

# Argus report sample

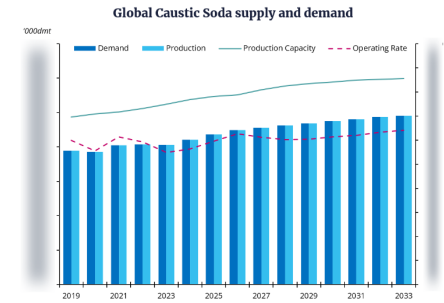
## Chlor-Alkali Analytics

November 2024

### Global Key Updates

Beginning the next cycle of growth.

Key Market Changes	
Supply	Global operating rates are increasing, leading to incremental supply in the market.
	Capacity additions are robust in the short term but strengthen in 2027 leading to global overcapacity later in the decade.
	Caustic soda demand is forecast to recover later this year with a strong



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[Click here to download the balances dataset in Excel](#)

[Click here to download the capacities dataset in Excel](#)



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# About this report

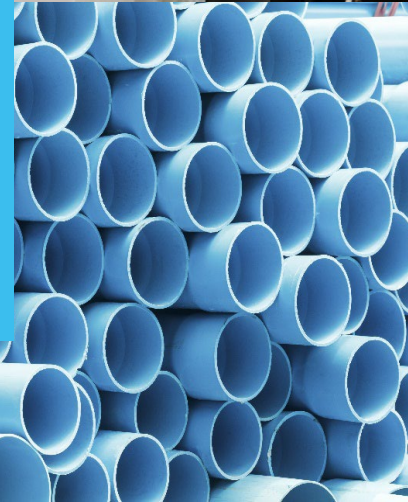
Argus Chlor-Alkali Analytics is a data-driven evaluation of supply-demand fundamentals forecast for chlorine and caustic soda and their derivatives markets, published twice a year.

The service includes a 10-year forecast and 5-year history covering balances and capacities, organized by country and region.

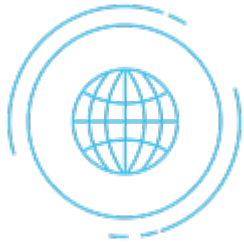
Subscribers receive a PowerPoint PDF written by our experts plus the accompanying Excel data files.

This is a sample of the full report only. It includes insights for North America.

**To find out more about the full Argus Chlor-Alkali Analytics service, click here to get in touch.**



# Key features



## **10-year price forecast & five-year history**

Covering key prices, capacities, supply and demand, trade, and feedstock forecasts for leading derivatives, by country and region, published twice a year.



## **Detailed report**

In an easy-to-read PowerPoint format focusing on new plant capacities, growth rates in relevant markets, and regulatory developments.



## **Regional insight**

Covering capacities and operating rates based on global trade and economics.



## **Downloadable datasets**

With data on supply, demand, capacities, operating rates and trade balances, by country and region.



## **Access to specialists**

Speak to the experts behind Argus' long-term analytics forecast services.

# Associated data

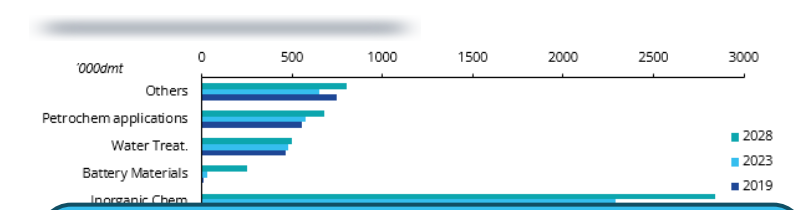
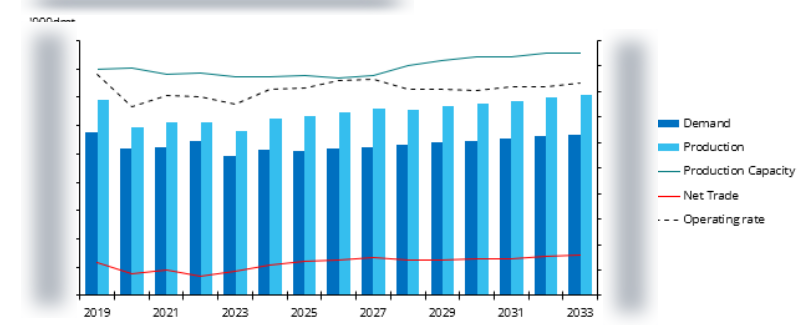
## Global supply, demand and trade by country; caustic soda and chlorine capacities

Capacity list for caustic soda, '000dmt													
Product	Region	Country	Location	Country Subdivision	Operating Company	Source	2019	2020	2021	2022	2023	2024	
Caustic Soda	Africa	Algeria	Mostaganem		ADWAN Chemical	Membrane	28	28	28	28	28	28	
Caustic Soda	Africa	Algeria	Quargla		Flash Chemical Industry	Membrane	30	30	30	30	30	30	
Caustic Soda	Africa	Egypt	Alexandria		Egyptian petrochemical Co.	Membrane	120	120	200	200	200	200	
Caustic Soda	Africa	Egypt	El Mex		Misr Chemical Industries	Membrane	56	56	56	56	56	56	
Caustic Soda	Africa	Egypt	El Nasir		Intermediate Chemicals (NCIC)	Membrane	27	27	27	27	27	27	
Caustic Soda	Africa	Egypt	Port Said		Sanmar Group (Trust Chemical)	Membrane	275	275	275	275	275	275	
Caustic Soda	Africa	Gabon	Sisag		Gabon chemical	Mercury	22	22	22	22	22	22	

Product	Region	Capacity	Estimate					Outlook						CAGR %					
			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2019-23	2023-33
Caustic Soda	Africa	<b>Capacity</b>																	
Caustic Soda	Africa	Diaphragm	7,945	7,945	7,418	7,222	6,850												
Caustic Soda	Africa	Mercury	238	238	238	238	238												
Caustic Soda	Africa	Membrane	7,691	7,832	7,881	8,211	8,267												
Caustic Soda	Africa	Other	59	59	59	59	59												
Caustic Soda	Africa	Speculative	-	-	-	-	-												
Caustic Soda	Africa	<b>Total capacity</b>	<b>15,933</b>	<b>16,074</b>	<b>15,596</b>	<b>15,730</b>	<b>15,414</b>												
Caustic Soda	Africa	<b>Production</b>																	
Caustic Soda	Africa	Diaphragm	6,427	5,633	5,183	5,350	4,850												
Caustic Soda	Africa	Mercury	153	118	118	127	95												
Caustic Soda	Africa	Membrane	7,174	6,085	6,865	6,734	6,597												
Caustic Soda	Africa	Other	50	50	50	50	50												
Caustic Soda	Australasia	<b>Total production</b>	<b>13,804</b>	<b>11,886</b>	<b>12,216</b>	<b>12,261</b>	<b>11,592</b>												
Caustic Soda	Australasia	Operating rate	87%	74%	78%	78%	75%												
Caustic Soda	Australasia	Import	812	828	833	888	762												
Caustic Soda	Australasia	<b>Total supply</b>	<b>14,616</b>	<b>12,714</b>	<b>13,048</b>	<b>13,149</b>	<b>12,354</b>												
Caustic Soda	Australasia	<b>Derivative Consumption</b>																	
Caustic Soda	Australasia	Pulp & Paper	2270	1904	1889	2062	1832												
Caustic Soda	Australasia	Alumina	236	228	199	208	203												
Caustic Soda	Australasia	Phosgene	343	311	319	318	275												
Caustic Soda	Australasia	Organic Chemicals	2644	2359	2466	2181	2025												
Caustic Soda	Australasia	Soaps & Detergents	1128	1162	1177	1195	1172												
Caustic Soda	Black Sea	Textile	339	274	280	317	312												
Caustic Soda	Black Sea	Inorganic Chemicals	2753	2406	2409	2763	2293												
Caustic Soda	Black Sea	Battery Materials	10	10	10	10	33												
Caustic Soda	Black Sea	Water Treatment	464	459	470	476	477												
Caustic Soda	Black Sea	Petrochemicals applications	554	549	551	574	577												
Caustic Soda	Black Sea	Others	749	672	685	762	647												
Caustic Soda	Black Sea	<b>Total consumption</b>	<b>11,490</b>	<b>10,334</b>	<b>10,455</b>	<b>10,866</b>	<b>9,846</b>												
Caustic Soda	Black Sea	Export	3,126	2,380	2,593	2,283	2,508												
Caustic Soda	Black Sea	<b>Total demand</b>	<b>14,616</b>	<b>12,714</b>	<b>13,048</b>	<b>13,149</b>	<b>12,354</b>												
Caustic Soda	Central Eu	Net Trade	2,314	1,552	1,761	1,395	1,746												
Caustic Soda	Central Eu	To/(from) inventory	-	-	-	-	-												
Caustic Soda	Central Eu	Demand % change	-10%	1%	4%	-9%													

Subscription includes detailed Excel downloads



>>Want to see more data?  
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# 1. Executive Summary

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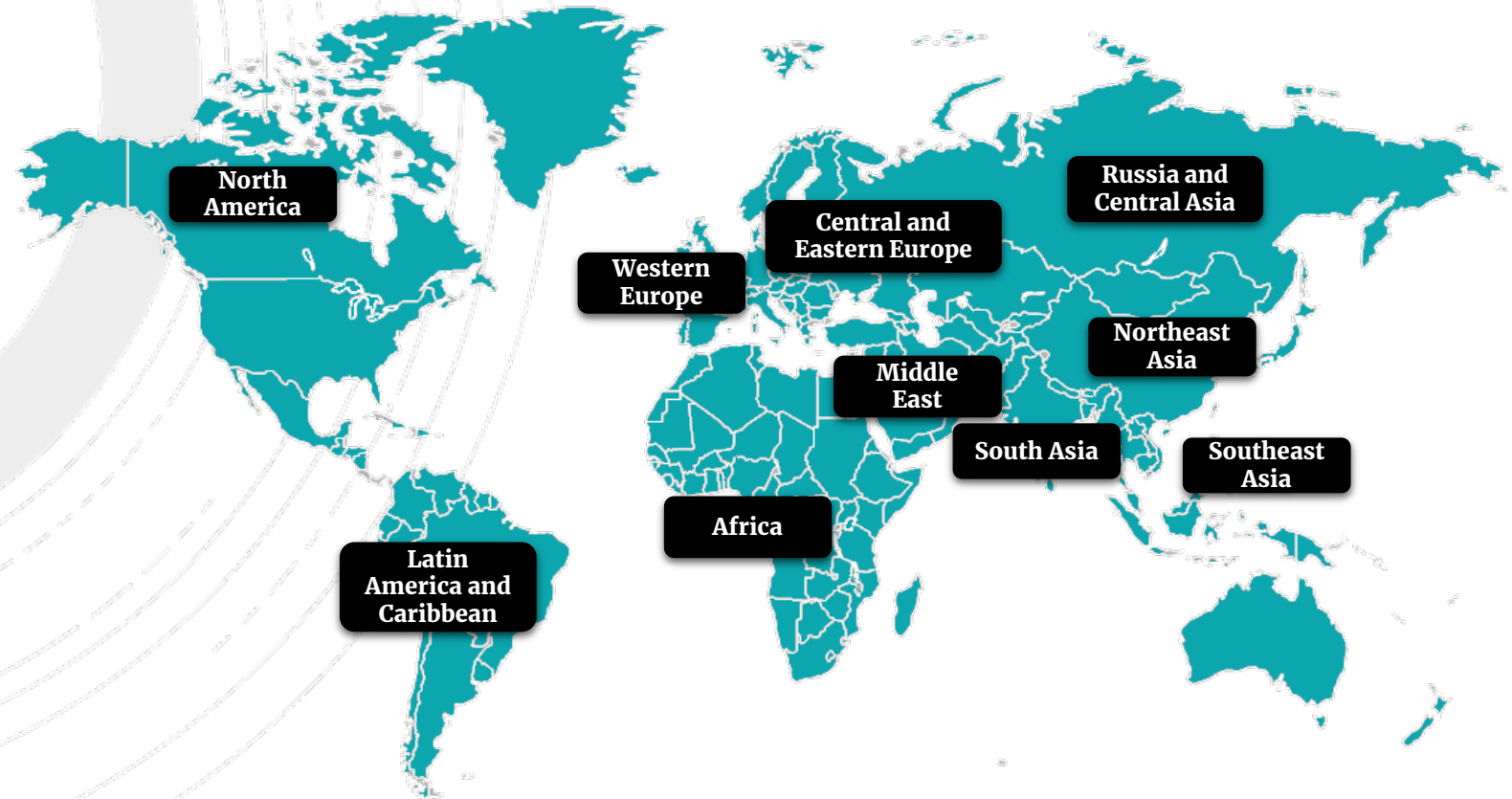


# Chlor-Alkali Analytics Executive Summary

Nov 2024 update of 10-year global caustic soda and chlorine supply, demand and trade analysis.

- ❑ The global chlor-alkali market has adopted new trade lanes associated with the hostilities in the Red Sea, but it is now being buffeted by multiple countries erecting protectionist trade barriers to chlorine derivatives like PVC and Epichlorohydrin among others. Some key caustic soda derivatives are also experiencing raw material disruptions that may lead to significantly higher caustic soda demand if political instability increases.
- ❑ The significant disparities in energy prices in Europe compared with the rest of the world have essentially normalised, resulting in Europe having an elevated value for electricity compared with other chlor-alkali manufacturing regions. The region is implementing antidumping duties on select products to protect the industry.
- ❑ The global economy is forecast to see stronger growth in 2025 and then growth is expected to steadily decline in future years. The global economy has essentially normalized after the severe disruptions from the Covid-19 lockdowns. This growth forecast implies a stronger chlorine offtake than caustic soda offtake in 2025 and then reverting to a stronger caustic soda offtake than chlorine offtake in future years.
- ❑ The industry is currently recovering from a period of significant supply disruption. This supply disruption has led to a period of higher caustic soda demand, especially in battery materials and alumina. While caustic soda demand is growing, chlorine demand is forecast to be the stronger side of the molecule in 2025 as interest rates fall and governments pass economic stimulus. Chlor-alkali capacity additions are forecast to exceed the global demand growth profile beginning in 2026, leading to oversupplied conditions for a few years as demand overtakes supply, resulting in support for caustic soda price and reinvestment economics being achieved again in the last few years of the forecast.
- ❑ Despite Electric Vehicle adoption in the automobile industry not meeting some analysts' expectations, it will be one of the main drivers of caustic soda demand growth. This will not only lead to a rapid expansion of caustic soda demand for battery materials but also many related industries such as alumina, copper and to a lower extent some of the chlorine derivatives such as polyvinyl chloride, polycarbonates, as well as polyvinylidene chloride.
- ❑ Biodiesel is forecast to be the second fastest-growing caustic soda derivative. The manufacture of biodiesel consumes caustic soda to neutralize organic acids as well as sodium methyate which is produced from caustic soda, sodium metal, or the sodium-mercury amalgam produced in a mercury cell electrolyser.

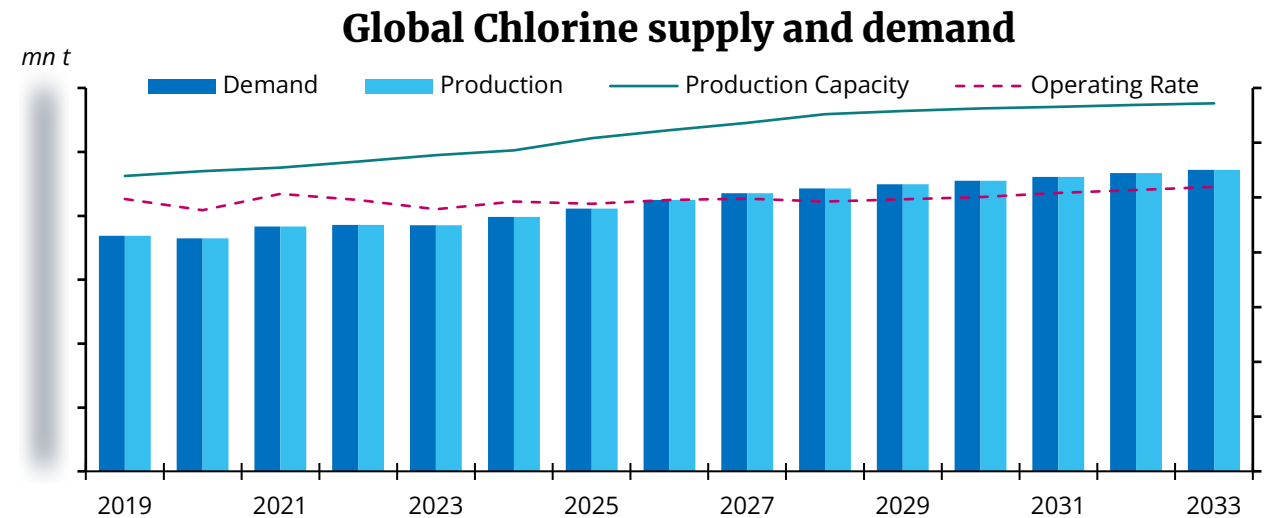
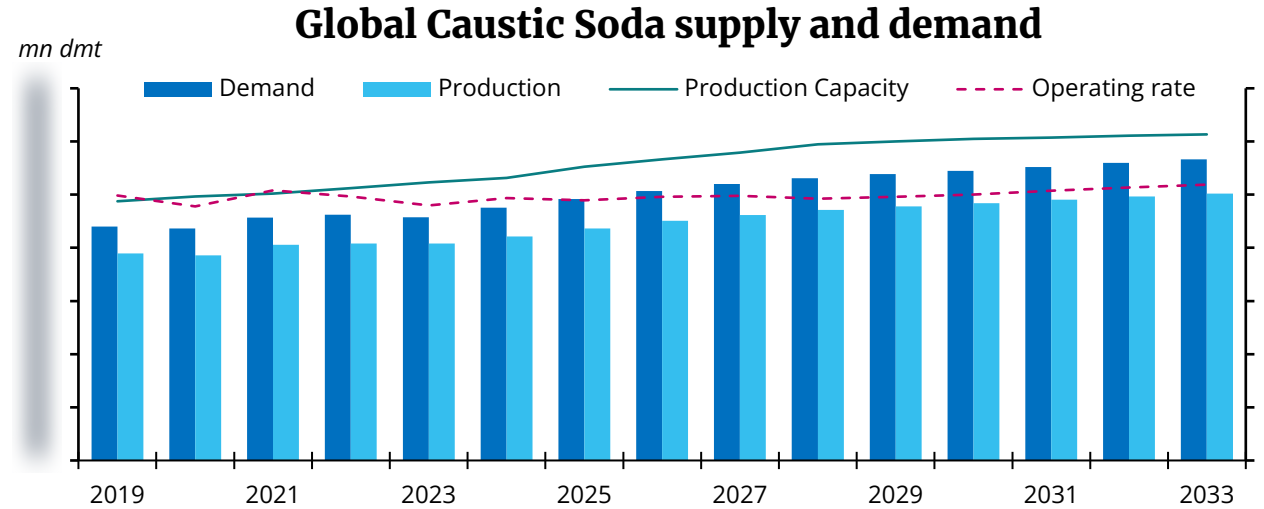
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# Global Chlor-Alkali Overview

Overcoming supply disruption to support the next cycle of growth.

↑	Supply	<p>Global operating rates are increasing, leading to incremental supply in the market. Higher operating rates have made it difficult for the market to overcome short-term supply disruptions.</p> <p>Capacity additions are robust in the short term but strengthen, leading to global overcapacity later in the decade.</p>
↑	Demand	
↑	Trade	<p>Caustic soda trade is forecast to increase over the forecast period as low-cost energy regions provide an increasing supply of caustic soda to support derivatives disassociated from the supply regions.</p> <p>Trade barriers are being erected to protect domestic markets, but caustic soda trade will continue to increase.</p>





# Global: Economy

Moderating inflationary pressure and implementation of fiscal and monetary policy will support global growth.

## GDP Forecast Assumptions

### Inflation

Inflationary pressure has been moderating. CPI inflation continues to fall while service inflation falls at a slower pace.

### Monetary Policy

Key advanced economies' central banks to slowly lower rates moving forward. China and the US monetary and fiscal policy will support demand.

### Global conflicts

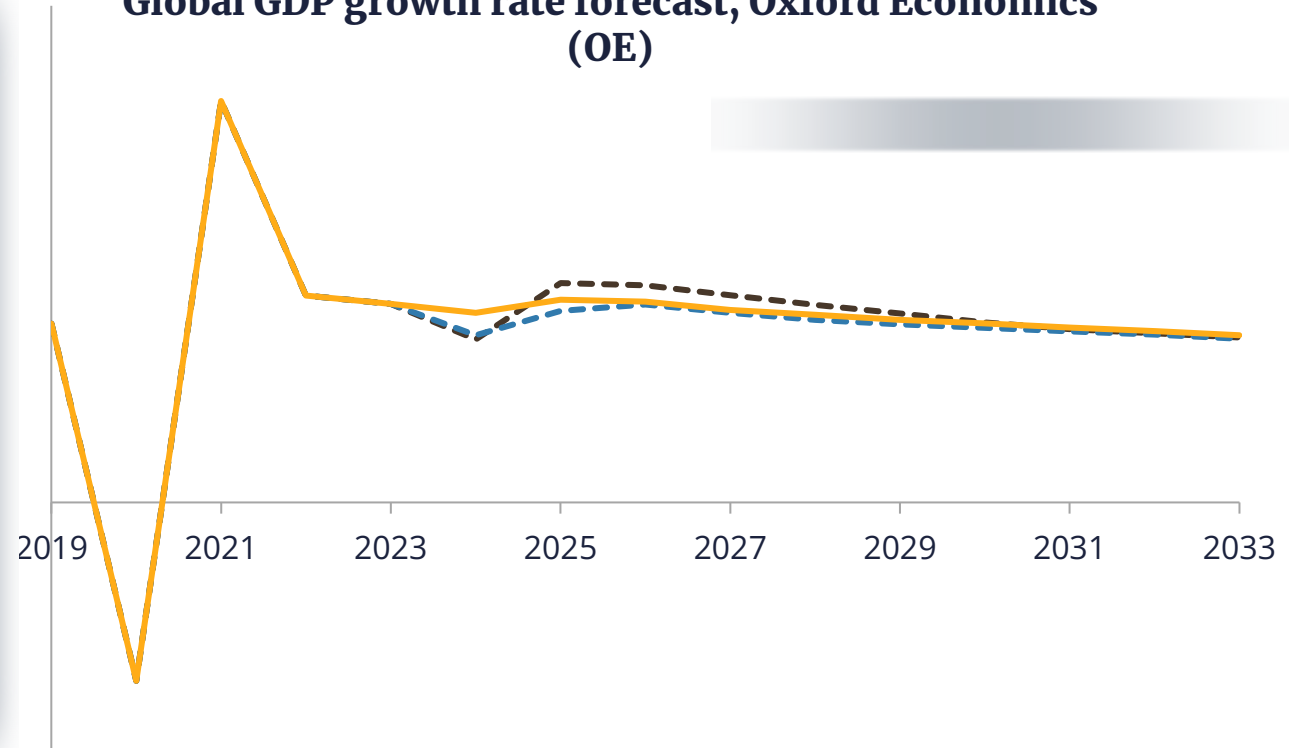
Russian sanctions from western nations to stay in place. Israel and Iran conflict will keep the oil market volatile.

### Globalisation

No meaningful change in the global trading system or US/China relationship. Recent tariffs and other trade barriers stay in place or increase.

GDP pc

## Global GDP growth rate forecast, Oxford Economics (OE)



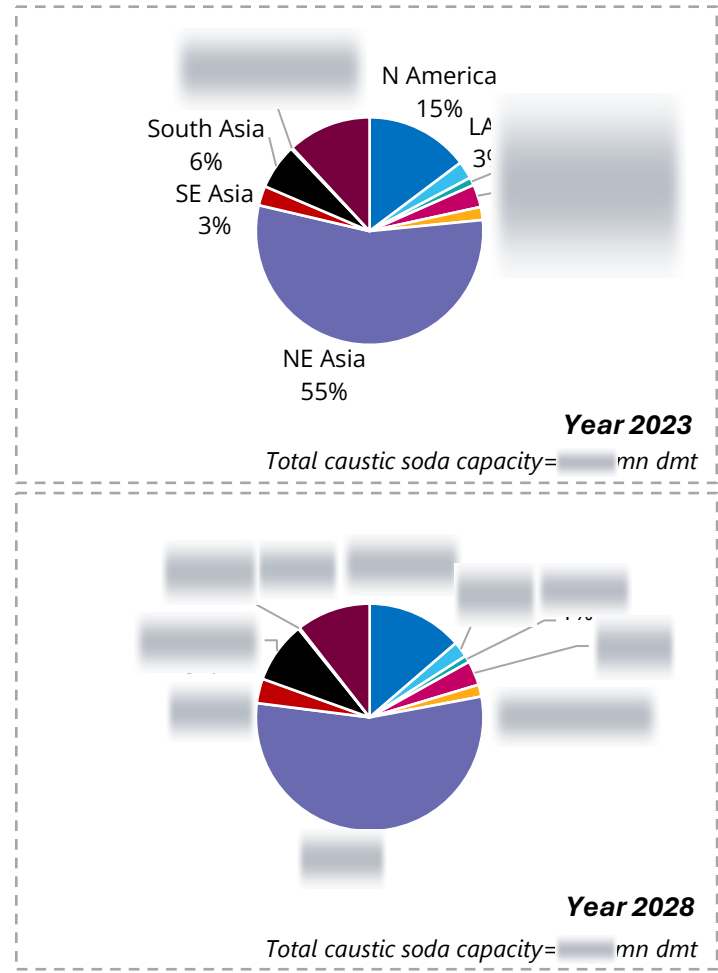
# Global: Supply

## Capacity additions being added at rapid pace.

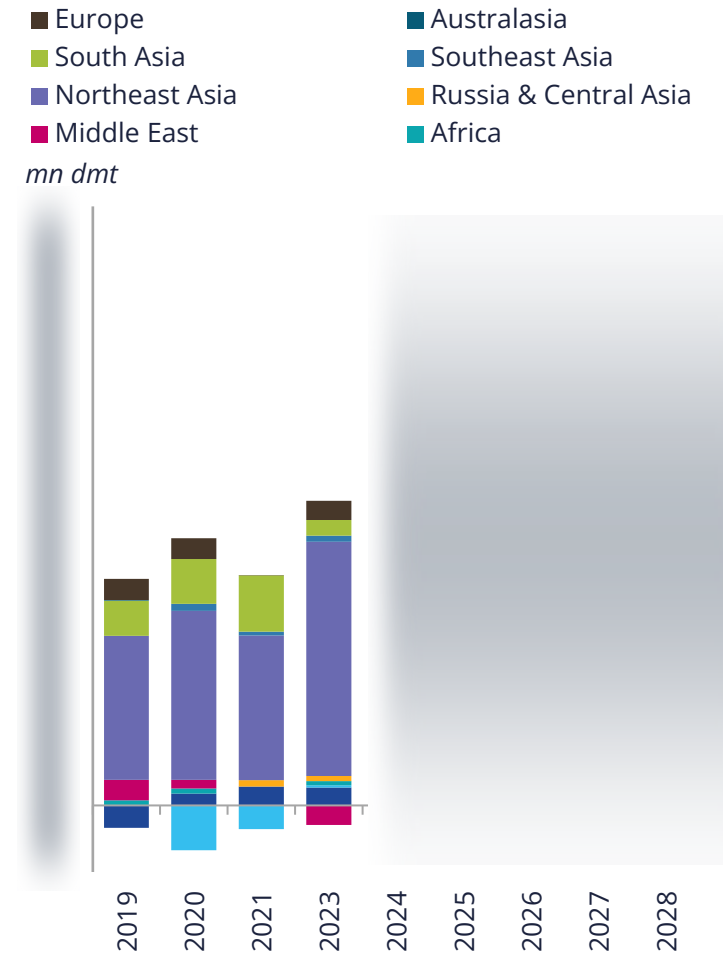
- ❑ New capacity additions have slowed as economics for some projects have come into question. Some projects have been delayed owing to construction delays or financing issues. Global capacity addition in 2024 is expected to be [redacted] of caustic soda with 59pc of the expansion added in China.



Capacity by region



Capacity year-on-year changes

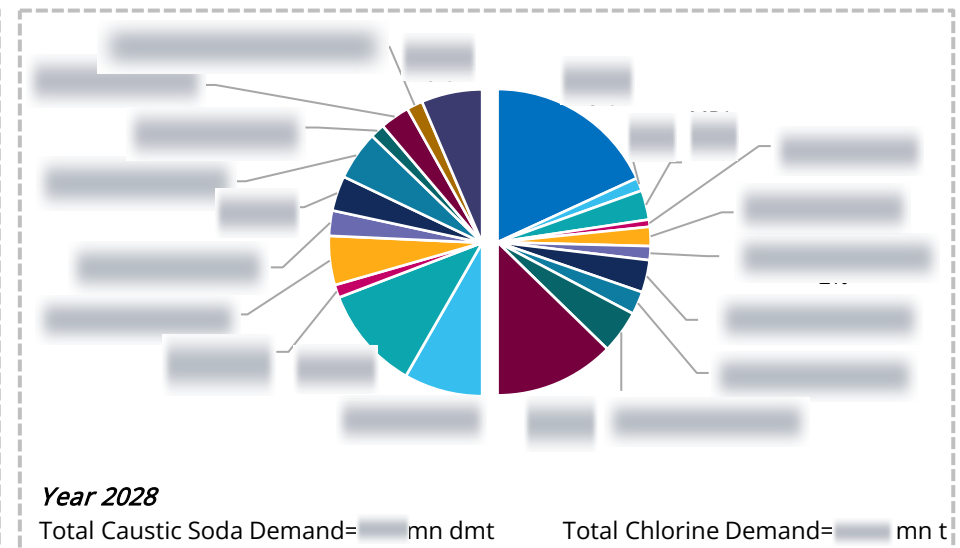
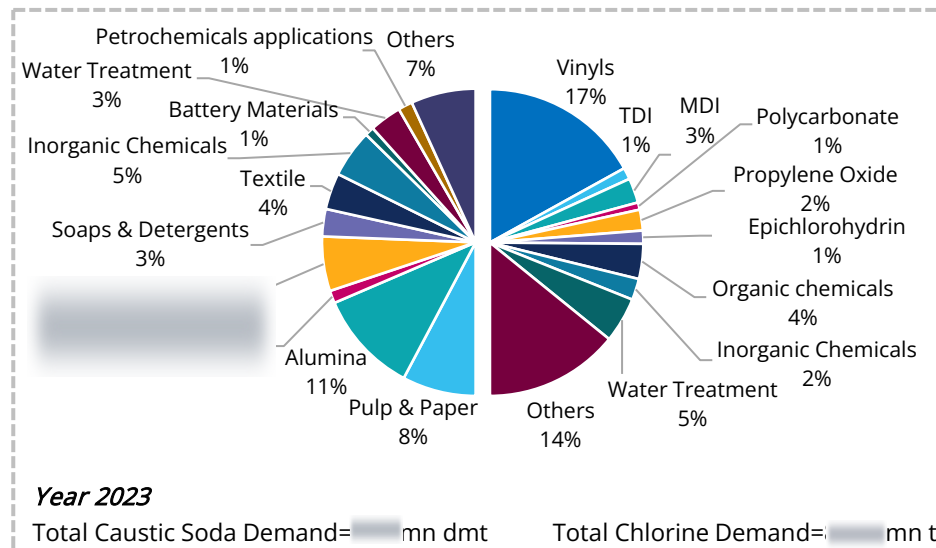


# Global: Demand

## GDP growth forecast to increase from 2025.

- ❑ Economists expect global GDP growth to increase from 2025. With chlorine being a leading indicator, operating rates have increased in the first few months of 2024, leading to a surplus of caustic soda in the market. Although the surplus ended the year in deficit plant as disruptions and maintenance outages could not be overcome.

- ❑
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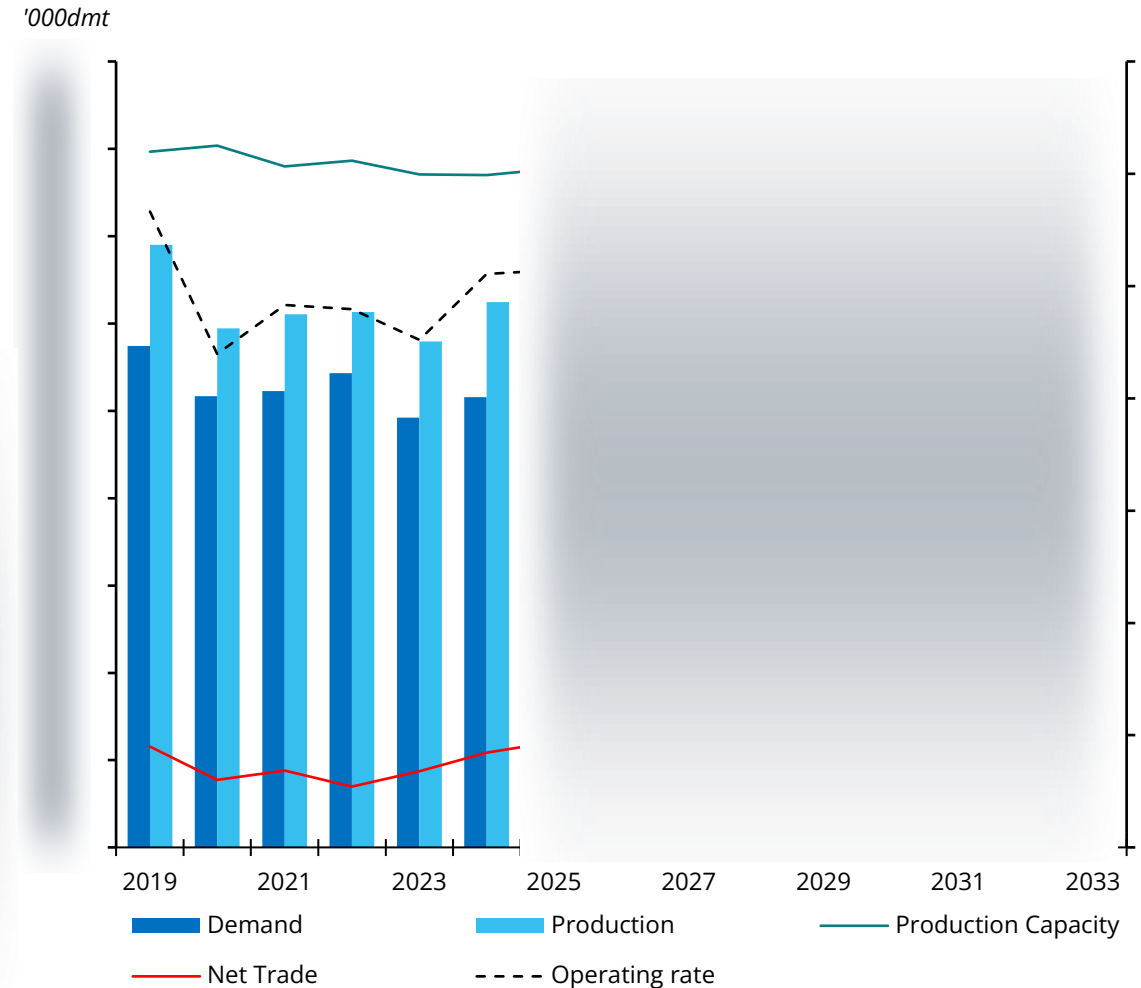


# North America: Key updates

Expansions exceed demand leading to increased caustic soda exports.

	<p><b>Supply</b></p>	<p>The US chlorine market is short. Chlorine buyers are having to compete with derivatives that can pay the highest price for chlorine. Capacity increases are primarily integrated to vinyls and isocyanates which is leading to a significant rise in caustic soda supply in the region.</p>
	<p><b>Demand</b></p>	
	<p><b>Trade</b></p>	

**North America caustic soda supply and demand**



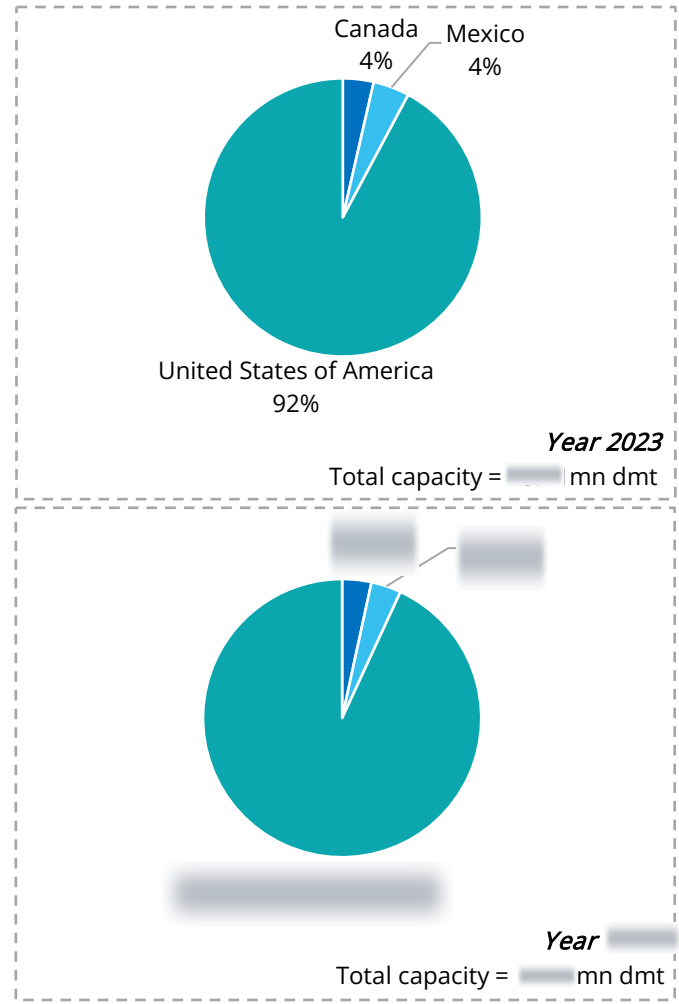
# North America: Supply

PVC capacity expansion and increased production lead to strong growth in caustic soda supply.

North America is experiencing growing pains as new chlor-alkali and PVC started up late, leading to a tight market owing to a producer over-committing and under-performing. Additional chlor-alkali capacity integrated into PVC and isocyanates will start in mid- through . This new capacity will add significantly to the surplus volume of caustic soda in North America.

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Capacity by country



Capacity year-on-year changes

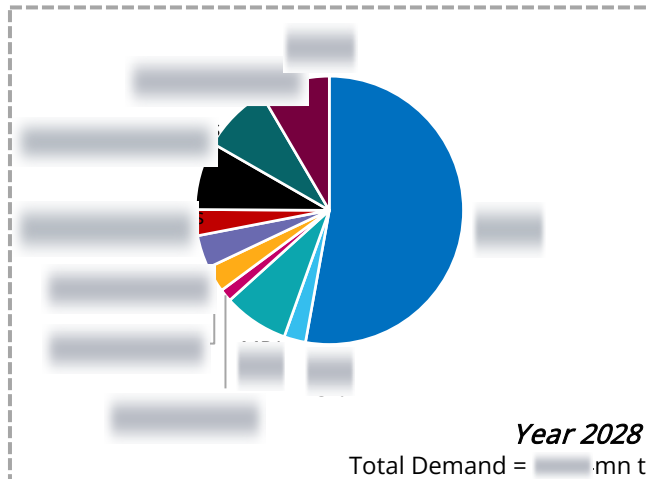
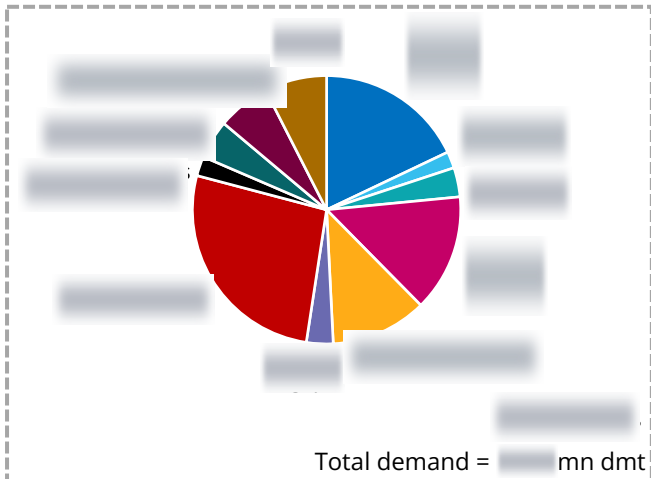
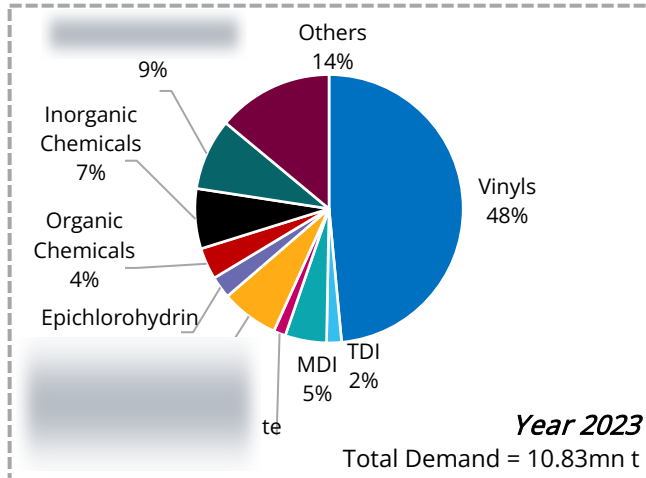
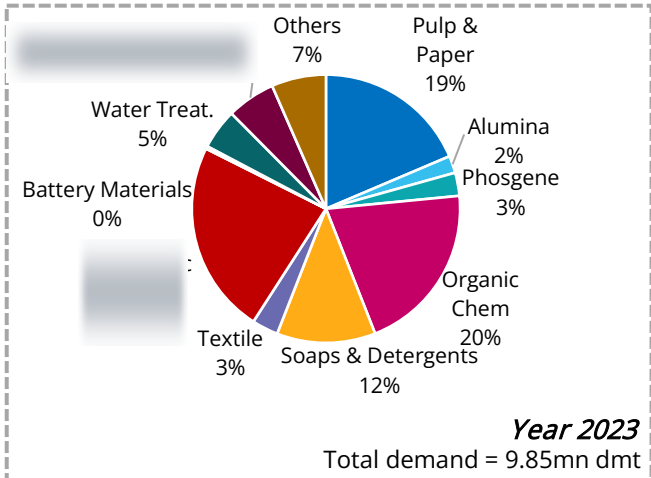


# North America: Demand

PVC dominates chlorine demand while caustic soda demand shifts to inorganics.

Caustic soda demand by derivative

Chlorine demand by derivative



Chlorine demand will be driven by PVC and the vinyl chain owing to low-cost energy and ethylene on the US Gulf coast.

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# We hope you found this sample report for Argus Chlor-Alkali Analytics valuable.

The Chlor-Alkali Analytics service is for anyone engaged in the chlorine and caustic soda market and seeking insight into the fundamentals driving key trends, including global supply, demand growth, exports, operating rates, etc.

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# Meet our experts



## **George Eisenhauer** **Vice-President Chlor-Alkali**

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 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.

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## **Stephanie Koenig** **Head of European Chlor-Alkali**

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 years' 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 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.

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## **Anshu Pandey** **Business Analyst Chlor-Alkali**

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

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