

14 OCTOBER 2020

THAILAND / MATERIALS

SIAM CEMENT SCC TB

BUY

TARGET PRICE THB445.00
CLOSE THB348.00
UP/DOWNSIDE +27.9%
TP vs CONSENSUS +14.5%

ยั่งยืนเหนือวงจรธุรกิจ

เล็กแต่โตอย่างยั่งยืน

เราเชื่อว่ากำไรสุทธิของ SCC ยังมีแนวโน้มการเติบโตที่ดีด้วยอัตรา 4% CAGR ในระยะเวลา 3 ปี (2020-2022) แม้ว่าแนวโน้มอัตรากำไรของอุตสาหกรรมบีโตรีเคมี รวมถึงปูนซีเมนต์และวัสดุก่อสร้าง (CBM) จะยังคงทำหายจากปัญหาอุปทานเกินดุลเรื้อรังและความต้องการที่อ่อนแออันเกิดจากการแพร่ระบาด COVID-19 ในความเห็นของเรา ปัจจัยสำคัญที่จะช่วยผลักดันให้กำไรสุทธิของ SCC มีความยั่งยืนในปี 2020-2022 ประกอบด้วยตะกร้าธุรกิจ (Portfolio) ที่สมดุลโดยมีธุรกิจทั้งในประเทศและต่างประเทศ การเติบโตที่มาจากภายนอกในเวลาที่เหมาะสม และการปรับธุรกิจที่มีความสำคัญทางยุทธศาสตร์ซึ่งไม่เพียงแต่ช่วยให้อัตราผลตอบแทนยังสร้างมูลค่าสำหรับผู้ถือหุ้นระยะยาว

ธุรกิจสร้างเงินสดแฝด: เคมีและ CBM

ในขณะที่เราไม่แน่ใจเกี่ยวกับแนวโน้มอัตรากำไรในธุรกิจเคมี และโอกาสในการขยายกำลังการผลิตของโครงการ LSP จากแนวโน้มอัตรากำไรที่ไม่แน่นอนหลังปี 2023E เราเห็นว่า SCC สามารถได้ประโยชน์อย่างสูงจากความยืดหยุ่นในด้านวัตถุดิบที่สูงกว่าโดยใช้สัดส่วนวัตถุดิบที่สามารถแข่งขันได้ดีกว่าระหว่างก๊าซและแนฟทา เราคาดว่ากำไรสุทธิจากธุรกิจ CBM จะเพิ่มจาก 5.5 พัน ลบ. ในปี 2019 เป็น 7.6 พัน ลบ. ในปี 2020 เป็น 7 พัน ลบ. ในปี 2021 และเป็น 6.9 พัน ลบ. ในปี 2022 จากต้นทุนพลังงานที่คาดว่าจะลดลงและประสิทธิภาพในการผลิตที่สูงขึ้น ซึ่งควรช่วยชดเชยความต้องการปูนซีเมนต์ที่อ่อนแอได้บางส่วน

SCGP อาจมีมูลค่า 42 บาทต่อหุ้น

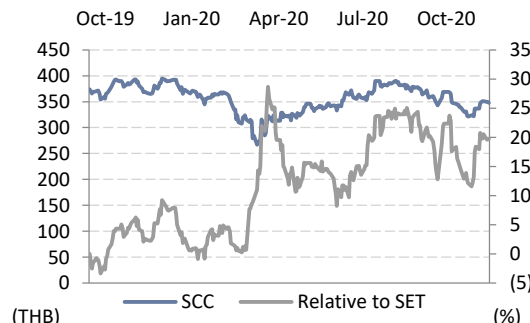
เราคาดว่ามูลค่าของ SCGP หลังการเสนอขายหุ้นแก่ประชาชนทั่วไปเป็นครั้งแรก (IPO) จะอยู่ที่ 178 พัน ลบ. โดยคิดจาก FY21E EV/EBITDA ที่ 9x เท่ากับ 42 บาทต่อหุ้นโดยคิดจากจำนวนหุ้นชำระแล้วที่ประชาชนทั่วไปถืออยู่ (Outstanding Shares) หลัง IPO ที่ 4.255 พันล้านหุ้นและ 1,127.6-1,296.7 ล้านหุ้นที่นำเสนอแก่ประชาชนทั่วไป (26.5-29.3% ของจำนวนหุ้นชำระแล้วที่ประชาชนทั่วไปถืออยู่หลัง IPO) ปัจจุบัน SCGP กำลังเสนอขายหุ้น 1,127.6 ล้านหุ้นให้แก่ประชาชนทั่วไปและจำนวนหุ้นจองที่มากกว่าที่ได้รับการจัดสรร (Overallotment) 169.1 ล้านหุ้น SCGP มีกำหนดเข้าซื้อขายในตลาดหลักทรัพย์แห่งประเทศไทยภายในตุลาคม 2020

สร้างมูลค่าด้วยธุรกิจ 3 ขา

เราเริ่มรายงาน SCC ด้วยคำแนะนำซื้อที่ราคาเป้าหมาย 445 บาท (SOTP) เราใช้ค่า FY21E EV/EBITDA ที่แตกต่างกันเพื่อสะท้อนอัตราส่วนผลตอบแทนต่อความเสี่ยงและวงจรธุรกิจอันเป็นเอกลักษณ์ของแต่ละธุรกิจ กล่าวคือ เราใช้ค่า FY21E EV/EBITDA เพียง 6x สำหรับธุรกิจเคมีและ 11x สำหรับธุรกิจ CBM เพื่อสะท้อนมุมมองเชิงลบของเราต่อแนวโน้มกำไรสุทธิและ EBITDA ของธุรกิจเคมีของ SCC ในปี 2021-2022E จากแนวโน้มอุปทานในอุตสาหกรรมที่คาดว่าจะอยู่ในสภาวะเกินดุล สำหรับธุรกิจบรรจุภัณฑ์ เราใช้ค่า FY21E EV/EBITDA ที่ 9x ซึ่งเรามองว่าสมเหตุสมผลจากแนวโน้มอัตรากำไรที่กำลังปรับตัวขึ้นของ SCGP ในปี 2021-2022E โดยได้แรงผลักดันจากการบูรณาการธุรกิจที่กำลังเพิ่มสูงขึ้น

KEY STOCK DATA

| YE Dec (THB m) | 2019 | 2020E | 2021E | 2022E |
|----------------------|---------|---------|---------|---------|
| Revenue | 437,980 | 452,914 | 479,900 | 493,105 |
| Net profit | 32,014 | 33,047 | 35,508 | 35,883 |
| EPS (THB) | 26.68 | 27.54 | 29.59 | 29.90 |
| vs Consensus (%) | - | 2.9 | 4.8 | 3.5 |
| EBITDA | 49,258 | 54,912 | 60,236 | 62,919 |
| Core net profit | 32,014 | 33,047 | 35,508 | 35,883 |
| Core EPS (THB) | 26.68 | 27.54 | 29.59 | 29.90 |
| Chg. In EPS est. (%) | - | - | - | - |
| EPS growth (%) | (28.5) | 3.2 | 7.4 | 1.1 |
| Core P/E (x) | 13.0 | 12.6 | 11.8 | 11.6 |
| Dividend yield (%) | 4.0 | 4.3 | 4.5 | 4.5 |
| EV/EBITDA (x) | 13.2 | 12.8 | 12.3 | 12.3 |
| Price/book (x) | 1.5 | 1.4 | 1.3 | 1.3 |
| Net debt/Equity (%) | 55.8 | 65.5 | 69.6 | 72.1 |
| ROE (%) | 11.5 | 11.5 | 11.6 | 11.1 |



| Share price performance | 1 Month | 3 Month | 12 Month |
|--------------------------------|-------------------------------------|---------|----------|
| Absolute (%) | 0.6 | (9.4) | (6.5) |
| Relative to country (%) | 1.8 | (3.8) | 20.3 |
| Mkt cap (USD m) | | | 13,391 |
| 3m avg. daily turnover (USD m) | | | 26.7 |
| Free float (%) | | | 67 |
| Major shareholder | H.M. King Maha Vajiralongkorn (34%) | | |
| 12m high/low (THB) | 400.00/244.00 | | |
| Issued shares (m) | 1,200.00 | | |

Sources: Bloomberg consensus; FSSIA estimates



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บทวิเคราะห์ฉบับนี้แปลมาจากบทวิเคราะห์ของ FSSIA ฉบับวันที่ 14 ตุลาคม 2020

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 timely offset the weaker net profit contributions from its chemical and CBM units in 2021-22E.

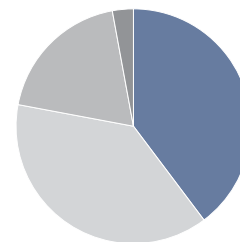
Company profile

30% owned by the Crown Property Bureau, Siam Cement Group is the 3rd largest company on the Thailand Stock Exchange by market capitalisation. Established in 1913 as a cement company, SCG was a means to reduce reliance on cement imports and to take fuller advantage of the natural resources available in Thailand.

www.scg.com

Principal activities (revenue, 2019)

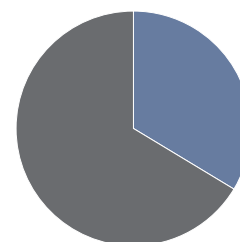
- Cement & Building Material - 42.2 %
- Chemicals - 40.6 %
- Packaging - 20.3 %
- Other - (3.1) %



Source: Siam Cement

Major shareholders

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



Source: Siam Cement

Catalyst

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) margin expansions due to lower energy and financial costs.

Risk to our call

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.

Event calendar

| Date | Event |
|-----------------|---------------------------|
| 29 October 2020 | 3Q20 results announcement |

Key assumptions

| | 2020E | 2021E | 2022E |
|----------------------------------|-------|-------|-------|
| Brent oil price (USD/bbl) | 40 | 50 | 50 |
| Naphtha price (USD/tonne) | 450 | 498 | 480 |
| Ethylene price (USD/tonne) | 690 | 850 | 821 |
| Propylene price (USD/tonne) | 762 | 860 | 823 |
| HDPE-naphtha (USD/tonne) | 440 | 417 | 430 |
| PP-naphtha (USD/tonne) | 470 | 422 | 450 |
| Packaging paper-AOCC (USD/tonne) | 270 | 260 | 250 |
| Cement demand growth (%) | (3) | 3 | 3 |

Source: FSSIA estimates

Earnings sensitivity

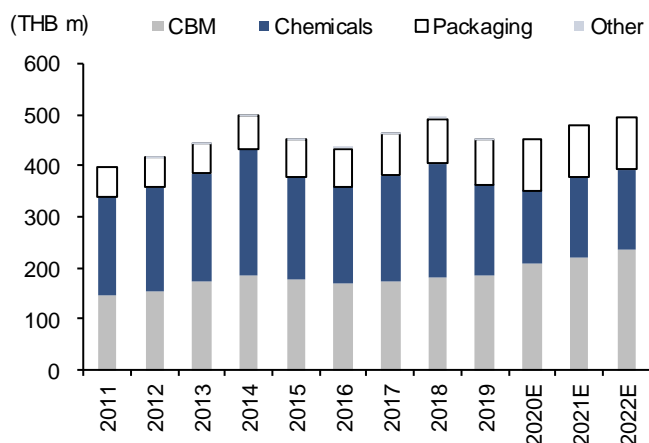
- For every 1% change in Brent oil price we estimate a 0.8% change in 2020 EPS, all else being equal.
- For every 1% increase in PP-naphtha margin, we estimate 2020 EPS would rise 0.9%, and vice versa, all else being equal.
- For every 1% increase in utilisation rate, we estimate 2020 EPS would rise 1.4%, and vice versa, all else being equal.
- For every 1% increase in AOCC price, we estimate 2020 EPS would fall by 0.3%, and vice versa, all else being equal.

Source: FSSIA estimates

Packaging star shining on the chemical and CBM cash cows

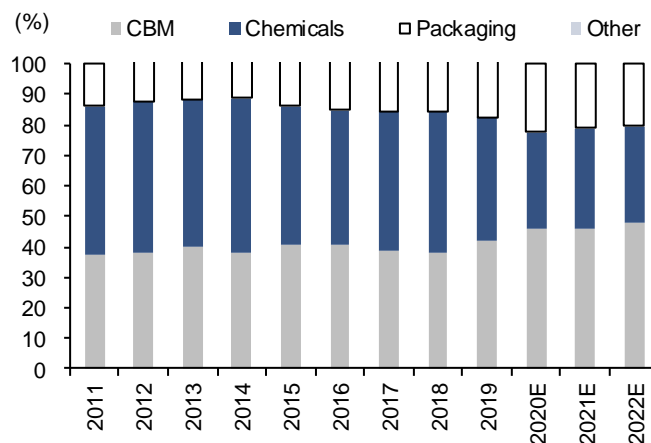
We believe SCC's net profit growth outlook remains sanguine at a 3Y CAGR of 4% (2020-22), despite the challenging margin outlook for the petrochemical and CBM industries due to the chronic oversupply and weak demand resulting from the COVID-19 pandemic. The key drivers to sustain SCC's net profits in 2020-22E, in our view, are its well-balanced portfolio with domestic and global exposure, timely inorganic growth, and its strategic business adaptation that should not only enable the company to survive but also create value for long-term shareholders.

Exhibit 1: Revenue breakdown by segment



Sources: SCC; FSSIA estimates

Exhibit 2: Revenue breakdown by segment (%)



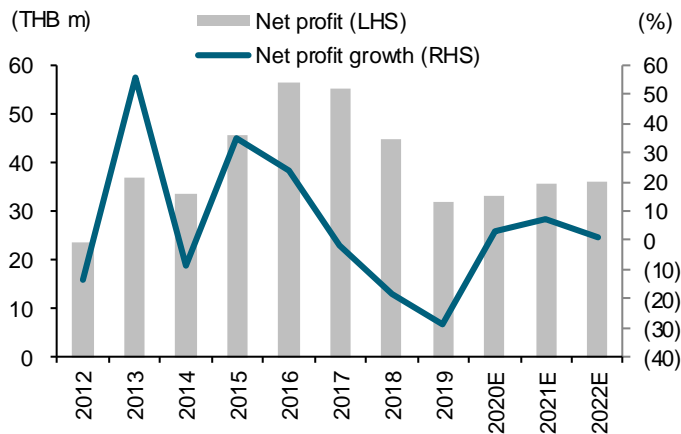
Sources: SCC; FSSIA estimates

Revenue from CBM has made up the largest proportion of SCC's revenue since 2011. However, the net profits from CBM have continued to weaken from their THB16.1b peak in 2012 down to only THB5.5b in 2019 due to Thailand's long, chronic oversupply of cement following the 1997 financial crisis. SCC's chemical revenue has fluctuated depending on the oil price movement, and its net profits have started to decline from their peak at THB42.2b in 2017 down to THB15.5b in 2019 due to the oversupply of chemical products.

SCC's packaging unit, SCG Packaging (SCGP), is the only business unit that has grown its net profit and EBITDA since 2011, rising from THB3.3b net profit and THB8.8b EBITDA in 2011 to THB5.3b net profit and THB15b EBITDA in 2019, thanks to its expansion strategy via both organic growth and M&As.

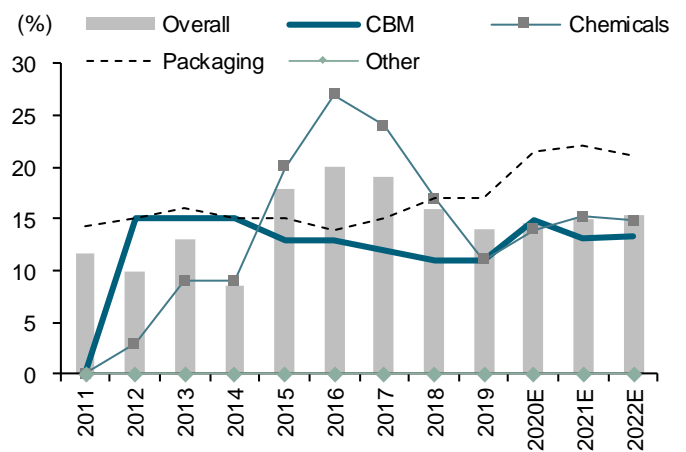
We project SCC's net profit to gradually rise in 2020-22 after bottoming out in 2019, driven by net profit growth from SCGP that should timely offset the weaker net profits from SCC's chemical and CBM cash-cow units.

Exhibit 3: Net profit and net profit growth



Sources: SCC; FSSIA estimates

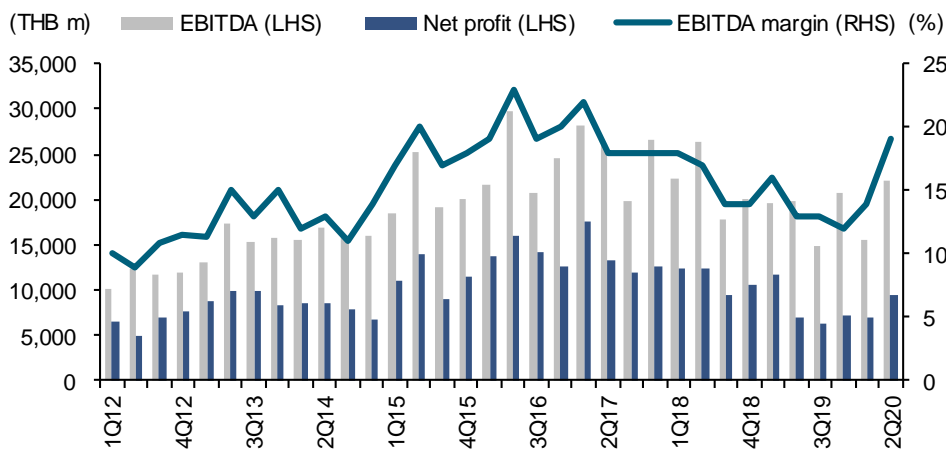
Exhibit 4: EBITDA margin by segment



Sources: SCC; FSSIA estimates

We project the chemical and CBM units' EBITDA margins to remain weak at 13-15% in 2020-22, due to the industry oversupply for cement in Thailand and chemical products globally. However, we think SCGP's EBITDA margin will gradually improve from 14% in 2016 and 17% in 2019 to 21-22% in 2020-22, backed by the projected capacity growth and margin expansion on the back of lower energy and raw material costs, as well as a lower interest expense post SCGP's IPO in October 2020.

Exhibit 5: SCC's EBITDA, net profit, and EBITDA margin



Sources: SCC; FSSIA estimates

Petrochemical margin outlook remains challenging in 2020-22E

SCC's chemical products can be divided into four key groups: 1) ethylene chain products, including polyethylene (PE) and the downstream high density polyethylene (HDPE), low density PE (LDPE), linear LDPE (LLDPE), and polyvinyl chloride (PVC); 2) propylene chain products, including polypropylene (PP), propylene oxide (PO), and methyl methacrylate (MMA); 3) the butadiene-based synthetic rubber elastomers and solution styrene-butadiene rubber (SSBR); and 4) the benzene-based styrene monomer (SM).

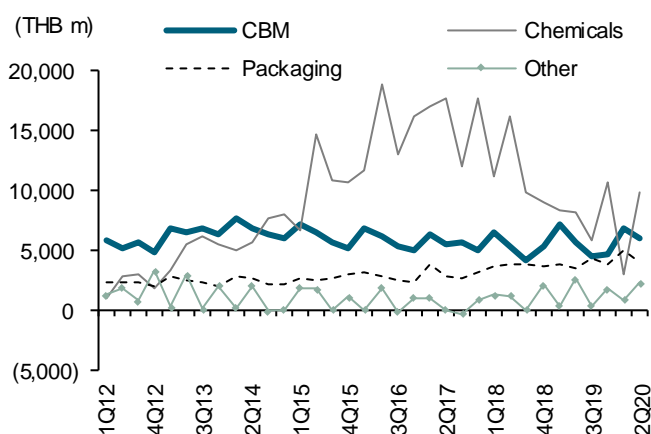
Exhibit 6: SCC's chemical capacity as of May 2020

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020E | 2021E |
|----------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) |
| Chemicals - upstream | | | | | | | | | | | |
| Ethylene | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 | 1,800 | 1,800 | 1,800 | 1,800 | 2,100 |
| Propylene | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,250 | 1,250 | 1,250 | 1,250 | 1,300 |
| Chanda Asri (30% stake) | | | | | | | | | | | |
| Ethylene | 600 | 600 | 600 | 600 | 600 | 860 | 860 | 860 | 860 | 900 | 900 |
| Propylene | 320 | 320 | 320 | 320 | 320 | 470 | 470 | 470 | 470 | 490 | 490 |
| Chemicals - downstream | | | | | | | | | | | |
| HDPE | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 |
| PP | 720 | 720 | 720 | 720 | 720 | 720 | 720 | 720 | 720 | 720 | 720 |
| PVC (Thai, Indo, Vietnam) (90% stake in TPC) | 886 | 886 | 886 | 886 | 886 | 886 | 886 | 886 | 886 | 886 | 886 |
| Chemicals - downstream (JV) | | | | | | | | | | | |
| LLDPE (Dow JV) | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 | 650 |
| Specialty elastomers (Dow JV) | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 |
| Propylene oxide (Dow JV) | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 | 390 |
| SSBR (BST JV) | 0 | 0 | 50 | 50 | 50 | 100 | 100 | 100 | 100 | 100 | 100 |
| LLDPE cast sheet film (Mitsui Tocello JV) | 0 | 0 | 0 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| MMA (Mitsui Rayon JV) | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 |
| Cast sheets (Mitsui Rayon JV) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| HDPE/LLDPE (CAP JV) | 336 | 336 | 336 | 336 | 336 | 336 | 336 | 336 | 736 | 736 | 736 |
| PP (CAP JV) | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 480 | 590 | 590 | 590 |
| SM (CAP JV) | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 |

Sources: SCC; FSSIA estimates

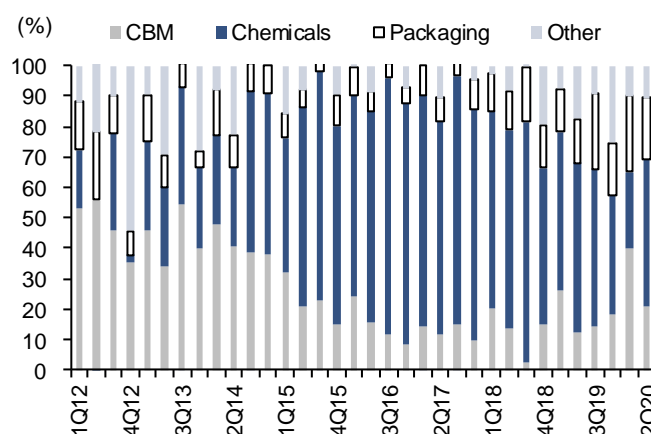
Since posting a peak quarterly net profit in 2Q16, SCC's net profit from its chemical unit has continued to decline due to poorer product margins as a result of a large new supply influx of PE and PP.

Exhibit 7: Quarterly net profit breakdown by segment



Source: SCC

Exhibit 8: Quarterly net profit breakdown by segment (%)

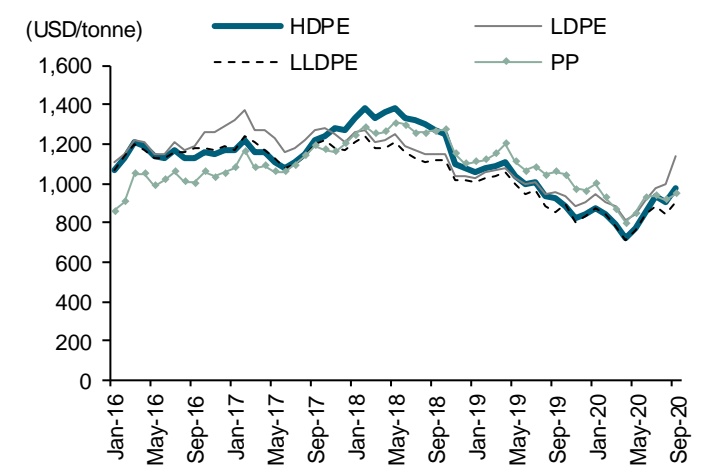
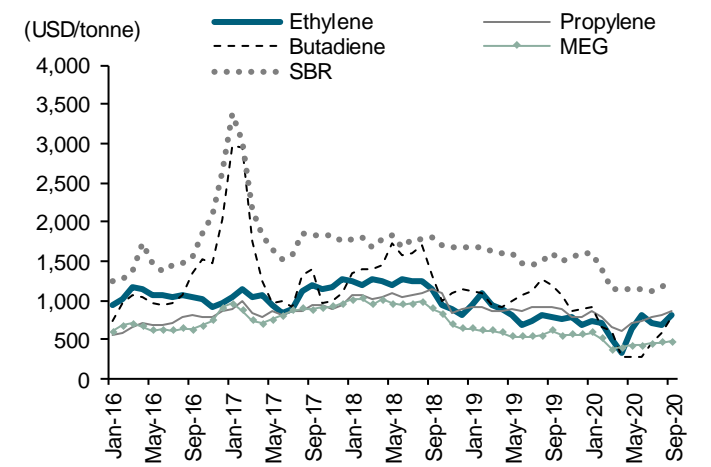


Source: SCC

Among SCC's key downstream product groups, only its PVC (886ktpa capacity) margin has been in an upcycle since Apr-19, while the margins of the remaining downstream groups have been in downcycles since 2018. These include: 1) PE (HDPE, LLDPE), its largest downstream product group; 2) the PP group, its second largest product group; 3) the synthetic rubber group; and 4) the SM group.

Exhibit 9: Prices of SCC's key chemical products

Exhibit 10: Prices of SCC's key PE and PP products



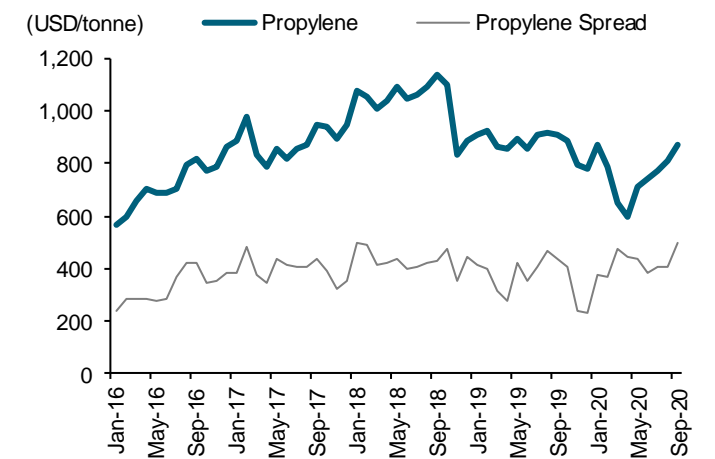
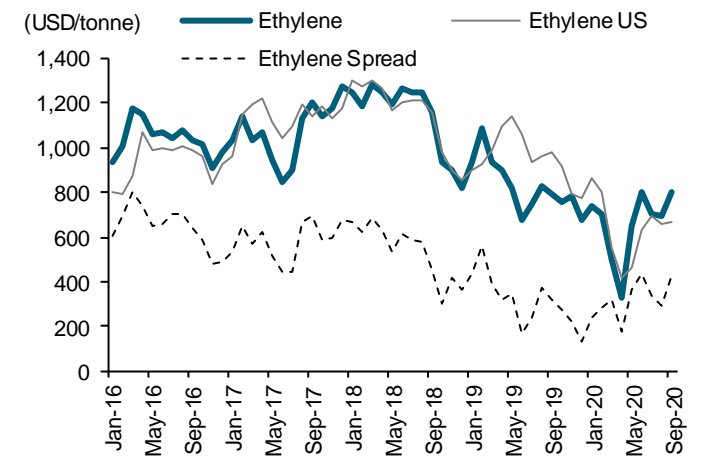
Source: Bloomberg

Source: Bloomberg

Ethylene margin remains bleak in 2020E onward. While SCC has a relatively integrated ethylene chain for its upstream capacity (2.7mtpa) vs its downstream capacity (2.5mtpa), according to our estimate, we think SCC's chemical EBITDA remains exposed to the global ethylene margin cycle, which has been in a downcycle since 2018. The ethylene-naphtha margin has declined from USD800/t in 1Q16 to its bottom at below USD200/t in 1H20.

Exhibit 11: Prices of ethylene in Asia vs US and the ethylene-naphtha margin

Exhibit 12: Propylene price and propylene-naphtha margin



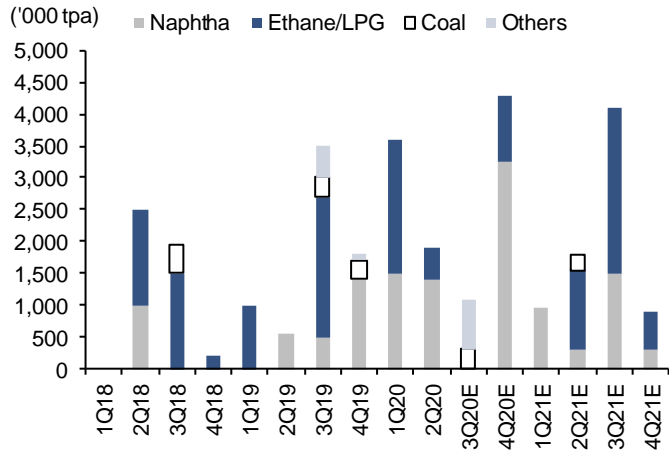
Source: Bloomberg

Source: Bloomberg

While the ethylene-naphtha margin has recently started to recover, we think an upcoming wave of new supply, mainly in China from the naphtha-based ethylene plants, will continue to pressure the ethylene-naphtha margin in 2020-22.

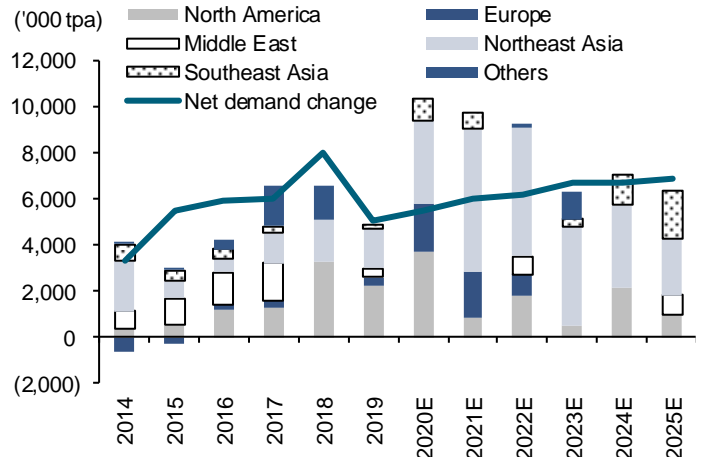
Similarly, the propylene-naphtha margin has weakened since 4Q18 after a supply influx and weaker demand for automotive parts – one of the key applications for propylene downstream products.

Exhibit 13: Global ethylene capacity addition by feedstock



Source: Extracted from PTTGC's investor presentation

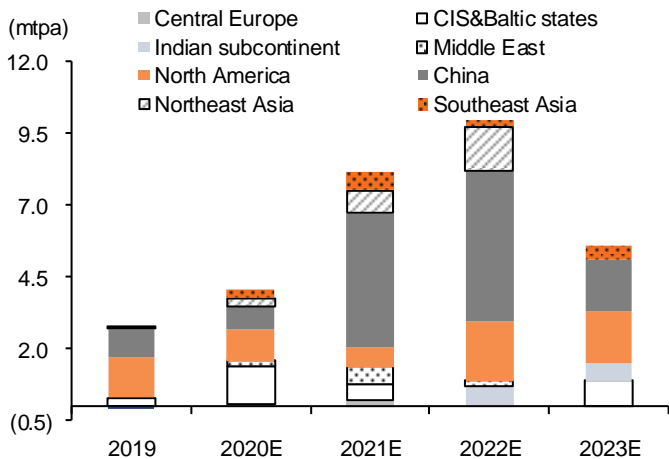
Exhibit 14: Global ethylene supply addition vs demand growth



Source: Extracted from PTTGC's investor presentation

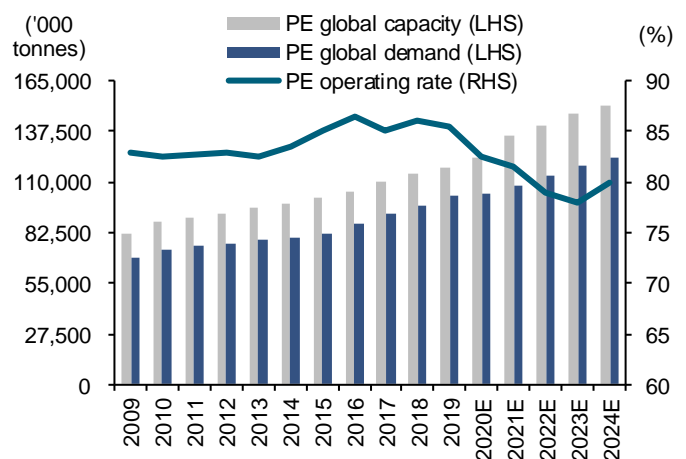
PE product chain margins. Since the beginning of 2020, the PE-naphtha margins have risen sharply from their bottoms in 4Q19, driven by the rising demand for single-use plastics after the COVID-19 outbreak and the online and e-commerce packaging boom. However, we project the PE-naphtha margins to start softening in 2H20 onward due to the influx of new supplies.

Exhibit 15: Polyethylene supply addition by region



Source: Extracted from PTTGC's investor presentation

Exhibit 16: Global PE supply vs demand and operating rate



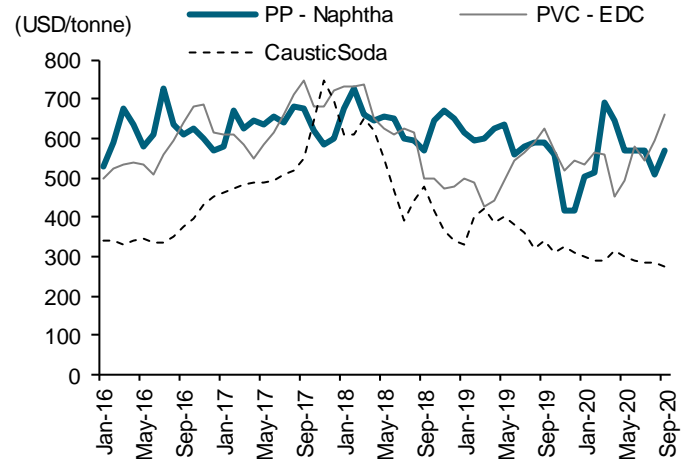
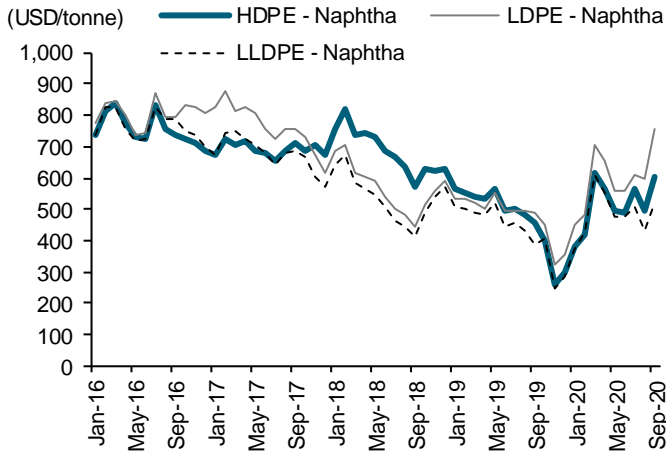
Source: Extracted from PTTGC's investor presentation

In contrast, the PP-naphtha margin has been much more resilient than the PE-naphtha margin, due to the more limited supply on the market. While the PE-naphtha margins have ranged from USD280-800/t during 2016-1H20, the PP-naphtha margin has hovered between USD420/t and USD730/t. We believe the PP-naphtha margin will continue to stay above USD500/t in 2021-22, driven by limited new supply and an improving demand for automotive and construction materials.

PVC margin is expected to remain healthy in 2021-22. SCC's third largest chemical product group, PVC, has seen its margin in the upcycle range of USD400-620/t since Apr-19, thanks to the sharp drop in supply from the coal-based PVC in China and the resurgent demand from the construction material sector. We project PVC-ethylene dichloride (EDC) to remain at a healthy level above USD500/t in 2021-22, thanks to the projected strong demand in China.

Exhibit 17: Margins of HDPE, LDPE, and LLDPE over naphtha

Exhibit 18: PP-naphtha, PVC-EDC, and price of caustic soda



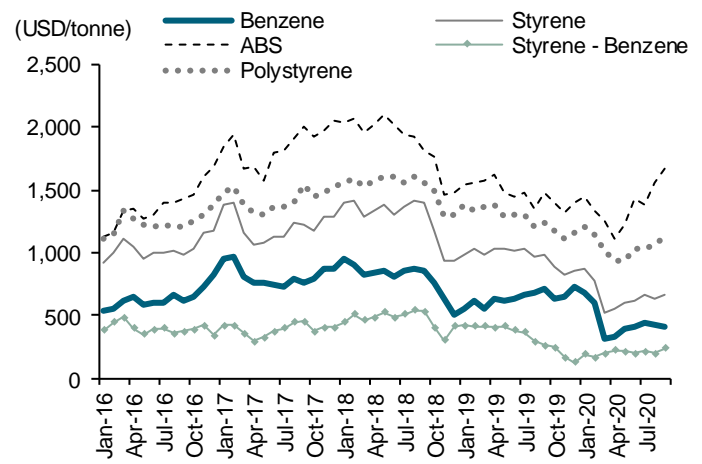
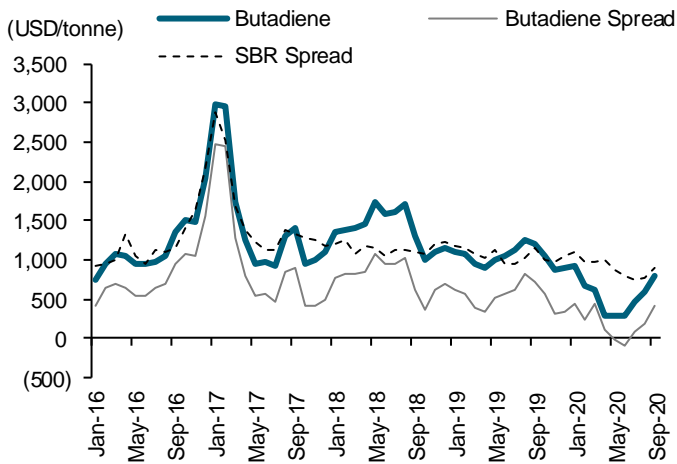
Source: Bloomberg

Source: Bloomberg

Synthetic rubber could provide a surprising upside in 2021-22. SCC has chemical exposure to synthetic rubber applications via its 50%-owned JV with Dow Chemical, which owns and operates specialty elastomer and SBR plants. While SCC's capacities for these two products are relatively small (220ktpa for specialty elastomers and 110ktpa for SBR), the company suffered net losses from those products in 1H20 due to the demand collapse of the automotive tire segment as a result of the COVID-19 outbreak.

Exhibit 19: Butadiene price, butadiene-naphtha, and SBR-naphtha margins

Exhibit 20: Benzene, Styrene, ABS, Styrene – Benzene, Polystyrene

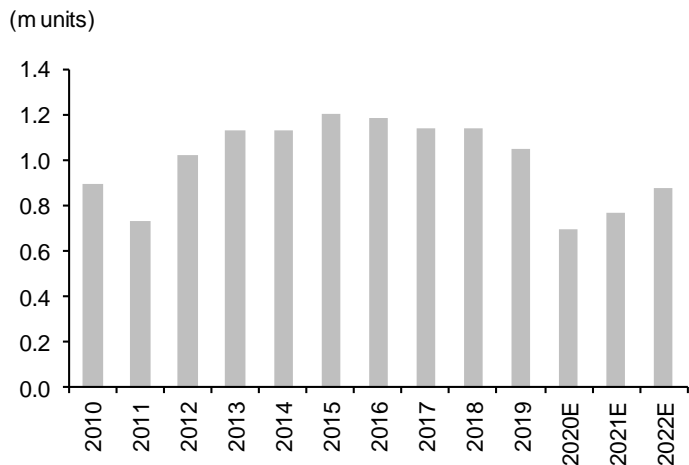


Source: Bloomberg

Source: Bloomberg

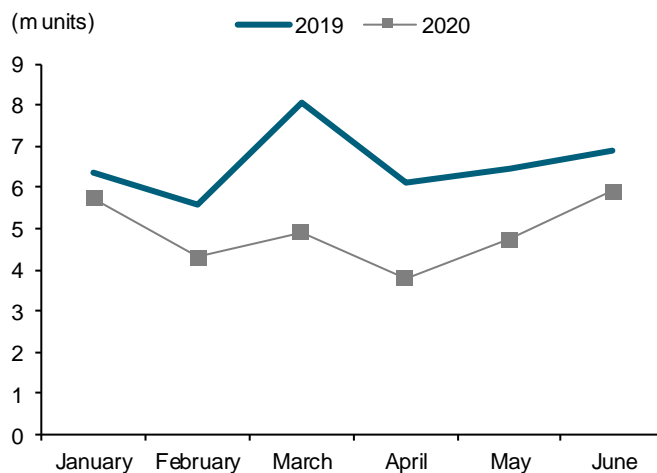
SM – SCC's last main chemical chain, with a 340ktpa capacity, is projected to witness a margin recovery in 2021-22. The margin recovery should be driven by the y-y global demand improvement for automobiles, including both electric vehicles and conventional oil-based internal combustion engine vehicles. According to the International Organization of Motor Manufacturing (OICA), global car production is projected to improve by 10-15% y-y in 2021, and we think the prices and margins of SBR and butadiene will recover from their bottoms starting in 2H20 onward.

Exhibit 21: Thailand's car exports



Sources: Thai Automotive Industry Association, FSSIA estimates

Exhibit 22: Sales/registration of new vehicles in countries represented by the OICA

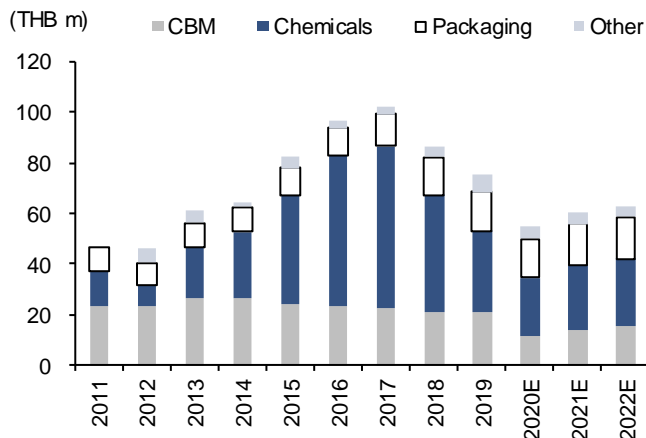


Source: International Organization of Motor Vehicle Manufacturers (OICA)

While the margins of PE (HDPE, LDPE, and LLDPE) and PP over naphtha, SCC's two largest downstream products, are projected to soften in 2H20 onward, we project SCC's chemical EBITDA in 2020-22 to improve from THB22.6b in 2020 up to THB26b in 2021 and THB26.8b in 2022.

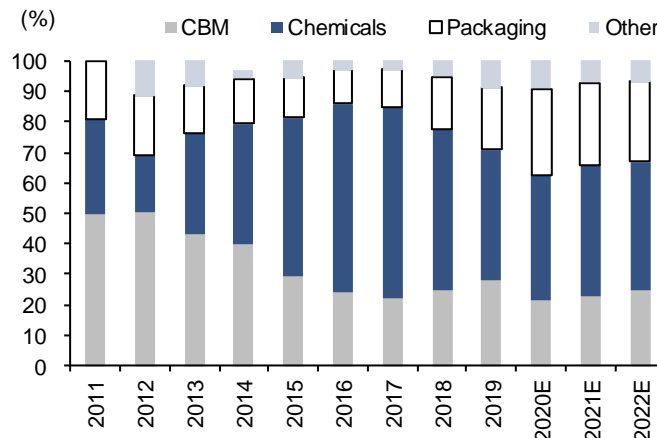
The key drivers to counter the downcycle margin impacts for SCC's chemical EBITDA include 1) the feedstock flexibility to use up to 30% liquefied petroleum gas (LPG) and 70% naphtha for its upstream naphtha crackers; 2) competitive naphtha cost thanks to the low oil price, which we project at USD40/bbl in 2020 and USD50/bbl in 2021-22; and 3) SCC's high-value added products of film grade PE and PP.

Exhibit 23: Annual EBITDA breakdown by segment



Sources: SCC; FSSIA estimates

Exhibit 24: Annual EBITDA breakdown by segment (%)

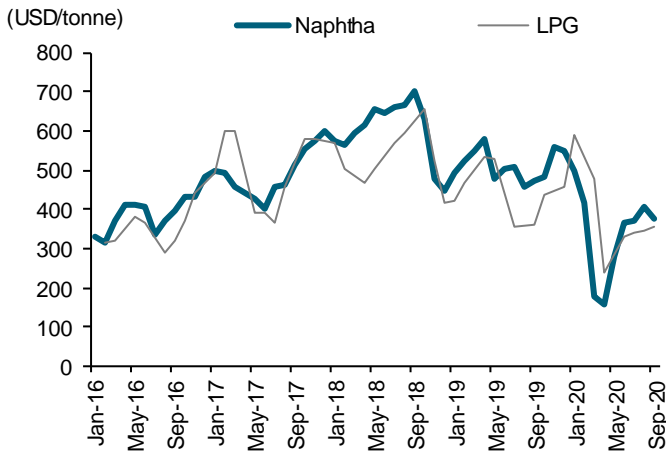


Sources: SCC; FSSIA estimates

As one of the leading naphtha-based petrochemical producers in Asia, we believe SCC will benefit from the expected low naphtha and LPG costs in 2021-22, given 1) the low oil price of USD50/bbl in 2021-22E, due to the weak demand and oversupply outlook that would result in a continued oversupply of naphtha; and 2) the shale gas oversupply in the US that has depressed the prices of gas and LNG globally. As LPG is a gas product – a combination of butane and propane produced from US shale gas – we think the price of LPG will remain low in 2021-22.

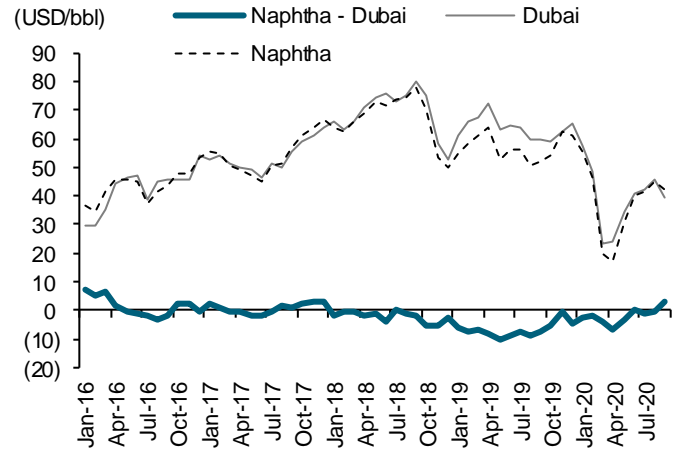
According to management, SCC has the operational flexibility to use up to 30% LPG and 70% naphtha as feedstock for its upstream naphtha crackers (2.9mtpa capacity) in Thailand and Indonesia via its 30% stake in Chandra Asri (CAP ID). Hence, the projected low prices of naphtha and LPG should help offset the weaker margin outlook of PE/PP in 2021-22, in our view.

Exhibit 25: Prices of naphtha and LPG



Source: Bloomberg

Exhibit 26: Naphtha price discount to Dubai crude oil price



Source: Bloomberg

New chemical growth projects could enhance SCC’s feedstock competitiveness.

While we remain bearish on the global industry margin outlook for PE/PP post 2020, based on the projected industry oversupply, we think SCC’s chemical EBITDA should continue to grow, or at least sustain at the current level post 2023, after SCC’s two new capacity growth projects commence their commercial operation dates (COD).

Exhibit 27: SCC’s new capacity projects



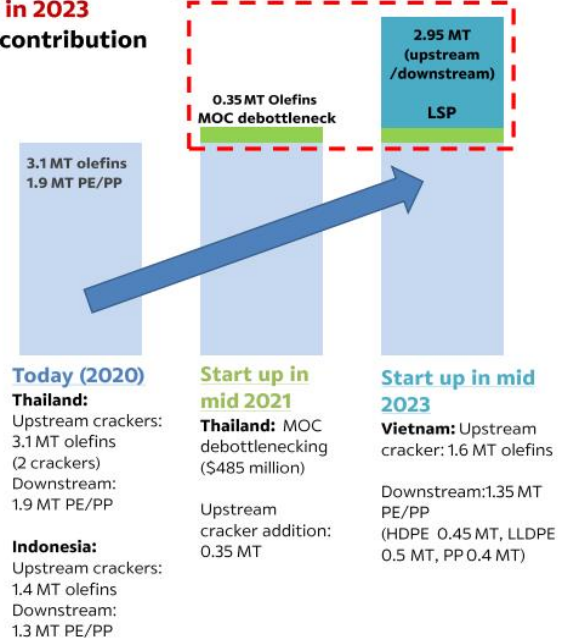
Source: SCC

Competitive capacity addition

Add up capacity growth by

c. +70% in 2023

✓ **EBITDA contribution**



Project #1: Debottlenecking of Map Ta Phut Olefins Company (MOC). SCC will debottleneck one of its two naphtha crackers with a current upstream capacity of 0.9mtpa ethylene and 0.8mtpa propylene, and a downstream capacity of 0.4mtpa HDPE and 0.4mtpa PP. MOC is a JV between SCC (66% stake) and Dow Chemical; COD since March 2010. SCC plans to debottleneck its MOC complex to increase the upstream capacity by 20.5%, or 0.35mtpa, to 2.05mtpa by mid-2021, at an investment cost of USD485m.

Project #2: Long Son Petrochemical Complex (LSP). SCC had already completed 45% of its large-scale LSP project in Vietnam as of 2Q20. This project is 100%-owned by SCC and is a highly flexible feedstock chemical cracker with the capability to use up to 80% gas and 20% naphtha as feedstock for the plant. LSP's COD is scheduled in 2023 with a near-complete integration of its upstream (1.6mtpa) and downstream (1.35mtpa) capacities.

Exhibit 28: SCC's petrochemical complex in Vietnam

| SCC's new Vietnam petrochemical complex | | Location: Long Son Island, Baria-Vung Tau | |
|-----------------------------------------|---------|-------------------------------------------|--------------|
| | (USD m) | | |
| Total investment cost | 5,400 | | |
| Debt to equity (x) | 1.50 | | |
| Equity investment | 2,160 | | |
| Capacity | | (ktpa) | |
| Olefins | | 1,600 | |
| HDPE | | 450 | |
| LLDPE | | 500 | |
| PP | | 400 | |
| Key feedstock | | | (%) |
| Ethane | | | 50 |
| Propane | | | 30 |
| Naphtha | | | 20 |
| Commercial starting date | | | 2023E |

Sources: SCC; FSSIA estimates

While we are not positive on the capacity growth potential from the LSP project, given the uncertainty of the margin outlook post 2023E, we think SCC should greatly benefit from its higher feedstock flexibility by using a more competitive feedstock mix between gas and naphtha.

We estimate that SCC will be able to increase its capability to use gas feedstock – from the current 30% (LPG) for its MOC and Rayong Olefins Company (ROC) naphtha crackers in Thailand – by up to 67%, after the LSP and MOC debottlenecking projects are complete.

Exhibit 29: Chemical feedstock comparison of SCC vs PTTGC

| | SCC - VN complex | | SCC - current | PTTGC |
|---------|------------------|-----|---------------|-------|
| | (%) | (%) | (%) | (%) |
| Gas | 67 | 30 | 55 | |
| Naphtha | 33 | 70 | 45 | |

Sources: Companies; FSSIA estimates

We think SCC's two growth projects, particularly LSP, could bring the feedstock competitiveness of its chemical plants in Thailand (MOC and ROC), Vietnam (LSP), and Indonesia (CAP), up to par with, or possibly even exceed, PTT Global Chemical (PTTGC, BUY TP THB50)'s. PTTGC should complete its new Map Ta Phut retrofit project expansion in 2020, which will add naphtha-based capacity vs SCC's gas-based capacity addition.

Exhibit 30: Chemical production yield comparison (SCC vs PTTGC) as of 2Q20

| Product yield | SCC | PTTGC |
|---------------|-----|--------|
| | (%) | (%) |
| Gas type | LPG | Ethane |
| Gas yield | 55 | 75 |
| Naphtha yield | 71 | 54 |
| Ethylene | 38 | 37 |
| Propylene | 33 | 17 |

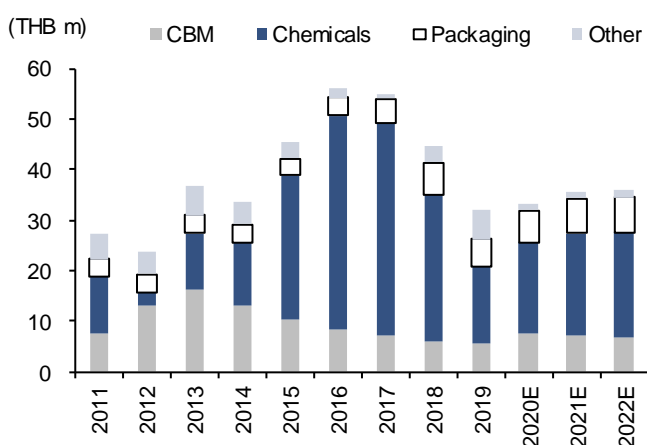
Sources: Companies; FSSIA estimates

Cement and building material oversupply continues

Cement and building materials (CBM) has long been SCC's core business. However, the post-financial crisis net profits from SCC's CBM unit have continued to decline due to the chronic oversupply in the Thai cement market, despite SCC's multiple capacity expansions via both greenfield investments and M&As in ASEAN countries. Its CBM unit generated only THB5.5b net profit in 2019 – a nine-year low – due to the weaker demand for cement and ceramics in Asia and Thailand. Net profit contributions from the CBM unit to SCC's total net profit has plunged from 56% in 2012 down to only 13% in 2018 and 17% in 2019.

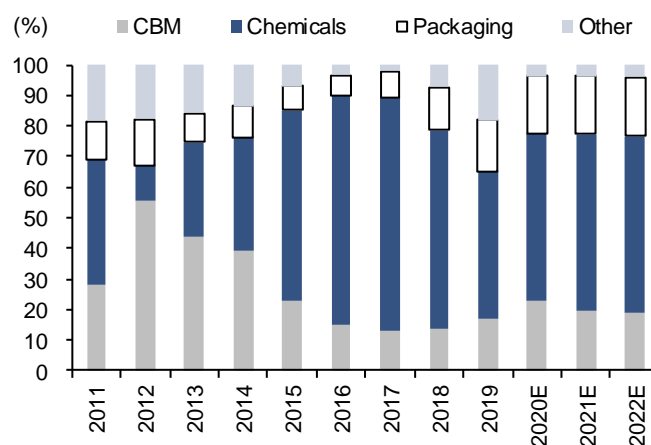
We project the CBM unit's net profit contributions to rise from THB5.5b in 2019 to THB7.6b in 2020, THB7b in 2021, and THB6.9b in 2022, thanks to the projected lower energy costs and higher production efficiency that should partly offset the weak cement demand.

Exhibit 31: Annual net profit breakdown by segment



Sources: SCC; FSSIA estimates

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



Sources: SCC; FSSIA estimates

We believe SCC's cement unit will continue to face a weak demand outlook across ASEAN countries where the company has cement plants, including Thailand, Laos, Indonesia, Cambodia, Myanmar, and Vietnam.

Similarly, in the building material segment, we think SCC could face a weak demand outlook for its ceramics (SCC currently has a 210m sqm capacity), lightweight concrete, and other construction materials.

Exhibit 33: SCC's CBM capacity

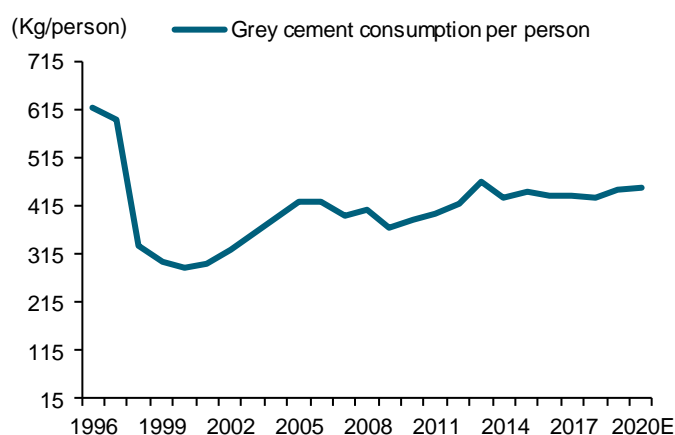
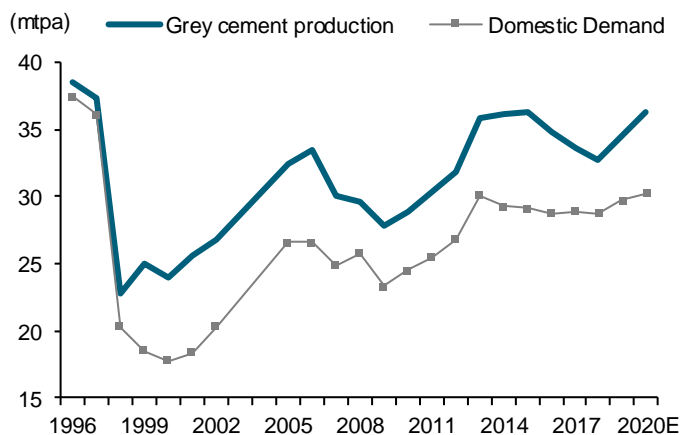
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020E | 2021E |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Cement | (tpa) | (tpa) | (tpa) | (tpa) | (tpa) | (tpa) | (tpa) | (tpa) | (tpa) | (tpa) | (tpa) |
| Grey cement (TH,KH,MM,ID,LA,VN) | 24 | 24 | 24 | 24 | 27 | 27 | 34 | 34 | 34 | 34 | 34 |
| White cement (TH,VN) | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Mortar | 2.1 | 2.1 | 2.1 | 3.2 | 4.1 | 6.6 | 6.6 | 7.6 | 7.6 | 7.6 | 7.6 |
| Building products | (m sqm) | (m sqm) | (m sqm) | (m sqm) | (m sqm) | (m sqm) | (m sqm) | (m sqm) | (m sqm) | (m sqm) | (m sqm) |
| Ceramic tiles | 149 | 149 | 225 | 225 | 225 | 225 | 225 | 210 | 210 | 214 | 214 |
| Ceiling & wall products (TH) | 60 | 68 | 86 | 99 | 99 | 100 | 100 | 107 | 107 | 107 | 107 |
| Lightweight concrete (TH,ID) | 15 | 15 | 21 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Modular homes (Sekisui Heim JV) | 200 | 200 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |

Sources: SCG; FSSIA estimates

Thailand cement market remains in the doldrums. In Thailand, the cement market has long been in a chronic oversupply since 1997, thanks to the weak demand growth and relatively stable saturated cement consumption per capita at 455kg/person as of 1H20, according to the Thai Cement Manufacturing Association (TCMA).

Exhibit 34: Thailand’s grey cement production and demand

Exhibit 35: Thailand’s grey cement demand per capita



Source: TCMA

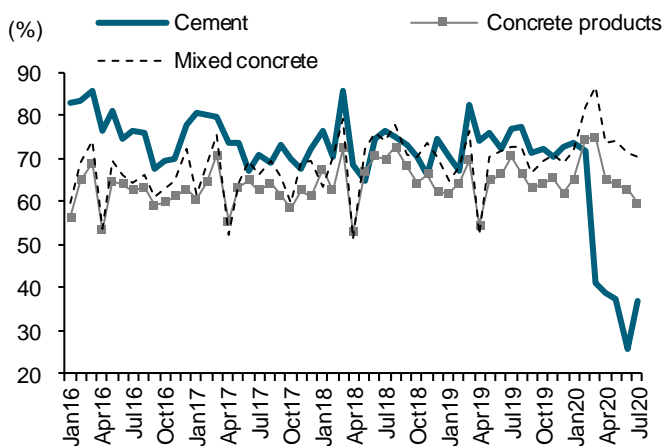
Source: TCMA

In 2019, cement production in Thailand amounted to only 34.51mtpa vs the domestic demand of 29.75mtpa, resulting low utilisation rates of 70-80% during 2018-19. When the COVID-19 outbreak hit the country, cement utilisation rates plunged to 26% in June and have yet to recover to the 70-80% pre-COVID-19 levels.

Exhibit 36: Thailand’s cement capacity

Exhibit 37: Thailand’s utilisation rates of cement, concrete products, and mixed concrete

| | | Grey cement | Clinker |
|-------------------------|-----------|-------------|--------------|
| | | (mtpa) | (ktpa) |
| SCC | Thaluang | 3.1 | 8.0 |
| | Khaowong | 3.8 | 10.0 |
| | Kaengkhoi | 7.3 | 19.0 |
| | Thungsong | 6.9 | 18.0 |
| | Lampang | 2.1 | 5.5 |
| Total - SCC | | 23.2 | 60.5 |
| SCCC | Saraburi | 14.8 | 38.5 |
| TPIPL | Saraburi | 13.0 | 33.5 |
| Asia Cement | Saraburi | 5.0 | 14.0 |
| Jalaprathan Cement | Taklee | 1.2 | 3.0 |
| Jalaprathan Cement | Chaa Am | 1.2 | 3.1 |
| Thai Pride Cement | Saraburi | 1.0 | 2.5 |
| Globe Cement | Saraburi | 0.8 | 2.2 |
| Total - Thailand | | 60.2 | 157.3 |

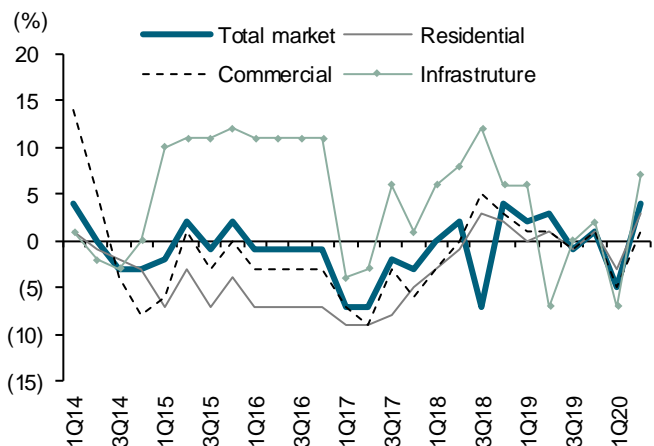


Source: TCMA

Source: TCMA

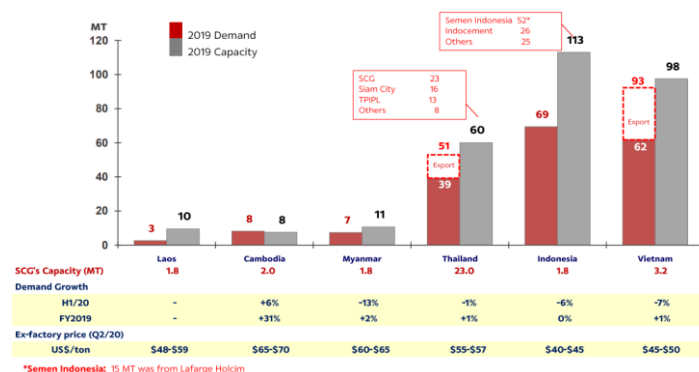
We project a cement demand decline of -3% y-y in Thailand, before growing to 4% y-y in 2021, driven by the government segment, which currently accounts for 38-42% of the total cement demand. We project the cement demand in ASEAN markets to be much stronger than Thailand's in 2021-22, since we project those countries' lockdowns to end by mid-2021, thereby allowing cement demand growth to return to its normal level.

Exhibit 38: Thailand's cement demand



Source: SCC

Exhibit 39: Regional cement demand



Source: SCC

Cement demand growth outlook in Thailand in 2020-22. We believe Thailand's cement demand growth will rise to 4% y-y in 2021, backed by the rising demand for cement from the government's infrastructure projects that we expect to grow at a high 10% y-y in 2021. The Thai government has set aside over THB1.9t in funds for 44 megaprojects. We expect infrastructure projects and commercial property developments to boost the demand for cement, with less demand from residential property projects, in our view.

Exhibit 40: Thailand's megaprojects – 44 investment projects

| | No. of projects | Fiscal budget | Borrowing | PPP* | Investment | Total |
|----------------------------------------------------|-----------------|----------------|------------------|----------------|----------------|------------------|
| | (no.) | (THB m) | (THB m) | (THB m) | (THB m) | (THB m) |
| Approved by the cabinet | | | | | | |
| - Under construction | 17 | 169,176 | 475,268 | 126,037 | 11,848 | 782,329 |
| Motorway: Pattaya-Mabtaput | | | | | | |
| Motorway: Bang-pa-in - Saraburi - Nakornratchasima | | | | | | |
| Motorway: Bangyai - Kanchanaburi | | | | | | |
| - In preparation | 12 | 43,085 | 286,432 | 23,679 | 59,543 | 412,739 |
| Approved by PPP* pending cabinet approval | 2 | 32,960 | 168,095 | | 19 | 201,073 |
| Pending to propose to the cabinet | 13 | 14,569 | 439,356 | | 76,245 | 530,170 |
| Total 44 investment projects | 44 | 259,790 | 1,369,151 | 149,716 | 147,655 | 1,926,311 |

* Public-private partnership
Source: Ministry of Transport

Exhibit 41: Investment projects approved by the cabinet – currently under construction

| Project under construction | Expected completion | | Expected completion |
|----------------------------------------------------------|---------------------|------------------------------------------------------------|---------------------|
| Air transport: | | Dual-track railways: | |
| Suvarnabhumi Airport Phase 2 and Mae Sot Airport (Tak) | 2020 | Prachuap Khiri Khan-Chumphon | 2021 |
| | | Nakhon Pathom - Hua-Hin | 2021 |
| Marine transport: | | Hua-Hin - Prachuap Khiri Khan | |
| Single rail transfer operator (SRTO) - Leam Chabang Port | 25-Oct-19 | Lop Buri - Park Nam Pho | 2022 |
| | | Mab Kabao - Jira Junction | 2023 |
| Others: | | | |
| Intermodal Facility - Chiang Khong (Chiang Rai) | 2020 | High-speed railway: | |
| | | Thailand-Chinese (Bangkok - Nakorn Ratchasima - Nong Khai) | 2023 |
| Motorways: | | Mass-transit system and commuter rail lines | |
| Pattaya-Map Ta Phut | 2020 | Red line (Bang Sue - Rangsit) | 2020 |
| Bang-pa-in - Saraburi - Nakornratchasima | 2020 / 2021 | Pink line (Khae Rai - Min Buri) | 2021 |
| Bangyai - Kanchanaburi | 2021 / 2022 | Yellow line (Lad Prao - Samrong) | 2021 |
| | | Orange line (Thailand Cultural Centre - Min Buri) | 2022 |

Source: Ministry of Transport

Of the 44 megaprojects – which are scheduled to be completed staggeringly from 2020-26 – we think the main projects that will have a significant impact on the cement demand in Thailand are the motorway projects, which include:

- 1) The committed projects of Pattaya – Map Ta Phut, Bang-pa-in – Saraburi – Nakornratchasima, and Bangyai – Kanchanaburi, scheduled to commence their CODs during 2020-22;
- 2) The motorway projects under expropriation and environmental impact assessment (EIA) processes, including M8, M82, M5, M7, and M9.

Exhibit 42: Projects under expropriation and EIA

| | Road | Project | Distance (Km) | ----- Project cost ----- | | | Status | Expected timeline |
|---|----------------------------------|--------------------------------------|------------------|--------------------------|-----------------------|--------------------|---------------|----------------------|
| | | | | PPP Method | Government (THB m) | Private (THB m) | | |
| 1 | Intercity Motorway (M8) | Nakhon Pathom - Cha Am | 109 | Net cost | 60,715 | n/a | E&E | RSD 2024 |
| 2 | Intercity Motorway (M82) | Bang Khun Thian - Ban Phaeo | 25 | Net cost | 31,570 | 16,100 | E&E | RSD 2024 |
| 3 | Elevated Tollway Utraphimuk (M5) | Rangsit - Bang Pa-in | 18 | n/a | 28,108 | n/a | E&E | RSD 2025 |
| 4 | Motorway (M7) | Srinakarindra - Suvarnabhumi Airport | 19 | n/a | 37,054 | n/a | PPP reports | RSD 2025 |
| 5 | West 2nd Outer Ring Road (M9) | Bang Khun Thian - Bangbuathong | 38 | n/a | 56,002 | n/a | Detail design | RSD 2026 |

*E&E are Expropriation & EIA approvals

Source: Ministry of Transport

Based on SCC's guidance, we estimate that the cement demand in Thailand will grow 3-4% CAGR in 2020-25, based on the cement consumption per km distance for the different megaprojects. While the cement demand growth from the government's infrastructure projects (38-42% of Thailand's total cement demand in 2019) is unlikely to sufficiently offset the weak demand from the residential sector (40-45%), we think the megaprojects should at least sustain SCC's EBITDA in 2020-24E.

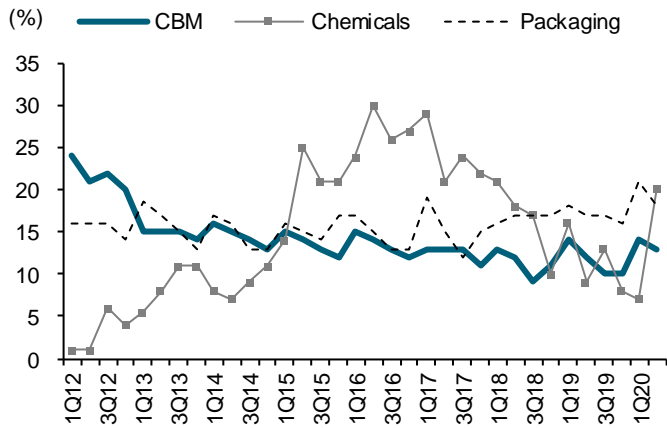
Exhibit 43: Megaprojects' cement consumption

| Mega infrastructure project | ----- Cement consumption (tonne per km) ----- | |
|--------------------------------------|-----------------------------------------------|-------|
| | Min | Max |
| High-speed railway (1.4-metre gauge) | 5,000 | 5,500 |
| Motorway (8-lane) | 3,000 | 5,000 |
| Bangkok mass rapid transport | 2,500 | 3,500 |
| Dual-track railway (1-metre gauge) | 400 | 450 |

Sources: SCC; FSSIA estimates

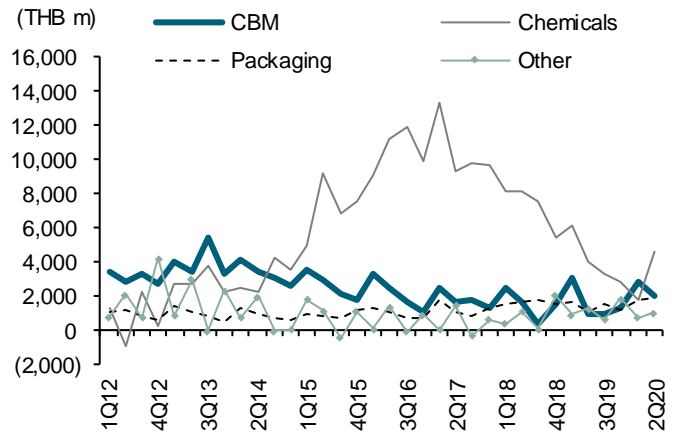
Despite the continued weak demand for SCC’s CBM, the CBM EBITDA margin recently recovered from its bottom at 9% in 3Q18 to the 13-14% range in 1H20, thanks to 1) the lower energy cost (66% of total production cost for cement) due to the lower coal price; and 2) a higher proportion of self-developed, biomass-based energy for cement production, which has risen from less than 5% in 2010 to over 15% as of 1H20. We estimate that SCC’s biomass energy could save up to 10-20% of its energy cost, or 6-12% of the total cement production cost, supporting its CBM unit’s EBITDA margin.

Exhibit 44: EBITDA margins of SCC’s key segments



Source: SCC

Exhibit 45: SCC’s net profit by segment



Source: SCC

Packaging is the most promising segment

SCC announced that it would spin off its subsidiary, SCG Packaging Plc (SCGP), in an upcoming IPO on the Stock Exchange of Thailand (SET), estimated to occur in October 2020. With registered post-IPO capital of THB4.42b at a THB1 par value and an estimated IPO price range of THB33.5-35, we expect SCGP to be included in the SET50 index.

SCC plans to maintain at least a 70% stake in SCGP post IPO, down from 99% pre IPO. The proceeds are expected to be used to fund its growth projects and future mergers and partnerships (M&P), based on the company's IPO filing.

Exhibit 46: Key packaging capacity

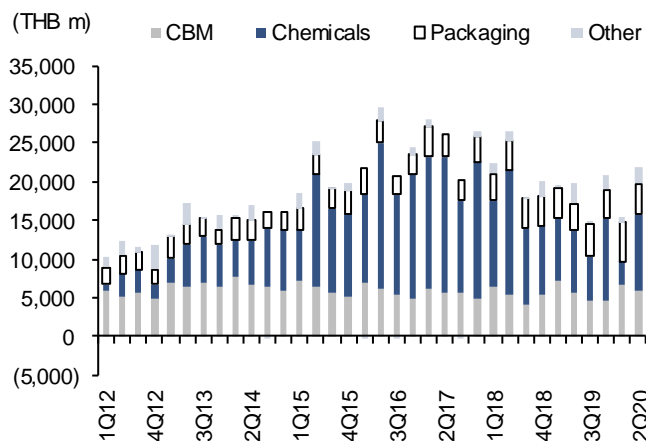
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020E | 2021E |
|-----------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Packaging | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) | (ktpa) |
| Packaging paper | 1,880 | 1,880 | 1,956 | 2,306 | 2,306 | 2,306 | 2,557 | 2,557 | 3,965 | 3,965 | 4,585 |
| Box | 795 | 885 | 1,013 | 1,013 | 1,013 | 1,013 | 1,070 | 1,070 | 1,070 | 1,070 | 1,070 |
| Machine glazed paper (Nippon Paper JV) | 0 | 0 | 0 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| Flexible packaging (Prepack + Batico) (m sqm) | 0 | 0 | 0 | 254 | 648 | 714 | 727 | 817 | 817 | 901 | 954 |
| Rigid packaging | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 25 | 25 | 25 |
| Printing & writing paper (Fibrous) | 570 | 570 | 570 | 570 | 570 | 491 | 491 | 491 | 491 | 491 | 491 |

Source: SCC

SCGP has two key business divisions: the integrated packaging chain (IPC) and fibrous chain (FB). Within IPC, there are three major segments: packaging paper, fibre-based packaging (FBP), and polymer and performance packaging (PPP).

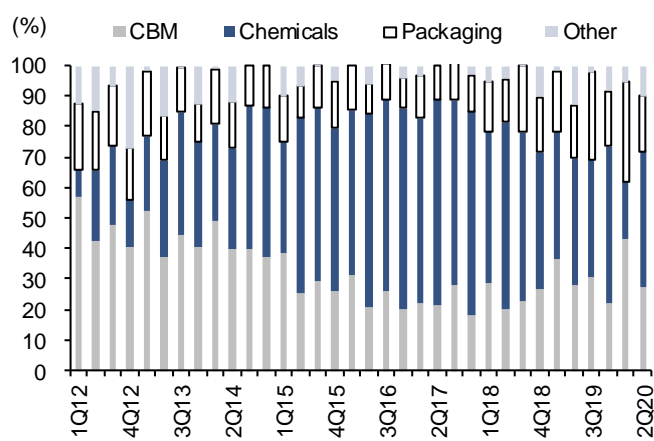
As of 2019, SCGP's capacity included 1) IPC: 3.965mtpa of packaging paper, 1.07mtpa of corrugated boxes, and 817m sqm of flexible packaging; and 2) FB: 491ktpa of printing and writing paper. The declining capacity of FB is due to the continued decline in industry demand for printing and writing paper, while SCGP has successfully shifted most of its capacity into IPC.

Exhibit 47: Quarterly EBITDA



Source: SCC

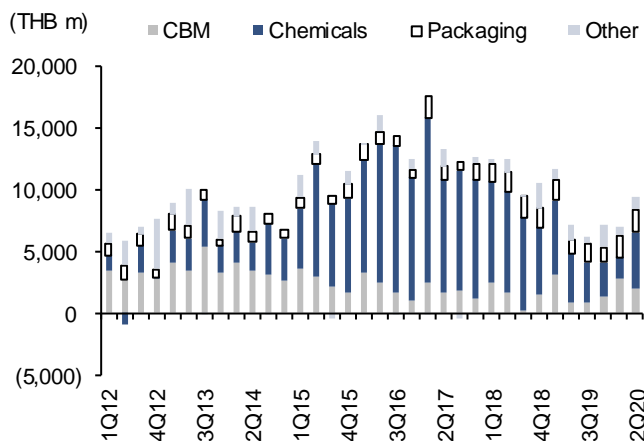
Exhibit 48: Quarterly EBITDA, breakdown by segment



Source: SCC

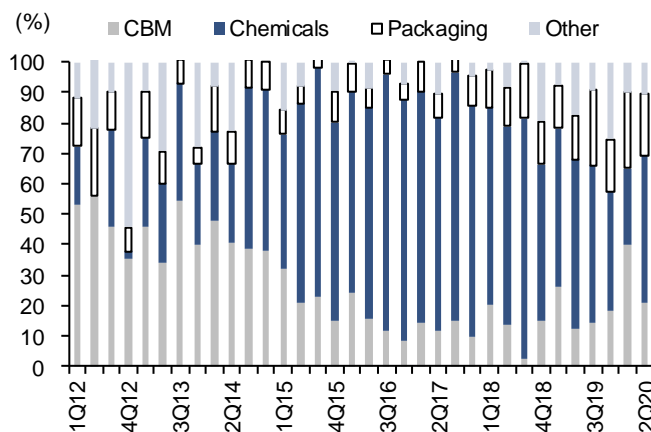
As a group, SCGP contributed THB89b, or 20% of SCC's total revenue, and accounted for 20% of the total EBITDA and 16% of the total net profit in 2019. SCGP's revenue and net profit contributions to SCC have continued to improve since 2017, as SCGP has grown its business, mostly via acquisitions, in many countries.

Exhibit 49: Quarterly net profit



Source: SCC

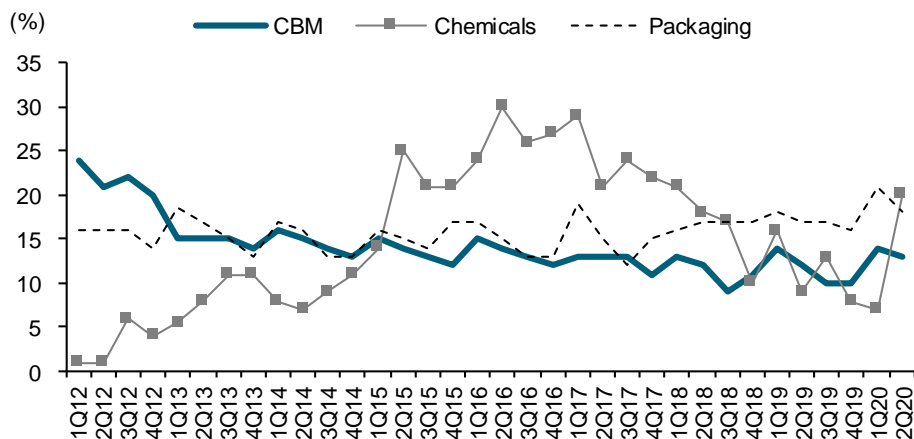
Exhibit 50: Quarterly net profit breakdown



Source: SCC

Superior margin sustainability is key for SCGP. We believe SCGP will have increasingly more strategic importance to SCC’s overall net profit and EBITDA growth, and particularly sustainability, given that 1) SCGP’s EBITDA, net profit, and EBITDA margin have been far more stable than the EBITDA margins of SCC’s two cyclical business units (chemicals and CBM), which have seen highly volatile EBITDA and EBITDA margins since 2012.

Exhibit 51: Quarterly EBITDA margins

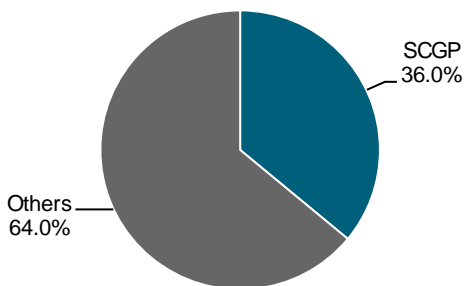


Source: SCC

Given the more sustainable margin and less cyclical nature of SCGP, SCC plans to invest its capex in 2020-23 to expand SCGP’s capacity using the upcoming IPO cash raised. It expects to fund an estimated THB20-30b in annual capex for SCGP’s capacity expansions via both brownfield expansions and M&Ps.

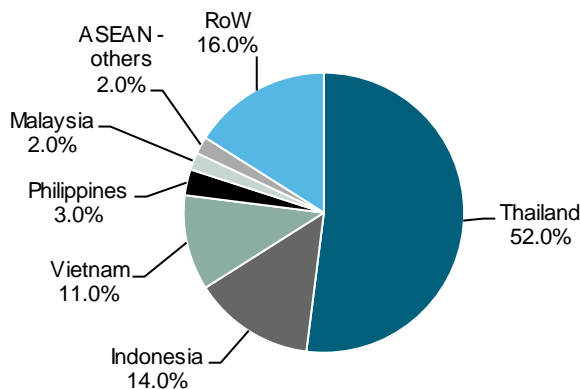
According to Frost and Sullivan, SCGP is currently the largest packaging producer in ASEAN, with a 36% market share as of 1H20. Thailand remains SCGP’s largest market, accounting for 52% of total revenue in 1H20, with large-scale production facilities for FB and packaging paper in Thailand due to their close proximities to the raw material (pulp) and recovered paper (RCP).

Exhibit 52: SCGP's market share in ASEAN market (1H20)



Source: SCGP

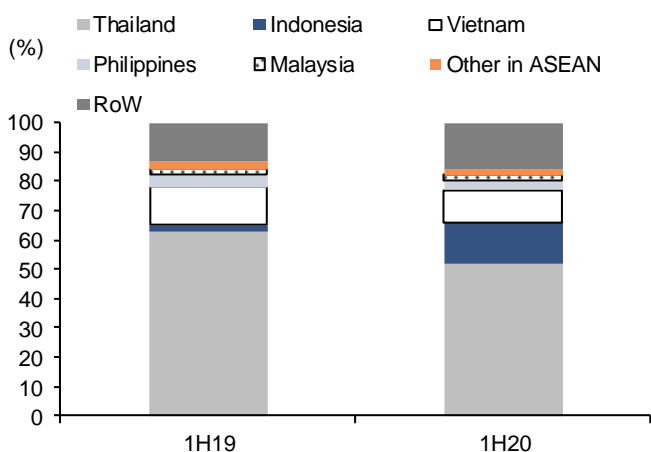
Exhibit 53: Revenue breakdown by country (1H20)



Source: SCGP

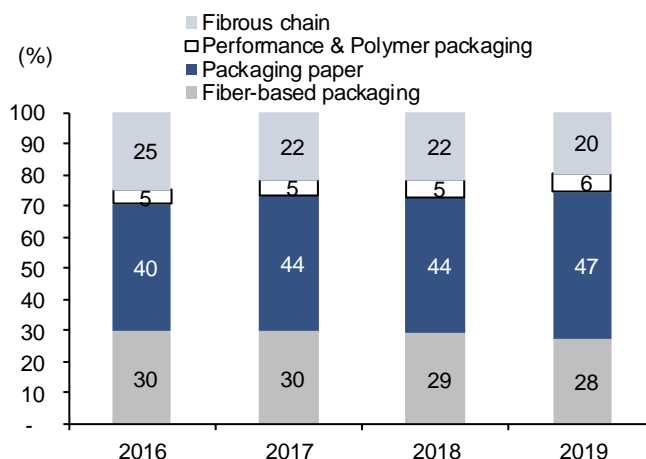
SCGP successfully expanded into the Indonesian market – SCGP's second largest market with 14% of SCGP's 1H20 total revenue – via the acquisition of PT Fajar Surya Wisesa (FASW IJ) in mid-2019. Vietnam is SCGP's third largest market, accounting for 11% of SCGP's 1H20 revenue. SCGP entered the packaging market in Vietnam in 2007. These three markets – Thailand, Indonesia, and Vietnam – will be the key markets where SCGP focuses its capacity growth in 2020-24, in our view.

Exhibit 54: SCGP's revenue breakdown by country



Source: SCGP

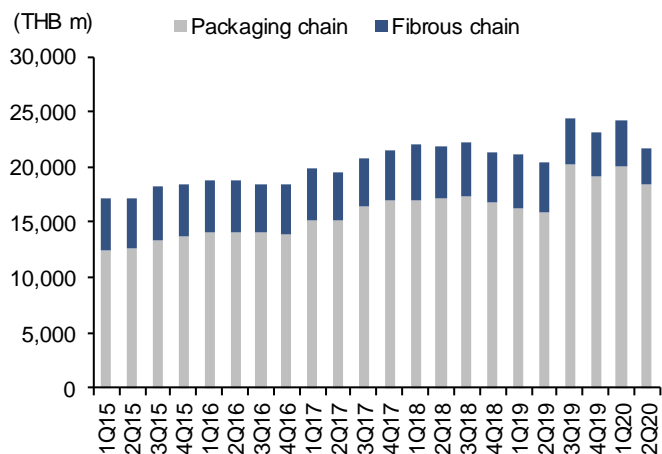
Exhibit 55: Revenue breakdown by product segment



Source: SCGP

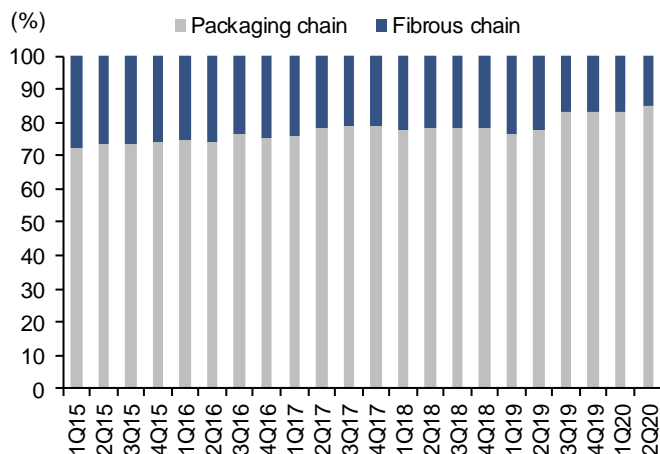
Shifting from sunset FB to sunrise IPC. IPC is SCGP's current core business, accounting for 80% of total revenue in 2019, up from 75% in 2016, as SCGP has gradually shifted its capacity from the sunset FB, as a result of the continued decline in FB demand, to the sunrise IPC, thanks to the rising demand for packaging from e-commerce and online markets.

Exhibit 56: SCGP's revenue breakdown by segment



Source: SCGP

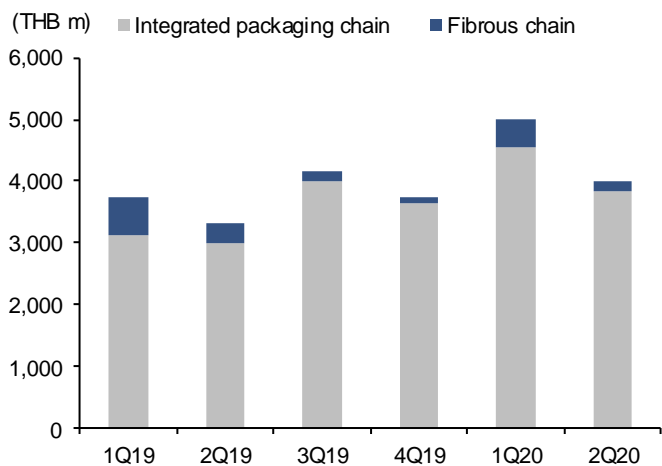
Exhibit 57: SCGP's revenue breakdown by segment (%)



Source: SCGP

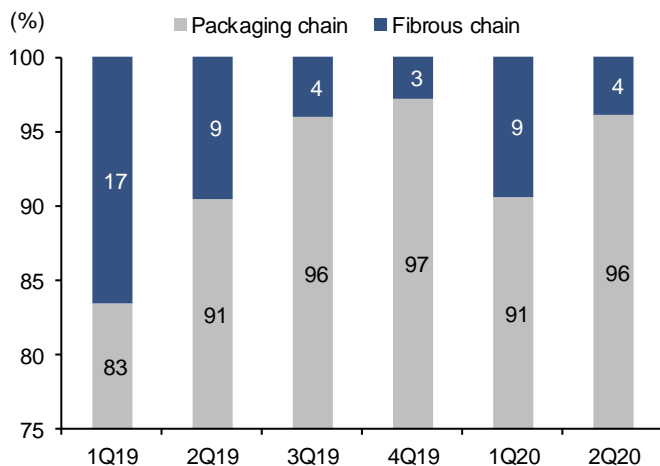
As of 2Q20, SCGP generated 85% of its revenue from IPC, up from 80% in 2019 and 83% in 1Q20. However, in terms of EBITDA, the IPC unit generated 96% of SCGP's total EBITDA of THB4b in 2Q20, thanks to the higher EBITDA margin of IPC at 21% vs only 4% for FB.

Exhibit 58: SCGP's quarterly EBITDA breakdown



Source: SCGP

Exhibit 59: SCGP's quarterly EBITDA breakdown (%)

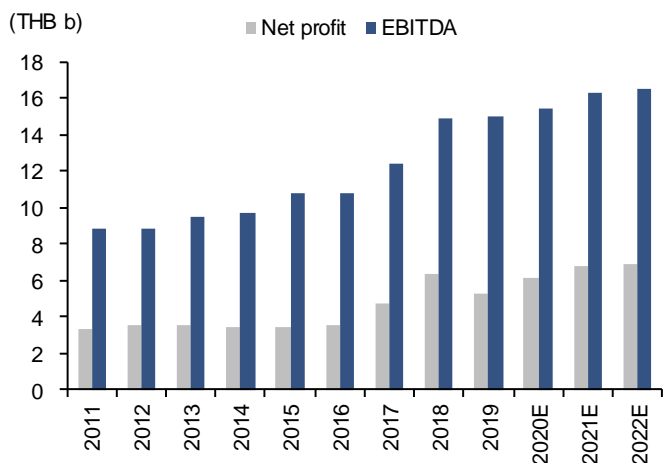


Source: SCGP

Key drivers for SCGP. We believe the growth outlook for both SCGP and SCC will mainly depend on the growth outlook of the IPC unit, given the bleak net profit outlook for the chemical and CBM units due to the weak demand and industry oversupply.

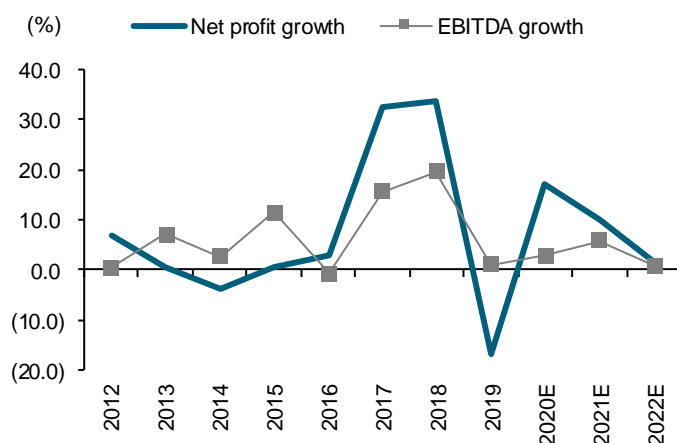
The four key drivers for SCGP include 1) low raw material costs; 2) potential margin expansions from improving production efficiency; 3) rising industry demand; and 4) organic and inorganic capacity growth.

Exhibit 60: SCGP's net profit and EBITDA projections



Sources: SCGP; FSSIA estimates

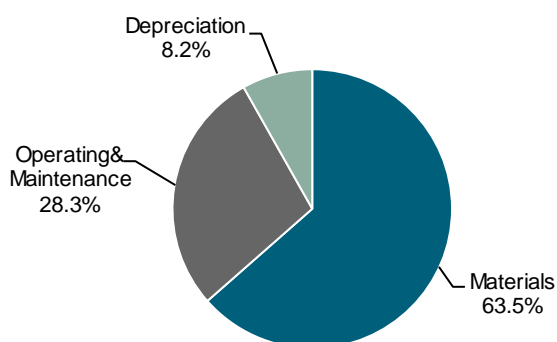
Exhibit 61: SCGP's net profit growth and EBITDA growth



Sources: SCGP; FSSIA estimates

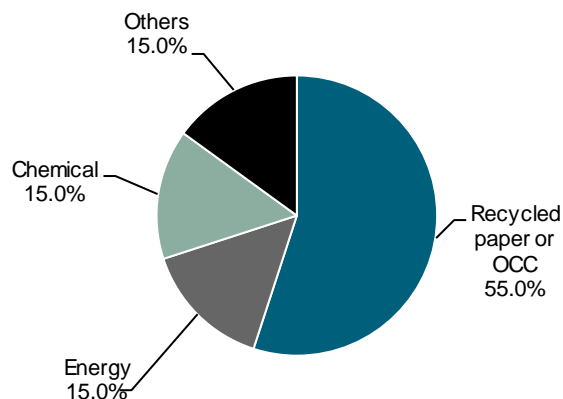
Driver #1: Margin expansion and sustainability. While the CBM unit's EBITDA margin has continued to decline since 2012, and the chemical unit's EBITDA margin has already peaked in 2016, we think SCGP's EBITDA margin will still have room to improve, given the potential cost savings for both raw materials and energy.

Exhibit 62: SCGP's production cost breakdown (2019)



Source: SCGP

Exhibit 63: Cost structure; packaging paper (2019)



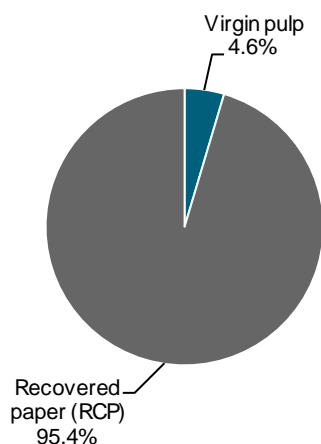
Source: SCGP

The raw material (RM) cost accounted for 63.5% of SCGP's total cost in 2019. For packaging paper, the RM cost – which accounted for 55% of the total cost and is comprised of 95.4% RCP and 4.6% pulp – is from pulp produced from SCGP's own plants in its Fibrous Chain Facility in 2019. SCGP's own RCP production plants supplied 54.5% of the total RCP RM cost, while the remaining 45.5% was from imported waste paper, mainly from the US – using the benchmark price of American Old Corrugated Containers (AOCC) – Europe, and Japan.

As of 2019, energy and chemical costs equally represent 15% of the total RM cost, while depreciation expenses account for less than 10% of the total cost of packaging paper. Based on SCGP's guidance, the energy cost is mostly comprised of the coal cost – SCGP consumes around 2mtpa of coal imported from Indonesia annually.

SCGP has increased its consumption of biomass fuels, including wood chips, sugarcane bagasse, straw and other agricultural wastes, to produce its own electricity, thereby reducing its coal cost (2/3 of the total energy cost) and the amount of electricity purchased from the power grid (10%).

Exhibit 64: Raw material cost of packaging paper (2019)



Source: SCGP

SCGP has continued to reduce its RCP cost by operating numerous RCP plants in the ASEAN markets where its packaging paper plants are located. As of 2Q20, SCGP owned and operated 69 RCP plants in ASEAN markets, altogether supplying 95.4% of the total required RCP RM cost for its 4mtpa packaging paper production capacity in ASEAN.

Exhibit 66: SCGP's plants (2Q20)

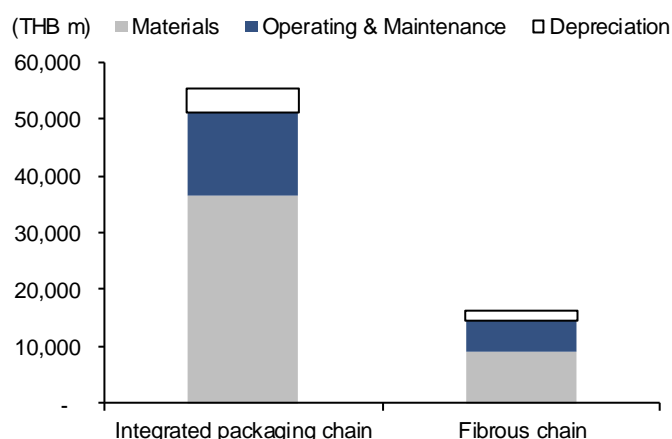
| | (no.) |
|----------------------------------------------|-----------|
| Packaging plant breakdown by business | 40 |
| Packaging paper plant | 7 |
| Corrugated container plants | 21 |
| Containerboard plants | 2 |
| Performance & polymer packaging plants | 6 |
| Fibre-based packaging plants | 4 |
| | |
| Packaging plant breakdown by location | 40 |
| Thailand | 28 |
| Vietnam | 6 |
| Indonesia | 4 |
| Philippines | 1 |
| Malaysia | 1 |
| | |
| Recycling plants for recovered paper | 69 |

Source: SCGP

There were two key events in 2017 that led to a sharp price drop in AOCC as a result of the Chinese government attempting to prevent further environmental contamination in the country. First, China started banning the import of foreign waste, including electronics, industrial waste, waste paper, and plastics. Second, China implemented a 1.5% contaminant limit for Chinese paper producers, effectively prohibiting the import of AOCC from the US, which contains contaminants at a 3-5% higher level than the contaminant limit set by the Chinese government.

We think SCGP's RCP plant ownership in countries where it has operating packaging paper plants may not provide it with a significant cost advantage over the imported AOCC and virgin pulp RMs. However, we believe SCGP's backward integration of the RCP plants should help sustain its EBITDA margin, given the high degree of RM cost management.

Exhibit 65: Cost structures of IPC and FB



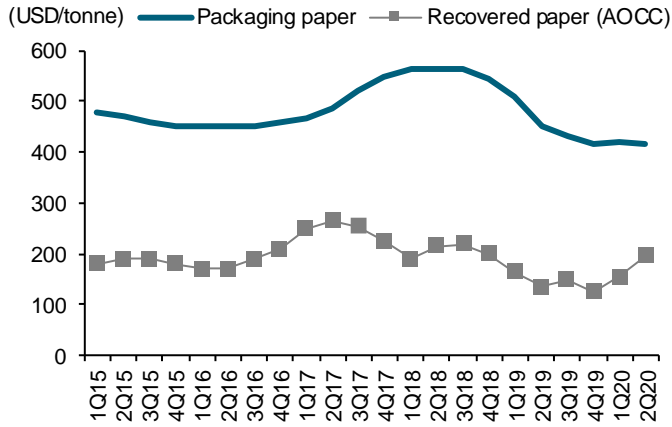
Source: SCGP

Exhibit 67: SCGP's packaging capacity and facilities (2Q20)

| Labour | 15,000 | persons |
|-----------------------|--------|---------------|
| Corrugated containers | 1.1 | m tonnes/year |
| Packaging paper | 4.0 | m tonnes/year |
| Flexible packaging | 817 | m sqm/year |
| Rigid packaging | 25,100 | m tonnes/year |
| Food service products | 26 | m pieces/day |
| Eucalyptus | 48,000 | rai |

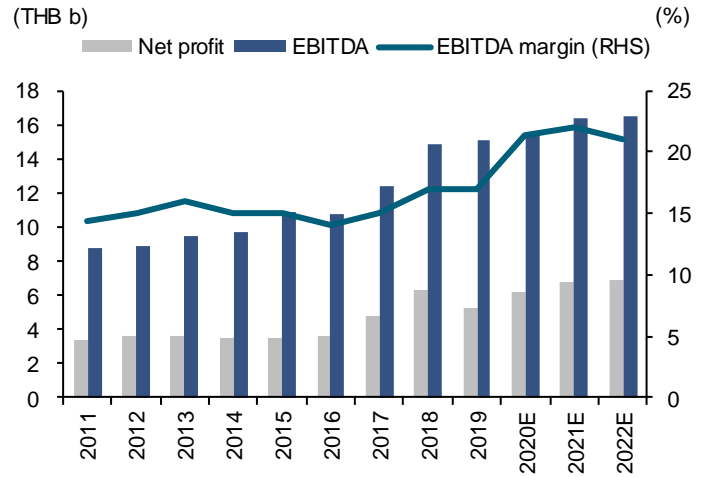
Source: SCGP

Exhibit 68: Prices of packaging paper vs recovered paper



Source: SCGP

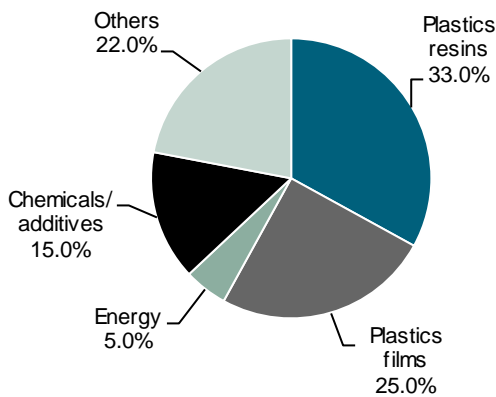
Exhibit 69: SCGP's net profit, EBITDA, and EBITDA margin



Source: SCGP; FSSIA estimates

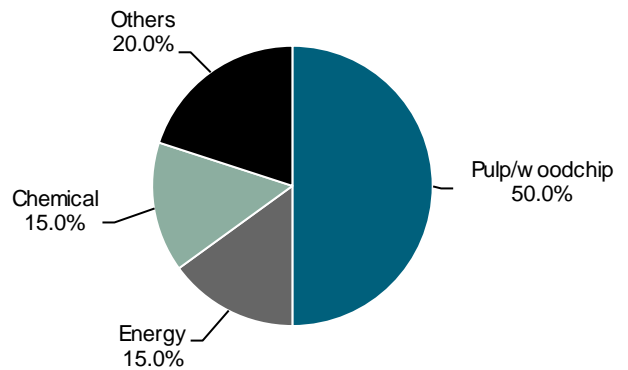
RM costs remain the largest cost component for SCGP's IPC and FB. RM cost accounted for 58% of the PPP cost in IPC chain and 50.0% of the FB cost. For PPP, the RMs are the plastics resins and films purchased from other producers, while for FB, the RM is the virgin pulp that SCGP secures mostly from eucalyptus plantations.

Exhibit 70: Cost structure: polymer and performance packaging (2019)



Source: SCGP

Exhibit 71: Cost structure: fibrous chain (2019)

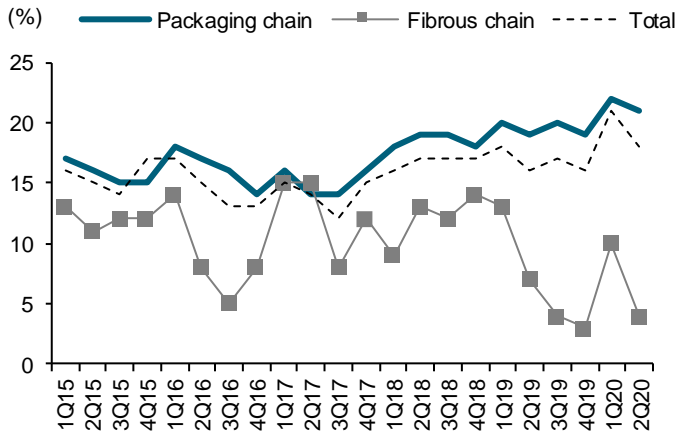


Source: SCGP

Since 2015, SCGP has strategically shifted its production facilities from FB to IPC due to the structural decline in demand for printing and writing papers due to the advent of digital books.

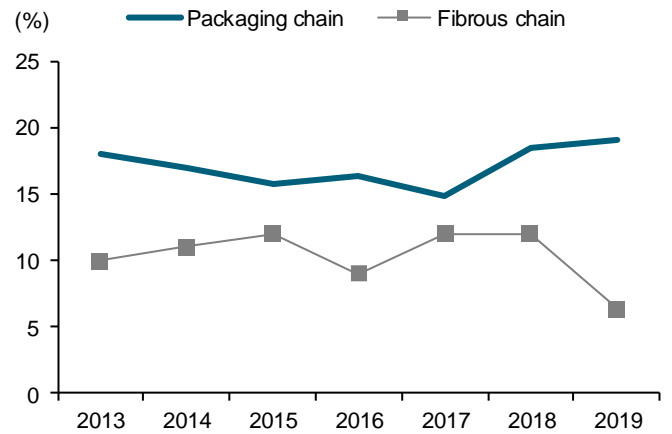
The FB chain's quarterly EBITDA margin has declined from 14% in 1Q15 down to 3-4% in 2019-1H20, and is likely to continue its downward trend in 2021-22. Fortunately, SCGP has successfully ramped up the production of its IPC unit to replace FB, resulting in an improving overall EBITDA margin from 14% in 2011 to 17% in 2019.

Exhibit 72: Quarterly EBITDA margin by segment



Source: SCGP

Exhibit 73: Annual EBITDA margin by segment



Source: SCGP

Driver #2: Volume growth. According to SCGP's IPO filing, the company plans to use part of the IPO proceeds to invest in the capacity expansions of four committed projects.

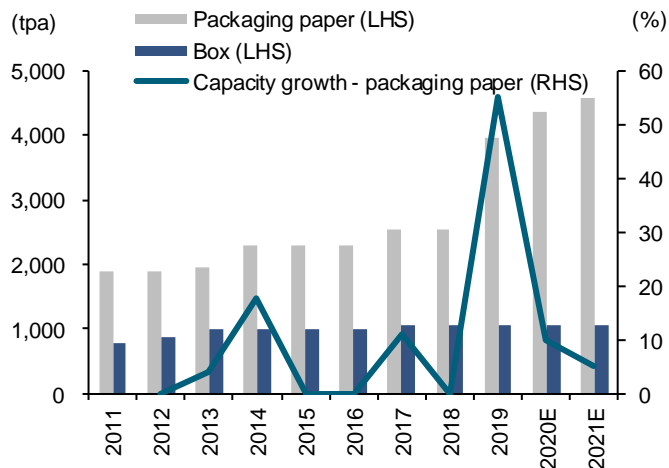
Upstream packaging paper. The first two projects are capacity expansions for packaging paper:

- 1) A 0.4mtpa capacity expansion of the containerboard and duplex paper plant at Surabaya in Indonesia under Fajar, scheduled to commence its COD in 1Q21, increasing Fajar's capacity by 29% with capex of THB1.9b;
- 2) A 0.22mtpa capacity expansion (+96% from existing capacity) of the United Pulp & Paper (UPCC) plant for containerboard in the Philippines, with capex of THB5.1b (COD scheduled in 2Q21), according to management's guidance.

Downstream packaging. There are two major capacity expansions planned for SCGP's downstream PPP.

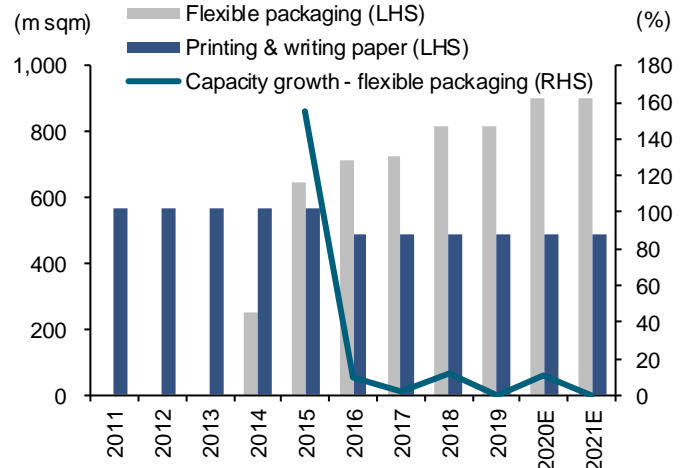
- 1) The capacity expansion of Batico in Vietnam by 84m sqm (+19.8% from 424m sqm p.a.) with capex of THB562m, COD scheduled in 4Q20;
- 2) The 53m sqm capacity expansion of Prepack in Thailand (+18% from 295m sqm p.a.), COD scheduled in 3Q21.

Exhibit 74: Packaging paper and box capacities vs capacity growth of packaging paper



Sources: SCC; FSSIA estimates

Exhibit 75: Flexible packaging and printing & writing paper capacities, and capacity growth of flexible packaging



Sources: SCC; FSSIA estimates

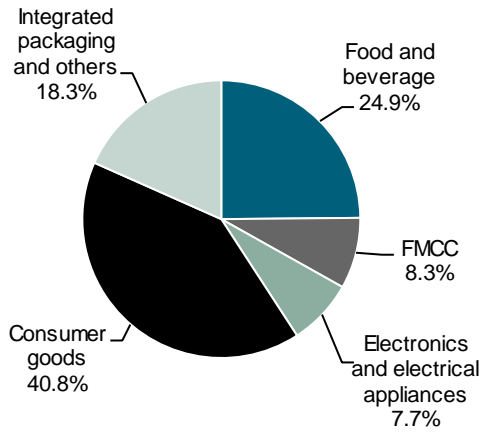
We project 0.22mtpa capacity growth for SCGP's upstream packaging paper, bringing its capacity to 4.6mtpa, and 137m sqm capacity growth for its downstream PPP, bringing it to 945m sqm p.a. These four committed growth projects would require a total of THB8.15b capex, based on the company's guidance.

Exhibit 76: SCGP's four committed growth projects (as of 3Q20)

| Project | Unit | |
|---------------------------|--------------------------------------------|------------|
| Capacity expansion | Packaging paper | |
| Project | PT Dayasa Asia Prima (DAP) | |
| Product | Containerboard and duplex paper | |
| Location | Surabaya | |
| Country | Indonesia | |
| Capacity | 400,000 | tonne/year |
| CAPEX | 1,868 | THB m |
| Start construction - COD | Jul 2019 - Jul 2020 | |
| % completion | 43 | % |
| Project | United Pulp & Paper (UPPC) | |
| Product | Containerboard | |
| Location | Bulacan | |
| Country | Philippines | |
| Capacity | 220,000 | tonne/year |
| CAPEX | 5,115 | THB m |
| Start construction - COD | Dec 2018 - Nov 2020 | |
| % completion | 34 | % |
| Capacity expansion | Performance & Polymer packaging | |
| Project | Tin Thanh Packaging JSC (BATICO) | |
| Product | Flexible packaging | |
| Location | Long An | |
| Country | Vietnam | |
| Capacity | 84 | m sqm/year |
| CAPEX | 562 | THB m |
| Start construction - COD | Sep 2018 - Mar 2020 | |
| % completion | 55 | % |
| Project | Prepack (PREPACK) | |
| Product | Flexible packaging | |
| Location | Samut Sakhon | |
| Country | Thailand | |
| Capacity | 53 | m sqm/year |
| CAPEX | 600 | THB m |
| Start construction - COD | Jun 2020 - Jul 2021 | |
| % completion | 7 | % |

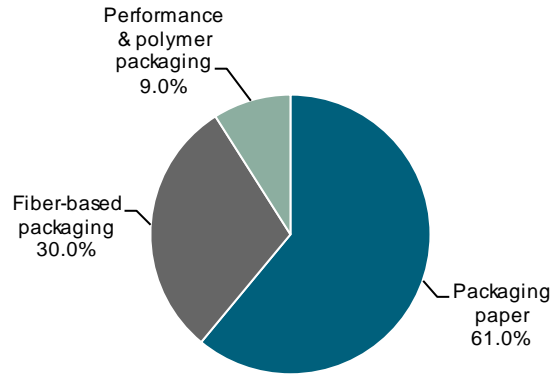
Source: SCGP

Exhibit 77: Integrated packaging sales, breakdown by industry (1H20)



Source: SCGP

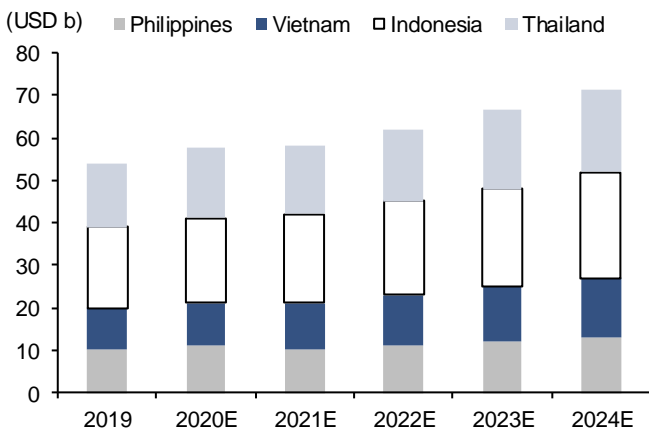
Exhibit 78: Integrated packaging sales, breakdown by segment (1H20)



Source: SCGP

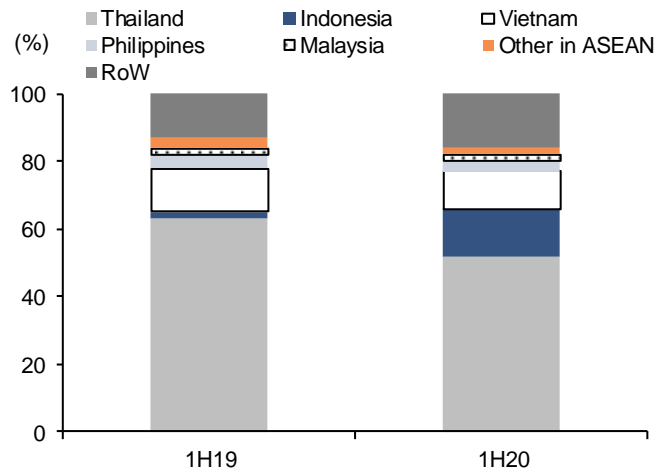
Driver #3: Market expansions. SCGP has continued to expand its market presence in ASEAN countries and entered many new consumer packaging markets via multiple M&As. We believe SCGP now has a well-balanced product portfolio in terms of products (packaging paper, PPP, FBP, and fibrous), geographical market presence (Thailand, Indonesia, Vietnam, Philippines), and end-consumer industries (food and beverages, electronics and electrical appliances, consumer goods, and fast-moving consumer goods).

Exhibit 79: ASEAN market value for packaging



Sources: SCGP; Frost & Sullivan

Exhibit 80: SCGP's market presence

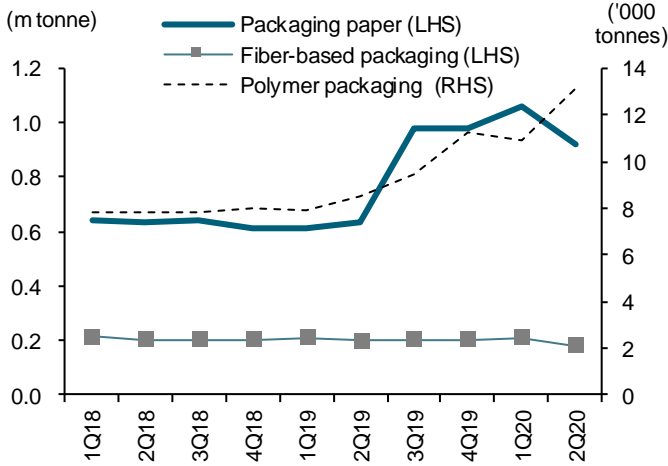


Source: SCGP

Pricey acquisition underscores long-term strategic business sustainability

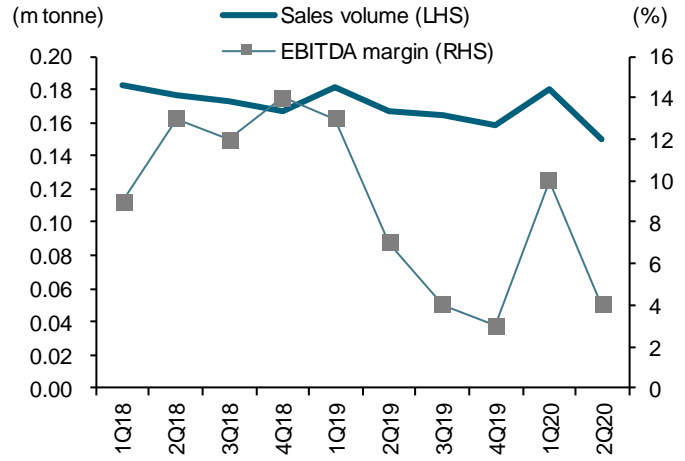
Unlike SCC's other two cyclical business units – chemicals and CBM – we believe SCGP's recent M&As to expand its capacity and market presence, both horizontally and vertically, are right strategic moves to enhance not only SCGP's but also SCC's long-term net profit growth and sustainability.

Exhibit 81: Sales volume of integrated packaging paper



Source: SCGP

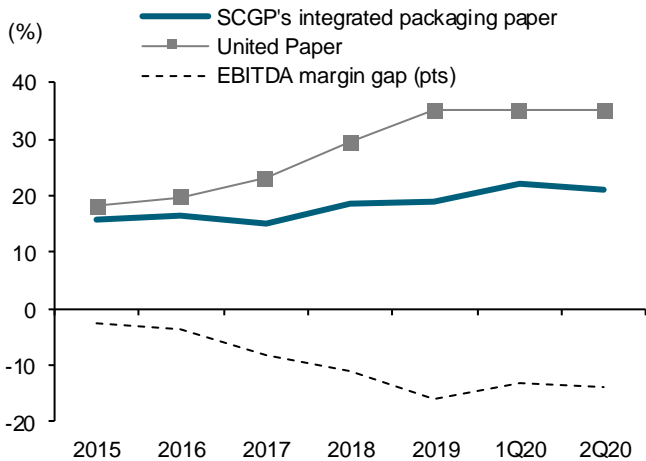
Exhibit 82: Fibrous sales volume and EBITDA margin of fibrous chain



Source: SCGP

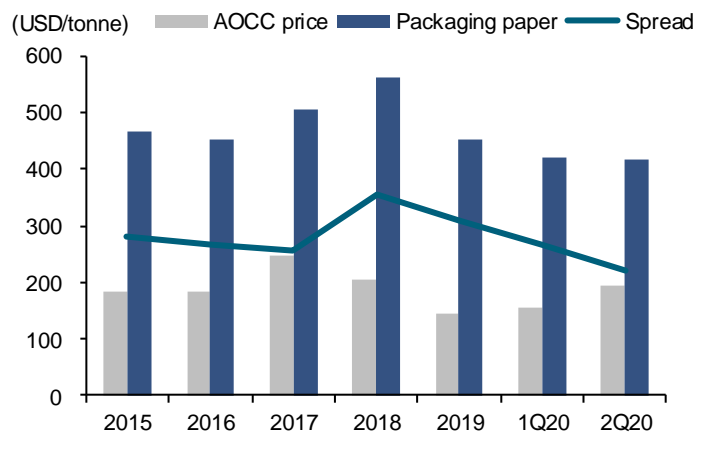
Improving long-term sustainability at the expense of short-term lower ROEs and ROAs. Since 2018, SCGP's IPC unit has seen continued higher sales volumes for all three units, particularly for the packaging paper and PPP units, which witnessed strong sales volume growth since 2Q19 after the acquisition of Fajar (packaging paper; May-19) at an implied EV/EBITDA of 7.6x and P/E of 12.3x, and the acquisition of Visy (PPP; Aug-19) at an implied EV/EBITDA of 13x.

Exhibit 83: SCGP's lower EBITDA margin than Thai local United Paper was due to SCGP's market expansion strategy



Sources: SCGP; UTP; SET

Exhibit 84: EBITDA margin of upstream packaging paper has expanded since 2017 due to the decline in AOCC price



Source: SCGP

Fajar's acquisition valuation of 7.6x EV/EBITDA was at the high-end valuation range of 4-14x EV/EBITDA, and Visy's valuation of 13x was higher than the 6-12x EV/EBITDA average range for its peers at the time. We believe the valuation premiums paid by SCGP for both acquisitions were justified by:

1) The future capacity growth opportunities, similar to the capacity expansions of Fajar and UPCC;

2) Market penetration into high-growth countries: Indonesia, the Philippines, and Vietnam;

3) The client bases of the multinational corporations that SCGP could immediately access and tap into to grow its packaging business;

4) SCGP's focus on long-term net profit and margin sustainability at the expense of a lower EBITDA margin in the near term. An example is the rising EBITDA margin for United Paper (UTP TB, not rated) since 2017, after the price of AOCC sharply declined thanks to China's ban on waste imports and its imposition of a stricter contamination limit for Chinese paper producers since 2017. However, we believe the upward EBITDA margin trend could reverse when the AOCC price starts to rise again, potentially leading to a narrower EBITDA margin gap between the upstream UTP and the integrated and more diversified SCGP;

Exhibit 85: Comparisons of business model, market presence, and financial data

| Company | SCGP | Mondi | Smurfit Kappa | United paper | Union Paper Carton | Nine Dragon Paper | Lee & Man Papers | Amcor |
|--------------------------|-------|--------|---------------|--------------|--------------------|-------------------|------------------|--------|
| Founded | 1975 | 1967 | 2005 | n/a | n/a | n/a | n/a | n/a |
| Country location | 5 | 30 | 35 | n/a | n/a | n/a | n/a | n/a |
| Location | ASEAN | Global | Global | Thailand | Thailand | China/Vietnam/US | China/Vietnam/US | Global |
| Corrugated container | / | / | / | | / | / | / | / |
| Retail display packaging | / | / | / | | / | | | |
| Packaging paper | / | / | / | / | | / | / | |
| Non-packaging paper | / | / | / | | | / | | |
| Flexible packaging | / | / | / | | | | | / |
| Rigid packaging | / | / | / | | | | | / |
| Food container | / | / | / | | | | | / |
| Graphic paper | / | / | / | | | / | / | |
| Pulp | / | / | / | | | / | / | |
| Recycled paper factory | / | / | / | | | / | / | |
| | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| 2019 EBITDA margin | 16.9 | 23.2 | 17.7 | 35 | 12 | 14.8 | 23.2 | 14.1 |
| 2019 ROE | 9.1 | 21.7 | 16.7 | 29.6 | 22.6 | 10.4 | 13.5 | 13.8 |
| 2019 ROA | 4.5 | 9.8 | 4.9 | 24.6 | 22.6 | 4.8 | 7.5 | 3.3 |

Sources: SCGP; Bloomberg

5) SCGP's more integrated value chain in the packaging paper segment is comparable to the global players Mondi (MNDI LN) and Smurfit Kappa (SKG ID). However, unlike MNDI and SKG, SCGP's packaging business recently underwent a faster and more strategic expansion following a slow growth phase since its inception in 1975-2010. Hence, we think that over the next 10 years, SCGP could emerge as one of the leading players in the global packaging industry, with a large-scale capacity and ASEAN market presence.

Positioned as a well-integrated packaging player in ASEAN per se, we think SCGP's strategy – to increase its business integration and expand its geographical presence, as well as grow its product categories and industrial customer base – should create medium- to long-term value for shareholders in the form of improving ROEs and ROAs after its heavy capex cycle since 2017, following its multiple asset acquisitions.

Packaging valuation is estimated at THB42

Given the similarities between their business models (fully integrated) and market presence (regional and global), we think SCGP's closest peers are MNDI and SKG – both being leading global diversified packaging companies.

Based on Bloomberg's consensus estimates (12 Oct 2020), MNDI and SKG are trading at 7.9x and 7.5x FY21E EV/EBITDA, respectively. We estimate SCGP to have a value of THB178b, based on 9x FY21E EV/EBITDA post IPO, implying a THB42 value per share for SCGP using 4.255b shares outstanding post IPO and 1,127.6m-1,296.7m shares offered (26.5-29.3% of the post-IPO shares outstanding).

SCGP is currently offering 1,127.6m IPO shares and an over-allotment of 169.1m shares, and is scheduled to be listed on the SET within October 2020.

Exhibit 86: SCGP's peers comparison

| Company | BBG code | Rec | Share Price (LCY) | Target Price (LCY) | Upside (%) | Market Cap (USD m) | 3Y EPS CAGR (%) | ----- PE ----- | | ----- ROE ----- | | ----- PBV ----- | | EV/EBITDA | |
|------------------------------|----------|-----|----------------------|-----------------------|---------------|-----------------------|--------------------------|----------------|--------------|-----------------|--------------|-----------------|-------------|-------------|-------------|
| | | | | | | | | 20E (x) | 21E (x) | 20E (%) | 21E (%) | 20E (x) | 21E (x) | 20E (x) | 21E (x) |
| ASIA | | | | | | | | | | | | | | | |
| Eastern Polymer | EPG TB | BUY | 4.76 | 6.30 | 32 | 428 | 1.0 | 13.2 | 14.4 | 9.6 | 8.7 | 1.3 | 1.3 | 9.2 | 9.5 |
| Polyplex Pcl | PTL TB | NA | 24.3 | NA | NA | 698 | 4.0 | NA | 8.7 | NA | 17.7 | NA | 1.4 | NA | 5.9 |
| United Paper Pcl | UTP TB | NA | 14.3 | NA | NA | 298 | 5.3 | 9.6 | 9.1 | 28.6 | 26.8 | 2.6 | 2.3 | 6.8 | 6.5 |
| Lee & Man Paper | 2314 HK | NA | 5.99 | NA | NA | 3,180 | 2.2 | 8.3 | 7.4 | 11.7 | 12.3 | 1.0 | 0.9 | 7.0 | 6.4 |
| Nine Dragons Paper | 2689 HK | NA | 9.92 | NA | NA | 5,915 | 106.2 | 9.6 | 8.1 | 9.9 | 11.9 | 1.0 | 0.9 | 7.4 | 6.6 |
| ASIA avg | | | | | | 10,519 | 77.4 | 7.9 | 7.4 | 9.3 | 11.4 | 0.9 | 0.9 | 6.2 | 5.9 |
| Europe | | | | | | | | | | | | | | | |
| Ds Smith Plc | SMDS LN | NA | 304.7 | NA | NA | 5,386 | (1.6) | 9.3 | 12.7 | 12.4 | 8.6 | 1.2 | 1.1 | 6.5 | 7.7 |
| Mondi Plc | MNDI LN | NA | 1666.5 | NA | NA | 10,447 | (6.3) | 15.2 | 13.6 | 14.0 | 14.7 | 2.1 | 1.9 | 8.6 | 7.9 |
| Smurfit Kappa Group | SKG ID | NA | 3140 | NA | NA | 9,692 | NA | 15.5 | 13.7 | 16.7 | 16.8 | 2.5 | 2.3 | 8.0 | 7.5 |
| Europe avg | | | | | | 36,044 | 29.1 | 9.6 | 9.2 | 10.1 | 9.8 | 1.4 | 1.3 | 5.4 | 5.3 |
| USA | | | | | | | | | | | | | | | |
| Amcor Plc-Cdi | AMC AU | NA | 15.91 | NA | NA | 17,862 | NA | 17.9 | 16.4 | 18.2 | 23.0 | 3.5 | 3.8 | 12.4 | 11.8 |
| Amcor Plc | AMCR US | NA | 11.41 | NA | NA | 17,896 | 13.9 | 17.9 | 16.4 | 18.2 | 23.0 | 3.5 | 3.8 | 12.4 | 11.8 |
| Ardagh Group Sa | ARD US | NA | 13.98 | NA | NA | 3,304 | (278.8) | 10.4 | 9.4 | NA | 85.4 | NA | 199.7 | 8.1 | 7.6 |
| USA avg | | | | | | 75,107 | 57.9 | 8.9 | 8.1 | 8.5 | 14.5 | 1.6 | 10.4 | 6.2 | 5.9 |
| Polymer packaging | | | | | | | | | | | | | | | |
| Ds Smith Plc | SMDS LN | NA | 304.7 | NA | NA | 5,386 | (1.6) | 9.3 | 12.7 | 12.4 | 8.6 | 1.2 | 1.1 | 6.5 | 7.7 |
| Polymer packaging avg | | | | | | 5,386 | 5,386 | (1.6) | 9.3 | 12.7 | 12.4 | 8.6 | 1.2 | 1.1 | 6.5 |
| Overall average | | | | | | 127,055 | 65.45 | 15.30 | 13.59 | 15.62 | 24.89 | 0.52 | 2.36 | 6.40 | 6.03 |

Prices as of 12 Oct 2020

Sources: Bloomberg; FSSIA estimates

SCC's valuation

We reinitiate coverage on SCC with a BUY rating and SOTP-based TP of THB445. We employ different FY21E EV/EBITDA multiples for each of SCC's business units to reflect their distinct risk-reward ratios and industry business cycles.

For the chemical sector, we apply only 6x FY21E EV/EBITDA, a slightly higher valuation than the distressed 4x EV/EBITDA level, to reflect our bearish view on SCC's chemical net profit and EBITDA outlook in 2021-22E, given the continued industry oversupply outlook.

For the CBM unit, we use 11x FY21E EV/EBITDA to reflect our negative view on the industry demand outlook for CBM, which we think could extend into 2021-22, due to the negative impact from the COVID-19 pandemic.

For the packaging unit, we apply 9x FY21E EV/EBITDA, which we think is justified based on SCGP's improving margin outlook in 2021-22E, driven by its growing business integration, capacity expansion, and the highly favourable industry demand outlook from the rising e-commerce and online marketing trend.

Exhibit 87: SCC's SOTP valuation

| SOTP valuation | End-21E | | % total | Valuation basis |
|----------------------------|----------------|------------|-------------|-----------------------|
| | (THB m) | (THB/shr) | | |
| Cement & building material | 385,973 | 322 | 72 | 11x FY21E EV/EBITDA |
| Petrochemical | 156,064 | 130 | 29 | 6x FY21E EV/EBITDA |
| Paper | 125,834 | 105 | 24 | 9x FY21F EV/EBITDA |
| Total core | 667,871 | 557 | 125 | |
| Investment (P/B) | 189,371 | 158 | 35 | 1.5x FY21E P/BV |
| Gross SOTP | 857,242 | 714 | 160 | |
| Net debt | (261,100) | (218) | (49) | Net debt at end-FY21E |
| Minority | (61,947) | (52) | (12) | |
| Net SOP value | 534,195 | 445 | 100% | |

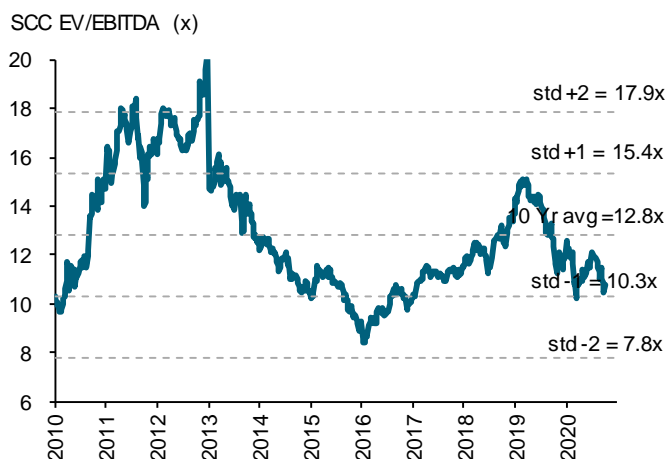
Sources: SCC; FSSIA estimates

Exhibit 88: Key assumptions

| | 2020E | 2021E | 2022E |
|----------------------------------|-------|-------|-------|
| Brent oil price (USD/bbl) | 40 | 50 | 50 |
| Naphtha price (USD/tonne) | 450 | 498 | 480 |
| Ethylene price (USD/tonne) | 690 | 850 | 821 |
| Propylene price (USD/tonne) | 762 | 860 | 823 |
| HDPE-naphtha (USD/tonne) | 440 | 417 | 430 |
| PP-naphtha (USD/tonne) | 470 | 422 | 450 |
| Packaging paper-AOCC (USD/tonne) | 270 | 260 | 250 |
| Cement demand growth (%) | (3) | 3 | 3 |

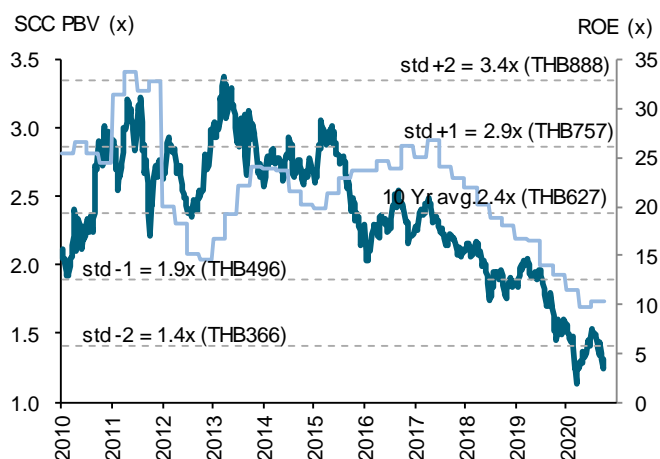
Source: FSSIA estimates

Exhibit 89: SCC's one-year forward EV/EBITDA band



Sources: SCC; FSSIA estimates

Exhibit 90: SCC's one-year forward P/BV band and ROE



Sources: SCC; FSSIA estimates

Exhibit 91: SCC's peers comparison

| Company | BBG code | Rec | Share Price | Target price | Upside | Market Cap | 2Y EPS CAGR | -----PE----- | | -----ROE----- | | ----PBV--- | | EV/ EBITDA | |
|------------------------|-----------|-----|-------------|--------------|--------|----------------|--------------|--------------|-------------|---------------|------------|------------|------------|-------------|-------------|
| | | | | | | | | 20E | 21E | 20E | 21E | 20E | 21E | 20E | 21E |
| | | | | | | | | (x) | (x) | (%) | (%) | (x) | (x) | (x) | (x) |
| THAILAND | | | | | | | | | | | | | | | |
| Indorama Ventures | IVL TB | BUY | 24.20 | 44.00 | 82 | 4,357 | 57.6 | 17.7 | 10.1 | 5.8 | 9.4 | 1.0 | 1.0 | 6.2 | 6.0 |
| Irpc Pcl | IRPC TB | BUY | 2.08 | 4.20 | 102 | 1,363 | (291.3) | 5.5 | 5.0 | 9.1 | 9.5 | 0.5 | 0.5 | 5.4 | 4.5 |
| Ptt Global Chem | PTTGC TB | BUY | 40.75 | 50.00 | 23 | 5,863 | 17.2 | 19.1 | 11.5 | 3.4 | 5.8 | 0.7 | 0.7 | 7.0 | 5.0 |
| Siam Cement | SCC TB | BUY | 348.00 | 445.00 | 28 | 13,391 | 3.5 | 12.6 | 11.8 | 11.5 | 11.6 | 1.4 | 1.3 | 12.8 | 12.3 |
| Eastern Polymer | EPG TB | BUY | 4.72 | 6.30 | 33 | 424 | 1.0 | 13.1 | 14.3 | 9.6 | 8.7 | 1.2 | 1.2 | 9.1 | 9.4 |
| Vinythai Public | VNT TB | NA | 22.90 | NA | NA | 872 | (10.0) | 12.2 | 9.8 | 10.3 | 12.2 | 1.2 | 1.1 | 6.2 | 5.4 |
| THAILAND avg | | | | | | 26,270 | (0.2) | 14.5 | 11.1 | 8.5 | 9.8 | 1.1 | 1.1 | 9.7 | 9.0 |
| INDIA | | | | | | | | | | | | | | | |
| Reliance Industries | RIL IN | NA | 2,287.50 | NA | NA | 206,005 | (0.8) | 32.8 | 35.3 | 10.6 | 8.2 | 3.3 | 2.7 | 20.2 | 19.9 |
| INDIA avg | | | | | | 206,005 | (0.8) | 32.8 | 35.3 | 10.6 | 8.2 | 3.3 | 2.7 | 20.2 | 19.9 |
| TAIWAN | | | | | | | | | | | | | | | |
| Formosa Plastics | 1301 TT | NA | 80.00 | NA | NA | 17,692 | (2.8) | 28.3 | 16.0 | 5.4 | 9.3 | 1.5 | 1.4 | 21.5 | 16.9 |
| Nan Ya Plastics | 1303 TT | NA | 60.50 | NA | NA | 16,669 | 8.2 | 26.0 | 17.8 | 5.2 | 8.0 | 1.4 | 1.3 | 17.1 | 16.2 |
| Formosa Chem&Fi | 1326 TT | NA | 68.80 | NA | NA | 14,009 | (7.8) | 28.5 | 19.3 | 3.9 | 5.5 | 1.2 | 1.2 | 15.3 | 15.0 |
| Formosa Petro | 6505 TT | NA | 81.60 | NA | NA | 27,004 | (0.8) | 153.4 | 23.4 | 1.4 | 9.8 | 2.6 | 2.3 | 47.7 | 14.1 |
| TAIWAN avg | | | | | | 75,374 | (0.6) | 72.6 | 19.7 | 3.6 | 8.5 | 1.8 | 1.7 | 28.7 | 15.4 |
| SOUTH KOREA | | | | | | | | | | | | | | | |
| Hanwha Solutions | 009830 KS | NA | 46,250.00 | NA | NA | 6,455 | 40.1 | 17.4 | 12.7 | 7.0 | 9.1 | 1.2 | 1.1 | 10.4 | 8.9 |
| Lotte Chemical | 011170 KS | NA | 219,000.00 | NA | NA | 6,554 | (6.8) | 34.8 | 11.0 | 1.6 | 5.2 | 0.6 | 0.5 | 7.5 | 4.6 |
| Lg Chem | 051910 KS | NA | 628,000.00 | NA | NA | 38,706 | 59.8 | 36.0 | 24.9 | 7.3 | 9.6 | 2.6 | 2.4 | 11.8 | 9.6 |
| Kumho Petro | 011780 KS | NA | 145,000.00 | NA | NA | 3,857 | 12.6 | 9.9 | 9.6 | 15.7 | 14.3 | 1.5 | 1.3 | 6.8 | 6.6 |
| Oci | 010060 KS | NA | 62,000.00 | NA | NA | 1,291 | (193.1) | NA | 19.4 | (3.9) | 3.4 | 0.6 | 0.6 | 70.5 | 8.7 |
| SOUTH KOREA avg | | | | | | 56,863 | 41.0 | 31.2 | 20.8 | 6.9 | 9.2 | 2.1 | 1.9 | 12.2 | 8.7 |
| MALAYSIA | | | | | | | | | | | | | | | |
| Petronas Chem | PCHEM MK | NA | 6.06 | NA | NA | 11,681 | (4.0) | 30.1 | 19.5 | 5.5 | 7.7 | 1.6 | 1.5 | 11.4 | 8.7 |
| Lotte Chemical Titan | TTNP MK | NA | 2.35 | NA | NA | 1,287 | (24.6) | 235.0 | 28.3 | 0.2 | 1.1 | 0.5 | 0.4 | 3.5 | 2.7 |
| MALAYSIA avg | | | | | | 12,967 | (6.1) | 50.5 | 20.4 | 5.0 | 7.1 | 1.5 | 1.4 | 10.6 | 8.1 |
| Average (Asia) | | | | | | 377,480 | 5.4 | 39.8 | 27.8 | 8.3 | 8.5 | 2.6 | 2.2 | 19.6 | 16.1 |
| US | | | | | | | | | | | | | | | |
| Eastman Chem | EMN US | NA | 84.52 | NA | NA | 11,440 | (11.7) | 14.9 | 12.1 | 11.7 | 14.4 | 1.9 | 1.7 | 10.0 | 9.0 |
| Dupont De Nem | DD US | NA | 58.32 | NA | NA | 42,797 | 8.4 | 19.3 | 17.0 | 5.8 | 6.8 | 1.1 | 1.1 | 12.2 | 11.2 |
| Celanese | CE US | NA | 116.37 | NA | NA | 13,765 | (14.1) | 16.6 | 12.8 | 28.7 | 35.8 | 5.2 | 4.8 | 12.7 | 10.8 |
| Westlake Chem | WLK US | NA | 68.26 | NA | NA | 8,716 | (39.5) | 38.5 | 25.0 | 4.0 | 5.2 | 1.4 | 1.4 | 9.9 | 8.6 |
| Ppg Industries | PPG US | NA | 133.57 | NA | NA | 31,519 | (3.3) | 25.0 | 20.4 | 22.4 | 26.2 | 5.6 | 5.2 | 15.8 | 13.7 |

| | | | | | | | | | | | | | | | |
|---------------------------------|-----------|----|-------|----|----|----------------|---------------|-------------|-------------|-------------|-------------|------------|------------|-------------|-------------|
| Alpek Sa De Cv | ALPEKA MM | NA | 16.04 | NA | NA | 1,594 | (40.6) | 17.9 | 9.6 | 3.2 | 8.0 | 0.8 | 0.8 | 6.7 | 5.6 |
| Avg (US) | | | | | | 109,832 | (4.4) | 21.7 | 17.5 | 13.9 | 16.7 | 3.0 | 2.8 | 12.8 | 11.3 |
| ME/Europe | | | | | | | | | | | | | | | |
| Saudi Basic | SABIC AB | NA | 97.40 | NA | NA | 77,899 | (53.2) | 124.7 | 32.5 | 1.5 | 5.8 | 1.8 | 1.8 | 13.6 | 10.6 |
| Saudi Kayan | KAYAN AB | NA | 11.24 | NA | NA | 4,495 | (186.8) | NA | NA | (8.3) | (0.6) | 1.2 | 1.2 | 19.1 | 11.9 |
| Yanbu National | YANSAB AB | NA | 61.20 | NA | NA | 9,178 | (38.9) | 62.6 | 31.0 | 3.5 | 7.9 | 2.3 | 2.4 | 18.9 | 13.7 |
| Industries Qatar | IQCD QD | NA | 9.90 | NA | NA | 16,223 | (28.4) | 32.1 | 22.9 | 4.9 | 6.6 | 1.8 | 1.8 | 26.7 | 20.4 |
| Basf Se | BAS GR | NA | 54.44 | NA | NA | 58,640 | (19.1) | 22.7 | 15.5 | 3.1 | 7.1 | 1.3 | 1.3 | 10.4 | 8.7 |
| Arkema | AKE FP | NA | 94.38 | NA | NA | 8,548 | (19.9) | 18.1 | 13.9 | 6.9 | 8.7 | 1.3 | 1.3 | 8.0 | 7.2 |
| Lanxess Ag | LXS GR | NA | 50.52 | NA | NA | 5,200 | (8.3) | 17.0 | 13.1 | 7.5 | 8.1 | 1.3 | 1.2 | 6.4 | 5.5 |
| Solvay Sa | SOLB BB | NA | 76.94 | NA | NA | 9,555 | (7.2) | 14.1 | 12.7 | 2.8 | 7.4 | 1.0 | 1.0 | 6.9 | 6.5 |
| Avg (ME/Europe) | | | | | | 189,737 | (37.9) | 66.0 | 23.2 | 2.7 | 6.5 | 1.6 | 1.6 | 13.3 | 10.5 |
| Petrochem under coverage | | | | | | 25,397 | 0.1 | 14.1 | 10.7 | 8.2 | 9.4 | 1.1 | 1.1 | 9.5 | 8.8 |
| Average (all) | | | | | | 677,049 | (8.3) | 44.2 | 24.8 | 7.6 | 9.2 | 2.4 | 2.1 | 16.8 | 13.8 |

Share prices as of 14 Oct 2020

Sources: Bloomberg; FSSIA estimates

Financial Statements

Siam Cement

| Profit and Loss (THB m) Year Ending Dec | 2018 | 2019 | 2020E | 2021E | 2022E |
|---------------------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Revenue | 478,438 | 437,980 | 452,914 | 479,900 | 493,105 |
| Cost of goods sold | (359,716) | (331,821) | (339,160) | (357,316) | (366,122) |
| Gross profit | 118,722 | 106,159 | 113,754 | 122,583 | 126,982 |
| Other operating income | - | - | - | - | - |
| Operating costs | (55,093) | (56,902) | (58,842) | (62,348) | (64,063) |
| Operating EBITDA | 63,629 | 49,258 | 54,912 | 60,236 | 62,919 |
| Depreciation | (23,747) | (23,932) | (23,660) | (26,703) | (29,745) |
| Goodwill amortisation | 0 | 0 | 0 | 0 | 0 |
| Operating EBIT | 39,881 | 25,326 | 31,252 | 33,533 | 33,174 |
| Net financing costs | (6,835) | (6,442) | (5,302) | (4,272) | (4,759) |
| Associates | 15,047 | 11,632 | 9,713 | 10,145 | 11,052 |
| Recurring non operating income | 26,870 | 20,479 | 19,002 | 19,899 | 21,294 |
| Non recurring items | 0 | 0 | 0 | 0 | 0 |
| Profit before tax | 59,916 | 39,363 | 44,953 | 49,159 | 49,709 |
| Tax | (7,269) | (6,167) | (5,286) | (5,852) | (5,798) |
| Profit after tax | 52,647 | 33,197 | 39,667 | 43,307 | 43,910 |
| Minority interests | (7,899) | (1,182) | (6,620) | (7,799) | (8,028) |
| Preferred dividends | 0 | 0 | 0 | 0 | 0 |
| Other items | - | - | - | - | - |
| Reported net profit | 44,748 | 32,014 | 33,047 | 35,508 | 35,883 |
| Non recurring items & goodwill (net) | 0 | 0 | 0 | 0 | 0 |
| Recurring net profit | 44,748 | 32,014 | 33,047 | 35,508 | 35,883 |
| Per share (THB) | | | | | |
| Recurring EPS * | 37.29 | 26.68 | 27.54 | 29.59 | 29.90 |
| Reported EPS | 37.29 | 26.68 | 27.54 | 29.59 | 29.90 |
| DPS | 18.00 | 14.00 | 15.00 | 15.50 | 15.50 |
| Diluted shares (used to calculate per share data) | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 |
| Growth | | | | | |
| Revenue (%) | 6.1 | (8.5) | 3.4 | 6.0 | 2.8 |
| Operating EBITDA (%) | (12.0) | (22.6) | 11.5 | 9.7 | 4.5 |
| Operating EBIT (%) | (18.7) | (36.5) | 23.4 | 7.3 | (1.1) |
| Recurring EPS (%) | (18.7) | (28.5) | 3.2 | 7.4 | 1.1 |
| Reported EPS (%) | (18.7) | (28.5) | 3.2 | 7.4 | 1.1 |
| Operating performance | | | | | |
| Gross margin inc depreciation (%) | 19.9 | 18.8 | 19.9 | 20.0 | 19.7 |
| Gross margin of key business (%) | 478,437.6 | 437,979.9 | 452,914.0 | 479,899.6 | 493,104.7 |
| Operating EBITDA margin (%) | 13.3 | 11.2 | 12.1 | 12.6 | 12.8 |
| Operating EBIT margin (%) | 8.3 | 5.8 | 6.9 | 7.0 | 6.7 |
| Net margin (%) | 9.4 | 7.3 | 7.3 | 7.4 | 7.3 |
| Effective tax rate (%) | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| Dividend payout on recurring profit (%) | 48.3 | 52.5 | 54.5 | 52.4 | 51.8 |
| Interest cover (X) | 9.8 | 7.1 | 9.5 | 12.5 | 11.4 |
| Inventory days | 60.1 | 64.5 | 58.1 | 54.0 | 54.8 |
| Debtor days | 45.5 | 52.5 | 50.1 | 47.3 | 46.0 |
| Creditor days | 48.2 | 57.7 | 53.8 | 46.2 | 46.8 |
| Operating ROIC (%) | 10.1 | 5.9 | 6.2 | 5.8 | 5.1 |
| ROIC (%) | 11.2 | 7.2 | 7.1 | 6.8 | 6.4 |
| ROE (%) | 16.6 | 11.5 | 11.5 | 11.6 | 11.1 |
| ROA (%) | 10.0 | 6.3 | 6.7 | 6.8 | 6.4 |
| * Pre-exceptional, pre-goodwill and fully diluted | | | | | |
| Revenue By Division (THB m) | | | | | |
| Cement & Building Material | 182,952 | 184,690 | 229,067 | 241,090 | 253,683 |
| Chemicals | 221,538 | 177,634 | 143,782 | 157,387 | 155,993 |
| Packaging | 87,255 | 89,070 | 79,945 | 81,283 | 83,279 |
| Other | (13,307) | (13,414) | 120 | 140 | 150 |

Sources: Siam Cement; FSSIA estimates

Financial Statements

Siam Cement

| Cash Flow (THB m) Year Ending Dec | 2018 | 2019 | 2020E | 2021E | 2022E |
|---------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Recurring net profit | 44,748 | 32,014 | 33,047 | 35,508 | 35,883 |
| Depreciation | 23,747 | 23,932 | 23,660 | 26,703 | 29,745 |
| Associates & minorities | 15,047 | 11,632 | 9,713 | 10,145 | 11,052 |
| Other non-cash items | - | - | - | - | - |
| Change in working capital | (8,831) | 13,185 | (7,011) | (491) | (238) |
| Cash flow from operations | 74,711 | 80,763 | 59,409 | 71,865 | 76,442 |
| Capex - maintenance | (20,253) | (22,349) | (25,647) | (28,946) | (32,244) |
| Capex - new investment | (131) | (57,404) | (52,084) | (46,910) | (42,787) |
| Net acquisitions & disposals | (205) | 11,123 | 0 | 0 | 0 |
| Other investments (net) | (11,143) | (4,271) | (2) | 0 | 0 |
| Cash flow from investing | (31,732) | (72,902) | (77,734) | (75,855) | (75,031) |
| Dividends paid | (22,800) | (19,800) | (16,800) | (18,600) | (18,600) |
| Equity finance | 0 | 0 | 0 | 0 | 0 |
| Debt finance | (3,790) | 21,767 | 20,000 | 20,000 | 42,000 |
| Other financing cash flows | (22,915) | (15,987) | (11,725) | (8,939) | (10,441) |
| Cash flow from Financing | (49,505) | (14,020) | (8,525) | (7,539) | 12,959 |
| Non-recurring cash flows | - | - | - | - | - |
| Other adjustments | 0 | 0 | 0 | 0 | 0 |
| Net other adjustments | 0 | 0 | 0 | 0 | 0 |
| Movement in cash | (6,526) | (6,159) | (26,849) | (11,529) | 14,370 |
| Free cash flow to firm (FCFF) | 49,814.25 | 14,302.99 | (13,022.42) | 281.28 | 6,169.74 |
| Free cash flow to equity (FCFE) | 16,273.74 | 13,640.97 | (10,049.16) | 7,070.56 | 32,969.64 |
| Per share (THB) | | | | | |
| FCFF per share | 41.51 | 11.92 | (10.85) | 0.23 | 5.14 |
| FCFE per share | 13.56 | 11.37 | (8.37) | 5.89 | 27.47 |
| Recurring cash flow per share | 69.62 | 56.31 | 55.35 | 60.30 | 63.90 |
| Balance Sheet (THB m) Year Ending Dec | | | | | |
| Tangible fixed asset (gross) | 569,620 | 584,507 | 666,959 | 749,410 | 831,862 |
| Less: Accumulated depreciation | (322,154) | (278,521) | (302,181) | (328,884) | (358,629) |
| Tangible fixed assets (Net) | 247,466 | 305,986 | 364,777 | 420,526 | 473,233 |
| Intangible fixed assets (Net) | 0 | 0 | 0 | 0 | 0 |
| Long-term financial assets | - | - | - | - | - |
| Invest. In associates & subsidiaries | 105,808 | 94,685 | 94,685 | 94,685 | 94,685 |
| Cash & equivalents | 50,381 | 44,222 | 17,373 | 5,843 | 20,213 |
| A/C receivable | 63,915 | 62,166 | 62,166 | 62,166 | 62,166 |
| Inventories | 60,817 | 56,411 | 51,499 | 54,256 | 55,593 |
| Other current assets | 2,157 | 1,587 | 6,627 | 7,018 | 7,208 |
| Current assets | 177,271 | 164,386 | 137,664 | 129,283 | 145,179 |
| Other assets | 59,242 | 69,676 | 69,678 | 69,678 | 69,678 |
| Total assets | 589,787 | 634,733 | 666,805 | 714,173 | 782,776 |
| Common equity | 277,097 | 280,215 | 296,462 | 313,370 | 330,653 |
| Minorities etc. | 40,773 | 47,528 | 54,148 | 61,947 | 69,975 |
| Total Shareholders' equity | 317,869 | 327,743 | 350,610 | 375,317 | 400,627 |
| Long term debt | 151,315 | 155,361 | 175,361 | 195,361 | 225,361 |
| Other long-term liabilities | 12,803 | 20,124 | 20,124 | 20,124 | 20,124 |
| Long-term liabilities | 164,118 | 175,485 | 195,485 | 215,485 | 245,485 |
| A/C payable | 48,992 | 55,887 | 44,014 | 46,370 | 47,513 |
| Short term debt | 53,860 | 71,581 | 71,581 | 71,581 | 83,581 |
| Other current liabilities | 4,948 | 4,037 | 5,115 | 5,420 | 5,569 |
| Current liabilities | 107,800 | 131,505 | 120,710 | 123,371 | 136,663 |
| Total liabilities and shareholders' equity | 589,787 | 634,733 | 666,805 | 714,173 | 782,776 |
| Net working capital | 72,950 | 60,240 | 71,163 | 71,650 | 71,885 |
| Invested capital | 485,466 | 530,588 | 600,303 | 656,540 | 709,481 |
| * Includes convertibles and preferred stock which is being treated as debt | | | | | |
| Per share (THB) | | | | | |
| Book value per share | 230.91 | 233.51 | 247.05 | 261.14 | 275.54 |
| Tangible book value per share | 230.91 | 233.51 | 247.05 | 261.14 | 275.54 |
| Financial strength | | | | | |
| Net debt/Equity (%) | 48.7 | 55.8 | 65.5 | 69.6 | 72.1 |
| Net debt/total assets (%) | 26.2 | 28.8 | 34.4 | 36.6 | 36.9 |
| Current ratio (x) | 1.6 | 1.3 | 1.1 | 1.0 | 1.1 |
| CF interest cover (x) | 3.4 | 12.0 | 8.9 | 13.6 | 16.9 |
| Valuation | | | | | |
| Recurring P/E (x) * | 9.3 | 13.0 | 12.6 | 11.8 | 11.6 |
| Recurring P/E @ target price (x) * | 11.9 | 16.7 | 16.2 | 15.0 | 14.9 |
| Reported P/E (x) | 9.3 | 13.0 | 12.6 | 11.8 | 11.6 |
| Dividend yield (%) | 5.2 | 4.0 | 4.3 | 4.5 | 4.5 |
| Price/book (x) | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 |
| Price/tangible book (x) | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 |
| EV/EBITDA (x) ** | 9.6 | 13.2 | 12.8 | 12.3 | 12.3 |
| EV/EBITDA @ target price (x) ** | 11.5 | 15.5 | 14.9 | 14.2 | 14.2 |
| EV/invested capital (x) | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 |
| * Pre-exceptional & pre-goodwill are fully diluted ** EBITDA includes associate income and recurring non operating income | | | | | |

Sources: Siam Cement; FSSIA estimates

Corporate Governance report of Thai listed companies 2019

| EXCELLENT LEVEL | | | | | | | | | | |
|-----------------|----------------|---------|--------|--------|--------|--------------|--------|--------|--------|--------|
| AAV | ADVANC | AIRA | AKP | AKR | AMA | AMATA | AMATAV | ANAN | AOT | AP |
| ARROW | BAFS | BANPU | BAY | BCP | BCPG | BOL | BRR | BTS | BTW | BWG |
| CFRESH | CHEWA | CHO | CK | CKP | CM | CNT | COL | COMAN | CPALL | CPF |
| CPI | CPN | CSS | DELTA | DEMCO | DRT | DTAC | DTC | EA | EASTW | ECF |
| EGCO | GBX | GC | GCAP | GEL | GGP | GGC | GOLD | GPSC | GRAMMY | GUNKUL |
| HANA | HARN | HMPRO | ICC | ICHI | III | ILINK | INTUCH | IRPC | IVL | JKN |
| JSP | K | KBANK | KCE | KKP | KSL | KTB | KTC | KTIS | LH | LHFG |
| LIT | LPN | MAKRO | MALEE | MBK | MBKET | MC | MCOT | MFEC | MINT | MONO* |
| MTC | NCH | NCL | NKI | NSI | NVD | NYT | OISHI | OTO | PAP | PCSGH |
| PDJ | PG | PHOL | PJW | PLANB | PLANET | PORT | PPS | PR9 | PREB | PRG |
| PRM | PSH | PSL | PTG | PTT | PTTEP | PTTGC | PYLON | Q-CON | QH | QTC |
| RATCH | ROBINS** | RS | S | S & J | SABINA | SAMART | SAMTEL | SAT | SC | SCB |
| SCC | SCCC | SCN | SDC | SEAFCO | SEAOIL | SE-ED | SELIC | SENA | SIS | SITHAI |
| SNC | SORKON | SPALI | SPI | SPRC | SSSC | STA | STEC | SVI | SYNTEC | TASCO |
| TCAP | THAI | THANA | THANI | THCOM | THIP | THREL | TIP | TISCO | TK | TKT |
| TMB | TMILL | TNDT | TOA | TOP | TRC | TRU | TRUE | TSC | TSR | TSTH |
| TTA | TTCL | TTW | TU | TVD | TVO | U | UAC | UV | VGI | VIH |
| WACOAL | WAVE | WHA | WHAUP | WICE | WINNER | | | | | |
| VERY GOOD LEVEL | | | | | | | | | | |
| 2S | ABM | ADB | AF | AGE | AH | AHC | AIT | ALLA | ALT | AMANA |
| AMARIN | APCO | APCS | AQUA | ARIP | ASAP | ASIA | ASIAN | ASIMAR | ASK | ASN |
| ASP | ATP30 | AUCT | AYUD | B | BA | BBL | BDMS | BEC | BEM | BFIT |
| BGC | BGRIM | BIZ | BJC | BJCHI | BLA | BPP | BROOK | CBG | CEN | CENDEL |
| CGH | CHG | CHOTI | CHOW | CI | CIMBT | CNS | COLOR | COM7 | COTTO | CRD |
| CSC | CSP | DCC | DCON | DDD | DOD | EASON | ECL | EE | EPG | ERW |
| ESTAR | ETE | FLOYD | FN | FNS | FORTH | FPI | FPT | FSMART | FSS | FVC |
| GENCO | GJS | GL | GLOBAL | GLOW** | GULF | HPT | HTC | HYDRO | ICN | IFS |
| INET | INSURE | IRC | IRCP | IT | ITD*** | ITEL | J | JAS* | JCK | JCKH |
| JMART | JMT | JWD | KBS | KCAR | KGI | KIAT | KOOL | KWC | KWM | L&E |
| LALIN | LANNA | LDC | LHK | LOXLEY | LRH | LST | M | MACO | MAJOR | MBAX |
| MEGA | METCO | MFC | MK | MODERN | MOONG | MPG | MSC | MTI | NEP | NETBAY |
| NEX | NINE | NOBLE | NOK | NTV | NWR | OCC | OGC | ORI | OSP | PATO |
| PB | PDG | PDI | PL | PLAT | PM | PPP | PRECHA | PRIN | PRINC | PSTC |
| PT | QLT | RCL | RICHY | RML | RWI | S11 | SAAM | SALEE | SAMCO | SANKO |
| SAPPE | SAWAD | SCG | SCI | SCP | SE | SFP | SIAM | SINGER | SIRI | SKE |
| SKR | SKY | SMIT | SMK | SMP | SMT | SNP | SONIC | SPA | SPC | SPCG |
| SPVI | SR | SRICHA | SSC | SSF | SST | STANLY | STPI | SUC | SUN | SUSCO |
| SUTHA | SWC | SYMC | SYNEX | T | TACC | TAE | TAKUNI | TBSP | TCC | TCMC |
| TEAM | TEAMG | TFG | TFMAMA | THG | THRE | TIPCO | TITLE | TIW | TKN | TKS |
| TM | TMC | TMD | TMI | TMT | TNITY | TNL | TNP | TNR | TOG | TPA |
| TPAC | TPBI | TPCORP | TPOLY | TRITN | TRT | TSE | TSTE | TVI | TVT | TWP |
| TWPC | UBIS | UEC | UMI | UOBKH | UP | UPF | UPOIC | UT | UWC | VNT |
| WIIK | XO | YUASA | ZEN | ZMICO | | | | | | |
| GOOD LEVEL | | | | | | | | | | |
| A | ABICO | ACAP*** | AEC | AEONTS | AJ | ALUCON | AMC | APURE | AS | ASEFA |
| AU | B52 | BCH | BEAUTY | BGT | BH | BIG | BLAND | BM | BR | BROCK |
| BSBM | BSM | BTNC | CCET | CCP | CGD | CHARAN | CHAYO | CITY | CMAN | CMC |
| CMO | CMR | CPL | CPT | CSR | CTW | CWT | D | DIMET | EKH | EMC |
| EPCO | ESSO | FE | FTE | GIFT | GLAND | GLOCON | GPI | GREEN | GTB | GYT |
| HTECH | HUMAN | IHL | INGRS | INOX | JTS | JUBILE | KASET | KCM | KKC | KWG |
| KYE | LEE | LPH | MATCH | MATI | M-CHAI | MCS | MDX | META | MGT | MJD |
| MM | MVP | NC | NDR | NER | NNCL | NPK | NUSA | OCEAN | PAF | PF |
| PICO | PIMO | PK | PLE | PMTA | POST | PPM | PROUD | PTL | RCI | RJH |
| ROJNA | RPC | RPH | SF | SGF | SGP | SKN | SLP | SMART | SOLAR | SPG |
| SQ | SSP | STI | SUPER | SVOA | TCCC | THE | THMUI | TIC | TIGER | TNH |
| TOPP | TPCH | TPIPP | TPLAS | TQM | TTI | TYCN | UTP | VCOM | VIBHA | VPO |
| WIN | WORK | WP | WPH | ZIGA | | | | | | |
| Score Range | Number of Logo | | | | | Description | | | | |
| 90-100 | | | | | | Excellent | | | | |
| 80-89 | | | | | | Very Good | | | | |
| 70-79 | | | | | | Good | | | | |
| 60-69 | | | | | | Satisfactory | | | | |
| 50-59 | | | | | | Pass | | | | |
| Less than 50 | No logo given | | | | | - | | | | |

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

| CERTIFIED | | | | | | | | | | |
|-----------|--------|--------|---------|-------|--------|--------|--------|--------|-------|--------|
| ADVANC | AIE | AKP | AMANAHA | AP | APCS | AQUA | ARROW | ASK | ASP | AYUD |
| BAFS | BANPU | BAY | BBL | BCH | BCP | BCPG | BGRIM | BJCHI | BKI | BLA |
| BROOK | BRR | BSBM | BTS | BWG | CEN | CENTEL | CFRESH | CGH | CHEWA | CIG |
| CIMBT | CM | COM7 | CPALL | CPF | CPI | CPN | CSC | DCC | DEMCO | DIMET |
| DRT | DTAC | DTC | EASTW | ECL | EGCO | FE | FNS | FSS | GBX | GC |
| GCAP | GEL | GFPT | GGC | GJS | GOLD | GPSC | GSTEEL | GUNKUL | HANA | HARN |
| HMPRO | HTC | ICC | IFS | INET | INSURE | INTUCH | IRPC | IVL | K | KASET |
| KBANK | KBS | KCAR | KCE | KGI | KKP | KSL | KTB | KTC | KWC | L&E |
| LANNA | LHK | LPN | LRH | M | MAKRO | MALEE | MBAX | MBK | MBKET | MC |
| MCOT | MFC | MINT | MONO | MOONG | MSC | MTI | NBC | NINE | NKI | NMG |
| NNCL | NSI | OCC | OCEAN | OGC | PAP | PATO | PB | PCSGH | PDG | PDI |
| PDJ | PE | PG | PHOL | PL | PLANB | PLANET | PLAT | PM | PPP | PPS |
| PREB | PRG | PRINC | PSH | PSTC | PT | PTG | PTT | PTTEP | PTTGC | PYLON |
| Q-CON | QH | QLT | QTC | RATCH | RML | S & J | SABINA | SAT | SC | SCB |
| SCC | SCCC | SCG | SCN | SE-ED | SELIC | SENA | SGP | SIRI | SIS | SITHAI |
| SMIT | SMK | SMPC | SNC | SNP | SORKON | SPACK | SPC | SPI | SPRC | SRICHA |
| SSF | SSI | SSSC | SST | STA | SUSCO | SVI | SYNTEC | TASCO | TCAP | TFG |
| TFI | TFMAMA | THANI | THCOM | THIP | THRE | THREL | TIP | TIPCO | TISCO | TKT |
| TMB | TMD | TMILL | TMT | TNITY | TNL | TNP | TNR | TOG | TOP | TPA |
| TPCORP | TRU | TRUE | TSC | TSTH | TTCL | TU | TVD | TVI | TWPC | U |
| UBIS | UEC | UKEM | UOBKH | VGI | VIH | VNT | WACOAL | WHA | WICE | WIIK |
| DECLARED | | | | | | | | | | |
| 2S | ABICO | AF | AI | AIRA | ALT | AMA | AMARIN | AMATA | ANAN | B |
| BM | BPP | BUI | CHG | CHO | CHOTI | CHOW | CI | CMC | COL | DDD |
| DELTA | EFORL | EPCO | ESTAR | ETE | FPI | FTE | ICHI | INOX | IRC | ITEL |
| JAS | JSP | JTS | KWG | LDC | LIT | META | MFEC | MPG | NEP | NOK |
| NWR | ORI | PRM | PSL | ROJNA | RWI | SAAM | SAPPE | SCI | SEOIL | SHANG |
| SKR | SPALI | STANLY | SYNEX | TAE | TAKUNI | TMC | TOPP | TPP | TRITN | TVO |
| UV | UWC | WHAUP | XO | YUASA | ZEN | | | | | |

| 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

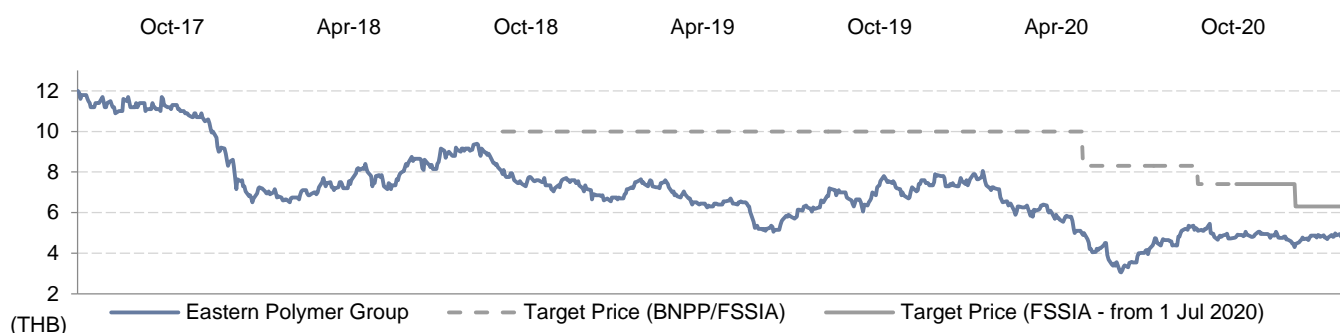
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

This report has been prepared by FSS International Investment Advisory Company Limited (FSSIA). The information herein has been obtained from sources believed to be reliable and accurate; however FSS makes no representation as to the accuracy and completeness of such information. Information and opinions expressed herein are subject to change without notice. FSS has no intention to solicit investors to buy or sell any security in this report. In addition, FSS does not guarantee returns nor price of the securities described in the report nor accept any liability for any loss or damage of any kind arising out of the use of such information or opinions in this report. Investors should study this report carefully in making investment decisions. All rights are reserved.

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History of change in investment rating and/or target price

Eastern Polymer Group (EPG TB)



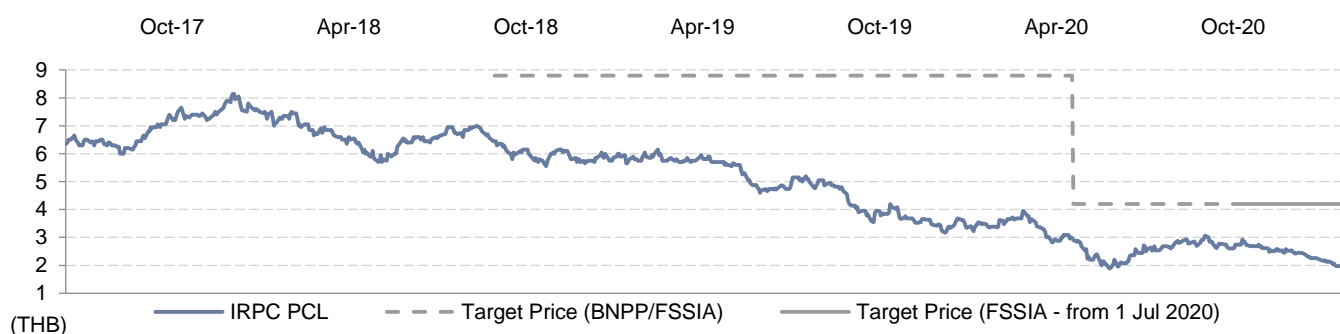
| Date | Rating | Target price | Date | Rating | Target price | Date | Rating | Target price |
|-------------|--------|--------------|-------------|--------|--------------|-------------|--------|--------------|
| 09-Oct-2018 | BUY | 10.00 | 29-May-2020 | BUY | 7.40 | 20-Aug-2020 | BUY | 6.30 |
| 20-Feb-2020 | BUY | 8.30 | 29-May-2020 | BUY | 7.40 | | | |

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

Price and TP are in local currency

Source: FSSIA estimates

IRPC PCL (IRPC TB)



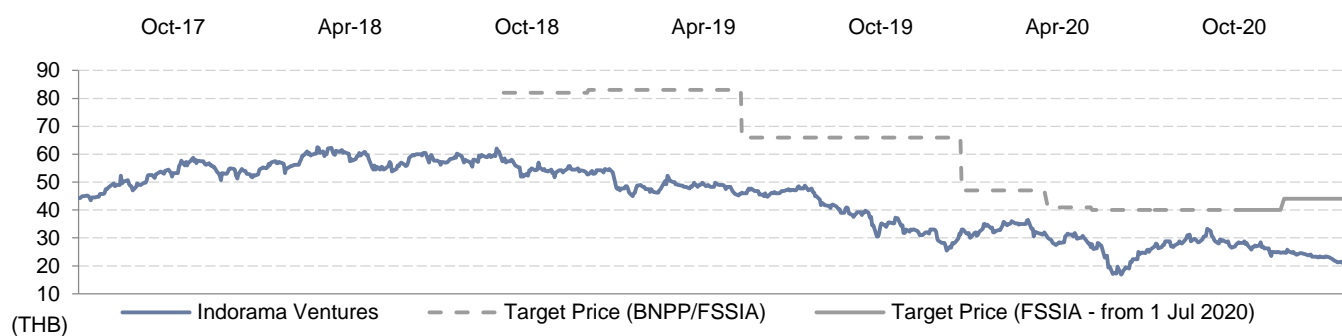
| Date | Rating | Target price | Date | Rating | Target price | Date | Rating | Target price |
|-------------|--------|--------------|-------------|--------|--------------|-------------|--------|--------------|
| 09-Oct-2018 | BUY | 8.80 | 13-Feb-2019 | BUY | 8.80 | 14-Feb-2020 | BUY | 4.20 |

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

Price and TP are in local currency

Source: FSSIA estimates

Indorama Ventures (IVL TB)



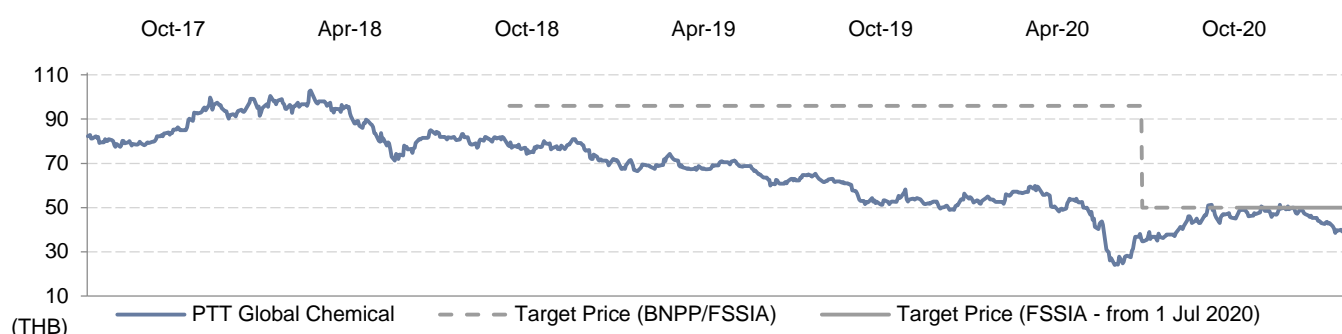
| Date | Rating | Target price | Date | Rating | Target price | Date | Rating | Target price |
|-------------|--------|--------------|-------------|--------|--------------|-------------|--------|--------------|
| 09-Oct-2018 | BUY | 82.00 | 07-Nov-2019 | BUY | 47.00 | 09-Jun-2020 | BUY | 40.00 |
| 21-Dec-2018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

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

Price and TP are in local currency

Source: FSSIA estimates

PTT Global Chemical (PTTGC TB)



| Date | Rating | Target price | Date | Rating | Target price | Date | Rating | Target price |
|-------------|--------|--------------|-------------|--------|--------------|------|--------|--------------|
| 09-Oct-2018 | BUY | 96.00 | 09-Apr-2020 | BUY | 50.00 | - | - | - |

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

Price and TP are in local currency

Source: FSSIA estimates

| Company | Ticker | Price | Rating | Valuation & Risks |
|-----------------------|----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Siam Cement | SCC TB | THB348.00 | 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 4.72 | 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. |
| IRPC PCL | IRPC TB | THB 2.08 | 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. |
| Indorama Ventures | IVL TB | THB 24.20 | 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. |
| PTT Global Chemical | PTTGC TB | THB 40.75 | BUY | The key downside risks to our EV/EBITDA-based TP are the weaker-than-expected HDPE price and HDPE-naphtha margin |

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 14-Oct-2020 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.