



Building on our Strengths:

Key Enablers for Impactful Change

Presented by

Beth Mitchell | Head of Engagement
Sam Mella | Senior Project Manager

Acknowledgement of Country

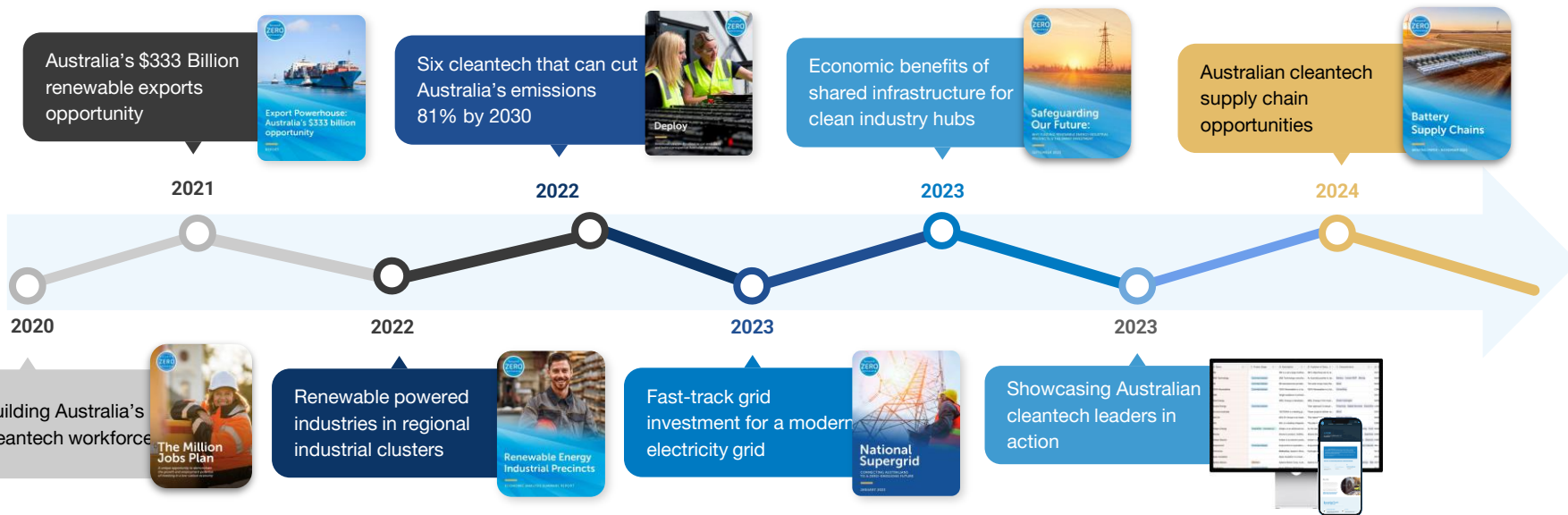
Beyond Zero Emissions is committed to reconciliation. We support the Uluru Statement from the Heart, humbly accepting the invitation to walk with First Nations people towards a better future.

We pay our respects to the elders past and present of all First Nations peoples across Australia, and acknowledge their connections to land, sea, and community. We acknowledge that sovereignty was never ceded.

We are honoured today to join you on the lands of the Tubbagah People of the Wiradjuri Nation



Nation-building energy infrastructure to reduce energy costs and ensure long-term economic success



Overview of report

Key findings: Australia can...

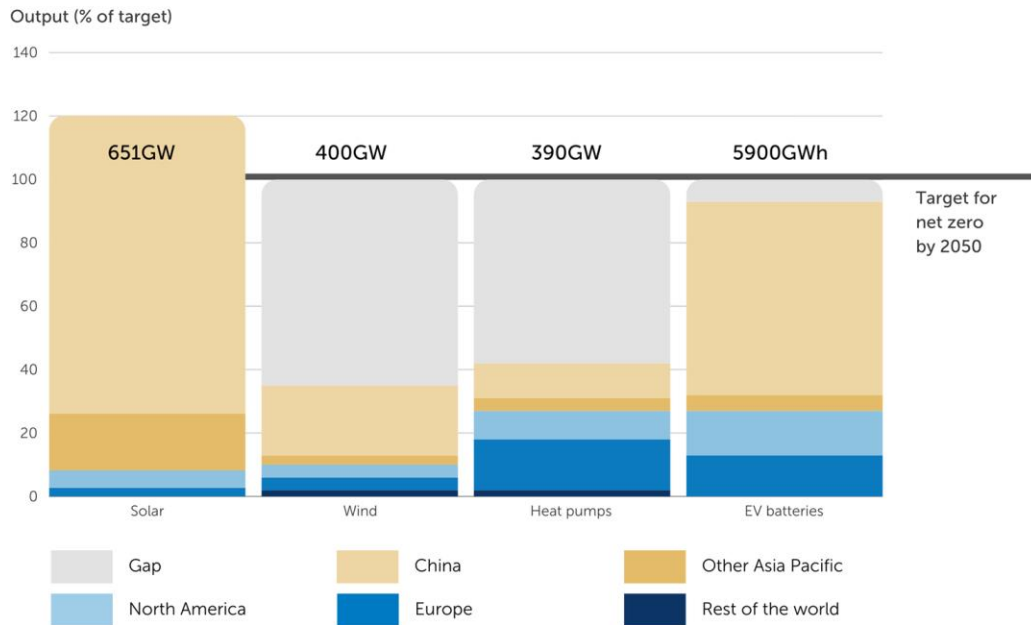
1. **Play a significant role in the global energy transition** with its endowment of raw materials for key cleantech
2. Move from “**dig and ship**” to “**mine and make**” by
 - a. value adding to raw material extractions and investing in the circular economy to become a major supplier of refined minerals
 - b. manufacturing more cleantech onshore
3. Establish sovereign capability in key supply chains essential to Australia’s **energy security, job creation and decarbonisation**
4. Generate over **\$215 billion in revenue** and create **53,000 jobs** by 2035



Australia's role in global supply chain growth for clean technologies

- **No country alone can provide the manufacturing capacity required to meet growing global needs**
- The substantial growth in cleantech supply chains creates an **opportunity for Australia to establish cleantech manufacturing and revitalise Australian industry**

Projected and targets of global cleantech manufacturing capacity, 2030



Cleantech manufacturing needs Australian minerals and materials

- The world has sufficient reserves of materials but supply chains globally are falling short to meet growing demand
- **Australia ranks highly for many of the materials cleantech needs**
- Critical opportunity to build new export portfolios and and value-add to Australia’s rich endowment of minerals

Australia's raw material reserves	Share of world reserves (2022)	World ranking for reserves (2022)	World ranking for extraction (2022)	Cleantech it is used for	Current value-add	Value-add opportunity
Iron Ore (steel)	31%	1	1		Low	High
Nickel	23%	1	5		Low	High
Vanadium	31%	2	0		Low	High
Lithium	29%	2	1		Low	High
Cobalt	20%	2	3		Low	High
Silver	18%	2	5		Low	High
Copper	11%	2	8		Low	High
Bauxite (aluminium)	7%	3	1		Medium	High
Rare Earths	3%	6	4		Low	High

Making it happen

Recommendations:



Supply-side subsidies to enable Australian industry to compete, and to attract foreign investment from global cleantech companies



Grow the demand, and demand certainty, for Australian-made cleantech

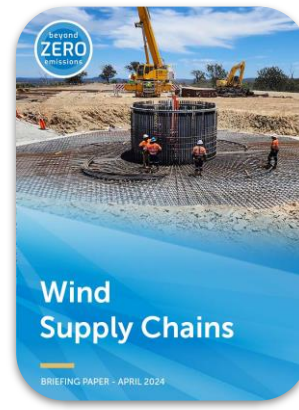
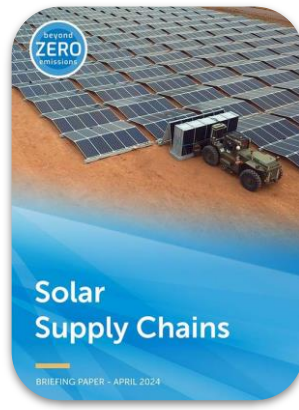
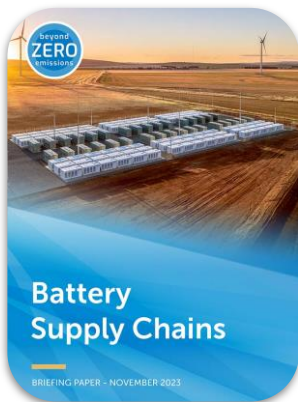
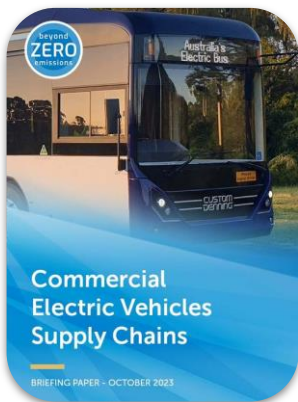


Cleantech manufacturing to be predominantly placed in **Renewable Energy Industrial Precincts** (REIPs)



Ensure the establishment of a **full circular economy** for each clean technology

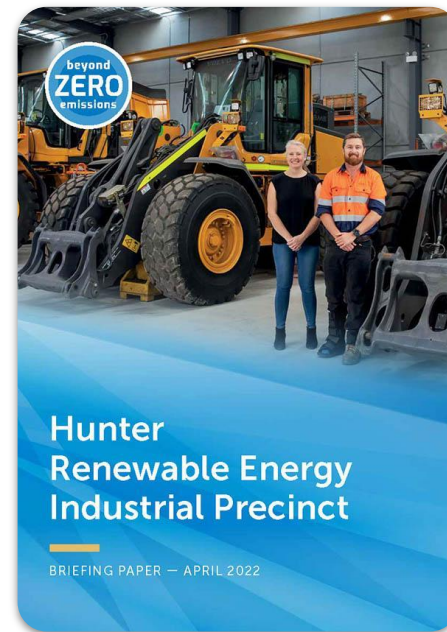
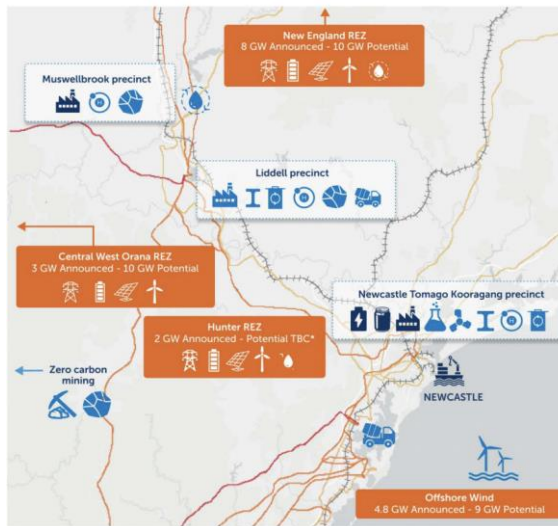
Cleantech Supply Chains Briefing Papers



Hunter Renewable Energy Industrial Precinct

By 2032 a Hunter REIP can:

- Unlock new capital investment of \$28 billion
- Create 34,000 new ongoing local jobs in new manufacturing and service industries
- Generate \$11 billion in revenue per annum
- Protect existing manufacturing jobs



Read BZE's Hunter Briefing Paper:
<https://bit.ly/hunterreip>



Manufacturing opportunities in the Hunter



Energy Renaissance, Tomago,
manufactures lithium ion batteries.



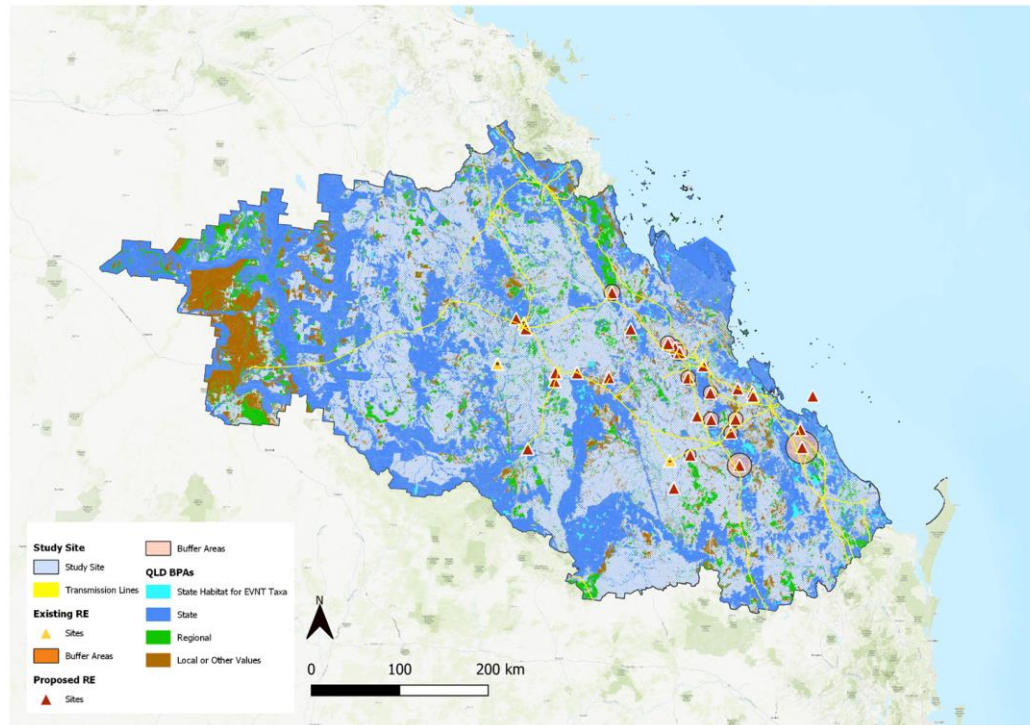
BME retrofits batteries into diesel mining vehicles and plans to manufacture EVs for hard rock mining.

Location is key in the roll-out of renewables

- The roll out of renewables must consider nature and communities
- BZE’s Queensland land use mapping case study (available on request)

“Without the support and participation of these communities, the transition cannot succeed.”

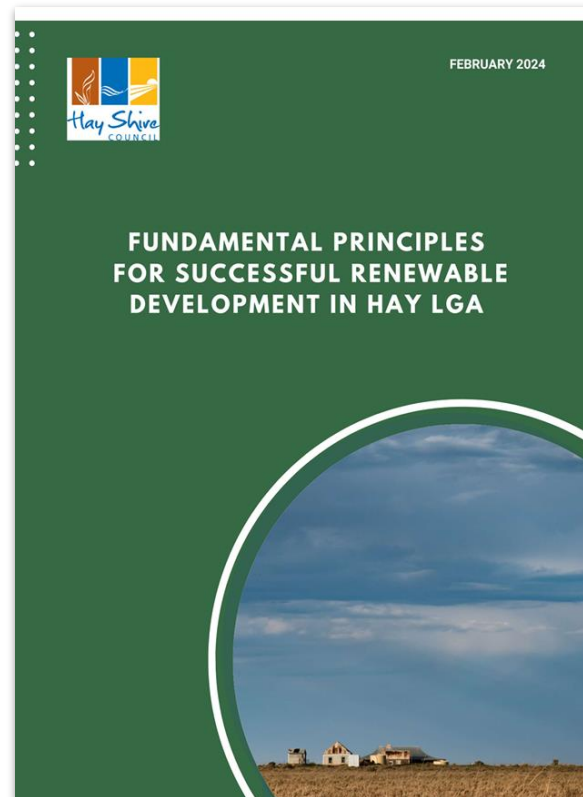
- Andrew Dyer, Australian Energy Infrastructure Commissioner



RE-Alliance: The South West REZ Case Study

The Hay Community developed these Principles to deliver the following message to the NSW Government, EnergyCo, Developers and other stakeholders:

- We are supportive of the clean energy transition
- We want to keep the overall experience for our community positive, to remain supportive
- **We will ensure the energy transition happens with us, not to us.**
- Assist us to deliver a coordinated approach to our community.
- Follow our Fundamental Principles for Successful Renewable Energy Development, to maximise collaboration and strategic outcomes.
- We want to ensure that renewable energy developments maintain or enhance our existing economy.
- We have a long-term plan for our economic transition, which includes the energy transition and we invite you to support it.

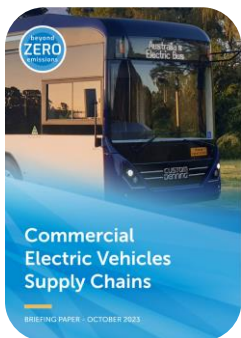


Key Opportunities for the Central West

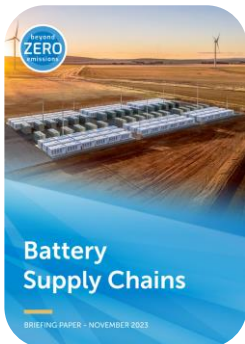
1. Local supply chains manufacturing/needs certainty for a pipeline
2. Investment and jobs and revenue to the regions
3. Strong METS Foundation - not starting from zero
4. Recycling - Circular economy opportunity - already emerging
5. Infrastructure upgrades - roads, schools, housing, new industries



Thank you



Beth Mitchell
Head of Engagement
beth.mitchell@bze.org.au



Sam Mella
Senior Project Manager
Sam.mella@bze.org.au

