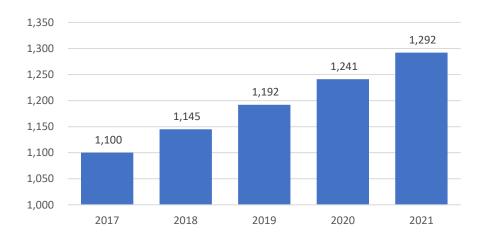
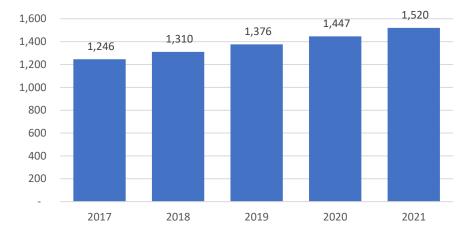
Global sodium cyanide demand and supply dynamics



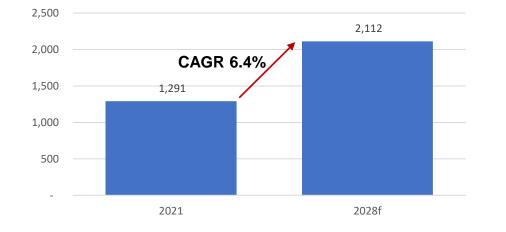
Global Sodium Cyanide Demand, 000 metric ton



Global Sodium Cyanide Supply, 000 metric ton

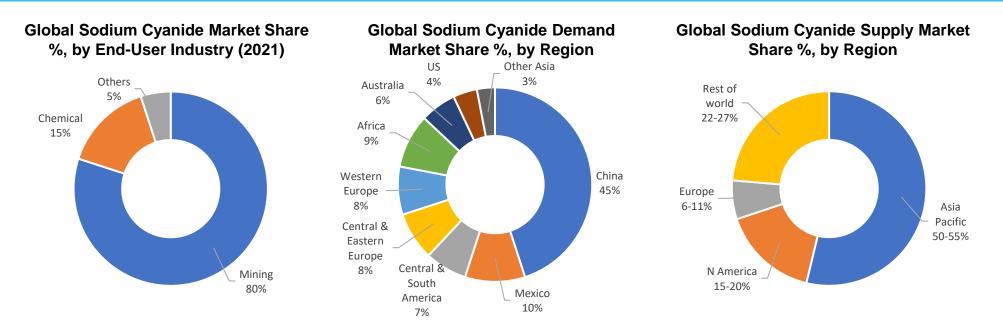
- ✓ Global sodium cyanide market size is projected to grow at a CAGR of 6.4% p.a. to reach USD2,112mln by 2028.
- Asia Pacific region dominates the sodium cyanide global market share, driven by robust demand from gold extraction & chemical industry.

Global Sodium Cyanide Market Size in Value, USD bln





Mining industry dominates global sodium cyanide market demand, led by Asia Pacific region



- ✓ Mining (gold) industry will continue to dominate the global demand for sodium cyanide in the medium to longer-term.
- ✓ The demand for global sodium cyanide is driven by Asia Pacific, primarily China, the largest gold producer globally.
- ✓ Australia is the second largest gold producer in Asia Pacific and the third largest globally, it is expected to overtake China in terms of gold production in the near future due to expansion plans.
- ✓ Indonesia holds immense mineral reserves (9th largest gold producer globally), the government has been promoting and offering attractive investment opportunities to domestic and foreign investors.

Global sodium cyanide market is consolidated, with top 10 players accounting for >60% of global production capacities market share

			•		•			
Manufacturer	HQ	Cyanide form		Regional footprint			Country/ region	Capacit
		Solid	Liquid	Americas	APAC	EMEA	served	y (ton p.a.)
Cyanco Intl LLC	US	Yes	Yes	/	-	/	US	148,000
Orica Chemicals Pty	Australia	Yes	Yes	/	/	/	Global	95,000
Australian Gold Reagents	Australia	Yes	Yes	/	/	/	Global	90,000
Tongsuh Petrochemical	S Korea	Yes	No	/	/	/	W Africa, S America	70,000
TaeKwang Industrial Co Ltd	S Korea	Yes	No	/	/	/	Africa, S America, China, Russia	65,000
Anhui Shuguang Chemical	China	Yes	No	/	/	/	China, Turkey, KZ, Mongolia	NA
Hebei Chengxin	China	Yes	No	/	/	/	W Africa, Argentina	Up to 65,000
Cyplus Idesa	Mexico	Yes	No	/			Mexico	40,000
Draslovka (acquired The Chemours & Sasol)	Czech Republic	Yes	Yes	/	/	/	Americas, S Africa, Europe	>30,000
Korund	Russia	Yes	No	/	/	/	Russia	20,000

Global Sodium Cyanide Selected Market Players

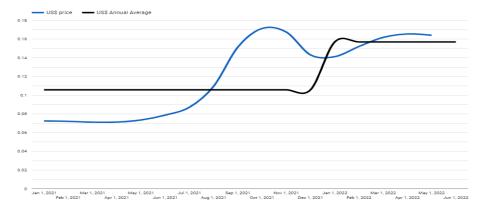
Factors considered in periodic price recalculation equations of sodium cyanide

Key factors	Current market conditions				
Inflation rate	 IMF raised 2022 inflation projections for advanced and EM economies to 5.7% and 8.7% respectively, 1.8% and 2.8% higher than earlier forecasts. World Bank highlighted that global inflation is expected to moderate in 2023 but it will likely remain above inflation targets in many economies. 				
Raw materials costs	 Global ammonia prices increased significantly especially over 2H21, the Fertecon Far East CFR ammonia index was 85% YoY higher on average. Increased costs were passed through in sales price. Natural gas prices in Europe are >7x higher on the year, and 12x the levels in the US (vs. 1.5x in 2020). 				
Freight costs	 Sea freight costs increased sharply especially in 2H21, the Baltic Dry Index hit 5,650 on 7th Oct 2021. It stood at 2,578 on 17th June, having gained 16.3% YTD. Global port congestion is expected to continue until at least early-2023 and keep spot freight rates elevated. 				
FX conversion	 USD index gained 9% YTD Against USD: AUD -3.6%, RMB -5.3%, KRW -7.0%, EUR -8.1%, Mexican peso +1.2%, African rand +1.3%, rouble +34.8%. 				

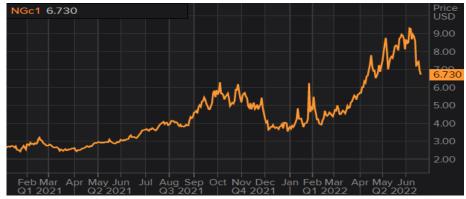
Global sodium cyanide prices have risen by 25%-30% across global markets, driven by rising input material and transport costs

Average Annual Ammonia Prices, 2017-2021						
Year	FOB Black Sea price, USD	CFR Tampa Price, USD				
2017	269	283				
2018	289	315				
2019	235	250				
2020	204	236				
2021	539	617				

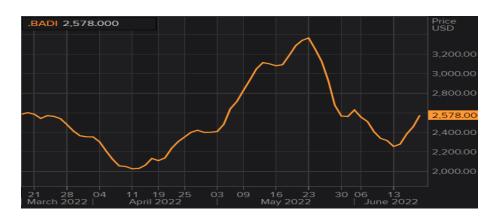
Caustic Soda Prices, 1st Jan 2021-21st June 2022



NYMEX Henry Hub Natural Gas Price, 1st Jan 2021-21st June 2022



Baltic Dry Index, 3-Month, as at 17th June 2022



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