



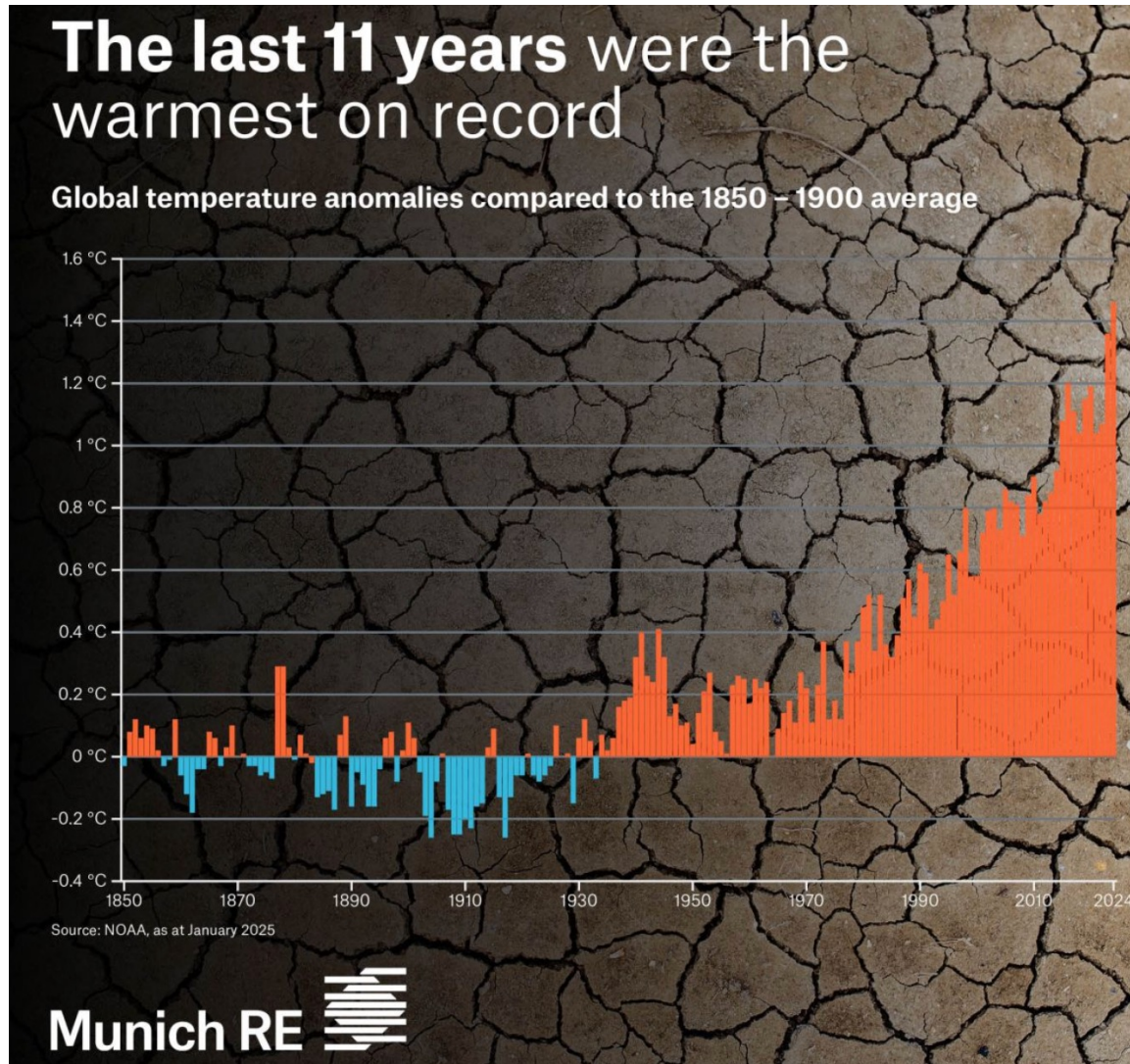
Tim Buckley, Director CEF  
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## **CISL Australia - Business and Sustainability Program**

**2 March 2026**

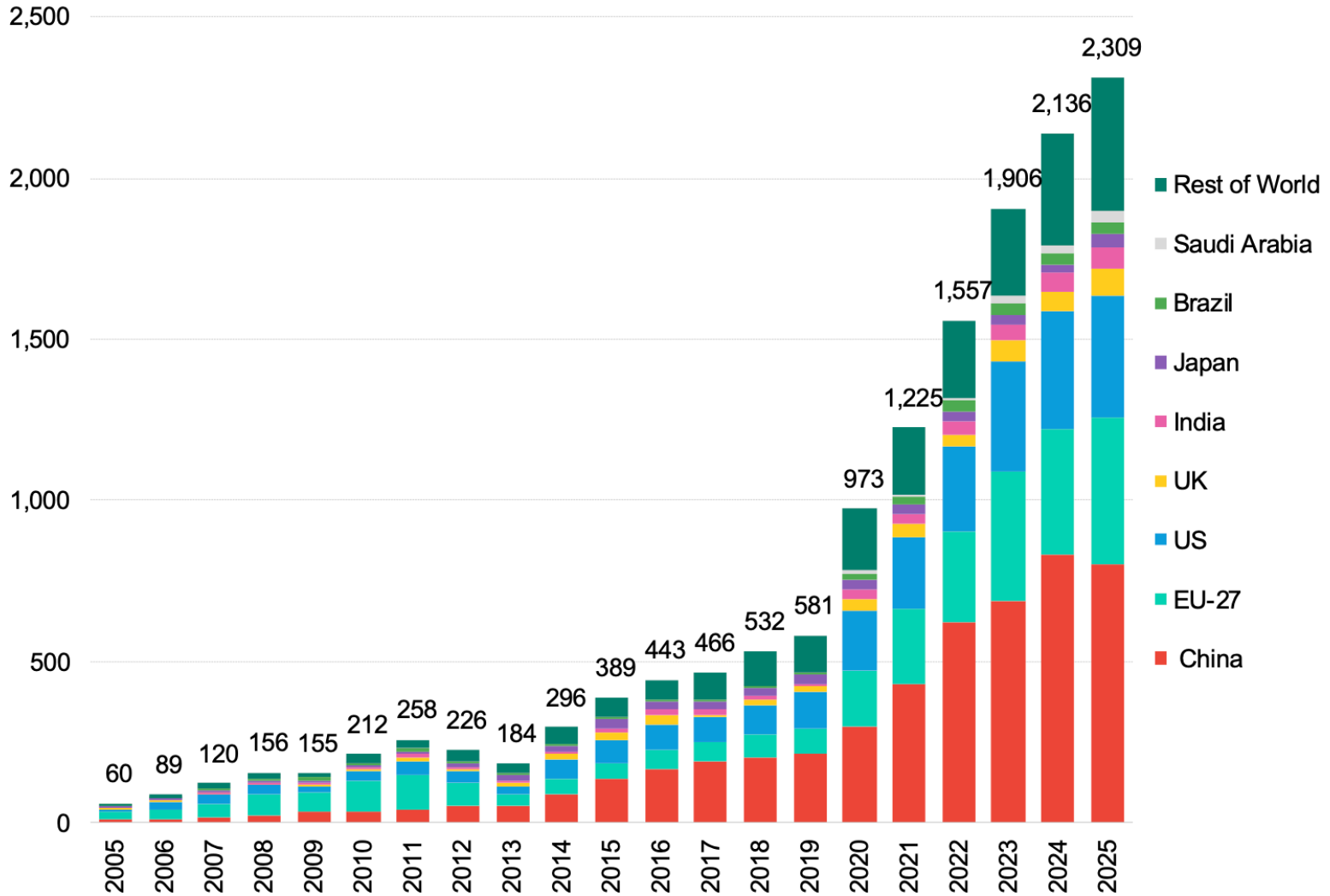
# CEF accepts the climate science

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



# Renewables, EV & Grid outspend Fossil Fuels >2:1

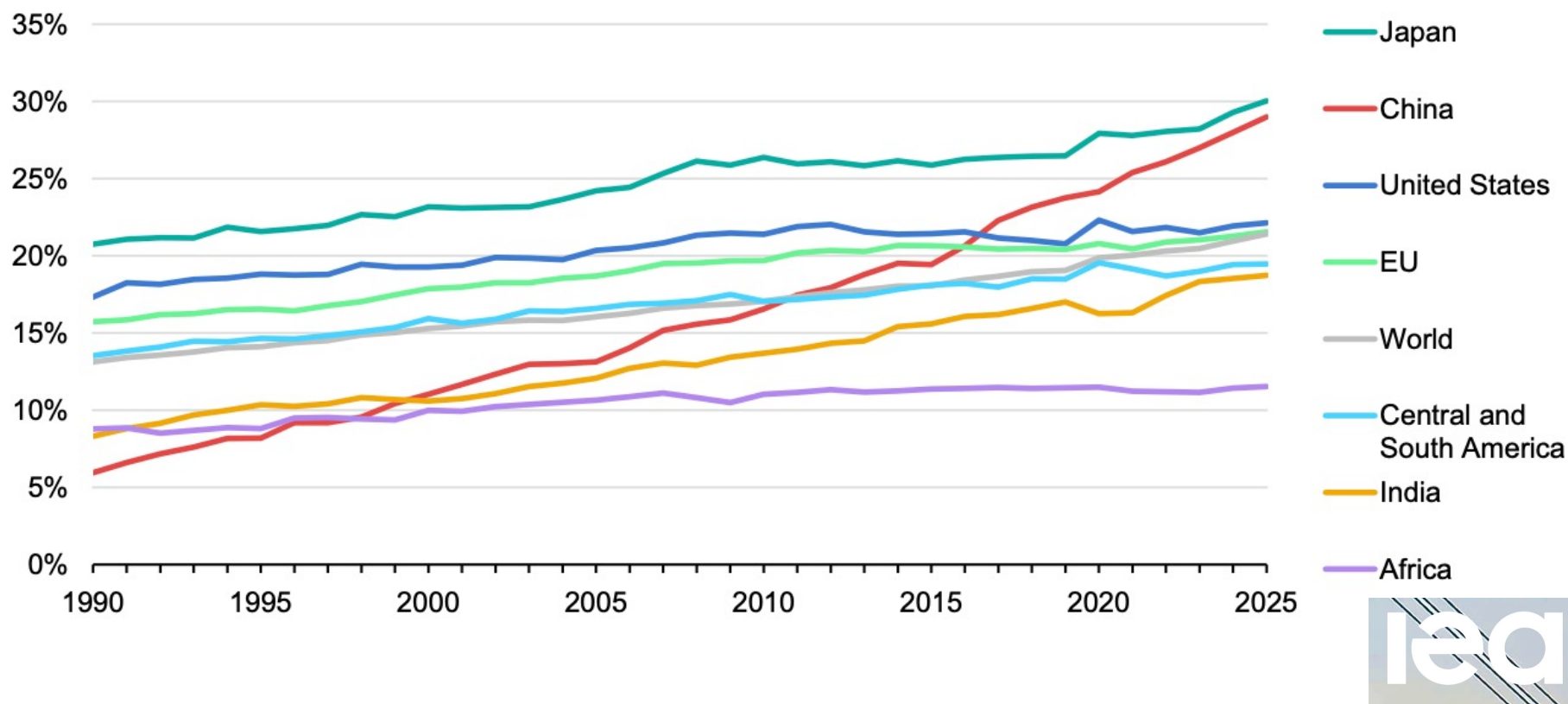
\$ billion **Global Energy Transition Investment, by Country, US\$bn: 2025 +8% yoy**



Source: BloombergNEF, Energy Transition Investment Trends, January 2026

# China is Moving in Electrification of Everything, Rapidly

Share of electricity in total final consumption in select countries and regions, 1990-2025



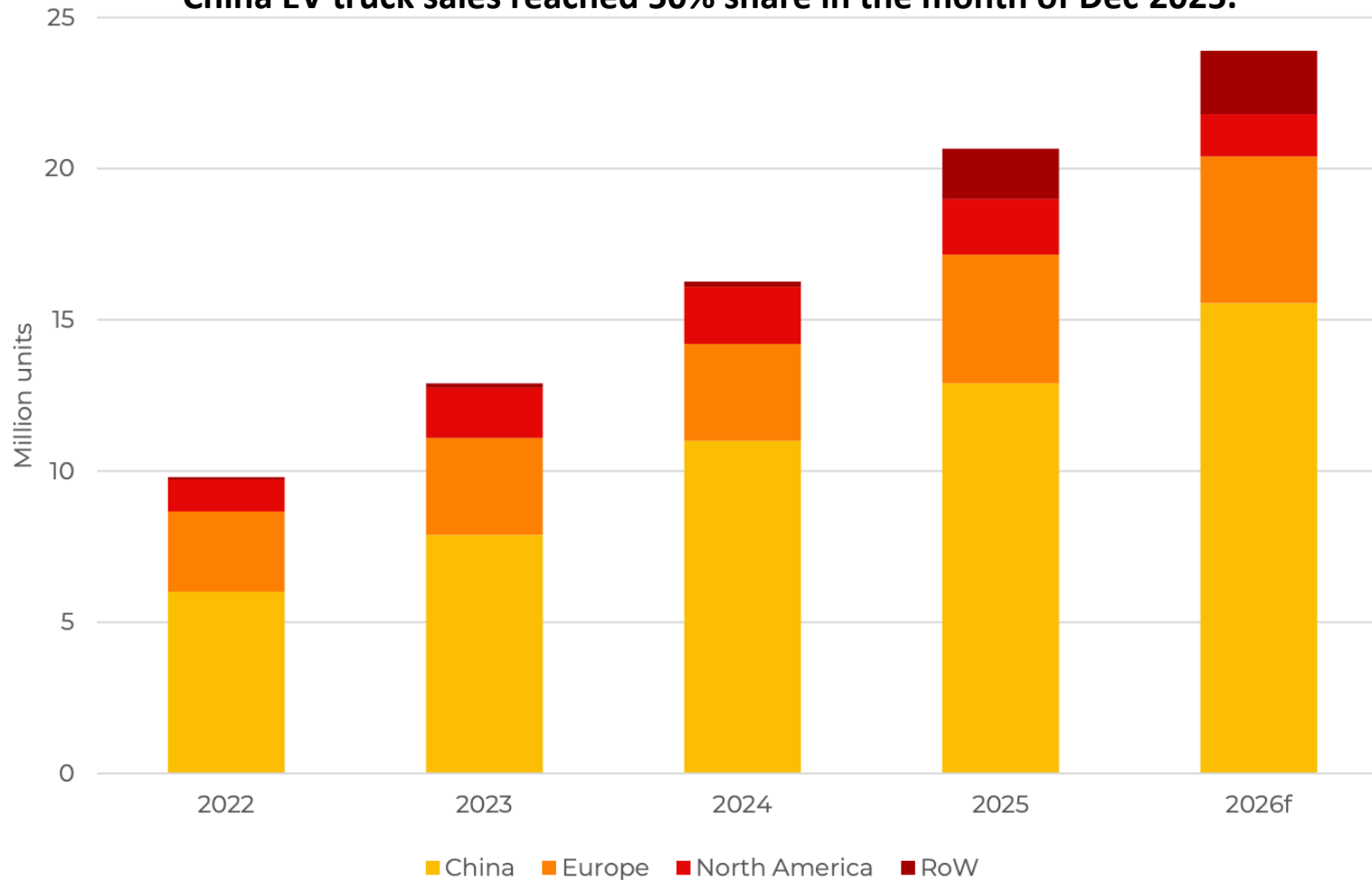
# Electric Vehicle Boom Continues Globally, But China Led

Overall passenger EV sales in 2025 totaled 20.7 million units, +20% yoy.

BMI forecasts 2026 growth to 23.9 million units, +15% yoy.

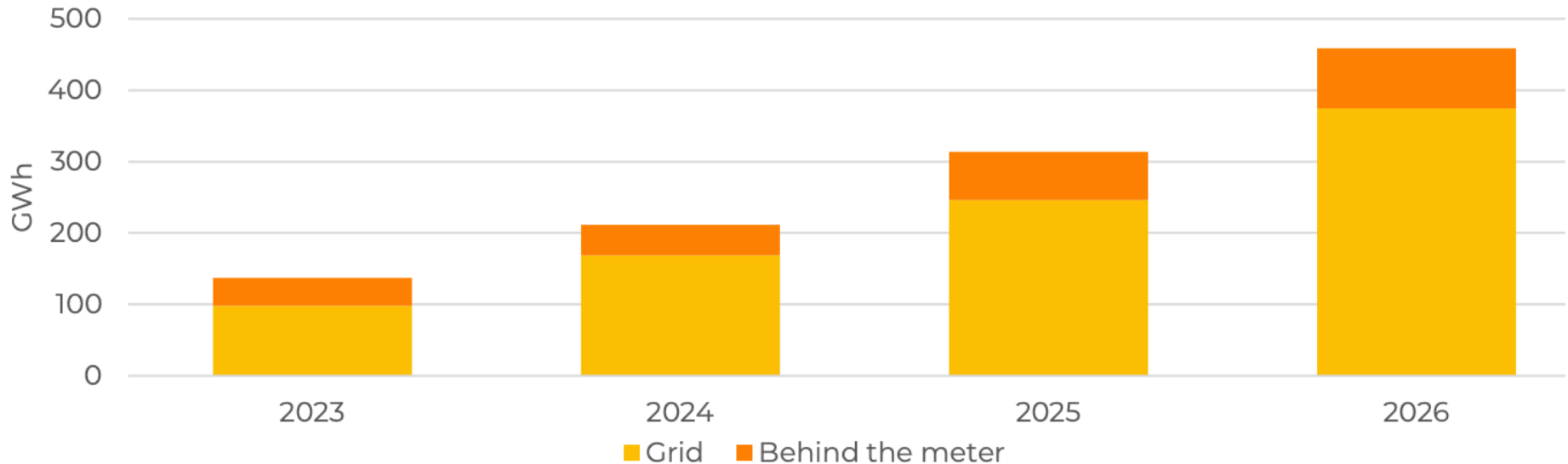
EU EV sales reached 50% share in the month of Dec'2025.

China EV truck sales reached 50% share in the month of Dec'2025.



## Battery Boom Accelerates Globally, But China Led

In 2025, BESS was the fastest growing battery demand market, with 315GWh installed across the grid and behind the meter (BTM) markets. In 2026, BESS is set for another record year, with BMI forecasting 450GWh set to enter operation globally (+42% yoy). BESS system pricing hit new lows with project tenders in China hitting US\$63/kWh



Source: Benchmark BESS Forecast

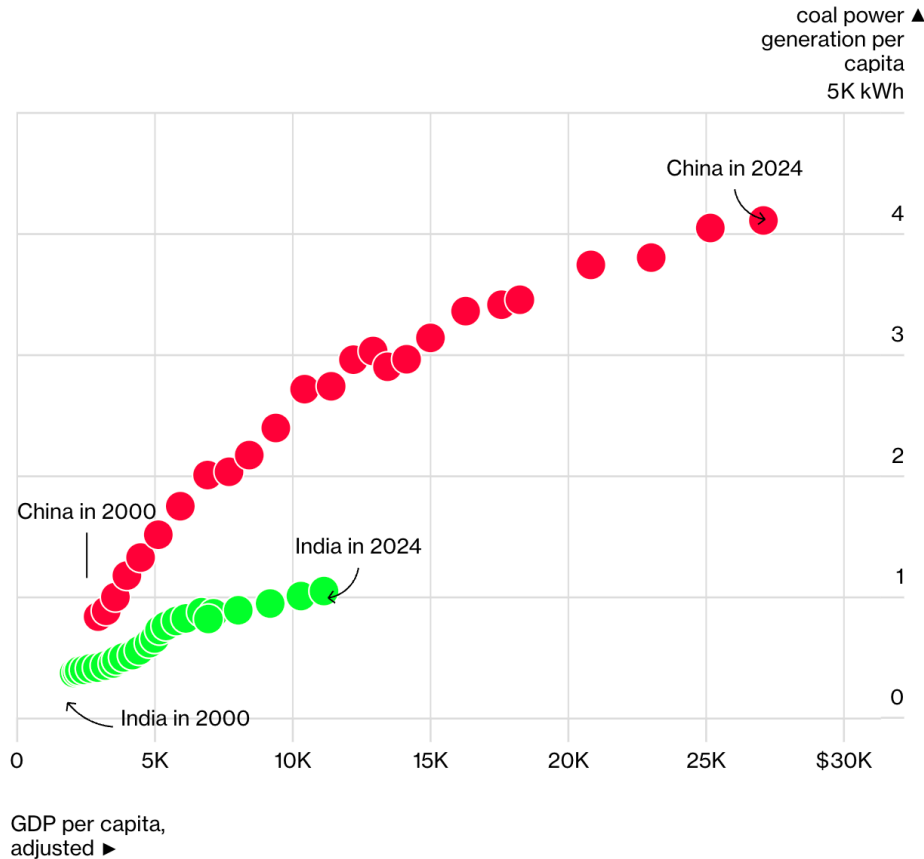
# India is adopting Zero Emissions Solutions, Fast

India is well behind China in terms of economic development, but the path is very different, and less energy / emissions intensive.  
India added 48GW of RE in CY2025 (+70% yoy)

## Coal Giants

India crossed the 1,000 kilowatt-hours of coal power generation threshold at three times China's gross domestic product

● India ● China



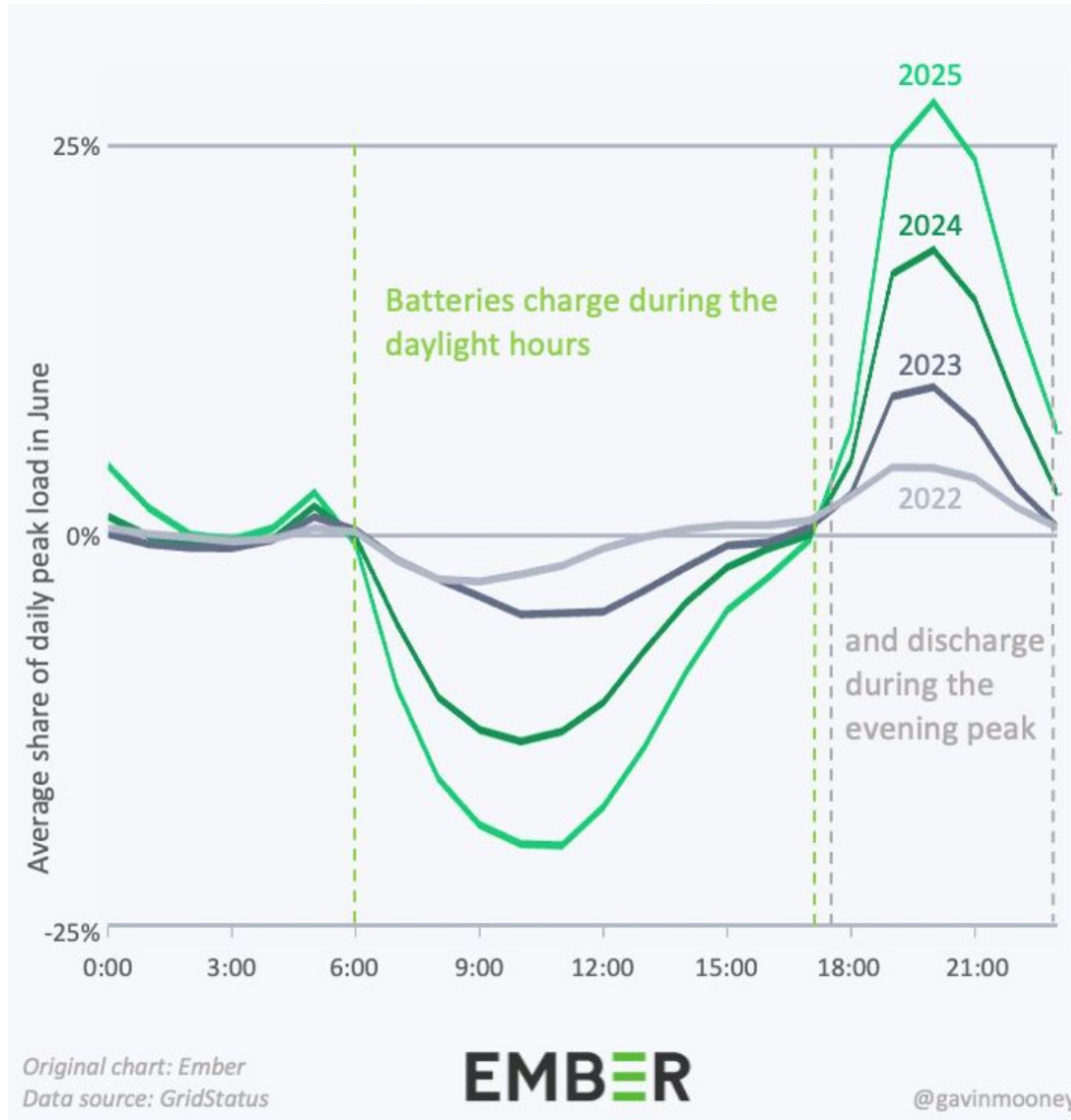
## India expected to install about 42.5 GW of new solar capacity in 2026: JMK Research

India installed around 37.8 GW of solar capacity in CY2025. This comprised about 28.6 GW of new utility-scale solar, a 54.6% increase from 2024, and 7.9 GW of rooftop solar, up 72% year on year. Off-grid additions stood at 1.35 GW, compared to 1.48 GW in 2024.

FEBRUARY 27, 2026 UMA GUPTA

# Global Cleantech Investment is Accelerating

Solar + BESS + V2G => Accelerated Energy System Transformation: California



# China is Moving in Decarbonisation, Rapidly

China is still adding flexible coal power plants (too much!), but utilization rates are down to average just 47% in CY2025, balancing ever more VRE! China deployed 446GW of renewable energy capacity in CY2025, +20% yoy. China deploys as much VRE every 5 days as Australia does each year.

## New Capacity Installed in China in CY2025 (GW)

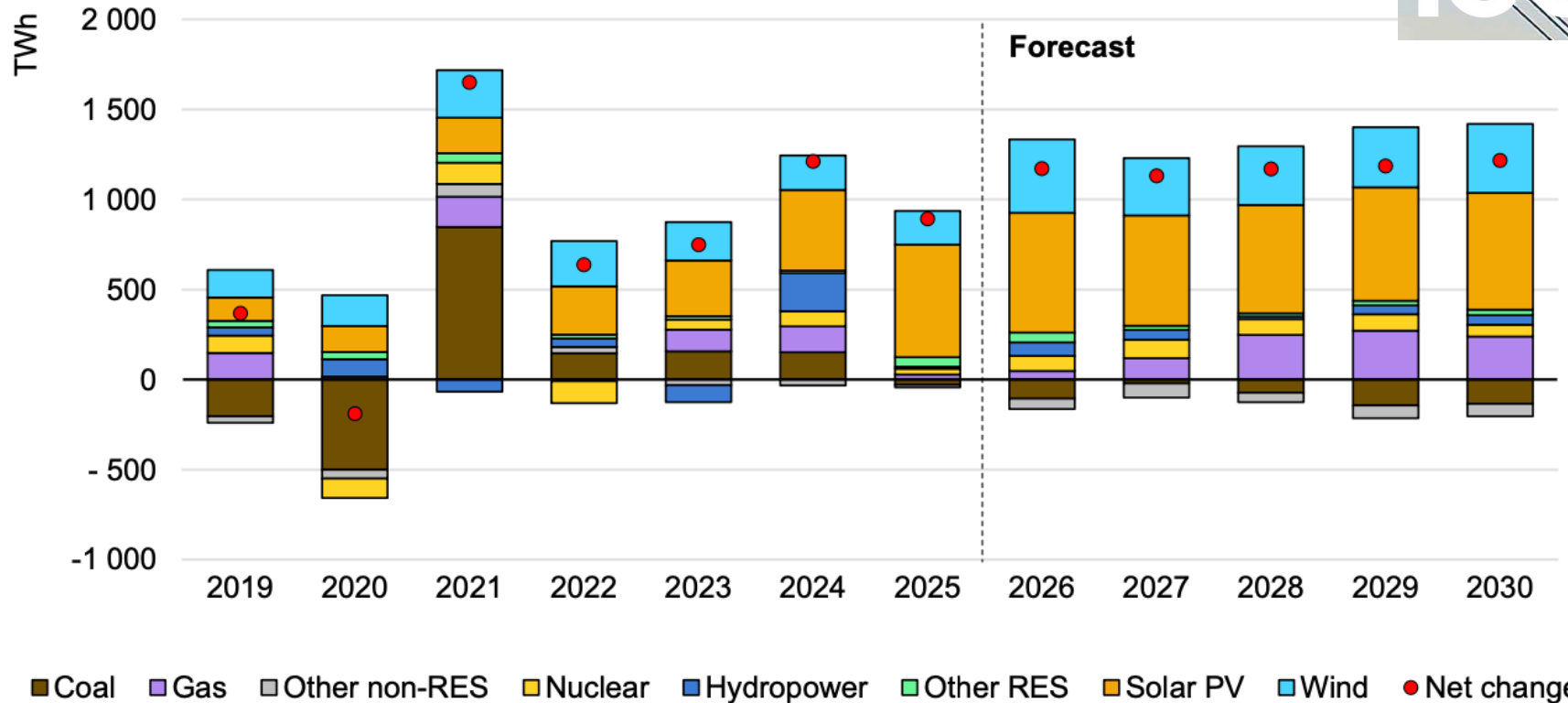
Gigawatts (GW)	Dec'2025 Total Capacity	Jan-Dec'25 Net Adds	% Share of new adds	% yoy change in net adds	Dec'25 Net Adds for month
Fossil Power	1,539.0	95	17%	75%	16.8
Hydropower	448.0	12	2%	-16%	3.1
Nuclear Power	62.5	2	0%	-58%	-
Wind Power	640.0	119	22%	50%	37.4
Solar Power	1,201.7	315	58%	14%	40.5
<b>Total capacity</b>	<b>3,891.3</b>	<b>543</b>	<b>100%</b>	<b>27%</b>	<b>97.8</b>
Renewable Energy adds		446	82%	20%	81.0
Zero Emissions Capacity Adds		448	83%	20%	81.0

Source: National Energy Administration; CEF Estimates

# China is Moving in Decarbonisation, Rapidly

China added 95GW of new thermal capacity in CY2025, yet thermal power generation in CY2025 was -0.7% yoy

Year-on-year global change in electricity generation by source, 2019-2030



IEA. CC BY 4.0.

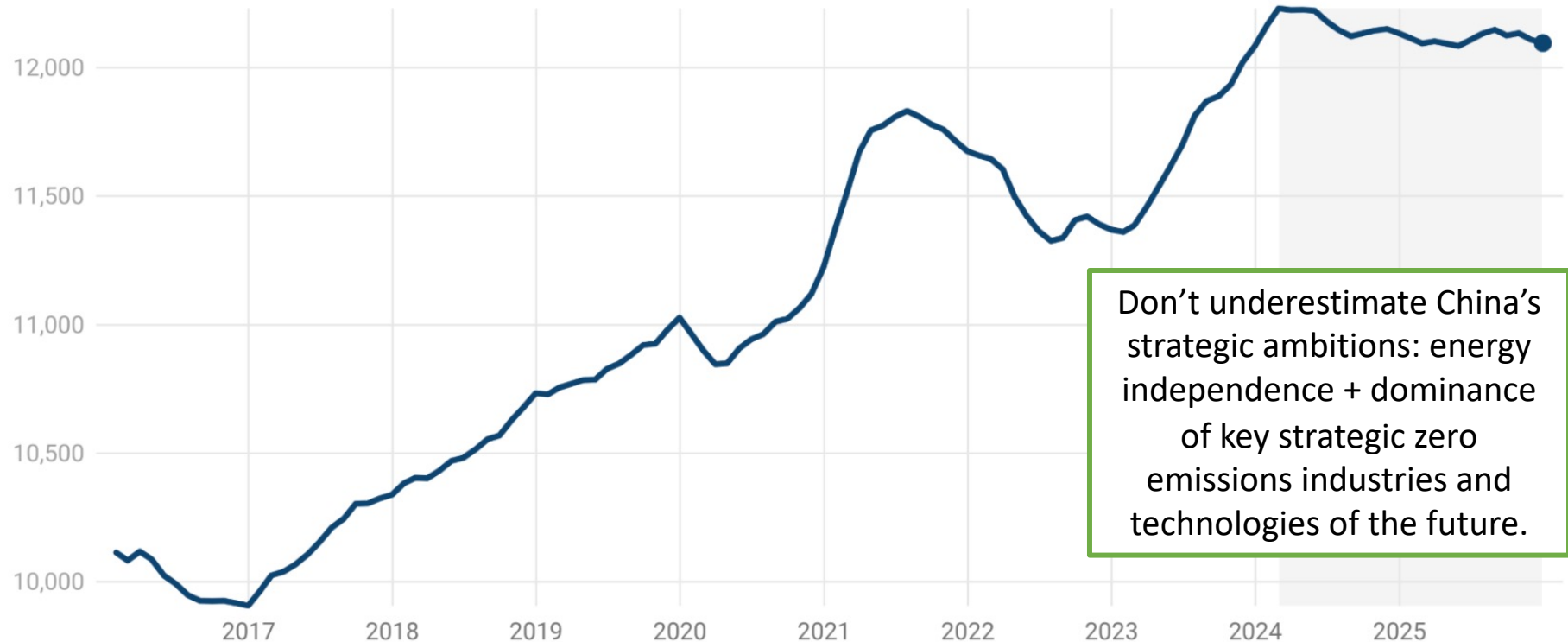
Notes: RES = renewable energy sources. 'Other non-RES' includes oil, waste and other non-renewable sources. 'Other RES' includes geothermal, bioenergy, concentrated solar power (CSP), and ocean energy. Data for 2026-2030 are forecast values.

# China's electrification leadership drives decarbonisation

China's electrification is about energy security i.e. permanently reducing reliance on imported fossil fuels. Combined with lower steel and cement production => national emissions in China have plateaued.

## China's CO2 emissions have now been 'flat or falling' for 21 months

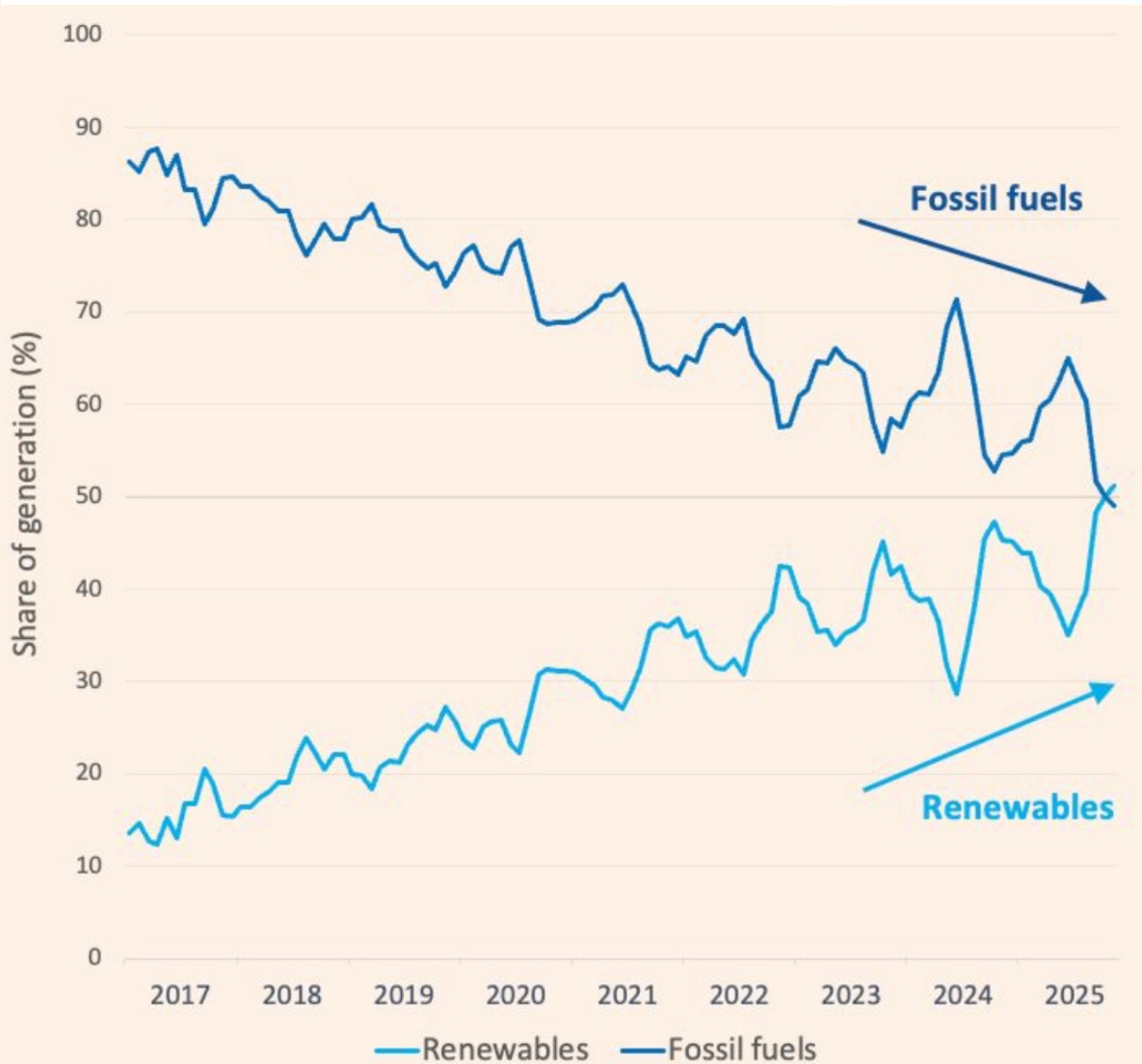
CO2 emissions from fossil fuels and cement, million tonnes of CO2, rolling 12-month totals



Don't underestimate China's strategic ambitions: energy independence + dominance of key strategic zero emissions industries and technologies of the future.

# Australia is Half-way to 82% Renewables by 2030

Australia averaged >50% renewable share in 4QCY2025



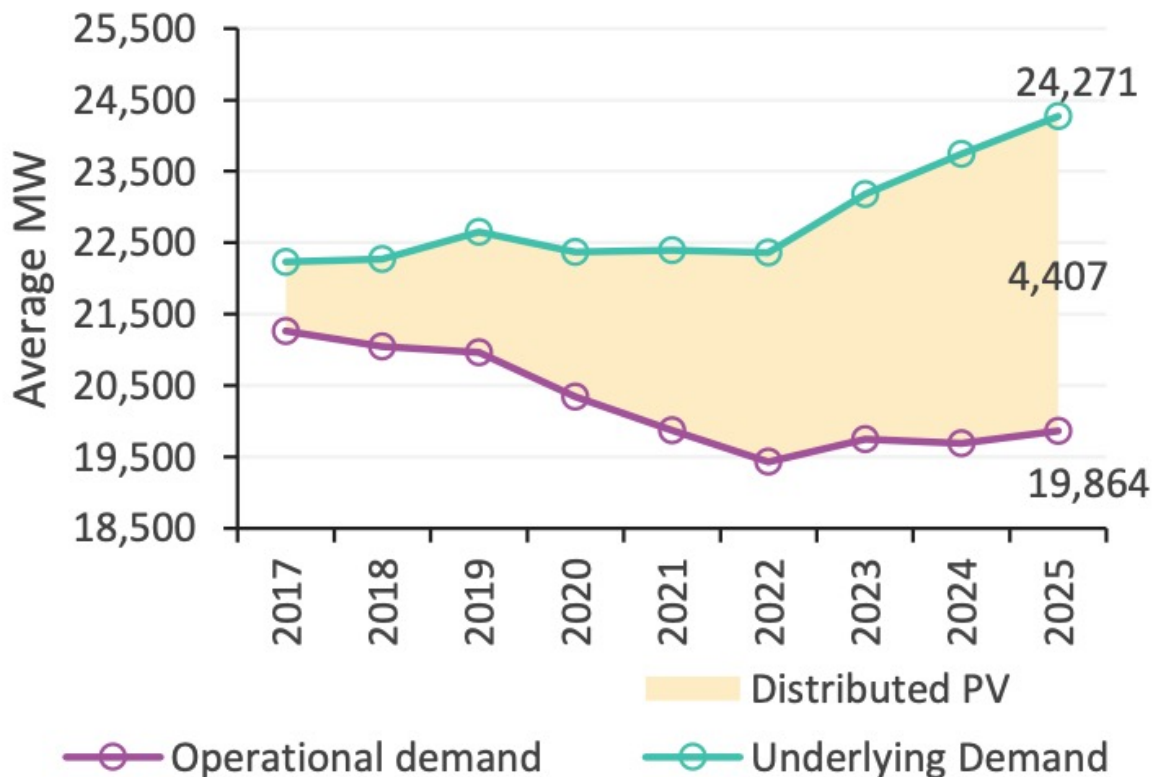
For the NEM, the month of Jan'2026 was 'only' 49.1% renewables share, a slight decline vs the 49.9% average for the 4QCY2025 (and 50.1% average nationally).

But then January 2024 was only 39.3% renewables share – so a near 10% share increase in 2 years for the month. Not bad in that context!!!

# Australia is Half-way to 82% Renewables by 2030

**Figure 3 Underlying demand grew to a new Q4 high**

NEM average underlying and operational demand – Q4s



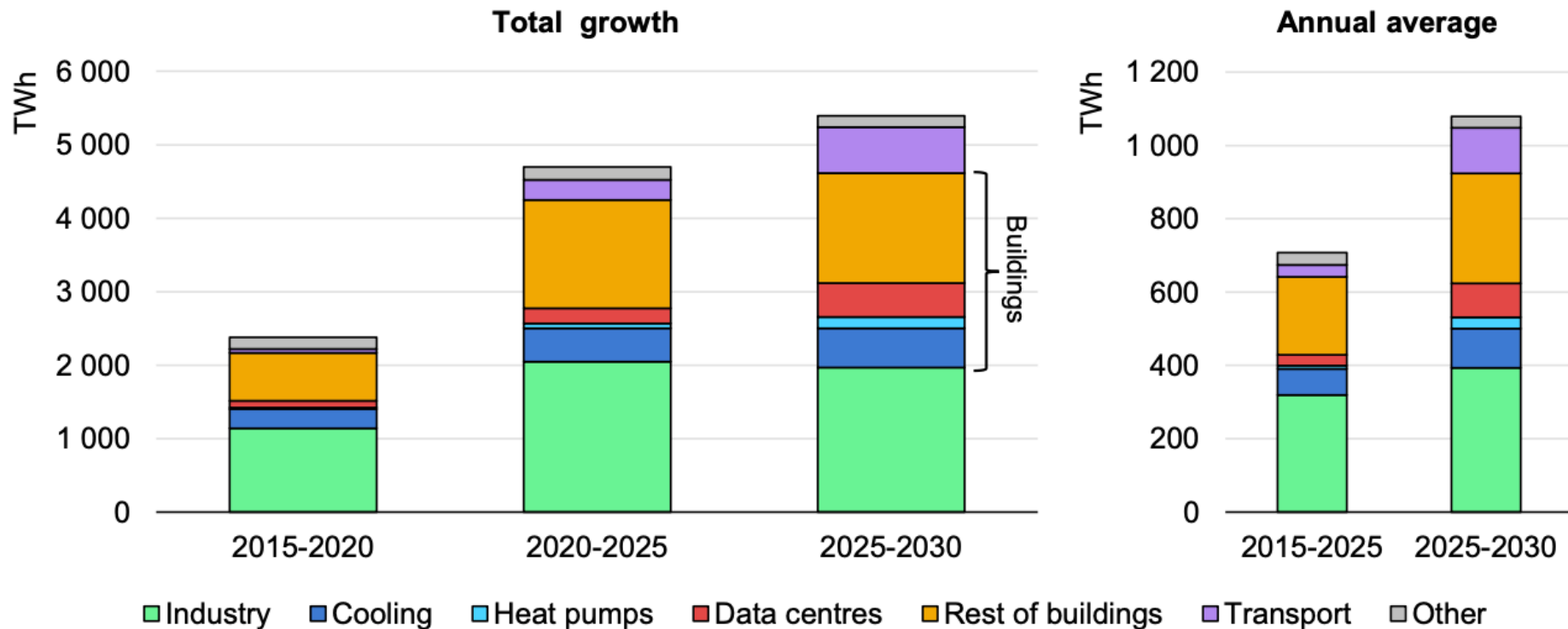
AEMO: Total 4QCY2025 NEM generation averaged 25,064MW (+3.1%), with renewables (incl. storage) exceeding 50% of the quarterly energy mix for the first time (51% up from 46% in 4Q2024).

Wholesale electricity prices across the NEM averaged \$50/MWh in 4QCY2025, a \$39/MWh (-44%) reduction from 3Q2024.

# Datacentres are Incremental to Electrification



## Global electricity demand growth by sector and end-use, 2015-2030

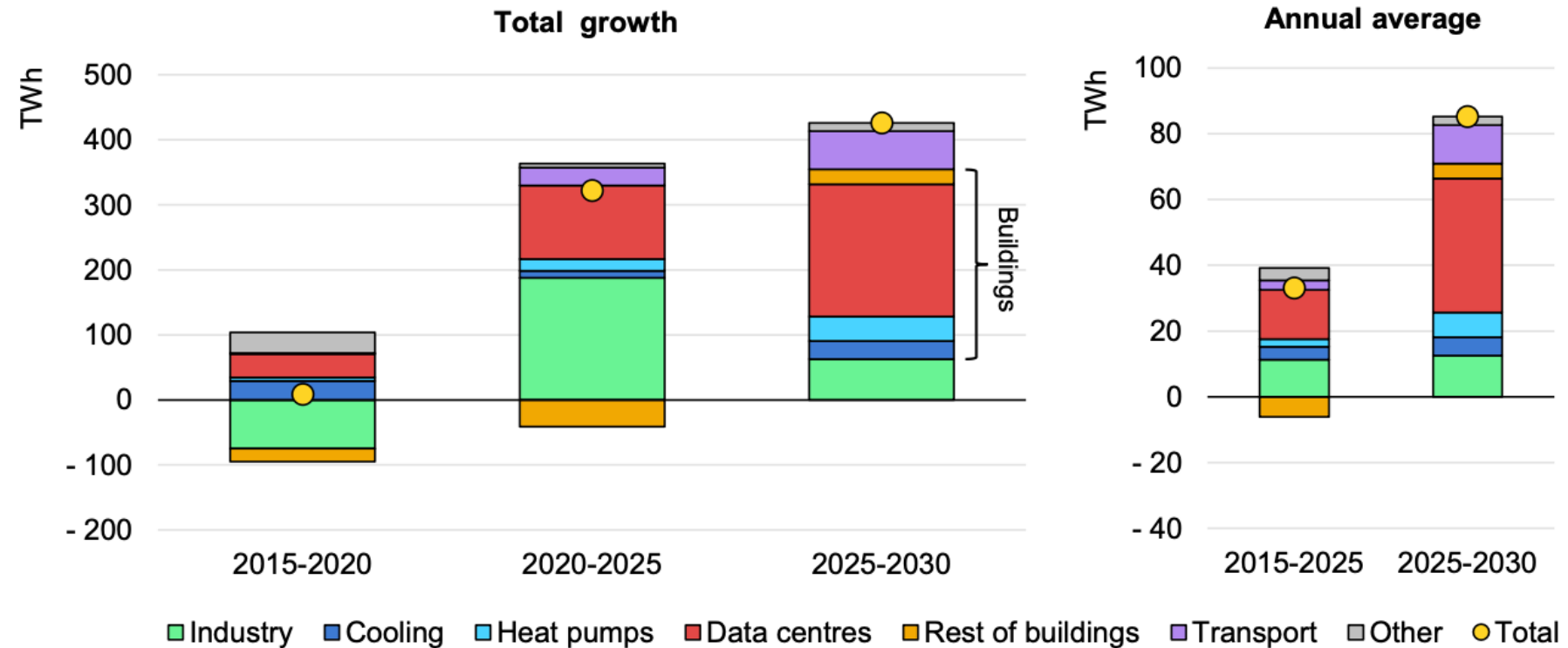


Data centres are all the buzz in 2026 in capital markets. Data centres add to the electrification of everything, but they are part of the story. EVs are a far bigger impact. It is important we ensure data centres enable more firmed renewables, rather than absorb existing capacity and drive energy prices up.

# Datacentres in the US are disruptive

Except in the US (80% of world DC), and possibly Australia

## Electricity demand growth by sector and end-use in the United States, 2015-2030



The US has seen double digit electricity price inflation as a result of the unplanned boom in data centres.

Source: [IEA Electricity 2026](#), 6 February 2026

# Datacentres in Australia

## Public Interest Principles for Data Centres

### JOINT STATEMENT

February 2026



### Data centre rush must power itself says industry, unions and environment groups

- *Industry, unions, community and environment groups unite on eight responsible data centre principles put to Federal Government in joint statement*
- *Data centres should install own renewable energy, train new tradies, use water responsibly*

### MEDIA RELEASE

**THURS 26 FEBRUARY** - Data centres setting up shop in Australia as part of the AI boom will be required to contribute to Australian energy and skills under a proposal put to the federal government by an alliance of industry groups, unions, community groups and environmental organisations today.

The plan, delivered to Industry Minister Tim Ayres and Assistant Minister for Science, Technology and the Digital Economy Andrew Charlton by the Carbon Zero Initiative, would see data centre operators invest in new renewable energy to power their operations instead of pushing up the price of wholesale power, use water responsibly and train local apprentices rather than siphoning skills away from national priorities like housing.

Australia does have a data centre potential like the US. AEMO forecasts 10% of NEM electricity will go to data centres by 2035, vs just 2% in 2025.



# 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

The Safeguard Mechanism was reformed in 2023. It will be reviewed by the Department of Climate Change, Energy, the Environment and Water in FY2026–27.

China's national ETS will expand 50% by end 2027.

# CEF's Report On A key Strategic Risk for Australian Mining

Climate Energy Finance

March 2026



## China Outbound Foreign Investment in Resources and Resource Value-add

***China is going global in zero emissions industries of the future. China is also going global in critical minerals and strategic metals, to secure control and build global supply to accommodate its needs. Australia should take note!***

Authors:

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