

Context

After a successful initial 5-year term, CRC ORE has been funded for a further 6 years to achieve its full potential. It is well supported, has a strong pipeline of innovation and is on-track to deliver broad commercialisation of a number of step-change, whole-of-system signature technologies before 2021. This is consistent with its prime directive to identify and implement innovations that improve operational value and reverse the trend of declining productivity in the minerals sector. The CRC ORE team and Board have created a dynamic strategic plan, building on the successes to date, providing clear guidance for achieving CRC ORE's objectives in the years ahead and establishing the basis for a smooth transition of this work to the Australian METS and Minerals sector by 2021.

Vision & Mission

Our Vision

A significantly more productive and sustainable minerals industry.

Our Mission

To deliver step-change operational innovations and value through a novel approach to whole-of-system integration and collaboration.

Values & Guiding Principles

Our decisions, behaviour and leadership will reflect:

- The health, safety and welfare of all staff, stakeholders and the environment is of utmost importance.
- Collaboration and teamwork at every opportunity, with high levels of engagement and respect for each other and our stakeholders.
- Wise and efficient investment of our stakeholders' funds and resources.
- Urgency in exploring opportunities for rapid commercialisation and technology transfer.
- Excellence in project definition, planning and delivery.
- Decisiveness in what to 'hold' and what to 'fold.'
- Independence, honesty and integrity in all dealings with our stakeholders.

People & Leadership

Implement and sustain positive and productive leadership and staff engagement practices and systems.
Integrated structure and roles directly aligned to delivering this strategy.
Actively invest in developing our people.
The right people, in the right roles, doing the right work.

Our Innovation Pathway



Key outcomes

- Technology development through world-class applied research Development Programs.
- The next step-change innovation facilitating whole-of-system integration.
- Fully integrate point solutions to deliver whole-of-system value, including Grade Engineering (GE) and Integrated Extraction Simulator (IES).
- Develop viable separation technologies as an integrated system.
- Bridge technology and knowledge gaps across our Delivery Themes* enabling their full commercialisation by the Australian METS sector.
- Implement Delivery Themes on site and at production scale.
- Implement GE (Screening and Enhanced) at production scale and transfer to the Australian METS sector.
- Implement IES at site scale and commercialise.
- Facilitate alliances that fast-track the project to prototype cycle from 15 to 5 years.

Our Delivery Themes*

- GE-enabled block models and mine plan optimisation.
- Instrumenting the bench.
- Sensing and coarse separation in the pit.
- Delivering grade and throughput engineering.
- On-line sensing of coarse streams.
- Energy efficient enhanced coarse liberation.
- IES-enabled integrated simulation across the value chain.
- GE enabled circuit design with advanced process control.
- Optimised system value across all operational metrics.
- Sustaining whole-of-system value.

Staged Projects

Technology Readiness Levels (TRLs)

TRL 1-5

Development Programs

Proof of technology concept with lab-scale validation and initial value proposition involving specialist point solutions.

TRL 5-7

Delivery Themes

Integrated solution stacks addressing major segments of the value chain involving consortia of METS, Miners and Researcher outcomes.

TRL 7-9

Commercial Implementation

Prototype validated on site with proven value proposition resulting in transition to a commercially supported product.