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Argus LPG Outlook

The quarter ahead

Propane price volatility in August was driven by a variety of factors, but falling crude prices began to dominate by the end of last month, dragging outright propane prices lower.

Supply is restricted by maintenance in the Middle East and the lack of additional export capacity in the US. Supply will further tighten as maintenance ramps up and Hurricane Francine disrupts US exports.

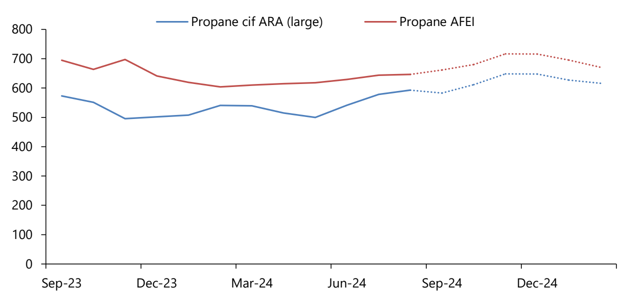
Petrochemical demand for LPG has dipped but is likely to find support towards the end of the year as crude prices are expected to remain weak.

A weaker than expected summer driving season has caused gasoline blenders to begin production of winter-specification product early, providing support for butane markets.

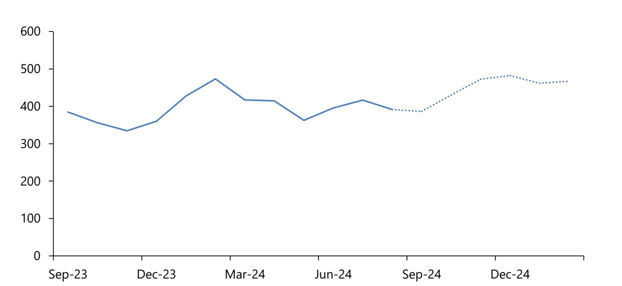
We expect prices to increase in eastern Europe as we approach full implementation of the EU's sanctions against Russian LPG in December.

Crude prices are expected to recover from current lows, but the risk is firmly to the downside owing to a lacklustre response from the Opec+ group.

Propane cif ARA, cfr Japan $/t



Propane Mont Belvieu (EPC) $/t



Forecast prices									$/t
	Sep 24	Oct 24	Nov 24	3Q24	4Q24	1Q25	2024	2025	2026
Propane cif ARA (large)	592	616	651	588	639	611	569	605	609
Butane cif ARA (large)	569	605	651	553	635	618	561	603	605
Propane Mt Belvieu EPC	405	435	475	404	465	467	425	493	501
Butane Mt Belvieu EPC	433	451	493	436	482	481	447	496	506
USGC propane export	525	544	569	525	561	540	503	538	532
Propane Conway	404	428	471	395	461	451	412	473	478
Propane Edmonton	305	339	392	278	381	344	297	377	394
Mixed butane Edmonton	438	475	504	397	480	402	391	394	390
Propane AFEI	665	684	719	652	707	670	648	660	672
Butane AFEI	667	682	717	650	709	663	649	648	659
Propane ANI	667	687	722	654	710	673	649	663	674
Butane ANI	669	685	720	652	712	666	650	650	661
Daf Brest Propane	607	670	737	578	718	806	572	790	737
Propane Saudi CP	605	645	695	592	678	648	622	622	622
Butane Saudi CP	595	635	700	577	682	655	621	642	651
Propane Sonatrach SP	590	605	620	565	612	590	552	603	582
Butane Sonatrach SP	565	585	595	522	597	618	542	587	592
North Sea Dated (*$/bl*)	78	80	82	81	82	82	83	82	82
LLS (*$/bl*)	73	78	80	77	80	80	79	80	80
Naphtha cif NWE	628	641	660	655	658	661	662	665	686
Naphtha Japan C and F	651	667	693	670	691	679	680	691	722
Biopropane fca ARA	1648	1681	1674	1620	1672	1661	1622	1735	

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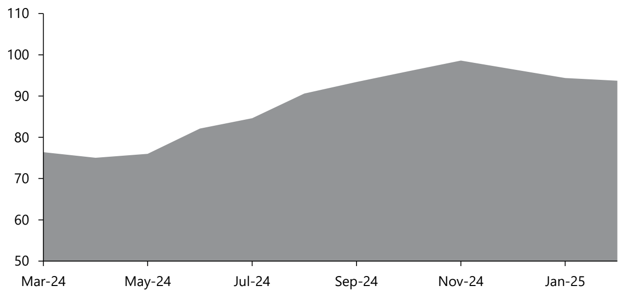
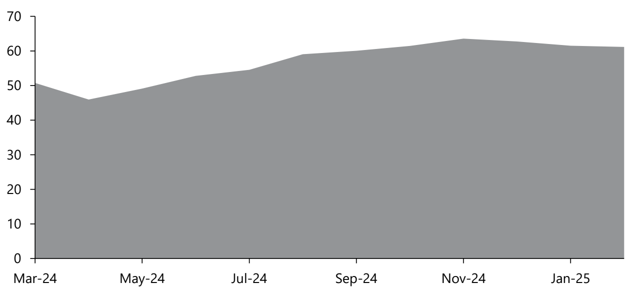
Petrochemical feedstock prices - August		$/t
	Price	±
Ethane fob Mt Belvieu (¢/USG)	13.90	-1.49
Naphtha cif NWE	654	-29
Naphtha c+f Japan	672	-17
Ice gasoil	714.15	-53

Crude prices - August		$/bl
	Price	±
North Sea Dated	80.71	-4.5
Ice Brent	78.88	-5.0
Louisiana Light Sweet	77.18	-5.8
Nymex WTI	75.43	-5.0
Dubai	77.58	-5.9

Propane cif ARA large as percentage of naphtha cif



Propane cif ARA large as percentage of North Sea Dated



Outlook summary

- LPG market fundamentals remain bullish owing to supply constraints
- Petrochemical demand has fallen owing to higher LPG prices relative to naphtha but could find strength from lower energy prices
- Rising supply from the second half of 2025 will result in a more bearish market

The LPG market was in turmoil over August as numerous factors pulled prices in different directions. Plummeting crude prices, LPG export capacity restrictions in the US, supply disruption in the Middle East, weak summer gasoline demand, hurricanes in the Gulf of Mexico, firm petrochemical utilisation, upcoming EU sanctions against Russian LPG, and the approach of winter heating demand are all major factors that had conflicting effects on the market. The result has been divergence between markets geographically, as individual regions were affected to varying degrees by different factors. We expect a largely bullish tone in the coming months as supply disruptions and seasonally stronger heating demand tighten the market.

US propane exports rose by over 4pc in August from July as logistical problems eased, but were still unable to provide a sufficient outlet for the country's excess supply. Weekly EIA data show propane stocks are now within 300,000 bl of this time last year, and are higher than every other year since 2016. At the same time, Middle East exports are steady at around 4mn t/month. This is capping supply availability globally and keeping the LPG market tight. Middle East supply is likely to tighten in the coming months as a result of maintenance in Iran and Saudi Arabia, while new US export capacity will not come on line until the second half of next year, ensuring continued tightness.

Ship-tracking data show LPG imports to northeast Asia fell by 20pc in August compared with a month earlier. The month-on-month difference is exaggerated by a particularly strong July, but August was still the lowest volume since February. Propane values remained above 95pc of naphtha throughout August and began to approach parity by the end of the month. This pushed propane margins below naphtha even at coastal, import-based steam crackers. Propane dehydrogenation (PDH) utilisation also dropped below 70pc for the first time since April, owing to technical problems and weak operating margins. But PDH capacity in China is so large that even at this lower utilisation demand remained strong by historical standards. And with energy prices falling, we expect margins to recover and utilisation to stabilise, even if LPG does not return to steam cracker feedslates.

With the summer now behind us and winter approaching, seasonal factors are becoming more significant. Many in the market are beginning to build inventories ahead of the winter heating season. But the unusual backwardation in the forward curve — with forward prices below prompt — even when accounting for bearish crude and naphtha futures, indicates that this will be sluggish. Blending for winter-specification gasoline has started unusually early in 2024 as unexpectedly weak demand gives blenders confidence that current summer-specification stocks will last. These factors will continue to support prices going into winter.

Prices in eastern Europe are beginning to respond to the coming full implementation of sanctions on Russian LPG, with the daf Brest propane assessment increasing by almost $100/t over August. Russia's largest LPG exporter, Sibur, has stopped rail exports to Poland and the market is beginning to tighten. Not including the Police terminal, which can only serve the associated PDH plant, seaborne Polish imports last month rose to their highest since January, and Romanian imports to their highest since July 2023. This has been compounded by a seasonal surge in demand in September owing to rising heating use, increased autogas consumption and crop drying. With sanctions to be implemented in full in December, we expect prices to continue to rise as the market struggles to reconfigure logistics to facilitate the required new trade flows.

Bearish macroeconomic sentiment has weighed heavily on crude prices. The continued underperformance of China's economy has dominated discussions, outweighing tensions in the Middle East and other bullish supply fundamentals. A limited response from Opec+ has failed to arrest the decline (*see p10*). Downside risks remain significant, but we do expect crude prices to recover slightly as tighter fundamentals take more prominence. Combined with bullish LPG fundamentals this should support higher LPG prices in the coming months. We expect strong LPG pricing to last until the middle of 2025, when an increase in US export capacity will provide a large influx of supply and start to pull prices lower.

Global fundamentals								'000t
	2023	1Q24	2Q24	3Q24	4Q24	2024	2025	2026
LPG supply								
Gas processing	231,838	64,350	55,021	56,923	65,338	238,431	249,409	260,189
Refining	126,153	30,837	32,978	32,600	29,738	128,744	130,106	131,249
Total LPG supply	357,991	95,187	87,999	89,523	95,076	367,176	379,515	391,438
Capacity ('000 b/d)	98,698	99,344	99,744	99,744	100,079	100,079	100,832	101,639
Utilisation (%)	0.82	0.83	0.81	0.83	0.82	0.82	0.83	0.83
Trade position								
LPG import requirement	146,238	39,205	38,061	38,727	39,797	155,790	162,201	166,771
LPG export availability	149,992	39,532	36,895	36,206	42,547	155,180	164,786	175,761
LPG demand	356,681	95,187	87,999	89,523	95,076	367,786	376,930	382,448

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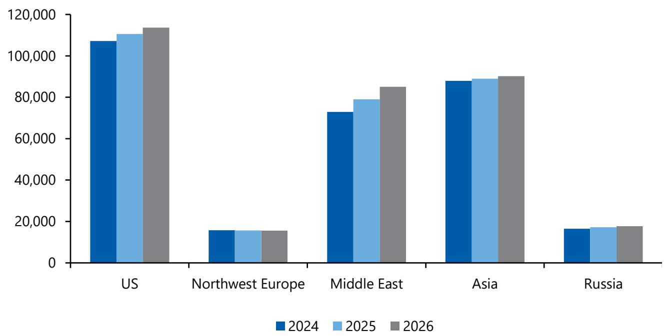
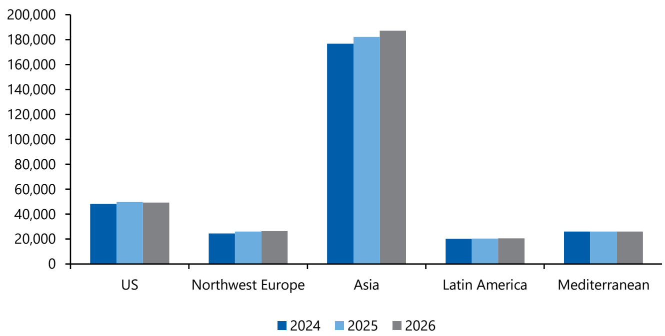
LPG major producing regions 2024-26 *'000t*



LPG major consuming regions 2024-26 *'000t*



LPG fundamentals overview

- The regional and global balances will be updated in the November issue of this report.
- The last update was in August.

Regional fundamentals - LPG								'000t
	2023	1Q24	2Q24	3Q24	4Q24	2024	2025	2026
US								
Production	104,732	23,544	29,555	29,943	24,114	107,155	110,552	113,662
Import requirement	4,595	1,385	906	998	1,307	4,595	4,595	4,595
Export availability	62,520	14,317	15,665	16,185	17,250	63,417	65,368	68,928
Consumption	47,993	14,235	9,990	10,219	13,890	48,334	49,780	49,330
Canada								
Production	16,556	4,817	3,956	4,289	3,873	16,935	17,168	17,504
Import requirement	239	62	65	53	59	239	239	239
Export availability	7,318	1,093	1,887	2,483	1,001	6,464	6,741	7,046
Consumption	10,811	3,010	2,406	2,803	2,491	10,710	10,666	10,697
Mexico								
Production	3,432	969	955	927	866	3,717	3,790	3,770
Import requirement	6,665	1,651	1,379	1,316	2,002	6,348	6,211	6,231
Export availability	0	0	0	0	0	0	0	0
Consumption	10,044	2,697	2,209	2,348	2,811	10,065	10,001	10,001
Latin America								
Production	13,744	3,723	3,332	3,475	3,327	13,857	14,033	14,090
Import requirement	8,497	2,066	2,289	2,327	2,181	8,863	8,828	8,930
Export availability	2,339	911	492	360	701	2,464	2,479	2,509
Consumption	20,399	4,701	5,289	5,357	4,909	20,256	20,381	20,512
Northwest Europe								
Production	15,654	4,020	4,136	4,026	3,594	15,775	15,649	15,520
Import requirement	18,970	5,427	4,639	4,977	5,122	20,165	21,992	22,489
Export availability	10,657	3,063	2,805	2,675	2,902	11,445	11,654	11,642
Consumption	22,824	6,413	5,922	6,272	5,888	24,495	25,987	26,367
Mediterranean								
Production	19,259	5,153	4,741	5,008	4,772	19,673	19,917	20,174
Import requirement	15,503	4,312	3,487	3,509	3,934	15,242	15,330	15,219
Export availability	8,607	2,119	2,402	2,388	1,961	8,870	9,264	9,401
Consumption	26,181	7,185	6,076	6,163	6,621	26,045	25,983	25,992
Middle East								
Production	70,489	17,457	20,835	18,582	16,057	72,931	78,948	85,081
Import requirement	121	56	32	16	27	130	140	148
Export availability	43,940	13,357	9,888	8,606	14,383	46,233	51,434	57,073
Consumption	26,669	7,161	6,673	6,173	6,821	26,828	27,654	28,156
Africa								
Production	6,235	2,173	1,968	1,235	1,319	6,695	7,058	7,493
Import requirement	3,028	695	1,041	778	607	3,122	3,314	3,504
Export availability	3,545	1,689	596	409	1,157	3,851	4,075	4,389
Consumption	5,728	1,525	1,629	1,397	1,414	5,966	6,298	6,608
Russia								
Production	16,155	4,504	4,056	3,894	4,064	16,518	17,262	17,690
Import requirement	75	16	19	21	18	75	75	75
Export availability	2,855	807	727	698	728	2,960	4,352	5,292
Consumption	13,375	3,633	3,115	3,365	3,519	13,632	12,984	12,473
Other Eastern Europe								
Production	5,923	1,559	1,477	1,397	1,576	6,009	6,135	6,254
Import requirement	1,326	312	305	391	339	1,347	1,364	1,380
Export availability	2,501	639	719	639	571	2,569	2,563	2,511
Consumption	4,748	1,265	1,184	1,174	1,164	4,787	4,936	5,123
Asia-Pacific								
Production	85,812	21,415	21,732	22,152	22,610	87,909	89,002	90,199
Import requirement	87,219	23,221	23,899	24,341	24,204	95,665	100,113	103,961
Export availability	5,709	1,538	1,715	1,762	1,892	6,906	6,856	6,971
Consumption	167,909	43,361	43,506	44,251	45,549	176,668	182,260	187,190

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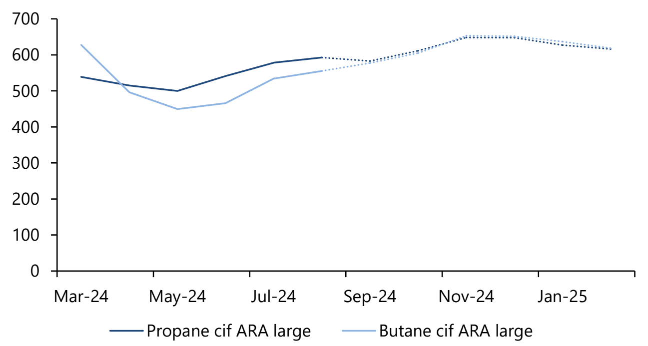
Regional analysis

Northwest Europe

Prices in Europe rose in August owing to tighter local supplies and firm competition from Asian buyers. But petrochemical resales and declines in the crude market pressured LPG prices towards the end of the month. We expect crude to rebound while resales will not be sustained, providing a bullish outlook as we approach winter.

Maintenance at Norway's Karsto gas processing plant over the first half of September has reduced LPG supplies in Europe, with Norwegian exports falling by almost 90pc, according to analytics firm Vortexa. More exports have started to depart from the US, but European buyers will be forced to outbid the firm Asian market to secure these cargoes. Outright prices dropped by over $50/t, despite these bullish factors, as crude prices fell and flexible steam crackers resold their propane as prices rose above 90pc of naphtha.

Propane and butane cif ARA large *$/t*



Looking forward, all signs point towards bullish prices. Crude values are forecast to rise and firm naphtha should provide a strong backdrop for LPG prices. Winter-specification gasoline blending has already begun and is starting to tighten butane markets. Restricted US exports and continued Asian demand will weigh on the availability of LPG imports. Steam crackers will continue to favour naphtha, but further propane resales are unlikely. And the onset of winter will boost demand for heating use, supporting stockbuilding.

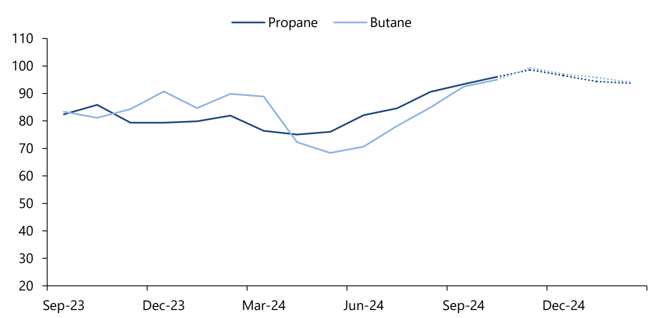
A dramatic drop in voluntary consumption of biofuels, likely because of weaker crude, resulted in biopropane prices falling at the end of August, and prices are likely to remain subdued in September. After rising at the start of winter we expect biopropane and bionaphtha to start to weaken as values begin to fall more in line with their historical relationship to other biofuels going into 2025.

Eastern Europe

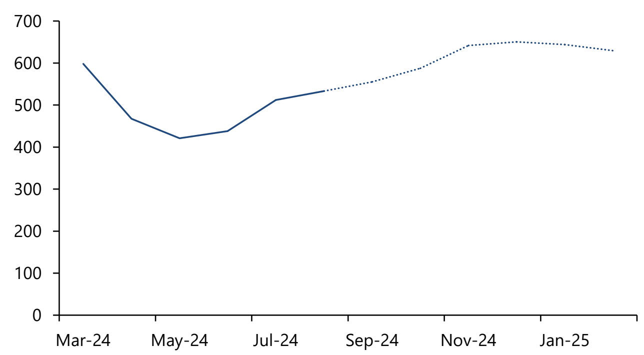
Russian supplies to eastern Europe weakened again in August owing to logistical problems and firm Russian consumption, which combined with strong local demand pushed LPG prices higher. With disruption to rail deliveries and maintenance at Russian gas processing plants expected to continue, eastern European supplies are likely to remain tight. There is scope for higher imports to Poland to replace these volumes, but high northwest Europe prices are making such supply uncompetitive at present.

We expect LPG prices to continue to rise as we approach December, when EU sanctions on Russian LPG will be fully

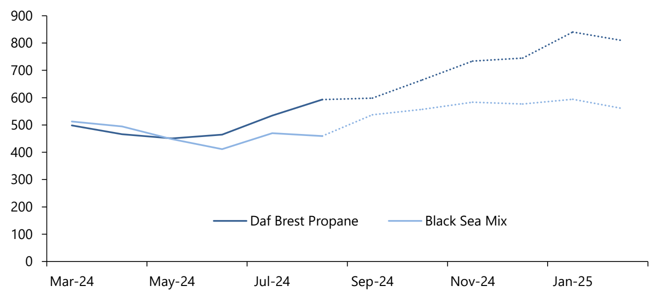
LPG ratio to naphtha northwest Europe *%*



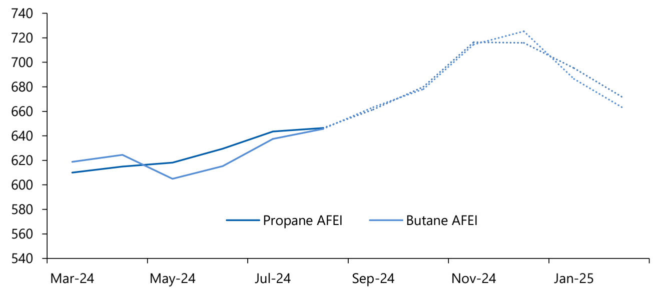
Butane cif Lavera large *$/t*



Daf Brest propane and Black Sea LPG mix *$/t*



Propane and butane cfr Japan *$/t*



implemented, owing to increased costs as logistics are reconfigured to facilitate new trade flows. Eastern European prices will need to outcompete either northwest Europe or Mediterranean markets to draw supply, but at a significant premium owing to the major logistical challenges of transporting large amounts of LPG to eastern Europe from the west and through seaborne routes.

Middle East

Saudi Arabia's state-controlled Aramco raised its August propane and butane contract prices (CPs) by $15/t and $25/t, respectively, on the month to a five-month high. Strong import demand from Asia, particularly India, Indonesia and China, supported prices. Maintenance at Mideast Gulf gas fields and processing plants is likely to limit supplies this month.

The September propane CP was set at $605/t, $55/t higher than a year earlier. The CP was within market participants' expectations but lower than *Argus Consulting's*, with lower than forecast crude prices likely to have limited the upside in LPG prices. But suppressed availability from Mideast Gulf producers and strong demand from Asia, pushed prices higher on the month. In Saudi Arabia, gas plant maintenance and higher domestic demand is tightening export availability from Ras Tanura and Yanbu. In Iran, maintenance at the country's South Pars gas field is expected to peak this month, which is likely to curtail exports. Iranian LPG production and exports surged last year, which coincided with recent gains in natural gas output and gas processing capacity from South Pars.

The Saudi September butane CP rose to $595/t, up by $35/t from a year earlier. The propane-butane spread narrowed by $10/t from $20/t a month earlier, in line with firmer demand for evenly split propane-butane cargoes, mainly from India and Indonesia. India's LPG demand is set to rise as the end of the monsoon season approaches. Demand rose by 14pc on the month to 2.63mn t in July, which is up by 10pc from 2.39mn t in July 2023, the latest data from the oil ministry show. The rise in demand is mainly attributed to the cut in residential cylinder prices since March and the extension of the cylinder subsidy for low-income households. Commercial LPG cylinder prices in September have increased for the second month in a row after they were cut for four consecutive months from April, which could limit the rise in demand this month.

India's LPG output from crude refineries is likely to decline as a result of turnarounds, with at least three refineries undergoing partial maintenance between September and October.

The outlook for Saudi Aramco's monthly CPs is expected to remain firm until the end of this year, as export demand is expected to tighten the balance in the region going into the winter, while maintenance in the fourth quarter will reduce supply. Risks do persists on the demand side of the balance, with the biggest downsides being the possibility of a mild winter in northeast Asia and if Chinese propylene demand drops by more than expected, which would encourage deeper run cuts at PDH plants.

Asia-Pacific

China's LPG imports fell by 9pc in August to 2.9mn t after hitting a peak in July, as higher Argus Far East Index prices kept costs elevated. Restricted US exports, driven by high terminal fees and tight shipping availability, along with seasonal gas processing maintenance in the Middle East, contributed to the tight supply. Demand remained steady throughout the month, but concerns over China's economic outlook, coupled with lower use by the petrochemical sector, put downward pressure on LPG imports.

The sluggish Chinese economy has dampened demand, with PDH plant run rates dropping by four percentage points in August, settling at 64pc. This decline was driven by falling margins, as domestic propylene prices dropped sharply owing to high supply from steam crackers, while global propane prices remained firm, buoyed by the approach of the heating season. Chinese steam cracker operating rates increased by 1.1 percentage points to 90.5pc, as refineries increasingly shifted towards petrochemical production to offset weakening transport fuel demand.

Naphtha is expected to remain the dominant steam cracker feedstock over the winter, but a likely recovery in PDH utilisation will prevent LPG demand from falling significantly. China's new Yulong refinery in Shandong province has the potential to increase domestic LPG production but is unlikely to fully offset declining overall utilisation as the refinery maintenance season takes hold. With supply forecast to remain tight and winter heating demand approaching, we can expect LPG prices to remain strong relative to naphtha over the next six months. But we forecast weaker prices in the medium term as imports become more abundant during 2025.

North America

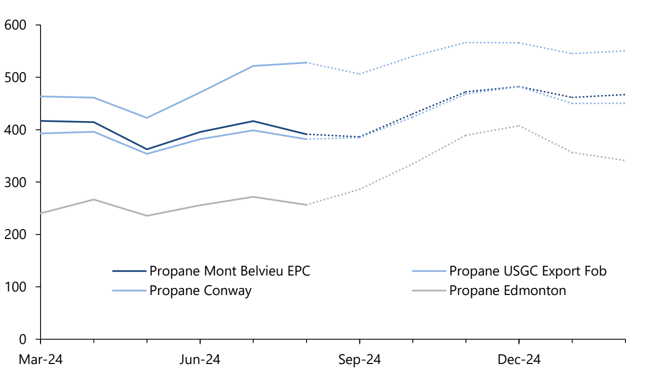
Propane and butane diverged dramatically at the US Gulf coast in August. Propane was dragged down by falling crude prices, ballooning inventories and concerns about Hurricane Francine. Butane markets focused instead on an early start to winter-specification gasoline production, which boosted demand. This provided a respite from the structural oversupply that LPG faces on the Gulf coast, but it is unlikely to last. Weak US gasoline demand means that we do not expect this level of support to be sustained once suppliers have built up comfortable working inventories of winter-specification gasoline. This should result in the spread between propane and butane narrowing in the next few months.

LPG export capacity continues to be tight, as current infrastructure is unable to handle the abundance of supply. With Hurricane Francine further disrupting shipments we expect inventories to grow even further, possibly reaching the 2015 record high of 103mn bl by mid-October. The next significant increase in export capacity is unlikely to be available for at least nine months, when the 250,000 b/d Nederland expansion comes on line. As a result, we expect inventories to remain high and Mont Belvieu prices to stay weak relative to the export price for most of 2025. The export price may find support next year as freight rates ease and Asian markets continue to demand US product.

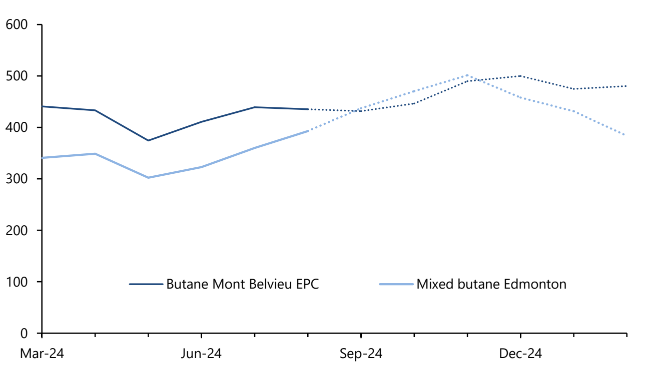
A long-anticipated rail strike in Canada lasted only 18 hours before being halted by the country's labour ministry on 22 August. Railroad employees, represented by the TCRC union, were ordered to return to work, preventing a potentially extended work stoppage. But the TCRC union has filed an appeal with the Federal Court challenging the order, creating the potential for the strike to resume.

Scheduled fractionator maintenance in September has driven spot buying interest in western Canada. This has kept Edmonton butane and propane prices supported, despite a drop in Mont Belvieu LPG prices in anticipation of potential disruption from Hurricane Francine in the Gulf of Mexico. Edmonton butane prices rose to a premium to Mont Belvieu in the second week of September, driven by increased gasoline blending demand and the fractionator turnaround. Edmonton LPG prices are expected to remain supported as Canada enters the winter heating season.

Propane fob Mt Belvieu and USGC export fob *$/t*



Butane Mt Belvieu EPC *$/t*



Freight and arbitrage

Global very large gas carrier (VLGC) rates surged in August on rising demand. Houston-Chiba rates jumped by 31pc to $119/t, the highest since 27 June, while Ras Tanura-Chiba rates rose by 36pc to $64/t, the highest since 11 July. These increases were driven by strong chartering demand in the US Gulf, which led to a vessel shortage in the Middle East, subsequently pushing rates higher either side of the Suez Canal.

Storm-related delays, including Hurricane Beryl and the closure of the Houston Ship Channel, constrained US Gulf cargo availability for several months. The easing of restrictions in mid-August has allowed for increased September loadings, although export demand still exceeds terminal capacity. This, in turn, has enabled shipowners in the Middle East to ballast to the Atlantic basin, reducing fleet availability east of Suez and pushing freight rates in the Pacific basin higher.

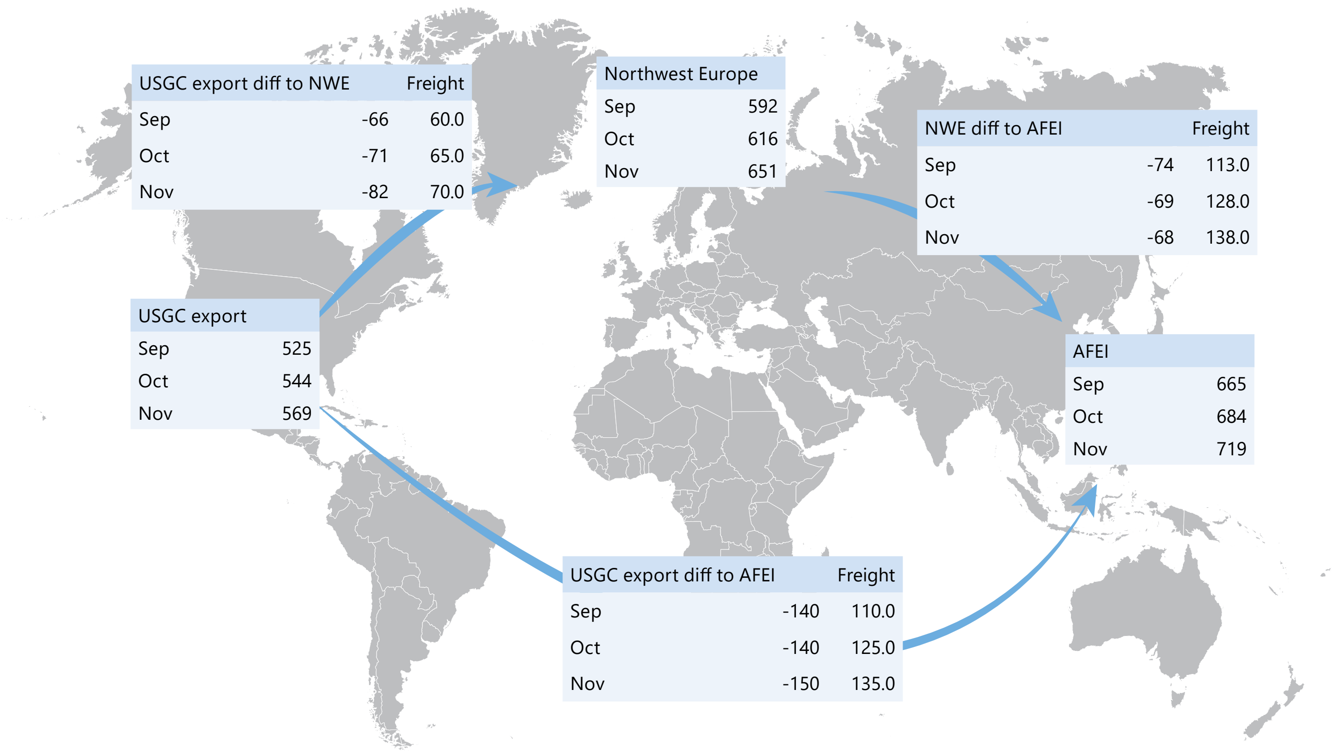
Charterers have scrambled to secure shipments to east Asia, supported by China's strong petrochemical sector, where PDH and steam cracker utilisation rates remain high at 64pc and 90.5pc, respectively. PDH capacity has increased by 340,000 t/yr in 2024, further bolstering petrochemical output. And a seasonal rise in heating demand ahead of winter has absorbed surplus vessels in the Atlantic, further boosting shipowners' earnings on long-haul US Gulf-to-Japan routes.

Short-term forecast freight rates		$/t
	Sep	Oct
VLGC Mideast Gulf-Japan	60.0	70.0
VLGC Houston-Chiba	110.0	125.0
VLGC Houston-Flushing	60.0	65.0

Panama Canal transits have been smooth since June, but auctioned slot prices could rise ahead of winter owing to increased traffic, potentially limiting VLGC crossings and keeping shipowners' offers firm. As the seasonal lull ends, higher European demand for US propane is expected to further tighten vessel availability. Rising propane prices in northwest Europe are supporting higher netbacks, prompting shipowners to favour shorter voyages. Indian LPG demand is expected to rise ahead of the Diwali festival, while east Asian imports are anticipated to grow despite negative margins. These factors may support modest freight rate increases, although significant gains are unlikely until winter demand peaks.

PROPANE ARBITRAGE MAP

$/t



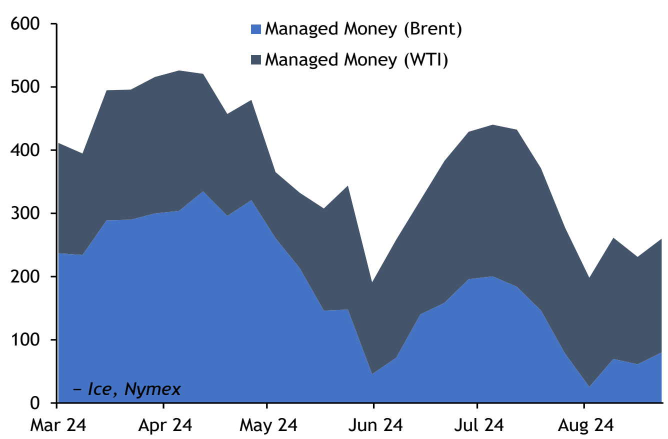
Crude overview

The bearish sentiment that has been building in the market since the start of July has now taken full hold and crude prices have fallen sharply. At the start of July, Atlantic basin benchmark North Sea Dated was trading close to $90/bl, but fell by $10/bl during the month. It looked as though a price floor might be forming in August, but this has turned out not to be the case, with the benchmark starting September by dropping by a further $5/bl.

Underpinning this steep drop in prices has been a massive sell-off in crude futures markets. The net length held by the money managers — hedge funds and other speculative investors — has more than halved since early April, when North Sea Dated was trading at $90/bl (*see graph*). Net length represents the extent to which long contracts exceed short and reflects how bullish investors are feeling. Clearly they are not feeling bullish at all now.

As we have been pointing out for some time, purely from the point of view of market fundamentals there is no real reason for this loss of confidence in the upside. Crude prices have been in backwardation — when the near-term price is above values further along the forward curve — for most of this year, and backwardation is usually a reliable indicator of a tight prompt market. Crude and gasoline inventories in the US have been falling steadily, while OECD crude and products inventories remain well below normal. And looking forward we continue to see the market remaining in deficit. But the market appears to be uninterested in this. It is instead focused on general macroeconomic weakness and the prospect of a sluggish Chinese economy, to the extent that

Net speculative length ***'000 contracts***



even sustained geopolitical tension in the Middle East has failed to lift prices.

A below-expectation second-quarter GDP growth reading of 4.7pc implies that China's 2024 target of 5pc might be missed. Consumer demand is proving particularly weak, with June retail sales up by a modest 2pc on the year — which is not unrelated to real estate sector worries after a three-year squeeze on credit. July real estate investment declined by more than 10pc from a year earlier, with contraction the trend since April 2022.

The impact of property sector weakness has been felt far and wide, with real estate accounting for about a quarter of Chinese GDP. Contraction is depressing banking sector profitability, local government finances, consumer sentiment and broader construction sector commodity demand.

Any sign of a weak Chinese economy inevitably affects price sentiment because — as far as oil markets are concerned — China matters. Apparent Chinese oil demand increased by 1.44mn b/d last year, making up about two-thirds of global oil demand growth. And Chinese oil imports have stepped up by almost 7mn b/d over the past 10 years — again, equivalent to about two-thirds of global oil demand growth for the period. So signs of slowing Chinese GDP growth and — as a result — weaker oil demand growth have dented market confidence.

The lack of official data makes it difficult to work out exactly what is happening with Chinese oil demand. But news of reduced refinery utilisation and shutdowns — Sinochem recently stopped processing at two of its three plants — suggests a difficult operating environment for refiners. Crude imports are nearly 300,000 b/d lower than a year earlier, while the supply of finished products — a proxy for oil demand — is down by 130,000 b/d in January-July. PetroChina and Sinopec, which between them supply around 80pc of Chinese demand for transport fuels, report combined sales rising by only 2pc year on year in the first quarter and dropping by 7pc in the second quarter (*see graph*).

Against this background, the confirmation from Opec+ in early August that it intended to go ahead with its plan to start returning supply to the market in October was greeted by a 5pc fall in prices. The re-emergence of tensions in

Summary of global oil balance *mn b/d*

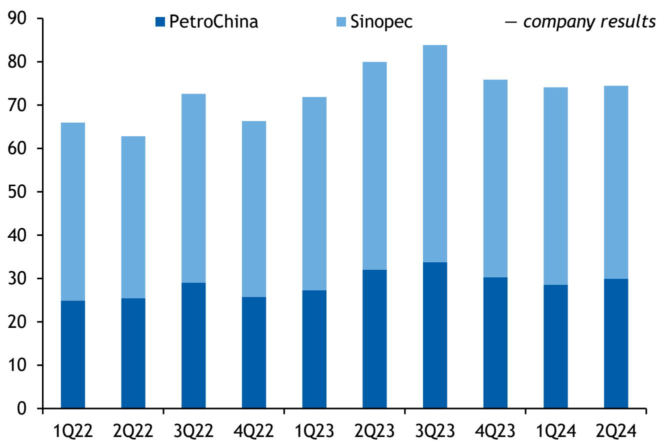
	1Q23	2Q23	3Q23	4Q23	2023	1Q24	2Q24	3Q24	4Q24	2024	2025	2026
Demand	99.74	101.39	102.19	101.82	**101.29**	100.85	103.09	103.18	103.39	**102.62**	**103.78**	**104.62**
Supply	101.09	100.95	101.30	102.37	**101.43**	101.18	101.98	101.76	102.08	**101.75**	**104.40**	**108.04**
Opec crude	27.85	27.31	26.69	26.92	**27.19**	26.76	26.73	26.33	26.57	**26.60**	**27.78**	**29.46**
Opec NGL and condensate	5.27	5.27	5.27	5.27	**5.27**	5.40	5.40	5.40	5.40	**5.40**	**5.47**	**5.73**
Non-Opec crude and NGL	62.50	62.24	62.85	64.08	**62.92**	63.31	63.47	63.33	63.92	**63.51**	**64.94**	**66.57**
Other supply	5.48	6.13	6.50	6.10	**6.05**	5.72	6.38	6.69	6.19	**6.25**	**6.20**	**6.29**
Global balance*	1.32	-0.31	-0.89	0.59	**0.18**	0.20	-1.19	-1.51	-1.37	**-0.97**	**0.61**	**3.43**

**equivalent to global stock change*

Libya last month and the resulting sharp fall in the country's crude production and exports completely failed to move the market, although in full keeping with the bearish mood, mere suggestions of a resolution to the latest crisis helped pull prices even lower. Crude prices have also been dragged down in recent trading by worse than expected US manufacturing PMI data, which continue to point to contraction. And fully revealing of the market's current mindset is speculation that even an anticipated 0.5pc cut in US interest rates might be taken as bearish for crude prices since such a decision would reflect the US Federal Reserve's fears of a worsening US economy.

As expected, persistent price weakness has spurred Opec+ to reconsider its plans to start returning more crude to the market from October, and the alliance has now agreed to delay the start of the increase until December. In our view this will increase the supply deficit in the market and, in theory, provide more potential for prices to rise. The recent reduction in speculative net length has reduced market length to a level

Domestic transport fuel sales *mn t*



only slightly higher than in the early days of the pandemic in 2020, so there is considerable upside potential given the scope for investors to rebuild long positions should market sentiment turn bullish again.

But market fundamentals currently appear to have little or no bearing on market sentiment and price direction. And the latest Opec+ agreement is almost certainly too feeble to change the mood of the market. Given the extent of recent price falls, merely agreeing to delay the process of tapering output cuts by two months is a weak response and hints at a reluctance to make the hard decision needed to turn the market — to abandon the move to increase production and actually cut output further. So prices are unlikely to rise and while we have reduced our forecast for North Sea Dated in the near term to $78/bl, there is a real possibility that prices will fail to even return to that level.

Turning point?

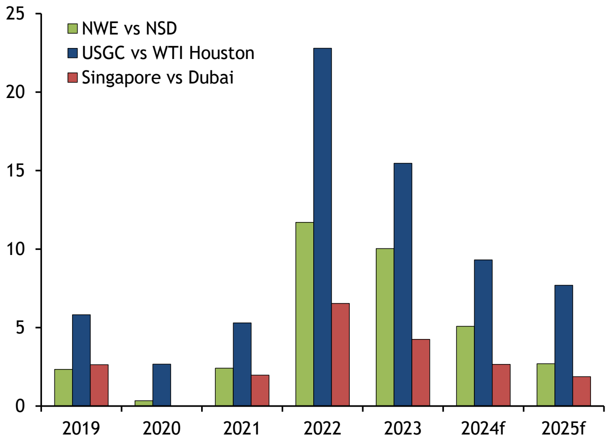
The market now is in a very unstable situation. Oil demand growth is on a much weaker trend and non-Opec+ supply growth is robust and set to accelerate. But Opec+'s own analysis of the market is overly optimistic in its favour and, for whatever reason, is clearly overestimating forward demand for its crude. This will make decision making problematic at a time when many producers appear to be experiencing mounting quota fatigue.

Finding the right strategy in itself will be challenging enough. Finding the collective will to make it succeed may prove even more so. We are firm believers in the exercise of market management, which has been the dominant feature of the crude market for decades. But sometimes it takes the crisis of a price collapse to reinvigorate the spirit needed to collectively deliver the actions necessary. It is starting to feel that such a moment may be approaching.

Refining economics

Fluid catalytic cracking (FCC) refining margins weakened across the board in August, as falls in product prices outpaced those for crude. The oil complex has been weighed on by a worsening outlook for global oil demand, particularly in China, and the start-up of new refining capacity in Nigeria, Mexico and China. This has resulted in refining margins largely returning to 2019 levels, heralding the end of the sustained strength that margins enjoyed from 2022-23 (*see graph*).

Regional FCC refining margins ***$/bl***



Refining margins in Singapore against Dubai crude fell by 85¢/bl to average $2.74/bl in August. Asia-Pacific margins are under pressure owing to a subdued outlook for Chinese oil demand growth this year. *Argus Consulting* currently forecasts 400,000 b/d of demand growth in China this year compared with last year, but this has been revised down from the 700,000 b/d forecast at the start of this year. This has been a common theme across market analysts as Chinese macroeconomic data have consistently disappointed as the year has progressed, leading to downward demand revisions.

New refining capacity may further pressure margins in the region. The 400,000 b/d Yulong refinery in China began running crude in late August and will start up further units in September. The refinery is primarily an integrated petrochemical facility, but with 130,000 b/d of FCC, 127,000 b/d of reforming and 100,000 b/d of hydrocracking capacity, it will also produce a considerable amount of transport fuels. It will take some months for supply from the refinery to become consistent as the start-up process continues, but this will eventually contribute to a decline in Asia-Pacific refining margins over the remainder of this year, with the FCC margin slipping to average just 96¢/bl in the fourth quarter.

In the US Gulf coast, refining margins declined by $1.11/bl in August from July and by $12/bl compared with a year earlier. Margins last month were pressured by weak transport fuel demand and high refinery throughputs. Further downside for refining margins may emerge if the start-up of Mexican state-owned firm Pemex's 340,000 b/d Olmeca refinery curtails export demand to Latin America. The long-awaited refinery began operating in the past few months, reaching half capacity in early August and producing diesel during test runs. Olmeca was targeting running at full capacity by the end of August, which would enable it to produce 175,000 b/d of gasoline and 130,000 b/d of diesel. The US currently exports around 300,000 b/d of gasoline to Mexico.

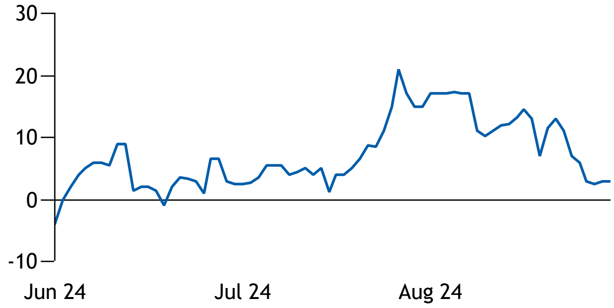
The northwest Europe FCC margin against North Sea Dated fell by $1.69/bl to average $3.04/bl — a 30-month low. Export demand to west Africa is declining as Nigeria's Dangote refinery continues to ramp up operations. The 650,000 b/d plant is still in the first phase of its start-up, running at below half of its capacity. But Dangote produced gasoline in August for the first time, having obtained regulatory approval to start up its 247,000 b/d FCC and 27,000 b/d alkylation units in April and May, respectively. Gasoline exports from Europe to Nigeria have already fallen to around 100,000 b/d this year, from closer to 300,000 b/d in 2022, Vortexa data show, and export demand will be further curtailed as the refinery approaches full capacity, at which point it is slated to produce 350,000 b/d of gasoline.

Refining margins					***$/bl***
	Jul	**Aug**	**Sep**	**Oct**	**Nov**
Northwest Europe					
vs North Sea Dated	4.73	3.04	2.60	2.80	2.70
vs Johan Sverdrup	0.66	0.13	-1.31	-1.09	-1.21
Mediterranean					
vs Kebco cif Augusta	1.40	0.03	-0.81	-1.64	-1.91
vs CPC Blend	4.92	4.21	3.60	4.90	4.50
US Gulf coast					
vs WTI Houston	7.70	6.59	6.40	4.90	4.20
vs Mars	2.55	3.37	2.80	0.90	-0.70
Singapore					
vs Dubai	3.59	2.74	1.90	1.30	0.80
vs ESPO Blend	13.60	13.52	11.30	11.30	10.70

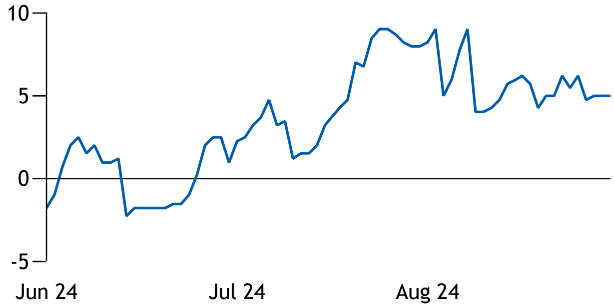
Gross refining margins calculated based on FCC unit yields

LPG swaps

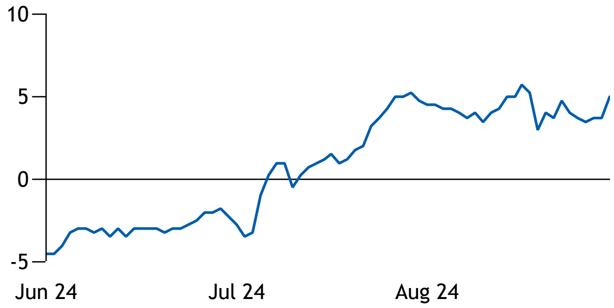
Propane NW Europe month 1 vs month 2 $/t



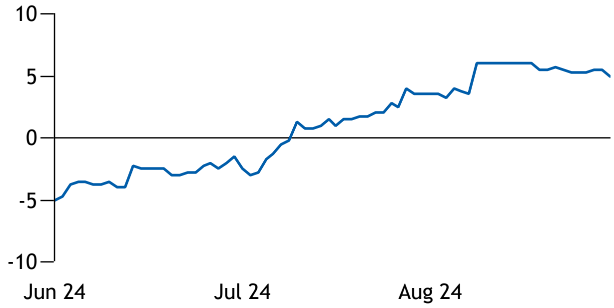
Propane NW Europe month 2 vs month 3 $/t



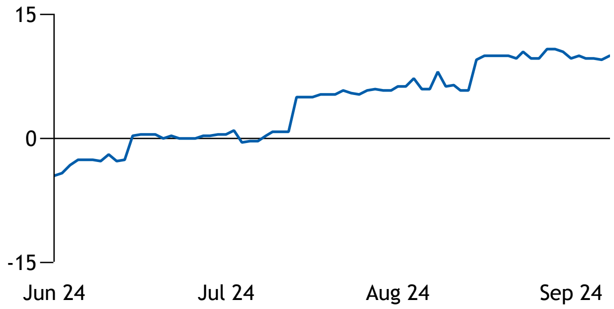
Propane NW Europe month 3 vs month 4 $/t



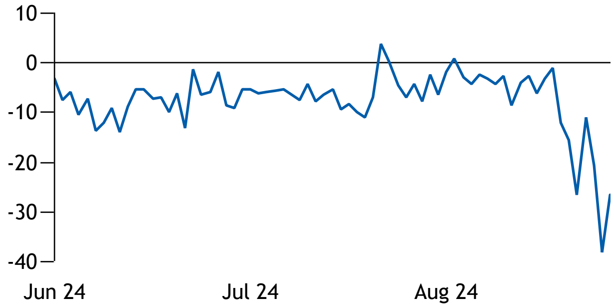
Propane NW Europe month 4 vs month 5 $/t



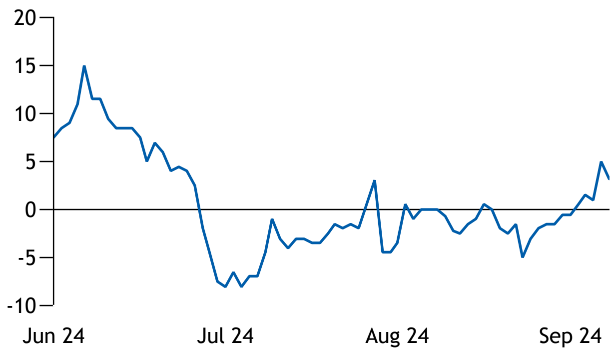
Propane NW Europe month 5 vs month 6 $/t



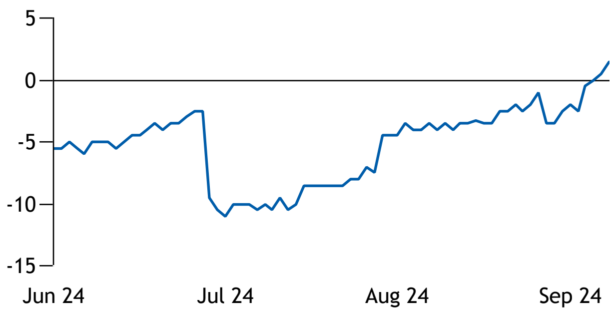
Mont Belvieu month 1 vs month 2 $/t



Saudi CP month 1 vs month 2 $/t



Saudi CP month 2 vs month 3 $/t



LPG developments to watch

Date	Development
China PDH start-ups	
2024	Sinochem Ruiheng
2024	Guoheng Chemicals
2024	Lihuayi Weiyuan Chemical
2024	Ningbo Jinfa No 2
2024	Fujian Soft Packaging Meide
2024	Qingdao Jinneng No 2
2024	Shandong Zhenhua Chemical/Yatong Petchem
2024	Shandong Zhonghai Jingxi
2025	Yuanjin New Material
2025	Juzhengyuan No 3
2025	Sinopec Zhenhai
2025	Oriental Maoming No 2
2025	Wanhua No 2
2026	SP Chemical

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Issue 8	8 August
Issue 9	12 September
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