

The image features a large, vibrant green leaf with a detailed vein structure, which is superimposed over a white map of Australia. A white rectangular box with a thin black border is positioned on the left side of the leaf, containing the main title text. The overall composition suggests a focus on environmental or sustainable investment themes.

**AUSTRALIA:
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AUSTRALIA: UNIQUELY PLACED FOR TRANSITION INVESTMENT

At COP28, commencing 30th November 2023, the importance of financial flows to climate solutions will once again be an important topic. A long-term goal of the Paris Agreement¹ is to ensure that finance flows – both public and private – are consistent with low-carbon, climate-resilient development. Many developed economies are stimulating financial flows to transition and adaptation investments such as the Inflation Reduction Act in the US, and we believe Australia has an important role to play.

Australia is in a unique position as the world strives to respond to climate and nature challenges. In particular, Australia’s combination of vast natural resources (mineral, renewable and natural capital related), advanced and globally integrated financial markets and strengthening climate policy and regulation creates numerous climate-related investment opportunities.

On November 3rd 2023 the Federal Treasury released Australia’s ‘Sustainable Finance Strategy’². This strategy confirms that the Australian government is focused on **‘Positioning Australia as a global sustainability leader’**.

“Australia’s strong and stable financial system, respected regulators, sophisticated investors and significant sustainability-related capabilities and opportunities mean we have a lot to offer.”

Sustainable Finance Strategy Consultation Paper, November 2023

¹ The Paris Agreement’s central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

² [Sustainable Finance Strategy Consultation Paper, November 2023](#)

THREE OPPORTUNITIES STAND OUT AS COMPELLING IN THE AUSTRALIAN CONTEXT:

CRITICAL MINERALS

SOLAR AND ELECTRIFICATION

NATURAL CAPITAL INNOVATION

CRITICAL MINERALS

Australia’s geology alone requires that we play a key role in the energy transition. Global demand for critical minerals materials such as lithium, copper, nickel, cobalt and graphite – key ingredients in solar, wind, electricity networks, electric vehicles (EV) and utility battery storage components – is primed to increase rapidly.

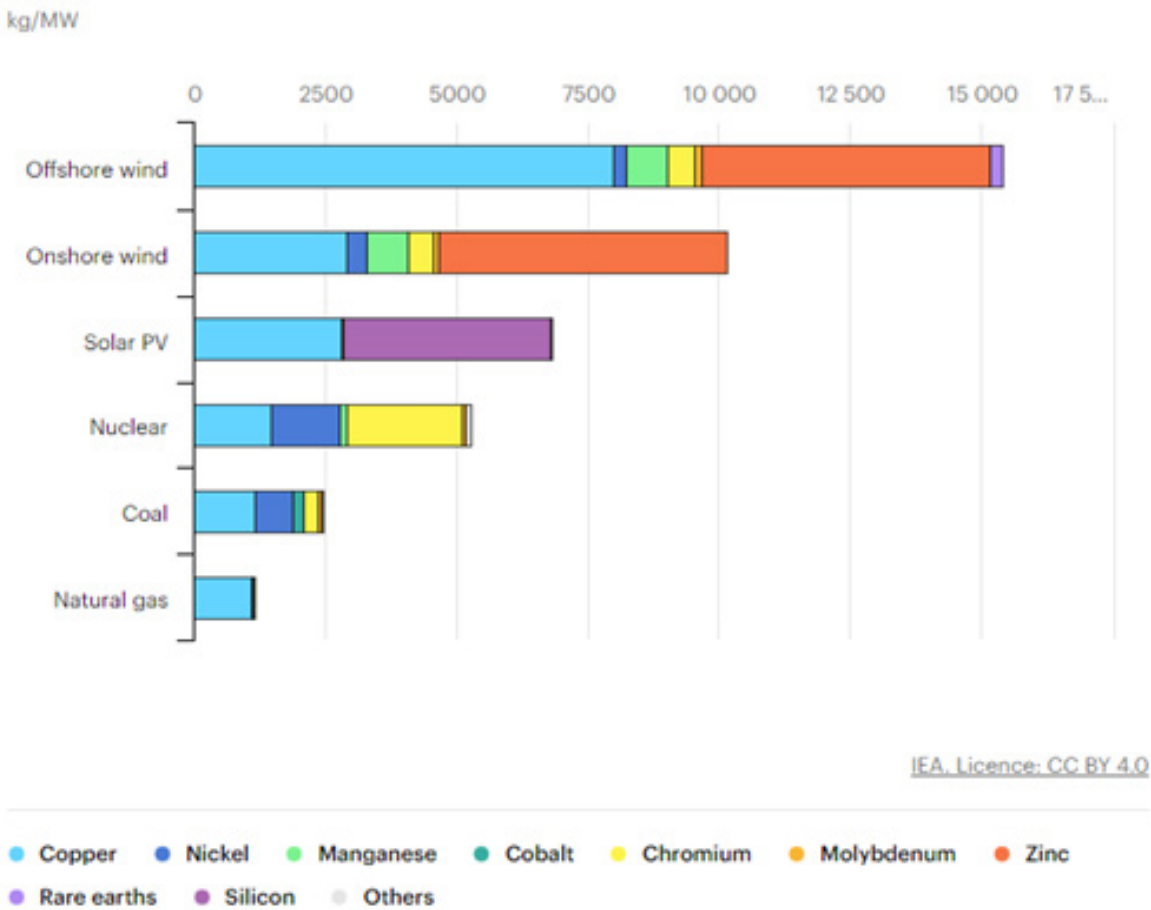


Figure One: Minerals used in clean energy technologies compared to other power generation sources³

Australia has a stable political environment, a strong mining industry, and a well-established regulatory framework, making it a reliable source of critical minerals. Australia’s reserves are in the top five for 21 key world economic resources including cobalt, lithium, and vanadium⁴.

³ IEA, The Role of Critical Minerals in the Clean Energy Transition

⁴ Australian Trade and Investment Commission, Critical Minerals

Australia is also the world's:

- Largest lithium exporter, and was responsible for 53% of global production in 2022⁵
- Second largest cobalt producer, with around 19% of the world's cobalt resources⁶

The Australian government and industry stakeholders are actively working to capitalise on this opportunity and position the country as a key player in the critical minerals market. In 2023 the Federal Government has released:

- The **Critical Minerals Strategy**⁷ which will support the development of Australia's upstream critical minerals mining and processing sector. The strategy calls out the ability of Australia's critical mineral industry to create jobs and national wealth, therefore attracting investment is identified as one of the strategy's six key focus areas.
- A draft of the **National Battery Strategy**⁸, which is currently incorporating consultation feedback. Complementing the Critical Minerals Strategy, this focuses on the downstream manufacturing and assembly components, capitalising on Australia's existing advantages and highlighting the role of Australia's mining sector in the lithium-ion battery global value chain.

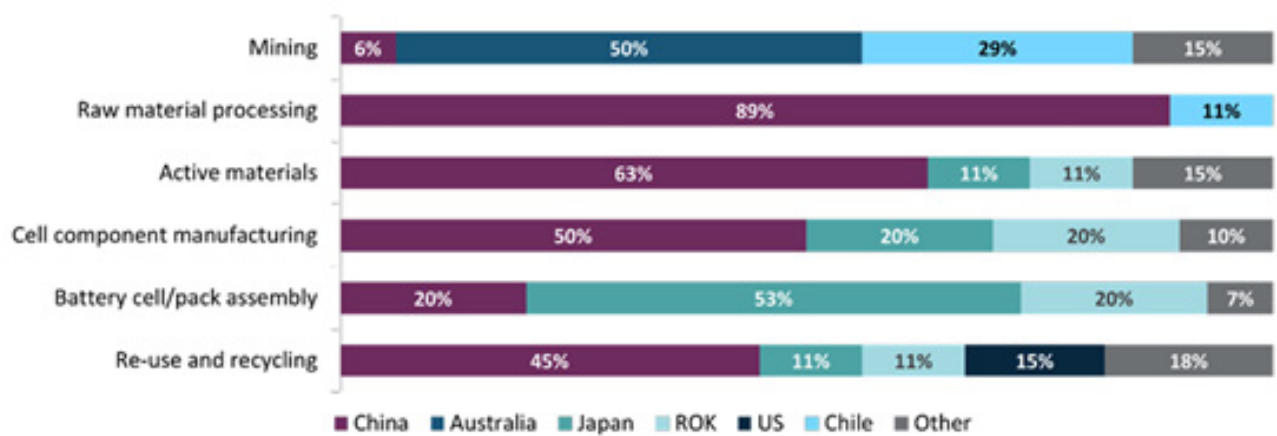


Figure Two: The global lithium-ion battery value chain segments and market shares⁹

These strategies sit alongside the Federal Government's \$15bn **National Reconstruction Fund**, established as the primary vehicle to reboot domestic manufacturing and maintain capital investment in Australia to support growth of the clean energy industry.

Investors focussed on deploying capital to support the energy transition should consider allocating capital to critical mineral projects and associated supply chain infrastructure, such as EV charging technology and utility battery storage components. The investment potential in this opportunity is evident now and looks likely to persist in the medium to long term. A PwC Australia analysis identified 30 investment-ready projects in Australia spanning lithium, nickel, cobalt, graphite, copper, vanadium and rare earths that have all completed pre-feasibility studies at a minimum. The average post-tax internal rate of return for the pool of projects analysed was 26%¹⁰.

⁵ Office of the Chief Economist, Resources and Energy Quarterly March 2023

⁶ Office of the Chief Economist, Outlook for Selected Critical Minerals 2021

⁷ [Critical Minerals Strategy 2023-2030](#)

⁸ [National Battery Strategy Issues Paper](#)

⁹ Accenture, Future Charge: Building Australia's Battery Industries

¹⁰ PwC Australia, Accelerating Australia's Critical Mineral Opportunity

SOLAR AND ELECTRIFICATION

The Australian continent has the highest solar radiation per square metre of any continent, and consequently some of the best solar energy resource in the world¹¹. Australia has set a goal of generating 82% of its electricity through renewable sources such as solar and wind by 2030, and solar energy is expected to be a significant contributor to achieving this target.

Australia's residential solar capacity has grown exponentially since 2016 as a result of high residential adoption and increasing regulatory backing. It is estimated that rooftop solar accounted for more than 25% of Australia's renewable energy generation in 2022¹².

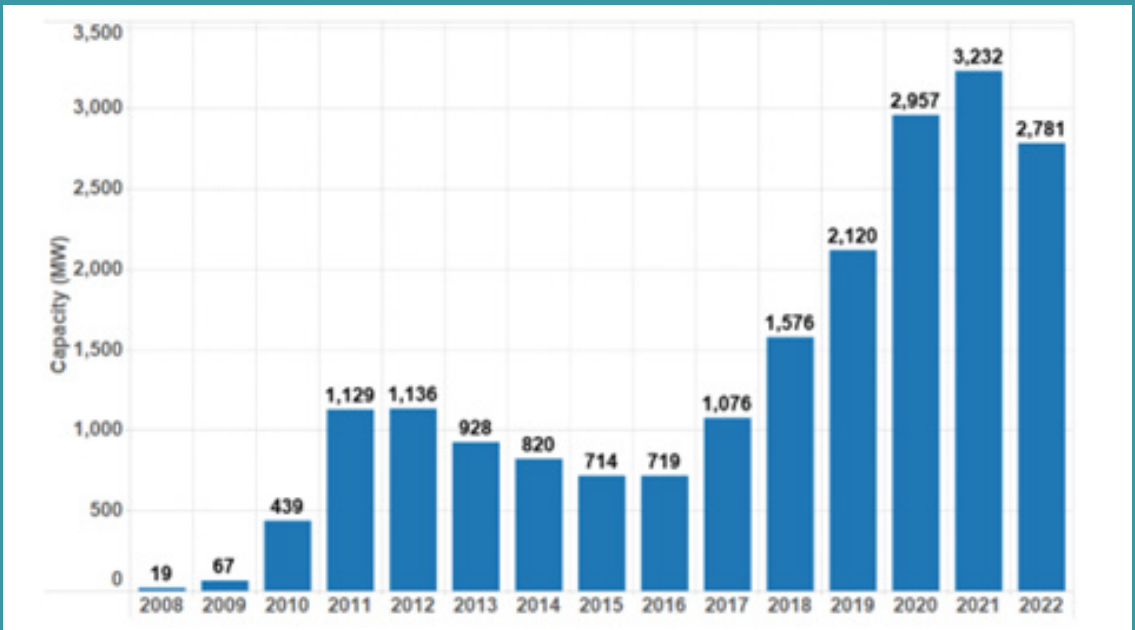


Figure Three: Annual capacity of residential solar installed in Aus (MW p.a.)¹³

The Australian solar power market is expected to have a CAGR (2023-2028) of 14.07%, growing from current market volume of 36.5 gigawatts to 70.5 gigawatts by 2028, presenting a clear and immediate opportunity for investors¹⁴. This growth is being fuelled by several drivers, most notably high electricity prices, regulatory incentives and changes, such as recent changes to the National Construction Code, favouring widespread adoption of solar installation during construction.

The increasing availability of solar energy across Australia is also driving broader adoption of on-site batteries. These batteries enable the storage of excess power generated during the day, even when it may not be economically viable to sell it to others. This also empowers the creation of networks of batteries, effectively forming virtual power plants. This network can be coordinated to release stored power back into the grid during peak demand in an organised manner at the end of the day. This trend is creating more investment opportunities in Australia across the electrification supply chain.

¹¹ Geoscience Australia, Solar Energy

¹² Clean Energy Council, Large-Scale Solar

¹³ SunWiz, The 2023 Annual SunWiz Australian PV Report

¹⁴ Mordor Intelligence, Solar Energy in Australia Market Size & Share Analysis - Growth Trends & Forecasts (2023-2028)

NATURAL CAPITAL INNOVATION

Australia is rich in biodiversity – it is also one of the world’s megadiverse countries. Megadiverse countries only make up 10% of the world’s surface but they support more than 70% of all species¹⁵. Australia’s natural capital assets present a significant opportunity for investment, particularly as the role of natural capital to achieve the objectives of the Paris Agreement becomes clearer.

More than 50% of the global gross GDP, ~\$44 trillion of economic value¹⁶, exhibits moderate to high dependence on nature. This significant interconnection between economic activities and nature has gained international attention – this can be seen in the rapid development of the Taskforce on Nature Related Financial Disclosures (released September 2023) and the International Sustainability Standards Board indicating that it will develop a nature-focussed disclosure standard. Safeguarding nature is fundamental to climate resilient development. The loss of nature is therefore inextricably linked to the challenges of climate change as well as land and ocean degradation, therefore a transition to net zero requires the preservation and restoration of natural capital.

Natural capital innovation in Australia has been greatly accelerated by the scientific and innovative work of the Commonwealth Scientific and Industrial Research Organisation (CSIRO). CSIRO is an Australian Government statutory authority and has become a world leader in the development of biological solutions associated with abating greenhouse gas emissions. The CSIRO provides scientific and financial support to several natural capital innovations, creating opportunities for a wider group of investors as the innovations are scaled.

Two notable examples of Australian ingenuity in the natural capital space are:

Sea Forest: a feed supplement for cattle and sheep made with native red seaweed, *Asparagopsis*, which has been shown to cut methane emissions of cattle and sheep when added in small amounts to feed rations.

Hydrobe: utilising bacteria to convert carbon dioxide emissions from various industrial sources, such as power plants, into useful products like biodegradable plastics and biofuels.

Natural capital innovation also includes land-based carbon abatement techniques, for which Australia has become a global leader due to the vast native forests and soil carbon sequestration.

Australia’s carbon offset market is regulated and has well-established standards and independently reviewed methodologies for the creation and issuance of Australian Carbon Credit Units. Investment opportunities in this space continue to grow and have already been a source of strong financial returns for early investors.

In March 2023, the Australian Federal Government launched the Nature Repair Bill which provides a framework for the generation of tradeable ‘biodiversity certificates’, which would enable investment in approved projects which enhance or protect biodiversity in native species. This will further expand opportunities to invest in natural capital offsets.

Each of these areas of investment opportunity will be enhanced by other significant related developments currently underway across Australia’s sustainable finance landscape. In particular, 2023 has seen the commencement of the development of an Australian sustainable finance taxonomy, consultation on mandatory climate disclosures and the announcement of the development of sectoral decarbonisation pathways. Each of these developments enhance the availability of Australian-specific frameworks and tools to support meaningful sustainable investment into the future.

¹⁵ Australian Conservation Foundation, Australia is a megadiverse country – what does megadiverse actually mean?

¹⁶ World Economic Forum, Half of World’s GDP Moderately or Highly Dependent on Nature