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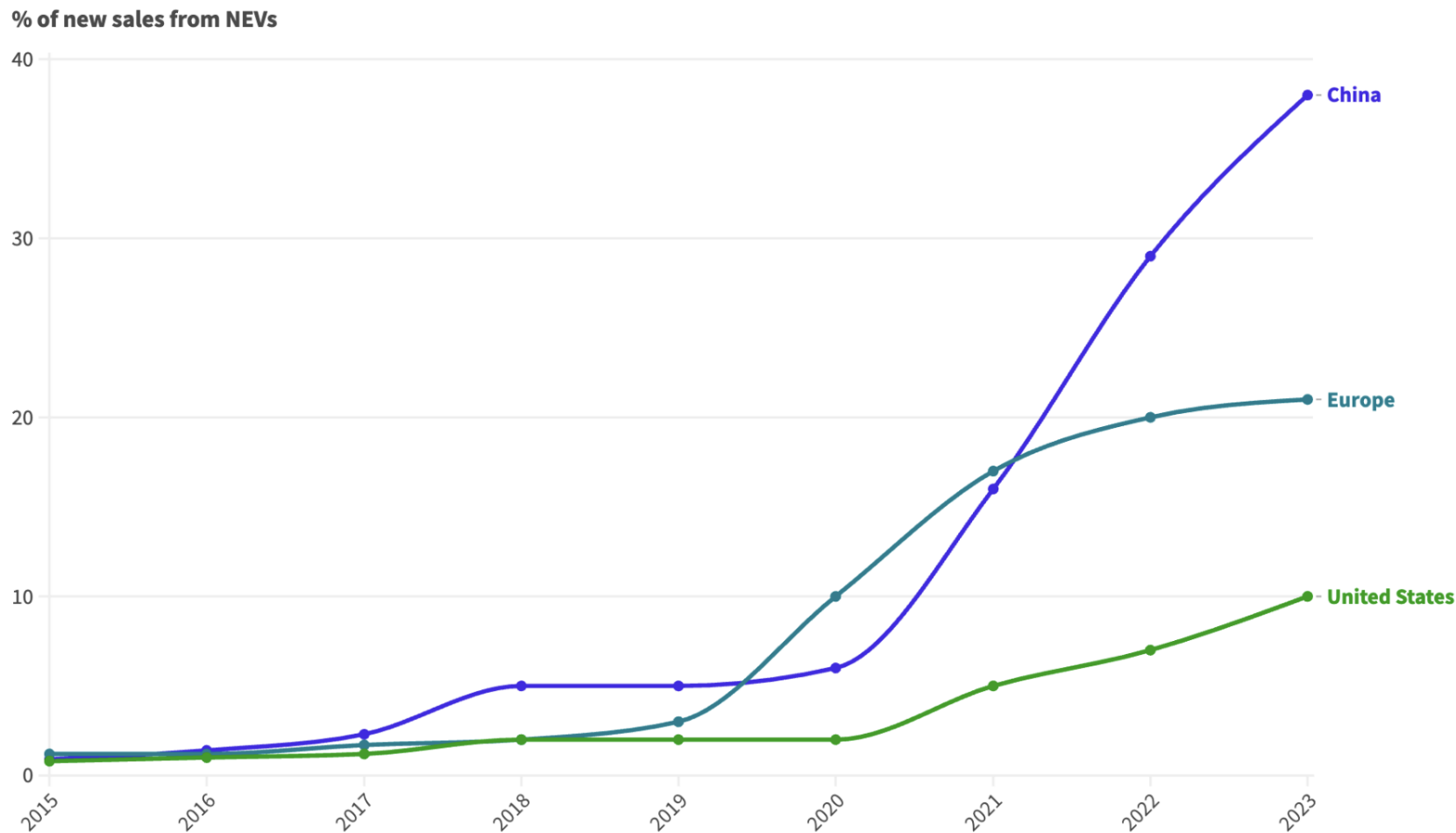
Electrifying Tomorrow: China's Outbound Foreign Direct Investment in Batteries and EVs

UTS ISETS

1 August 2024

China leads the Rising New Energy Vehicle Penetration

Figure 5.4: The Pivot to Electric Vehicles Manufacturing and Use in China is World leading

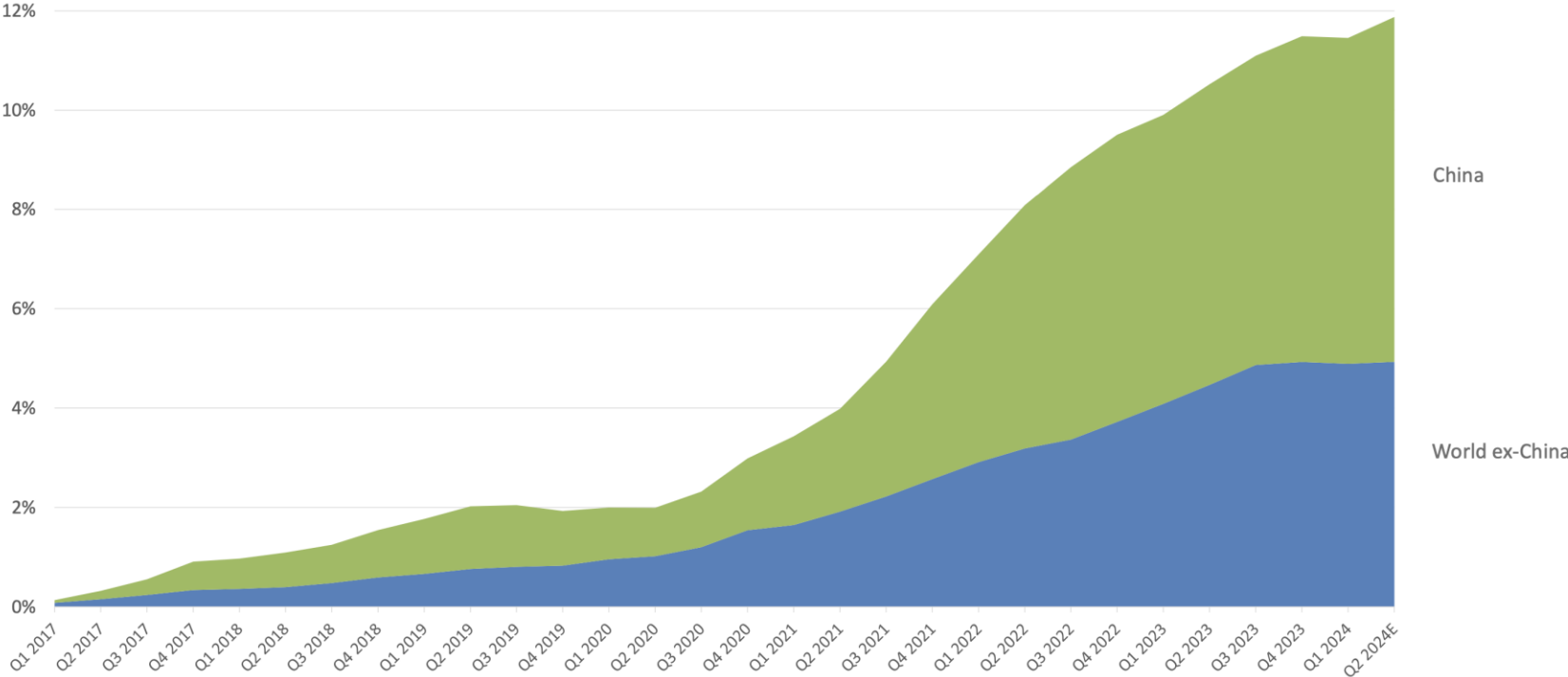


Source: CEF Calculations, IEA ⁵²

China leads the Rising New Energy Vehicle Penetration

ELECTRIC VEHICLE ADOPTION RATE - RETURNED TO GROWTH IN Q2

Global BEV market share* (12-months trailing)



*Source: ev-volumes.com and <https://www.renaultgroup.com/en/finance-2/key-figures/monthly-sales/>



Production Volume

Sales Volume

	June 2024	June 2023	Year-to-date June 2024	Year-to-date June 2023	Percentage Year on Year	June 2024	June 2023	Year-to-date June 2024	Year-to-date June 2023	Percentage Year on Year
New energy vehicle	341,671	252,657	1,632,033	1,275,547	27.95%	341,658	253,046	1,612,983	1,255,637	28.46%

Source: <https://www.bydglobal.com/en/InvestorNotice.html?scroll=true>

BESS + Solar => Disruption!

Sungrow secures 7.8 GWh battery storage deal with Saudi Arabia's Alghihaz Holding

China's Sungrow has signed three landmark energy storage contracts with Saudi Arabia's Alghihaz Holding, amounting to the world's largest grid-side storage order. Each project will have a capacity of 2.6 GWh, totaling 7.8 GWh.



By Vincent Shaw | Jul 16, 2024



3 Chinese clean-energy firms to set up solar, wind manufacturing in Saudi Arabia

- Jinko Solar, TCL Zhonghuan and Envision Energy will set up joint ventures with Saudi Arabia's Public Investment Fund and a private firm

[Yujie Xue](#) | 17th July 2024 | SCMP

Three major Chinese clean-energy manufacturers will build production plants in Saudi Arabia to expand their global footprints amid US and European trade barriers and fierce competition at home.

[Saudi Arabia's](#) Public Investment Fund (PIF) announced on Tuesday that it will form joint ventures in the [Middle Eastern](#) country with Jinko Solar and TCL Zhonghuan, two of the world's largest producers of [solar modules and solar silicon wafers](#), as well as [wind turbine](#) maker Envision Energy.

Australia must look to strategic partnerships with our key trade partners, as part of the FMIA

China is installing 23GW per month of RE

RE Momentum in 1HCY2024 has Slowed, it is 'only' +25% yoy

New Capacity Installed in China in Jan-June 2024

		Jan-June 2024	Share of new adds (%)	Change (yoy %)	Jun-24	Share of new adds (%)
Thermal Power	GW	18.3	12%	-30%	6.2	17%
Hydropower	GW	5.0	3%	-7%	1.6	4%
Nuclear Power	GW	1.2	1%	0%	0.0	0%
Wind Power	GW	25.8	17%	12%	6.1	16%
Solar Power	GW	102.5	67%	31%	23.3	63%
Total capacity added	GW	152.8	100%	14%	37.1	100%
Renewable Energy adds	GW	133.3	87%	25%	31.0	83%
Zero Emissions Capacity Adds	GW	134.5	88%	25%	31.0	83%
Investment in Completed Power Grid Project	1 billion yuan	254.0		24%	83.7	

Source: NBS, CEF Estimates

Xi Jinping's Great Economic Rewiring Is Cushioning China's Slowdown

Advances in EV, solar and semiconductors are helping the nation navigate its property slump

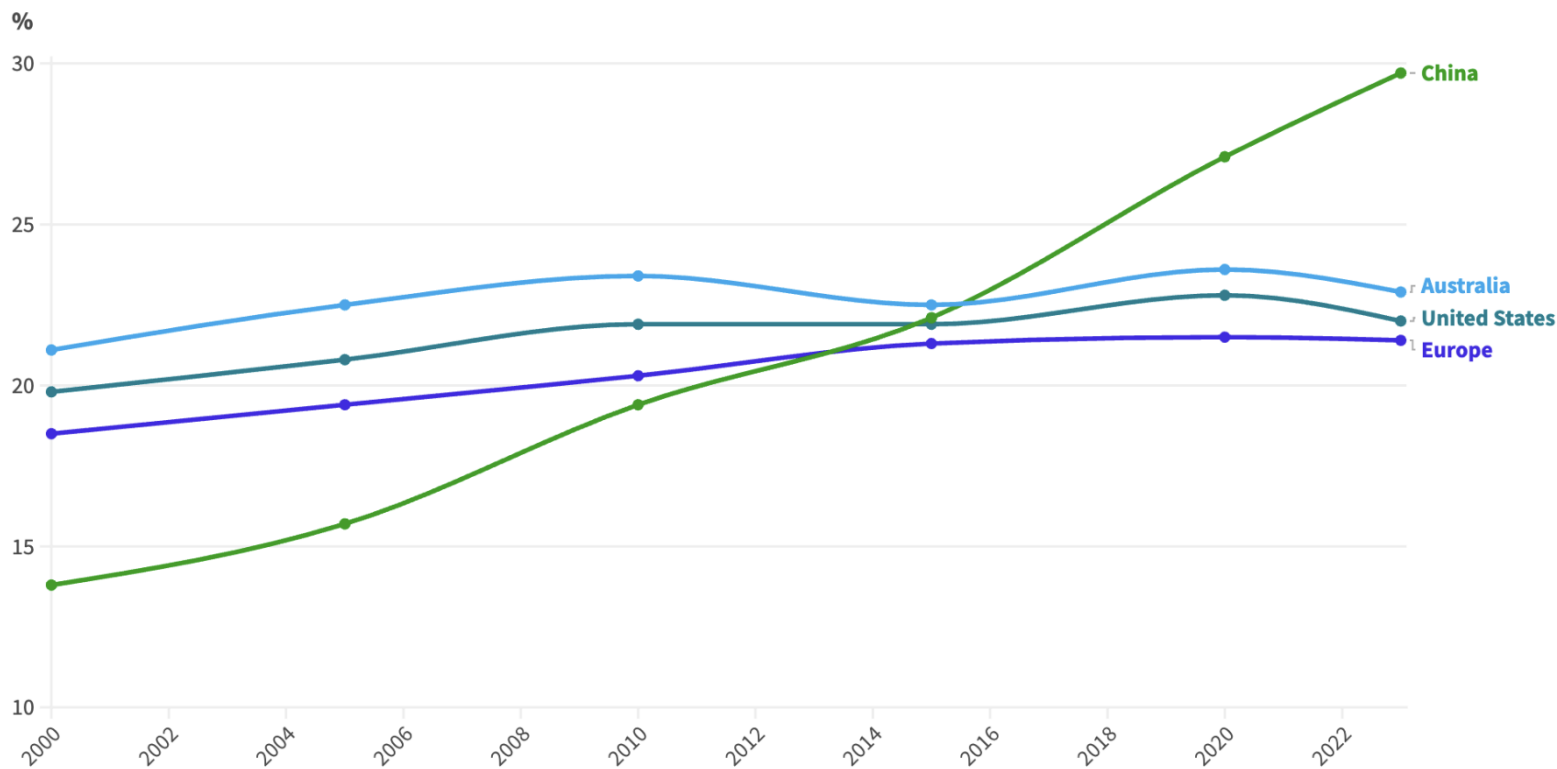
By Bloomberg News 16 July 2024

China's Electrification of Everything

The Progressive Electrification of Everything in China is World leading

Share of final energy from electricity

China has leapfrogged United States, Europe and Australia in electrification



Source: CEF calculations, [Enerdata](#)

Geopolitical Risk Rising, particularly US/EU

The National Security Twist in an EV Maker's Graphite Deal

The agreement between Lucid and Graphite One shows the global energy system is increasingly tied to a new era of geopolitical contest.

30 July 2024 By Liam Denning is a Bloomberg Opinion columnist



Graphite supply is enmeshed in geopolitics.

Graphite, the stuff in pencils, doesn't typically feature in thrillers; that's reserved for the likes of uranium and gold. So one doesn't expect a senator talking about it at a somewhat obscure press conference to lead with the line: "The dictators are on the march."

That was Dan Sullivan of Alaska, a Republican who sits on the Senate's Armed Services Committee. He was speaking in a nondescript meeting room at Capitol Hill last week at the announcement of a deal between **Graphite One Inc.**, a start-up conducting a feasibility study on a major graphite deposit in Alaska — the largest in North America — & **Lucid Group Inc.**, a maker of high-end EV.

China is Going Global in Batteries & EV

BYD agrees US\$1bn deal to build electric vehicle plant in Turkey

Second-largest EV maker expands EU production as bloc clamps down on access for China imports

[Adam Samson](#) in Ankara and [Arjun Neil Alim](#) in London | FT | 9th July 2024

BYD has agreed a \$1bn deal to build an EV plant in Turkey, as China's largest carmaker looks to increase its European production and continue its overseas expansion.

The plant will be capable of producing 150,000 vehicles a year, the Turkish government said on Monday. It is expected to begin production at the end of 2026 and create about 5,000 jobs.

The pact comes as Warren Buffett-backed BYD, the world's second-largest EV maker after Tesla, looks to tap the large EU market at a time when Brussels is clamping down on access for cars imported from China. BYD is also building a plant in Hungary that will begin production next year and is considering a second plant in that country.

Europe is finalising higher tariffs on China-made EVs to protect local carmakers. BYD will face a total tariff rate of 27.4% on EVs imported from China. Ankara has also taken steps to defend domestic car manufacturers, recently imposing an additional 40% tariff on all Chinese vehicle imports.

Turkey has a large automotive industry, with foreign groups including Hyundai, Toyota, Renault and Ford operating in the country, often through JV. Automakers produced about 1.5mn vehicles in Turkey last year, according to the Turkish Automotive Manufacturers Association. The country's primary export market is the EU.

Turkey is part of the EU's Customs Union, meaning vehicles can be exported to the bloc without additional duties.

BYD: Indonesia, Thailand, Brazil, Hungary, maybe Mexico & Indonesia
Great Wall: Brazil
CATL: Germany, Hungary, Indonesia, Thailand, Spain, US (license to Ford, Tesla), Morocco, Bolivia
BTR Cathodes: Morocco, Indonesia
Gotion: Germany, Vietnam, Thailand, Indonesia, Slovakia, US, Spain, Argentina, Morocco

6. China is diversifying from Oz Resource Dependence

Rio Tinto's \$34.3b African iron ore project gets green light

Peter Ker Resources reporter AFR Jul 16, 2024

Rio Tinto's \$US23.2 billion African iron ore project has won final approval from the Guinean and Chinese governments, clearing the way for first production to begin within 18 months.

The long-awaited final approval for the Simandou iron ore project in Guinea came on the same day that Rio's flagship Australian iron ore division confirmed that [a train derailment](#) had hampered exports in 2QCY2024.



Rio Tinto's plan to develop Simandou has taken a step forward, having won final approval from the Guinean and Chinese governments

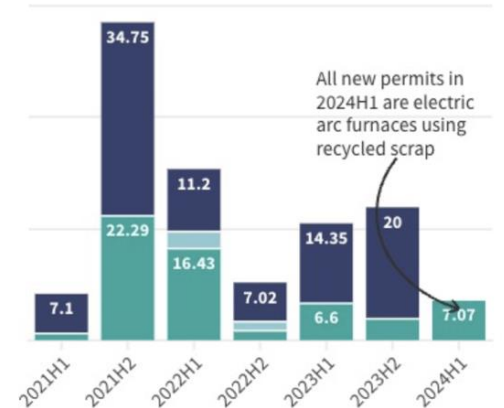
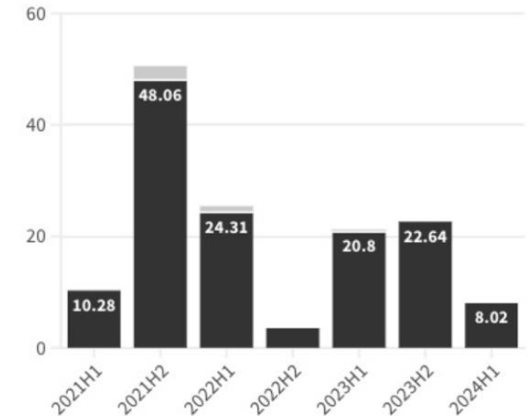
Simandou will initially comprise two neighbouring iron ore projects under different ownership, which will use shared rail and port infrastructure to get a combined tally of about 120Mt of iron ore to seaborne markets.

New Project Permits in China

■ BF ■ Non-BF ■ EAF ■ AOD ■ BOF

Ironmaking

Capacity, million tonnes per annum



Source: Centre for Research on Energy and Clean Air

Guinea (iron ore), Indonesia (nickel), Peru (copper), Mali, Argentina, Bolivia, Mexico (lithium)

Significant Scope for Oz-China Partnerships

How China would work with Future Made in Australia

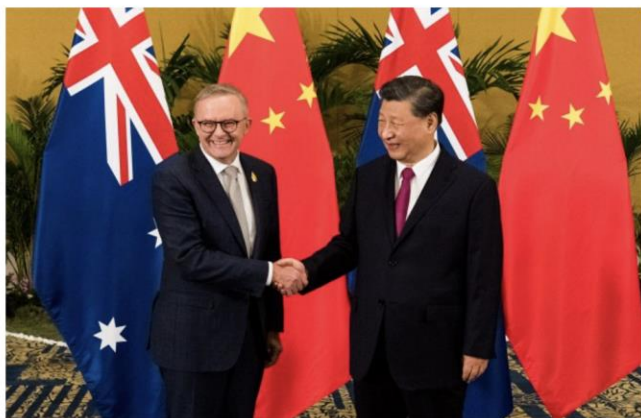
Chinese economic modernisation encompasses enormous potential for bilateral cooperation in emerging sectors such as green development and the digital economy.



Xiao Qian Ambassador to Australia Aug 1, 2024

From July 15 to 18, the 20th central committee of the Communist Party of China convened its third plenary session.

Held at a pivotal moment for China's development, this session clearly outlined the overall goal of further deepening comprehensive reforms, emphasising that the nation will continue to improve and develop the system of socialism with Chinese characteristics – and modernise China's system and capacity for governance.



Australian Prime Minister Anthony Albanese and Chinese President Xi Jinping.

China's Ambassador highlights China's prioritisation of "China will continue to promote reform through opening up, proactively aligning with high-standard international economic and trade rules,

"aligns perfectly with the concept of Australia's "Future Made in Australia" plan. There is enormous potential for bilateral cooperation in emerging sectors such as green development and digital economy.