

MAY 2023

Petrochemicals market- May 2023

Prices of petrochemical products continued the negative momentum following to slower demand recovery from China, additional global capacities and an overall negative economic outlook. Average HDPE and PP prices decreased by 1.0% mom and 1.5% mom respectively, while HDPE-propane and PP propane spreads contracted by 2.3% mom and 3.6% mom respectively. However, the decline in feedstock prices in May might provide support to Saudi producers' margins and profitability in Q2 23.

- Since Q4 22, the market believed that China reopening will be a key factor that will drive the recovery of the petrochemicals sector. However, demand recovery was slower than anticipated and was pushed towards H2 23 or early 2024. Moreover, large capacity additions in the polyolefin market is expected to increase China's polyolefin exports and exert further pressure on prices. We highlight that India also will contribute to the overall capacity additions with 1.25mn mt of PE and 0.5mn mt of PP in 2023f and an additional 1mn mt of new PE and PP capacities expected in 2024f.
- In May 23, average urea prices recorded a moderate increase of 6.8% mom (53.7% yoy) to US\$330 after 7 consecutive months of declines. We believe the increase in prices were driven by the expectation of an Indian tender in advance of the monsoon season. In general, high supplies and weak global demand is putting pressure on prices.
- Methanol prices declined by 10.2% mom (-22.2% yoy) to US\$269 in May 23, reaching its lowest level since Nov 20. Asia's methanol market losses were led by the key Chinese market, where import prices fell to Oct 2020 levels. Methanol demand from the derivatives sector was weak as demand from the end-products market was low. In May 23, average LDPE and MEG prices decreased 3.9% mom and 0.8% mom respectively. Benzene and styrene prices decreased 10.5% yoy and 7.9% yoy respectively. Despite weak prices, margins are expected to improve in Q2 23, as Saudi Aramco propane and butane prices declined to its lowest levels since January 2021 to reach US\$450 and US\$440, respectively.

Exhibit 1: Key product prices- monthly

Product	Latest	1m Avg	mom %	yoy %
PP	915	941	(1.5)	(21.3)
HDPE	980	999	(1.0)	(17.6)
LLDPE	960	987	1.1	(17.3)
MEG	485	514	(0.8)	(19.0)
Methanol	248	269	(10.2)	(22.2)
Urea	327.5	330	6.8	(53.7)
Benzene	845	883	(10.5)	(29.0)
PC	1,780	1,812	(0.7)	(33.6)
Aramco-Propane	450	555	(18.9)	(34.7)
PP-Propane	360	386	(3.6)	11.7
PE-Propane	425	444	(2.3)	22.6

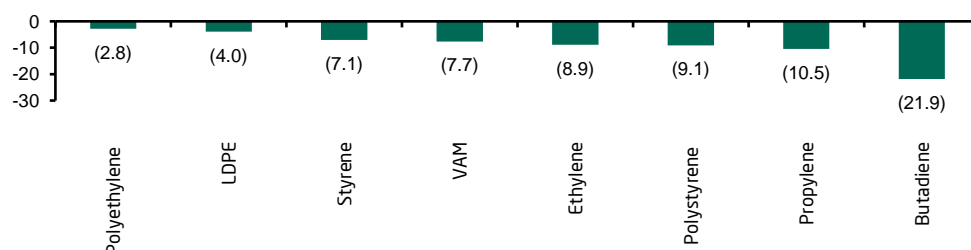
Source: Bloomberg, SNB Capital Research. As of 28 May 2023

Exhibit 2: Key product prices- quarterly

Product	Q2 23 Avg	qoq %	yoy %
PP	948	(2.8)	(20.4)
HDPE	1,005	(0.6)	(16.9)
LLDPE	982	(3.2)	(17.9)
MEG	516	(1.7)	(19.4)
Methanol	284	(11.1)	(20.4)
Urea	319	(15.6)	(59)
Benzene	936	(1.3)	(25.3)
PC	1,818	(5.5)	(32.6)
Aramco-Propane	610	(9.7)	(28.8)
PP-Propane	311	3.8	4.7
PE-Propane	367	9.8	17.1

Source: Bloomberg, SNB Capital Research. As of 28 May 2023

Exhibit 3: Other Petrochemical product prices - mtd



Source: Bloomberg, SNB Capital Research. As of 28 May 2023

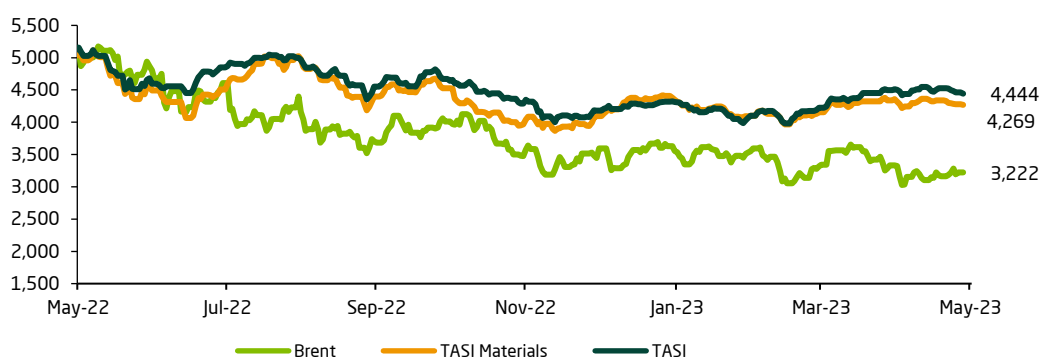
Iyad Ghulam, CFA
+966 11 874 7811
i.ghulam@alahlicapital.com

Local news summary

- **SIIG** reported a weak set of Q1 23 results with a net loss of SAR242mn, compared to a loss of SAR296mn in Q4 22 and a profit of SAR235mn in Q1 22. The losses are higher than the SNB Capital and consensus estimates of losses of SAR147mn and SAR59mn, respectively. We believe the losses are due to 1) a 37- day unscheduled maintenance at the SPC with a financial impact of SAR230mn in Q1 23, 2) weaker JV performance and 3) low prices and spreads.
- **Advanced** reported a Q1 23 net profit of SAR43mn, compared to a net profit of SAR164mn in Q1 22 and net loss of SAR6mn in Q4 22. This is higher than the SNB Capital and consensus estimates of profits of SAR20mn and SAR19mn respectively. Although revenues were in-line with our estimates, we believe the better-than-expected earnings is mainly due 1) higher than expected gross margin and 2) lower than expected losses from SK Advanced which came in at SAR22mn in Q1 23, vs our estimates of SAR30mn.
- **Advanced** secured a credit facility of SAR2.2bn to pay back the existing credit facilities and finance general corporate purposes.
- **Sipchem** announced the safe completion of the scheduled periodic turnaround maintenance activities for International Diol Company (affiliate of Sipchem) with the startup activities commencing on 20-May-23. We highlight the scheduled turnaround maintenance started on 1-May-23. The financial impact of this turnaround is expected to be reflected in the Q2 23 results. The company also resumed operations at IMC facility on 3 June 2023 following to a 5 weeks shutdown.
- In June 2023, Saudi Aramco cut the offer price for propane and butane by US\$105 and US\$115 respectively. Propane and butane prices were US\$450 (-18.9% mom) and US\$440 (- 20.7% mom) respectively. We highlight these prices are the lowest since January 21.

Exhibit 4: Index tracker

Index re-based to 5000 as of May 2022

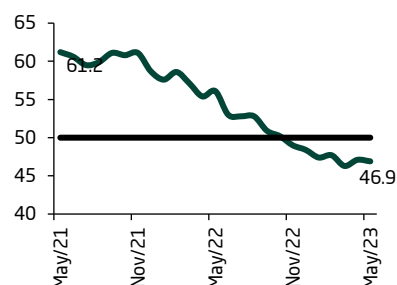


Source: Bloomberg, SNB Capital Research; Index re-based to 5000 as of May 2022

Global summary

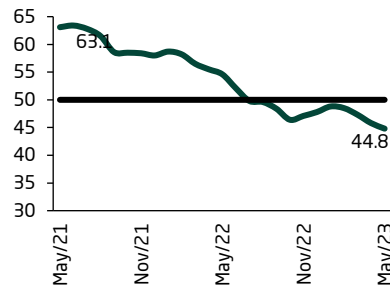
Exhibit 5: Manufacturing PMI

US PMI



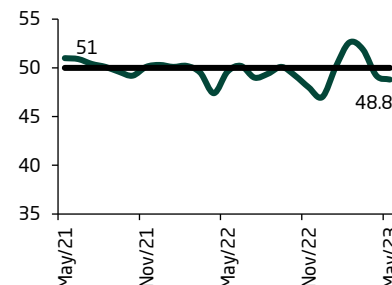
Source: Bloomberg, SNB Capital Research

Eurozone PMI



Source: Bloomberg, SNB Capital Research

China PMI



Source: Bloomberg, SNB Capital Research

*A level above 50 indicates expansion

EIA forecast for 2023f-2024f

Exhibit 6: Oil and Natural Gas forecast

	May 2023 STEO Forecast			April 2023 STEO Forecast			yoy Change (%)			Variance over April -2023 forecast (%)		
	2022	2023f	2024f	2022	2023f	2024f	2022	2023f	2024f	2022	2023f	2024f
Oil (mmbpd)												
WTI Spot Average (US\$/b)	94.8	73.7	69.5	94.8	79.3	75.3	142%	(22.2)%	(5.7)%	0.0%	(7.0)%	(7.6)%
Brent Spot Average (US\$/b)	101	78.8	74.5	101	85.0	81.3	141%	(21.8)%	(5.4)%	0.0%	(7.4)%	(8.3)%
OPEC Production	28.7	28.3	29.0	28.7	28.3	29.2	11.9%	(1.2)%	2.3%	0.0%	0.3%	(0.7)%
US Production	11.9	12.5	12.7	11.9	12.5	12.7	5.3%	5.4%	1.3%	0.0%	(0.1)%	(0.5)%
Global Supply	99.9	101.3	103.0	99.8	101.3	103.2	6.4%	1.5%	1.7%	0.0%	0.0%	(0.2)%
Global Demand	99.4	101.0	102.7	99.4	100.9	102.7	8.3%	1.6%	1.7%	(0.0)%	0.1%	(0.0)%
Global Stock Drawdown	0.4	0.3	0.3	0.4	0.4	0.5	NM	NM	NM	NM	NM	NM
Natural Gas (bcf)												
Henry Hub Spot (US\$/MMBtu)	6.4	2.9	3.7	6.4	2.9	3.7	215 %	(54.6)%	27.7%	0.0%	(1.1)%	0.3%
US Natural Gas Supply	98.1	101.1	101.2	98.1	100.9	101.6	7.2%	3.0%	0.1%	0.0%	0.2%	(0.3)%
US Natural Gas Demand	88.6	87.6	86.1	88.6	87.4	86.1	6.4%	(1.1)%	(1.8)%	0.0%	0.2%	(0.1)%
US Natural Gas Inventory	2,927	3,092	3,318	2,927	3,095	3,285	(12.4)%	5.7%	7.3%	0.0%	(0.1)%	1.0%

Source: EIA STEO, SNB Capital Research

JUNE 2023

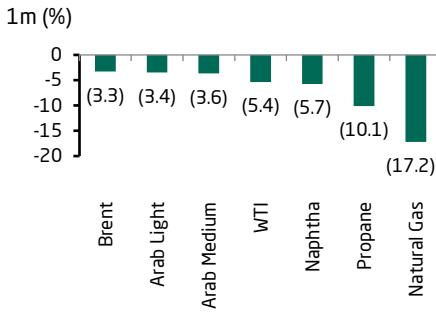
Products performance

Exhibit 7: Relative product Spreads

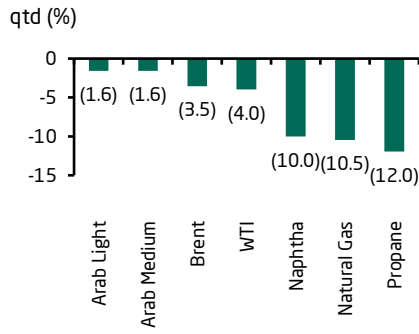
US\$/mt	Last Price May 23	Avg May-23	Avg Apr-23	Avg Mar-23	Avg Feb-23	Avg Jan-23	Avg Dec-22	Avg Nov-22	Avg Oct-22	Avg Sep-22	Avg Aug-22	Avg Jul-22	Avg Jun-22	Avg May-22	%Yoy May23 /May 22
WTI	72.7	71.7	79.2	73.3	77	78	76.6	84.3	87.0	84.1	91.5	100.7	114.4	110.3	(34.9)
Brent	77.0	75.8	83	79	83	84	81.5	91.0	93.5	90.6	97.7	105.6	117.4	112.6	(32.7)
Naphtha	597	599	677	689	729	686	651	700	689	658	698	782	824	902	(33.6)
Ethylene	820	856	907	925	878	777	847	850	841	938	822	897	1,046	1,138	(24.7)
Propylene	810	877	909	919	965	890	889	852	886	885	886	929	1,020	1,091	(19.6)
LLDPE	960	987	977	1,019	1,024	999	964	936	996	973	974	1,093	1,143	1,194	(17.3)
HDPE	980	999	1,010	1,039	1,019	976	956	949	996	986	1,009	1,098	1,157	1,212	(17.6)
LDPE	970	998	1,039	1,096	1,101	1,064	1,052	1,044	1,138	1,121	1,166	1,335	1,437	1,505	(33.7)
PP	915	941	955	980	995	955	932	937	996	985	982	1,080	1,126	1,195	(21.3)
Benzene	845	883	986	953	965	930	834	848	913	933	977	1,142	1,346	1,243	(29.0)
Methanol	248	269	299	316	327	318	303	308	327	319	310	309	339	345	(22.2)
Styrene	980	1,012	1,099	1,075	1,108	1,114	1,012	969	1,021	1,122	1,090	1,218	1,403	1,335	(24.2)
MEG	485	514	519	520	530	526	490	462	491	525	517	548	624	635	(19.0)
PVC	800	815	820	897	902	879	810	764	825	875	918	1,019	1,203	1,301	(37.3)
PS	1,200	1,280	1,309	1,272	1,300	1,228	1,211	1,246	1,342	1,348	1,361	1,464	1,519	1,551	(17.5)
Europe ethylene	755	855	978	964	975	881	852	858	767	771	911	1,138	1,372	1,425	(40.0)
Propane	613	613	613	613	613	613	613	617	586	625	652	694	686	787	(22.1)
Ammonia	223	245	295	451	675	836	906	1,032	1,082	1,095	950	955	986	1,150	(78.7)
Urea	328	330	309	317	364	450	531	594	640	675	585	608	690	711	(53.7)
EDC	365	337	325	312	294	279	241	263	312	331	370	553	637	688	(51.1)
China Butanol	1,076	1,118	1,095	1,080	1,084	1,192	1,147	1,048	996	1,028	996	1,166	1,420	1,511	(26.0)
Phenol	1,055	1,130	1,164	1,181	1,183	1,118	1,141	1,257	1,484	1,481	1,364	1,394	1,634	1,570	(28.0)
Acetone	853	916	943	896	813	761	860	847	849	784	705	762	920	878	4.3
Acetic Acid	421	428	442	446	446	425	428	448	472	449	466	546	675	688	(37.9)
Vinyl Acetate	878	905	1,019	1,095	1,128	1,131	1,124	1,146	1,126	1,288	1,624	2,218	2,401	2,299	(60.6)
Ethyl Acetate	924	939	945	952	978	990	974	948	963	983	1,005	1,075	1,176	1,264	(25.7)

Source: Bloomberg, Argaam, SNB Capital Research

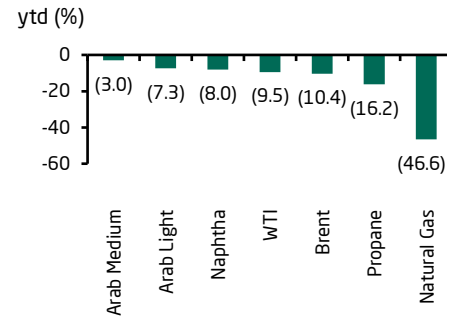
Exhibit 8: Oil and Gas



Source: Bloomberg, SNB Capital Research

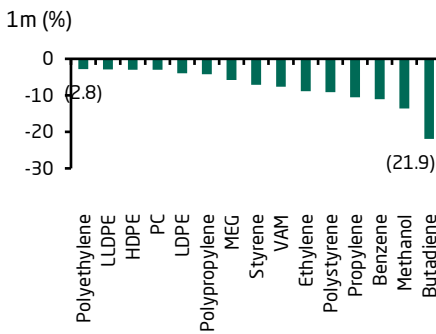


Source: Bloomberg, SNB Capital Research

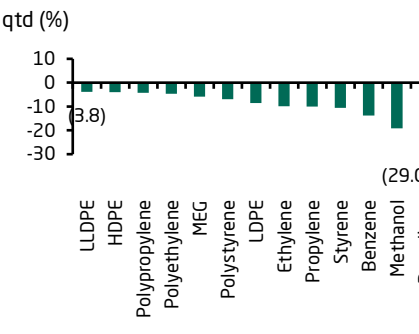


Source: Bloomberg, SNB Capital Research

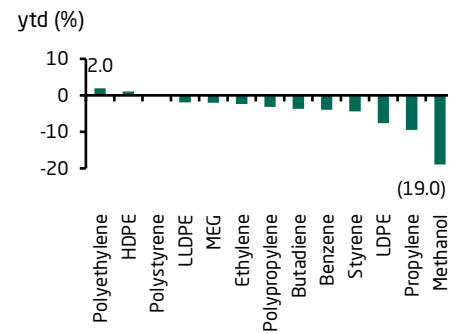
Exhibit 9: Petrochemicals



Source: Bloomberg, SNB Capital Research

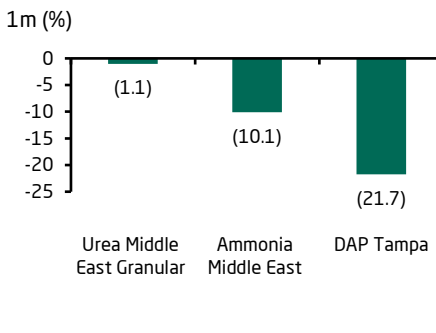


Source: Bloomberg, SNB Capital Research

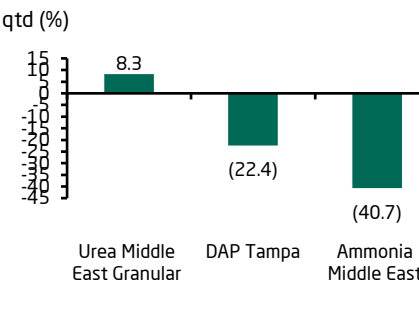


Source: Bloomberg, SNB Capital Research

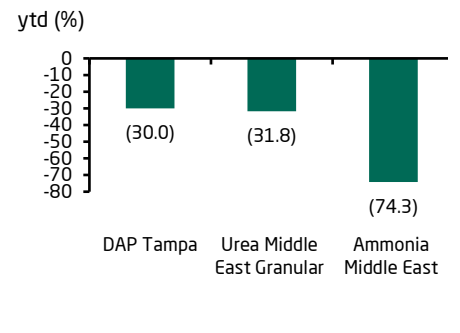
Exhibit 10: Fertilizers



Source: Bloomberg, SNB Capital Research

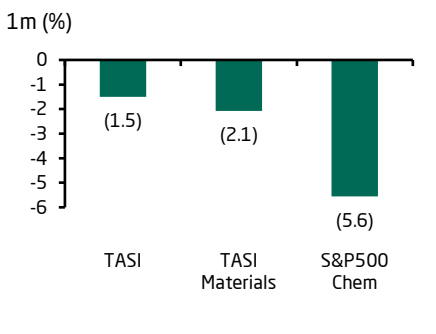


Source: Bloomberg, SNB Capital Research

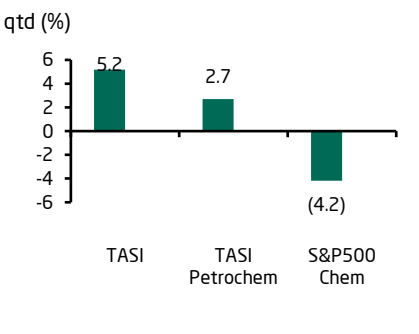


Source: Bloomberg, SNB Capital Research

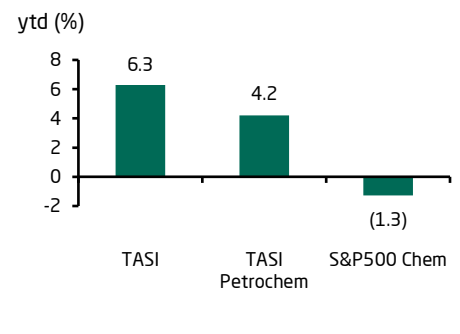
Exhibit 11: Indices



Source: Bloomberg, SNB Capital Research



Source: Bloomberg, SNB Capital Research

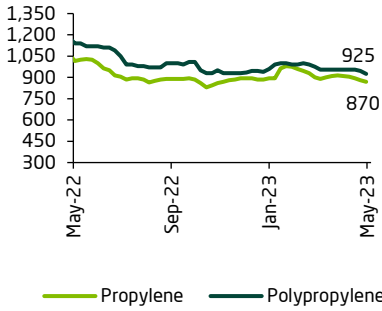


Source: Bloomberg, SNB Capital Research

Key petrochemical prices and spread charts

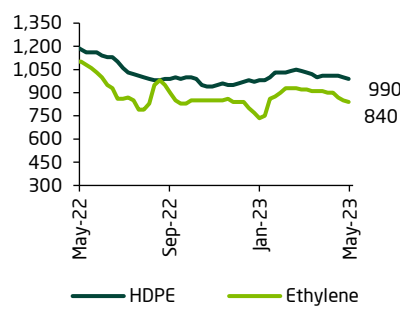
Exhibit 12: Petrochemical prices

PP-Propylene (US\$/mt)



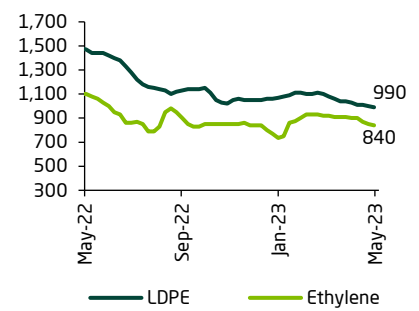
Source: Bloomberg, SNB Capital Research

HDPE-Ethylene (US\$/mt)



Source: Bloomberg, SNB Capital Research

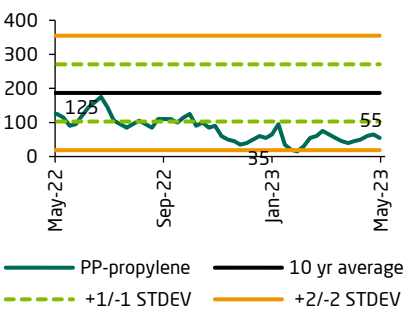
LDPE-Ethylene (US\$/mt)



Source: Bloomberg, SNB Capital Research

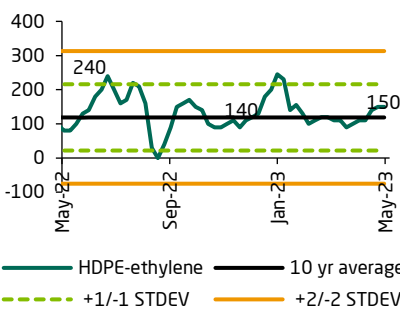
Exhibit 13: Spreads

PP-Propylene (US\$/mt)



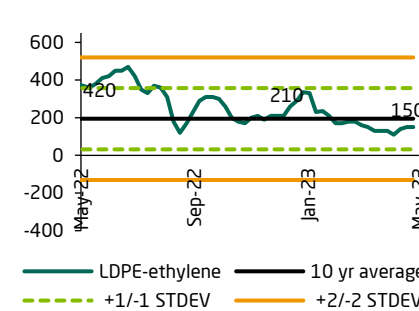
Source: Bloomberg, SNB Capital Research

HDPE-Ethylene (US\$/mt)



Source: Bloomberg, SNB Capital Research

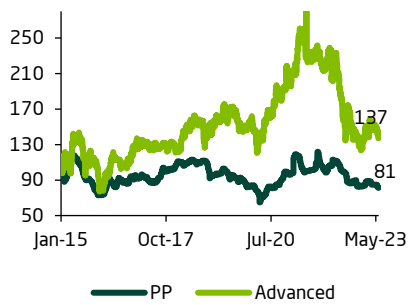
LDPE-Ethylene (US\$/mt)



Source: Bloomberg, SNB Capital Research

Exhibit 14: Stock Prices vs Product Prices

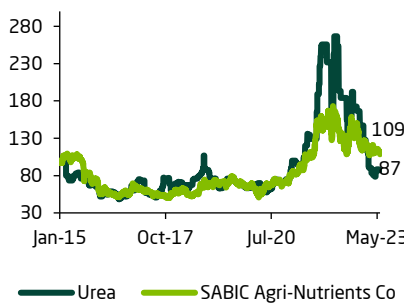
Advanced-PP



Source: Bloomberg, SNB Capital Research

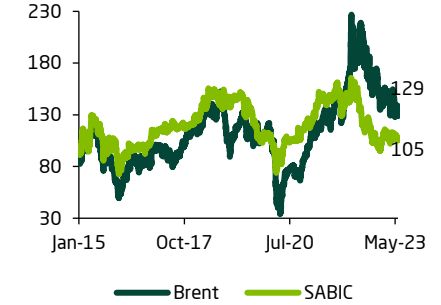
*Prices and Spreads are rebased to 100 as of Jan 2015.

SABIC AN -Urea



Source: Bloomberg, SNB Capital Research

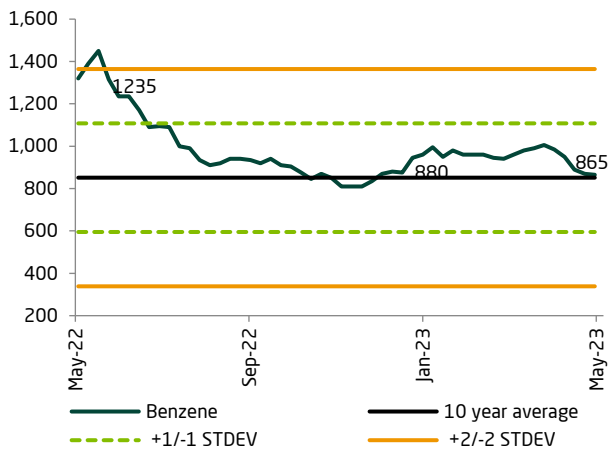
SABIC-Brent



Source: Bloomberg, SNB Capital Research

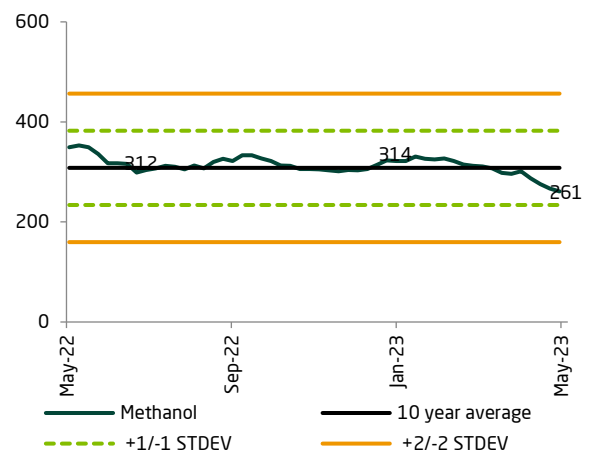
Exhibit 15: Other Key Petrochemical Products

Benzene (US\$/mt)



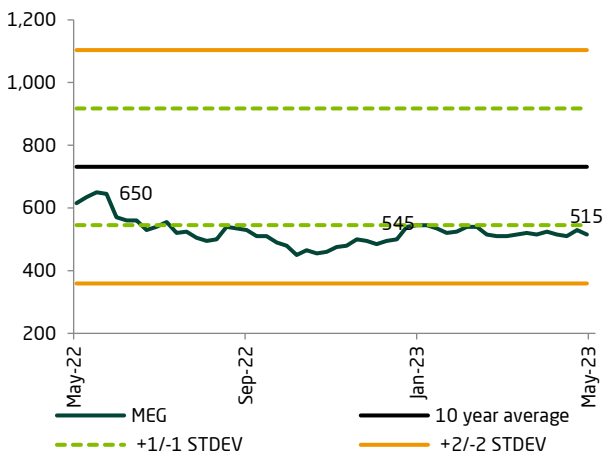
Source: Bloomberg, SNB Capital Research

Methanol (US\$/mt)



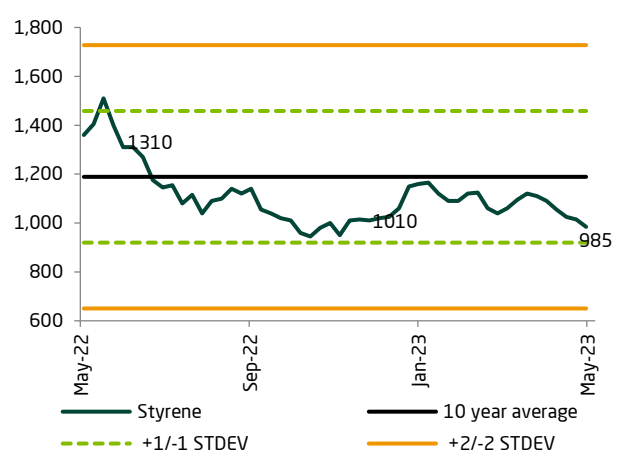
Source: Bloomberg, SNB Capital Research

MEG (US\$/mt)



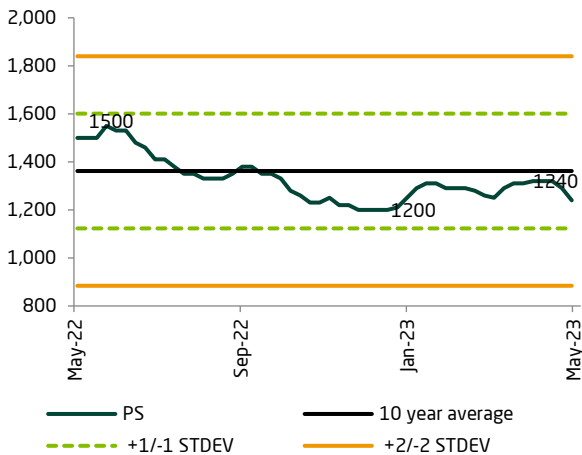
Source: Bloomberg, SNB Capital Research

Styrene (US\$/mt)



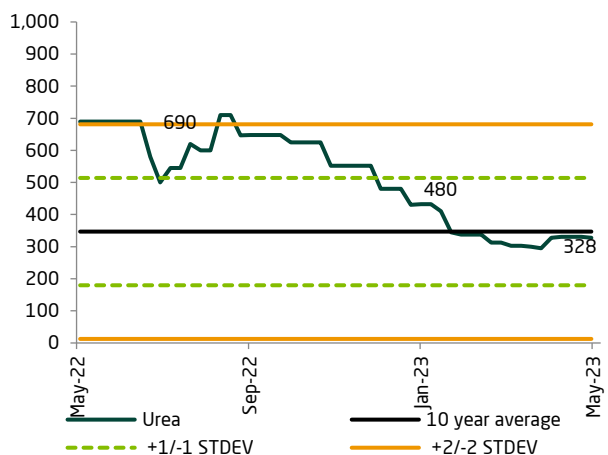
Source: Bloomberg, SNB Capital Research

Polystyrene (US\$/mt)



Source: Bloomberg, SNB Capital Research

Urea (US\$/mt)



Source: Bloomberg, SNB Capital Research

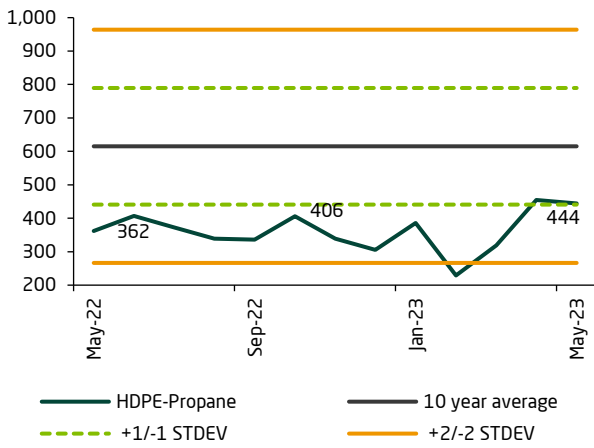
Exhibit 16: Relative product Spreads

	Last Price May -23	Average Price May-23	% mtd	% qtd	% ytd
HDPE-ethylene	160	143	45.5	45.5	23.1
LDPE-ethylene	150	142	36.4	0.0	(28.6)
LLDPE-ethylene	140	131	40	55.6	(12.5)
PP-propylene	105	63	110.0	90.9	110.0
HDPE-naphtha	384	400	1.7	7.4	19.3
LDPE-naphtha	374	399	(1.0)	(5.9)	(6.9)
PP-naphtha	319	341	(1.2)	9.0	7.5
PP-Propane (Aramco)	360	386	(10.0)	53.2	22.0
HDPE- Propane (Aramco)	425	444	(6.6)	41.7	32.8

Source: Bloomberg, Argaam, SNB Capital Research

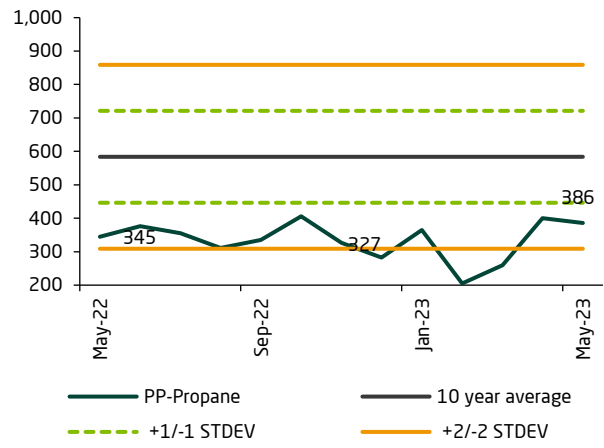
Exhibit 17: HDPE-Propane and PP-Propane spreads decreased 2.3% mom and 3.6% mom respectively

PE-Propane (US\$/mt)



Source: Bloomberg, SNB Capital Research

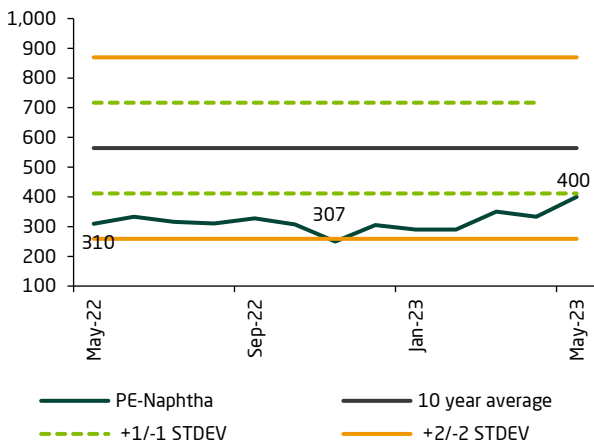
PP-Propane (US\$/mt)



Source: Bloomberg, SNB Capital Research

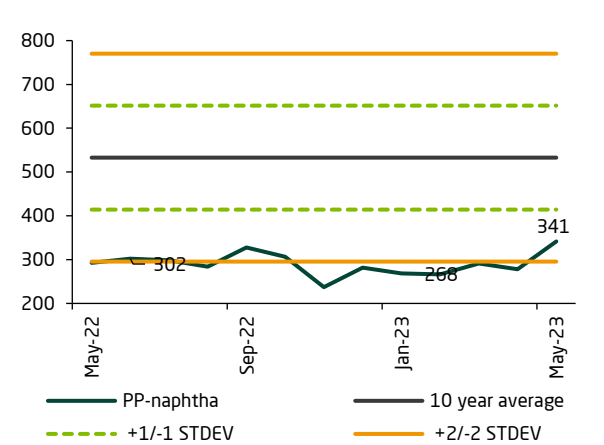
Exhibit 18: HDPE-naphtha and PP-naphtha spreads increased by 20.2% mom and 22.8% mom respectively

PE-Naphtha (US\$/mt)



Source: Bloomberg, SNB Capital Research

PP-Naphtha (US\$/mt)



Source: Bloomberg, SNB Capital Research

JUNE 2023

Performance and valuation

Exhibit 19: Industry - performance and valuation

Name	Country	Products	Last price (Native)	Mkt cap (SAR mn)	Price chg (%)		ttm (%)		2023f EV/ EBITDA	2023f		Div yld 2023f %
					1m	ytd	ROE	ROA		P/E	P/B	
Saudi Arabia												
Tasnee	Saudi Arabia	PP	14.7	9,821.5	8.6	18.8	4.6	3.0	12.3	23.6	1.0	4.6
Alujain	Saudi Arabia	PP	40.9	2,831	1.9	9.8	2.1	1.8	NA	NA	NA	NA
Saudi Kayan	Saudi Arabia	EG/LDPE	12.8	19,144	(0.8)	(6.6)	NA	(6.9)	18.4	NA	1.4	0.0
PetroRabigh	Saudi Arabia	PE/PP	11.0	18,384	(1.4)	3.0	NA	(3.9)	23.9	NA	1.3	NA
Chemanol	Saudi Arabia	Methanol	25.5	1,717	(2.5)	0.6	4.8	2.9	9.8	26.8	1.3	NA
Nama Chemical	Saudi Arabia	Resins	35.4	832	(3.0)	7.1	(4.1)	(1.3)	NA	NA	NA	NA
SIIG	Saudi Arabia	Benzene	24.7	18,617	(4.6)	12.2	(2.2)	(1.7)	NA	33.3	1.9	7.1
Yansab	Saudi Arabia	EG	42.5	23,883	(4.8)	2.0	(1.7)	(1.5)	16.1	NA	1.9	5.3
SABIC	Saudi Arabia	Diversified	88.2	264,649	(5.1)	(1.3)	5.7	5.0	9.6	24.5	1.4	4.6
SABIC AN	Saudi Arabia	Urea	125	59,516	(6.3)	(14.5)	NA	NA	9.3	14.0	3.4	6.0
Advanced	Saudi Arabia	PP	43.7	11,364	(8.5)	2.8	4.9	2.4	27.0	34.2	2.9	3.3
Sipchem	Saudi Arabia	Diversified	35.6	26,112	(9.1)	4.9	18.7	13.5	8.5	12.4	1.6	6.8
Ma'aden	Saudi Arabia	Diversified	62.1	152,868	(10.4)	(4.0)	18.1	8.9	14.8	32.6	3.6	0.0
Average					(3.5)	2.7	5.1	1.8	15.0	25.2	2.0	4.2
Global												
Braskem SA	Brazil	Resins	22.5	13,365	13.5	(5.5)	(41.5)	(5.1)	6.2	28.4	2.5	0.8
Formosa Plastics	Taiwan	Diversified	94.1	73,514	0.2	8.4	5.7	4.0	19.4	21.1	1.7	3.9
Mesaieed Petr.	Qatar	PE/CS	2.0	25,467	0.2	(7.4)	9.8	9.5	NA	NA	NA	NA
Lotte Chemical	South Korea	PP/HDPE/EG	166,900	20,289	(0.7)	(6.5)	0.6	0.4	8.2	15.9	0.5	2.1
Celanese Corp	US	Diversified	104	42,443	(2.1)	1.7	29.1	7.8	9.2	9.4	1.7	2.7
Sasol Ltd	South Africa	Diversified	23,102	28,094	(2.6)	(14.3)	21.2	9.9	3.5	4.3	0.7	8.8
Yara International	Norway	Fertilizer	414	35,703	(3.4)	(3.8)	23.0	10.7	4.8	8.5	1.2	10.6
Dupont DeNemours	US	Diversified	67.2	115,677	(3.6)	(2.1)	4.0	2.5	11.3	18.5	1.2	2.1
BASF SE	Germany	Diversified	44.8	159,819	(4.7)	(3.6)	(0.7)	(0.1)	6.5	9.5	1.0	7.6
LG Chem Ltd	South Korea	Diversified	693,000	139,030	(6.4)	15.5	5.2	3.1	8.1	20.6	1.6	1.5
Petronas Chem	Malaysia	Diversified	6.6	42,809	(7.3)	(23.7)	13.0	9.4	7.9	15.2	1.3	4.1
Industries Qatar	Qatar	Diversified	12.0	74,618	(7.5)	(6.5)	20.0	18.7	11.7	13.0	1.8	6.8
Eastman Chemical	US	Diversified	77.1	34,452	(8.5)	(5.3)	12.5	4.5	7.8	9.6	1.3	4.1
Westlake Chemical	US	Diversified	104	49,765	(8.6)	1.4	19.8	9.6	5.2	9.2	1.2	1.4
Arkema SA	France	Diversified	81.5	24,621	(9.1)	(2.8)	10.7	5.6	5.1	9.0	0.8	4.5
Sumitomo Chem	Japan	Diversified	416	18,482	(9.2)	(12.2)	0.6	(1.1)	8.7	10.5	0.6	3.6
Covestro AG	Germany	Polymers	36.1	27,928	(9.4)	(1.3)	(9.2)	(4.7)	6.8	40.3	0.9	1.1
Solvay SA	Belgium	Diversified	97.7	41,624	(10.3)	3.4	17.0	8.7	4.0	7.0	0.9	4.4
OCI NV	Netherlands	Diversified	20.8	17,585	(13.0)	(37.8)	57.3	24.8	4.2	12.1	2.7	10.7
Exxon Mobil Corp	US	Diversified	102	1,549,466	(13.7)	(7.4)	33.5	17.6	5.4	10.2	2.0	3.6
CF Industries	US	Fertilizer	61.5	44,969	(14.1)	(27.8)			4.7	6.7	2.1	2.5
Average					(5.7)	(6.6)	11.6	6.8	7.4	14.0	1.4	4.3
Indices												
S&P500 Chem	US		798		(5.6)	(1.3)						

Source: Tadawul, Reuters Eikon, SNB Capital Research

LC = Local currency, *Prices are as of 31 May 2023, **Sumitomo year ending is as of 31 March

JUNE 2023

Product portfolio and capacities

Below are the Saudi listed petrochemical company's product portfolios along with their capacity and price movements.

Exhibit 20: Portfolio product and capacities

Company	Product	Capacity (mn mt)	Planned Commissioning of Capacity	Price mom (%)	Price ytd (%)
SABIC	Ethylene	7.185	on-stream	(8.9)	(2.4)
	Methanol	4.129	on-stream	(13.6)	(19.0)
	Gases	4.100	on-stream		
	PE	4.095	on-stream	(2.8)	2.0
	MEG	3.505	on-stream		
	MTBE	3.308	on-stream		
	Urea	3.105	on-stream	(1.1)	(31.8)
	Long Steel	2.702	on-stream		
	Ammonia	2.451	on-stream	(10.1)	(74.3)
	Flat Steel	1.154	on-stream		
	Styrene	1.074	on-stream	(7.1)	(4.4)
	Propylene	0.870	on-stream	(10.5)	(9.5)
	Ethylene Dichloride (EDC)	0.827	on-stream		
	PP	0.774	on-stream	(4.2)	(3.2)
	Caustic Soda	0.632	on-stream		
	Vinyl Chloride Monomer (VCM)	0.434	on-stream		
	MEG	0.415	on-stream	(5.8)	(2.0)
	Benzene	0.374	on-stream	(11.1)	(4.0)
	DEG	0.332	on-stream		
	Purified Terephthalic Acid (PTA)	0.298	on-stream		
	Phosphate, compound and liquid	0.256	on-stream		
	Paraxylene	0.252	on-stream		
	PS	0.174	on-stream	(9.1)	0.0
	2-Ethylene Hexanol (ZEH)	0.166	on-stream		
	Butane	0.151	on-stream		
	Butadiene	0.121	on-stream	(21.9)	(3.7)
	Pyrolysis Gasoline	0.117	on-stream		
	Sulphuric Acid	0.097	on-stream		
	Polyethylene Terephthalate (PET) Resin	0.079	on-stream		
	CIE (crude industrial ethanol)	0.070	on-stream		
	Textile Chips	0.051	on-stream		
	Dioctyle Phthalate (DOP)	0.029	on-stream		
	Melamine	0.021	on-stream		
Tri Ethylene Glycol (TEG)	0.018	on-stream			
Urea Formaldehyde	0.013	on-stream			
Polyester Fibers	0.008	on-stream			
LDPE	0.400	on-stream	(4.0)	(7.6)	
Methyl methacrylate	0.250	on-stream			
Polymethyl methacrylate	0.030	on-stream			
Polyacetal	0.050	on-stream			
Polyethylene	0.230	on-stream			
PetroRabigh	Petroleum Products	17.300	on-stream		
	Ethylene	1.250	on-stream	(8.9)	(2.4)
	Propylene	0.900	on-stream	(10.5)	(9.5)
	LDPE	0.350	on-stream	(4.0)	(7.6)
	LLDPE	0.250	on-stream	(2.9)	(1.9)
	HDPE	0.300	on-stream	(3.0)	1.0
	MEG	0.600	on-stream		
	PP	0.700	on-stream	(4.2)	(3.2)
	Polypropylene Oxide	0.200	on-stream		

JUNE 2023

Exhibit 20: Portfolio product and capacities

Company	Product	Capacity (mnmt)	Planned commissioning of Capacity	Price mom (%)	Price ytd (%)
SABIC Agri-Nutrients Company (SAFCO)					
	Urea	5.141	on-stream	(1.1)	(31.8)
	Ammonia	3.821	on-stream	(10.1)	(74.3)
	Others	1.100	on-stream		
Saudi Kayan					
	Ethylene	1.571	on-stream	(8.9)	(2.4)
	Propylene	0.630	on-stream	(10.5)	(9.5)
	LDPE	0.300	on-stream	(4.0)	(7.6)
	HDPE	0.420	on-stream	(3.0)	1.0
	MEG	0.653	on-stream		
	PP	0.350	on-stream	(4.2)	(3.2)
	PC	0.260	on-stream		
	Acetone	0.135	on-stream		
	Benzene	0.109	on-stream	(11.1)	(4.0)
	Ethanolamines & Ethoxylates	0.140	on-stream		
	Bisphenol A	0.240	on-stream		
	Phenol	0.220	on-stream		
	Cumene	0.290	on-stream		
	Ethylene oxide	0.611	on-stream		
	Synthetic/Natural Alcohol- Detergent grade	0.050	on-stream		
	n-Butanol	0.330	on-stream		
	Iso-Butanol	0.011	on-stream		
Yansab					
	Ethylene	1.300	on-stream	(8.9)	(2.4)
	Propylene	0.400	on-stream	(10.5)	(9.5)
	MEG	0.850	on-stream		
	Di Ethylene Glycol (DEG)	0.065	on-stream		
	Tri Ethylene Glycol (TEG)	0.005	on-stream		
	PP	0.400	on-stream	(4.2)	(3.2)
	HDPE	0.400	on-stream	(3.0)	1.0
	LDPE	0.400	on-stream	(4.0)	(7.6)
	Benzene	0.170	on-stream	(11.1)	(4.0)
	Butane	0.115	on-stream		
	Benzene-Toluene and Xylene (BTX)	0.070	on-stream		
	MTBE	0.020	on-stream		
Sipchem					
	Methanol	1.000	on-stream	(13.6)	(19.0)
	Carbon Monoxide	0.345	on-stream		
	Butanediol	0.075	on-stream		
	Acetic Acid	0.460	on-stream		
	Vinyl Acetate Monomer (VAM)	0.330	on-stream		
	Ethyl Acetate	0.100	on-stream		
	Semi-Conductive Outer & Inner Shield Compounds	0.025	on-stream		
	EVA	0.004	on-stream		
	EVA/LDPE	0.200	on-stream		
	Polybutylene Terephthalate (PBT)	0.063	on-stream		
	Plastic Moulds	0.001	on-stream		
	Ethylene	1.010	on-stream	(8.9)	(2.4)
	PE	0.800	on-stream	(2.8)	2.0
	Propylene	0.752	on-stream	(10.5)	(9.5)
	PP	0.450	on-stream	(4.2)	(3.2)
	Chlorine	0.227	on-stream		
	Caustic Soda	0.250	on-stream		
	Ethylene Dichloride (EDC)	0.300	on-stream		
	n-Butanol	0.330	on-stream		
	Iso-Butanol	0.011	on-stream		

JUNE 2023

Exhibit 20: Portfolio product and capacities

Company	Product	Capacity (mmt)	Planned commissioning of Capacity	Price mom (%)	Price ytd (%)
SIIG	Benzene	0.835	on-stream	(11.1)	(4.0)
	Cyclohexane	0.290	on-stream		
	Motor Gasoline	0.780	on-stream		
	Styrene	0.730	on-stream	(7.1)	(4.4)
	Propylene	0.150	on-stream	(10.5)	(9.5)
	Ethylene	1.220	on-stream	(8.9)	(2.4)
	HDPE/LLDPE	1.100	on-stream	(3.0)	1.0
	Propylene	0.440	on-stream	(10.5)	(9.5)
	PP	0.400	on-stream	(4.2)	(3.2)
	1-Hexene	0.100	on-stream		
Tasnee	Ethylene	1.010	on-stream	(8.9)	(2.4)
	Propylene	0.740	on-stream	(10.5)	(9.5)
	PP	0.720	on-stream	(4.2)	(3.2)
	HDPE	0.400	on-stream	(3.0)	1.0
	LDPE	0.400	on-stream	(4.0)	(7.6)
	n-Butanol	0.330	on-stream		
	Iso-Butanol	0.011	on-stream		
	Titanium sponge	0.015	on-stream		
Advanced	Propylene	0.455	on-stream	(10.5)	(9.5)
	PP	0.450	on-stream	(4.2)	(3.2)
	Propylene	0.843	2024	(10.5)	(9.5)
	PP	0.800	2024	(4.2)	(3.2)
	Iso propanol	0.070	2024		
	Ethylene	1.115	2025	(8.9)	(2.4)
	Propylene	0.85	2025		
	Aromatics	0.40	2025		
Chemanol	Methanol	0.231	on-stream	(13.6)	(19.0)
	Pentaerythritol	0.020	on-stream		
	Dimethylformaldehyde (DMF)	0.060	on-stream		
	Methylamines	0.050	on-stream		
	Carbon Monoxide	0.033	on-stream		
	Acetaldehyde	0.012	on-stream		
	Formaldehyde	0.215	on-stream		
	Resins	0.014	on-stream		
	Hexamine	0.011	on-stream		
	Others	0.222	on-stream		
	SNF	0.035	on-stream		
Alujain	PP	0.400	on-stream	(4.2)	(3.2)
	PP Compounded	0.100	on-stream	(4.2)	(3.2)
Nama Chemicals	Epoxy resins	0.060	on-stream		
	Calcium Chloride	NA	on-stream		

Source: Company, SNB Capital Research

JUNE 2023

Appendix

Exhibit 21: Commodity wrap-up

Name	Latest 1 wk (%)	1m (%)	qtd (%)	ytd (%)	ttm (%)	5yr high	5yr low	10 yr Avg	
Oil and Gas									
WTI	72.7	1.6	(5.4)	(4.0)	(9.5)	(36.6)	124	(37.6)	65.0
Brent	77.0	1.8	(3.3)	(3.5)	(10.4)	(37.4)	128	19.3	69.9
Arab Light	78.1	0.5	(3.4)	(1.6)	(7.3)	(37.3)	134	13.3	69.2
Arab Medium	78.6	2.2	(3.6)	(1.6)	(3.0)	(31.3)	124	(27.8)	64.8
Natural Gas Henry Hub (US\$ MMBtu)	1.9	(20.7)	(17.2)	(10.5)	(46.6)	(77.8)	16.4	1.3	3.3
Naphtha	597	0.2	(5.7)	(10.0)	(8.0)	(32.4)	1,161	170	603
Propane	525	0.4	(10.1)	(12.0)	(16.2)	(35.7)	1,001	241	572
Aramco Propane	555	0.0	0.0	(22.9)	(14.6)	(34.7)	940	230	554
Petrochemicals									
Methanol CFR China (US\$ mt)	248	(5.0)	(13.6)	(19.2)	(19.0)	(28.9)	446	152	308
Benzene (US\$ mt)	845	(2.3)	(11.1)	(13.8)	(4.0)	(36.0)	1,450	295	848
Ethylene (US\$ mt)	820	(2.4)	(8.9)	(9.9)	(2.4)	(25.5)	1,370	345	1,051
Polystyrene (US\$ mt)	1,200	(3.2)	(9.1)	(7.0)	0.0	(20.0)	1,610	830	1,359
Polyethylene (US\$ mt)	1,040	(1.0)	(2.8)	(4.6)	2.0	(17.5)	1,440	700	1,196
Polypropylene (US\$ mt)	915	(1.1)	(4.2)	(4.2)	(3.2)	(19.7)	1,370	730	1,136
Propylene (US\$ mt)	810	(6.9)	(10.5)	(10.0)	(9.5)	(20.2)	1,230	540	950
VAM (US\$ mt)	878	(1.1)	(7.7)	(16.5)	(22.4)	(62.8)	2,738	696	1,197
PC (US\$ mt) (China)	2,194	(2.1)	(3.0)	(5.2)	(12.6)	(30.8)	4,530	1,722	3,023
MEG (US\$ mt)	485	(5.8)	(5.8)	(5.8)	(2.0)	(21.1)	990	380	729
Butadiene (US\$ mt)	785	(4.8)	(21.9)	(29.0)	(3.7)	(48.9)	1,745	305	1,134
Styrene (US\$ mt)	980	(0.5)	(7.1)	(10.5)	(4.4)	(27.9)	1,515	550	1,185
LDPE (US\$ mt)	970	(2.0)	(4.0)	(8.5)	(7.6)	(34.0)	1,760	750	1,244
LLDPE (US\$ mt)	1,010	(1.0)	(2.9)	(3.8)	(1.9)	(22.3)	1,450	700	1,176
HDPE (US\$ mt)	980	(1.0)	(3.0)	(3.9)	1.0	(16.9)	1,385	700	1,167
Fertilizers									
Ammonia Middle East (US\$ mt)	223	(10.1)	(10.1)	(40.7)	(74.3)	(76.6)	1,238	155	432
DAP Saudi (US\$ mt)	450	(7.7)	(21.7)	(22.4)	(30.0)	(56.7)	1,158	288	469
Urea Middle East Granular (US\$ mt)	328	0.0	(1.1)	8.3	(31.8)	(52.4)	995	214	344
Indices									
TASI Materials	6,554	(1.4)	(2.1)	2.7	4.2	(15.7)	8,980	3,466	5,661
TASI	11,138	(1.8)	(1.5)	5.2	6.3	(13.8)	13,820	5,960	8,726
S&P500 Chem	798	(3.3)	(5.6)	(4.2)	(1.3)	(8.7)	929	402	612

Source: SNB Capital Research; *Prices are as on 28 May 2023

JUNE 2023

Important information

The authors of this report hereby certify that the views expressed in this document accurately reflect their personal views regarding the securities and companies that are the subject of this document. The authors also certify that neither they nor their respective spouses or dependents (if relevant) hold a beneficial interest in the securities that are the subject of this document. Funds managed by SNB Capital and its subsidiaries for third parties may own the securities that are the subject of this document. SNB Capital or its subsidiaries may own securities in one or more of the aforementioned companies, or funds or in funds managed by third parties. The authors of this document may own securities in funds open to the public that invest in the securities mentioned in this document as part of a diversified portfolio over which they have no discretion. The investment banking division of SNB Capital may be in the process of soliciting or executing fee earning mandates for companies that are either the subject of this document or are mentioned in this document.

This document is issued to the person to whom SNB Capital has issued it. This document is intended for general information purposes only, and may not be reproduced or redistributed to any other person. This document is not intended as an offer or solicitation with respect to the purchase or sale of any security. This document is not intended to take into account any investment suitability needs of the recipient. In particular, this document is not customized to the specific investment objectives, financial situation, risk appetite or other needs of any person who may receive this document. SNB Capital strongly advises every potential investor to seek professional legal, accounting, tax and financial guidance when determining whether an investment in a security is appropriate to his or her needs. Any investment recommendations contained in this document take into account both risk and expected return. Information and opinions contained in this document have been compiled or arrived at by the author are from sources believed to be reliable, but SNB Capital has not independently verified the contents of this document and such information may be condensed or incomplete. Accordingly, no representation or warranty, express or implied, is made as to, and no reliance should be placed on the fairness, accuracy, completeness or correctness of the information and opinions contained in this document. To the maximum extent permitted by applicable law and regulation, SNB Capital shall not be liable for any loss that may arise from the use of this document or its contents or otherwise arising in connection therewith. Any financial projections, fair value estimates and statements regarding future prospects contained in this document may not be realized. All opinions and estimates included in this document constitute the author's judgment as of the date of production of this document, and are subject to change without notice. Past performance of any investment is not indicative of future results. The value of securities, the income from them, the prices and currencies of securities, can go down as well as up. An investor may get back less than he or she originally invested. Additionally, fees may apply on investments in securities. Changes in currency rates may have an adverse effect on the value, price or income of a security. No part of this document may be reproduced without the written permission of SNB Capital. Neither this document nor any copy hereof may be distributed in any jurisdiction outside the Kingdom of Saudi Arabia where its distribution may be restricted by law. Persons who receive this document should make themselves aware, of and adhere to, any such restrictions. By accepting this document, the recipient agrees to be bound by the foregoing limitations.

SNB Capital is authorised by the Capital Market Authority of the Kingdom of Saudi Arabia to carry out dealing, as principal and agent, and underwriting, managing, arranging, advising and custody, with respect to securities under licence number 37-06046. The registered office of SNB Capital is at King Saud Road, SNB Regional Building P.O. Box 22216, 11495 Riyadh, Kingdom of Saudi Arabia.

SNB Capital Company, Saudi Joint Stock Company, Paid up capital SAR 1,000 million, authorized by the Capital Market Authority, CR 1010231474, P.O. Box 22216, Riyadh 11495, Kingdom of Saudi Arabia, T:+966 11874 7106, F:+966 11 406 0049, www.alahlicapital.com

Research Disclosures**Third Party Research**

This research is prepared by SNB Capital, with headquarters in Riyadh, Saudi Arabia. SNB Capital is authorized to engage in securities activities according to its domestic legislation. This research is not a product of Tellimer Markets, Inc., a U.S. registered broker-dealer. SNB Capital has sole control over the contents of this research report. Tellimer Markets, Inc. does not exercise any control over the contents of, or the views expressed in, research reports prepared by SNB Capital.

SNB Capital is not registered as a broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to "major U.S. institutional investors" and other "U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act").

Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through Tellimer Markets, Inc., located at 27th Floor, 575 Fifth Avenue, New York, NY 10017. A representative of Tellimer Markets, Inc. is contactable on +1 (212) 551 3480. Tellimer Markets, Inc. accepts responsibility for the contents of this research report, subject to the terms set out below, to the extent that it is delivered to a U.S. person including major U.S. institutional investors.

None of the materials provided in this report may be used, reproduced, or transmitted, in any form or by any means, electronic or mechanical, including recording or the use of any information storage and retrieval system, without written permission from Tellimer and SNB Capital.

SNB Capital is the employer of the research analyst(s) responsible for the content of this report and research analysts preparing this report are resident outside the U.S. and are not associated persons of any U.S. regulated broker-dealer. The analyst whose name appears in this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA") and may not be an associated person of Tellimer Markets, Inc. and, therefore, may not be subject to applicable restrictions under FINRA Rules on communications with a subject company, public appearances and trading securities held by a research analyst account.

Tellimer Markets, Inc. or its affiliates has not managed or co-managed a public offering of securities for the subject company in the past 12 months, has not received compensation for investment banking services from the subject company in the past 12 months, and does not expect to receive or intend to seek compensation for investment banking services from the subject company in the next three months. Tellimer Markets, Inc. has never owned any class of equity securities of the subject company. There are no other actual, or potential, material conflicts of interest of Tellimer Markets, Inc. at the time of the publication of this report. As of the publication of this report, Tellimer Markets, Inc. does not make a market in the subject securities.

JUNE 2023

About Tellimer

Tellimer is a registered trade mark of Exotix Partners LLP. Exotix Partners LLP and its subsidiaries ("Tellimer") provide specialist investment banking services to trading professionals in the wholesale markets. Tellimer draws together liquidity and matches buyers and sellers so that deals can be executed by its customers. Tellimer may at any time, hold a trading position in the securities and financial instruments discussed in this report. Tellimer has procedures in place to identify and manage any potential conflicts of interests that arise in connection with its research. A copy of Tellimer's conflict of interest policy is available at www.tellimer.com/regulatory-information.

Distribution

This report is not intended for distribution to the public and may not be reproduced, redistributed or published, in whole or in part, for any purpose without the written permission of Tellimer. Tellimer shall accept no liability whatsoever for the actions of third parties in this respect. This report is for distribution only under such circumstances as may be permitted by applicable law.

This report may not be used to create any financial instruments or products or any indices. Neither Tellimer and SNB Capital, nor its members, directors, representatives, or employees accept any liability for any direct or consequential loss or damage arising out of the use of all or any part of the information herein.

United Kingdom: Distributed by Exotix Partners LLP only to Eligible Counterparties or Professional Clients (as defined in the FCA Handbook). The information herein does not apply to, and should not be relied upon by, Retail Clients (as defined in the FCA Handbook); neither the FCA's protection rules nor compensation scheme may be applied.

UAE: Distributed in the Dubai International Financial Centre by Exotix Partners LLP (Dubai) which is regulated by the Dubai Financial Services Authority ("DFSA"). Material is intended only for persons who meet the criteria for Professional Clients under the Rules of the DFSA and no other person should act upon it.

Other distribution: The distribution of this report in other jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe, any such restriction.

Disclaimers

Tellimer and/or its members, directors or employees may have interests, or long or short positions, and may at any time make purchases or sales as a principal or agent of the securities referred to herein. Tellimer may rely on information barriers, such as "Chinese Walls" to control the flow of information within the areas, units, divisions, groups of Tellimer.

Investing in any non-U.S. securities or related financial instruments (including ADRs) discussed in this report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the U.S. Securities and Exchange Commission. Information on such non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect within the United States. The value of any investment or income from any securities or related financial instruments discussed in this report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments.

Frontier and Emerging Market laws and regulations governing investments in securities markets may not be sufficiently developed or may be subject to inconsistent or arbitrary interpretation or application. Frontier and Emerging Market securities are often not issued in physical form and registration of ownership may not be subject to a centralised system. Registration of ownership of certain types of securities may not be subject to standardised procedures and may even be effected on an ad hoc basis. The value of investments in Frontier and Emerging Market securities may also be affected by fluctuations in available currency rates and exchange control regulations. Not all of these or other risks associated with the relevant company, market or instrument which are the subject matter of the report are necessarily considered.