



# State of the Advanced Materials and Battery Sector in Queensland 2022

## QUICK FACTS



Register to read  
the full report

# GROWTH & DEMAND



Projections for the global battery market over the next decade show it increasing at least ten times (*page 3*). As Queensland and the rest of the world work towards Net Zero Emissions (NZE), demand for batteries and the advanced materials to make them will become exponential, as the industry scales up to deliver batteries for EVs, electric aviation, stationary storage and more.



Li-S batteries that extend performance beyond the fundamental limits of Li-ion technology are essential for the transformation of aviation (*page 19*).



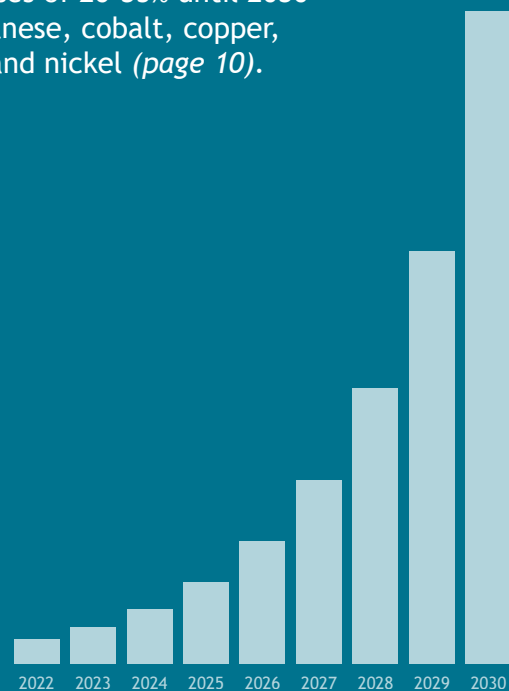
EVs with Li-ion batteries need 6x more specialist minerals than standard cars – 195kg on average (*page 15*).



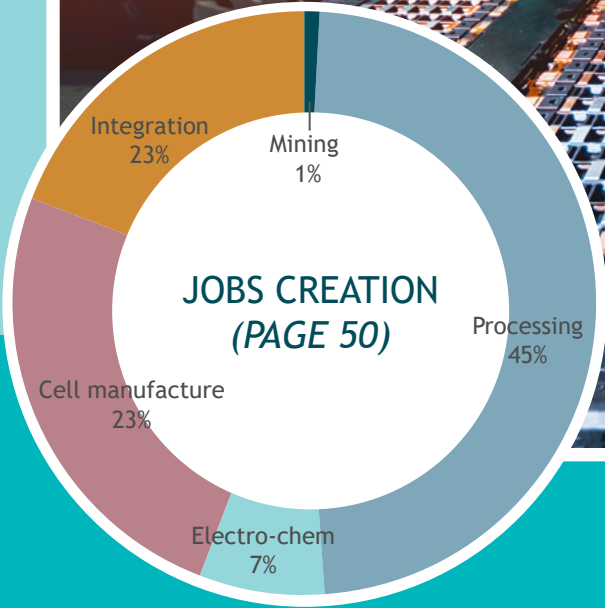
Li-ion battery manufacturing capacity will increase 218% by 2025, which in turn will require annual increases of 26-35% until 2030 for supply of manganese, cobalt, copper, graphite, lithium and nickel (*page 10*).



The International Energy Agency (IEA) estimates stationary energy storage of 590 GW by 2030, and 3100GW by 2050, is required to stabilise global variable renewable energy for electricity supply (*page 20*).



Global EV sales are forecast to grow more than 30% each year between now and 2030 (*page 9*).

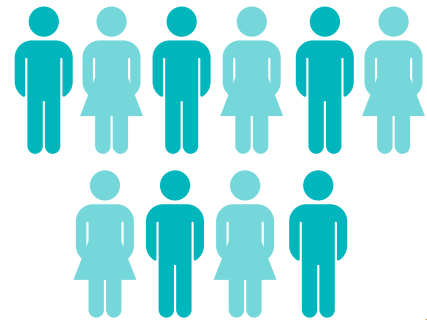


## QUEENSLAND EMPLOYMENT



The creation of a robust AM&B eco-system supported by private and government funding could increase employment from 370 to 3,500 in just three years (*page 50*).

2025



## GLOBAL INVESTMENT

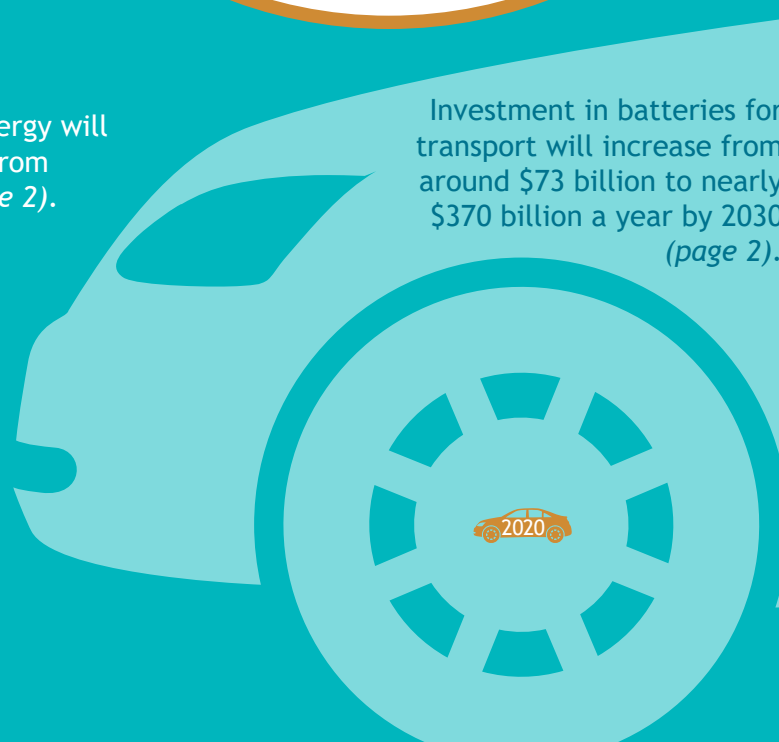
# \$3.1 trillion dollar annual increase

According to the IEA, global investment in clean energy will increase from an average of US\$2 trillion per year from 2016-20 to US\$5 trillion per year from 2022-30 (*page 2*).



The NZE2050 targets require very large investment in supply of specific metals for EVs, renewable energy and storage to balance supply of renewable energy from wind and solar (*page 10*).

Investment in batteries for transport will increase from around \$73 billion to nearly \$370 billion a year by 2030 (*page 2*).



# QUEENSLAND AT THE READY

Our advanced materials and battery sector is ready to partner with northern hemisphere manufacturers to participate in ESG-compliant battery supply chains to meet NZE 2050 targets.

Queensland with its:

- skilled workforce
- existing chemical manufacturing expertise (think LNG, Glencore's Mt Isa operations, SunMetals, Queensland Alumina and Boyne Smelter)
- world-class research institutions
- access to energy transition mineral deposits in nearby states or countries

is the partner of choice for the manufacturing sector supply chain (page 51).



## FUTURE KEYS TO SUCCESS

What government action do we need to successfully transition to a robust supply chain (page 5)?



### FUNDING

for collaboration between industry, research institutions, government and sources of finance



### INFRASTRUCTURE INVESTMENT

to build transport networks, industrial precincts, processing & commercialisation plants



### GOVERNMENT ALIGNMENT

of vision, strategy and prioritisation between all levels of government



### LOCAL PROCUREMENT SUPPORT

to leverage Australian made advantages

## ABOUT THE AMBC

The Advanced Materials and Battery Council (AMBC) was formed in July 2022 for the purpose of leading and representing the multi-technology advanced materials and battery industry in Australia.

The Council enables industry, government and academic participants from across the value chain to share, collaborate, and promote opportunities

and policies aligned with the rapid development of a successful new industry meeting the needs of a zero-carbon future society.

To find out more about the AMBC and to become a member visit [ambc.au](http://ambc.au)

Register and read the full report at [ambc.au](http://ambc.au)

