



Tim Buckley, Director CEF tim@climateenergyfinance.org

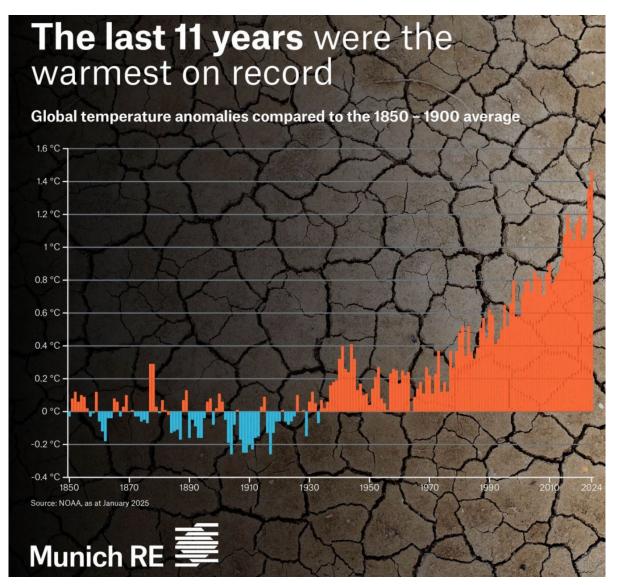
Weld Australia – National Manufacturing Summit 2025

Getting Industry Policy Right & Building Capacity

24 July 2025

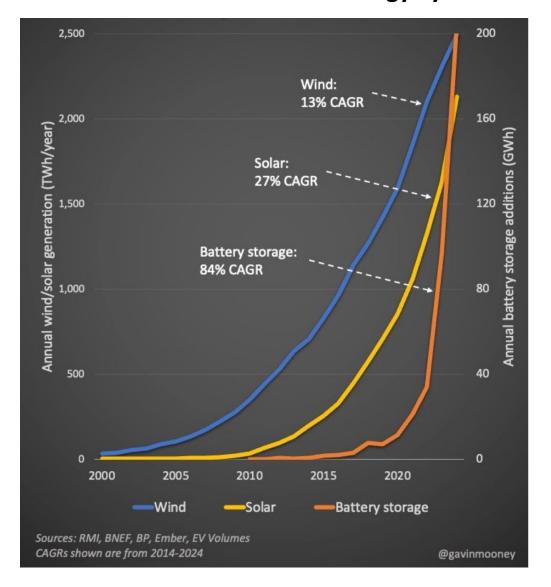
CEF accepts the climate science

CEF is a public interest thinktank with no government or corporate funding



Global Cleantech Investment is Accelerating

As Battery Prices fell 50% in 2 years, global Installations have Taken Off Solar + BESS + V2G => Accelerated Energy System Transformation



China is Moving in Decarbonisation, Rapidly

China is still adding flexible coal power plants (too much!), but utilization rates are down to average just 46% in 5MCY2025, balancing ever more VRE! China deployed 247GW of renewable energy capacity in 5M to-date CY2025.

China deploys as much wind 4 days as Australia does each year.

New Capacity Installed in China in Jan-May 2025

			% Share			% Share
		Jan-May'25	of new	% yoy change	May-25	of new
			adds			adds
Thermal Power	GW	18	7%	45%	4.6	4%
Hydropower	GW	3	1%	-6%	0.6	0%
Nuclear Power	GW	-	0%	0%	-	0%
Wind Power	GW	46	17%	134%	26.3	21%
Solar Power	GW	198	75%	150%	92.9	75%
Total capacity added	GW	265	100%	129%	124.4	100%
Renewable Energy adds	GW	247	93%	142%	119.8	96%
Zero Emissions Capacity Adds	GW	247	93%	139%	119.8	96%
YTD power grid investment	US\$bn	28		20%		

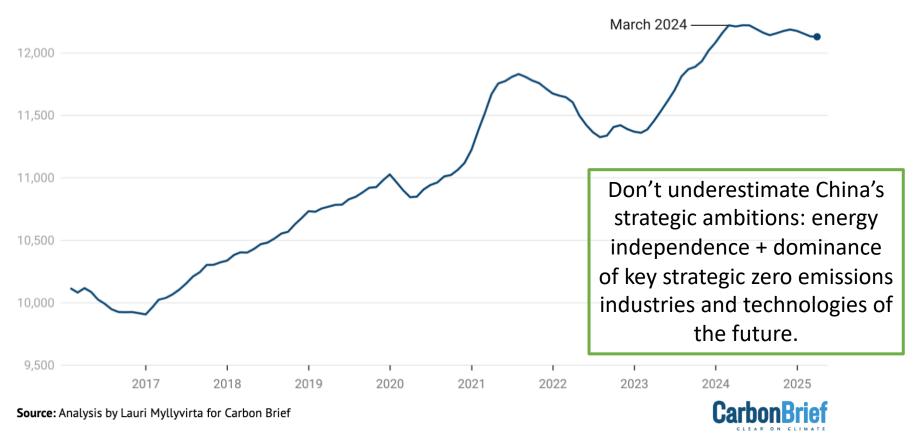
Source: National Energy Administration

China's electrification leadership drives decarbonisation

China's electrification is about energy security i.e. permanently reducing reliance on imported fossil fuels.

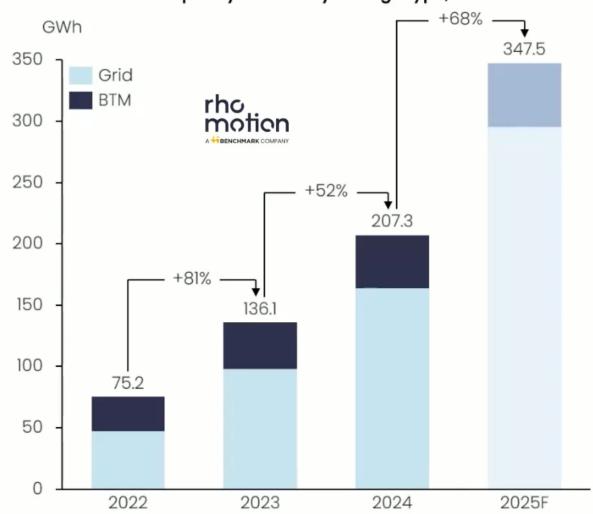
China's CO2 emissions drop due to clean energy for first time

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



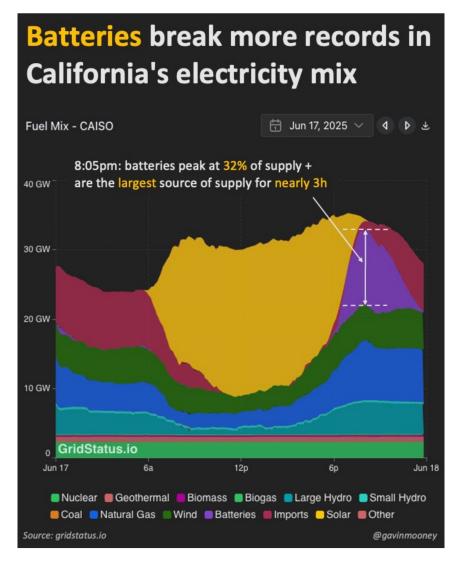
BESS + Solar + EV => Accelerating Transformation





Global Cleantech Investment is Accelerating

Solar + BESS + V2G => Accelerated Energy System Transformation



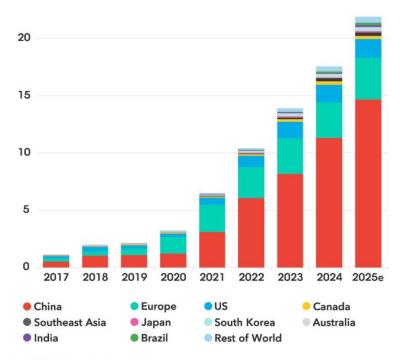
China's Global Cleantech Investment Dominance

Global EV Sales By Region

Global EV sales are on track for another record-breaking year, but some markets are experiencing a significant slowdown.

- Flectric vehicles are set to make up one in four cars sold globally in 2025.

- Femerging markets like Brazil and Thailand are seeing record adoption, d........ by affordable Chinese models.

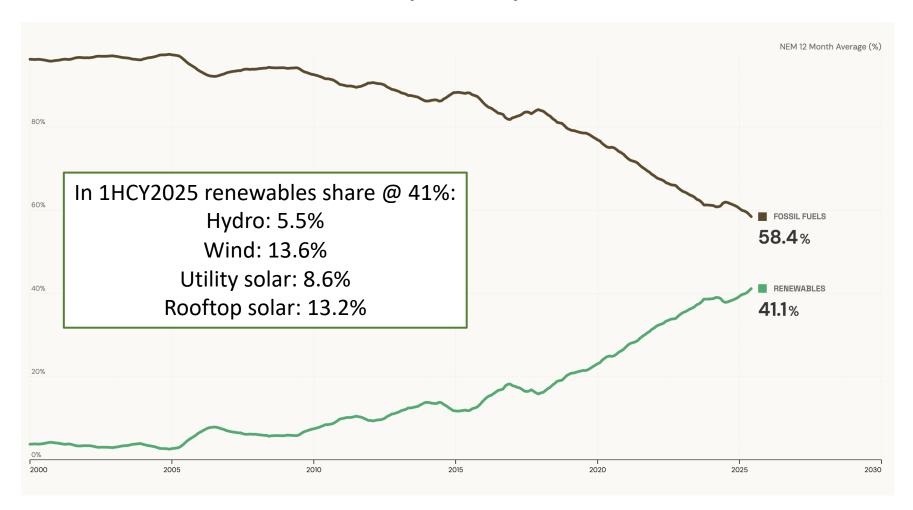


Source: BloombergNEF, MarkLines, Jato Dynamics Note: Includes battery electric and plug-in hybrid passenger vehicles. 2025 is BNEF's forecast for the year.



Australia is Half-way to 82% Renewables by 2030

Australia has reached 41% renewable share in FY2025; Halfway to 82% by 2030



Open~Electricity

Australia is Responding to China's Challenge

Strategic public capital is a key facilitator, in the absence of a CO₂ price signal FMIA, CIS, RTN, NRF, Future Fund, CEFC, ARENA, EFA, NAIF

Capacity Investment Scheme

The Capacity Investment Scheme (CIS) is an Australian Government revenue underwriting scheme to accelerate investment in:

South Australia Australian Associated Press

20 Feb 2025

Troubled Whyalla steelworks gets \$2.4bn government bailout as hunt for new owner begins

- 23 GW of renewable capacity representing \$52 billion in investment
- 9 GW of clean dispatchable capacity representing \$15 billion in investment.

"Crucial support:" Federal Labor launches \$2bn green aluminium production credit scheme \$19bn Rewiring the Nation Fund

RENEW ECONOMY Andrew Brown

lan 20, 2025

The \$19 billion Rewiring the Nation (RTN) Fund is a significant expansion of CEFC investment capacity, with a particular focus on facilitating the timely delivery of grid and transmission projects, using CEFC capital to accelerate the benefits of grid transformation to consumers, including helping to lower consumer energy costs.

Rio Tinto says aluminium could run on renewables and batteries

FINANCIAL REVIEW

Feb 6, 2025

\$200 million investment in critical minerals to build Australia's future

15 January 2025

Minister for Industry and Science

The Albanese Government's National Reconstruction Fund Corporation (NRFC) will invest \$200 million in Arafura Rare Earths to help build Australia's Future.

Australian green iron - a massive strategic opportunity





Green Metal Statecraft: Forging Australia's Green Iron Industry

Matt Pollard, Net Zero Transformation Analyst, CEF Tim Buckley, Director, CEF



Australia is Responding to China's Challenge

Australia needs to build enduring competitive advantages – we must realise low cost zero emissions energy at world scale, and promote low emissions trade in Asia

China's top leadership takes aim at 'disorderly low-price competition'

Officials have favoured a vaguer term – "involutionary competition" – but president cut to the chase at top-level economic meeting

2 Jul 2025 SCMP

In addressing the price wars plaguing many industries in China, the country's top leadership has resorted to a phrase rarely seen at a high-level meeting, saying that enterprises' "disorderly low-price competition" needs to be regulated. Speaking at a top-level economic meeting, President Xi Jinping used that phrase to explicitly characterise the much-debated phenomenon, in stark contrast to officials who have, since late last year, favoured the vaguer term "involutionary competition" when discussing the problem.

China needs to "lawfully regulate enterprises' disorderly low-price competition, guide companies to improve product quality, and promote the orderly exit of outdated production capacity", Xi urged at a meeting of the <u>Central Financial and Economic Affairs Commission</u>, the Communist Party body that supervises economic matters.

Beijing sees tackling such competition as crucial for the health of the world's second-largest economy as it harms innovation, lowers efficiency and hinders industrial upgrading and product quality improvement.

Different business structures: we need to explore public-private ownership, public risk underwriting .e.g. Minimum price offtakes and strategic reserves.

Location	Resource	Jobs at risk		
Tomago, NSW	Aluminium smelter	1200 direct, 5000 indirect		
Whyalla, SA	Steel mill	1100 direct, 2000 indirect		
Port Pirie, SA	Lead smelter	1050 direct		
Boyne Island, Qld	Aluminium smelter	1020		
Hobart, Tas	Zinc smelter	650		
Townsville, Mount Isa, Qld	Copper refinery, copper smelter, lead smelter	570 direct, 1000 indirect		
Bell Bay, Tas	Aluminium smelter	495		
Townsville, Qld	Zinc smelter	350 direct		
Boyer, Tas	Paper mill	340		
Bell Bay, Tas	Ferromanganese smelter	280		

Table: Financial Review • Source: Liberal-National Coalition

CEF's Report Advocating for Carbon Pricing

Climate Energy Finance 05 June 2025



A Price on Carbon: Building Towards an Asian CBAM

A focus on the harmonisation and integration of carbon pricing mechanisms in Asia-Pacific for the steel, aluminium and cement value chains.

Authors:

Matt Pollard, Net Zero Transformation Analyst, CEF **Tim Buckley,** Director, CEF

Source: Climate Energy Finance,