

Powering a path towards decarbonising Australia

New research highlights the coordinated efforts and level of investment needed in the National Electricity Market if Australia is to meet Paris Agreement commitments

17 April 2023, Sydney: The Clean Energy Investor Group (CEIG) released research today highlighting that investment of \$421 billion is needed for Australia to align with growing global investor ambitions for limiting climate change to 1.5°C.

New modelling by consulting firm Baringa, in the *Decarbonising Australia: Accelerating our energy transition with a credible 1.5°C scenario* report, highlights a credible path and the coordinated efforts needed across the National Electricity Market (NEM) to limit global temperature increases to 1.5°C. The modelling shows that at present, Australia's current scenario planning for the NEM is not consistent with global commitments for 1.5°C.

The report outlines the additional steps that Australian government, the electricity sector, market bodies and the investment community need to take if they are to deliver emissions reductions in line with a 1.5°C objective. Decarbonisation of the electricity sector creates the biggest opportunity to drive economy-wide decarbonisation, most importantly across the transport and industrial sectors.

Simon Corbell, CEO, CEIG said: "Decisive policy action by the federal, state and territory governments, has set Australia up to be within striking range of a 1.5°C aligned future."

"Accelerating emission reductions in the National Electricity Market is the next step we need to take, but the scenario planning must be commercially credible with the investment community."

"Through a continued and coordinated effort across government, industry and private markets, we can unlock \$421 billion in total investment, ensuring Australia is aligned with a growing global investor effort to make 1.5°C the benchmark for action."

Peter Sherry, Partner - Energy and Resources, Baringa said: "Our modelling outlines a practical and commercially credible scenario for decarbonising the NEM in line with staying below 1.5°C and this has been validated by investors. While there are certainly near-term challenges, there is huge opportunity to attract major global investment and paint a bright future for Australia, powered by renewables."

This ambitious, yet credible transition plan is projected to deliver long term lower wholesale energy prices in the medium to long term. To deliver on this credible plan, CEIG has identified six priority actions:

- **The Electricity sector needs a carbon budget** – This will help governments and market bodies accelerate transition in line with targets.
- **Transition requires national coordination** – Governments, industry and communities must work together to accelerate coal closures and renewables roll out.
- **Investment in long duration storage** – This strengthens reliability and security during infrequent renewable energy droughts.

- **Support for offshore wind development** – Offshore wind offers significant volumes but is unlikely to be cost-competitive in Australia until the 2040s without policy support.
- **Accelerating network infrastructure build** – Transmission buildout must be accelerated.
- **Skills, supply chains and communities** – Delivery of infrastructure projects will be challenging with international competition for resources. Communities must be supported and empowered through the transition.

You can download a copy of *Decarbonising Australia: Accelerating our energy transition with a credible 1.5°C scenario* here: ceig.org.au

ENDS

For further information or to arrange an interview; please contact:

Jacquie Potter

Jacquie.potter@ogilvy.com.au

+61 414 449 070

Notes to editors:

Investor support:

Tim Buckley, Director of independent public interest think tank Climate Energy Finance, and leading finance and energy analyst said:

"As the CEIG/Baringa report demonstrates, to deliver on a 1.5°C alignment Australia needs to dramatically lift its momentum on investment in new zero emissions electricity capacity, including grid modernisation and a range of firming technologies, and to facilitate the retirement of all coal power by 2033. This will drive a massive \$43bn social benefit for Australians in terms of the value of avoided emissions, whilst also buying Australia more time on hard to abate sectors. This requires an unprecedented level of public-private coordination and strategic planning in the national interest, including with respect to onshore cleantech supply chains. The financial resources are available. We now need the confidence in planning and the right policy aspiration to unlock already existing technology solutions and leverage our transformative, once in a hundred year decarbonisation investment opportunity".

Ross Israel, Head of Global Infrastructure, QIC said:

"The Baringa 1.5C scenario shows that a clear path to a Paris-aligned decarbonisation is achievable via coordinated effort. It importantly highlights the huge opportunity for the investment community with the majority of the additional \$421 billion of investment being required in proven technologies of wind, solar and batteries. QIC welcomes this detailed analysis and its contribution of how Australia can achieve its decarbonisation goals."

Investment in transmission:

Total public investment of \$41B is only \$2B higher than AEMO's current ISP. But elements of this investment need to be brought forward in the 1.5°C Investor Credible scenario.

Renewable buildout: Total renewable energy buildout is \$116 billion higher than the AEMO ISP Step Change scenario, realising a total of \$421 billion. Renewable energy buildout by region is linked to the timing of coal closures and demand growth, but the model also allows for new build in one region to service the needs of a neighbouring region via interconnection.

New South Wales key numbers:

- NSW deployment needs to accelerate due to the retirement of the Liddell and Eraring power stations.

Victoria key numbers:

- Victorian deployment of onshore wind and utility-scale solar PV is lower than NSW and Queensland, given greater land and network constraints. The Victorian Government is focused on developing an offshore wind industry that will deliver projects by the end of the decade.

Queensland key numbers:

- Queensland needs to accelerate wind and solar buildout in the short term, increasing to about 2.5 GW per year for wind and 1 GW per year for solar.

About the report

Decarbonising Australia: Accelerating our energy transition with a credible 1.5°C scenario was commissioned by Boundless Earth. The research and modelling was completed by Baringa in November 2022 in consultation with the investor community. Clean Energy Investor Group acknowledges the support of Boundless Earth to present this report to key stakeholders.

About the Clean Energy Investor Group: The Clean Energy Investor Group presents 21 domestic and global investors with a combined Australian portfolio value of over A\$38 billion and more than 76 clean energy assets under management. It is an investor body, representing the unique perspective of clean energy investors to regulators, policy makers and the broader energy sector. <https://www.ceig.org.au/>

About Baringa: Baringa is a global management consultancy operating across sectors including energy, financial services, consumer products and services and government. We set out to build the world's most trusted consulting firm – creating lasting impact for clients and pioneering a positive, people-first way of working. We work with everyone from FTSE 100 names to bright new start-ups, in every sector. We have hubs in Europe, the US, Asia and Australia, and we can work all around the world – from a wind farm in Wyoming to a boardroom in Berlin. Find us wherever there's a challenge to be tackled and an impact to be made.