EMERGING MARKETS EQUITIES

Emerging markets are in pole position in the resources race

ROBECO
The Investment Engineers

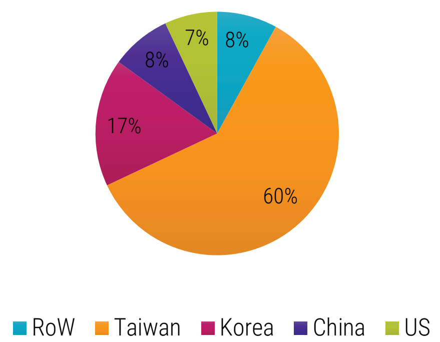
- EM are central to supply chains for AI and renewable energy
- The key strategic mineral inputs are also concentrated in EM
- Global mining giants face a more challenging environment

With key inputs for AI infrastructure and renewable energy primarily found within emerging economies in Latin America, Africa and Asia-Pacific, we think EM investors will be beneficiaries of the global race for resources.

In March 2026, emerging markets equities stalled, as a rising US dollar and concerns over global energy security pushed investors toward the US as a perceived safe haven, underpinned by its domestic oil and gas resources. This reaction was understandable given that the largest constituents of the MSCI Emerging Markets Index — China, India, Korea and Taiwan — import oil products and natural gas from the Middle East, leaving them exposed in the short term to an energy supply shock.

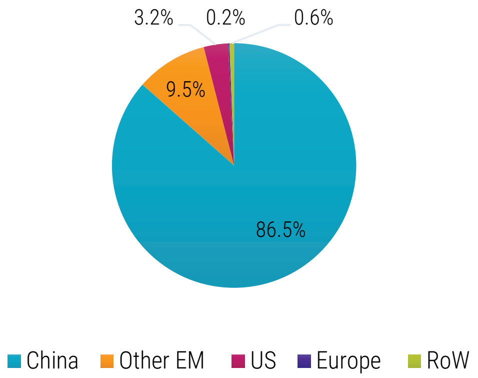
Over the longer term, however, the picture is much more constructive. Emerging markets have moved into leadership positions[1] in key technologies supporting the AI buildout, like semiconductor manufacturing (see Figure 1a), and the development and manufacture of renewable energy technologies like solar panels (see Figure 1b).

Figure 1a: EM dominate semiconductor production



Source: TrendForce/Visual Capitalist (2024-2025 Estimates)

Figure 1b: China and other EM dominate solar production



Source: StatRanker. PV module production for 2024

[1] See 'Emerging markets' strength comes from within' – Robeco – March 2026

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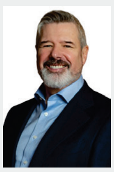
Marketing material for professional investors, not for onward distribution



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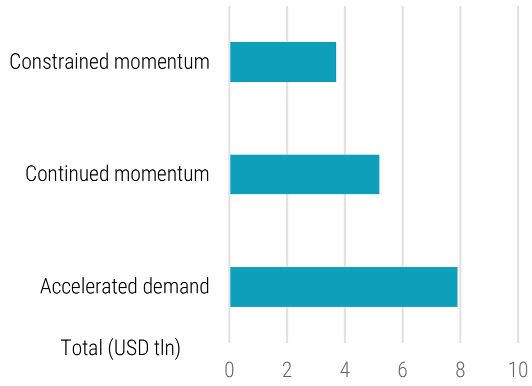
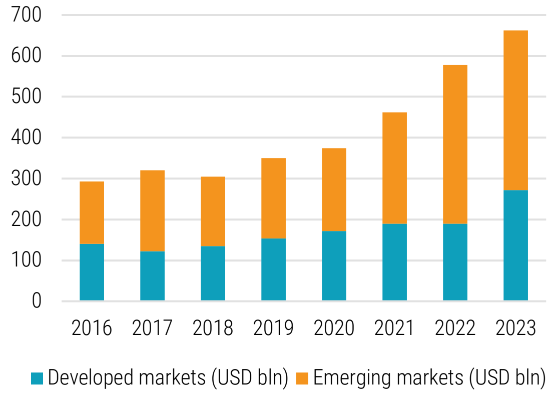
Both of these sectors are attracting vast amounts of capital expenditure in both developed and emerging markets, as Figures 2a and 2b show.

Figure 2a: Three scenarios for global AI Capex 2025-2030



Source: McKinsey projections from April 2025 encompassing data center infrastructure, related IT equipment, and power generation capex to support data centers

Figure 2b: New build renewable energy investment EM vs DM



Source: BloombergNEF, Climate Investment Funds, World Bank, March 2025

The two sectors are also inextricably linked. The AI revolution is contributing to rising electricity demand, which is in turn increasing demand for power generation sources, whether via fossil fuels, nuclear or renewables. The sudden jump in oil and LNG prices sparked by the Iran war in March 2026 has also illustrated the fragility of fossil fuel supply chains and is likely to further accelerate global investment in renewables, electrification and efficiency.

Moreover, the two trends are relying on many of the same mineral inputs to enable the infrastructure buildout (see Table 1), resulting in a surge in demand for these specific materials.

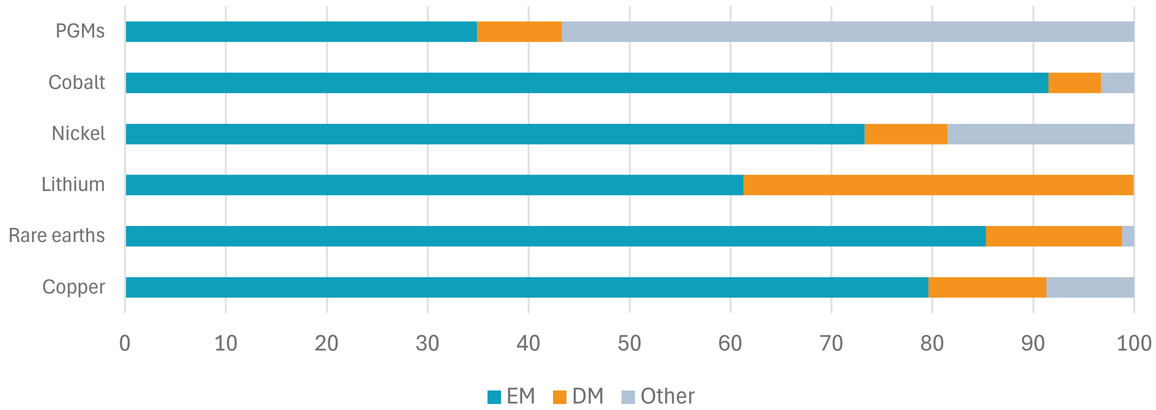
Table 1: Selected mineral inputs overlapping in both the AI and renewable energy infrastructure build-outs

	AI infrastructure	Renewable energy
Copper	Power cables, busbars, transformers, switchgear, cooling loops, heat sinks, and short-range high-speed interconnects inside racks	Generator windings, universal wiring, high-voltage lines, transformers, invertors switchgear, substations, and interconnectors
Rare earths	High-performance permanent magnets in server and cooling fans, high-efficiency motors, and some storage devices, and fiber optics	Magnets in turbines
Lithium	Battery technology for back-up and power saving	Battery technology
Cobalt	Battery technology	Battery technology, magnets
Nickel	Battery technology	Battery technology
Platinum group metals (PGMs)	Contacts, solders, multilayer capacitors, connectors and high-reliability interconnects	Green hydrogen, wind energy, advanced batteries and some types of solar

Sources: IEA, UN Task Force on Critical Energy Transition Minerals – December 2025, Artificial Intelligence and the Critical Minerals Crunch – FP Analytics, October 2025.

Of these key minerals, critical to both AI and the energy transition, a significant share of economically viable reserves and production is concentrated in emerging economies (see Figure 3).

Figure 3: Percentage of mining production of critical minerals in EM vs DM in 2024



Sources: IEA (2025), Global Critical Minerals Outlook 2025, IEA, Paris www.iea.org/reports/global-critical-minerals-outlook-2025, Licence: CC BY 4.0. 'Other' includes Russia and disputed resources

For example, South Africa remains the most reliable global source of PGMs. Chile, Zambia, Indonesia and the Democratic Republic of the Congo (DRC) supply the balance of global copper, while China dominates in rare earths mining and especially in processing. Indonesia is also the swing supplier in nickel, and the DRC dominates cobalt mining. The world's largest lithium miner is a developed market (Australia), but the rest is produced in Chile, Argentina, China, and various African nations.

The location of these minerals has been given particular significance by the geopolitical tension between the US and China. Trade relations are worsening and the two global powers have established rival technology and military-industrial stacks. In particular, China has built a dominant position in metals and rare earths processing, outcompeting the steel and smelting sectors in the US and Europe, and leaving them dependent on China for the balance of refined supply in many key industrial inputs. This in turn has seen the US classify its mineral supply chain as a national security policy priority,[2] rather than an issue that can be left to market forces.

In our view, this new environment is likely to elevate the value of emerging markets' generous mineral endowment and also give emerging economies more leverage to capture value.

Resource nationalism is becoming a tailwind for some emerging markets

Traditionally, if you want exposure to metals and minerals you can invest in global companies* headquartered and listed in developed markets, like Rio Tinto, BHP Billiton or Glencore, which operate some of the biggest mines in the world. The global miners' access to deep pools of capital and technological expertise has enabled some projects that would not have been otherwise possible, like Oyu Tolgoi – Rio Tinto's giant underground copper mine in Mongolia's Gobi desert – and Freeport-McMoran's Grasberg mine in Papua province, Indonesia, which is situated at 4,000 meters altitude in the remote Carstenz mountain range. The countries that host these mines typically benefit from profit sharing via royalty agreements and corporate taxes, and there is growing evidence that emerging markets are going to capture more of this value in the future. This follows the same model as the oil and gas industry where countries like Saudi Arabia, the UAE and Kazakhstan, have taken control of more productive assets and emerged with more diverse economies that extend beyond fossil fuels.

*** The companies are named for illustrative purposes only. No inference can be made on the future development of the company. These are not buy, sell or hold recommendations.**

[2] New Executive Order Ties U.S. Critical Minerals Security to Global Partnerships - Center for Strategic & International Studies – 15 January 2026

Figure 4: Inside the Oyu Tolgoi mine in Mongolia

Source: Turquoise Hill Resources

A good example in the metals space is the Escondida copper mine in Chile, a joint venture between BHP (57.5% ownership), Rio Tinto (30%) and JECO Corporation, a Japanese consortium comprising Mitsubishi, JX Nippon Mining and Metals (12.5%). This is now the world's largest copper mine (~6% of annual global production) after starting operations in 1991. While Chile has benefited substantially via corporate taxes, and profit share schemes which have brought wealth to the local workforce and the wider economy, it recently secured an even more advantageous deal just as the mine reaches record levels of production at record high copper prices.[3] The new Mining Royalty Act came into force in 2024, giving the country a more generous and scalable royalty stream, related to margins, from all foreign-owned mines.

The trend toward resource nationalism and the pattern of more engagement from governments is being repeated across EM, even in countries where the central government has traditionally been weak. For example, Ghana just demanded international mining companies use local contractors for their ongoing operations,[4] while the DRC has ordered a review of its export revenues and mineral assets.[5] Indonesia is also trying to accrete more value share, using export taxes to try to move processing of its nickel ore onshore, rather than exporting to China.[6]

The World Bank says that emerging economies should follow the example of Chile in the design of royalty agreements, and potentially the example of Norway in the allocation of some resource proceeds to Sovereign Wealth Funds[7] that can invest in economic security and diversification. This is very dependent on the strength of fiscal frameworks and strong institutions, but has proved a successful model for energy exporters. Currently Chile, Peru, Mongolia, Namibia, Indonesia and Botswana are major emerging economies and minerals exporters that have established stabilization funds.

Are global miners losing their grip?

The relationship between the host country and foreign mining companies is almost always subject to contention, especially if the commodity in question enters a bull market. Rio Tinto's Oyu Tolgoi copper mine which started

[3] BHP now expects nearly 2M tonnes copper production after record Escondida throughput – Mining.com – 22 April 2026
[4] Ghana directs Newmont, AngloGold, Zijin to shift mining ops to local firms by December – Reuters – 22 April 2026
[5] Congo president orders probe into copper and cobalt export revenues, document shows – Reuters 28 April 2026
[6] Indonesia bets on nickel levy to break its China habit – Asia Times – 1 April 2026
[7] Commodity exporters can transform their resource curse into a blessing – World Bank – May 2024

production back in 2013 is a good example. The project is a joint venture between the company and the Mongolian government. The latter took on debt finance to fund its portion of the more than USD 25 billion capital expenditure to build and operate the mine. This has caused continual tension between the company and the Mongolian government, with ongoing domestic pressure to renegotiate the original financing agreement so the country can derive more value share.[8]

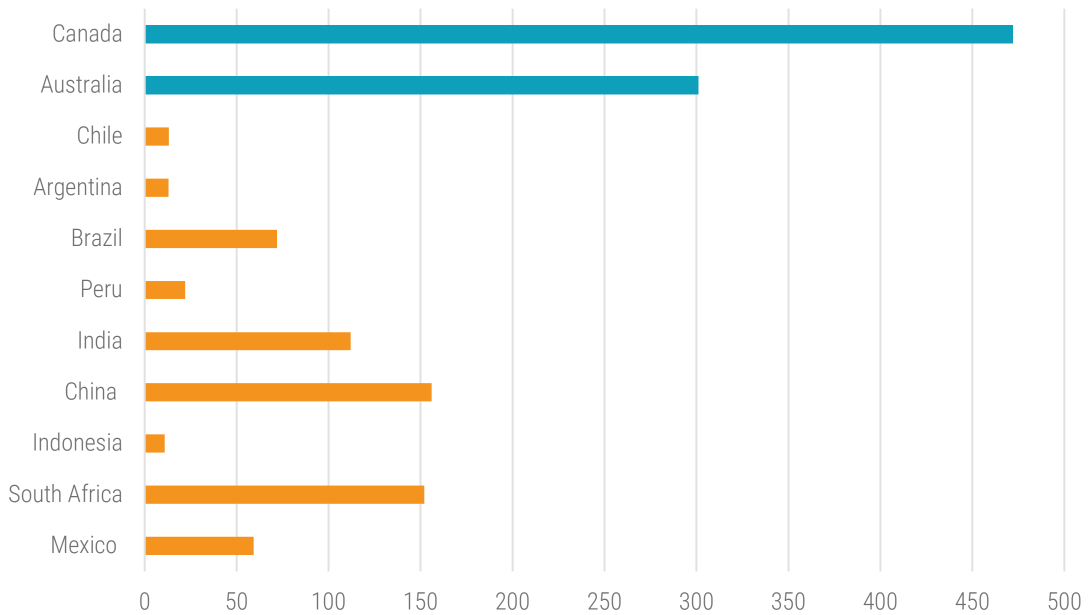
This type of situation potentially means that global miners could be less likely to pursue mega-projects in emerging economies or alternatively accept a smaller slice of the proceeds. For example, Canada's Barrick Mining* recently announced it was pausing development of its proposed USD 7 billion Reko Diq copper project in Pakistan, apparently due to security concerns following the outbreak of hostilities in neighboring Iran, but the company also noted that "there could be significant increases to the previously disclosed total estimated capital budget and timeline for the project." [9]

The emerging markets miners: A growing ecosystem

Brazil's national mining champion Vale is the largest in EM.* The company dates back to the 1940s, but came to investors' prominence in the early 2000s as the third major supplier of iron ore, behind BHP and Rio Tinto, to China's rapidly growing steel sector. In 2024, Vale carved out its base metals business, which focuses on copper and nickel with operations in Brazil, Canada and Indonesia, into a separate unit, which might pursue a listing, confirming Vale's status as a global miner to compare with the western giants. China also has large-cap mining companies with global reach including Jiangxi Copper and Zijin Mining, which both complement base and precious metals mining across the world with metals processing at home.
* The companies named here are for illustrative purposes only. No inference can be made on the future development of the companies. These are not buy, sell or hold recommendations.

However, mining capital is still largely raised in developed markets, especially Canada and Australia, where 'junior' miners often list, whether they operate locally, or in Asia, Africa or Latin America.

Figure 5: Large and mid-cap listed materials sector in respective country (USD billions)



Source: MSCI Country Index factsheets to end of March 2026. Based on the weight of the materials sector as a percentage of total index market capitalization. MSCI Country Indices only include large and mid-cap companies so the numbers do not represent the entire market capitalization of each country's materials sector.

[8] Oyu Tolgoi: Mongolia's High-Stakes Clash With Rio Tinto – The Diplomat – 5 February 2026
[9] Barrick provides an update on Reqo Diq – Barrick Mining – 2 April 2026

Nevertheless, capital markets activity in various sectors of emerging markets is active and growing. South Africa (coal, precious metals), Indonesia (nickel, gold and copper) India (coal, iron ore, zinc), Peru (copper, precious metals), Brazil (iron ore, copper) Argentina (precious metals, copper, lithium) and Chile (copper, mining services), all have significant clusters of resource companies listed domestically. China (copper, iron ore, rare earths, precious metals, aluminum and metals processing) also saw the world's biggest mining IPO of 2025 when Zijin Gold International raised USD 3.2 billion through a listing in Hong Kong.[10]

Conclusion: Possession is nine-tenths of the law

For asset allocators, emerging markets' prime position in key natural resources is yet another reason why increasing allocation to EM makes sense in the long term. Robeco's emerging markets equities team looks at emerging markets' resource endowment from two perspectives. First, we look at how it contributes to our top-down country selection. EM countries with mineral resources should benefit fiscally, and the roadmap to avoiding a 20th century-style 'resource curse' is now well established. We believe that, on balance, mineral resources are a tailwind for EM, and the deglobalized geopolitical landscape we are entering will only intensify that.

Second, we look at the companies in the materials sector themselves. At the end of April 2026, we are underweight in the materials sector across our EM strategies. This reflects a deliberate, bottom-up outcome of our investment process rather than a top-down sector call. In emerging markets, country factors are a far more important driver of returns than sectors, and the portfolio is positioned accordingly, which naturally limits exposure to materials-heavy countries where fundamentals are less attractive.

From a stock selection perspective, many EM materials companies offer highly cyclical earnings, weaker cash flow resilience and limited scope for sustainable returns without a supportive commodity cycle, which has historically constrained alpha generation. In addition, prolonged headwinds linked to China's property and metals cycle, alongside elevated ESG and transition risks for a wide part of the sector, further raise the bar for investment, narrowing the opportunity set to only a small number of high-conviction positions.

[10] China's Zijin Gold shines in Hong Kong debut as gold prices reach record high – Reuters - 30 September 2025