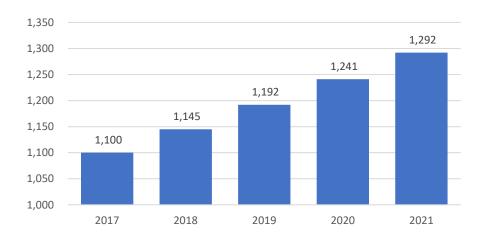
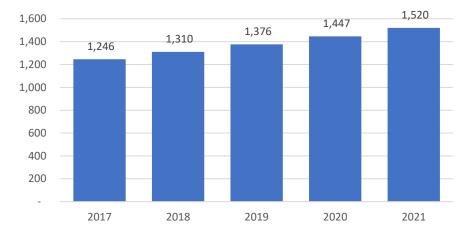
## **Global sodium cyanide demand and supply dynamics**



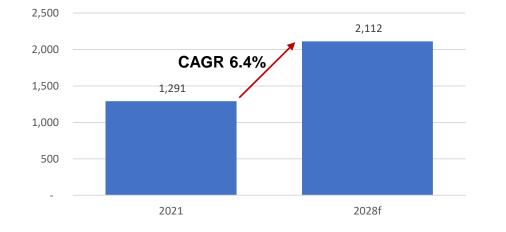
#### Global Sodium Cyanide Demand, 000 metric ton



#### Global Sodium Cyanide Supply, 000 metric ton

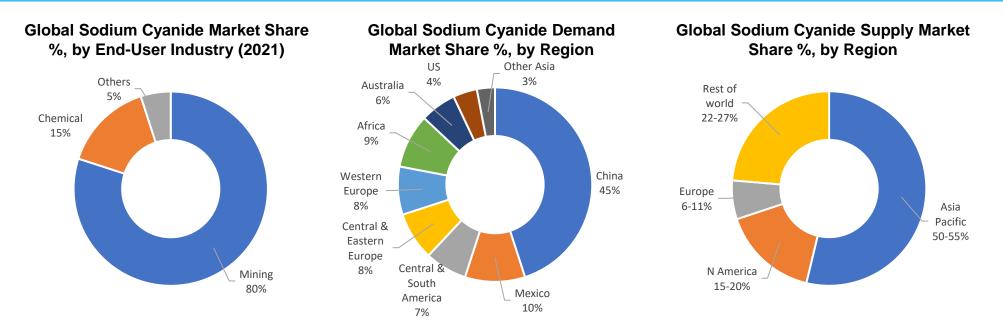
- ✓ Global sodium cyanide market size is projected to grow at a CAGR of 6.4% p.a. to reach USD2,112mln by 2028.
- Asia Pacific region dominates the sodium cyanide global market share, driven by robust demand from gold extraction & chemical industry.

#### 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 (9<sup>th</sup> 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**

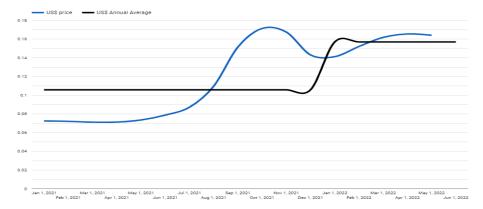
## Factors considered in periodic price recalculation equations of sodium cyanide

Key factors	Current market conditions				
Inflation rate	<ul> <li>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.</li> <li>World Bank highlighted that global inflation is expected to moderate in 2023 but it will likely remain above inflation targets in many economies.</li> </ul>				
Raw materials costs	<ul> <li>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.</li> <li>Natural gas prices in Europe are &gt;7x higher on the year, and 12x the levels in the US (vs. 1.5x in 2020).</li> </ul>				
Freight costs	<ul> <li>Sea freight costs increased sharply especially in 2H21, the Baltic Dry Index hit 5,650 on 7<sup>th</sup> Oct 2021. It stood at 2,578 on 17th June, having gained 16.3% YTD.</li> <li>Global port congestion is expected to continue until at least early-2023 and keep spot freight rates elevated.</li> </ul>				
FX conversion	<ul> <li>USD index gained 9% YTD</li> <li>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%.</li> </ul>				

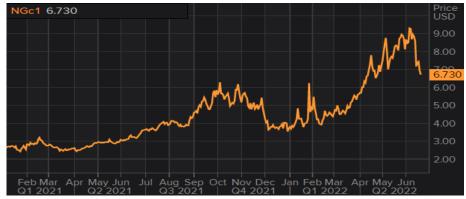
# Global sodium cyanide prices have risen by 25%-30% across global markets, driven by rising input material and transport costs

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				

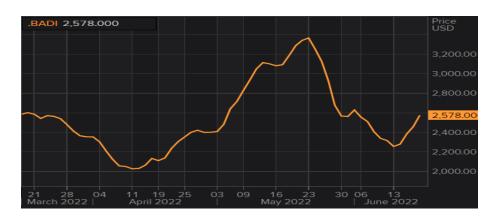
#### Caustic Soda Prices, 1<sup>st</sup> Jan 2021-21<sup>st</sup> June 2022



#### NYMEX Henry Hub Natural Gas Price, 1<sup>st</sup> Jan 2021-21<sup>st</sup> June 2022



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



### DISCLAIMER & DISCLOSURES



The Investment Team Market Intelligence of Verny Capital LLP (hereinafter referred to as the ("**Research Team**") have prepared this report (hereinafter referred to as the "**Report**"). The Research Team certifies that all views expressed in this Report reflect the Research Team's personal professional views. The Report is based on the information and methodologies taken from the sources which the Research Team considers to be reliable and have used public and other data which was not independently verified. While the Report is intended to be as accurate as possible, the Research Team and/or Verny Capital LLP make no guarantee, warranty or representation of any kind under any applicable law, express or implied, as to the accuracy or completeness of the information contained in the Report or otherwise, and it should not be relied on as such, and expressly disclaim under any applicable law any and all liability whether arising in tort, contract or otherwise which they might otherwise be found to have in respect of this Report or any statement in it. Further, the forward-looking statements speak only as at the date of the Report. The Research Team and/or Verny Capital LLP make no undertaking to update this Report or its contents after the date of the Report notwithstanding that such information may have become outdated or inaccurate. Notwithstanding above, the Research Team may change information contained in this Report at any time without notice.

Neither the Research Team nor Verny Capital LLP or any of its officers, employees shall be liable for any losses or damage that may result from any use of or reliance upon the information contained in the Report as a consequence of any inaccuracies in, errors or omissions, if any, in the information which the Report may contain or otherwise arising from the use and/or further communication, publication, or other disclosure of the information contained in the Report. Reliance upon any information in the Report is at the sole discretion and risk of the reader. Receipt and continuing review of the report shall be deemed agreement with, and consideration for, the foregoing.

This Report is solely intended for general information purposes only. Verny Capital LLP states that this Report is not in any sense, and shall not be construed under any applicable law, as an offer or solicitation of an offer to any person of the purchase or sale of any assets or securities in any jurisdiction; the Report and any materials contained therein shall not be relied upon for any purpose whatsoever, including but not limited to, for investment or any other decisions.

No portion of this Report may be copied, published, used or duplicated in any form by any means or redistributed without prior written consent of Verny Capital LLP. In addition, Verny Capital LLP expressly prohibits the use of any portion of the Report, whether by reference, by incorporation, or otherwise, in any prospectus, IPO materials, or other filings in any jurisdiction with financial supervisory or other authorities, or in any public materials on which any investment or any other decisions might be based.