

About ANDAMAN PARTNERS

ANDAMAN PARTNERS supports international business ventures and growth. We help launch global initiatives and accelerate successful expansion across borders. We work across selected industries in our chosen markets — and we get involved in three ways:

We **Invest**



ANDAMAN Investment

Providing seed and growth capital to early-stage companies.

We Advise



ANDAMAN Advisory

Transaction origination & execution support.

Strategy formulation & implementation support.

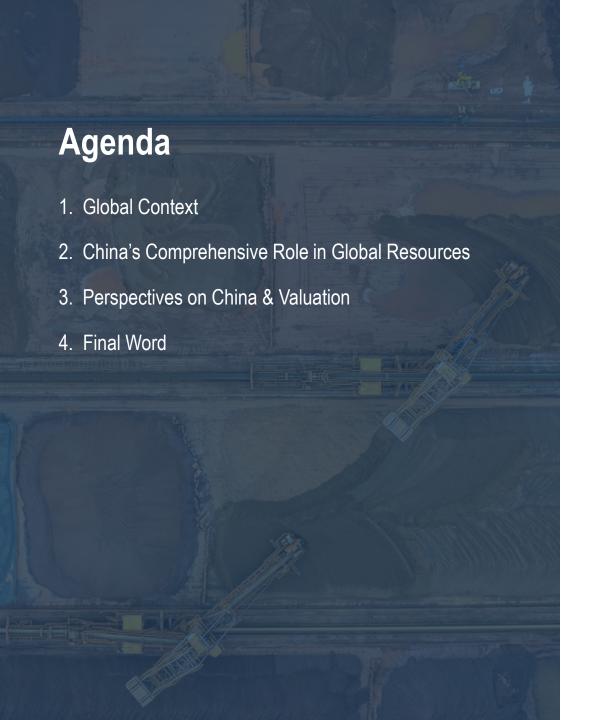
We Trade



ANDAMAN Trade

We make complex international value chains work.

www.andamanpartners.com





Prelude

China remains one of the world's largest producers of resources and the largest consumer, and is typically the largest importer of mining commodities and hence a massive market (and customer) for global producers.

China dominates much of the world's mineral processing and related supply chains, including several critical minerals. The country is a crucial investor and financial partner to the industry. Moreover, it has become a prominent engineering, procurement and construction partner for mining projects and operations worldwide.

China's role in the resource sector is complex, comprehensive and consequential.

China's growth may be slowing, and its demand for selected minerals and fuels may be peaking. But now is the time to form a comprehensive view of China's role in the sector and to become more — not less — strategically engaged.

ANDAMAN PARTNERS presents perspectives on selected key issues.

Feedback welcome!

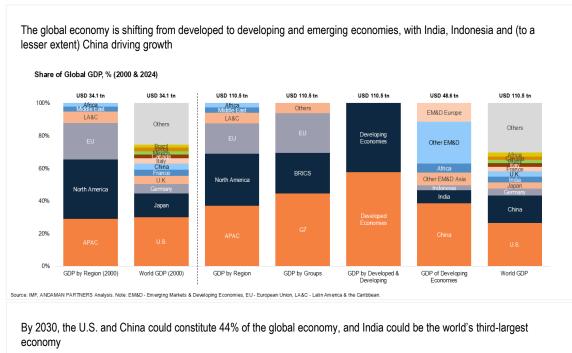
Kobus van der Wath Co-Founder, ANDAMAN PARTNERS



Global GDP growth in 2024 is under 3.5%, below historical averages, led by India, Indonesia and China among the top 20 largest economies, and Bangladesh, the Philippines, Vietnam and UAE outside the top 20. Growth in emerging markets and developing economies is more than double that in advanced economies



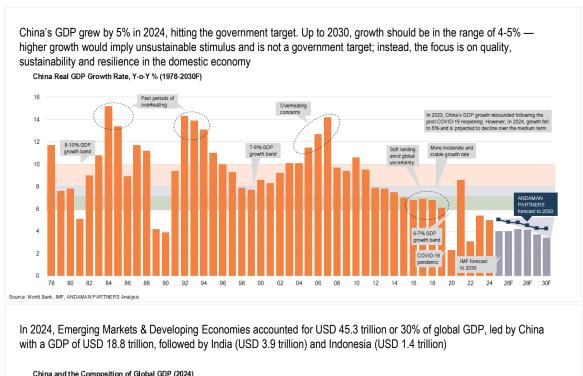
- Global real GDP growth in 2024 was 3.3%, a decline from 3.5% in 2023. Overall, the global growth outlook for 2025-2026 remains patchy, with significant regional divergences.
- The IMF projects a global GDP growth rate of 2.8% for 2025.
- The GDP growth of advanced economies slightly increased from 1.7% in 2023 to 1.8% in 2024, while emerging markets and developing economies declined marginally from 4.7% to 4.3%.
- The IMF projects global GDP growth of 2.8% and 3.0% for 2025 and 2026, respectively, below the historical (2000-2024) average of 3.5%. The forecast for advanced economies is 1.4% for 2025 and 1.5% for 2026. For emerging markets and developing economies, the forecasts are 3.7% and 3.9%, respectively.
- From 2024 to 2030, global real GDP growth is forecast at 3.1%, while the forecast for emerging markets and developing economies is 4.0%.
- Up to 2030, among the larger developing economies, India (6.4%), Indonesia (4.9%), China (4.1%) and Türkiye (3.4%) could outperform the global average, while many developed economies will likely not reach this level.
- Several emerging markets and developing economies outside the top 20 largest economies are projected to exceed global average growth, notably Bangladesh (5.8%), the Philippines (6.0%), Vietnam (5.3%), the UAE (4.3%) and Malaysia (4.1%).

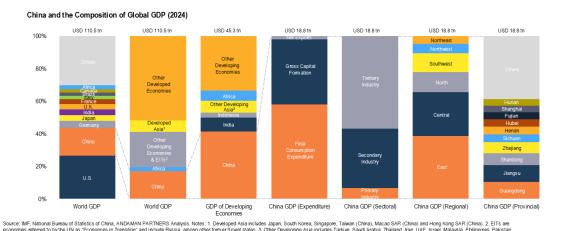


Rank 2000)			Rank (2024)			Rank (2030F)			USD bn (2030F)	Share of Global GDP (2030F)	Avg. Real GDP Growth Rate (2024-2030)
 1	U.S.		→ 1	U.S.		→ 1	U.S.		37, 153	26%	4.1%
2	Japan	• ~	~ 2	China	•>	→ 2	China	*3	25,828	18%	5.5%
3	Germany		√→ 3	Germany	_	3	India	-	6,770	5%	9.6%
4	U.K.	**-	4	Japan	• -	4	Germany		5,576	4%	3.0%
5	France		, 5	India	- Z	5	Japan	•	4,995	3%	3.7%
6	China		6	U.K.	* -	→ 6	U.K.		4,956	3%	5.3%
7	Italy	115	7	France	$\mathbf{H} =$	→ 7	France		3,755	3%	2.9%
8	Canada	1+1-	8	Italy		→ 8	Canada	+	2,792	2%	3.7%
9	Mexico		→ 9	Canada	1+1 -	9	Italy		2,779	2%	2.7%
10	Brazil	\bullet	→ 10	Brazil	◆ —	→ 10	Brazil		2,680	2%	3.6%
11	Spain	= </td <td>_11</td> <td>Russia</td> <td></td> <td>→ 11</td> <td>Russia</td> <td></td> <td>2,384</td> <td>2%</td> <td>1.7%</td>	_11	Russia		→ 11	Russia		2,384	2%	1.7%
12	South Korea	:e: — }	12	South Korea	:0: _	12	Spain	C	2,201	2%	4.2%
13	India	エノ	13	Mexico		13	Australia	**	2,182	2%	3.3%
14	Netherlands	=\	14	Australia	*	14	Mexico	•	2,152	1%	2.5%
15	Australia	***	15	Spain		15	South Korea	:•:	2,150	1%	2.4%
16	Iran	= \	16	Indonesia		→ 16	Indonesia		2,066	1%	6.7%
17	Taiwan, China	© -\	17	Türkiye	C·	→ 17	Türkiye	c.	1,776	1%	5.0%
18	Argentina	=	18	Netherlands	=-	→ 18	Netherlands		1,514	1%	3.6%
19	Switzerland	□ →	19	Saudi Arabia	SURE	→ 19	Saudi Arabia	9,918	1,374	1%	4.0%
20	Russia		20	Switzerland	•••	20	Poland	-	1,305	1%	6.2%

China's economic growth is slowing to a more manageable level. Growth of 6-7%, would entail economic instability and financial risks; around 5%, as in 2023-2024, is more sustainable in a global environment characterised by slower growth and trade tensions



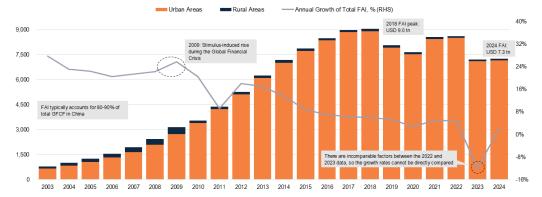




Bangladesh, Vietnam, Iraq, Qatar, Kuwait, Sri Lanka, Oman, Myanmar, Lebanon, Bahrain, Nepal, Cambodia, Afghanistan, Lao PDR, Yemen, Brunei, Mongolia, Fiji, Maldives and Bhutar

The period from 2000 to 2018 was an era of Fixed Asset Investment (FAI)-led GDP growth in China, with a focus on transportation, industry and real estate. Peaking in 2018 amid concerns over over-capacity and debt, slower FAI growth since has been a key factor in slowing GDP growth





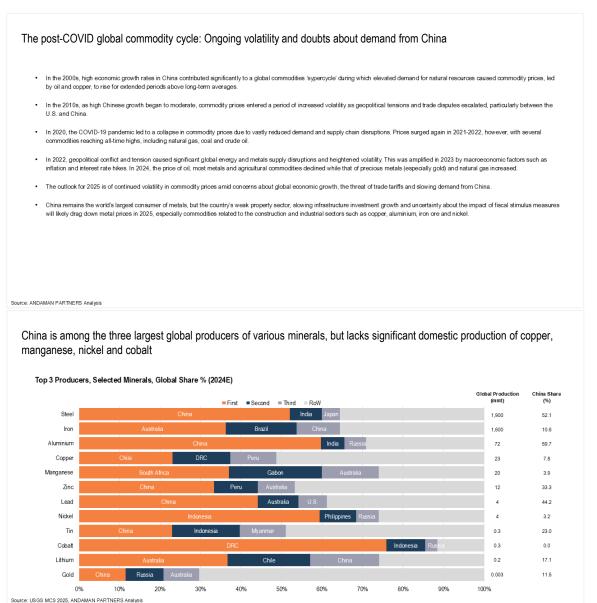
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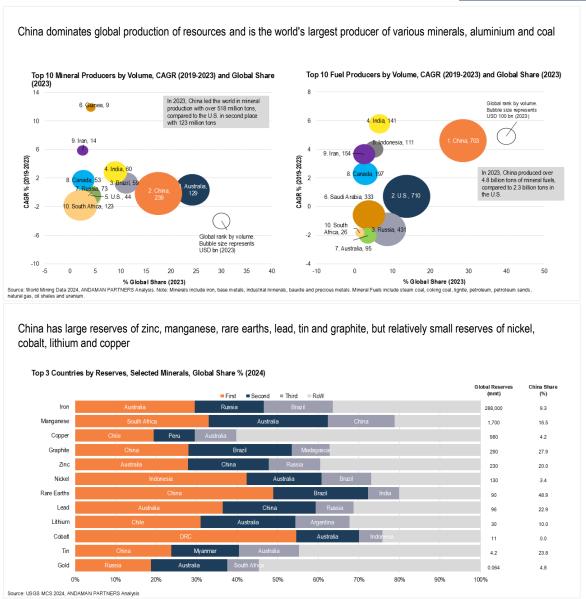
China GDP outlook: Slower growth and adjustments bring new opportunities

- China is in a long-term structural adjustment phase towards lower GDP growth but is still one of the most significant contributors to global growth.
- . China's GDP grew by only 3.1% in 2022 but rebounded to 5.4% in 2023 and 5% in 2024. In 2025, growth is expected to be around 4%.
- China is the world's largest exporter and second-largest importer. China's position as a trade leader and its large trade surplus provide it with economic heft but complicate its international relations (and dependencies).
- Shifting supply chains have worldwide implications affecting all global supply chains, but they also expose vulnerabilities in an interdependent world, including for China.
- This is causing wholesale restructuring and coordination of supply chains for companies across regions and industries and the start of many new trade partnerships an opportunity and a threat
- China's economy faces several structural and cyclical pressures, and the old model is no longer relevant. To address this, the country is undertaking painful reforms and implementing policy measures to strengthen the real estate sector, domestic manufacturing and domestic consumption.
- China's global impact and influence is only increasing. BRICS+, FOCAC and various other forums are testimony to this. Moreover, investments in the Belt and Road Initiative ensure China continues to expand its influence on global trade and investment.
- Despite growing complexity, increased outward investment, increased trade in high-end products and rising domestic consumption are traits of China's new economic growth mode
- Political and business leaders must consider the many and variable opportunities with and in China for strategies and tactics, competitive operating models, inbound and outbound supply chains and capital choices (as well as investment decisions).

China's dominance of mineral production continues to shape strategic dependencies globally, even as doubts about China's slowing demand for resources contribute to volatile global commodity markets, impacting prices and supply chains



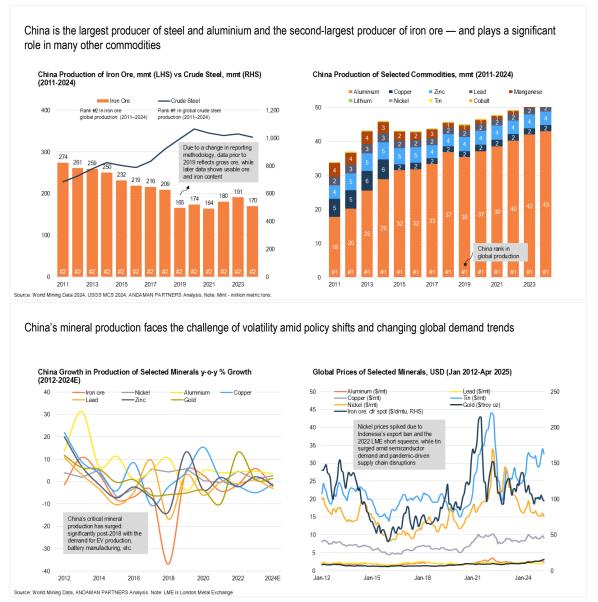


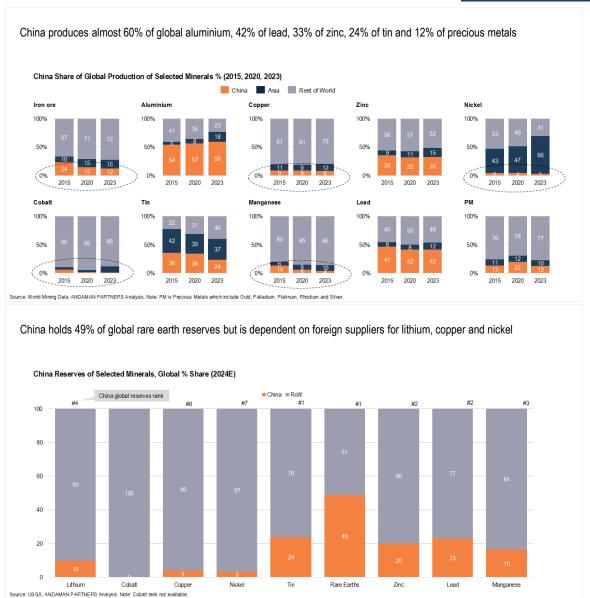




China dominates production of steel, aluminum and several minerals, and supplies significant shares of global demand for various other commodities. China itself is dependent on foreign sources for key metals such as lithium, copper, cobalt and nickel







Mineral production is geographically diverse, but China dominates critical mineral production and processing, providing it with significant leverage over supply chains and trade policy

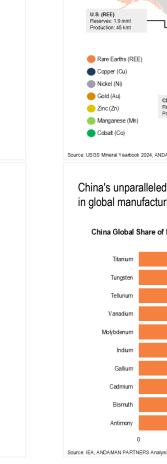


China's control over critical mineral processing is reshaping global supply chains, but mineral production remains geographically diverse · China dominates global mineral processing, particularly for rare earths, graphite, lithium and cobalt, shaping supply chain dependencies Mineral production remains geographically diverse, with key contributors including Australia. Indonesia and Peru for various critical minerals · China holds a stronghold over the production of key industrial minerals like gallium (98%), tungsten (81%) and bismuth (80%), reinforcing its strategic control over these minerals. Manufacturing and bulk material production are highly concentrated in China, covering solar PV wind, batteries, steel, gement and aluminium. . Copper, lithium and nickel mining is more diversified, with Chile, Australia, Indonesia, Philippines and Peru leading global production. · China's mineral dominance translates into geopolitical leverage, influencing trade policies, supply security and industrial dependencies . The global supply chain for critical minerals is increasingly polarized, with China controlling processing while mining remains spread across multiple regions. Source: ANDAMAN PARTNERS Analysis China dominates mineral processing while production remains diversified, shaping global supply chains and geopolitical control of resources Top Three Producers of Selected Minerals, Global Share % (2024) Top Three Processors of Selected Mineral, Global Share % (2022) ■ U.S ■ Russia DRC Madagasca ■ Malaysia Canada Estonia Chile New Caledonia
 RoW Rare Earths Copper Graphite Nickel

Lithium

Cobalt

9 6



Critical mineral supply is concentrated in a few countries. Strategic resource control is increasingly defining industrial and geopolitical landscapes Top Countries by Reserves and Production of Critical Minerals, Volume (2024) Australia's strength is zinc. Russia and Australia holds ample gold reserve Russia (Au) Reserves: 12 kmt Production: 310 mt China (REE, Cu, Au, Zn) Gabon (Mn) Reserves: 61 mm Production: 4.6 mm DRC (Co) Peru (Cu, Zn) Reserves: 6 mmt Reserves: 4.8 mmt Reserves: 100 mmt, 20 mmt Production: 220 kmt Production: 330 kmt Reserves: 55 mmt, 640 kmt Chile (Cu) Brazil (REE) Production: 2.2 mmt. 28 kmt Reserves: 190 mmt Reserves: 21 mmt Production: 7.2 mmt Production: 20 mt South Africa (Mn) Reserves: 560 mmt Production: 7.4 mmt Reserves: 24 mmt, 12 kmt, 64 mmt, 500 mmt, 1.7 mmt Production: 1.1 mmt, 290 mt, 1.1 mmt, 2.8 kmt, 3.6 kmt Source: USGS Mineral Yearbook 2024, ANDAMAN PARTNERS Analysis China's unparalleled control of critical minerals, rare earths processing and supply chain integration solidifies its advantage in global manufacturing China Global Share of Production of Other Critical Minerals % (2023) Geographic Concentration of Supply Chains by Segment (2023) ■ Largest Producing Country ■ Second-Largest ■ Third-Largest ■ Other Countries Critical Minerals Mining Nickel Lithium Copper Critical Minerals Production Cobalt Nickel Lithium Copper **Bulk Material Production** Cement Manufacturing Wind Solar PV Heat Pumps

Source: ANDAMAN PARTNERS Analysis

Source: IEA, ANDAMAN PARTNERS Analysis, Note: Production data for Graphite is for 2023

Cobalt

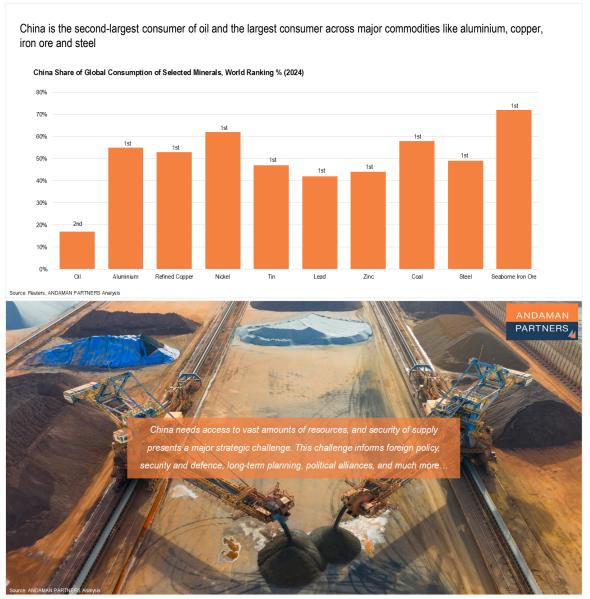
Graphite³



China and Asia are the world's dominant consumers of key commodities, and have vastly increased their consumption of metals and minerals in recent years — a trend that will continue. Resource security remains a key factor informing China's foreign policy





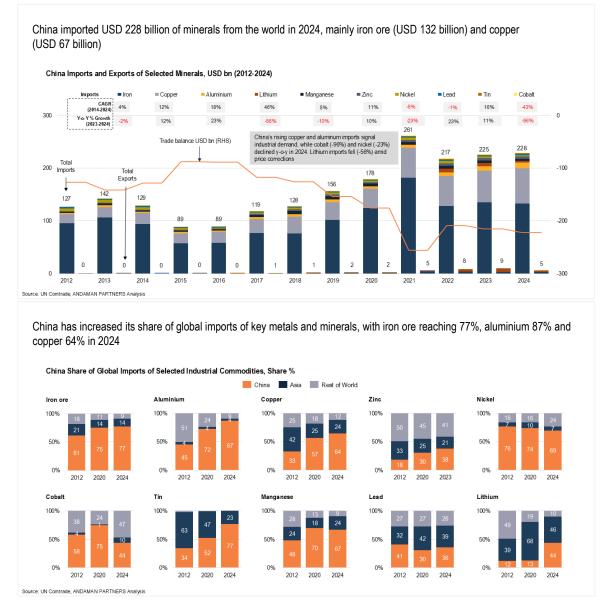




China is still the world's largest importer of resources with increasing shares of global imports of key metals and minerals. But China is no longer a seller's market for resources — now, sellers must operate in a low-growth environment and be more strategic to succeed

Source: ANDAMAN PARTNERS Analysis







China has become a buyer's market for resources and is diversifying its resource imports. China is still a massive customer, but mining companies must now adapt and approach China differently than before, taking a comprehensive view of the country's role



The Middle East & North Africa was China's largest import partner in 2024 accounting for a share of 25%, followed by Latin America & the Caribbean (18%) and Oceania (16%)

China Import Partners by Region for Selected Minerals, USD bn (2014-2024) 14% North America 11% 85 2014 USD 10 bn 2024 USD 10 bn 2024 USD 10 bn 2024 USD 10 bn Middle East & North Africa 25% Sub-Saharan Africa 150 152 125 25% Sub-Saharan Africa 26% 27% 28% 32% 38%

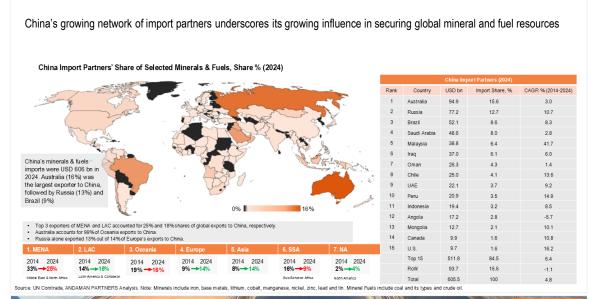
China Imports of Selected Commodities, USD bn (2014-2024)

Sr. No.	Mineral	USD billion (2024)	Global Share % (2014)	Global Share % (2024)	CAGR % (2014-2024)
1	Aluminium	10.5	44.8	↑ 87.0	17.8
2	Cobalt	0.0	59.4	↓ 43.8	-42.7
3	Copper	67.3	40.1	↑ 64.1	12.1
4	Iron	132.4	63.7	↑ 77.4	3.5
5	Lead	2.0	32.9	↑ 35.6	-0.7
6	Manganese	4.4	54.8	↑ 66.7	4.9
7	Nickel	2.7	76.0	♦ 69.3	-5.3
8	Tin	1.7	41.7	† 76.7	15.7
9	Zinc	4.4	19.5	↑ 37.6	11.1
10	Lithium	2.9	12.6	43.9	45.5
11	Coal	53.2	16.7	1 25.7	7.9
12	Crude Oil	337.6	15.1	1 26.3	3.6

Source: UN Comtrade, ANDAMAN PARTNERS Analysis. Note: Selected commodities are Aluminium, Copper, Cobalt, Iron, Lead, Manganese, Nickel, Tine, Zinc, Lithium, Crude Oil and Coal. The % share is of global imports of the respective commodity.

China is diversifying its import sources, strengthening resource security and shifting trade dynamics to adapt to evolving global supply and demand trends

- China is diversifying its import sources, with Latin America & the Caribbean (14% -> 18%) and Europe (9% -> 14%) gaining shares, while MENA's share declined from 33% to 25%.
- Australia and Russia remain China's top import partners, contributing USD 94.9 bn (15.6%) and USD 77.2 bn (12.7%) in 2024, respectively, reinforcing their role in China's resource security.
- . Cobalt imports saw the most significant decline (-42.7% CAGR) while lithium surged (+45.5%), reflecting China's focus on battery metals and EV supply chains.
- . The Middle East remains China's key energy supplier led by Saudi Arabia (USD 48.6 bn) and Iraq (USD 37.0 bn).
- Malaysia's importance surged (+42% CAGR) in China's supply chains, signaling a more substantial role in mineral processing and industrial metals.
- . Nickel (69.3% global share) and manganese (66.7%) remain critical to China's imports, while iron and copper imports continue to rise, fueling infrastructure and manufacturing.
- . China's total mineral and fuel imports reached USD 605.8 bn in 2024, growing at 4.8% CAGR, with the top 15 suppliers accounting for 84.5% of total imports.





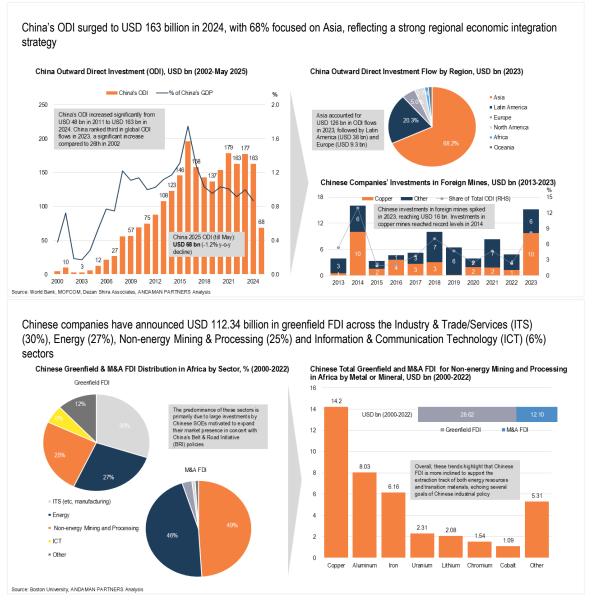
Source: ANDAMAN PARTNERS Analysis



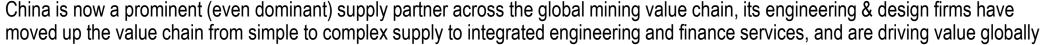
China's is an important and growing source of mining investment and finance, impacting global trade, resource security and economic influence. The roles and preferences of Chinese investors have changed in recent years, but China still offers real potential



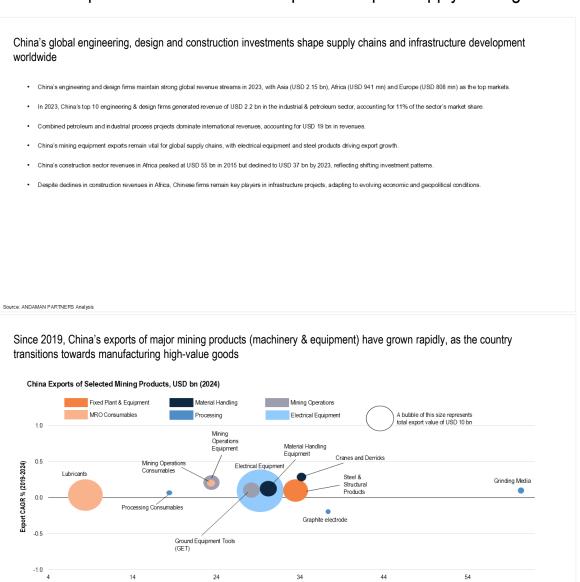


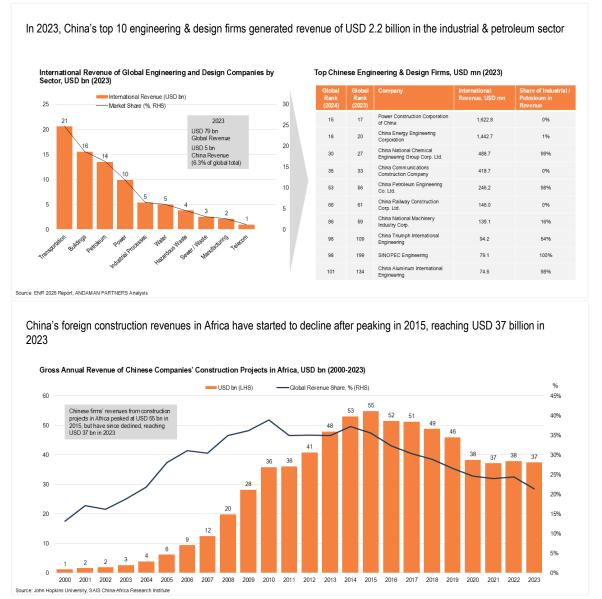






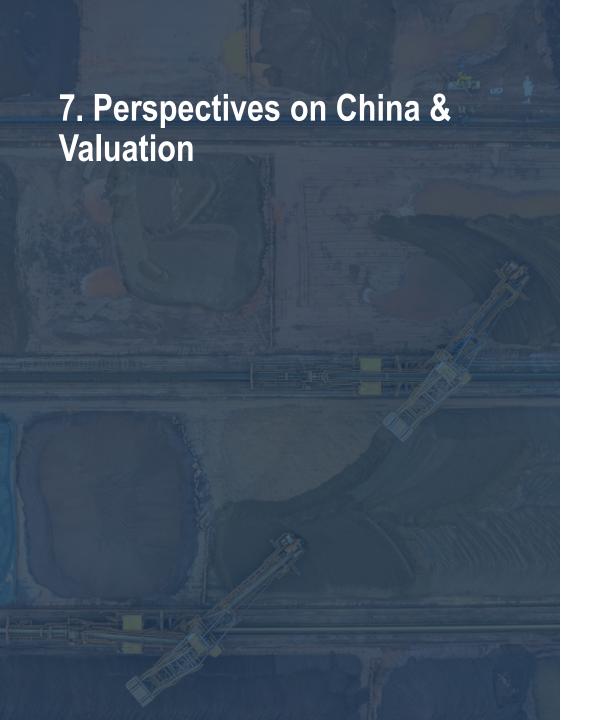






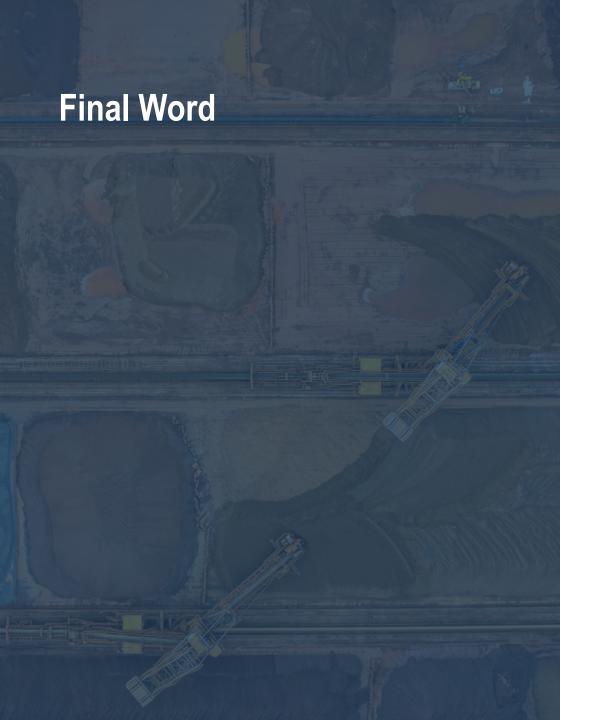
Source: UN Comtrade, ANDAMAN PARTNERS Analysis

Source: ANDAMAN PARTNERS Analysis





- Strategic need (resource security)
- Investable funds
- Negotiation culture
- History, experience and context
- Geopolitics / Geostrategy / Technology race
- SOE vs private players
- Mining vs other sectors
- Standards & practices (geology, etc.)





- World's second-largest economy
- Typically the largest producer
- The largest consumer
- Driver of trade and largest importer
- Crucial investor and capital partner
- Dominates mineral processing and supply chains
- Capacity to design and build
- Unique valuation context

