

# SIAM CEMENT

## THAILAND / MATERIALS

# SCC TB

# BUY

UNCHANGED

## Cementing a new growth roadmap

- Earnings momentum to accelerate in 2023-24 as SCC transforms into a balanced conglomerate from an oil-driven petrochemical firm.
- Growth performance to be supported by chemical competitiveness and packaging capacity expansion.
- SoTP-based TP at THB466 factors in poor industry outlook.

TARGET PRICE	THB466.00
CLOSE	THB380.00
UP/DOWNSIDE	+22.6%
PRIOR TP	THB483.00
CHANGE IN TP	-3.5%
TP vs CONSENSUS	+9.0%

### KEY STOCK DATA

YE Dec (THB m)	2021	2022E	2023E	2024E
Revenue	530,112	608,488	726,219	761,491
Net profit	47,174	35,011	46,340	51,632
EPS (THB)	39.31	29.18	38.62	43.03
vs Consensus (%)	-	(11.8)	0.2	(8.9)
EBITDA	71,091	61,469	88,987	99,477
Core net profit	47,174	35,011	46,340	51,632
Core EPS (THB)	39.31	29.18	38.62	43.03
Chg. In EPS est. (%)	-	(41.1)	(27.5)	(36.6)
EPS growth (%)	38.2	(25.8)	32.4	11.4
Core P/E (x)	9.7	13.0	9.8	8.8
Dividend yield (%)	4.3	4.5	4.1	4.6
EV/EBITDA (x)	10.7	13.3	9.5	8.7
Price/book (x)	1.2	1.2	1.1	1.0
Net debt/Equity (%)	49.4	56.9	55.7	51.3
ROE (%)	13.7	9.4	11.8	12.2

### Becoming a stronger and more competitive player

While we turn more bearish on SCC's net profit growth in 2022 due to the rising cost of oil, naphtha, coal, and gas, we believe SCC's net profit growth will start to accelerate in 2023-24. Key drivers are the start-up of LSP, its new chemical complex in Vietnam, stronger earnings from packaging, and improving earnings from cement and building materials (CBM). We believe SCC will transform itself from an oil-driven petrochemical firm into a balanced conglomerate with a portfolio featuring competitive cost structures for chemicals (higher gas feedstock), packaging (more HVA products), and CBM (more biomass to replace coal).

### Chemical competitiveness and packaging capacity growth are key

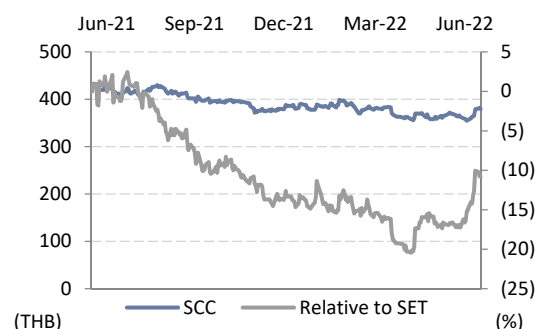
We see three key catalysts for SCC's earnings growth in 2022-24. First, the start-up of LSP will increase its chemical capacity by 53% to 4.1mtpa of upstream olefins and enhance feedstock competitiveness. Second, the stronger net profit growth from its packaging unit, which we expect to grow by 40% y-y in 2022 and 13% y-y in 2023 on rising capacity from M&As, organic expansion, and declines in raw material costs. Third, the higher earnings from its CBM unit, driven by improving demand for its regional cement production, and its stronger pricing power to raise prices to match the rising cost of energy and raw materials.

### Chemicals: Growth via transformations and capacity expansion

We believe SCC's LSP, a new USD5.4b petrochemical complex in Vietnam scheduled to open in 1H23, will be a game changer for SCC not only for its capacity growth but also for its enhanced cost competitiveness and feedstock flexibility that are critical in today's fast-changing industry environment. Post LSP, SCC will grow its upstream chemical capacity by 53% to 4.1mt. We believe the propylene-to-olefins (PTO) technology using the combined PDH with propylene self-metathesis (MET) will enhance olefin production yield by using more propane feedstock.

### Regional play with higher pricing power

We lower our SoTP-based TP from THB483 to THB466 due to 1) our cuts in EPS forecasts in 2022-24; and 2) the valuation rollover to 2023. We decrease our EV/EBITDA multiple for CBM from 10x to 8x to reflect the poorer industry outlook but maintain our valuations for the packaging and chemical units based on projected demand recoveries in 2H22-2024.



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	3.8	0.3	(11.6)
Relative to country (%)	8.9	7.2	(11.5)
Mkt cap (USD m)			12,986
3m avg. daily turnover (USD m)			25.7
Free float (%)			67
Major shareholder	H.M. King Maha Vajiralongkorn (34%)		
12m high/low (THB)	440.00/355.00		
Issued shares (m)	1,200.00		

Sources: Bloomberg consensus; FSSIA estimates



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## Investment thesis

We believe SCC's unique asset portfolio – consisting of cyclical chemical production, cement and building materials (CBM), and its more sustainable packaging business – could position it as one of Thailand's leading growth plays. SCC's net profit growth from its packaging business should further strengthen net profit growth from its chemical unit, mainly from the start-up of the new LSP complex in Vietnam in 2023. The CBM units should continue to be SCC's cash cow with low capex and high depreciation expenses to generate cash flows in 2022-23.

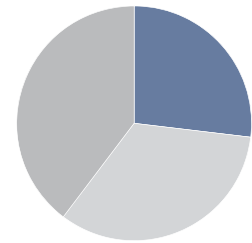
## Company profile

SCC is 30% owned by the Crown Property Bureau and is the third largest company on the Thailand Stock Exchange by market capitalisation. Established in 1913 as a cement company, SCC was a means to reduce Thailand's reliance on cement imports and to take fuller advantage of the natural resources available in the country.

[www.scg.com](http://www.scg.com)

## Principal activities (revenue, 2021)

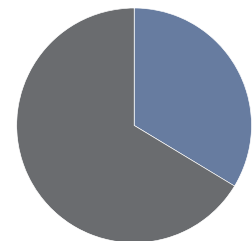
- Cement & Building Material - 26.9 %
- Chemicals - 33.4 %
- Packaging - 39.7 %



Source: Siam Cement

## Major shareholders

- H.M. King Maha Vajiralongkorn - 33.6 %
- Others - 66.4 %



Source: Siam Cement

## Catalysts

Key potential catalysts for SCC include: 1) capacity expansions of its chemical and packaging businesses; 2) the rising demand for chemicals and paper packaging that should more than offset the weak demand for CBM; and 3) improving margins for its CBM unit on the back of higher HVA revenue.

## Risks to our call

Downside risks to our SoTP-based TP 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.

## Event calendar

Date	Event
28 July 2022	2Q22 result announcement

## Key assumptions

	2022E	2023E	2024E
Cement demand growth (%)	3.0	6.0	6.0
Petrochemical utilisation (%)	95	95	95
Olefins capacity (m tonnes)	2,050	3,550	3,550
HDPE-naphtha (USD/tonne)	508	520	713
PP-naphtha (USD/tonne)	508	570	713

Source: FSSIA estimates

## Earnings sensitivity

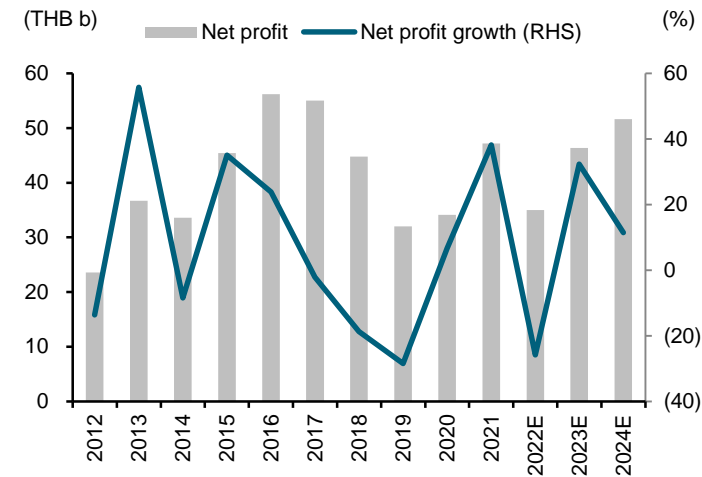
- For every 1% change in Dubai oil price, we estimate a 0.7% change in 2023 EPS, all else being equal.
- For every 1% increase in PP-naphtha margin, we estimate 2023 EPS would rise 1%, and vice versa, all else being equal.
- For every 1% increase in utilisation rate, we estimate 2023 EPS would rise 1.5%, and vice versa, all else being equal.

Source: FSSIA estimates

## Cementing a new growth roadmap

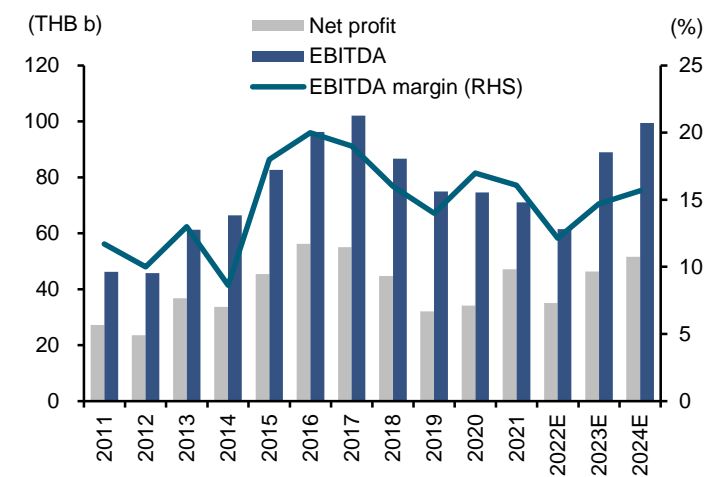
While we turn more bearish on SCC's near-term net profit and EBITDA growth in 2022 due to rising cost pressures from spikes in the prices of oil and naphtha (for the petrochemicals unit), coal (packaging and CBM), and gas (ceramics), we believe SCC's net profit growth momentum will start to accelerate again in 2023-24.

Exhibit 1: Net profit, net profit growth



Sources: SCC; FSSIA estimates

Exhibit 2: Net profit, EBITDA, EBITDA margin



Sources: SCC; FSSIA estimates

We see the key drivers as the start-up of its new chemical complex in Vietnam, stronger earnings from packaging, and improving earnings from CBM.

### Driver #1: Chemical capacity growth and improving feedstock competitiveness.

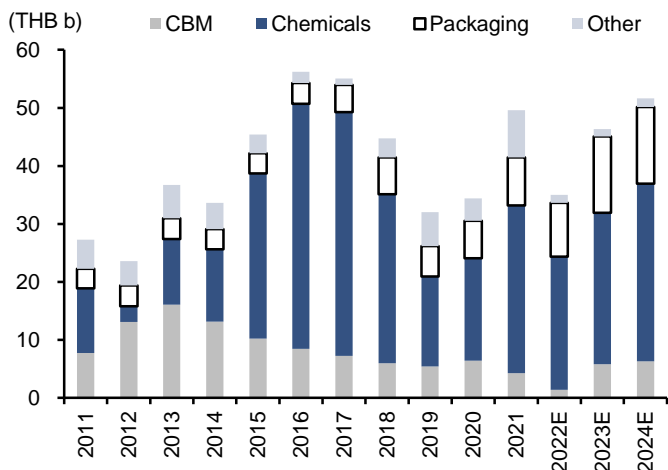
The upcoming commencement of the commercial operation date (COD) of its Longsan petrochemical complex (LSP) will increase its chemical capacity by 53% to 4.1mtpa of upstream olefins.

### Driver #2: Stronger net profit growth from its packaging unit via the stake in

**SCG Packaging (SCGP TB, BUY, TP THB70).** We expect SCGP's net profit to grow by 40% y-y in 2022 and 13% y-y in 2023 on the back of rising capacity from M&As and organic expansions and gradual declines in raw material costs, particularly for Old Corrugated Containers (OCC), which would help offset higher energy costs.

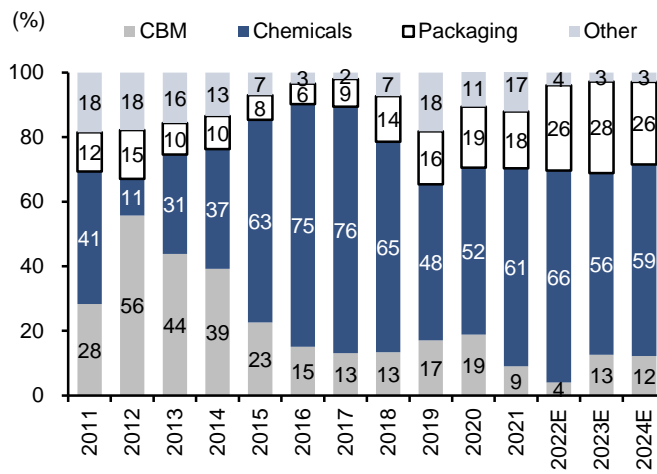
**Driver #3: Improving earnings from its CBM unit,** driven by improving demand for its regional cement production plants in ASEAN markets and the piecemeal improvement in its pricing power to raise cement and ceramic prices to match the rising costs of energy and raw materials.

Exhibit 3: Net profit breakdown by segment



Sources: SCC; FSSIA estimates

Exhibit 4: Net profit breakdown by segment (%)



Sources: SCC; FSSIA estimates

We believe that in the next three years, SCC will transform itself from an oil-driven petrochemical and coal-driven CBM company into a balanced conglomerate with a business portfolio featuring more competitive cost structures for chemicals (higher proportion of gas feedstock), packaging (higher proportion of high value-added (HVA) products with a greater degree of production integration), and CBM (more biomass to replace coal).

While we project the net profit from its chemical unit to gradually decline from 61% of total net profit in 2021 to 55% in 2023 and 59% in 2024, given the gradual ramp-up of production at LSP in 2023 before reaching a higher utilisation rate in 2024, we think the net profit portion from packaging will continue to rise from 18% in 2021 to 25-28% in 2022-24, thanks to its capacity expansions, superior product synergies and integration to command higher gross margins for a number of its new products.

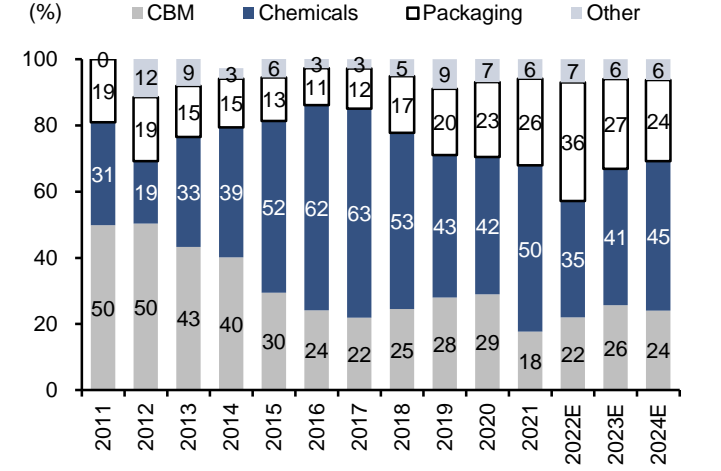
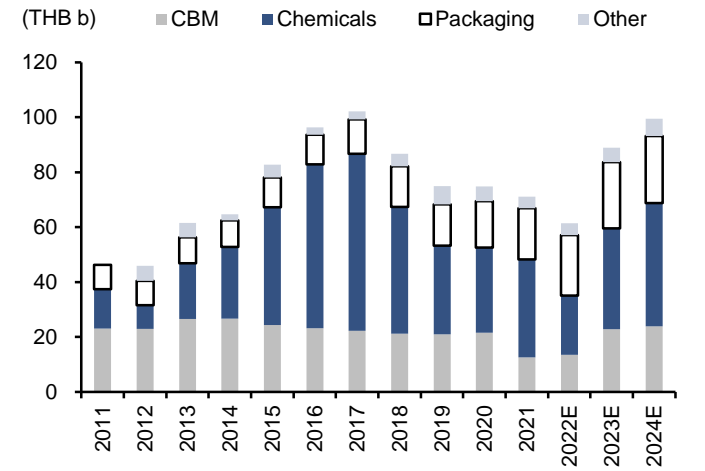
For CBM, we turn slightly positive on its earnings outlook in 2022-24, given the lower cost pressures from the spikes in coal and gas prices and the gradual improvement in SCC's pricing power for passing through rising costs on to consumers.

### Chemicals: Growth from transformations and capacity expansion (LSP, CAP)

In the past 12 years, SCC's chemical business has grown to become its crown jewel, providing the largest net profit contribution at over 40% of total quarterly net profits during 2011-21, ranging from 19% at the bottom of the 2012 downcycle to 63% during the 2017 upcycle period. The rising net profit growth from the chemical unit has been driven by SCC's sound growth strategy, both organically from debottlenecking and capacity expansions and inorganically via the acquisition of stakes in Chandra Asri (TPIA IJ), the leading chemical producer in Indonesia.

Exhibit 5: EBITDA breakdown by segment

Exhibit 6: EBITDA breakdown by segment (%)



Sources: SCC; FSSIA estimates

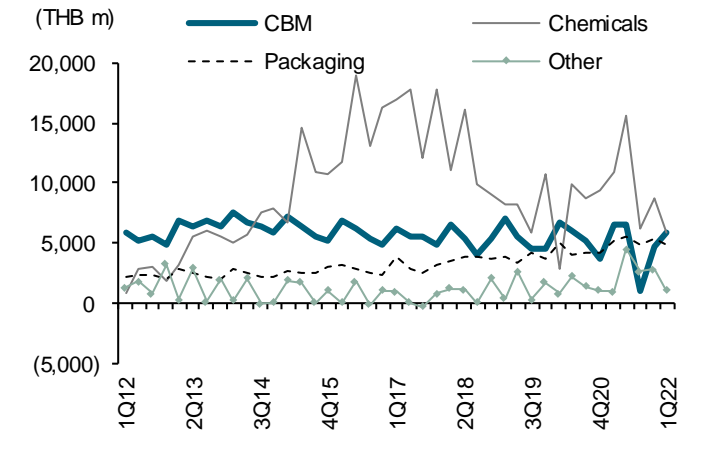
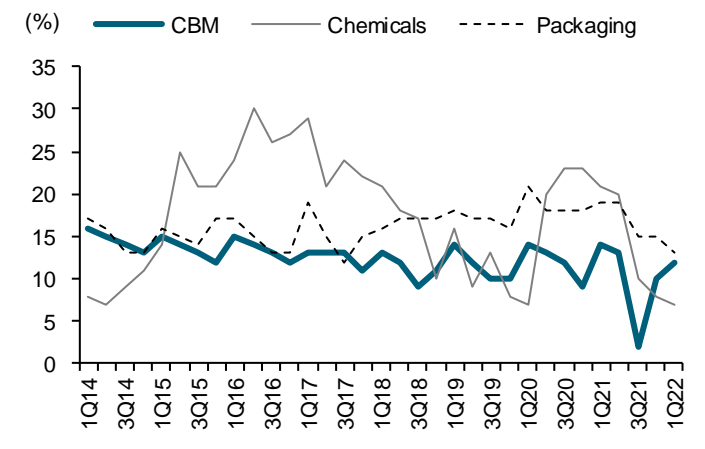
Sources: SCC; FSSIA estimates

As of 2021, SCC owns and operates 3.4mtpa of upstream olefins production capacity, 2.8mtpa of downstream polyethylene (PE) and polyvinyl chloride (PVC), and a number of downstream specialty products via many JVs with several world-leading chemical producers such as DOW Chemical (DOW NYSE) and Mitsui Chemical to further strengthen its earnings sustainability and growth.

Thanks to its superior strategy, SCC has been able to generate strong quarterly EBITDA of over THB5b since 2012, even during the industry downcycle period in 2019-1Q22, with its EBITDA margin staying above 7% and hitting a peak level of 30% in 1Q16. This, in our view, reflects the quality of SCC's management and growth strategy that is capable of not only maximising EBITDA in the upcycles but also surviving and growing during the downcycle periods.

Exhibit 7: Quarterly EBITDA margin by segment

Exhibit 8: Quarterly EBITDA by segment



Source: SCC

Source: SCC

Currently, SCC's chemical portfolio is relatively balanced, with the 3.4mtpa upstream olefins used as feedstock to produce a number of high-margin downstream products, which include high-density PE (HDPE), low-density PE (LDPE) linear LDPE (LLDPE), PVC, and more specialised chemical products using both olefins and aromatics (benzene and paraxylene) as upstream feedstocks to produce PP compound, specialty elastomer, propylene oxide (PO), styrene monomer (SM), polystyrene (PS), methyl methacrylate (MMA), and cast sheets.

In Sep-11, SCC acquired a 30% stake in Chandra Asri (CAP) worth USD442m, which gave SCC access to the high-growth Indonesian market. With its 30% ownership in CAP, SCC's equity capacity grew to 0.8mtpa of both upstream and downstream olefins products.

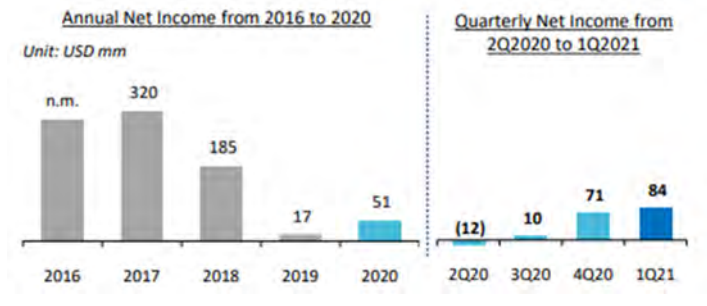
### Exhibit 9: Capacity breakdown by products

Consolidated	(ktpa)	(%)	(ktpa)
<b>Chemical - Naphtha cracker</b>	<b>Capacity</b>	<b>% holding</b>	<b>Equity capacity</b>
Ethylene	2,100	67	1,407
Propylene	1,300	67	871
<b>Total upstream</b>	<b>3,400</b>		<b>2,278</b>
<b>Chemicals - Downstream</b>	<b>Capacity</b>	<b>% holding</b>	<b>Equity capacity</b>
HDPE	920	100	920
LDPE + LLDPE	272	100	272
PP	720	100	720
PVC (Thailand, Indo, Vietnam)*	886	100	886
<b>Total downstream</b>	<b>2,798</b>		<b>2,798</b>
<b>SCC's Chemical - associates</b>	<b>(ktpa)</b>	<b>(%)</b>	<b>(ktpa)</b>
<b>Mitsui Chemical JV</b>	<b>Capacity</b>	<b>% holding</b>	<b>Equity capacity</b>
PTA	1,440	50	720
PET	100	20	20
PP compound	86	46	40
<b>Total for Mitsui Chemical</b>	<b>1,626</b>		<b>780</b>
<b>DOW Chemical JV</b>	<b>Capacity</b>	<b>% holding</b>	<b>Equity capacity</b>
LLDPE	650	50	325
Specialty Elastomer	220	50	110
Propylene Oxide	390	50	195
SM	300	50	150
PS	100	50	50
<b>Total for DOW Chemical</b>	<b>1,660</b>		<b>830</b>
<b>Mitsubishi Rayon JV</b>	<b>Capacity</b>	<b>% holding</b>	<b>Equity capacity</b>
MMA	175	47	82
Cast Sheets	20	47	9
<b>Total for Mitsubishi Rayon</b>	<b>195</b>		<b>92</b>
<b>Chandra Asri (Indonesia)</b>	<b>Capacity</b>	<b>% holding</b>	<b>Equity capacity</b>
Ethylene	860	30	258
Propylene	470	30	141
Crude C4	220	30	66
HDPE/LLDPE	336	30	101
PP	480	30	144
SM	340	30	102
<b>Total for Chandra Asri</b>	<b>2,706</b>		<b>812</b>

Sources: SCC; FSSIA's compilation

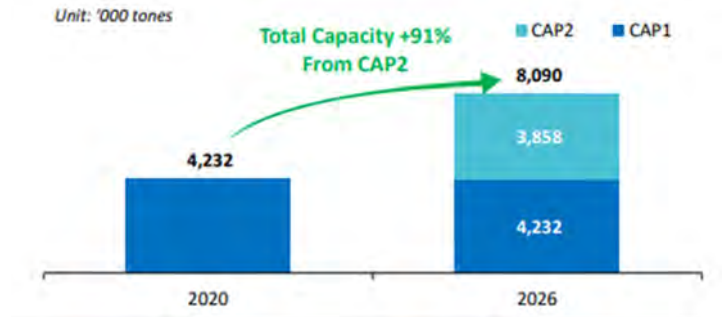
In 2020-21, CAP delivered improving financial performance after two years of poor earnings due to the Covid-19 pandemic in 2019-20. Looking forward, we believe SCC will greatly benefit from CAP's capacity expansion of the CAP2 project that will position CAP (and SCC) well to capture olefins demand growth in the Indonesian market post 2025.

**Exhibit 10: Share of profit from CAP to enhance TOP's performance**



Source: TOP

**Exhibit 11: Performance expected to increase significantly from CAP2 operations**



Source: TOP; 2026 figures are forecast by TOP

**LSP is SCC's key game changer.** We believe SCC's investment of USD5.4b for its new petrochemical complex, LSP in Vietnam, scheduled to COD in 1H23, will be a game changer for SCC not only for its capacity growth but also for its enhanced cost competitiveness and feedstock flexibility that are critical in today's fast-changing industry environment. With 100% ownership, SCC will grow its upstream chemical capacity by 53% to 4.1mt in 2023, with an integrated downstream production capacity of 1.35mtpa of PE and PP.

Located in Long Son commune of Baria-Vung Tau province in Vietnam, around 100km from Ho Chi Minh city, LSP is the first integrated petrochemical complex in Vietnam. Approved by Vietnam's government since Jul-08, but due to the country's economic instability and the highly volatile exchange rate, the development of LSP has long been stalled, resulting in the departures of original partners Qatar Petroleum International (QPI) in Oct-15 and PetroVietnam in May-18.

LSP will also include a port facility comprising two hydrocarbon jetties and raw material transfer pipelines used for importing feedstock. The jetties berth one and two will be designed to accommodate vessels with a carrying capacity ranging from 1,500 dead weight tonnes (DWT) to 20,000DWT and from 5,000DWT to 100,000DWT, respectively.

Although QPI has already exited as a partner for LSP, SCC has already secured a propane and naphtha feedstock agreement, signed in May-18, to ensure feedstock security for LSP.

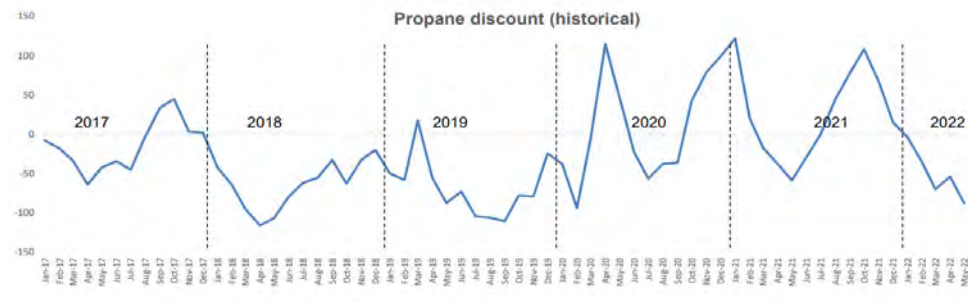
**Exhibit 12: LSP project**

SCC's new Vietnam petrochemical complex		Unit
Location	Long Son Island, Baria-Vung Tau	
Total investment cost	5,400	USD m
Debt to equity	1.50	x
Equity investment	2,160	USD m
<b>Capacity</b>		
Olefins	1,500	ktpa
HDPE	450	ktpa
LLDPE	500	ktpa
PP	400	ktpa
<b>Key feedstock</b>		
Ethane	50	%
Propane	30	%
Naphtha	20	%
Commercial Starting Date	2023	

Sources: SCC; FSSIA estimates

**Feedstock flexibility is key.** While SCC’s previous two olefin crackers – Map Ta Phut Olefin Cracker (MOC) and Rayong Olefin Cracker (ROC) – employed a metathesis technology to enhance the production yield of olefins using naphtha or LPG as a key feedstock, SCC will deploy a new technology with its partner Mitsui Chemicals for HDPE and PP and use the Univation technology process for LLDPE.

Exhibit 13: LSP’s flexible feedstock advantage

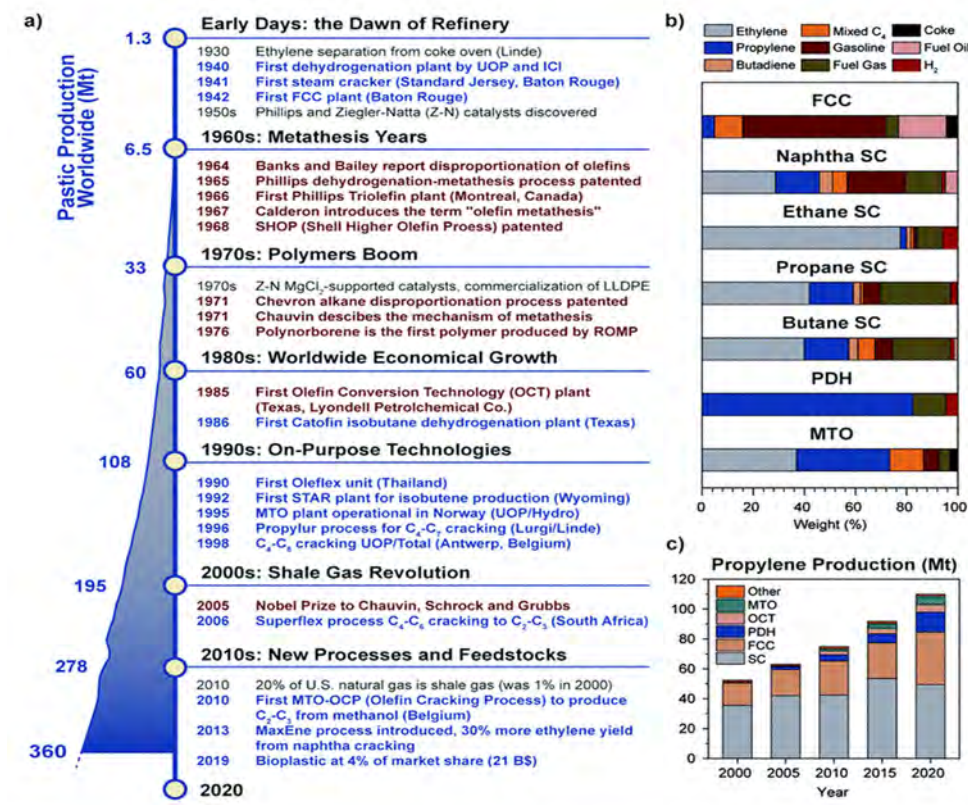


Source: SCC

**Olefin cracker technology and its economic consequences.** At present, olefins are mainly produced by refinery technologies such as steam cracking (SC) and fluid catalytic cracking (FCC) of naphtha, diesel (gas oil), or other oil by-products. While well-established since the 1940s, such refinery-based technologies have a low selectivity for light olefins, as they were developed to produce other products such as aromatics and gasoline, not olefins.

In the past 20 years, according to the [Royal Society of Chemistry](#) (RSC), a number of on-purpose technologies, including Propane Dehydrogenation (PDH) and Methanol-to-Olefins (MTO), have emerged to produce light olefins with high selectivity, driven by many technological and economical drivers, including the boom in plastic production in the 1970-80s, rising oil prices in the 1990s, and most importantly the advent of fracking technologies to produce low-cost shale gas at the beginning of the 21<sup>st</sup> century.

Exhibit 14: Historical development of technology to produce propylene



Source: RSC



### Shale gas boom introduced PDH, a dedicated propylene production process.

The shale gas boom has led to a sharp drop in global gas prices and a shift away from oil and coal for the production of fuels and chemicals. SCC's unit, originally designed to use naphtha feedstock, began to be retrofitted to accommodate ethane or propane cracking to increase margin thanks to the lower feedstock cost while producing a higher olefin yield of up to 40% ethylene on a weight feed basis (wt), compared to the only 30% yield of ethylene using naphtha feedstock.

A similar trend is currently occurring worldwide, with Asia and South America aiming to select the most optimal feed mix based on market conditions. Consequently, naphtha's share in ethylene production has fallen from 47% in 2017 to a projected 44% by 2027, while ethane's feedstock proportion is expected to rise from 35% in 2017 to 39% in 2027, based on RSC data. Under metathesis technology, which has emerged since the 1960s as one of the leading olefin conversion technologies (OCT), and used at SCC's MOC and ROC, the production yield of olefins (ethylene plus propylene) will be 60-70% vs only 43-45% without using metathesis technology.

In the last 10 years, other propylene production technologies such as methanol-to-olefins or methanol-to-propylene (MTO, MTP) and OCT underwent a similar development curve (currently 5% of production for each). It should also be noted that while FCC were traditionally operated to maximise gasoline or distillate production, current catalyst formulations and improvements in process technology (high severity-FCC, HS-FCC) now allow the production of propylene with yields of around 25wt% (compared to the traditional 4-6wt%).

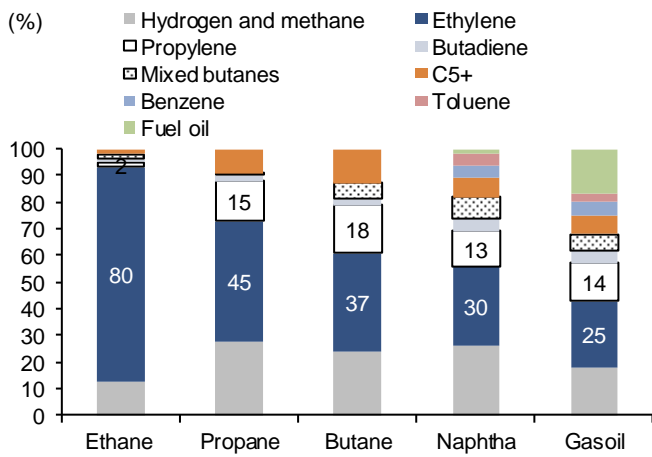
### Exhibit 15: Global PDH production sites as of 2021



Source: RSC

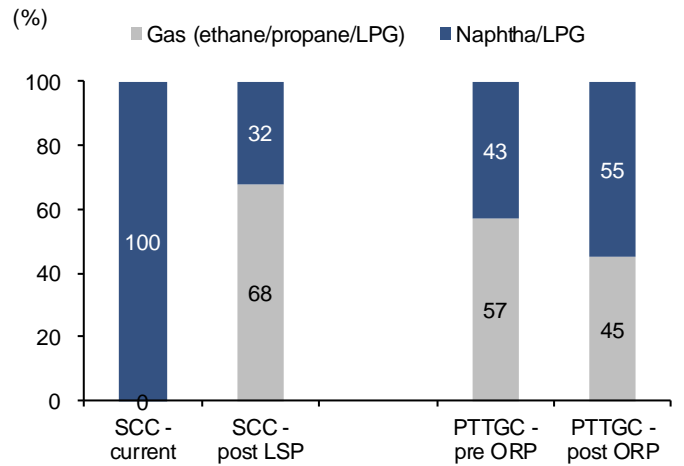
LSP's PTO technology, which uses PDH with propylene self-metathesis (MET) to enhance olefin production yield using propane as a feedstock, will allow the highest optimal proportionate use of propane gas feedstock instead of naphtha in order to achieve feedstock flexibility. We believe this will be a winning factor for the next generation of chemical crackers given the unpredictable price trends of propane and naphtha.

Exhibit 16: Production yield by feedstock



Source: RSC

Exhibit 17: Chemical feedstock comparison (SCC vs PTTGC)

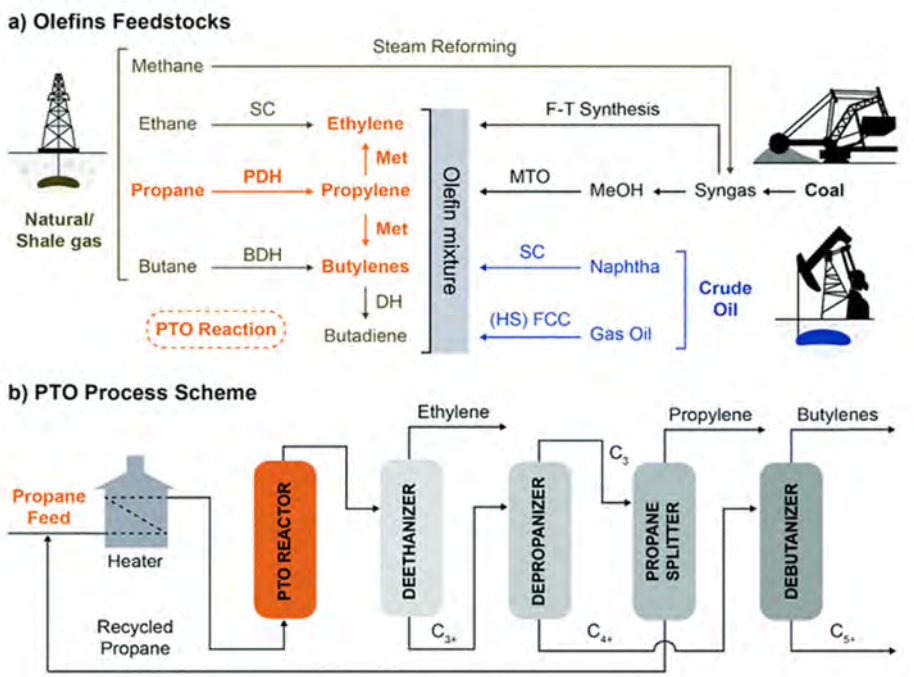


Sources: SCC; PTTGC; FSSIA estimates

PTO technology is a process that converts propane feedstock into propylene, ethylene, and butenes, allowing higher feedstock flexibility in PDH plants. In principle, any PDH installation can be adapted to PTO by changing the catalyst to a mixture, or using dehydrogenation and metathesis catalysts, which makes a strong case for adopting PTO to increase flexibility in the olefin supply chain. New PTO technologies are emerging to improve the speed, yield, and selectivity of the process, by changing catalyst design, contact state, and more, of the operation.

Propane dehydrogenation, olefin metathesis and their combination in PTO have emerged as strategic technologies for the chemical industry. Olefin metathesis, one of the latest fundamentally new organic reactions discovered, rapidly came to large-scale industrial application in the late 1960s for the production of petrochemicals, polymers and specialty chemicals. The PTO reaction is a two-step tandem reaction: first, propane is dehydrogenated to yield propylene reaction, and then two propylene molecules react in a metathesis step to yield ethylene and butene. For LSP, we believe the ability to consume propane and ethane feedstock at a proportion of up to 80% will allow LSP to optimise its feedstock types to maximise the profitability of its chemical production.

Exhibit 18: PTO technology to produce olefins using propane feedstock



Source: RSC

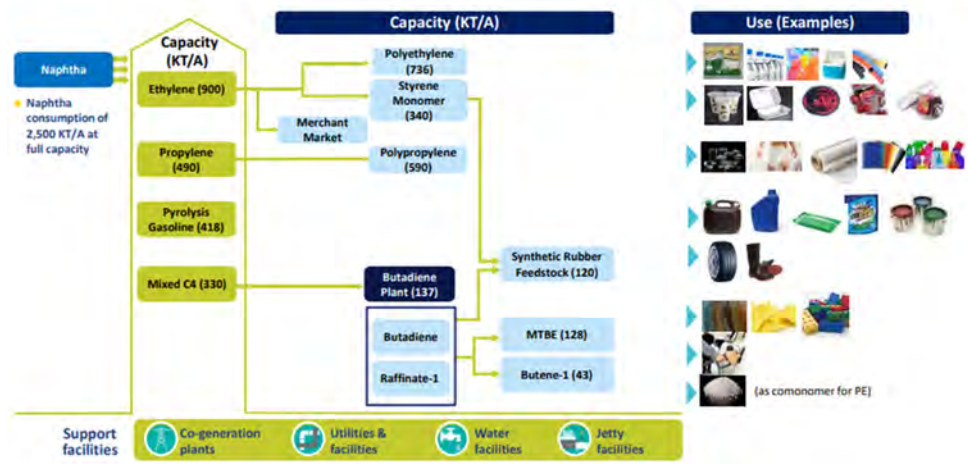
**CAP is SCC's wild card growth driver.** Following SCC's acquisition of a 30% stake at a cost of THB13.5b (USD0.4b) in Sep-11, CAP has seen its operations and profitability improve significantly thanks to SCC's shared operational expertise from its two olefin crackers in Thailand.

However, CAP1 is now likely reaching the limits of operational efficiency improvements and hence its profitability will depend on olefins industry margins and the naphtha price – the sole feedstock for CAP1.

Financially, CAP1 has generated small net profits (losses) contributions for SCC since 2011 due to its low cost competitiveness and no feedstock flexibility to use olefin gas (ethane and propane) as feedstock for its cracker.

Strategically, however, we think SCC will benefit from the expansion into the olefin chemical chain via the revitalised CAP (CAP1 + CAP2) by 2025 with greater feedstock flexibility, world-scale production capacity of 3.1mtpa, and by being well-positioned in Indonesia's high-growth market.

#### Exhibit 19: Integrated production of diverse products for CAP1



Source: [Chandra-Asri](#)

For downstream products, CAP2 will have more capacity for producing aromatics, including benzene, toluene, and mixed xylene, which could be further converted into paraxylene, which has a higher value.

In contrast, CAP1 yields a number of by-products including pygas, crude C4, and butane-1, which all must be converted into value-added products. CAP2 will convert pygas into aromatics, which will enhance the profitability of the plant.

**Capacity:** CAP2's larger production capacity for upstream olefins, at 1.7mtpa vs 1.39mtpa for CAP1, would allow CAP2 to achieve better cost savings from economies of scale than CAP1. We estimate 20-30% lower operating costs for CAP2.

#### Exhibit 20: Comparison of capacity and competitiveness between CAP1 and CAP2

Capacity	CAP1 (mtpa)	CAP2 (mtpa)	Total (mtpa)
<b>Upstream</b>	<b>1,390</b>	<b>1,700</b>	<b>3,090</b>
Ethylene	900	1,100	2,000
Propylene	490	600	1,090
<b>Downstream - olefins</b>	<b>1,326</b>	<b>1,200</b>	<b>2,526</b>
LLDPE	400	750	1,150
HDPE	336	-	336
PP	590	450	1,040
<b>Downstream - aromatics</b>	<b>340</b>	<b>798</b>	<b>1,138</b>
Benzene	-	335	335
Toluene	-	220	220
Mixed xylene	-	243	243
Styrene	340	-	340
<b>Downstream - others</b>	<b>1,176</b>	<b>160</b>	<b>1,336</b>
Synthetic Rubber	120	-	120
Methyl Tert-butyl Ether (MTBE)	128	-	128
Butene-1	43	-	43
Pygas	418	-	418
Crude C4	330	-	330
Butadiene	137	160	297
<b>Total</b>	<b>4,232</b>	<b>3,858</b>	<b>8,090</b>
Plant facility	Standalone	Shared facilities	
Feedstock	Naphtha	Naphtha/Propane	
Naphtha (%)	100	30	61
Propane (%)	-	70	39

Sources: CAP; TOP; FSSIA estimates

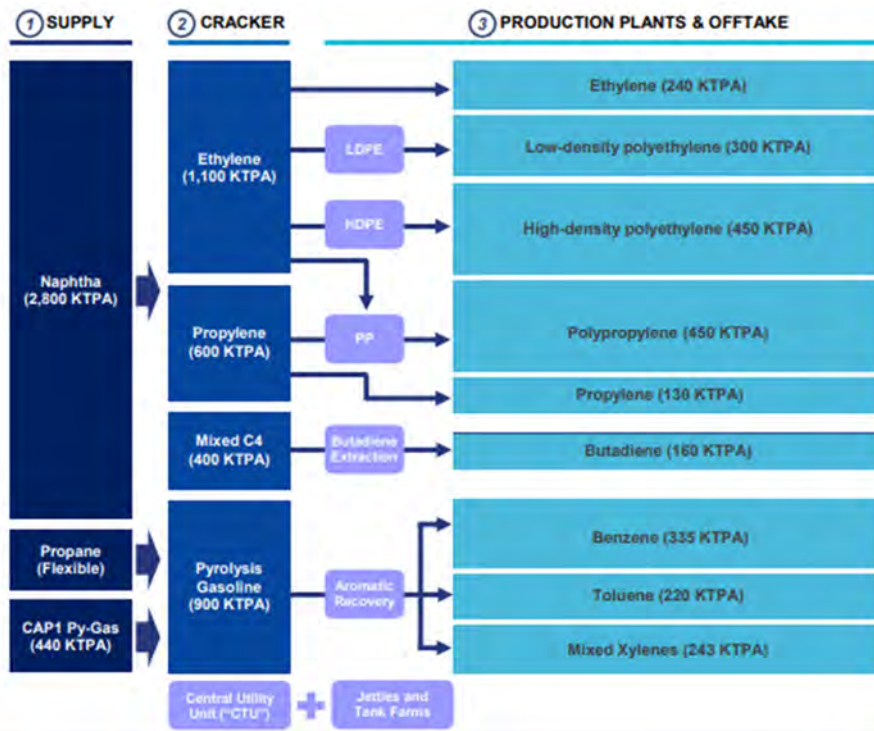
**CAP2's feedstock flexibility represents SCC's second transformation.** The most significant factor that differentiates CAP2 from CAP1 as a more competitive olefin producer is that CAP2 is designed to be able to consume up to 70% propane gas as a feedstock. We think this will greatly improve CAP2's operational flexibility and result in much higher profitability if the strategy for feedstock optimisation is well implemented to benefit from the lower market price of feedstock gas vs naphtha.

Based on CAP1 and CAP2's combined total upstream capacity of 3.1mtpa and downstream capacity of 4.9mtpa, we estimate that the maximum percentage of gas used for CAP1&2's total feedstock requirements would be 39%, based on a 70% proportion of gas feedstock for CAP2 and 0% for CAP1.

We believe the feedstock flexibility for CAP1&2 will be the most important factor for SCC's investment in CAP, given the highly unpredictable and volatile prices of both naphtha, which is driven by the crude oil price, and propane, which is driven by the LPG price.

According to CAP, CAP2 is scheduled to be completed and commence its COD in 2025, two years after SCC completes its LSP project in 2023. We think the twin large-scale, integrated petrochemical complexes in Vietnam (LSP) and Indonesia (CAP) will allow SCC to create greater synergies via cross market trades and most importantly, the enhanced feedstock capability that will position SCC well for earnings growth and asset portfolio diversification post 2025.

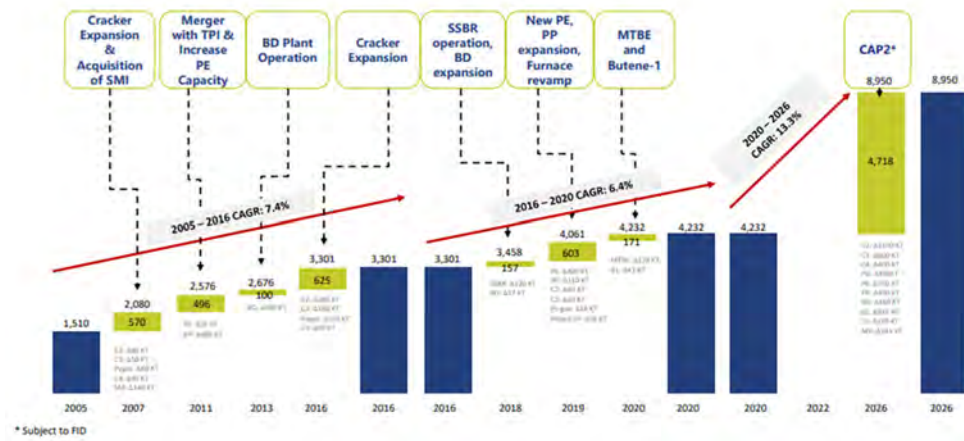
Exhibit 21: CAP2's product flows and production capacity



Sources: TOP; CAP

CAP2 is now on track to be completed in 2025, before commencing pre-commissioning and testing activities ahead of its official start-up in 2025. According to CAP, of the USD5b allocated for CAP2, CAP has already spent up to 71% of the total budget with construction now reaching 82% of completion as of 1Q22. We believe that CAP2, despite the delay caused by the Covid-19 pandemic in 2020-21, is on track to commence its COD in 2024.

Exhibit 22: Growth targets for CAP2



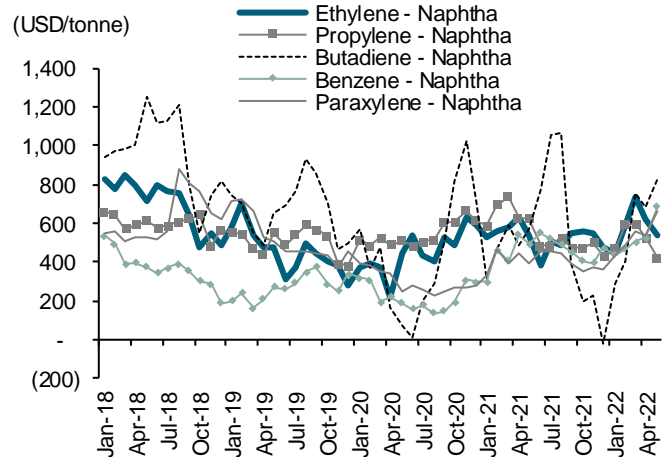
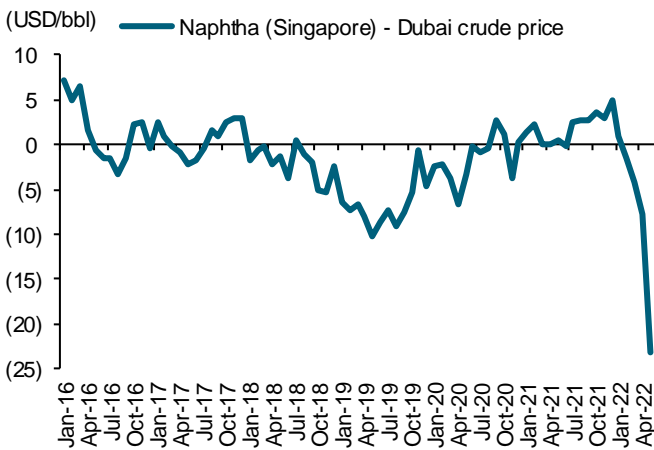
Source: Chandra Asri; Note: 2026 figures are forecast by CAP

**Margin pressure to continue in 2022-23.** Since 2020, the margins of both upstream (ethylene and propylene) and downstream (PE, PP) olefins products have been under pressure due to the industry oversupply and the spikes in the prices of both naphtha and gas feedstock, caused by the rising supply risks from the Russia-Ukraine war and the strong demand post the global economic reopening.

Thanks to the sharp drop in the price of naphtha feedstock, which stood at a USD23/bbl discount to the Dubai crude oil price in May-22, and down from a premium of USD1.1/bbl in 2021, the margins of ethylene and propylene over naphtha have been highly resilient, hovering in the range of USD400-700/t in 2020-1Q22.

Exhibit 23: Naphtha-Dubai oil price spread

Exhibit 24: Product margins



Source: Bloomberg

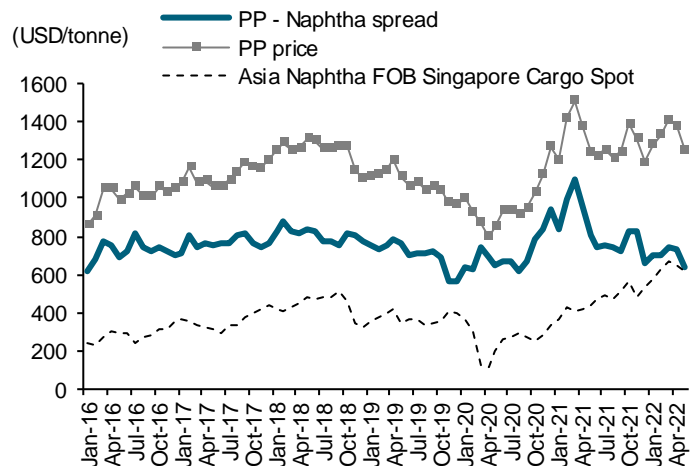
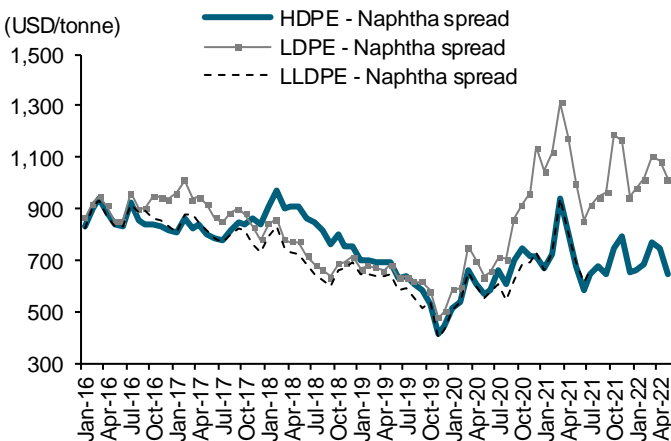
Source: Bloomberg

The margins of downstream PP and PE over naphtha have been resilient, staying above USD600/t for all three major PEs and PP, higher than the estimated breakeven cost at USD450/t based on the current high naphtha price of USD94/bbl vs the USD117/bbl Dubai oil price as of May-22.

We project the margins of PE and PP over naphtha to stay above USD500/t in 2022-23 and rise to USD700/t in 2024 as the demand-supply balance should improve due to the lower new supply and rising demand.

Exhibit 25: Margins of PE-naphtha

Exhibit 26: Margins of PP-naphtha



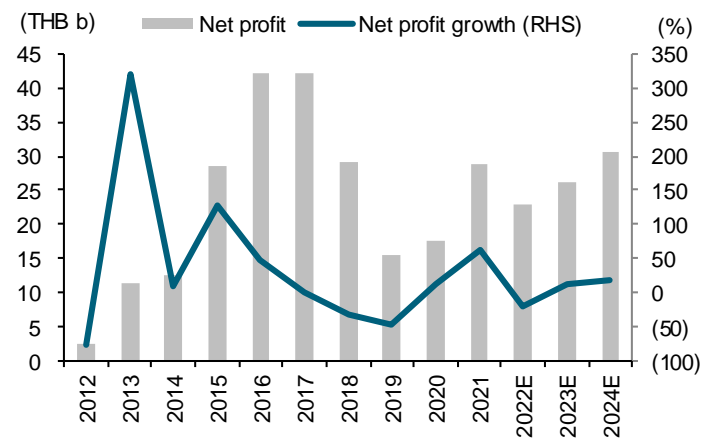
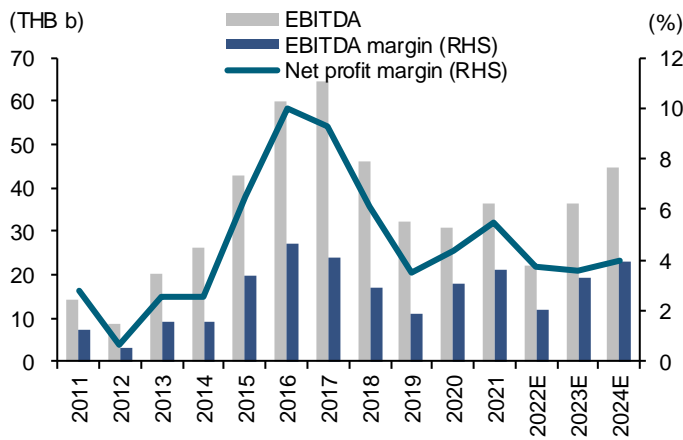
Source: Bloomberg

Source: Bloomberg

Armed with LSP and CAP2, we project SCC's chemical EBITDA and net profit to grow 13% y-y in 2023 and 17% y-y in 2024 after recording negative growth of 21% y-y in 2022 due to the sharp spike in the naphtha price.

**Exhibit 27: Chemical EBITDA, EBITDA margin, net profit margin**

**Exhibit 28: Chemical net profit and net profit growth**



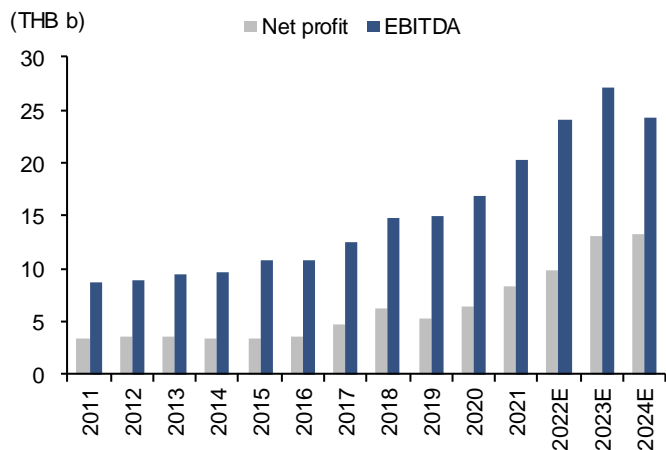
Sources: SCC; FSSIA estimates

Sources: SCC; FSSIA estimates

### Packaging: Stronger net profit growth after the global economic reopening

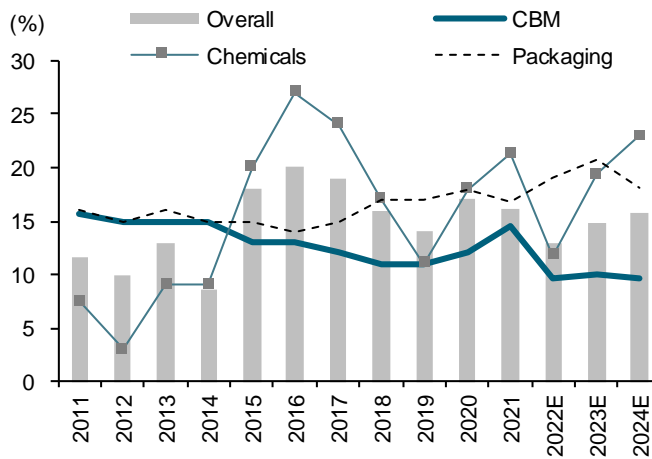
We expect SCC's packaging net profit to grow by 40% y-y in 2022 and 13% y-y in 2023 on the back of the rising capacity from M&As, organic expansions, and the gradually declines in the raw material prices, particularly for OCC, which should help offset the higher energy costs.

Exhibit 29: Net profit from packaging



Sources: SCC; FSSIA estimates

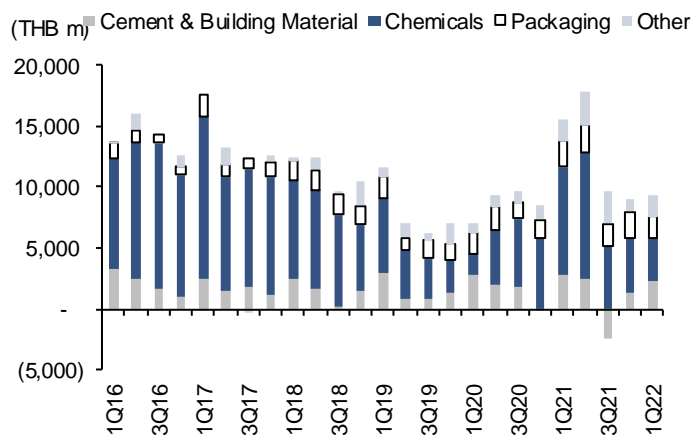
Exhibit 30: Quarterly EBITDA margin by segment (%)



Sources: SCC; FSSIA estimates

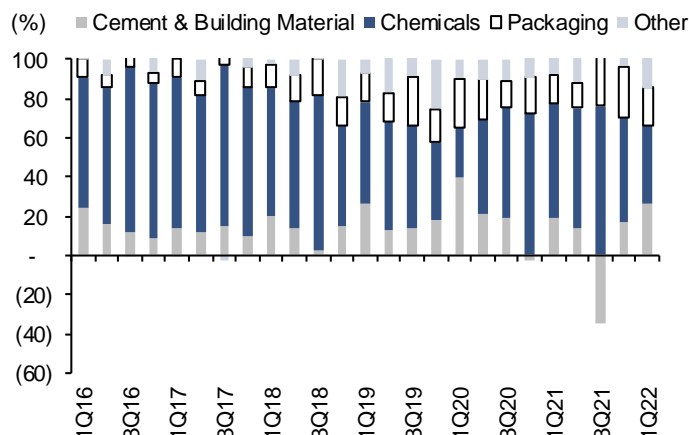
In the past six quarters since SCGP, SCC's packaging business subsidiary, was listed on the Thai stock market in Oct-20, SCC has seen its net profit from packaging rise, driven by capacity expansions from both organic growth and M&As. However, since 3Q21, the quarterly net profits from packaging have plunged markedly due to the sharp spike in the cost of OCC and energy. The EBITDA margin for its packaging business continued to improve from 2019-21 but weakened in 2022 due to the sharp rise in energy prices and the cost of OCC.

Exhibit 31: Quarterly net profit breakdown by segment



Source: SCC

Exhibit 32: Quarterly net profit breakdown by segment (%)

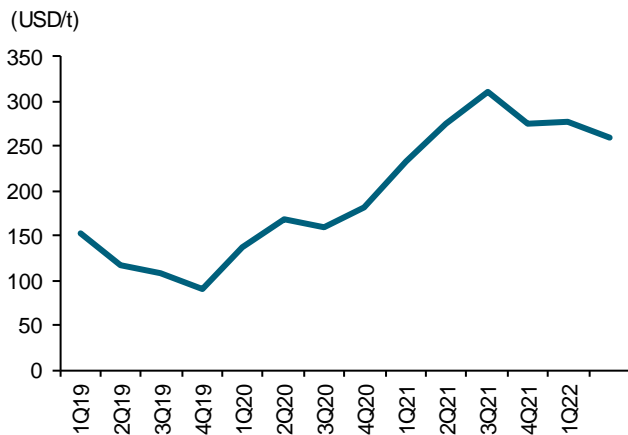


Source: SCC



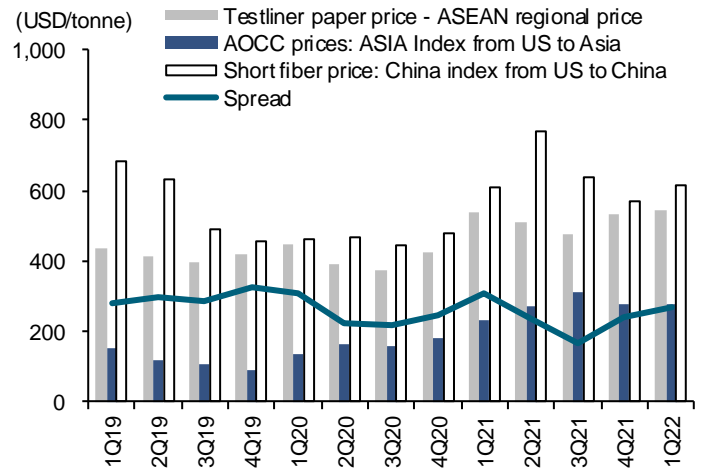
Since peaking at over USD300/t in 3Q21, the price of American OCC (AOCC), the key raw material used by SCC's packaging business which accounts for over 95% of its total raw material cost, has declined to USD260/t in 2Q22QTD, thanks to the rising supply of OCC globally. As a result, the margin of testliner paper, which is a proxy for SCGP's blended selling prices, over AOCC recovered to the USD270-USD300/t range in Jan-May 2022.

Exhibit 33: AOCC price



Sources: SCC; FSSIA estimates

Exhibit 34: Prices of testliner paper, AOCC, and short fibre



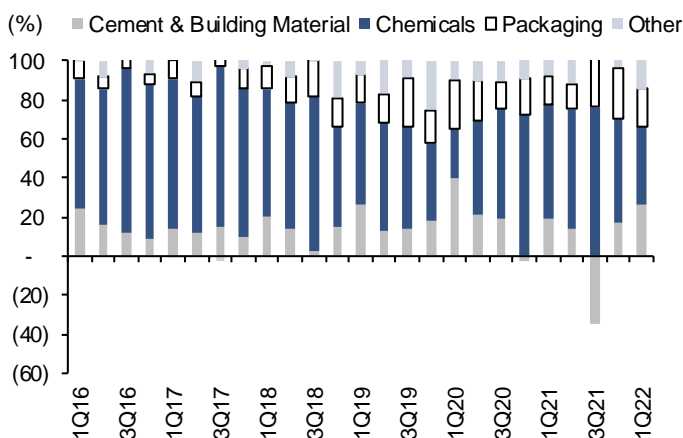
Sources: SCC; FSSIA estimates

**CBM: Stronger net profit growth post global economic reopening**

CBM has been SCC's most underperforming unit since 2016 due to the rising cost of energy, mostly due to coal prices and electricity tariffs, and weak demand due to Thailand's chronic oversupply which has lingered since the 1997 financial crisis. While we are not bullish on CBM's net profit outlook in 2022-24, we think margins are likely to improve in 2023-24, catalysed by SCC's higher pricing power which should allow it to increase the selling price of cement to THB2,000/t, up from THB1,700/t in 2019.

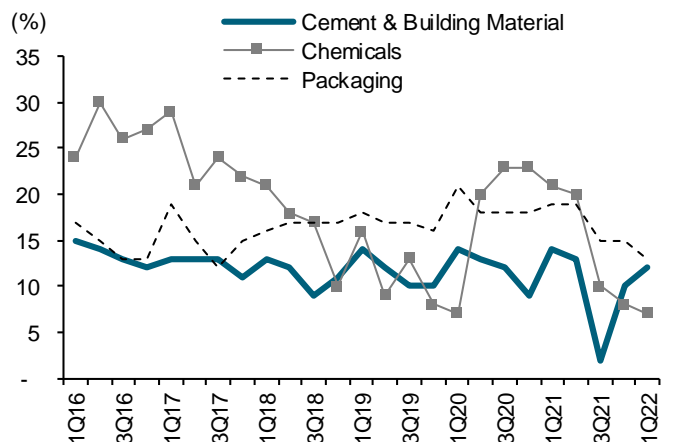
The ability to pass through the higher cost of energy and electricity should come from stronger domestic demand growth thanks to the government segment and recovering demand from the residential sector.

Exhibit 35: SCC's quarterly net profit breakdown by segment (%)



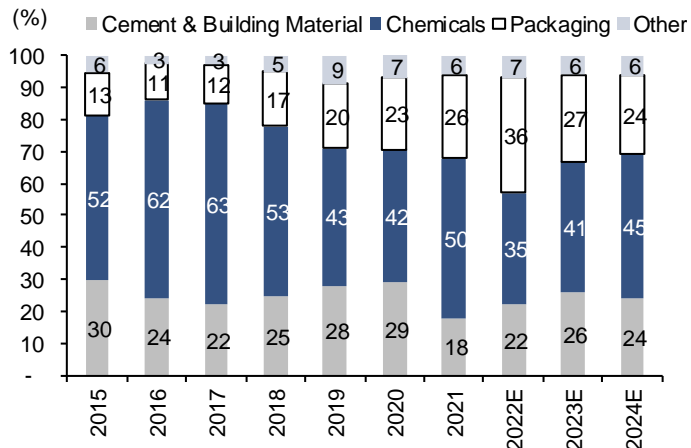
Source: SCC

Exhibit 36: Quarterly EBITDA margin by segment



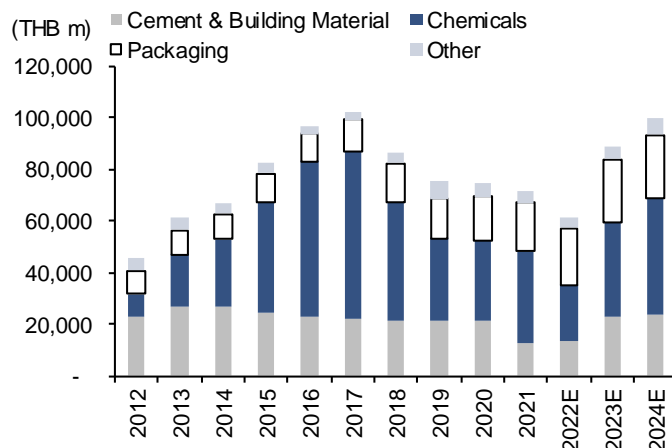
Source: SCC

Exhibit 37: EBITDA breakdown by segment (%)



Sources: SCC; FSSIA estimates

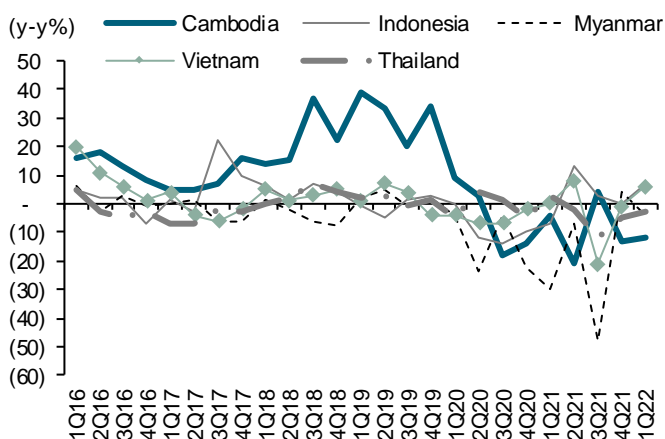
Exhibit 38: EBITDA breakdown by segment



Sources: SCC; FSSIA estimates

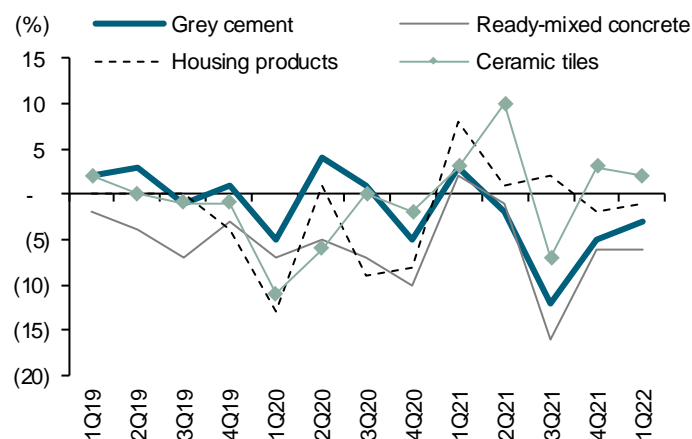
We project cement demand growth at 3%/6%/6% in 2022-24, backed by a host of mega-projects to be completed within 2025, including the high-speed train lines linking the three major airports of Suvarnabhumi, Don Mueang, and U-Tapao, motorways, and expressways to connect Bangkok and the three provinces in the Eastern Economic Corridor area.

Exhibit 39: ASEAN's cement demand (y-y%)



Source: SCC

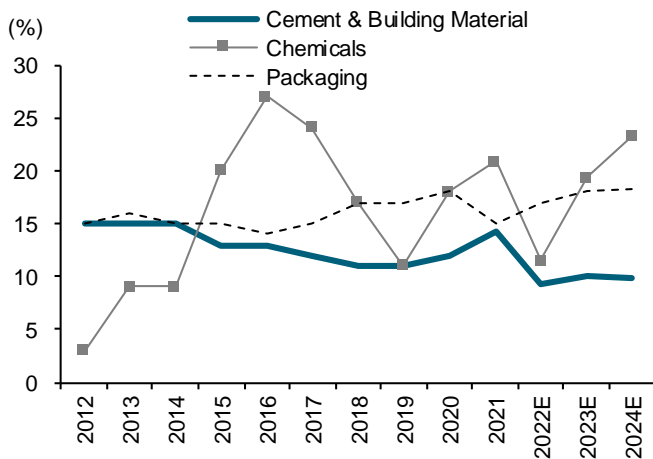
Exhibit 40: Thailand's cement demand breakdown (y-y%)



Source: SCC

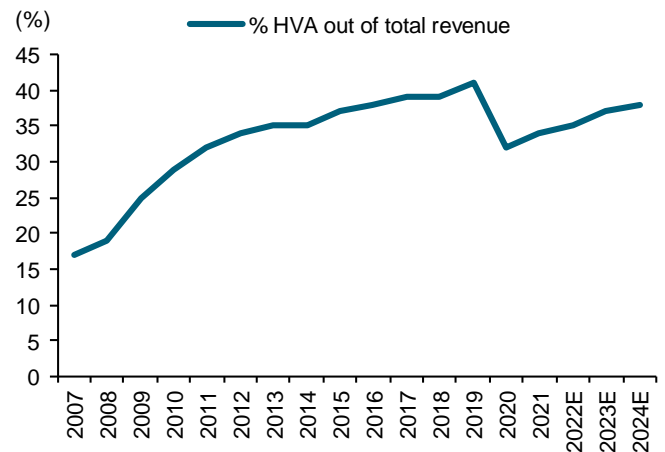
However, we project that the CBM unit's EBITDA margin will continue to remain at sub-10% in 2022-24, given the higher cost pressures of energy and electricity that are likely to continue in 2022-24. This cost pressure will however be offset by the higher proportion of revenue generated from its HVA products, which should rise from 30% in 2020 to 35% in 2024. HVA CBM products normally command a 5-10 ppt higher EBITDA margin than commodity products such as grey cement or ceramics.

Exhibit 41: EBITDA margin by segment



Sources: SCC; FSSIA estimates

Exhibit 42: % HVA revenue to total revenue



Sources: SCC; FSSIA estimates

## EPS and TP revisions

We lower our EPS forecasts in 2022-24 by 27.5-41.1% to incorporate 1) the higher Dubai crude oil price assumptions of USD120/110/110 per bbl; 2) the lower utilisation rates for SCC's petrochemical units on the back of industry oversupply; 3) the higher olefins capacity to include the capacity from LSP; 4) the 18.1-26.8% lower HDPE-naphtha margin assumptions for 2022-23 to reflect our bearish view, though we lift our assumption by 0.4% on the more positive outlook in 2024; and 5) the 12.0-29.6% lower PP-naphtha margin estimates in 2022-24 to reflect the larger-than-expected new supply.

Exhibit 43: Key changes in assumptions and EPS forecasts

	New			Old			Change		
	2022E (THB m)	2023E (THB m)	2024E (THB m)	2022E (THB m)	2023E (THB m)	2024E (THB m)	2022E (%)	2023E (%)	2024E (%)
Revenue	608,488	726,219	761,491	560,337	607,240	735,373	8.6	19.6	3.6
Gross profit	152,742	193,563	221,315	176,284	188,527	265,552	(13.4)	2.7	(16.7)
Operating profit	31,319	54,671	62,175	62,084	66,767	110,591	(49.6)	(18.1)	(43.8)
Net profit	35,011	46,340	51,632	59,433	63,912	81,435	(41.1)	(27.5)	(36.6)
EPS (THB/shr)	29.2	38.6	43.0	49.5	53	68	(41.1)	(27.5)	(36.6)
<b>Key assumptions</b>							<b>% pts change</b>		
Dubai oil price (USD/bbl)	120	110	110	100	90	90	20.0	20.0	20.0
Cement demand growth (%)	3.0	6.0	6.0	2.5	4.0	4.0	0.5	2.0	2.0
Petrochemical utilisation (%)	95	95	95	96	96	96	(1.0)	(1.0)	(1.0)
<b>Petrochemical assumptions</b>							<b>change (%)</b>		
Olefins capacity (m tonne)	2,050	3,550	3,550	2,050	2,050	2,050	0.0	73.2	73.2
HDPE-naphtha (USD/tonne)	508	520	713	620	710	710	(18.1)	(26.8)	0.4
PP-naphtha (USD/tonne)	508	570	713	720	810	810	(29.4)	(29.6)	(12.0)

Source: FSSIA estimates

We lower our SoTP-based TP from THB483 to THB466 due to 1) our cuts in EPS forecasts in 2022-24; and 2) the valuation rollover to 2023. We decrease our EV/EBITDA multiple for CBM from 10x to 8x to reflect the poorer industry outlook while maintaining 7x EV/EBITDA for the chemical unit and 10x for packaging as we maintain our positive view on the margin recoveries for chemicals and packaging in 2H22-24.

#### Exhibit 44: SoTP valuation

SoTP valuation	End-2023E		% total (%)	Valuation basis
	(THB m)	(THB/shr)		
Cement & building material	188,022	157	30	8x FY23E EV/EBITDA
Petrochemical	256,755	214	41	7x FY23E EV/EBITDA
Packaging	375,148	313	60	10x FY23E EV/EBITDA
<b>Total core</b>	<b>819,925</b>	<b>683</b>	<b>132</b>	
Investment (P/B)	192,757	161	31	1.4x FY23E P/BV
Gross SoTP	1,012,682	844	163	
Net debt	(285,936)	(238)	(46)	Net debt at end-FY23E
Minority	(105,881)	(88)	(17)	
<b>Net SOP value</b>	<b>620,865</b>	<b>517</b>	<b>100</b>	
10% holding discount	(62,086)	(52)		
<b>SoTP target price</b>	<b>558,778</b>	<b>466</b>		

Sources: SCC; FSSIA estimates

#### Exhibit 45: Summary of key valuations of companies under our coverage

Company	-- Share price --		Up (down) side (%)	--- Recur profit ---		NP growth		--- P/E ---		-- PBV --		----- 2022E -----				
	BBG	Rec		Current (THB)	Target (THB)	22E (THB m)	23E (THB m)	22E (%)	23E (%)	22E (x)	23E (x)	22E (x)	23E (x)	ROE (%)	Div (%)	EV/EBITDA (x)
<b>Energy &amp; Utilities</b>					<b>354,712</b>	<b>381,254</b>	<b>41.0</b>	<b>7.5</b>	<b>18.9</b>	<b>16.4</b>	<b>2.5</b>	<b>2.2</b>	<b>14.5</b>	<b>3.9</b>	<b>10.9</b>	
<b>Oil &amp; Gas</b>					<b>265,096</b>	<b>283,815</b>	<b>37.5</b>	<b>7.1</b>	<b>12.4</b>	<b>10.8</b>	<b>1.4</b>	<b>1.3</b>	<b>13.5</b>	<b>4.8</b>	<b>6.5</b>	
PTT PCL	PTT TB	BUY	35.00	60.00	71	134,095	151,749	50.2	13.2	7.5	6.6	0.9	0.8	12.7	4.3	4.5
PTT Explor & Prod	PTTEP TB	BUY	163.50	176.00	8	54,880	51,174	13.1	(6.8)	11.8	12.7	1.5	1.4	12.9	5.4	4.7
PTT Oil & Retail	OR TB	BUY	26.25	32.00	22	11,654	13,879	(1.1)	19.1	27.0	22.7	3.0	2.8	11.3	1.8	15.6
Bangkok Aviation	BAFS TB	BUY	29.00	36.00	24	120	408	nm	240.4	154.3	45.3	4.1	3.7	2.6	0.3	22.5
Thai Oil	TOP TB	BUY	52.25	70.00	34	13,238	13,825	5.2	4.4	8.1	7.7	0.8	0.8	10.6	5.6	10.5
Star Petroleum Refin	SPRC TB	BUY	12.20	14.00	15	7,375	6,844	280.7	(7.2)	7.2	7.7	1.3	1.1	19.6	3.3	4.2
Bangchak Corp	BCP TB	BUY	32.00	40.00	25	6,830	6,887	100.8	0.8	6.5	6.4	0.8	0.7	12.3	7.8	5.3
PTG Energy	PTG TB	BUY	13.70	18.30	34	1,784	2,263	77.3	26.8	12.8	10.1	2.4	2.1	20.3	1.5	4.6
Esso Thailand	ESSO TB	BUY	11.60	12.90	11	5,782	6,289	528.3	8.8	6.9	6.4	1.8	1.5	27.7	4.3	6.3
Susco	SUSCO TB	BUY	3.76	3.50	(7)	303	365	29.6	20.5	13.7	11.3	1.0	0.9	8.1	2.1	9.9
Scan Inter	SCN TB	BUY	2.36	3.10	31	118	225	70.0	91.5	24.1	12.6	1.0	1.0	4.3	2.1	22.8
Banpu	BANPU TB	BUY	12.60	18.80	49	28,728	29,682	20.7	3.3	3.2	3.8	0.8	0.8	30.4	17.7	3.6
WP Energy	WP TB	BUY	4.72	5.90	25	189	225	0.0	0.0	13.0	10.9	1.9	1.7	14.7	5.3	3.2
<b>Petrochemical</b>					<b>57,832</b>	<b>64,859</b>	<b>(17.9)</b>	<b>12.2</b>	<b>10.6</b>	<b>9.1</b>	<b>1.1</b>	<b>1.0</b>	<b>10.8</b>	<b>5.7</b>	<b>7.7</b>	
Indorama Ventures	IVL TB	BUY	47.75	70.00	47	23,553	25,905	7.6	10.0	11.4	10.3	1.5	1.3	13.7	5.4	7.3
IRPC PCL	IRPC TB	REDUCE	3.26	3.00	(8)	4,676	10,098	(71.6)	115.9	14.2	6.6	0.8	0.7	5.5	3.5	9.3
PTT Global Chem	PTTGC TB	REDUCE	46.00	40.00	(13)	29,027	28,054	(7.4)	(3.4)	7.1	7.4	0.7	0.7	9.1	7.1	7.3
Global Green Chem	GGC TB	BUY	15.20	13.50	(11)	576	802	(25.7)	39.4	27.0	19.4	1.5	1.4	5.7	2.0	11.9
<b>Building materials</b>					<b>39,408</b>	<b>50,240</b>	<b>(23.3)</b>	<b>27.5</b>	<b>13.1</b>	<b>10.2</b>	<b>1.3</b>	<b>1.2</b>	<b>10.1</b>	<b>4.7</b>	<b>13.0</b>	
Siam Cement	SCC TB	BUY	380.00	466.00	23	35,011	46,340	(25.8)	32.4	13.0	9.8	1.2	1.1	9.4	4.5	13.3
Eastern Polymer Group	EPG TB	BUY	9.50	16.00	68	1,448	1,670	20.9	15.3	18.4	15.9	2.3	2.1	12.7	2.5	13.5
Tipco Asphalt	TASCO TB	BUY	16.00	22.50	41	2,949	2,230	(1.6)	(24.4)	8.6	11.3	1.9	2.0	20.7	11.3	7.9

Share prices as of 29 Jun 2022

Sources: Bloomberg; FSSIA estimates

## Financial Statements

### Siam Cement

Profit and Loss (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Revenue	399,939	530,112	608,488	726,219	761,491
Cost of goods sold	(282,570)	(392,165)	(455,746)	(532,656)	(540,175)
<b>Gross profit</b>	<b>117,369</b>	<b>137,946</b>	<b>152,742</b>	<b>193,563</b>	<b>221,315</b>
Other operating income	-	-	-	-	-
Operating costs	(56,535)	(66,855)	(91,273)	(104,575)	(121,839)
<b>Operating EBITDA</b>	<b>60,835</b>	<b>71,091</b>	<b>61,469</b>	<b>88,987</b>	<b>99,477</b>
Depreciation	(27,377)	(28,835)	(30,149)	(34,317)	(37,302)
Goodwill amortisation	0	0	0	0	0
<b>Operating EBIT</b>	<b>33,457</b>	<b>42,256</b>	<b>31,319</b>	<b>54,671</b>	<b>62,175</b>
Net financing costs	(7,082)	(6,757)	(7,518)	(7,671)	(8,135)
Associates	9,456	17,543	12,305	11,045	14,355
Recurring non-operating income	16,734	28,137	23,429	22,725	26,620
Non-recurring items	0	0	0	0	0
<b>Profit before tax</b>	<b>43,109</b>	<b>63,636</b>	<b>47,230</b>	<b>69,725</b>	<b>80,660</b>
Tax	(5,809)	(8,900)	(5,239)	(8,802)	(9,946)
<b>Profit after tax</b>	<b>37,300</b>	<b>54,736</b>	<b>41,991</b>	<b>60,923</b>	<b>70,714</b>
Minority interests	(3,156)	(7,562)	(6,981)	(14,583)	(19,082)
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
<b>Reported net profit</b>	<b>34,144</b>	<b>47,174</b>	<b>35,011</b>	<b>46,340</b>	<b>51,632</b>
<b>Non-recurring items &amp; goodwill (net)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Recurring net profit</b>	<b>34,144</b>	<b>47,174</b>	<b>35,011</b>	<b>46,340</b>	<b>51,632</b>
<b>Per share (THB)</b>					
Recurring EPS *	28.45	39.31	29.18	38.62	43.03
Reported EPS	28.45	39.31	29.18	38.62	43.03
DPS	14.50	16.50	17.00	15.50	17.50
Diluted shares (used to calculate per share data)	1,200	1,200	1,200	1,200	1,200
<b>Growth</b>					
Revenue (%)	(8.7)	32.5	14.8	19.3	4.9
Operating EBITDA (%)	23.5	16.9	(13.5)	44.8	11.8
Operating EBIT (%)	32.1	26.3	(25.9)	74.6	13.7
Recurring EPS (%)	6.7	38.2	(25.8)	32.4	11.4
Reported EPS (%)	6.7	38.2	(25.8)	32.4	11.4
<b>Operating performance</b>					
Gross margin inc. depreciation (%)	22.5	20.6	20.1	21.9	24.2
Gross margin of key business (%)	22.5	20.6	20.1	21.9	24.2
Operating EBITDA margin (%)	15.2	13.4	10.1	12.3	13.1
Operating EBIT margin (%)	8.4	8.0	5.1	7.5	8.2
Net margin (%)	8.5	8.9	5.8	6.4	6.8
Effective tax rate (%)	15.0	15.0	15.0	15.0	15.0
Dividend payout on recurring profit (%)	51.0	42.0	58.3	40.1	40.7
Interest cover (X)	7.1	10.4	7.3	10.1	10.9
Inventory days	71.7	64.1	61.0	51.4	55.0
Debtor days	53.4	46.1	51.0	49.4	54.3
Creditor days	78.3	65.3	53.7	43.9	47.0
Operating ROIC (%)	7.0	7.6	4.8	7.4	(1.9)
ROIC (%)	7.3	8.8	5.9	7.7	(2.1)
ROE (%)	11.4	13.7	9.4	11.8	12.2
ROA (%)	6.2	7.5	5.6	7.6	7.3
* Pre-exceptional, pre-goodwill and fully diluted					
<b>Revenue by Division (THB m)</b>					
	2020	2021	2022E	2023E	2024E
Cement & Building Material	116,534	142,495	168,176	190,859	222,006
Chemicals	143,782	177,230	213,008	292,123	287,795
Packaging	139,624	210,386	227,304	243,237	251,689
Others					

Sources: Siam Cement; FSSIA estimates

## Financial Statements

### Siam Cement

Cash Flow (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Recurring net profit	34,144	47,174	35,011	46,340	51,632
Depreciation	27,377	28,835	30,149	34,317	37,302
Associates & minorities	9,456	17,543	12,305	11,045	14,355
Other non-cash items	-	-	-	-	-
Change in working capital	18,594	(43,259)	(14,395)	(16,615)	(15,514)
<b>Cash flow from operations</b>	<b>89,571</b>	<b>50,293</b>	<b>63,070</b>	<b>75,086</b>	<b>87,775</b>
Capex - maintenance	(25,695)	(28,913)	(31,958)	(35,003)	(38,048)
Capex - new investment	(54,360)	(41,460)	(38,679)	(35,786)	(32,742)
Net acquisitions & disposals	(20,205)	(22,794)	0	0	0
Other investments (net)	26,143	(18,624)	0	0	0
<b>Cash flow from investing</b>	<b>(74,117)</b>	<b>(111,792)</b>	<b>(70,637)</b>	<b>(70,789)</b>	<b>(70,789)</b>
Dividends paid	(17,400)	(18,600)	(19,800)	(19,800)	(19,800)
Equity finance	0	0	0	0	0
Debt finance	21,703	41,458	(20,000)	20,000	0
Other financing cash flows	39,002	3,270	(18,787)	(1,786)	(596)
<b>Cash flow from financing</b>	<b>43,305</b>	<b>26,128</b>	<b>(58,587)</b>	<b>(1,586)</b>	<b>(20,396)</b>
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
<b>Net other adjustments</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Movement in cash</b>	<b>58,759</b>	<b>(35,371)</b>	<b>(66,154)</b>	<b>2,711</b>	<b>(3,410)</b>
Free cash flow to firm (FCFF)	22,536.69	(54,741.42)	(48.63)	11,967.63	25,120.80
Free cash flow to equity (FCFE)	76,159.26	(16,771.03)	(46,354.29)	22,511.19	16,390.11

#### Per share (THB)

FCFF per share	18.78	(45.62)	(0.04)	9.97	20.93
FCFE per share	63.47	(13.98)	(38.63)	18.76	13.66
Recurring cash flow per share	59.15	77.96	64.55	76.42	86.07

Balance Sheet (THB m) Year Ending Dec	2020	2021	2022E	2023E	2024E
Tangible fixed assets (gross)	621,946	669,229	745,346	821,463	897,581
Less: Accumulated depreciation	(258,521)	(258,521)	(288,670)	(322,987)	(360,288)
<b>Tangible fixed assets (net)</b>	<b>363,425</b>	<b>410,708</b>	<b>456,676</b>	<b>498,477</b>	<b>537,293</b>
<b>Intangible fixed assets (net)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	114,890	137,684	137,684	137,684	137,684
Cash & equivalents	102,981	67,610	1,456	4,167	757
A/C receivable	54,842	78,951	91,121	105,645	120,875
Inventories	54,654	83,121	69,202	80,880	82,022
Other current assets	1,540	3,334	8,901	10,620	11,132
<b>Current assets</b>	<b>214,017</b>	<b>233,016</b>	<b>170,680</b>	<b>201,313</b>	<b>214,786</b>
Other assets	57,049	79,694	79,694	79,694	79,694
<b>Total assets</b>	<b>749,381</b>	<b>861,101</b>	<b>844,734</b>	<b>917,167</b>	<b>969,456</b>
Common equity	320,972	365,691	380,901	407,442	439,274
Minorities etc.	75,154	84,318	91,298	105,881	124,964
<b>Total shareholders' equity</b>	<b>396,126</b>	<b>450,008</b>	<b>472,200</b>	<b>513,323</b>	<b>564,237</b>
Long term debt	160,553	206,291	206,291	226,291	226,291
Other long-term liabilities	31,281	36,415	36,415	36,415	36,415
<b>Long-term liabilities</b>	<b>191,834</b>	<b>242,706</b>	<b>242,706</b>	<b>262,706</b>	<b>262,706</b>
A/C payable	65,273	75,026	59,144	69,124	70,100
Short term debt	88,092	83,812	63,812	63,812	63,812
Other current liabilities	8,055	9,549	6,872	8,202	8,600
<b>Current liabilities</b>	<b>161,420</b>	<b>168,386</b>	<b>129,827</b>	<b>141,138</b>	<b>142,512</b>
<b>Total liabilities and shareholders' equity</b>	<b>749,381</b>	<b>861,101</b>	<b>844,734</b>	<b>917,167</b>	<b>969,456</b>
Net working capital	37,708	80,831	103,209	119,820	135,329
Invested capital	573,072	708,916	777,262	835,674	889,999

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

#### Per share (THB)

Book value per share	267.48	304.74	317.42	339.53	366.06
Tangible book value per share	267.48	304.74	317.42	339.53	366.06

#### Financial strength

Net debt/equity (%)	36.8	49.4	56.9	55.7	51.3
Net debt/total assets (%)	19.4	25.8	31.8	31.2	29.8
Current ratio (x)	1.3	1.4	1.3	1.4	1.5
CF interest cover (x)	19.4	4.7	0.0	8.6	7.0

Valuation	2020	2021	2022E	2023E	2024E
<b>Recurring P/E (x) *</b>	<b>13.4</b>	<b>9.7</b>	<b>13.0</b>	<b>9.8</b>	<b>8.8</b>
<b>Recurring P/E @ target price (x) *</b>	<b>16.4</b>	<b>11.9</b>	<b>16.0</b>	<b>12.1</b>	<b>10.8</b>
Reported P/E (x)	13.4	9.7	13.0	9.8	8.8
Dividend yield (%)	3.8	4.3	4.5	4.1	4.6
Price/book (x)	1.4	1.2	1.2	1.1	1.0
Price/tangible book (x)	1.4	1.2	1.2	1.1	1.0
EV/EBITDA (x) **	11.1	10.7	13.3	9.5	8.7
EV/EBITDA @ target price (x) **	12.8	12.2	15.0	10.7	9.8
EV/invested capital (x)	1.2	1.1	1.0	1.0	1.0

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

Sources: Siam Cement; FSSIA estimates

## Corporate Governance report of Thai listed companies 2021

EXCELLENT LEVEL – Score range 90-100										
AAV	BCPG	CPALL	GCAP	K	MSC	PLANET	SAMART	SPI	THRE	TVD
ADVANC	BDMS	CPF	GFPT	KBANK	MST	PLAT	SAMTEL	SPRC	THREL	TVI
AF	BEM	CPI	GGC	KCE	MTC	PORT	SAT	SPVI	TIPCO	TVO
AH	BGC	CPN	GLAND	KKP	MVP	PPS	SC	SSSC	TISCO	TWPC
AIRA	BGRIM	CRC	GLOBAL	KSL	NCL	PR9	SCB	SST	TK	U
AKP	BIZ	CSS	GPI	KTB	NEP	PREB	SCC	STA	TKT	UAC
AKR	BKI	DDD	GPSC	KTC	NER	PRG	SCCC	STEC	TMT	UBIS
ALT	BOL	DELTA	GRAMMY	LALIN	NKI	PRM	SCG	STI	TNDT	UV
AMA	BPP	DEMCO	GULF	LANNA	NOBLE	PROUD	SCGP	SUN	TNITY	VGI
AMATA	BRR	DRT	GUNKUL	LH	NSI	DRSH	SCM	SUSCO	TOA	VIH
AMATAV	BTS	DTAC	HANA	LHFG	NVD	PSL	SDC	SUTHA	TOP	WACOAL
ANAN	BTW	DUSIT	HARN	LIT	NWR	PTG	SEAFECO	SVI	TPBI	WAVE
AOT	BWG	EA	HMPRO	LPN	NYT	PTT	SEAOIL	SYMC	TQM	WHA
AP	CENTEL	EASTW	ICC	MACO	OISHI	PTTEP	SE-ED	SYNTEC	TRC	WHAUP
ARIP	CFRESH	ECF	ICHI	MAJOR	OR	PTTGC	SELIC	TACC	TRU	WICE
ARROW	CHEWA	ECL	III	MAKRO	ORI	PYLON	SENA	TASCO	TRUE	WINNER
ASP	CHO	EE	ILINK	MALEE	OSP	Q-CON	SHR	TCAP	TSC	ZEN
AUCT	CIMBT	EGCO	ILM	MBK	OTO	QH	SIRI	TEAMG	TSR	
AWC	CK	EPG	INTUCH	MC	PAP	QTC	SIS	TFMAMA	TSTE	
AYUD	CKP	ETC	IP	MCOT	PCSGH	RATCH	SITHAI	TGH	TSTH	
BAFS	CM	FPI	IRPC	METCO	PDG	RS	SMK	THANA	TTA	
BANPU	CNT	FPT	ITEL	MFEC	PDJ	S	SMPC	THANI	TTB	
BAY	COM7	FSMART	IVL	MINT	PG	S & J	SNC	THCOM	TTCL	
BBL	COMAN	GBX	JSP	MONO	PHOL	SAAM	SONIC	THG	TTW	
BCP	COTTO	GC	JWD	MOONG	PLANB	SABINA	SPALI	THIP	TU	
VERY GOOD LEVEL – Score range 80-89										
2S	ASIMAR	CHOW	FLOYD	IT	LOXLEY	OCC	RPC	SKY	TCC	TVT
7UP	ASK	CI	FN	ITD	LRH	OGC	RT	SLP	TCMC	TWP
ABICO	ASN	CIG	FNS	J	LST	PATO	RWI	SMIT	TEAM	UEC
ABM	ATP30	CMC	FORTH	JAS	M	PB	S11	SMT	TFG	UMI
ACE	B	COLOR	FSS	JCK	MATCH	PICO	SA	SNP	TFI	UOBKH
ACG	BA	CPL	FTE	JCKH	MBAX	PIMO	SAK	SO	TIGER	UP
ADB	BAM	CPW	FVC	JMART	MEGA	PJW	SALEE	SORKON	TITLE	UPF
AEONTS	BC	CRD	GEL	JMT	META	PL	SAMCO	SPA	TKN	UPOIC
AGE	BCH	CSC	GENCO	KBS	MFC	PM	SANKO	SPC	TKS	UTP
AHC	BEC	CSP	GJS	KCAR	MGT	PMTA	SAPPE	SPCG	TM	VCOM
AIT	BEYOND	CWT	GYT	KEX	MICRO	PPP	SAWAD	SR	TMC	VL
ALL	BFIT	DCC	HEMP	KGI	MILL	PPPM	SCI	SRICHA	TMD	VPO
ALLA	BJC	DCON	HPT	KIAT	MITSIB	PRIME	SCN	SSC	TMI	VRANDA
ALUCON	BJCHI	DHOUSE	HTC	KISS	MK	PRIN	SCP	SSF	TMILL	WGE
AMANAH	BLA	DOD	HYDRO	KOOL	MODERN	PRINC	SE	STANLY	TNL	WIK
AMARIN	BR	DOHOME	ICN	KTIS	MTI	PSG	SFLEX	STGT	TNP	WP
APCO	BROOK	DV8	IFS	KUMWEL	NBC	PSTC	SFP	STOWER	TOG	XO
APCS	CBG	EASON	IMH	KUN	NCAP	PT	SFT	STPI	TPA	XPG
APURE	CEN	EFORL	IND	KWC	NCH	QLT	SGF	SUC	TPAC	YUASA
AQUA	CGH	ERW	INET	KWM	NETBAY	RBF	SIAM	SWC	TPCS	
ASAP	CHARAN	ESSO	INSET	L&E	NEX	RCL	SINGER	SYNEX	TPS	
ASEFA	CHAYO	ESTAR	INSURE	LDC	NINE	RICHY	SKE	TAE	TRITN	
ASIA	CHG	ETE	IRC	LEO	NRF	RML	SKN	TAKUNI	TRT	
ASIAN	CHOTI	FE	IRCP	LHK	NTV	ROJNA	SKR	TBSP	TSE	
GOOD LEVEL – Score range 70-79										
A	BGT	CITY	GIFT	JTS	MDX	PK	SGP	SUPER	TQR	YGG
AI	BH	CMAN	GLOCON	JUBILE	MJD	PLE	SICT	SVOA	TTI	ZIGA
AIE	BIG	CMO	GREEN	KASET	MORE	PPM	SIMAT	TC	TYCN	
AJ	BLAND	CMR	GSC	KCM	MUD	PRAKIT	SISB	TCCC	UKEM	
ALPHAX	BM	CPT	GTB	KK	NC	PRAPAT	SK	THMUI	UMS	
AMC	BROCK	CRANE	HTECH	KKC	NDR	PRECHA	SMART	TNH	UNIQ	
APP	BSBM	CSR	HUMAN	KWI	NFC	PTL	SOLAR	TNR	UPA	
AQ	BSM	D	IHL	KYE	NNCL	RJH	SPACK	TOPP	UREKA	
ARIN	BTNC	EKH	IIG	LEE	NOVA	RP	SPG	TPCH	VIBHA	
AS	BYD	EMC	INGRS	LPH	NPK	RPH	SQ	TPIPL	W	
AU	CAZ	EP	INOX	MATI	NUSA	RSP	SSP	TIPIP	WIN	
B52	CCP	F&D	JAK	M-CHAI	PAF	SABUY	STARK	TPLAS	WORK	
BEAUTY	CGD	FMT	JR	MCS	PF	SF	STC	TPOLY	WPH	

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\* 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

Sources: Thai Institute of Directors Association (IOD); FSSIA's compilation; data as of 26 October 2021

## Anti-corruption Progress Indicator

CERTIFIED										
2S	BCH	CPALL	GC	K	MFC	PE	QLT	SNP	THCOM	TU
7UP	BCP	CPF	GCAP	KASET	MFEC	PG	QTC	SORKON	THIP	TVD
ADVANC	BCPG	CPI	GEL	KBANK	MILL	PHOL	RATCH	SPACK	THRE	TVI
AF	BE8	CPN	GFPT	KBS	MINT	PK	RML	SPALI	THREL	TVO
AI	BEYOND	CSC	GGC	KCAR	MONO	PL	RWI	SPC	TIDLOR	TWPC
AIE	BGC	DCC	GJS	KCE	MOONG	PLANB	S & J	SPI	TIPCO	U
AIRA	BGRIM	DELTA	GPI	KGI	MSC	PLANET	SAAM	SPRC	TISCO	UBE
AKP	BJCHI	DEMCO	GPSC	KKP	MST	PLAT	SABINA	SRICHA	TKS	UBIS
ALPHAX	BKI	DIMET	GSTEEL	KSL	MTC	PM	SAPPE	SSF	TKT	UEC
AMA	BLA	DRT	GUNKUL	KTB	MTI	PPP	SAT	SSP	TMD	UKEM
AMANAHA	BPP	DTAC	HANA	KTC	NBC	PPPM	SC	SSSC	TMILL	UOBKH
AMATA	BROOK	DUSIT	HARN	KWC	NEP	PPS	SCB	SST	TMT	UPF
AMATAV	BRR	EA	HEMP	KWI	NINE	PR9	SCC	STA	TNITY	UV
AP	BSBM	EASTW	HENG	L&E	NKI	PREB	SCCC	STOWER	TNL	VGI
APCS	BTS	ECL	HMPRO	LANNA	NMG	PRG	SCG	SUSCO	TNP	VIH
AQUA	BWG	EGCO	HTC	LH	NNCL	PRINC	SCN	SVI	TNR	WACOAL
ARROW	CEN	EP	ICC	LHFG	NOBLE	PRM	SEAOIL	SYMC	TOG	WHA
AS	CENTEL	EPG	ICHI	LHK	NOK	PROS	SE-ED	SYNTEC	TOP	WHAUP
ASIAN	CFRESH	ERW	IFEC	LPN	NSI	PSH	SELIC	TAE	TOPP	WICE
ASK	CGH	ESTAR	IFS	LRH	NWR	PSL	SENA	TAKUNI	TPA	WIIK
ASP	CHEWA	ETE	ILINK	M	OCC	PSTC	SGP	TASCO	TPP	XO
AWC	CHOTI	FE	INET	MAKRO	OGC	PT	SINGER	TBSP	TRU	ZEN
AYUD	CHOW	FNS	INSURE	MALEE	ORI	PTG	SIRI	TCAP	TRUE	
B	CIG	FPI	INTUCH	MATCH	PAP	PTT	SITHAI	TCMC	TSC	
BAFS	CIMBT	FPT	IRC	MBAX	PATO	PTTEP	SKR	TFG	TSTE	
BAM	CM	FSMART	IRPC	MBK	PB	PTTGC	SMIT	TFI	TSTH	
BANPU	CMC	FSS	ITEL	MC	PCSGH	PYLON	SMK	TFMAMA	TTA	
BAY	COM7	FTE	IVL	MCOT	PDG	Q-CON	SMPC	TGH	TTB	
BBL	COTTO	GBX	JKN	META	PDJ	QH	SNC	THANI	TTCL	
DECLARED										
AJ	CHG	DDD	ETC	JR	MAJOR	NUSA	RS	SSS	TQM	YUASA
ALT	CPL	DHOUSE	FLOYD	JTS	NCAP	NYT	SAK	STECH	TSI	ZIGA
APCO	CPR	DOHOME	GULF	KEX	NCL	OR	SCGP	STGT	VARO	
B52	CPW	ECF	III	KUMWEL	NOVA	PIMO	SCM	TKN	VCOM	
BEC	CRC	EKH	INOX	LDC	NRF	PLE	SIS	TMI	VIBHA	

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)

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Sources: The Securities and Exchange Commission, Thailand; \* FSSIA's compilation



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Company	Ticker	Price	Rating	Valuation & Risks
Siam Cement	SCC TB	THB 380.00	BUY	Downside risks to our SOTP based TP 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.
PTT PCL	PTT TB	THB 35.00	BUY	Risks to our SoTP-based valuation are the oil price and potential earnings downside from government intervention.
PTT Explor & Prod	PTTEP TB	THB 163.50	BUY	Risks our TP, which is based on EV/EBITDA, are a sharp decline in oil price and a potential earnings downside from government intervention.
PTT Oil and Retail Business	OR TB	THB 26.25	BUY	The downside risks to our SOTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) a lower marketing margin; and 3) weaker-than-expected jet demand.
Bangkok Aviation Fuel Services	BAFS TB	THB 29.00	BUY	Downside risks to our SoTP-based target price include a slower-than-expected vaccination rate, leading to slower demand in tourism activities, and uncertainty in the fuel volume demand in the north which could lead to volatility in Fuel Pipeline Transportation Limited (FPT)'s income.
Thai Oil	TOP TB	THB 52.25	BUY	Downside risks to our EV/EBITDA-based TP are a sharp fall in oil price and weak demand for refined oil products.
Star Petroleum Refining	SPRC TB	THB 12.20	BUY	TP is based on EV/EBITDA. Downside risks are a sharp rise in oil price and weak demand for refined oil products.
Bangchak Corp	BCP TB	THB 32.00	BUY	The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) higher crude premiums; and 3) unplanned shutdowns of the company's refinery plants.
PTG Energy	PTG TB	THB 13.70	BUY	The downside risks to our SoTP-based TP include 1) a government cap on oil prices; and 2) weaker demand for diesel and gasoline.
Esso Thailand	ESSO TB	THB 11.60	BUY	The downside risks to our SoTP-based TP on ESSO include 1) lower-than-expected demand for petroleum products; 2) a higher crude premium; and 3) unplanned shutdowns of its refinery and petrochemical plants.
Susco	SUSCO TB	THB 3.76	BUY	The downside risks to our SOTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) a lower marketing margin; and 3) weaker-than-expected jet fuel demand.
Scan Inter	SCN TB	THB 2.36	BUY	The downside risks to our SOTP-based TP include 1) a sharp decline in oil prices; and 2) weaker demand for NGV and delays in new NGV projects.
Banpu	BANPU TB	THB 12.60	BUY	We see downside risks to our SoTP-based TP from lower coal prices, higher diesel costs and any unplanned shutdowns of its power plants.
WP Energy	WP TB	THB 4.72	BUY	The downside risks to our SOTP-based TP include: 1) lower-than-expected demand for LPG gas; and 2) a lower marketing margin.
Indorama Ventures	IVL TB	THB 47.75	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 3.26	REDUCE	Key risks to our bearish view and EV/EBITDA-based target price are rising margins of PP-naphtha, SM and ABS-benzene, and a higher market GRM.
PTT Global Chemical	PTTGC TB	THB 46.00	REDUCE	The key upside risks to our EV/EBITDA-based TP are a stronger-than-expected HDPE price and HDPE-naphtha margin.
Global Green Chemicals	GGC TB	THB 15.20	BUY	Downside risks to our EV/EBITDA-based target price include: 1) a sharp decline in crude palm oil price; 2) a change in government policy for biodiesel from the current B7; and 3) a narrower fatty alcohol margin due to the new supply in the US
Eastern Polymer Group	EPG TB	THB 9.50	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.
Tipco Asphalt	TASCO TB	THB 16.00	BUY	Downside risks to our EV/EBITDA multiple based TP include 1) a lower asphalt margin due to an oversupply in Asia on the back of faster recovery of utilisation rate for global refiners; and 2) a lower-than-expected supply of alternative crudes and asphalt.
SCG Packaging	SCGP TB	THB 55.25	BUY	Downside risks to our EV/EBITDA-based TP include a lower-than-expected demand for packaging, rising raw material costs of recycled paper and higher energy costs.

Source: FSSIA estimates

### Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

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

All share prices are as at market close on 29-Jun-2022 unless otherwise stated.

## RECOMMENDATION STRUCTURE

### Stock ratings

Stock ratings are based on absolute upside or downside, which we define as  $(\text{target price}^* - \text{current price}) / \text{current price}$ .

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

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

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

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

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

### Industry Recommendations

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

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

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

### Country (Strategy) Recommendations

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

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

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