



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



Agenda

Executive Summary

- 1. Orientation
- 2. Production
- 3. Consumption
- 4. Trade
- 5. Investment & Financing
- 6. Supply Chains

Conclusions, Implications and Recommendations

Prelude

China remains one of the world's largest producers of resources and the largest consumer, typically importing the most mining commodities and is thus 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. And 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 growth 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

China is still China, but mining companies must now approach it more strategically



- Long vs short term China's long-term rise continues, but it faces significant cyclical and structural challenges in a very complex world.
- Complex resources landscape Global resources are woven into geopolitics, geostrategy, the technology race, etc. The stakes are high. Issues and risks abound; geopolitics enter the boardroom, as do global supply chain realignment and international competition, among others.
- Consumption China remains the world's largest consumer, typically the #1
 customer for many of the world's mining companies. But much has changed ('peak
 demand?'). Much clearer strategic intel is needed.
- Production China's mining production is significant in many commodities, but low on a per-capita basis. Domestic demand remains high, albeit demand growth is moderating.
- Critical juncture for critical minerals Many forces are converging simultaneously in CM: geopolitics, risk perception, diversification efforts and shifts in supply and demand (dis)equilibrium, etc. Key is China's role in production, processing, consumption and value chain prominence, i.e., its large imports, processing share and commanding REE reserves are stand-out factors in geopolitics and boardrooms.
- Trade Imbalances between China's domestic production and consumption still drive large resource trade to China, albeit at lower growth rates. Global mining companies need to work much harder and smarter to succeed in marketing and sales, with an entirely new China strategy, customer engagement model and logistics approach.
- Capital partner China's role as a source of investment and finance remains significant. However, much has changed (compared to, for example, 2005-2015): geopolitics, perceptions and China's approach (as well as that of Chinese investors, including their maturity, deal preferences, etc.). Still, the potential is real to tap quality partners and capital from China.
- Inbound Supply Chain partner China has become a very prominent (even dominant) supply partner across the global mining value chain. China's engineering & design, machinery & equipment, technologies and construction services are already driving value for many projects and operations worldwide through cost reduction and schedule gains.

Global & China Macro Environment

- 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.
- China is in a long-term structural adjustment phase towards lower GDP growth, but still contributes significantly to global growth. GDP grew by 3.0% in 2022, 5.2% in 2023 and 5% in 2024, and should remain at around 5% in 2025.

Global Resources Context

- In 2022, geopolitical tensions caused energy and metals supply disruptions, amplified in 2023 by macroeconomic factors. In 2024, the prices of oil, metals and agricultural commodities declined; precious metals and natural gas rose.
- The outlook for 2025 is of continued volatility in commodity prices amid concerns about global economic growth, the threat of trade tariffs and slowing demand from China.

China Consumption, Production & Trade

- Despite slower growth, China is still the largest consumer of various commodities.
- China is the top producer of steel, aluminium and key minerals, but remains dependent on foreign sources for metals like Li, Cu, Ni, etc.
- Over the past 2-3 decades, China increased its share of global imports of key metals and minerals, as well as more recently (iron ore 74%, Al 81% and Cu 61%).

China as Capital Partner

- China's ODI and lending shape global trade, resource security and economic influence.
- China's ODI continues to expand: USD 177 bn in 2023 with Asia (USD 126 bn) and Latin America (USD 37.6 bn) as primary destinations.
- Resource security remains a priority, with a stock of USD 194 bn for mining investments.
- China provided USD 182.3 bn in loans to African governments (2000-2023).

China as Inbound Supply Chain Partner

- Chinese mining equipment, machinery and chemicals are integral to project procurement.
- Chinese EPCs are moving up the value chain: design & engineering revenues are expanding and construction earnings are rising.
- The value derived from having China in the project or operations supply chain is already very significant and quality risks have largely dissipated (even if they must be managed well)

Critical Minerals, Transition & Sustainability

- Mineral production remains geographically diverse, but China dominates CM processing.
- China controls the production of key industrial minerals like gallium (98%) and tungsten (81%)
- Manufacturing and bulk material production are highly concentrated in China.
- China's mineral dominance signifies geopolitical leverage, influence over trade policy, supply (in)security and industrial dependencies.

Conclusions

- China remains a core node in global mining: leading producer, consumer and importer, dominating mineral processing as well as manufacturing and bulk material production.
- China is a key player in investment, financing and project execution, and its EPC firms play a crucial role.
- Despite slowing growth and economic challenges, China is still China: the world's largest resource consumer and a critical and unavoidable player in the global mining industry.

Implications

- Despite China's slowing growth and possibly peaking demand for resources, now is the time to form a comprehensive view of China's role in the sector and to engage it more strategically.
- The mining industry is facing a complex global landscape with increased risk. But in reality, it is impossible to detach from China.
- It is essential to recognise China's comprehensive role, engage it strategically and compete effectively to win.

Recommendations

- Organisation: Select appropriate leaders/teams for China engagement; invest in strategic intel; form strategic partnerships; take a long-term view.
- Marketing/Sales: Leverage the proper marketing and branding machinery; adapt customer engagement models; use the correct information.
- Capital: Select the right partners (longlist > shortlist > shortlist); focus on projects that are deserving/appropriate; follow a disciplined process; use astute advisors (DD them).
- Inbound Supply Chain: Balance China's share in global procurement; determine China+5 priorities; frame category/packages vs supply market/cluster choices; use the right operating model, physical supply chain, strong partners.

Source: ANDAMAN PARTNERS Analysis





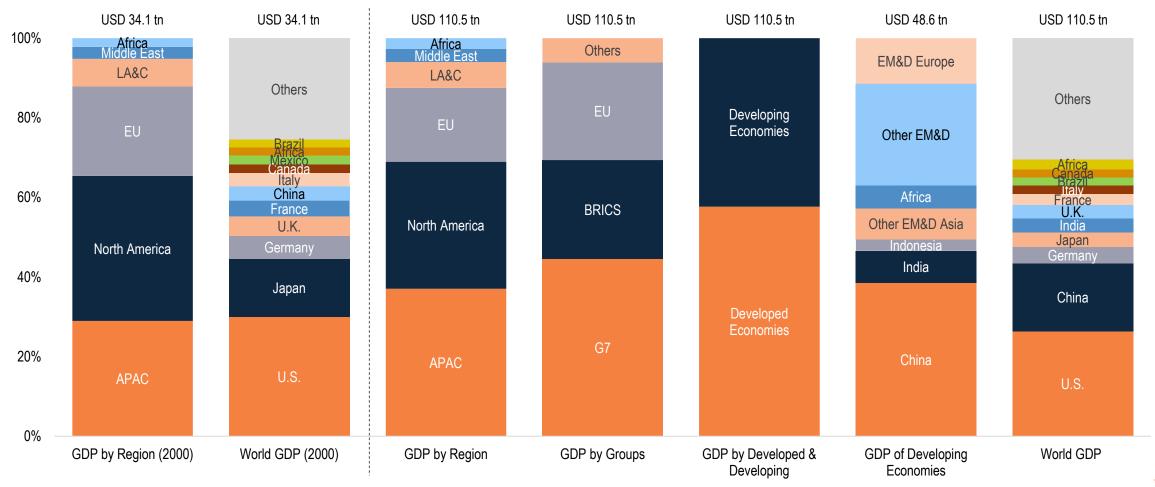
Global GDP growth in 2024 was below 3.5%, a rate below historical averages, led by India, Indonesia and China, among the top 20 largest economies. Additionally, Bangladesh, the Philippines, Vietnam, and the UAE, which are not among the top 20, also contributed to this growth. Growth in emerging markets and developing economies is more than double that in advanced economies

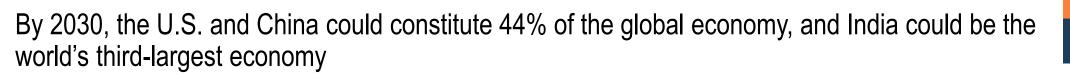
- Global real GDP growth in 2024 was 3.3%, a decline from 3.5% in 2023. Overall, the global growth outlook for 2025-2026 remains patchy, with significant regional divergences.
- The IMF projects a global GDP growth rate of 2.8% for 2025.
- The GDP growth of advanced economies slightly increased from 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%).

The global economy is shifting from developed to developing and emerging economies, with India, Indonesia and (to a lesser extent) China driving growth



Share of Global GDP, % (2000 & 2024)







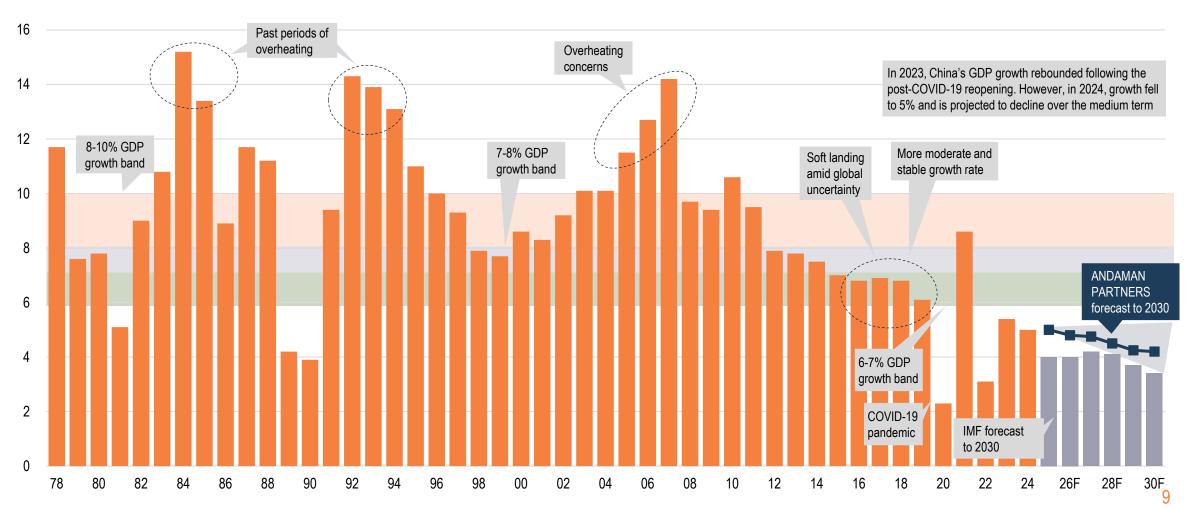
Top 20 Economies by GDP (2000, 2024, 2030F)

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	*):	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		5	Japan		4,995	3%	3.7%
6	China	*	6	U.K.		→ 6	U.K.		4,956	3%	5.3%
7	Italy		7	France		→ 7	France		3,755	3%	2.9%
8	Canada	 + -	8	Italy		8	Canada	*	2,792	2%	3.7%
9	Mexico		9	Canada	*	9	Italy		2,779	2%	2.7%
10	Brazil		10	Brazil	◆ —	→ 10	Brazil	♦	2,680	2%	3.6%
11	Spain	*	— 11	Russia		→ 11	Russia		2,384	2%	1.7%
12	South Korea	***	12	South Korea	***	1 2	Spain	<u>(6)</u>	2,201	2%	4.2%
13	India		13	Mexico		13	Australia	*	2,182	2%	3.3%
14	Netherlands	=	14	Australia	*	14	Mexico	3	2,152	1%	2.5%
15	Australia	*	15	Spain		15	South Korea	"• "	2,150	1%	2.4%
16	Iran	Φ	16	Indonesia		1 6	Indonesia		2,066	1%	6.7%
17	Taiwan, China	©	17	Türkiye	C*	→ 17	Türkiye	C*	1,776	1%	5.0%
18	Argentina	\equiv	18	Netherlands		1 8	Netherlands		1,514	1%	3.6%
19	Switzerland		19	Saudi Arabia	5-231.3	1 9	Saudi Arabia	2200	1,374	1%	4.0%
20	Russia		20	Switzerland	-	20	Poland	+	1,305	1%	6.2%
	AND ALAM DADTH		▼			*	World		144,576	100%	4.6%



China's GDP grew by 5% in 2024, hitting the government's target. Up to 2030, growth should be in the range of 4-5%; higher growth would imply unsustainable stimulus and is not a government target; instead, the focus is on quality, sustainability and resilience in the domestic economy

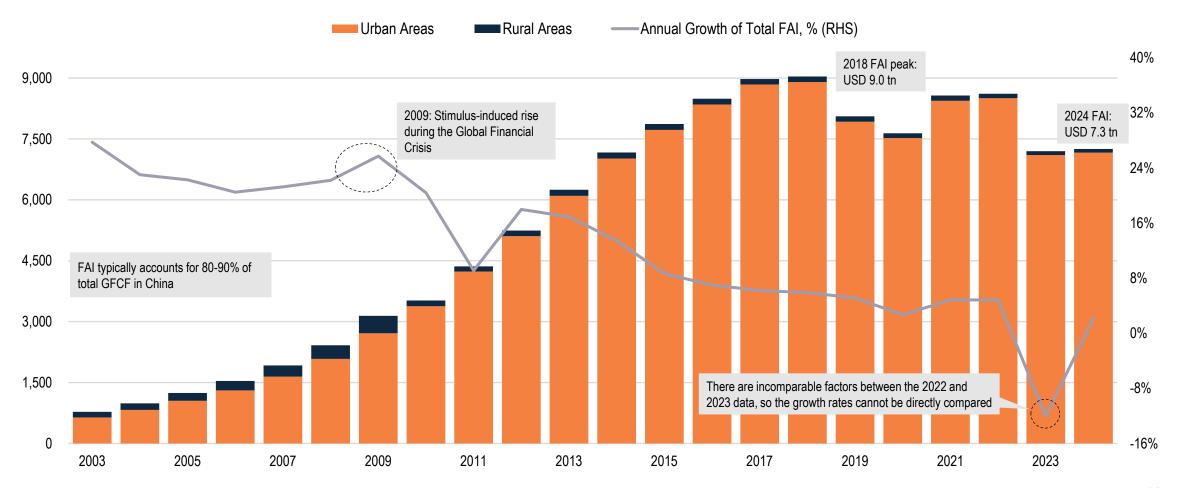
China Real GDP Growth Rate, Y-o-Y % (1978-2030F)





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-capacity and debt, slower FAI growth since has been a key factor in slowing GDP growth

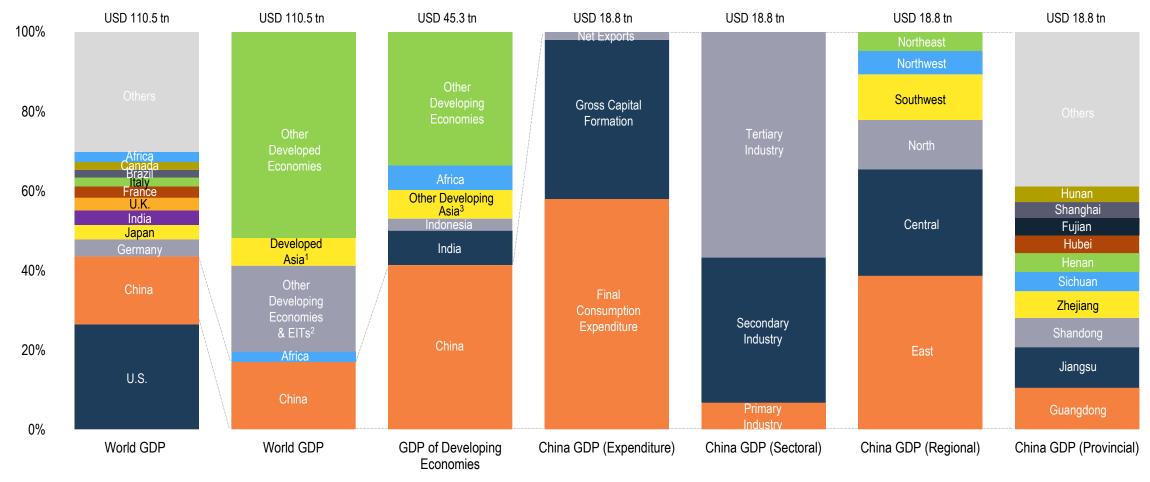
China Annual Fixed Asset Investment in Urban and Rural Areas, USD bn (2003-2024)





In 2024, Emerging Markets & Developing Economies accounted for USD 45.3 trillion or 30% of global GDP, led by China with a GDP of USD 18.8 trillion, followed by India (USD 3.9 trillion) and Indonesia (USD 1.4 trillion)

China and the Composition of Global GDP (2024)



China GDP outlook: Slower growth and adjustments bring new opportunities

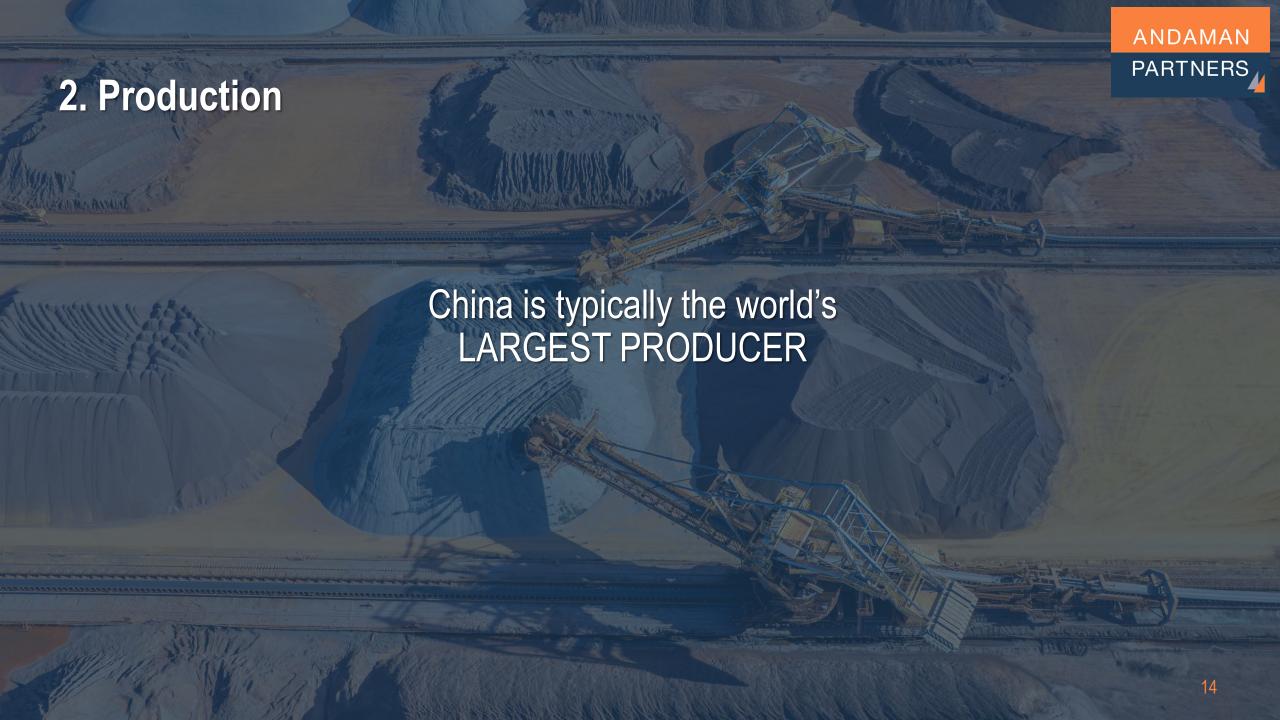


- China is in a long-term structural adjustment phase towards lower GDP growth, but is still one of the most significant contributors to global growth.
- China's GDP grew by only 3.1% in 2022 but rebounded to 5.4% in 2023 and 5% in 2024. In 2025, growth is expected to be around 4%.
- China is the world's 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 are 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 model.
- 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).

The post-COVID global commodity cycle: Ongoing volatility and doubts about demand from China



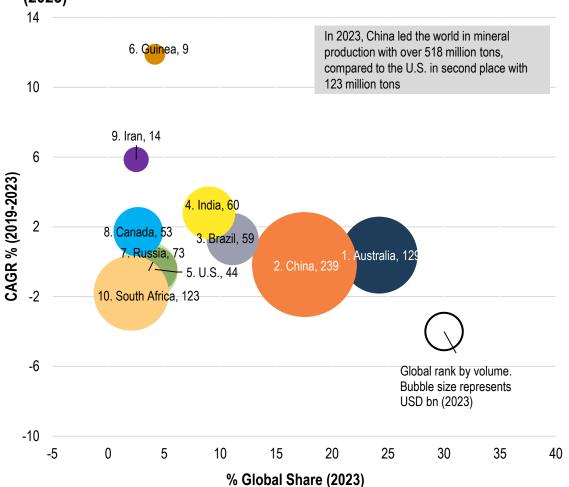
- In the 2000s, high economic growth rates in China contributed significantly to a global commodities 'sypercycle' during which elevated demand for natural resources caused commodity prices, led by oil and copper, to rise for extended periods above long-term averages.
- In the 2010s, as high Chinese growth began to moderate, commodity prices entered a period of increased volatility as geopolitical tensions and trade disputes escalated, particularly between the U.S. and China.
- In 2020, the COVID-19 pandemic led to a collapse in commodity prices due to vastly reduced demand and supply chain disruptions. Prices surged again in 2021-2022, however, with several commodities reaching all-time highs, including natural gas, coal and crude oil.
- In 2022, geopolitical conflict and tension caused significant global energy and metals supply disruptions and heightened volatility. This was amplified in 2023 by macroeconomic factors, including inflation and interest rate hikes. In 2024, the prices of oil, most metals, and agricultural commodities declined, while those of precious metals (especially gold) and natural gas increased.
- The outlook for 2025 is of continued volatility in commodity prices amid concerns about global economic growth, the threat of trade tariffs and slowing demand from China.
- China remains the world's largest consumer of metals. Still, the country's weak property sector, slowing infrastructure investment growth and uncertainty about the impact of fiscal stimulus measures will likely drag down metal prices in 2025, especially commodities related to the construction and industrial sectors such as copper, aluminium, iron ore and nickel.



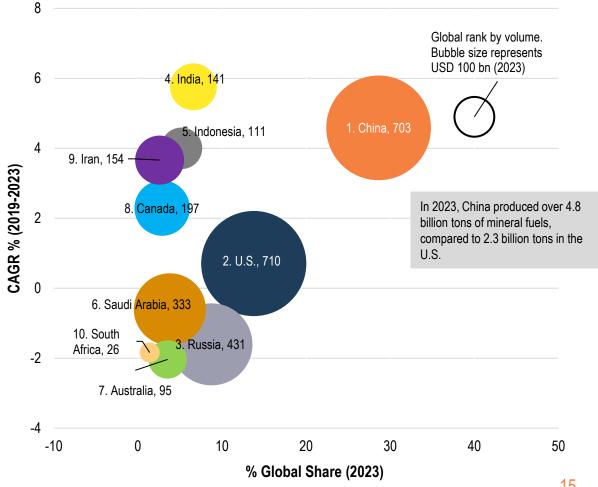
China dominates global production of resources and is the world's largest producer of various minerals, aluminium and coal



Top 10 Mineral Producers by Volume, CAGR (2019-2023) and Global Share (2023)



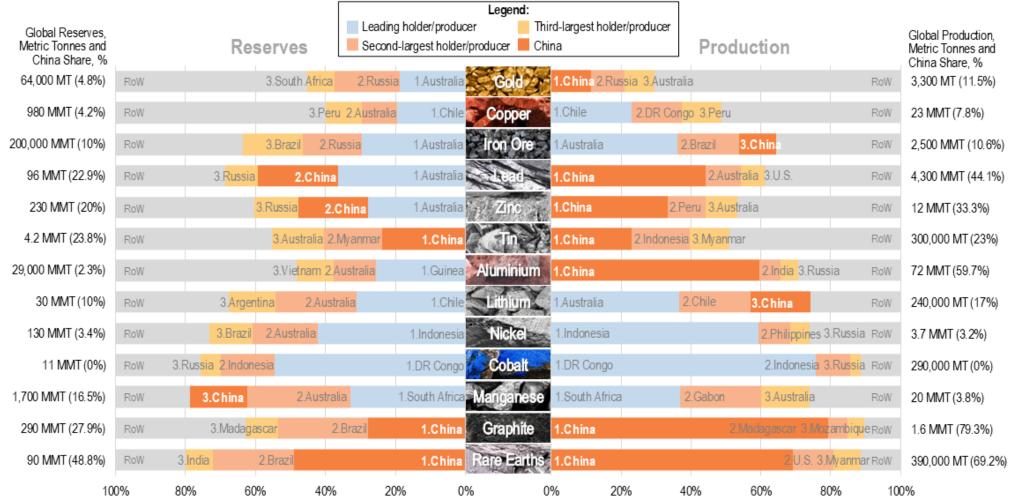
Top 10 Fuel Producers by Volume, CAGR (2019-2023) and Global Share (2023)

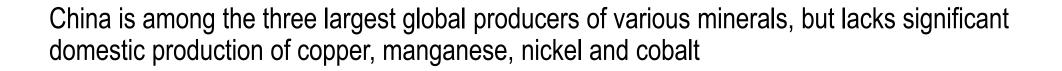




China ranks among the world's top three producers and holders of reserves across a wide range of minerals and metals, providing significant leverage in global resource security and the energy transition

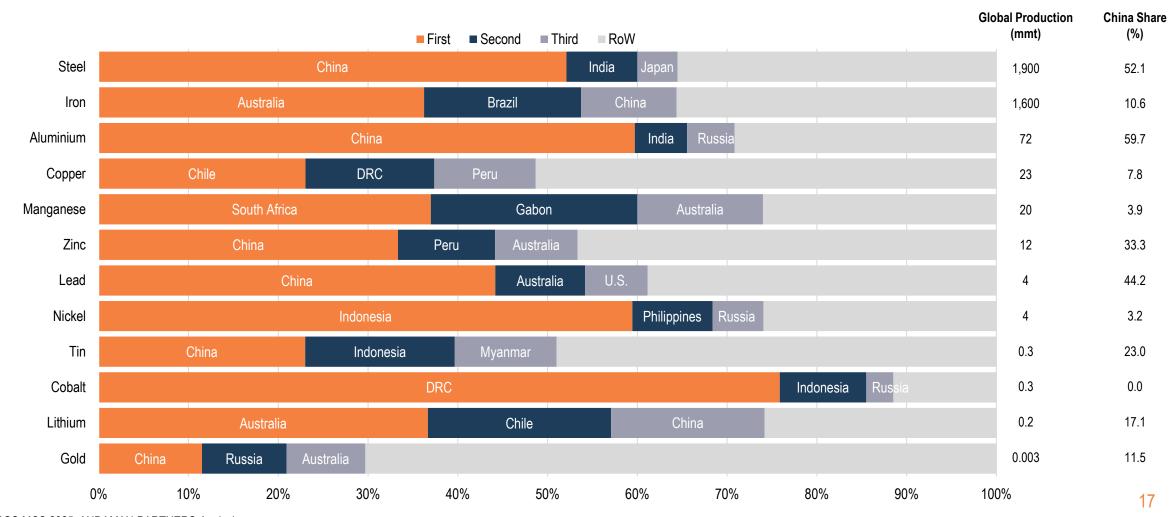
Strategic Minerals and Metals: Top 3 Holders of Reserves and Producers, % Share (2024)







Top 3 Producers, Selected Minerals, Global Share % (2024E)

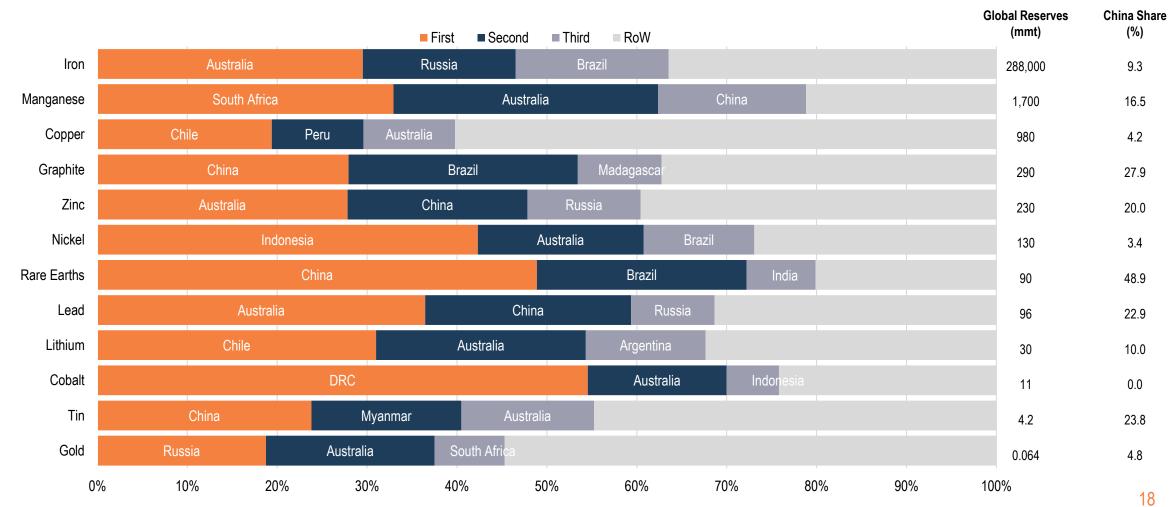


Source: USGS MCS 2025, ANDAMAN PARTNERS Analysis

China has extensive reserves of zinc, manganese, rare earths, lead, tin and graphite, but relatively small reserves of nickel, cobalt, lithium and copper



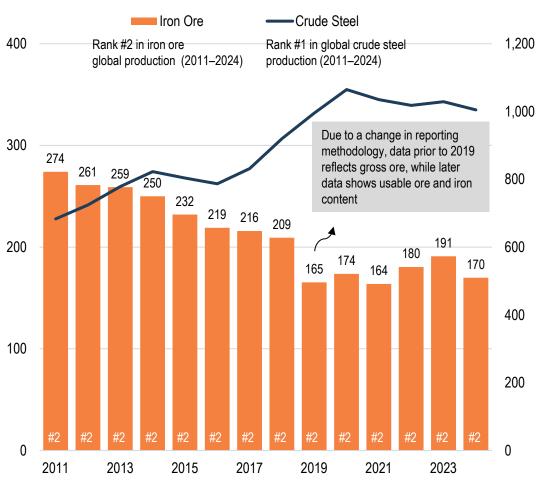
Top 3 Countries by Reserves, Selected Minerals, Global Share % (2024)



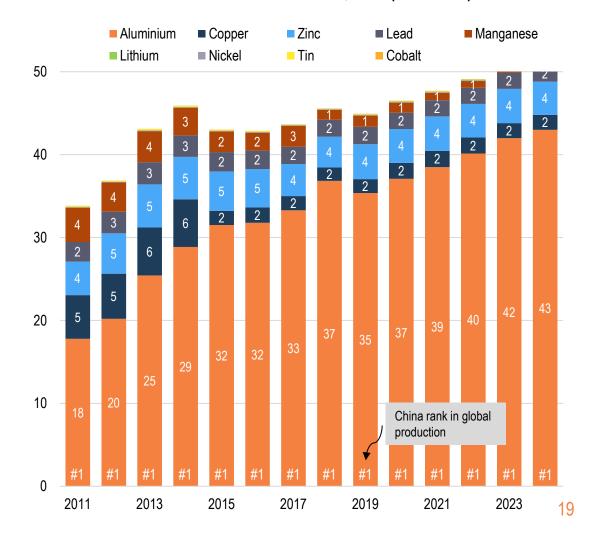




China Production of Iron Ore, mmt (LHS) vs Crude Steel, mmt (RHS) (2011-2024)



China Production of Selected Commodities, mmt (2011-2024)

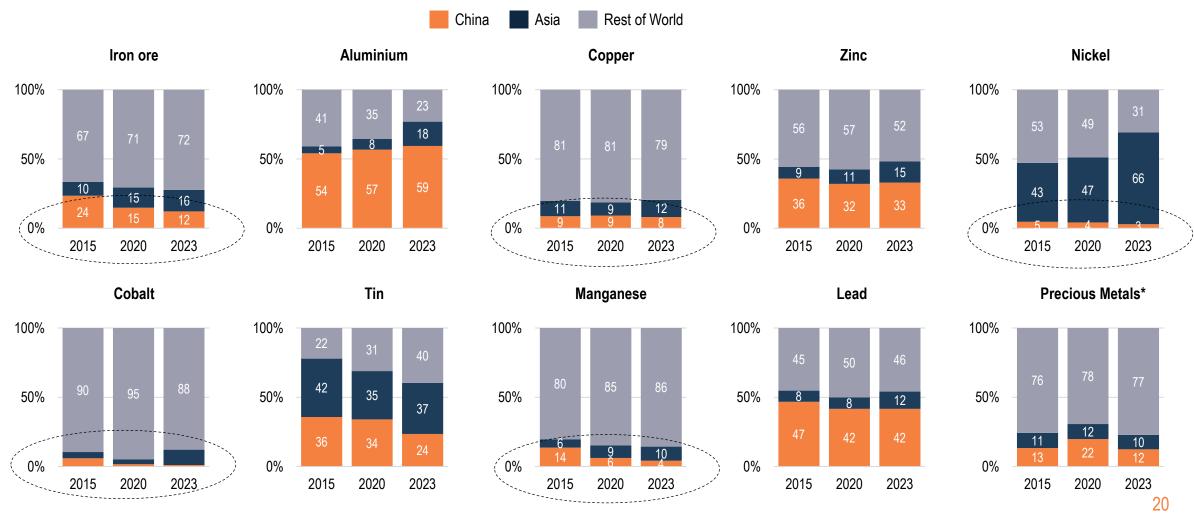


Source: World Mining Data 2024, USGS MCS 2024, ANDAMAN PARTNERS Analysis. Note: Mmt - million metric tons.

China produces almost 60% of global aluminium, 42% of lead, 33% of zinc, 24% of tin and 12% of precious metals



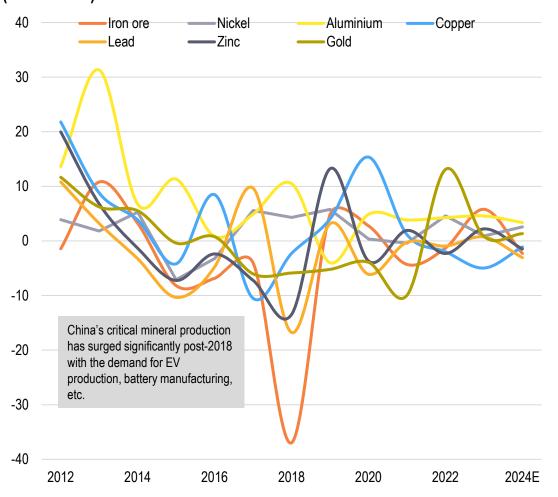
China Share of Global Production of Selected Minerals % (2015, 2020, 2023)



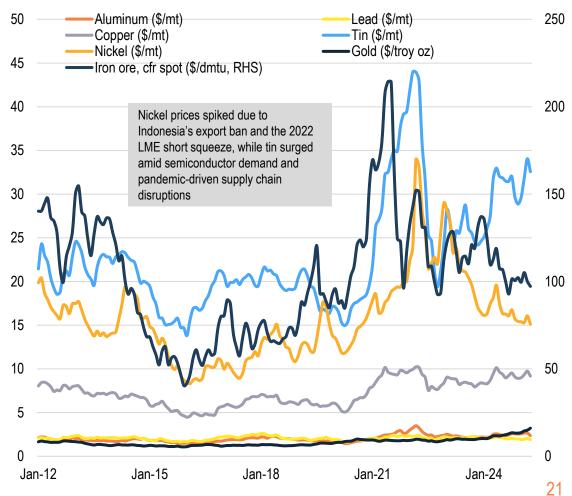
China's mineral production faces the challenge of volatility amid policy shifts and changing global demand trends



China Growth in Production of Selected Minerals y-o-y % Growth (2012-2024E)



Global Prices of Selected Minerals, USD (Jan 2012-Apr 2025)

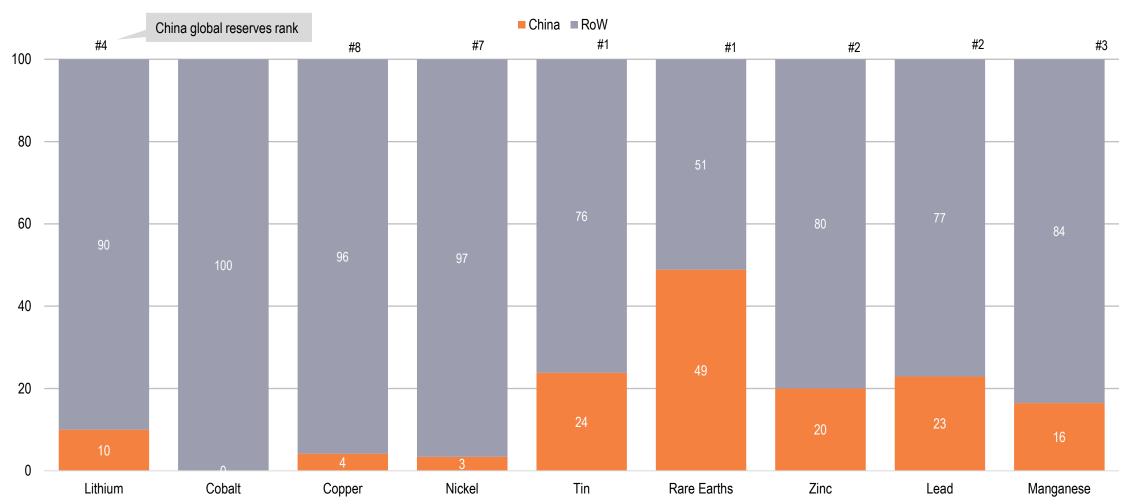


Source: World Mining Data, ANDAMAN PARTNERS Analysis. Note: LME is London Metal Exchange

China holds 49% of global rare earth reserves, but is dependent on foreign suppliers for lithium, copper and nickel



China Reserves of Selected Minerals, Global % Share (2024E)

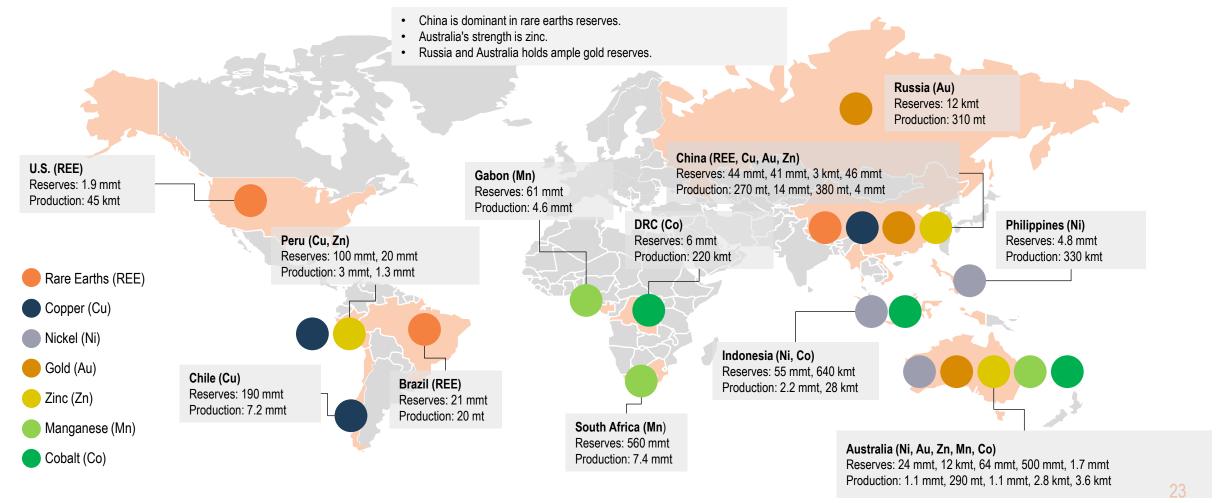


Source: USGS, ANDAMAN PARTNERS Analysis. Note: Cobalt rank not available.

The supply of critical minerals 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)



Source: USGS Mineral Yearbook 2024, ANDAMAN PARTNERS Analysis

China's control over critical mineral processing is reshaping global supply chains, but mineral production remains geographically diverse

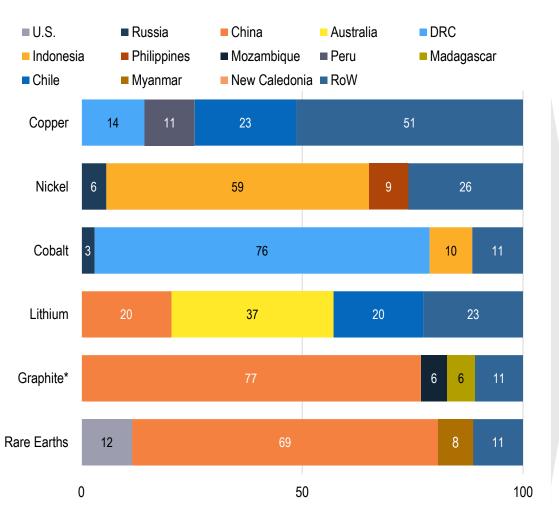


- China dominates global mineral processing, particularly for rare earths, graphite, lithium and cobalt, shaping supply chain dependencies.
- Mineral production remains geographically diverse, with key contributors including Australia, Indonesia and Peru for various critical minerals.
- China holds a 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, cement and aluminium.
- Copper, lithium and nickel mining is more diversified, with Chile, Australia, Indonesia, the 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 polarised, with China controlling processing while mining remains spread across multiple regions.

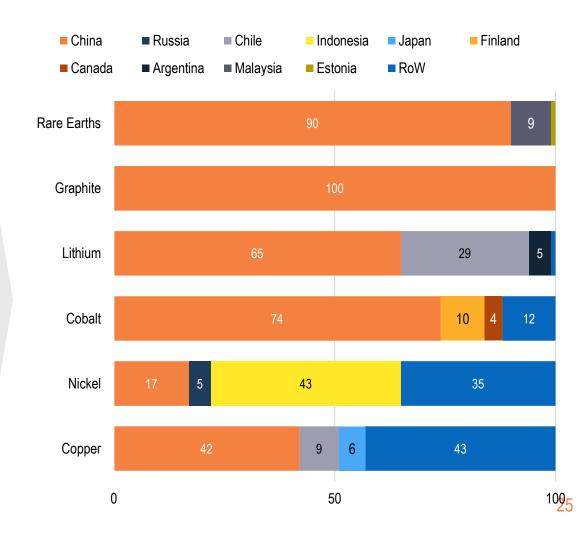




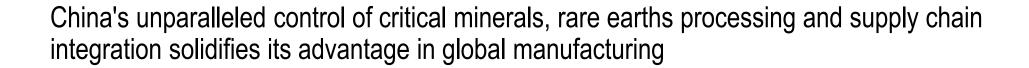




Top Three Processors of Selected Mineral, Global Share % (2022)

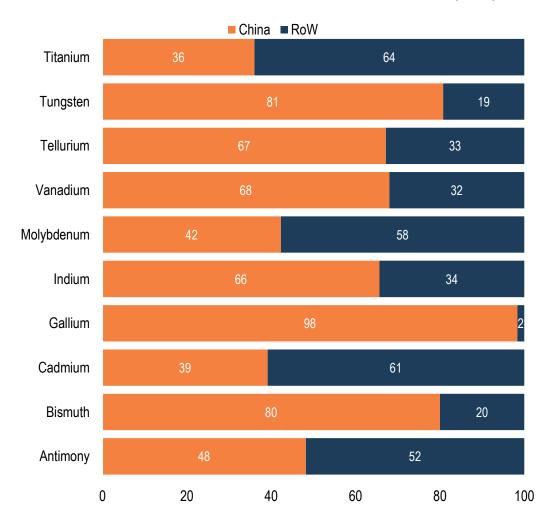


Source: IEA, ANDAMAN PARTNERS Analysis. Note: Production data for Graphite is for 2023.

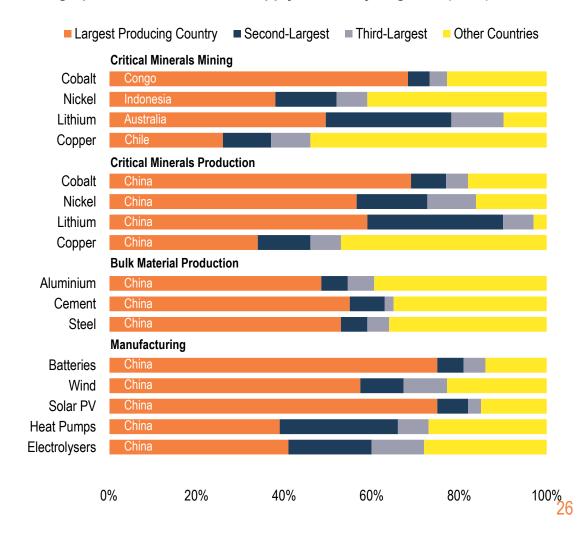




China Global Share of Production of Other Critical Minerals % (2023)



Geographic Concentration of Supply Chains by Segment (2023)

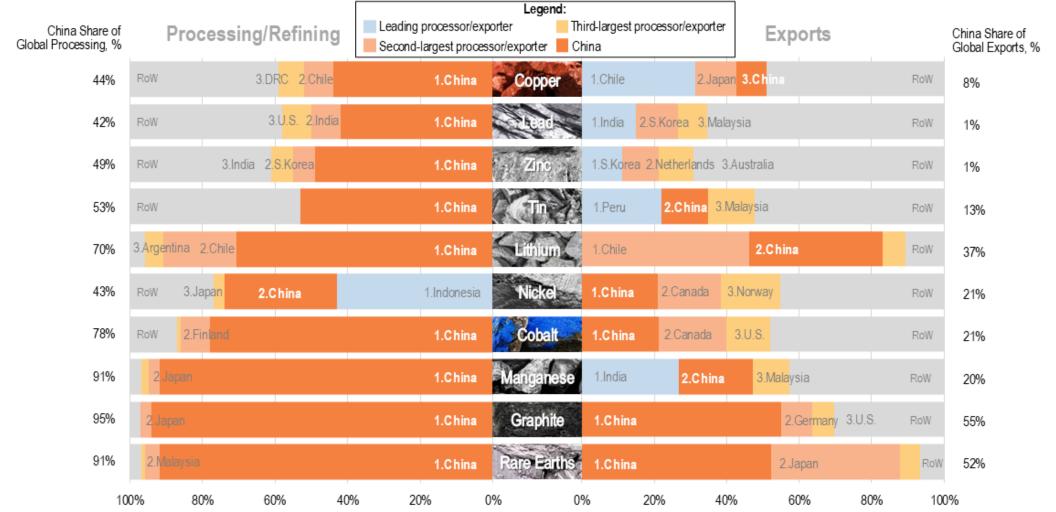


Source: IEA, ANDAMAN PARTNERS Analysis



China ranks as the world's leading processor of nearly all major minerals and metals, and also stands as the top exporter of several critical ones—notably nickel, cobalt and rare earth elements—underscoring its pivotal role in global supply chains

Strategic Minerals and Metals: Top 3 Countries for Processing and Exports, % Share (2024)





Asia, including China, consumes the vast majority of several commodities, especially iron ore, nickel and coal



- China is the world's largest consumer of a range of commodities, including coal, aluminium, copper, iron ore and steel; and the second-largest consumer of oil.
- China consumes over 50% of the world's aluminium, copper, nickel, coal, steel and iron ore; and over 40% of tin, lead and zinc.
- China and Asia have vastly increased key metals and minerals consumption in recent years. In 2024, China's share of the consumption of resources was:

• Steel: 49%

Primary aluminium: 55%

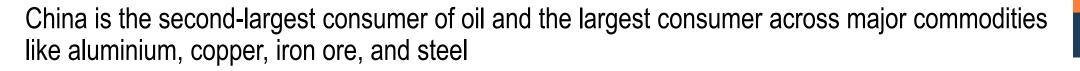
Refine copper: 53%

Seaborne iron ore: 72%

Refined nickel: 62%

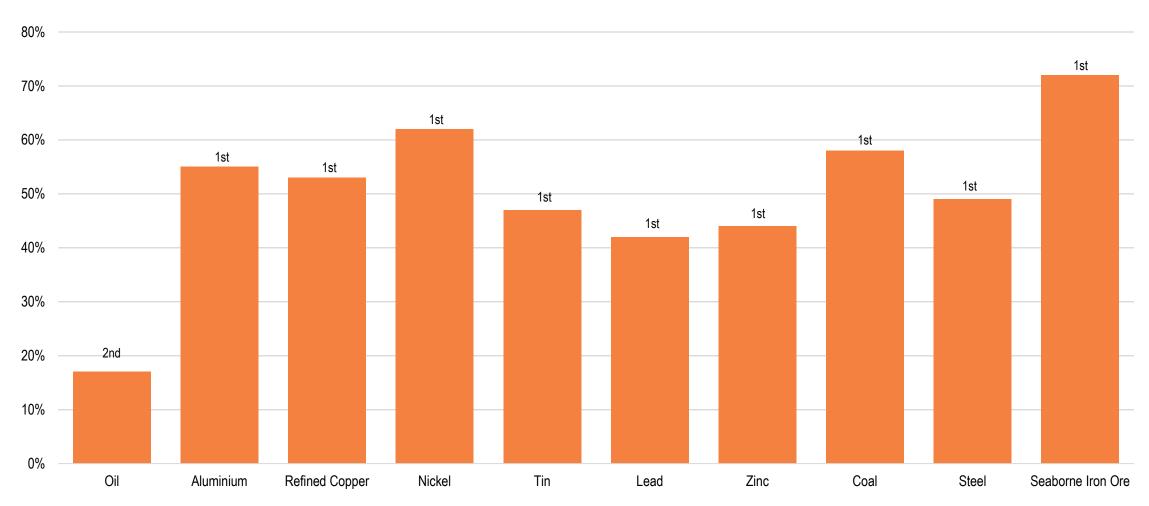
• Refined zinc: 44%

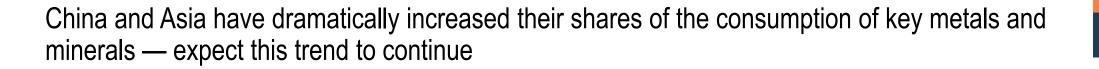
• Coal: 58%





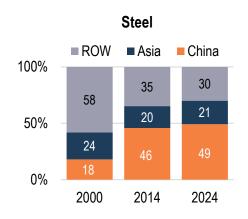
China Share of Global Consumption of Selected Minerals, World Ranking % (2024)

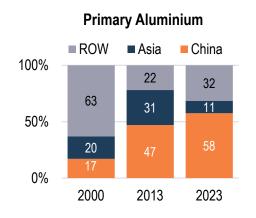


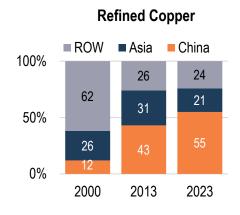


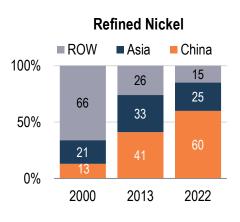


China and Asia Shares of Global Consumption of Selected Minerals, % (2000, 2013, 2024)

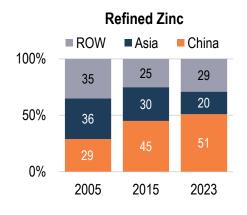


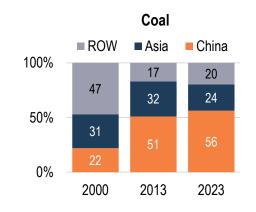


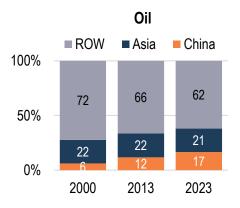


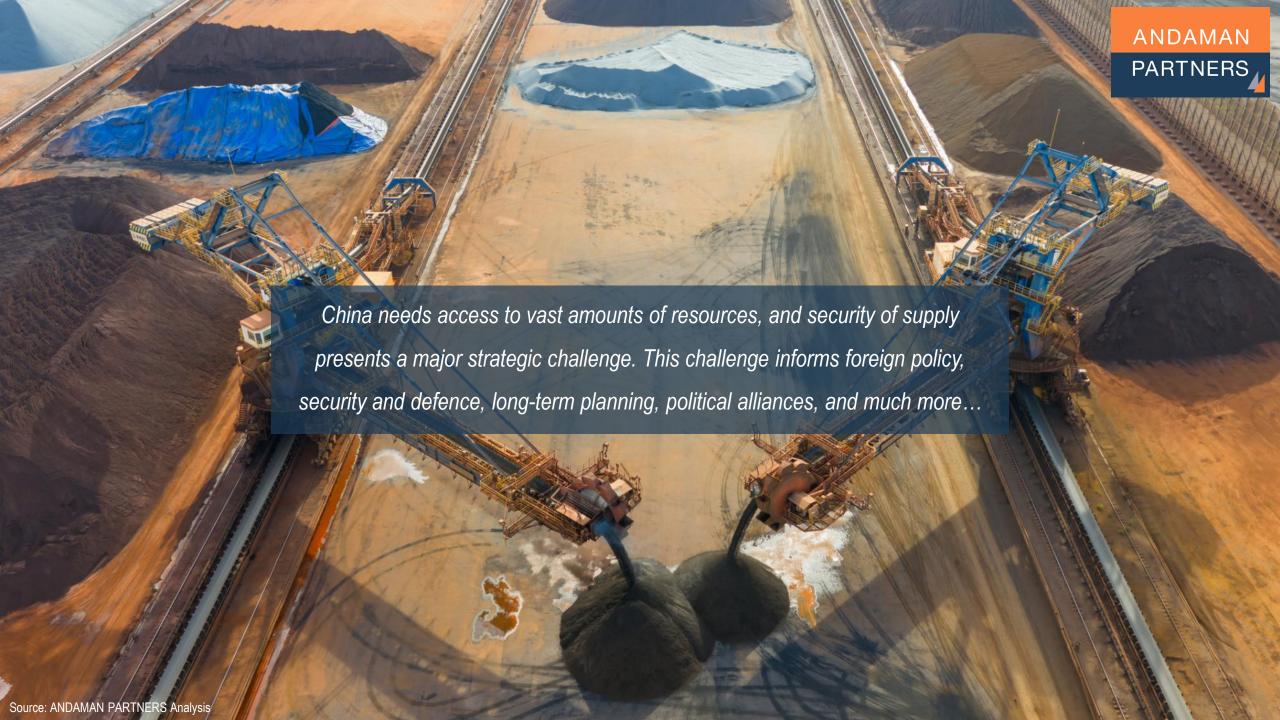










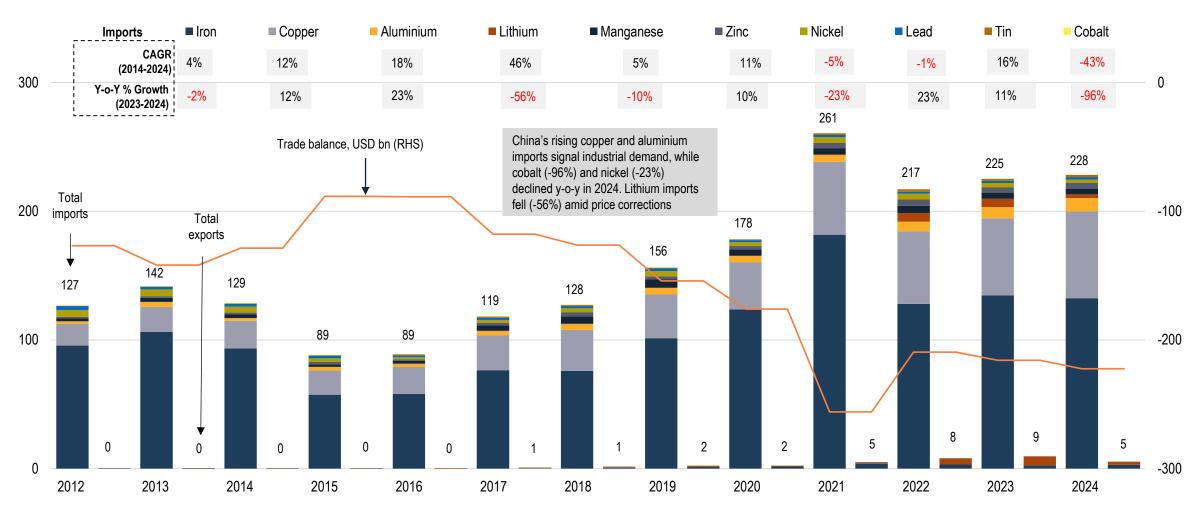




China imported USD 228 billion of minerals from the world in 2024, mainly iron ore (USD 132 bilion) and copper (USD 67 billion)



China Imports and Exports of Selected Minerals, USD bn (2012-2024)

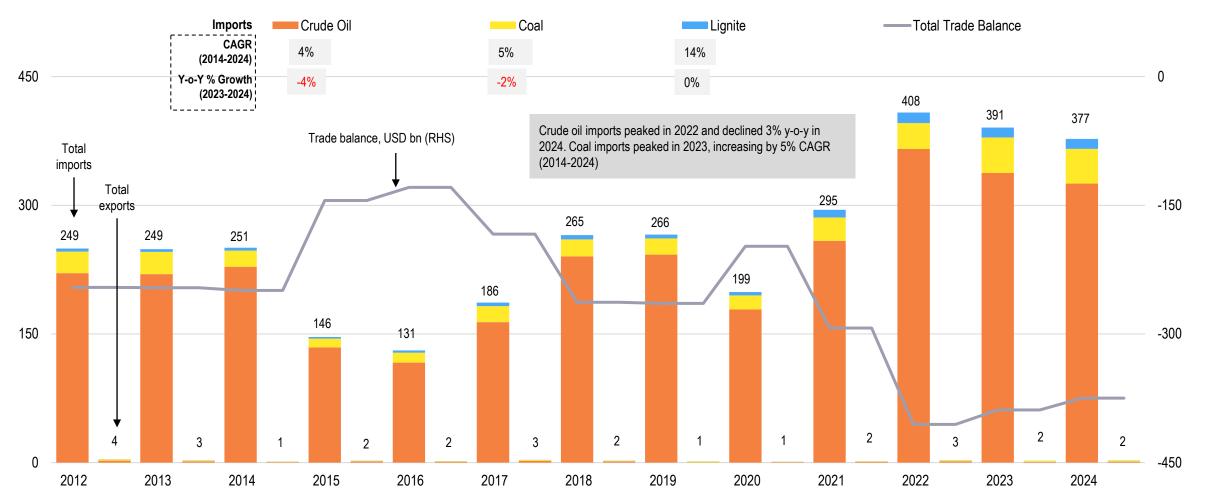


Source: UN Comtrade, ANDAMAN PARTNERS Analysis

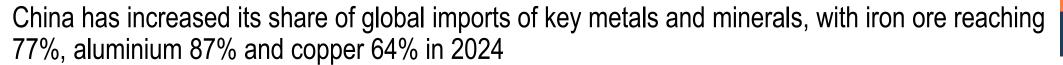
China imported USD 377 billion of fuels from the world in 2024, mainly crude oil (USD 325 billion) and coal (USD 40 billion)



China Imports and Exports of Selected Minerals, USD bn (2012-2024)

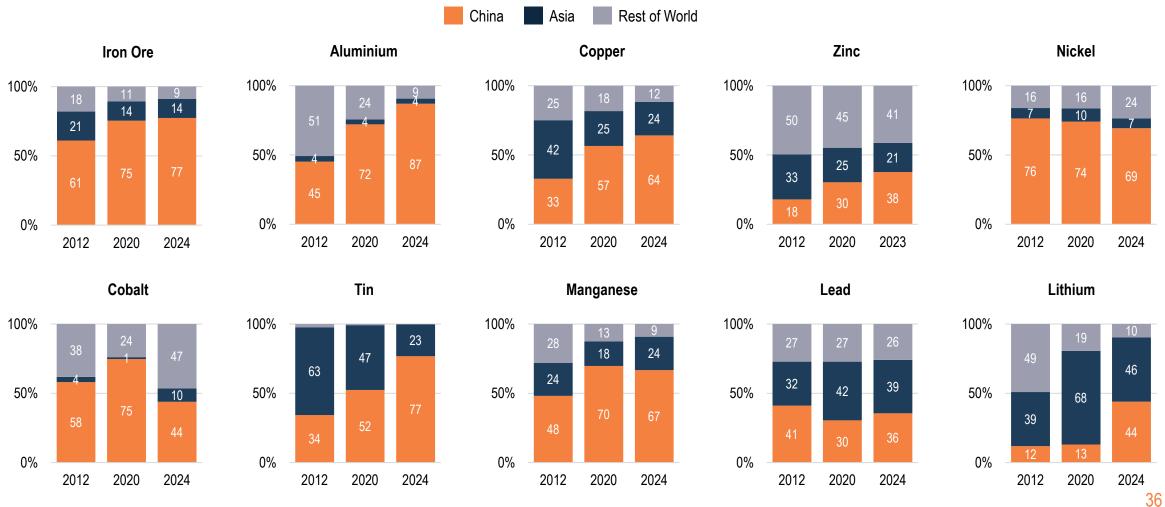


Source: UN Comtrade, ANDAMAN PARTNERS Analysis





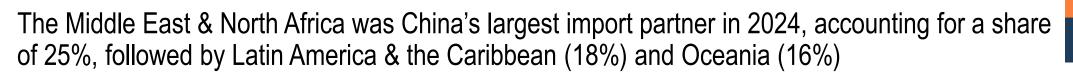
China Share of Global Imports of Selected Industrial Commodities, Share %



China's import dependence for raw materials has increased rapidly to sustain demand, reshaping global trade flows

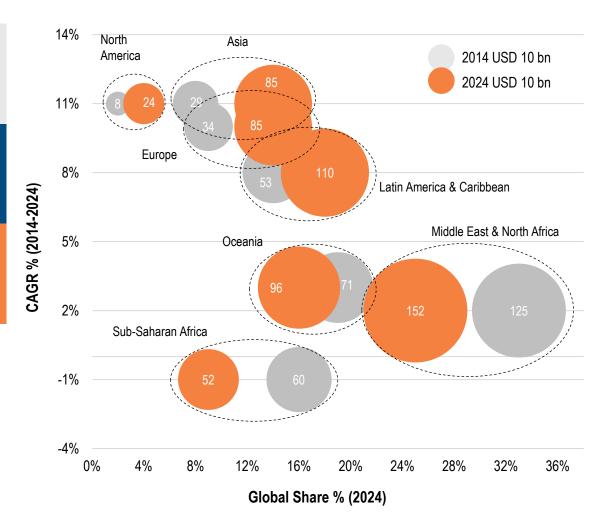


- Over 2014-2024, China's demand increased for copper (+12% CAGR) and aluminium (+1% CAGR) to sustain industrial expansion.
- Coal imports reached their highest level in a decade (+5% y-o-y) in 2023, supporting energy security, but then again fell (-2% y-o-y) in 2024, while crude oil imports declined (-4%) as China diversified its energy mix.
- China remains the dominant buyer of key industrial commodities, maintaining over 60% of global iron ore, nickel, aluminium, copper and manganese imports, reinforcing its role in global supply chains.
- Lithium imports saw a significant decline by value (-56% y-o-y) in 2024.
- Cobalt imports declined since 2014 with a negative CAGR of 43% up to 2024.
- Iron ore and copper imports remain resilient, ensuring a stable supply for infrastructure and manufacturing despite global supply chain fluctuations.
- China is actively reshaping global trade flows, balancing strategic imports with domestic production while strengthening its position in industrial and energy transition minerals.





China Import Partners by Region for Selected Minerals, USD bn (2014-2024)



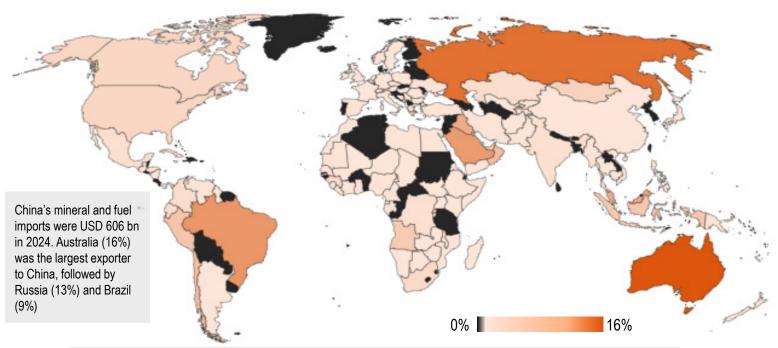
China Imports of Selected Commodities, USD bn (2014-2024)

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	4 3.8	-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	25.7	7.9
12	Crude Oil	337.6	15.1	1 26.3	3.6

China's growing network of import partners underscores its growing influence in securing global mineral and fuel resources



China Import Partners' Share of Selected Minerals & Fuels, Share % (2024)



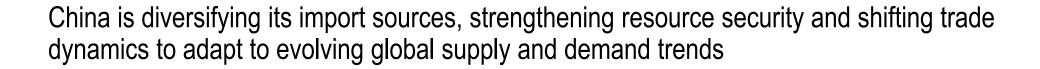
- The top 3 exporters of MENA and LAC accounted for 25% and 18% shares of global exports to China, respectively.
- · Australia accounts for 99% of Oceania's exports to China.
- Russia alone exported 13% out of 14% of Europe's exports to China.

1. MENA*	2. LAC*	3. Oceania	4. Europe	5. Asia	6. SSA*	7. NA*
2014 2024 33% 25%	2014 2024 14% 18%	2014 2024 19% 16%	2014 2024 9% 14%	2014 2024 8% 14%	2014 2024 16% 9%	2014 2024 2% 4%
*Middle East & North Africa	*Latin America & Caribbean				*Sub-Saharan Africa	*North America

Griina import Partners (2024)						
Rank	Country	USD bn	Import Share, %	CAGR % (2014-2024)		
1	Australia	94.9	15.6	3.0		
2	Russia	77.2	12.7	10.7		
3	Brazil	52.1	8.6	8.3		
4	Saudi Arabia	48.6	8.0	2.8		
5	Malaysia	38.8	6.4	41.7		
6	Iraq	37.0	6.1	6.0		
7	Oman	26.3	4.3	1.4		
8	Chile	25.0	4.1	13.6		
9	UAE	22.1	3.7	9.2		
10	Peru	20.9	3.5	14.9		
11	Indonesia	19.4	3.2	8.5		
12	Angola	17.2	2.8	-5.7		
13	Mongolia	12.7	2.1	10.1		
14	Canada	9.9	1.6	10.8		
15	U.S.	9.7	1.6	16.2		
	Top 15	511.8	84.5	6.4		
	RoW	93.7	15.5	-1.1		
	Total	605.5	100	4.8		
nclude coal and its types and crude oil.						

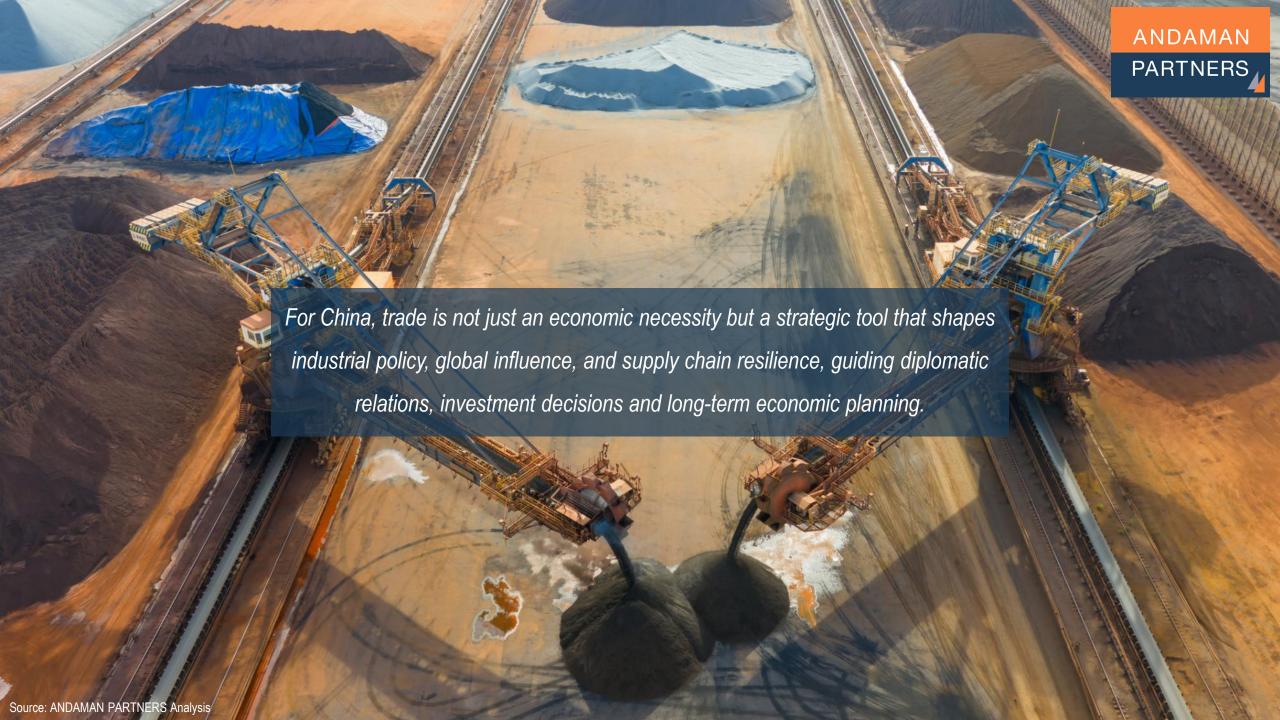
China Import Partners (2024)

Source: UN Comtrade, ANDAMAN PARTNERS Analysis. Note: Minerals include iron, base metals, lithium, cobalt, manganese, nickel, zinc, lead and tin. Mineral Fuels include coal and its types and crude oil.





- 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 billion (15.6%) and USD 77.2 billion (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 billion) and Iraq (USD 37.0 billion).
- Malaysia's importance surged (+42% CAGR) in China's supply chains, signalling 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 billion in 2024, growing at a 4.8% CAGR, with the top 15 suppliers accounting for 84.5% of total imports.





China's ODI and lending shape global trade, resource security and economic influence in key sectors

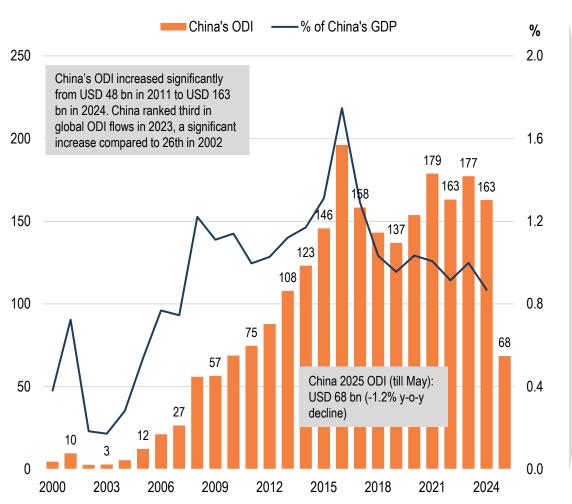


- China's ODI declined to USD 163 billion in 2024, with Asia (68.2% in 2023) and Latin America (20.3% in 2023) as primary investment destinations.
- Strategic resource security remains a priority, with USD 194 billion (2012-2023) allocated to mining and consistent investments in foreign copper mines over this period.
- Africa remains a significant loan recipient, with USD 182.3 billion in lending since 2000, primarily focused on energy and mining infrastructure.
- Chinese mining investments remain cyclical, with notable peaks in 2014, 2018 and 2023, aligning with commodity price trends and supply chain needs.
- Latin America's role in China's resource strategy is growing, with the region accounting for 20.3% of total ODI stock from 2012 to 2023 (USD 37.6 billion), driven by mining and agriculture investments.
- China's global economic influence is deeply tied to ODI, leveraging direct investment and strategic lending to secure supply chains and strengthen geopolitical ties.

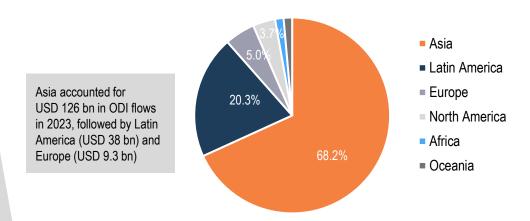
China's ODI surged to USD 163 billion in 2024, with 68% focused on Asia, reflecting a strong regional economic integration strategy



China Outward Direct Investment (ODI), USD bn (2002-May 2025)



China Outward Direct Investment Flow by Region, USD bn (2023)



Chinese Companies' Investments in Foreign Mines, USD bn (2013-2023)

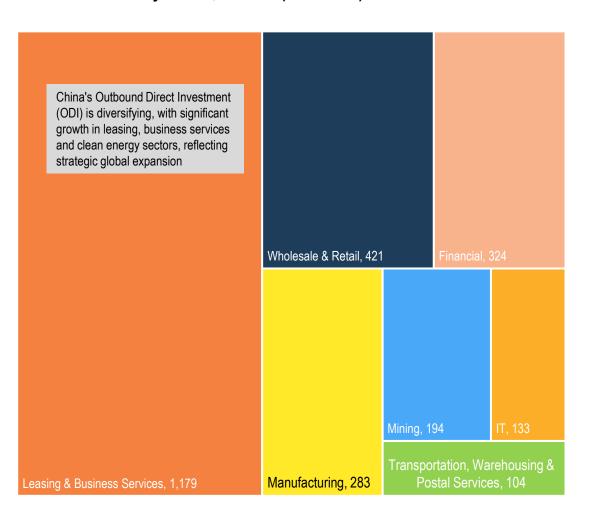


Source: World Bank, MOFCOM, Dezan Shira Associates, ANDAMAN PARTNERS Analysis

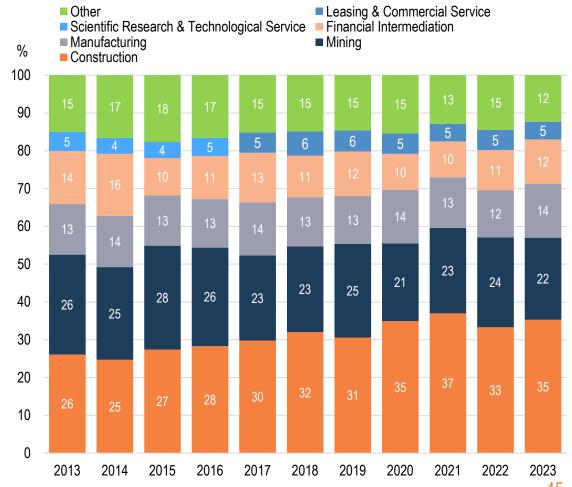
Leasing & Business Services dominate China's ODI, while the stock of mining investments reached USD 194 billion in 2023



China ODI Stock by Sector, USD bn (2012-2023)



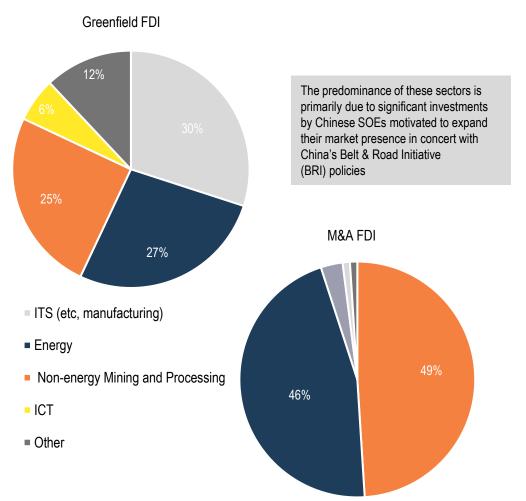
Chinese FDI Stock to Africa: Top 5 Sectors, % (2013-2023)



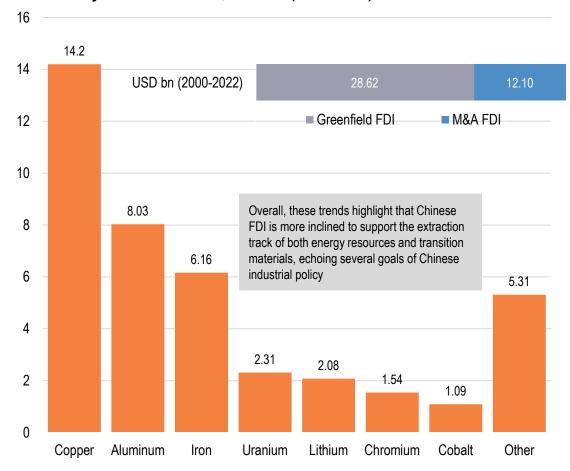


Chinese companies have announced USD 112.34 billion in greenfield FDI across the Industry & Trade/Services (ITS) (30%), Energy (27%), Non-energy Mining & Processing (25%) and Information & Communication Technology (ICT) (6%) sectors

Chinese Greenfield & M&A FDI Distribution in Africa by Sector, % (2000-2022)



Chinese Total Greenfield and M&A FDI for Non-energy Mining and Processing in Africa by Metal or Mineral, USD bn (2000-2022)





China's global engineering, design and construction investments shape supply chains and infrastructure development worldwide

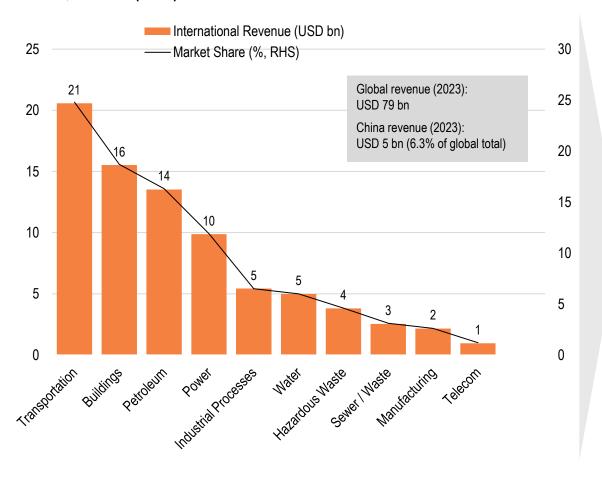


- China's engineering and design firms maintain strong global revenue streams in 2023, with Asia (USD 2.15 billion), Africa (USD 941 million) and Europe (USD 808 million) as the top markets.
- In 2023, China's top 10 engineering & design firms generated revenue of USD 2.2 billion in the industrial & petroleum sector, accounting for 11% of the sector's market share.
- Combined petroleum and industrial process projects dominate international revenues, accounting for USD 19 billion in revenues.
- China's mining equipment exports remain vital for global supply chains, with electrical equipment and steel products driving export growth.
- China's construction sector revenues in Africa peaked at USD 55 billion in 2015 but declined to USD 37 billion by 2023, reflecting shifting investment patterns.
- Despite declines in construction revenues in Africa, Chinese firms remain key players in infrastructure projects, adapting to evolving economic and geopolitical conditions.

In 2023, China's top 10 engineering & design firms generated revenue of USD 2.2 billion in the industrial & petroleum sector



International Revenue of Global Engineering and Design Companies by Sector, USD bn (2023)



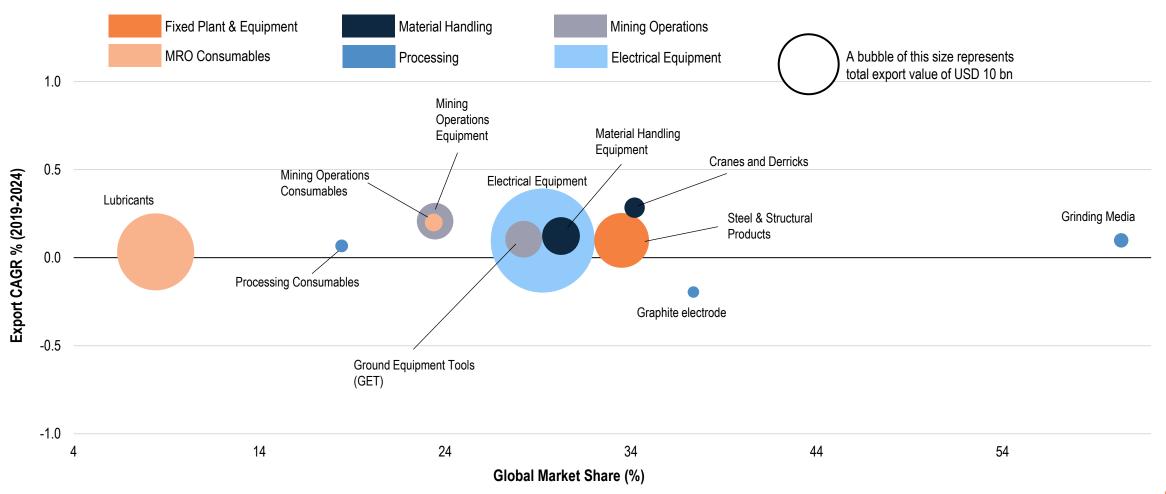
Top Chinese Engineering & Design Firms, USD mn (2023)

Global Rank (2024)	Global Rank (2023)	Company	International Revenue, USD mn	Share of Industrial / Petroleum in Revenue
15	17	Power Construction Corporation of China	1,622.8	0%
18	20	China Energy Engineering Corporation	1,442.7	1%
30	27	China National Chemical Engineering Group Corp. Ltd.	488.7	99%
35	33	China Communications Construction Company	418.7	0%
53	56	China Petroleum Engineering Co. Ltd.	246.2	98%
66	61	China Railway Construction Corp. Ltd.	146.0	0%
86	59	China National Machinery Industry Corp.	139.1	16%
96	109	China Triumph International Engineering	94.2	54%
98	199	SINOPEC Engineering	79.1	100%
101	134	China Aluminum International Engineering	74.6	98%

Since 2019, China's exports of major mining products (machinery & equipment) have grown rapidly, as the country transitions towards manufacturing high-value goods



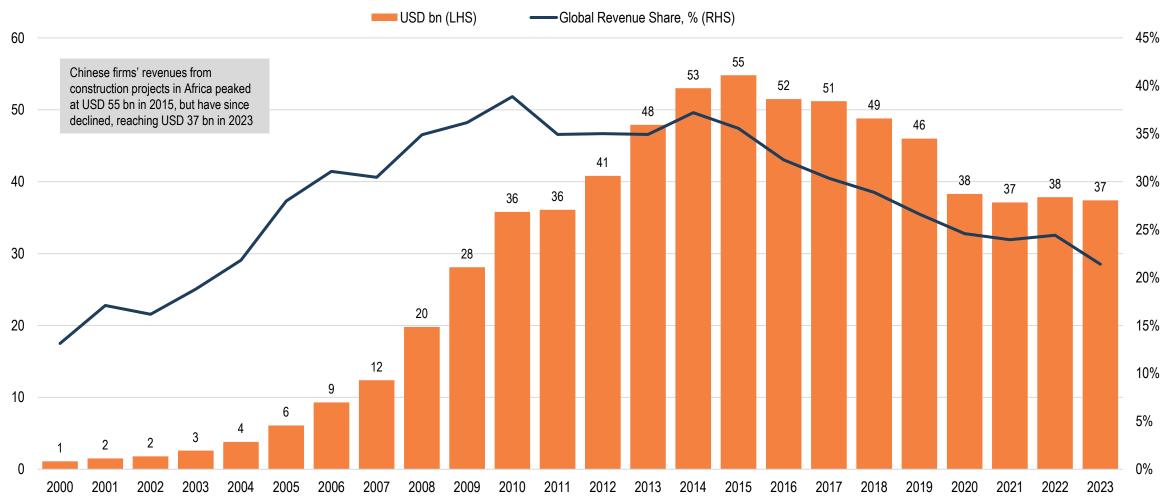
China Exports of Selected Mining Products, USD bn (2024)



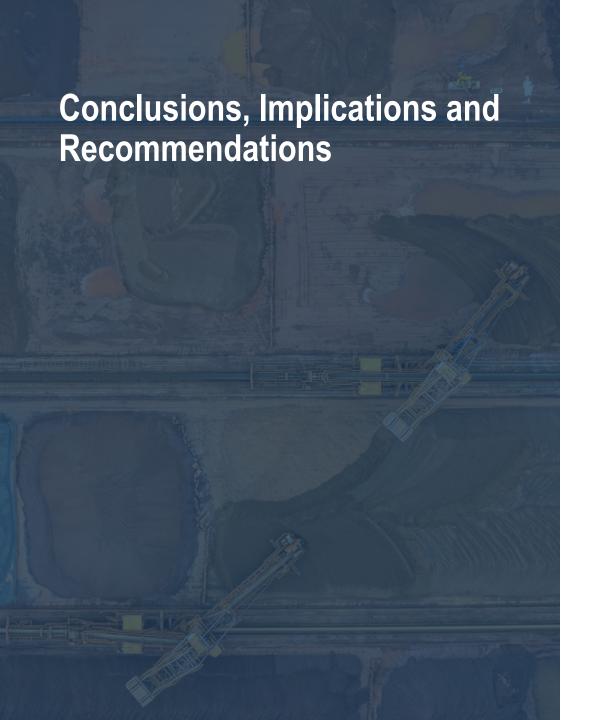
China's foreign construction revenues in Africa have started to decline after peaking in 2015, reaching USD 37 billion in 2023



Gross Annual Revenue of Chinese Companies' Construction Projects in Africa, USD bn (2000-2023)



Source: John Hopkins University, SAIS China-Africa Research Institute





Conclusions

- China remains a core node in global mining: leading producer, consumer and importer, dominating mineral processing as well as manufacturing and bulk material production.
- China is a key player in investment, financing and project execution, and its EPC firms play a crucial role.
- Despite slowing growth and economic challenges, China is still China: the world's largest resource consumer and a critical and unavoidable player in the global mining industry.

Implications

- Despite China's slowing growth and possibly peaking demand for resources, now is the time to form a comprehensive view of China's role in the sector and to engage it more strategically.
- The mining industry is facing a complex global landscape with increased risk. But in reality, it is impossible to detach from China.
- It is essential to recognise China's comprehensive role, engage it strategically and compete effectively to win.

Recommendations

- Organisation: Select appropriate leaders/teams for China engagement; invest in strategic intel; form strategic partnerships; take a long-term view.
- Marketing/Sales: Leverage the proper marketing and branding machinery; adapt customer engagement models; use the correct information.
- Capital: Select the right partners (longlist > shortlist > short shortlist); focus on projects that are deserving/appropriate; follow a disciplined process; use astute advisors (DD them).
- Inbound Supply Chain: Balance China's share in global procurement; determine China+5 priorities; frame category/packages vs supply market/cluster choices; use the right operating model, physical supply chain, strong partners.



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