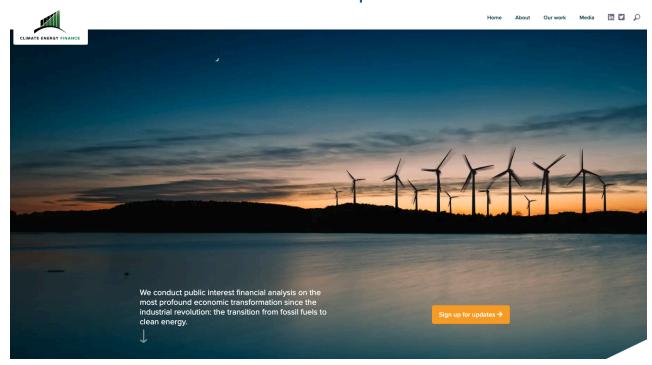


CLIMATE ENERGY FINANCE REPORT | 6 MONTHS JULY – DEC 2023



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1. INTRODUCTION

<u>Climate Energy Finance</u> (CEF) is a public interest think tank established in early 2022. Our key goal is to accelerate decarbonisation by hastening the shift of capital from fossil fuels to cleantech at the speed and scale required to solve the climate crisis.

We conduct high-impact probono financial analyses of the global energy transition, and leverage these within networks of influence to shape the public narrative, investment decisions, and public, industry and corporate policy. We consistently frame the accelerating transition to deflationary, zero-emissions renewables as the solution to the climate, energy security and energy prices crises. We also conduct daily private chatham house discussions with key stakeholders in finance, industry and government.

The key focus of our work is the implications of the energy transition for the Australian economy – specifically the massive opportunities for investments, regional employment and zero-emissions sector net exports, and the threat of inadequate policy ambition or delayed action in terms of ongoing deindustrialisation. We also track the domestic impacts of global shifts in energy policy and investment dynamics such as the US Inflation Reduction Act (IRA) and China's leadership on all aspects of decarbonisation. CEF sees the US IRA as a massive opportunity to shift the Australian narrative to one of opportunity, in terms of jobs, investment, exports and the pivot away from our historic overreliance on fossil fuel exports. And China's strides present onshoring and partnership opportunities for Australia in renewables and cleantech.

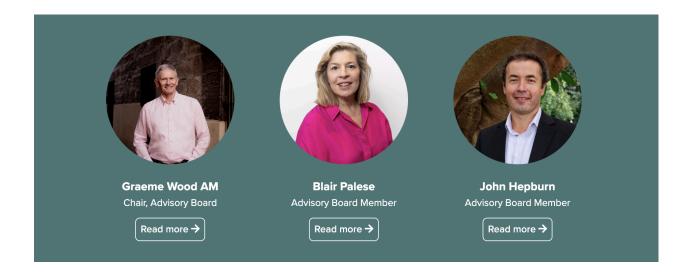
Beyond the US IRA and China, CEF's focus is the greater Asian region, primarily India, Japan and South Korea, as priority destinations for our exports, and key inbound investment partners for Australian industry. CEF also examines the convergence of technology trends in electricity, transport, mining, property and industry in accelerating decarbonisation.

During the second half of 2023, our team comprised 4.6 staff (see bios here):

- Tim Buckley, founder and director (Sydney)
- Annemarie Jonson, chief of staff and director of communications (Sydney)
- Matt Pollard, global EV & cleantech supply chain analyst (Brisbane)
- Nishtha Aggarwal, financed emissions analyst (Brisbane)
- Xuyang Dong, China energy policy analyst (Sydney)

Additionally, CEF hosts Paul Oosting as special advisor on reforms to Your Future Your Super (Sydney). In late October, Amanda Caldwell (Canberra), former head of communications for the Chief Scientist, joined CEF to work with CEF partner the Climate Capital Forum on an Australian response to the US's game-changing ~\$1tn energy transition investment program, the IRA.

CEF retained its high-level informal <u>Advisory Board</u> comprising leading entrepreneur and philanthropist Graeme Wood; founder and executive director of The Sunrise Project, John Hepburn; and philanthropy director of Ethinvest and founder of the Climate Capital Forum, Blair Palese, who was named in November as one of The Australian's Top 100 Green Energy Players.



2. SCOPE OF WORK: tactics | activities

See CEF's website for a full, accessible archive of our body of work and our media output

2.1 REPORTS, ANALYSES & SUBMISSIONS

CEF completed and published ~50 reports and analyses in the second half of 2023, including major proactive reports on key decarbonisation opportunities and rapid-response analyses at key intervention points. We highlight below some highlights with further details under the relevant Strategic Priorities, below.



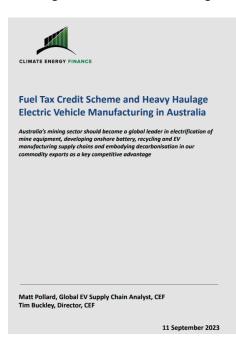


Tim Buckley Founder and Director Climate Fnerry Finance

Major publications included the July report <u>The Lights Will Stay On: NSW Electricity Plan 2023-30</u>, which made the case for the on-time closure of Australia's biggest coal power station, Eraring, modelling that closure on schedule in 2025 is entirely doable if the state incentivises continued installation at the current run-rate of 1.2 gigawatts (GW) pa of rooftop solar and front-loads at least 1.2GW annually of utility scale wind and solar to 2030.

Our report <u>An Australian</u>
Response to the US IRA, written
with CEF advisory board

member and CCF founder Blair Palese, mapped the scale of the opportunity and challenge the IRA presents for Australia, breaking down the \$100bn strategic capital investment



response required from the Australian government. This built on our <u>analysis of the impacts of the IRA in the US one year</u> after its passage through Congress.



Our September report, Fuel Tax Credit Scheme and Heavy
Haulage Electric Vehicle Manufacturing in Australia, argued
that Australia should cap the Federal diesel FTCS subsidy for
the mining sector at \$50m annually per consolidated group,
raising >\$14bn in revenue over FY24-FY30 to be invested in a
purpose fund within the National Reconstruction Fund to scale
domestic manufacturing and adoption of battery and electric
vehicle (EV) technology across Australia's mining sector.



Decarbonising China & the World: Chinese Energy SOEs Supercharge Renewable Investment in Response to the 14th Five Year Plan



China's energy titans, in sync with China's 14th Five Year Plan to cut emissions and transition the economy to clean energy, spearhead a global revolution, propelling us towards a greener and more sustainable future.

30 November 2023

Lead author: Xuyang Dong, China Energy Policy Analyst, CEF (xuyang@climateenergyfinance.org)
Tim Buckley, Director, CEF (tim@climateenergyfinance.org)
Annemarie poson. CEF (annemarie@climateenergyfinance.org)

Our major report, <u>Decarbonising China & the World:</u>
<u>Chinese Energy SOEs Supercharge Renewable Investment in Response to the 14th Five Year Plan</u>, released in November, tracked how China's massive energy-focussed State Owned Enterprises (SoEs) are shifting their huge capital expenditure in line with the central government's renewable energy and emissions reduction targets, dramatically accelerating decarbonisation of the world's second biggest economy. This spells structural decline for Australian coal exports, driving home again our need to pivot our economy to energy transition materials.

We were active in rapid-response analyses of a diverse range of key shifts, developments and news in energy policy domestically and internationally. For example, we reviewed <u>CBA's move</u> to match HSBC's global benchmark

policy on oil and gas financing. We provided commentary on <u>AEMO's quarterly dynamics reports</u>. We penned a critique of the <u>Productivity Commission's Industry Assistance report</u>, which misguidedly decried government investment in cleantech. We maintained a watching brief on <u>Adani</u>, commenting on new allegations post the Hindenburg expose of the alleged biggest fraud in world history.

We maintained a consistent high level presence on Australia's decarbonisation opportunities as a critical minerals superpower in the context of the US inflation Reduction Act (IRA). To take two examples, we explored Australia's opportunity in green iron and responded to the announcement by PM Albanese on his US state visit of a \$2bn boost to the critical minerals facility.

We continued our record of regular analyses of banks' financed emissions, reviewing the full year results and climate reporting of CBA, Westpac, NAB and ANZ, building our IP, readership and influence. And we maintained our schedule of monthly China Energy Updates, a key value-add, tracking China's extraordinary decarbonisation progress. (See relevant sections below for details.)

We also produced comprehensive submissions for key federal and state government consultations, including the NSW government's <u>Climate Change (Net Zero Future) Bill</u>, which was enhanced and then passed in November, incorporating many of the recommendations in our submission, including for an interim 2035 emissions reduction target; a consultation by NSW Treasury, the NSW Office of Energy and Climate Change and the Sustainable Finance Unit of the Commonwealth Treasury on a <u>nationally</u> <u>consistent approach to transition planning</u>; and a comprehensive response to <u>Treasury's Sustainable</u> <u>Finance Strategy</u> consultation.

2.2 CONFERENCES AND OTHER PRESENTATIONS

In the second half of calendar 2023 (2HCY2023), CEF director Tim Buckley expanded his program of presenting at multiple conferences and private engagements, with multiple requests from conference convenors and industry leaders for his participation.



Tim spoke on: Australia's renewables export opportunities at the ANU's Annual Energy Update convened by Professor Frank Jotzo; and on mobilising capital to leverage critical minerals supply chain diversity at ANU's Rare Earths Conference, featuring Federal Resources Minister Madeleine King; set out the challenges and opportunities the US IRA poses to Australia as it drives US and global decarbonisation at the ALP National Conference; addressed the National Manufacturing Summit on the global energy transition's implications for Australian

manufacturing; and spoke to the <u>Investment Innovation Institute</u> on how we can embody decarbonisation in our exports.

He presented at the September <u>Australian Renewables Industry Summit</u> in Canberra convened by SEC, alongside Ross Garnaut, ACTU president Michele O'Neil, energy innovator Dr Saul Griffith and other energy transition and industry leaders; at the <u>APAC Offshore Wind and Green Hydrogen Summit</u> in Melbourne, headlined by Federal Energy Minister Chris Bowen and Victorian Energy Minister Lily D'Ambrosio; at the <u>All-Energy 2023 Conference</u>, convened by the Clean Energy Council and featuring leaders including the CEO of ARENA,



Victorian Premier Jacinta Allan, Mike Cannon-Brookes and Australia's Climate Ambassador Kristin Tilley; the <u>Asia Solar Energy for Climate Change Conference</u>; the Hydrogen Conference in Brisbane; the Offshore Wind Conference in Melbourne; the SEC's Queensland Energy Conference in September; the Investor Group on Climate Change's annual conference (alongside analyst Nishtha Aggarwal); and the Export Council of Australia's <u>Super Exchange</u>: <u>Emerging Technologies & Sustainable Trade</u> Conference.

Tim presented privately on the transition investment landscape to many groups including Ethinvest, Altius, several leading major asset owner Boards, at the BCSDA's Member Only Event SUSTAIN 2023, Spring Bay Mill's ESG Summit, Macquarie University, AIGCC, Lonsec, and the Australian Defence College on Australia's strategic critical minerals opportunity.

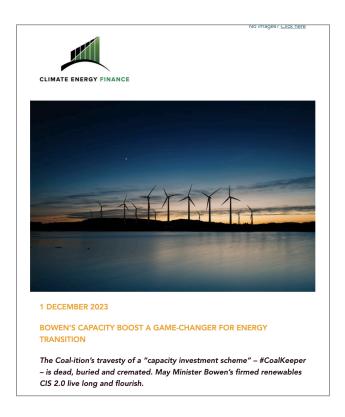
Tim was joined by Matt Pollard and Xuyang Dong to present to the Asian Investor Group on Climate Change (AIGCC), representing investors with \$35tn under management, on Australia's renewable and critical minerals opportunity; by Xuyang to present at invite-only Australia-China Relations Institute roundtable at UTS, and a Bank of America webinar with Asian investors; and by Nishtha Aggarwal to present at the Australian Accounting Standards Board's Annual Research Forum, on climate statements in the banking sector and climate-related finance risks.

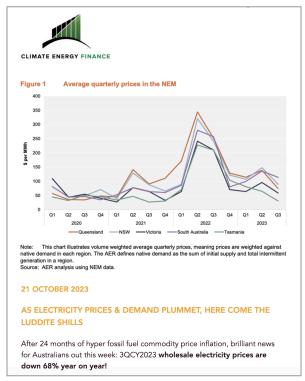
2.3 NEWSLETTER

Our <u>e-newsletter</u>, published every 2 weeks, reviews key CEF energy, climate and finance news, consolidating our analyses in digest form as a value-add to our stakeholder network.

From July to December our subscriber list grew from ~600 to over 1000 high-value subscribers, including policymakers, political and corporate decision makers and thought leaders. This growth has happened organically with zero marketing.

The newsletter consistently has open rates of +60%, massively exceeding industry standard <u>NGO enews</u> open rates of about 27% (closest comparable industry sector in available statistics) and reporting shows that some of our most avid readers are decision-makers across industry, finance and government sectors.









21 JULY 2023

_The lights will stay on in NSW, despite coal lobby's bleating on Eraring – here's how |

A relentless campaign is underway to pressure NSW Minister for Climate Change and Energy Penny Sharpe to delay the planned August 2025 closure of Australia's biggest coal power station, Eraring. The fossil fuel

lobby and its media arms are agitating on." This is a massive furphy and a ba



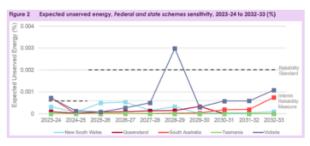




3 NOVEMBER 2023

WAITING FOR THE DOUGH: FEDERAL GOVERNMENT YET TO LAUNCH AMBITIOUS IRA RESPONSE

In a <u>major address</u>, Australian Treasurer Jim Chalmers this week prioritised a uniquely Australian response that "complements" but does not "copy" the US's landmark climate and energy policy, the ~\$1 trillion Inflation Reduction Act (IRA). The IRA has turbocharged the energy transformation in the US and attracted unprecedented private capital into the country, reindustrialising and greening the US economy and threatening to pull capital investment away from Australia at a critical juncture in the energy transformation.



1 SEPTEMBER 2023

NSW MULLS ERARING EXTENSION, WE URGE ON-TIME 2025 CLOSURE

August saw leaked reports that the O'Reilly Electricity Supply and Reliability Review in NSW will recommend taxpayer subsidies to extend the life of Eraring coal power station, Australia's biggest, beyond its closure date phased over 2025. CEF's joint response with the Clean Energy Investor Group (CEIG), Smart Energy Council (SEC), and Nexa Advisory made the case that this would be a massive retrograde step when the exact opposite is needed — an accelerated transition to firmed renewables. The issue is so contentious the NSW Government has decided to delay its decision, originally slated for August.

2.4 MEDIA

CEF is active in shaping public discourse, and was sought out for expert analysis in <u>hundreds of articles</u> and <u>interviews</u> across all our key areas of work in a broad range of influential outlets domestically and <u>internationally</u> including FT, SCMP, TIME, Bloomberg, Reuters, CNN, ABC, 9fax including the AFR, News Corp, Sky News and independents, e.g., Guardian, Renew Economy, AAP, AusBiz, Capital Brief, PV Mag.

Tim remained CEF's main spokesperson in the second half of 2023. We were a go-to source for media key to shifting the narrative and politics such as the AFR, SkyNews, ABC TV News Breakfast and 7.30.

For example, the AFR published <u>4 of our op eds</u> during July-December 2023. SkyNews' influential Afternoon Agenda with Kieran Gilbert, based in Parliament House and typically featuring federal ministers, came to us first for <u>commentary on Minister Bowen's Capacity Investment Scheme boost</u>, as did ABC TV News Breakfast for the <u>first interview on the COP pledge to triple renewables by 2030</u>.

ABC 7.30 approached CEF for interviews with Tim on both <u>federal renewables progress</u> and states' moves to <u>get off gas</u>. Likewise, ABC TV's The Business came to us for interviews with Tim on <u>battery manufacturing</u> and <u>Brookfield's multibillion dollar bid for Origin</u>.

International coverage also increased, including in the prestigious Financial Times, which ran a January 2024 story leading with our December 2023 <u>China State-owned Enterprises report</u>, the South China Morning Post, CNN, TIME magazine and elsewhere.



FINANCIAL REVIEW

Big Super shouldn't block Brookfield's bid for Origin Energy

AustralianSuper's spoiler act trashes a key consideration that, along with members' interests, the broader national interest should be paramount.

Tim Buckley Clean energy advocate





How Australia's largest fossil fuel subsidy could decarbonise mining

> Albanese's pittance for critical minerals means Australia's golden opportunity goes

All over bar the shouting: Fossil fuels finally named and shamed by COP as climate culprit

Rapid US coal exit has lessons for Australia as it faces down fossil lobby once again

> Bowen has put a rocket under big renewables. Small-scale market must be Tim Buckley

The Sydney Morning Herald

OPINION

Keeping the lights on at Eraring will only add to NSW energy risk





Woodside-Santos \$52 billion merger talk spurs competition, price concerns

REUTERS® World

Business

Markets

Sustainability

Legal

Breakingviews

Technology

Investigations

"It's a dramatic concentration of control," said Tim Buckley, a director at think tank Climate Energy Finance. "But I would emphasize it's coming from a point of weakness. It's coming from a point of ongoing massive underperformance."

As the parliamentary year winds up, the Government's opportunities to reassure voters it is there to help with cost-of-living pressures is being inhibited by other issues, but it has also been making progress in other areas like energy and climate

Chief political correspondent Laura Tingle reports.

FINANCIAL TIMES

China's 'dinosaur' state-owned enterprises make a green pivot

The groups are helping Beijing achieve its goals on cleaner energy

According to a recent analysis by analyst Xuyang Dong of Climate Energy Finance, a new Australian think-tank, China is on track to exceed Beijing's target for a 50 per cent boost in the installed capacity of renewable energy generation over the period of the state's 14th five-year plan, from 2021 to 2025.

While European and US politicians complain about Beijing's generous state support for manufacturing of clean tech products, Dong points to benefits stemming from China's centralised command and control structure as well as governance continuity.

The Canberra Times

THE AUSTRALIAN *

Governments's Capacity Investment Scheme 'doubles' on grid capacity of renewables

4:10PM November 23, 2023

Climate Energy Finance Director Tim Buckley says the announcing of the Capacity Investment Scheme is a "very significant move" by Climate Change and Energy Minister Chris Bowen as it "doubles" on grid capacity of renewables.



Investors and unions press Labor to invest \$100bn to compete in global green economy

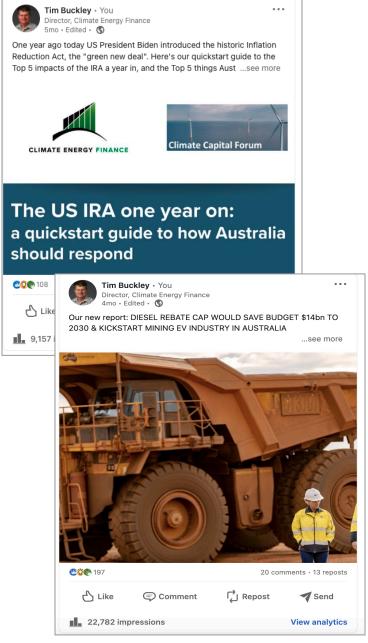
Climate Energy Finance's founder, Tim Buckley, said, "we need a far more integrated and 'big picture' approach to encourage greater investment, commensurate with the scale of this massive renewables and critical minerals and metals embodied decarbonisation export opportunity for

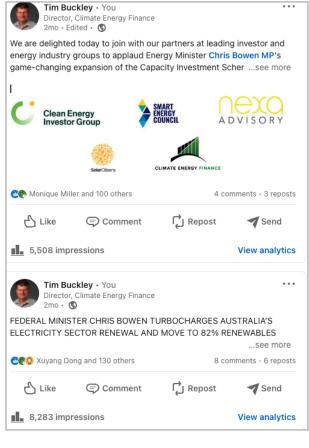
Nuclear energy is not viable for Australia, for a number of reasons

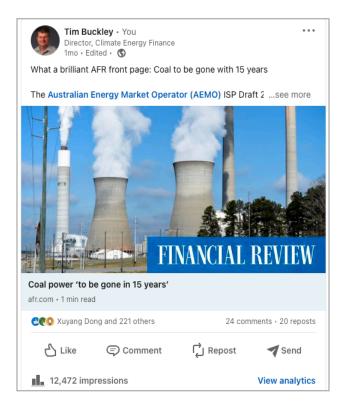
2.5 SOCIAL MEDIA AS A PUBLISHING PLATFORM

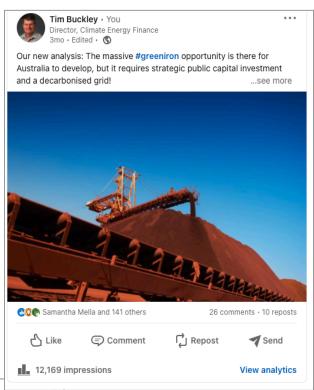
We maintained a program of intensive engagement on <u>LinkedIn</u>, which we use as a publishing and amplification platform.

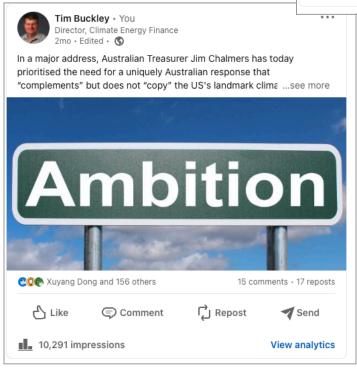
We have moved away from Twitter given its policy allowing hate-speech. In the period covered here we published over 180 pieces, mostly article-length analyses, to Tim Buckley's LinkedIn, nearly tripling the rate of the first six months. Our LinkedIn engagement delivered connections with key decision-makers in government, industry and finance, in Australia and globally. The analyst team also maintained a strong presence on LinkedIn.











2.6 BUILDING CROSS-SECTORAL NETWORKS & PARTNERSHIPS

We have maintained consistent formal and informal engagements with a diverse network of stakeholders such as key climate and energy movement and adjacent groups, including those with a special focus on shifting capital and decarbonising business, such as the Clean Energy investor Group (CEIG), Investor Group on Climate Change (IGCC), Asian IGCC (AIGCC), Business Council for Sustainable Development (BCSDA), Investment Innovation Institute (i3), Climate Capital Forum (CCF), Pollination, Climate 200, Beyond Zero Emissions (BZE) and Smart Energy Council (SEC). Indicative partner list follows:

Our partners

We work in a variety of ways with the following organisations and groups, as well as many others across finance, eNGOs, corporates and government.

Business Council for Sustainable
Development Australia
Clean Energy Investor Group
Investor Group on Climate Change
Asian Investor Group on Climate
Change
Investment Innovation Institute (i3)
Institute for Energy Economics &
Financial Analysis India
Pollination

—
Accenture
UBS

NTPC India

Tata Power India

Boundless Earth
Ethinvest Foundation
Graeme Wood Foundation
The Sunrise Project
Trawalla Foundation
—
Australian Conservation Foundation
Climate Action Network Australia
Climate Council of Australia
Climate Media Centre
Doctors for the Environment

Doctors for the Environment
Environmental Defenders Office
Environmental Leadership Australia
Equity Generation Lawyers
First Nations Clean Energy Network
Lock the Gate

Beyond Zero Emissions
Clean Energy Council
Climate Capital Forum
Green Building Council of Australia
Macquarie University
Rewiring Australia
Smart Energy Council
Superpower Institute
University of Sydney

—
Meridian Energy
Southern Green Hydrogen

We have also established ongoing inside-track dialogue with **corporate and finance authorities and networks key to advancing the energy transition agenda, as well as a number of the largest asset owners and managers** with hundreds of billions in assets under management. Tim Buckley continued **regular briefings to political leaders, advisors and decision makers**, key government transition authorities, and departments federally and at state level, including treasuries, federal and state departments of climate and energy, ministerial offices, and energy bodies.

With the CCF, SEC and other partners, Tim was a lead participant in a September delegation to Canberra as part of the **Australian Renewable Industry Summit** (see Conferences, above), during which he launched the CCF/CEF paper setting out policy recommendations for <u>An Australian Response to the IRA</u>. In November, Tim joined a Beyond Zero Emissions (BZE)-led delegation to Canberra for the **Australian**

Cleantech Spotlight featuring Australian firms innovating in battery technology, engaging with various political leaders including Senators Andrew Bragg and David Pocock.

CEF also had frequent engagements with cleantech industry leaders and peak industry bodies, and **worked closely with partner groups within the movement** including the Australasian Centre for Corporate Responsibility, ACTU, AWU, Australian Conservation Foundation, the Climate Council, The Australia Institute, WWF, and the Sunshot Initiative (a BCA/ACTU/WWF/ACF collaboration).

During 2HCY2023, we expanded our funding partner base to include the Trawalla Foundation, Boundless, Ethinvest and others. This builds on the support of the Graeme Wood Foundation and The Sunrise Project.

2.7 COLLECTIVE ENGAGEMENTS & ADVISORY BOARDS

CEF director Tim Buckley is on the **expert advisory board** of the Investor Group on Climate Change (IGCC) and Asian IGCC (AIGCC), and a member of the Federal Energy Minister's National Hydrogen Strategy Advisory Group, which meets monthly with the Energy Department and Treasury on key global and domestic energy issues. We retain active membership of and partnership with the Smart Energy Council (SEC).

CEF has also continued its work as a **leading member of the Climate Capital Forum (CCF)**, founded and led by Blair Palese, a group whose establishing members include the SEC, Rewiring Australia (Saul Griffith), SunDrive, MCi Carbon, Lautec, Ethinvest, Australian Impact Investments, and Energy Estate. Building on CCF's <u>roadmap to decarbonisation</u> launched in January 2023, which set out key policies to establish Australia as a zero-emissions trade and investment leader, in 2HCY2023 with CEF's input CCF published opinion pieces in <u>The Australian</u> on the drive for expanded investment in renewables, and <u>ACM/Canberra Times</u> on why PM Albanese's attendance at APEC was essential to position Australia in the rapidly decarbonising global geopolitical landscape.

CEF partnered with CCF and the SEC to <u>call on the government</u> to invest the budget surplus projected through MYEFO in policies and programs to advance renewable energy projects.

In 2HCY2023, **CEF coordinated joint interventions** on key issues and transition opportunities. We released a <u>joint statement</u> welcoming Minister Bowen's massively expanded Capacity Investment Scheme, co-signed by CEOs of the CEIG, SEC, Solar Citizens and Nexa Advisory, building on a <u>joint statement</u> we coordinated from these parties urging the NSW government to stand firm on the August 2025 closure date of coal power clunker Eraring. In response to the growing momentum around nuclear energy in Australia fomented by the Federal Opposition, we drafted and coordinated a joint statement marshalling the reasons why nuclear is not a viable zero-emissions energy solution for Australia, which was published as <u>full page print op ed in The Canberra Times</u>, co-signed by Saul Griffith/Rewiring Australia, the SEC, CCF, John Hewson, Mara Bun and Diplomats for Climate.

3. STRATEGIC PRIORITIES

3.1 AUSTRALIAN & GLOBAL DECARBONISATION

CEF adds value by anticipating, tracking and leveraging key trends in global and Australian decarbonisation to help accelerate the shift of capital to cleantech. Our Work and Media are on our website.

In 2HCY2023, as detailed in the sections below, we provided ongoing expert analysis of key international policy and investment developments such as the US IRA and other global policy shifts; decarbonisation trends and policy shifts in China and India; the acceleration of global capital to renewables; and domestic and global green finance and financial disclosure frameworks and instruments. We closely reviewed the dynamic geopolitics of the global industrial-energy-finance complex.

In Australia, we kept abreast of and had input into major climate and energy policy, investment and budget developments as noted above under Reports and Submissions, such as NSW' introduction of the





13 December 2023

POST MYEFO. THERE IS NO TIME TO WASTE TO STEP UP THE **ENERGY TRANSITION INVESTMENT PHASE**

The members of the <u>Climate Capital Forum</u> including <u>Climate Energy Finance</u> and <u>Smart Energy Council</u> welcome news from the <u>Treasurer and Finance Minister that their 2023-24 mid-year economic and fiscal outlook (MYEFO) for the Australian economy shows a much stronger and healther position than originally expected, with a deficit of just 51h forecast for 2023/24, after Labor's fiscal discipline has delivered Australia a <u>stumning surplus of S2018</u> 2022/25, the first in a decade, a massive tumaround vs the S78hn deficit inherited from the previous government. The Albanese government has rightly made cost of living relief and new housing affordability its top priorities, while reducing June 2024 net debt to a forecast \$491bn.</u>

Post the May 2023 budget's \$40bn allocation, the government has announced another \$3bn of unding for the transition to becoming a renewable energy superpower. This includes new

- funding for the transition to usconting a returnative time of the Critical Minerals Strategy; \$2bn of which is the doubling to \$4bn for the Critical Minerals Strategy that Prime Minister Anthony Albanese announced alongside US President Joe Biden; and \$500m is additional funding for the Northern Marstial Infrastructure Facility (NMEP).

 \$5m for capacity building in the Battery Supply Chain and Research Working Group to work with the United States Government on battery supply chains, battery manufacturing capabilities and battery technology research and development.

 \$556m over four years to unlock cleaner, cheaper and more reliable energy, as a critical enabler of future clean industries and broader decarbonisation, including the recently announced fourfold expansion of the Capacity Investment Scheme to \$2 gigwates (GW)

 - announced fourfold expansion of the <u>Capacity Investment Scheme</u> to 32 gigawatts (GW) of storage and renewables infrastructure, a key enabling policy to deliver on the
 - of storage and renewaties intrastructure, a key enabling policy to deliver on the Albanese Government's ambitious 82% renewables by 2030. \$82m for improved and standardised climate-related financial disclosures. A still pitfully small \$50m contribution at COP28 to the UNFCCC Green Climate Fund and a \$100m funding into the Pacific Resilience Facility (PRF) to support climate and disaster resilience, plus \$95m into Invested: Australia's \$E Asia Economic Strategy to 2040 to enhance Australian business links, trade and internships.

Climate Change (Net Zero Future) Act, and at federal level, MYEFO, and the Opposition's furphy on the viability of <u>nuclear</u> energy in Australia. We advocated for firmed renewables developments at state and federal level, including the transformative federal Capacity Investment Scheme; shaped the conversation on electricity sector decarbonisation developments such as the planned 2025 closure of Australia's biggest coal power clunker, Eraring, and Brookfield's bid for Origin; reviewed and commented on AEMO's work on energy transition and dynamics and AER electricity price projections; and made the investment case for electrification of everything.

We continued to maintain our advocacy for meaningful reform of fossil fuel taxation regimes and rebates; refuted the myth that we need new gas and applauded state moves to get gas out of new builds.



3.2 CRITICAL MINERALS / CLEANTECH SUPPLY CHAIN & AUSTRALIA'S RESPONSE TO THE IRA

In 2HCY2023, CEF has continued its momentum in strategically positioning itself at the forefront of identifying, mapping and amplifying the case for Australia's once-in-100-year opportunity to pivot from petrostate dependence on fossil fuel exports and oil imports, to value-add our world-leading critical minerals and energy transition materials onshore pre-export using our abundant renewables – the key means to establishing Australia as a global zero-emissions trade and investment superpower.

Over this period, CEF published its call for an Australian Response to the US IRA in collaboration with the Climate Capital Forum, Smart Energy Council, Clean Energy Council, the ACTU, ACF and Rewiring Australia, calling for \$100bn of government strategic public-interest capital investment into an Australian Renewables Industry Package and value-adding critical minerals industry to crowd in the necessary \$200-300bn of private capital. This represents a call commensurate with Australia's opposition to develop world-leading decarbonised critical mineral supply chains to replace the eventual decay of fossil fuel exports that have propped up Australia's economy for decades.

Highlighting the imperative to cultivate a domestic investment environment that will turbocharge Australia's critical minerals and cleantech industries, we published a series of articles, reports and op-eds, including:

- An Australian IRA response to unlock the <u>massive green iron opportunity</u> as significant global capital is directed into transforming the global steel industry into a decarbonised industry.
- A response to the lackluster \$2bn Critical Minerals Facility pledged by the Federal Government, whilst the US\$1 trillion IRA and DOE LPO package catalysed more than US\$500bn in less than one year.
- A response applauding Treasurer <u>Dr Jim Chalmers' prioritisation of an Australian IRA response</u>
 across four key new-economy industries including critical minerals, cleantech manufacturing,
 hydrogen / ammonia production and decarbonised metals including green iron. However, given
 the speed and scale of the US IRA, CEF called for a more aggressive approach deploying \$100bn
 of public capital to seize the opportunity presented to Australia.
- A <u>guest contribution</u> by Climate Capital Forums' Founder, Blair Palese, on the need to tackle cost
 of living, energy transition and climate change crises, whilst positioning Australia as a
 zero-emissions trade and investment leader.
- A <u>joint statement</u> (as noted above) with CEIG, SEC, Solar Citizens and Nexa Advisory commending
 Federal Energy Minister Chris Bowen's Capacity Investment Scheme to underpin the deployment
 of dispatchable renewable energy and storage across Australia.

As noted we have continued active engagement with media across all areas of decarbonisation, electrification, onshoring cleantech manufacturing and scaling the deployment of national-interest public capital to crowd in private investment across clean energy and mining supply chains eg:.

- Articles in <u>The AFR</u> and <u>Australian Manufacturing</u> on the failure of Productivity Commission's argument against public capital investment in cleantech manufacturing and deployment.
- Guest article on Renew Economy with Blair Palese on what Australia can learn from US IRA one-year on, highlighting the speed and scale that private capital has been turbocharged by the subsidy and loan packages.
- Extensive media coverage on the joint call for \$100bn in strategic public capital to unlock the energy transition of Australia, including <u>AFR</u>, the

FINANCIAL REVIEW

Labor pushed to create \$100b 'Australian inflation reduction act'

Tom McIlroy Political correspondent



Guardian, ABC Radio National, and the Lowy Institute's Interpreter.

As part of the broader IRA response, CEF has also concentrated on removing the headwinds to electrification and the replacement of high-emissions, inflationary diesel and petroleum imports used in mobile mining equipment and road transport – namely Australia's continued subsidisation of diesel via the fuel tax credit scheme.





Led by analyst Matt Pollard, CEF published a comprehensive 50 page report highlighting the significant tax revenue the Federal Government has foregone to subsidise the import of billions of litres of diesel fuel to Australia's largest and most profitable, legacy bulk-commodity majors, and identified the colossal opportunity to position Australia as a world-leading renewables and energy transition materials superpower by redirecting government revenue that would be gained from fuel tax credit reform. This resulted in coverage across Australian media in articles, radio and TV

appearances by co-author, Tim Buckley including <u>Canberra Times</u>, <u>Renew Economy</u>, <u>Radio National</u>, and <u>ABC TV News</u> channel.

Following the publication of our <u>A Critical Minerals Agreement for Australia and South Korea</u> report at the end of June 2023, also led by Matt Pollard, CEF has continued to engage with media and stakeholders on the need to partner with world-leading battery manufacturers and metal/mineral refiners to crowd-in foreign investment into Australia's domestic industry. The report generated extensive media coverage including <u>Canberra Times</u>, <u>AusBiz TV interview</u>, <u>Renew Economy</u>, <u>Sky News TV</u>, <u>The Australian</u>, <u>The Age</u> and <u>PV Magazine</u>.

3.3 FINANCED EMISSIONS

Following up our FY22 climate finance analyses, CEF completed FY23 reports on the Big 4 banks – <u>CBA</u>, <u>NAB</u>, <u>Westpac</u> and <u>ANZ</u>. Led by analyst Nishtha Aggarwal, we applied the same four material





CQ♠ Luke Schoen and 78 others 11 comments • 5 reposts

decarbonisation criteria established the previous year, which we deem to be critical indicators of the banking sector's net zero transition planning and progress – energy loanbook trends, climate solutions financing, sector targets, and customer transition plans.

This continues to be a significant value-add – we are not aware of any other think tank systematically scrutinising the Australian banking industry's major players from an expert finance and climate analysis perspective.

With transition planning becoming a key focus of the Federal Government's Sustainable Finance

Strategy, and with the corporate regulators (ASIC, APRA, ACCC, Council of Financial Regulators) getting materially more involved, we expect our banking climate finance assessments to become valuable market information for investors.

On that note, Nishtha Aggarwal had the opportunity to consult with the NSW Treasury, the NSW Office of Energy and Climate Change and Commonwealth Treasury to provide input into the decision on whether a nationally consistent approach to transition planning is needed, producing a submission <u>Net Zero Transition Planning for Financial Institutions</u>.

Nishtha attended the Westpac and ANZ FY2023 AGMs, putting questions to the Board and Executive regarding the banks' transition plans (audio here: <u>Westpac</u> and <u>ANZ</u>).

A large component of our finance work was inside track, as we exerted influence behind the scenes to accelerate the shift of capital from fossil fuels to cleantech and maintained extensive engagements with financial institutions, groups working on corporate responsibility and clean energy investors.

We continued a watching brief on international banks' fossil fuel finance, with a view to identifying world's best practice and encouraging Australian banks to follow suit. For example, we reported on <u>CBA's</u> FY23 policy on financing oil and gas comparing it with global leader HSBC.

We played a more focussed role on assessing climate finance in the built environment this year, e.g. via the op ed, 'Big banks take on greening Australia's \$10tn housing stock', which was widely shared. We also published a case study on



the <u>Woolworths Green Bond</u> to assess the effectiveness/integrity in this bond's impact on reducing real emissions.

We continued reviewing and commenting constructively on the governance of the Australian Sustainable Finance Institute (ASFI), working alongside influential expert finance stakeholders to act collectively and strategically to strengthen the credibility of the forthcoming ASFI taxonomy. This culminated in an op ed, <u>Australia's sustainable finance taxonomy: Good Governance is a can of worms</u>. We will continue to play a constructive and interrogative role as the Taxonomy development continues into this year.

We contributed insights to a number of external papers including: <u>'New Scenario Narratives for Action on Climate Change'</u> (by the UK's Universities Superannuation Scheme and the University of Exeter), the ACF's <u>'From laggards to leaders: An assessment of Australian banks' climate commitments'</u>, and the Climate Council's <u>'Dollars and Sense: Mitigating Climate Risk in a Warming World'</u>.

We intend to continue our focus on climate integrity, pursuing and encouraging efforts towards achieving the standards set out by the <u>United Nations High Level Expert Group</u> in the Australian climate finance landscape.

3.4 YOUR FUTURE YOUR SUPER BENCHMARKS

With almost a trillion in capital required to decarbonise Australia's economy, and ~\$3.5trillion in Australia's pension capital pool, one of the world's biggest, Climate Energy Finance has prioritised ensuring the superannuation sector fully engages in the energy transition, engaging Paul Oosting to work on reform of the Your Future Your Super benchmarks, introduced by the Morrison Government in 2020. These force superfunds to skew investments towards a backward view of the largest equities, banks, retailers, gas companies, toll roads and airports, recently heavily skewed to fossil fuel companies as a result of temporary windfall gains due to Russia's war on Ukraine.

This redirection of capital is stifling innovation, slowing the transition of the Australian economy and putting superannuation returns at risk. There is a narrow and closing window for reforms to be delivered prior to the government entering pre-election mode ahead of the next federal election.

In December, Treasurer Jim Chalmers announced the government will run a consultation to improve the superannuation performance test amid the growing concerns that it disincentivises sustainable investment. This opens up the opportunity for the reforms to be delivered inside the political window.

3.5 CHINA

We continued to put the context around the biggest story in global cleantech – China's world leadership and dominance – as energy policy and investment increasingly shape geopolitics and international relations, and vice versa, against a backdrop of escalating climate change.

We established a Monthly China Energy Update series publishing 8 monthly updates from January to October (with Nov and Dec figures out Jan 2024) based on data published by China's National Energy Agency and National Bureau of Statistics. These review China's newly installed capacity, national installed capacity, and electricity generation mix, as well as highlighting policy developments, significant renewable investment and projects, and China's role in global renewable supply chain.

We found that more than 80% of China's newly added installed capacity has been zero emissions capacity each month, and that the portion of zero emissions capacity in the total national installed capacity rose from 49% to 51% in 2023. We forecast that with the speed of increase of China's newly added zero emissions capacity China is already ontrack to more than treble its variable renewable energy capacity by 2030 even at the high 2023 install rates. A trebling of China's total renewables capacity by 2030 to 3,500GW would require 30GW of wind and solar per month.

CEF produced a major report, led by Xuyang Dong, on China's massive energy-focussed State Owned Enterprises (SoEs): Decarbonising China & the World: Chinese Energy SOEs Supercharge Renewable Investment. We found that SoEs are shifting their huge capital expenditure in line with the central government's RE and emissions reduction targets, dramatically accelerating decarbonisation. China has already met its 2025 target requiring that 50% of installed capacity is renewable energy, and this target is likely to be exceeded by a significant margin. China's domestic CO2 emissions could also fall in 2024 with its record increase in installation of zero-emissions energy sources and a recovery in hydropower, combined with enormous gains in electrification of transport and electric vehicle (EV) adoption, foreshadowing a structural plateauing of China's emissions well before the formal target of a peak before 2030. This spells structural decline for Australian coal exports, driving home again our need to pivot our economy to value-adding critical minerals and onshoring clean manufacturing.

Media coverage of our China work was extensive in 2HFY2023, including the FT's feature on our December China report, multiple articles in the AFR, and other diverse coverage including the Canberra Times and the West Australian via AAP, Australian Financial News (Chinese-language media), SBS mandarin. Xuyang's commentary for SCMP on Australia decoupling from China was widely republished on major media platforms inside China, including Australian Chinese Daily, Reference News Tencent, Sohu, 163, Sina Finance, and Shanghai Observer, her oped for 9DashLine was quoted by Bloomberg, and she co-authored an op ed with Ember on China's methane emissions reduction action plan, published in RenewEconomy. We also produced detailed analyses on China including in the lead-up to COP: China's Leadership in Cleantech Manufacturing is the Necessary Precondition of COP28 Goal to Triple Global Renewable Energy Capacity by 2030, and Forget About COP, Focus on China for Climate & Capital Media.



Two new reports, from global energy consultancy Wood Mackenzie and
Sydney-based Climate Energy Finance, show that China is building wind and
solar at twice the rate of the US and Europe combined, and also leading the
way with huge energy storage installations.

descend on Dubai for the <u>United Nations climate change conference</u> (COP28) and wrangle over phasing out fossil fuels and supporting developing countries' clean energy projects.



South China Morning Post

"Diversifying away from China in the supply chain would be tough," said **Dong Xuyang**, an analyst at Climate Energy Finance, an independent think tank in Sydney.

"Whether people like it or not, the reality is that China is dominating the global renewable industry as a result of insufficient effort from the rest of the world. And China is producing these products at the scale and speed the global energy transition needs."

Australia at back of the pack on methane as China announces action plan



3.6 INDIA/ADANI

The first six months of 2023 cemented Tim Buckley's leadership globally as an India and Adani expert, with leading global media outlets including NYT, WSJ, SCMP, Forbes, FT, TIME and Bloomberg approaching CEF daily for comment, as the explosive Hindenburg report alleged Adani has perpetrated the "world's largest corporate con" and we produced 6 comprehensive analyses on the fallout.

Activity on Adani and India moderated in the second half of CY2023. We produced a <u>response to new bombshell stockmarket fraud allegations</u>, and provided commentary on India's energy transition and Adani for various outlets including <u>TIME</u> magazine, <u>CNN</u> and <u>Capital Monitor</u>.



Reuters reported that India also plans to stop building new coal-fired power plants—apart from those already in the pipeline. Not making any new commitments to coal is good news, says <code>Tim Buckley</code>, the director of the think thank Climate Energy Finance, but there's a downside for those affected by existing operations: "No new coal' means you rush to complete all the mines that are already there," he said.

"If you're a villager in that coal mine, you're screwed," he added.



Analysis by Diksha Madhok, CNN

© 8 minute read · Updated 1:07 PM EST, Thu December 7, 2023

"There has probably never been a better time than now for India to grow more sustainably," said Tim Buckley director of Sydney-based think tank Climate Energy Finance.

That's because of two main reasons: the world is seeing unprecedented levels of investment in clean technologies following Russia's invasion of Ukraine and solar energy is getting significantly cheaper, he explained.

We continue to keep a watching brief on India's decarbonisation, which is critical to global efforts to address climate change, and the opportunities for far stronger Australian collaboration with India.

4. LOOKING FORWARD

CEF is focussed on developing interventions to drive the narrative of the accelerating global energy transition and the need for the financial sector to pivot its financing exposures accordingly. Our focus is about moving capital at the speed and scale required, including from the globally significant financial institutions, be that asset owners, asset managers, the big 4 consumer banks in Australia and Macquarie Group, as well as via strategic national interest public capital through government investment programs.

We intend to stay independent, focussed on the public interest, small and agile, delivering an oversized impact in alignment with the view that once the right policies are in place, global finance can solve the climate crisis before it is too late. We also aim to use this positive narrative and cautious optimism to motivate and crowd-in solutions, a more powerful and constructive influencer than fear.

Contacts: Tim Buckley <u>tim@climateenergyfinance.org</u> | Annemarie Jonson <u>annemarie@climateenergyfinance.org</u>