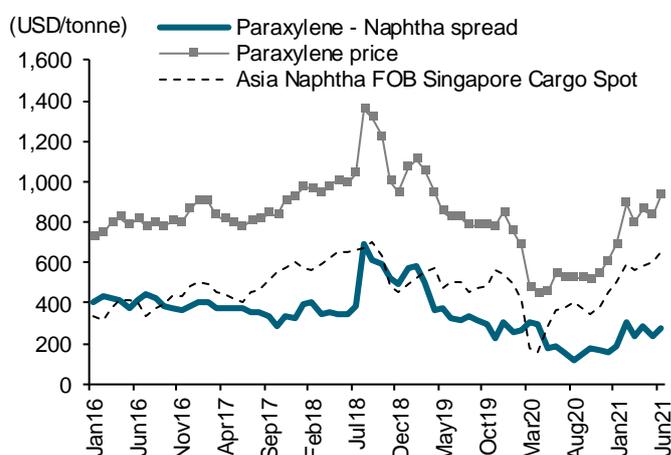
ABS provides favourable mechanical properties such as impact resistance, toughness, and rigidity when compared with other common polymers. A variety of modifications can be made to improve impact resistance, toughness, and heat resistance. The impact resistance can be amplified by increasing the proportions of polybutadiene in relation to styrene and also acrylonitrile, although this causes changes in other properties. Impact resistance does not fall off rapidly at lower temperatures. Stability under load is excellent with limited loads. Thus, by changing the proportions of its components, ABS can be prepared in different grades.

Exhibit 10: Naphtha spread – ABS



Source: Bloomberg

Exhibit 11: Naphtha spread – paraxylene



Source: Bloomberg

ABS is derived from acrylonitrile, butadiene, and styrene. Acrylonitrile is a synthetic monomer produced from propylene and ammonia; butadiene is a petroleum hydrocarbon obtained from the C4 fraction of steam cracking; styrene monomer is made by dehydrogenation of ethyl benzene – a hydrocarbon obtained in the reaction of ethylene and benzene.

Two major categories could be ABS for extrusion and ABS for injection moulding, then high and medium impact resistance. Generally, ABS would have useful characteristics within a temperature range from $-20-80^{\circ}\text{C}$ ($-4-176^{\circ}\text{F}$).

Exhibit 12: Lego bricks are made from ABSSource: [Wikipedia](#)**Exhibit 13: Citroën Méharis are made from ABS**Source: [Wikipedia](#)

ABS is a thermoplastic resin, with well-balanced physical properties between hardness and toughness. It is tough, has a high impact strength, high heat and chemical resistance, and high stiffness and weather resistance, including high gloss. It is mainly used for the manufacturing of electrical parts, automotive parts, office automation, electronics appliance parts, and toys.

Exhibit 14: AS

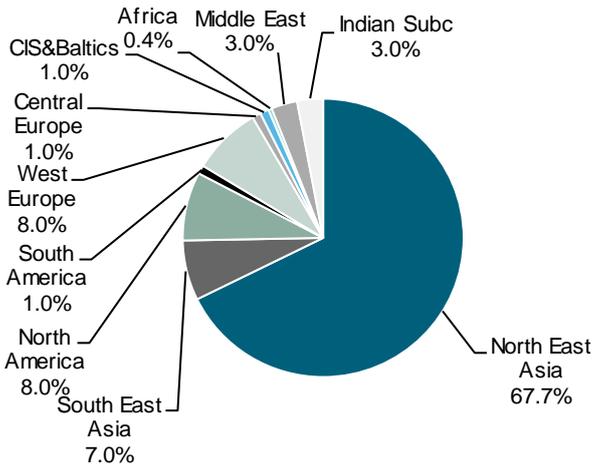
Source: IRPC

Exhibit 15: ABS

Source: IRPC

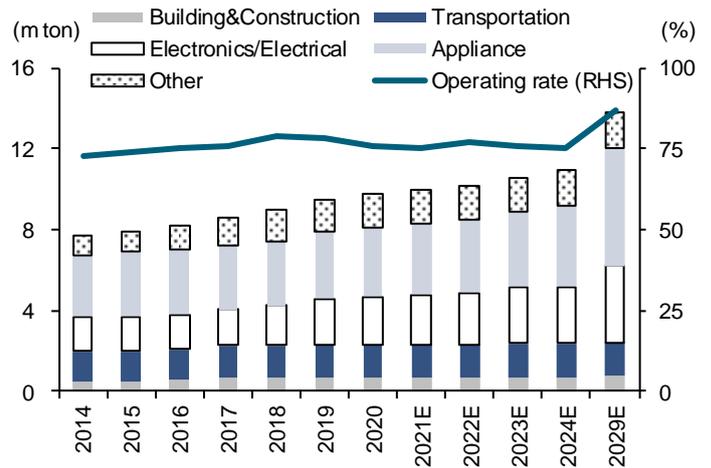
In addition, IRPC also produces another styrene downstream specialty chemical product, acrylonitrile styrene (AS or SAN), a copolymer of styrene and acrylonitrile. It offers significant properties such as transparency, stiffness, strength and also heat and chemical resistance, which are suitable for the production of sanitary wares, juice mixers, cosmetic cases, and lighters, according to IRPC.

Exhibit 16: 2019 ABS demand by region



Source: IRPC

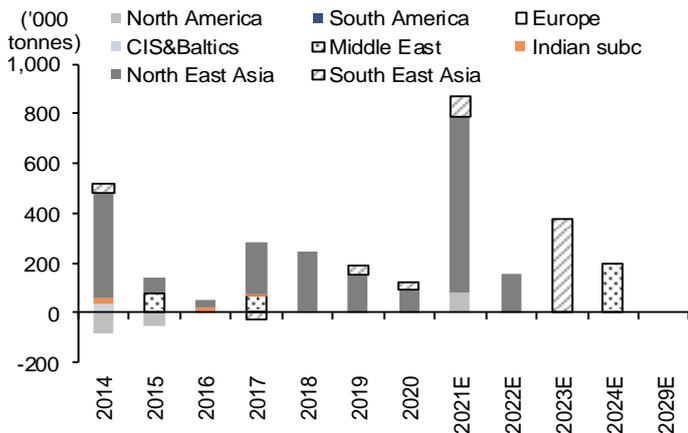
Exhibit 17: ABS demand by application



Source: IRPC

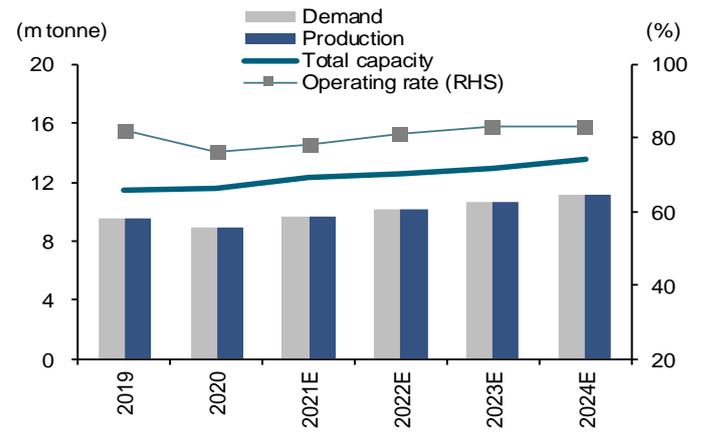
According to IRPC, the demand growth for ABS is projected to grow in 2021-24, rising from 9.4mtpa to 11.3mtpa in 2024. The key growth drivers for ABS demand will likely come from Northeast and Southeast Asia, led by the demand growth in China and ASEAN countries. Hence, we think the ABS-SM margin should stay high at over USD1,500/t in 2021-22 and likely stay above USD1,400/t in 2023, thanks to the strong demand and limited new supply.

Exhibit 18: ABS capacity addition by region



Source: IRPC

Exhibit 19: ABS supply, demand, world operating rate



Source: IRPC

Potential net profit windfall from EPS in Thailand. On 5 June 2021 at 3am, there was a fire incident at the production and warehouse plant of Ming Dih Chemical, one of two producers of EPS in Thailand (the other is IRPC). The plant is located in Bangkok’s eastern area close to Suvarnabhumi Airport and residential and commercial areas. The fire completely destroyed the entire plant as well as the storage and warehouse facilities, resulting in Ming Dih shutting down its EPS production for an indefinite period.

Exhibit 20: Fire incident at Ming Dih chemical plant on 5 June 2021 at 3am



Source: [Post Today](#)

Exhibit 21: Damage from fire incident after almost 24 hours



Source: [WorkPoint](#)

With a capacity of 30ktpa vs IRPC’s 48ktpa, Ming Dih’s fire-damaged production plant is expected to result in an EPS supply shortage in Thailand, potentially driving up the EPS price and margin, and in turn greatly benefitting IRPC. We estimate that for every USD100/t increase in EPS margin, IRPC could benefit up to a THB0.1b net profit upside.

Given IRPC’s capacities of 180ktpa ABS and 48ktpa EPS, we believe the projected high margin of ABS due to strong demand and the recent fire at Ming Dih Chemical, the only other producer of EPS in Thailand, we think IRPC will greatly benefit from the sustained high margin of ABS-SM and the lower EPS supply in Thailand in 2H21 and likely in 2022.

Exhibit 22: Capacity of polyethylene resin producing companies in Thailand as of 2020

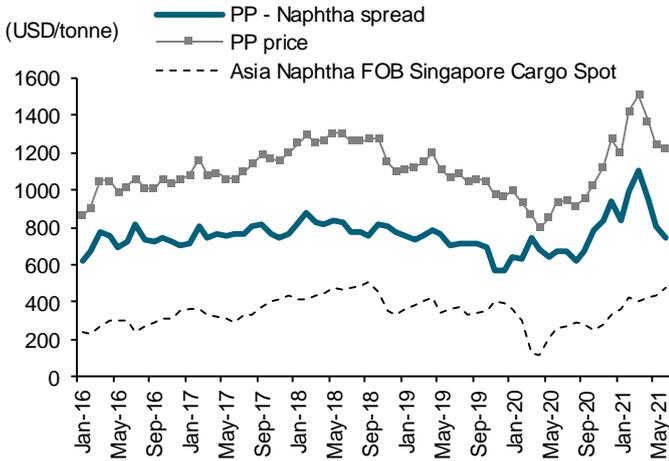
Product	Company	Total capacity (ktpa)	%
HDPE	IRPC	140	7
	Thai Polyethylene	920	50
	PTT Global Chemical	800	43
	Total	1860	100
PP	IRPC	775	34
	HMC Polymers	810	35
	Thai Polyethylene	720	31
	Total	2305	100
ABS	IRPC	179	65
	Ineos ABS	95	35
	Total	274	100
EPS	IRPC	48	61
	Ming Dih Chemical	30	39
	Total	70	100
PS	IRPC	125	34
	Siam Polystyrene	150	41
	Thai Styrenics	90	25
	Total	365	100

Source: IRPC

Weaker PP-naphtha margin should soften IRPC's petrochemical GIM in 2021-22.

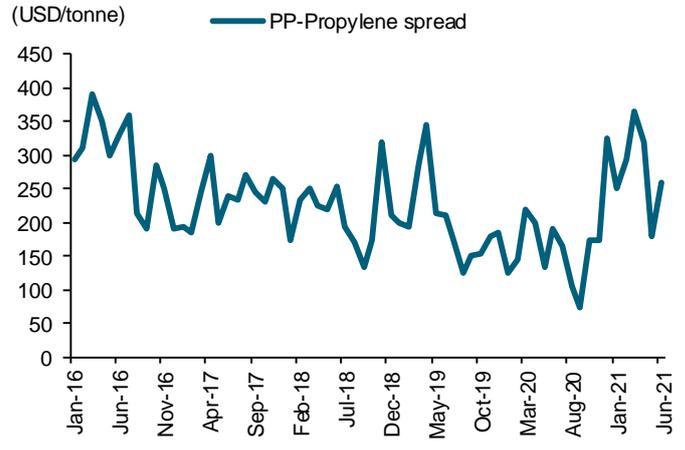
The margin of PP over naphtha has already weakened from its peak since Mar-21 due to the new supply influx from China and Southeast Asia, and we think those factors should continue to pressure the PP-naphtha margin in 2H21-22. However, unlike the PE-naphtha margin, we believe the PP-naphtha margin will stay healthy at over USD600/t vs USD450-500/t for PE, thanks to the stronger demand for PP used in the automobile and packaging industries and the more limited new supply than is set to come on stream in 2021-22.

Exhibit 23: Margin and price of PP vs naphtha price



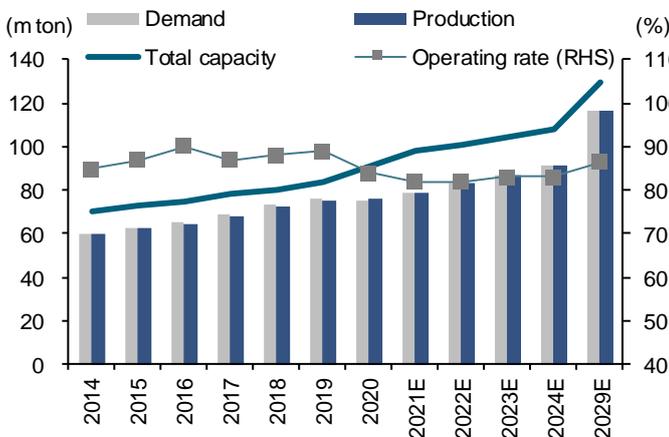
Source: Bloomberg

Exhibit 24: PP-propylene margin



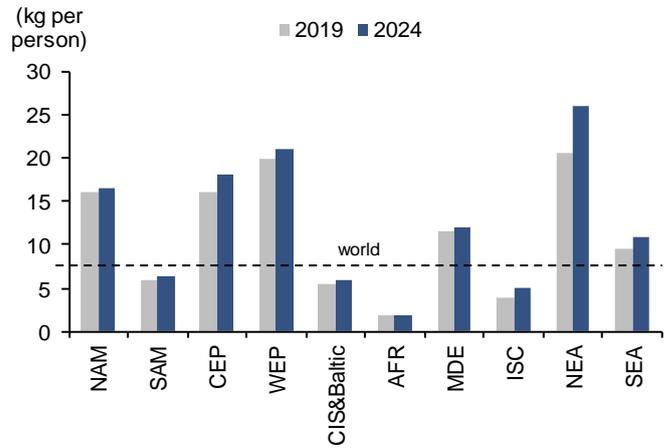
Source: Bloomberg

Exhibit 25: Polypropylene supply, demand, world operating rate



Source: IRPC

Exhibit 26: Polypropylene per capita consumption



Source: IRPC

Exhibit 27: Polypropylene additional capacity



Source: IRPC

Exhibit 28: Regional polypropylene net trade



Source: IRPC

More specialty, less commodity

Management indicated that IRPC has strived for superior earnings sustainability and margin enhancement via the capacity expansion of its specialty chemical products, which mostly include ABS, PS, EPS, and certain specialty PP pellets, such as the PP melt-blown resin that IRPC and Innobic (not listed), PTT (PTT TB, BUY, TP THB60)'s new subsidiary, produce for the 'life science' business. The Innobic/PP melt-blown resin plant is planned to commence its COD in 4Q21 with a capacity of 2.1ktpa.

What are specialty chemical products as defined by IRPC? According to management, IRPC defines its chemical products as specialty products with a broad set of definitions, which include 1) 10% higher price over commodity grade; 2) demand growth over 1.3x to GDP; 3) oligopoly market structure with 3-5 players; 4) no product substitution; 5) margin contribution over 30%; and 6) high entry barrier either due to the lengthy product quality proving process or product specifications.

Exhibit 29: Specialty strategic growth plan

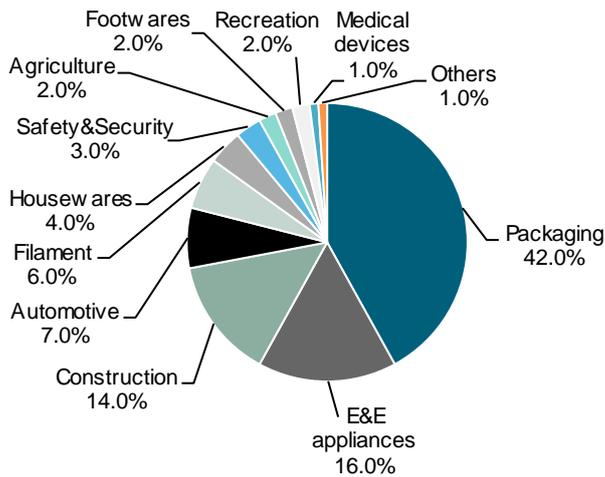


Source: IRPC

We expect IRPC’s margin expansion to go from strength to strength given IRPC’s clear strategy to increase its revenue proportion from specialty chemical products from 17% in 2020 to 30% by 2024. Management believes that IRPC should be able to penetrate into the high-entry barrier markets of high-value added construction materials, personal care, healthcare disposable products, packaging, and home appliances, all being industries that are in a consumer megatrend growth trajectory, in our view.

IRPC believes that its specialty chemical products should command up to a THB300m-500m higher annual net profit over commodity products, given their superior quality and more customised and customer-driven products.

Exhibit 30: Thailand plastics market structure as of 2019



Source: IRPC

Exhibit 31: To expedite specialty products in focus areas from 17% in 2020 to 30% in 2024

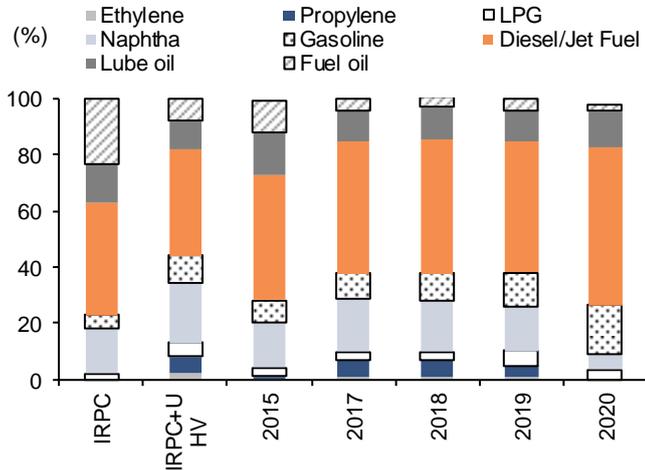
	% specialty of total polymer sales volume		Margin
		(%)	(THB m)
2020		17	-
2021		20	300 - 500
2022		24	300 - 500
2023		27	300 - 500
2024		30	300 - 500

Source: IRPC

UCF: A value-accretive project to strengthen GRM

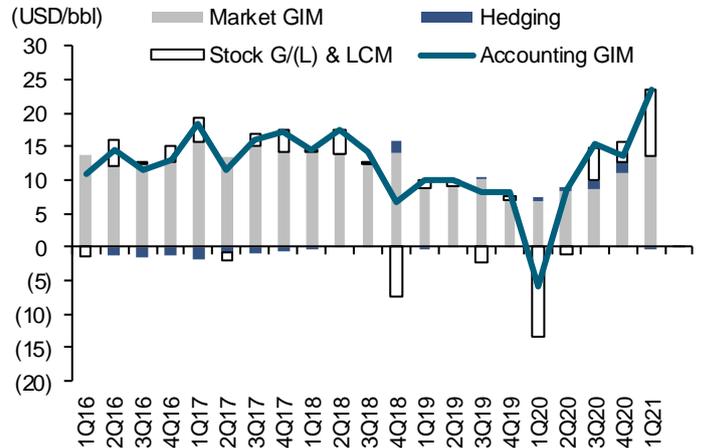
To comply with the Ministry of Energy's nationwide mandate for Euro V-based refined oils, effective 1 Jan-24, IRPC is committed to completing and starting up its THB13.3b UCF project, scheduled to commence its COD in Jan-24. We estimate that UCF will create a net USD1/bbl higher GIM for IRPC, based on a USD1.5/bbl higher GRM on the higher price of Euro V diesel vs an additional cost of USD0.5/bbl, resulting in THB2b annual net profit to IRPC.

Exhibit 32: Refinery production breakdown by products



Source: IRPC

Exhibit 33: Market GIM, accounting GIM, hedging GIM, and stock gain (loss)



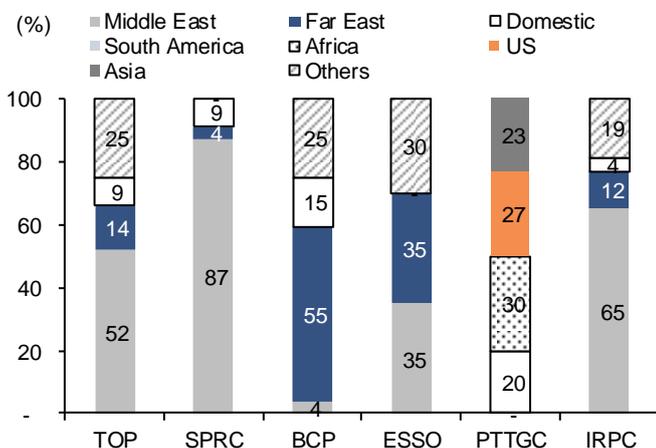
Source: IRPC

On 2 Jul-21, IRPC announced its Final Investment Plan for its UCF project, a project to improve refinery efficiency and diesel quality up to Euro V standards that is scheduled to commence its COD in Jan-24, which should further improve its GIM by USD1.5/bbl before the OPEX cost deduction, based on our estimate.

Regarding IRPC's refinery production yield in 1Q21, it produced a 54% diesel yield, mostly being Euro III diesel with a high sulphur content. Hence, the UCF project is aimed at converting all Euro III diesel into Euro V diesel, which, according to management, IRPC would sell at a USD2-3/bbl premium over the Euro III diesel price, resulting in a net incremental USD1.5/bbl GIM.

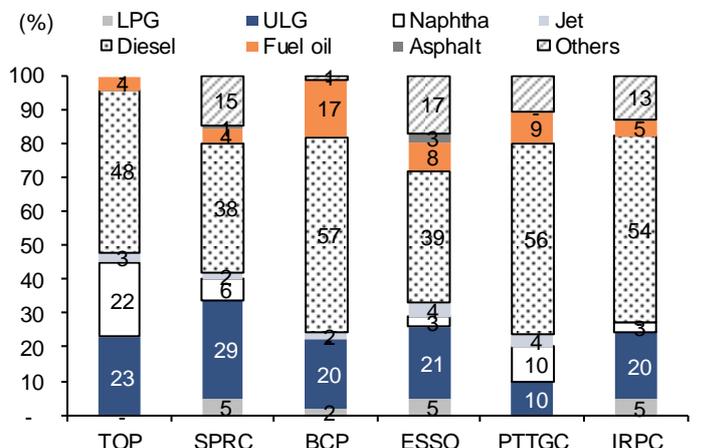
After deducting a USD0.5/bbl total additional cost from UCF, including a USD0.3/bbl depreciation expense and other overhead and SG&A expenses, we estimate that the incremental GIM after net depreciation and cost would be USD1.0/bbl once the UCF is in operation in Jan-24.

Exhibit 34: Crude mix breakdown as of 1Q21



Source: Company data

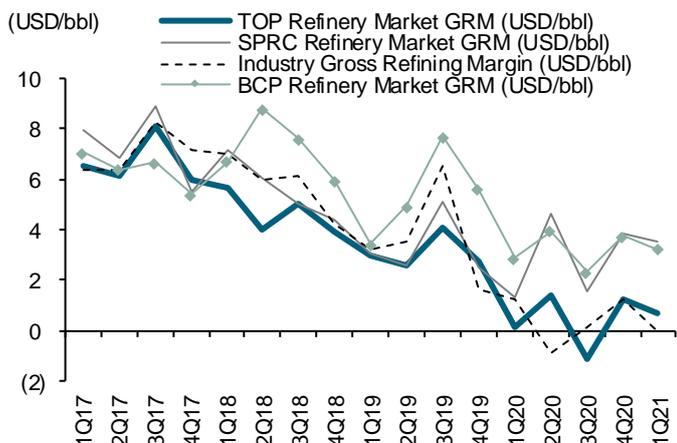
Exhibit 35: Product yield breakdown as of 1Q21



Source: Company data

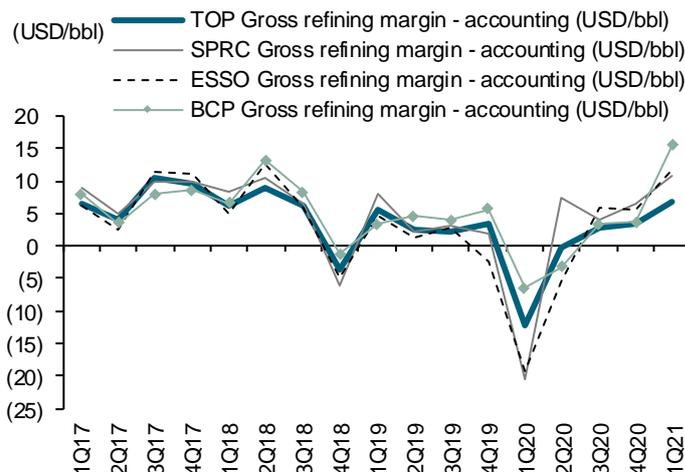
In the Thai refinery sector, we believe IRPC stands as one of the most promising refiners to gain from the margin strengths of ABS, EPS, lube, and the GRM recovery in 2H21 after the global economic reopening.

Exhibit 36: TOP, SPRC, BCP – market GRM



Source: Company data

Exhibit 37: TOP, SPRC, ESSO, BCP – gross refining margin

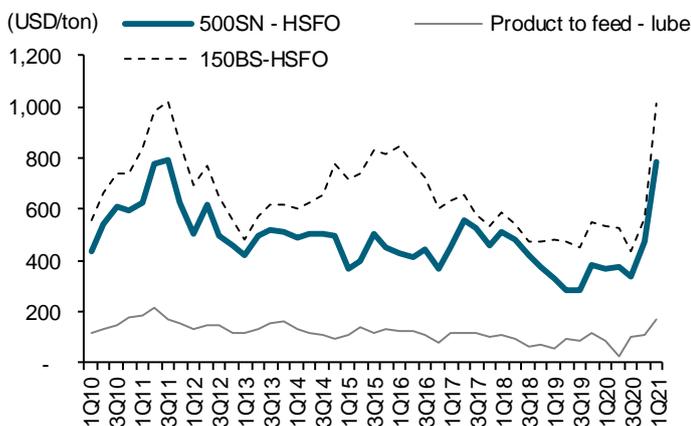


Source: Company data

Lube emerges as a white knight in 2021

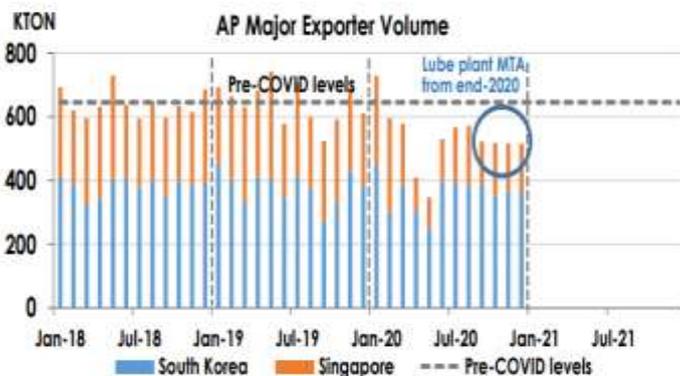
In 1Q21, the lube-HSFO margins, represented by the margins of 500SN-HSFO (low-grade lube) and 150BS-HSFO (high-grade lube), have skyrocketed from USD400-500/t in 4Q20 to USD800-1,000/t in May-21. The key drivers are the sharp rise in demand for transportation and the tight supply due to the lower utilisation rates of Asian refiners to optimise their profitability, given the weak market GRMs.

Exhibit 38: Lube base spread



Sources: TOP; IRPC

Exhibit 39: Lower base oil supply from limited feedstock on run cuts



Source: TOP

Lube is a short-term driver for TOP and IRPC. In Thailand, there are two companies producing lube: Thai Oil (TOP TB, BUY, TP THB74) with a capacity of 267ktpa and IRPC with 320ktpa. In the production process using HSFO as a feedstock to produce lube, there will be a key by-product: asphalt. Asphalt has had a strong margin since 2020 due to the tight supply from the refinery run cuts and the structural reduction in asphalt supply as a result of the high level of global upgrading capacity to convert HSFO into diesel, gasoline, or propylene, depending on the upgrading technology.

Exhibit 40: Lube capacity in Thailand

Company	TOP	IRPC	Unit
Subsidiary name	Thai Lube Base Public Company (TLB)	IRPC Lube Base	
Stake owned	100	100	%
Lube Base Oil	267,015	320,000	tpa
Bitumen/Asphalt	350,000	600,000	tpa
Treated Distillate Aromatic Extract	67,520		tpa

Sources: TOP; IRPC

In 1Q21, TOP enjoyed USD1.5/bbl from its lube business, up 2x q-q, while IRPC saw its lube contribution jump from USD1.55/bbl in 4Q20 to USD2.59/bbl in 1Q21. We project that the lube margin contributions should rise q-q to over USD2.0/bbl for TOP and USD3.0/bbl for IRPC in 2Q21 thanks to the sharp rise in the lube-HSFO margin.

Exhibit 41: IRPC's lube margin rose from USD1.55/bbl in 4Q20 to USD2.59/bbl in 1Q21



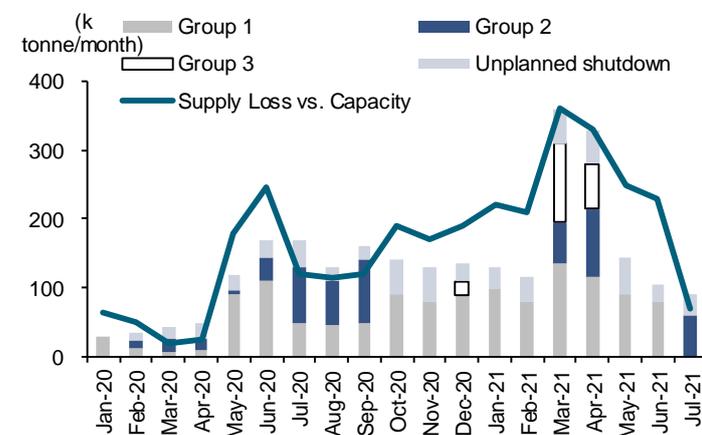
Source: IRPC

Exhibit 42: TOP's lube contributed USD1.5/bbl to its GIM in 1Q21, up 2x q-q



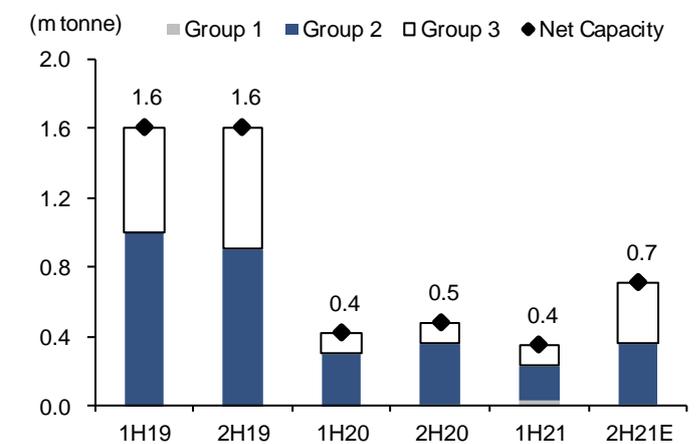
Source: TOP

Exhibit 43: Asia Pacific base oil plant maintenance



Source: TOP

Exhibit 44: Higher base oil supply in 2H21



Source: TOP

Cost reduction and operational streamlining to further enhance GIM

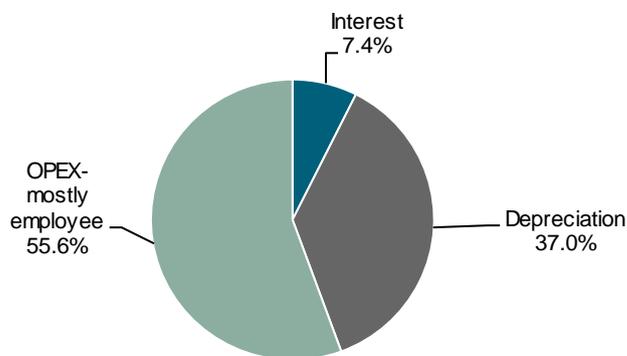
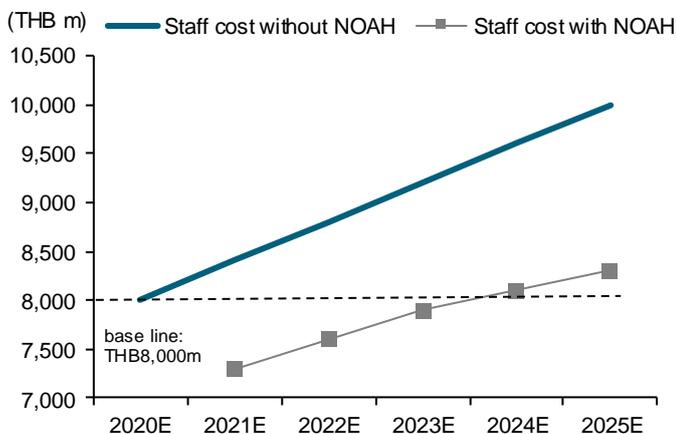
On top of the margin expansion from the high product margins (ABS, EPS, GRM) and the rising revenue from specialty products in 2021-23 and the UCF project in 2024 onward, we expect IRPC’s GIM to further expand in 2021-23. This should be backed by its ongoing implementation of its cost reduction program, New Organisation with Agile Human (NOAH), and its operational optimisation.

In essence, NOAH is a cost reduction program aiming to reduce IRPC’s excessive and inefficient cost structure from oversized staff expenses, which are the legacy from IRPC’s predecessor, Thai Polyene Industry (TPI), the pre-structured, bankrupted company before PTT’s takeover and name change to IRPC in 2016.

In 4Q20, IRPC cut its staff numbers by over 1,000 via voluntary and early retirement programs, effectively cutting its staff expenses by THB0.5b annually. In 2019, we estimate that IRPC’s total cost was USD11/bbl, with employee expenses accounting for almost 40% of the total OPEX cost. We expect IRPC’s cost per bbl to gradually decline by USD0.2/bbl per annum in 2021-23, bringing down its total cost to below USD11/bbl.

Exhibit 45: NOAH plan

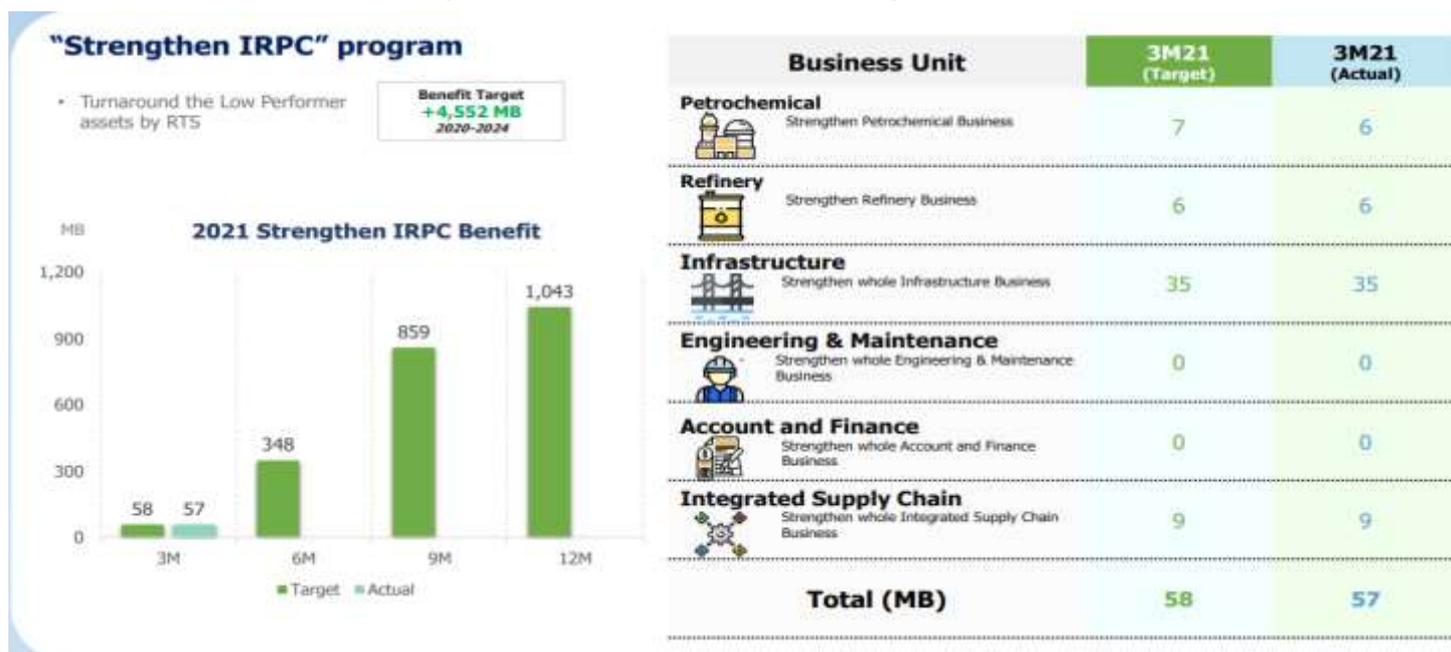
Exhibit 46: Cost breakdown per unit (USD11/bbl in 2019-20)



Source: IRPC

Sources: IRPC; FSSIA estimates

Exhibit 47: : Operational streamlining and optimisation to improve efficiency

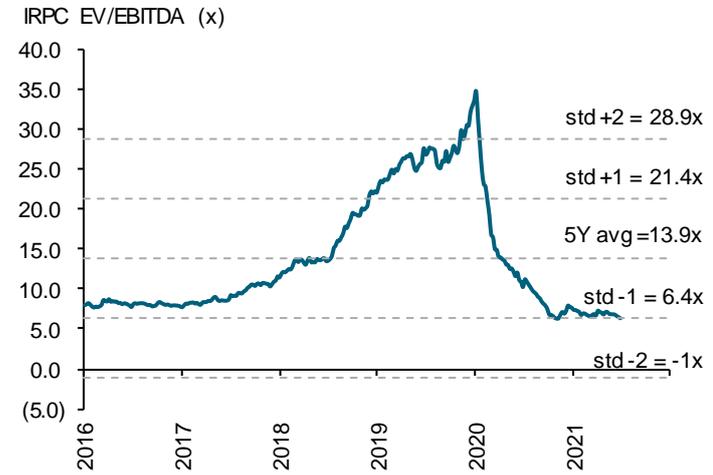


Source: IRPC

Valuation

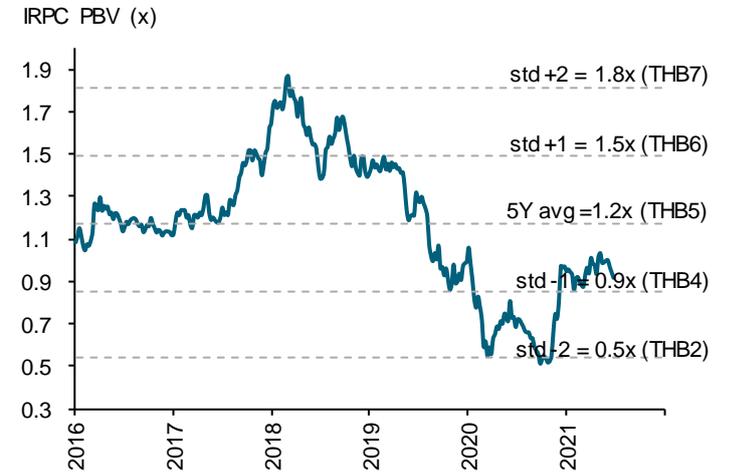
We maintain BUY and our TP of THB5.3, based on 9x 2021E EV/EBITDA – still a discount to IRPC’s 11-year average – to reflect the weak market GRM outlook, even though we project a GRM recovery in 2H21. We believe IRPC remains attractive for its net profit turnaround and growth potential in 2021-23, led by the margin strengths of ABS, EPS, and lube, and we think it is one of the best plays on the upcoming GRM recovery in 2H21.

Exhibit 48: One-year forward rolling EV/EBITDA band



Sources: Bloomberg; FSSIA estimates

Exhibit 49: One-year forward rolling P/BV band



Sources: Bloomberg; FSSIA estimates

Financial Statements

IRPC PCL

Profit and Loss (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Revenue	239,315	195,659	244,442	239,120	242,049
Cost of goods sold	(228,027)	(176,744)	(217,261)	(202,576)	(203,121)
Gross profit	11,287	18,915	27,181	36,545	38,928
Other operating income	-	-	-	-	-
Operating costs	(7,056)	(6,457)	(8,067)	(7,891)	(7,988)
Operating EBITDA	4,231	12,458	19,114	28,654	30,940
Depreciation	(8,542)	(8,874)	(9,369)	(9,983)	(10,432)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	(4,311)	3,584	9,745	18,671	20,508
Net financing costs	(1,931)	(2,377)	(2,677)	(2,499)	(2,523)
Associates	363	363	363	363	363
Recurring non-operating income	4,318	(7,987)	763	763	763
Non-recurring items	0	0	0	0	0
Profit before tax	(1,924)	(6,780)	7,832	16,936	18,748
Tax	779	0	(2,542)	(5,641)	(6,258)
Profit after tax	(1,146)	(6,780)	5,290	11,295	12,491
Minority interests	(28)	(28)	(28)	(28)	(28)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	(1,174)	(6,808)	5,261	11,267	12,462
Non-recurring items & goodwill (net)	0	0	0	0	0
Recurring net profit	(1,174)	(6,808)	5,261	11,267	12,462
Per share (THB)					
Recurring EPS *	(0.06)	(0.33)	0.26	0.55	0.61
Reported EPS	(0.06)	(0.33)	0.26	0.55	0.61
DPS	0.10	0.05	0.13	0.28	0.30
Diluted shares (used to calculate per share data)	20,434	20,434	20,434	20,434	20,434
Growth					
Revenue (%)	(14.7)	(18.2)	24.9	(2.2)	1.2
Operating EBITDA (%)	(75.4)	194.4	53.4	49.9	8.0
Operating EBIT (%)	nm	nm	171.9	91.6	9.8
Recurring EPS (%)	nm	nm	nm	114.1	10.6
Reported EPS (%)	nm	nm	nm	114.1	10.6
Operating performance					
Gross margin inc. depreciation (%)	1.1	5.1	7.3	11.1	11.8
Gross margin of key business (%)	1.1	5.1	7.3	11.1	11.8
Operating EBITDA margin (%)	1.8	6.4	7.8	12.0	12.8
Operating EBIT margin (%)	(1.8)	1.8	4.0	7.8	8.5
Net margin (%)	(0.5)	(3.5)	2.2	4.7	5.1
Effective tax rate (%)	34.0	34.0	34.0	34.0	34.0
Dividend payout on recurring profit (%)	(174.1)	(15.0)	50.0	50.0	50.0
Interest cover (X)	0.0	(1.9)	3.9	7.8	8.4
Inventory days	43.6	47.6	37.7	43.1	41.6
Debtor days	17.0	17.2	10.9	7.9	4.7
Creditor days	40.9	45.6	36.1	41.3	39.8
Operating ROIC (%)	(2.6)	2.1	(1.4)	(2.7)	(3.1)
ROIC (%)	0.0	(2.4)	(1.4)	(2.6)	(2.9)
ROE (%)	(1.4)	(8.6)	6.9	13.6	13.7
ROA (%)	0.2	(2.7)	2.7	5.9	6.3
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Petroleum products	174,996	145,248	159,269	153,095	155,073
Petrochemical products	59,656	47,726	68,435	69,100	69,869
Other business	4,663	2,686	16,737	16,925	17,106

Sources: IRPC PCL; FSSIA estimates

Financial Statements

IRPC PCL

Cash Flow (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Recurring net profit	(1,174)	(6,808)	5,261	11,267	12,462
Depreciation	8,542	8,874	9,369	9,983	10,432
Associates & minorities	363	363	363	363	363
Other non-cash items	-	-	-	-	-
Change in working capital	(558)	1,743	2,193	2,140	2,133
Cash flow from operations	7,174	4,172	17,187	23,753	25,391
Capex - maintenance	(4,536)	(4,712)	(4,975)	(5,301)	(5,540)
Capex - new investment	(418)	(12,404)	(1,453)	(13,217)	(6,104)
Net acquisitions & disposals	(1,484)	0	0	0	0
Other investments (net)	2,924	0	0	0	0
Cash flow from investing	(3,513)	(17,116)	(6,428)	(18,518)	(11,644)
Dividends paid	(4,087)	(2,043)	(1,022)	(2,631)	(5,633)
Equity finance	0	0	0	0	0
Debt finance	1,369	13,000	(5,000)	0	0
Other financing cash flows	(244)	(852)	(861)	(923)	11,309
Cash flow from financing	(2,962)	10,105	(6,882)	(3,554)	5,675
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	699	(2,840)	3,876	1,681	19,423
Free cash flow to firm (FCFF)	5,591.97	(10,567.33)	13,435.27	7,733.17	16,270.16
Free cash flow to equity (FCFE)	4,785.79	(796.15)	4,897.98	4,311.21	25,055.86
Per share (THB)					
FCFF per share	0.27	(0.52)	0.66	0.38	0.80
FCFE per share	0.23	(0.04)	0.24	0.21	1.23
Recurring cash flow per share	0.38	0.12	0.73	1.06	1.14
Balance Sheet (THB m) Year Ending Dec					
Tangible fixed assets (gross)	196,801	210,888	217,842	236,949	236,949
Less: Accumulated depreciation	(72,062)	(80,936)	(90,305)	(100,288)	(110,720)
Tangible fixed assets (net)	124,739	129,952	127,537	136,661	126,229
Intangible fixed assets (net)	564	564	564	564	564
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	9,925	9,925	9,925	9,925	9,925
Cash & equivalents	3,036	196	4,072	5,752	25,175
A/C receivable	10,100	8,386	6,245	4,149	2,029
Inventories	25,995	20,149	24,768	23,094	23,156
Other current assets	4,515	3,691	4,612	4,511	4,567
Current assets	43,647	32,423	39,696	37,507	54,927
Other assets	2,646	2,646	2,646	2,646	2,646
Total assets	181,521	175,510	180,368	187,303	194,290
Common equity	83,256	74,528	78,768	87,404	94,232
Minorities etc.	146	175	203	232	260
Total shareholders' equity	83,402	74,703	78,971	87,635	94,493
Long term debt	43,881	56,881	51,881	51,881	51,881
Other long-term liabilities	4,860	4,860	4,860	4,860	4,860
Long-term liabilities	48,742	61,742	56,742	56,742	56,742
A/C payable	24,871	19,278	23,697	22,095	22,155
Short term debt	15,090	15,090	15,090	15,090	15,090
Other current liabilities	5,745	4,697	5,868	5,741	5,811
Current liabilities	45,707	39,065	44,655	42,926	43,056
Total liabilities and shareholders' equity	177,850	175,510	180,368	187,303	194,290
Net working capital	9,994	8,252	6,059	3,919	1,786
Invested capital	147,868	151,338	146,730	153,715	141,149
* Includes convertibles and preferred stock which is being treated as debt					
Per share (THB)					
Book value per share	4.07	3.65	3.85	4.28	4.61
Tangible book value per share	4.05	3.62	3.83	4.25	4.58
Financial strength					
Net debt/equity (%)	67.1	96.1	79.6	69.9	44.2
Net debt/total assets (%)	30.8	40.9	34.9	32.7	21.5
Current ratio (x)	1.0	0.8	0.9	0.9	1.3
CF interest cover (x)	3.7	5.9	3.4	8.0	13.4
Valuation					
Recurring P/E (x) *	(67.9)	(11.7)	15.1	7.1	6.4
Recurring P/E @ target price (x) *	(92.2)	(15.9)	20.6	9.6	8.7
Reported P/E (x)	(67.9)	(11.7)	15.1	7.1	6.4
Dividend yield (%)	2.6	1.3	3.3	7.1	7.8
Price/book (x)	1.0	1.1	1.0	0.9	0.8
Price/tangible book (x)	1.0	1.1	1.0	0.9	0.9
EV/EBITDA (x) **	32.1	12.2	7.5	4.9	3.9
EV/EBITDA @ target price (x) **	38.8	14.5	9.0	5.9	4.9
EV/invested capital (x)	0.9	1.0	1.0	0.9	0.9
* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income					

Sources: IRPC PCL; 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	PCSGH	PDJ	PG	PHOL	PLANB	PLANET
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEAOIL	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	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

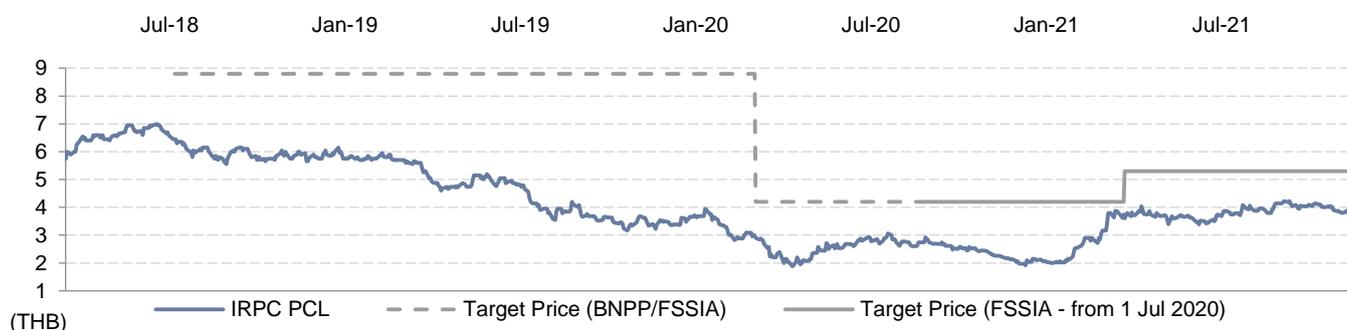
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

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History of change in investment rating and/or target price

IRPC PCL (IRPC TB)



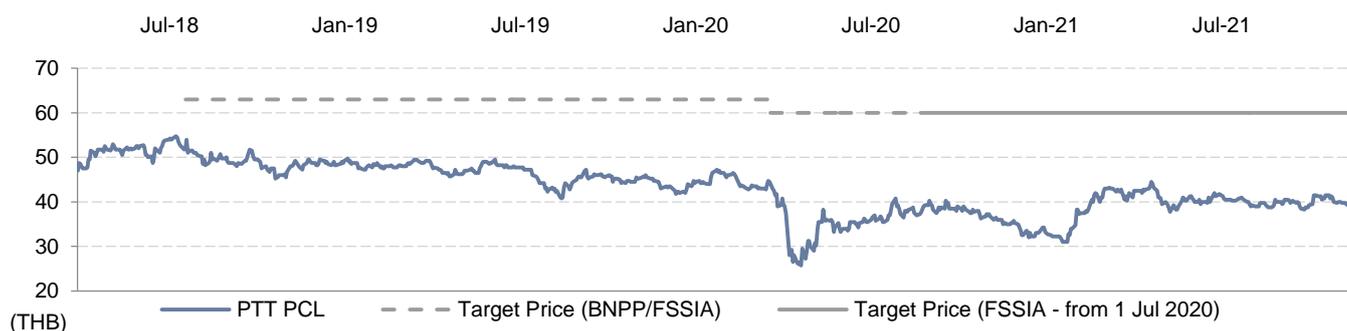
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Oct-2018	BUY	8.80	14-Feb-2020	BUY	4.20	22-Dec-2020	BUY	5.30
13-Feb-2019	BUY	8.80	08-May-2020	BUY	4.20			

Suwat Sinsadok started covering this stock from 09-Oct-2018

Price and TP are in local currency

Source: FSSIA estimates

PTT PCL (PTT TB)



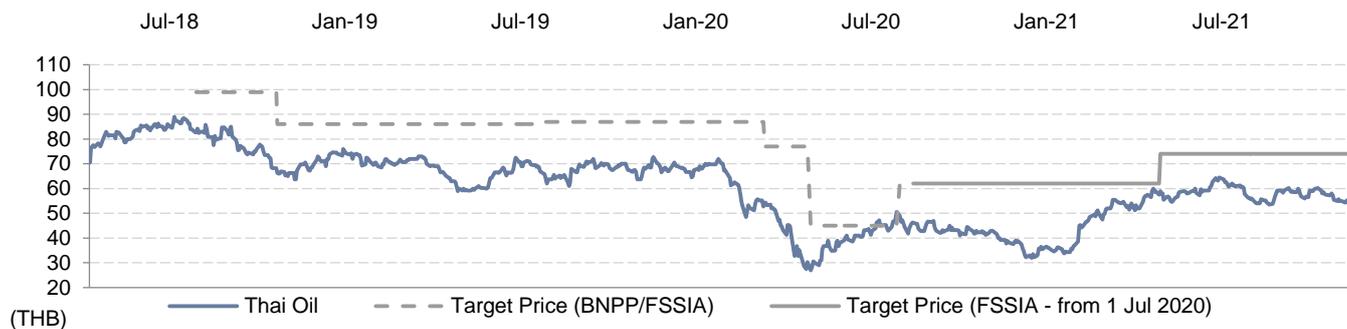
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Oct-2018	BUY	63.00	21-Feb-2020	BUY	60.00	-	-	-

Suwat Sinsadok started covering this stock from 09-Oct-2018

Price and TP are in local currency

Source: FSSIA estimates

Thai Oil (TOP TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Oct-2018	BUY	99.00	12-Feb-2020	BUY	77.00	08-Jun-2020	BUY	62.00
18-Dec-2018	BUY	86.00	23-Mar-2020	BUY	45.00	21-Aug-2020	BUY	62.00
06-Aug-2019	BUY	87.00	08-Jun-2020	BUY	62.00	18-Jan-2021	BUY	74.00

Suwat Sinsadok started covering this stock from 09-Oct-2018

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
IRPC PCL	IRPC TB	THB 3.90	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.
PTT PCL	PTT TB	THB 39.00	BUY	Risks to our SoTP-based valuation are the oil price and potential earnings downside from government intervention.
Thai Oil	TOP TB	THB 54.50	BUY	Downside risks to our EV/EBITDA-based TP are a sharp rise in oil price and weak demand for refined oil products.

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 06-Jul-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.