



Professionals for Climate Action

July Meeting

Tim Buckley, Director, Climate Energy Finance

Tim is the director of Climate Energy Finance (CEF) a think tank established in 2022 that works pro-bono in the public interest to accelerate decarbonisation. The CRF conducts research on global financial issues related to the global energy transition from fossil fuels to clean energy, as well as the implications for the Australian economy.

Tim was recently part of an Australian delegation to China organised by the Smart Energy Council, travelling to 6 cities to see the latest developments in clean tech.

Key take-outs from the China trip:

- The scale of clean tech growth and investment in China is staggering across all areas.
- China installed 293 gigawatts of wind and solar capacity last year and is set to do more in 2024. This is installing more capacity each week than Australia does in a year.
- The scale of the Chinese market is significant with 600,000 attendees at a clean energy trade fair in Shanghai.
- EV manufacturing is growing quickly – with one factory producing a car every 36 seconds. This is driven by high levels of automation and robotics combined with large scale. There is significant take up of EVs in the domestic Chinese market with year-on-year sales growth of 30% (India is at 28%).
- There is significant investment in battery technologies as a key underpinning technology. One company, CATL, had 21,000 employees focused on battery R&D. Innovation is allowing BYD to claim a new EV with a range of over 2000km while another company is offering 80% battery charging in 10 minutes. Issues of safety and range anxiety for EV batteries are being overcome by testing, quality control and innovation.
- China is still the world's largest manufacturer of coal fired powerplants opening 58 gigawatts of capacity last year. However, the % of non-renewable energy is decreasing year on year despite this due to the speed of renewable roll-out.
- China may have reached peaked in emissions in 2023 which if correct would have significant implications for global emission reductions: <https://amp.smh.com.au/environment/climate-change/it-s-good-news-scientists-suspect-history-about-to-be-made-in-china-20240709-p5jsbi.html>

Implications for Australia:

- China is Australia's no.1 export market at over 30% and significantly larger than any other market.
- It is critical that Australia chart a different course to the US with their aim to wall-off China and potential to become more isolationist.
- There is an opportunity for Australia to build on the "Future Made in Australia" plans to develop a critical minerals and metals export opportunity with China. The \$A24 billion in the budget was a good first step to helping develop this approach.

Joey Clarke, Senior Science Communications Lead at the Australian Wildlife Conservancy

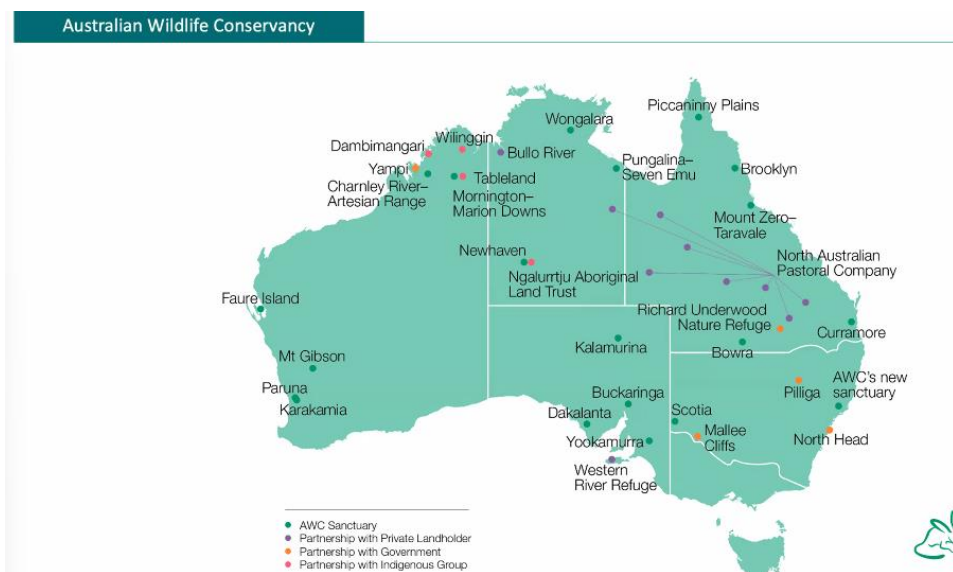
Joey has worked with the Australian Wildlife Conservancy (AWC) for 8.5 years and is an ecologist by background. The AWC is a non-profit conservation groups with the mission of effective conservation of all Australian animal species and the habitats in which they live. AWC is not a lobbying organisation and is aiming to develop a successful template for conversation that other organisations can leverage.

Biodiversity Loss

- While Australia is a very ecologically diverse continent with unique flora and fauna it has poor record on protecting biodiversity including the extinction of 14 mammal species
- Funding for Biodiversity is modest at \$492m less than 0.1% of the Federal Budget. This is not enough to support the 30 by 30 protection targets and no extinction losses.

Sanctuaries & protected areas

- The AWC is focused on establishing sanctuaries across a diverse portfolio of habitats either by owning these directly or partnering with others especially pastoralists (50%+ of Australian land is under pastoralism). There is a national framework of sanctuaries:



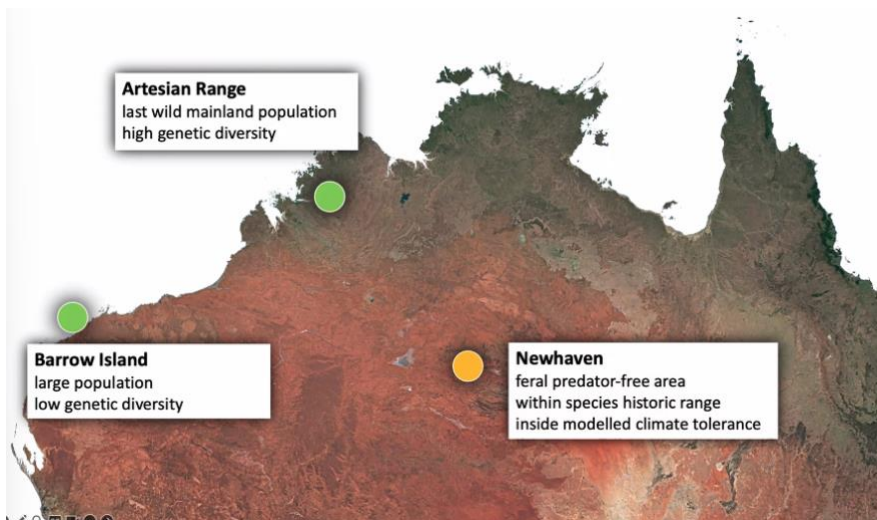
Land management & fire, feral animals & weeds.

- Based on monitoring and research the AWC has identified that the key to successful management of the sanctuaries is to control fire and remove feral animals and weeds.
- The AWC manages the largest network of feral predator free safe havens with 8 fenced sites plus Faure Island. The fences are extensive with one over 40km long, 6ft tall and electrified.

Case study – Golden Bandicoot

- The AWC has successfully established a new population of golden bandicoots in Newhaven, a protected area.

- There is significant scientific work done to support the program – genetically identifying the best populations for the reintroduction as well as extensive climate forecast modelling to look at viable areas based on potential future scenarios.
- Projects are undertaken in close co-ordination and with the support of local Indigenous communities.



New Forest Sanctuary – Gorton Forest, Stroud

- The AWC has recently acquired a 4,000-hectare forest between Barrington Tops and the Myall Lakes National Park
- This is prime koala habitat – to date with limited survey work 20 threatened species have been confirmed in the area
- AWC uses acoustic monitoring and remote cameras supported by AI analysis to identify species



Recommended resources / reading:

[Home - Climate Energy Finance](#)

[Animal Conservation Organisation | Australian Wildlife Conservancy](#)

The AWC offers newsletter updates and monthly webinars.

Articles on China & peak emissions:

<https://amp.smh.com.au/environment/climate-change/it-s-good-news-scientists-suspect-history-about-to-be-made-in-china-20240709-p5jsbi.html>

<https://www.afr.com/policy/foreign-affairs/the-smarter-way-to-exploit-china-s-technical-expertise-20240709-p5js8v>