

Thailand Energy Sector

Weaker fundamental dynamics

Sector Valuation			Current	Target	Market	Norm EPS grw		— Norm PE —		— P/BV —		— Div. yield —	
Company	BBG Code	Rec.	price (Bt)	price (Bt)	Cap (US\$ m)	2023F (%)	2024F (%)	2023F (x)	2024F (x)	2023F (x)	2024F (x)	2023F (%)	2024F (%)
Banpu Pcl	BANPU TB	SELL	8.25	7.00	1,965	(86.8)	(16.8)	8.6	10.3	0.6	0.6	3.1	2.4
Bangchak	BCP TB	BUY	37.25	45.00	1,445	(41.6)	(5.1)	5.7	6.0	0.7	0.7	4.1	3.8
Esso (Thailand) Pcl	ESSO TB	BUY	9.80	11.50	955	(51.7)	(18.0)	6.4	7.8	1.2	1.1	3.1	3.6
IRPC Pcl	IRPC TB	SELL	2.22	1.90	1,278	50.6	(2.2)	16.1	16.5	0.6	0.6	1.7	1.4
PTT Oil And Retail	OR TB	SELL	19.80	17.50	6,693	3.8	(1.7)	22.2	22.6	2.2	2.0	1.8	1.7
PTT Pcl	PTT TB	SELL	34.50	31.00	27,758	(10.4)	(8.4)	10.1	11.0	0.9	0.9	5.8	5.8
PTT Exploration	PTTEP TB	BUY	164.50	187.00	18,396	(13.8)	(2.1)	8.4	8.5	1.3	1.2	5.5	5.2
PTT Global Chemical	PTTGC TB	HOLD	35.25	37.00	4,477	(72.4)	103.9	33.1	16.2	0.5	0.5	2.1	2.3
Siam Cement Pcl	SCC TB	BUY	310.00	390.00	10,479	11.5	40.9	15.6	11.1	0.9	0.9	4.8	4.5
Star Petroleum	SPRC TB	HOLD	9.00	9.80	1,099	(52.1)	(16.7)	9.5	11.5	1.0	0.9	3.4	2.3
Thai Oil Pcl	TOP TB	BUY	47.75	56.00	3,005	(57.0)	(28.4)	6.2	8.7	0.6	0.6	5.0	3.8

Source: Thanachart estimates, Based on 11 September 2023 closing prices

We downgrade Thai energy sector to Neutral as we expect 2024F to be another year of normalization, with higher risk of demand headwinds. SCC is our top sector pick while BANPU and OR are our top SELL calls.

Downgrade to Neutral

We downgrade our Thai energy sector rating to Neutral from OW, with expectation of 2024F being another normalization year with higher demand risk from a global slowdown after a series of interest rate hikes and the weak Chinese economy. We are positive on the polyethylene cycle as we expect the heavy supply cycle to end in 2024F, while we have a negative view on refinery after cyclical factors fade and supply growth turns higher. For upstream oil, we expect OPEC's supply management to help cushion the weak demand. Despite a weak overall energy sector outlook, we think our sector valuation is fair as most stocks are already trading at or below book. **SCC** is our top sector pick coming out from the bottom of its earnings cycle this year, followed by **PTTEP** which should see an oil price cushion from OPEC's supply management. Our top SELLS are **BANPU** on weak earnings in 1H23 despite still high coal prices and **OR** on its expensive valuation.

Upstream – supply management

Although we see limited upside for oil prices as they are currently at the high range of US\$85-90/bbl, we do not see much downside either amid higher global demand risk due to OPEC being quite effective in supply management. We raise our Brent oil price assumptions by US\$2-3/bbl to US\$83/80/78/bbl in 2023-25F, respectively.

Downstream – diverging paths

We are positive on the polyethylene chain and expect the market to recover next year on our expectation of the end of the supply cycle in 2024F. However, PP and PET will continue to be under pressure from large capacity additions. For refinery, despite an upcoming high season in 4Q23, we turn cautious and expect the GRM to fall to the mid-cycle next year given the absence of cyclical factors and higher supply growth. Our new SG GRM forecasts are \$8.2/6.5/7.0/bbl in 2023-25F.

The parent – policy risks and lack of catalysts

We have a SELL call on PTT. On top of a potential gas price hike in 2H23F, we expect stronger pressure from the refinery downturn and policy risk. The recent rise in share price also makes PTT look expensive in our view, trading at 0.9x P/BV vs. less than 10% ROE in 2024-25F.

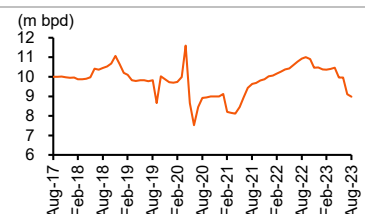


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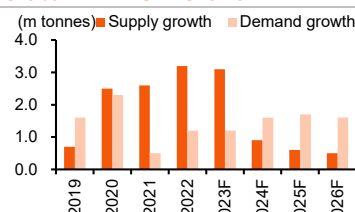
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Saudi Oil Production



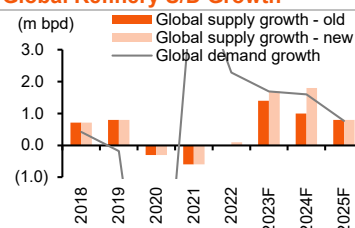
Source: Bloomberg

Global HDPE S/D Growth



Source: PTTGC

Global Refinery S/D Growth



Source: TOP

Downgrade to Neutral

We cut our GRM and chemical spread assumptions for 2023-25F

We downgrade our Thai energy sector rating to Neutral from OW, with expectation of 2024F being another normalization year with higher demand risk from a global slowdown after a series of interest rate hikes and the weak Chinese economy. As for the different business segments, we have a positive view on the polyethylene cycle as we expect the heavy supply cycle to end in 2024F, while we have a negative view on refinery after cyclical factors fade and supply growth turns higher. On upstream oil, we expect OPEC's supply management to help cushion the impact from potentially weaker demand in 2024F. Despite our weak overall energy sector outlook, we think our sector valuation is fair as most stocks are already trading at or below book. As such, we cut our GRM and chemical assumptions but raise our Brent oil price assumptions to reflect our expectations on OPEC's supply management.

Visibility and value

In the Thai energy sector, we prefer SCC as we think it has already seen a de-rating and its stock is already priced for the downturn. SCC has a more favorable chemical product mix vs. its domestic peers, while offering substantial capacity growth prospects in 2024F with its Long Son Chemical plant start-up. Another name we believe investors should focus on is PTTEP, which offers good earnings visibility over 2023-25 and benefits from a high oil price environment. Both stocks offer good yields and we think they have ample balance sheet space to withstand any further downside risk. We turn less positive on refiners, and downgrade SPRC to HOLD (from BUY) and IRPC to SELL (from BUY). We reaffirm our BUY rating on BCP and ESSO on higher ROE uplift post acquisition, and TOP mainly on valuation

Ex 1: Our Key Assumptions Changes

Assumption	(Unit)	2019	2020	2021	2022	2023F	2024F	2025F
New								
Brent oil price	(US\$/bbl)	64	42	69	101	83	80	78
Singapore GRM	(US\$/bbl)	4.2	0.7	3.7	11.5	8.2	6.5	7.0
HDPE-naphtha	(US\$/tonne)	466	506	531	392	400	450	530
PP-naphtha	(US\$/tonne)	538	561	637	376	350	360	390
PX-ULG	(US\$/tonne)	285	180	177	125	200	180	180
BZ-ULG	(US\$/tonne)	29	89	229	50	60	100	100
Old								
Brent oil price	(US\$/bbl)					81	78	75
Singapore GRM	(US\$/bbl)					7.5	7.3	7.3
HDPE-naphtha	(US\$/tonne)					430	470	550
PP-naphtha	(US\$/tonne)					380	420	500
PX-ULG	(US\$/tonne)					200	180	180
BZ-ULG	(US\$/tonne)					120	150	150
Change								
Brent oil price	(US\$/bbl)					2.0	2.0	3.0
Singapore GRM	(US\$/bbl)					0.7	(0.8)	(0.3)
HDPE-naphtha	(US\$/tonne)					(30.0)	(20.0)	(20.0)
PP-naphtha	(US\$/tonne)					(30.0)	(60.0)	(110.0)
PX-ULG	(US\$/tonne)					0.0	0.0	0.0
BZ-ULG	(US\$/tonne)					(60.0)	(50.0)	(50.0)

Sources: Bloomberg, Thanachart estimates

Given the above changes in our key assumptions, plus a few minor adjustments, we have revised our earnings forecasts and TP as follows:

Ex 2: Our Earnings And TP Revisions

(Bt/shr)	Norm EPS			TP	REC
	2023F	2024F	2025F		
New					
BANPU	0.96	0.80	0.56	7.00	SELL
BCP	6.50	6.17	6.57	45.00	BUY
ESSO	1.54	1.26	1.57	11.50	BUY
IRPC	0.14	0.13	0.16	1.90	SELL
OR	0.89	0.88	0.91	17.50	SELL
PTT	3.42	3.13	3.02	31.00	SELL
PTTEP	19.70	19.28	18.45	187.00	BUY
PTTGC	1.06	2.17	3.03	37.00	HOLD
SPRC	0.94	0.79	0.74	9.80	HOLD
TOP	7.70	5.52	8.82	56.00	BUY
SCC	19.86	27.98	33.93	390.00	BUY
Old					
BANPU	0.98	0.75	0.53	6.50	SELL
BCP	4.90	6.05	6.48	42.00	BUY
ESSO	1.37	1.29	1.16	10.50	BUY
IRPC	0.17	0.25	0.29	3.10	BUY
OR	0.89	0.97	1.01	19.00	SELL
PTT	3.42	3.13	3.02	31.00	SELL
PTTEP	17.19	17.12	15.90	170.00	BUY
PTTGC	2.18	3.74	4.60	41.00	HOLD
SPRC	1.15	1.15	0.88	12.50	BUY
TOP	5.56	5.37	8.65	58.00	BUY
SCC	22.76	35.72	47.23	410.00	BUY
Change (%)					
BANPU	(1.7)	6.4	5.5	7.7	Maintain
BCP	32.6	1.9	1.4	7.1	Maintain
ESSO	12.0	(2.5)	34.6	9.5	Maintain
IRPC	(18.7)	(45.8)	(45.0)	(38.7)	Downgrade
OR	0.0	(9.4)	(9.4)	(7.9)	Maintain
PTT	0.0	0.0	0.0	0.0	Maintain
PTTEP	14.6	12.6	16.0	10.0	Maintain
PTTGC	(51.1)	(42.0)	(34.1)	(9.8)	Maintain
SPRC	(17.8)	(31.4)	(16.1)	(21.6)	Downgrade
TOP	38.5	2.8	1.9	(3.4)	Maintain
SCC	(12.7)	(21.6)	(28.2)	(4.9)	Maintain

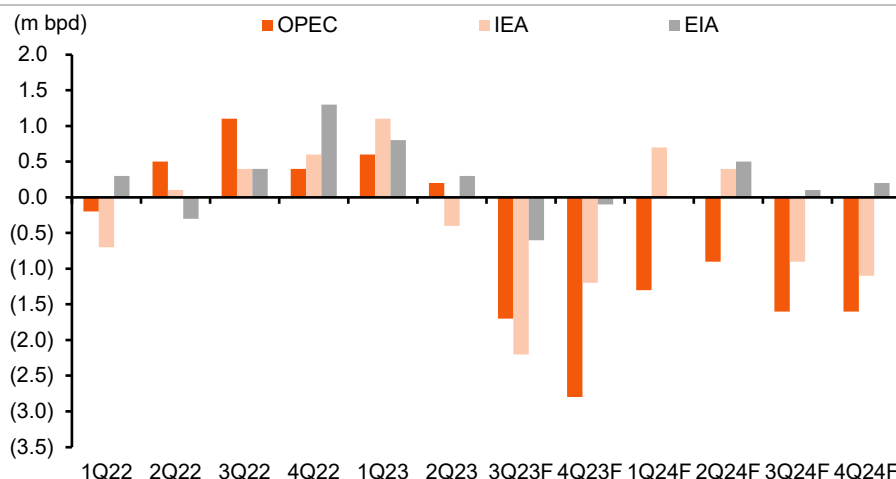
Sources: Thanachart estimates

Upstream – supply management

We raise our Brent oil price assumptions to US\$83/80/78/bbl in 2023-25F, respectively

In terms of the oil price outlook, we expect the global oil market to experience a degree of supply management to help maintain oil prices at elevated levels. The recent announcement by OPEC and its allies to extend production cuts until Dec. 2023 reaffirms our positive view. We raise our Brent oil price assumptions by US\$2-3/bbl to US\$83/80/78/bbl in 2023-25F, respectively. We expect prices to stay in a high range due to OPEC's clear intention to manage output in case a lack of demand puts too much pressure on prices. Therefore, we see limited downside risk to oil prices despite the risk of a global economic slowdown next year after a series of interest rate hikes this year.

Ex 3: Key Agencies Expect A Tighter Market Balance In 2024F



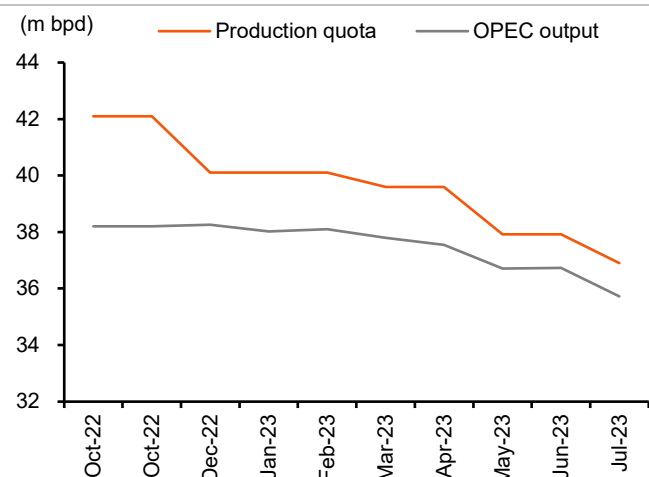
Sources: Bloomberg

Saudi and Russia extend cuts

Extra output cuts will continue to support the oil market

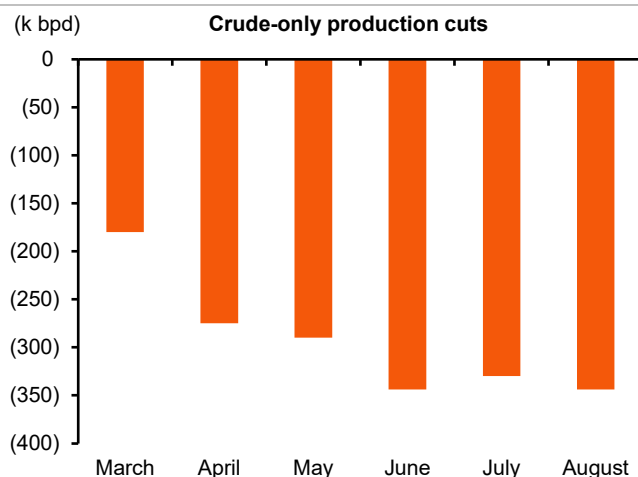
Saudi Arabia announced that it would extend its voluntary supply cut of 1m bpd until the end of the year. Similarly, Russia said that it would extend its export cut of 300k bpd through to end-2023. While it was largely expected that these voluntary cuts would be extended, expectations were for a one-month extension rather than three months. Originally, Saudi Arabia had proposed an additional 1m bpd supply cut as a July-only event. This would leave the market with a deeper-than-expected deficit over the fourth quarter of 2023, which should continue to support prices. The current production cuts will keep the oil market tight, thereby providing support for oil prices.

Ex 4: OPEC Production Vs. Quota



Source: Bloomberg

Ex 5: Russia Oil Output Was 344k bpd Lower From Feb



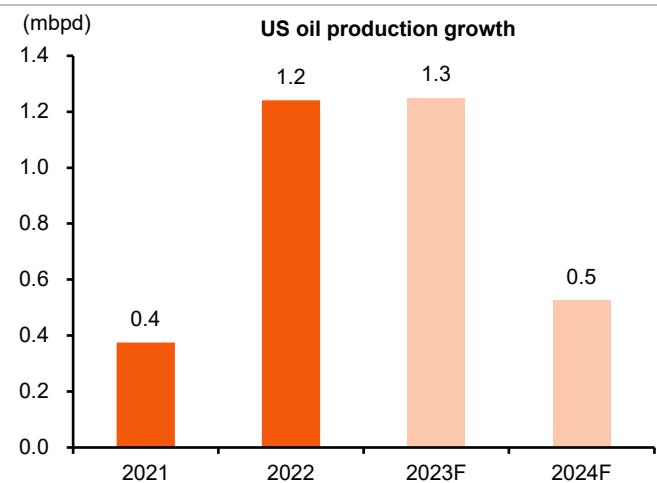
Source: Bloomberg

Decelerating shale oil output growth

US oil output growth to slow in 2024F

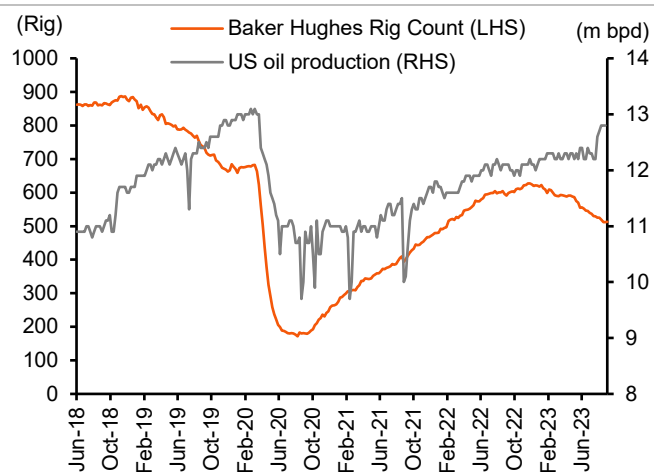
US crude oil production levels reached its highest production level since 2019 at 12.8m bpd in the week ending Sep. 1, according to the latest weekly EIA estimates. US production levels are now up c.700,000 bpd vs. a year ago. However, we expect US shale output growth to level off in 2024F. The U.S. Energy Information Administration (EIA) forecasts US production growth to slow to 0.5m bpd in 2024F from 1.25m bpd in 2023F. The global oil rig count is also on a declining trend pointing towards lower production. According to data from Baker Hughes, the current US crude oil rig count is at 570, which is far lower than the 1,600 rigs running around mid-2014 at the peak of the shale boom. Moreover, rising costs as well as limited supplies of labor and equipment will continue to be key challenges for US shale producers to quickly ramp up production.

Ex 6: Shale Oil Production



Source: IEA

Ex 7: Baker Hughes' Oil Rig Count and US Oil Production



Source: Bloomberg

Downstream – diverging paths

Mixed outlooks in downstream sectors

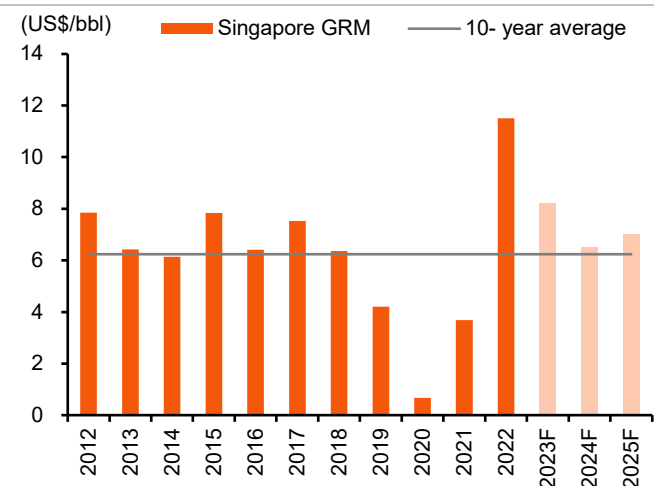
We are very positive on the polyethylene chain and expect the polyethylene market to recover next year on our expectation of the end of the supply cycle in 2024F. However, PP and PET will continue to be under pressure from large capacity additions. For refinery, despite the upcoming high season in 4Q23F, we turn cautious and expect the GRM to fall to mid-cycle next year as given the absence of cyclical factors and higher supply growth. Our new Singapore GRM forecasts are \$8.2/6.5/7.0/bbl in 2023-25F, respectively.

Refiners – Less positive on GRM outlook

We cut our 2024-25F GRM assumptions

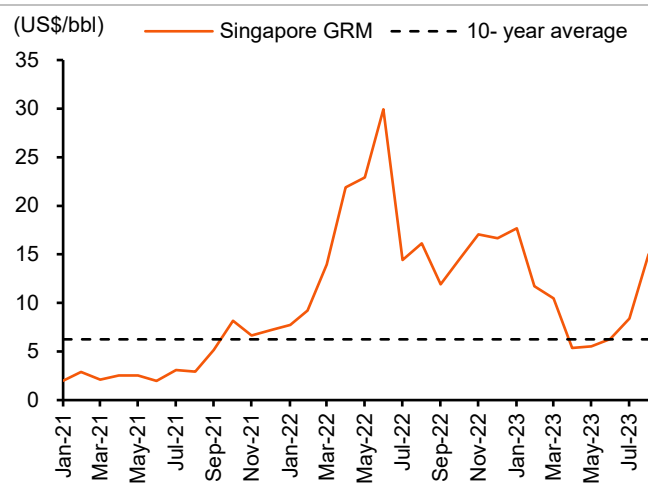
The refinery margin has rallied substantially to US\$10/bbl in 3QTD, which is well above the average of US\$4/bbl in 2Q23 and mid-cycle average of US\$5-6/bbl. We think this is not a sustainable level as it is supported by cyclical factors. We are turning more cautious on the refinery market in 2024F and now expect the benchmark Singapore GRM to normalize to the mid-cycle level vs. above mid-cycle previously. We expect excess market supply next year as a result of new capacity additions that will likely outstrip the additional demand. We raise the Singapore GRM to US\$8.2/bbl (from US\$7.5) in 2023F but trim it to US\$6.5/7.0/bbl (from US\$7.3/7.3/bbl) in 2024-25F.

Ex 8: Singapore GRM Forecast



Sources: Company data, Thanachart estimates

Ex 9: GRM Spread

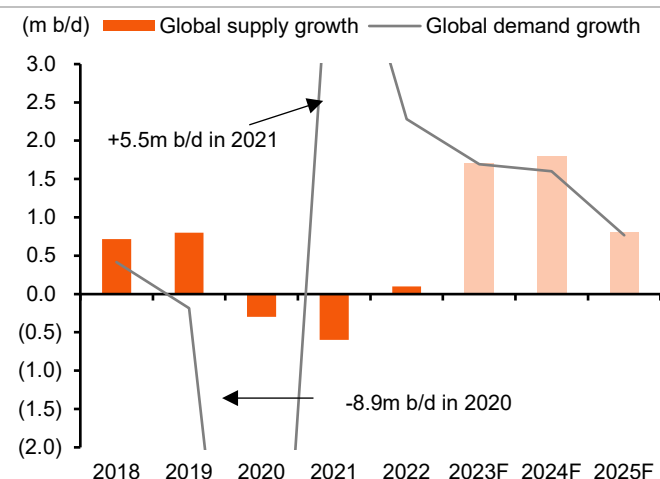


Sources: Bloomberg, Thanachart estimates

Higher supply growth in 2024F

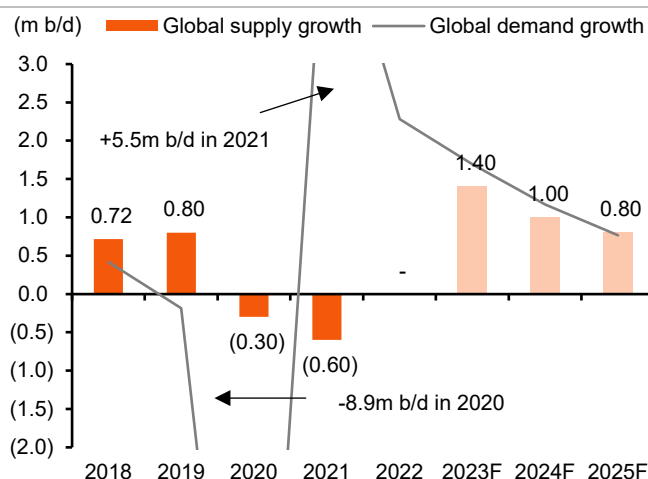
Due to the delayed start-up of some plants, new capacity additions have been pushed back. Based on Thai Oil's data, the global refining capacity addition is expected at 1.8m bpd in 2024F vs. 1.2m bpd previously. This is higher than the demand growth of 1.6m bpd. We expect tightness in the market to ease in the first half of 2024 as new refining capacity comes online, most notably Nigeria's Dangote refinery with capacity of 650k bpd.

Ex 10: New Forecasts – Refinery Global Demand-Supply



Sources: TOP, Thanachart estimates

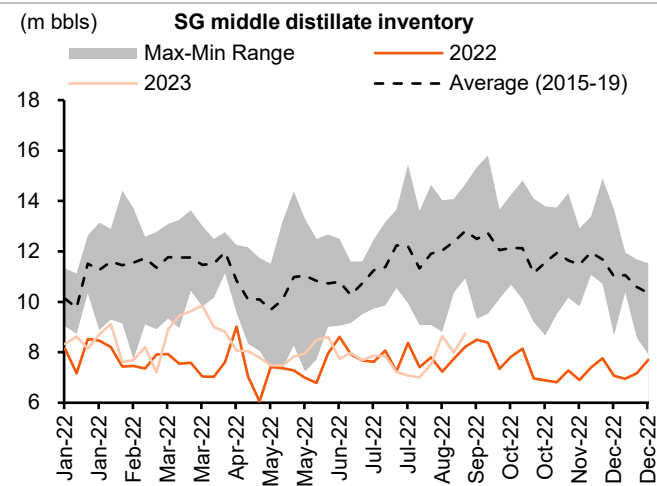
Ex 11: Prior Forecasts – Refinery Global Demand-Supply



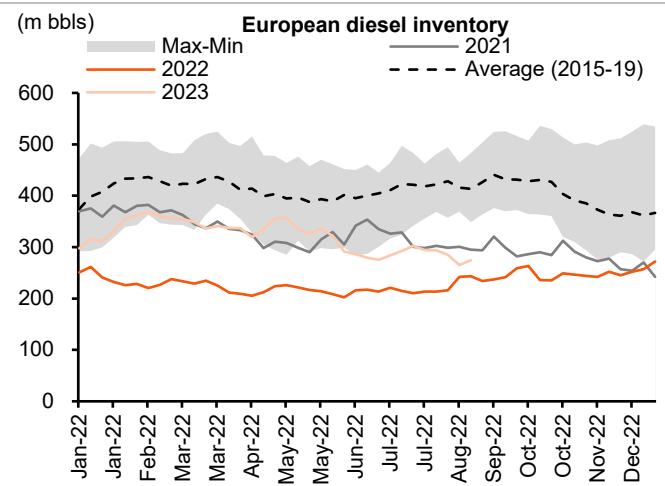
Sources: TOP, Thanachart estimates

Lean inventory to support GRM at decent level

Although supply growth forecasts will surpass demand growth forecasts next year, we expect the GRM to remain healthy, at around mid-cycle levels. This is supported by low global inventory, especially in the middle distillate market. Note that there could be a possibility of further delays given that the Dangote refinery start-up was initially expected July this year.

Ex 12: Singapore Middle Distillate Inventory

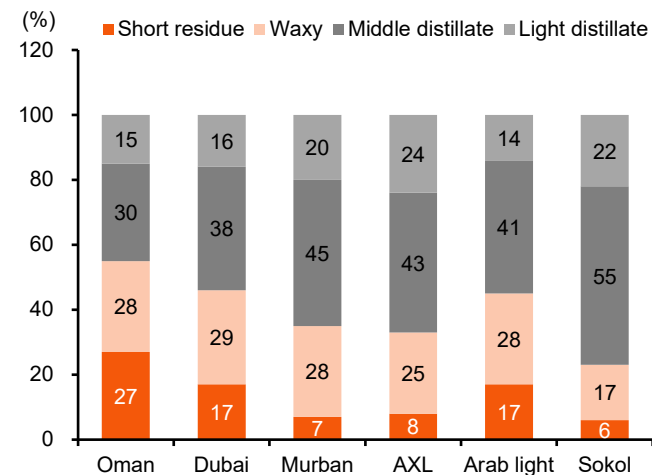
Source: Bloomberg

Ex 13: Europe Diesel Inventory

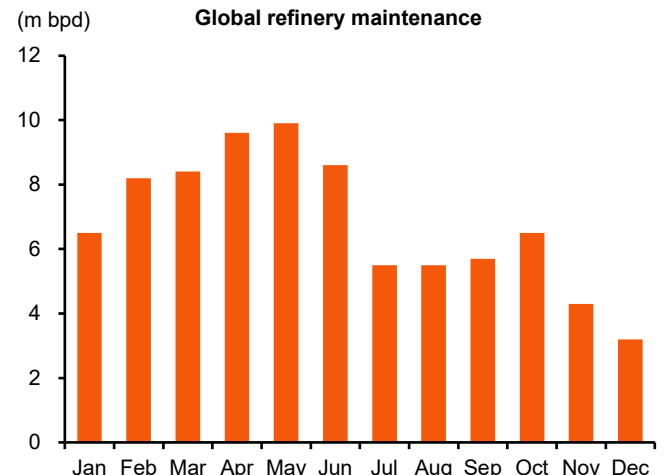
Source: Bloomberg

Cyclical strength in diesel spread in 2H23F

The middle distillate market has led the GRM rally. Diesel crack traded at \$29/bbl in Sep. vs. US\$14/bbl in 2Q23. The diesel crack spread rally was supported by several positive factors which included the planned and unplanned shutdown of global refineries, a severe heatwave and most importantly Saudi Arabia's voluntary crude supply cut that led to lower availability of medium crude which has a high diesel yield (please see exhibit 14). We expect the refinery margin to continue to remain high over the next few months, supported by the extension of Saudi Arabia's extra supply cut until Dec 23, slower pace of refinery start-ups and seasonal demand growth.

Ex 14: Refinery Product Yield For Key Crudes

Source: TOP

Ex 15: Global Refinery Maintenance

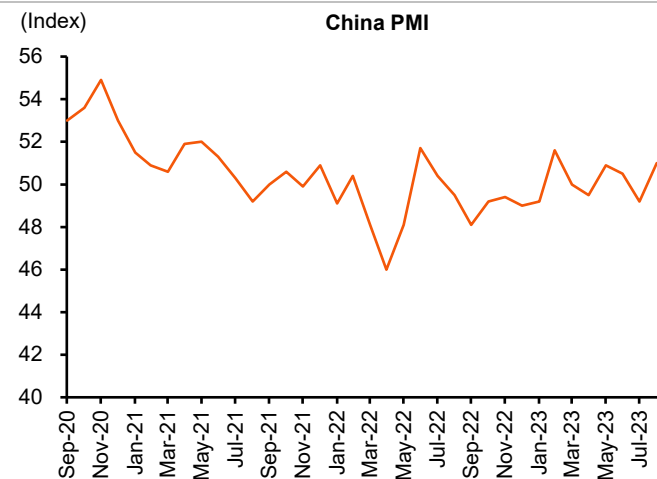
Source: TOP

Chemical – Rising from the bottom

We cut our chemical spread assumptions over 2023-25F

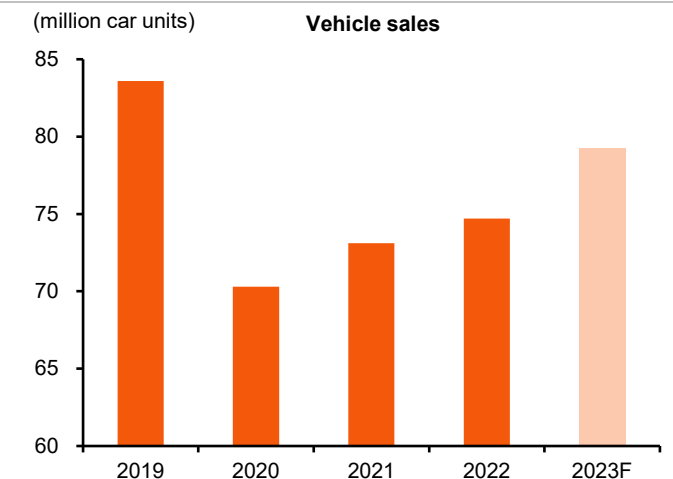
China's reopening did not lead to a strong rebound in chemical spreads and has been below our expectation YTD. Demand for the majority of products has proven fragile due in part to the weak Chinese economy. However, we maintain our longer-term view as chemical spreads are already at the low end of their historical ranges, and we expect a recovery as heavy supply pressure fades. The margin levels for several products are now at their lowest level for the past 10 years.

Ex 16: China PMI



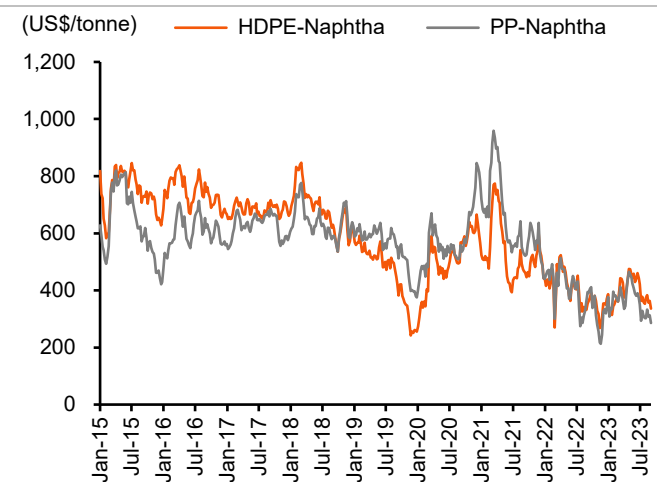
Source: Bloomberg

Ex 17: Global Vehicle Sales Still Below 2019 Level



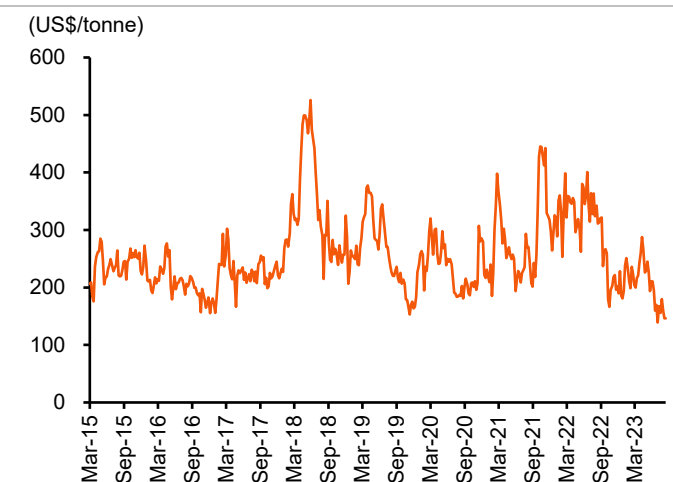
Source: Bloomberg

Ex 18: PE/PP- Naphtha



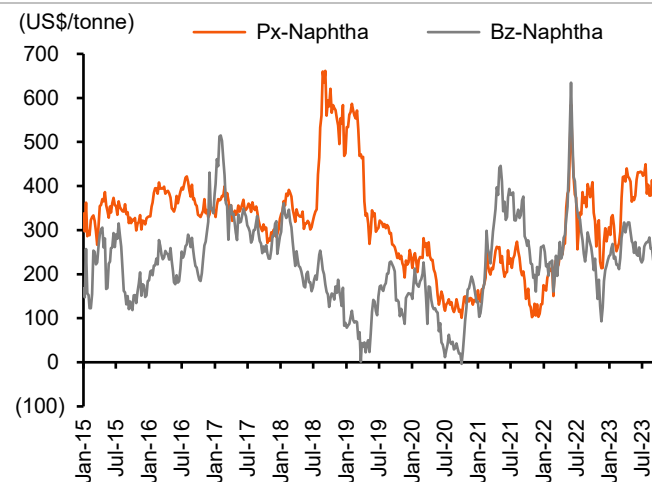
Source: Bloomberg

Ex 19: Asia Integrated PET



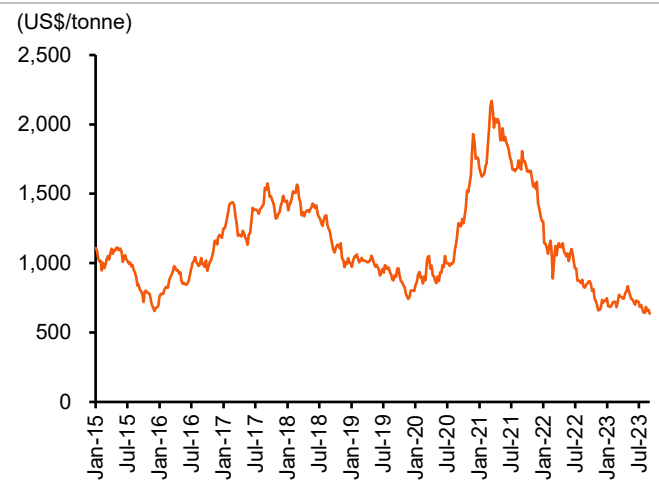
Source: Bloomberg

Ex 20: Px, Bz Over Naphtha



Source: Bloomberg

Ex 21: ABS Over Naphtha



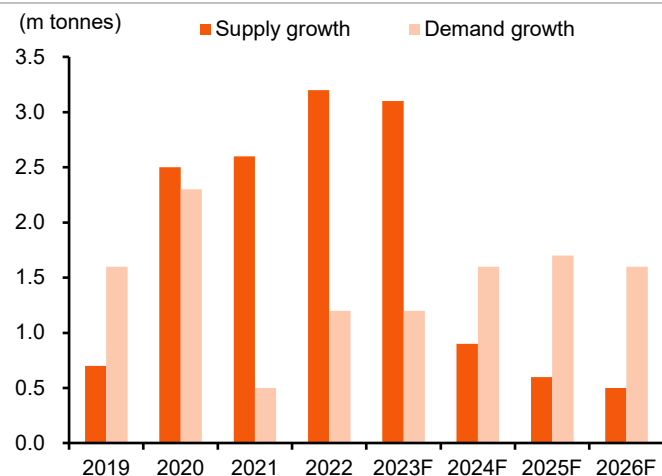
Source: Bloomberg

PE market has the best potential to recover

PE – heavy capacity addition to peak in 2023F

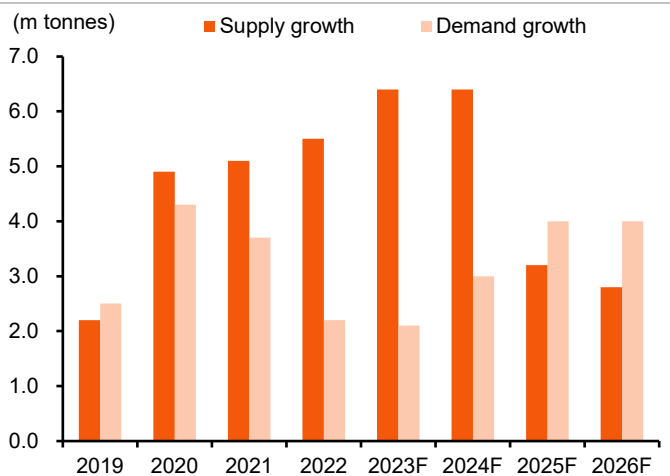
Within the chain, we expect polyethylene (PE) to see the least new supply. The HDPE-naphtha spread peaked in 2016 at US\$740/tonne and fell to US\$391 in 2022, hitting its trough at US\$336 in 4Q22. The spread has averaged US\$393 YTD. Due to China's weak economic momentum, we cut our HDPE-naphtha spread assumptions by US\$20-30/tonne to US\$400/450/530/tonne in 2023-25F, but maintain a turnaround view for 2024F. Unless there is an extra push from stimulus policies in China, we believe that PET, PP and ABS spreads are likely to remain weak in 2024F due to still large capacity additions.

Ex 22: Global HDPE Demand Vs. Supply Growth

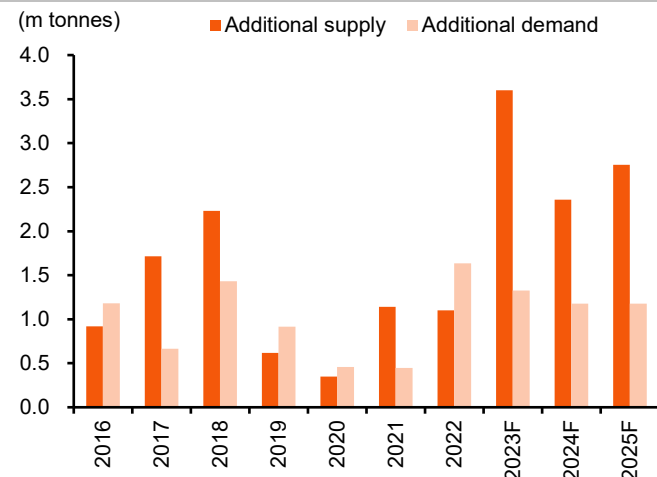


Source: IIRPC

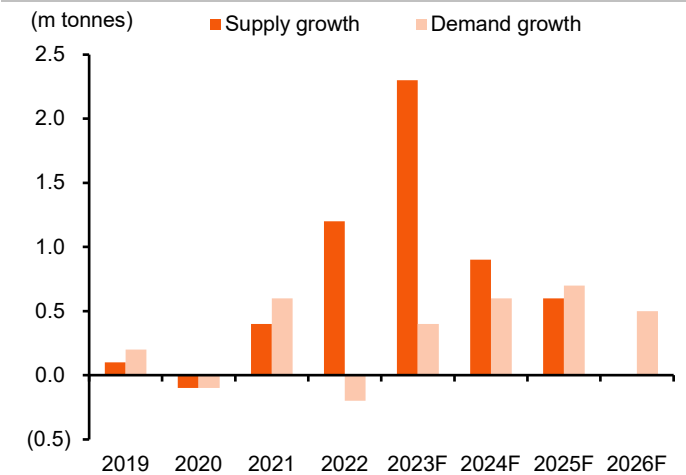
Ex 23: Global PP Demand Vs. Supply Growth



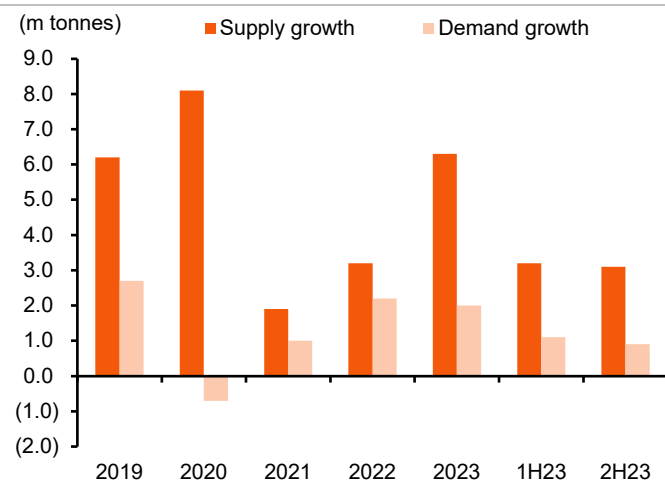
Source: IIRPC

Ex 24: Global PET Demand Vs. Supply Growth

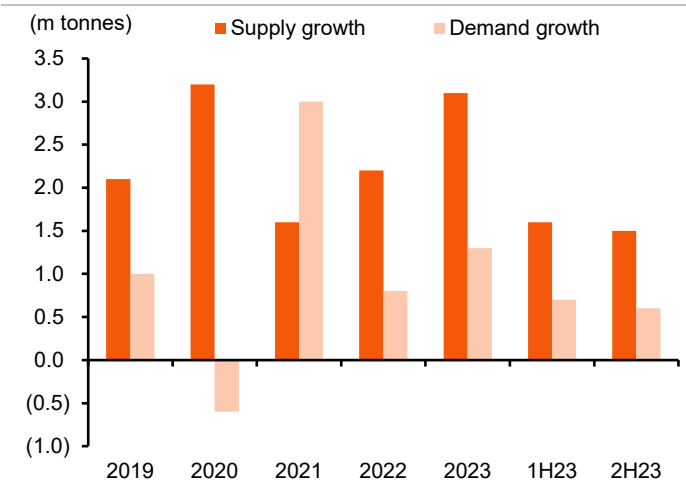
Source: IVL

Ex 25: Global ABS Demand Vs. Supply Growth

Source: IRPC

Ex 26: Global Px Demand Vs. Supply Growth

Source: TOP

Ex 27: Global Bz Demand Vs. Supply Growth

Source: TOP

SCC has the best product mix out of the companies under our Thai chemical sector coverage

We believe that SCC has the best chance of emerging from the trough of the chemical cycle out of the Thai chemical companies under our coverage, given limited exposure to the products that are likely to remain in oversupply in 2024F. SCC's key product is polyethylene which accounts for around 40% of SCC's existing polyolefins capacity. Accordingly, we consider SCC's chemical EBITDA as relatively more defensive than that of PTTGC (exposed to phenol, BPA, PO), IRPC (exposed to PP and ABS) and IVL (exposed to PET).

Ex 28: Sector Valuation Comparison

		BANPU	BCP	ESSO	IRPC	OR	PTT	PTTEP	PTTGC	SPRC	TOP	SCC	Industry
Rating		SELL	BUY	BUY	SELL	SELL	SELL	BUY	HOLD	HOLD	BUY	BUY	
Target price (Bt)	Thanachart	7.00	45.00	11.50	1.90	17.50	31.00	187.00	37.00	9.80	56.00	390.00	
	Consensus	9.45	43.11	11.15	2.66	25.09	38.21	174.16	43.99	11.03	62.53	343.56	
Consensus rec.	BUY	2	9	5	6	14	16	17	9	16	21	12	
	HOLD	5	6	1	10	5	6	12	11	5	4	10	
	SELL	4	0	1	7	4	3	2	5	0	2	2	
Sales (Bt m)	2022	272,270	312,202	263,000	318,396	789,785	3,367,203	331,350	678,267	285,264	529,589	569,609	7,716,936
	2023F	188,297	301,021	169,343	309,318	681,396	3,202,210	292,018	620,071	237,038	421,764	582,221	7,004,697
	2024F	174,115	291,994	165,990	315,310	649,502	3,076,390	302,182	603,527	222,363	389,795	662,682	6,853,851
	2025F	168,844	310,374	165,990	301,116	665,843	3,022,530	307,376	593,804	194,283	383,027	704,146	6,817,332
Norm profits (Bt m)	2022	55,712	15,337	11,007	1,869	10,326	108,916	90,721	17,381	8,538	37,825	21,382	379,014
	2023F	8,984	8,953	5,315	2,815	10,720	97,617	78,196	4,799	4,093	17,196	23,836	262,523
	2024F	8,153	8,496	4,359	2,753	10,536	89,428	76,542	9,786	3,408	12,319	33,580	259,360
	2025F	5,672	9,045	5,418	3,255	10,968	86,204	73,247	13,675	3,213	19,683	40,711	271,092
Sales growth (%)	2022	104.4	56.6	57.3	35.4	54.3	49.1	51.3	45.8	65.4	53.3	7.5	52.8
	2023F	(30.8)	(3.6)	(35.6)	(2.9)	(13.7)	(4.9)	(11.9)	(8.6)	(16.9)	(20.4)	2.2	(13.4)
	2024F	(7.5)	(3.0)	(2.0)	1.9	(4.7)	(3.9)	3.5	(2.7)	(6.2)	(7.6)	13.8	(1.7)
	2025F	(3.0)	6.3	0.0	(4.5)	2.5	(1.8)	1.7	(1.6)	(12.6)	(1.7)	6.3	(0.8)
Norm EPS growth (%)	2022	476.4	234.0	na	(52.2)	(6.2)	22.7	111.5	(38.6)	na	561.1	(54.5)	139.4
	2023F	(86.8)	(41.6)	(51.7)	50.6	3.8	(10.4)	(13.8)	(72.4)	(52.1)	(57.0)	11.5	(29.1)
	2024F	(16.8)	(5.1)	(18.0)	(2.2)	(1.7)	(8.4)	(2.1)	103.9	(16.7)	(28.4)	40.9	4.1
	2025F	(30.4)	6.5	24.3	18.2	4.1	(3.6)	(4.3)	39.7	(5.7)	59.8	21.2	11.8
Operating margin (%)	2022	31.1	12.6	5.1	0.3	1.3	8.6	48.9	2.2	3.8	9.4	1.5	11.3
	2023F	8.8	6.4	3.6	1.2	1.5	6.6	47.5	1.2	2.2	6.0	4.5	8.1
	2024F	8.7	6.1	3.5	1.1	1.5	7.2	44.3	2.1	1.6	4.9	6.1	7.9
	2025F	7.1	6.1	4.2	1.4	1.5	7.7	41.8	2.9	1.6	7.3	7.6	8.1
ROE (%)	2022	56.5	26.4	47.4	2.2	10.1	10.6	20.6	5.7	23.4	27.3	5.8	21.5
	2023F	7.1	13.6	18.8	3.5	10.0	9.1	16.0	1.6	10.4	10.7	6.2	9.7
	2024F	5.9	11.9	14.2	3.4	9.3	8.1	14.4	3.3	8.3	7.3	8.3	8.6
	2025F	4.0	11.6	15.9	3.9	9.1	7.6	12.8	4.5	7.5	11.0	9.6	8.9
Dividend yield (%)	2022	14.5	6.0	5.1	3.2	1.7	5.8	5.6	2.8	12.3	7.7	2.6	6.1
	2023F	3.1	4.1	3.1	1.7	1.8	5.8	5.5	2.1	3.4	5.0	4.8	3.7
	2024F	2.4	3.8	3.6	1.4	1.7	5.8	5.2	2.3	2.3	3.8	4.5	3.3
	2025F	1.7	4.2	4.5	1.9	1.8	5.8	4.9	3.3	2.6	4.5	5.5	3.7
P/BV (x)	2022	0.6	0.8	1.2	0.6	2.3	0.9	1.4	0.5	1.0	0.7	1.0	1.0
	2023F	0.6	0.7	1.2	0.6	2.2	0.9	1.3	0.5	1.0	0.6	0.9	1.0
	2024F	0.6	0.7	1.1	0.6	2.0	0.9	1.2	0.5	0.9	0.6	0.9	0.9
	2025F	0.6	0.6	0.9	0.5	1.9	0.9	1.1	0.5	0.9	0.6	0.9	0.9
Norm PE (x)	2022	1.1	3.3	3.1	24.3	23.0	9.0	7.2	9.1	4.6	2.7	17.4	9.5
	2023F	8.6	5.7	6.4	16.1	22.2	10.1	8.4	33.1	9.5	6.2	15.6	12.9
	2024F	10.3	6.0	7.8	16.5	22.6	11.0	8.5	16.2	11.5	8.7	11.1	11.8
	2025F	14.8	5.7	6.3	13.9	21.7	11.4	8.9	11.6	12.1	5.4	9.1	11.0
EV/EBITDA (x)	2022	1.8	1.7	4.3	12.7	12.6	3.8	2.6	9.7	3.7	4.0	16.7	6.7
	2023F	5.7	3.4	5.7	9.6	13.7	4.5	2.6	11.5	5.3	7.7	11.2	7.4
	2024F	5.8	3.8	5.6	9.8	13.8	4.1	2.5	9.4	5.9	10.3	8.9	7.3
	2025F	5.7	3.5	4.4	7.8	12.8	3.6	2.5	8.0	5.8	7.3	7.3	6.2
Net D/E (x)	2022	0.9	0.4	1.3	0.9	(0.1)	0.5	(0.0)	0.8	0.2	0.8	0.6	0.6
	2023F	0.9	0.6	0.6	0.8	(0.2)	0.5	(0.2)	0.7	0.0	0.9	0.6	0.5
	2024F	0.9	0.7	0.5	0.9	(0.2)	0.4	(0.2)	0.7	(0.1)	0.9	0.6	0.5
	2025F	0.9	0.6	0.3	0.8	(0.2)	0.3	(0.2)	0.6	(0.1)	0.8	0.5	0.4

Sources: Company data; Thanachart estimates

Valuation Comparison

Ex 29: Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F	24F	23F	24F	23F	24F	23F	24F	23F	24F	23F	24F
			(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)	(%)	(%)
Refining & Marketing														
Ampol	ALD AU	Australia	(10.8)	(4.0)	12.0	12.5	2.3	2.2	7.2	7.2	6.1	5.5	18.6	18.6
BPCL	BPCL IN	India	(66.3)	na	23.2	5.0	1.4	1.2	13.8	5.2	1.9	6.9	3.3	24.5
HPCL	HPCL IN	India	na	na	na	3.7	1.3	1.0	na	6.5	3.8	8.3	na	28.8
IOCL	IOCL IN	India	(72.5)	na	19.3	6.1	1.0	0.9	11.6	5.7	4.0	8.8	5.2	17.0
Reliance Industries	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
SK Energy	096770 KS	S.Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1	3.2	8.6
S-OIL	010950 KS	S.Korea	(54.9)	30.4	8.7	6.7	1.0	0.9	5.6	4.8	3.1	3.8	11.6	14.2
Formosa Petrochemical	6505 TT	Taiwan	(30.0)	31.3	38.9	29.6	2.4	2.3	21.4	15.5	1.9	2.4	5.8	7.5
Bangchak *	BCP TB	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
ESSO (Thailand) *	ESSO TB	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
IRPC Pcl *	IRPC TB	Thailand	50.6	(2.2)	16.1	16.5	0.6	0.6	9.6	9.8	1.7	1.4	3.5	3.4
PTT Oil And Retail *	OR TB *	Thailand	3.8	(1.7)	22.2	22.6	2.2	2.0	13.7	13.8	1.8	1.7	10.0	9.3
PTG Pcl *	PTG TB	Thailand	4.0	18.5	17.3	14.6	1.9	1.8	4.4	3.8	2.6	3.1	11.5	12.8
PTT Global Chemicals *	PTTGC TB	Thailand	(72.4)	103.9	33.1	16.2	0.5	0.5	11.5	9.4	2.1	2.3	1.6	3.3
Star Petroleum Refining *	SPRC TB	Thailand	(52.1)	(16.7)	9.5	11.5	1.0	0.9	5.3	5.9	3.4	2.3	10.4	8.3
Thai Oil *	TOP TB	Thailand	(57.0)	(28.4)	6.2	8.7	0.6	0.6	7.7	10.3	5.0	3.8	10.7	7.3
Average			(34.0)	22.3	17.3	11.7	1.3	1.2	9.3	7.6	3.1	4.0	9.1	12.4
Integrated oils														
PetroChina	857 HK	China	3.5	(2.4)	7.2	7.4	0.8	0.7	3.8	3.8	6.8	6.4	11.0	9.5
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Total	FP	France	(31.3)	(3.8)	na	na	na	na	na	na	na	na	20.5	17.3
Eni	ENI IM	Italy	(34.6)	(7.4)	6.1	6.6	0.9	0.8	3.1	3.2	6.2	6.4	14.0	12.4
Repsol	REP SM	Spain	(23.0)	(20.9)	4.5	5.7	0.7	0.7	2.8	3.0	4.7	5.0	16.5	11.2
Chevron Texaco	CVX US	USA	(29.1)	9.2	12.4	11.4	2.0	1.9	6.5	6.2	3.6	3.8	15.6	15.8
Exxon Mobil	XOM US	USA	(33.7)	(0.9)	12.6	12.7	2.3	2.2	6.7	6.9	3.2	3.3	18.1	16.1
Conoco Philips	COP US	USA	(37.1)	13.4	14.2	12.5	3.1	2.9	6.2	5.9	1.7	2.1	22.0	22.5
PTT Pcl *	PTT TB	Thailand	(10.4)	(8.4)	10.1	11.0	0.9	0.9	4.5	4.1	5.8	5.8	9.1	8.1
Average			(20.9)	(1.7)	9.3	9.3	1.4	1.3	4.9	4.8	5.2	5.3	15.1	13.6
Exploration and Production														
Santos	STO AU	Australia	(41.5)	(0.9)	16.9	17.0	1.7	1.6	4.9	4.9	2.5	2.3	10.0	9.2
Woodside	WDS AU	Australia	(50.0)	(1.5)	21.1	21.5	2.0	2.0	5.2	4.9	3.6	3.6	9.2	8.7
Suncor Energy	SU US	Canada	(38.5)	14.7	6.9	6.0	1.1	1.0	4.7	4.5	6.1	6.4	15.7	15.6
ONGC	ONGC IN	India	10.9	(4.5)	4.8	5.0	0.8	0.7	4.0	3.7	8.6	7.3	18.0	15.9
RIL	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
Apache	APA US	USA	(43.7)	21.7	9.7	8.0	10.0	6.1	3.9	3.7	2.2	2.4	na	na
Devon Energy	DVN US	USA	(33.9)	15.9	9.4	8.1	2.8	2.5	5.3	4.9	1.5	2.3	30.6	32.4
PTTEP *	PTTEP TB	Thailand	(13.8)	(2.1)	8.4	8.5	1.3	1.2	2.6	2.5	5.5	5.2	16.0	14.4
Average			(24.7)	6.7	11.0	10.6	2.8	2.1	4.4	4.2	4.3	4.2	15.4	15.0

Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

STOCK PERFORMANCE

	Absolute (%)				Rel SET (%)			
	1M	3M	12M	YTD	1M	3M	12M	YTD
SET INDEX	0.4	(0.7)	(7.5)	(7.7)	—	—	—	—
Energy Sector	(4.9)	0.4	(18.1)	(14.2)	(5.3)	1.1	(10.6)	(6.5)
BANPU	(11.8)	(5.7)	(42.3)	(39.8)	(12.1)	(5.0)	(34.8)	(32.1)
BCP	(3.2)	8.0	12.0	18.3	(3.6)	8.6	19.5	25.9
ESSO	5.4	9.5	(27.4)	(22.2)	5.0	10.2	(19.9)	(14.6)
IRPC	(7.5)	(6.7)	(32.7)	(26.5)	(7.9)	(6.0)	(25.2)	(18.8)
OR	(3.4)	(4.8)	(28.0)	(16.8)	(3.8)	(4.1)	(20.5)	(9.2)
PTT	(3.5)	8.7	(6.1)	3.8	(3.9)	9.3	1.4	11.4
PTTEP	(0.9)	8.6	0.9	(6.8)	(1.3)	9.3	8.4	0.9
PTTGC	(10.8)	(8.4)	(21.2)	(25.4)	(11.1)	(7.8)	(13.7)	(17.7)
SCC	(2.2)	(6.9)	(12.4)	(9.4)	(2.6)	(6.2)	(4.9)	(1.7)
SPRC	(4.3)	(1.1)	(26.8)	(15.9)	(4.6)	(0.4)	(19.3)	(8.2)
TOP	(11.6)	3.8	(15.1)	(15.1)	(12.0)	4.5	(7.6)	(7.5)

Source: Bloomberg

SECTOR - SWOT ANALYSIS

S — Strength

- Synergies within the PTT group could help lower costs and increase competitiveness via integration.
- Strong balance sheets should enable Thai energy companies to take advantage of low oil prices in M&As.

O — Opportunity

- Thai refineries, i.e. TOP, IRPC and PTTGC, have room for further downstream expansion into the higher value-added plastic pellets market.
- Overseas acquisitions that could drive growth and value.

W — Weakness

- High cost of E&P operation in Thailand.
- Earnings and cash flows are highly volatile, following fluctuations in global oil prices.

T — Threat

- Cheap imported LNG is a major threat to local gas producers, including PTTEP.
- Regulatory risk, i.e. price caps.

REGIONAL COMPARISON

Name	—EPS growth—		— PE —		— P/BV —		— EV/EBITDA —		— Div. Yield —	
	23F	24F	23F	24F	23F	24F	23F	24F	23F	24F
	(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)
Australia	(34.1)	(2.1)	16.7	17.0	2.0	1.9	5.8	5.7	4.1	3.8
China	5.4	1.6	7.1	7.0	0.7	0.7	4.6	4.4	8.1	7.9
India	(20.5)	5.2	15.8	4.9	1.1	1.0	9.8	5.3	4.6	7.8
S.Korea	(63.2)	101.3	15.9	7.6	0.9	0.8	7.7	5.5	2.6	3.0
USA	(35.5)	11.9	11.7	10.5	4.0	3.1	5.7	5.5	2.4	2.8
Thailand	(24.1)	4.0	13.5	12.3	1.1	1.0	6.8	6.9	3.5	3.3
Average	(28.7)	20.3	13.4	9.9	1.6	1.4	6.7	5.5	4.2	4.8

Sources: Bloomberg Consensus

Note: * Thanachart estimate – using normalized EPS

SELL (Unchanged)

Change in Numbers

TP: Bt 7.00 (From: Bt 6.50)

Downside : 15.2%

12 SEPTEMBER 2023

Banpu Public Co Ltd (BANPU TB)

Unsolved structural issues

We reaffirm SELL on BANPU but raise our TP to Bt7.0 from Bt6.5 as we factor in the Temple II acquisition. BANPU is still making low returns in a high coal-price environment due to its persistently high cost structure.



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Maintain SELL

This report is a part of *Energy Sector – Weaker fundamental dynamics, dated 12 September 2023*. We maintain our SELL on BANPU. **First**, despite the upcoming winter season that would be beneficial for gas and coal prices in 4Q23, our view on coal price declining over the next three years remains unchanged. **Second**, we expect production cost to remain structurally high for BANPU due to the high-cost base of its underground coal mine in Australia. In the near term, rising oil prices should also increase costs for its Indonesian coal mines. **Finally**, with both pricing trend and the cost base being unfavourable for BANPU, we forecast an earnings contraction trend of 87/17/30% in 2023-25F. Note that in this report we change BANPU's earnings by -2/6/6% in 2023-25F and its DCF-based TP to Bt7.0 from Bt6.5 to factor in the Temple II acquisition and TP roll-over to 2024F as base year.

Short-term support of coal and gas price

While we marginally raise our NEX coal price assumptions for 2023-25F by US\$5-10/tonne to \$180/145/105/tonne, we still expect a falling price trend over the next three years. Demand for coal, considered a "dirty fuel", is on a structurally declining trend. As for gas price, the recent rise is due to the worker strike at some Australian LNG plants operated by Chevron. These plants contributed about 7% of global LNG supply last year. This is short-term factor, in our view.

Structurally high cost

BANPU made a surprising loss in 2Q23 despite the high NEX coal price of US\$163/tonne. This was due to persistently high coal-production cost at both its Australian and Indonesian mines. Coal accounted for 72% of EBITDA in 2Q23. Due to geographical difficulty, costs at the Australian coal mine have been on the rise since 2017. We estimate the breakeven NEX price for the mine at US\$170/tonne vs. only US\$70/tonne in 2017. We revise up the mine's unit cost by A\$10-15/tonne to A\$165/135/125 over 2023-25F. For the Indonesian coal mine, the high cost is attributable to high oil prices. We revise up the Indonesian mine's unit cost by US\$1-2/tonne to US\$65/58/55 over 2023-25F vs. US\$60 in 2022.

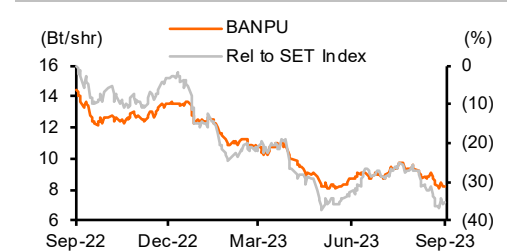
CCUS contribution to be small

BANPU will start its first carbon capture, utilisation, & sequestration (CCUS) project with capacity of 210,000 tonnes by end of 2023F and another one with capacity of 80,000 tonnes by end of 2024F. We estimate potential contribution from this project to be only Bt200m p.a. or only 2% of 2024F profit.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	272,270	188,297	174,115	168,844
Net profit	40,519	10,339	8,153	5,672
Consensus NP	—	15,423	11,568	8,151
Diff frm cons (%)	—	(33.0)	(29.5)	(30.4)
Norm profit	55,712	8,984	8,153	5,672
Prev. Norm profit	—	9,138	7,660	5,378
Chg frm prev (%)	—	(1.7)	6.4	5.5
Norm EPS (Bt)	7.3	1.0	0.8	0.6
Norm EPS grw (%)	476.4	(86.8)	(16.8)	(30.4)
Norm PE (x)	1.1	8.6	10.3	14.8
EV/EBITDA (x)	1.8	5.7	5.8	5.7
P/BV (x)	0.6	0.6	0.6	0.6
Div yield (%)	14.5	3.1	2.4	1.7
ROE (%)	56.5	7.1	5.9	4.0
Net D/E (%)	85.5	90.9	93.5	87.2

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	8.25
Market Cap (US\$ m)	1,964.3
Listed Shares (m shares)	8,454.2
Free Float (%)	90.8
Avg Daily Turnover (US\$ m)	26.3
12M Price H/L (Bt)	14.40/8.05
Sector	Energy
Major Shareholder	Vongkusolkrit family 8.34%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P18

Ex 1: Earning Revisions

	2019	2020	2021	2022	2023F	2024F	2025F
Core profit (Bt m)							
- New	2,567	(4,122)	7,520	55,712	8,984	8,153	5,672
- Old					9,138	7,660	5,378
- Change (%)					(1.7)	6.4	5.5
Net profit (Bt m)							
- New	(395)	(1,786)	9,852	40,519	10,339	8,153	5,672
- Old					13,639	7,660	5,378
- Change (%)					(24.2)	6.4	5.5
NEX coal price (US\$/tonne)							
- New	78	60	136	357	175	145	105
- Old					170	140	95
- Change (%)					5.0	5.0	10.0
Henry Hub (US\$/mmbtu)							
- New	2.5	2.3	2.7	4.5	2.7	2.8	3.0
- Old					2.7	2.8	3.0
- Change (%)					0.0	0.0	0.0
Indonesian coal ASP (US\$/tonne)							
- New	66	53	102	192	109	97	82
- Old					108	94	77
- Change (%)					1.9	3.1	5.0
Australian coal ASP (AUD/tonne)							
- New	95	81	100	211	167	150	126
- Old					164	147	121
- Change (%)					2.9	2.9	5.8
Australian coal cost (AUD/tonne)							
- New	81	77	93	132	160	135	125
- Old					145	125	110
- Change (%)					15.0	10.0	15.0

Sources: Company data, Thanachart estimates

Ex 2: 12-month DCF-based TP Calculation Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal Value
EBITDA	43,418	43,762	45,176	48,895	52,133	55,371	58,609	61,847	65,085	68,323	71,889	
Free cash flow	3,273	12,222	12,492	13,771	17,074	20,661	24,692	28,417	31,817	35,299	38,711	422,227
PV of free cash flow	2,993	10,223	9,557	9,635	10,696	11,788	12,830	13,448	13,709	13,852	13,213	144,117
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.3											
WACC (%)	9.3											
Terminal growth (%)	1.0											
Enterprise value - add investments	266,060											
Net debt (2023F)	156,870											
Minority interest	38,138											
Equity value	71,053											
# of shares (m)*	10,149											
Target price/share (Bt)	7.0											

Sources: Company data, Thanachart estimates

Valuation Comparison**Ex 3: Valuation Comparison With Regional Peers**

Company	Code	Country	EPS Growth		— PE —		— P/BV —		— EV/EBITDA —		— Div. yield —	
			23F	24F	23F	24F	23F	24F	23F	24F	23F	24F
			(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)
New Hope Corp	NHC AU	Australia	6.4	(48.7)	4.6	9.0	2.0	2.0	2.4	4.6	12.0	6.1
Whitehaven Coal Ltd	WHC AU	Australia	64.1	(68.1)	2.1	6.4	1.0	0.9	0.6	2.0	9.5	5.2
China Shenhua Energy	601088 CH	China	(12.9)	1.0	9.2	9.2	1.5	1.4	4.5	4.5	7.4	7.5
Datong Coal Industry	601001 CH	China	(39.1)	4.2	6.2	5.9	1.1	1.0	2.5	2.4	na	na
Guizhou Panjiang Ref. Coal	600395 CH	China	(36.6)	14.5	9.9	8.6	1.1	1.1	7.3	6.2	4.5	4.8
Kailuan Energy	600997 CH	China	na	na	na	na	1.1	1.0	na	na	3.6	3.9
Pingdingshan Tianan Coal	601666 CH	China	(28.3)	1.3	5.3	5.2	1.0	0.9	4.3	4.4	6.5	7.1
Yang Quan Coal Industry	600348 CH	China	(10.8)	12.5	4.9	4.4	1.0	0.9	3.5	3.4	6.3	7.0
Yanzhou Coal Mining	600188 CH	China	(35.3)	(0.5)	6.5	6.5	1.3	1.2	4.3	4.4	9.2	8.6
China Coal Energy	1898 HK	Hong Kong	(15.0)	(4.3)	3.8	4.0	0.5	0.5	2.9	3.0	7.2	6.8
Indo Tambangraya Megah	ITMG IJ	Indonesia	(39.7)	(42.7)	3.3	5.8	1.1	1.1	1.4	2.4	23.7	14.0
Bukit Asam Tbk PT	PTBA IJ	Indonesia	(54.2)	(11.5)	5.5	6.2	1.2	1.2	2.0	2.1	24.1	12.1
Semirara Mining Corp.	SCC PM	Philippines	(16.8)	(23.3)	4.4	5.7	1.9	1.6	3.1	3.6	12.6	9.7
Banpu Pcl *	BANPU TB	Thailand	(86.8)	(16.8)	8.6	10.3	0.6	0.6	5.7	5.8	3.1	2.4
Average			(23.5)	(14.0)	5.7	6.7	1.2	1.1	3.4	3.8	10.0	7.3

Sources: Bloomberg, * Thanachart estimates

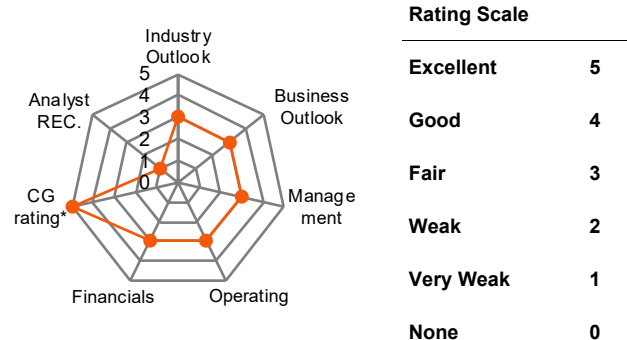
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

Banpu Pcl (BANPU) is a leading regional energy company. It operates coal mines in Indonesia, Australia and China. It also has investments in the power businesses in Thailand, Laos, China and Japan. In recent years, BANPU has significantly expanded its footprint in US shale gas as well as invested in new energy businesses, including battery (Durapower) and EV (Fomm).

Source: Thanachart

COMPANY RATING



Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Strong footprint in key coal-exporting countries (Australia, Indonesia).
- Large and growing gas operations in the US.

O — Opportunity

- BANPU could look to grow its US shale gas business after having established a firm footing.
- New energy businesses such as lithium-ion battery and nickel mining offer strong growth potential.

W — Weakness

- BANPU still relies heavily on coal despite efforts to diversify into cleaner energy.
- Relatively high financial leverage.

T — Threat

- Regulatory risk and environmental concerns.
- High coal and gas prices could accelerate the global transition away from these fuels.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	9.45	7.00	-26%
Net profit 23F (Bt m)	15,423	10,339	-33%
Net profit 24F (Bt m)	11,568	8,153	-30%
Consensus REC	BUY: 2	HOLD: 5	SELL: 4

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2023-24F net profit estimates are 30-33% lower than the Bloomberg consensus numbers, likely due to us having lower coal and gas price assumptions and higher cost.
- Our TP is consequently lower as well.

Sources: Bloomberg consensus, Thanachart estimates

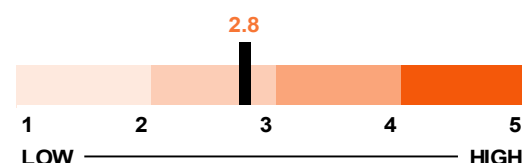
RISKS TO OUR INVESTMENT CASE

- A higher-than-expected coal or gas price environment would present the key downside risk to our earnings and TP.
- Higher-than-expected growth in the power business would present a secondary downside risk to our TP.

Source: Thanachart

BANPU produces coal in Indonesia, Australia and China. The company also produces natural gas in the US and has power plants across Asia and the US. It has a strong commitment to improving its ESG metrics. Our ESG score for BANPU is 2.84, which is slightly below the average for our energy coverage due to the nature of its business.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
BANPU	YES	YES	YES	AA	57.18	82.41	79.00	44.0	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)
Note: Please see third party on "terms of use" toward the back of this report.

Factors
Our Comments
ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- In terms of investment, BANPU targets to generate over 50% of its EBITDA from non-coal businesses by 2025 vs. about 24% in 2Q23. To achieve this goal, over 90% of its investments are made in green energy (including natural gas), renewable energy (wind, solar), as well as energy technologies (batteries, carbon capture).
- For its mining business, BANPU aims to cut energy intensity by 5% and reduce its greenhouse gas (GHG) emissions intensity by 7% from the 2021 baseline of 0.129 tonne CO₂e per tonne of finished coal. For the power business, the company wants to reduce GHG emissions intensity by 20% from the 2021 baseline of 0.555 CO₂e/MWh by 2025. The company also aims to send zero hazardous waste to landfills by 2025.
- BANPU will start its first carbon capture, utilisation, & sequestration (CCUS) project with capacity of 210,000 tonnes by end of 2023F and another one with capacity of 80,000 tonnes by end of 2024F. We see Banpu has good position to scale up CCUS project as a leading shale gas producer in the U.S.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- As of 2022, BANPU already assessed 70% of its business and its supply chain for any potential human rights risks, including occupational health and safety, labour rights and personal data protection, among others.
- BANPU is active in its CSR programme, including community development, a university scholarship programme, a local economic development programme and skills training for local youth.
- In 2022, Banpu elevated its ESG rating in "Labor Practices" and "Human Rights" to top-tier levels through the establishment of the "Nondiscrimination & Anti-harassment Policy" and conducted human rights due diligence in its power businesses in Vietnam and Thailand.

**GOVERNANCE &
SUSTAINABILITY**

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- BANPU's board of directors comprises 13 members, five of whom are independent. However, there are two females on the board.
- The company established an ESG Committee, comprising three independent directors, to support the BOD's ongoing commitment to ESG.
- 100% of material ESG aspects form part of the KPIs for the CEO and senior management across all business units.

Sources: Company data, Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	133,190	272,270	188,297	174,115	168,844
Cost of sales	76,916	142,611	138,332	127,079	125,244
Gross profit	56,274	129,659	49,966	47,036	43,600
% gross margin	42.3%	47.6%	26.5%	27.0%	25.8%
Selling & administration expenses	24,824	44,882	33,334	31,868	31,579
Operating profit	31,450	84,777	16,632	15,168	12,021
% operating margin	23.6%	31.1%	8.8%	8.7%	7.1%
Depreciation & amortization	15,895	22,207	24,404	28,249	31,741
EBITDA	47,346	106,984	41,035	43,418	43,762
% EBITDA margin	35.5%	39.3%	21.8%	24.9%	25.9%
Non-operating income	(12,846)	2,993	700	660	680
Non-operating expenses	(307)	(288)	0	0	0
Interest expense	(5,576)	(9,079)	(10,408)	(8,686)	(9,112)
Pre-tax profit	12,722	78,403	6,923	7,142	3,589
Income tax	6,372	18,379	1,564	1,981	1,358
After-tax profit	6,350	60,025	5,360	5,161	2,232
% net margin	4.8%	22.0%	2.8%	3.0%	1.3%
Shares in affiliates' Earnings	7,290	11,980	7,214	6,064	5,989
Minority interests	(6,121)	(16,293)	(3,590)	(3,072)	(2,549)
Extraordinary items	2,332	(15,193)	1,355	0	0
NET PROFIT	9,852	40,519	10,339	8,153	5,672
Normalized profit	7,520	55,712	8,984	8,153	5,672
EPS (Bt)	1.7	5.3	1.1	0.8	0.6
Normalized EPS (Bt)	1.3	7.3	1.0	0.8	0.6

We estimate earnings to trend downward over 2023-25F

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	85,437	127,405	134,787	136,654	140,844
Cash & cash equivalent	42,704	77,258	87,258	92,258	97,258
Account receivables	15,806	23,102	20,635	19,558	19,429
Inventories	3,905	5,059	4,907	4,508	4,443
Others	23,022	21,987	21,987	20,331	19,716
Investments & loans	55,806	68,619	68,619	68,619	68,619
Net fixed assets	114,167	144,829	190,626	206,176	208,235
Other assets	110,390	95,941	95,941	95,941	95,941
Total assets	365,799	436,794	489,972	507,391	513,639
LIABILITIES:					
Current liabilities:	97,191	96,185	108,916	105,043	105,977
Account payables	3,293	4,246	4,118	3,783	3,729
Bank overdraft & ST loans	39,232	15,582	18,332	19,673	19,610
Current LT debt	21,418	31,746	37,348	40,080	39,951
Others current liabilities	33,248	44,611	49,117	41,507	42,688
Total LT debt	139,747	160,178	188,447	202,232	201,579
Others LT liabilities	25,164	28,057	19,986	18,583	18,062
Total liabilities	262,102	284,420	317,350	325,859	325,618
Minority interest	24,420	34,548	38,138	41,210	43,759
Preferreds shares	0	0	0	0	0
Paid-up capital	6,766	8,454	10,149	10,149	10,149
Share premium	22,139	28,891	39,886	39,886	39,886
Warrants	0	0	0	0	0
Surplus	(17,950)	(23,698)	(23,698)	(23,698)	(23,698)
Retained earnings	68,322	104,179	108,148	113,985	117,925
Shareholders' equity	79,277	117,826	134,485	140,322	144,262
Liabilities & equity	365,799	436,794	489,972	507,391	513,639

We expect leverage to decline given the high profit and FCF

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	12,722	78,403	6,923	7,142	3,589
Tax paid	(3,165)	(13,875)	(4,334)	(2,198)	(1,584)
Depreciation & amortization	15,895	22,207	24,404	28,249	31,741
Chg In working capital	(7,025)	(7,497)	2,491	1,141	140
Chg In other CA & CL / minorities	9,283	18,859	14,491	327	8,012
Cash flow from operations	27,711	98,096	43,975	34,661	41,899
Capex	(52,539)	(52,870)	(70,200)	(43,800)	(33,800)
Right of use	(53)	(462)	0	0	0
ST loans & investments	0	0	0	0	0
LT loans & investments	(4,417)	(12,813)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	351	(2,578)	(6,716)	(1,403)	(521)
Cash flow from investments	(56,658)	(68,723)	(76,916)	(45,203)	(34,321)
Debt financing	40,793	7,150	36,621	17,858	(846)
Capital increase	8,458	8,440	12,690	0	0
Dividends paid	(1,776)	(4,736)	(6,369)	(2,316)	(1,731)
Warrants & other surplus	400	(5,674)	0	0	0
Cash flow from financing	47,875	5,179	42,942	15,542	(2,577)
Free cash flow	(24,828)	45,227	(26,225)	(9,139)	8,099

BANPU plans for capex to target its expanding gas business

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	6.5	1.1	8.6	10.3	14.8
Normalized PE - at target price (x)	5.5	1.0	7.3	8.7	12.5
PE (x)	5.0	1.6	7.4	10.3	14.8
PE - at target price (x)	4.2	1.3	6.3	8.7	12.5
EV/EBITDA (x)	4.4	1.8	5.7	5.8	5.7
EV/EBITDA - at target price (x)	4.2	1.7	5.4	5.5	5.4
P/BV (x)	0.7	0.6	0.6	0.6	0.6
P/BV - at target price (x)	0.6	0.5	0.5	0.5	0.5
P/CFO (x)	1.8	0.6	1.7	2.4	2.0
Price/sales (x)	0.5	0.3	0.4	0.4	0.4
Dividend yield (%)	5.5	14.5	3.1	2.4	1.7
FCF Yield (%)	(50.8)	71.9	(34.1)	(10.9)	9.7
(Bt)					
Normalized EPS	1.3	7.3	1.0	0.8	0.6
EPS	1.7	5.3	1.1	0.8	0.6
DPS	0.5	1.2	0.3	0.2	0.1
BV/share	11.7	13.9	13.3	13.8	14.2
CFO/share	4.7	12.9	4.7	3.4	4.1
FCF/share	(4.2)	5.9	(2.8)	(0.9)	0.8

Sources: Company data, Thanachart estimates

BANPU is trading at a premium to peers

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	86.7	104.4	(30.8)	(7.5)	(3.0)
Net profit (%)	na	311.3	(74.5)	(21.1)	(30.4)
EPS (%)	na	220.0	(79.1)	(27.7)	(30.4)
Normalized profit (%)	na	640.9	(83.9)	(9.3)	(30.4)
Normalized EPS (%)	na	476.4	(86.8)	(16.8)	(30.4)
Dividend payout ratio (%)	30.9	25.0	25.0	25.0	25.0
Operating performance					
Gross margin (%)	42.3	47.6	26.5	27.0	25.8
Operating margin (%)	23.6	31.1	8.8	8.7	7.1
EBITDA margin (%)	35.5	39.3	21.8	24.9	25.9
Net margin (%)	4.8	22.0	2.8	3.0	1.3
D/E (incl. minor) (x)	1.9	1.4	1.4	1.4	1.4
Net D/E (incl. minor) (x)	1.5	0.9	0.9	0.9	0.9
Interest coverage - EBIT (x)	5.6	9.3	1.6	1.7	1.3
Interest coverage - EBITDA (x)	8.5	11.8	3.9	5.0	4.8
ROA - using norm profit (%)	2.3	13.9	1.9	1.6	1.1
ROE - using norm profit (%)	10.6	56.5	7.1	5.9	4.0
DuPont					
ROE - using after tax profit (%)	9.0	60.9	4.2	3.8	1.6
- asset turnover (x)	0.4	0.7	0.4	0.3	0.3
- operating margin (%)	13.7	32.1	9.2	9.1	7.5
- leverage (x)	4.6	4.1	3.7	3.6	3.6
- interest burden (%)	69.5	89.6	39.9	45.1	28.3
- tax burden (%)	49.9	76.6	77.4	72.3	62.2
WACC (%)	9.3	9.3	9.3	9.3	9.3
ROIC (%)	7.8	27.4	5.2	3.8	2.4
NOPAT (Bt m)	15,699	64,904	12,875	10,961	7,474
invested capital (Bt m)	236,969	248,074	291,355	310,049	308,144

Sources: Company data, Thanachart estimates

With lower profit forecasts, we expect ROE to trend lower as well

BUY (Unchanged)

Change in Numbers

TP: Bt 45.00

Upside : 20.8%

(From: Bt 42.00)

12 SEPTEMBER 2023

Small Cap Research

Bangchak Corporation Pcl (BCPTB)

Mispriced

We reaffirm our BUY call on BCP as we think it is mispriced by the market trading at 0.7x P/BV against 12% ROE. Against the falling GRM trend next year, BCP's earnings are more resilient than peers as it will be cushioned by the ESSO acquisition.



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Undervalued; reaffirm BUY

This report is a part of *Energy Sector – Weaker fundamental dynamics, dated 12 September 2023*. We reaffirm our BUY on BCP as it is a less expensive choice in the Thai energy sector, in our view. BCP is trading on only 0.7x 2024F P/BV against an 12% ROE. It is also on only 6.0x 2024F PE vs. the energy sector's average of 8.4x. As far as earnings are concerned, against the falling GRM trend in 2024F, we forecast relatively flat earnings, which are likely to be cushioned by its 66% stake acquisition of Esso (ESSO TB, Bt9.80, BUY) without capital increase financing. On its upstream oil business, we expect oil prices to remain elevated on OPEC's supply management effort.

Earnings revisions

We revise up our earnings forecast on BCP by 33% for 2023F due to higher-than-expected oil price and GRM. We increase our forecasts by 1.9/1.4% for 2024-25F on higher oil prices and synergy from the acquisition of Esso, which are countered by our lower GRM assumptions. Consequently, our DCF-based TP is up to Bt45 (from Bt41). We also rollover effect to 2024F base year. Note that we already factor in synergy benefits from the ESSO acquisition of Bt1.4bn in 2024F and another Bt2bn in 2025F. This is against BCP's after tax target of Bt2.4bn p.a. We currently assume BCP has the 66% stake in ESSO, which can be increased after a tender offer in mid-October 2023.

ESSO contribution

We forecast ESSO to contribute Bt2.2/2.9bn on a 66% stake to BCP's earnings in 2024-25F. That is about 27/28% of BCP's total earnings. As the acquisition is financed by debt and internal cash flow, earnings contribution boost BCP's ROE, which we forecast at 11.9/11.6% over 2024-25F vs. its 10-year average of 8%. BCP completed the ESSO acquisition in September 2023 with an investment of Bt36bn or Bt9.9 per ESSO share.

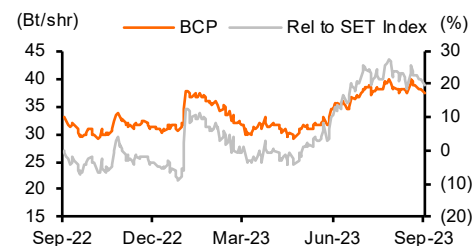
Beneficiary of strong oil price

Upstream E&P business accounted for c.20% of BCP's profit in 2022. We expect oil price to stay elevated on the back of OPEC's supply management. We raise our Brent oil price assumptions by US\$2-3/bbl to US\$83/80/78/bbl in 2023-25F. We also forecast BCP's sales volume to grow by 42/74% in 2024-25F with the 28%-stake acquisition of the Statfjord oil field in Mar 2023.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	312,202	301,021	291,994	310,374
Net profit	12,575	8,494	7,884	8,637
Consensus NP	—	7,710	8,307	8,574
Diff frm cons (%)	—	10.2	(5.1)	0.7
Norm profit	15,337	8,953	8,496	9,045
Prev. Norm profit	—	6,753	8,334	8,919
Chg frm prev (%)	—	32.6	1.9	1.4
Norm EPS (Bt)	11.1	6.5	6.2	6.6
Norm EPS grw (%)	234.0	(41.6)	(5.1)	6.5
Norm PE (x)	3.3	5.7	6.0	5.7
EV/EBITDA (x)	1.7	3.4	3.8	3.5
P/BV (x)	0.8	0.7	0.7	0.6
Div yield (%)	6.0	4.1	3.8	4.2
ROE (%)	26.4	13.6	11.9	11.6
Net D/E (%)	40.9	62.9	74.6	63.1

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	37.25
Market Cap (US\$ m)	1,444.5
Listed Shares (m shares)	1,376.9
Free Float (%)	59.4
Avg Daily Turnover (US\$ m)	7.0
12M Price H/L (Bt)	39.75/29.25
Sector	Energy
Major Shareholder	Social Security Office 14.41%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P26

Ex 1: BCP's Profit Revisions

	2019	2020	2021	2022	2023F	2024F	2025F
Reported profit (Bt m)							
- New	1,732	(6,967)	7,624	12,575	8,494	7,884	8,637
- Old					6,516	8,334	8,919
- Change (%)					30.3	(5.4)	(3.2)
Norm profit (Bt m)							
- New	1,138	(4,450)	4,592	15,337	8,953	8,496	9,045
- Old					6,753	8,334	8,919
- Change (%)					32.6	1.9	1.4
Market GRM (US\$/bbl)							
- New	5.4	3.2	4.5	14.3	8.4	6.4	7.0
- Old					6.5	6.7	7.5
- Change (%)					29.7	(3.9)	(6.4)
E&P EBITDA (Bt m)							
- New	(36)	(1,004)	8,251	17,625	15,555	17,870	17,175
- Old					13,351	16,670	15,184
- Change (%)					16.5	7.2	13.1

Sources: Company data, Thanachart estimates

Ex 2: 12-month DCF-based TP Calculation, Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal value
EBITDA	32,428	34,236	31,751	30,595	31,127	31,193	30,288	31,329	30,357	30,429	30,501	
Free cash flow *	10,413	9,516	8,984	10,142	8,540	8,906	10,312	8,943	10,560	10,960	11,605	180,716
PV of free cash flow *	9,673	8,212	7,112	7,427	5,784	5,580	5,977	4,795	5,044	4,823	4,705	73,261
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.3											
WACC (%)	7.7											
Terminal growth (%)	2.0											
Enterprise value - add investments	142,393											
Net debt	57,359											
Minority interest	22,632											
Equity value	62,402											
# of shares (m)	1,377											
Equity value/share (Bt)	45											

Sources: Company data, Thanachart estimates

Note: *Excluding solar farm cash flows, our TP is rounded up

Valuation Comparison

Ex 3: Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F (%)	24F (%)	23F (x)	24F (x)	23F (x)	24F (x)	23F (x)	24F (x)	23F (%)	24F (%)	23F (%)	24F (%)
PetroChina	857 HK	China	3.5	(2.4)	7.2	7.4	0.8	0.7	3.8	3.8	6.8	6.4	11.0	9.5
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Average			5.4	1.6	7.1	7.0	0.7	0.7	4.6	4.4	8.1	7.9	10.2	9.4
SK Innovation	096770	S.Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1	3.2	8.6
S-Oil	010950	S.Korea	(54.9)	30.4	8.7	6.7	1.0	0.9	5.6	4.8	3.1	3.8	11.6	14.2
Average			(63.2)	101.3	15.9	7.6	0.9	0.8	7.7	5.5	2.6	3.0	7.4	11.4
Reliance Industries	RIL IB	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
Indian Oil	IOCL IB	India	(72.5)	na	19.3	6.1	1.0	0.9	11.6	5.7	4.0	8.8	5.2	17.0
Bharat Petroleum	BPCL IB	India	(66.3)	na	23.2	5.0	1.4	1.2	13.8	5.2	1.9	6.9	3.3	24.5
Hindustan Petroleum	HPCL IB	India	na	na	na	3.7	1.3	1.0	na	6.5	3.8	8.3	na	28.8
Average			(42.0)	10.1	21.3	4.9	1.2	1.0	12.7	5.8	3.2	8.0	5.6	19.8
Marathon Petroleum	MPC US	USA	(8.7)	(35.6)	6.8	10.5	2.5	2.6	4.7	6.5	1.9	2.1	31.5	20.6
Valero	VLO US	USA	(10.8)	(42.6)	5.7	10.0	1.8	1.7	3.9	6.0	2.8	2.9	33.6	17.0
Phillips 66	PSX US	USA	(15.9)	(18.5)	7.6	9.4	1.7	1.6	5.8	7.0	3.4	3.5	23.3	18.2
PBF Energy ^a	PBF US	USA	(54.0)	(38.6)	5.0	8.2	1.0	0.9	2.7	3.9	1.5	1.6	25.4	11.9
Delek	DK US	USA	(29.8)	(75.3)	7.9	32.1	2.0	2.0	4.2	5.5	2.9	2.8	23.8	8.2
Average			(23.9)	(42.1)	6.6	14.0	1.8	1.8	4.3	5.8	2.5	2.6	27.5	15.2
Bangchak Corp*	BCP TB *	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
ESSO (Thailand) *	ESSO TB *	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
Star Petroleum Refining	SPRC TB *	Thailand	(52.1)	(16.7)	9.5	11.5	1.0	0.9	5.3	5.9	3.4	2.3	10.4	8.3
Thai Oil *	TOP TB *	Thailand	(57.0)	(28.4)	6.2	8.7	0.6	0.6	7.7	10.3	5.0	3.8	10.7	7.3
Average			(50.6)	(17.0)	7.0	8.5	0.9	0.8	5.5	6.4	3.9	3.4	13.4	10.4
Total Average			(34.9)	10.8	11.6	8.4	1.1	1.0	7.0	5.6	4.1	5.0	12.8	13.3

Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

Bangchak Corporation Pcl (BCP) engages in a number of businesses, with its core operations centring on oil refining (capacity 120,000bpd) and marketing (the No.3 player in Thailand with a 16% market share). In recent years, the company has invested heavily in the power business, chiefly renewable energy, via its 70%-owned subsidiary BCPG. It also diversified into new industries such as oil & gas exploration and production.

Source: Thanachart

THANACHART'S SWOT ANALYSIS

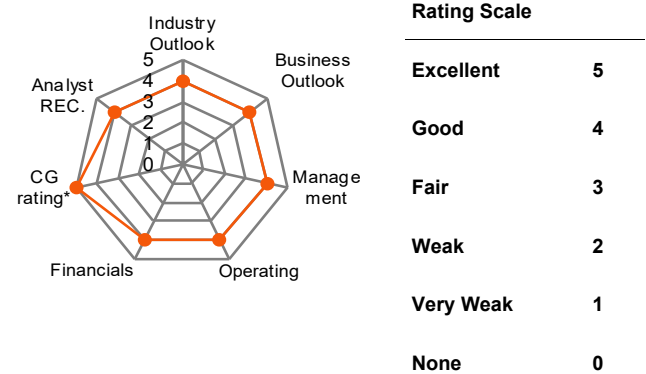
S — Strength

- An integrated refinery and marketing model. This provides BCP with a high-margin outlet for its refinery.
- Access to high-quality yet relatively low-priced domestic crude oil helps improve its GRM vs. peers.

O — Opportunity

- Diversifying into green energy.

COMPANY RATING



Source: Thanachart; *CG Rating

W — Weakness

- Volatile earnings due to its refinery exposure.
- Significant investments in new businesses have yet to pay off.
- Limited opportunity to expand its refinery given constraints over land availability.

T — Threat

- The government intervenes in the marketing margin at the gas station business, especially when oil prices increase rapidly.
- Overpaying for acquisitions and higher-than-expected expansion costs.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	43.11	45.00	4%
Net profit 23F (Bt m)	7,710	8,494	10%
Net profit 24F (Bt m)	8,307	7,884	-5%
Consensus REC	BUY: 9	HOLD: 6	SELL: 0

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2024F earnings are slightly lower than the Bloomberg consensus estimate, likely as we are more conservative on GRM.
- Our DCF-based TP is slightly ahead the street as we are more positive on long-term synergy from ESSO acquisition.

Sources: Bloomberg consensus, Thanachart estimates

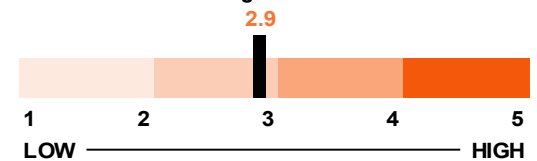
RISKS TO OUR INVESTMENT CASE

- GRM represents the key downside risk to our forecasts. If GRM falls substantially, the market could become concerned about BCP's balance sheet.
- Lower-than-expected synergies from the acquisition of ESSO would lead to downside risk to our EPS forecasts and TP.

Source: Thanachart

Bangchak Corporation Pcl (BCP) is a refining company with a nationwide network of retail service stations. Our ESG score for BCP is 2.92, which is above the sector average of 2.9 due to its lower energy intensity and clearer targets and initiatives to reduce carbon emissions.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
BCP	YES	YES	-	AA	56.07	79.61	83.00	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "terms of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- In 2022, BCP released 0.94mt of CO2 equivalent, a 12% increase from 2021. We believe this was due to post Covid demand recovery. However, emission intensity was at 120kg/BOE (barrels of crude oil equivalent), which was below Thai energy peers' average of 280kg/BOE. Carbon emissions from its refinery business account for 99% of its greenhouse gas (GHG) emissions.
- The company's main strategy to reduce carbon emissions is by introducing green innovations and products as well as improving plant efficiency, and promoting the circular economy.
- BCP has a target to achieve net-zero GHG emissions by 2050 and be a carbon-neutral organization by 2030.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- BCP group's occupational health and safety management system is in line with international standards. The company had zero cases of significant oil and chemical spills and zero lost-time injury frequency (LTI) in 2022.
- BCP says it tries to ensure employee development as well as employee happiness. In 2022, employees, on average, received 29.08 hours of training and an employee engagement score of 75%.
- The company also tries to ensure the wellness of the surrounding community. BCP's employees spent 9,375 voluntary hours in 2022.

GOVERNANCE &
SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- BCP has an appropriate board structure, in our view. There are 10 independent directors among the 15 board members, and the chairman of the board is an independent director.
- Its M&A track record has caused some concern in the past with investments in non-core assets such as its lithium and E&P businesses. BCP recorded substantial impairments in its E&P assets. However, this situation has now improved, with the company focusing more on its core businesses. We are positive on Esso's acquisition and expect synergy to lead to higher return.
- BCP's balance sheet strength is better and clear of debt covenants post capital increase and the IPO of its power and bio-based subsidiaries. However, BCP is subject to forex risk and commodities' price fluctuation risk.

Sources: Thanachart, Company data

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	199,417	312,202	301,021	291,994	310,374
Cost of sales	179,179	262,503	271,695	264,557	281,143
Gross profit	20,238	49,699	29,326	27,437	29,231
% gross margin	10.1%	15.9%	9.7%	9.4%	9.4%
Selling & administration expenses	7,153	10,391	10,019	9,719	10,330
Operating profit	13,085	39,308	19,307	17,718	18,901
% operating margin	6.6%	12.6%	6.4%	6.1%	6.1%
Depreciation & amortization	8,075	10,004	12,303	14,709	15,335
EBITDA	21,159	49,312	31,609	32,428	34,236
% EBITDA margin	10.6%	15.8%	10.5%	11.1%	11.0%
Non-operating income	(512)	(4,754)	2,547	1,854	1,854
Non-operating expenses	0	0	1,905	0	0
Interest expense	(2,540)	(3,977)	(3,427)	(3,268)	(3,269)
Pre-tax profit	10,034	30,578	20,331	16,304	17,485
Income tax	4,263	12,852	9,790	7,846	8,539
After-tax profit	5,771	17,726	10,541	8,458	8,947
% net margin	2.9%	5.7%	3.5%	2.9%	2.9%
Shares in affiliates' Earnings	1,042	188	370	1,608	1,806
Minority interests	(2,221)	(2,577)	(1,958)	(1,569)	(1,708)
Extraordinary items	3,032	(2,762)	(459)	(612)	(408)
NET PROFIT	7,624	12,575	8,494	7,884	8,637
Normalized profit	4,592	15,337	8,953	8,496	9,045
EPS (Bt)	5.5	9.1	6.2	5.7	6.3
Normalized EPS (Bt)	3.3	11.1	6.5	6.2	6.6

We expect BCP's earnings to fall less than peers due to contribution from ESSO

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	69,372	111,349	83,886	72,084	75,984
Cash & cash equivalent	32,829	47,169	20,000	10,000	10,000
Account receivables	15,234	22,199	21,404	20,762	22,069
Inventories	18,497	29,533	30,567	29,764	31,630
Others	2,812	12,449	11,915	11,558	12,286
Investments & loans	14,070	3,505	3,505	3,505	3,505
Net fixed assets	69,233	73,018	103,816	105,106	105,771
Other assets	49,110	54,471	53,548	75,328	76,846
Total assets	201,785	242,344	244,755	256,024	262,107
LIABILITIES:					
Current liabilities:	34,105	47,852	51,326	50,521	52,301
Account payables	15,651	28,948	29,961	29,174	31,003
Bank overdraft & ST loans	1,257	1,101	3,868	4,177	3,871
Current LT debt	9,464	9,631	7,349	7,937	7,354
Others current liabilities	7,734	8,172	10,148	9,232	10,073
Total LT debt	69,787	70,507	66,142	71,434	66,186
Others LT liabilities	28,334	40,607	36,068	35,444	36,715
Total liabilities	132,226	158,966	153,536	157,398	155,202
Minority interest	16,092	20,674	22,632	24,201	25,909
Preferreds shares	0	0	0	0	0
Paid-up capital	1,377	1,377	1,377	1,377	1,377
Share premium	11,157	11,157	11,157	11,157	11,157
Warrants	0	0	0	0	0
Surplus	12,069	12,099	12,099	12,099	12,099
Retained earnings	28,863	38,071	43,954	49,791	56,363
Shareholders' equity	53,467	62,704	68,587	74,424	80,996
Liabilities & equity	201,785	242,344	244,755	256,024	262,107

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	10,034	30,578	20,331	16,304	17,485
Tax paid	(4,263)	(12,852)	(9,790)	(7,846)	(8,539)
Depreciation & amortization	8,075	10,004	12,303	14,709	15,335
Chg In working capital	(7,793)	(4,704)	775	658	(1,344)
Chg In other CA & CL / minorities	8,341	(4,192)	2,788	1,049	1,920
Cash flow from operations	14,394	18,833	26,407	24,874	24,858
Capex	(22,741)	(13,789)	(43,100)	(16,000)	(16,000)
Right of use	(2,538)	(3,322)	0	0	0
ST loans & investments	0	(91)	91	0	0
LT loans & investments	1,516	10,564	0	0	0
Adj for asset revaluation	3,333	491	0	0	0
Chg In other assets & liabilities	3,531	4,749	(4,367)	(23,016)	(655)
Cash flow from investments	(16,899)	(1,397)	(47,376)	(39,016)	(16,655)
Debt financing	17,513	733	(3,588)	6,189	(6,138)
Capital increase	0	0	0	0	0
Dividends paid	(2,672)	(4,261)	(2,611)	(2,047)	(2,065)
Warrants & other surplus	(1,183)	431	0	0	0
Cash flow from financing	13,658	(3,097)	(6,199)	4,142	(8,203)
Free cash flow	(8,347)	5,045	(16,693)	8,874	8,858

We include in capex the
66% investment in ESSO

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	11.2	3.3	5.7	6.0	5.7
Normalized PE - at target price (x)	13.5	4.0	6.9	7.3	6.9
PE (x)	6.7	4.1	6.0	6.5	5.9
PE - at target price (x)	8.1	4.9	7.3	7.9	7.2
EV/EBITDA (x)	4.7	1.7	3.4	3.8	3.5
EV/EBITDA - at target price (x)	5.2	1.9	3.8	4.2	3.8
P/BV (x)	1.0	0.8	0.7	0.7	0.6
P/BV - at target price (x)	1.2	1.0	0.9	0.8	0.8
P/CFO (x)	3.6	2.7	1.9	2.1	2.1
Price/sales (x)	0.3	0.2	0.2	0.2	0.2
Dividend yield (%)	5.4	6.0	4.1	3.8	4.2
FCF Yield (%)	(16.3)	9.8	(32.5)	17.3	17.3
(Bt)					
Normalized EPS	3.3	11.1	6.5	6.2	6.6
EPS	5.5	9.1	6.2	5.7	6.3
DPS	2.0	2.3	1.5	1.4	1.6
BV/share	38.8	45.5	49.8	54.1	58.8
CFO/share	10.5	13.7	19.2	18.1	18.1
FCF/share	(6.1)	3.7	(12.1)	6.4	6.4

Sources: Company data, Thanachart estimates

BCP trades at a valuation
discount to peers despite
its higher ROE

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	46.1	56.6	(3.6)	(3.0)	6.3
Net profit (%)	na	64.9	(32.5)	(7.2)	9.5
EPS (%)	na	64.9	(32.5)	(7.2)	9.5
Normalized profit (%)	na	234.0	(41.6)	(5.1)	6.5
Normalized EPS (%)	na	234.0	(41.6)	(5.1)	6.5
Dividend payout ratio (%)	36.1	24.6	25.0	25.0	25.0
Operating performance					
Gross margin (%)	10.1	15.9	9.7	9.4	9.4
Operating margin (%)	6.6	12.6	6.4	6.1	6.1
EBITDA margin (%)	10.6	15.8	10.5	11.1	11.0
Net margin (%)	2.9	5.7	3.5	2.9	2.9
D/E (incl. minor) (x)	1.2	1.0	0.8	0.8	0.7
Net D/E (incl. minor) (x)	0.7	0.4	0.6	0.7	0.6
Interest coverage - EBIT (x)	5.2	9.9	5.6	5.4	5.8
Interest coverage - EBITDA (x)	8.3	12.4	9.2	9.9	10.5
ROA - using norm profit (%)	2.6	6.9	3.7	3.4	3.5
ROE - using norm profit (%)	9.2	26.4	13.6	11.9	11.6
DuPont					
ROE - using after tax profit (%)	11.6	30.5	16.1	11.8	11.5
- asset turnover (x)	1.1	1.4	1.2	1.2	1.2
- operating margin (%)	6.3	11.1	7.9	6.7	6.7
- leverage (x)	3.5	3.8	3.7	3.5	3.3
- interest burden (%)	79.8	88.5	85.6	83.3	84.2
- tax burden (%)	57.5	58.0	51.8	51.9	51.2
WACC (%)	7.7	7.7	7.7	7.7	7.7
ROIC (%)	8.6	22.5	10.3	7.3	6.5
NOPAT (Bt m)	7,525	22,787	10,010	9,192	9,671
invested capital (Bt m)	101,145	96,774	125,946	147,972	148,406

Sources: Company data, Thanachart estimates

We expect net D/E to rise
post ESSO acquisition

BUY (Unchanged)
Change in Numbers

TP: Bt 11.50 (From: Bt 10.50)
Upside : 17.3%

12 SEPTEMBER 2023

Small Cap Research

Esso (Thailand) Pcl (ESSO TB)

A higher return company

We reaffirm our BUY on ESSO and raise our TP to Bt11.50 as we expect ESSO to reach higher profitability under the new parent company. We look beyond falling GRM in 2024F from a high base this year to a full synergy year in 2025F and see 6.3x PE and 0.9x P/BV vs. 15.9% ROE as inexpensive.



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Reaffirm BUY

This report is a part of *Energy Sector – Weaker fundamental dynamics, dated 12 September 2023*. We reaffirm our BUY rating on ESSO and raise our DCF-based TP to Bt11.5 from Bt10.5 to factor in clearer synergy benefits from the new parent company Bangchak Corporation Pcl (BCP TB, Bt37.25, BUY). We expect ESSO to reach higher profitability under BCP via lower operating expenses paid to the old parent, cost synergies from BCP's refinery business, and more aggressive petrol station management. Although we forecast an 18% fall in 2024F earnings from falling industry GRM from a high base this year, we forecast a 24/9% EPS growth in 2025-26F with full synergy benefits. We forecast ESSO's ROE to increase to 15.9% in 2025F vs. average of 4.8% over 2012-22.

GRM to normalize further

We expect the refinery market to continue to normalize to mid-cycle levels in 2024F from high base levels in 2022-23F. We expect more capacity additions to surpass demand growth next year (please see the main report for more details). For ESSO, we forecast GRM of US\$7.2/5.9/6.0/bbl in 2023-25F. We raise our Singapore GRM to US\$8.2/bbl (from US\$7.5) in 2023F, but trim that for 2024-25F to US\$6.5/7.0/bbl (from US\$7.3/7.3).

Synergies with the new parent

BCP estimates combined synergy benefits of Bt3bn p.a. to be created after its 66% stake acquisition of ESSO from ExxonMobil. We conservatively factor around 80% of the estimates into our numbers. Synergy benefit breakdown: 1) 50% from corporate expense saving that ESSO paid to the old parent; 2) 33% from an increase of ESSO's refinery run rate to 92% utilization from 75% in 2022; and 3) 17% from same-business cost saving and improvement of petrol stations. We believe ESSO can easily increase its run rate after the acquisition because BCP runs above its capacity and needs to import refined products.

A higher return base

ESSO during mid-cycle GRM years in the past made earnings of around c.Bt2-3bn. We forecast ESSO's earnings base to rise to Bt4/5bn in 2025-26F. ROE is to be lifted up to 15.9% in 2025F vs. average of 4.8% over 2012-22. Note that in this report, we revise ESSO earnings forecasts by +12%/-2.5%/+35% in 2023-25F, respectively, to reflect higher-than-expected GRM for 2023F and synergy benefits in later years.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	263,000	169,343	165,990	165,990
Net profit	9,508	3,461	4,050	5,144
Consensus NP	—	3,625	4,726	5,760
Diff firm cons (%)	—	(4.5)	(14.3)	(10.7)
Norm profit	11,007	5,315	4,359	5,418
Prev. Norm profit	—	4,743	4,471	4,024
Chg firm prev (%)	—	12.0	(2.5)	34.6
Norm EPS (Bt)	3.2	1.5	1.3	1.6
Norm EPS grw (%)	na	(51.7)	(18.0)	24.3
Norm PE (x)	3.1	6.4	7.8	6.3
EV/EBITDA (x)	4.3	5.7	5.6	4.4
P/BV (x)	1.2	1.2	1.1	0.9
Div yield (%)	5.1	3.1	3.6	4.5
ROE (%)	47.4	18.8	14.2	15.9
Net D/E (%)	129.9	58.7	46.0	29.3

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	9.80
Market Cap (US\$ m)	955.2
Listed Shares (m shares)	3,460.9
Free Float (%)	34.0
Avg Daily Turnover (US\$ m)	3.5
12M Price H/L (Bt)	14.70/8.30
Sector	Energy
Major Shareholder	ExxonMobil Int'l 65.99%

Sources: Bloomberg, Company data, Thanachart estimates

Ex 1: ESSO's Key Assumption Changes

	2019	2020	2021	2022	2023F	2024F	2025F
ESSO's market GRM (US\$/bbl)							
New	2.2	1.3	3.7	10.9	7.2	5.9	6.0
Old					6.5	5.9	5.6
Change (%)					10.2	0.8	6.8
Refinery utilization (%)							
New	66	66	71	75	70	85	92
Old					80	80	80
Change (%)					(12.5)	6.3	15.0
Reported profit (Bt m)							
New	(3,066)	(7,911)	4,443	9,508	3,461	4,050	5,144
Old					2,888	3,645	3,364
Change (%)					19.8	11.1	52.9
Core profit (Bt m)							
New	(3,066)	(7,911)	(1,284)	11,007	5,315	4,359	5,418
Old					4,743	4,471	4,024
Change (%)					12.0	(2.5)	34.6

Sources: Company data, Thanachart estimates

Ex 2: 12-month DCF-based TP Calculation, Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal Value
EBITDA + dividend	8,743	10,058	10,257	9,360	7,815	8,450	8,565	8,681	8,796	8,911	8,434	
Free cash flow	4,902	5,732	5,828	5,054	3,794	4,488	4,567	4,684	4,801	4,918	4,518	62,577
PV of free cash flow	4,520	4,873	4,512	3,592	2,475	2,689	2,512	2,366	2,144	2,008	1,687	23,364
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.2											
WACC (%)	8.5											
Terminal growth (%)	2.0											
Enterprise value - add investments	56,740											
Net debt (2023F)	17,196											
Minority interest	8											
Equity value	39,536											
# of shares (m)	3,461											
Equity value/share (Bt)	11.5											

Sources: Company data, Thanachart estimates

Valuation Comparison

Ex 3: Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F (%)	24F (%)	23F (x)	24F (x)	23F (x)	24F (x)	23F (x)	24F (x)	23F (%)	24F (%)	23F (%)	24F (%)
PetroChina	857 HK	China	3.5	(2.4)	7.2	7.4	0.8	0.7	3.8	3.8	6.8	6.4	11.0	9.5
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Average			5.4	1.6	7.1	7.0	0.7	0.7	4.6	4.4	8.1	7.9	10.2	9.4
SK Innovation	096770	S.Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1	3.2	8.6
S-Oil	010950	S.Korea	(54.9)	30.4	8.7	6.7	1.0	0.9	5.6	4.8	3.1	3.8	11.6	14.2
Average			(63.2)	101.3	15.9	7.6	0.9	0.8	7.7	5.5	2.6	3.0	7.4	11.4
Reliance Industries	RIL IB	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
Indian Oil	IOCL IB	India	(72.5)	na	19.3	6.1	1.0	0.9	11.6	5.7	4.0	8.8	5.2	17.0
Bharat Petroleum	BPCL IB	India	(66.3)	na	23.2	5.0	1.4	1.2	13.8	5.2	1.9	6.9	3.3	24.5
Hindustan Petroleum	HPCL IB	India	na	na	na	3.7	1.3	1.0	na	6.5	3.8	8.3	na	28.8
Average			(42.0)	10.1	21.3	4.9	1.2	1.0	12.7	5.8	3.2	8.0	5.6	19.8
Marathon Petroleum	MPC US	USA	(8.7)	(35.6)	6.8	10.5	2.5	2.6	4.7	6.5	1.9	2.1	31.5	20.6
Valero	VLO US	USA	(10.8)	(42.6)	5.7	10.0	1.8	1.7	3.9	6.0	2.8	2.9	33.6	17.0
Phillips 66	PSX US	USA	(15.9)	(18.5)	7.6	9.4	1.7	1.6	5.8	7.0	3.4	3.5	23.3	18.2
PBF Energy'	PBF US	USA	(54.0)	(38.6)	5.0	8.2	1.0	0.9	2.7	3.9	1.5	1.6	25.4	11.9
Delek	DK US	USA	(29.8)	(75.3)	7.9	32.1	2.0	2.0	4.2	5.5	2.9	2.8	23.8	8.2
Average			(23.9)	(42.1)	6.6	14.0	1.8	1.8	4.3	5.8	2.5	2.6	27.5	15.2
Bangchak Corp*	BCP TB *	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
ESSO (Thailand) *	ESSO TB *	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
Star Petroleum Refining	SPRC TB *	Thailand	(52.1)	(16.7)	9.5	11.5	1.0	0.9	5.3	5.9	3.4	2.3	10.4	8.3
Thai Oil *	TOP TB *	Thailand	(57.0)	(28.4)	6.2	8.7	0.6	0.6	7.7	10.3	5.0	3.8	10.7	7.3
Average			(50.6)	(17.0)	7.0	8.5	0.9	0.8	5.5	6.4	3.9	3.4	13.4	10.4
Total Average			(34.9)	10.8	11.6	8.4	1.1	1.0	7.0	5.6	4.1	5.0	12.8	13.3

Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

Esso (Thailand) Pcl (ESSO) is one of the leading refining companies in Thailand. It operates a 177,000bpd complex refinery with a Nelson Complexity of 6.6. It controls 13% of Thailand’s refining production capacity and commands around a 15% oil retail market share. ESSO also has a PX capacity of 0.5m tonnes. The company is a 65%-owned subsidiary of ExxonMobil while the Ministry of Finance owns 7%. ESSO has one of the highest sales volumes in the domestic market at over 90%, as its parent, ExxonMobil, has strategically positioned ESSO as a key refinery supplier for Thailand, while ExxonMobil’s larger refinery and petrochemical complex in Singapore is used for export markets.

Source: Thanachart

THANACHART’S SWOT ANALYSIS

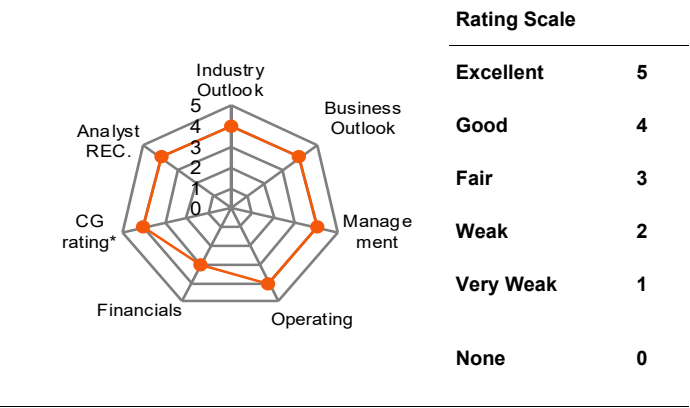
S — Strength

- Technology transfer and benefits of crude sourcing from Exxon – its parent company.

O — Opportunity

- Only moves along with industry; limited growth opportunities in our view.

COMPANY RATING



W — Weakness

- Inactive parent company policy limits growth potential.
- Government intervention in retail refined oil price easier than at the wholesale level via control of marketing margins.
- Being a less complex refinery would cause the company to have a higher cost structure and is thus less competitive.

T — Threat

- Rivals under the PTT group are active in capacity expansion and new areas of growth potential.
- Threat of substitutes such as electric vehicles may lower demand for oil products.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	11.15	11.50	3%
Net profit 23F (Bt m)	3,625	3,461	-5%
Net profit 24F (Bt m)	4,726	4,050	-14%
Consensus REC	BUY: 5	HOLD: 1	SELL: 1

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2024F profit is lower than the Bloomberg consensus estimate, likely as we incorporate a more conservative GRM assumption and we also factor in a stock loss in 2024F.
- However, our TP is close to the Street’s; we attribute this to us factoring in synergy effects from the acquisition.

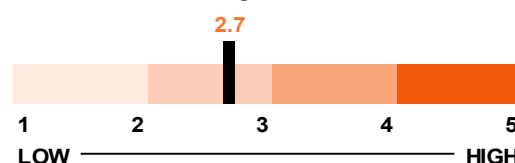
Sources: Bloomberg consensus, Thanachart estimates

RISKS TO OUR INVESTMENT CASE

- Lower-than-expected refining margins would be the key downside risk to our call.
- Lower-than-expected domestic demand growth would negatively impact ESSO’s oil retail business, which is a secondary downside risk to our call.

Source: Thanachart

Esso (Thailand) Pcl (ESSO) is a mid-scale Thai refining company with a capacity of 174k b/d. Our ESG score for ESSO is 2.7, which is at the low end of our coverage. We see ESSO's green-energy strategy still lagging behind those of its peers. We don't believe ESSO has a strong intention to make new investments that need heavy capex in Thailand.

Thanachart ESG Rating


	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
ESSO	-	-	-	-	47.10	46.13	17.00	-	4.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)
Note: Please see third party on "terms of use" toward the back of this report.

Factors
Our Comments
ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- ESSO is the Thai refinery with the second-lowest carbon emission intensity level in the sector at 161kg/BOE (barrels of crude oil equivalent) vs. the sector average of 280kg/BOE. However, we still assign the company the lowest ESG score at 2.7 because it lags behind its peers in having clear targets and plans for ESG issues.
- ESSO released 1.07mt of CO2 equivalent in 2022, which was a 5% higher in carbon emissions from the 2021 level. We believe this is due to higher utilization rate. However, the company has reduced greenhouse gas emissions intensity approximately 1.2% compared to 2021.
- ESSO has no concrete target to cut carbon emissions. However, it supports its parent company ExxonMobil's aim to achieve net-zero greenhouse gas (GHG) emissions by 2050. We believe the company's key focus will be on energy optimization for its existing operation and that it is unlikely to make big green investments unless Thailand comes up with clearer policies on carbon pricing.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- ESSO has high operational safety standards and achieved several safety milestones in 2021. There were no safety lost-time incidents and no reportable spills in 2021. Neither its refinery nor aromatics plants have reported any spills for 15 years, while there have been no lost-time incidents for 11 years for its employees and contractors.
- In 2022, ESSO provided training and skills development for its employees with a proven global training curriculum. In 2022, average training hours per employee per year increased by 100% from 2021.
- ESSO has won the platinum award for 13 consecutive years from The American Chamber of Commerce in Thailand in recognition for Corporate Social Responsibility.

**GOVERNANCE &
SUSTAINABILITY**

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- We see ESSO as having an appropriate board structure. There are six independent directors from a total of 13, and there are four female directors.
- ESSO is now acquired by domestic listed refinery, BCP. We expect potential synergy post acquisition that should lead to higher return for the company.
- We see room for improvement in terms of information disclosure. Relative to refinery peers, we see ESSO having the lowest information disclosure.
- Earnings volatility is high given the nature of its business, which is exposed to fluctuations in oil prices and refining margins. However, the company has low net gearing and limited capex requirements, mainly for its petrol station business and refinery maintenance.

Sources: Company data, Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	167,151	263,000	169,343	165,990	165,990
Cost of sales	162,261	244,209	158,300	156,067	155,618
Gross profit	4,891	18,792	11,043	9,922	10,372
% gross margin	2.9%	7.1%	6.5%	6.0%	6.2%
Selling & administration expenses	5,068	5,440	4,964	4,116	3,366
Operating profit	(177)	13,352	6,079	5,807	7,006
% operating margin	-0.1%	5.1%	3.6%	3.5%	4.2%
Depreciation & amortization	2,808	2,772	2,831	2,937	3,052
EBITDA	2,630	16,123	8,910	8,743	10,058
% EBITDA margin	1.6%	6.1%	5.3%	5.3%	6.1%
Non-operating income	29	40	86	95	95
Non-operating expenses	0	0	0	0	0
Interest expense	(311)	(376)	(368)	(913)	(781)
Pre-tax profit	(459)	13,016	5,797	4,989	6,321
Income tax	1,051	2,320	865	1,013	1,286
After-tax profit	(1,510)	10,696	4,931	3,976	5,035
% net margin	-0.9%	4.1%	2.9%	2.4%	3.0%
Shares in affiliates' Earnings	227	312	384	384	384
Minority interests	(1)	(1)	(0)	(0)	(0)
Extraordinary items	5,727	(1,499)	(1,854)	(309)	(274)
NET PROFIT	4,443	9,508	3,461	4,050	5,144
Normalized profit	(1,284)	11,007	5,315	4,359	5,418
EPS (Bt)	1.3	2.7	1.0	1.2	1.5
Normalized EPS (Bt)	(0.4)	3.2	1.5	1.3	1.6

Core profit to drop from its peak in 2023F as GRM normalizes

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	33,784	51,922	36,158	35,590	35,546
Cash & cash equivalent	802	586	3,000	3,000	3,000
Account receivables	8,171	8,430	5,428	5,320	5,320
Inventories	18,786	23,893	15,488	15,270	15,226
Others	6,025	19,013	12,242	12,000	12,000
Investments & loans	4,455	2,871	2,871	2,871	2,871
Net fixed assets	23,706	22,982	22,651	22,715	22,663
Other assets	8,109	7,766	6,362	6,312	6,312
Total assets	70,055	85,541	68,042	67,487	67,391
LIABILITIES:					
Current liabilities:	42,008	49,624	31,533	28,360	24,994
Account payables	5,117	5,872	3,806	3,753	3,742
Bank overdraft & ST loans	19,323	26,436	14,857	13,114	9,972
Current LT debt	5,667	5,334	2,998	2,646	2,012
Others current liabilities	11,900	11,983	9,872	8,847	9,268
Total LT debt	3,999	4,166	2,341	2,066	1,571
Others LT liabilities	4,839	4,547	4,887	4,856	4,856
Total liabilities	50,846	58,337	38,761	35,282	31,421
Minority interest	7	7	8	8	9
Preferreds shares	0	0	0	0	0
Paid-up capital	17,075	17,075	17,075	17,075	17,075
Share premium	4,032	4,032	4,032	4,032	4,032
Warrants	0	0	0	0	0
Surplus	731	691	691	691	691
Retained earnings	(2,637)	5,399	7,475	10,399	14,163
Shareholders' equity	19,201	27,197	29,273	32,197	35,961
Liabilities & equity	70,055	85,541	68,042	67,487	67,391

We expect a stronger balance sheet in 2023F due to higher Oil Fund collections

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

With limited capex and a healthy refinery margin, we expect positive FCF

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	(459)	13,016	5,797	4,989	6,321
Tax paid	(1,051)	(2,320)	(865)	(1,013)	(1,286)
Depreciation & amortization	2,808	2,772	2,831	2,937	3,052
Chg In working capital	(8,064)	(4,611)	9,342	272	33
Chg In other CA & CL / minorities	1,436	(12,565)	5,043	(399)	805
Cash flow from operations	(5,331)	(3,709)	22,147	6,786	8,924
Capex	(1,763)	(2,048)	(2,500)	(3,000)	(3,000)
Right of use	(18)	482	0	0	0
ST loans & investments	0	0	0	0	0
LT loans & investments	1,193	1,585	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(462)	(1,957)	(110)	(289)	(274)
Cash flow from investments	(1,049)	(1,939)	(2,610)	(3,289)	(3,274)
Debt financing	787	6,945	(15,739)	(2,370)	(4,271)
Capital increase	0	0	0	0	0
Dividends paid	(1)	(1,730)	(1,384)	(1,127)	(1,379)
Warrants & other surplus	406	217	0	0	0
Cash flow from financing	1,193	5,433	(17,123)	(3,497)	(5,650)
Free cash flow	(7,094)	(5,757)	19,647	3,786	5,924

VALUATION

We think ESSO's valuation looks attractive, at 1.1x 2024F P/BV

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	na	3.1	6.4	7.8	6.3
Normalized PE - at target price (x)	na	3.6	7.5	9.1	7.3
PE (x)	7.6	3.6	9.8	8.4	6.6
PE - at target price (x)	9.0	4.2	11.5	9.8	7.7
EV/EBITDA (x)	23.6	4.3	5.7	5.6	4.4
EV/EBITDA - at target price (x)	25.8	4.7	6.4	6.2	5.0
P/BV (x)	1.8	1.2	1.2	1.1	0.9
P/BV - at target price (x)	2.1	1.5	1.4	1.2	1.1
P/CFO (x)	(6.4)	(9.1)	1.5	5.0	3.8
Price/sales (x)	0.2	0.1	0.2	0.2	0.2
Dividend yield (%)	0.0	5.1	3.1	3.6	4.5
FCF Yield (%)	(20.9)	(17.0)	57.9	11.2	17.5
(Bt)					
Normalized EPS	(0.4)	3.2	1.5	1.3	1.6
EPS	1.3	2.7	1.0	1.2	1.5
DPS	0.0	0.5	0.3	0.4	0.4
BV/share	5.5	7.9	8.5	9.3	10.4
CFO/share	(1.5)	(1.1)	6.4	2.0	2.6
FCF/share	(2.0)	(1.7)	5.7	1.1	1.7

Sources: Company data, Thanachart estimates

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	32.0	57.3	(35.6)	(2.0)	0.0
Net profit (%)	na	114.0	(63.6)	17.0	27.0
EPS (%)	na	114.0	(63.6)	17.0	27.0
Normalized profit (%)	na	na	(51.7)	(18.0)	24.3
Normalized EPS (%)	na	na	(51.7)	(18.0)	24.3
Dividend payout ratio (%)	0.0	18.2	30.0	30.0	30.0
Operating performance					
Gross margin (%)	2.9	7.1	6.5	6.0	6.2
Operating margin (%)	(0.1)	5.1	3.6	3.5	4.2
EBITDA margin (%)	1.6	6.1	5.3	5.3	6.1
Net margin (%)	(0.9)	4.1	2.9	2.4	3.0
D/E (incl. minor) (x)	1.5	1.3	0.7	0.6	0.4
Net D/E (incl. minor) (x)	1.5	1.3	0.6	0.5	0.3
Interest coverage - EBIT (x)	na	35.5	16.5	6.4	9.0
Interest coverage - EBITDA (x)	8.5	42.9	24.2	9.6	12.9
ROA - using norm profit (%)	na	14.1	6.9	6.4	8.0
ROE - using norm profit (%)	na	47.4	18.8	14.2	15.9
DuPont					
ROE - using after tax profit (%)	na	46.1	17.5	12.9	14.8
- asset turnover (x)	2.5	3.4	2.2	2.4	2.5
- operating margin (%)	na	5.1	3.6	3.6	4.3
- leverage (x)	3.9	3.4	2.7	2.2	2.0
- interest burden (%)	309.5	97.2	94.0	84.5	89.0
- tax burden (%)	na	82.2	85.1	79.7	79.7
WACC (%)	8.5	8.5	8.5	8.5	8.5
ROIC (%)	(0.4)	23.2	8.3	10.0	11.9
NOPAT (Bt m)	(177)	10,972	5,172	4,628	5,581
invested capital (Bt m)	47,389	62,546	46,469	47,023	46,517

Sources: Company data, Thanachart estimates

We expect net gearing to improve over the next few years

SELL (From: BUY)
Change in Recommendation

TP: Bt 1.90 (From: Bt 3.10)
Downside : 14.4%

12 SEPTEMBER 2023

IRPC Public Co Ltd (IRPC TB)

Prolonged weakness

We downgrade IRPC to **SELL** on its continued disappointing operations and cut our TP to Bt1.9. While we expect an industry-wide falling GRM trend, IRPC's petrochemical business is exposed to weak segments of PP and ABS.



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Downgrade to SELL

This report is a part of *Energy Sector – Weaker fundamental dynamics, dated 12 September 2023*. We downgrade IRPC to SELL from Buy and cut our DCF-based TP, which is rolled over to 2024F base year, to Bt1.9 from Bt3.10. The TP cut follows our substantial earnings downgrades of 19/46/45% in 2023-25F on weaker-than-expected refinery and petrochemical businesses. *First*, we expect IRPC to suffer from an industry-wide falling GRM trend next year. *Second*, although we believe the olefins-chain petrochemical cycle to have reached bottom this year, IRPC is also exposed to the weaker-outlook segments of polypropylene (PP) and ABS. *Finally*, IRPC is expensive in our view, trading on 16.5x 2024F PE and 0.6x 2024F P/BV against 3.4% ROE.

Prolonged weakness of PP and ABS

Petrochemical accounted for 40% of IRPC's 2021 EBITDA before the chemical spread declined in 2022. PP accounts for 25% of IRPC's total petrochemical capacity and ABS, for 7%. We expect the olefins chain petrochemical cycle to have reached bottom this year with a clearer turnaround trend anticipated next year. However, the turnaround is expected more in the main product polyethylene (PE) than in PP and ABS. PE accounts for 4% of IRPC's capacity. PP and ABS are expected to remain in a low cycle next year due to continued supply additions in China. Therefore, IRPC will see a counter effect to keep its petrochemical business weak. See our spread assumptions in Exhibit 1.

Falling GRM trend

Refinery accounted for 49% of IRPC's EBITDA in 2021. We expect IRPC's GRM to fall following the industry trend. Our IRPC's GRM forecasts are US\$5.2/4.4/4.7/bbl in 2023-25F.

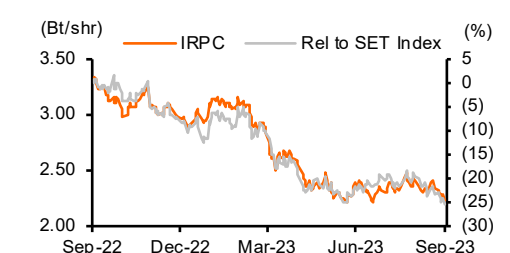
UCF project to be up in 1Q24

IRPC's Bt13.3bn Ultra Clean Fuel (UCF) project is scheduled to start operation in 1Q24. It is the project to enhance IRPC's refinery units. With UCF, its diesel product will be upgraded to Euro 5 from Euro 4. Thai authorities set the new product standard to Euro 5 starting January 2024. The other benefit is to help IRPC be able to reduce diesel exports, which carry lower margin. We estimate UCF to add US\$1/bbl to IRPC's GIM base. We already factor this in our numbers.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	318,396	309,318	315,310	301,116
Net profit	(4,364)	2,572	2,141	2,859
Consensus NP	—	2,470	4,056	5,853
Diff frm cons (%)	—	4.1	(47.2)	(51.2)
Norm profit	1,869	2,815	2,753	3,255
Prev. Norm profit	—	3,461	5,078	5,922
Chg frm prev (%)	—	(18.7)	(45.8)	(45.0)
Norm EPS (Bt)	0.1	0.1	0.1	0.2
Norm EPS grw (%)	(52.2)	50.6	(2.2)	18.2
Norm PE (x)	24.3	16.1	16.5	13.9
EV/EBITDA (x)	12.7	9.6	9.8	7.8
P/BV (x)	0.6	0.6	0.6	0.5
Div yield (%)	3.2	1.7	1.4	1.9
ROE (%)	2.2	3.5	3.4	3.9
Net D/E (%)	85.8	81.3	85.6	77.5

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	2.22
Market Cap (US\$ m)	1,277.6
Listed Shares (m shares)	20,434.4
Free Float (%)	51.9
Avg Daily Turnover (US\$ m)	3.6
12M Price H/L (Bt)	3.34/2.20
Sector	Energy
Major Shareholder	PTT Pcl 45.05%

Sources: Bloomberg, Company data, Thanachart estimates

Ex 1: IRPC's Key Assumptions Changes

	2019	2020	2021	2022	2023F	2024F	2025F
Net profit (Bt m)							
- New	(1,174)	(6,152)	14,505	(4,364)	2,572	2,141	2,859
- Old					3,461	5,078	5,922
- Change (%)					(25.7)	(57.8)	(51.7)
Norm profit (Bt m)							
- New	(2,876)	(2,646)	3,910	1,869	2,815	2,753	3,255
- Old					3,461	5,078	5,922
- Change (%)					(18.7)	(45.8)	(45.0)
Market GIM (US\$/bbl)							
- New	8.7	8.7	13.1	10.6	10.9	10.7	11.8
- Old					13.2	14.4	13.9
- Change (%)					(17.7)	(25.8)	(15.6)
Market GRM (US\$/bbl)							
- New	1.1	0.1	3.1	6.4	5.2	4.4	5.0
- Old					5.0	5.5	5.7
- Change (%)					4	(19)	(12)
HDPE-Naphtha (US\$/tonne)							
- New	466	506	531	392	400	450	530
- Old					430	470	550
- Change (%)					(7.0)	(4.3)	(9.1)
PP-Naphtha (US\$/tonne)							
- New	538	561	637	376	350	360	390
- Old					380	420	500
- Change (%)					(7.9)	(14.3)	(22.0)
ABS-Naphtha (US\$/tonne)							
- New	935	1,142	1,713	901	640	650	670
- Old					700	750	780
- Change (%)					(8.6)	(13.3)	(14.1)

Sources: Company data, Thanachart estimates

Ex 2: 12-month DCF-based TP Calculation, Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal value
EBITDA	11,866	14,230	13,872	13,941	13,941	13,941	13,941	13,941	13,941	13,941	13,941	
Free cash flow	(653)	7,138	12,840	11,392	9,202	9,248	9,295	9,341	9,388	9,435	9,483	131,631
PV of free cash flow	(602)	6,072	10,073	8,104	6,010	5,547	5,120	4,726	4,361	3,859	3,546	49,230
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.2											
WACC (%)	8.4											
Terminal growth (%)	2.0											
Enterprise value - add investments	106,045											
Net debt (2023F)	65,992											
Minority interest	229											
Equity value	39,824											
# of shares (m)	20,434											
Equity value/share (Bt)	1.9											

Sources: Company data, Thanachart estimates

Valuation Comparison

Ex 3: Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F (%)	24F (%)	23F (x)	24F (x)	23F (x)	24F (x)	23F (x)	24F (x)	23F (%)	24F (%)	23F (%)	24F (%)
Refining & Marketing														
Ampol	ALD AU	Australia	(10.8)	(4.0)	12.0	12.5	2.3	2.2	7.2	7.2	6.1	5.5	18.6	18.6
BPCL	BPCL IN	India	(66.3)	na	23.2	5.0	1.4	1.2	13.8	5.2	1.9	6.9	3.3	24.5
HPCL	HPCL IN	India	na	na	na	3.7	1.3	1.0	na	6.5	3.8	8.3	na	28.8
IOCL	IOCL IN	India	(72.5)	na	19.3	6.1	1.0	0.9	11.6	5.7	4.0	8.8	5.2	17.0
Reliance Industries	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
SK Energy	096770 KS	S.Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1	3.2	8.6
S-OIL	010950 KS	S.Korea	(54.9)	30.4	8.7	6.7	1.0	0.9	5.6	4.8	3.1	3.8	11.6	14.2
Formosa Petrochemical	6505 TT	Taiwan	(30.0)	31.3	38.9	29.6	2.4	2.3	21.4	15.5	1.9	2.4	5.8	7.5
Bangchak *	BCP TB	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
ESSO (Thailand) *	ESSO TB	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
IRPC Pcl *	IRPC TB	Thailand	50.6	(2.2)	16.1	16.5	0.6	0.6	9.6	9.8	1.7	1.4	3.5	3.4
PTT Oil And Retail *	OR TB *	Thailand	3.8	(1.7)	22.2	22.6	2.2	2.0	13.7	13.8	1.8	1.7	10.0	9.3
PTG Pcl *	PTG TB	Thailand	4.0	18.5	17.3	14.6	1.9	1.8	4.4	3.8	2.6	3.1	11.5	12.8
PTT Global Chemicals *	PTTGC TB	Thailand	(72.4)	103.9	33.1	16.2	0.5	0.5	11.5	9.4	2.1	2.3	1.6	3.3
Star Petroleum Refining *	SPRC TB	Thailand	(52.1)	(16.7)	9.5	11.5	1.0	0.9	5.3	5.9	3.4	2.3	10.4	8.3
Thai Oil *	TOP TB	Thailand	(57.0)	(28.4)	6.2	8.7	0.6	0.6	7.7	10.3	5.0	3.8	10.7	7.3
Average			(34.0)	22.3	17.3	11.7	1.3	1.2	9.3	7.6	3.1	4.0	9.1	12.4
Integrated oils														
PetroChina	857 HK	China	3.5	(2.4)	7.2	7.4	0.8	0.7	3.8	3.8	6.8	6.4	11.0	9.5
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Total	FP	France	(31.3)	(3.8)	na	na	na	na	na	na	na	na	20.5	17.3
Eni	ENI IM	Italy	(34.6)	(7.4)	6.1	6.6	0.9	0.8	3.1	3.2	6.2	6.4	14.0	12.4
Repsol	REP SM	Spain	(23.0)	(20.9)	4.5	5.7	0.7	0.7	2.8	3.0	4.7	5.0	16.5	11.2
Chevron Texaco	CVX US	USA	(29.1)	9.2	12.4	11.4	2.0	1.9	6.5	6.2	3.6	3.8	15.6	15.8
Exxon Mobil	XOM US	USA	(33.7)	(0.9)	12.6	12.7	2.3	2.2	6.7	6.9	3.2	3.3	18.1	16.1
Conoco Philips	COP US	USA	(37.1)	13.4	14.2	12.5	3.1	2.9	6.2	5.9	1.7	2.1	22.0	22.5
PTT Pcl *	PTT TB	Thailand	(10.4)	(8.4)	10.1	11.0	0.9	0.9	4.5	4.1	5.8	5.8	9.1	8.1
Average			(20.9)	(1.7)	9.3	9.3	1.4	1.3	4.9	4.8	5.2	5.3	15.1	13.6
Exploration and Production														
Santos	STO AU	Australia	(41.5)	(0.9)	16.9	17.0	1.7	1.6	4.9	4.9	2.5	2.3	10.0	9.2
Woodside	WDS AU	Australia	(50.0)	(1.5)	21.1	21.5	2.0	2.0	5.2	4.9	3.6	3.6	9.2	8.7
Suncor Energy	SU US	Canada	(38.5)	14.7	6.9	6.0	1.1	1.0	4.7	4.5	6.1	6.4	15.7	15.6
ONGC	ONGC IN	India	10.9	(4.5)	4.8	5.0	0.8	0.7	4.0	3.7	8.6	7.3	18.0	15.9
RIL	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
Apache	APA US	USA	(43.7)	21.7	9.7	8.0	10.0	6.1	3.9	3.7	2.2	2.4	na	na
Devon Energy	DVN US	USA	(33.9)	15.9	9.4	8.1	2.8	2.5	5.3	4.9	1.5	2.3	30.6	32.4
PTTEP *	PTTEP TB	Thailand	(13.8)	(2.1)	8.4	8.5	1.3	1.2	2.6	2.5	5.5	5.2	16.0	14.4
Average			(24.7)	6.7	11.0	10.6	2.8	2.1	4.4	4.2	4.3	4.2	15.4	15.0

Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

IRPC Pcl (IRPC) is an integrated refinery and petrochemical complex located on Thailand's eastern seaboard. The company has 215kbd of crude refining capacity, 1.2m tpa of olefin capacity and 0.6m tpa of aromatics and styrenics capacities. The company's growth strategy mainly focuses on expanding its specialty portfolio, which it targets to raise to 52% of polymer sales volume by 2025 from the current 22%.

Source: Thanachart

THANACHART'S SWOT ANALYSIS

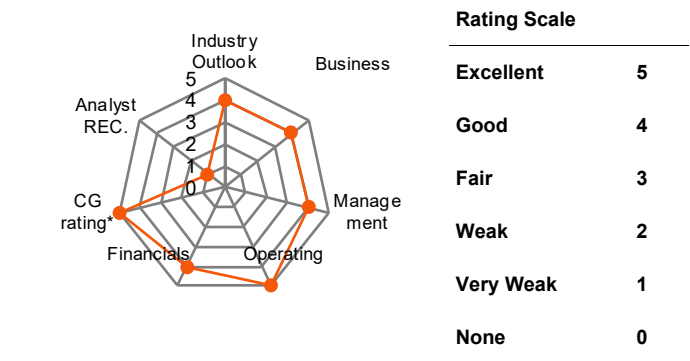
S — Strength

- Integrated refinery and petrochemical complex.
- Part of the PTT group.

O — Opportunity

- Significant potential to cut costs and improve domestic sales portion.
- Potential margin uplift from successful expansion in its specialty portfolio.

COMPANY RATING



Source: Thanachart; *CG Rating

W — Weakness

- Legacy cost structure.
- Relatively isolated location in the Map Ta Phut Industrial Estate on the eastern seaboard.

T — Threat

- Weaker-than-expected refining margins and petrochemical spreads from either soft demand or significant growth in new supplies.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	2.66	1.90	-29%
Net profit 23F (Bt m)	2,470	2,572	4%
Net profit 24F (Bt m)	4,056	2,141	-47%
Consensus REC	BUY: 6	HOLD: 10	SELL: 7

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2024F earnings are much lower than the Bloomberg consensus, which we attribute to us having more conservative chemical and GRM assumptions.
- Consequently, our TP is slightly lower than the Street's.

RISKS TO OUR INVESTMENT CASE

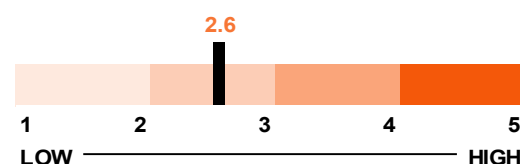
- Stronger-than-expected refining margins or petrochemical spreads would be the key downside risk to our call.
- If the crude oil price were to come down to a low level that would lead to lower operating costs, this would be a secondary downside risk to our call.
- Delivering less cost savings and/or productivity improvements would be another downside risk to our call.

Sources: Bloomberg consensus, Thanachart estimates

Source: Thanachart

IRPC is a fully integrated refinery and naphtha-based petrochemical producer. It is 47.6% owned by PTT. Our ESG score on IRPC is 2.6, which is below average among our coverage. We believe IRPC lags behind its local refinery and chemical peers in terms of ESG commitment and it may also lag behind some global peers that have started to produce more bio- or green products, such as bio jet fuel.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
IRPC	YES	YES	YES	A	59.72	80.97	82.00	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "terms of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- IRPC released 3.685mt of CO2 equivalent in 2022, which was within its target range and down by 15% from 2021. We believe this was due to a major turnaround of its refinery unit and we expect carbon emissions to normalise in 2023F. The carbon emission intensity was at 442 kg CO2 per barrel of crude oil equivalent, above peers' average of 280 kg CO2 per barrel of crude oil equivalent. We believe this was due to IRPC having the longest operating chain among Thai downstream operators.
- IRPC has a long-term goal of reducing its greenhouse gas emissions by 20% by 2030 (base year: 2018). The company plans for this to be done via efficiency improvement, a UFC project to produce Euro 5-compliant diesel and by promoting the circular economy.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- IRPC says it does not compromise on employees, personnel and stakeholders' lives, safety and well-being or the need to prevent making a serious environmental impact. There were no lost-time accidents among employees and contractors in 2022. The company also received a satisfaction score of 99% from society and surrounding communities, which was higher than its score in 2021.
- IRPC's employee engagement score was 87 in 2022, which was higher than its score in 2021. At IRPC, there are a total of seven labour unions, and 75% of employees are union members. In 2022, the company received a total of three suggestions from the labour unions, and the three cases were resolved.

GOVERNANCE & SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- We see IRPC having an appropriate board structure. Eight out of 15 board members are independent.
- IRPC's decisions require PTT's approval, mostly just to ensure alignment with the group's policies.
- IRPC's unit costs are high compared with its Thai refinery peers', largely due to higher operating costs. However, the company has committed to reducing its operating costs to generate higher returns to shareholders.
- The company also set aside an R&D budget and aims to increase the proportion of specialty products in its product portfolio from 20% in 2021 to 55% in 2030.

Sources: Company data, Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	235,174	318,396	309,318	315,310	301,116
Cost of sales	214,173	302,694	290,862	296,646	282,158
Gross profit	21,001	15,702	18,456	18,664	18,958
% gross margin	8.9%	4.9%	6.0%	5.9%	6.3%
Selling & administration expenses	15,699	14,777	14,745	15,140	14,695
Operating profit	5,302	925	3,710	3,524	4,263
% operating margin	2.3%	0.3%	1.2%	1.1%	1.4%
Depreciation & amortization	8,587	8,059	7,932	8,342	9,967
EBITDA	13,889	8,984	11,642	11,866	14,230
% EBITDA margin	5.9%	2.8%	3.8%	3.8%	4.7%
Non-operating income	1,967	1,353	1,458	1,522	1,477
Non-operating expenses	0	0	0	0	0
Interest expense	(1,699)	(1,836)	(1,995)	(2,042)	(2,055)
Pre-tax profit	5,570	442	3,173	3,005	3,685
Income tax	2,351	(1,142)	644	536	716
After-tax profit	3,219	1,584	2,530	2,468	2,970
% net margin	1.4%	0.5%	0.8%	0.8%	1.0%
Shares in affiliates' Earnings	719	289	289	289	289
Minority interests	(28)	(4)	(4)	(4)	(4)
Extraordinary items	10,595	(6,233)	(243)	(612)	(396)
NET PROFIT	14,505	(4,364)	2,572	2,141	2,859
Normalized profit	3,910	1,869	2,815	2,753	3,255
EPS (Bt)	0.7	(0.2)	0.1	0.1	0.1
Normalized EPS (Bt)	0.2	0.1	0.1	0.1	0.2

We see 2023 earnings to contract due to lower refinery margin.

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	67,200	70,920	84,536	84,623	83,947
Cash & cash equivalent	11,236	3,230	14,000	12,699	15,421
Account receivables	13,785	15,051	16,682	17,005	16,239
Inventories	33,766	39,376	40,970	41,785	39,744
Others	8,413	13,263	12,885	13,134	12,543
Investments & loans	8,603	8,746	8,746	8,746	8,746
Net fixed assets	109,067	111,432	113,899	118,609	117,242
Other assets	5,622	7,088	6,913	7,029	6,755
Total assets	190,492	198,187	214,095	219,007	216,690
LIABILITIES:					
Current liabilities:	47,543	62,056	62,119	62,722	60,407
Account payables	28,671	34,466	39,105	39,883	37,935
Bank overdraft & ST loans	0	9,000	0	0	0
Current LT debt	10,585	10,762	13,750	14,328	13,931
Others current liabilities	8,287	7,827	9,264	8,510	8,541
Total LT debt	50,494	51,849	66,242	69,029	67,113
Others LT liabilities	4,743	4,604	4,581	4,665	4,466
Total liabilities	102,780	118,509	132,942	136,416	131,987
Minority interest	217	225	229	233	237
Preferreds shares	0	0	0	0	0
Paid-up capital	20,434	20,434	20,434	20,434	20,434
Share premium	28,554	28,554	28,554	28,554	28,554
Warrants	0	0	0	0	0
Surplus	(112)	(116)	(116)	(116)	(116)
Retained earnings	38,619	30,579	32,050	33,484	35,593
Shareholders' equity	87,496	79,452	80,923	82,357	84,466
Liabilities & equity	190,492	198,187	214,095	219,007	216,690

Sources: Company data, Thanachart estimates

Balance sheet is strong given the limited capex

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	5,570	442	3,173	3,005	3,685
Tax paid	(2,351)	1,142	(644)	(536)	(716)
Depreciation & amortization	8,587	8,059	7,932	8,342	9,967
Chg ln working capital	(12,068)	(1,081)	1,415	(360)	858
Chg ln other CA & CL / minorities	(1,040)	(3,642)	2,103	(714)	911
Cash flow from operations	(1,302)	4,920	13,980	9,736	14,707
Capex	(3,104)	(10,424)	(10,399)	(13,052)	(8,600)
Right of use	(26)	(24)	0	0	0
ST loans & investments	0	0	0	0	0
LT loans & investments	(531)	(143)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg ln other assets & liabilities	11,210	(9,017)	(91)	(644)	(321)
Cash flow from investments	7,549	(19,608)	(10,490)	(13,696)	(8,921)
Debt financing	(1,326)	10,361	8,380	3,366	(2,314)
Capital increase	0	0	0	0	0
Dividends paid	(2,857)	(3,674)	(1,101)	(707)	(750)
Warrants & other surplus	322	(6)	0	0	0
Cash flow from financing	(3,862)	6,682	7,279	2,659	(3,064)
Free cash flow	(4,406)	(5,504)	3,581	(3,316)	6,107

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	11.6	24.3	16.1	16.5	13.9
Normalized PE - at target price (x)	9.9	20.8	13.8	14.1	11.9
PE (x)	3.1	na	17.6	21.2	15.9
PE - at target price (x)	2.7	na	15.1	18.1	13.6
EV/EBITDA (x)	6.9	12.7	9.6	9.8	7.8
EV/EBITDA - at target price (x)	6.4	11.9	9.0	9.2	7.3
P/BV (x)	0.5	0.6	0.6	0.6	0.5
P/BV - at target price (x)	0.4	0.5	0.5	0.5	0.5
P/CFO (x)	(34.8)	9.2	3.2	4.7	3.1
Price/sales (x)	0.2	0.1	0.1	0.1	0.2
Dividend yield (%)	3.6	3.2	1.7	1.4	1.9
FCF Yield (%)	(9.7)	(12.1)	7.9	(7.3)	13.5
(Bt)					
Normalized EPS	0.2	0.1	0.1	0.1	0.2
EPS	0.7	(0.2)	0.1	0.1	0.1
DPS	0.1	0.1	0.0	0.0	0.0
BV/share	4.3	3.9	4.0	4.0	4.1
CFO/share	(0.1)	0.2	0.7	0.5	0.7
FCF/share	(0.2)	(0.3)	0.2	(0.2)	0.3

Sources: Company data, Thanachart estimates

IRPC's plan to invest
Bt13.3bn in UCF project
started in 1Q24F.

Valuation looks
unattractive

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	54.4	35.4	(2.9)	1.9	(4.5)
Net profit (%)	na	na	na	(16.7)	33.5
EPS (%)	na	na	na	(16.7)	33.5
Normalized profit (%)	na	(52.2)	50.6	(2.2)	18.2
Normalized EPS (%)	na	(52.2)	50.6	(2.2)	18.2
Dividend payout ratio (%)	11.3	(32.8)	30.0	30.0	30.0
Operating performance					
Gross margin (%)	8.9	4.9	6.0	5.9	6.3
Operating margin (%)	2.3	0.3	1.2	1.1	1.4
EBITDA margin (%)	5.9	2.8	3.8	3.8	4.7
Net margin (%)	1.4	0.5	0.8	0.8	1.0
D/E (incl. minor) (x)	0.7	0.9	1.0	1.0	1.0
Net D/E (incl. minor) (x)	0.6	0.9	0.8	0.9	0.8
Interest coverage - EBIT (x)	3.1	0.5	1.9	1.7	2.1
Interest coverage - EBITDA (x)	8.2	4.9	5.8	5.8	6.9
ROA - using norm profit (%)	2.1	1.0	1.4	1.3	1.5
ROE - using norm profit (%)	4.8	2.2	3.5	3.4	3.9
DuPont					
ROE - using after tax profit (%)	3.9	1.9	3.2	3.0	3.6
- asset turnover (x)	1.3	1.6	1.5	1.5	1.4
- operating margin (%)	3.1	0.7	1.7	1.6	1.9
- leverage (x)	2.2	2.3	2.6	2.7	2.6
- interest burden (%)	76.6	19.4	61.4	59.5	64.2
- tax burden (%)	57.8	358.4	79.7	82.2	80.6
WACC (%)	8.4	8.4	8.4	8.4	8.4
ROIC (%)	2.4	2.4	2.0	2.0	2.2
NOPAT (Bt m)	3,064	3,315	2,958	2,895	3,435
invested capital (Bt m)	137,339	147,833	146,915	153,015	150,089

Sources: Company data, Thanachart estimates

With weak PP and lower GRM, ROE should remain low.

SELL (Unchanged)

Change in Numbers

TP: Bt 17.50 (From: Bt 19.00)

Downside : 11.6%

12 SEPTEMBER 2023

PTT Oil And Retail Pcl (OR TB)

Challenging outlook

We reaffirm our SELL call on OR on factoring in the challenging business outlook and expensive valuation at 22.6x 2024F PE on flat earnings growth. Its operating environment is challenged by resilient oil prices and policy risk from the new government.



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Challenging outlook and still expensive to us

This report is a part of *Energy Sector – Weaker fundamental dynamics, dated 12 September 2023*. We reaffirm our SELL call on OR. **First**, we do not foresee key earnings drivers and forecast flat earnings growth of 3.8/-1.7/4.1% over 2023-25F. **Second**, while the high oil price environment keeps its marketing margin at bay, we do not expect much growth from non-oil business given the already high base for Café Amazon. **Third**, there is a policy risk from the new government's attempt to lower energy prices. **Last**, we see OR as expensive on 22.6x 2024F PE vs. flat earnings growth. In this report we cut our earnings forecasts by 9% over 2024-25F to reflect our lower marketing margin assumptions. We then lower our DCF-based TP on 2024F base year to Bt17.5 (from Bt19).

Peaked out marketing margin

OR's marketing margin was Bt0.99/litre in 1H23 vs. Bt1.15/0.98/litre over 2021-22. We expect the margin to fall in 2H23F to Bt0.90 on higher oil prices. We forecast subdued margin outlook at Bt0.97/0.92/0.92/litre over 2023-25F due to: 1) the replacement of Euro 4 diesel with Euro 5 sales from Jan-24 in the environment of cap diesel price; 2) resilient oil price outlook on OPEC's effective supply management; and 3) policy risk at home to lower end-product energy prices.

A policy risk

Assuming everything remains constant, marketing margin should fall next year from the replacement of Euro 4 diesel with cleaner Euro 5 diesel sales. This is because petrol stations have to buy Euro 5 from refiners at higher price than Euro 4 while end diesel price is capped at Bt32/litre. We already factor this in our numbers. However, there is another risk from the new government's attempt to bring down energy prices, including diesel. One way to do that is to remove Singapore-Thailand freight cost out of diesel price calculation to bring down diesel price. If we were to assume freight cost of Bt0.3/litre, diesel price ceiling could fall from Bt32.0/litre to Bt31.7/litre. However, as petrol stations, including OR, do not actually pay for such freight cost as they buy refined oil from Thai refiners in Thailand, their costs remain the same. With the same cost, a lower diesel price, assuming Bt31.7/litre, should cut into its marketing margin, on our estimate.

Premium valuations

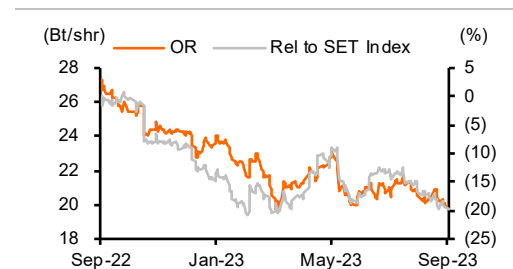
We see OR at 22.6x 2024F PE as expensive against its earnings growth of only 1% over 2024-25F. This is also a substantial premium to Thai petrol station peers' average of 13x. We also do not believe OR should be priced highly as a retail firm as its non-oil business accounts for 29% of 2Q23 EBITDA.

This report is prepared by Thanachart Securities. Please contact our salesperson for authorisation. Please see the important notice on the back page

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	789,785	681,396	649,502	665,843
Net profit	10,370	10,720	10,536	10,968
Consensus NP	—	12,300	13,791	13,602
Diff frm cons (%)	—	(12.8)	(23.6)	(19.4)
Norm profit	10,326	10,720	10,536	10,968
Prev. Norm profit	—	10,720	11,635	12,104
Chg frm prev (%)	—	0.0	(9.4)	(9.4)
Norm EPS (Bt)	0.9	0.9	0.9	0.9
Norm EPS grw (%)	(6.2)	3.8	(1.7)	4.1
Norm PE (x)	23.0	22.2	22.6	21.7
EV/EBITDA (x)	12.6	13.7	13.8	12.8
P/BV (x)	2.3	2.2	2.0	1.9
Div yield (%)	1.7	1.8	1.7	1.8
ROE (%)	10.1	10.0	9.3	9.1
Net D/E (%)	(5.4)	(19.1)	(18.4)	(18.0)

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	19.80
Market Cap (US\$ m)	6,691.6
Listed Shares (m shares)	12,000.0
Free Float (%)	23.7
Avg Daily Turnover (US\$ m)	10.9
12M Price H/L (Bt)	27.25/19.80
Sector	ENERG
Major Shareholder	PTT Pcl 75.00%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P51



Ex 1: Earning Revisions

	2019	2020	2021	2022	2023F	2024F	2025F
Net profit (Bt m)							
- New	10,896	8,791	11,474	10,370	10,720	10,536	10,968
- Old					10,720	11,635	12,104
- Change (%)					0.0	(9.4)	(9.4)
Norm profit (Bt m)							
- New	10,712	9,218	11,009	10,326	10,720	10,536	10,968
- Old					10,720	11,635	12,104
- Change (%)					0.0	(9.4)	(9.4)
Sale volume (m liters)							
- New	12,078	12,547	11,777	13,133	13,741	14,145	14,423
- Old					13,741	14,145	14,423
- Change (%)					(0.0)	(0.0)	0.0
Sale volume growth (%)							
- New	4.1	3.9	(6.1)	11.5	4.6	2.9	2.0
- Old					4.6	2.9	2.0
- Change (%)					0.0	0.0	0.0
Marketing margin (Bt/liter)							
- New	1.06	0.97	1.15	0.98	0.97	0.92	0.92
- Old					0.97	0.97	0.97
- Change (%)					0.0	(4.7)	(4.7)
Non-oil EBITDA margin (%)							
- New	25.0	26.6	24.7	24.8	23.8	24.5	25.2
- Old					23.8	24.5	25.2
- % Change					0.0	0.0	0.0
Café Amazon branch							
- New	2,930	3,168	3,628	3,895	4,275	4,655	4,955
- Old					4,275	4,655	4,955
- Change (%)					0.0	0.0	0.0

Sources: Company data, Thanachart estimates

Ex 2: 12-month DCF-based TP Calculation, Using A Base Year Of 2024F

(Bt m)	2023F	2024F	2025F	2026F	2018F	2028F	2029F	2030F	2031F	2032F	2033F	Terminal Value
EBITDA & equity income	13,832	14,922	15,911	16,838	17,746	18,689	19,668	20,684	21,740	23,013	24,353	
Free cash flow	5,541	5,569	8,199	9,036	9,863	10,713	11,591	12,499	13,439	14,553	15,721	294,096
PV of free cash flow	5,151	4,813	6,588	6,633	6,700	6,736	6,746	6,733	6,700	6,430	6,402	119,758
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	0.9											
WACC (%)	7.6											
Terminal growth (%)	3.0											
Enterprise value - add investments	189,390											
Net debt (end-2023F)	(21,114)											
Minority interest	60											
Equity value	210,444											
# of shares (m)	12,000											
Equity value/share (Bt)	17.5											

Source: Thanachart estimates

Valuation Comparison

Ex 3: Valuation Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F (%)	24F (%)	23F (x)	24F (x)	23F (x)	24F (x)	23F (x)	24F (x)	23F (%)	24F (%)	23F (%)	24F (%)
<u>Petrol station operators</u>														
Pure petrol station operators														
PTT Oil And Retail	OR TB *	Thailand	3.8	(1.7)	22.2	22.6	2.2	2.0	13.7	13.8	1.8	1.7	10.0	9.3
PTG Pcl	PTG TB *	Thailand	4.0	18.5	17.3	14.6	1.9	1.8	4.4	3.8	2.6	3.1	11.5	12.8
SUSCO Pcl	SUSCO TB	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
Bangchak Corp	BCP TB *	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
ESSO (Thailand)	ESSO TB *	Thailand	(10.5)	33.8	9.8	7.3	1.0	0.9	6.2	5.8	5.1	6.9	10.4	12.9
Average			(21.4)	(1.6)	12.9	12.7	1.5	1.4	6.8	6.7	2.9	3.1	13.5	12.0
Petrol station operators with other business														
Ampol	ALD AU	Australia	(10.8)	(4.0)	12.0	12.5	2.3	2.2	7.2	7.2	6.1	5.5	18.6	18.6
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Average			(1.8)	0.8	9.6	9.6	1.5	1.4	6.3	6.1	7.7	7.4	14.0	14.0
Average			(14.8)	(0.8)	11.8	11.7	1.5	1.4	6.6	6.5	4.5	4.5	13.7	12.7
<u>Thailand retailers</u>														
Berli Jucker	BJC TB *	Thailand	4.0	12.6	25.7	22.8	1.1	1.1	13.0	12.3	2.7	3.1	4.3	4.8
CP All	CPALL TB *	Thailand	35.3	36.2	34.6	25.4	5.2	4.7	13.0	11.4	1.4	2.0	16.7	19.8
Central Pattana	CPN TB *	Thailand	34.0	28.8	36.9	28.7	1.3	1.2	13.9	12.1	2.0	2.6	3.5	4.4
Central Retail Corp.	CRC TB *	Thailand	11.1	14.7	26.9	23.4	3.4	3.1	17.3	15.2	1.7	1.9	13.1	13.7
Siam Global House	GLOBAL TB *	Thailand	20.4	26.9	29.6	23.4	3.7	3.3	9.7	8.5	1.3	1.7	12.9	15.0
Home Product	HMPRO TB *	Thailand	(7.4)	14.4	28.4	24.8	3.9	3.5	21.2	18.6	1.2	1.4	14.3	14.8
Siam Makro	MAKRO TB *	Thailand	11.0	14.9	25.7	22.4	7.1	6.6	14.8	13.2	3.1	3.6	28.0	30.4
Average			15.5	21.2	29.7	24.4	3.7	3.4	14.7	13.0	1.9	2.3	13.2	14.7

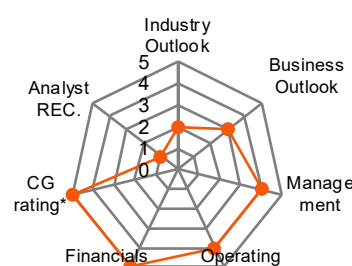
Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

PTT Oil and Retail (OR), is the flagship company in the oil and retail business under PTT Group, which is the most comprehensive oil marketing operator in Thailand. OR, as of 1Q22, ran the largest network with a total of 2,312 oil retail stations across the country and a volume market share of 41% (as of 2021). OR also has a presence in Cambodia, Laos, and the Philippines. The company also has a strong non-oil business that accounted for 21% of EBITDA in 2021.

Source: Thanachart

COMPANY RATING



Rating Scale

Excellent	5
Good	4
Fair	3
Weak	2
Very Weak	1
None	0

Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Strong oil retail network that could allow the company to maintain its No.1 ranking
- Owns Thailand's leading coffee brand, Café Amazon, which is the key magnet for its petrol stations.
- Strong partnership with 7-Eleven, Thailand's No.1 convenience store operator.

O — Opportunity

- Overseas markets could offer substantial growth opportunities.
- OR's strong balance sheet could allow it to find new businesses or investments to enhance its existing operation.

W — Weakness

- Highly dependent on 7-Eleven stores. A breaking of the master franchise contract with 7-Eleven could lead to lower profitability for PTTOR's non-oil business.
- Located in the low-growth and competitive oil retail industry.
- Highly volatile earnings due to inventory gains/losses.

T — Threat

- Risk of government intervention when oil prices are high.
- Rising EV penetration rate could lead to lower oil demand.
- Potential cannibalisation of store expansion

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	25.09	17.50	-30%
Net profit 23F (Bt m)	12,300	10,720	-13%
Net profit 24F (Bt m)	13,791	10,536	-24%
Consensus REC	BUY: 14	HOLD: 5	SELL: 4

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2023-24F profits are 13/24% below the Bloomberg consensus estimates. We believe this is due to us having lower margin assumptions for its oil business.
- Consequently, our DCF-based TP is lower.

Sources: Bloomberg consensus, Thanachart estimates

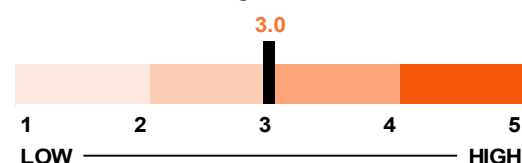
RISKS TO OUR INVESTMENT CASE

- A stronger-than-expected oil demand recovery is the key upside risk to our call.
- OR may acquire a new non-oil business that could lead to higher-than-expected returns and reduce its earnings volatility, and this would represent a secondary upside risk to our call.
- A faster-than-expected expansion of Café Amazon that could lead to a potential upside surprise to our EBITDA forecasts.

Source: Thanachart

PTT Oil and Retail (OR) is PTT Group's oil trading and retail business arm. EBITDA breakdown in 2Q23 was 63% oil, 29% retail, and 9% overseas businesses. OR's oil business doesn't involve production or processing but it trades in the retail market via its 2,570 petrol stations and wholesale trading. Therefore, our ESG score for PTTOR of 2.98 is higher than the sector average of 2.8.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
OR	YES	YES	-	A	58.38	57.12	71.00	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, Arabesque S-Ray®, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "term of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- OR doesn't disclose its carbon emissions. However, in line with PTT Group's policy, the company aims for carbon neutrality by 2030 and net-zero carbon status by 2050. OR isn't involved in actual energy production and processing but is in the trading side of the business, so we believe the company has far fewer concerns and challenges to achieve its environmental targets.
- OR's petrol station design follows the "Friendly Design" concept, which reduces the use of electricity. The decor in its petrol station and Café Amazon outlets is made partly from recycled material and waste products.
- We expect OR to be PTT's investment arm in the EV infrastructure business, which includes EV charging stations. However, the speed of expansion will depend on the pace of EV adoption in Thailand.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- OR follows PTT Group's human rights policy. There were no complaints in 2021 under this comprehensive management approach.
- OR continually develops employees' skills to prepare them for new businesses and enhance satisfaction at work as well as their capabilities through flexi-time and work-from-home approaches.
- OR allocates a part of its budget to engage in community activities and services, including providing scholarships, channeling a portion of its treated wastewater to communities to reduce their farming costs and increase their revenue, and offering support during periods of water shortages.
- Café Amazon participates in environmental conservation under the "Go Green" concept by using environmental-friendly and biodegradable materials, such as bio cups.

GOVERNANCE &
SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- OR's board comprises 15 qualified directors who possess a range of expertise. There are seven independent directors and one female director.
- The company is 75%-owned by PTT, a state-owned enterprise. This means there is a high risk of government intervention in marketing margins when oil prices are high.
- The company has a strong corporate governance policy in line with PTT Group's award-winning framework.
- OR's balance sheet is also solid with low net gearing. The company has high growth visibility, in our view, supported by its strong non-oil business.

Sources: Company data, Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	511,799	789,785	681,396	649,502	665,843
Cost of sales	475,592	750,677	644,242	614,060	629,273
Gross profit	36,207	39,108	37,154	35,443	36,569
% gross margin	7.1%	5.0%	5.5%	5.5%	5.5%
Selling & administration expenses	25,087	29,110	27,256	25,980	26,634
Operating profit	11,120	9,998	9,898	9,462	9,936
% operating margin	2.2%	1.3%	1.5%	1.5%	1.5%
Depreciation & amortization	7,910	8,362	5,953	6,232	6,850
EBITDA	19,030	18,360	15,852	15,695	16,785
% EBITDA margin	3.7%	2.3%	2.3%	2.4%	2.5%
Non-operating income	3,480	3,633	3,633	3,633	3,633
Non-operating expenses	0	0	0	0	0
Interest expense	(1,250)	(1,155)	(901)	(693)	(633)
Pre-tax profit	13,351	12,476	12,630	12,402	12,936
Income tax	2,719	2,638	2,400	2,356	2,458
After-tax profit	10,632	9,838	10,231	10,046	10,478
% net margin	2.1%	1.2%	1.5%	1.5%	1.6%
Shares in affiliates' Earnings	372	490	490	490	490
Minority interests	4	(2)	0	0	0
Extraordinary items	465	44	0	0	0
NET PROFIT	11,474	10,370	10,720	10,536	10,968
Normalized profit	11,009	10,326	10,720	10,536	10,968
EPS (Bt)	1.0	0.9	0.9	0.9	0.9
Normalized EPS (Bt)	0.9	0.9	0.9	0.9	0.9

We expect flat earnings growth over 2023-25F.

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	126,066	136,552	111,614	108,236	109,960
Cash & cash equivalent	66,224	39,461	39,461	39,461	39,461
Account receivables	20,235	28,083	18,668	17,795	18,242
Inventories	24,432	27,474	17,650	16,824	17,240
Others	15,175	41,534	35,834	34,157	35,016
Investments & loans	5,948	8,743	8,743	8,743	8,743
Net fixed assets	42,663	44,363	52,732	59,362	65,026
Other assets	32,982	35,846	10,527	8,664	6,800
Total assets	207,659	225,504	183,616	185,006	190,530
LIABILITIES:					
Current liabilities:	51,730	68,660	29,490	27,354	28,110
Account payables	37,275	48,414	17,650	16,824	17,240
Bank overdraft & ST loans	93	4,689	0	0	0
Current LT debt	4,775	4,630	917	899	863
Others current liabilities	9,587	10,927	10,922	9,631	10,007
Total LT debt	29,502	24,488	17,430	17,078	16,392
Others LT liabilities	26,555	28,595	26,364	23,887	22,604
Total liabilities	107,787	121,744	73,284	68,319	67,106
Minority interest	54	60	60	60	60
Preferreds shares	0	0	0	0	0
Paid-up capital	120,000	120,000	120,000	120,000	120,000
Share premium	23,497	23,497	23,497	23,497	23,497
Warrants	0	0	0	0	0
Surplus	(66,086)	(66,195)	(66,195)	(66,195)	(66,195)
Retained earnings	22,407	26,399	32,971	39,325	46,063
Shareholders' equity	99,818	103,701	110,273	116,627	123,365
Liabilities & equity	207,659	225,504	183,616	185,006	190,530

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	13,351	12,476	12,630	12,402	12,936
Tax paid	(2,397)	(2,976)	(2,172)	(2,479)	(2,398)
Depreciation & amortization	7,910	8,362	5,953	6,232	6,850
Chg In working capital	366	249	(11,525)	874	(448)
Chg In other CA & CL / minorities	6,212	(23,033)	5,958	998	(53)
Cash flow from operations	25,441	(4,922)	10,844	18,028	16,886
Capex	(6,742)	(8,202)	(12,459)	(11,000)	(10,650)
Right of use	(3,446)	(1,102)	0	0	0
ST loans & investments	0	0	0	0	0
LT loans & investments	(1,155)	(2,796)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(1,735)	(3,804)	21,224	(2,476)	(1,284)
Cash flow from investments	(13,078)	(15,904)	8,765	(13,476)	(11,934)
Debt financing	(15,662)	550	(15,460)	(370)	(722)
Capital increase	53,497	0	0	0	0
Dividends paid	(4,423)	(6,464)	(4,149)	(4,181)	(4,230)
Warrants & other surplus	1,446	(23)	0	0	0
Cash flow from financing	34,858	(5,937)	(19,609)	(4,552)	(4,952)
Free cash flow	18,699	(13,124)	(1,615)	7,028	6,236

OR chooses to use cash
to explore new
businesses

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	21.6	23.0	22.2	22.6	21.7
Normalized PE - at target price (x)	19.1	20.3	19.6	19.9	19.1
PE (x)	20.7	22.9	22.2	22.6	21.7
PE - at target price (x)	18.3	20.2	19.6	19.9	19.1
EV/EBITDA (x)	10.8	12.6	13.7	13.8	12.8
EV/EBITDA - at target price (x)	9.4	11.1	11.9	12.0	11.2
P/BV (x)	2.4	2.3	2.2	2.0	1.9
P/BV - at target price (x)	2.1	2.0	1.9	1.8	1.7
P/CFO (x)	9.3	(48.3)	21.9	13.2	14.1
Price/sales (x)	0.5	0.3	0.3	0.4	0.4
Dividend yield (%)	1.4	1.7	1.8	1.7	1.8
FCF Yield (%)	7.9	(5.5)	(0.7)	3.0	2.6
(Bt)					
Normalized EPS	0.9	0.9	0.9	0.9	0.9
EPS	1.0	0.9	0.9	0.9	0.9
DPS	0.3	0.3	0.4	0.3	0.4
BV/share	8.3	8.6	9.2	9.7	10.3
CFO/share	2.1	(0.4)	0.9	1.5	1.4
FCF/share	1.6	(1.1)	(0.1)	0.6	0.5

Sources: Company data, Thanachart estimates

We see its high PE as
unjustified as profit is
still being driven by its oil
retail business

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	19.4	54.3	(13.7)	(4.7)	2.5
Net profit (%)	30.5	(9.6)	3.4	(1.7)	4.1
EPS (%)	30.5	(9.6)	3.4	(1.7)	4.1
Normalized profit (%)	19.4	(6.2)	3.8	(1.7)	4.1
Normalized EPS (%)	19.4	(6.2)	3.8	(1.7)	4.1
Dividend payout ratio (%)	28.2	39.3	39.3	39.3	39.3
Operating performance					
Gross margin (%)	7.1	5.0	5.5	5.5	5.5
Operating margin (%)	2.2	1.3	1.5	1.5	1.5
EBITDA margin (%)	3.7	2.3	2.3	2.4	2.5
Net margin (%)	2.1	1.2	1.5	1.5	1.6
D/E (incl. minor) (x)	0.3	0.3	0.2	0.2	0.1
Net D/E (incl. minor) (x)	(0.3)	(0.1)	(0.2)	(0.2)	(0.2)
Interest coverage - EBIT (x)	8.9	8.7	11.0	13.6	15.7
Interest coverage - EBITDA (x)	15.2	15.9	17.6	22.6	26.5
ROA - using norm profit (%)	6.2	4.8	5.2	5.7	5.8
ROE - using norm profit (%)	16.0	10.1	10.0	9.3	9.1
DuPont					
ROE - using after tax profit (%)	15.4	9.7	9.6	8.9	8.7
- asset turnover (x)	2.9	3.6	3.3	3.5	3.5
- operating margin (%)	2.9	1.7	2.0	2.0	2.0
- leverage (x)	2.6	2.1	1.9	1.6	1.6
- interest burden (%)	91.4	91.5	93.3	94.7	95.3
- tax burden (%)	79.6	78.9	81.0	81.0	81.0
WACC (%)	7.6	7.6	7.6	7.6	7.6
ROIC (%)	12.7	11.6	8.2	8.6	8.5
NOPAT (Bt m)	8,856	7,884	8,017	7,665	8,048
invested capital (Bt m)	67,963	98,047	89,159	95,142	101,158

Sources: Company data, Thanachart estimates

Despite OR's asset-light strategy, returns are not superior to peers'

SELL (Unchanged)
Company Update

TP: Bt 31.00 (Unchanged)
Downside : 10.1%

12 SEPTEMBER 2023

PTT Public Co Ltd (PTT TB)

Not all rosy

We maintain our SELL rating on PTT and DCF-derived SOTP-based TP of Bt31 despite factoring in the 1H23 profit and rolling over our TP to a 2024F base year. We think regulatory risk isn't the only negative factor as the profit outlook remains subdued over 2023-25F.



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Policy risk isn't the only negative factor

PTT's share price has rallied 20% from its bottom this year as the market sees regulatory risk easing since the Move Forward Party (MFP) didn't become part of the new government. However, we think regulatory risk is not the only negative factor. We expect PTT's earnings to remain stagnant over the next two years due to our expectation of range-bound oil prices. We see PTT's valuation as unattractive at 11x 2024F PE. We maintain our SELL call on PTT and DCF-derived SOTP-based 12-month TP of Bt31 despite factoring in the 1H23 profit and rolling over our TP to a 2024F base year.

Gas profit peak in 2Q23

After the sharp improvement in 2Q23, we expect PTT's gas profit (39% of 2023F profit) to peak in the quarter as benefits from strong gas demand and lower pool gas costs fade in 2H23F. PTT's gas sales volume has grown substantially by 19% q-q in 2Q23, given lower gas prices, which make it more competitive for power generation. However, we expect gas demand to trend lower in 2H23F due to seasonally weak demand. We also anticipate margins to trend down in 4Q23F as pool gas costs should reflect higher oil prices, and the spot LNG price could see support from seasonal winter demand. On a longer-term basis, we expect domestic gas demand to grow at its normal level of only 1% p.a. Gas profit should grow only 6% p.a., based on our lower gas cost assumptions.

Mixed outlook for subsidiaries

The biggest contributor to PTT's profit comes from its upstream subsidiary, PTT Exploration & Production (PTTEP TB, Bt164.50, BUY) (accounts for 44% of 2023F profit), where we expect profit to decline due to our lower oil price assumptions. Meanwhile, downstream refinery (6% of 2023F profit) should see lower profit as GRM will likely trend lower in 2024F due to more supply pressure. The only potential recovery area in the next two years is at its chemical subsidiaries (1% of profit in 2023F), but we don't think this is enough to lead to major earning growth for PTT.

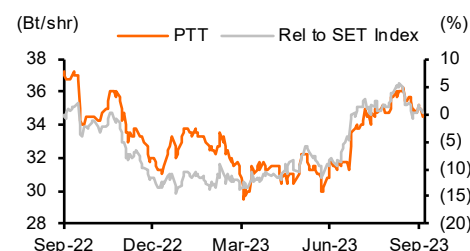
New business contribution is still small

The only way that we see a multiple re-rating happening is from PTT's new businesses. The company has been very active in exploring new businesses given limited growth from its legacy gas business. And the progress has been good, especially for its pharmaceutical business. Profit from the new businesses reached Bt500m in 1H23, which was up from Bt200m in 2022. However, it was still very small compared to PTT's total profit, accounting for only 1% of 1H23 profit.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	3,367,203	3,202,210	3,076,390	3,022,530
Net profit	91,175	97,617	89,428	86,204
Consensus NP	—	97,345	102,994	108,043
Diff frm cons (%)	—	0.3	(13.2)	(20.2)
Norm profit	108,916	97,617	89,428	86,204
Prev. Norm profit	—	97,617	89,428	86,204
Chg frm prev (%)	—	0.0	0.0	0.0
Norm EPS (Bt)	3.8	3.4	3.1	3.0
Norm EPS grw (%)	22.7	(10.4)	(8.4)	(3.6)
Norm PE (x)	9.0	10.1	11.0	11.4
EV/EBITDA (x)	3.8	4.5	4.1	3.6
P/BV (x)	0.9	0.9	0.9	0.9
Div yield (%)	5.8	5.8	5.8	5.8
ROE (%)	10.6	9.1	8.1	7.6
Net D/E (%)	48.1	45.1	39.4	30.5

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	34.50
Market Cap (US\$ m)	27,752.9
Listed Shares (m shares)	28,563.0
Free Float (%)	48.9
Avg Daily Turnover (US\$ m)	42.3
12M Price H/L (Bt)	37.25/29.50
Sector	Energy
Major Shareholder	Ministry of Finance 51.11%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P59

Ex 1: 12-month DCF-derived SOTP-based TP Calculation Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal Value
EBITDA	61,207	65,478	67,433	68,957	73,517	72,737	72,032	71,404	70,856	70,391	70,011	
Free cash flow	29,248	69,267	68,378	59,208	67,734	67,387	66,915	66,505	66,163	65,886	65,686	805,289
PV of free cash flow	24,385	52,728	47,528	36,897	38,391	34,748	31,390	28,383	25,682	22,354	20,202	247,666
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.1											
WACC (%)	9.5											
Terminal growth (%)	2.0											
Enterprise value - add investments	610,354											
Net debt	245,246											
Minority interest	0											
Equity value	365,107											
# of shares (m)	28,563											
Equity value/sh (Bt)	13.00											

Sum-of-the-parts valuation	Value (Bt m)	Per share (Bt/shr)	% of total	Methodology
Gas and other core operations	318,888	11.2	27	DCF
Oil & retail	171,000	6.0	15	EV/EBITDA
Upstream	438,683	15.4	37	DCF
Refining & chemical	173,389	6.1	15	DCF
Power	41,411	1.4	4	DCF
Other investments	31,040	1.1	3	Earnings multiples
Total equity value	1,174,411	41.0	100	SOTP
Holding discount assumption		25%		
Target price		31.0		

Sources: Thanachart estimates

Valuation Comparison

Ex 2: Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F (%)	24F (%)	23F (x)	24F (x)	23F (x)	24F (x)	23F (x)	24F (x)	23F (%)	24F (%)	23F (%)	24F (%)
Refining & Marketing														
Ampol	ALD AU	Australia	(10.8)	(4.0)	12.0	12.5	2.3	2.2	7.2	7.2	6.1	5.5	18.6	18.6
BPCL	BPCL IN	India	(66.3)	na	23.2	5.0	1.4	1.2	13.8	5.2	1.9	6.9	3.3	24.5
HPCL	HPCL IN	India	na	na	na	3.7	1.3	1.0	na	6.5	3.8	8.3	na	28.8
IOCL	IOCL IN	India	(72.5)	na	19.3	6.1	1.0	0.9	11.6	5.7	4.0	8.8	5.2	17.0
Reliance Industries	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
SK Energy	096770 KS	S.Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1	3.2	8.6
S-OIL	010950 KS	S.Korea	(54.9)	30.4	8.7	6.7	1.0	0.9	5.6	4.8	3.1	3.8	11.6	14.2
Formosa Petrochemical	6505 TT	Taiwan	(30.0)	31.3	38.9	29.6	2.4	2.3	21.4	15.5	1.9	2.4	5.8	7.5
Bangchak *	BCP TB	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
ESSO (Thailand) *	ESSO TB	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
IRPC Pcl *	IRPC TB	Thailand	50.6	(2.2)	16.1	16.5	0.6	0.6	9.6	9.8	1.7	1.4	3.5	3.4
PTT Oil And Retail *	OR TB *	Thailand	3.8	(1.7)	22.2	22.6	2.2	2.0	13.7	13.8	1.8	1.7	10.0	9.3
PTG Pcl *	PTG TB	Thailand	4.0	18.5	17.3	14.6	1.9	1.8	4.4	3.8	2.6	3.1	11.5	12.8
PTT Global Chemicals *	PTTGC TB	Thailand	(72.4)	103.9	33.1	16.2	0.5	0.5	11.5	9.4	2.1	2.3	1.6	3.3
Star Petroleum Refining *	SPRC TB	Thailand	(52.1)	(16.7)	9.5	11.5	1.0	0.9	5.3	5.9	3.4	2.3	10.4	8.3
Thai Oil *	TOP TB	Thailand	(57.0)	(28.4)	6.2	8.7	0.6	0.6	7.7	10.3	5.0	3.8	10.7	7.3
Average			(34.0)	22.3	17.3	11.7	1.3	1.2	9.3	7.6	3.1	4.0	9.1	12.4
Integrated oils														
PetroChina	857 HK	China	3.5	(2.4)	7.2	7.4	0.8	0.7	3.8	3.8	6.8	6.4	11.0	9.5
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Total	FP	France	(31.3)	(3.8)	na	na	na	na	na	na	na	na	20.5	17.3
Eni	ENI IM	Italy	(34.6)	(7.4)	6.1	6.6	0.9	0.8	3.1	3.2	6.2	6.4	14.0	12.4
Repsol	REP SM	Spain	(23.0)	(20.9)	4.5	5.7	0.7	0.7	2.8	3.0	4.7	5.0	16.5	11.2
Chevron Texaco	CVX US	USA	(29.1)	9.2	12.4	11.4	2.0	1.9	6.5	6.2	3.6	3.8	15.6	15.8
Exxon Mobil	XOM US	USA	(33.7)	(0.9)	12.6	12.7	2.3	2.2	6.7	6.9	3.2	3.3	18.1	16.1
Conoco Philips	COP US	USA	(37.1)	13.4	14.2	12.5	3.1	2.9	6.2	5.9	1.7	2.1	22.0	22.5
PTT Pcl *	PTT TB	Thailand	(10.4)	(8.4)	10.1	11.0	0.9	0.9	4.5	4.1	5.8	5.8	9.1	8.1
Average			(20.9)	(1.7)	9.3	9.3	1.4	1.3	4.9	4.8	5.2	5.3	15.1	13.6
Exploration and Production														
Santos	STO AU	Australia	(41.5)	(0.9)	16.9	17.0	1.7	1.6	4.9	4.9	2.5	2.3	10.0	9.2
Woodside	WDS AU	Australia	(50.0)	(1.5)	21.1	21.5	2.0	2.0	5.2	4.9	3.6	3.6	9.2	8.7
Suncor Energy	SU US	Canada	(38.5)	14.7	6.9	6.0	1.1	1.0	4.7	4.5	6.1	6.4	15.7	15.6
ONGC	ONGC IN	India	10.9	(4.5)	4.8	5.0	0.8	0.7	4.0	3.7	8.6	7.3	18.0	15.9
RIL	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
Apache	APA US	USA	(43.7)	21.7	9.7	8.0	10.0	6.1	3.9	3.7	2.2	2.4	na	na
Devon Energy	DVN US	USA	(33.9)	15.9	9.4	8.1	2.8	2.5	5.3	4.9	1.5	2.3	30.6	32.4
PTTEP *	PTTEP TB	Thailand	(13.8)	(2.1)	8.4	8.5	1.3	1.2	2.6	2.5	5.5	5.2	16.0	14.4
Average			(24.7)	6.7	11.0	10.6	2.8	2.1	4.4	4.2	4.3	4.2	15.4	15.0

Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

PTT Pcl (PTT) is a fully integrated oil and gas company, and it has the largest market capitalization on the Stock Exchange of Thailand (SET). The government owns directly and indirectly 66% of PTT. Its businesses can be mainly grouped into seven segments: 1) Exploration & Production – operated by its key subsidiary, 65%-owned PTTEP; 2) petrochemicals with its flagship PTTGC; 3) refinery via SET-listed TOP and IRPC; 4) oil marketing business through its 75%-owned PTTOR; 5) power flagship through its 43%-owned GPSC; 6) gas pipeline and GSP businesses operated by PTT, the parent firm, and 7) coal and international trading.

Source: Thanachart

THANACHART’S SWOT ANALYSIS

S — Strength

- Sole gas distributor in Thailand that operates Thailand’s gas pipeline and gas separation plants.
- Integrated business model: upstream E&P, gas processing, chemical, refining and retailing.

O — Opportunity

- Strong free cash to expand into new products and abroad.
- M&As within the group or overseas to strengthen its business structure.

CONSENSUS COMPARISON

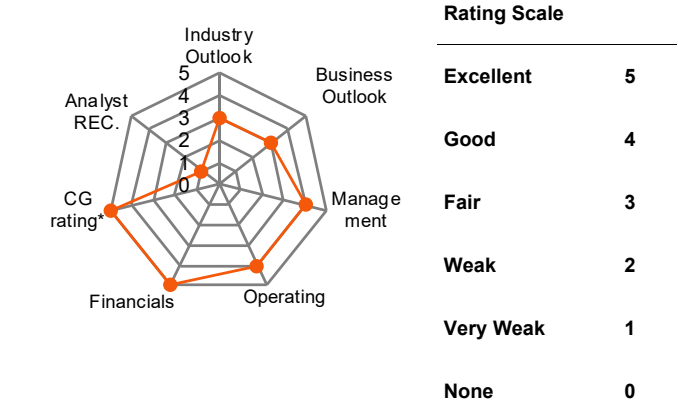
	Consensus	Thanachart	Diff
Target price (Bt)	38.21	31.00	-19%
Net profit 23F (Bt m)	97,345	97,617	0%
Net profit 24F (Bt m)	102,994	89,428	-13%
Consensus REC	BUY: 16	HOLD: 6	SELL: 3

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2024F net profit is 13% lower than the Bloomberg consensus estimate, likely due to us having lower profit assumptions for its downstream subsidiaries.
- Our TP is also lower than the Street’s. This is likely partly because we assume a political risk discount of 5% and holding company discount of 25%

Sources: Bloomberg consensus, Thanachart estimates

COMPANY RATING



Source: Thanachart; *CG Rating

W — Weakness

- PTT is heavily reliant on the Thailand market, which has limited growth opportunities for its legacy O&G businesses.
- PTT, being a state-owned enterprise, is heavily regulated and the company may from time to time be called upon to do national service (i.e., provide energy price subsidies).

T — Threat

- The government is allowing third-party imports of LNG and could soon deregulate PTT’s exclusive gas distributorship.
- Depleting domestic gas reserves, which could be a threat to its gas separation plants’ earnings.
- Potential investments that could lead to value destruction.

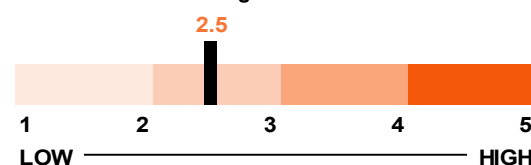
RISKS TO OUR INVESTMENT CASE

- Higher-than-expected oil prices would be the key upside risk to our call.
- High oil prices could trigger the implementation of adverse regulatory measures.
- Another secondary upside risk would come from higher-than-expected refining/chemical margins.

Source: Thanachart

PTT is a Thai state-owned energy firm tasked with ensuring the country's energy security. It is actively seeking new business opportunities to increase its footprint in renewable energy and EV businesses. We score PTT at 2.5 for ESG. Still, 90% of its EBITDA is contributed by its traditional energy business. We expect the score to improve in the future from a rising proportion of green energy and non-oil businesses.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
PTT	YES	YES	YES	A	53.04	76.46	73.00	44.0	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "terms of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- In 2022, PTT released 9.71mt of CO₂ equivalent and 44.54mt of CO₂ equivalent for PTT group, which was the highest in the energy sector. The absolute amount is high due to its size, but if we look at it in terms of PTT's business, the company released carbon amounting to 82.86kg CO₂ per barrel of crude oil equivalent. This is 5% below its target.
- PTT has set a target to cut carbon emissions by 15% from 2020 to 2030 and expects to reach net zero GHG emissions by 2050F.
- The four key Future Energy investments are a battery business via its holding in Global Power Synergy Plc (GPSC), a licensee of US-based battery start-up 24M Technologies Inc, battery assembly plants with cell-to-module technology for NV Gotion and cell-to-pack technology for CATL, and an agreement with Hon Hai Technology Group (Foxconn), a leading global technological solutions provider and electronics manufacturer.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- PTT is committed to respecting human rights in all business activities, and the company has received zero human rights complaints since 2018 (oldest historical data).
- The company has also established PTT Group's Quality, Security, Safety, Health, and Environment (QSHE) Policy as a framework to control work processes, maintenance, and productivity improvement. These policies are reviewed consistently to be in line with Thailand's laws, international standards, and other practices, such as the ISO Standard, GRI, WBCSD, and IPIECA, as well as a changing corporate context and risk factors.
- PTT also allocates a part of its budget to engage in community activities and services.

GOVERNANCE &
SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- Being a national oil company with the government as its major shareholder, PTT at times has to fulfil social/national service obligations.
- We believe PTT has an appropriate board size of 14 members. Ten out of its 14 directors are independent directors.
- Its financial disclosure is of a very high standard, in our view. However, there are a lot of company-related transactions since it sells gas/oil feedstocks to its subsidiaries. Sometimes, the company also provides loans to help its subsidiaries.
- PTT, in our opinion, is the most aggressive energy company in Thailand that is diversifying away from the traditional energy business. According to PTT, 32% of its long-term five-year capex will be allocated to Future Energy and Beyond, which includes EV platforms and EV-related infrastructure, life science business, and renewable projects.

Sources: Company data, Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	2,258,818	3,367,203	3,202,210	3,076,390	3,022,530
Cost of sales	1,882,252	2,906,726	2,846,494	2,717,513	2,653,044
Gross profit	376,567	460,477	355,716	358,877	369,486
% gross margin	16.7%	13.7%	11.1%	11.7%	12.2%
Selling & administration expenses	128,269	171,732	144,099	138,438	136,014
Operating profit	248,298	288,745	211,617	220,440	233,472
% operating margin	11.0%	8.6%	6.6%	7.2%	7.7%
Depreciation & amortization	146,790	167,330	172,037	182,025	191,148
EBITDA	395,088	456,075	383,654	402,465	424,620
% EBITDA margin	17.5%	13.5%	12.0%	13.1%	14.0%
Non-operating income	2,904	47,714	16,011	15,382	12,090
Non-operating expenses	(31,958)	(74,914)	0	0	0
Interest expense	(28,163)	(37,091)	(43,026)	(45,762)	(46,224)
Pre-tax profit	191,080	224,454	184,602	190,060	199,338
Income tax	67,591	90,462	57,135	62,691	69,764
After-tax profit	123,490	133,992	127,466	127,369	129,574
% net margin	5.5%	4.0%	4.0%	4.1%	4.3%
Shares in affiliates' Earnings	9,010	5,849	5,849	5,849	5,849
Minority interests	(43,704)	(30,925)	(35,698)	(43,790)	(49,220)
Extraordinary items	19,568	(17,741)	0	0	0
NET PROFIT	108,363	91,175	97,617	89,428	86,204
Normalized profit	88,796	108,916	97,617	89,428	86,204
EPS (Bt)	3.8	3.2	3.4	3.1	3.0
Normalized EPS (Bt)	3.1	3.8	3.4	3.1	3.0

Profits set to decline over
2023-25F with falling
energy prices

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	855,254	1,040,863	1,111,870	1,084,678	1,072,329
Cash & cash equivalent	361,637	352,654	450,990	450,990	450,990
Account receivables	196,243	219,054	208,321	200,135	196,632
Inventories	170,823	222,348	217,740	207,874	202,942
Others	126,551	246,806	234,819	225,678	221,765
Investments & loans	137,403	173,060	173,060	173,060	173,060
Net fixed assets	1,436,877	1,499,330	1,519,122	1,528,926	1,496,394
Other assets	641,851	702,379	804,149	787,660	780,601
Total assets	3,071,384	3,415,632	3,608,201	3,574,324	3,522,385
LIABILITIES:					
Current liabilities:	493,650	592,540	618,167	570,794	551,446
Account payables	213,944	230,366	225,593	215,370	210,261
Bank overdraft & ST loans	11,743	90,757	97,845	92,717	82,271
Current LT debt	87,649	74,021	79,802	75,620	67,100
Others current liabilities	180,314	197,395	214,928	187,086	191,813
Total LT debt	786,224	924,943	997,173	944,919	838,459
Others LT liabilities	318,570	364,456	387,266	376,924	372,497
Total liabilities	1,598,444	1,881,940	2,002,607	1,892,638	1,762,401
Minority interest	466,243	481,102	516,800	560,590	609,810
Preferreds shares	0	0	0	0	0
Paid-up capital	28,563	28,563	28,563	28,563	28,563
Share premium	29,211	29,211	29,211	29,211	29,211
Warrants	0	0	0	0	0
Surplus	22,700	33,499	29,211	29,211	29,211
Retained earnings	926,222	961,318	1,001,809	1,034,111	1,063,188
Shareholders' equity	1,006,696	1,052,591	1,088,794	1,121,096	1,150,174
Liabilities & equity	3,071,384	3,415,632	3,608,201	3,574,324	3,522,385

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	191,080	224,454	184,602	190,060	199,338
Tax paid	(53,397)	(93,039)	(49,623)	(68,533)	(68,203)
Depreciation & amortization	146,790	167,330	172,037	182,025	191,148
Chg In working capital	(21,004)	(57,914)	10,567	7,829	3,326
Chg In other CA & CL / minorities	9,998	(118,761)	25,591	(7,010)	12,928
Cash flow from operations	273,468	122,069	343,175	304,372	338,537
Capex	(290,950)	(229,782)	(191,830)	(191,830)	(158,616)
Right of use	(9,558)	(43,664)	0	0	0
ST loans & investments	139	(594)	0	0	0
LT loans & investments	(52,091)	(35,658)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(128,997)	14,267	(76,694)	6,147	2,631
Cash flow from investments	(481,457)	(295,431)	(268,524)	(185,683)	(155,984)
Debt financing	136,414	209,659	85,098	(61,563)	(125,427)
Capital increase	0	0	(0)	0	0
Dividends paid	(78,469)	(78,469)	(57,126)	(57,126)	(57,126)
Warrants & other surplus	94,762	33,189	(4,288)	0	0
Cash flow from financing	152,706	164,379	23,684	(118,689)	(182,553)
Free cash flow	(17,482)	(107,713)	151,346	112,543	179,921

PTT's capex is mainly driven by subsidiaries

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	11.1	9.0	10.1	11.0	11.4
Normalized PE - at target price (x)	10.0	8.1	9.1	9.9	10.3
PE (x)	9.1	10.8	10.1	11.0	11.4
PE - at target price (x)	8.2	9.7	9.1	9.9	10.3
EV/EBITDA (x)	3.8	3.8	4.5	4.1	3.6
EV/EBITDA - at target price (x)	3.6	3.6	4.2	3.8	3.3
P/BV (x)	1.0	0.9	0.9	0.9	0.9
P/BV - at target price (x)	0.9	0.8	0.8	0.8	0.8
P/CFO (x)	3.6	8.1	2.9	3.2	2.9
Price/sales (x)	0.4	0.3	0.3	0.3	0.3
Dividend yield (%)	5.8	5.8	5.8	5.8	5.8
FCF Yield (%)	(1.8)	(10.9)	15.4	11.4	18.3
(Bt)					
Normalized EPS	3.1	3.8	3.4	3.1	3.0
EPS	3.8	3.2	3.4	3.1	3.0
DPS	2.0	2.0	2.0	2.0	2.0
BV/share	35.2	36.9	38.1	39.2	40.3
CFO/share	9.6	4.3	12.0	10.7	11.9
FCF/share	(0.6)	(3.8)	5.3	3.9	6.3

Sources: Company data, Thanachart estimates

Valuation looks unattractive to us against lower earnings growth

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	39.8	49.1	(4.9)	(3.9)	(1.8)
Net profit (%)	186.9	(15.9)	7.1	(8.4)	(3.6)
EPS (%)	186.9	(15.9)	7.1	(8.4)	(3.6)
Normalized profit (%)	133.3	22.7	(10.4)	(8.4)	(3.6)
Normalized EPS (%)	133.3	22.7	(10.4)	(8.4)	(3.6)
Dividend payout ratio (%)	52.7	62.7	58.5	63.9	66.3
Operating performance					
Gross margin (%)	16.7	13.7	11.1	11.7	12.2
Operating margin (%)	11.0	8.6	6.6	7.2	7.7
EBITDA margin (%)	17.5	13.5	12.0	13.1	14.0
Net margin (%)	5.5	4.0	4.0	4.1	4.3
D/E (incl. minor) (x)	0.6	0.7	0.7	0.7	0.6
Net D/E (incl. minor) (x)	0.4	0.5	0.5	0.4	0.3
Interest coverage - EBIT (x)	8.8	7.8	4.9	4.8	5.1
Interest coverage - EBITDA (x)	14.0	12.3	8.9	8.8	9.2
ROA - using norm profit (%)	3.2	3.4	2.8	2.5	2.4
ROE - using norm profit (%)	9.4	10.6	9.1	8.1	7.6
DuPont					
ROE - using after tax profit (%)	13.1	13.0	11.9	11.5	11.4
- asset turnover (x)	0.8	1.0	0.9	0.9	0.9
- operating margin (%)	9.7	7.8	7.1	7.7	8.1
- leverage (x)	3.0	3.2	3.3	3.3	3.1
- interest burden (%)	87.2	85.8	81.1	80.6	81.2
- tax burden (%)	64.6	59.7	69.0	67.0	65.0
WACC (%)	10.2	10.2	10.2	10.2	10.2
ROIC (%)	13.3	11.3	8.2	8.1	8.5
NOPAT (Bt m)	160,468	172,372	146,120	147,728	151,762
invested capital (Bt m)	1,530,675	1,789,659	1,812,624	1,783,363	1,687,014

Sources: Company data, Thanachart estimates

We expect falling ROE on lower profits from its subsidiaries

BUY (Unchanged)**TP: Bt 187.00** (From: Bt 170.00)**12 SEPTEMBER 2023**

Change in Numbers

Upside : 13.7%

PTT Exp & Production Pcl (PTTEP TB)

Relatively resilient

We reaffirm our BUY rating on PTTEP with a higher TP of Bt187 after our base year rollover to 2024F and higher margin assumptions. We expect PTTEP's earnings to be relatively resilient, with a 5% dividend yield in 2024F and the lowest regulatory risk within the PTT group.

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Reaffirming BUY

This report is a part of *Energy Sector – Weaker fundamental dynamics*, dated 12 September 2023. We reaffirm our BUY rating on shares of PTTEP as a sector top pick. **Firstly**, we expect the global oil market to experience a degree of supply management to help maintain oil prices at elevated levels. That should help support PTTEP's earnings. **Secondly**, PTTEP offers a volume growth story of 10/5% in 2024-25F from the Erawan field. **Thirdly**, we estimate decent dividend yields of 5.5/5.2% in 2023-24F. **Finally**, PTTEP, in our view, as a straightforward upstream company, has the most limited regulatory risk in the group.

The oil supply is being managed

We raise our Brent oil price assumptions by US\$2-3/bbl to US\$83/80/78/bbl in 2023-25F. We expect the price to stay in the high range due to OPEC's clear intention to manage output in case a lack of demand puts too much pressure on prices. Therefore, we see limited downside risk to oil prices despite the risk of a global economic slowdown next year after a series of interest rate hikes this year. Our earnings sensitivity for PTTEP indicates that each US\$5/bbl change in the oil price would move PTTEP's earnings in the same direction by c. 7% and our TP by Bt7/share.

A volume growth story

PTTEP recently revised up its 2023F volume guidance by 2% to 464k boed, given higher-than-expected sales volume in 2Q23. The company has guided for 6% q-q growth in sales volume in 3Q23 due to an output ramp-up at Erawan and the resumption of the operation of the Malaysia block K field. We estimate PTTEP's volume growth at 10/5% in 2024-25F from a further ramp-up of the Erawan field.

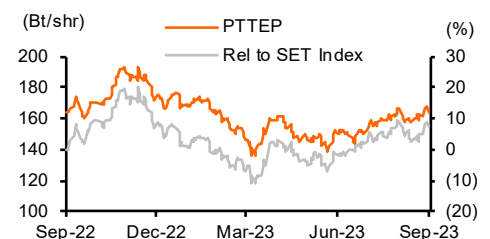
Most limited regulatory risk in the PTT group

We see PTTEP having the most limited regulatory risk in the PTT group in the current environment where the new government is looking for ways to cut energy costs for the public. PTTEP is an upstream oil and gas business with a less complicated pricing structure than downstream segments, and it also helps that at many fields, there are other owners, too. The government's targets are retail oil prices and the electricity tariff. For retail oil prices, the regulatory risks are borne by oil retailers and refiners. As for the electricity tariff, the regulatory risk lies with the fuel tariff (Ft), which can impact small power producer (SPP) and renewable power companies, and the pool gas price, which can impact PTT, which is also exposed to subsidization risk of LPG and LNG prices.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	331,350	292,018	302,182	307,376
Net profit	70,901	78,196	76,542	73,247
Consensus NP	—	69,116	67,762	63,944
Diff frm cons (%)	—	13.1	13.0	14.5
Norm profit	90,721	78,196	76,542	73,247
Prev. Norm profit	—	68,241	67,957	63,129
Chg frm prev (%)	—	14.6	12.6	16.0
Norm EPS (Bt)	22.9	19.7	19.3	18.5
Norm EPS grw (%)	111.5	(13.8)	(2.1)	(4.3)
Norm PE (x)	7.2	8.4	8.5	8.9
EV/EBITDA (x)	2.6	2.6	2.5	2.5
P/BV (x)	1.4	1.3	1.2	1.1
Div yield (%)	5.6	5.5	5.2	4.9
ROE (%)	20.6	16.0	14.4	12.8
Net D/E (%)	(1.8)	(15.2)	(15.9)	(16.5)

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	164.50
Market Cap (US\$ m)	18,392.5
Listed Shares (m shares)	3,970.0
Free Float (%)	34.7
Avg Daily Turnover (US\$ m)	40.2
12M Price H/L (Bt)	193.50/136.00
Sector	Energy
Major Shareholder	PTT Pcl 63.79%

Sources: Bloomberg, Company data, Thanachart estimates

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Ex 1: Earning Revisions

	2019	2020	2021	2022	2023F	2024F	2025F
Norm profit (Bt m)							
- New	48,844	21,397	42,888	90,721	78,196	76,542	73,247
- Old					68,241	67,957	63,129
- Change (%)					14.6	12.6	16.0
Reported profit (Bt m)							
- New	48,803	22,664	38,864	70,901	78,196	76,542	73,247
- Old					68,241	67,957	63,129
- Change (%)					14.6	12.6	16.0
Volume ('000 bpd)							
- New	351	354	416	468	464	510	535
- Old					456	510	535
- Change (%)					1.8	-	-
Brent oil (US\$/bbl)							
- New	64	42	69	101	83	80	78
- Old					81	78	75
- Change (%)					2.5	2.6	4.0
Unit cost (US\$/BOE)							
- New	30	29	27	28	27	27	27
- Old					27	28	28
- Change (%)					(1.4)	(5.0)	(3.7)

Sources: Company data, Thanachart estimates

Ex 2: 12-month DCF-based TP Calculation, Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal Value
EBITDA	224,048	225,880	204,827	210,922	209,752	208,582	207,412	206,243	205,075	203,910	202,746	
Free cash flow	47,409	42,206	45,546	79,938	62,681	65,370	67,904	70,443	72,997	75,556	78,124	885,400
PV of free cash flow	43,072	34,836	34,154	53,549	37,977	35,831	33,673	31,602	29,619	26,594	24,773	280,762
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.2											
WACC (%)	10.1											
Terminal growth (%)	2.0											
Enterprise value	666,443											
Net debt	(77,601)											
Minority interest	0											
Equity value	744,045											
# of shares	3,970											
Equity value / share	187											

Sources: Company data, Thanachart estimates

Valuation Comparison

Ex 3: Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F	24F	23F	24F	23F	24F	23F	24F	23F	24F	23F	24F
			(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)	(%)	(%)
Refining & Marketing														
Ampol	ALD AU	Australia	(10.8)	(4.0)	12.0	12.5	2.3	2.2	7.2	7.2	6.1	5.5	18.6	18.6
BPCL	BPCL IN	India	(66.3)	na	23.2	5.0	1.4	1.2	13.8	5.2	1.9	6.9	3.3	24.5
HPCL	HPCL IN	India	na	na	na	3.7	1.3	1.0	na	6.5	3.8	8.3	na	28.8
IOCL	IOCL IN	India	(72.5)	na	19.3	6.1	1.0	0.9	11.6	5.7	4.0	8.8	5.2	17.0
Reliance Industries	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
SK Energy	096770 KS	S.Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1	3.2	8.6
S-OIL	010950 KS	S.Korea	(54.9)	30.4	8.7	6.7	1.0	0.9	5.6	4.8	3.1	3.8	11.6	14.2
Formosa Petrochemical	6505 TT	Taiwan	(30.0)	31.3	38.9	29.6	2.4	2.3	21.4	15.5	1.9	2.4	5.8	7.5
Bangchak *	BCP TB	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
ESSO (Thailand) *	ESSO TB	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
IRPC Pcl *	IRPC TB	Thailand	50.6	(2.2)	16.1	16.5	0.6	0.6	9.6	9.8	1.7	1.4	3.5	3.4
PTT Oil And Retail *	OR TB *	Thailand	3.8	(1.7)	22.2	22.6	2.2	2.0	13.7	13.8	1.8	1.7	10.0	9.3
PTG Pcl *	PTG TB	Thailand	4.0	18.5	17.3	14.6	1.9	1.8	4.4	3.8	2.6	3.1	11.5	12.8
PTT Global Chemicals *	PTTGC TB	Thailand	(72.4)	103.9	33.1	16.2	0.5	0.5	11.5	9.4	2.1	2.3	1.6	3.3
Star Petroleum Refining *	SPRC TB	Thailand	(52.1)	(16.7)	9.5	11.5	1.0	0.9	5.3	5.9	3.4	2.3	10.4	8.3
Thai Oil *	TOP TB	Thailand	(57.0)	(28.4)	6.2	8.7	0.6	0.6	7.7	10.3	5.0	3.8	10.7	7.3
Average			(34.0)	22.3	17.3	11.7	1.3	1.2	9.3	7.6	3.1	4.0	9.1	12.4
Integrated oils														
PetroChina	857 HK	China	3.5	(2.4)	7.2	7.4	0.8	0.7	3.8	3.8	6.8	6.4	11.0	9.5
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Total	FP	France	(31.3)	(3.8)	na	na	na	na	na	na	na	na	20.5	17.3
Eni	ENI IM	Italy	(34.6)	(7.4)	6.1	6.6	0.9	0.8	3.1	3.2	6.2	6.4	14.0	12.4
Repsol	REP SM	Spain	(23.0)	(20.9)	4.5	5.7	0.7	0.7	2.8	3.0	4.7	5.0	16.5	11.2
Chevron Texaco	CVX US	USA	(29.1)	9.2	12.4	11.4	2.0	1.9	6.5	6.2	3.6	3.8	15.6	15.8
Exxon Mobil	XOM US	USA	(33.7)	(0.9)	12.6	12.7	2.3	2.2	6.7	6.9	3.2	3.3	18.1	16.1
Conoco Philips	COP US	USA	(37.1)	13.4	14.2	12.5	3.1	2.9	6.2	5.9	1.7	2.1	22.0	22.5
PTT Pcl *	PTT TB	Thailand	(10.4)	(8.4)	10.1	11.0	0.9	0.9	4.5	4.1	5.8	5.8	9.1	8.1
Average			(20.9)	(1.7)	9.3	9.3	1.4	1.3	4.9	4.8	5.2	5.3	15.1	13.6
Exploration and Production														
Santos	STO AU	Australia	(41.5)	(0.9)	16.9	17.0	1.7	1.6	4.9	4.9	2.5	2.3	10.0	9.2
Woodside	WDS AU	Australia	(50.0)	(1.5)	21.1	21.5	2.0	2.0	5.2	4.9	3.6	3.6	9.2	8.7
Suncor Energy	SU US	Canada	(38.5)	14.7	6.9	6.0	1.1	1.0	4.7	4.5	6.1	6.4	15.7	15.6
ONGC	ONGC IN	India	10.9	(4.5)	4.8	5.0	0.8	0.7	4.0	3.7	8.6	7.3	18.0	15.9
RIL	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
Apache	APA US	USA	(43.7)	21.7	9.7	8.0	10.0	6.1	3.9	3.7	2.2	2.4	na	na
Devon Energy	DVN US	USA	(33.9)	15.9	9.4	8.1	2.8	2.5	5.3	4.9	1.5	2.3	30.6	32.4
PTTEP *	PTTEP TB	Thailand	(13.8)	(2.1)	8.4	8.5	1.3	1.2	2.6	2.5	5.5	5.2	16.0	14.4
Average			(24.7)	6.7	11.0	10.6	2.8	2.1	4.4	4.2	4.3	4.2	15.4	15.0

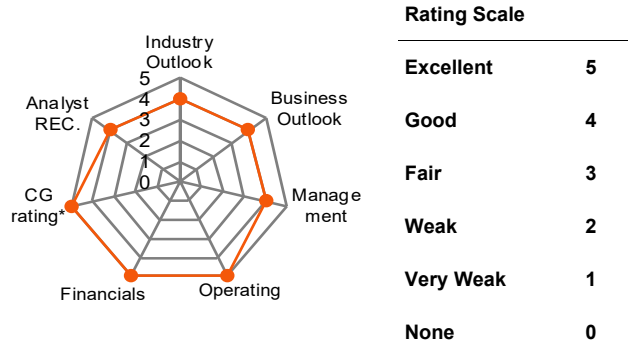
Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

PTT Exploration and Production (PTTEP) is a pure upstream exploration and production (E&P) company with production of 464,000 barrels of oil equivalent (boe) per day. Some 70% of its production is natural gas, and almost all of its production comes from fields in Thailand and other Southeast Asian countries. It has proven and probable reserves of 2,286m boe with a reserve life of 10.7 years. PTTEP is the upstream arm of PTT Pcl (PTT TB, Bt34.50, SELL), which owns 65% of PTTEP.

Source: Thanachart

COMPANY RATING



Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- The parent company PTT is the country's sole gas buyer and PTTEP's biggest client.
- Secured off-take agreements limit downside risks to production volume.

O — Opportunity

- Significant resources on its balance sheet are still undeveloped.
- Potential investment overseas or expansion into new businesses.

W — Weakness

- Reserves in the Gulf of Thailand are being depleted with a reserve life index of only eight years.
- Limited experience and a lack of technical skills in running operations abroad compared to major international peers.

T — Threat

- Threat of low-cost LNG imports.
- Potential impairment risk on overseas business.
- Competition from international peers for projects abroad.
- Political and regulatory risks concerning its concessions, especially those about to expire.
- Overpaying for acquisitions, leading to a lower ROI.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	174.16	187.00	7%
Net profit 23F (Bt m)	69,116	78,196	13%
Net profit 24F (Bt m)	67,762	76,542	13%
Consensus REC	BUY: 17	HOLD: 12	SELL: 2

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2023-24F net profit estimates are 13% higher than the Bloomberg consensus figures, which we attribute mainly to us having higher oil price assumptions.
- Our DCF-based TP is largely similar to the Street's number.

Sources: Bloomberg consensus, Thanachart estimates

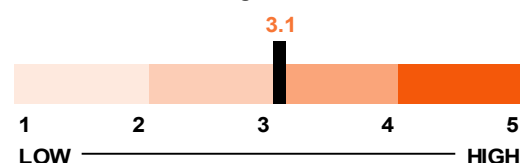
RISKS TO OUR INVESTMENT CASE

- The key downside risk to our call would come from lower oil and/or gas prices.
- A secondary downside risk would be higher-than-expected operating costs.
- Another risk could come from new investments that are not value-accretive.

Source: Thanachart

PTTEP is PTT's oil and gas exploration arm. Its oil and gas product mix is around 30:70, with gas emitting less carbon than oil. Despite its business nature of emitting large amounts of greenhouse gas, our ESG score for PTTEP is decent at 3.1 due to the company's strong commitment with clear targets to achieve improvements in ESG issues. PTTEP also plans to diversify into non-E&P businesses.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
PTTEP	YES	YES	-	AA	65.05	51.97	69.00	43.0	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)
Note: Please see third party on "terms of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- PTTEP released 5.7m tonnes of CO2 equivalent in 2022, up 38% from 2018's level due to new project acquisitions. In 2022, PTTEP was able to avoid and reduce GHG missions intensity by more than 25%, 8 years ahead of plan with accumulated emissions reduction of approximately 8.9 million tonnes of CO2 equivalent or equivalent to the growing of trees on 9.3 million-rai areas since 2013. We believe the reduction was due to hydrocarbon recovery and energy efficiency improvements.
- PTTEP targets to achieve net-zero greenhouse gas (GHG) emissions by 2050. Its medium-term goal is to cut GHG intensity by 30% by 2030 and 50% by 2040 from 2020's level. The company has also expressed an interest in investing in non-E&P businesses with the aim of reducing carbon emissions.
- PTTEP is the first company in Thailand to have laid out a plan for capex to invest in Carbon Capture and Storage (CCS), an important move toward decarbonization. That said, it is also continuing with its capex plan for its core E&P business. Its capex plan is US\$29bn over 2023-27, of which US\$407m is for ESG-related projects.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- PTTEP's human rights policy is aligned with international human rights standards. The company also provides training programs to prepare its employees for rapid changes in the business environment.
- For production safety, PTTEP delivers an above-average performance level against the average rate of the International Association of Oil and Gas Producers (IOGP).
- PTTEP allocates a part of its budget to engage in community activities and services. Total spending on CSR projects including GHG emissions reduction projects amount US\$9.3m

GOVERNANCE &
SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- PTTEP's board comprises 13 directors who possess a range of expertise and an appropriate mix of skills suitable for the E&P industry, in our view. There are eight independent directors and three female directors.
- PTTEP is in a net-cash position with strong cash-flow generation. Although it has a high customer concentration (it mainly sells gas to its parent PTT, Thailand's sole gas buyer), the selling price is market-based and linked to oil prices.
- As for business sustainability, PTTEP faces the risk of long-term depletion of domestic energy resources. The company is aiming to diversify into new non-E&P businesses to tackle this issue. Those businesses so far include its AI and Robotics Venture and renewable power business.

Source: Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	219,068	331,350	292,018	302,182	307,376
Cost of sales	122,122	148,949	136,092	149,366	159,050
Gross profit	96,946	182,401	155,925	152,815	148,326
% gross margin	44.3%	55.0%	53.4%	50.6%	48.3%
Selling & administration expenses	11,416	20,386	17,275	18,987	19,918
Operating profit	85,530	162,015	138,651	133,828	128,408
% operating margin	39.0%	48.9%	47.5%	44.3%	41.8%
Depreciation & amortization	70,294	83,168	82,602	90,220	97,472
EBITDA	155,824	245,183	221,253	224,048	225,880
% EBITDA margin	71.1%	74.0%	75.8%	74.1%	73.5%
Non-operating income	4,869	8,552	9,181	9,759	10,188
Non-operating expenses	0	0	0	0	0
Interest expense	(6,472)	(8,218)	(8,672)	(6,920)	(7,919)
Pre-tax profit	83,927	162,348	139,159	136,667	130,677
Income tax	41,528	72,295	63,463	62,625	59,930
After-tax profit	42,399	90,053	75,696	74,042	70,747
% net margin	19.4%	27.2%	25.9%	24.5%	23.0%
Shares in affiliates' Earnings	489	668	2,500	2,500	2,500
Minority interests	0	0	0	0	0
Extraordinary items	(4,024)	(19,820)	0	0	0
NET PROFIT	38,864	70,901	78,196	76,542	73,247
Normalized profit	42,888	90,721	78,196	76,542	73,247
EPS (Bt)	9.8	17.9	19.7	19.3	18.5
Normalized EPS (Bt)	10.8	22.9	19.7	19.3	18.5

We expect volume growth to support earnings over 2023-25F

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	139,584	196,842	236,817	270,042	302,024
Cash & cash equivalent	85,528	122,369	172,369	202,369	232,369
Account receivables	33,430	42,166	37,161	38,454	39,115
Inventories	14,069	19,115	15,660	17,187	18,302
Others	6,557	13,192	11,626	12,031	12,238
Investments & loans	15,795	9,609	3,423	(2,763)	(8,950)
Net fixed assets	380,307	410,614	432,028	472,191	514,342
Other assets	247,850	252,799	218,980	222,304	224,003
Total assets	783,536	869,864	891,247	961,774	1,031,419
LIABILITIES:					
Current liabilities:	104,502	114,616	99,582	105,609	114,774
Account payables	36,660	52,940	48,371	53,089	56,531
Bank overdraft & ST loans	12,738	16,887	0	0	0
Current LT debt	0	0	14,215	17,200	20,205
Others current liabilities	55,105	44,789	36,996	35,320	38,038
Total LT debt	102,661	97,095	80,553	97,466	114,496
Others LT liabilities	161,022	191,033	199,817	205,599	208,554
Total liabilities	368,186	402,744	379,952	408,674	437,824
Minority interest	0	0	0	0	0
Preferreds shares	0	0	0	0	0
Paid-up capital	3,970	3,970	3,970	3,970	3,970
Share premium	105,418	105,418	105,418	105,418	105,418
Warrants	0	0	0	0	0
Surplus	18,955	28,668	30,873	30,873	30,873
Retained earnings	287,007	329,065	371,035	412,839	453,334
Shareholders' equity	415,350	467,121	511,296	553,100	593,595
Liabilities & equity	783,536	869,864	891,247	961,774	1,031,419

Sources: Company data, Thanachart estimates

PTTEP generates strong cash flows, which lead to a robust balance sheet

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	83,927	162,348	139,159	136,667	130,677
Tax paid	(30,528)	(70,801)	(61,495)	(64,311)	(58,068)
Depreciation & amortization	70,294	83,168	82,602	90,220	97,472
Chg In working capital	(3,775)	2,499	3,890	1,897	1,667
Chg In other CA & CL / minorities	14,010	(17,612)	(5,694)	2,105	3,150
Cash flow from operations	133,928	159,601	158,462	166,578	174,898
Capex	(155,110)	(113,475)	(104,016)	(130,383)	(139,623)
Right of use	(2,867)	(16,319)	0	0	0
ST loans & investments	0	0	0	0	0
LT loans & investments	(21)	6,186	6,186	6,186	6,186
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(33,877)	24,675	42,602	2,458	1,256
Cash flow from investments	(191,876)	(98,934)	(55,228)	(121,739)	(132,181)
Debt financing	7,139	(4,695)	(19,214)	19,898	20,035
Capital increase	(0)	0	0	0	0
Dividends paid	(19,325)	(28,670)	(36,226)	(34,737)	(32,752)
Warrants & other surplus	41,400	9,539	2,205	0	0
Cash flow from financing	29,214	(23,826)	(53,234)	(14,839)	(12,717)
Free cash flow	(21,182)	46,126	54,446	36,195	35,275

PTTEP continues to generate high cash flows from operations

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	15.2	7.2	8.4	8.5	8.9
Normalized PE - at target price (x)	17.3	8.2	9.5	9.7	10.1
PE (x)	16.8	9.2	8.4	8.5	8.9
PE - at target price (x)	19.1	10.5	9.5	9.7	10.1
EV/EBITDA (x)	4.4	2.6	2.6	2.5	2.5
EV/EBITDA - at target price (x)	5.0	3.0	3.0	2.9	2.9
P/BV (x)	1.6	1.4	1.3	1.2	1.1
P/BV - at target price (x)	1.8	1.6	1.5	1.3	1.3
P/CFO (x)	4.9	4.1	4.1	3.9	3.7
Price/sales (x)	3.0	2.0	2.2	2.2	2.1
Dividend yield (%)	3.0	5.6	5.5	5.2	4.9
FCF Yield (%)	(3.2)	7.1	8.3	5.5	5.4
(Bt)					
Normalized EPS	10.8	22.9	19.7	19.3	18.5
EPS	9.8	17.9	19.7	19.3	18.5
DPS	5.0	9.3	9.0	8.5	8.0
BV/share	104.6	117.7	128.8	139.3	149.5
CFO/share	33.7	40.2	39.9	42.0	44.1
FCF/share	(5.3)	11.6	13.7	9.1	8.9

Sources: Company data, Thanachart estimates

At 1.3x 2023F P/BV, we see PTTEP's valuation as attractive

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	36.6	51.3	(11.9)	3.5	1.7
Net profit (%)	71.5	82.4	10.3	(2.1)	(4.3)
EPS (%)	71.5	82.4	10.3	(2.1)	(4.3)
Normalized profit (%)	100.4	111.5	(13.8)	(2.1)	(4.3)
Normalized EPS (%)	100.4	111.5	(13.8)	(2.1)	(4.3)
Dividend payout ratio (%)	51.1	51.8	45.7	44.1	43.4
Operating performance					
Gross margin (%)	44.3	55.0	53.4	50.6	48.3
Operating margin (%)	39.0	48.9	47.5	44.3	41.8
EBITDA margin (%)	71.1	74.0	75.8	74.1	73.5
Net margin (%)	19.4	27.2	25.9	24.5	23.0
D/E (incl. minor) (x)	0.3	0.2	0.2	0.2	0.2
Net D/E (incl. minor) (x)	0.1	(0.0)	(0.2)	(0.2)	(0.2)
Interest coverage - EBIT (x)	13.2	19.7	16.0	19.3	16.2
Interest coverage - EBITDA (x)	24.1	29.8	25.5	32.4	28.5
ROA - using norm profit (%)	5.9	11.0	8.9	8.3	7.3
ROE - using norm profit (%)	11.1	20.6	16.0	14.4	12.8
DuPont					
ROE - using after tax profit (%)	11.0	20.4	15.5	13.9	12.3
- asset turnover (x)	0.3	0.4	0.3	0.3	0.3
- operating margin (%)	41.3	51.5	50.6	47.5	45.1
- leverage (x)	1.9	1.9	1.8	1.7	1.7
- interest burden (%)	92.8	95.2	94.1	95.2	94.3
- tax burden (%)	50.5	55.5	54.4	54.2	54.1
WACC (%)	10.1	10.1	10.1	10.1	10.1
ROIC (%)	12.4	20.2	16.4	16.7	14.9
NOPAT (Bt m)	43,209	89,868	75,419	72,504	69,519
invested capital (Bt m)	445,221	458,733	433,694	465,397	495,927

Sources: Company data, Thanachart estimates

We see room for ROE improvement on higher gearing and margin expansion

HOLD (Unchanged)
Change in Numbers

TP: Bt 37.00 (From: Bt 41.00)
Upside : 5.0%

12 SEPTEMBER 2023

PTT Global Chemical Pcl (PTTGC TB)

Inexpensive for a reason

We cut our DCF-based TP for PTTGC to Bt37/share from Bt41 as we factor in its soft 1H23 performance and a weak contribution from Allnex. We see PTTGC as fairly priced at 0.5x 2024F P/BV but also as one of the least profitable firms in the sector. Maintain HOLD.



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Maintaining HOLD

This report is a part of *Energy Sector – Weaker fundamental dynamics*, dated 12 September 2023. In this report, we lower our earnings estimates for PTTGC by 51/42/35% in 2023-25F to reflect its weaker-than-expected 1H23 earnings and cut our DCF-based 12-month TP to Bt37 from Bt41, having rolled over our TP to a 2024F base year. We maintain our HOLD rating on shares of PTTGC. **First**, we regard the stock as fairly priced at a low 0.5x 2024F P/BV on the back of its soft ROE of 3.3/4.5% in 2024-25F. This makes it one of the least profitable firms in the sector. **Second**, PTTGC still faces a structural decline in the country's cheap domestic gas supply, which means higher average costs for the company. **Third**, we still expect its subsidiary Allnex to contribute weak profits for more years to come. **Lastly**, we believe PTTGC is subject to higher policy risk than its peers.

Allnex remains an earnings drag

PTTGC bought a 100% stake in Allnex for US\$4.75bn in 2021, and we estimate that the firm accounted for 23% of PTTGC's total assets in 2Q23. However, we estimate Allnex to have contributed a disappointing Bt1bn loss to PTTGC in 1H23 vs. Bt3bn in 2022. Europe and the US were weak, and these markets accounted for 40% and 24% of Allnex's EBITDA, respectively, in 2020. We are not bullish on the outlook for Allnex, given the risk of a global slowdown after a series of interest rate hikes and a weak Chinese economy.

Structurally higher feedstock costs

PTTGC has faced rising average feedstock costs because of lower cheap domestic gas supply. Its feedstock mix of gas/naphtha fell from 57/43% in 2018 to 36/64% in 2022. Despite the ramping up of gas output from the Erawan field from the low of 200mmscfd in 2022 to the targeted peak of 800mmscfd from April 2024, we estimate PTTGC's gas mix to increase back to only 40% in 2025F. And within the gas portion itself, when there is further depletion of domestic gas, PTTGC will likely have to use more naphtha or LPG in the longer term.

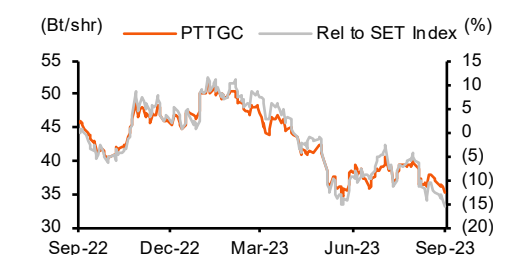
More exposed to regulatory risk

One of the critical policies of the new government is to cut energy costs for the public. PTTGC is exposed to policy risk via both its refinery (if the government gets involved with the ex-factory price structure) and petrochemical businesses. PTTGC's petrochemical profit is linked to a netback formula with a profit-sharing mechanism with PTT's gas separation plants (GSPs). If the government wants to reduce the pool gas price, which is the cost of power generation and other things, and if that means lower profit from GSPs, then PTTGC may also be affected.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	678,267	620,071	603,527	593,804
Net profit	(8,753)	3,089	9,051	13,185
Consensus NP	—	4,302	16,538	23,940
Diff frm cons (%)	—	(28.2)	(45.3)	(44.9)
Norm profit	17,381	4,799	9,786	13,675
Prev. Norm profit	—	9,812	16,864	20,759
Chg frm prev (%)	—	(51.1)	(42.0)	(34.1)
Norm EPS (Bt)	3.9	1.1	2.2	3.0
Norm EPS grw (%)	(38.6)	(72.4)	103.9	39.7
Norm PE (x)	9.1	33.1	16.2	11.6
EV/EBITDA (x)	9.7	11.5	9.4	8.0
P/BV (x)	0.5	0.5	0.5	0.5
Div yield (%)	2.8	2.1	2.3	3.3
ROE (%)	5.7	1.6	3.3	4.5
Net D/E (%)	82.2	74.1	66.5	57.2

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	35.25
Market Cap (US\$ m)	4,476.2
Listed Shares (m shares)	4,508.8
Free Float (%)	54.8
Avg Daily Turnover (US\$ m)	16.9
12M Price H/L (Bt)	51.50/34.75
Sector	PETRO
Major Shareholder	PTT Pcl 45.18%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P75

Ex 1: Our Assumption Changes For PTTGC

	2019	2020	2021	2022	2023F	2024F	2025F
Reported profit (Bt m)							
- New	11,637	200	44,983	(8,752)	3,089	9,786	13,675
- Old					9,812	16,864	20,759
- Change (%)					(68.5)	(42.0)	(34.1)
Norm profit (Bt m)							
- New	8,164	7,634	28,295	17,381	4,799	9,786	13,675
- Old					9,812	16,864	20,759
- Change (%)					(51.1)	(42.0)	(34.1)
Allnex EBITDA (EUR m)							
- New		316	328	339	215	264	277
- Old					280	300	300
- Change (%)					(23.2)	(12.2)	(7.8)
Phenol-Bz (US\$/tonne)							
- New	340	264	239	279	100	150	200
- Old					150	200	200
- Change (%)					(33.3)	(25.0)	0.0
HDPE-Naphtha (US\$/tonne)							
- New	466	514	541	415	400	450	500
- Old					430	470	550
- Change (%)					(7.0)	(4.3)	(9.1)

Sources: Company data, Thanachart estimates

Ex 2: 12-month DCF-based TP Calculation, Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2018F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal Value
EBITDA & equity income	39,061	42,838	47,271	47,445	48,203	48,203	48,203	48,203	48,203	48,203	48,203	
Free cash flow	30,861	33,408	35,315	35,825	36,527	36,486	36,590	36,562	36,662	36,625	36,720	447,700
PV of free cash flow	28,479	28,450	27,402	25,544	23,927	21,963	20,239	18,584	16,481	15,066	13,822	168,521
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.2											
WACC (%)	8.4											
Terminal growth (%)	1.0											
Enterprise value - add investments	408,478											
Net debt (end-2023F)	224,136											
Minority interest	8,549											
Equity value	175,793											
# of shares (m)	4,509											
Equity value / share	39											
Political discount	5%											
Equity value/share (Bt)	37											

Source: Thanachart estimates

Valuation Comparison

Ex 3: Comparison With Regional Peers

Name	BBG code	Country	EPS growth		— PE —		— P/BV —		EV/EBITDA		– Div yield –	
			23F	24F	23F	24F	23F	24F	23F	24F	23F	24F
			(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)
Sinopec Shanghai	338 HK	Hong Kong	(44.1)	45.3	11.9	8.2	0.5	0.4	9.8	7.7	4.7	4.8
Sinopec Yizheng	1033 HK	Hong Kong	72.2	3.2	20.0	19.4	1.2	1.0	6.7	7.1	0.0	na
AKR Corporindo	AKRA IJ	Indonesia	25.5	7.4	11.1	10.4	2.4	2.2	8.4	8.0	4.8	4.9
Reliance Industries Ltd	RIL IN	India	12.8	10.1	na	na	na	na	na	na	na	na
LG Chem	051910 KS	South Korea	(14.0)	89.8	20.5	10.8	1.3	1.2	8.0	5.3	1.8	2.1
SK Energy	096770 KS	South Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1
Petronas Chemicals Group	PCHEM MK	Malaysia	(61.0)	30.1	20.1	15.5	1.4	1.4	10.9	9.1	2.8	3.6
Formosa Chemical	1326 TT	Taiwan	(60.3)	97.1	54.9	27.8	1.1	1.1	16.7	12.8	1.5	2.7
Far Eastern New Century	1402 TT	Taiwan	(20.8)	17.9	17.9	15.2	0.7	0.7	10.7	10.2	4.0	5.1
IRPC Pcl *	IRPC TB *	Thailand	50.6	(2.2)	16.1	16.5	0.6	0.6	9.6	9.8	1.7	1.4
Indorama Ventures *	IVL TB *	Thailand	(69.7)	29.4	14.6	11.3	0.8	0.7	6.7	6.2	1.7	2.7
PTT Global Chemical *	PTTGC TB *	Thailand	(72.4)	103.9	33.1	16.2	0.5	0.5	11.5	9.4	2.1	2.3
Siam Cement *	SCC TB *	Thailand	11.5	40.9	15.6	11.1	0.9	0.9	11.2	8.9	4.8	4.5
TPI Polene	TPIPL TB	Thailand	(55.0)	(5.6)	8.6	9.1	0.5	0.5	11.1	10.9	5.8	5.8
Average			(38.7)	53.8	22.7	14.6	0.8	0.8	10.9	9.3	2.9	3.3

Sources: Bloomberg, * Thanachart estimates

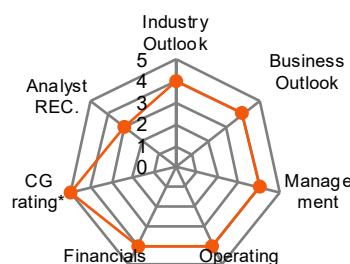
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

PTT Global Chemical Pcl (PTTGC) became a fully integrated petrochemical and refining company after the amalgamation of PTTCH (PTT Chemicals) and PTTAR (PTT Aromatics & Refining) in late 2011. The company produces olefins and derivatives, and its key products are ethylene, propylene, HDPE, LDPE, LLDPE, and MEG. Together, the olefins value chain made up about half of 2022 EBITDA. PTTGC is one of the few gas-based crackers in Asia, and it has a competitive cost structure compared with other naphtha-based crackers. The company also has fully integrated refinery and aromatics plants that produce mainly paraxylene and benzene. The company also recently moved into the specialty coating business with its investment in Allnex Holdings GmbH (Allnex).

Source: Thanachart

COMPANY RATING



Rating Scale

Excellent	5
Good	4
Fair	3
Weak	2
Very Weak	1
None	0

Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- It is a low-cost producer that is leveraging its gas-based and flexible cracker.
- Large economies of scale due to synergies from its fully integrated facilities.
- Being a PTT group company helps ensure feedstock and raises its franchise value.

O — Opportunity

- Significant growth potential in terms of chemical demand in the region.
- Value enhancement from synergies, debottlenecking of its units, and further downstream integration.
- M&A activity that could lead to higher returns to investors.

W — Weakness

- Cyclical business with volatile earnings and cash flow.
- Potential impact of stock losses (due mainly to oil price movements) on earnings.
- Reliance on bulk chemicals and limited exposure to specialty chemicals.

T — Threat

- Depleting low-cost domestic gas supply would reduce its competitive edge of being a low-cost producer.
- Low oil prices erode its competitive advantage.
- Increasing competition from low-cost producers in the Middle East and US-based crackers.
- Overpaying for acquisitions and limited synergies.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	43.99	37.00	-16%
Net profit 23F (Bt m)	4,302	3,089	-28%
Net profit 24F (Bt m)	16,538	9,051	-45%
Consensus REC	BUY: 9	HOLD: 11	SELL: 5

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2023-24F net profits are lower than the Bloomberg consensus estimate, likely due to us having a weaker chemical spread assumption.
- Our DCF-based TP is consequently lower than the Street's.

Sources: Bloomberg consensus, Thanachart estimates

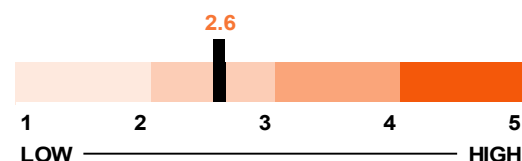
RISKS TO OUR INVESTMENT CASE

- Higher-than-expected oil prices and/or chemical spreads would be the key upside risk to our call.
- Hiccups in the gas supply from its parent company PTT or any unplanned outages at the complex would be a downside risk.

Source: Thanachart

PTTGC is a large-scale olefins cracker with 35-45% of olefins intake running on ethane gas and 55-65% on naphtha/LPG. It also has 145kbd of oil refinery capacity. Our ESG score for PTTGC is 2.6, at the low end among our coverage. The firm has clear intentions and targets to cut carbon emissions, but its score is dragged down by its high energy intensity and an information disclosure level that could be improved.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
PTTGC	YES	YES	YES	BBB	43.72	45.08	89.00	49.0	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "terms of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- PTTGC released 8.6mt of CO2 equivalent in 2022, down 4% from 2021. We think this is attributable to weak chemical demand. Its carbon emission intensity also increased by 5% to 437kg/BOE (barrels of oil equivalent) of CO2. We believe the increases were due to falling gas and higher naphtha feedstock use in its petrochemical production. However, PTTGC emitted less carbon than the average of 476kg/BOE of CO2 for the Thai petrochemical industry, which mainly uses naphtha.
- PTTGC aims for its greenhouse gas (GHG) emissions to peak in 2025. It has a target to cut GHG emissions by 20% from the 2020 level by 2030. However, we believe this is still pending the final investment decision on a US shale gas cracker project, which is under a feasibility study. PTTGC has an interest in recycling projects.
- The firm also has an interest in carbon capture and storage (CCS) investment, which we expect to be a collaboration among the PTT group given the high investment costs.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- PTTGC encourages a culture of safety with a total recordable injury rate (TRIR) of employees and contractors of only 0.4 and 0.63 cases per 1m man hours, respectively.
- PTTGC's staff turnover rate was low at 5.65% in 2022. It invested Bt112m in 2022 on staff training that led to 37.92 training hours/person/year. It also focuses on the well-being of employees such as via the implementation of its Work From Home (WFH) policy as normal work behavior, providing insurance for employees and families, and offering an Employee Assistance Program (EAP) to boost the quality of life and help counsel employees with personal issues.
- PTTGC in 2022 received a high satisfaction rate of over 90% from customers, suppliers and employees as well as communities.

GOVERNANCE &
SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- PTTGC has a 13-member board of directors (BOD) with seven being independent directors with a 2-year average tenure.
- There are many related-party transactions with its parent company, PTT. Gas (ethane and propane) feedstock is supplied by PTT. Pricing is on a net-back or equal-IRR basis with PTT's gas separation plant business.
- We see room for improvement in more timely information disclosure, such as the performance of its US\$4.75bn Allnex acquisition and regarding past supply outages.
- We see two areas of balance sheet risk. The first is a potential asset impairment from the high investment cost of Allnex. Another risk is a potential debt increase if PTTGC decides to invest in a US ethane cracker, which would require substantial investment.

Sources: Company data, Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	465,128	678,267	620,071	603,527	593,804
Cost of sales	416,647	631,848	583,712	562,886	549,297
Gross profit	48,481	46,419	36,360	40,641	44,507
% gross margin	10.4%	6.8%	5.9%	6.7%	7.5%
Selling & administration expenses	18,878	31,457	28,758	27,991	27,540
Operating profit	29,603	14,962	7,602	12,651	16,967
% operating margin	6.4%	2.2%	1.2%	2.1%	2.9%
Depreciation & amortization	23,092	26,646	25,586	26,410	25,871
EBITDA	52,695	41,608	33,188	39,061	42,838
% EBITDA margin	11.3%	6.1%	5.4%	6.5%	7.2%
Non-operating income	4,931	7,526	7,526	7,526	7,526
Non-operating expenses	0	0	943	0	0
Interest expense	(5,434)	(9,170)	(8,881)	(8,577)	(8,052)
Pre-tax profit	29,100	13,318	7,190	11,600	16,441
Income tax	7,229	(2,272)	1,370	2,320	3,288
After-tax profit	21,871	15,590	5,820	9,280	13,153
% net margin	4.7%	2.3%	0.9%	1.5%	2.2%
Shares in affiliates' Earnings	6,992	2,908	0	1,500	1,500
Minority interests	(568)	(1,117)	(1,021)	(994)	(978)
Extraordinary items	15,339	(26,134)	(1,710)	(735)	(490)
NET PROFIT	43,634	(8,753)	3,089	9,051	13,185
Normalized profit	28,295	17,381	4,799	9,786	13,675
EPS (Bt)	9.7	(1.9)	0.7	2.0	2.9
Normalized EPS (Bt)	6.3	3.9	1.1	2.2	3.0

We expect a turnaround in 2024-25F earnings, but there could be a risk

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	209,092	172,009	198,232	194,174	196,626
Cash & cash equivalent	74,994	31,963	70,000	70,000	75,000
Account receivables	50,540	45,254	41,371	40,267	39,618
Inventories	71,553	76,619	70,782	68,257	66,609
Others	12,004	18,173	16,080	15,651	15,399
Investments & loans	74,706	81,236	81,236	81,236	81,236
Net fixed assets	301,042	296,321	292,427	280,943	269,692
Other assets	162,640	170,399	170,399	170,399	170,399
Total assets	747,481	719,965	742,295	726,753	717,953
LIABILITIES:					
Current liabilities:	147,003	103,976	134,463	186,238	106,647
Account payables	70,111	57,613	53,224	51,325	50,086
Bank overdraft & ST loans	2,423	4,318	0	0	0
Current LT debt	37,835	9,341	40,000	100,000	20,000
Others current liabilities	36,634	32,704	41,238	34,913	36,561
Total LT debt	224,760	263,890	254,136	177,647	239,166
Others LT liabilities	48,115	53,272	51,322	50,568	50,125
Total liabilities	419,878	421,138	439,921	414,454	395,938
Minority interest	9,361	7,528	8,549	9,543	10,521
Preferreds shares	0	0	0	0	0
Paid-up capital	45,088	45,088	45,088	45,088	45,088
Share premium	36,937	36,937	36,937	36,937	36,937
Warrants	0	0	0	0	0
Surplus	5,235	(3,299)	(3,299)	(3,299)	(3,299)
Retained earnings	230,982	212,574	215,099	224,031	232,768
Shareholders' equity	318,242	291,300	293,825	302,757	311,494
Liabilities & equity	747,481	719,965	742,295	726,753	717,953

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	29,100	13,318	7,190	11,600	16,441
Tax paid	(5,976)	1,753	(906)	(2,623)	(3,175)
Depreciation & amortization	23,092	26,646	25,586	26,410	25,871
Chg In working capital	(9,375)	(12,276)	5,331	1,730	1,057
Chg In other CA & CL / minorities	21,688	(4,265)	9,580	(4,093)	3,288
Cash flow from operations	58,528	25,176	46,780	33,024	43,482
Capex	(54,957)	(21,925)	(21,692)	(14,926)	(14,620)
Right of use	(4,342)	(14,235)	0	0	0
ST loans & investments	485	(532)	585	0	0
LT loans & investments	(9,032)	(6,530)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(81,897)	(16,235)	(3,309)	(1,489)	(933)
Cash flow from investments	(149,743)	(59,457)	(24,416)	(16,415)	(15,553)
Debt financing	111,958	9,438	16,237	(16,489)	(18,482)
Capital increase	0	0	0	0	0
Dividends paid	(14,080)	(11,746)	(564)	(119)	(4,447)
Warrants & other surplus	7,672	(6,443)	0	0	0
Cash flow from financing	105,551	(8,751)	15,673	(16,608)	(22,929)
Free cash flow	3,571	3,251	25,088	18,098	28,862

We expect positive FCF
from limited capex

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	5.6	9.1	33.1	16.2	11.6
Normalized PE - at target price (x)	5.9	9.6	34.8	17.0	12.2
PE (x)	3.6	na	51.5	17.6	12.1
PE - at target price (x)	3.8	na	54.0	18.4	12.7
EV/EBITDA (x)	6.6	9.7	11.5	9.4	8.0
EV/EBITDA - at target price (x)	6.8	9.9	11.8	9.6	8.2
P/BV (x)	0.5	0.5	0.5	0.5	0.5
P/BV - at target price (x)	0.5	0.6	0.6	0.6	0.5
P/CFO (x)	2.7	6.3	3.4	4.8	3.7
Price/sales (x)	0.3	0.2	0.3	0.3	0.3
Dividend yield (%)	10.6	2.8	2.1	2.3	3.3
FCF Yield (%)	2.2	2.0	15.8	11.4	18.2
(Bt)					
Normalized EPS	6.3	3.9	1.1	2.2	3.0
EPS	9.7	(1.9)	0.7	2.0	2.9
DPS	3.8	1.0	0.8	0.8	1.2
BV/share	70.6	64.6	65.2	67.1	69.1
CFO/share	13.0	5.6	10.4	7.3	9.6
FCF/share	0.8	0.7	5.6	4.0	6.4

Sources: Company data, Thanachart estimates

After our profit cut, we
don't see PTTGC as
attractive at 17x 2024F PE

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	41.3	45.8	(8.6)	(2.7)	(1.6)
Net profit (%)	21,760.6	na	na	193.0	45.7
EPS (%)	21,760.6	na	na	193.0	45.7
Normalized profit (%)	270.7	(38.6)	(72.4)	103.9	39.7
Normalized EPS (%)	270.7	(38.6)	(72.4)	103.9	39.7
Dividend payout ratio (%)	38.7	(51.5)	(109.5)	40.0	40.0
Operating performance					
Gross margin (%)	10.4	6.8	5.9	6.7	7.5
Operating margin (%)	6.4	2.2	1.2	2.1	2.9
EBITDA margin (%)	11.3	6.1	5.4	6.5	7.2
Net margin (%)	4.7	2.3	0.9	1.5	2.2
D/E (incl. minor) (x)	0.8	0.9	1.0	0.9	0.8
Net D/E (incl. minor) (x)	0.6	0.8	0.7	0.7	0.6
Interest coverage - EBIT (x)	5.4	1.6	0.9	1.5	2.1
Interest coverage - EBITDA (x)	9.7	4.5	3.7	4.6	5.3
ROA - using norm profit (%)	4.6	2.4	0.7	1.3	1.9
ROE - using norm profit (%)	9.4	5.7	1.6	3.3	4.5
DuPont					
ROE - using after tax profit (%)	7.3	5.1	2.0	3.1	4.3
- asset turnover (x)	0.8	0.9	0.8	0.8	0.8
- operating margin (%)	7.4	3.3	2.6	3.3	4.1
- leverage (x)	2.1	2.4	2.5	2.5	2.4
- interest burden (%)	84.3	59.2	44.7	57.5	67.1
- tax burden (%)	75.2	117.1	80.9	80.0	80.0
WACC (%)	8.4	8.4	8.4	8.4	8.4
ROIC (%)	6.0	3.4	1.1	2.0	2.7
NOPAT (Bt m)	22,249	17,514	6,153	10,121	13,573
invested capital (Bt m)	508,266	536,886	517,961	510,404	495,660

Sources: Company data, Thanachart estimates

Net D/E remains relatively low

BUY (Unchanged)
Change in Numbers

TP: Bt 390.00 (From: Bt 410.00)
Upside : 25.8%

12 SEPTEMBER 2023

The Siam Cement Pcl (SCC TB)

Off from a low base

We reiterate our BUY call on SCC as our top sector pick. We see the company's earnings are gradually coming off from the trough awaiting a clearer petrochemical cycle turnaround next year. SCC also has a new capacity story to further boost its earnings.



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Reaffirm BUY

This report is a part of *Energy Sector – Weaker fundamental dynamics, dated 12 September 2023*. We reiterate our BUY call on SCC as our top sector pick. **First**, SCC's earnings have already started to turn around since 1Q23 and we forecast 11/41/21% EPS growth in 2023-25F. **Second**, with estimated petrochemical earnings at 38% of total earnings in 2024F and polyethylene (PE) product mix at 50% of capacity (including Long Son), SCC is the best play in the sector to enjoy a new olefins-chain petrochemical cycle, which will have a better demand-supply matrix from 2024F. **Third**, SCC also has a volume growth story from its new Long Son Petrochemical (LSP) plant, which has delayed its start-up schedule to early 2024F. LSP will add 46% to SCC's existing petrochemical capacity. **Finally**, SCC's share price is still hopping near its bottom, which we see as a good opportunity. We see its 11x 2024F PE as inexpensive against EPS growth of 41/21% in 2024-25F.

A new petrochemical cycle

We maintain our view that the olefins-chain petrochemical industry will enter its new up-cycle next year as the heavy supply cycle is ending this year, leaving demand to exceed supply starting next year. Within the chain, we expect PE to see the least new supply. HDPE-naphtha spread peaked in 2016 at US\$740/tonne and fell to US\$391 in 2022 with the trough of US\$336 in 4Q22. The spread averaged US\$393 YTD. Due to China's weak economic momentum, we cut our HDPE-naphtha spread assumptions by US\$20-30/tonne to US\$400/450/530/tonne for 2023-25F but maintain our view of an anticipated turnaround. This is the reason for our 13/22/28% earnings cuts. We also trim our DCF-based 12-month TP to Bt390, from Bt410.

Better petrochemical product mix

PE accounts for 40% of SCC's existing polyolefins capacity or 50% including LSP. Polypropylene (PP) is expected to be a weaker product due to more supply additions in China. PP accounts for 24% of SCC's existing capacity and 25% including LSP. We consider SCC to have a better petrochemical product outlook than peers, including PTTGC's more exposure to phenol, BPA and PO), IRPC's to PP and ABS, and IVL's to EO and PET.

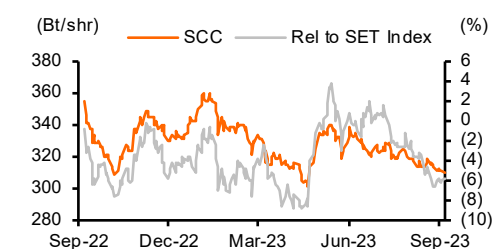
Other businesses pass their troughs

We expect both cement building material (CBM, 20% of 2023F earnings) and packaging paper (22%) businesses to have passed their troughs this year. We forecast CBM EBITDA growth of 43/23/21% and packaging paper EBITDA growth of 6/14/26%. While falling energy cost is helping recover CBM's margin, lower cost and freight rate along with lower pressure of product price cut are improving the paper business' margin.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	569,609	582,221	662,682	704,146
Net profit	21,382	35,897	33,580	40,711
Consensus NP	—	32,474	33,973	42,933
Diff frm cons (%)	—	10.5	(1.2)	(5.2)
Norm profit	21,382	23,836	33,580	40,711
Prev. Norm profit	—	27,313	42,858	56,677
Chg frm prev (%)	—	(12.7)	(21.6)	(28.2)
Norm EPS (Bt)	17.8	19.9	28.0	33.9
Norm EPS grw (%)	(54.5)	11.5	40.9	21.2
Norm PE (x)	17.4	15.6	11.1	9.1
EV/EBITDA (x)	16.7	11.2	8.9	7.3
P/BV (x)	1.0	0.9	0.9	0.9
Div yield (%)	2.6	4.8	4.5	5.5
ROE (%)	5.8	6.2	8.3	9.6
Net D/E (%)	57.6	55.6	55.6	50.8

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	310.00
Market Cap (US\$ m)	10,476.8
Listed Shares (m shares)	1,200.0
Free Float (%)	66.2
Avg Daily Turnover (US\$ m)	16.6
12M Price H/L (Bt)	359.00/301.00
Sector	CONMAT
Major Shareholder	HM King Maha Vajiralongkorn Bodindradebayavarangkun 33.64%

Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P83

Ex 1: Earning Revisions

	2019	2020	2021	2022	2023F	2024F	2025F
Reported profit (Bt m)							
- New	32,014	34,144	47,174	21,382	35,897	33,580	40,711
- Old					27,313	42,858	56,677
- Change (%)					31.4	(21.6)	(28.2)
Norm profit (Bt m)							
- New	34,608	37,864	46,967	21,382	23,836	33,580	40,711
- Old					27,313	42,858	56,677
- Change (%)					(12.7)	(21.6)	(28.2)
Profit - Chemical (Bt m)							
- New	15,480	17,667	28,931	5,901	6,605	12,871	18,839
- Old					10,535	18,967	30,876
- Change (%)					(37.3)	(32.1)	(39.0)
HDPE-Naphtha (US\$/tonne)							
- New	466	506	531	392	400	450	530
- Old					430	470	550
PP-Naphtha (US\$/tonne)							
- New	538	561	637	376	350	360	390
- Old					380	420	500
Profit - Packaging (Bt m)							
- New	5,268	6,457	8,294	5,801	6,121	7,584	8,763
- Old					6,542	9,318	10,931
- Change (%)					(6.4)	(18.6)	(19.8)

Sources: Company data, Thanachart estimates

Ex 2: 12-month DCF-based TP Calculation, Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal Value
EBITDA + other income	72,404	87,222	94,551	100,661	106,606	112,371	118,155	123,959	129,782	135,625	141,490	
Free cash flow	18,476	36,286	46,455	51,940	57,250	62,597	67,692	72,755	77,807	82,891	88,005	1,185,801
PV of free cash flow	17,008	30,749	36,240	36,661	37,029	37,111	36,784	36,238	35,513	33,218	32,187	433,697
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.1											
Wacc (%)	8.6											
Terminal growth (%)	2.0											
Enterprise value	812,830											
Net debt*	264,944											
Minority interest	79,993											
Equity value	467,893											
# of shares	1,200											
Equity value / share	390											

Sources: Company data, Thanachart estimates

Note: *Includes liquid assets held under current and non-current assets

Valuation Comparison

Ex 3: Valuation Comparison With Regional Peers

Name	BBG code	Country	EPS growth		— PE —		— P/BV —		EV/EBITDA		– Div yield –	
			23F	24F	23F	24F	23F	24F	23F	24F	23F	24F
			(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)
Chemical peers												
Petronas Chemicals Group	PCHEM MK	Malaysia	(61.0)	30.1	20.1	15.5	1.4	1.4	10.9	9.1	2.8	3.6
LG Chem	051910 KS	South Korea	(14.0)	89.8	20.5	10.8	1.3	1.2	8.0	5.3	1.8	2.1
Kumho Petrochemical	011780 KS	South Korea	(50.4)	16.8	8.0	6.8	0.7	0.6	5.0	4.3	3.0	3.1
Lotte Chemical	011170 KS	South Korea	13.2	186.8	30.4	10.6	0.4	0.4	10.4	6.2	2.3	2.8
Formosa Chemicals & Fibre	1326 TT	Taiwan	(60.3)	97.1	54.9	27.8	1.1	1.1	16.7	12.8	1.5	2.7
Formosa Plastics	1301 TT	Taiwan	(81.8)	131.3	59.0	25.5	1.6	1.5	25.9	17.9	2.3	3.5
Nan Ya Plastics	1303 TT	Taiwan	(56.8)	79.8	31.8	17.7	1.4	1.4	18.8	11.2	2.6	4.4
Formosa Petrochemical	6505 TT	Taiwan	(30.0)	31.3	38.9	29.6	2.4	2.3	21.4	15.5	1.9	2.4
Siam Cement	SCC TB *	Thailand	11.5	40.9	15.6	11.1	0.9	0.9	11.2	8.9	4.8	4.5
Indorama Ventures	IVL TB *	Thailand	(69.7)	29.4	14.6	11.3	0.8	0.7	6.7	6.2	1.7	2.7
PTT Global Chemical	PTTGC TB *	Thailand	(72.4)	103.9	33.1	16.2	0.5	0.5	11.5	9.4	2.1	2.3
IRPC	IRPC TB *	Thailand	50.6	(2.2)	16.1	16.5	0.6	0.6	9.6	9.8	1.7	1.4
Average			(35.1)	69.6	28.6	16.6	1.1	1.0	13.0	9.7	2.4	3.0
Cement peers												
Indocement	INTP IJ	Indonesia	55.4	13.7	19.1	16.8	2.0	1.9	10.6	9.5	3.6	4.3
Semen Indonesia	SMGR IJ	Indonesia	3.4	20.0	17.0	14.2	1.1	1.0	7.4	6.9	3.2	3.3
Asia Cement	1102 TT	Taiwan	(7.8)	(1.6)	11.0	11.2	na	na	14.3	13.1	6.5	6.5
Taiwan Cement	1101 TT	Taiwan	103.0	20.3	20.3	16.8	1.2	1.1	15.8	12.5	1.5	1.5
Siam City Cement	SCCC TB	Thailand	(20.5)	12.1	13.4	12.0	1.2	1.1	10.2	7.1	5.6	6.1
TPI Polene	TPIPL TB	Thailand	(55.0)	(5.6)	8.6	9.1	0.5	0.5	11.1	10.9	5.8	5.8
Average			13.1	9.8	14.9	13.3	1.2	1.1	11.6	10.0	4.4	4.6
Packaging paper peers												
Amcor	AMC AU	Britain	(9.5)	(4.8)	12.9	13.6	3.4	3.3	10.1	10.1	5.2	5.2
Huhtamaki	HUH1V FH	Finland	(11.5)	15.4	14.3	12.3	1.7	1.5	8.5	7.8	3.3	3.7
Mondi	MNDI LN	EU	(45.2)	13.0	14.4	12.8	1.2	1.2	7.3	6.8	4.4	4.3
Leeman	2314 HK	Hong Kong	(27.8)	32.4	9.0	6.8	0.4	0.3	9.2	7.5	4.3	5.6
Nine Dragon Paper	2689 HK	Hong Kong	(133.2)	na	na	10.4	0.5	0.4	22.1	8.7	0.3	2.2
BillerudKorsnas	BILL SS	EU	(100.2)	na	na	12.5	0.8	0.8	9.7	5.5	4.6	5.6
Int. Paper	IP US	US	(41.3)	(5.0)	15.8	16.7	1.4	1.5	7.7	7.8	5.3	5.3
PCA	PKG US	US	(26.0)	(4.2)	18.2	19.0	3.4	3.4	9.8	10.2	3.4	3.4
Mondi	MNDI LN	EU	(45.2)	13.0	14.4	12.8	1.2	1.2	7.3	6.8	4.4	4.3
SCG Packaging	SCGP TB *	Thailand	6.1	23.9	27.5	22.2	1.7	1.6	10.6	8.8	1.5	1.8
United Paper	UTP TB *	Thailand	(8.9)	10.0	9.3	8.5	1.7	1.5	5.6	5.0	5.5	6.0
Average			(40.2)	10.4	15.1	13.4	1.6	1.5	9.8	7.7	3.8	4.3
Average			(27.1)	36.6	21.0	14.7	1.3	1.2	11.5	9.0	3.3	3.8

Sources: Bloomberg, * Thanachart estimates

Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

The Siam Cement Pcl (SCC) is one of Thailand's largest industrial conglomerates. The company's operations comprise three main divisions: cement and building materials, petrochemicals, and packaging. Approximately two-thirds of earnings are now derived from chemicals, although the company is focusing on growing its cement and building material businesses in ASEAN.

Source: Thanachart

THANACHART'S SWOT ANALYSIS

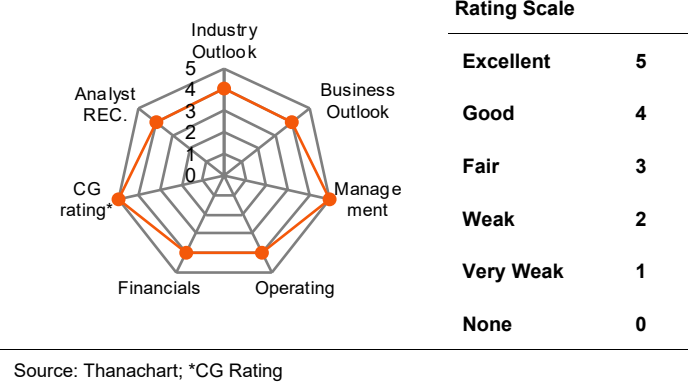
S — Strength

- Very strong market position in most of its businesses and products.
- Strong track record of operational and distribution excellence.
- Robust financial position.
- Experienced and prudent management team.

O — Opportunity

- M&A opportunities, especially for its construction materials businesses in ASEAN.
- Significant potential to expand its chemical businesses, especially in Vietnam and Indonesia.

COMPANY RATING



W — Weakness

- Still heavily reliant on Thailand as its key market.
- Petrochemical is a highly cyclical business that can cause high earnings volatility for the company.

T — Threat

- Threat from competition in the local cement market.
- Potential holding discount after its Chemical IPO.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	343.56	390.00	14%
Net profit 23F (Bt m)	32,474	35,897	11%
Net profit 24F (Bt m)	33,973	33,580	-1%
Consensus REC	BUY: 12	HOLD: 10	SELL: 2

RISKS TO OUR INVESTMENT CASE

- The key downside risk to our call would be a decrease in chemical spreads due to a sudden decrease in demand or new supply.
- A secondary risk would be rising energy costs that would decrease margins.

HOW ARE WE DIFFERENT FROM THE STREET?

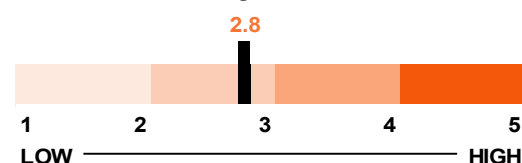
- Although we expect higher 2023F profit than the Bloomberg consensus, we are in line with the Street on our 2024F profit estimate.
- Our DCF-based TP is therefore higher than the consensus number because we are more positive on SCC's chemical spread recovery over the longer term.

Sources: Bloomberg consensus, Thanachart estimates

Source: Thanachart

SCC has three core businesses, i.e., petrochemicals, building materials, and packaging paper, all of which have high carbon emission levels. We assign an ESG score of 2.8 to SCC, which is about the average for the Thai energy sector. The score reflects high carbon emissions but a strong commitment to cut these and to improve in other ESG areas.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
SCC	YES	YES	YES	AA	57.57	83.5	89.00	43.0	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)
Note: Please see third party on "terms of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- SCC released 30m tonnes of CO2 equivalent in 2022, the second-highest level in the energy sector following PTT. However, this is a reduction of 9% from 2021 and 12.5% lower from base year 2020 by increasing the proportion of low-carbon energy use such as biomass from agricultural wastes, refuse derived fuel (RDF) for cement productions, and solar energy. While the petrochemical business uses naphtha, which is an oil-based feedstock, its cement and packaging businesses use a lot of coal. Its ceramic production also uses natural gas as fuel. Its carbon-emission intensity is at 296kg/BOE (barrel of oil equivalent) of CO2 vs. the Thai energy space average of 280kg/BOE.
- SCC has committed to net-zero greenhouse gas (GHG) emissions by 2050 with at least a 20% GHG reduction in 2030 from 2020. However, we see the target as a challenge given its petrochemical business expansion plan, including the Long Son petrochemical plant due to start up in 2023.
- SCC has implemented various strategies to cut its coal usage and increase its non-coal feedstock to 40% in 1H23 from 18% in 2020. Other projects include a green-based product mix at 67% of revenue by 2030 vs. 54% in 1H23, an energy efficiency policy, and investing in recycling waste plastic to be used as a chemical feedstock.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- SCC considers occupational health and safety as its core value and top priority. The lost-time/injury frequency rate for employees and contractors is only 0.015 cases/1 million hours of work. All companies under SCC have passed the Safety Performance Assessment Program (SPAP) at the Standard level or higher.
- SCC promotes equality and well-being among communities and in the workplace. It has undertaken several initiatives to this end. For example, SCC provides training programmes to inspire communities to create value-added products and it has introduced the Q-Chang application for the training of 415 home-improvement workers.

GOVERNANCE & SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- Eight of SCC's 15-member board of directors (BOD) are independent. Air Chief Marshal Satitpong Sukvimol is the chairman of the BOD. He is also currently His Majesty the King's Principal Private Secretary, Bureau of the Royal Household.
- SCC's results announcements and analyst meetings are punctual with comprehensive information disclosure. The CEO and top management of all key business lines are present at analyst meetings and take questions.
- SCC has set a budget of 2% of revenue for R&D and the company increased high value-added product sales to 36% of total revenue in 2022 from 32% in 2011.
- SCC has consistently grown its non-chemical businesses to reduce earnings fluctuations from its petrochemical division, i.e., its paper and cement building material (CBM) businesses.

Sources: Thanachart, Company data

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	530,112	569,609	582,221	662,682	704,146
Cost of sales	420,793	491,339	482,410	541,910	566,295
Gross profit	109,319	78,269	99,810	120,772	137,852
% gross margin	20.6%	13.7%	17.1%	18.2%	19.6%
Selling & administration expenses	62,797	69,773	73,837	80,580	84,242
Operating profit	46,522	8,497	25,974	40,192	53,610
% operating margin	8.8%	1.5%	4.5%	6.1%	7.6%
Depreciation & amortization	28,835	29,461	30,724	32,212	33,612
EBITDA	75,357	37,958	56,698	72,404	87,222
% EBITDA margin	14.2%	6.7%	9.7%	10.9%	12.4%
Non-operating income	10,594	12,684	5,440	7,459	6,485
Non-operating expenses	(4,472)	(1,985)	0	0	0
Interest expense	(6,757)	(7,523)	(9,227)	(12,886)	(12,997)
Pre-tax profit	45,886	11,672	22,186	34,766	47,098
Income tax	8,900	4,650	4,713	6,953	9,524
After-tax profit	36,986	7,021	17,473	27,812	37,574
% net margin	7.0%	1.2%	3.0%	4.2%	5.3%
Shares in affiliates' Earnings	17,543	10,703	8,187	8,975	7,975
Minority interests	(7,562)	3,658	(1,823)	(3,207)	(4,838)
Extraordinary items	207	0	12,061	0	0
NET PROFIT	47,174	21,382	35,897	33,580	40,711
Normalized profit	46,967	21,382	23,836	33,580	40,711
EPS (Bt)	39.3	17.8	29.9	28.0	33.9
Normalized EPS (Bt)	39.1	17.8	19.9	28.0	33.9

Profits set to trough in 2023F with likely strong recovery in 2024-25F

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	233,016	250,049	220,220	241,149	255,872
Cash & cash equivalent	67,610	89,859	60,000	60,000	65,000
Account receivables	78,951	74,459	76,108	86,626	92,046
Inventories	83,121	83,162	81,651	91,721	95,849
Others	3,334	2,570	2,462	2,802	2,977
Investments & loans	139,808	144,274	144,274	144,274	144,274
Net fixed assets	410,708	425,052	439,327	447,115	453,504
Other assets	77,569	87,115	89,044	101,350	107,691
Total assets	861,101	906,490	892,865	933,888	961,340
LIABILITIES:					
Current liabilities:	168,386	132,316	125,988	135,057	137,913
Account payables	75,026	59,783	58,697	65,936	68,903
Bank overdraft & ST loans	39,262	36,252	33,624	34,755	34,212
Current LT debt	44,550	29,423	27,291	28,208	27,767
Others current liabilities	9,549	6,858	6,376	6,157	7,031
Total LT debt	206,291	284,661	264,029	272,906	268,640
Others LT liabilities	36,415	37,088	26,477	30,136	32,022
Total liabilities	411,093	454,065	416,494	438,099	438,575
Minority interest	84,318	78,169	79,993	83,200	88,038
Preferreds shares	0	0	0	0	0
Paid-up capital	1,200	1,200	1,200	1,200	1,200
Share premium	3,467	3,179	3,179	3,179	3,179
Warrants	0	0	0	0	0
Surplus	1,790	6,380	6,380	6,380	6,380
Retained earnings	359,234	363,496	385,619	401,830	423,968
Shareholders' equity	365,691	374,255	396,378	412,589	434,727
Liabilities & equity	861,101	906,490	892,865	933,888	961,340

Sources: Company data, Thanachart estimates

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	45,886	11,672	22,186	34,766	47,098
Tax paid	(10,069)	(5,211)	(4,273)	(6,812)	(9,231)
Depreciation & amortization	28,835	29,461	30,724	32,212	33,612
Chg In working capital	(42,824)	(10,791)	(1,224)	(13,349)	(6,580)
Chg In other CA & CL / minorities	24,823	9,681	7,211	8,275	8,380
Cash flow from operations	46,652	34,812	54,624	55,092	73,278
Capex	(76,117)	(43,805)	(45,000)	(40,000)	(40,000)
Right of use	0	0	0	0	0
ST loans & investments	(90)	39	161	0	0
LT loans & investments	(22,799)	(4,465)	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	(19,692)	(11,747)	(478)	(8,647)	(4,456)
Cash flow from investments	(118,699)	(59,978)	(45,317)	(48,647)	(44,456)
Debt financing	39,132	60,233	(25,392)	10,924	(5,250)
Capital increase	3,467	(288)	0	0	0
Dividends paid	(20,398)	(19,199)	(13,774)	(17,369)	(18,573)
Warrants & other surplus	14,475	6,669	0	0	0
Cash flow from financing	36,677	47,415	(39,166)	(6,445)	(23,823)
Free cash flow	(29,466)	(8,993)	9,624	15,092	33,278

We expect FCF to
improve with higher profit

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	7.9	17.4	15.6	11.1	9.1
Normalized PE - at target price (x)	10.0	21.9	19.6	13.9	11.5
PE (x)	7.9	17.4	10.4	11.1	9.1
PE - at target price (x)	9.9	21.9	13.0	13.9	11.5
EV/EBITDA (x)	7.9	16.7	11.2	8.9	7.3
EV/EBITDA - at target price (x)	9.2	19.2	12.9	10.3	8.4
P/BV (x)	1.0	1.0	0.9	0.9	0.9
P/BV - at target price (x)	1.3	1.3	1.2	1.1	1.1
P/CFO (x)	8.0	10.7	6.8	6.8	5.1
Price/sales (x)	0.7	0.7	0.6	0.6	0.5
Dividend yield (%)	6.0	2.6	4.8	4.5	5.5
FCF Yield (%)	(7.9)	(2.4)	2.6	4.1	8.9
(Bt)					
Normalized EPS	39.1	17.8	19.9	28.0	33.9
EPS	39.3	17.8	29.9	28.0	33.9
DPS	18.5	8.0	15.0	14.0	17.0
BV/share	304.7	311.9	330.3	343.8	362.3
CFO/share	38.9	29.0	45.5	45.9	61.1
FCF/share	(24.6)	(7.5)	8.0	12.6	27.7

Sources: Company data, Thanachart estimates

We see SCC's PE as
attractive given its profit
growth outlook

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	32.5	7.5	2.2	13.8	6.3
Net profit (%)	38.2	(54.7)	67.9	(6.5)	21.2
EPS (%)	38.2	(54.7)	67.9	(6.5)	21.2
Normalized profit (%)	24.0	(54.5)	11.5	40.9	21.2
Normalized EPS (%)	24.0	(54.5)	11.5	40.9	21.2
Dividend payout ratio (%)	47.1	44.9	50.0	50.0	50.0
Operating performance					
Gross margin (%)	20.6	13.7	17.1	18.2	19.6
Operating margin (%)	8.8	1.5	4.5	6.1	7.6
EBITDA margin (%)	14.2	6.7	9.7	10.9	12.4
Net margin (%)	7.0	1.2	3.0	4.2	5.3
D/E (incl. minor) (x)	0.6	0.8	0.7	0.7	0.6
Net D/E (incl. minor) (x)	0.5	0.6	0.6	0.6	0.5
Interest coverage - EBIT (x)	6.9	1.1	2.8	3.1	4.1
Interest coverage - EBITDA (x)	11.2	5.0	6.1	5.6	6.7
ROA - using norm profit (%)	5.8	2.4	2.6	3.7	4.3
ROE - using norm profit (%)	13.7	5.8	6.2	8.3	9.6
DuPont					
ROE - using after tax profit (%)	10.8	1.9	4.5	6.9	8.9
- asset turnover (x)	0.7	0.6	0.6	0.7	0.7
- operating margin (%)	9.9	3.4	5.4	7.2	8.5
- leverage (x)	2.3	2.4	2.3	2.3	2.2
- interest burden (%)	87.2	60.8	70.6	73.0	78.4
- tax burden (%)	80.6	60.2	78.8	80.0	79.8
WACC (%)	8.6	8.6	8.6	8.6	8.6
ROIC (%)	8.0	0.9	3.2	4.9	6.2
NOPAT (Bt m)	37,498	5,111	20,456	32,154	42,770
invested capital (Bt m)	588,184	634,732	661,322	688,457	700,346

Sources: Company data, Thanachart estimates

We expect leverage to come down in the next few years

HOLD (From: BUY)

Change in Recommendation

TP: Bt 9.80

Upside : 8.9%

(From: Bt 12.50)

12 SEPTEMBER 2023

Small Cap Research

Star Petroleum Refining (SPRC TB)

Unexciting long-term outlook

We downgrade SPRC to HOLD from Buy and cut our DCF-based TP to Bt9.8 from Bt12.5 due to our lower margin assumptions. While SPRC should see a strong profit turnaround in 3Q23F, we see an unexciting long-term outlook with a declining earnings trend over 2024-25F.


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Downgrading to HOLD

This report is a part of *Energy Sector – Weaker fundamental dynamics*, dated 12 September 2023. We downgrade our call on SPRC to HOLD from Buy and cut our DCF-based 12-month TP to Bt9.8/share from Bt12.5 because of our lower margin assumptions and the prolonged suspension of its Single Point Mooring (SPM) license. We also roll over our TP to a 2024F base year. We see SPRC's long-term profitability outlook as unexciting, with GRM expected to peak in 2023F and the company's major scheduled plant maintenance in 2025. Valuation-wise, we believe SPRC is fairly priced, trading at 0.9x 2024F P/BV against its ROE of 8.3%/7.5% in 2024-25F.

Less positive on GRM outlook

We are turning more cautious on the refinery market in 2024F and now expect the benchmark Singapore gross refining margin (GRM) to normalize back to the mid-cycle level. We expect excess market supply next year as a result of new capacity additions that will likely outstrip the additional demand. We estimate SPRC's GRM at US\$6.1/5.4/5.8/bbl in 2023-25F (from US\$7.2/6.7/6.7/bbl)

Declining earnings trend

We estimate SPRC's earnings to contract by 52/18%/6% in 2023-25F. The fall in 2024F is due to our lower GRM assumption, while the drop in 2025F is because of the planned major plant maintenance. In this report, we cut our earnings projections for SPRC by 16-31% over 2023-25F on the back of our lower GRM assumptions and the continued suspension of its SPM license. Note that the license has been suspended since January 2022 after the company suffered an oil spill.

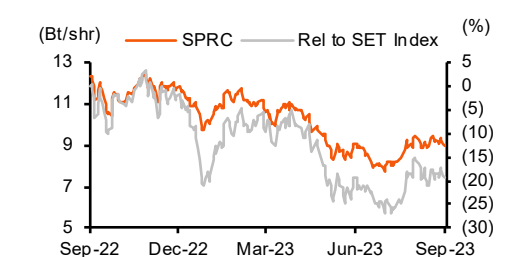
Expect a good 3Q23F

We estimate 3Q23F earnings of Bt3.9bn, a substantial improvement from the Bt2bn loss in 2Q23 as a result of the GRM spike and inventory gains from higher oil prices. Excluding the inventory gains, we estimate core earnings of Bt2.6bn vs. a Bt891m loss in 2Q23. We estimate SPRC's market GRM at US\$10/bbl in 3Q23F vs. only US\$1.3/bbl in 2Q23. The refinery market in 3Q23 has so far been supported by planned and unplanned plant shutdowns and tight medium crude supply. However, we expect this to be short-lived and for GRM in 4Q23F to be softer because of a lower gasoline spread. SPRC's refinery has a higher gasoline yield than its peers.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	285,264	237,038	222,363	194,283
Net profit	7,703	4,359	2,934	2,932
Consensus NP	—	3,591	5,354	6,413
Diff frm cons (%)	—	21.4	(45.2)	(54.3)
Norm profit	8,538	4,093	3,408	3,213
Prev. Norm profit	—	4,979	4,970	3,829
Chg frm prev (%)	—	(17.8)	(31.4)	(16.1)
Norm EPS (Bt)	2.0	0.9	0.8	0.7
Norm EPS grw (%)	na	(52.1)	(16.7)	(5.7)
Norm PE (x)	4.6	9.5	11.5	12.1
EV/EBITDA (x)	3.7	5.3	5.9	5.8
P/BV (x)	1.0	1.0	0.9	0.9
Div yield (%)	12.3	3.4	2.3	2.6
ROE (%)	23.4	10.4	8.3	7.5
Net D/E (%)	24.9	3.7	(7.2)	(11.6)

PRICE PERFORMANCE



COMPANY INFORMATION

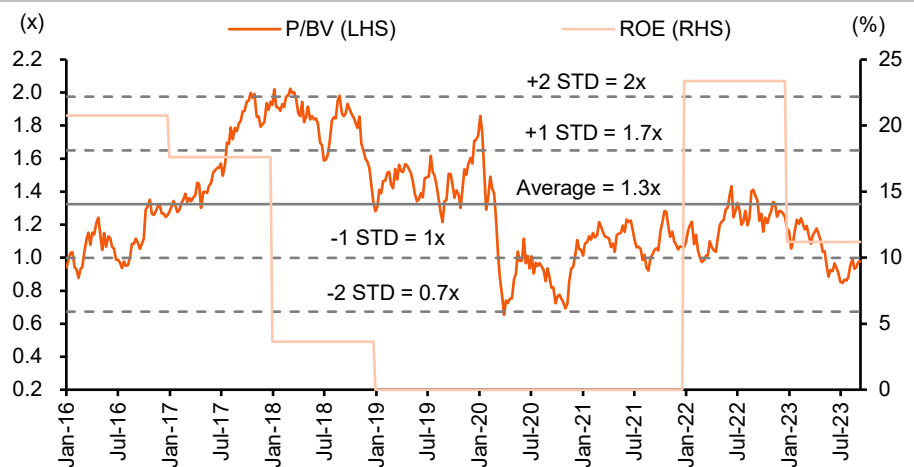
Price as of 11-Sep-23 (Bt)	9.00
Market Cap (US\$ m)	1,099.0
Listed Shares (m shares)	4,335.9
Free Float (%)	39.4
Avg Daily Turnover (US\$ m)	4.8
12M Price H/L (Bt)	12.40/7.75
Sector	Energy
Major Shareholder	Chevron Asia Holdings 60.56%

Sources: Bloomberg, Company data, Thanachart estimates

Ex 1: Earnings Revisions

	2019	2020	2021	2022	2023F	2024F	2025F
Core profit (Bt m)							
- New	(4,034)	(6,325)	(1,542)	8,538	4,093	3,408	3,213
- Old					4,979	4,970	3,829
- Change (%)					(17.8)	(31.4)	(16.1)
Net profit (Bt m)							
- New	(1,694)	(12,280)	4,746	7,703	4,359	2,934	2,932
- Old					4,979	4,145	3,148
- Change (%)					(12.5)	(29.2)	(6.8)
Market GRM (US\$/bbl)							
- New	3.4	2.8	3.7	9.7	6.1	5.4	5.8
- Old					7.2	6.7	6.7
- Change (%)					(15.0)	(19.9)	(13.3)
Utilization (%)							
- New	82	87	77	89	90	90	80
- Old					92	94	80
- Change (ppt)					(2)	(4)	0

Sources: Company data, Thanachart estimates

Ex 2: P/BV Vs. ROE

Sources: Bloomberg, Company data, Thanachart estimates

Ex 3: 12-month DCF-based TP Calculation, Using A Base Year Of 2024F

(Bt m)		2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal Value
EBITDA + dividend		6,140	5,844	8,632	8,655	6,697	6,720	6,743	4,665	6,789	6,812	6,308	
Free cash flow		5,983	2,596	3,007	7,251	5,291	5,358	5,382	7,526	1,609	5,451	5,038	47,289
PV of free cash flow		5,399	2,114	2,182	4,729	3,100	2,821	2,546	3,200	591	1,792	1,482	13,911
Risk-free rate (%)	2.5												
Market risk premium (%)	8.0												
Beta	1.3												
WACC (%)	10.8												
Terminal growth (%)	1.0												
Enterprise value - add	43,867												
Investments													
Net debt (2023F)	1,495												
Minority interest	0												
Equity value	42,372												
# of shares (m)	4,336												
Equity value/sh (Bt)	9.8												

Sources: Thanachart estimates

Valuation Comparison

Ex 4: Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F (%)	24F (%)	23F (x)	24F (x)	23F (x)	24F (x)	23F (x)	24F (x)	23F (%)	24F (%)	23F (%)	24F (%)
PetroChina	857 HK	China	3.5	(2.4)	7.2	7.4	0.8	0.7	3.8	3.8	6.8	6.4	11.0	9.5
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Average			5.4	1.6	7.1	7.0	0.7	0.7	4.6	4.4	8.1	7.9	10.2	9.4
SK Innovation	096770	S.Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1	3.2	8.6
S-Oil	010950	S.Korea	(54.9)	30.4	8.7	6.7	1.0	0.9	5.6	4.8	3.1	3.8	11.6	14.2
Average			(63.2)	101.3	15.9	7.6	0.9	0.8	7.7	5.5	2.6	3.0	7.4	11.4
Reliance Industries	RIL IB	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
Indian Oil	IOCL IB	India	(72.5)	na	19.3	6.1	1.0	0.9	11.6	5.7	4.0	8.8	5.2	17.0
Bharat Petroleum	BPCL IB	India	(66.3)	na	23.2	5.0	1.4	1.2	13.8	5.2	1.9	6.9	3.3	24.5
Hindustan Petroleum	HPCL IB	India	na	na	na	3.7	1.3	1.0	na	6.5	3.8	8.3	na	28.8
Average			(42.0)	10.1	21.3	4.9	1.2	1.0	12.7	5.8	3.2	8.0	5.6	19.8
Marathon Petroleum	MPC US	USA	(8.7)	(35.6)	6.8	10.5	2.5	2.6	4.7	6.5	1.9	2.1	31.5	20.6
Valero	VLO US	USA	(10.8)	(42.6)	5.7	10.0	1.8	1.7	3.9	6.0	2.8	2.9	33.6	17.0
Phillips 66	PSX US	USA	(15.9)	(18.5)	7.6	9.4	1.7	1.6	5.8	7.0	3.4	3.5	23.3	18.2
PBF Energy'	PBF US	USA	(54.0)	(38.6)	5.0	8.2	1.0	0.9	2.7	3.9	1.5	1.6	25.4	11.9
Delek	DK US	USA	(29.8)	(75.3)	7.9	32.1	2.0	2.0	4.2	5.5	2.9	2.8	23.8	8.2
Average			(23.9)	(42.1)	6.6	14.0	1.8	1.8	4.3	5.8	2.5	2.6	27.5	15.2
Bangchak Corp*	BCP TB *	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
ESSO (Thailand) *	ESSO TB *	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
Star Petroleum Refining	SPRC TB *	Thailand	(52.1)	(16.7)	9.5	11.5	1.0	0.9	5.3	5.9	3.4	2.3	10.4	8.3
Thai Oil *	TOP TB *	Thailand	(57.0)	(28.4)	6.2	8.7	0.6	0.6	7.7	10.3	5.0	3.8	10.7	7.3
Average			(50.6)	(17.0)	7.0	8.5	0.9	0.8	5.5	6.4	3.9	3.4	13.4	10.4
Total Average			(34.9)	10.8	11.6	8.4	1.1	1.0	7.0	5.6	4.1	5.0	12.8	13.3

Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

Star Petroleum Refining Pcl's (SPRC) refinery produces petroleum products, which include LPG, premium and regular grades of unleaded gasoline, high-speed diesel, jet fuel, and fuel oil, as well as petrochemical feedstocks used in the petrochemical industry, which include PGP, LPG, chemical-grade naphtha, mixed C4, and reformate. The company has a refining capacity of 175K b/d.

Source: Thanachart

THANACHART'S SWOT ANALYSIS

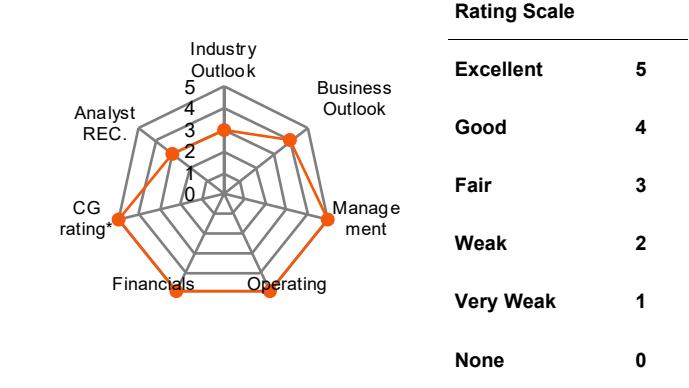
S — Strength

- Strong operator with a very high utilization rate and high plant reliability.
- Procurement, distribution, and technical support from parent Chevron.

O — Opportunity

- Opportunities to upgrade and/or expand its refinery to meet higher local demand.
- Expansion into new businesses or securing its own retail channel.

COMPANY RATING



Source: Thanachart; *CG Rating

W — Weakness

- Volatile earnings due to its pure refinery exposure.
- Lack of company-owned retail channel limits upside from domestic product placement and higher marketing margin.
- Limited growth potential to expand its refinery business given that Thailand is a net export country for refined oil products.

T — Threat

- High oil prices could slow local demand and force it to sell in the lower-margin export market.
- Threat of substitutes such as electric vehicles may lower demand for oil products.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	11.03	9.80	-11%
Net profit 23F (Bt m)	3,591	4,359	21%
Net profit 24F (Bt m)	5,354	2,934	-45%
Consensus REC	BUY: 16	HOLD: 5	SELL: 0

HOW ARE WE DIFFERENT FROM THE STREET?

- We are significantly below the Bloomberg consensus estimate with our 2024F net profit, which we attribute to our lower GRM forecast and stock loss.
- Our TP is consequently lower than the consensus number.

RISKS TO OUR INVESTMENT CASE

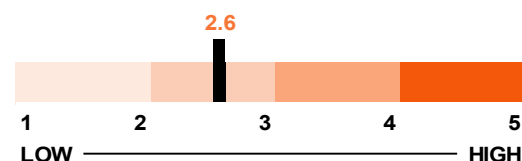
- Downside risks would be a sudden increase in oil exports from China or a collapse in demand that would lead to a refinery margin correction.
- A secondary downside risk would be sudden government intervention at the ex-refinery price to help reduce inflationary pressure.
- The key upside risk would be if the GRM outlook were to turn out better than we expect.

Sources: Bloomberg consensus, Thanachart estimates

Source: Thanachart

SPRC appears to have decent transparency and robust measures to protect minority interests to offset related-party transactions with its major shareholder, Chevron. Our ESG score for SPRC of 2.6 is due to its high energy intensity, given the nature of its business and the lack of green investment project announcements.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
SPRC	-	-	-	-	57.38	37.19	28.00	-	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "terms of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- In 2022, SPRC released 1.3mt of CO2 equivalent, which was increase 4% from 2021 due to higher refinery utilization following post COVID demand recovery. Emission intensity was at 194kg/BOE (barrels of crude oil equivalent). This was below Thai energy peers' average of 280kg/BOE. We believe this was due to its less diversified business, as the company only has refinery operations.
- The company doesn't have clear emission reduction targets. However, SPRC does have targets for spill prevention, improving air quality, and waste/water management. In addition, SPRC plans to partner with Chevron, a leading global refiner, to study and establish continuous improvements that need to be made to bring down energy usage and greenhouse gas emissions
- SPRC lags behind global peers in terms of diversifying into the biofuel or renewable business that could help it to reduce carbon emissions. We believe the company is maintaining its goal is to use capex for efficiency improvements.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- The safety principles in the Environment, Health, and Safety (EHS) Management System are used as a safety framework for all of SPRC's practices. The company experienced an oil spill in early 2022, but the company acted quickly, and no serious injuries were reported. SPRC also showed a responsible attitude toward minimizing the environmental damage, and the company paid compensation to affected people of US\$42m this year.
- In 2022, SPRC did not receive any complaints through any of its whistleblowing channels. SPRC's average training hours of total employees was at 35 hours per person, up from 22 in 2021. Some 70% of employees have been with SPRC for over ten years, and the turnover rate is only 2.2%

GOVERNANCE &
SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- The major shareholder is Chevron South Asia Limited, with a 60.6% stake. However, the company is run independently and has flexibility in purchasing crude.
- The company has a good mix of its board of director members with a policy guideline and performance review on an annual basis. Four of SPRC's nine board members are independent non-executive directors (INEDs).
- Operating performance margins are in line with the benchmarks and can be cross-checked easily. Audit fees are reported, and IFRS accounting standards are used. While there is some risk from contingent liabilities, commodities prices, and forex rates, the balance sheet is generally strong.

Sources: Company data, Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	172,484	285,264	237,038	222,363	194,283
Cost of sales	171,528	271,745	230,983	217,934	190,245
Gross profit	956	13,519	6,055	4,429	4,038
% gross margin	0.6%	4.7%	2.6%	2.0%	2.1%
Selling & administration expenses	749	2,791	881	880	879
Operating profit	207	10,728	5,174	3,549	3,160
% operating margin	0.1%	3.8%	2.2%	1.6%	1.6%
Depreciation & amortization	2,644	2,603	2,535	2,591	2,685
EBITDA	2,851	13,331	7,709	6,140	5,844
% EBITDA margin	1.7%	4.7%	3.3%	2.8%	3.0%
Non-operating income	62	63	0	0	0
Non-operating expenses	(433)	0	0	0	0
Interest expense	(212)	(316)	0	0	0
Pre-tax profit	(376)	10,475	5,174	3,549	3,160
Income tax	1,166	1,937	1,081	608	569
After-tax profit	(1,542)	8,538	4,093	2,941	2,591
% net margin	-0.9%	3.0%	1.7%	1.3%	1.3%
Shares in affiliates' Earnings	0	0	0	467	623
Minority interests	0	0	0	0	0
Extraordinary items	6,288	(834)	266	(474)	(281)
NET PROFIT	4,746	7,703	4,359	2,934	2,932
Normalized profit	(1,542)	8,538	4,093	3,408	3,213
EPS (Bt)	1.1	1.8	1.0	0.7	0.7
Normalized EPS (Bt)	(0.4)	2.0	0.9	0.8	0.7

We expect 2024F profit to trend lower from GRM normalization

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	32,731	38,258	39,398	41,379	39,776
Cash & cash equivalent	2,945	76	5,000	9,000	11,500
Account receivables	13,219	14,328	13,919	13,057	11,408
Inventories	16,486	23,762	20,403	19,251	16,805
Others	81	92	76	72	63
Investments & loans	0	0	0	0	0
Net fixed assets	24,219	22,735	22,900	21,010	23,325
Other assets	1,776	2,295	1,926	1,814	1,599
Total assets	58,726	63,288	64,225	64,203	64,700
LIABILITIES:					
Current liabilities:	20,031	23,904	21,487	20,001	18,407
Account payables	13,961	12,780	15,262	14,399	12,570
Bank overdraft & ST loans	0	6,562	4,380	4,030	4,335
Current LT debt	4,680	3,168	317	292	314
Others current liabilities	1,390	1,393	1,528	1,280	1,188
Total LT debt	3,374	0	1,797	1,654	1,779
Others LT liabilities	950	677	934	702	690
Total liabilities	24,355	24,581	24,219	22,357	20,875
Minority interest	0	0	0	0	0
Preferreds shares	0	0	0	0	0
Paid-up capital	30,004	30,004	30,004	30,004	30,004
Share premium	978	978	978	978	978
Warrants	0	0	0	0	0
Surplus	(4,207)	(2,608)	(2,608)	(2,608)	(2,608)
Retained earnings	7,596	10,333	11,632	13,472	15,451
Shareholders' equity	34,371	38,707	40,006	41,845	43,825
Liabilities & equity	58,726	63,288	64,225	64,203	64,700

Sources: Company data, Thanachart estimates

SPRC's balance sheet is relatively strong with limited capex and healthy cash generation

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	(376)	10,475	5,174	3,549	3,160
Tax paid	(1,166)	(1,937)	(1,081)	(608)	(569)
Depreciation & amortization	2,644	2,603	2,535	2,591	2,685
Chg In working capital	(5,999)	(9,565)	6,250	1,152	2,265
Chg In other CA & CL / minorities	(171)	41	148	221	538
Cash flow from operations	(5,068)	1,616	13,025	6,905	8,078
Capex	(2,665)	(1,073)	(2,700)	(700)	(5,000)
Right of use	0	0	0	0	0
ST loans & investments	0	0	0	0	0
LT loans & investments	0	0	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	7,670	(2,098)	895	(592)	(77)
Cash flow from investments	5,005	(3,172)	(1,805)	(1,292)	(5,077)
Debt financing	(1,824)	2,053	(3,235)	(519)	451
Capital increase	0	0	0	0	0
Dividends paid	(774)	(4,936)	(3,060)	(1,094)	(953)
Warrants & other surplus	3,971	1,569	0	0	0
Cash flow from financing	1,373	(1,314)	(6,296)	(1,613)	(502)
Free cash flow	(7,733)	543	10,325	6,205	3,078

With limited capex and high GRM, FCF is strong over the next three years

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	na	4.6	9.5	11.5	12.1
Normalized PE - at target price (x)	na	5.0	10.4	12.5	13.2
PE (x)	8.2	5.1	9.0	13.3	13.3
PE - at target price (x)	9.0	5.5	9.7	14.5	14.5
EV/EBITDA (x)	15.5	3.7	5.3	5.9	5.8
EV/EBITDA - at target price (x)	16.7	3.9	5.7	6.4	6.4
P/BV (x)	1.1	1.0	1.0	0.9	0.9
P/BV - at target price (x)	1.2	1.1	1.1	1.0	1.0
P/CFO (x)	(7.7)	24.1	3.0	5.7	4.8
Price/sales (x)	0.2	0.1	0.2	0.2	0.2
Dividend yield (%)	2.0	12.3	3.4	2.3	2.6
FCF Yield (%)	(19.8)	1.4	26.5	15.9	7.9
(Bt)					
Normalized EPS	(0.4)	2.0	0.9	0.8	0.7
EPS	1.1	1.8	1.0	0.7	0.7
DPS	0.2	1.1	0.3	0.2	0.2
BV/share	7.9	8.9	9.2	9.7	10.1
CFO/share	(1.2)	0.4	3.0	1.6	1.9
FCF/share	(1.8)	0.1	2.4	1.4	0.7

Sources: Company data, Thanachart estimates

Valuation at 0.9x P/BV in 2024F looks full to us with 8% ROE

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	32.5	65.4	(16.9)	(6.2)	(12.6)
Net profit (%)	na	62.3	(43.4)	(32.7)	(0.0)
EPS (%)	na	62.3	(43.4)	(32.7)	(0.0)
Normalized profit (%)	na	na	(52.1)	(16.7)	(5.7)
Normalized EPS (%)	na	na	(52.1)	(16.7)	(5.7)
Dividend payout ratio (%)	16.3	62.5	30.0	30.0	35.0
Operating performance					
Gross margin (%)	0.6	4.7	2.6	2.0	2.1
Operating margin (%)	0.1	3.8	2.2	1.6	1.6
EBITDA margin (%)	1.7	4.7	3.3	2.8	3.0
Net margin (%)	(0.9)	3.0	1.7	1.3	1.3
D/E (incl. minor) (x)	0.2	0.3	0.2	0.1	0.1
Net D/E (incl. minor) (x)	0.1	0.2	0.0	(0.1)	(0.1)
Interest coverage - EBIT (x)	1.0	33.9	na	na	na
Interest coverage - EBITDA (x)	13.5	42.1	na	na	na
ROA - using norm profit (%)	na	14.0	6.4	5.3	5.0
ROE - using norm profit (%)	na	23.4	10.4	8.3	7.5
DuPont					
ROE - using after tax profit (%)	na	23.4	10.4	7.2	6.0
- asset turnover (x)	3.3	4.7	3.7	3.5	3.0
- operating margin (%)	na	3.8	2.2	1.6	1.6
- leverage (x)	1.7	1.7	1.6	1.6	1.5
- interest burden (%)	229.4	97.1	100.0	100.0	100.0
- tax burden (%)	na	81.5	79.1	82.9	82.0
WACC (%)	10.8	10.8	10.8	10.8	10.8
ROIC (%)	0.6	22.1	8.6	7.1	6.8
NOPAT (Bt m)	207	8,744	4,146	2,939	2,646
invested capital (Bt m)	39,480	48,362	41,501	38,822	38,752

Sources: Company data, Thanachart estimates

ROE to decline with lower
GRM in 2024F

BUY (Unchanged)

Change in Numbers

TP: Bt 56.00 (From: Bt 58.00)**Upside : 17.3%****12 SEPTEMBER 2023**

Thai Oil Public Co Ltd (TOP TB)

Crisis-level valuation

We reaffirm our BUY call on TOP for what we see as its compelling valuation of just 0.6x 2024F P/BV, which is near its COVID-crisis level of 0.5x. This is despite our expectation for GRM, despite normalizing down, to be at a mid-cycle level. An anticipated strong 3Q23F earnings recovery should also act as a short-term catalyst.

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Trading near crisis level

This report is a part of *Energy Sector – Weaker fundamental dynamics*, dated 12 September 2023. We reaffirm our BUY rating on shares of TOP as we see its valuations as compelling. It is trading at just 0.6x 2024F P/BV, which is near its COVID-crisis level of 0.5x. Despite our expectation for the Singapore gross refining margin (GRM) benchmark to normalize from the abnormally high level currently in 2024-25F, we still expect it to be decent at a mid-cycle level of US\$8.2/6.5/7.0bbl in 2023-25F. We also foresee TOP's 3Q23F earnings turning around, and we expect this to be a short-term share price catalyst.

Cyclical strength in diesel spread

The Diesel-Dubai spread recovered strongly to US\$29/bbl in September and to US\$27/bbl 3QTD from US\$14/bbl in 2Q23. We believe tight medium crude supply, seasonal winter demand, and lower Russia diesel exports will likely continue to support high diesel margins over the next few months. This bodes well for TOP, given its high diesel exposure, which accounted for 38% of its total yield in 2Q23.

Oil spill overhang

On 4 September this year, TOP announced that there had been an oil spill during its oil discharge around the area of the Single Buoy Mooring (SBM-2) of TOP's refinery at Sriracha in Chon Buri province. TOP is exposed to the risk of higher shipping costs if its SBM license were to be suspended. There would also be other expenses related to the oil spill. TOP has insurance to cover oil spill expenses, which includes third-party liability, which has a limit of US\$50m, while its pollution liability covers US\$25m. It also has property damage breakdown insurance of US\$225m with a deductible of US\$5m. We believe the strong GRM rally in 3Q before this likely extends into 4Q should more than offset the extra expenses that TOP may incur and that its earnings turnaround momentum in 2H23F should remain intact.

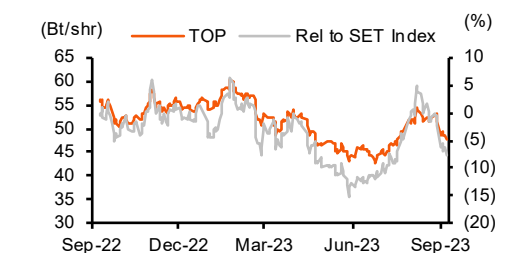
Fine-tuning earnings, cutting our TP to Bt56

We bring down our DCF-derived SOTP-based TP to Bt56.0/share (from Bt58.0 previously) as we incorporate our lower GRM assumptions in 2024-25F. We also roll over the base year in our DCF model to 2024F. The changes to our earnings forecasts are mixed with an upward earnings revision for 2023F, given a stronger-than-expected GRM 3QTD, while we trim our earnings estimates for 2024-25F to reflect our more cautious view on the GRM outlook.

COMPANY VALUATION

Y/E Dec (Bt m)	2022A	2023F	2024F	2025F
Sales	529,589	421,764	389,795	383,027
Net profit	32,813	15,127	11,554	19,016
Consensus NP	—	13,956	14,259	20,419
Diff frm cons (%)	—	8.4	(19.0)	(6.9)
Norm profit	37,825	17,196	12,319	19,683
Prev. Norm profit	—	12,413	11,978	19,308
Chg frm prev (%)	—	38.5	2.8	1.9
Norm EPS (Bt)	17.9	7.7	5.5	8.8
Norm EPS grw (%)	561.1	(57.0)	(28.4)	59.8
Norm PE (x)	2.7	6.2	8.7	5.4
EV/EBITDA (x)	4.0	7.7	10.3	7.3
P/BV (x)	0.7	0.6	0.6	0.6
Div yield (%)	7.7	5.0	3.8	4.5
ROE (%)	27.3	10.7	7.3	11.0
Net D/E (%)	82.0	89.6	94.2	78.8

PRICE PERFORMANCE



COMPANY INFORMATION

Price as of 11-Sep-23 (Bt)	47.75
Market Cap (US\$ m)	3,002.1
Listed Shares (m shares)	2,232.3
Free Float (%)	52.0
Avg Daily Turnover (US\$ m)	15.9
12M Price H/L (Bt)	60.25/42.75
Sector	Energy
Major Shareholder	PTT Pcl 45.03%

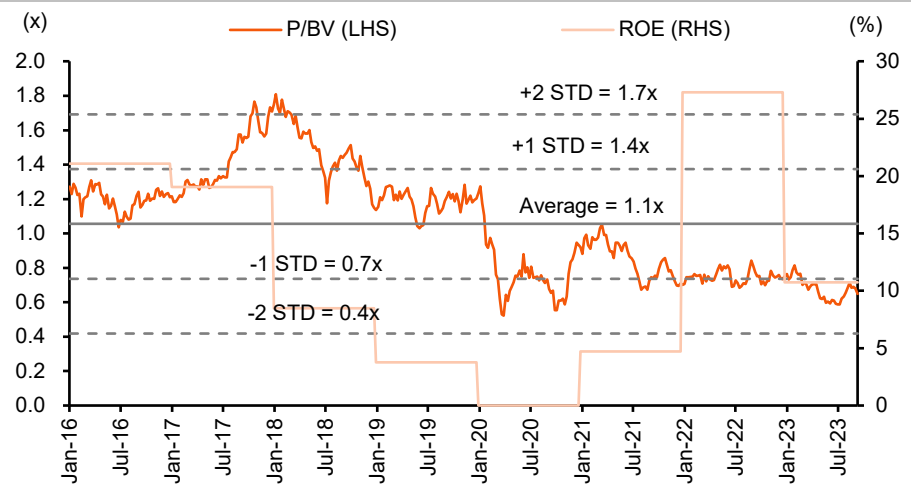
Sources: Bloomberg, Company data, Thanachart estimates

ESG Summary Report P101

Ex 1: Earning Revisions

	2020	2021	2022	2023F	2024F	2025F
Reported profit						
- New	(3,301)	12,578	32,813	15,127	11,554	19,016
- Old				12,413	11,978	19,308
- Change (%)				21.9	(3.5)	(1.5)
Normalized profit						
- New				17,196	12,319	19,683
- Old				12,413	11,978	19,308
- Change (%)				38.5	2.8	1.9
Market GRM (US\$/bbl)						
- New	0.4	2.2	11.9	7.8	6.7	7.9
- Old				6.8	7.1	8.2
- Change (%)				14.5	(5.4)	(4.3)
Refinery utilization (%)						
- New	101.0	100.0	107.0	110.0	100.0	90.0
- Old				110.0	100.0	90.0
- Change (%)				0.0	0.0	0.0-

Sources: Company data, Thanachart estimates

Ex 2: P/BV Vs. ROE

Sources: Bloomberg, Company data, Thanachart estimates

Ex 3: 12-month DCF-based TP Calculation For Downstream Business, Using A Base Year Of 2024F

(Bt m)	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F	2032F	2033F	2034F	Terminal Value
EBITDA	26,200	34,865	37,859	30,297	29,600	30,564	30,564	31,503	31,503	31,503	30,087	
Free cash flow	(6,724)	23,067	24,572	19,795	18,166	19,105	18,801	19,522	19,518	19,578	18,451	301,021
PV of free cash flow	(5,836)	18,655	18,201	13,602	11,578	11,297	10,313	9,935	8,829	8,181	7,122	116,192
Risk-free rate (%)	2.5											
Market risk premium (%)	8.0											
Beta	1.0											
WACC (%)	7.3											
Terminal growth (%)	2.0											
Enterprise value - add investments	228,069											
Net cash/(debt)	149,877											
Minority interest	2,972											
Equity value	75,220											
# of shares (m)	2,040											
Equity value/share (Bt)	37											
Sum-of-the-parts valuation	Value (Bt m)				Per share (Bt/shr)				% of total			Methodology
Downstream	75,220				37				66%			DCF
Power (GPSC)	9,737				5				9%			DCF
Chandra Asri	28,291				14				25%			BBG consensus
Total value per share	113,248				56							

Sources: Thanachart estimates

Note: Net debt position is for all businesses except GPSC, which is not consolidated

Valuation Comparison

Ex 4: Comparison With Regional Peers

Company	Code	Country	EPS Growth		— PE —		— P/BV —		EV/EBITDA		Div. Yield		— ROE —	
			23F (%)	24F (%)	23F (x)	24F (x)	23F (x)	24F (x)	23F (x)	24F (x)	23F (%)	24F (%)	23F (%)	24F (%)
PetroChina	857 HK	China	3.5	(2.4)	7.2	7.4	0.8	0.7	3.8	3.8	6.8	6.4	11.0	9.5
Sinopec	386 HK	China	7.2	5.6	7.1	6.7	0.6	0.6	5.4	5.0	9.3	9.3	9.5	9.4
Average			5.4	1.6	7.1	7.0	0.7	0.7	4.6	4.4	8.1	7.9	10.2	9.4
SK Innovation	096770	S.Korea	(71.4)	172.3	23.0	8.5	0.8	0.7	9.7	6.2	2.1	2.1	3.2	8.6
S-Oil	010950	S.Korea	(54.9)	30.4	8.7	6.7	1.0	0.9	5.6	4.8	3.1	3.8	11.6	14.2
Average			(63.2)	101.3	15.9	7.6	0.9	0.8	7.7	5.5	2.6	3.0	7.4	11.4
Reliance Industries	RIL IB	India	12.8	10.1	na	na	na	na	na	na	na	na	8.3	8.9
Indian Oil	IOCL IB	India	(72.5)	na	19.3	6.1	1.0	0.9	11.6	5.7	4.0	8.8	5.2	17.0
Bharat Petroleum	BPCL IB	India	(66.3)	na	23.2	5.0	1.4	1.2	13.8	5.2	1.9	6.9	3.3	24.5
Hindustan Petroleum	HPCL IB	India	na	na	na	3.7	1.3	1.0	na	6.5	3.8	8.3	na	28.8
Average			(42.0)	10.1	21.3	4.9	1.2	1.0	12.7	5.8	3.2	8.0	5.6	19.8
Marathon Petroleum	MPC US	USA	(8.7)	(35.6)	6.8	10.5	2.5	2.6	4.7	6.5	1.9	2.1	31.5	20.6
Valero	VLO US	USA	(10.8)	(42.6)	5.7	10.0	1.8	1.7	3.9	6.0	2.8	2.9	33.6	17.0
Phillips 66	PSX US	USA	(15.9)	(18.5)	7.6	9.4	1.7	1.6	5.8	7.0	3.4	3.5	23.3	18.2
PBF Energy'	PBF US	USA	(54.0)	(38.6)	5.0	8.2	1.0	0.9	2.7	3.9	1.5	1.6	25.4	11.9
Delek	DK US	USA	(29.8)	(75.3)	7.9	32.1	2.0	2.0	4.2	5.5	2.9	2.8	23.8	8.2
Average			(23.9)	(42.1)	6.6	14.0	1.8	1.8	4.3	5.8	2.5	2.6	27.5	15.2
Bangchak Corp*	BCP TB *	Thailand	(41.6)	(5.1)	5.7	6.0	0.7	0.7	3.4	3.8	4.1	3.8	13.6	11.9
ESSO (Thailand) *	ESSO TB *	Thailand	(51.7)	(18.0)	6.4	7.8	1.2	1.1	5.7	5.6	3.1	3.6	18.8	14.2
Star Petroleum Refining	SPRC TB *	Thailand	(52.1)	(16.7)	9.5	11.5	1.0	0.9	5.3	5.9	3.4	2.3	10.4	8.3
Thai Oil *	TOP TB *	Thailand	(57.0)	(28.4)	6.2	8.7	0.6	0.6	7.7	10.3	5.0	3.8	10.7	7.3
Average			(50.6)	(17.0)	7.0	8.5	0.9	0.8	5.5	6.4	3.9	3.4	13.4	10.4
Total Average			(34.9)	10.8	11.6	8.4	1.1	1.0	7.0	5.6	4.1	5.0	12.8	13.3

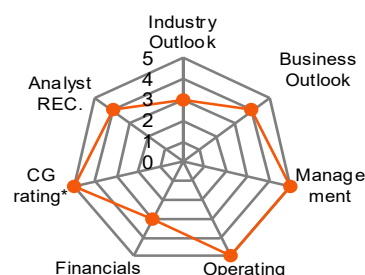
Sources: Bloomberg, * Thanachart estimates
Based on 11 September 2023 closing prices

COMPANY DESCRIPTION

Thai Oil Pcl (TOP) is the flagship refinery under the PTT group, which owns a 49% stake in the company. Its capacity of 275kbd makes up 25% of Thailand's total. With a Nelson complexity of 9.8, TOP produces 0.8m tpa of aromatics and 0.3m tpa of lube base oil and bitumen. The company also recently purchased a 15% stake in listed company Chandra Asri, one of the leading petrochemical complexes in Indonesia, which is also owned by Siam Cement (SCC TB, BUY, Bt310.00) with a 30.5% stake. Its other businesses include power, marine transport, and ethanol production.

Source: Thanachart

COMPANY RATING



Rating Scale

Excellent	5
Good	4
Fair	3
Weak	2
Very Weak	1
None	0

Source: Thanachart; *CG Rating

THANACHART'S SWOT ANALYSIS

S — Strength

- Some of the lowest operating costs in the region.
- Being part of the PTT group gives TOP secured off-take agreements.

O — Opportunity

- Potential further chemical expansion following its investment in Chandra Asri.
- Ability to upgrade derivatives into value-added plastic products.

W — Weakness

- Volatile earnings due to commodity exposure especially in the refining business where demand outlook is weak.
- Weak balance sheet with substantial capex over the next two years due to the USD4bn investment in clean fuel project (CFP).

T — Threat

- High oil prices could slow local demand and force it to sell in the lower-margin export market.
- Overpaying for acquisitions and higher-than-expected expansion costs.

CONSENSUS COMPARISON

	Consensus	Thanachart	Diff
Target price (Bt)	62.53	56.00	-10%
Net profit 23F (Bt m)	13,956	15,127	8%
Net profit 24F (Bt m)	14,259	11,554	-19%
Consensus REC	BUY: 21	HOLD: 4	SELL: 2

HOW ARE WE DIFFERENT FROM THE STREET?

- Our 2023F net profit is higher the Bloomberg consensus estimate, which we attribute to us factoring in recent strength in GRM.
- Due to our lower GRM assumptions, our DCF-derived SOTP-based TP is also lower due to our more conservative view on the GRM outlook over the longer term.

RISKS TO OUR INVESTMENT CASE

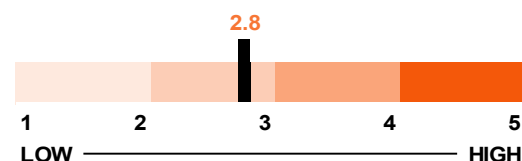
- The key downside risk to our call would be lower-than-expected GRMs.
- A secondary downside risk to our call would be lower oil prices, which would lead to stock losses.
- A higher-than-expected light-sweet crude premium would be another secondary downside risk to our call.
- Downside risk would also come from a sudden increase in China oil exports or a collapse in demand that would lead to a refinery margin correction.

Sources: Bloomberg consensus, Thanachart forecasts

Source: Thanachart

TOP is Thailand's largest oil refiner, with a total capacity of 275kbd. Our ESG score for TOP is 2.8, which is slightly below the 2.9 sector average. TOP doesn't have green energy projects, and we expect its greenhouse gas emissions to rise with its new capacity, the Clean Fuel Project (CFP), in 2024F.

Thanachart ESG Rating



	SETTHSI Index	THSI Index	DJSI Index	MSCI (CCC-AAA)	ESG Book (0-100)	Refinitiv (0-100)	S&P Global (0-100)	Moody's (0-100)	CG Rating (0-5)
TOP	YES	YES	YES	BBB	52.81	76.28	88.00	38.0	5.0

Sources: SETTRADE, SETTHSI Index, Thailand Sustainability Investment (THSI), The Dow Jones Industrial Average (DJSI), MSCI ESG Research LLC, ESG Book, Refinitiv ESG Information, S&P Global Market Intelligence, Moody's ESG Solutions, Thai IOD (CG rating)

Note: Please see third party on "terms of use" toward the back of this report.

Factors

Our Comments

ENVIRONMENT

- Environmental Policies & Guidelines
- Energy Management
- Carbon Management
- Water Management
- Waste Management

- In 2022, TOP released 3.3mt of CO2 equivalent, up 4% from the level in 2022 given higher production as a result of higher demand post COVID crisis. However, this is 8% lower than its target of 3.5mt in 2022.
- We expect TOP's greenhouse gas (GHG) intensity to increase in 2024F when its Clean Fuel Project (CFP) starts up. CFP is designed to use heavy crude oil as feedstock and upgrading high-sulfur oil into high-value products means more heat and GHG emissions.
- TOP has a target to achieve net-zero GHG emissions by 2060, but it has no medium-term goal. TOP still appears to lag global peers in green energy investment.

SOCIAL

- Human Rights
- Staff Management
- Health & Safety
- Product Safety & Quality
- Social Responsibility

- TOP's staff health and safety management system is in line with ISO standards. The company's safety performance is on par with the top 10% safety performers in the oil and gas industry.
- In 2022, TOP spent Bt506m on human capital development, with its employees, on average, receiving 316 hours of training per full-time equivalent (FTE). Its staff turnover rate was 2.81% in 2022, which was below its 3.5% target. Its employee satisfaction rate of 95% was slightly below its target of 96%.
- TOP tries to ensure the well-being of surrounding communities and says it has received no complaints from local communities about negative environmental impacts.

GOVERNANCE &
SUSTAINABILITY

- Board
- Ethics & Transparency
- Business Sustainability
- Risk Management
- Innovation

- TOP is 45% owned by PTT. Therefore, there are a lot of related-party transactions with PTT, including crude feedstock purchases. However, measures are taken to ensure market-based pricing.
- Seven of the 14 board members are independent. Its board of directors (BOD) is chaired by an independent director, Dr. Supot Teachavorasinskun. However, there is only one female on the board. The average tenure of the board members is 3.27 years.
- Accounting & Audit are generally easy to cross-check and seem transparent.
- TOP's business, by its nature, has very high earnings volatility. It is also in the middle of a heavy capex cycle due to the new CFP.

Source: Thanachart

INCOME STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Sales	345,496	529,589	421,764	389,795	383,027
Cost of sales	333,614	475,842	392,099	366,634	351,095
Gross profit	11,882	53,746	29,665	23,161	31,932
% gross margin	3.4%	10.1%	7.0%	5.9%	8.3%
Selling & administration expenses	3,056	4,182	4,218	3,898	3,830
Operating profit	8,826	49,565	25,448	19,263	28,102
% operating margin	2.6%	9.4%	6.0%	4.9%	7.3%
Depreciation & amortization	7,424	7,744	7,797	6,937	6,764
EBITDA	16,250	57,309	33,244	26,200	34,865
% EBITDA margin	4.7%	10.8%	7.9%	6.7%	9.1%
Non-operating income	1,136	863	687	635	1,722
Non-operating expenses	0	1,125	0	0	0
Interest expense	(3,595)	(3,860)	(4,743)	(4,994)	(5,594)
Pre-tax profit	6,367	47,692	21,391	14,904	24,229
Income tax	2,034	8,918	4,169	3,199	5,208
After-tax profit	4,333	38,774	17,223	11,704	19,022
% net margin	1.3%	7.3%	4.1%	3.0%	5.0%
Shares in affiliates' Earnings	1,675	(511)	322	937	979
Minority interests	(425)	(438)	(349)	(322)	(317)
Extraordinary items	6,995	(5,012)	(2,069)	(764)	(667)
NET PROFIT	12,578	32,813	15,127	11,554	19,016
Normalized profit	5,583	37,825	17,196	12,319	19,683
EPS (Bt)	6.1	15.6	6.8	5.2	8.5
Normalized EPS (Bt)	2.7	17.9	7.7	5.5	8.8

We expect TOP's earnings to drop in 2024F as the GRM normalizes

BALANCE SHEET

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
ASSETS:					
Current assets:	101,239	153,828	135,625	109,569	97,251
Cash & cash equivalent	29,696	43,576	50,000	30,000	20,000
Account receivables	23,415	28,759	24,783	22,905	22,507
Inventories	39,576	55,343	40,015	37,417	35,831
Others	8,552	26,150	20,826	19,247	18,913
Investments & loans	55,412	32,603	32,603	32,603	32,603
Net fixed assets	178,399	206,476	224,452	228,868	232,104
Other assets	27,094	51,674	47,056	46,038	46,217
Total assets	362,144	444,581	439,736	417,078	408,175
LIABILITIES:					
Current liabilities:	38,476	103,673	74,725	28,254	27,685
Account payables	23,001	74,154	32,593	10,045	10,581
Bank overdraft & ST loans	929	1,892	2,176	2,117	1,844
Current LT debt	4,213	20,202	31,632	9,619	8,375
Others current liabilities	10,334	7,426	8,323	6,473	6,886
Total LT debt	163,343	151,658	166,068	182,757	159,119
Others LT liabilities	37,230	30,593	31,601	31,519	31,888
Total liabilities	239,050	285,923	272,394	242,529	218,692
Minority interest	2,213	2,623	2,972	3,294	3,611
Preferreds shares	0	0	0	0	0
Paid-up capital	20,400	22,338	22,323	22,323	22,323
Share premium	2,456	10,699	10,699	10,699	10,699
Warrants	0	0	0	0	0
Surplus	(7,805)	(6,658)	(6,658)	(6,658)	(6,658)
Retained earnings	105,829	129,655	138,005	144,890	159,507
Shareholders' equity	120,881	156,034	164,369	171,254	185,871
Liabilities & equity	362,144	444,581	439,736	417,078	408,175

Sources: Company data, Thanachart estimates

TOP has stronger balance sheet after the GRM spike and capital increase

CASH FLOW STATEMENT

FY ending Dec (Bt m)	2021A	2022A	2023F	2024F	2025F
Earnings before tax	6,367	47,692	21,391	14,904	24,229
Tax paid	(1,747)	(9,212)	(3,985)	(3,371)	(5,154)
Depreciation & amortization	7,424	7,744	7,797	6,937	6,764
Chg In working capital	(14,344)	30,043	(22,258)	(18,071)	2,520
Chg In other CA & CL / minorities	(5,985)	(27,534)	1,617	(5,267)	(5,165)
Cash flow from operations	(8,284)	48,732	4,562	(4,870)	23,194
Capex	(40,599)	(35,821)	(25,773)	(11,352)	(10,000)
Right of use	(2,402)	(6,907)	(500)	(500)	(500)
ST loans & investments	8	0	0	0	0
LT loans & investments	(30,891)	22,809	0	0	0
Adj for asset revaluation	0	0	0	0	0
Chg In other assets & liabilities	29,448	(21,494)	8,801	6,775	6,861
Cash flow from investments	(44,436)	(41,413)	(17,472)	(5,077)	(3,639)
Debt financing	18,988	4,220	26,125	(5,384)	(25,155)
Capital increase	0	10,181	(15)	0	0
Dividends paid	(2,652)	(8,547)	(6,777)	(4,669)	(4,399)
Warrants & other surplus	(5,274)	707	0	0	0
Cash flow from financing	11,061	6,561	19,333	(10,053)	(29,554)
Free cash flow	(48,883)	12,911	(21,211)	(16,222)	13,194

Capex on a declining trend over the next three years

VALUATION

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Normalized PE (x)	17.6	2.7	6.2	8.7	5.4
Normalized PE - at target price (x)	20.6	3.1	7.3	10.1	6.4
PE (x)	7.8	3.1	7.0	9.2	5.6
PE - at target price (x)	9.2	3.6	8.3	10.8	6.6
EV/EBITDA (x)	14.6	4.0	7.7	10.3	7.3
EV/EBITDA - at target price (x)	15.6	4.3	8.3	11.0	7.9
P/BV (x)	0.8	0.7	0.6	0.6	0.6
P/BV - at target price (x)	1.0	0.8	0.8	0.7	0.7
P/CFO (x)	(11.9)	2.1	23.4	(21.9)	4.6
Price/sales (x)	0.3	0.2	0.3	0.3	0.3
Dividend yield (%)	5.4	7.7	5.0	3.8	4.5
FCF Yield (%)	(49.7)	12.8	(19.9)	(15.2)	12.4
(Bt)					
Normalized EPS	2.7	17.9	7.7	5.5	8.8
EPS	6.1	15.6	6.8	5.2	8.5
DPS	2.6	3.7	2.4	1.8	2.1
BV/share	58.7	69.9	73.6	76.7	83.3
CFO/share	(4.0)	23.1	2.0	(2.2)	10.4
FCF/share	(23.7)	6.1	(9.5)	(7.3)	5.9

Sources: Company data, Thanachart estimates

We see TOP's 0.6x 2024F P/BV as attractive

FINANCIAL RATIOS

FY ending Dec	2021A	2022A	2023F	2024F	2025F
Growth Rate					
Sales (%)	39.4	53.3	(20.4)	(7.6)	(1.7)
Net profit (%)	na	160.9	(53.9)	(23.6)	64.6
EPS (%)	na	154.6	(56.4)	(23.6)	64.6
Normalized profit (%)	na	577.5	(54.5)	(28.4)	59.8
Normalized EPS (%)	na	561.1	(57.0)	(28.4)	59.8
Dividend payout ratio (%)	42.2	25.2	35.0	35.0	25.0
Operating performance					
Gross margin (%)	3.4	10.1	7.0	5.9	8.3
Operating margin (%)	2.6	9.4	6.0	4.9	7.3
EBITDA margin (%)	4.7	10.8	7.9	6.7	9.1
Net margin (%)	1.3	7.3	4.1	3.0	5.0
D/E (incl. minor) (x)	1.4	1.1	1.2	1.1	0.9
Net D/E (incl. minor) (x)	1.1	0.8	0.9	0.9	0.8
Interest coverage - EBIT (x)	2.5	12.8	5.4	3.9	5.0
Interest coverage - EBITDA (x)	4.5	14.8	7.0	5.2	6.2
ROA - using norm profit (%)	1.7	9.4	3.9	2.9	4.8
ROE - using norm profit (%)	4.7	27.3	10.7	7.3	11.0
DuPont					
ROE - using after tax profit (%)	3.7	28.0	10.8	7.0	10.7
- asset turnover (x)	1.0	1.3	1.0	0.9	0.9
- operating margin (%)	2.9	9.7	6.2	5.1	7.8
- leverage (x)	2.8	2.9	2.8	2.6	2.3
- interest burden (%)	63.9	92.5	81.9	74.9	81.2
- tax burden (%)	68.1	81.3	80.5	78.5	78.5
WACC (%)	7.3	7.3	7.3	7.3	7.3
ROIC (%)	3.2	15.5	7.2	4.8	6.6
NOPAT (Bt m)	6,007	40,297	20,488	15,128	22,062
invested capital (Bt m)	259,670	286,209	314,246	335,747	335,209

Sources: Company data, Thanachart estimates

*We expect ROE to remain
at a decent level with the
GRM at a mid-cycle level*

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As a result, SET has created the SETTHSI for the purpose of indicating the price of these sustainable companies that pass the market capital size and liquidity criteria.

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ESG risk combines the concepts of management and exposure to arrive at an absolute assessment of ESG risk. We identify five categories of ESG risk severity that could impact a company's enterprise value

Moody's ESG Solutions

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