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**Presentation to China
National Petroleum
Corporation,
courtesy of ACBC**

**Opportunities for Australia-
China Renewable Energy
Cooperation**

22 May 2025

About Climate Energy Finance

关于我们

气候能源金融（CEF）是一家成立于2022年的智囊，致力于依据气候科学加速实现碳中和，为公众利益服务。

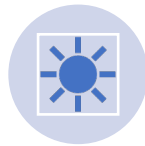
我们对与能源转型相关的全球金融和地缘政治问题，及其对澳大利亚经济的影响进行研究和分析，尤其关注澳大利亚投资、工业和出口因此面临的挑战和机遇。这涉及到就中国和印太地区其他主要贸易伙伴的发展提供追踪报道和独立评论，并倡导这些贸易伙伴加强互利合作。CEF还研究全球电力、运输、采矿和工业技术趋势在加速碳中和方面的趋同。CEF是独立的，无党派的，由慈善机构资助。我们致力于与澳大利亚的政府、金融企业、非政府组织以及海外合作伙伴共同促进碳中和的早日实现。

Australia's climate targets and supporting policies

The 2025 Australian Government Election Gives a Strong Mandate for Climate, Energy and Industry Progress



43% EMISSIONS
REDUCTION
TARGET BY 2030
AND NET ZERO BY
2050, AS WELL AS
MORE AMBITIOUS
TARGETS IN
SEVERAL STATES
AND TERRITORIES



82% RENEWABLE
ENERGY
NATIONALLY BY
2030



SAFEGUARD
MECHANISM TO
DRIVE -4.9% CAGR
REDUCTION IN
SCOPE 1 INDUSTRY
EMISSIONS



**CAPACITY
INVESTMENT
SCHEME TO**
DELIVER 32 GW OF
CAPACITY BY 2030

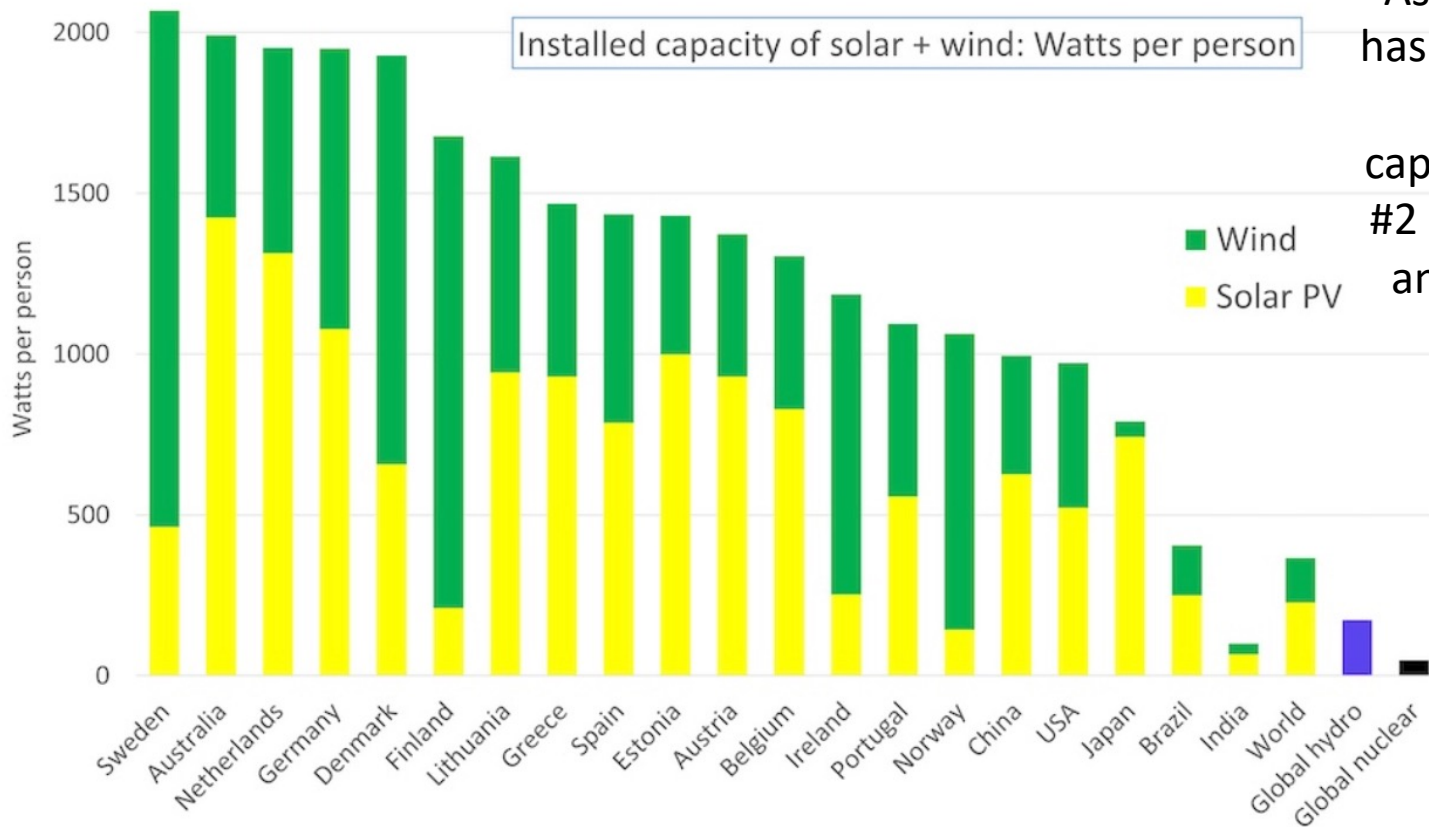


A\$15BN NATIONAL
RECONSTRUCTION
FUND



A\$22.7BN FUTURE
MADE IN
AUSTRALIA PLAN

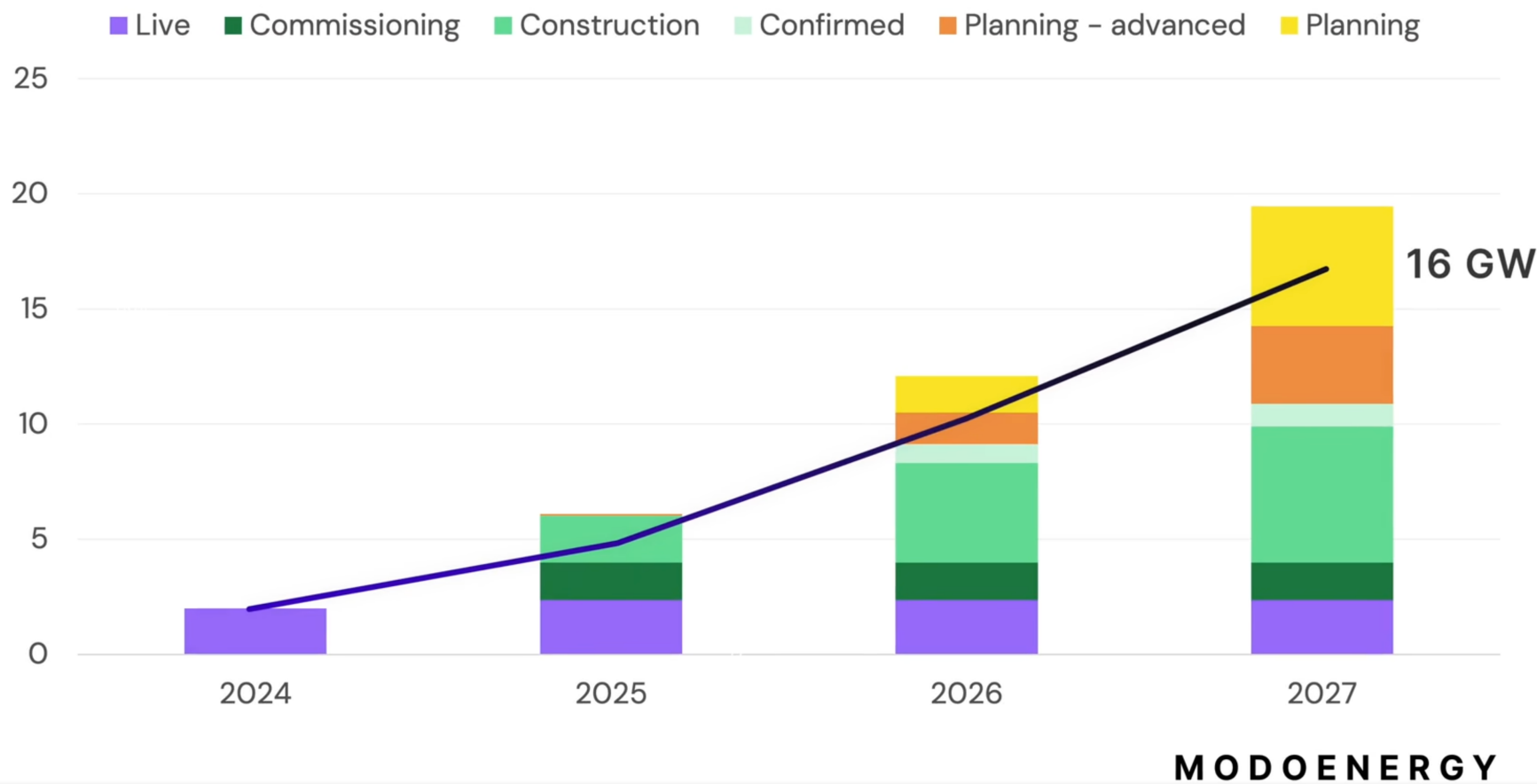
Australian Wind and Solar Installs vs Global Averages



As of 2024, Australia has the world's highest per capita solar capacity, and is ranked #2 for per capita wind and solar combined

Australian BESS uptake is at record levels, soon to be boosted again by the Federal government's \$2.3bn 30% battery rebate

Cumulative operational and pipeline battery energy storage capacity by current status (GW)



Source: Wendel Hortop, Modo Energy 8 May 2025

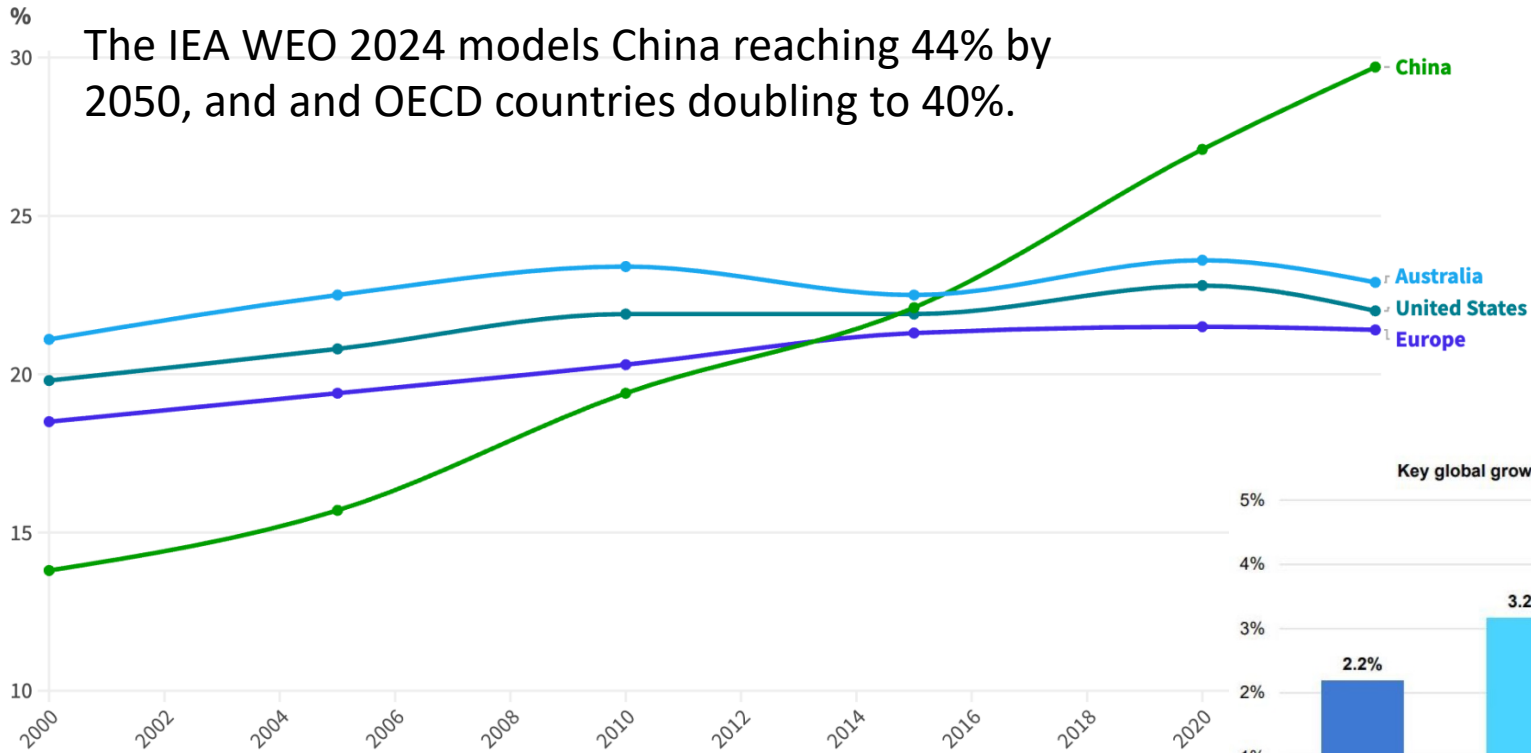
https://www.linkedin.com/posts/wendel-rhys-hortop_355-mw-of-new-bess-capacity-coming-online-activity-7325278123048984577-91bO?utm_source=share&utm_medium=member_desktop&rcm=ACoAAAK_xL4BN5TFIx7F-X4g0YfwthJ1QLTvZoQ

China's Electrification of Everything

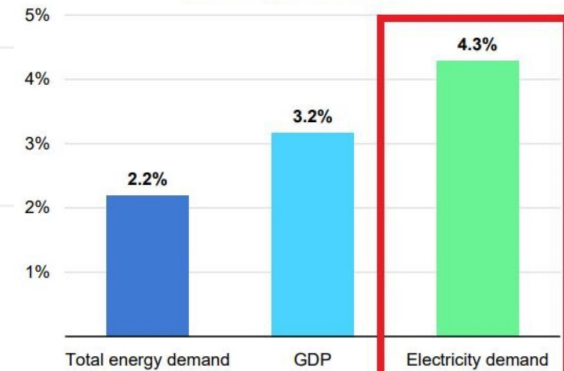
China Leads the world on Progressive Electrification of Everything

Share of final energy from electricity

China has leapfrogged United States, Europe and Australia in electrification



Key global growth rates, 2024



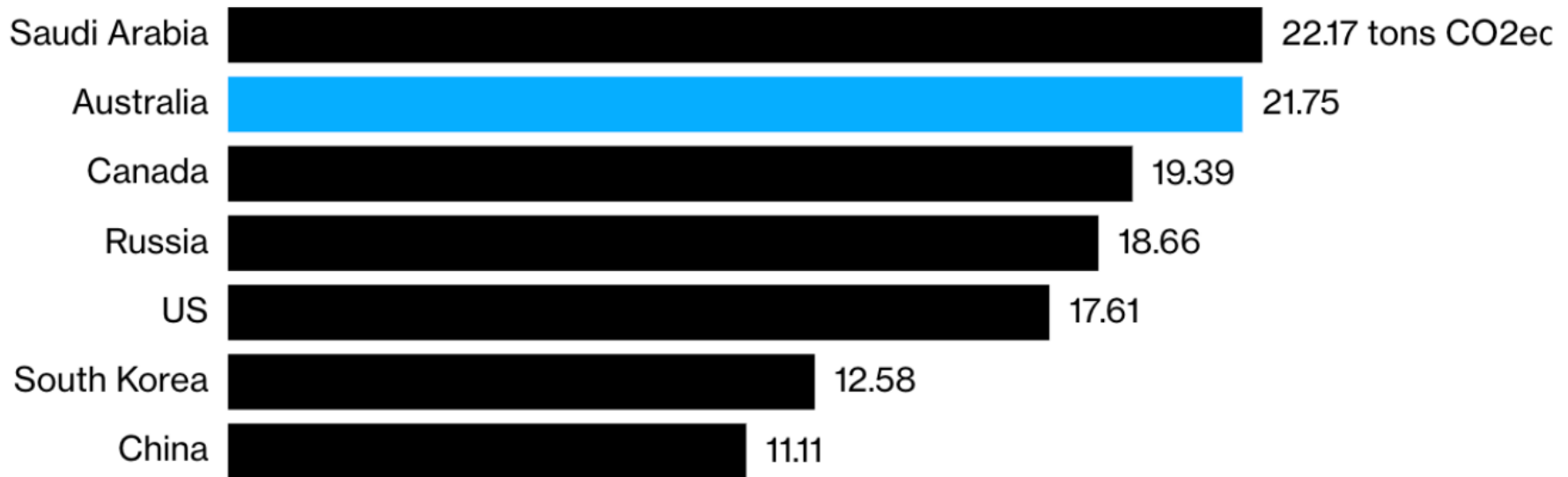
Source: CEF calculations, [Enerdata](#)

Australia is 0.3% of the world's population, but our fossil fuel exports contribute to ~4.5% of global fossil fuel CO₂ emissions

Australia's Climate Impact

Australia ranks among the top polluters in the G-20 based on per capita greenhouse gas emissions.

■ GHG per capita emissions (2023)

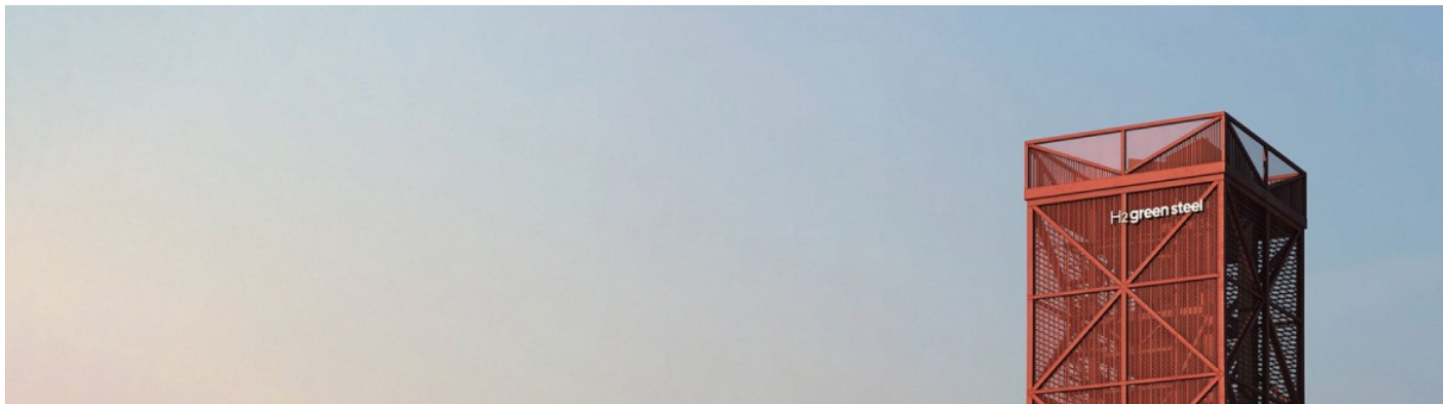


Australian green iron - a massive strategic opportunity



Green Metal Statecraft: Forging Australia's Green Iron Industry

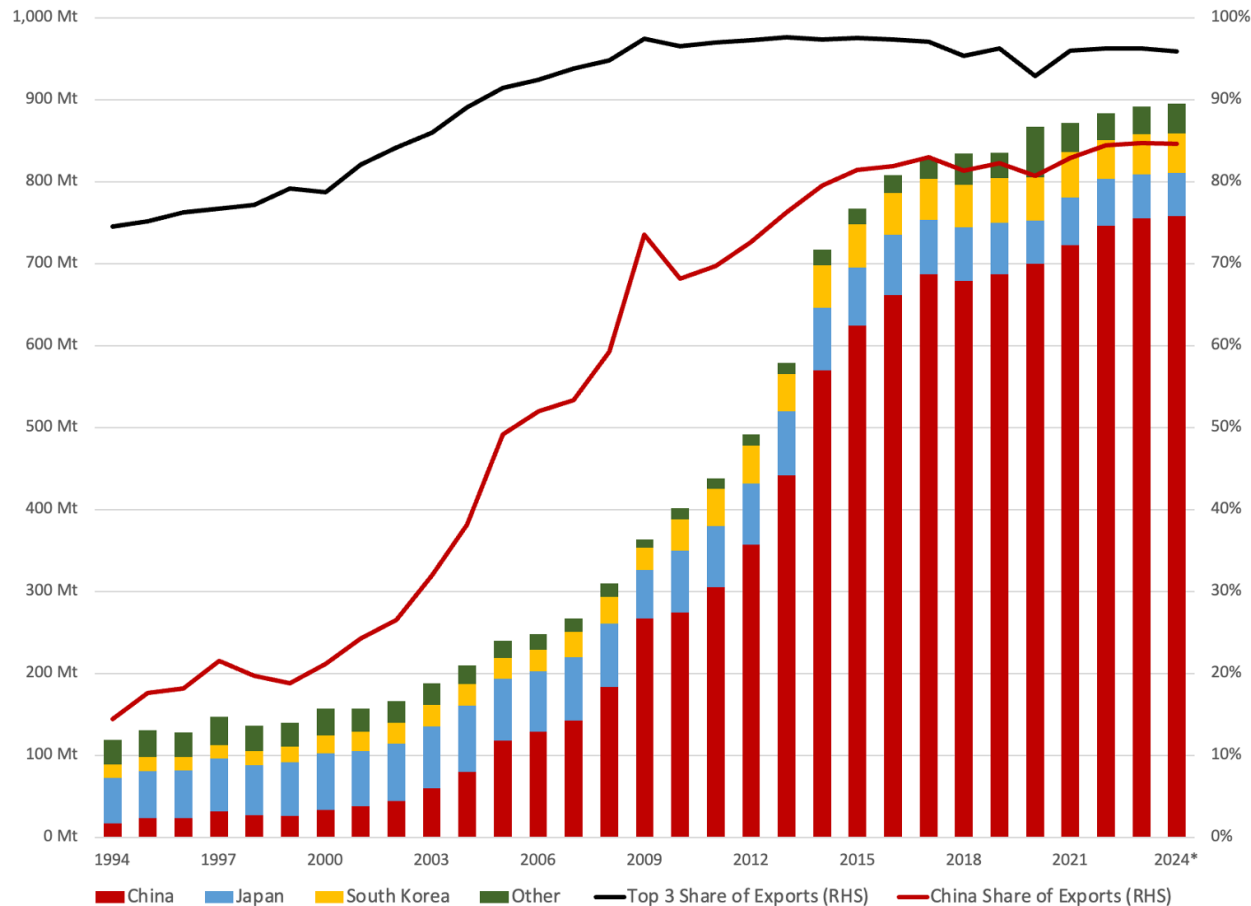
Matt Pollard, Net Zero Transformation Analyst, CEF
Tim Buckley, Director, CEF



https://climateenergyfinance.org/wp-content/uploads/2024/11/CEF_Green-Metal-Statecraft_FINAL.pdf

Australian green iron - a massive strategic opportunity

Australia's Iron Ore Export Markets



China accounted for 85% of Australia's A\$138bn pa of iron ore exports, having delivered +6% CAGR in volume over the last decade. This has been a key partnership of profound strategic value for Australia.

But Chinese steel production likely peaked in 2020 (China's steel output was -3% yoy in 2024), scrap use is rising, and China is diversifying into Simandou, Guinea (120Mtpa).

Source: Office of the Chief Economist

Note: 2024 is annualised from 1H2024

Hydrogen opportunities



2050 production target and milestones

Setting 5-yearly production milestones out to 2050 will provide the trajectory we will need to realise our goal to be a global hydrogen leader, with hydrogen providing both a critical component to our domestic decarbonisation strategy, and enabling new economic opportunities to emerge.

Australia will target producing at least 15 million tonnes of hydrogen annually, with a stretch potential of 30 million tonnes annually, by 2050.

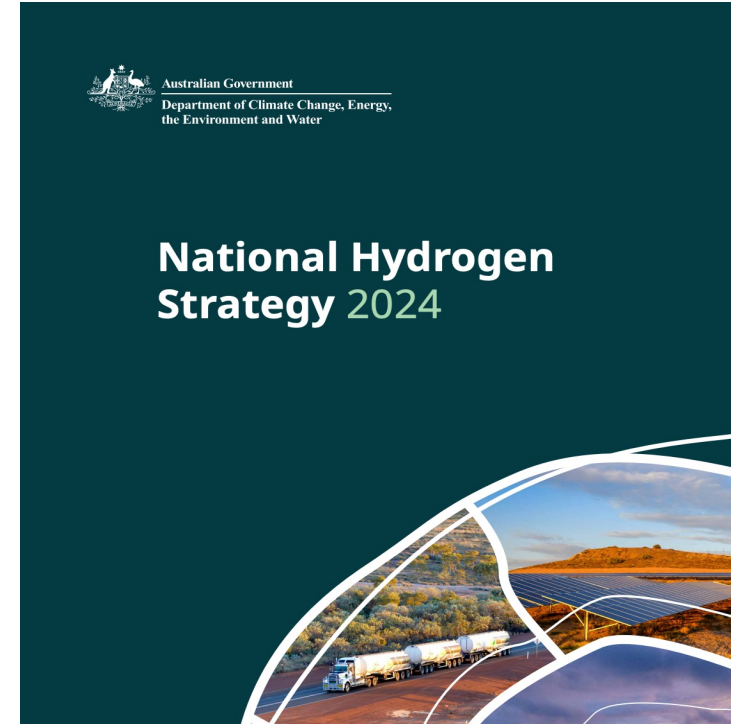


2030 export target

A base export target of 0.2 million tonnes of renewable hydrogen per year with a stretch potential of 1.2 million tonnes per year.

Future Made in Australia

- **Hydrogen Headstart** – A\$4bn to scale up large-scale green hydrogen production projects, & \$7bn production credits



中国氢能发展报告 2025

国家能源局能源节约和科技装备司
国能氢创科技有限责任公司

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Australia's Green Export Ambition: Critical Gaps Remain

Lack of Scale and Technology

CEF sees huge opportunity for Australia-China renewable energy cooperation, building on the decade-long solar R&D collaboration success story

As a first step, strengthened dialogue and exchange are needed to build mutual understanding and trust

Lack of Demand

CEF advocates for developing an Asian CBM





UNSW and JA Solar launch joint lab to accelerate the development and market deployment of advanced solar technologies - Dec 2024

新南威尔士大学与晶澳太阳能联合实验室成立，加速先进太阳能技术研发与市场应用



SunDrive Solar and Trina Solar Partner to Boost Australia's Solar Manufacturing- October 2024
天合光能与澳大利亚 SunDrive Solar 合作成立合资企业，推动澳大利亚太阳能制造业发展

CEF's Forthcoming Report Advocating for Carbon Pricing

Climate Energy Finance

April 2025



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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.

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