

# Petrochemicals

SET Petro Index Close: 28/11/2023 728.85 +1.98 / +0.27% Bt595mm  
Bloomberg ticker: SETPETRO



## Rising naphtha cost deepens low spread

**Naphtha price rose 4% WoW to US\$653/t on tighter supply due to maintenance shutdowns of regional oil refineries and higher demand for gasoline blending. This pulled petrochemical product spread down 7-17% WoW, as product prices continued to weaken due to slow seasonal demand. Uncertain global economic outlook and geopolitical issues will continue to degrade recovery of demand for petrochemical products. We will stay cautious until positive signs are seen.**

**Average PE/PP spread down on higher naphtha cost.** The 4% WoW rise in naphtha price pulled average PE/PP spread down 9% WoW to US\$310/t against 12MMA of US\$374/t. HDPE and PP were hit by new capacity in China that sliced 1% WoW off average PE/PP price. Demand recovery in China is weak on slower-than-expected economic recovery after reopening. Poor product margin will lead to more plant shutdowns globally, especially in Europe, given more cost-competitive players in the Middle East and the US, while demand recovery is not expected before 4Q24. (S&P Global). This could lead to more mothballing of inefficient and ageing naphtha crackers and ethylene-derivative units in the near term.

**Aromatics spread down WoW on lower demand for downstream.** PX spread fell 8% WoW to a 4-week low of US\$422/t (vs. 12MMA of US\$451/t) as naphtha cost increased while PX price slid 1% WoW to US\$1,075/t. Demand from downstream PTA softened amidst weaker PTA-PX spread, which fell 16% WoW to a 6-week low of only US\$45/t as polyester demand softened and inventory level rose after the National Day holiday in China. Some PTA producers have mothballed their plants amidst weak margin and sourced the product from others at a more competitive price. Benzene spread also dropped 17% WoW, approaching a 5-month low at US\$227/t vs. 12MMA of US\$247/t, reflecting lower buying activities as inventory level already covered production in Dec.

**Integrated PET spread up to 7-week high.** Integrated PET spread rose 17% WoW to a 7-week high of US\$134/t after falling 12% WoW last week, but remains below 12MMA of US\$145/t. This was due to a rise in PET bottle chip price to US\$920/t against a decline in feedstock cost of 1-2% WoW. Demand for PET bottle chips continued to recover, with current price still at US\$900/t± vs. >US\$1,000/t previously. We believe this reflects higher demand for restocking for 2024: worsening product spread worsened continues to reduce supply, with operating rate down to <80% recently from 100% in Jul-Aug.

### Key product prices and spread

(US\$/t)	Current 24-Nov-23	-1W	-1M	-3M	-6M	-12M	4Q23 QTD	3Q23	QoQ%	2023 YTD	YoY%	12MMA
Naphtha (Japan) C&F	653	4%	-1%	-3%	9%	-9%	651	656	-1%	652	-19%	653
Ethylene (SE Asia) CFR	945	0%	-3%	9%	8%	7%	943	829	14%	887	-18%	888
Propylene (SE Asia) CFR	810	0%	1%	-6%	-2%	-5%	806	810	-1%	858	-17%	861
HDPE (SE Asia Film) CFR	970	-1%	-6%	-6%	-7%	-2%	1,016	1,017	0%	1,038	-13%	1,034
LDPE (SE Asia Film) CFR	1,000	0%	-3%	-3%	-4%	-10%	1,028	999	3%	1,056	-28%	1,064
LLDPE (SE Asia Film) CFR	960	0%	-2%	-6%	-5%	-4%	983	992	-1%	1,017	-17%	1,017
PP (SE Asia Inj) CFR	920	-1%	-5%	-5%	-9%	0%	956	951	1%	994	-16%	990
<b>Related stocks</b>	PTTGC (-)	SCC (-)	IRPC (-)									
Paraxylene (FOB)	1,075	-1%	0%	-5%	3%	-8%	1,086	1,146	-5%	1,107	-14%	1,104
Benzene (FOB Korea Spot)	880	-2%	-4%	-4%	4%	13%	906	912	-1%	907	-14%	897
<b>Related stocks</b>	PTTGC (-)	TOP (-)										
MEG (SE Asia) CFR	490	-2%	2%	1%	1%	3%	485	485	0%	500	-16%	499
PTA (SE Asia) CFR	765	-2%	-3%	-4%	-2%	-4%	782	814	-4%	805	-10%	804
PET Bottle (NE Asia) FOB	920	1%	3%	-1%	-3%	2%	906	931	-3%	955	-17%	949
<b>Related stocks</b>	PTTGC (-)	IVL (+)										
ABS (SE Asia) CFR	1,300	-2%	-5%	-2%	-3%	-6%	1,360	1,327	2%	1,367	-23%	1,368
PS GPPS (SE Asia) CFR	1,270	0%	0%	4%	5%	0%	1,270	1,200	6%	1,251	-18%	1,250
<b>Related stocks</b>	IRPC (-)											
PVC (SE Asia) CFR	800	4%	4%	-12%	-2%	3%	790	860	-8%	849	-28%	847
<b>Related stocks</b>	SCC (+)	PTTGC (+)										
<b>Spread</b>												
Ethylene - naphtha	292	-8%	-8%	51%	5%	74%	292	173	69%	235	-16%	235
Propylene - naphtha	157	-15%	10%	-16%	-31%	14%	155	154	0%	206	-10%	208
HDPE - naphtha	317	-10%	-15%	-11%	-29%	16%	365	361	1%	386	-3%	381
LDPE - naphtha	347	-7%	-7%	-3%	-22%	-12%	377	343	10%	403	-39%	411
LDPE - Ethylene	55	0%	0%	-67%	-67%	-76%	84	170	-50%	169	-56%	175
LLDPE - naphtha	307	-8%	-5%	-12%	-26%	8%	332	337	-1%	364	-13%	364
PP - naphtha	267	-12%	-13%	-10%	-35%	31%	305	295	4%	342	-11%	337
PX - naphtha	422	-8%	1%	-9%	-6%	-6%	435	490	-11%	455	-6%	451
BZ - naphtha	227	-17%	-17%	-7%	-10%	259%	255	256	0%	255	0%	244
MEG - Ethylene	-96	n.a.	n.a.	n.a.	n.a.	n.a.	-100	-29	n.a.	-50	n.a.	-52
PTA - PX	45	-16%	-36%	13%	-44%	210%	54	46	18%	64	75%	64
PET spread	96	38%	101%	24%	-16%	74%	69	66	4%	93	-49%	89
ABS spread	782	-2%	-5%	-4%	-9%	-17%	823	816	1%	843	-27%	852
PS spread	301	6%	15%	22%	6%	-24%	281	239	17%	277	-25%	284
PVC - ethylene	325	7%	10%	-36%	-3%	-14%	323	453	-29%	404	-16%	408

Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

### Valuation summary

	Rating	Price (Bt)	TP (Bt)	ETR (%)	P/E (x)	P/BV (x)	23F	24F	23F	24F
GGC	Underperform	9.2	10.5	13.0	n.m.	16.1	1.0	0.9		
IVL	Neutral	25.5	35.0	38.4	53.2	11.2	0.8	0.7		
PTTGC	Neutral	38.5	50.0	31.2	n.m.	13.0	0.6	0.6		
<b>Average</b>							<b>53.2</b>	<b>13.4</b>	<b>0.8</b>	<b>0.7</b>

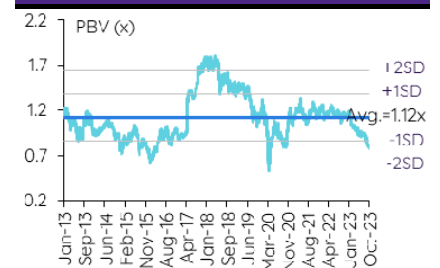
Source: InnovestX Research

### Price performance

(%)	Absolute			Relative to SET		
	1M	3M	12M	1M	3M	12M
GGC	(8.9)	(17.9)	(38.3)	(9.8)	(8.0)	(28.4)
IVL	2.0	(10.5)	(38.9)	1.0	0.2	(29.2)
PTTGC	8.5	2.7	(20.2)	7.4	14.9	(7.5)

Source: SET and InnovestX Research

### PBV band - SETPETRO

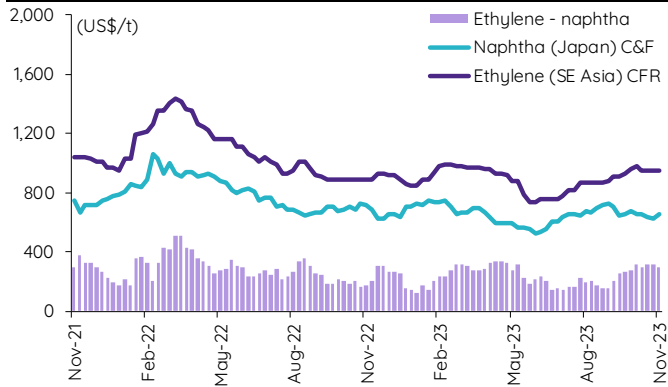


Source: SET, InnovestX Research

### Analyst

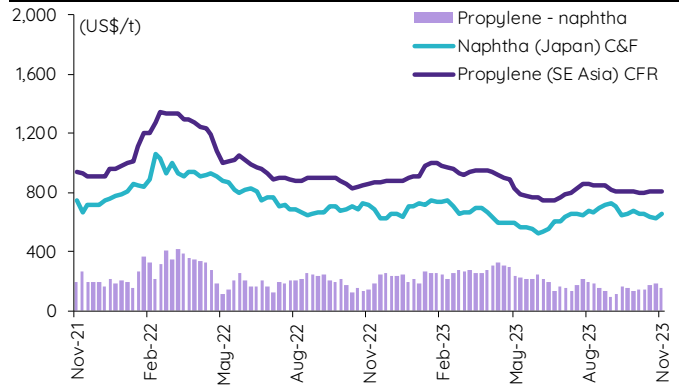
**Chaipat Thanawattano**  
Fundamental Investment  
Analyst on Securities  
(662) 949-1005  
chaipat.thanawattano@scb.co.th

**Figure 1: Ethylene vs. naphtha**



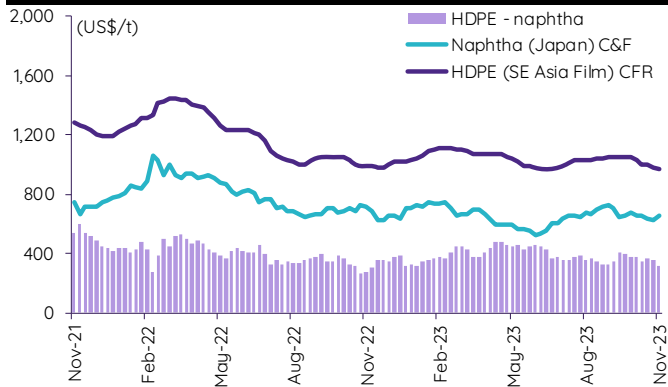
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 2: Propylene vs. naphtha**



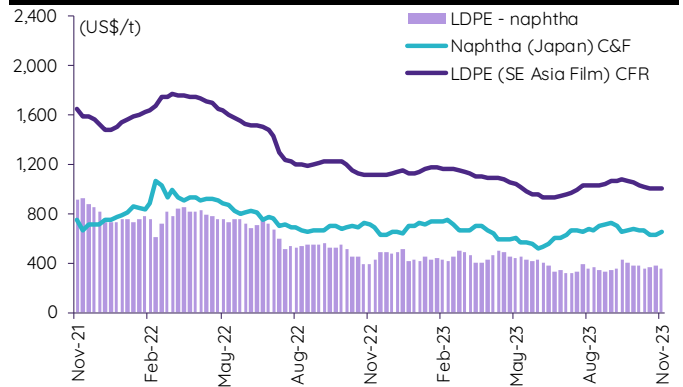
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 3: HDPE vs. naphtha**



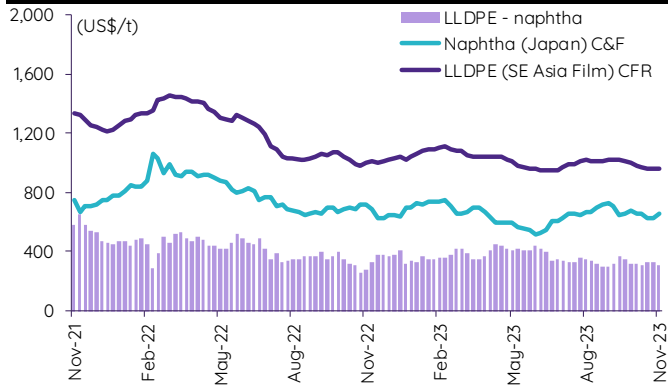
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 4: LDPE vs. naphtha**



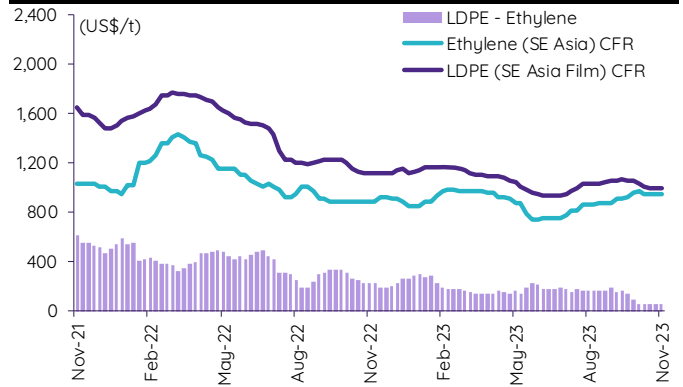
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 5: LLDPE vs. naphtha**



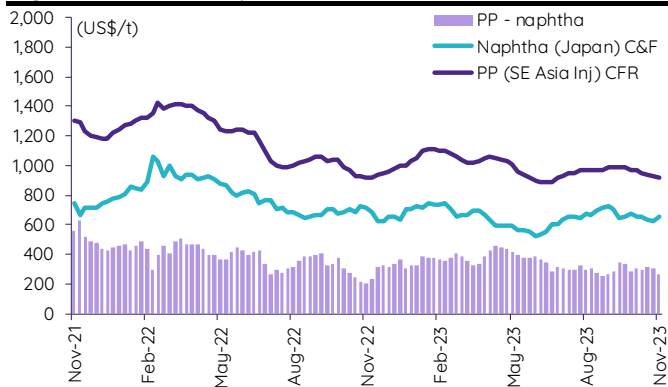
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 6: LDPE vs. ethylene**



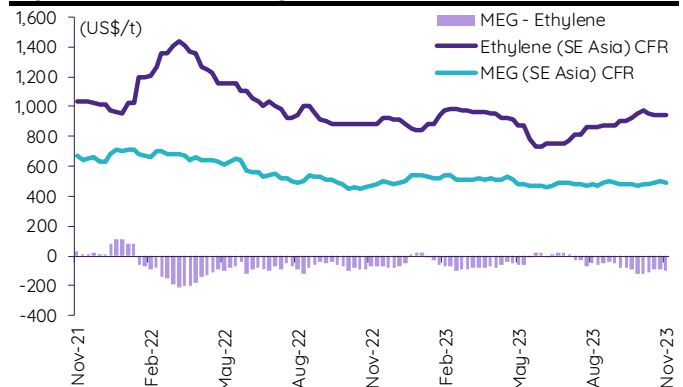
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 7: PP vs. naphtha**



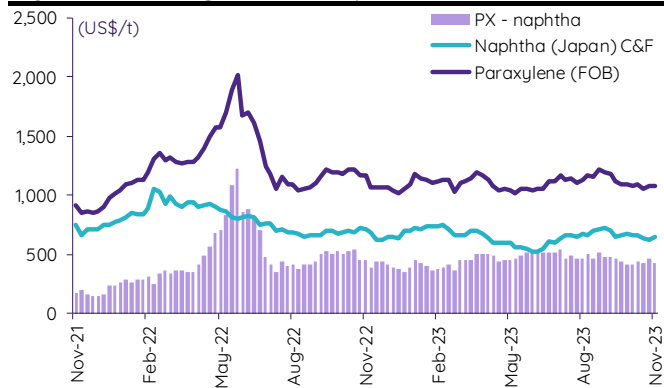
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 8: MEG vs. ethylene**



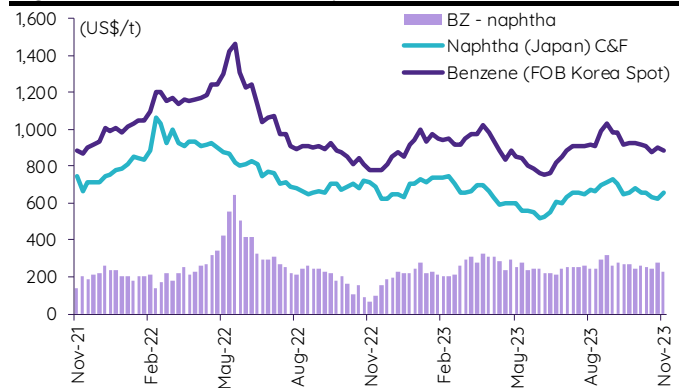
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 9: Paraxylene vs. naphtha**



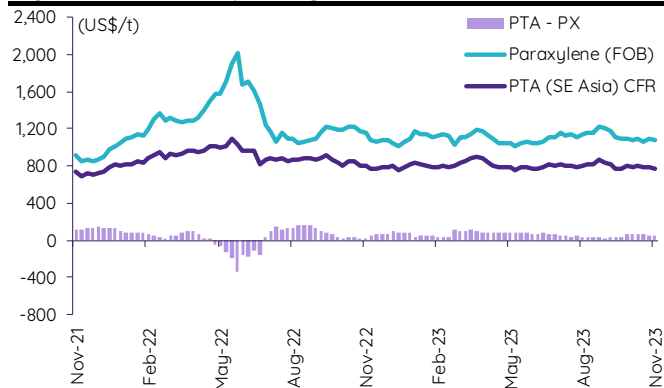
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 10: Benzene vs. naphtha**



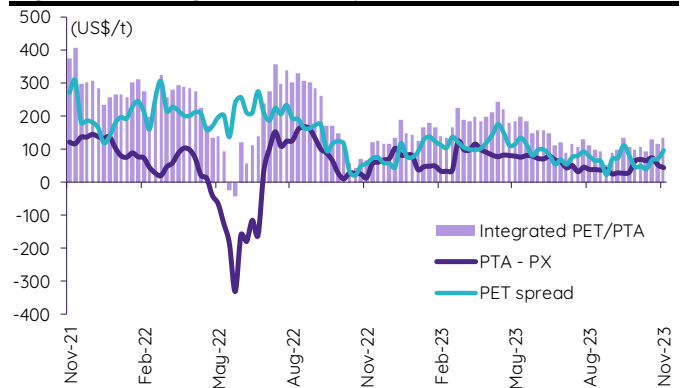
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 11: PTA vs. paraxylene**



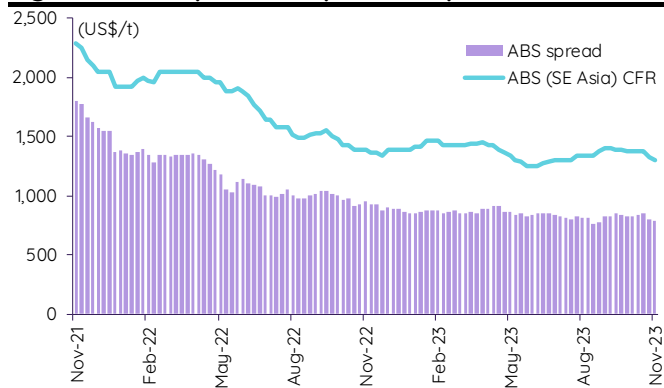
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 12: Integrated PET spread**



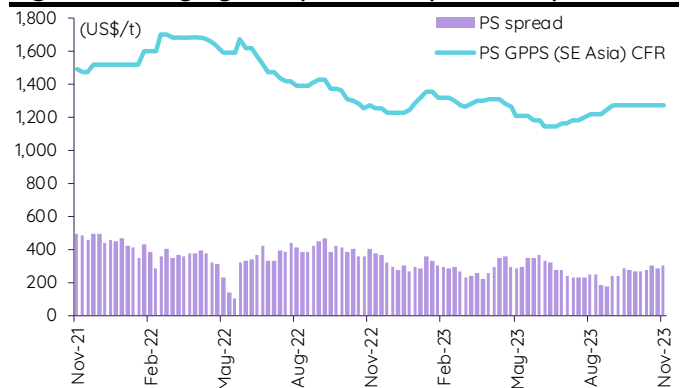
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 13: ABS price and product spread**



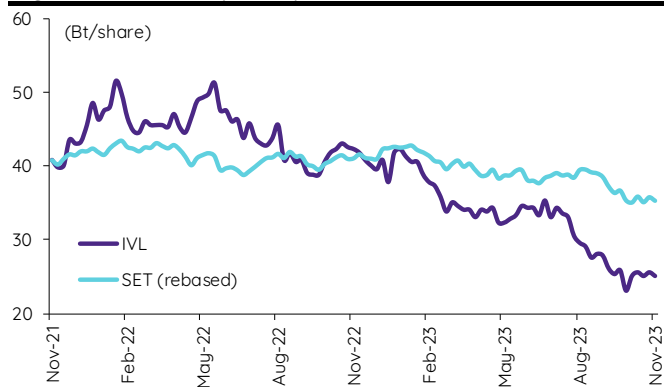
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 14: Polystyrene price and product spread**



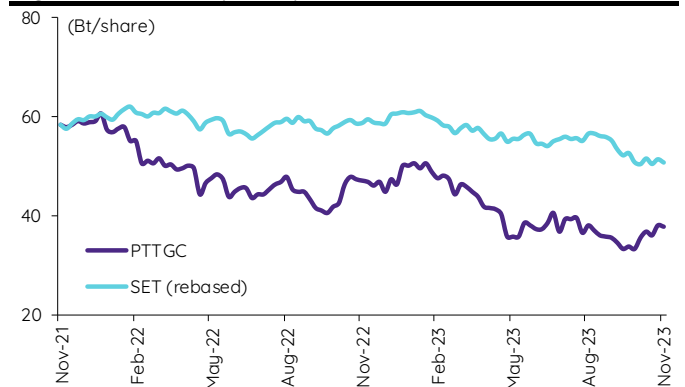
Source: Industry data, Bloomberg Finance L.P. and InnovestX Research

**Figure 15: Share price performance - IVL**



Source: Bloomberg Finance L.P. and InnovestX Research

**Figure 16: Share price performance - PTTGC**



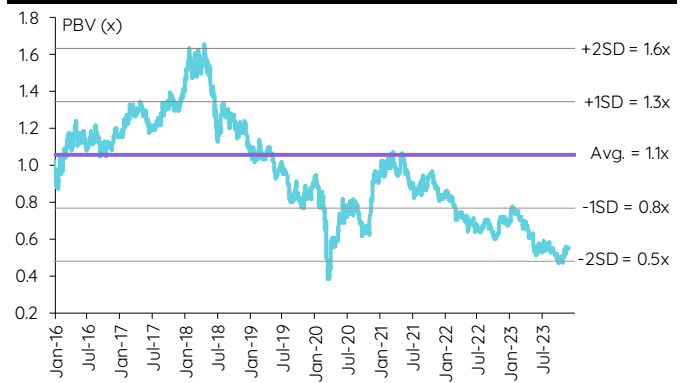
Source: Bloomberg Finance L.P. and InnovestX Research

Figure 17: PBV band - IVL



Source: InnovestX Research

Figure 18: PBV band - PTTGC



Source: InnovestX Research

Figure 19: Product spread - heat map

Product	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	Product
HDPE	565	523	475	327	362	497	518	607	583	576	462	505	421	445	368	336	373	436	361	365	HDPE
LDPE	536	506	483	380	430	577	601	831	968	917	740	880	741	782	600	472	446	437	343	377	LDPE
LLDPE	513	467	427	302	357	485	471	565	581	583	510	557	445	477	389	344	369	408	337	332	LLDPE
PP	581	582	553	455	464	560	525	653	754	695	547	550	428	432	352	291	359	393	295	305	PP
PX	507	372	291	242	294	196	122	149	226	312	274	179	286	635	501	468	401	484	490	435	PX
BZ	70	73	182	126	170	100	31	107	188	352	324	198	200	357	272	157	238	270	256	255	BZ
PS	552	546	447	362	372	459	411	574	511	498	450	472	395	305	392	365	285	306	239	281	PS
ABS	1,122	1,130	960	944	976	992	1,222	1,571	1,925	1,976	1,760	1,785	1,366	1,231	1,024	945	863	863	816	823	ABS
PET	143	154	118	101	146	175	129	132	145	149	118	217	203	201	200	69	109	117	66	69	PET
Int PET	277	317	279	191	198	279	213	208	241	224	209	321	269	172	257	113	166	190	106	115	Int PET
PVC	348	338	445	447	454	445	465	543	619	710	548	629	472	579	446	412	453	354	453	323	PVC

Source: InnovestX Research

Figure 20: Valuation summary (price as of Nov 28, 2023)

	Rating	Price	Target	ETR	P/E (x)			EPS growth (%)			P/BV (x)			ROE (%)			Div. Yield (%)			EV/EBITDA (x)		
		(Bt/Sh)	(Bt/Sh)	(%)	22A	23F	24F	22A	23F	24F	22A	23F	24F	22A	23F	24F	22A	23F	24F	22A	23F	24F
GGC	Underperform	9.20	10.5	13.0	9.4	n.m.	16.1	30	n.m.	n.m.	0.9	1.0	0.9	10	(3)	6	5.4	(1.1)	3.2	4.4	18.8	5.1
IVL	Neutral	25.50	35.0	38.4	3.7	53.2	11.2	44	(93)	377	0.8	0.8	0.7	22	1	7	6.3	1.2	2.7	4.4	7.3	5.2
PTTGC	Neutral	38.50	50.0	31.2	12.6	n.m.	13.0	(57)	n.m.	n.m.	0.6	0.6	0.6	4	(1)	4	2.6	1.3	3.9	9.0	12.0	7.5
<b>Average</b>					<b>8.6</b>	<b>53.2</b>	<b>13.4</b>	<b>6</b>	<b>(93)</b>	<b>377</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>	<b>12</b>	<b>(1)</b>	<b>6</b>	<b>4.8</b>	<b>0.5</b>	<b>3.3</b>	<b>5.9</b>	<b>12.7</b>	<b>5.9</b>

Source: InnovestX Research

Figure 21: Regional peer comparison

Company	PE (x)			EPS Growth (%)			PBV (x)			ROE (%)			Div. Yield (%)			EV/EBITDA (x)		
	23F	24F	25F	23F	24F	25F	23F	24F	25F	23F	24F	25F	23F	24F	25F	23F	24F	25F
Sinopec Shanghai Petrochem	49.3	20.7	13.2	122.6	138.3	57.3	1.2	1.1	1.1	2.4	5.6	8.3	n.a	2.0	4.2	8.9	5.9	5.4
China Petroleum & Chemical	8.9	7.9	7.6	12.0	13.2	3.9	0.8	0.8	0.7	9.0	9.7	9.7	7.5	7.7	7.5	4.7	4.2	4.0
PetroChina Co Ltd	5.2	5.2	5.7	10.0	0.0	(8.1)	0.6	0.5	0.5	11.6	10.6	9.2	9.2	9.1	8.4	3.3	3.2	3.3
Reliance Industries Ltd	n.m.	20.0	17.9	n.m.	n.m.	11.9	1.9	1.8	1.7	8.8	9.4	9.6	0.4	0.4	0.4	n.a.	n.a.	n.a.
Mitsui Chemicals Inc	11.0	9.3	7.8	(15.7)	18.0	19.5	1.0	0.9	0.8	9.9	10.6	11.5	3.1	3.4	3.7	7.1	6.5	5.7
Asahi Kasei Corp	34.0	13.3	11.5	247.9	155.2	16.4	0.8	0.8	0.8	5.0	6.2	6.9	3.5	3.6	3.6	7.5	6.7	6.1
Sumitomo Chemical Co Ltd	n.m.	17.3	7.7	(198.8)	179.2	125.6	0.6	0.5	0.5	n.m.	2.5	6.7	3.5	3.4	4.0	24.7	13.8	7.6
Lotte Chemical Corp	90.2	15.6	9.9	(2.3)	478.8	58.2	0.4	0.4	n.a.	0.4	2.7	4.4	1.7	2.2	2.6	14.8	8.0	6.3
Far Eastern New Century Corp	19.4	17.5	15.3	(3.4)	10.8	14.6	0.7	0.8	0.8	3.9	4.3	5.1	3.8	4.3	5.4	11.3	10.7	9.7
Formosa Chemicals & Fibre	48.1	30.1	28.2	6.4	59.7	6.9	1.1	1.1	1.3	2.3	3.6	5.8	1.7	2.7	3.9	28.5	18.3	13.9
Formosa Plastics Corp	40.4	28.8	25.4	(64.3)	40.1	13.5	1.5	1.5	1.4	3.9	5.4	8.0	2.0	2.8	3.2	52.4	26.3	19.0
Nan Ya Plastics Corp	41.9	21.0	18.3	(59.6)	99.3	15.1	1.5	1.4	1.3	3.6	6.0	7.6	1.7	3.1	4.2	23.4	14.2	12.5
Formosa Petrochemical Corp	31.9	28.2	26.5	76.1	13.1	6.3	2.4	2.4	2.3	8.5	9.1	10.8	2.4	2.6	3.5	19.6	15.5	13.0
Petronas Chemicals Group Bhd	21.7	15.6	13.1	(58.7)	39.6	18.7	1.4	1.3	1.3	6.9	8.8	10.2	2.5	3.5	4.1	11.5	9.4	8.2
Indorama Ventures PCL	34.8	12.1	8.4	(86.4)	188.0	43.1	0.8	0.7	0.7	2.4	5.9	8.6	1.8	2.7	4.1	9.4	7.6	6.5
IRPC PCL	108.4	17.5	10.6	109.0	521.1	65.3	0.5	0.5	0.5	0.3	4.0	6.8	2.2	3.5	5.4	10.7	7.4	5.9
PTT Global Chemical PCL	127.9	14.1	10.4	115.5	807.3	35.6	0.7	0.6	0.5	5.9	3.6	5.6	6.2	3.2	4.7	11.7	9.4	8.3
Global Green Chemicals	74.8	17.3	13.9	(86.8)	333.3	24.4	0.9	0.9	0.9	0.4	5.3	6.2	2.4	3.3	3.9	13.9	7.6	7.0
Alpek SA de CV	39.6	7.5	8.1	(94.7)	428.7	(8.0)	0.7	0.6	0.6	3.2	6.3	8.6	11.0	7.3	7.6	4.6	4.4	4.2
Eastman Chemical Co	13.3	10.6	9.1	(3.8)	25.7	15.8	1.8	1.6	1.5	14.0	16.2	17.1	3.8	4.0	4.2	9.1	8.0	7.4
<b>Average</b>	<b>44.5</b>	<b>16.5</b>	<b>13.4</b>	<b>1.3</b>	<b>186.8</b>	<b>26.8</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>5.4</b>	<b>6.8</b>	<b>8.3</b>	<b>3.7</b>	<b>3.7</b>	<b>4.4</b>	<b>14.6</b>	<b>9.8</b>	<b>8.1</b>

Source: Bloomberg Finance L.P., InnovestX Research

**Disclaimer**

The information in this report has been obtained from sources believed to be reliable. However, its accuracy or completeness is not guaranteed. Any opinions expressed herein reflect our judgment at this date and are subject to change without notice. This report is for information only. It is not to be construed as an offer, or solicitation of an offer to sell or buy any securities. We accept no liability for any loss arising from the use of this document. We or our associates may have an interest in the companies mentioned therein.

InnovestX Securities Company Limited ("INVX") is wholly owned by SCB X Public Company Limited ("SCBX") and The Siam Commercial Bank Public Company Limited ("SCB") is majority-owned by SCBX. Any information related to SCB is for sector comparison purpose.

This document is prepared by InnovestX Securities Company Limited ("INVX") which is wholly-owned by SCB X Public Company Limited ("SCBX"). The Siam Commercial Bank Public Company Limited, which is majority-owned by SCBX, acts as financial advisor of the SCG Chemicals Public Company Limited (SCGC). Any opinions, news, research, analyses, prices, statements, forecasts, projections and/or other information contained in this document (the "Information") is provided as general information purposes only and shall not be construed as individualized recommendation of an offer to buy or sell or the solicitation of an offer to buy or sell any securities. INVX and/or its directors, officers and employees shall not be liable for any direct, indirect, incidental, special or consequential loss or damage, resulting from the use of or reliance on the Information, including without limitation to, damages for loss of profits. The investors shall use the Information in association with other information and opinion, including their own judgment in making investment decision. The Information is obtained from sources believed to be reliable, and INVX cannot guarantee the accuracy, completeness and/or correctness of the Information.

This document is prepared by InnovestX Securities Company Limited ("INVX") which is wholly-owned by SCB X Public Company Limited ("SCBX"). The Siam Commercial Bank Public Company Limited, which is majority-owned by SCBX, acts as financial advisor of the Big C Retail Company Limited (BRC), a subsidiary of Berli Jucker Public Company Limited. Any opinions, news, research, analyses, prices, statements, forecasts, projections and/or other information contained in this document (the "Information") is provided as general information purposes only and shall not be construed as individualized recommendation of an offer to buy or sell or the solicitation of an offer to buy or sell any securities. INVX and/or its directors, officers and employees shall not be liable for any direct, indirect, incidental, special or consequential loss or damage, resulting from the use of or reliance on the Information, including without limitation to, damages for loss of profits. The investors shall use the Information in association with other information and opinion, including their own judgment in making investment decision. The Information is obtained from sources believed to be reliable, and INVX cannot guarantee the accuracy, completeness and/or correctness of the Information.

This document is prepared by InnovestX Securities Company Limited ("INVX") which is wholly owned by SCB X Public Company Limited ("SCBX"). The Siam Commercial Bank Public Company Limited, which is majority-owned by SCBX, acts as financial advisor of the LH Hotel Leasehold Real Estate Investment Trust. Any opinions, news, research, analyses, prices, statements, forecasts, projections and/or other information contained in this document (the "Information") is provided as general information purposes only and shall not be construed as individualized recommendation of an offer to buy or sell or the solicitation of an offer to buy or sell any securities. INVX and/or its directors, officers and employees shall not be liable for any direct, indirect, incidental, special or consequential loss or damage, resulting from the use of or reliance on the Information, including without limitation to, damages for loss of profits. The investors shall use the Information in association with other information and opinion, including their own judgment in making investment decision. The Information is obtained from sources believed to be reliable, and INVX cannot guarantee the accuracy, completeness and/or correctness of the Information.

INVX reserves the right to modify the Information from time to time without notice and in its sole discretion. This document is delivered to intended recipient(s) only and is not permitted to reproduce, retransmit, disseminate, sell, distribute, republish, circulate or commercially exploit the Information in any manner without the prior written consent of INVX.

Futures and Options trading carry a high level of risk with the potential for substantial losses, and are not suitable for all persons. Before deciding to trade Futures and Options, you should carefully consider your financial position, investment objectives, level of experience, and risk appetite if Futures and Options trading are appropriate. The possibility exists that you could sustain a loss of some or all of your initial investment. You should be aware of all the risks associated with Futures and Options trading, and you are advised to rely on your own judgment while making investment decision and/or should seek advice from professional investment advisor if you have any doubts.

This document is delivered to intended recipient(s) only and is not permitted to reproduce, retransmit, disseminate, sell, distribute, republish, circulate or commercially exploit the Information in any manner without the prior written consent of INVX.

© Copyright 2022 InnovestX Securities Co., Ltd. All right reserved.

**CG Rating 2023 Companies with CG Rating**

**Companies with Excellent CG Scoring**

7UP, AAV, ABM, ACE, ACG, ADB, ADD, ADVANC, AEONTS, AF, AGE, AH, AHC, AIRA, AIT, AJ, AKP, AKR, ALL, ALA, ALT, AMA, AMARIN, AMATA, AMATAV, ANAN, AOT, AP, APCO, APCS, ARIP, ARROW, ASEFA, ASK, ASP, ASW, ATP30, AUCT, AWC, AYUD, B, BA, BAFS, BAM, BANPU, BAY, BBGI, BBIK, BBL, BC, BCH, BCP, BCPG, BDMS, BEC, BEM, BEYOND, BGC, BGRIM, BH, BIZ, BJC, BJCHI, BKI, BLA, BOL, BPP, BRI, BROOK, BRR, BTS, BTW, BWG, BYD, CBG, CENTEL, CFRESH, CHASE, CHEWA, CHG, CHOW, CIMBT, CIVIL, CK, CKP, CM, CNT, COLOR, COM7, COTTO, CPALL, CPAXT, CPF, CPI, CPL, CPN, CPW, CRC, CRD, CSC, CSS, CV, DCC, DDD, DELTA, DEMCO, DMT, DOHOME, DRT, DUSIT, EA, EASTW, ECF, ECL, EE, EGCO, EPG, ERW, ETC, ETE, FE, FLOYD, FN, FPI, FPT, FSX, FVC, GBX, GC, GCAP, GENCO, GFPT, GGC, GLAND, GLOBAL, GPSC, GRAMMY, GULF, GUNKUL, HANA, HARN, HENG, HMPRO, HPT, HTC, ICC, ICHI, ICN, III, ILINK, ILM, IMH, IND, INET, INTUCH, IP, IRC, IRPC, ITC, ITCL, IVL, JAS, JTS, KBANK, KCC, KCE, KEX, KKP, KSL, KTB, KTC, KTMS, KUMWEL, KUN, LALIN, LANNA, LH, LHFG, LIT, LOXLEY, LPN, LRH, LST, M, MAJOR, MALEE, MATCH, MBK, MC, M-CHAI, MCOT, MEGA, MFC, MFEC, MILL, MINT, MONO, MOONG, MSC, MST, MTC, MTI, NC, NCH, NCL, NDR, NER, NKI, NOBLE, NRF, NTV, NVD, NWR, NYT, OCC, OISHI<sup>1</sup>, ONEE, OR, ORI, OSP, OTO, PAP, PATO, PB, PCSGH, PDG, PDJ, PG, PHOL, PIMO, PJW, PLANB, PLAT, PLUS, PM, POLY, PORT, PPP, PPS, PR9, PRG, PRINC, PRM, PRTR, PSH, PSL, PT, PTC, PTT, PTTEP, PTTGC, Q-CON, QH, QTC, RATCH, RBF, RPH, RS, RT, S, S&J, SA, SABINA, SAK, SAMART, SAMTEL, SAPPE, SAT, SBNEXT, SC, SCB, SCC, SCCC, SCG, SCGP, SCM, SDC, SEAFCO, SEAOL, SECURE, SELIC, SENA, SENX, SFP<sup>2</sup>, SFT, SGC, SGF, SGP, SHR, SICT, SIRI, SIS, SITHAI, SJWD, SKR, SM, SMPC, SMT, SNC, SNNP, SNP, SO, SPALI, SPC, SPCG, SPI, SPRC, SR, SSC, SSF, SSSC, STA, STC, STEC, STGT, STI, SUN, SUSCO, SUTHA, SVI, SVT, SYMC, SYNEX, SYNTEC, TACC, TAE, TCAP, TCMC, TEAMG, TEGH, TFG, TFMAMA, TGE, TGH, THANA, THANI, THCOM, THIP, THRE, THREL, TIDLOR, TIPH, TISCO, TK, TKN, TKS, TKT, TLI, TM, TMC, TMD, TMT, TNDT, TNITY, TNL, TNR, TOA, TOG, TOP, TPBI, TPCS, TPIPL, TPIPP, TPS, TQM, TQR, TRT, TRUE, TRV, TSC, TSTE, TSTH, TTA, TTB, TTCL, TTW, TURTLE, TVDH, TVH, TVO, TVT, TWPC, UAC, UBE, UBIS, UKEM, UP, UPF, UPOIC, UV, VCOM, VGI, VIBHA, VIH, VL, WACOAL, WGE, WHA, WHAUP, WICE, WINMED, WINNER, XPG, YUASA, ZEN

**Companies with Very Good CG Scoring**

2S, A5, AAI, AIE, ALUCON, AMR, APURE, ARIN, AS, ASIA, ASIAN, ASIMAR, ASN, AURA, BR, BSBM, BTG, CEN, CGH, CH, CHIC, CI, CIG, CMC, COMAN, CSP, DOD, DPAINT, DV8, EFORL, EKH, ESSO, ESTAR, EVER, FORTH, FSMART, FTI, GEL, GPI, HEALTH, HUMAN, IFS, INSET, IT, J, JCHK, JDF, JKN, JMART, JUBILE, K, KCAR, KGI, KIAT, KISS, KK, KTIS, KWC, KWM, LDC, LEO, LHK, MACO, METCO, MICRO, MK, MVP, NCAP, NOVA, NTSC, PACO, PIN, PQS, PREB, PRI, PRIME, PROEN, PROS, PROUD, PSTC, PTECH, PYLON, RCL, SALEE, SANKO, SCI, SCN, SE, SE-ED, SFLEX, SINGER, SKN, SONIC, SORKON, SPVI, SSP, SST, STANLY, STP, SUPER, SVOA, SWC, TCC, TEKA, TFM, TMILL, TNP, TPLAS, TPOLY, TRC, TRU, TRUBB, TSE, VRANDA, WAVE, WFX, WIIK, WIN, WP, XO

**Companies with Good CG Scoring**

24CS, AMANAH, AMARC, AMC, APP, ASAP, BCT, BE8, BIG, BIOTEC, BLESS, BSM, BVG, CAZ, CCET, CHARAN, CHAYO, CHOTI, CITY, CMAN, CMR, CRANE, CWT, DHOUSE, DTCENT, EASON, FNS, FTE, GIFT, GJS, GTB, GTV, GYT, HL, HTECH, HYDRO, IIG, INGRS, INSURE, IRPC, ITD, ITNS, JCK, JMT, JR, JSP, KBS, KGEN, KJL, L&E, LEE, MASTER, MBAX, MEB, MENA, META, MGT, MITSIB, MJD, MOSHI, MUD, NATION, NNCL, NPK, NSL, NV, OGC, PAF, PCC, PEACE, PICO, PK, PL, PLANET, PLE, PMTA, PPM, PRAKIT, PRAPAT, PRECHA, PRIN, PSG, RABBIT, READY, RJH, RSP, RWI, S11, SAAM, SAF, SAMCO, SAWAD, SCAP, SCP, SIAM, SKE, SKY, SMART, SMD, SMT, SOLAR, SPA, STECH, STPI, SVR, TC, TCCC<sup>3</sup>, TEAM, TFI, TIGER, TITL, TCC, TMI, TNH, TPA, TPAC, TRITN, UBA, UMI, UMS, UTP, VARO, VPO, W, WARRIX, WORK, WPH, YONG, ZIGA

**Corporate Governance Report**

The material contained in this publication is for general information only and is not intended as advice on any of the matters discussed herein. Readers and others should perform their own independent analysis as to the accuracy or completeness or legality of such information. The Thai Institute of Directors, its officers, the authors and editor make no representation or warranty as to the accuracy, completeness or legality of any of the information contained herein. By accepting this document, each recipient agrees that the Thai Institute of Directors Association, its officers, the authors and editor shall not have any liability for any information contained in, or for any omission from, this publication.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date. InnovestX Securities Company Limited does not conform nor certify the accuracy of such survey result.

To recognize well performers, the list of companies attaining "Good", "Very Good" and "Excellent" levels of recognition (Not including listed companies qualified in the "no announcement of the results" clause from 1 January 2022 to 31 October 2023) is publicized.

<sup>1</sup>OISHI was voluntarily delisted from the Stock Exchange of Thailand, effectively on September 6, 2023

<sup>2</sup>SFP was voluntarily delisted from the Stock Exchange of Thailand, effectively on July 19, 2023

<sup>3</sup>TCCC was voluntarily delisted from the Stock Exchange of Thailand effectively on August 25, 2023

**Anti-corruption Progress Indicator**

**Certified (ได้สุ่มสุ่ม)**

2S, 7UP, AAI, ADVANC, AF, AH, AI, AIE, AIRA, AJ, AKP, AMA, AMANAH, AMATA, AMATAV, AP, APCS, AS, ASIAN, ASK, ASP, AWC, AYUD, B, BAFS, BAM, BANPU, BAY, BBGI, BBL, BCH, BCP, BCPG, BE8, BEC, BEYOND, BGC, BGRIM, BKI, BLA, BPP, BROOK, BRR, BSBM, BTS, BWG, CEN, CENTEL, CFRESH, CGH, CHEWA, CHOTI, CHOW, CIG, CIMBT, CM, CMC, COM7, COTTO, CPALL, CPAXT, CPF, CPI, CPL, CPN, CPW, CRC, CSC, DCC, DELTA, DEMCO, DIMET, DOHOME, DRT, DUSIT, EA, EASTW, ECF, EGCO, EP, EPG, ERW, ESTAR, ETC, ETE, FNS, FPI, FPT, FSMART, FTE, GBX, GC, GCAP, GEL, GFPT, GGC, GJS, GPI, GPSC, GSTEEL, GULF, GUNKUL, HANA, HARN, HENG, HMPRO, HTC, ICC, ICHI, IFS, III, ILINK, ILM, INET, INOX, INSURE, INTUCH, IRPC, ITCL, IVL, JAS, JKN, JR, JTS, KASET, KBANK, KBS, KCAR, KCC, KCE, KGEN, KGI, KKP, KSL, KTB, KTC, L&E, LANNA, LHFG, LHK, LPN, LRH, M, MAJOR, MALEE, MATCH, MBAX, MBK, MC, MCOT, META, MFC, MFEC, MILL, MINT, MONO, MOONG, MSC, MST, MTC, MTI, NATION, NCAP, NEP, NKI, NOBLE, NRF, NWR, OGC, OCC, OR, ORI, PAP, PATO, PB, PCSGH, PDG, PDJ, PG, PHOL, PIMO, PK, PL, PLANB, PLANET, PLAT, PM, PPP, PPPM, PPS, PR9, PREB, PRG, PRINC, PRM, PROS, PSH, PSL, PSTC, PT, PTECH, PTG, PTT, PTTEP, PTTGC, PYLON, Q-CON, QH, QLT, QTC, RABBIT, RATCH, RML, RS, RWI, S&J, SAAM, SABINA, SAK, SAPPE, SAT, SC, SCC, SCCC, SCG, SCGP, SCM, SCN, SEAOL, SE-ED, SELIC, SENA, SGC, SGP, SIRI, SITHAI, SKR, SMT, SMK, SMPC, SNC, SNP, SORKON, SPACK, SPALI, SPC, SPI, SPRC, SRICHA, SSF, SSP, SSSC, SST, STA, STGT, STOWER, SUSCO, SVI, SYMC, SYNTEC, TAE, TAKUNI, TASCOC, TCAP, TCMC, TFG, TFI, TFMAMA, TGE, TGH, THANI, THCOM, THIP, THRE, THREL, TIDLOR, TIPCO, TISCO, TKS, TKT, TMD, TMILL, TMT, TNITY, TNL, TNP, TNR, TOG, TOP, TOPP, TPA, TPCS, TRT, TRU, TSC, TSI, TSTE, TSTH, TTA, TTB, TTCL, TU, TVDH, TVO, TWPC, UBE, UBIS, UEC, UKEM, UOBKH, UV, VCOM, VGI, VIH, WACOAL, WHA, WHAUP, WICE, WIIK, XO, YUASA, ZEN, ZIGA

**Declared (ได้ประกาศ)**

ACE, ADB, ALT, AMC, ASW, BLAND, BTG, BYD, CAZ, CBG, CV, DEXON, DMT, EKH, FSX, GLOBAL, GREEN, ICN, IHL, ITC, J, JMART, JMT, LEO, LH, MENA, MITSIB, MODERN, NER, NEX, OSP, OTO, PLUS, POLY, PQS, PRIME, PROEN, PRTR, RBF, RT, SA, SANKO, SCB, SENX, SFLEX, SIS, SKE, SM, SVOA, TBN, TEGH, TIPH, TKN, TPAC, TPLAS, TQM, TRUE, W, WPH, XPG

**N/A**

24CS, 3K-BAT, A, A5, AAV, ABM, ACAP, ACC, ACG, ADD, AEONTS, AFC, AGE, AHC, AIT, AJA, AKR, AKS, ALL, ALLA, ALPHAX, ALUCON, AMARC, AMARIN, AMR, ANAN, AOT, APCO, APEX, APP, APURE, AQUA, ARIN, ARIP, ARROW, ASAP, ASEFA, ASIA, ASIMAR, ASN, ATP30, AU, AUCT, AURA, B52, BA, BBIK, BC, BCT, BDMS, BEAUTY, BEM, BGT, BH, BIG, BIOTEC, BIS, BIZ, BJC, BJCHI, BKD, BLC, BLESS, BLISS, BM, BOL, BR, BRI, BROCK, BSM, BSRC, BTNC, BTW, BUI, BVG, CCET, CCP, CEYE, CGD, CH, CHARAN, CHASE, CHAYO, CHG, CHIC, CHO, CI, CITY, CIVIL, CK, CKP, CMAN, CMO, CMR, CNT, COCOCO, COLOR, COMAN, CPANEL, CPH, CPR, CPT, CRANE, CRD, CSP, CSR, CSS, CTW, CWT, D, DCON, DDD, DHOUSE, DITTO, DOD, DPAINT, DTCENT, DTCL, DV8, EASON, ECL, EE, EFORL, EMC, ETL, EVER, F&D, FANCY, FE, FLOYD, FMT, FN, FORTH, FTI, FVC, GABLE, GENCO, GFC, GIFT, GL, GLAND, GLOCON, GLORY, GRAMMY, GRAND, GSC, GTB, GTV, GYT, HEALTH, HFT, HL, HPT, HTECH, HUMAN, HYDRO, I2, IFEC, IIG, IMH, IND, INGRS, INSET, IP, IRC, IRPC, IT, ITD, ITNS, ITTHI, JAK, JCK, JCHK, JCT, JDF, JPARK, JSP, JUBILE, K, KAMART, KC, KCG, KCM, KDH, KEX, KIAT, KISS, KJL, KK, KKC, KLINIQ, KOOL, KTIS, KTMS, KUMWEL, KUN, KWC, KWI, KWM, KYE, LALIN, LDC, LEE, LIT, LOXLEY, LPH, LST, MACO, MANRIN, MASTER, MATI, MAX, MCA, M-CHAI, MCS, MDX, MEB, MEGA, METCO, MGC, MGT, MICRO, MIDA, MJD, MK, ML, MORE, MOSHI, MTW, MUD, MVP, NAM, NC, NCH, NCL, NDR, NETBAY, NEW, NEWS, NFC, NNCL, NOK, NOVA, NPK, NSL, NTSC, NTV, NUSA, NV, NVD, NYT, OHTL, ONEE, ORN, PACE, PACO, PAF, PCC, PEACE, PERM, PF, PHG, PICO, PIN, PJW, PLE, PLT, PMTA, POLAR, POMPUL, PORT, POST, PPM, PRAKIT, PRAPAT, PRECHA, PRI, PRIN, PRO, PROUD, PSG, PSP, PTC, PTL, RAM, RCL, READY, RICHY, RJH, ROCK, ROH, ROJNA, RP, RPC, RPH, RSP, S, S11, SABUY, SAF, SAFARI, SAFE, SALEE, SAM, SAMART, SAMCO, SAMTEL, SAUCE, SAV, SAWAD, SAWANG, SBNEXT, SCAP, SCI, SCL, SCP, SDC, SE, SEAFCO, SECURE, SFT, SGF, SHANG, SHR, SIAM, SICT, SIMAT, SINGER, SINO, SISB, SJWD, SK, SKN, SKY, SLM, SLP, SMART, SMD, SMT, SNNP, SO, SOLAR, SONIC, SPA, SPCG, SPG, SPVI, SQ, SR, SRS, SSC, SSS, STANLY, STARK, STC, STEC, STECH, STHAI, STI, STP, STPI, SUC, SUN, SUPER, SUTHA, SVR, SVT, SWC, SYNEX, TACC, TAN, TAPAC, TC, TCC, TCJ, TCOAT, TEAM, TEAMG, TEKA, TFM, TGPRO, TH, THAI, THANA, THE, THG, THMU, TIGER, TITL, TK, TKC, TLI, TM, TMC, TMI, TMW, TNDT, TNH, TNLC, TOA, TPBI, TPCH, TPIPL, TPIPP, TPL, TPOLY, TPP, TPS, TQR, TR, TRC, TRITN, TRP, TRUBB, TRV, TSE, TTI, TTT, TTW, TURTLE, TVH, TVT, TWP, TWPC, TYCN, UAC, UBA, UMI, UMS, UNIQ, UP, UPF, UPOIC, UREKA, UTP, UVAN, VARO, VIBHA, VL, VNG, VPO, VRANDA, WARRIX, WAVE, WFX, WGE, WIN, WINDOW, WINMED, WINNER, WORK, WORLD, WP, YGG, YONG, ZAA

**Explanations**

Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of November 1, 2023) are categorised into: companies that have declared their intention to join CAC, and companies certified by CAC.