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China in a Global Resources Context

Key Issues, Considerations and Imperatives

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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 and strategy formulation & implementation support.

We **Trade**

ANDAMAN Trade

We make complex international value chains work.

China in a Global Resources Context

Key Issues, Considerations and Imperatives

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Agenda

Prelude

China remains one of the world’s largest producers of resources and the largest consumer, and it is typically the largest importer of commodities and hence a massive market (and customer) for global producers. It dominates much of the world’s mineral processing and related supply chains, including of several critical minerals. And it is a significant investor and finance partner to the industry. Moreover, it has become a prominent engineering, procurement and construction partner for mining projects and operations worldwide.

China’s resource sector role 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

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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 does global supply chain re-alignment and international competition, etc.
- 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 source of investment and finance remains significant. But much has changed (compared to e.g., 2005-15): geopolitics, perceptions and China's approach (and 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 via cost-reduction and schedule gains.

Global & China Macro Environment

- Global real GDP growth was 3.5% in 2022 and 3.0% in 2023. The global growth outlook remains modest, with 3.2% projected for 2024, and 3.3% for 2025-2026, below the historical (2000-2019) average of 3.7%.
- 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.

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.
- Strategic resource security remains a priority, with a stock of USD 194 bn for mining investments (2012-2023).
- China provided USD 182.3 bn in loans to African governments (2000-2023).

Global Resources Context

- In 2022, geopolitical tensions caused energy and metals supply disruptions and heightened volatility, amplified in 2023 by macroeconomic factors. In 2024, the price of oil, most metals and agricultural commodities declined while precious metals 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 as Inbound Supply Chain Partner

- Chinese mining equipment, machinery and chemicals (& reagents) are long since integral to project and operations procurement.
- Chinese EPCs are moving up the value chain: design & engineering revenues are expanding and construction earnings rising (with a declining share from Africa in recent years).
- 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).

China Consumption, Production & Trade

- Despite slower growth, China is still the largest consumer of various commodities (>50% of Al, Cu, Ni, coal, steel & iron ore).
- China is the top producer of steel, aluminum 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%).

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%), tungsten (81%) and bismuth (80%).
- 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.

Conclusion

- China remains a core node in global mining: leading producer, consumer and importer; it dominates mineral processing as well as manufacturing and bulk material production; it 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 recognize China's comprehensive role, engage it strategically, and compete effectively to win.

Recommendations

- Organization: Select appropriate leaders/teams for China engagement; invest in strategic intel; form strategic partnerships; take long-term view.
- Marketing/Sales: Leverage the right marketing and branding machinery; adapt customer engagement models; use the right information right.
- 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 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

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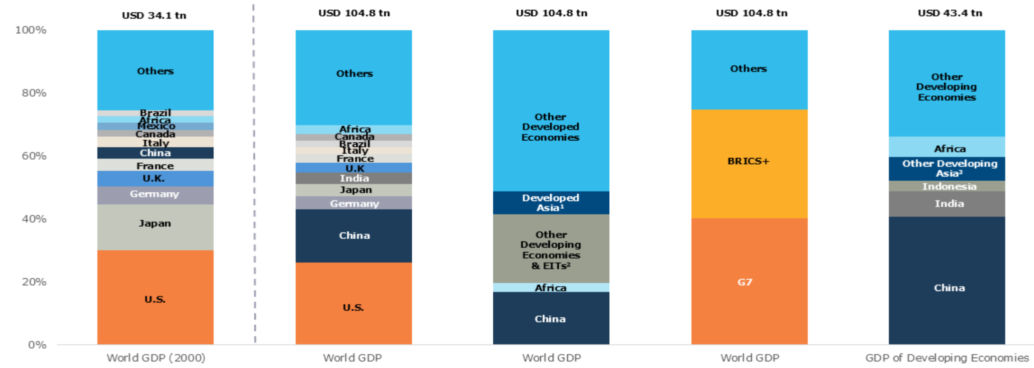
Global GDP growth is hovering under 3.5%, below historical averages, led by India, Indonesia and China among the top 20 largest economies, and Bangladesh, the Philippines, Vietnam and UAE outside the top 20. Growth in emerging markets and developing economies is more than double that in advanced economies

- Global real GDP growth in 2023 was 3.0%, a decline from 3.5% in 2022. Overall, the global growth outlook for 2024-2025 remains patchy, with significant regional divergences. The IMF projects a global GDP growth rate of 3.2% for 2024.
- The GDP growth of advanced economies dropped from 2.6% in 2022 to 1.5% in 2023, while emerging markets and developing economies declined marginally from 4.1% to 4.0%.
- The IMF projects global GDP growth of 3.3% for 2025 and 2026, below the historical (2000-2019) average of 3.7%. The forecast for advanced economies is 1.9% for 2025 and 1.8% for 2026, and for emerging markets and developing economies, 4.2% and 4.3%, respectively.
- From 2023 to 2029, global real GDP growth is forecast at 3.2%, while the forecast for emerging markets and developing economies is 4.1%.
- Up to 2029, among the larger developing economies, India (6.8%), Indonesia (5.1%), China (4.1%) and Türkiye (3.6%) 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 (6.3%), the Philippines (6.1%), Vietnam (5.8%), the UAE (4.5%) and Malaysia (4.2%).

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

Global GDP Breakdown, % Share (2000 & 2023)



1. Developed Asia includes Japan; South Korea; Singapore; Taiwan, China; Macao SAR, China; and Hong Kong SAR, China.
2. EITs denote economies referred to by the UN as "Economies in Transition," including Russia and other former Soviet states.
3. Other Developing Asia includes Turkey, Saudi Arabia, Thailand, Iran, UAE, Israel, Malaysia, Philippines, Pakistan, Bangladesh, Vietnam, Iraq, Qatar, Kuwait, Sri Lanka, Oman, Myanmar, Lebanon, Bahrain, Nepal, Cambodia, Afghanistan, Lao PDR, Yemen, Brunei, Mongolia, Fiji, Maldives and Bhutan.

Source: IMF, National Bureau of Statistics of China, ANDAMAN PARTNERS Analysis

By 2029, the U.S. and China could constitute 43% of the global economy, and India could become the world's third-largest economy

Top 20 Economies by GDP (2000, 2023, 2029F)

Rank (2000)		Rank (2023)		Rank (2029F)		USD bn (2029F)	Share of Global GDP (2029F)	Avg. Real GDP Growth Rate (2023-2029)
1	U.S.	1	U.S.	1	U.S.	35,458	25%	2.3%
2	Japan	2	China	2	China	24,590	18%	4.1%
3	Germany	3	Germany	3	India	6,307	5%	6.8%
4	U.K.	4	Japan	4	Germany	5,566	4%	0.6%
5	France	5	India	5	Japan	5,075	4%	0.8%
6	China	6	U.K.	6	U.K.	4,372	3%	1.2%
7	Italy	7	France	7	France	3,726	3%	1.2%
8	Canada	8	Italy	8	Brazil	2,855	2%	2.5%
9	Mexico	9	Brazil	9	Canada	2,793	2%	1.7%
10	Brazil	10	Canada	10	Italy	2,736	2%	0.7%
11	Spain	11	Russia	11	Russia	2,413	2%	1.9%
12	South Korea	12	South Korea	12	South Korea	2,279	2%	2.1%
13	India	13	Mexico	13	Australia	2,220	2%	2.0%
14	Netherlands	14	Australia	14	Mexico	2,176	2%	2.1%
15	Australia	15	Spain	15	Spain	2,146	2%	2.0%
16	Iran	16	Indonesia	16	Indonesia	2,030	1%	5.1%
17	Taiwan, China	17	Netherlands	17	Türkiye	1,764	1%	3.6%
18	Argentina	18	Türkiye	18	Netherlands	1,471	1%	1.2%
19	Switzerland	19	Saudi Arabia	19	Saudi Arabia	1,409	1%	2.9%
20	Russia	20	Switzerland	20	Switzerland	1,177	1%	1.3%
					World	**139,652**	**100%**	**3.2%**

Source: IMF World Economic Outlook 2024, ANDAMAN PARTNERS Analysis

Source: ANDAMAN PARTNERS Analysis

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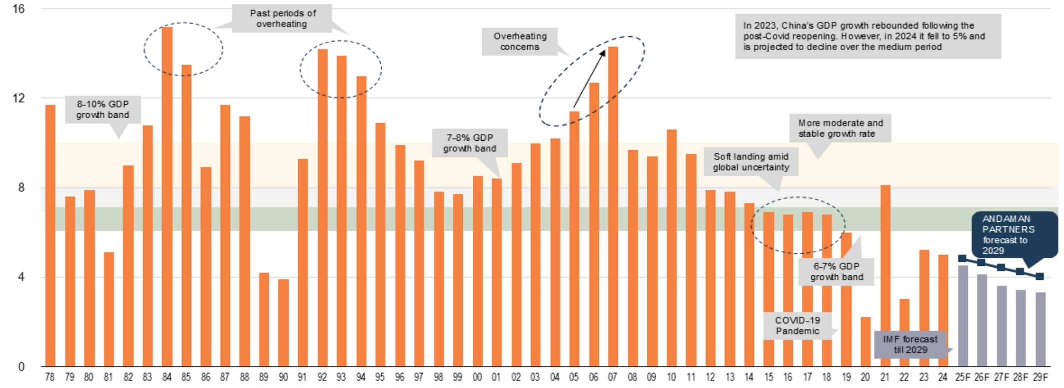
China's economic growth is slowing to a more manageable level. Growth of 6-7%, as in 2015-2019, would entail economic instability and financial risks; around 5%, as in 2023-2024, is more sustainable in a global environment characterized by slower growth and trade tensions — hence the natural tendency is downward

China's GDP grew by 5% in 2024, hitting the government target. Up to 2029, growth should be 4.5-5% as higher rates would imply unsustainable stimulus

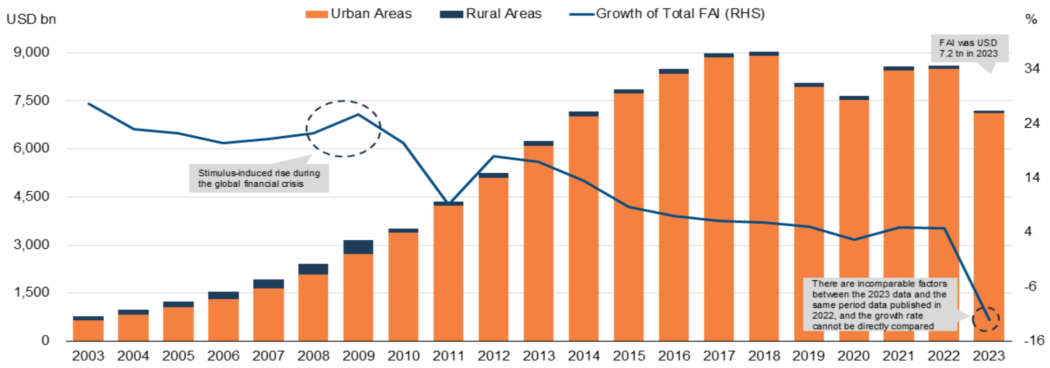
China Real GDP Growth Rate y-o-y % (1978-2029F)



Source: World Bank, IMF, ANDAMAN PARTNERS Analysis

Slower growth in Fixed Asset Investment (FAI), which has traditionally been one of China's core economic drivers, is a key factor in slowing GDP growth

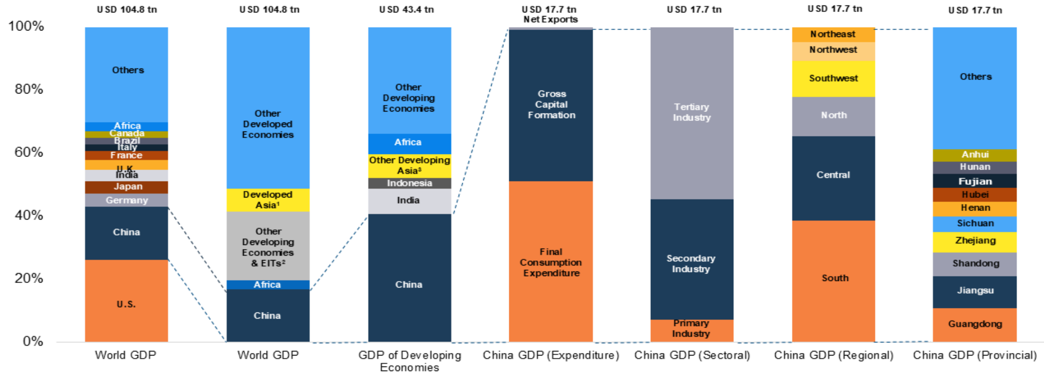
China Total Fixed Asset Investment[1] in Urban and Rural Areas (2003-2023)



Notes: 1. Fixed Asset Investment figures are often overstated by local governments, with figures even exceeding GDP in some provinces. In June 2013, NBS announced a pilot reform of data collection relating to Fixed Asset Investment in order to make local economic statistics more reliable. 2. There are incomparable factors between the 2023 data of the reporting period and the same period data published in 2022.
Source: National Bureau of Statistics of China, ANDAMAN PARTNERS Analysis

China has consolidated its position as the world's second-largest economy with a GDP of USD 17.7 trillion, 16.9% of the global total

China GDP Breakdown, % Share (2023)



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Source: IMF, National Bureau of Statistics of China, ANDAMAN PARTNERS Analysis

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% in 2022 but rebounded to 5.2% in 2023 and 5% in 2024. In 2025, growth should be around 5% again.
- 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. However, 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 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).

Source: ANDAMAN PARTNERS Analysis

Source: ANDAMAN PARTNERS Analysis

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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

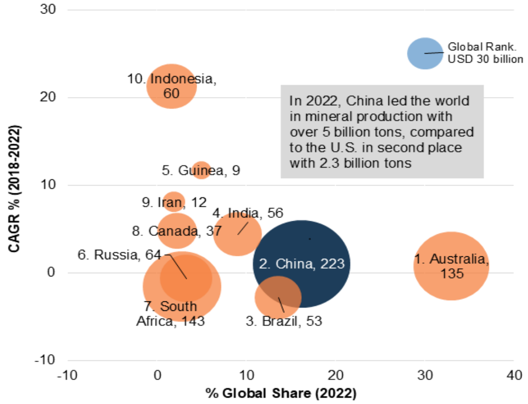
The post-COVID global commodity cycle: Ongoing volatility and doubts about demand from China

- In the 2000s, high economic growth rates in China contributed significantly to a global commodities 'supercycle' 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 such as inflation and interest rate hikes. In 2024, the price of oil, most metals and agricultural commodities declined while that 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, but 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.

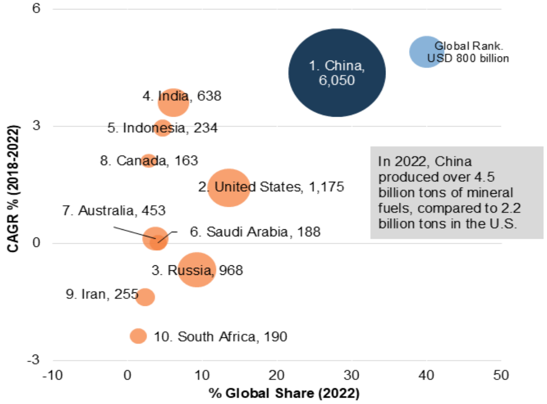
Source: ANDAMAN PARTNERS Analysis

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

Top 10 Mineral Producers by Volume, CAGR (2018-2022) and Global Share (2022)



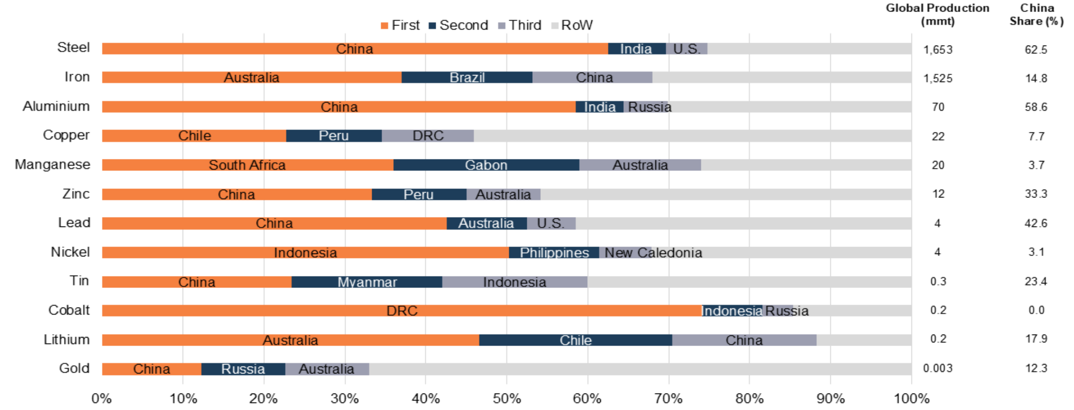
Top 10 Mineral Fuel Producers by Volume, CAGR (2018-2022) and Global Share (2022)



Note: Minerals include iron, base metals and precious metals. Mineral Fuels include steam coal, coking coal, lignite, petroleum, petroleum sands, natural gas, oil shales and uranium.
Source: World Mining Data 2024, ANDAMAN PARTNERS Analysis

China is among the three largest global producers of various minerals, but lacks significant domestic production of copper, manganese, nickel and cobalt

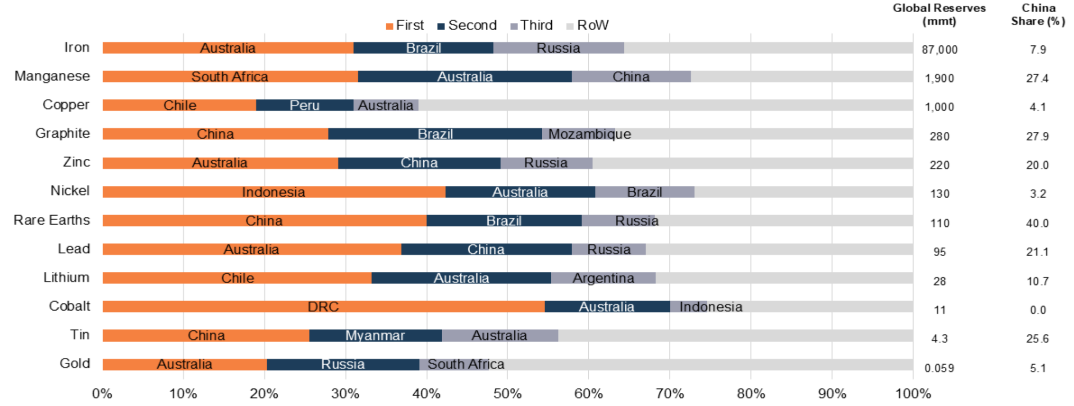
Top 3 Producers, Selected Minerals, Global Share % (2023)



Source: USGS MCS 2024, ANDAMAN PARTNERS Analysis

China has large reserves of coal, manganese, rare earths, tin and graphite, but relatively small reserves of nickel, cobalt, lithium and platinum

Top 3 Countries by Reserves, Selected Minerals, Global Share % (2023)



Source: USGS MCS 2024, ANDAMAN PARTNERS Analysis

Source: ANDAMAN PARTNERS Analysis

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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, strategic planning, etc.

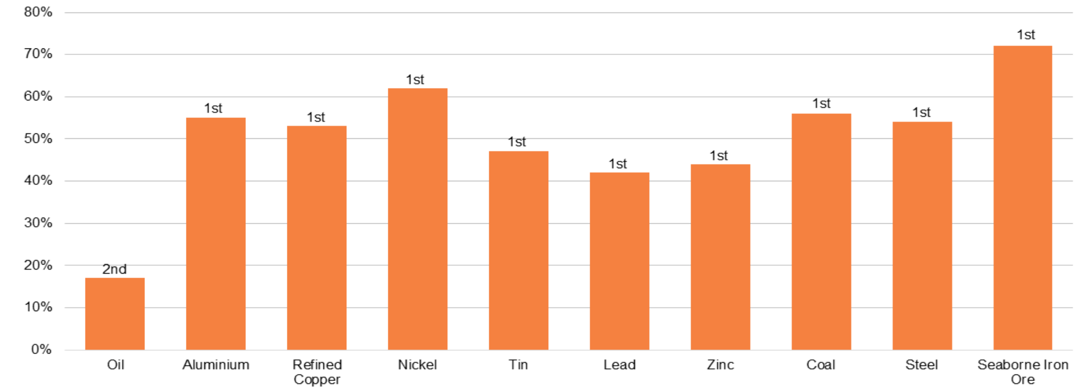
Asia, including China, consumes the vast majority of several commodities, especially iron ore, nickel and coal

- 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 2023, Asia's (including China) share of the consumption of resources was:
    - Steel: 73%
    - Primary aluminium: 69%
    - Refine copper: 76%
    - Seaborne iron ore: 88%
    - Refined nickel: 85%
    - Refined zinc: 76%
    - Coal: 80%

Source: ANDAMAN PARTNERS Analysis

China is the second-largest consumer of oil and the largest consumer across major commodities like aluminium, copper, iron ore and steel

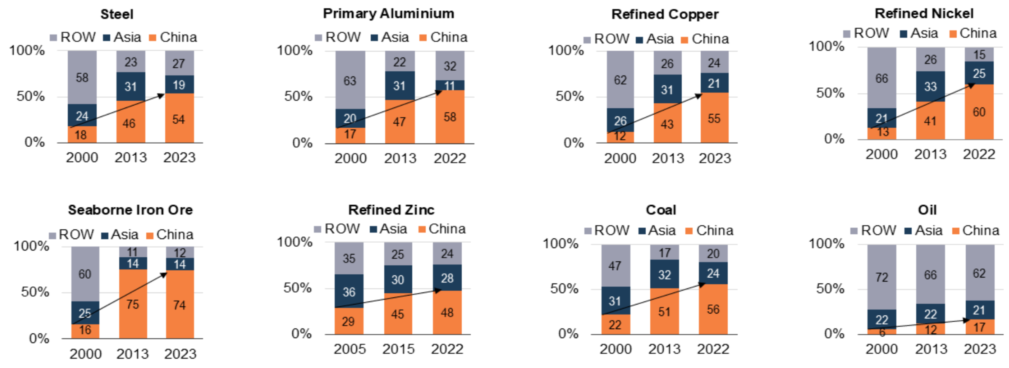
China Share of Global Consumption, Selected Minerals, World Ranking % (2023)



Source: Reuters, ANDAMAN PARTNERS Analysis

China and Asia have dramatically increased their shares of the consumption of key metals and minerals — expect this trend to continue

China and Asia Shares of Global Consumption, Selected Minerals % (2000, 2013, 2023)



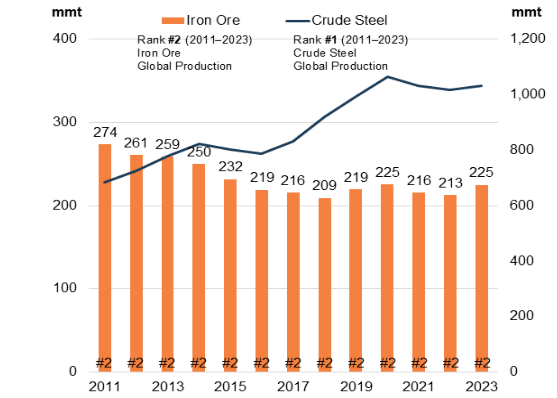
Source: Various, ANDAMAN PARTNERS Analysis

Source: ANDAMAN PARTNERS Analysis

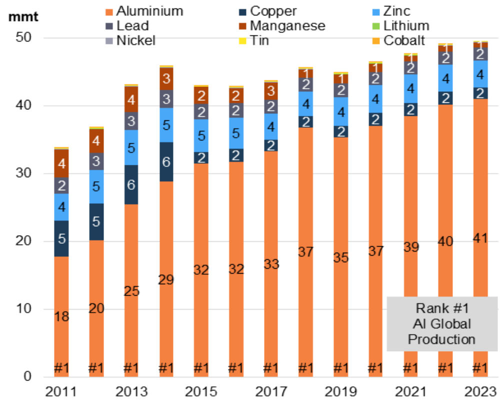
China dominates production of steel, aluminum and several minerals, and supplies significant shares of global demand for various other commodities. China itself is dependent on foreign sources for key metals such as lithium, copper, cobalt and nickel

China is the largest producer of steel and aluminium and the second-largest producer of iron ore — and plays a significant role in many other commodities

China Production of Iron Ore mmt (LHS) vs Crude Steel mmt (RHS) (2011-2022)



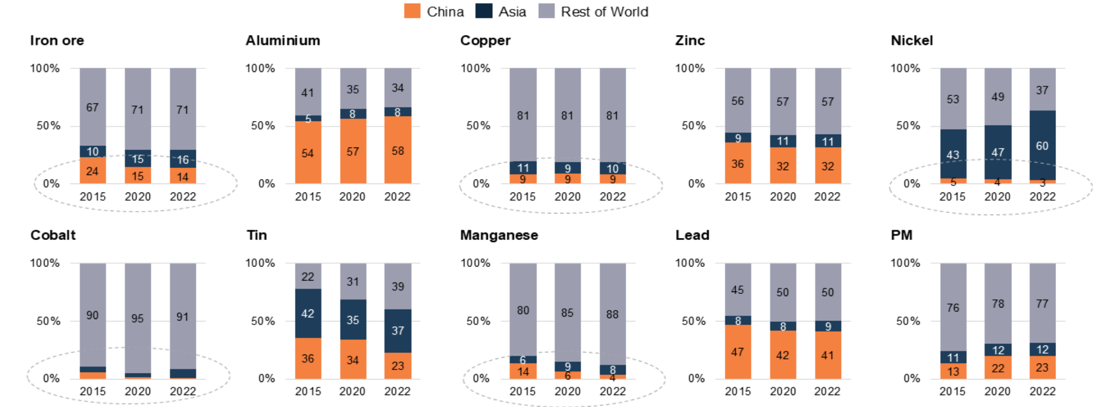
China Production of Selected Commodities mmt (2011-2022)



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

China produces almost 60% of global aluminium, 41% of lead, 32% of zinc, 23% of tin and 23% of precious metals

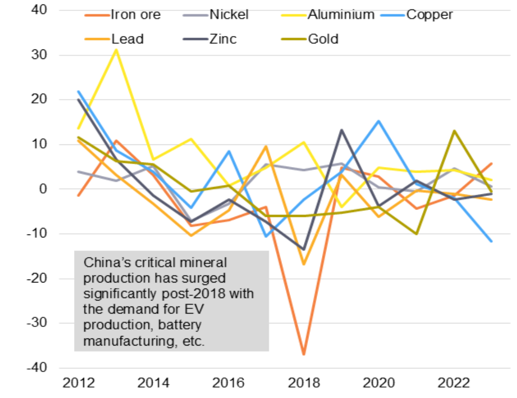
China Share of Global Production of Selected Minerals % (2015, 2020, 2022)



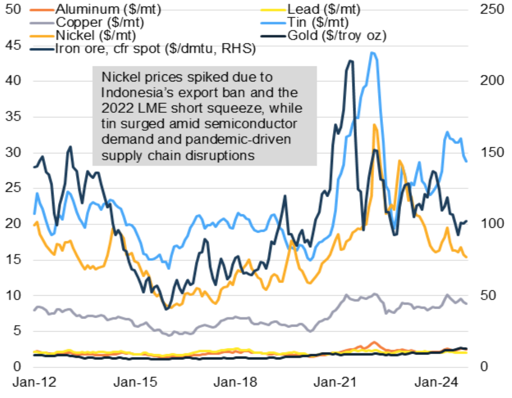
Source: World Mining Data, ANDAMAN PARTNERS Analysis. Note: PM is Precious Metals which include Gold, Palladium, Platinum, Rhodium and Silver.

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 (2012-2023)



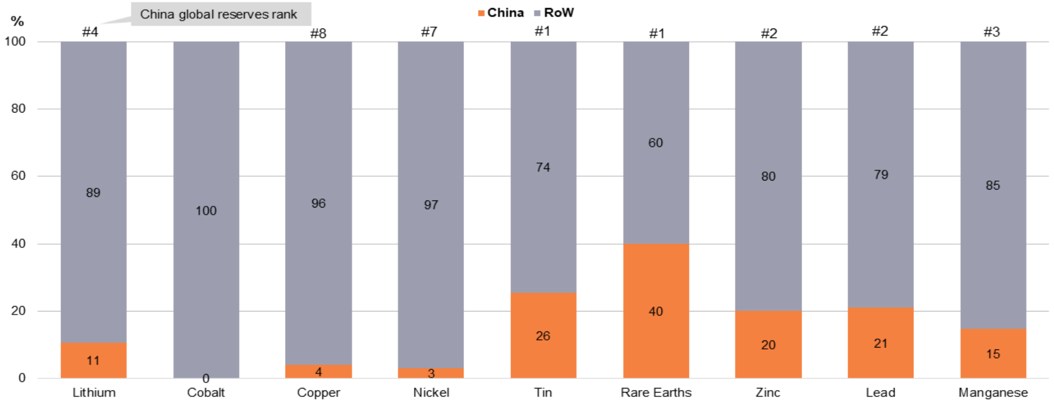
Global Prices of Selected Minerals, USD (Jan 2012-Dec 2024)



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

China holds 40% of global rare earth reserves but is dependent on foreign suppliers for lithium, copper and nickel

China Reserves of Selected Minerals, Global % Share (2023)



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

Source: ANDAMAN PARTNERS Analysis

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Mineral production is geographically diverse, but China dominates critical mineral production and processing, providing it with significant leverage over supply chains and trade policy. The world is at a critical juncture for critical minerals, however, with geopolitical tension rising over demand imbalances and supply diversification

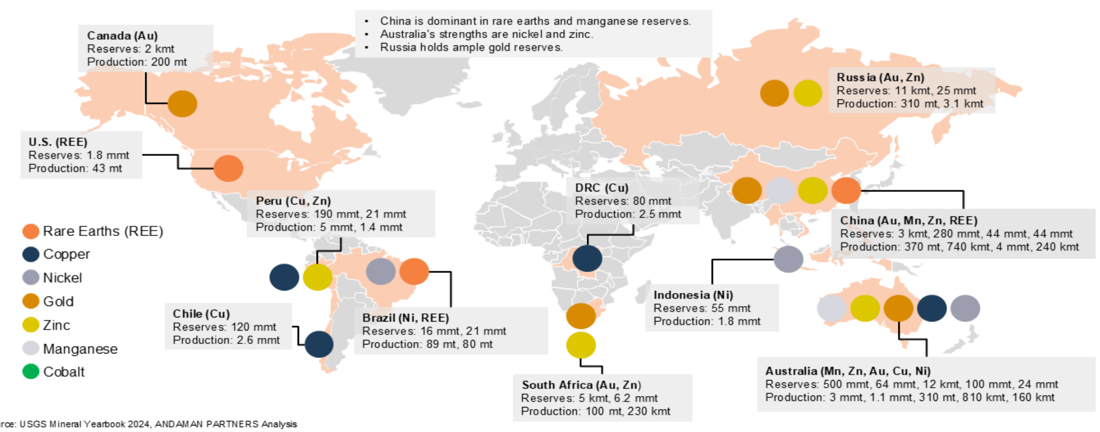
China's control over critical mineral processing is reshaping global supply chains, but mineral production remains geographically diverse

- Mineral production remains geographically diverse, with key contributors including Australia, Russia, Indonesia, and the DRC for various critical minerals.
- China dominates the production of key industrial minerals like gallium (98%), tungsten (81%) and bismuth (80%), reinforcing its strategic control over these minerals.
- Copper, lithium and nickel mining is more diversified, with Chile, Australia, Indonesia and the DRC leading global production.
- China dominates global mineral processing, particularly for rare earths, graphite, lithium and cobalt, shaping supply chain dependencies.
- Manufacturing and bulk material production are highly concentrated in China, covering solar PV, wind, batteries, steel, cement and aluminium.
- 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

Critical mineral supply is concentrated in a few countries. Strategic resource control is increasingly defining industrial and geopolitical landscapes

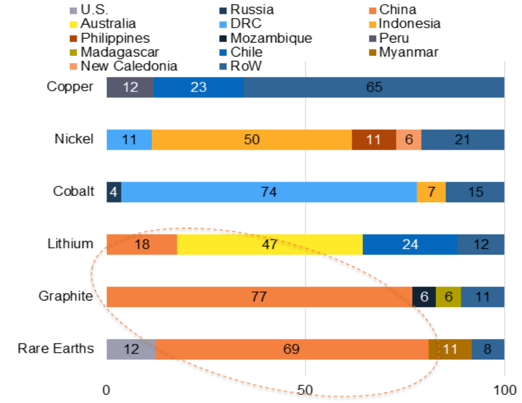
Top Countries by Reserves and Production of Critical Minerals, Volume (2023)



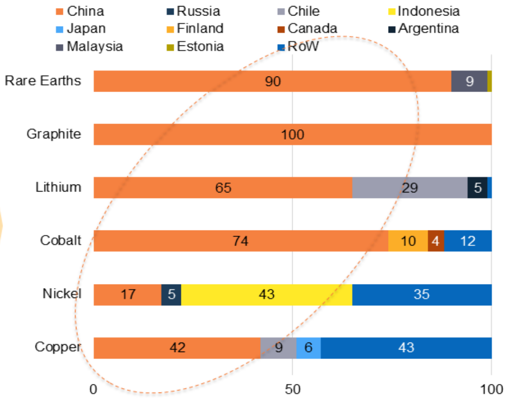
Source: USGS Mineral Yearbook 2024, ANDAMAN PARTNERS Analysis

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 % (2023)



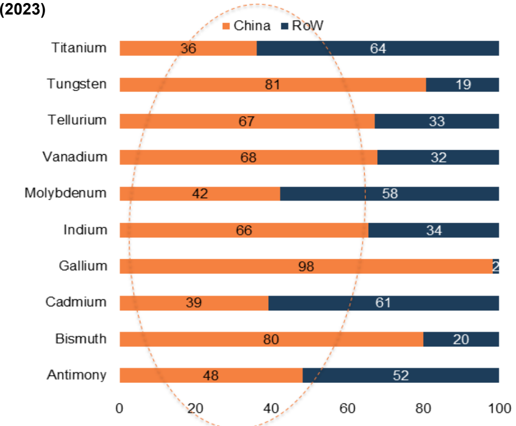
Top Three Processors of Selected Minerals, Global Share % (2022)



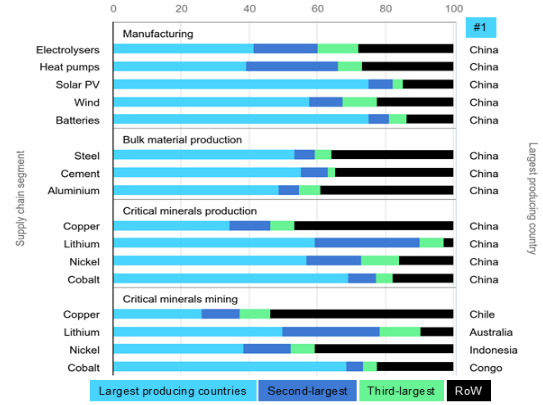
Source: IEA, ANDAMAN PARTNERS Analysis

China's unparalleled control of critical minerals and 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 (2021)



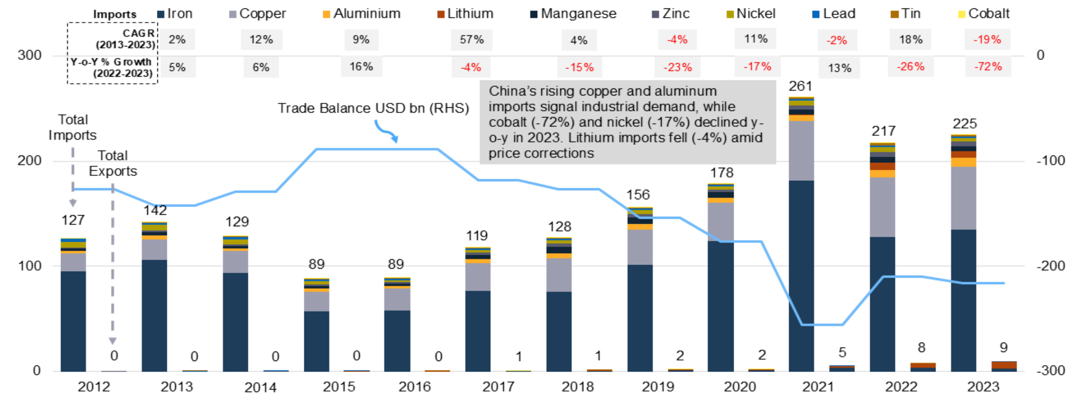
Source: IEA, ANDAMAN PARTNERS Analysis

Source: ANDAMAN PARTNERS Analysis

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 in China

China imported USD 225 bn of minerals from the world in 2023, mainly iron ore (USD 135 bn) and copper (USD 60 bn)

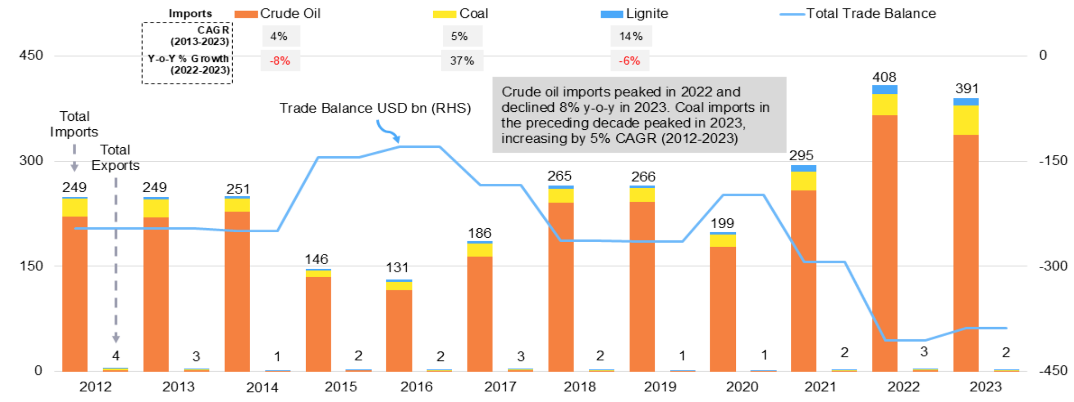
China Imports and Exports of Selected Minerals, USD bn (2012-2023)



Source: UN Comtrade, ANDAMAN PARTNERS Analysis

China imported USD 391 bn of mineral fuels from the world in 2023, mainly crude oil (USD 338 bn) and coal (USD 42 bn)

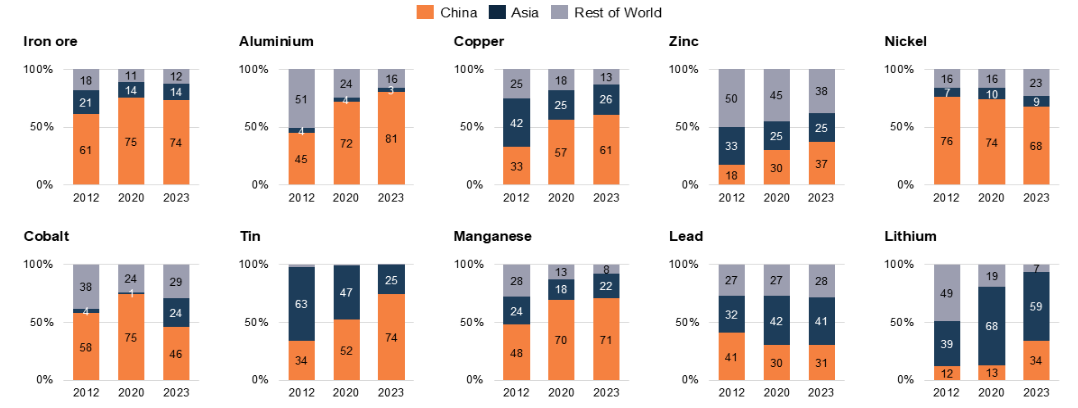
China Imports and Exports of Selected Mineral Fuels, USD bn (2012-2023)



Source: UN Comtrade, ANDAMAN PARTNERS Analysis

China has increased its share of global imports of key metals and minerals, with iron ore reaching 74%, aluminium 81% and copper 61% in 2023

China Share of Global Imports of Selected Industrial Commodities, % (2012, 2020, 2023)



Source: World Mining Data, ANDAMAN PARTNERS Analysis. Note: PM is Precious Metals which include Gold, Palladium, Platinum, Rhodium and Silver.

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

- Over 2013-2023, China's demand increased for copper (+12% CAGR) and aluminum (+9% CAGR) to sustain industrial expansion.
- Coal imports reached their highest level in a decade (+5% y-o-y) in 2023 in support of energy security, while crude oil imports declined (-8%) as China diversified its energy mix.
- China remains the dominant buyer of key industrial commodities, maintaining a share of over 60% of global iron ore, nickel, aluminum, copper and manganese imports, reinforcing its role in global supply chains.
- Lithium imports saw a minor correction (-4% y-o-y) in 2023 following price stabilization.
- Cobalt imports declined since 2013 with a negative CAGR of 19% up to 2023.
- Iron ore and copper imports remain resilient, ensuring 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.

Source: ANDAMAN PARTNERS Analysis

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 in the mining sector

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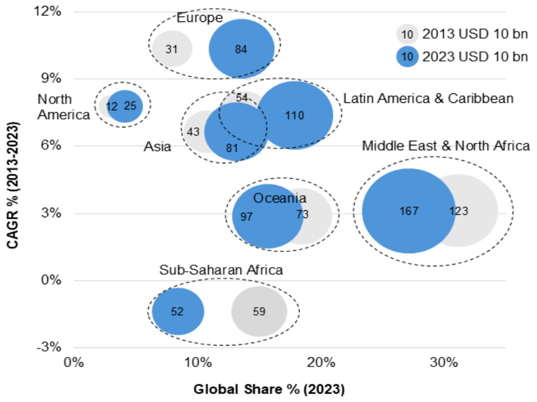
MENA was China's largest import partner in 2023 accounting for a share of 31%, followed by LAC (18%) and Oceania (16%)

China Import Partners for Selected Minerals, USD bn (2013-2023)



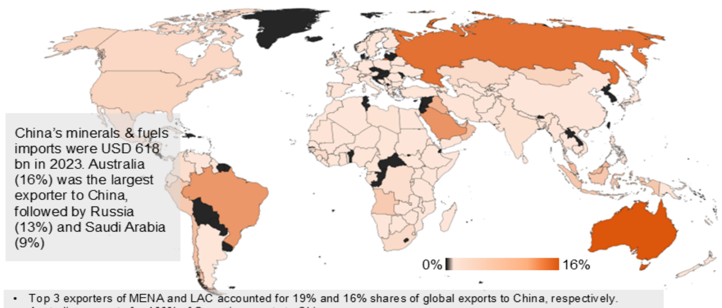
China Imports of Selected Commodities, USD bn (2013-2023)

Sr. No.	Mineral	USD billion (2023)	Global Share % (2013)	Global Share % (2023)	CAGR % (2013-2023)
1	Aluminium	8.6	63.7	↑ 80.8	8.6
2	Cobalt	0.04	61.7	↓ 46.3	-19.5
3	Copper	59.9	34.6	↑ 60.9	11.9
4	Iron	134.6	65.3	↑ 73.6	2.4
5	Lead	1.6	34.4	↓ 30.6	-2.5
6	Manganese	4.9	58.8	↑ 70.6	4.4
7	Nickel	3.5	78.3	↓ 67.9	-3.8
8	Tin	1.5	42.2	↑ 74.1	17.8
9	Zinc	4.0	19.2	↑ 37.3	11.4
10	Lithium	6.5	14.4	↑ 34.2	57.3
11	Coal	53.2	20.8	↑ 22.3	6.2
12	Crude Oil	337.6	13.5	↑ 24.8	4.4

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

China Import Partners' Share of Selected Minerals and Fuels, % Share of USD bn (2023)



- Top 3 exporters of MENA and LAC accounted for 19% and 16% shares of global exports to China, respectively.
- Australia accounts for 100% of Oceania 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
2013 2023	2013 2023	2013 2023	2013 2023	2013 2023	2013 2023	2013 2023
31% → 27%	14% → 18%	19% → 16%	8% → 14%	10% → 13%	15% → 8%	3% → 4%
Middle East & North Africa	Latin America & Caribbean				Sub-Saharan Africa	North America

Rank	Country	USD bn (2023)	Import share % (2023)	CAGR (2013-2023)
1	Australia	96.2	15.6	2.9
2	Russia	78.2	12.7	12.4
3	Saudi Arabia	54.5	8.8	2.5
4	Brazil	52.6	8.5	7.3
5	Iraq	35.2	5.7	7.0
6	Malaysia	29.2	4.7	32.0
7	UAE	26.7	4.3	11.5
8	Chile	26.1	4.2	13.5
9	Oman	25.5	4.1	2.5
10	Indonesia	20.7	3.4	2.8
11	Peru	19.4	3.1	13.0
12	Angola	18.5	3.0	-5.3
13	Kuwait	15.2	2.5	7.7
14	U.S.	12.1	2.0	13.4
15	Mongolia	12.1	2.0	13.8
	Top 15	522.4	84.6	6.1
	RoW	95.2	15.4	-1.1
	Total	617.7	100	4.6

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, strengthening resource security and shifting trade dynamics to adapt to evolving global supply and demand trends

- China is diversifying its import sources. From 2013 to 2023, Latin America & the Caribbean (14% → 18%) and Europe (8% → 14%) became more important while MENA's share declined from 31% to 27%.
- Australia and Russia remain China's top import partners, contributing USD 96.2 bn (15.6%) and USD 78.2 bn (12.7%) in 2023, respectively, reinforcing their role in China's resource security.
- From 2013 to 2023, cobalt imports saw the most significant decline (-19.5% CAGR) while lithium surged (+57.3%), reflecting China's focus on battery metals and EV supply chains.
- In 2023, the Middle East remained China's key energy supplier led by Saudi Arabia (USD 54.5 bn) and Iraq (USD 35.2 bn).
- Malaysia's importance surged (+32% CAGR) in China's supply chains from 2013 to 2023, signaling a more substantial role in mineral processing and industrial metals.
- Nickel (67.9% global share) and manganese (70.6%) remained critical to China's imports in 2023, while iron and copper imports continue to rise, fueling infrastructure and manufacturing.
- China's total mineral and fuel imports reached USD 617.7 bn in 2023, growing at 4.6% CAGR, with the top 15 suppliers accounting for 84.6% of total imports.

Source: ANDAMAN PARTNERS Analysis

Source: ANDAMAN PARTNERS Analysis

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 for gaining quality partners and capital

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

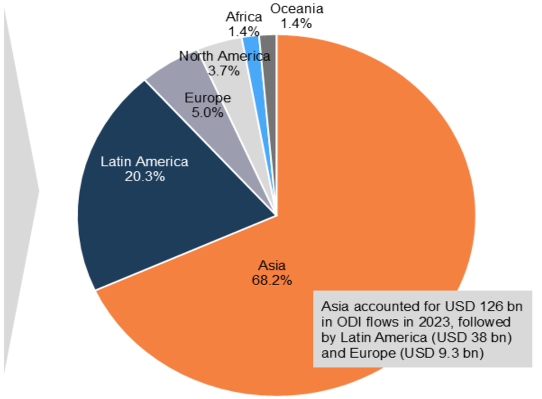
- China's ODI continues to expand, reaching USD 177 bn in 2023, with Asia (USD 126 bn) and Latin America (USD 37.6 bn) as primary investment destinations.
- Strategic resource security remains a priority, with USD 194 bn (2012-2023) allocated to mining and consistent investments in foreign copper mines over this period.
- Africa remains a significant loan recipient, with USD 182.3 bn 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 bn), 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.

Source: ANDAMAN PARTNERS Analysis

China's ODI surged to USD 177 bn in 2023, with 68% focused on Asia, reflecting a strong regional economic integration strategy

China Outward Direct Investment (ODI), USD bn (2002-Nov 2024)

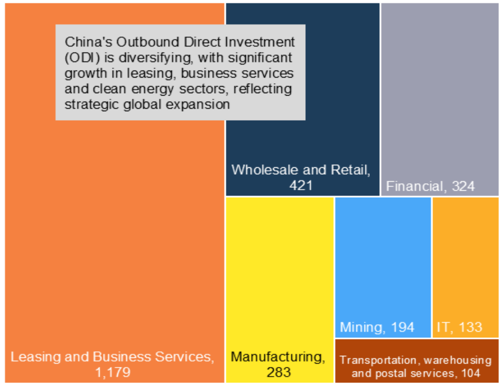
China Outward Direct Investment Flow by Region, USD bn (2023)



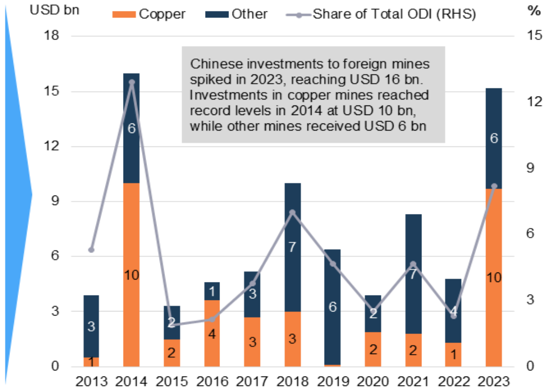
Source: World Bank, MOFCOM, Dezan Shira Associates, ANDAMAN PARTNERS Analysis

Leasing & business services dominate China's ODI, while the stock of mining investments reached USD 194 bn in the period 2012-2023

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



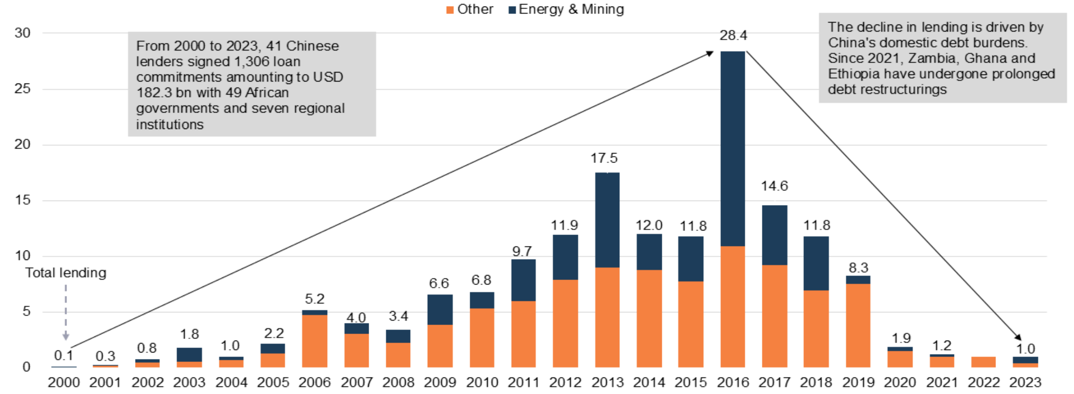
Chinese Companies' Investments in Foreign Mines, USD bn (2013-2023)



Source: The Economist, Dezan Shira Associates, ANDAMAN PARTNERS Analysis

Since 2000, China has provided USD 182.3 bn in loans to African governments, reinforcing its economic influence across the continent

China Lending to Africa in the Energy and Mining Sectors, USD bn (2000-2023)



Source: Boston University, ANDAMAN PARTNERS Analysis

Source: ANDAMAN PARTNERS Analysis

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China is now a prominent (even dominant) supply partner across the global mining value chain, its engineering & design firms have moved up the value chain from simple to complex supply to integrated engineering and finance services, and are driving value worldwide via cost reductions and schedule gains

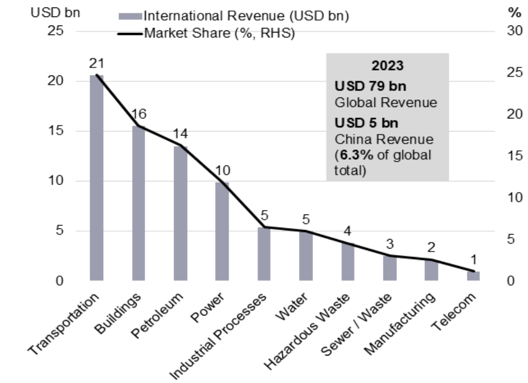
China's global engineering, design and construction investments shape supply chains and infrastructure development worldwide

- China's engineering and design firms maintained strong global revenue streams in 2023, with Asia (USD 2.15 bn), Africa (USD 941 mn) and Europe (USD 808 mn) as the top markets.
- In 2023, China's top 10 engineering & design firms generated revenue of USD 2.2 bn 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 bn.
- 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 bn in 2015 but declined to USD 38 bn by 2022, reflecting shifting investment patterns.
- Despite declining construction revenues in Africa, Chinese firms remain key players in infrastructure projects, adapting to evolving economic and geopolitical conditions.

Source: ANDAMAN PARTNERS Analysis

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

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



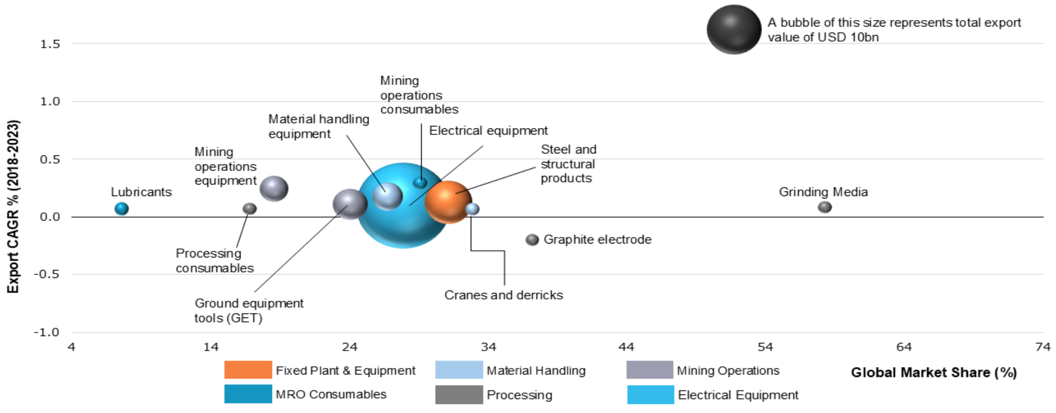
Top Chinese Engineering & Design Firms, USD mn (2023)

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

Source: ENR 2025 Report, ANDAMAN PARTNERS Analysis

From 2013 to 2023, China's exports of major mining products (machinery & equipment) grew rapidly as the country transitions towards manufacturing high-value goods

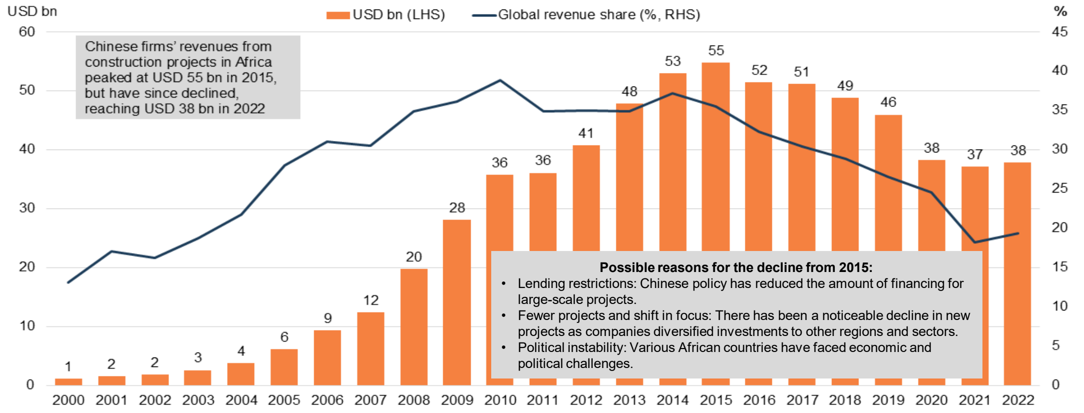
China Exports of Selected Mining Products, USD bn (2023)



Source: UN Comtrade, ANDAMAN PARTNERS Analysis

China's foreign construction revenues in Africa have started to decline after peaking in 2015

Gross Annual Revenue of Chinese Companies' Construction Projects in Africa, USD bn (2000-2022)



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

Source: ANDAMAN PARTNERS Analysis

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Conclusion, Implications and Recommendations

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