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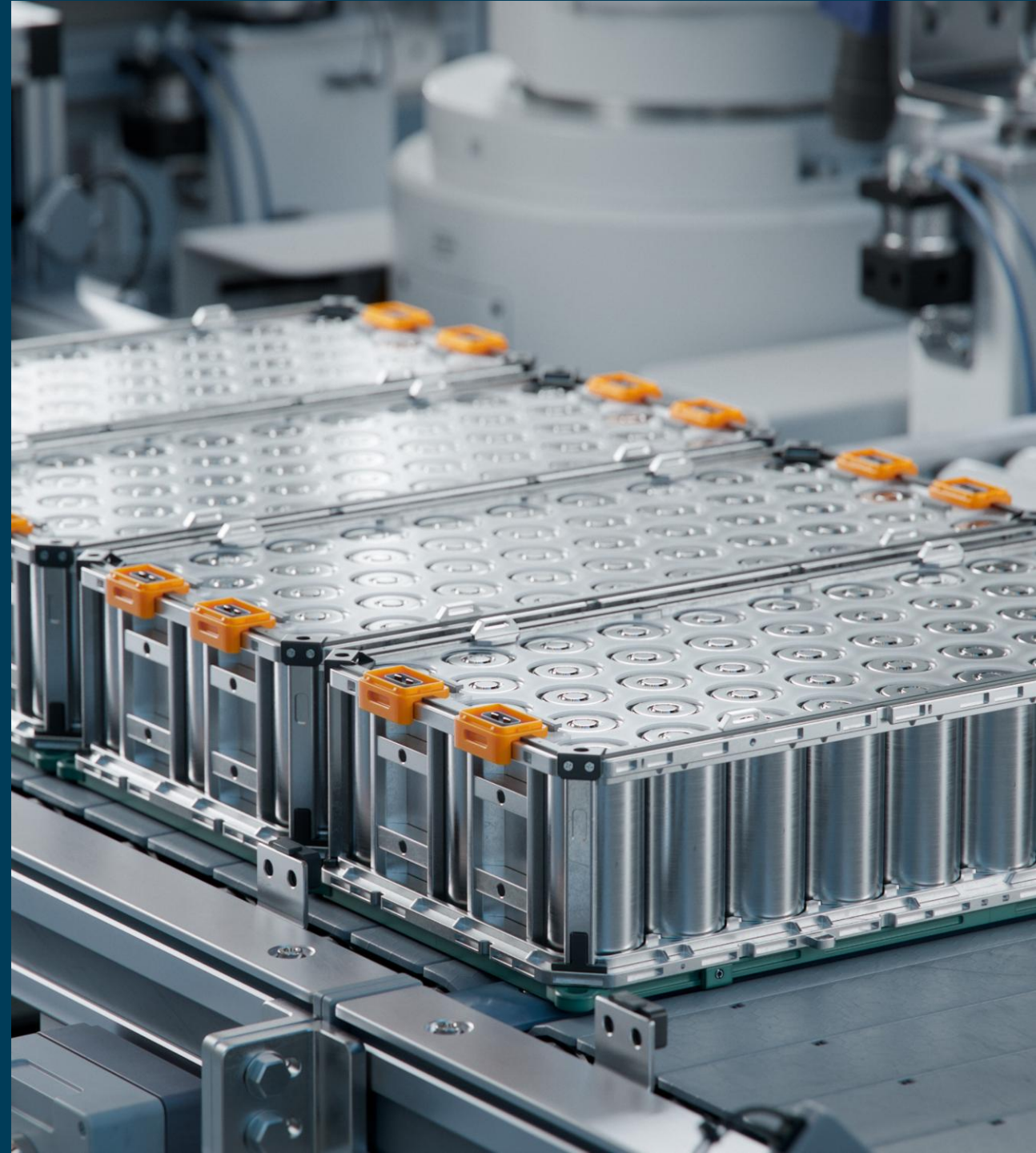
China
Cross-Border
Monitor

China Global Clean Tech Investment Dashboard

The Electric Vehicle Value Chain

September 2025

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Highlights

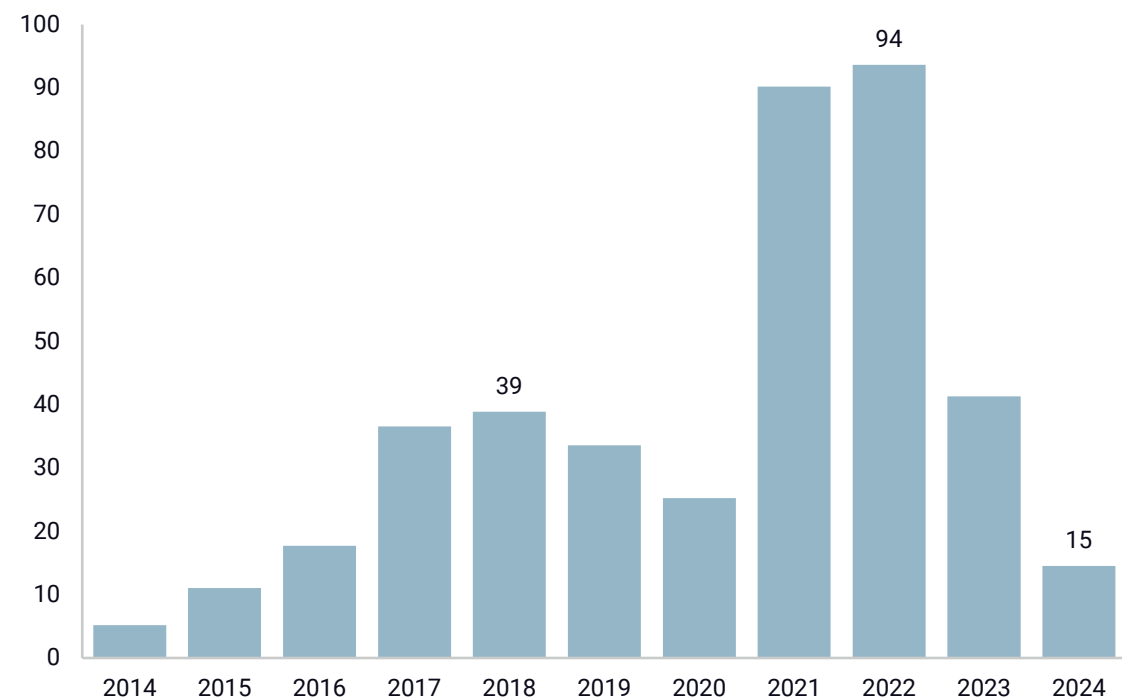
- **China's domestic electric vehicle (EV) industry is in a state of significant overcapacity.** Battery production capacity in 2024 was double domestic demand and 20% greater than global demand, triggering a 90% collapse in new domestic investment compared to the policy-fueled investment boom in 2021-2022.
- **Chinese firms are accelerating globalization to escape domestic price wars.** Chinese outbound foreign direct investment (OFDI) in the EV value chain soared from an annual average of \$8.5 billion in 2018-2021 to \$30.4 billion in 2022-2024, driving an overall rebound in China's global outbound investment. In 2024, EV investment by Chinese companies was greater overseas than domestically for the first time, a historic reorientation of capital as companies seek profitability outside of a domestic market facing "involution."
- **The momentum for new investment has cooled but completed investments are reaching record highs.** Since 2024, announced EV investment have dropped nearly 50% from 2022-2023 levels, but the share of completed Chinese FDI going to EVs continues to grow. In 2021, only 5% of Chinese FDI was dedicated to the EV value chain, but by 2024, that had grown to 25%.
- **The geographic focus is shifting from Europe toward Asia and the Middle East and North Africa (MENA).** Before 2024, Europe received 41% of announced Chinese EV investment. Since then, flows have shifted to Asia and the MENA region, drawing 33% and 25% of new investment, respectively.
- **Chinese investment is diversifying across the EV value chain.** Battery cell projects are no longer the sole focus. Firms are increasingly establishing overseas facilities for battery materials and vehicle components, while downstream assembly projects gather momentum in response to foreign market-access requirements and protectionist trade measures.
- **Private firms dominate China's global EV investment push.** They account for more than 85% of total investment and signal the rise of commercially competitive, globally ambitious Chinese companies. While overseas investors are diverse, they are more concentrated than in domestic markets: The top five investors represent 38% of total value and CATL alone is responsible for nearly 11% of all investments in the EV value chain.

China's domestic EV market is oversaturated

A policy-fueled investment boom in 2021-2022 has left China with massive overcapacity in batteries and EVs

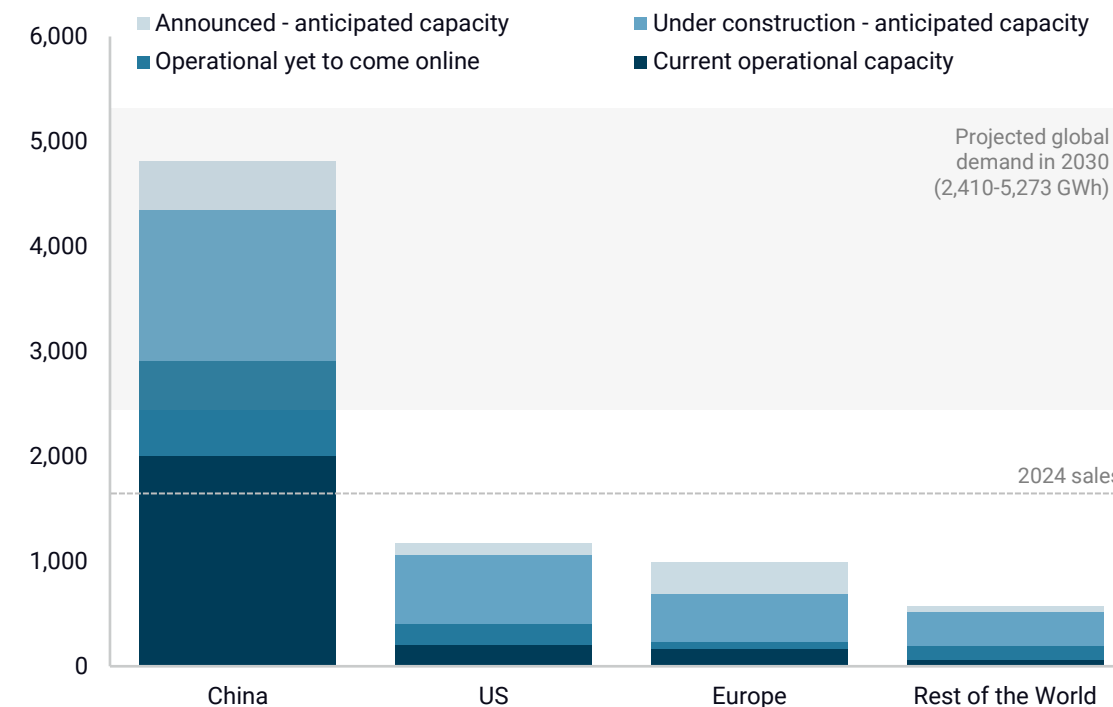
Value of announced domestic Chinese manufacturing investment in the EV value chain*

USD billion



China's projected battery manufacturing capacity and global demand in 2030**

GWh



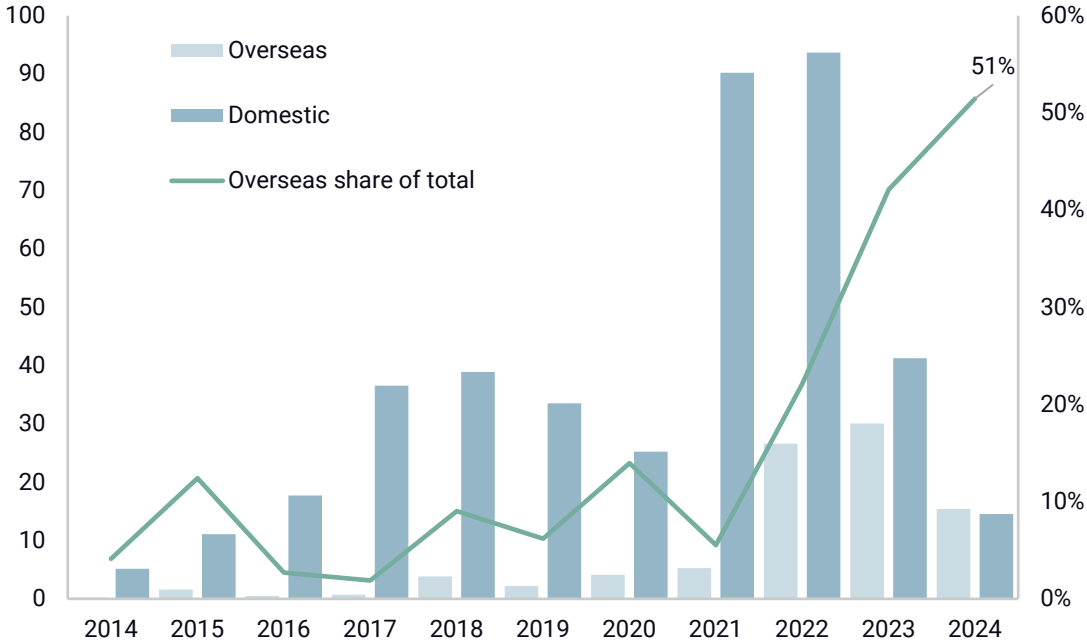
Source: Rhodium Group Global Clean Investment Monitor, EV Volume. *Only includes investments in midstream and downstream manufacturing. **Demand includes stationary storage capacity additions and EV sales.

Chinese firms are accelerating globalization to escape domestic price wars

Overseas investment exceeded domestic investment for the first time in 2024

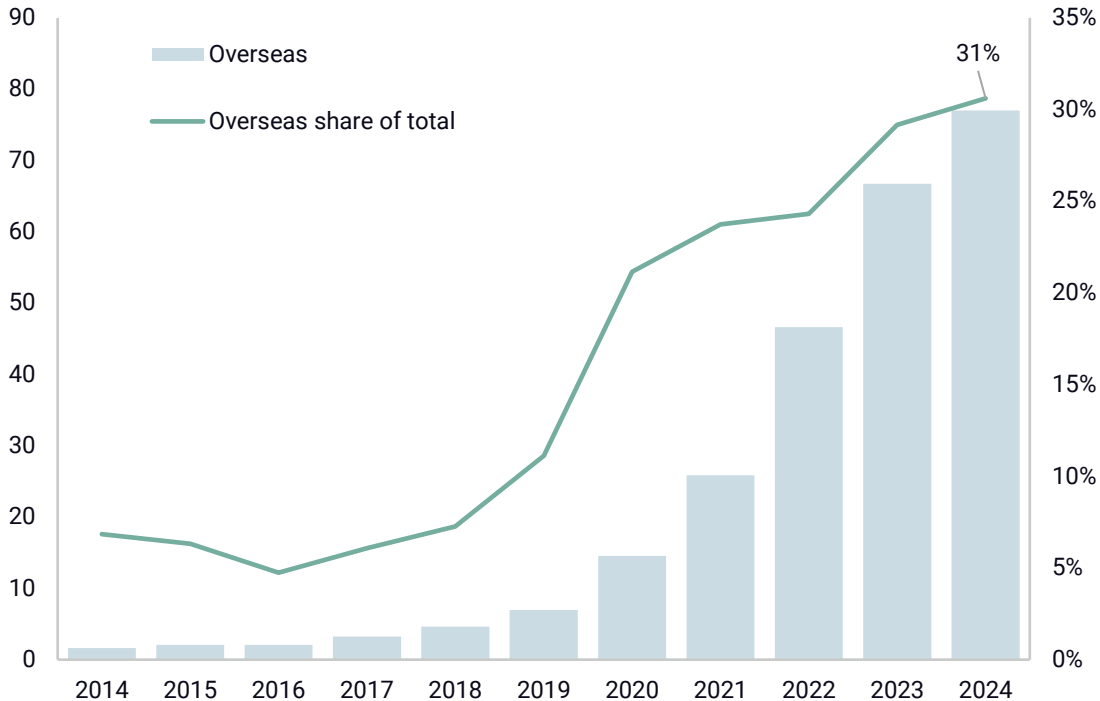
Value of announced Chinese manufacturing investment in the EV value chain*

USD billion (left), percent (right)



Overseas revenue of top 10 Chinese EV firms

USD billion (left), percent (right)



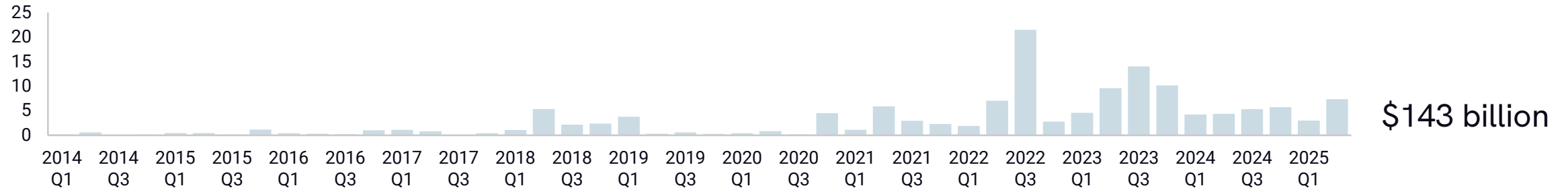
Source: Rhodium Group China Cross-Border Monitor, Global Clean Investment Monitor. *Only includes investments in midstream and downstream manufacturing.

Less than half of announced overseas investment has materialized

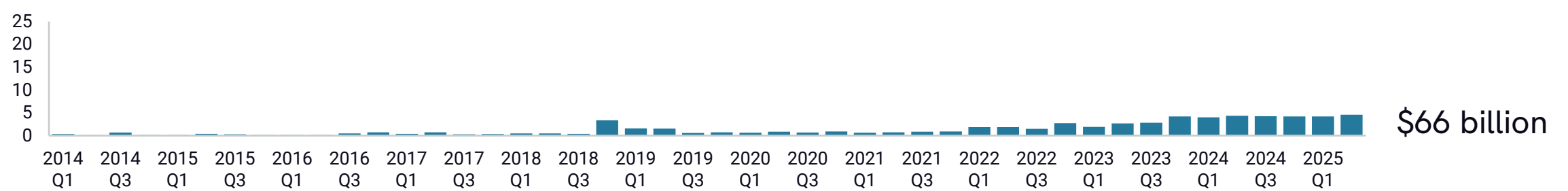
Announced investment is volatile, but completed investments are growing steadily

Value of Chinese FDI transactions in the EV value chain by status

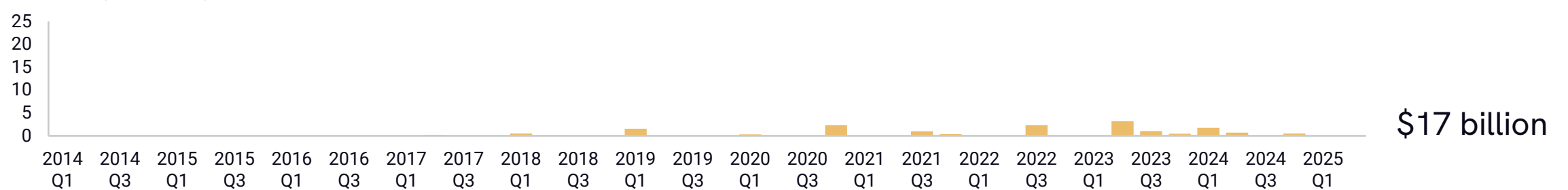
Announced (USD billion)



Completed (USD billion)



Canceled (USD billion)



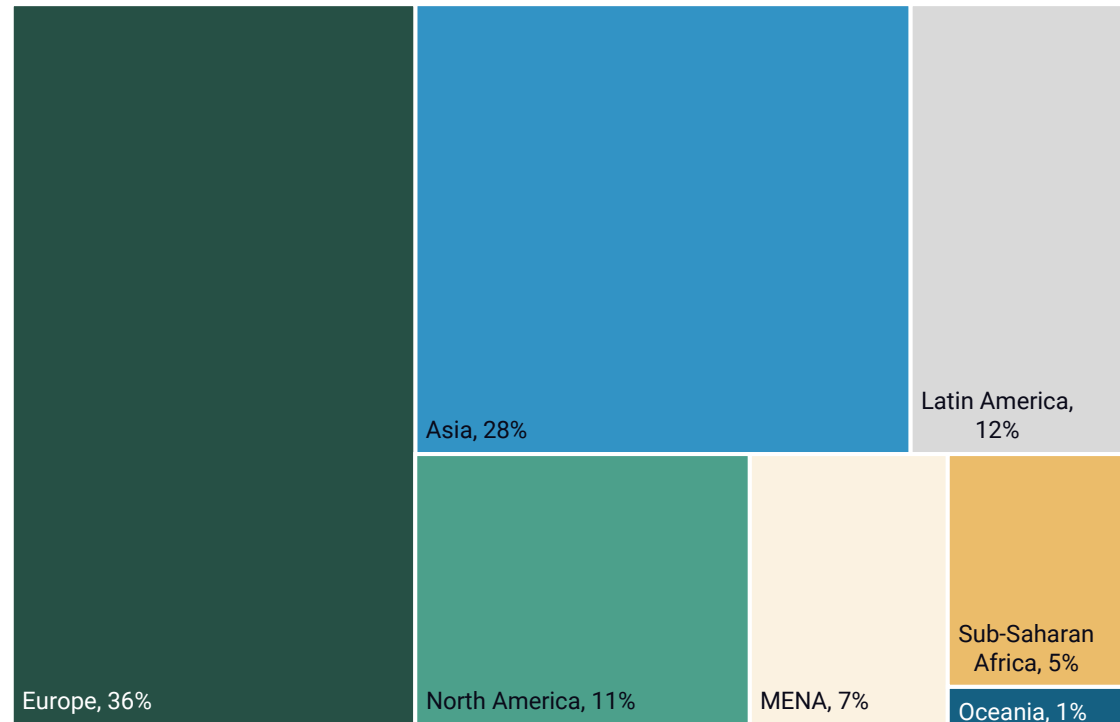
Source: Rhodium Group China Cross-Border Monitor

Europe has been the main recipient, but momentum is shifting

Investment in Asia and MENA is on the rise, while North America remains a laggard

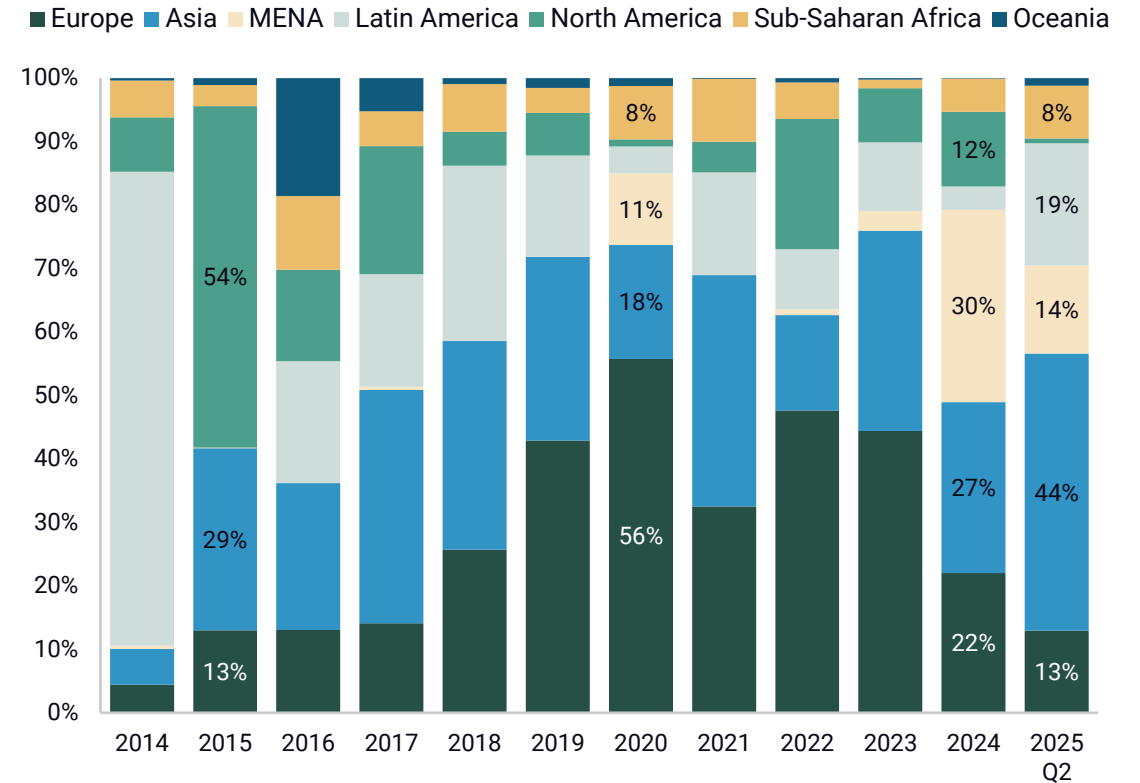
Value of announced Chinese FDI transactions in the EV value chain by region (2014-2025 Q2)

Percent



Value of announced Chinese FDI transactions in the EV value chain by region

USD billion

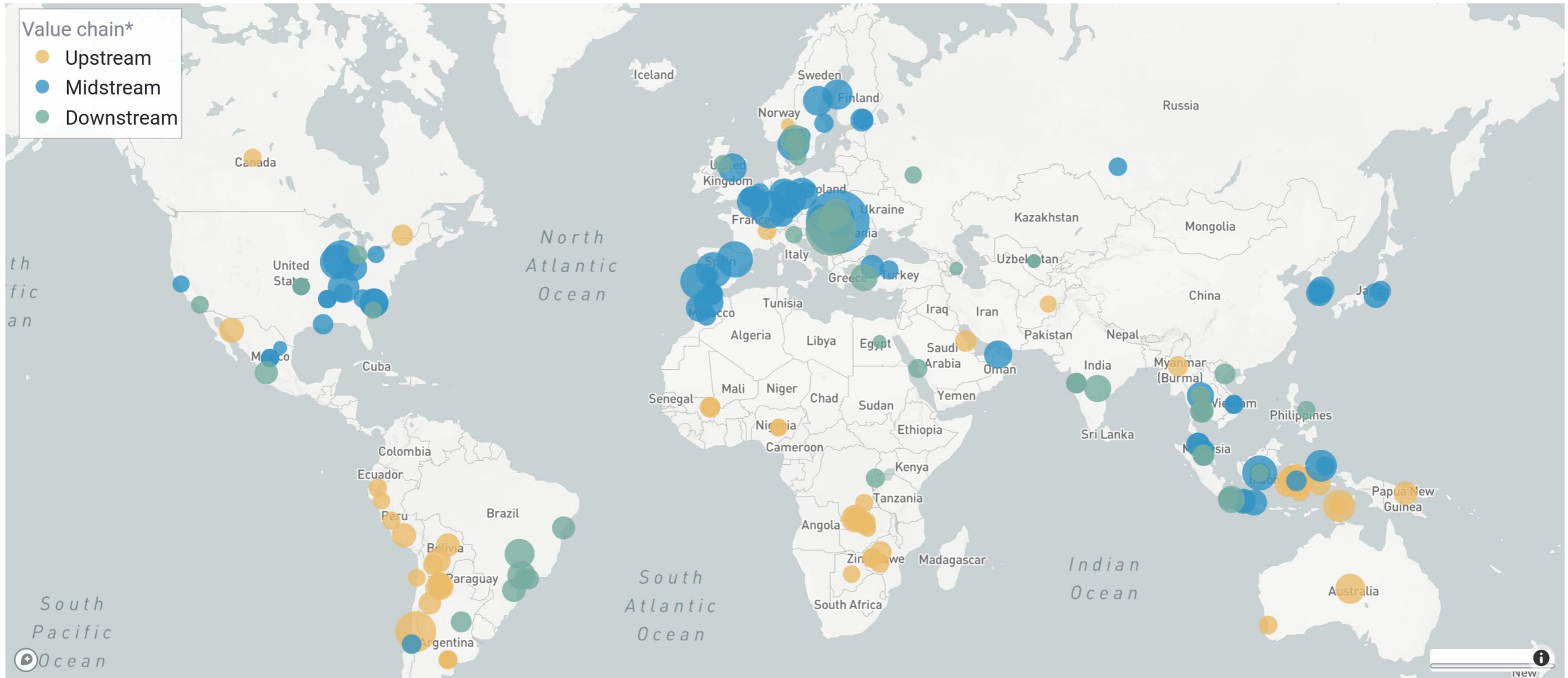


Source: Rhodium Group China Cross-Border Monitor

Local resources and EV demand drives Chinese OFDI

Midstream and especially downstream investments are concentrated in final sales markets

Value of announced Chinese FDI transactions in the EV value chain by segment



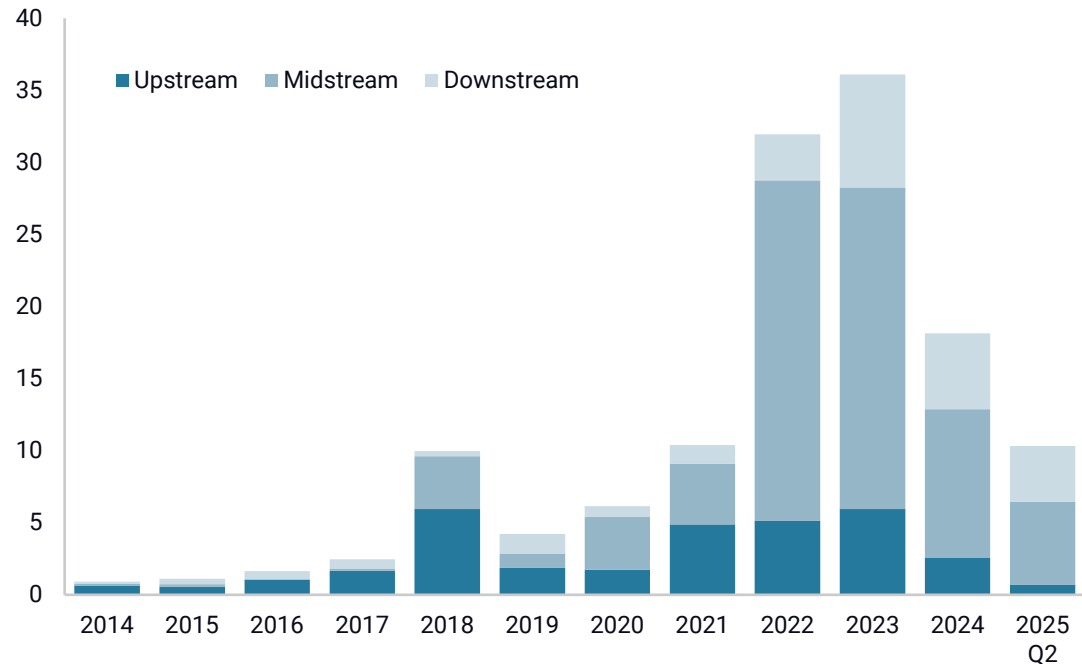
Source: Rhodium Group China Cross-Border Monitor. *Segments: Upstream (extraction & refining), midstream (parts & components), and downstream (final products)

Chinese investment now spans more of the EV value chain

Batteries and upstream investment are losing steam, but EV assembly investment has surged

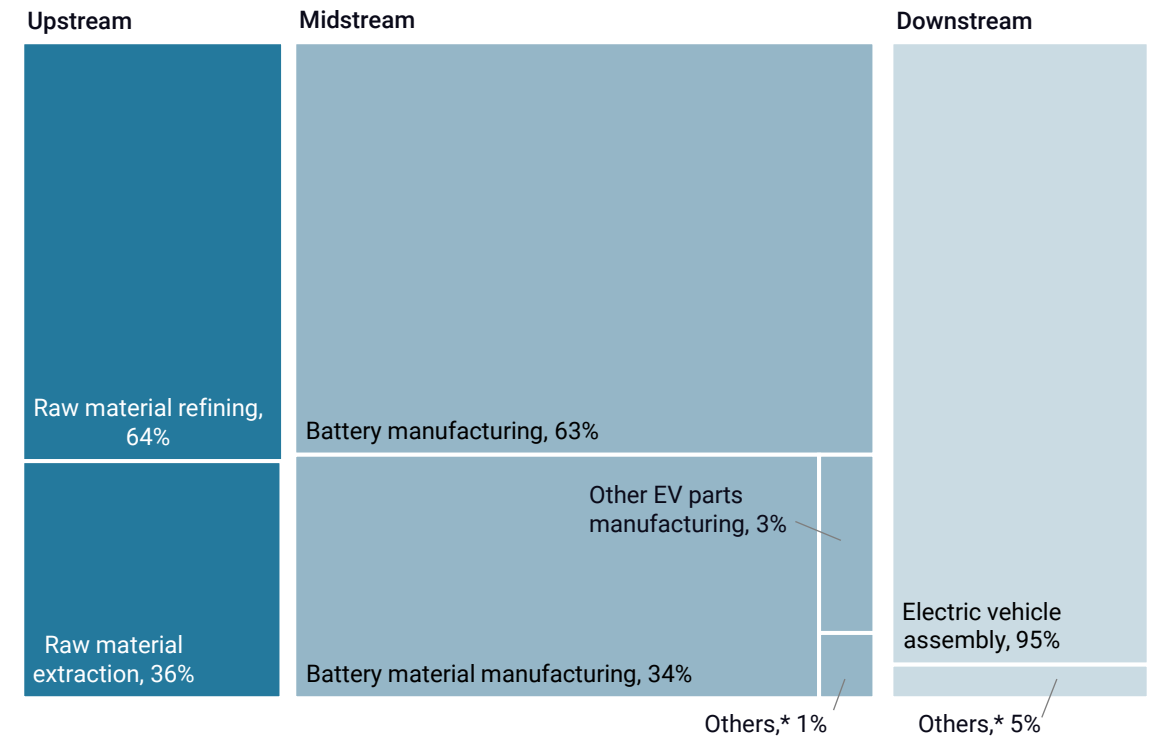
Value of announced Chinese FDI transactions in the EV value chain by segment

USD billion



Value of announced Chinese FDI transactions in the EV value chain by activity type, 2014-2025 Q2

Percent



Source: Rhodium Group China Cross-Border Monitor. Note: Investments across the entire electric vehicle value chain are categorized into three segments: Upstream (extraction and refining of critical raw minerals), Midstream (manufacturing of intermediate components, such as batteries and battery materials), and Downstream (assembly and production of finished goods, including electric passenger vehicles).

Overseas investors are diverse, but more concentrated than domestic markets

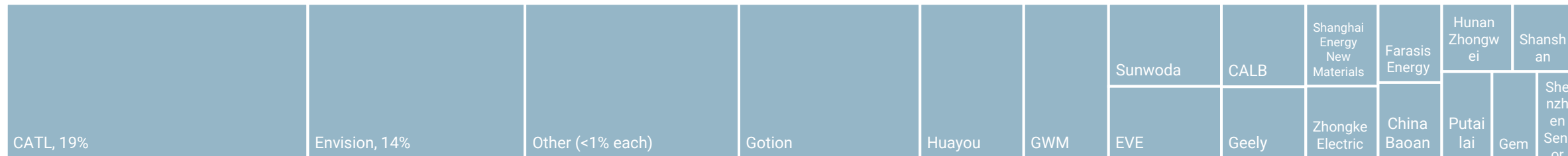
While most investment comes from private firms, SOEs remain active both upstream and downstream

Value of announced Chinese FDI transactions in the EV value chain by segment, top firms, 2014-2025 Q2

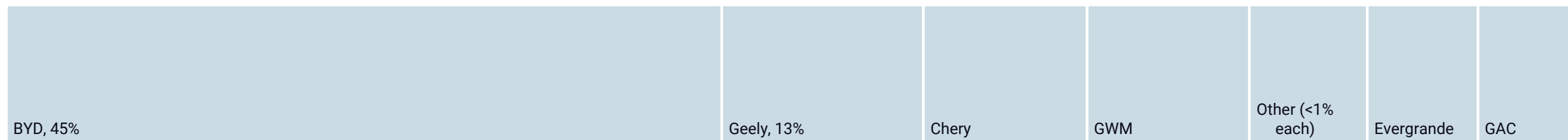
Upstream (percent)



Midstream (percent)



Downstream (percent)



Source: Rhodium Group China Cross-Border Monitor

About the China Global Clean Tech Investment

About the China Global Clean Tech Investment Dashboard

The China Global Clean Tech Investment Dashboard is a data tool hosted under the China Cross-Border Monitor umbrella to provide clear, granular insights into China's outbound investments in clean energy and transportation technologies. Since 2022, these sectors have driven a new generation of Chinese outbound investment accounting for nearly half of all Chinese announced investment. This shift is reshaping global engagement with China on decarbonization, economic development, and national security.

About the China Cross-Border Monitor (CBM)

Rhodium Group's China Cross-Border Monitor aims to increase transparency on China's global investments and economic footprint. Traditional statistics capturing outbound FDI by Chinese companies are distorted by tax optimization and capital controls, creating a skewed picture of China's overseas investments. Our transaction-based methodology tracks more than half a million individual investments worldwide, helping create a more transparent view of China's global investment footprint.

To contact the China Cross-Border Monitor team, email us at cbm@rhg.com. For media inquiries, please email us at press@rhg.com.

About Rhodium Group

Rhodium Group is an independent research provider with deep expertise in policy and economic analysis. We help decision-makers in both the public and private sectors navigate global challenges through objective, original, and data-driven research and insights. Our key areas of expertise are China's economy and policy dynamics, and global climate change and energy systems.

More information is available at rhg.com.



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