

21 APRIL 2021

THAILAND / PETROCHEM & CHEMICALS

PTT GLOBAL CHEMICAL

PTTGC TB

BUY

UNCHANGED

TARGET PRICE	THB86.00
CLOSE	THB63.25
UP/DOWNSIDE	+36.0%
PRIOR TP	THB86.00
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+16.7%

กระแสการเติบโตของ Olefins กำลังมา

แนวโน้มการเติบโตในระดับสูงได้เริ่มขึ้นแล้ว

ในปัจจุบันเราเชื่อว่าแนวโน้มการเติบโตของกำไรสุทธิของ PTTGC กำลังอยู่ในจุดที่ดีที่สุด โดยคาดว่าบริษัท จะรายงานกำไรที่ติดลบตั้งแต่ 1Q21 จนถึง 4Q21 จาก Product Margins ที่กำลังเพิ่มขึ้นและปริมาณขายที่คาดว่าจะโตประมาณ 12% y-y จากการเริ่มโครงการปรับปรุงกระบวนการผลิต Olefins (ORP) ขนาด 0.75mtpa ในเดือน มี.ค. 21 นอกจากนี้การเริ่มการผลิตเชิงพาณิชย์ของโรงงานผลิต Propylene Oxide (PO) และ Polyol ใน 2H20 ควรเพิ่มกำไรสุทธิจำนวน 1-2 พัน ลบ. ต่อปีให้แก่ PTTGC นับตั้งแต่ปี 2021 หลังเริ่มดำเนินงานในปี 2020

แนวโน้มกำไรสุทธิ 1Q21 อยู่ในระดับที่ดี

เราคาดว่ากำไรสุทธิ 1Q21 จะสูงถึง 12.6 พัน ลบ. จากกำไรที่ดีในทุกกลุ่มธุรกิจ โดยเฉพาะอย่างยิ่งในธุรกิจ Olefins และโรงกลั่น เนื่องจากอัตรากำไรของธุรกิจ Olefins ดีขึ้นเรื่อย ๆ ในขณะที่ธุรกิจโรงกลั่นมีกำไรจากสินค้าคงคลังเป็นจำนวนมาก PE และ PP margins ปรับตัวสูงขึ้นกว่า USD700/t พร้อม LDPE-naphtha margin ที่พุ่งขึ้นเป็น USD1,163/t ในเดือน เม.ย. 21 หลังการส่งออกจากสหรัฐฯ มาয়งเอเชียตั้งตัว พร้อมความต้องการบรรจุภัณฑ์ที่กำลังเพิ่มขึ้น ในขณะที่เราคาดว่า Market GRM ของ PTTGC จะยังคงอ่อนแอจาก Product margins ที่ตกต่ำต่อเนื่องของ Crude Distillation Unit (CDU) มาอยู่ที่ USD0.5/bbl เราคาดว่าค่าการกลั่นของ Condensate Residual Splitter (CRS) จะยังอยู่ในระดับสูงที่ USD7.4/bbl ซึ่งจะทำให้ค่าการกลั่นรวมอยู่ที่ USD1.8/bbl

การควมรวมและซื้อกิจการเป็นปัจจัยหนุนการเติบโตที่สำคัญในทางกลยุทธ์

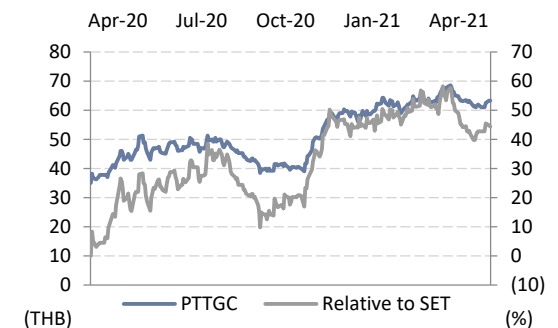
ปัจจุบัน PTTGC กำลังมองหากระแสใหม่ ๆ ที่จะช่วยเสริมสร้างการเติบโตของบริษัท ให้เพิ่มมากขึ้น ไม่เพียงในแง่ของการเติบโตของกำลังการผลิต แต่ยังรวมถึงการเพิ่มมูลค่าของพอร์ตผู้บริหารได้วางเป้าหมายสำคัญ 2 ประการ ประการแรก PTTGC วางแผนเพิ่มสินค้ามูลค่าสูงจาก 28% ของกำลังการผลิตสินค้ารวมในปี 2020 เป็น 35% ในปี 2021 และ 64% ในปี 2025 ส่วนมากจากกลยุทธ์การควมรวมและซื้อกิจการ ประการที่สอง PTTGC กำลังตั้งเป้าให้ได้ EBITDA ที่ 30% จากการดำเนินงานในต่างประเทศ เทียบกับตัวเลขที่ต่ำกว่า 10% ในปัจจุบัน โดยมีแผนลงทุนในโครงการใหม่ ๆ ซึ่งอาจประกอบด้วยโรงงาน Ethane Cracker ขนาด 1mtpa ในสหรัฐฯ

PTTGC ก็นรวม

เราคงคำแนะนำซื้อที่ราคาเป้าหมาย 86 บาทซึ่งเราคิดจากค่า 2021E EV/EBITDA ที่ 12.1x เราเชื่อว่า PTTGC ยังมีความน่าสนใจในฐานะที่เป็นผู้ชนะจากการฟื้นตัวของ GRM, PP, PE, PVC, MEG, และ Benzene Margin ที่คาดว่าจะอยู่ในระดับสูงจากความสามารถในการแข่งขันด้านต้นทุนและกำลังการผลิตที่เพิ่มขึ้นทั่วทั้งจากโครงการ ORP ขนาด 0.75mtpa ตั้งแต่เดือน มี.ค. 21 เป็นต้นไป

KEY STOCK DATA

YE Dec (THB m)	2020	2021E	2022E	2023E
Revenue	329,291	364,179	373,457	373,582
Net profit	200	19,390	25,041	25,380
EPS (THB)	0.04	4.30	5.55	5.63
vs Consensus (%)	-	10.8	29.5	15.5
EBITDA	19,813	42,790	50,361	51,340
Core net profit	(969)	19,390	25,041	25,380
Core EPS (THB)	(0.22)	4.30	5.55	5.63
Chg. In EPS est. (%)	nm	-	-	-
EPS growth (%)	nm	nm	29.1	1.4
Core P/E (x)	(294.2)	14.7	11.4	11.2
Dividend yield (%)	6.7	6.4	11.2	12.1
EV/EBITDA (x)	19.3	9.7	8.4	8.4
Price/book (x)	1.0	1.0	1.0	1.1
Net debt/Equity (%)	30.8	44.0	47.7	52.2
ROE (%)	(0.3)	6.9	9.0	9.4



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(2.7)	0.4	72.1
Relative to country (%)	(3.7)	(3.7)	37.9
Mkt cap (USD m)	9,076		
3m avg. daily turnover (USD m)	36.3		
Free float (%)	51		
Major shareholder	PTT Plc. (48%)		
12m high/low (THB)	69.00/34.25		
Issued shares (m)	4,508.85		

Sources: Bloomberg consensus; FSSIA estimates



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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 21 เมษายน 2021

Investment thesis

After suffering an earnings slowdown from its weak refinery and PE margin, we expect PTTGC to post strong earnings starting in 1Q21 into 4Q21, backed by rising product margins and volume growth, mainly from the start-up of its 0.75mtpa Olefins Reconfiguration Project (ORP) in Mar-21. The COD of its PO and polyol plants in 2H20 should further add net profits of THB1b-2b annually to PTTGC after their operational start-ups in 2020.

PTTGC is attractive as a winner of the strong projected GRM, PP, PE, PVC, MEG, and benzene margin recoveries, thanks to its cost competitiveness and timely capacity growth. While a rising oil price would negatively impact PTTGC's olefins earnings, we think the impact would be more muted than for its naphtha-based peers, as we estimate that PTTGC's gas feedstock cost advantage accounts for two-thirds of its EBITDA.

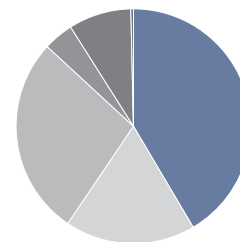
Company profile

PTTGC was a merger between two previously listed petrochemical companies - PTTCH and PTTAR. PTTGC was listed on 21 October 2011. PTTCH and PTTAR shares were delisted on 11 October 2011 and their shareholders became shareholders of PTTGC based on an agreed swap ratio.

www.pttgcgroup.com

Principal activities (revenue, 2020)

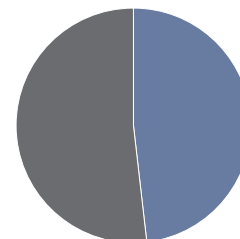
- Refinery and shared facilities - 41.5 %
- Aromatics - 18.0 %
- Olefins and derivatives - 27.4 %
- Green Chemicals - 4.1 %
- Performance materials and chemical - 8.6 %



Source: PTT Global Chemical

Major shareholders

- PTT Plc. - 48.2 %
- Others - 51.8 %



Source: PTT Global Chemical

Catalysts

Potential key drivers are a rising HDPE price, a higher market gross refining margin (GRM) and the continued strong margins of AN, PP and PVC.

Risks to our call

The key downside risks to our EV/EBITDA-based TP are the weaker-than-expected HDPE price and HDPE-naphtha margin.

Event calendar

Date	Event
May 2021	1Q21 results announcement

Key assumptions

	2021E	2022E	2023E
Olefin utilisation rate (%)	94.0	95.0	95.0
Refinery utilisation rate (%)	93.0	95.0	95.0
HDPE-naphtha (USD/t)	600	700	750
HDPE price (USD/t)	1,100	1,200	1,250
LDPE-naphtha (USD/t)	700	800	850
LDPE price (USD/t)	1,200	1,300	1,350
LLDPE-naphtha (USD/t)	650	750	800
LLDPE price (USD/t)	1,150	1,250	1,300
MEG-naphtha (USD/t)	350	400	400
MEG price (USD/t)	850	900	900
Market GRM (USD/bbl)	6.0	6.8	7.3
Dubai crude oil price (USD/bbl)	50.0	50.0	50.0
Gasoline-Dubai (USD/bbl)	12	13	13

Source: FSSIA estimates

Earnings sensitivity

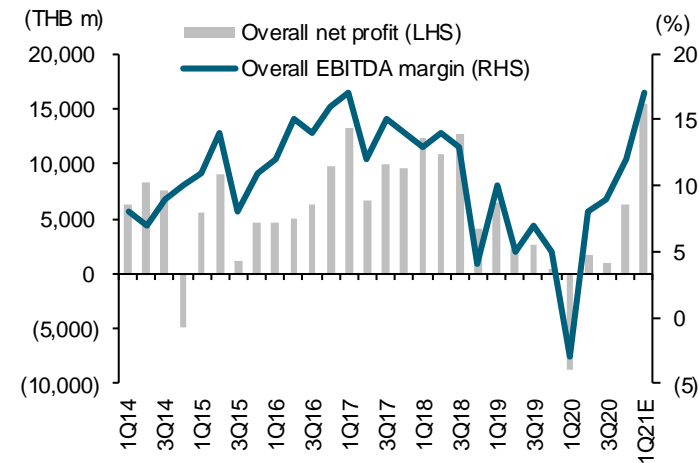
- For every 1% increase in average Dubai oil price, we project 2021 earnings to rise by 1.2%, and vice versa.
- For every 1% increase in market GRM, we estimate 2021 earnings will rise by 0.5%, and vice versa.
- For every 1% increase in HDPE price, we estimate 2021 earnings will rise by 1.8%, and vice versa.

Source: FSSIA estimates

Olefins growth tide is coming

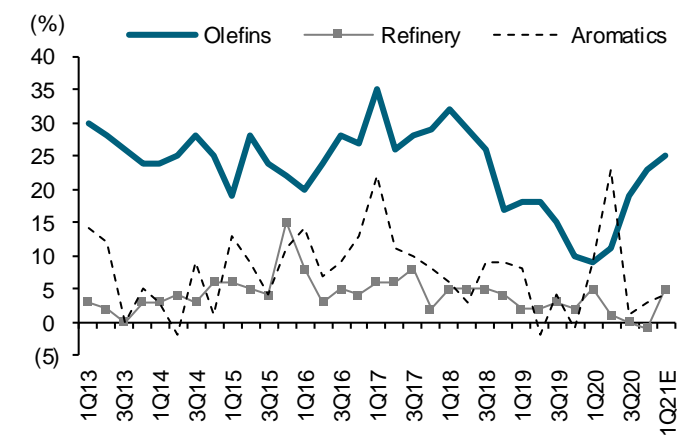
We believe PTTGC’s net profit growth momentum is now at a sweet spot, expecting the company to post strong earnings starting in 1Q21 into 4Q21, backed by rising product margins and c12% y-y volume growth, mainly from the start-up of its 0.75mtpa ORP in Mar-21. The COD commencement of its PO and polyol plants in 2H20 should further add net profits of THB1b-2b annually to PTTGC starting in 2021 after their operational start-ups in 2020.

Exhibit 1: Quarterly net profit projections



Sources: PTTGC; FSSIA estimates

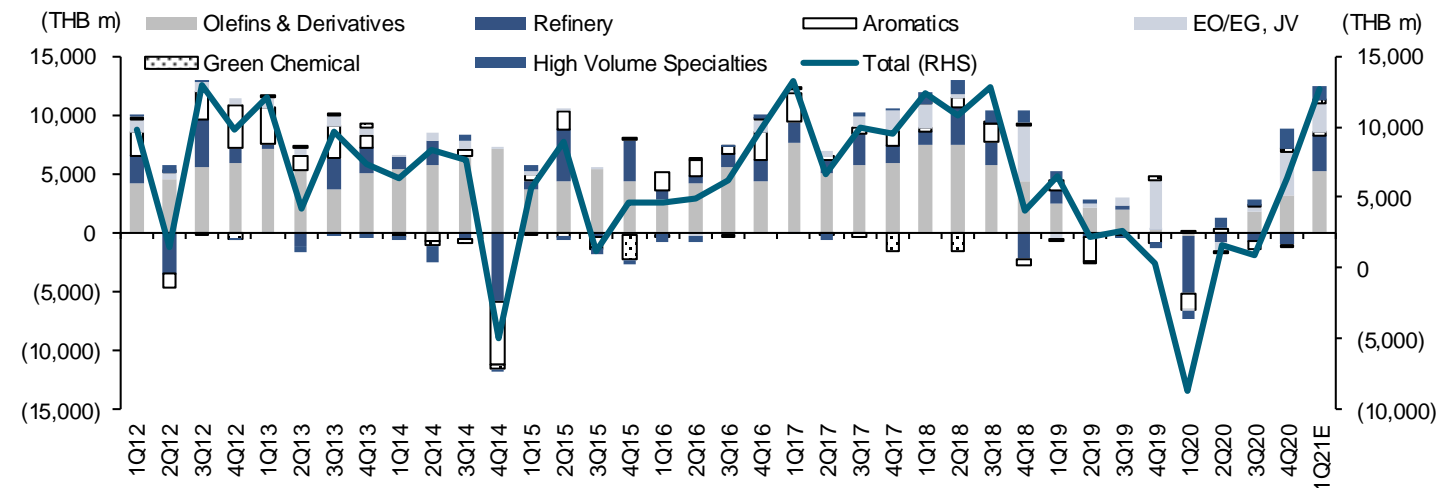
Exhibit 2: EBITDA margin breakdown by business



Sources: PTTGC; FSSIA estimates

We project a solid 1Q21 net profit at THB12.6b, up 98% q-q, driven by strong earnings across all of its business units, particularly for the olefins and refinery units – the olefins unit has seen its margins go from strength to strength and the refinery unit should have a large inventory gain.

Exhibit 3: Quarterly net profit breakdown by business unit



Sources: PTTGC; FSSIA estimates

Product margins have been stronger than expected

Starting in 1Q21 PTTGC’s product margins have all shot up markedly, led by the olefins products of polyethylene (PE), polypropylene (PP), monoethylene glycol, (MEG), poly vinyl chloride (PVC), and phenol – PTTGC’s five key products.

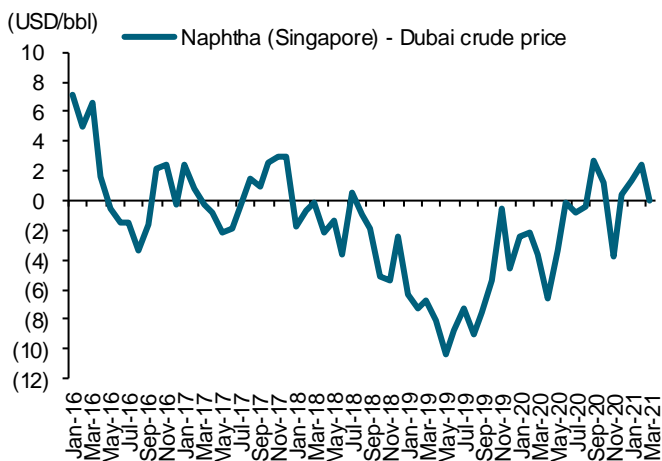
Exhibit 4: Capacity breakdown by plants

Olefins plants	Capacity ('000tpa)	Product	Feedstock type
I1	461	Ethylene	Gas
I1	125	Propylene	Gas
Olefex I	127	Propylene	Gas
I4-1	515	Ethylene	40% Naphtha/60% Gas
I4-1	310	Propylene	40% Naphtha/60% Gas
I4-2	300	Ethylene	Gas
I4-2 - Debottleneck	150	Ethylene	Gas
Ethane cracker (PTTPE)	1,000	Ethylene	Gas
Olefins Reconfiguration (ORP)	750	Ethylene/Propylene	Naphtha
Total olefins	3,738		
Aromatics/Refinery		Capacity (bpd)	
AR 1 Refinery (CDU)	145,000	Petroleum	Crude
AR 2 Condensate Splitter	65,000	Petroleum/Aromatics	Condensate
AR 3 Condensate Splitter	70,000	Petroleum/Aromatics	Condensate

Source: PTTGC

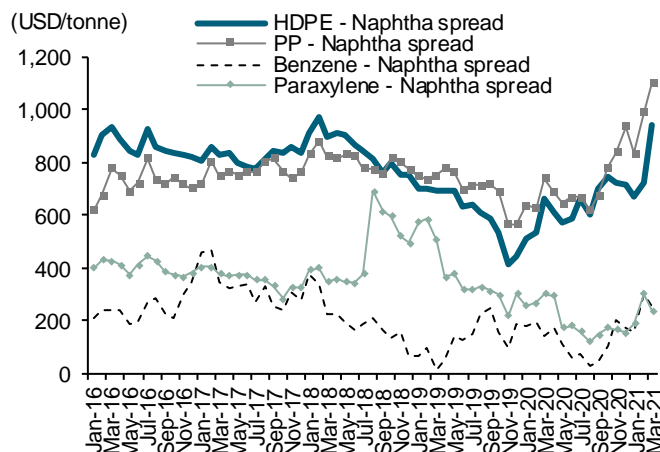
With the operational start-up of ORP’s 0.75mtpa upstream olefins capacity since Dec-20, we believe PTTGC will timely benefit from the low naphtha cost and the high prices of PE and PP thanks to its large gas-based olefins cracker capacity of up to 80% of total feedstock used to produce olefins products.

Exhibit 5: Naphtha (Singapore) – Dubai crude price



Source: Bloomberg

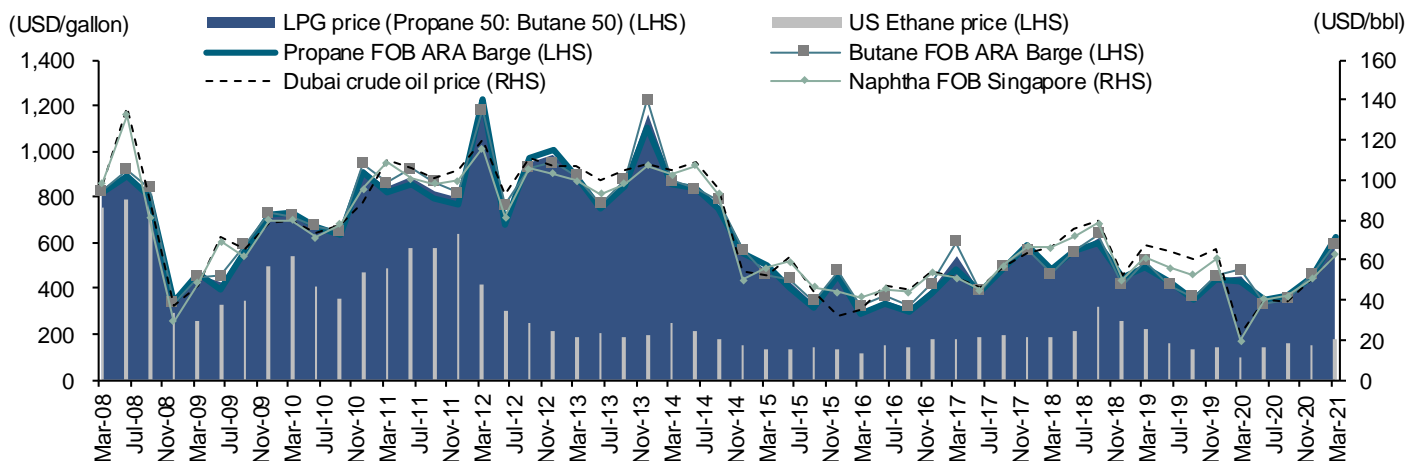
Exhibit 6: Key product margins



Source: Bloomberg

According to management, PTTGC expects to see strong product margins not only from the stronger-than-expected demand mainly coming from packaging and construction materials for PE, PVC, phenol and MEG, and from automobile parts for PP, but also from the lower feedstock costs of naphtha, liquefied petroleum gas (LPG), and propane – PTTGC’s three key feedstocks – thanks to the higher supplies.

Exhibit 7: Prices of key petrochemical feedstocks

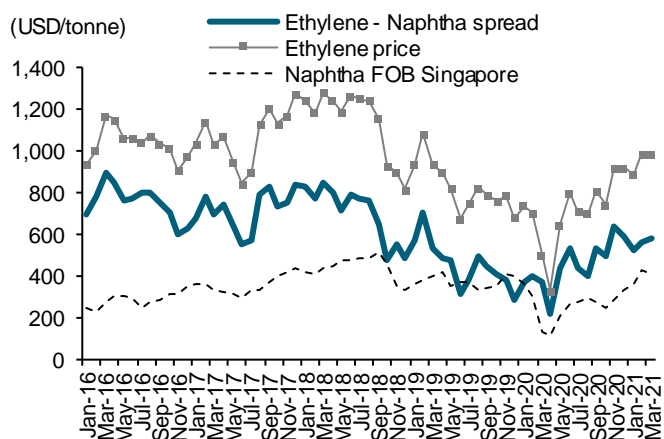


Source: Bloomberg

Olefins – A real white knight to drive up net profits in 1Q21 and 2021

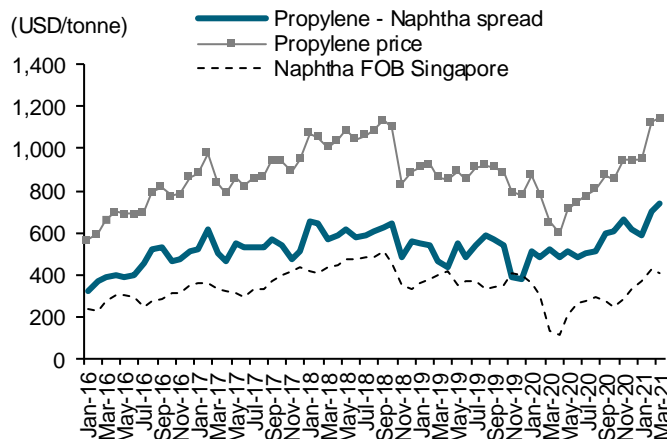
Polyolefins (PP and PE) margins have all strengthened q-q and y-y in 1Q21 thanks to the higher-than-expected demand from China and the US due to the supply disruptions caused by the polar vortex in Feb-21 and the transportation interruptions at the Suez Canal that temporarily blocked the sea route between Europe and Asia.

Exhibit 8: Naphtha spread – Ethylene



Source: Bloomberg

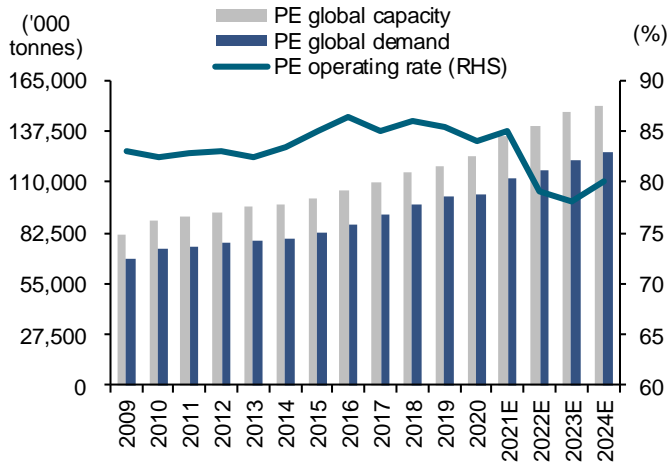
Exhibit 9: Naphtha spread – Propylene



Source: Bloomberg

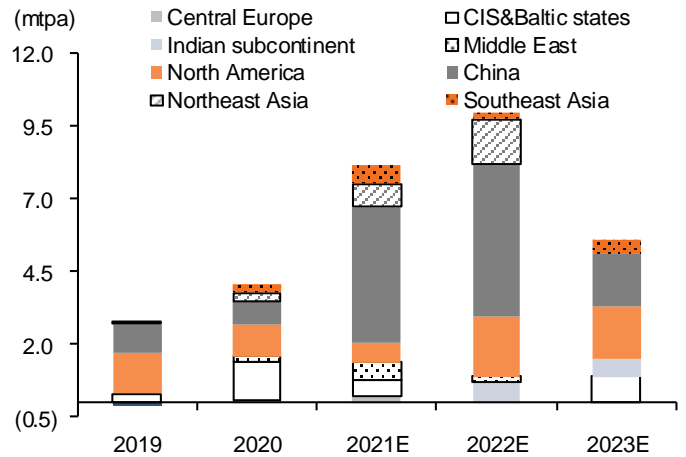
The margins of PE products (2mtpa of 0.8mt HDPE, 0.8mtpa LLDPE, and 0.4mtpa LDPE capacity for PTTGC) have all spiked to over USD700/t, with LDPE-naphtha surging to USD1,163/t as of Apr-21 due to the tight export supply from the US to Asia and the rising demand for packaging. The margin outlook for PE should remain strong in 2H21 and hold up at over USD600/t in 2H21, based on management’s expectation, thanks to the continued higher demand from Asia and North America following the reopening of the global economy that we expect in 2Q21 onward.

Exhibit 10: Global PE supply and demand growth



Source: PTTGC

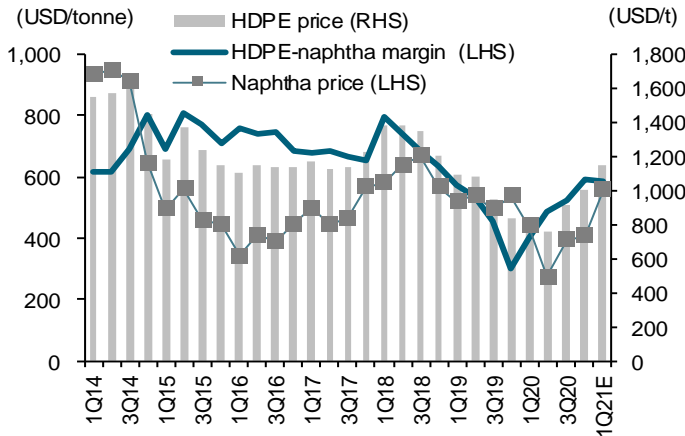
Exhibit 11: Global additional PE supply by region



Source: PTTGC

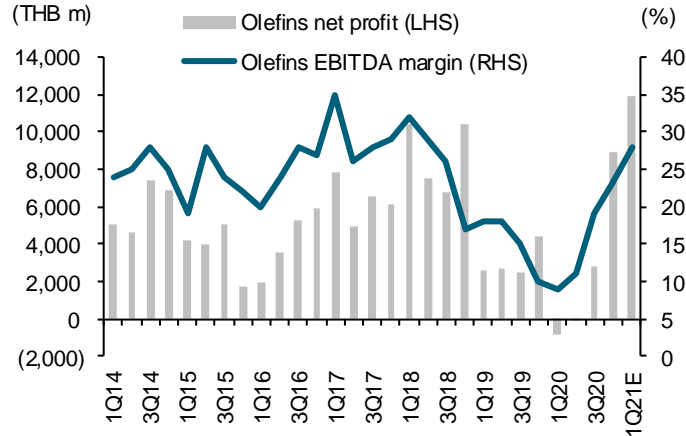
We project that the net profit generated from olefins unit will rise to THB8b-13b per quarter, up from the THB3b-8b range seen in 2019-20, driven by the higher margins and rising production volumes, mainly from ORP.

Exhibit 12: HDPE price, HDPE-naphtha margin vs naphtha price



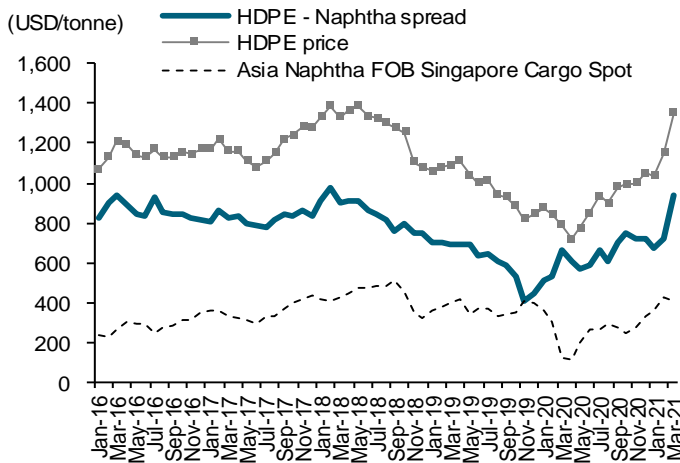
Sources: PTTGC; FSSIA estimates

Exhibit 13: PTTGC's olefins net profit and EBITDA margin



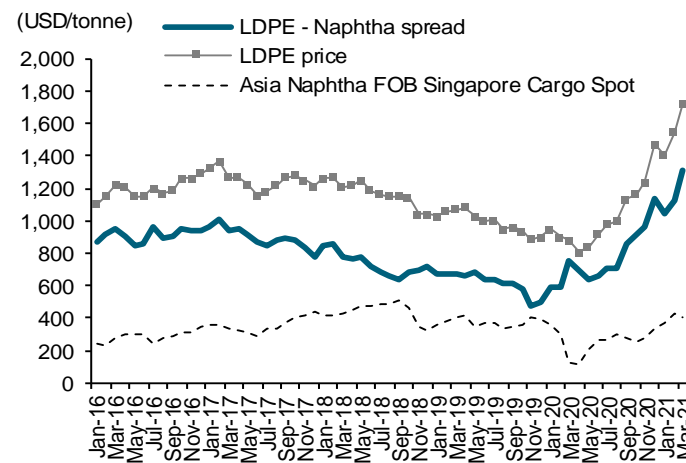
Sources: PTTGC; FSSIA estimates

Exhibit 14: Naphtha spread – HDPE



Source: Bloomberg

Exhibit 15: Naphtha spread – LDPE

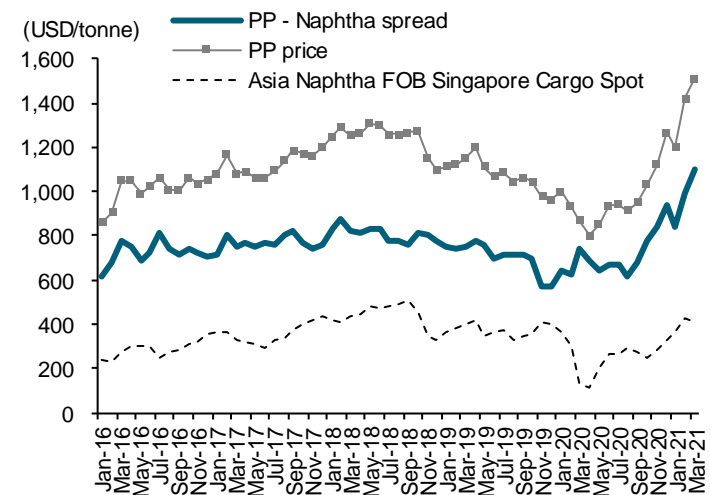


Source: Bloomberg

PP (41% in HMC polymers, 0.8mtpa capacity): The PP-naphtha margin has shot up to over USD900/t since Mar-21, thanks to higher demand for auto parts and packaging and the tight supply in the US. While the company expects the RAPID project in Malaysia to come on stream in 2H21, the PP-naphtha margin should hold up well at over USD700/t, given the projected strong demand outlook.

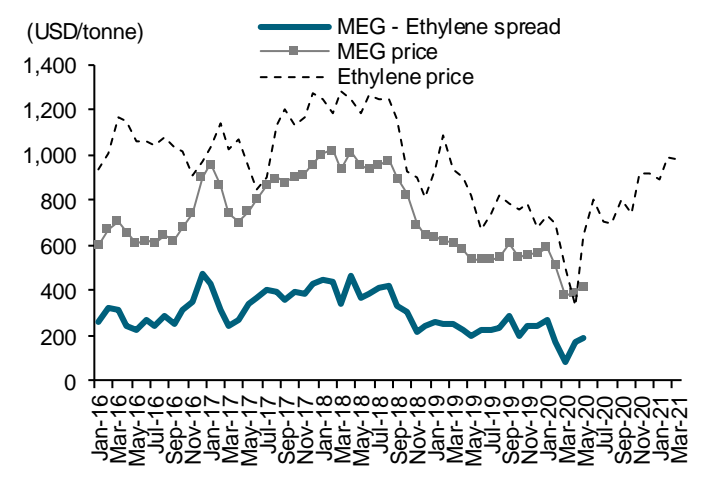
MEG (0.4mtpa capacity): The margin of MEG-0.65 Ethylene has spiked to USD277/t, up from USD160/t in 2020 and USD111/t in 1Q21, due to the higher demand for downstream PET and polyester and the tight supply in the US. Management expects the MEG margin to remain in an upcycle in 2021 thanks to the strong demand outlook and the limited new supply expected in 2021-22.

Exhibit 16: Naphtha spread – PP



Source: Bloomberg

Exhibit 17: Ethylene spread – MEG



Source: Bloomberg

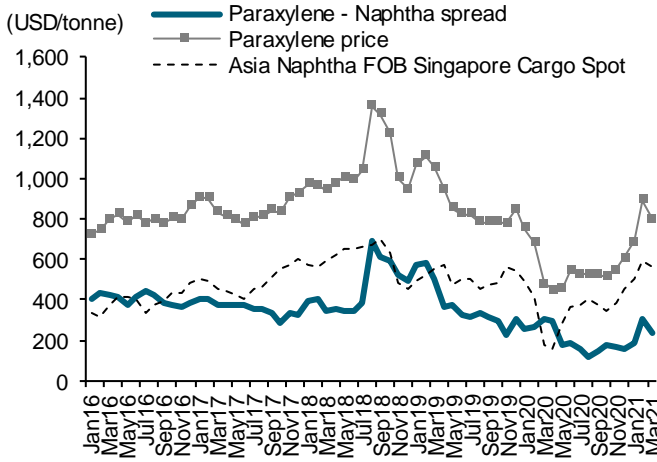
Phenol and BPA (0.45mtpa phenol and 0.15mt BPA capacity): The margins are now in an upcycle and should contribute over THB4b in net profit to PTTGC in 2021, up from cTHB4b in 2020, based on our estimate. Phenol uses propylene and benzene as key feedstocks and therefore should also reduce the demand and margin risks for propylene and benzene in 2H21.

PVC (0.2mtpa via 25% stake in Vinythai (VNT TB, NR)): The PVC-ethylene margin is still solid in 2021 thus far, staying at over USD900/t, driven by the strong demand from China and the US. The PVC margin should remain at a high level at over USD800/t in 2021. PTTGC will complete its tender offer for VNT by 4Q21 and will likely to increase its stake from 25% to over 60% by end-2021, according to management.

Aromatics – Benzene leading margin strength

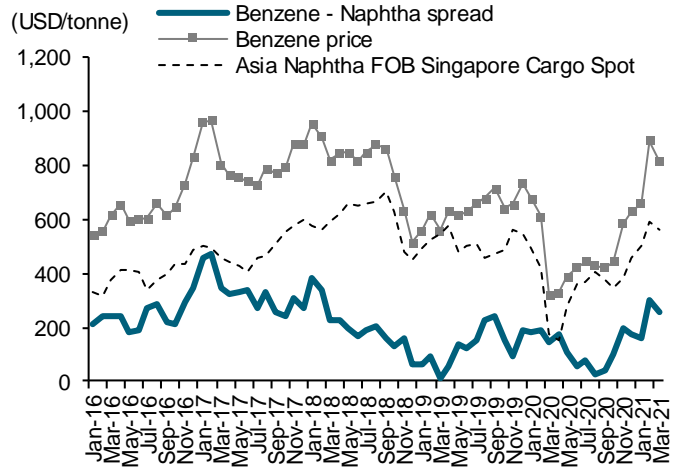
In 1Q21, the margins of paraxylene (PX)-naphtha and benzene-naphtha improved q-q and y-y, driven by the higher demand for PET and polyester fibres for PX (PX and MEG are two key feedstocks for PET and polyester) and from auto parts for the benzene chain. The benzene-naphtha margin has shot up to over USD300/t in Mar-21, while the PX-naphtha margin rose to USD250/t.

Exhibit 18: Naphtha spread – Paraxylene



Source: Bloomberg

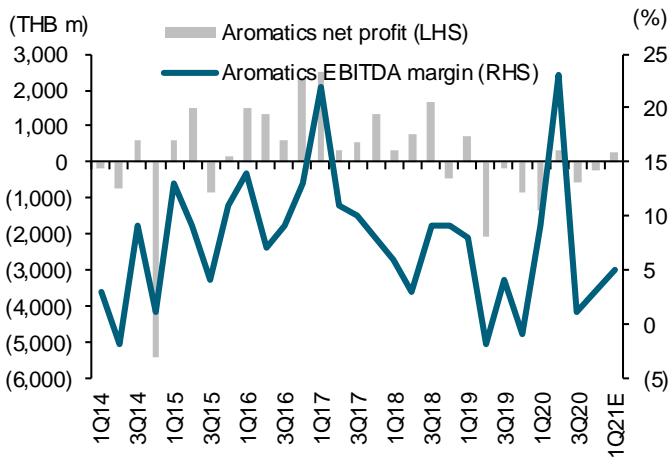
Exhibit 19: Naphtha spread – Benzene



Source: Bloomberg

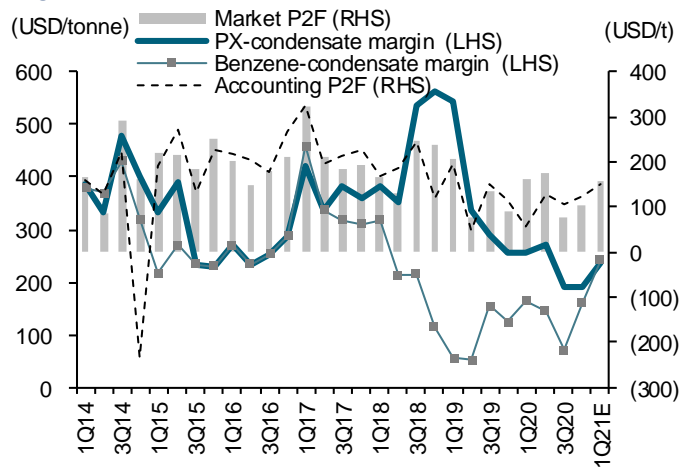
We estimate that PTTGC will see its net profit from PX and benzene improve significantly in 1Q21, posting THB250m in 1Q21, up from a net loss of THB243m in 4Q20 and a net loss of THB1.4b in 1Q20.

Exhibit 20: Net profit from aromatics unit



Sources: PTTGC; FSSIA estimates

Exhibit 21: PX-condensate margin, benzene-condensate margin, and accounting and market product-to-feed (P2F) margins



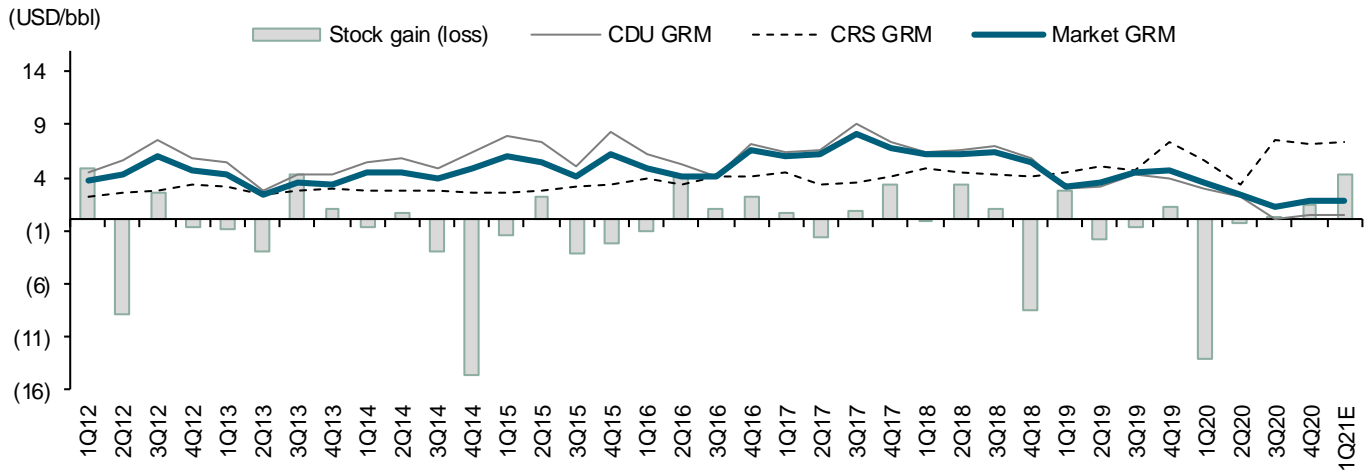
Sources: PTTGC; FSSIA estimates

Refinery net profit to turn black in 1Q21

While we expect PTTGC's market gross refining margin (GRM) to remain weak due to its CDU's continued depressed product margins at USD0.5/bbl, we expect the GRM from its CRS unit to remain high at USD7.4/bbl, resulting in a blended GRM of USD1.8/bbl.

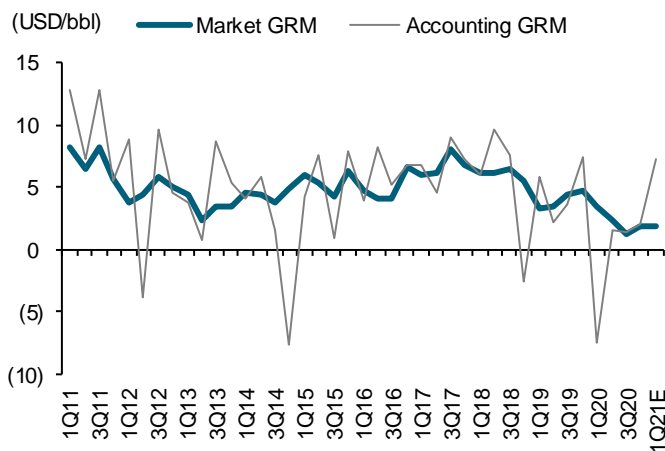
We project PTTGC to post a net profit of THB3.15b from its refinery unit in 1Q21, driven by a THB3b inventory gain to offset a thin operating net profit of THB0.2b.

Exhibit 22: Refinery market GRM, stock gain (loss)



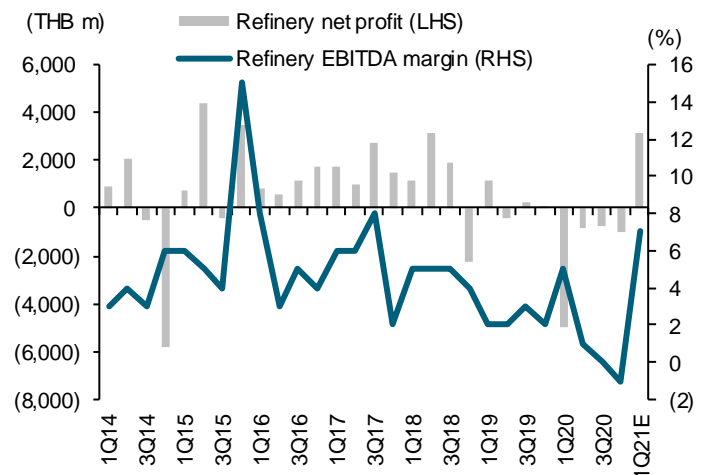
Sources: PTTGC; FSSIA estimates

Exhibit 23: Market and accounting GRMs



Sources: PTTGC; FSSIA estimates

Exhibit 24: Quarterly refinery net profit and EBITDA margin



Sources: PTTGC; FSSIA estimates

Strategic growth roadmap

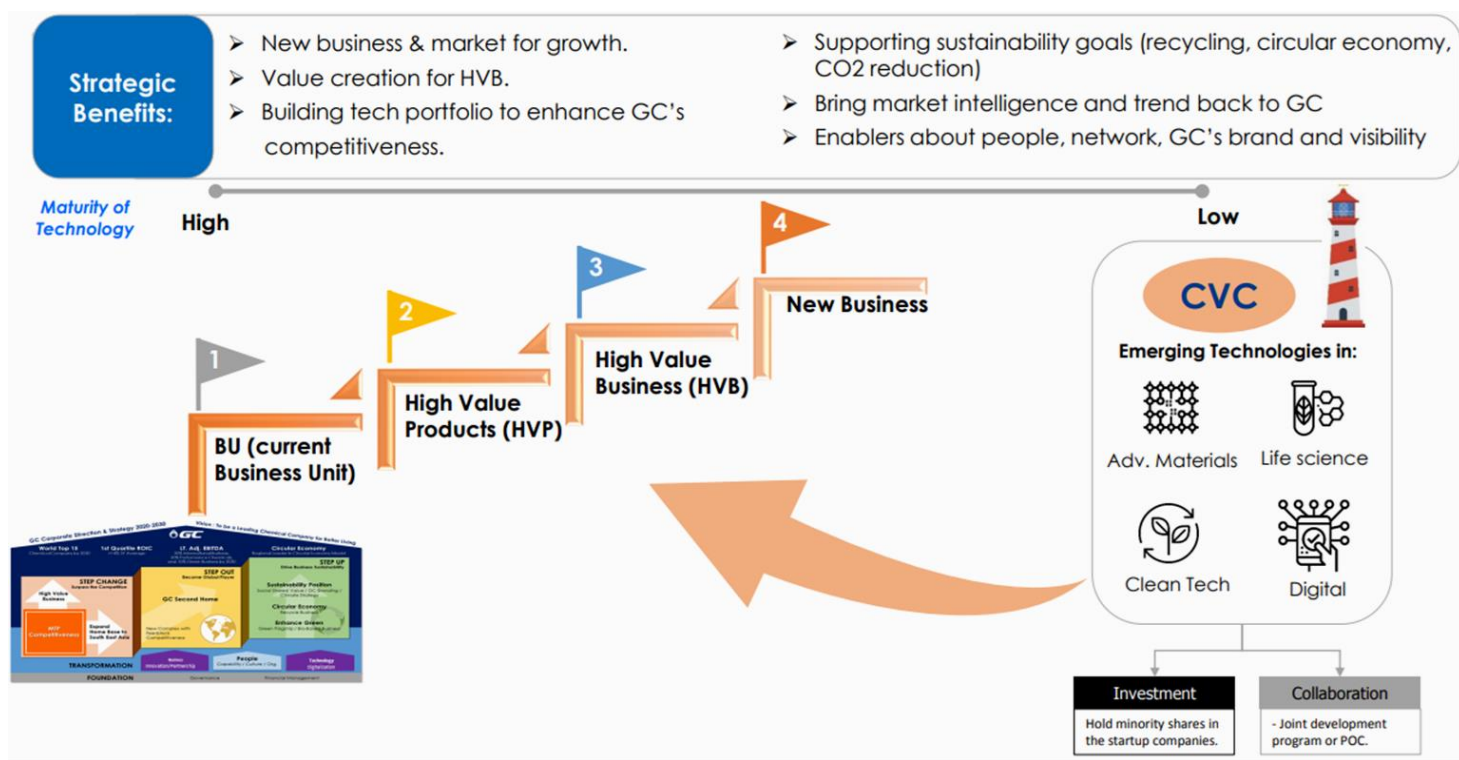
According to management, PTTGC is now seeking a new trajectory to further strengthen its growth, not only in terms of capacity growth but also to enhance the value of its portfolio.

Two goals have been clearly set by management. First, PTTGC plans to increase its high value products (HVP) – defined as products with a 20-25% gross margin vs a 5-10% gross margin for its existing commodity products – from 28% of its total product capacity in 2020 to 35% in 2021 and 64% in 2025.

The company plans to achieve its 64% HVP goal by 2025 via an M&A strategy, focusing on the acquisition of assets with strong and proven financial and operational track records and performance, and strategic product applications with mega-trends. The acquired assets will support the operating assets to immediately increase the net profits contributed to PTTGC.

Second, PTTGC is targeting 30% EBITDA from its overseas operations vs less than 10% currently, aiming to invest in greenfield projects, including a potential 1mtpa ethane cracker in the US.

Exhibit 25: PTTGC’s strategic growth roadmap

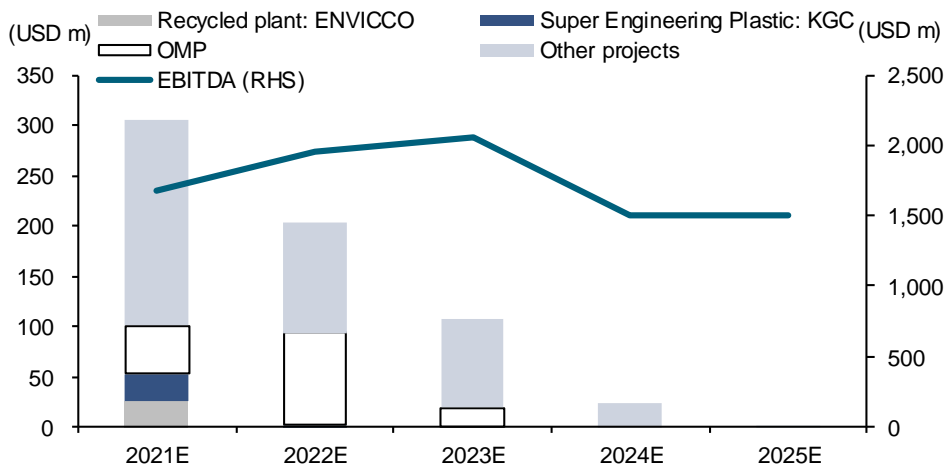


Source: PTTGC

M&A remain key potential growth drivers in 2021-22. Management indicated that PTTGC has a debt capacity to raise up to USD4b-5b to fund M&A that could occur in 2021-22, focusing on the operating assets that should add net profits and cash flows to PTTGC once the M&A are completed.

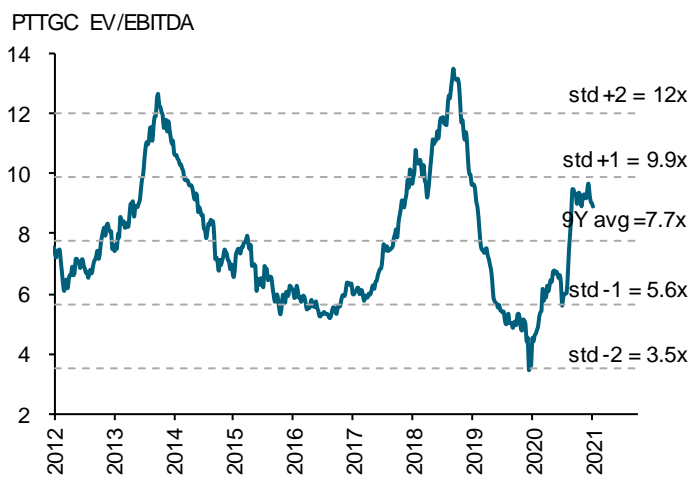
The M&A targets could be in downstream specialty products to further strengthen PTTGC's downstream capability. Note that PTTGC has already ended its capex cycle in 2020 and now has USD200m annual maintenance capex vs its projected USD1b-1.5b annual EBITDA.

Exhibit 26: PTTGC's capex projections



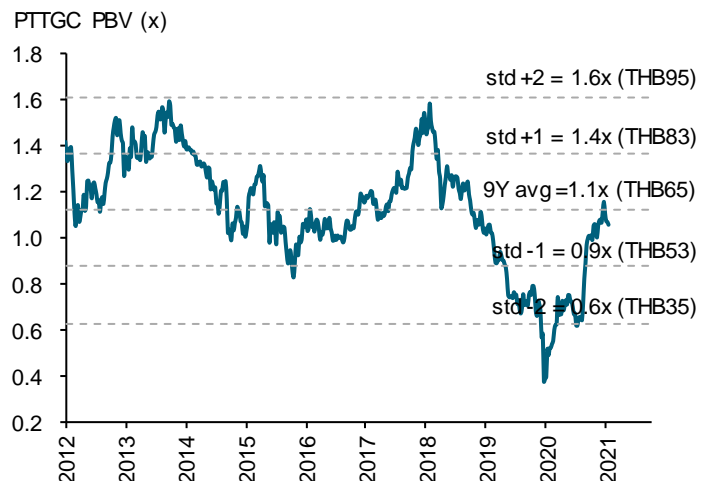
Source: PTTGC

Exhibit 27: Rolling one-year forward EV/EBITDA band



Sources: Bloomberg; FSSIA estimate

Exhibit 28: Rolling one-year forward P/BV band



Sources: Bloomberg; FSSIA estimate

Exhibit 29: Peer comparisons

Company	BBG code	Rec	Share Price	Target price	Upside	Market Cap	3Y EPS CAGR	PE		ROE		PBV		EV / EBITDA	
								21E	22E	21E	22E	21E	22E	21E	22E
			(LCY)	(LCY)	(%)	(USD m)	(%)	(x)	(x)	(%)	(%)	(x)	(x)	(x)	(x)
THAILAND															
Inorama Ventures	IVL TB	BUY	45.25	57.00	26	8,126	6.7	22.2	17.6	8.7	10.1	1.8	1.7	9.6	8.5
Irpc Pcl	IRPC TB	BUY	3.92	5.30	35	2,562	NA	15.2	7.1	6.9	13.6	1.0	0.9	7.5	4.9
Ptt Global Chem	PTTGC TB	BUY	63.25	86.00	36	9,076	36.2	14.7	11.4	6.9	9.0	1.0	1.0	9.7	8.4
Siam Cement	SCC TB	BUY	418.00	445.00	6	16,043	3.8	14.1	14.0	10.8	10.3	1.5	1.4	13.1	13.2
Eastern Polymer	EPG TB	BUY	11.20	12.00	7	1,003	18.2	24.4	21.0	11.8	12.9	2.8	2.6	17.4	14.9
Vinythai Public	VNT TB	NA	38.25	NA	NA	1,438	(2.5)	13.5	13.1	14.4	13.7	1.9	1.7	7.7	7.6
THAILAND avg						38,248	5.8	15.3	13.4	8.8	9.5	1.4	1.3	10.6	10.0
INDIA															
Reliance Industries	RIL IN	NA	1,901.15	NA	NA	165,222	10.2	27.5	20.8	8.5	9.8	2.1	1.9	17.0	12.4
INDIA avg						165,222	43.9	118.9	89.9	36.8	42.3	8.9	8.1	73.5	53.5
TAIWAN															
Formosa Plastics	1301 TT	NA	108.50	NA	NA	24,571	8.6	16.1	15.8	12.8	11.5	1.9	1.8	15.7	17.7
Nan Ya Plastics	1303 TT	NA	90.20	NA	NA	25,449	27.3	17.3	16.7	12.3	11.5	2.0	1.9	15.1	16.2
Formosa Chem&Fi	1326 TT	NA	93.00	NA	NA	19,391	6.7	17.3	18.3	8.5	7.5	1.5	1.5	12.6	14.4
Formosa Petro	6505 TT	NA	99.00	NA	NA	33,549	8.9	23.9	21.8	12.7	12.8	2.8	2.8	13.8	13.3
TAIWAN avg						102,960	11.9	51.6	49.7	31.8	30.1	5.8	5.7	38.6	41.2
SOUTH KOREA															
Hanwha Solutions	009830 KS	NA	49,350.00	NA	NA	8,438	35.4	13.4	11.9	10.2	10.3	1.3	1.2	9.4	8.5
Lotte Chemical	011170 KS	NA	286,500.00	NA	NA	8,777	14.4	8.2	7.9	9.0	8.6	0.7	0.7	4.1	4.0
Lg Chem	051910 KS	NA	864,000.00	NA	NA	54,517	84.9	27.5	24.3	12.1	12.3	3.2	3.0	10.6	9.4
Kumho Petro	011780 KS	NA	282,000.00	NA	NA	7,680	41.5	8.7	9.6	28.4	20.6	2.2	1.9	5.8	6.3
Oci	010060 KS	NA	129,000.00	NA	NA	2,750	NA	20.6	14.8	6.0	7.8	1.2	1.1	10.8	8.9
SOUTH KOREA avg						82,162	60.3	45.8	41.0	27.3	26.0	5.5	5.0	19.3	17.5
MALAYSIA															
Petronas Chem	PCHEM MK	NA	7.85	NA	NA	15,329	7.7	20.0	18.1	9.9	10.5	2.0	1.9	10.1	9.3
Lotte Chemical Titan	TTNP MK	NA	2.70	NA	NA	1,518	(7.4)	15.6	18.2	3.8	2.5	0.5	0.5	2.2	2.6
MALAYSIA avg						16,847	7.0	8.6	8.0	4.1	4.3	0.8	0.8	4.1	3.8
Average (Asia)						405,438	39.4	72.2	58.8	29.4	31.0	6.3	5.9	44.6	36.7
US															
Eastman Chem	EMN US	NA	112.07	NA	NA	15,299	6.0	14.2	13.2	16.4	16.0	2.3	2.2	9.9	9.5
Dupont De Nem	DD US	NA	75.13	NA	NA	40,159	17.3	21.9	18.5	4.7	6.1	1.2	1.1	15.2	14.1
Celanese	CE US	NA	155.54	NA	NA	17,759	8.5	13.6	12.8	33.4	31.1	4.6	3.9	10.6	10.3
Westlake Chem	WLK US	NA	92.88	NA	NA	11,901	15.7	13.5	15.9	13.4	12.6	1.8	1.6	7.0	7.6
Ppg Industries	PPG US	NA	169.00	NA	NA	40,068	11.8	21.6	19.5	29.2	28.4	5.9	5.2	14.6	13.6
Alpek Sa De Cv	ALPEKA MM	NA	20.97	NA	NA	2,223	(17.3)	11.1	11.4	10.0	8.0	1.1	1.0	5.5	5.7
Avg (US)						127,409	11.2	62.5	56.6	62.3	61.4	11.1	9.8	42.6	40.4
ME/Europe															
Saudi Basic	SABIC AB	NA	119.80	NA	NA	95,355	9.8	32.1	27.0	6.4	8.4	2.1	2.1	11.8	10.6
Saudi Kayan	KAYAN AB	NA	17.28	NA	NA	6,816	NA	44.1	27.3	4.4	6.7	1.7	1.6	12.1	10.7
Yanbu National	YANSAB AB	NA	72.50	NA	NA	10,919	13.5	29.0	25.7	9.6	11.1	2.7	2.7	14.5	13.2
Industries Qatar	IQCD QD	NA	13.20	NA	NA	21,567	17.0	22.5	19.2	9.5	8.8	2.2	2.2	23.7	20.6
Basf Se	BAS GR	NA	71.35	NA	NA	78,619	22.0	15.8	15.0	10.8	11.3	1.9	1.9	8.7	8.4
Arkema	AKE FP	NA	104.20	NA	NA	9,614	1.0	16.7	15.4	8.5	8.8	1.4	1.4	8.2	7.7
Lanxess Ag	LXS GR	NA	60.58	NA	NA	6,399	17.9	15.2	12.6	9.6	12.2	1.6	1.5	8.3	7.2
Solvay Sa	SOLB BB	NA	103.60	NA	NA	13,227	2.4	15.5	13.1	9.6	10.6	1.6	1.6	7.5	7.0
Avg (ME/Europe)						242,517	13.6	145.6	126.9	53.2	60.1	12.4	12.3	71.0	64.6
Petrochem under coverage						36,810	5.8	14.8	12.9	8.3	8.9	1.3	1.3	10.3	9.7
Average (all)						775,364	21.5	92.3	78.6	41.8	44.6	8.9	8.4	51.9	45.5

Share price as of 20 April 2021

Sources: Bloomberg; FSSIA estimates

Financial Statements

PTT Global Chemical

Profit and Loss (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Revenue	412,810	329,291	364,179	373,457	373,582
Cost of goods sold	(370,369)	(294,596)	(305,446)	(306,525)	(305,659)
Gross profit	42,441	34,695	58,733	66,932	67,923
Other operating income	-	-	-	-	-
Operating costs	(16,469)	(14,881)	(15,943)	(16,571)	(16,583)
Operating EBITDA	25,972	19,813	42,790	50,361	51,340
Depreciation	(20,250)	(22,497)	(24,744)	(26,991)	(29,238)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	5,722	(2,683)	18,046	23,371	22,102
Net financing costs	(363)	(3,861)	(3,374)	(3,609)	(4,096)
Associates	4,559	3,323	4,583	5,213	6,489
Recurring non-operating income	5,877	5,918	7,583	8,637	10,760
Non-recurring items	1,763	1,169	0	0	0
Profit before tax	12,999	543	22,256	28,399	28,767
Tax	(649)	109	(2,495)	(2,986)	(3,016)
Profit after tax	12,349	652	19,761	25,412	25,751
Minority interests	(667)	(452)	(371)	(371)	(371)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	11,682	200	19,390	25,041	25,380
Non-recurring items & goodwill (net)	(1,763)	(1,169)	0	0	0
Recurring net profit	9,919	(969)	19,390	25,041	25,380
Per share (THB)					
Recurring EPS *	2.20	(0.22)	4.30	5.55	5.63
Reported EPS	2.59	0.04	4.30	5.55	5.63
DPS	7.77	4.24	4.02	7.06	7.67
Diluted shares (used to calculate per share data)	4,508	4,508	4,508	4,508	4,508
Growth					
Revenue (%)	(20.4)	(20.2)	10.6	2.5	0.0
Operating EBITDA (%)	(54.3)	(23.7)	116.0	17.7	1.9
Operating EBIT (%)	(84.9)	nm	nm	29.5	(5.4)
Recurring EPS (%)	(75.6)	nm	nm	29.1	1.4
Reported EPS (%)	(70.8)	(98.3)	9,614.0	29.1	1.4
Operating performance					
Gross margin inc. depreciation (%)	5.4	3.7	9.3	10.7	10.4
Gross margin of key business (%)	5.4	3.7	9.3	10.7	10.4
Operating EBITDA margin (%)	6.3	6.0	11.7	13.5	13.7
Operating EBIT margin (%)	1.4	(0.8)	5.0	6.3	5.9
Net margin (%)	2.4	(0.3)	5.3	6.7	6.8
Effective tax rate (%)	5.0	-20.1	11.2	10.5	10.5
Dividend payout on recurring profit (%)	353.0	(1,973.8)	93.5	127.2	136.2
Interest cover (X)	31.9	0.8	7.6	8.9	8.0
Inventory days	37.3	43.2	36.5	33.3	33.9
Debtor days	35.3	35.2	30.7	31.7	32.1
Creditor days	44.6	44.7	40.3	42.7	43.3
Operating ROIC (%)	2.1	(0.9)	(0.7)	(0.8)	(0.8)
ROIC (%)	2.8	0.7	(0.7)	(0.8)	(0.8)
ROE (%)	3.4	(0.3)	6.9	9.0	9.4
ROA (%)	2.4	0.6	4.1	5.3	5.3
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Refinery and shared facilities	163,414	136,654	152,595	160,487	160,612
Aromatics	68,525	59,125	79,125	79,125	79,125
Olefins and derivatives	107,407	90,258	81,475	82,861	82,861
Green Chemicals	19,852	13,652	18,652	19,652	19,652

Sources: PTT Global Chemical; FSSIA estimates

Financial Statements

PTT Global Chemical

Cash Flow (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Recurring net profit	9,919	(969)	19,390	25,041	25,380
Depreciation	20,250	22,497	24,744	26,991	29,238
Associates & minorities	(6,000)	(6,001)	(4,583)	(5,213)	(6,489)
Other non-cash items	(1,931)	(1,584)	(1,584)	(1,584)	(1,584)
Change in working capital	7,728	6,024	(1,956)	(248)	363
Cash flow from operations	29,966	19,966	36,010	44,987	46,907
Capex - maintenance	-	-	-	-	-
Capex - new investment	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)
Net acquisitions & disposals	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Other investments (net)	(780)	(770)	(770)	(770)	(770)
Cash flow from investing	(41,780)	(41,770)	(41,770)	(41,770)	(41,770)
Dividends paid	(35,011)	(19,131)	(18,128)	(31,847)	(34,560)
Equity finance	0	0	0	0	0
Debt finance	(8,488)	(8,486)	(5,493)	10,000	10,000
Other financing cash flows	27,312	68,174	(13,194)	21,161	21,161
Cash flow from financing	(16,188)	40,556	(36,815)	(686)	(3,399)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	(28,002)	18,752	(42,575)	2,531	1,738
Free cash flow to firm (FCFF)	(8,695.04)	(18,292.83)	(815.04)	8,398.33	10,805.55
Free cash flow to equity (FCFE)	7,009.26	37,883.83	(24,446.96)	34,377.87	36,297.94
Per share (THB)					
FCFF per share	(1.93)	(4.06)	(0.18)	1.86	2.40
FCFE per share	1.55	8.40	(5.42)	7.62	8.05
Recurring cash flow per share	4.93	3.09	8.42	10.03	10.32
Balance Sheet (THB m) Year Ending Dec					
Tangible fixed assets (gross)	380,497	420,497	460,497	500,497	540,497
Less: Accumulated depreciation	(154,746)	(177,243)	(201,987)	(228,977)	(258,215)
Tangible fixed assets (net)	225,751	243,254	258,511	271,520	282,282
Intangible fixed assets (net)	0	0	0	0	0
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	44,790	51,791	57,374	63,587	71,076
Cash & equivalents	25,560	44,313	1,738	4,269	6,007
A/C receivable	34,157	29,277	32,030	32,846	32,857
Inventories	36,252	33,445	27,641	28,345	28,355
Other current assets	8,525	22,876	22,876	12,876	12,876
Current assets	104,494	129,911	84,285	78,336	80,094
Other assets	77,478	64,426	64,426	64,426	44,426
Total assets	452,514	489,383	464,595	477,869	477,879
Common equity	285,830	281,015	282,277	275,471	266,292
Minorities etc.	7,765	7,979	4,419	4,790	5,161
Total shareholders' equity	293,595	288,994	286,696	280,262	271,453
Long term debt	96,918	126,261	120,768	130,768	140,768
Other long-term liabilities	8,968	15,086	9,688	18,495	17,301
Long-term liabilities	105,886	141,347	130,456	149,262	158,069
A/C payable	40,102	31,988	35,378	36,279	36,291
Short term debt	9,068	7,066	7,066	7,066	7,066
Other current liabilities	3,864	19,987	5,000	5,000	5,000
Current liabilities	53,033	59,041	47,443	48,345	48,357
Total liabilities and shareholders' equity	452,514	489,383	464,595	477,869	477,879
Net working capital	34,969	33,622	42,169	32,788	32,796
Invested capital	382,989	393,094	422,480	432,321	430,581
* Includes convertibles and preferred stock which is being treated as debt					
Per share (THB)					
Book value per share	63.41	62.34	62.62	61.11	59.07
Tangible book value per share	63.41	62.34	62.62	61.11	59.07
Financial strength					
Net debt/equity (%)	27.4	30.8	44.0	47.7	52.2
Net debt/total assets (%)	17.8	18.2	27.1	28.0	29.7
Current ratio (x)	2.0	2.2	1.8	1.6	1.7
CF interest cover (x)	130.5	21.2	5.6	21.6	19.6
Valuation					
Recurring P/E (x) *	28.7	(294.2)	14.7	11.4	11.2
Recurring P/E @ target price (x) *	39.1	(400.0)	20.0	15.5	15.3
Reported P/E (x)	24.4	1,428.5	14.7	11.4	11.2
Dividend yield (%)	12.3	6.7	6.4	11.2	12.1
Price/book (x)	1.0	1.0	1.0	1.0	1.1
Price/tangible book (x)	1.0	1.0	1.0	1.0	1.1
EV/EBITDA (x) **	14.4	19.3	9.7	8.4	8.4
EV/EBITDA @ target price (x) **	18.3	24.5	12.1	10.4	10.4
EV/invested capital (x)	1.0	1.0	1.0	1.0	1.0
* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income					

Sources: PTT Global Chemical; FSSIA estimates

Corporate Governance report of Thai listed companies 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PAP	PCSGH	PDJ	PG	PHOL	PLANB
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	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

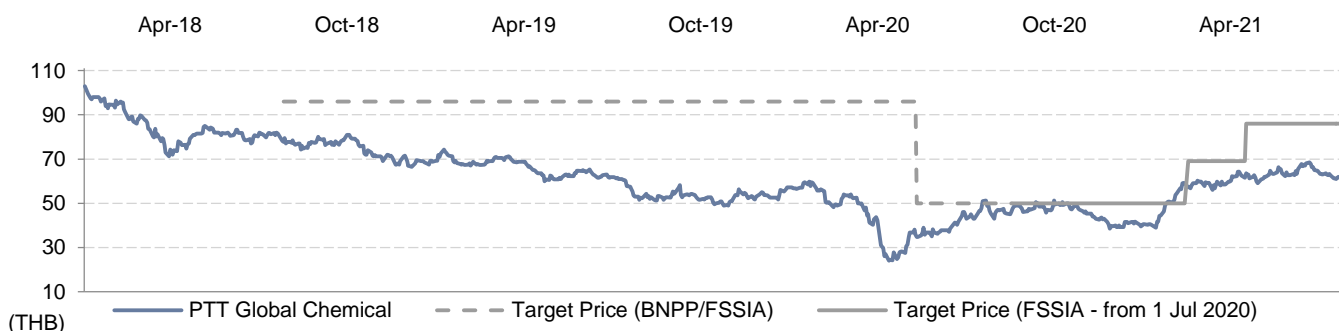
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) 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

PTT Global Chemical (PTTGC TB)



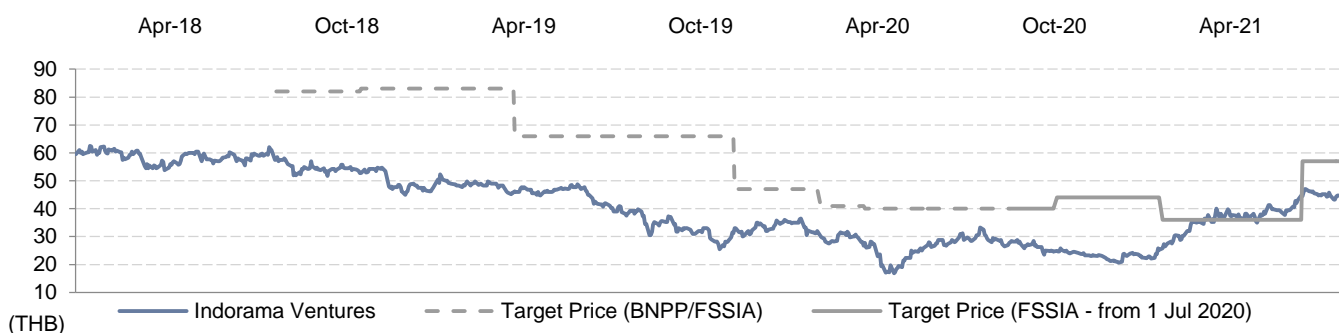
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Oct-2018	BUY	96.00	08-May-2020	BUY	50.00	18-Jan-2021	BUY	86.00
09-Apr-2020	BUY	50.00	27-Nov-2020	BUY	69.00			

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

Price and TP are in local currency

Source: FSSIA estimates

Indorama Ventures (IVL TB)



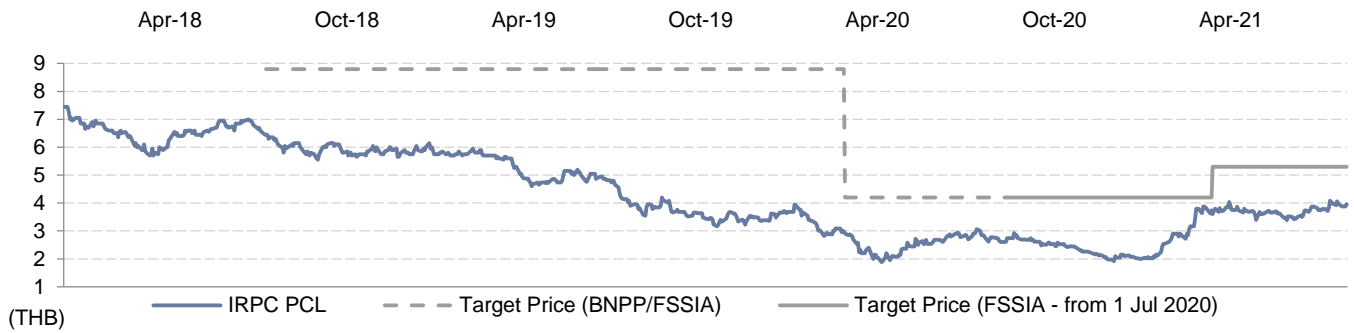
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Oct-2018	BUY	82.00	20-Jan-2020	BUY	41.00	06-Nov-2020	BUY	36.00
21-Dec-2018	BUY	83.00	27-Feb-2020	BUY	40.00	08-Mar-2021	BUY	57.00
02-May-2019	BUY	66.00	09-Jun-2020	BUY	40.00			
07-Nov-2019	BUY	47.00	07-Aug-2020	BUY	44.00			

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

Price and TP are in local currency

Source: FSSIA estimates

IRPC PCL (IRPC TB)



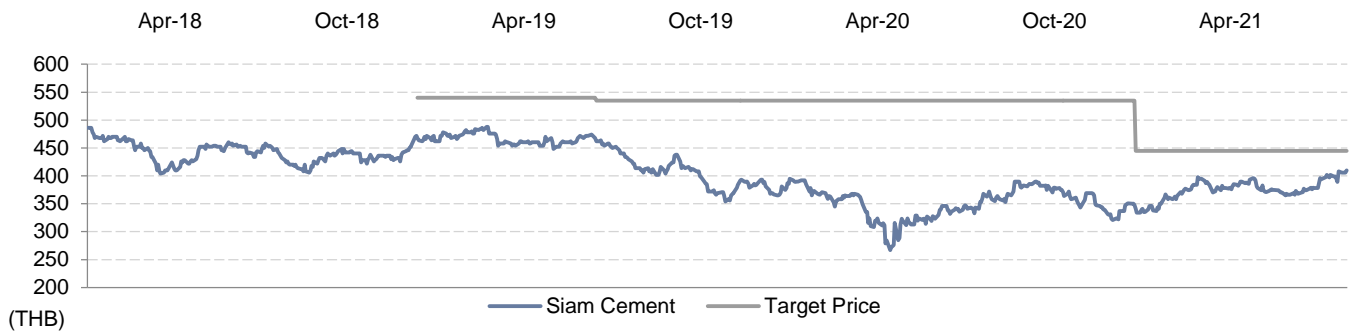
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Oct-2018	BUY	8.80	14-Feb-2020	BUY	4.20	22-Dec-2020	BUY	5.30
13-Feb-2019	BUY	8.80	08-May-2020	BUY	4.20			

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

Price and TP are in local currency

Source: FSSIA estimates

Siam Cement (SCC TB)



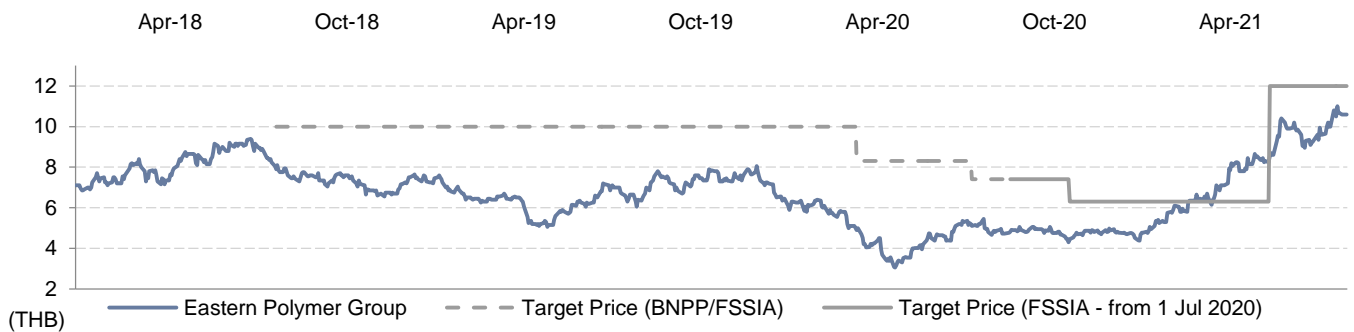
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
31-Jan-2019	BUY	540.00	02-Apr-2020	BUY	535.00	-	-	-
05-Jul-2019	BUY	535.00	14-Oct-2020	BUY	445.00			

Suwat Sinsadok started covering this stock from 14-Oct-2020

Price and TP are in local currency

Source: FSSIA estimates

Eastern Polymer Group (EPG TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
09-Oct-2018	BUY	10.00	29-May-2020	BUY	7.40	08-Feb-2021	BUY	12.00
20-Feb-2020	BUY	8.30	20-Aug-2020	BUY	6.30			
29-May-2020	BUY	7.40	10-Nov-2020	BUY	6.30			

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
PTT Global Chemical	PTTGC TB	THB 63.25	BUY	The key downside risks to our EV/EBITDA-based TP are a weaker-than-expected HDPE price and HDPE-naphtha margin.
Indorama Ventures	IVL TB	THB 45.25	BUY	The key downside risks to our EV/EBITDA-based TP are weaker-than-expected margins for PX-PTA and PET-PTA, lower demand for polyester, and delays in IVL's projects.
IRPC PCL	IRPC TB	THB 3.92	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.
Siam Cement	SCC TB	THB 418.00	BUY	Downside risks to our call include 1) a lower-than-expected demand for chemicals, CBM, and packaging; 2) rising coal costs for its cement and packaging units; and 3) weaker demand from the automobile industry that could erode the demand for SCC's chemical unit and its dividend contributions.
Eastern Polymer Group	EPG TB	THB 11.20	BUY	Downside risks to our EV/EBITDA-based target price include 1) a sharp rise in feedstock prices, driven mostly by a higher oil price; and 2) lower-than-expected demand for plastics used for insulators and the automobile and packaging industries.

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 20-Apr-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.