

BOOST FOR CLEVER VISIONARIES



FUTURE IS NOW



CRC HONEY BEE PRODUCTS has developed a sensor that determines honey bee numbers in the hive. It is important for tracking bee health, which is important for exports.



MINEX CRC has developed a new drill-rig recording system, which focuses on creating more efficient drilling technology.



FUTURE BATTERY INDUSTRIES is leading a major research effort into how WA has most of the elements for EV battery production.



FOOD AGILITY has developed sensors that track fruit health. The company is focused on improving the quality of food.

TRANSFORMATIONS IN MINING ECONOMIES has several research projects that are looking at how old mine sites can be best utilised.

FUTURE ENERGY EXPORTS is looking to develop a facility that SMEs in the green hydrogen sector can use for testing and training.

The digitisation allows for continuous improvement and benchmarking. Honey Bee Products' Liz Barbour

Stedman Ellis (Future Battery Industries), Julia Easton (Food Agility), Eric May (Future Energy Exports), Liz Barbour (Honey Bee Products), Andrew Bailey (MinEX) and Guy Boggs (TIME). Picture: Danella Bevis

Perserverance has paid off for research groups that help source funding for mining and agriculture innovation, writes **Kate Purnell**

WA's co-operative research centres landed more corporate funding this year to advance innovative projects in the mining and agricultural sectors, but industry leaders say it was no easy feat in the year of COVID-19.

Future Battery Industries CRC was one of the key groups to witness the impact the coronavirus pandemic had on funding. As the price of lithium fell, its partners were put under financial strain.

CRCs are partly government funded but they also need to secure additional investment partners to scale up projects.

Stedman Ellis, chief executive of FBICRC, said there was an initial adjustment as uncertainty hit confidence in the lithium sector. But in recent months the research group secured six new industry participants, including ASX-listed Talga Group and Lycopodium.

FBICRC is researching WA's ability to have a supply chain to produce lithium-ion batteries for electric vehicles. A study it commissioned this year found the State already produced nine out

of the 10 minerals required.

Launched this year during the pandemic, Transformations in Mining Economies is exploring sustainable ways to transition old mine sites. Announced in July, the CRC has secured 74 partners and funding to start on 22 foundational projects worth \$4.9 million.

“One of the foundational projects is focused on repurposing the mine area in novel ways to support future economic development with options ranging from water parks to energy projects to agricultural development,” TiME chief executive Guy Boggs said.

The group expects its projects will generate \$2 billion worth of benefits to the Australian economy over the next 10 years.

Future Energy Exports also launched this year and had Chevron, Mineral Resources and Horizon Power join as funding bodies. Overall the CRC secured \$40m from Commonwealth grants and \$38m from its partners to spend over the next 10 years. The industry participants have also committed \$88m in kind to Future Energy’s research.

The CRC is exploring ways to make Australia’s liquefied natural gas exports more efficient and sustainable. It is also working to boost the country’s green hydrogen export capability as global trends favour cleaner energy options.

Into the new year, MinEx CRC will continue its research into safer, more efficient and environmentally friendly drilling technologies. The research centre has almost \$220m split between cash and provided goods and services from the Government and industry participants to be spent over 10 years.

At the CRC for Honey Bee Products the team has developed a sensor that can monitor hive systems, which helps researchers track bee health.

Honey Bee Products has also created a digital record that tracks honey from field to packer. “The digitisation allows for continuous improvement and benchmarking,” chief executive Liz Barbour said.

Sensor work has been a key factor at Food Agility CRC. With a focus on food health and security the sensor and communication technologies that have been sent to farms have helped farmers manage their produce and make risk-informed decisions.