



China's Climate and Energy Trends in 2026

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lead analyst





About CREA

The Centre for Research on Energy and Clean Air (CREA) is an independent research organisation that uses scientific data, research and evidence to support the efforts of governments, companies and campaigning organizations worldwide in their efforts to move towards clean energy and clean air.



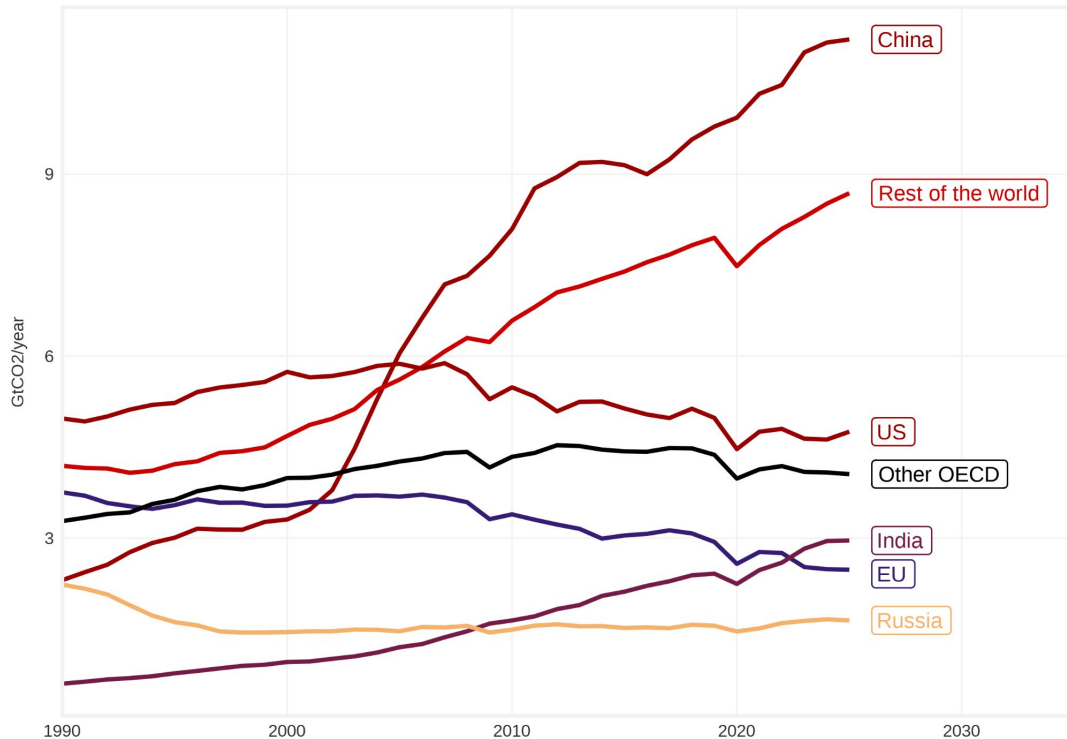
Centre for Research on Energy and Clean Air



Staff in ten countries across Asia and Europe

China dominates global emission trends

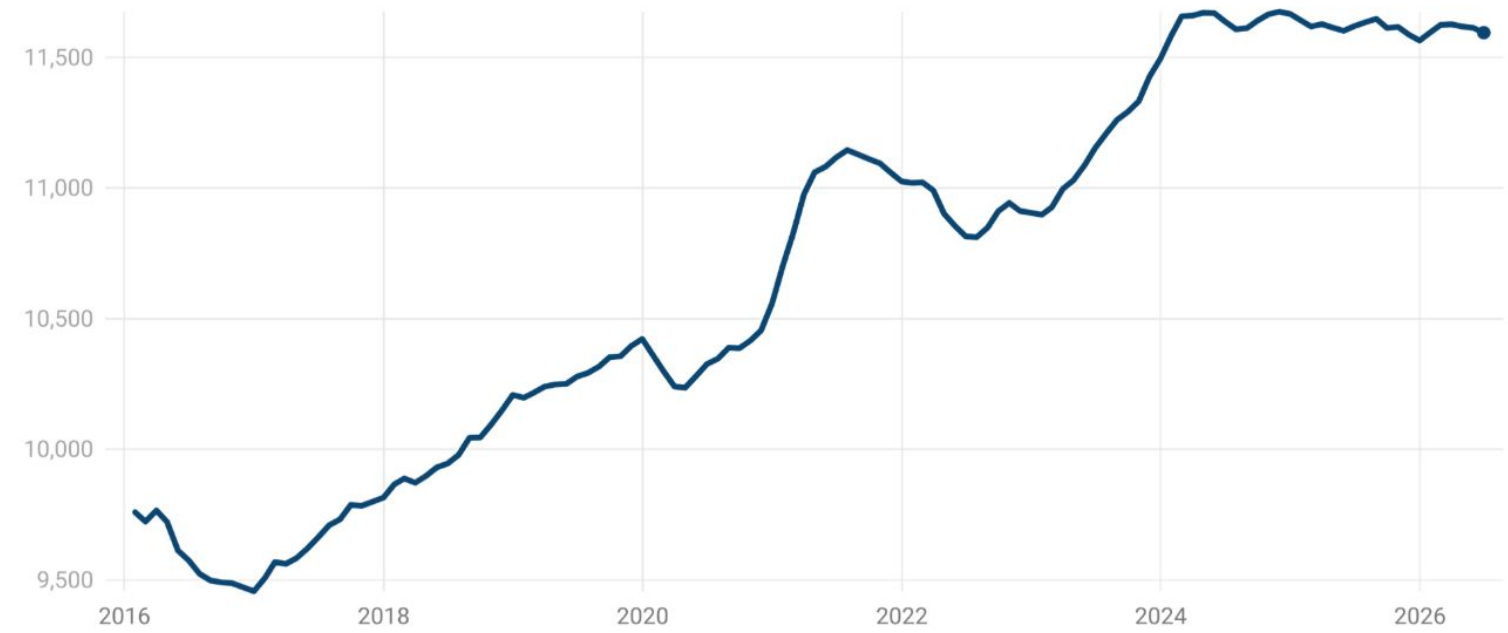
Global energy CO2 emissions



- China accounts for 30% of global emissions and is now the second largest historic emitter after the US
- China has been responsible for 75% of global emissions growth since the Paris climate conference in 2015

China's CO2 drops in spring 2026 after Hormuz puts squeeze on oil use

Emissions from fossil fuels and cement, MtCO2, rolling 12-month totals

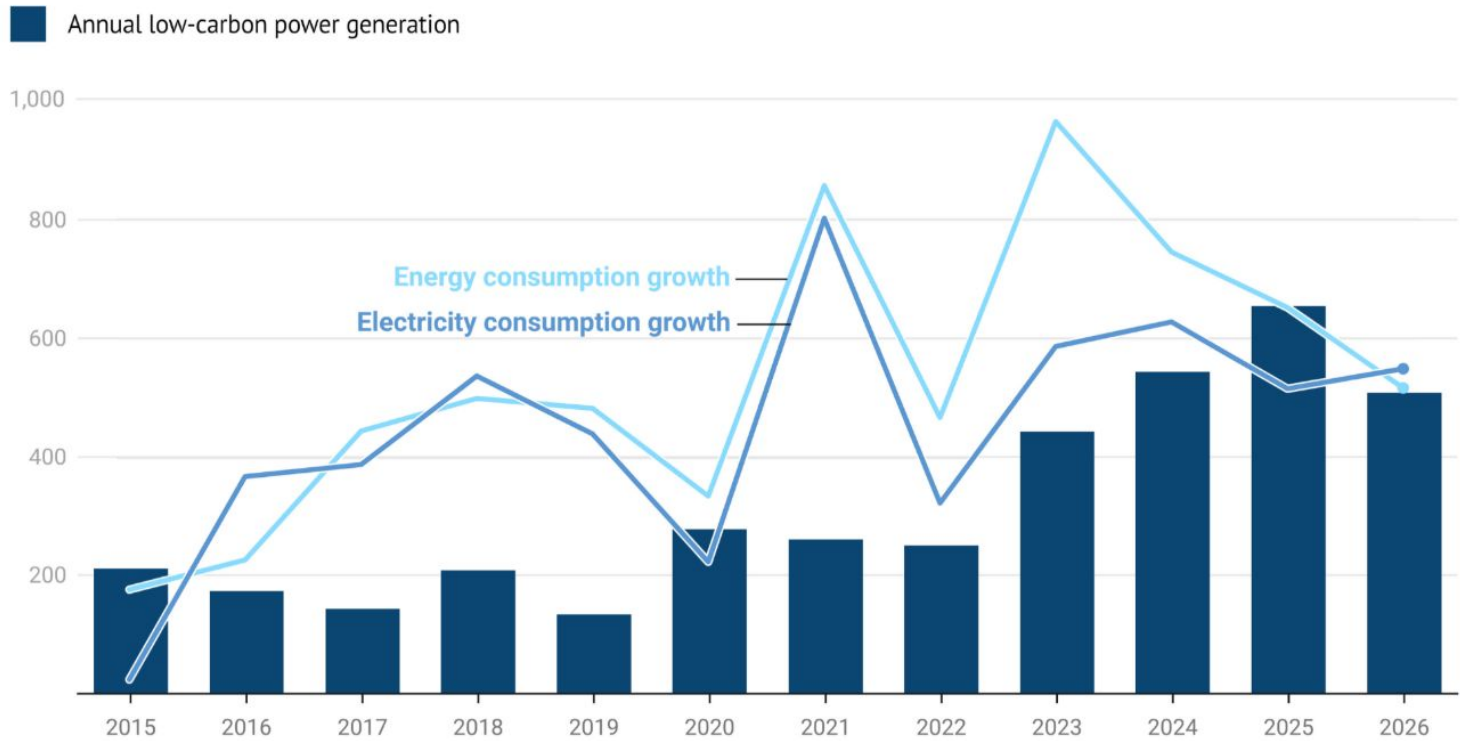


Source: Analysis for Carbon Brief by Lauri Myllyvirta

CarbonBrief

Clean energy is meeting new energy demand in China, halting fossil-fuel demand growth

Energy and power demand growth versus total low-carbon power generation, terawatt-hours per year

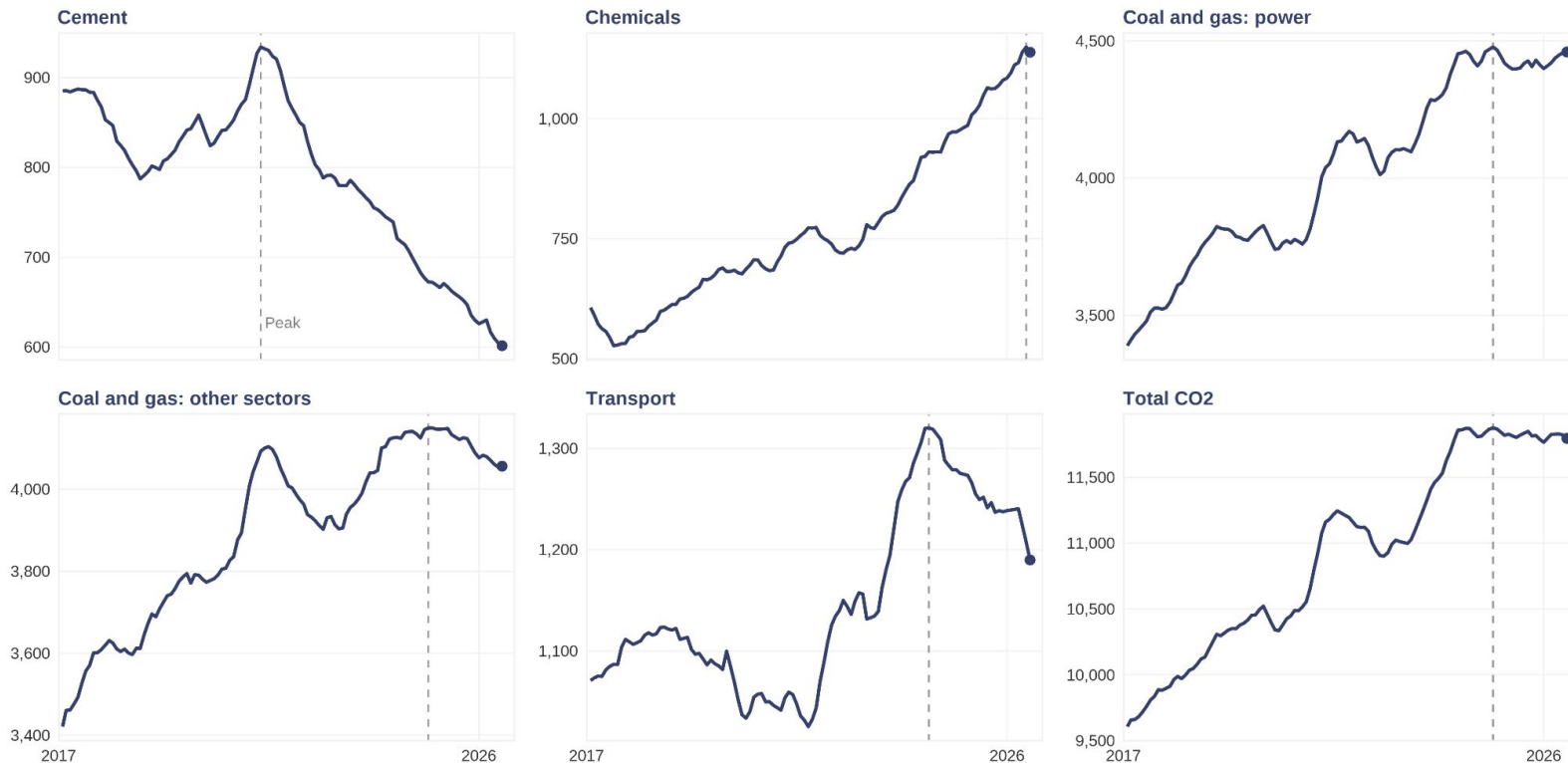


Source: Analysis for Carbon Brief by Lauri Myllyvirta

Almost every sector is cutting emissions

Sectoral CO2 emissions in China

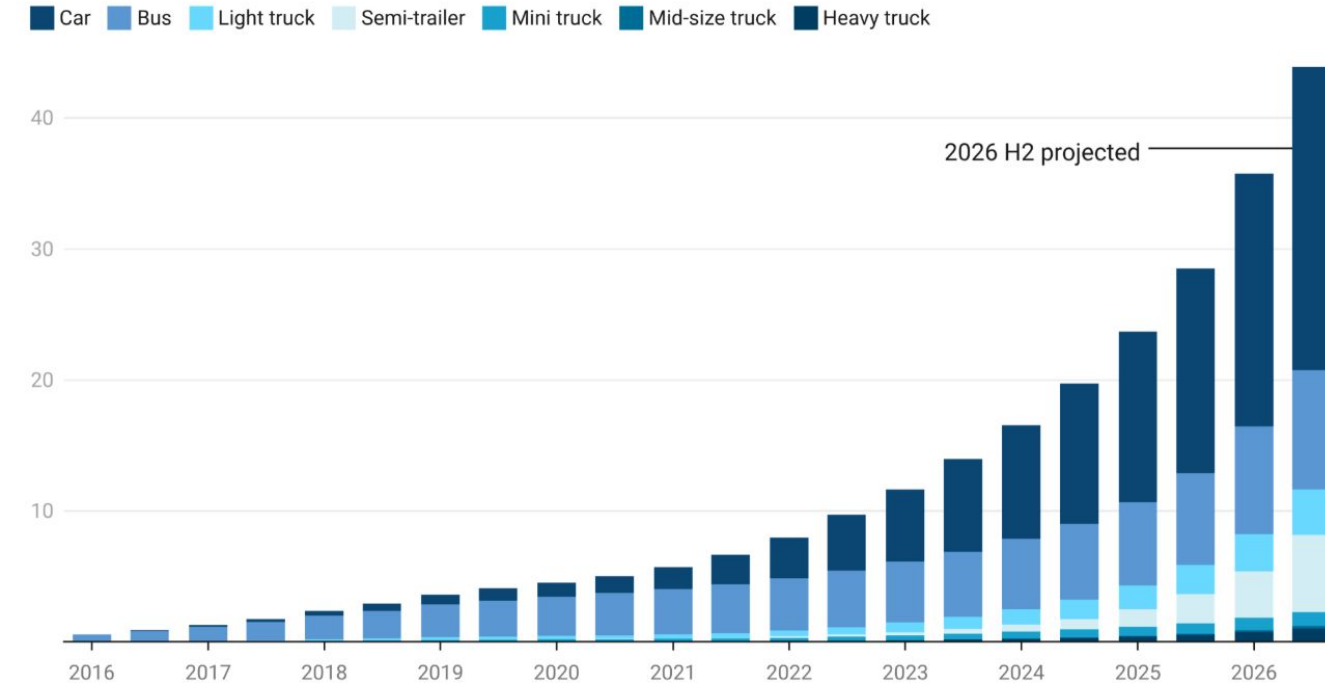
MtCO2, rolling 12-month totals, through June 2026. Dashed line = peak to date



Source: CREA analysis of official data and commodity output

EVs in China are displacing enough oil to meet the UK's entire demand

Half-yearly avoided oil use, Mtoe



Source: Analysis for Carbon Brief by Lauri Myllyvirta

CarbonBrief

- Secure, reliable and affordable energy system and supply chains
- Market and technology leadership in key energy technologies
- Contributor to the global climate effort
- Supporter of clean energy development in developing countries

“能源的饭碗 必须端在自己手里”

——我国加快能源强国建设筑牢安全发展根基



Drivers

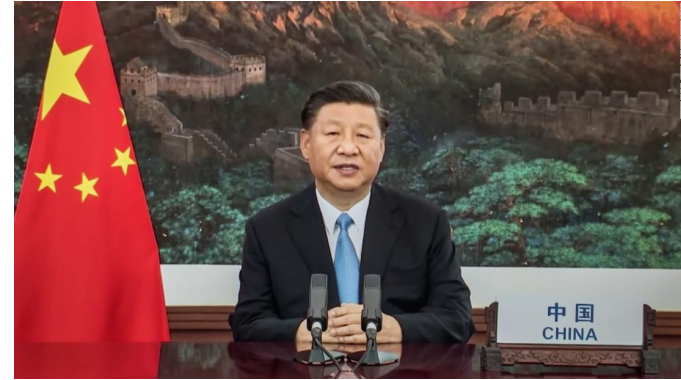
Economic and industrial policy



Air pollution



High-level signal on carbon neutrality



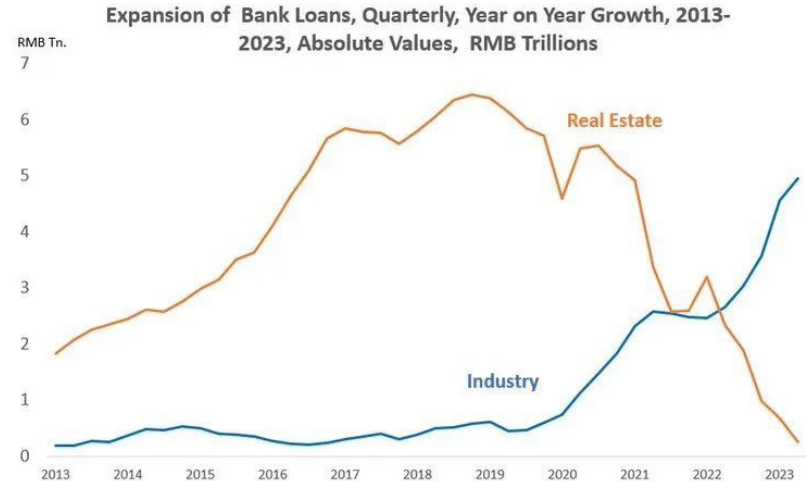
Energy security



Why China's Clean Energy Took Off

- Strong economics of clean energy projects amid weak returns on investment
 - Political support and priority from central government
 - Local governments looking for new sources of economic growth
- Pivot of lending and investment from real estate to manufacturing, particularly clean-tech, fueled by government incentives, easing of financial access

China's great rotation

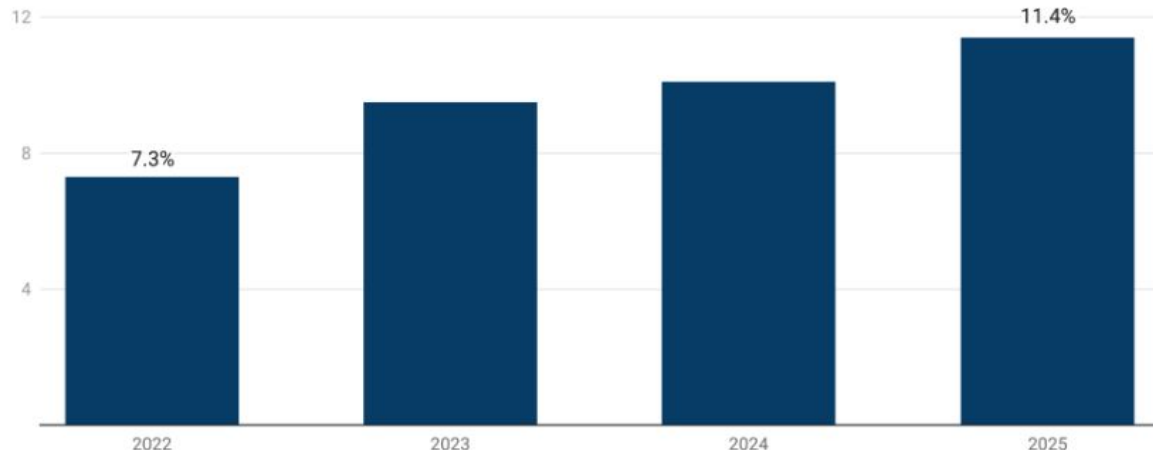


Source: People's Bank of China via CEIC Data, after an idea from The Shanghai Strategist, https://x.com/shanghaimacro/status/1711291278011638161?s=46&t=-my_1dLUkn-H33ualxTdgA

Clean energy sectors have become key growth drivers of China's GDP

Clean energy is claiming a rising share of China's economy

Share of China's GDP, %



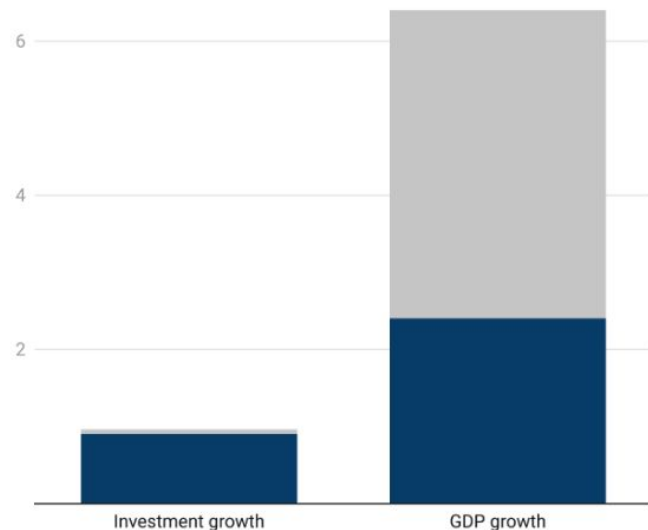
Source: CREA analysis for Carbon Brief

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Clean energy drove more than a third of China's economic growth in 2025

Investment growth and GDP growth by sector, trillion yuan

Clean energy All other sectors



Source: CREA analysis for Carbon Brief

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CLEAR ON CLIMATE

Contributions to the growth in Chinese investment (left) and GDP overall (right) in 2025 by sector, trillion yuan. Source: Centre for Research on Energy and Clean Air (CREA) analysis for Carbon Brief.

- Scale up clean energy and cleantech industries
- Build up the dual carbon control system and the ETS
- No strong national targets for emission reduction or fossil fuel consumption yet
 - Headline carbon intensity and non-fossil energy share are close to meaningless and a step down from 14th plan

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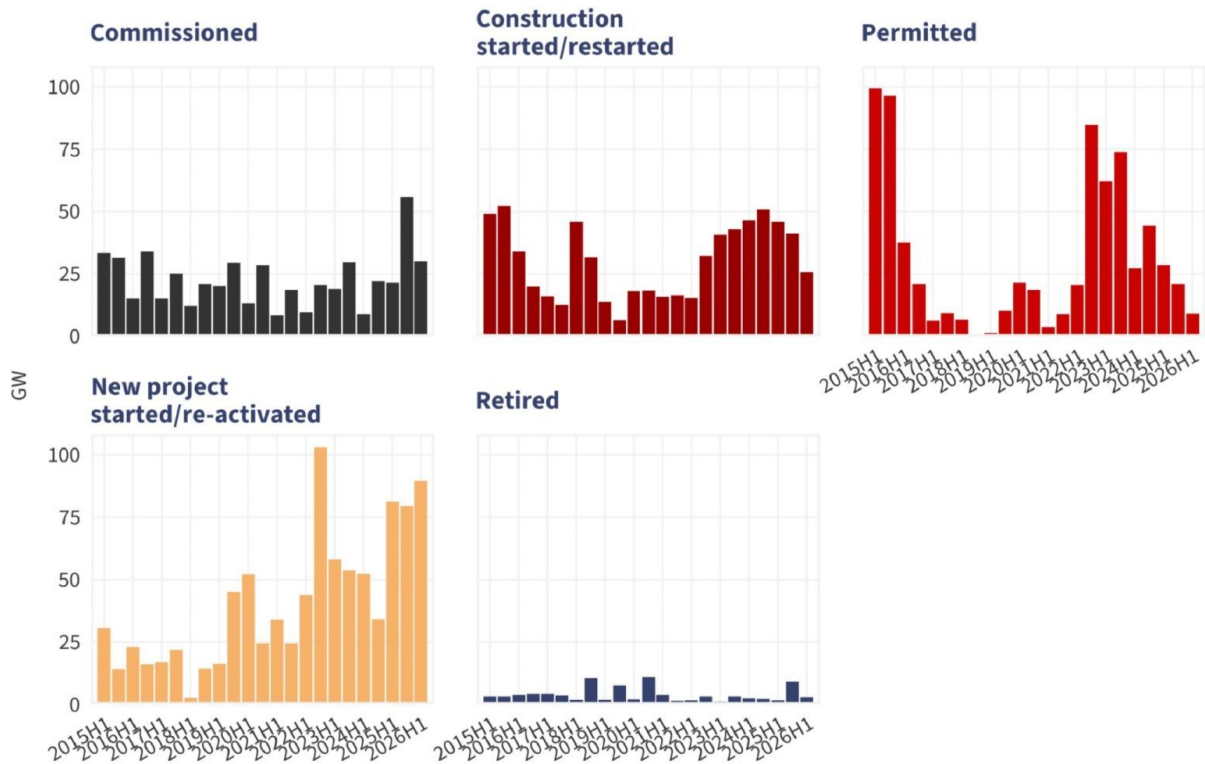
- Action plan to double non-fossil energy in 10 years
- “Six networks”
 - New type power system
 - Zero-carbon transport corridors
- Zero-carbon industrial parks: direct purchase of green power, VPPs, on-site renewables etc.
- Hydrogen and green fuels
- Water-wind-solar bases in the southwest
- Meaningful targets for offshore wind and nuclear
- Unified power market “basically” operating in 2030 and “fully” in 2035



Yellow areas: desert new energy bases; green areas: southwestern water-wind-solar bases; wind turbines: offshore wind bases; red circles: coastal nuclear bases; red arrows: cross-region electricity transmission channels; blue arrows: cross-province electricity exchange projects.

Progress of new coal power projects and retirements in China

Changes in project status, half-yearly



CHINA - COAL POWER BIENNIAL REVIEW - H1 2026



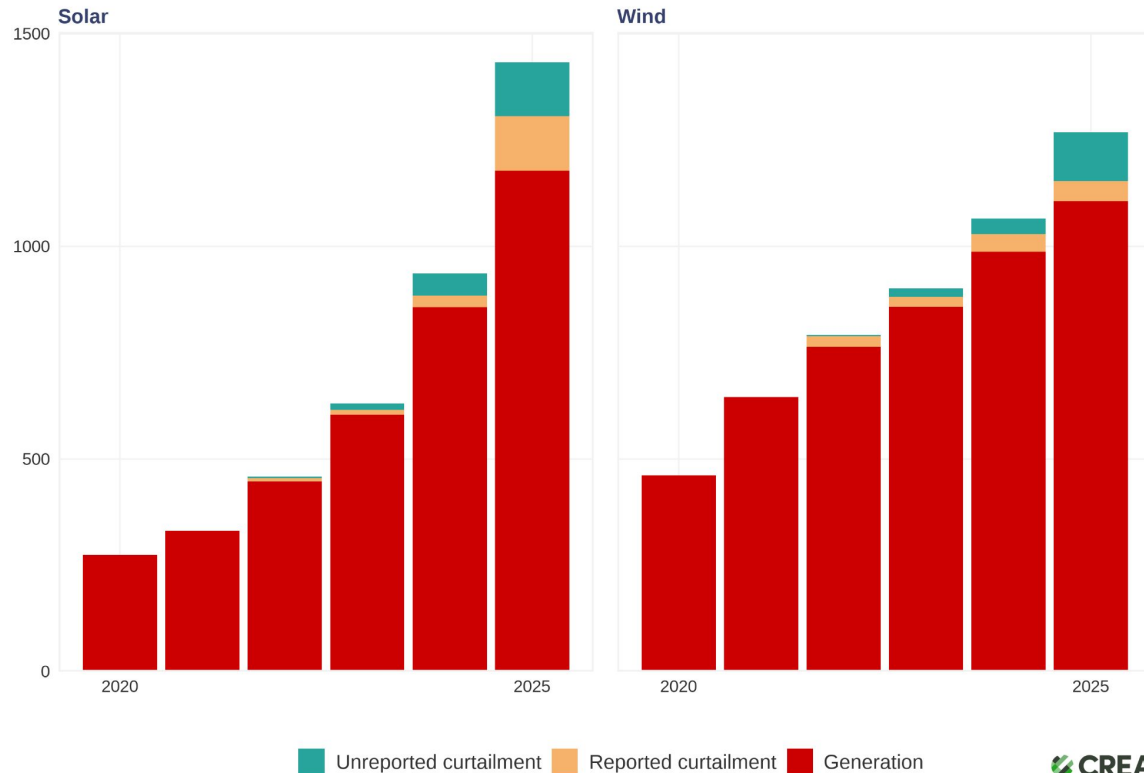
**China's coal support system
risks crowding out clean power**

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Reported and estimated unreported curtailment

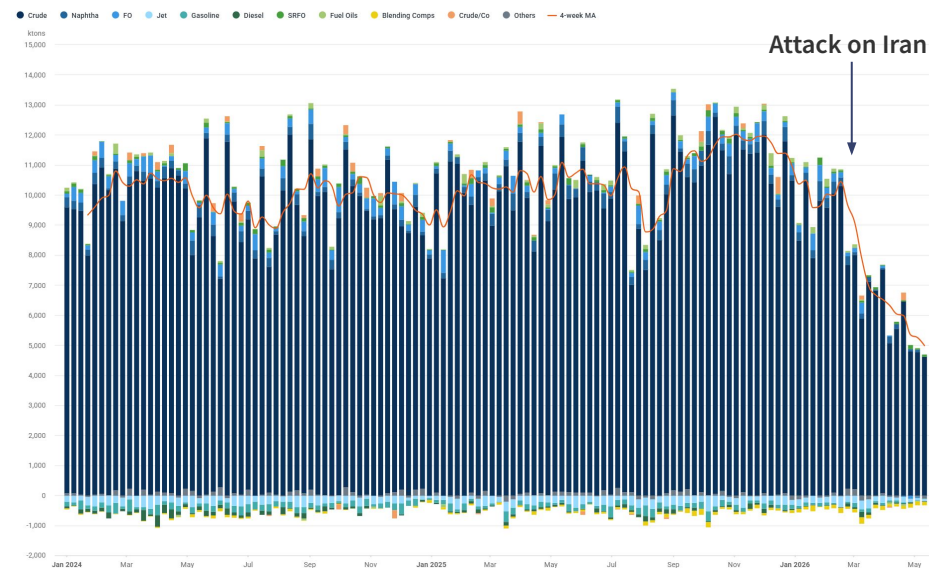




**What are the
implications of the
current fossil fuel
crisis?**

- A sharp reduction in oil and gas imports, small contraction in chemical industry
- Reduction in gas in the power sector fuel mix
- Improved profit margins and stronger political justification for the coal chemicals industry
- Further increase in the share of EVs and a major jump in cleantech exports

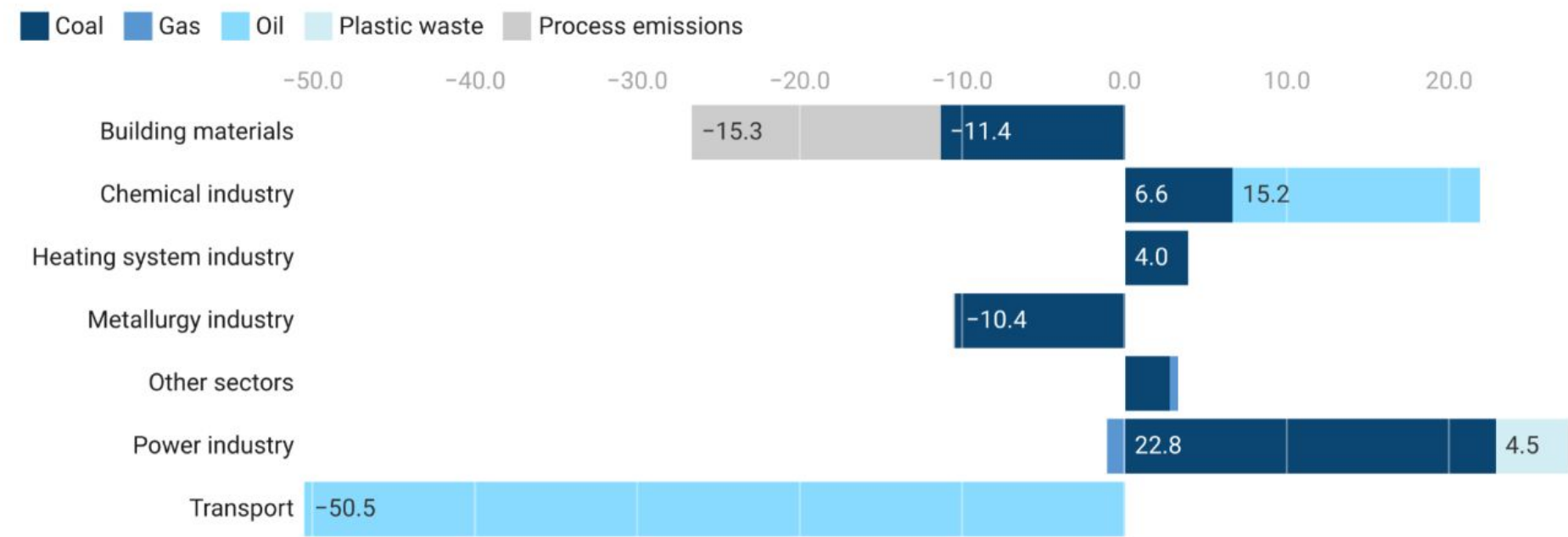
China's weekly net oil imports



Source: Kpler

Drop in oil use cuts China's CO2 emissions for the first time

Year-on-year change in emissions by sector and fuel, MtCO2



Source: Analysis for Carbon Brief by Lauri Myllyvirta

CarbonBrief

- **Validates China's emphasis on energy security**
- **The concept of energy security has become broader, no more limited to coal and fossil fuels**
 - Will boost electrification, green fuels and clean power
 - Fossil fuels becoming more expensive and volatile is bad news for fossil fuels and good news for clean energy
- **Limited role for coal in weathering the crisis; no response from coal-to-chemicals industry**
 - Investment in coal chemicals will still likely get a further boost — but undermined by expected volatility and oversupply of oil&gas

“China will strongly support green and low-carbon energy development in developing countries and will no longer build new overseas coal-fired power projects.” —President Xi in

独家视频 | 习近平：中国不再新建境外煤电项目

新闻频道 来源：中央广播电视总台央视新闻 2021年09月22日 09:23

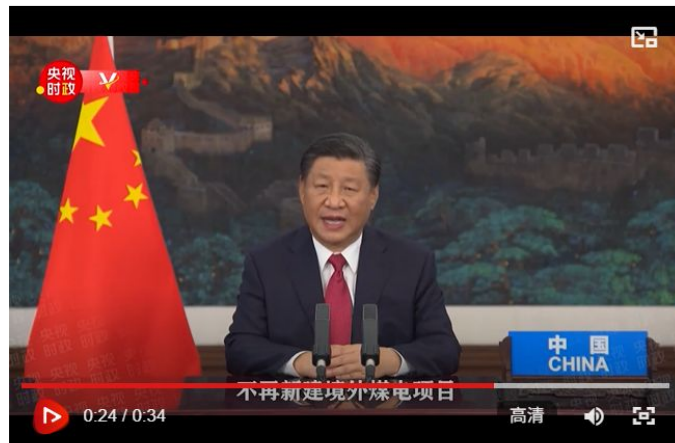


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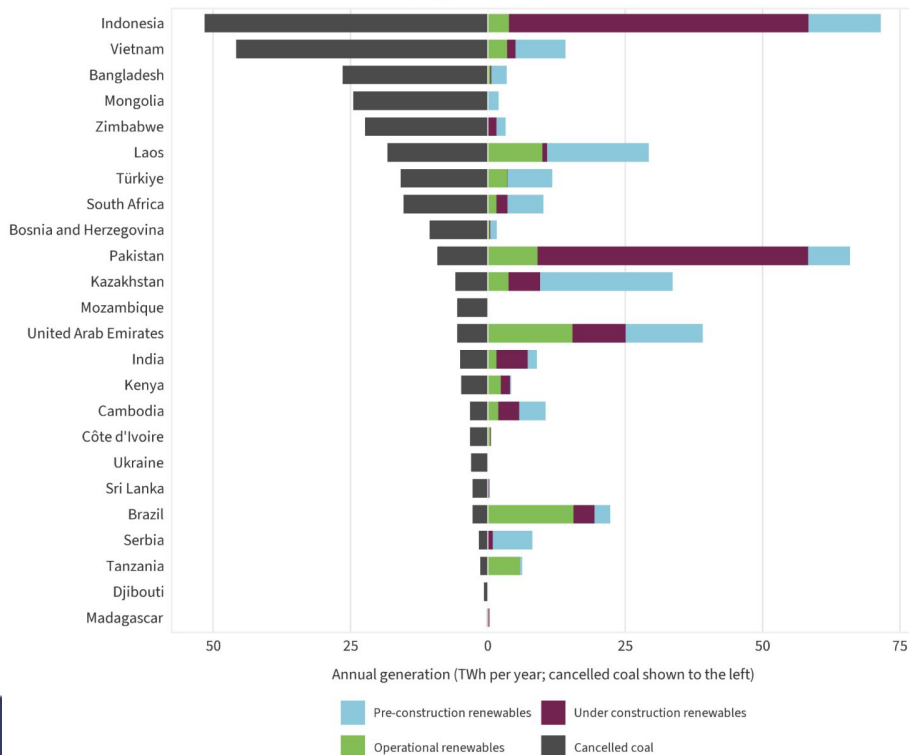


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国家主席习近平21日在北京以视频方式出席第七十六届联合国大会一般性辩论并发表题为《坚定信心 共克时艰 共建更加美好的世界》的重要讲话

Annual electricity generation of overseas China-linked cancelled coal power and renewables, by country



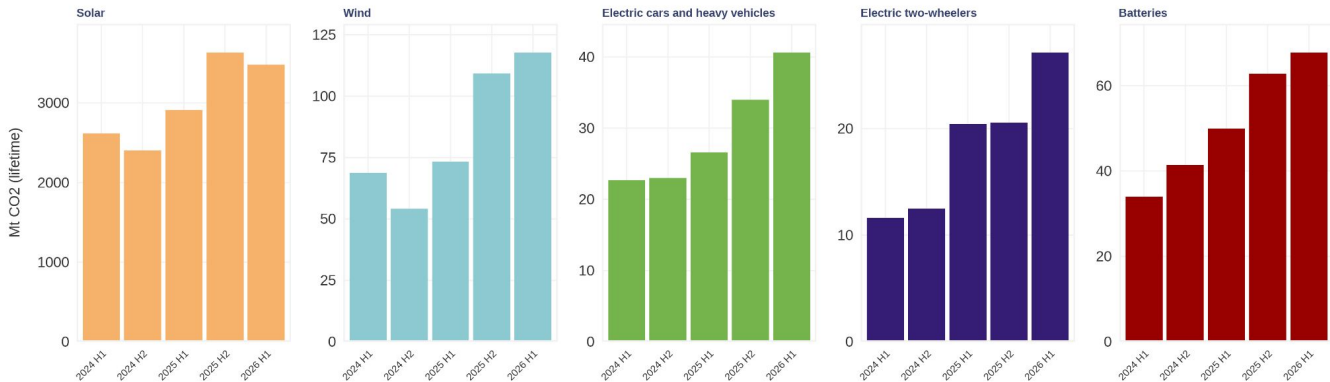
Source: GEM and D-CORE data, CREA analysis. Solar, wind and hydro use pinned Ember 2024 country factors; biomass, geothermal, waste heat and waste-to-energy use uniform capacity-factor assumptions for each technology. Capacity not yet operating is shown as potential generation once commissioned. Coal: 2021 to July 2026. Renewables: January 2022 to July 2026.

FIVE YEARS ON: CHINA SEEDS OVERSEAS RENEWABLES GROWTH BUT COAL BAN GAPS PERSIST

SEPTEMBER 2026

Half-yearly lifetime avoided CO2 by technology, 2024 H1 - 2026 H1

Net of manufacturing; lifetimes 20 yr solar/wind, 10 yr cars & heavy / batteries, 5 yr two-wheelers (note: free y-axes)



CREA. Lifetime = annual avoided x lifetime - manufacturing. Sources: Ember, China Customs, UN Comtrade, CABIA/CWEA.



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China's clean tech exports avoided more CO2 than UK emitted last year

By Lewis Jackson

September 23, 2026 11:56 AM GMT+3 · Updated September 23, 2026



- Emission outlook: Bumpy plateau but not yet systematic reductions
- Electrification and clean energy firmly integrated into the energy security and economic strategies but not to the exclusion of (domestic) fossil fuels
- China's role as a global solutions provider and market leader in clean energy



Thank you!