

Argus Chlor-Alkali Outlook

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Chlor-alkali experts

George Eisenhauer
George Leads the global chlor-alkali team. He has 30+ years' experience with roles in acquisition and asset management as well as operations control and strategic objectives, prior to his consulting career. Before joining to Argus in 2012, he was director Chlor-Alkali for IHS. George's past experience also includes roles at FMC Technologies, Dow Chemical and Union Carbide. He holds a BSc in Chemical Engineering from University of Texas and an MBA from Rice University.

Bernard Law
Bernard Law is Editor and covers the chlor-alkali and vinyl markets in Asia. Bernard has more than 25 years of experience in the chemical industry in Asia, holding various responsibilities in market and competitive analysis, benchmarking, sales, marketing, and business development. He spent 13 years working for specialty and commodity chemicals in the Asia-Pacific region. He generated benchmarking pricing and assessments, including northeast Asia and southeast Asia caustics to alumina indexes. He also contributes to single client consulting projects.

Stephanie Koenig
Stephanie is Editor for European Chlor alkali market she oversees contents and analytical standards across the European operations, spanning from editorial, to outlooks, analytics and events. She also contributes to single client consulting projects and has over 15

Chlor-alkali analysis

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Outlook executive summary

Contract negotiations begin for 2026 amid tariff changes to demand.

What's changed

- The economic crisis in the US continues to get worse, with the US posting record trade deficits after the import tariffs were reduced.
- Venator, a titanium dioxide producer, has essentially ceased operations, forcing caustic soda demand loss at all of its sulphate plants in Germany, Spain, and Malaysia, while the chloride plant in the UK continues to operate.
- The impacts of the import tariffs are beginning to be felt through the global supply chain as companies plan to adjust production plans to minimise the impacts of tariffs. This may mean fewer automobiles produced in Europe and more automobiles produced in the US, for example.

Price Forecasts (USD/dmt)	Sept 25	Oct 25	Nov 25	Dec 25	Jan 26
US Gulf fob	420	440	450	440	430
Northeast Asia fob	405	410	405	405	390
Northwest Europe domestic contract	760	-	-	-	787

*Forecasts for monthly or quarterly contracts that are under active negotiation at the time of publication are redacted from publication to avoid influencing discussions.

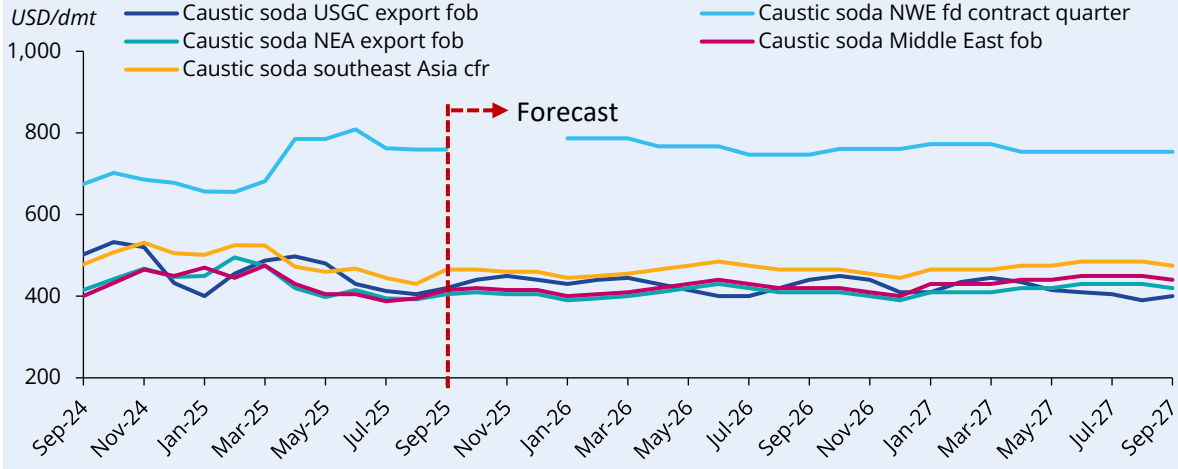
Short-term view, quarter ahead

- Buyers and producers are beginning to plan for the autumn maintenance season, with some European buyers locking in volumes from the US Gulf coast to be delivered during the peak maintenance season in Europe and US East coast buyers doing the same with European product.
- The US Gulf coast failed to experience a hurricane so far this year, leading some producers to have elevated inventories, but they appear manageable for now.

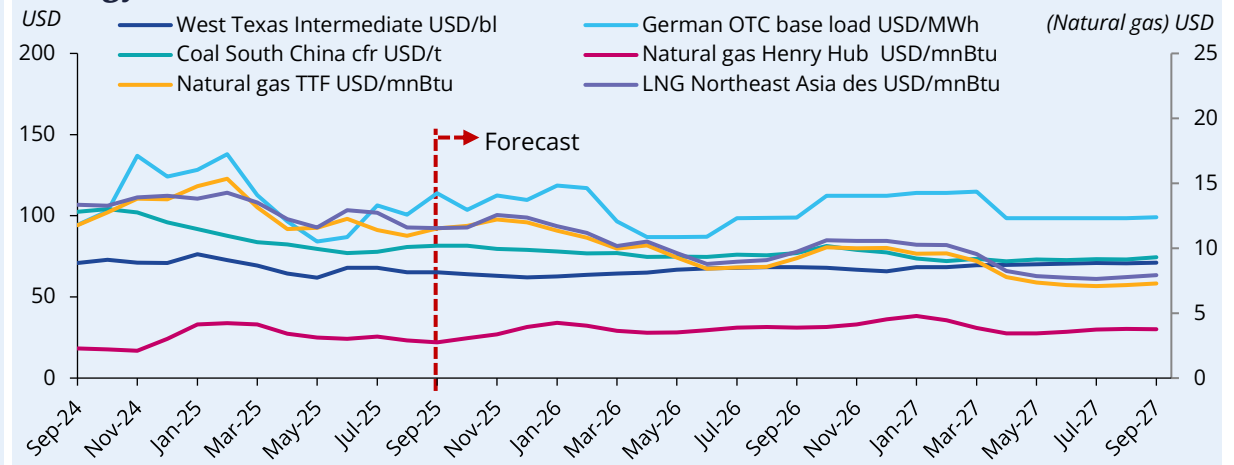
Long-term view, 24 months ahead

- As manufacturers gear up for 2026 production runs, the impact on demand will start to be felt towards the end of this year. This may result in some sizeable shifts in where chlorine is consumed and caustic soda is produced, resulting in an anticipated increase in caustic soda trade.
- With the European ETS (Carbon Emission Trading System) set to lower carbon emissions in 2026, this will further make exports of various chlor-alkali derivative products less competitive in international markets and subsequently reduce chlor-alkali demand in Europe further.
- Further asset optimisation is anticipated over the next 24 months, as the globe adjusts to the highly competitive exports from China.

Caustic Soda Price Forecast



Energy Price Outlook



Region	Forecast Data	Unit	09-25	10-25	11-25	12-25	01-26	02-26	03-26	04-26	05-26	06-26	07-26	08-26	09-26	10-26	11-26	12-26	01-27	02-27	03-27	04-27	05-27	06-27	07-27	08-27	09-27
NAM	WTI	USD/bl	65	64	63	62	63	64	64	65	67	68	68	68	68	68	67	66	68	68	70	70	70	71	71	71	71
	Natural Gas	USD/mn Btu	2.7	3.1	3.4	3.9	4.3	4.0	3.6	3.5	3.5	3.7	3.9	3.9	3.9	3.9	4.1	4.5	4.8	4.4	3.9	3.5	3.4	3.6	3.7	3.8	3.8
	Electricity	USD/KWH	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04
	Caustic soda Export fob USGC	USD/dmt	420	440	450	440	430	440	445	430	415	400	400	420	440	450	440	410	410	435	445	435	415	410	405	390	400
	Chlorine USGC contract	USD/t	825	815	815	810	780	780	770	760	760	750	720	720	710	685	685	685	665	665	665	650	650	650	635	630	665
	Hydrochloric Acid US Midwest	USD/sst	325	315	315	315	330	330	325	325	320	315	315	310	305	305	305	300	285	285	280	270	270	265	255	255	250
	ECU Cash Cost	USD/ECU	296	305	313	328	342	336	325	321	322	327	332	333	332	333	339	350	362	352	336	325	325	329	333	335	334
NWE	Natural Gas TTF	USD/mn Btu	11.5	11.7	12.2	12.0	11.4	10.8	10.0	10.2	9.3	8.4	8.5	8.6	9.2	10.1	10.0	10.0	9.6	9.6	9.0	7.8	7.3	7.2	7.1	7.2	7.3
	Electricity	USD/KWH	0.11	0.10	0.11	0.10	0.78	0.11	0.09	0.08	0.08	0.08	0.09	0.09	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.09	0.09	0.09	0.09	0.09	0.09
	Caustic soda Northwest Europe Domestic Contract	€/dmt	650	-	-	-	670	670	670	650	650	650	630	630	630	640	640	640	650	650	650	630	630	630	630	630	630
	Caustic soda Northwest Europe Domestic Contract	USD/dmt	760	-	-	-	787	787	787	767	767	767	747	747	747	761	761	761	773	773	773	754	754	754	754	754	754
	ECU Cash cost	USD/ECU	555	531	552	545	556	553	507	484	485	486	512	512	512	542	543	542	553	553	555	518	518	518	519	518	520
NEA (China excluded)	Electricity	USD/KWH	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	
	Coal South China cfr (5,500kcal/kg)	USD/t	82	82	80	79	78	77	77	75	75	75	76	76	77	81	79	77	74	72	73	72	73	73	73	74	
	Caustic soda Export fob NEA	USD/dmt	405	410	405	405	390	395	400	410	420	430	420	410	410	410	400	390	410	410	410	420	420	430	430	420	
	ECU Cash Cost	USD/ECU	359	359	355	354	358	356	357	353	354	354	356	356	357	364	360	358	357	355	357	356	358	357	358	358	360
China	Electricity	USD/KWH	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
	Coal South China cfr (5,500kcal/kg)	USD/t	82	82	80	79	78	77	77	75	75	75	76	76	77	81	79	77	74	72	73	72	73	73	73	74	
	Caustic soda Export fob NEA	USD/dmt	405	410	405	405	390	395	400	410	420	430	420	410	410	410	400	390	410	410	410	420	420	430	430	420	
	ECU Cash Cost	USD/ECU	303	303	299	299	301	300	301	297	298	298	300	299	301	307	303	301	300	298	300	299	301	300	301	300	302
SEA	Caustic soda SEA cfr	USD/dmt	465	465	460	460	445	450	455	465	475	485	475	465	465	465	455	445	465	465	465	475	475	485	485	475	
ME	Caustic soda ME fob	USD/dmt	415	420	415	415	400	405	410	420	430	440	430	420	420	420	410	400	430	430	430	440	440	450	450	440	

*Forecasts for monthly or quarterly contracts that are under active negotiation at the time of publication are redacted from publication, to avoid influencing discussions.



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Americas review

Ethylene costs have moderated and will support caustic soda production in September.

SUPPLY

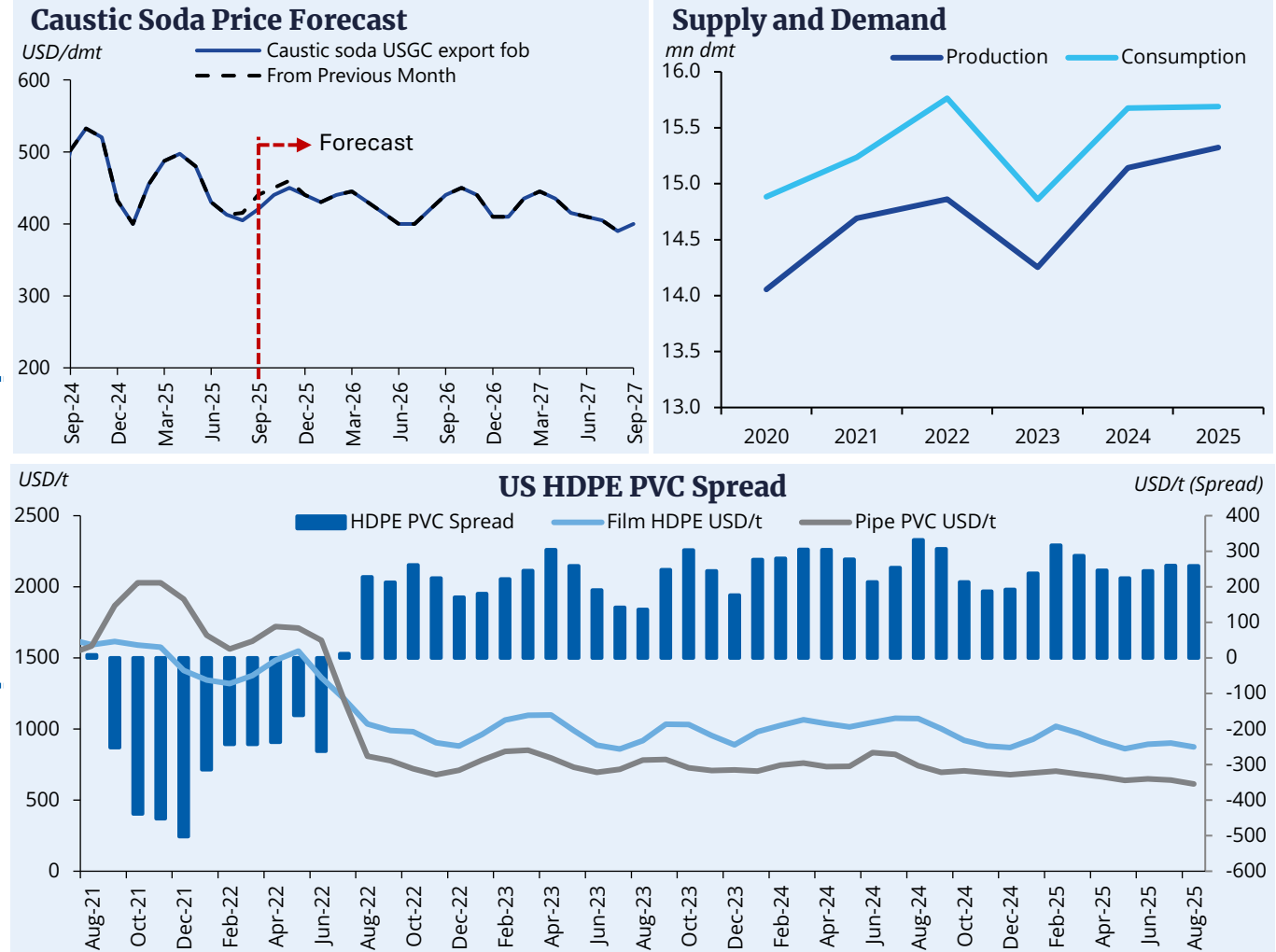
- ▶ The lack of hurricanes in the US Gulf coast so far this summer has allowed producers to run at planned rates and has led to still manageable inventory builds.
- ▶ US ethylene prices have fallen, allowing PVC producers to run at higher rates in September and increase caustic soda supply. Some of this increase is being offset by planned maintenance shutdowns.
- ▶ Olin is set to shut down 450,000 ECU's of capacity by the end of this month. This will be offset to a certain extent by Dow's closure of propylene oxide production at Freeport, TX.
- ▶ The autumn maintenance season on the US Gulf coast is limiting caustic soda supply, primarily in October, but producers are conserving inventories to ensure they meet contractual commitments. December may see US Gulf coast producers attempting to destock at the end of the year with potentially large volumes of caustic soda destined for Australia.

DEMAND

- ▶ Pulp mill closures in the US continue to impact caustic soda demand today as well as into the future, with about 30,000 dmt/yr of caustic soda demand closures announced.
- ▶ The full impact of the 50pc import duty on products from Brazil has not fully materialized, but it is expected to support caustic soda demand in the pulp and paper sector in the US. Pulp production that was destined for the US from Brazil is expected to be directed to Asia.
- ▶ With US import tariffs mostly settled, 2026 production schedules are being planned and should support stronger caustic soda demand in the domestic US market into a broad number of sectors, including industrial soaps.

SENSITIVITY

- ▶ Oil prices and the ramping of production by Opec are having an impact on the spread between US natural gas prices and oil prices. As this spread narrows, it could lead to further production of PVC in Asia and displace US Gulf coast production. Falling coal prices in China could also lead to stronger PVC production and replace USGC production.
- ▶ The US Federal Reserve will cut interest rates by 75 basis points, some of the largest banks said. This could help support domestic demand for PVD and increase caustic soda supply. The failure of the banks to properly forecast interest rate cuts could have a significant impact on the forecasted supply.



Northwest Europe review

Slow chlorine demand and further maintenance will depress operating rates.

SUPPLY

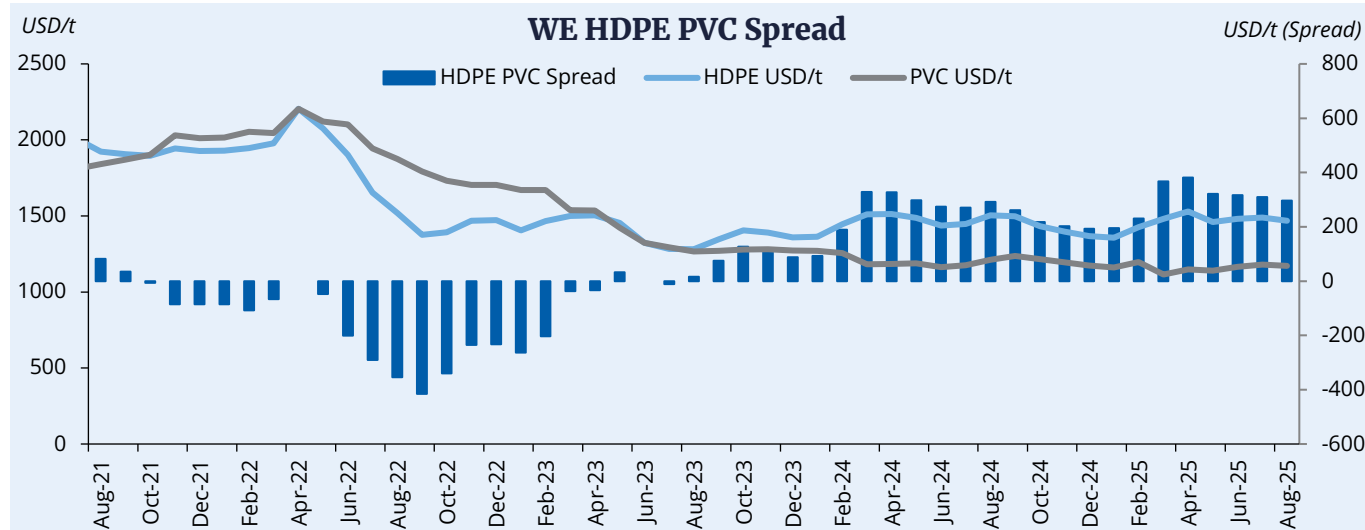
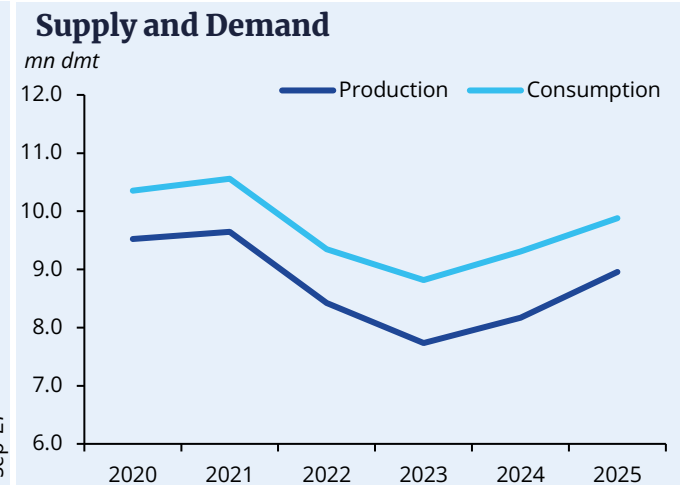
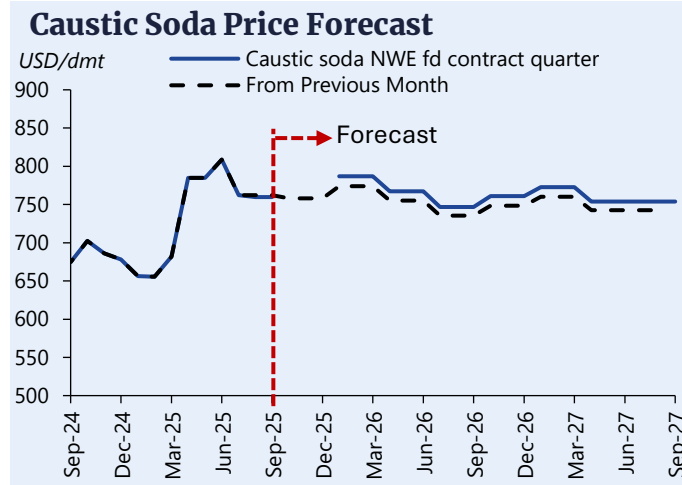
- ▶ Chlor-alkali producers are facing a challenging second half of the year with a number of factors limiting operating rates. Chlorine offtake is forecast to remain depressed because of a combination of slow consumption, including into vinyls, and customers working with minimal stocks towards the end of the year. A small maintenance season with turnarounds in all sub-regions will bring the potential for some more unplanned disruptions, but any expected production losses are offset by restocking efforts in advance.
- ▶ In the UK, Vynova's start-up of its new EDC unit and subsequent ramp-up of chlor-alkali production is boosting caustic soda supply there, but this will likely be countered by a loss in chlorine demand into vinyls in Tessenderlo from November when Vynova's nearby PVC unit is set to close permanently. The two events are to have no net impact on overall caustic soda supply. It is not certain at all that 2026 market conditions will be more favorable and bring about higher capacity utilization. The industry appears stuck in a trough and may still only be at the start of capacity consolidation along the supply chain.

DEMAND

- ▶ Chlorine and caustic soda demand are flat versus 2024, and the year will likely conclude without a recovery in offtake. Cost challenges and an overall difficult economic environment stifle a rise in consumption and any investment that could bring back some growth. In the short term, fourth-quarter chlorine offtake will struggle to reach levels seen in the first half of the year.
- ▶ Demand into vinyls will take its usual hit when construction activity slows during the cool winter months, and a recent rise in PVC supplies from Asia may contribute to slower capacity utilisation once the product moves through the market. There are also indications that some customers are engaging in minimal restocking efforts after the summer and might operate with rather low inventories.
- ▶ Caustic soda offtake may slow to a lesser extent with demand dropping off towards the end of the fourth quarter. There may thus be an imbalance between chlorine offtake and caustic soda demand, resulting in a firmer caustic soda market balance. Any unexpected and longer-lasting operational issues have the potential to tip caustic soda into tightness.

SENSITIVITY

- ▶ Northwest Europe is about to enter its next round of quarterly price negotiations, and a mostly balanced market with a tendency to edge towards tightness in 4Q may support producers in their idea to raise levels. This could mostly stem from a seasonal imbalance between chlorine and caustic soda demand, with caustic soda as the stronger component of the ECU. There are currently no indications for more severe supply limitations, so upward movements, if any, are expected to be modest.
- ▶ The uncertainty around import tariffs for US-origin products will still weigh on the market's mind. It is possible but not certain that the fourth quarter will bring clarity about whether or not the EU's proposal to remove import duties on US-origin caustic soda will be approved. If it will, the prospect of more competitively priced imports may depress European domestic prices where customers have access to this material.



Northeast Asia review

Caustic soda prices stabilized amid market uncertainty arising from trade conflicts.

SUPPLY

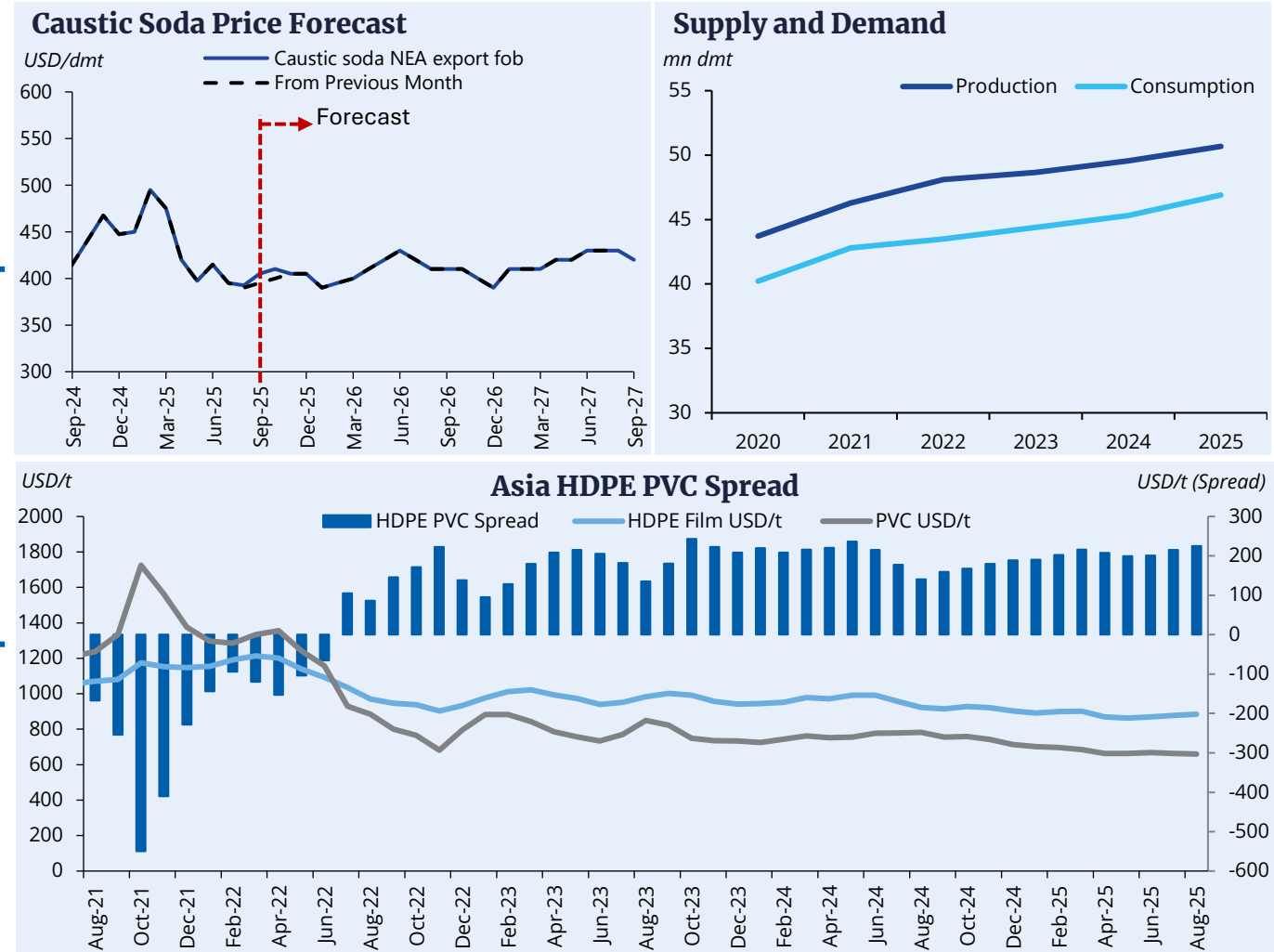
- ▶ Supply position of caustic soda in northeast Asia is largely balanced.
- ▶ Overall run rates in China stabilised at 83-84pc. Furthermore, full start-up of Tianjin Bohua's expanded capacity of 300,000dmt will raise more export availability from early Q4.
- ▶ Outside China, many of the major integrated producers have scaled down to around 70-75pc run rates due to worsening chlorine netback, especially on the vinyl value chain. Furthermore, slowing domestic consumption forces producers to divert more inventory into the export market.

DEMAND

- ▶ Caustic consumption patterns across Asia were largely mixed as steadier caustic demand from the alumina and battery upstream sectors in India, China, and Indonesia helped to maintain steadier caustic prices and to prevent it from trending down.
- ▶ However, caustic demand from the non-alumina sectors was showing signs of slowing amid market uncertainties arising from the trade conflicts and changes in policies. Caustic demand in some of the domestic markets has also slowed, especially outside China in northeast Asia and parts of the southeast Asian markets.
- ▶ Furthermore, buyers were getting more cautious, and some even opted to stay on the sidelines. This has further dampened market sentiment in the region.

SENSITIVITY

- ▶ Northeast Asia remains the largest caustic soda exporting region globally, especially from China, which provides a steady supply base to the export market. Exporting countries outside China also contributed significantly to the export market.
- ▶ Any price fluctuations in the market can affect the overall position of the region. The impact of export prices from India, the Middle East and southeast Asia was nominal, as producers use northeast Asia fob prices to benchmark their selling decisions.
- ▶ The prevailing US tariff duties imposed on the imports of caustic soda in the USWC and Canada's west coast have not altered the trade flow from northeast Asia to the region.



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America cash cost analysis

Energy prices continue to decline.

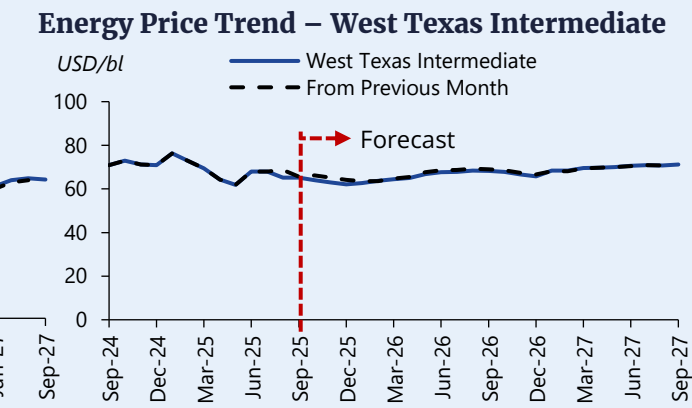
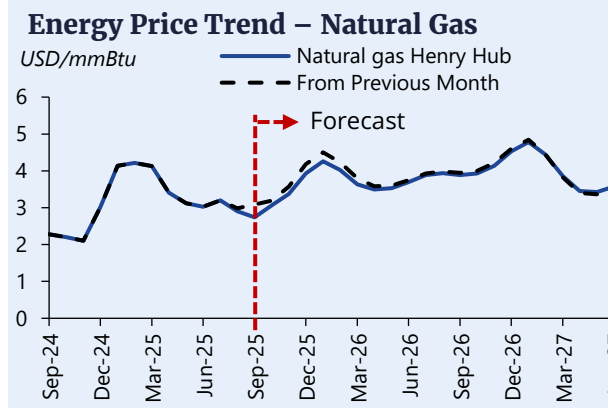
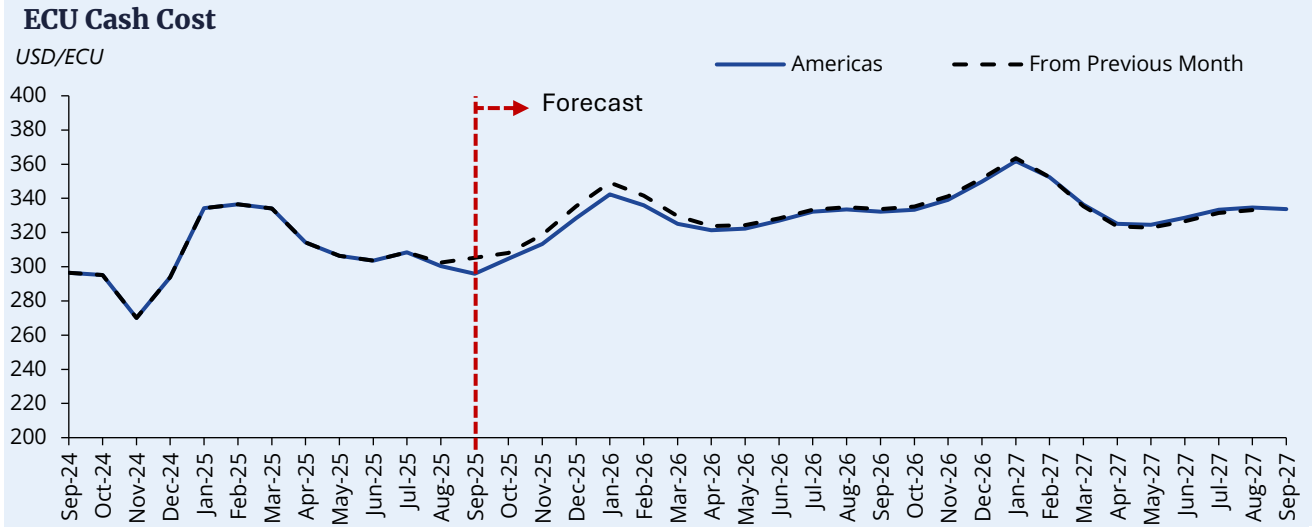
ECU Americas

Cash Cost

- Changes in natural gas prices have impacted ECU cash cost values and the anticipation of higher operating rates in the coming year, as many banks are forecasting interest rate cuts, which should follow through to higher demand for PVC and increased operating rates.
- The US is preparing for the loss of 450,000 asbestos diaphragm ECU at the end of this month and the addition of approximately 900,000 membrane ECU in July of next year. This addition will be offset by the retirement of about 500,000 asbestos diaphragm ECUs.
- The US is preparing to lose another 600,000t/yr of chlorine consumers at the end of September 2025. This should have minimal impact on the market balance, as a similar volume of caustic soda demand is anticipated to be lost.
- Brazil has temporarily idled 140,000 diaphragm ECUs since the beginning of September.

Energy

- Prices at the Henry Hub averaged \$2.91/mmBtu in August, a decrease of 9.1pc from July's price owing to hotter-than-normal weather. *Argus* forecast average price in September to decrease by 5.7pc to \$2.74/mmBtu with warm weather.
- The EIA expects US natural gas production to be stable next year because of rising prices and increased LNG exports.
- Inventories are expected to peak ahead of winter at about 3.88 Tcf, or 3.3pc higher than the average, because of higher gas prices and lower demand from the power sector, according to EIA.



Northwest Europe cash cost analysis

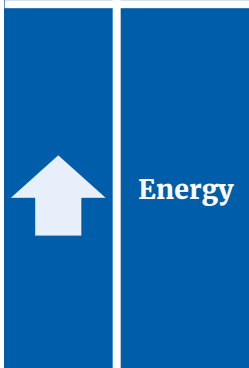
Winter cash cost increase will be difficult to fully offset through caustic soda pricing.

ECU Northwest Europe



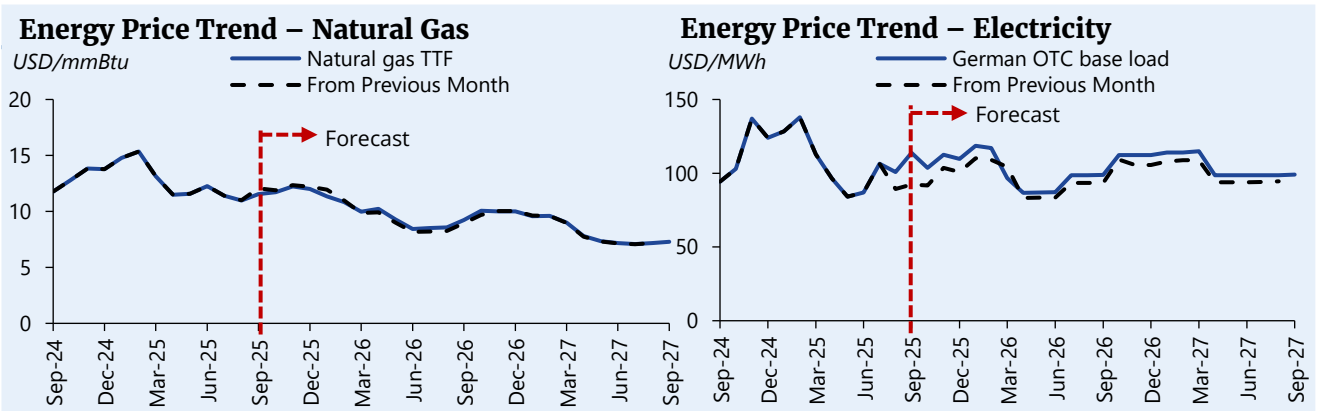
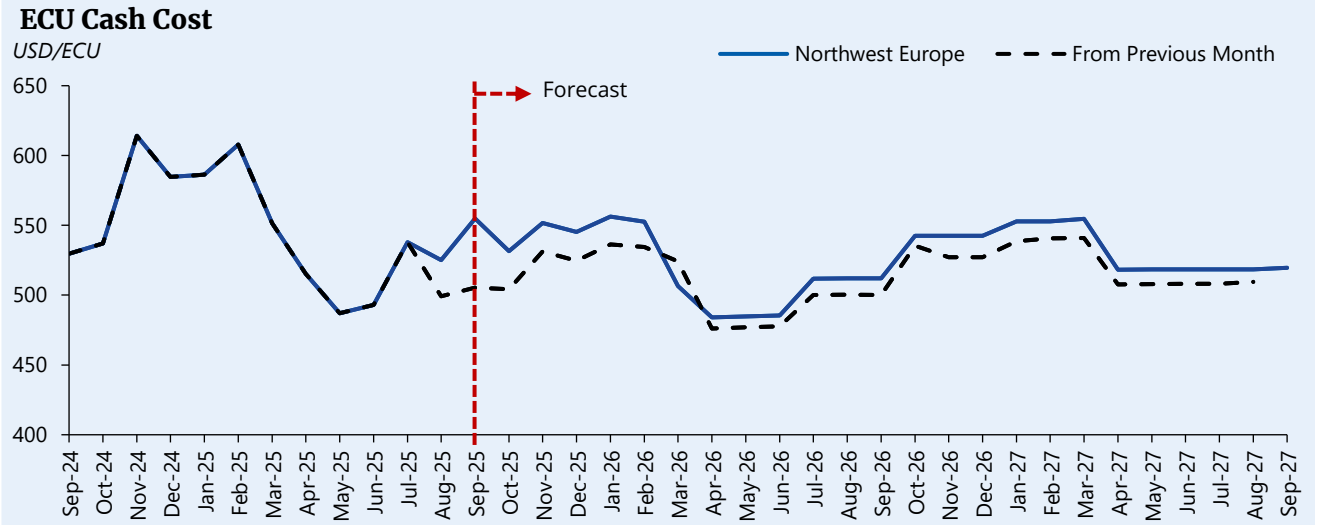
Cash Cost

- The link between caustic soda prices and ECU cash costs will likely remain broken in the fourth quarter, despite producers' attempts to recover some margin based on cost and supply/demand fundamentals. They point to an expected rise in average power prices for their energy mix, and we do forecast higher electricity prices.
- German OTC prices are forecast to increase to \$110/MWh during the winter compared with an average \$100/MWh this month, and this would add to already existing cost pressure from years of lower sales volumes, higher fixed costs and other factors.
- Cash costs are to average \$532/ECU in September and may peak at \$557/ECU in January before dropping off again in spring 2026. US ECU cash costs in January 2026 cash costs are forecast at \$342/ECU, lower than Europe by \$200/ECU.
- Producers are more likely to recover a proportion of the cost increases by raising fourth-quarter prices on the back of falling supply rather than through a cost argument.



Energy

- Prices at the Dutch TTF averaged \$10.96/mmBtu in August, a decrease of 3.9pc from the previous month's average. Argus forecasts prices to increase by 5.2pc in September to \$11.53/mmBtu because of the expected rise in seasonal demand.
- Power sector gas demand reached 186mn m³/d in August, 28mn m³/d above the forecast because of slightly higher power demand.
- Storage injection across Europe was 322mn m³/d in August, down by 13mn m³/d but 41mn m³/d higher than year earlier, raising the inventories to over 78pc full this month.



Northeast Asia (excluding China) cash cost analysis

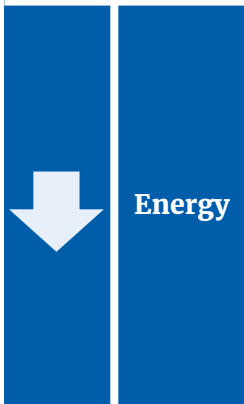
Northeast Asia's ECU cash costs inched higher on the back of rising coal prices.

ECU Northeast Asia (excluding China)



Cash Cost

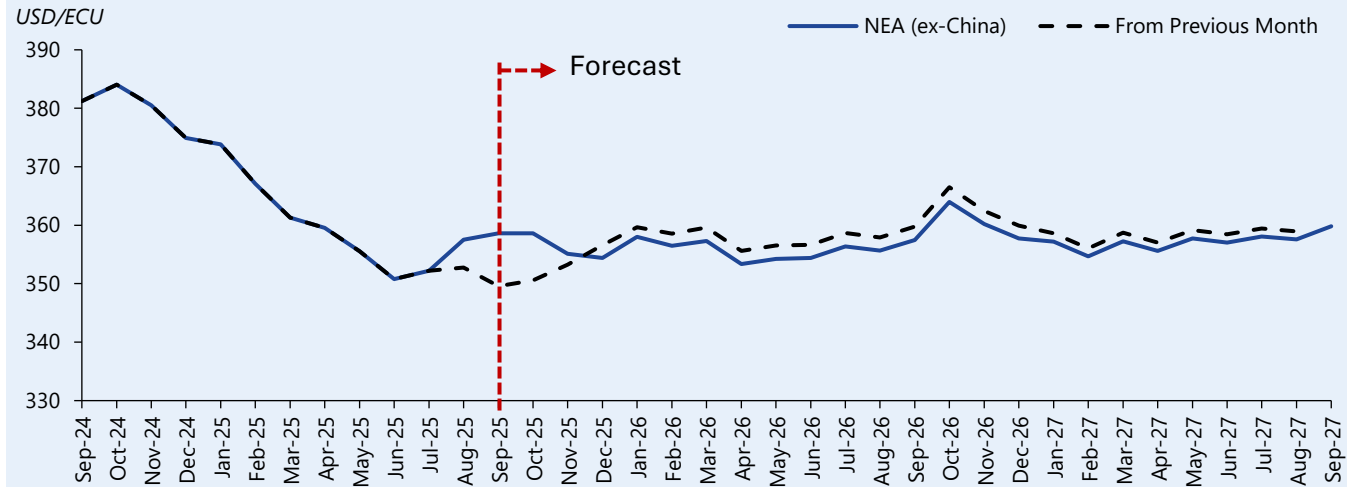
- The overall average ECU cash cost in northeast Asia, excluding China, was assessed marginally with Argus' coal and NEA LNG forecast at the end of Q3.
- Coal prices increased marginally because of a continuation of stricter domestic production oversight in China through October and rain-related supply disruption in Indonesia.
- The average ECU cash cost among northeast Asian producers outside China has remained at around \$56/ECU, more than Chinese producers.
- Most chlor-alkali producers from outside China derive their power supplies from the national grid; only a few major producers are equipped with cogeneration, especially in Taiwan and Japan.
- Coal prices are expected to be firmer as the winter months approach.



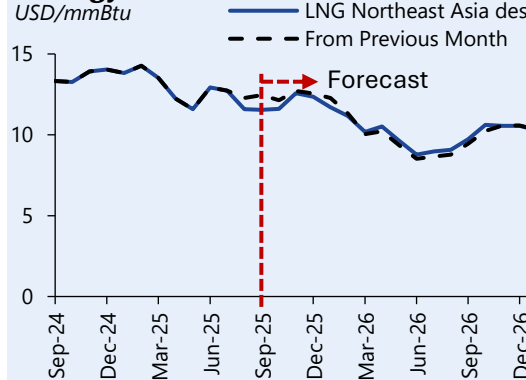
Energy

- Northeast Asian LNG prices averaged \$11.60/mmBtu in August, a decrease of 8.9pc from the previous month because of weak demand. Argus expects September's average price to further decrease by 0.4pc to \$11.55/mmBtu.
- Japan's LNG imports in August were 5.4mn t, a drop by 6.5pc on the year because of weak power demand.
- South Korea's LNG import recorded to 5.1mnt in August, an increase of 1.34mn t on year, attributed to higher power sector gas demand from hotter than normal weather across Q3.

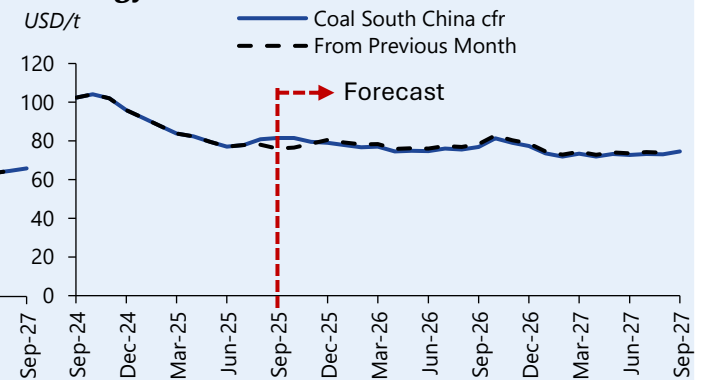
ECU Cash Cost



Energy Price Trend – Natural Gas



Energy Price Trend – Coal



China cash cost analysis

China's ECU cash costs rose marginally.

ECU China



Cash Cost

- China's ECU cash costs were marginally firmer, in line with the latest *Argus* coal forecast, as energy prices at the end of Q3.
- Chinese producers still have an advantage in ECU cash costs of \$56/ECU compared with northeast Asia producers outside China.
- Coal remained the main source of energy for power generation. Coal prices are expected to remain firm in the near term as the winter months approach.
- A marginal increase in energy prices has lifted the ECU cash cost for Chinese producers marginally higher. There is no impact on their competitiveness.

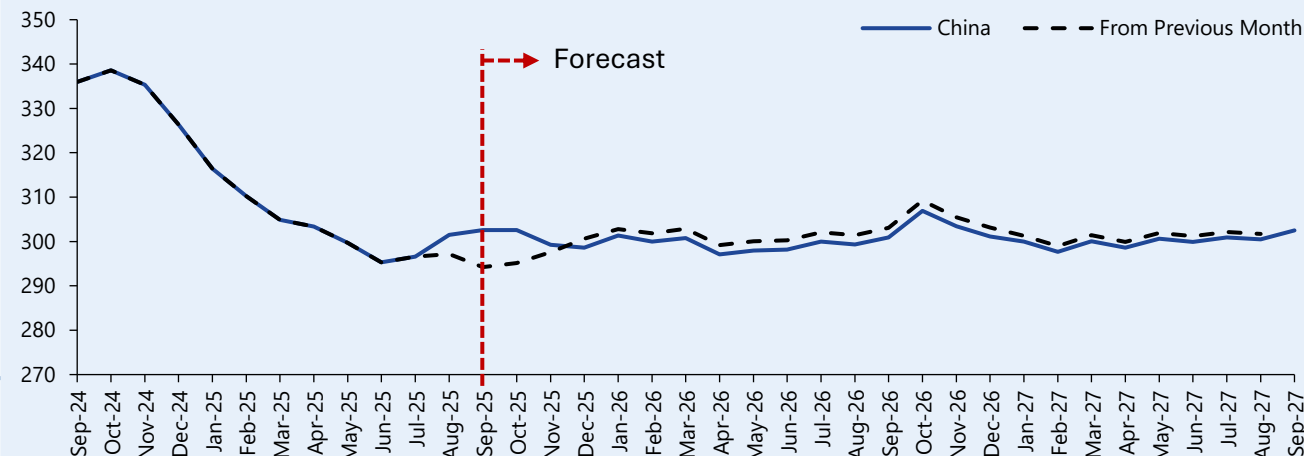


Energy

- South China's cfr coal prices averaged \$80.8/t in August, an increase of 3.8pc from July's price, driven by above-normal temperatures. *Argus* is forecasting coal prices to average \$81.50/t in September, a further rise of 0.9pc from July owing to fluctuating demand and the onset of the shoulder season.
- China's domestic coal production continues to be tight in the short term, giving a boost to seaborne coal imports. The domestic production declined by 2.4pc in July, the first on-year contraction.
- China's seaborne imports projections revised for 2025 by 25mn t to 305mn t, which is a 71mn t decline from 2024. *Argus* forecasts falling seaborne imports in 2026 and 2027, driven by robust domestic production over imports.

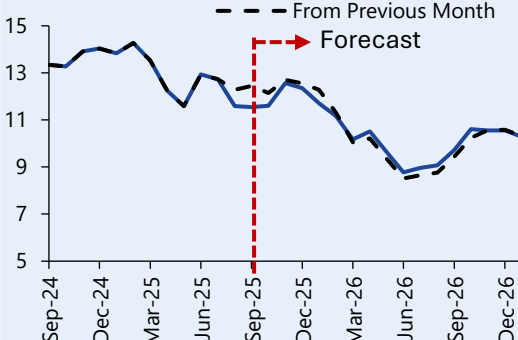
ECU Cash Cost

USD/ECU



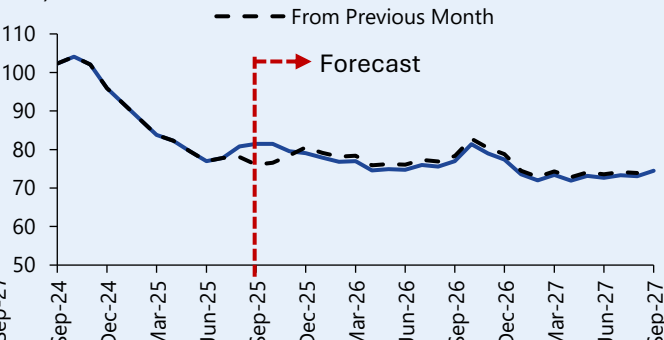
Energy Price Trend – Natural Gas

USD/mmBtu



Energy Price Trend – Coal

USD/t



Major Asia-Pacific plant maintenance schedule 2025.

COUNTRY	COMPANY	LOCATION	UNIT	CAPACITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
SOUTH KOREA	LG CHEM	YEOSU	CA #1	230														
			CA #2-1	370														
			CA #2-2	155														
			VCM #1	360														
			VCM #2	360														
			PVC	560														
		DAESAN	VCM	240														
		PVC	240															
	HANWHA	ULSAN	VCM #1	80														
			VCM #2	180														
			PVC	305														
		YEOSU	CA #1	300														
			CA #2	55														
			CA #3	210														
			CA #4	140														
			CA #5	140														
			CA #6	265														
			EDC															
			VCM #1	190														
			VCM #2	200														
VCM #3	150																	
PVC	320																	
PVC	130																	
LOTTE	YEOSU	CA	97															
		CA	116															
JAPAN	KASHIMA CA KASHIMA VCM SHIN-ETSU	KASHIMA	CA-EDC	320														
			VCM	600														
			PVC	550														
	AGC KEIYO VCM	CHIBA	CA	289														
			CA-EDC	230														
			VCM	200														
	TOSOH	YOKKAICHI	CA-EDC	190														
			VCM	250														
			PVC (TAIYO)	310														
		CHIBA	PVC (TAIYO)	100														
		NANYO	CA-EDC	1100														
			VCM #1	260														
VCM #2			600															
PVC	28																	

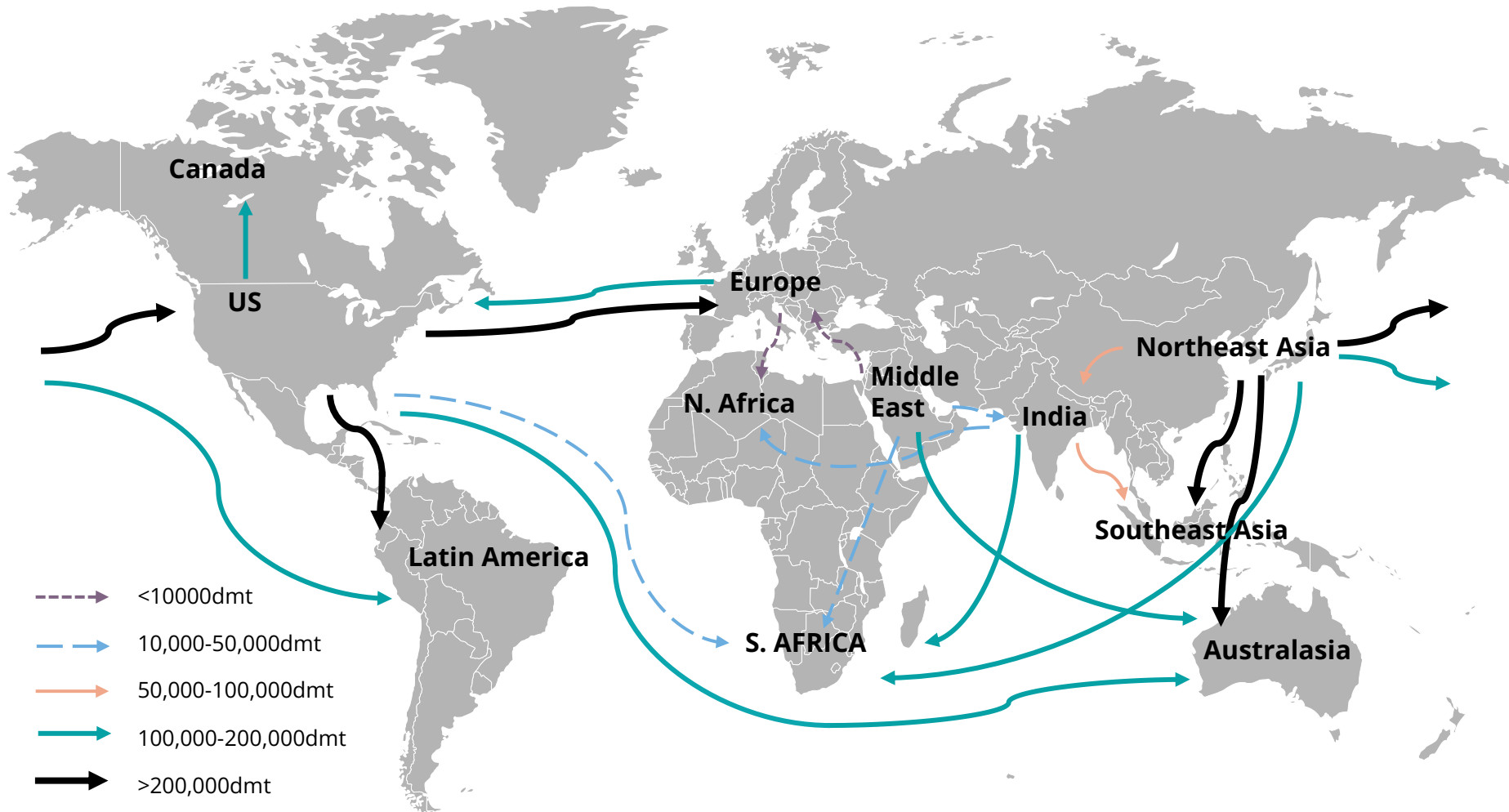
Major Asia-Pacific plant maintenance schedule 2025.

COUNTRY	COMPANY	LOCATION	UNIT	CAPACITY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
JAPAN	KANEKA	TAKASAGO	CA-EDC	360														
			VCM	270														
			VCM	270														
			PVC	276														
		KASHIMA	PVC	93														
	KAWASAKI	PVC	120															
	TOKUYAMA	TOKUYAMA	CA-EDC	490														
			VCM	330														
			PVC (SHIN-DAIICHI)	145														
		NIIHAMA	PVC (SHIN-DAIICHI)	30														
TAIWAN	FPC	JENWU	CA-EDC	367														
			VCM #1	292														
			VCM #2	292														
			PVC	455														
		LINYUAN	VCM	260														
		PVC	237															
	MAILIAO	CA-EDC	1,333															
		VCM	860															
		PVC	498															
	T-VCM CGPC	LINYUAN	VCM	450														
PVC			230															
KAOHSIUNG		PVC	220															
INDONESIA	ASC	ANYER	CA-EDC 2,3,5	670														
			CA-EDC 1,4															
		VCM #1	150															
		VCM #2	350															
		VCM #3	400															
	PVC	700																
MALAYSIA	KPP	KUANTAN	PVC	60														

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Global trade flows

A short-term fall in freight rates bolsters trade.



- Freight rates have risen from the lows seen in the last several weeks. Demand remains fairly robust as several market participants look to secure volumes in advance of the autumn maintenance season.
- Uncertainty surrounds the expectations for trade volumes in 2026, as chlorine demand has yet to see the full impacts of the US universal tariffs or protective tariffs implemented by countries around the world. *Argus* anticipates the 2026 caustic soda trade to increase compared to 2025.
- The shutdown of some European chlor-alkali and vinyls assets will lead to lower intraregional trade and increase international trade.
- The rate of new chlor-alkali and vinyl plant startups has slowed. There are a few more plants anticipated to start before the end of the year, but market participants expect some delays. Plant additions will increase again next, with the rate of capacity additions peaking around July 2026.

Northwest European trade analysis

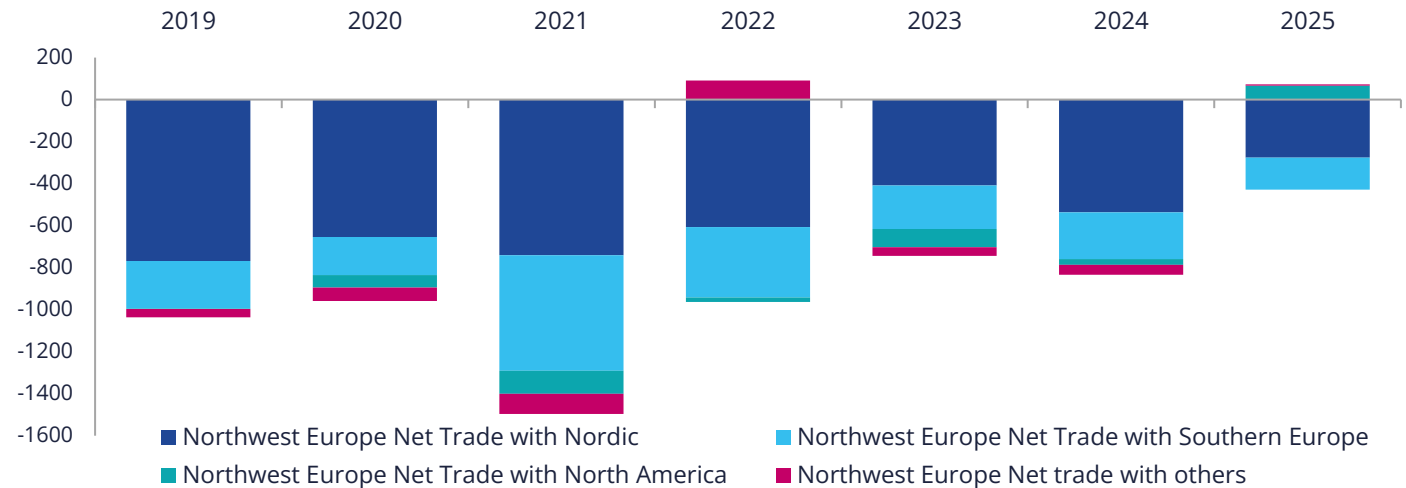
Rise in export interest short-lived; supplies to fall in 4Q.



*Largest production sites by capacity

- Northwest European exporters are choosing their outlets carefully to maximise netbacks. Prices for shipments into the true export markets, such as the Mediterranean area or overseas, remain unattractive for most sellers, and so they focus on any existing commitments to these markets or take the product elsewhere in Europe.
- Most look to move product above the current \$415-440/dmt fob export range and will continue to prioritise outlets in the local barge markets or in the northern parts of Europe. An uptick in export interest will occur in 2H September, just as some producers look to sell some stock before heading into fourth-quarter contract negotiations with domestic customers, but this will dwindle again soon. Export interest will then remain lower, and we do not foresee any major volume pressure beyond September.
- US imports into northwest Europe and the Nordic region will remain at their usual level to satisfy strategic set-ups. The EU's proposal to remove import tariffs for US material may impact the market at some point in the future if it passes, but there has been no immediate reaction. It will be viewed with caution until traders and end users have clarity about future tariffs.

Net Import (kdmt)



Net Export (kdmt)

* 2025 Trade data show only until June 2025

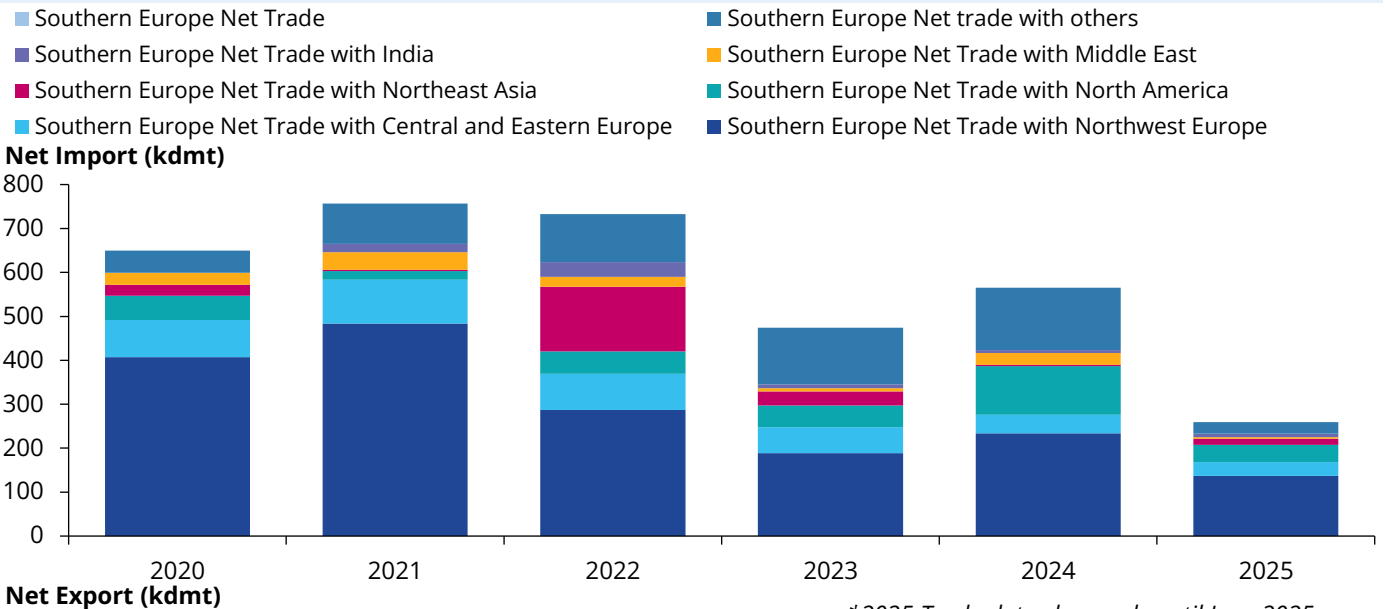
Southern Europe trade analysis

Overseas imports required to supplement local supplies.



*Largest production sites by capacity

- Imports into southern Europe could remain a mix of European and overseas origin products for a few more weeks and possibly until the end of the year.
- Scheduled and unscheduled outages, slow chlorine offtake, as well as producers' preference to place product in higher return markets outside the seaborne sector, could mean limited import availability unless it is supplemented with product from outside Europe.
- Import prices well above the current \$550-575/dmt cfr could prompt sellers to allocate more into vessel business and although some are pushing for higher levels any upward pressure is still minimal and may translate into small increases at most.
- US availability is to remain comfortable for now. The product that is currently being fixed in the high \$300s/dmt fob will work its way through southern Europe in October, but domestic prices in Iberia and Italy are under mild downward pressure in September, and it will require a shift in domestic availability to the tighter side for them to rebound and for importers to be receptive towards higher import prices.



*2025 Trade data show only until June 2025



Asia-Pacific trade analysis

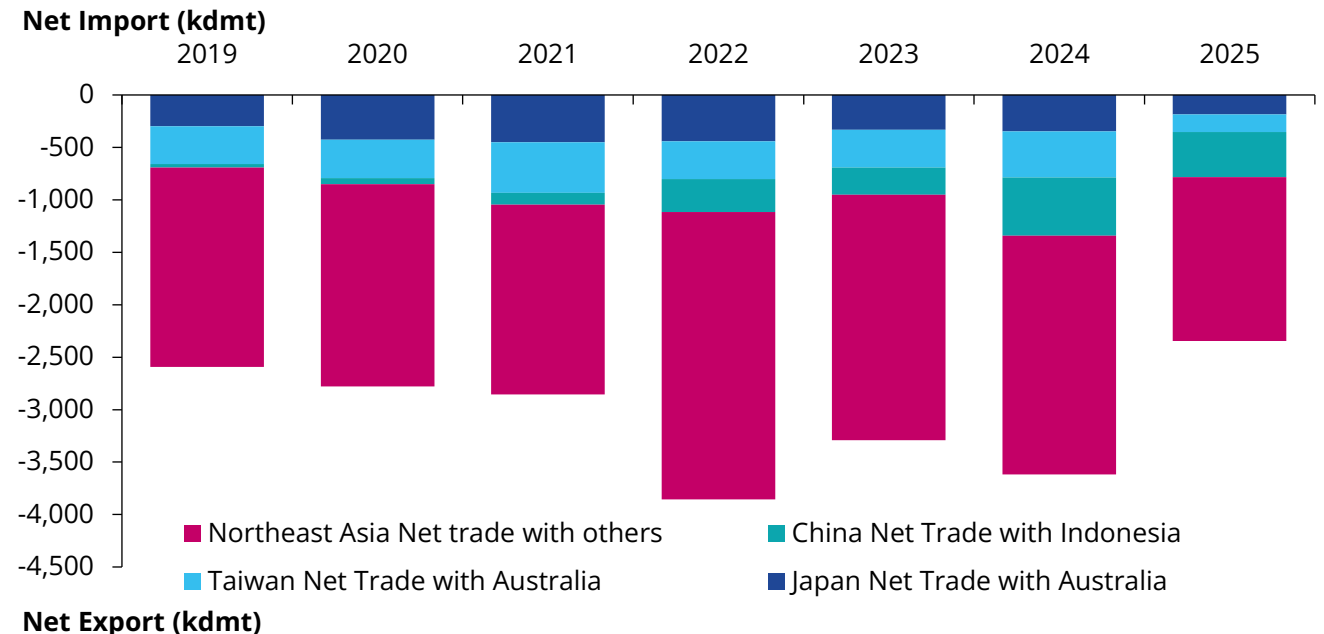
Flows of caustic shipments from northeast Asia slowed.



*Largest production sites by capacity



- The flow of spot caustic shipments from northeast Asia to southeast Asia has slowed amid market uncertainty arising from geopolitical and trade conflicts, as regular buyers are getting more cautious.
- Export availability from the newly commissioned expanded capacity in southeast Asia and Tianjin Bohua are likely to add more export availability into the region.
- The US tariffs of 15-25pc imposed on caustic imports from Taiwan, South Korea and Japan don't impact current caustic soda flows from northeast Asia to USWC, given prohibitive logistical constraints and costs of moving cargoes from USGC to USWC via land or sea routes. Traders have started exploring China-origin cargoes heading to the region as the tax gap has narrowed.



*2025 Trade data show only until July 2025

Middle East-Africa trade analysis

Middle East continued to seek more caustic soda imports.

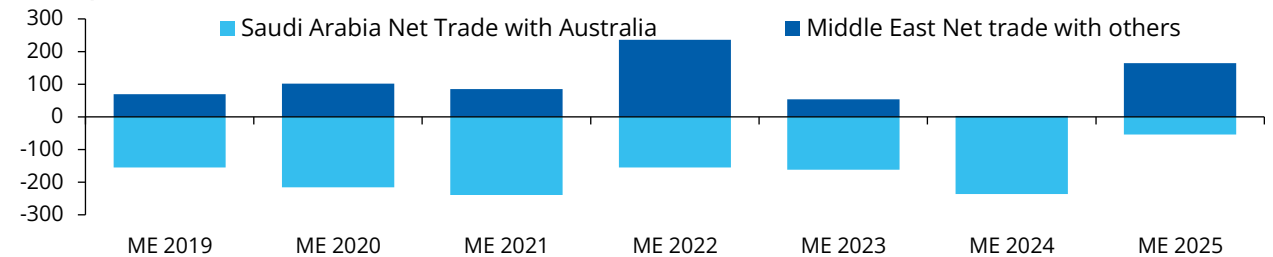


*Largest production sites by capacity



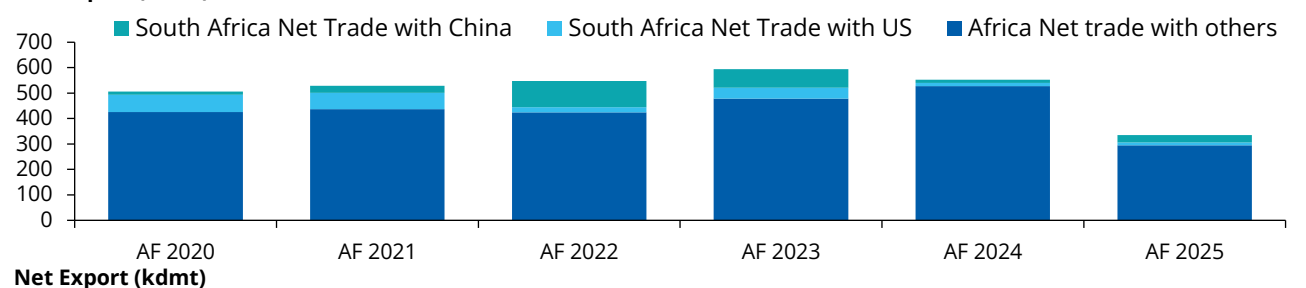
- The Middle East imports more cargoes, especially from India, to supplement the domestic supply shortfall arising from the technical problems at the local integrated facilities.
- However, export availability is expected to shrink as domestic demand, especially from the alumina and petrochemical sector, increases.
- No exports from the Middle East are expected in the near term.

Net Import (kdmmt)



Net Export (kdmmt)

Net Import (kdmmt)



*2025 Trade data show only until June 2025

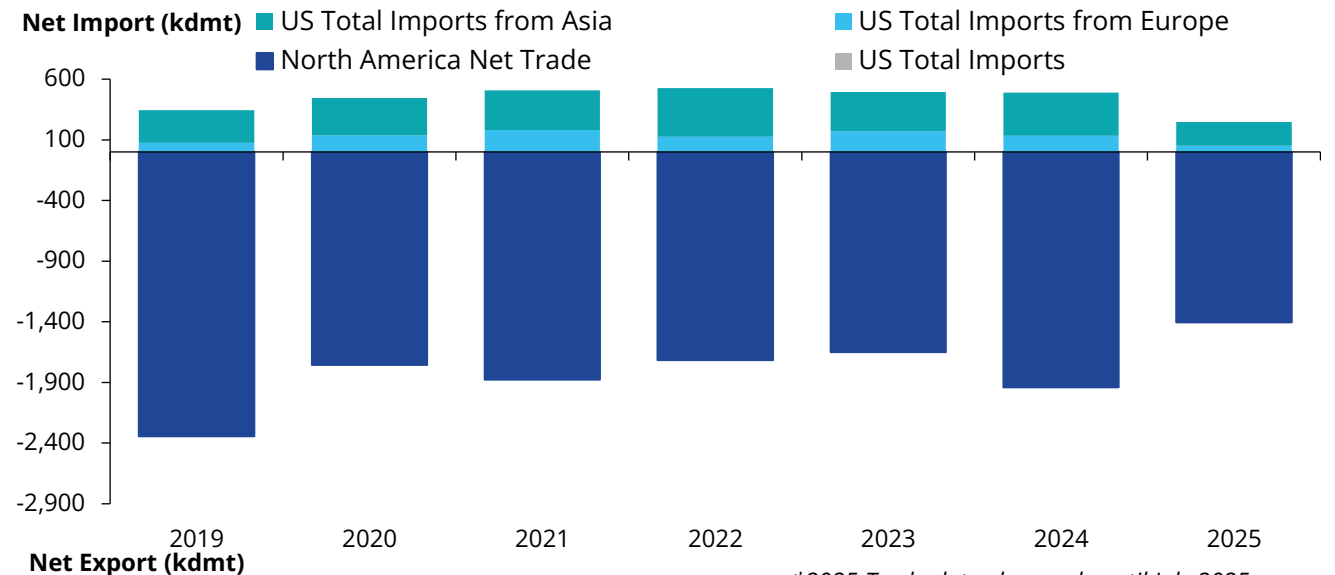
North America trade analysis

Falling domestic demand supports increased caustic soda exports.

- The US continues to see the closure of pulp mills. This is leading to a decline in domestic caustic soda demand. Vinyl producers are running their assets at relatively high rates, which leads to the need for US producers to export higher volumes of caustic soda. In the last twelve months.
- US Gulf coast caustic soda exports remain at an elevated pace. During the last 12 months, US liquid caustic soda exports have risen to 3.16mn dmt. This is a 19pc increase from the 2.64mn dmt in 2023. The increase has been expected owing to the weak domestic demand for caustic soda, as well as increased production resulting from PVC expansions.



*Largest production sites by capacity



*2025 Trade data show only until July 2025

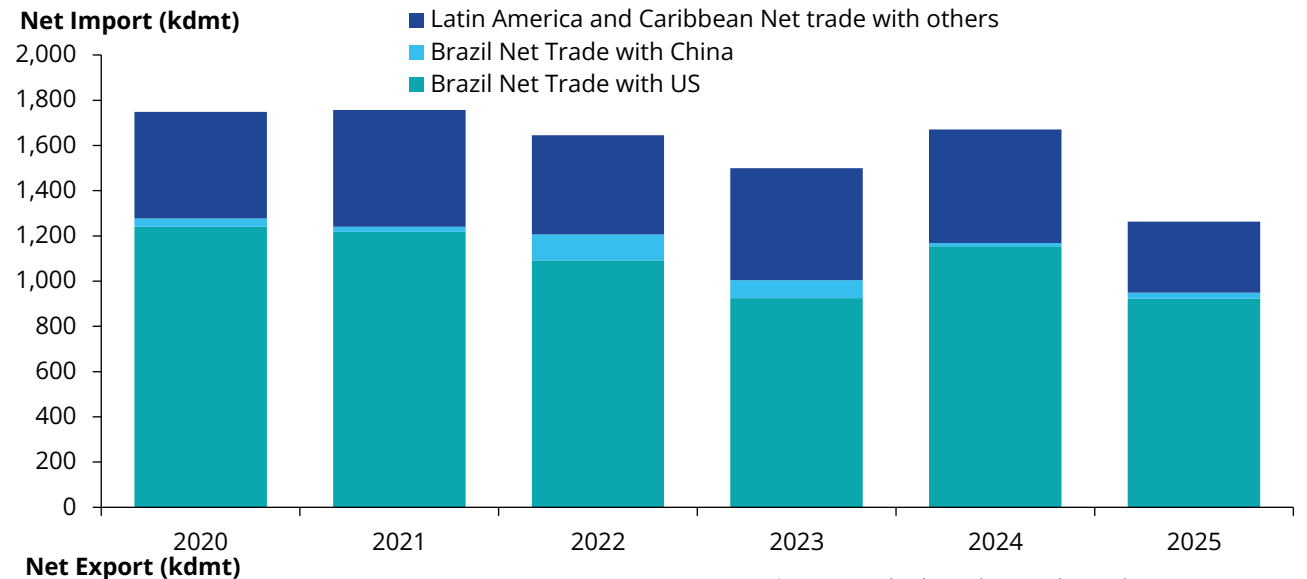
Latin America trade analysis

Brazil idles chlor-alkali capacity.



*Largest production sites by capacity

- One producer in Brazil has idled approximately 140,000 diaphragm ECUs in response to the challenging economic environment. The producer is continuing to produce the derivatives with imported raw materials.
- No significant impacts to the caustic soda trade have been detected since the implementation of the 50pc import tariff by the US on products from Brazil. Companies are anticipated to operate at their current levels of demand while redirecting products to more lucrative markets as contracts allow.
- Market supply pressures in Mexico and Brazil seem to be easing as the US Gulf coast approaches the fall maintenance season.







*2025 Trade data show only until August 2025

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Chlor-alkali related markets score card

Impact on chlor-alkali markets.

Chlor-Alkali Derivatives		
Battery Material		<ul style="list-style-type: none"> Vulcan Energy has received a permit to build and operate its Central Lithium Plant (CLP) for the Phase One Lionheart Project and a second phase for the production of lithium hydroxide monohydrate for battery production. The project is located in Frankfurt, Germany, and will have the capacity to deliver up to 24,000 t/yr lithium hydroxide monohydrate for around 500,000 EV batteries in the first phase. A construction timeline and estimated start-up as not yet been confirmed.
Chlorinated Derivative		<ul style="list-style-type: none"> Ineos Inovyn has mothballed its chloromethanes capacity at Tavaux, France, from 1 September 2025. It cites weak demand, high energy costs and challenging regulatory rules as reasons and will instead focus on chloromethanes production at Rosignano, Italy. Tavaux operates 370,000 t/yr chlor-alkali capacity with further integration into vinyls, epichlorohydrin and perchloroethylene. Rosignano has 35,000 t/yr of chloromethanes capacity, which is equivalent to 28,000 t/yr chlorine consumption at full rates.
Pulp and Paper		<ul style="list-style-type: none"> Domtar will idle operations at its Grenada, Mississippi, 2335,000 t/yr newsprint mill, erasing an estimated 5,000 dmt/yr of caustic soda consumption.
Chlor-Alkali producer news		<ul style="list-style-type: none"> Tianjin Bohua's newly commissioned chlor alkali capacity of 300,000 t/yr in Shandong is expected to run at full capacity by the end of September.

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Contact Us



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George leads the global chlor-alkali team. He has 30+ years' experience with roles in acquisition and asset management as well as operations control and strategic objectives, before his consulting career. Before joining Argus in 2012, he was director of Chlor-Alkali for HIS. George's experience also includes roles at FMC Technologies, Dow Chemical and Union Carbide. He holds a BSc in Chemical Engineering from the University of Texas and an MBA from Rice University.

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Stephanie Koenig Head of European Chlor-alkali

Stephanie is the Editor for European chlor-alkali market she oversees content and analytical standards across the European operations, spanning from editorial, to outlooks, analytics and events. She also contributes to single-client consulting projects and has over 15 years of experience directly related to the chlor-alkali industry. Before this, she spent time at IHS Chemical, leading the global Bleaching Chemicals Service and contributing to chlor-alkali products. Stephanie has a Master's Degree in Business Administration from the University of Leipzig, Germany.

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Bernard Law Chlor-alkali Editor

Bernard Law is Editor and covers the chlor-alkali and vinyl markets in Asia. Bernard has more than 25 years of experience in the chemical industry in Asia, holding various responsibilities in market and competitive analysis, benchmarking, sales, marketing, and business development. He spent 13 years working for speciality and commodity chemicals in the Asia-Pacific region. He generated benchmarking pricing and assessments, including northeast Asia and southeast Asia caustics to alumina indexes. He also contributes to single-client consulting projects.

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Anshu Pandey Business Analyst Chlor-alkali

Anshu is the lead analyst for Argus' chlor alkali and derivatives services and supports fundamentals and outlook services. Prior to joining Argus, she worked in research and development on projects associated with hydrogen storage and environmental assessment of fuels. Anshu holds a master's degree in Chemical Engineering.

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Argus Chlor-Alkali and Derivatives

Key regional prices, news and analysis for chlor-alkali and derivatives markets.

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Argus Chlor- Alkali Analytics

10-year forecast and a five-year history covering caustic soda, chlorine capacities, trade, supply and demand balances, plus details on demand growth for leading derivatives.

Find out more





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You can learn about all our chlor-alkali services [here](#).

To see the Chemicals forecast service publishing schedule, click [here](#).

Global caustic soda price forecasts

1M 2M 3M 6M 1Y 5Y Custom

- US Gulf coast caustic soda contract
- Northwest Europe caustic soda domestic contract
- Northeast Asia caustic soda fob
- Southeast Asia caustic soda cfr
- Middle East caustic soda fob

Global chlor-alkali analysis

Analysis Caustic soda Chlor-alkali Chlorine Global

- 16 Jan 25 Chlor-alkali outlook: Executive Summary
- 19 Dec 24 Chlor-alkali outlook: Executive Summary
- 27 Nov 24 Chlor-Alkali Analytics November 2024: Global Updates
- 27 Nov 24 Chlor-Alkali Analytics November 2024: Executive Summary
- 20 Nov 24 Chlor-Alkali Analytics November 2024: Executive Summary

More insights

PVDF demand to increase chlor-alkali consumption

Chlor-alkali experts

Argus' chlor-alkali services are led by VP **George Eisenhauer**. He has over 30 years' experience with roles in acquisition and asset management as well as operations control and strategy, prior to his consulting career.

Stephanie Koenig is Head of European Chlor-Alkali

5-year price forecast (Mar 24)

Chlor-Alkali 5-Year Outlook
20 March 2024

Americas ECU cash cost forecast

1M 2M 3M 6M 1Y 5Y Custom

Europe ECU cash cost forecast

1M 2M 3M 6M 1Y 5Y Custom

Asia ECU cash cost forecast

1M 2M 3M 6M 1Y 5Y Custom

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Argus Chlor-Alkali Outlook

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