Cobalt Blue and Mount Isa City Council:

A Collaboration for Mount Isa's Future

Dr Helen Degeling

Manager, ReMine+

ASX: COB

CobaltBlue | ReMine+

ReMine+
Positive impact from mine waste

Leveraging patented flowsheet for re-mining sulphur and metals from mine waste

Active Projects/ Testwork:

- Flin Flon – Hud Bay Minerals (Canada)
- Pyrite tailings as a source of sulphuric acid in NW Qld

Technology Development Centre
Broken Hill

Large scale sulphide hydro-metallurgical facility with 24/7 capacity

- Provides FS and DFS support for new projects
- $15million investment to date in plant equipment and design work
- Allows flowsheet flexibility focused on commercial products

CobaltBlue

Globally significant IP providing unique solutions and optionality:

- MHP and Co/Ni sulphate
- Sulphur and metal recoveries from tailings
- Stable commodity diversification includes Cu and Au

Expected to generate healthy and stable margins through the commodity price cycle, producing battery-grade cobalt sulphate

Cobalt–Nickel Refinery

Large-scale operation to produce battery-grade sulphate

- Mineral Resource of 127Mt* for 87kt cobalt, targeted project life +20 years

Broken Hill Cobalt Project

Positioned for project resumption as cobalt prices rise

- Mineral resource of 8.9 Mt @ 1.0% Cu, 3.7% Zn, 0.2 g/t Au, 32 g/t Ag

Halls Creek Project

Attractive use of capital to diversify portfolio

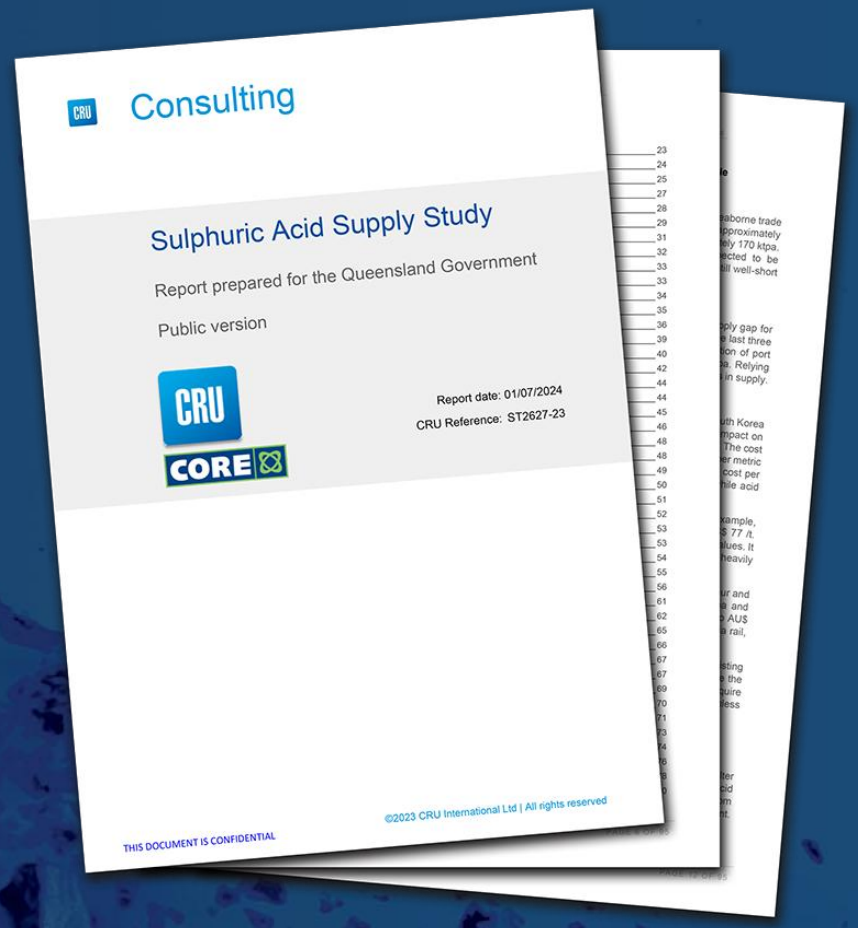
Source: Cobalt Blue Holdings Limited

** See Compliance Statement at end of presentation*

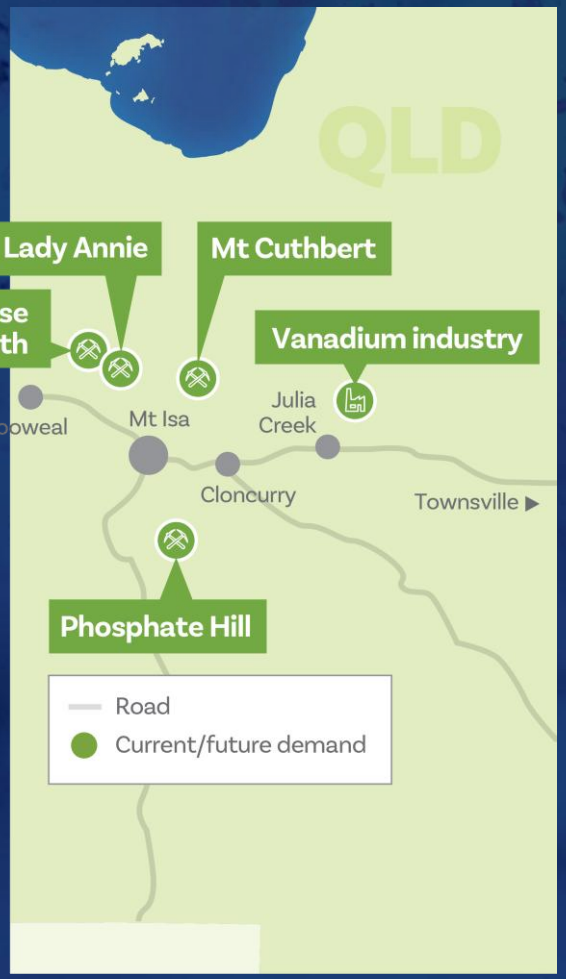
Sulphuric Acid in NW Qld

- Mt Isa Copper smelter closing ~2030
- Smelter supplies sulphur gas to Incitec Pivot acid plant
- Sulphuric acid required by
  - IPL's Phosphate Hill operation
  - Cu heap leach operations
  - Julia Creek vanadium operations
  - And more…
- Significant economic impacts related to acid supply
- DSD delivered Sulphuric Acid Supply Study in 2024:

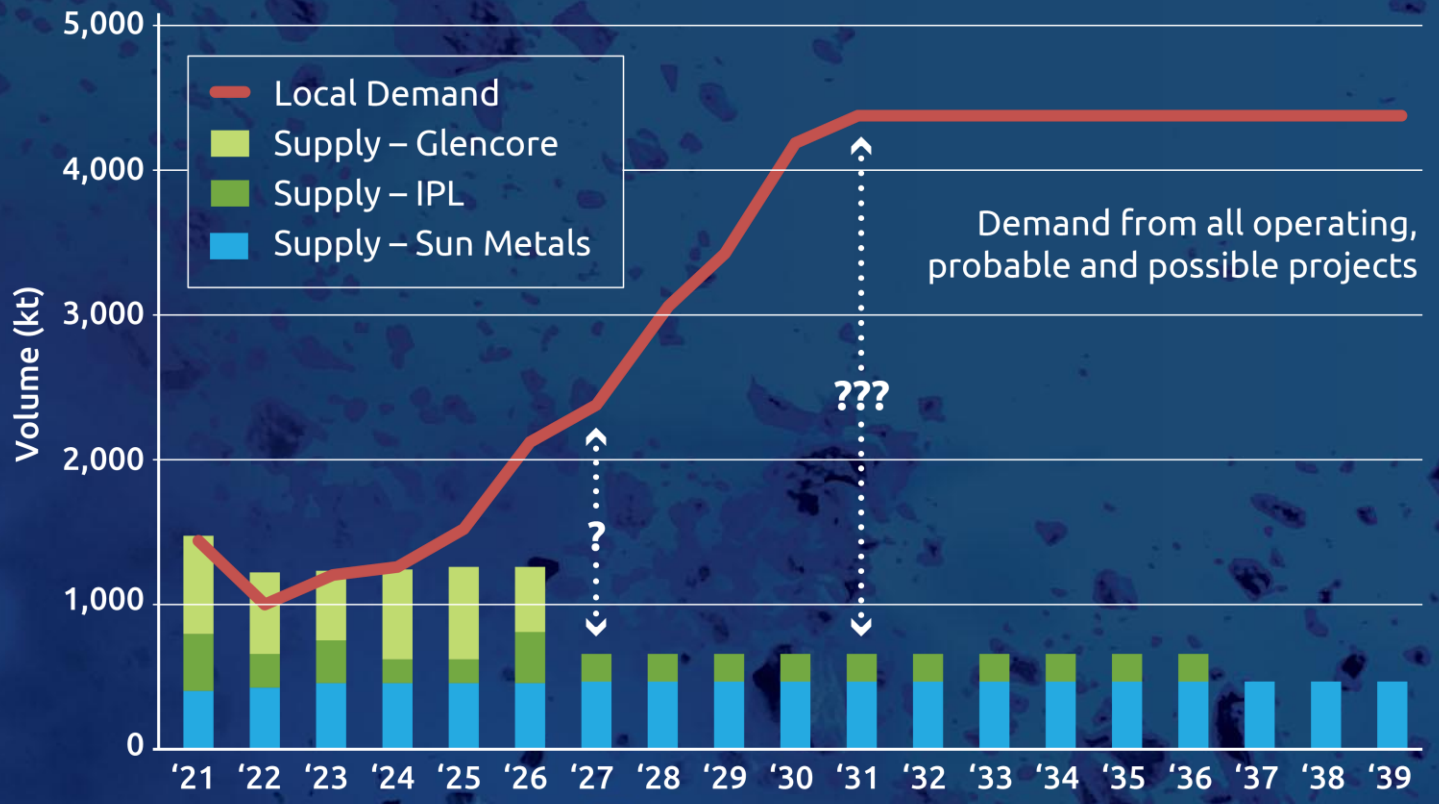
  https://www.statedevelopment.qld.gov.au/regions/regional-priorities/a-strong-and-prosperous-north-west-queensland/achievements-and-deliverables



Current/Future Acid Demand – NW Qld



Local supply and demand of sulphuric acid



Adapted from CRU presentation; Sulphuric Acid Supply Study, 1st August 2024

Recommended Outcomes

Domestic source

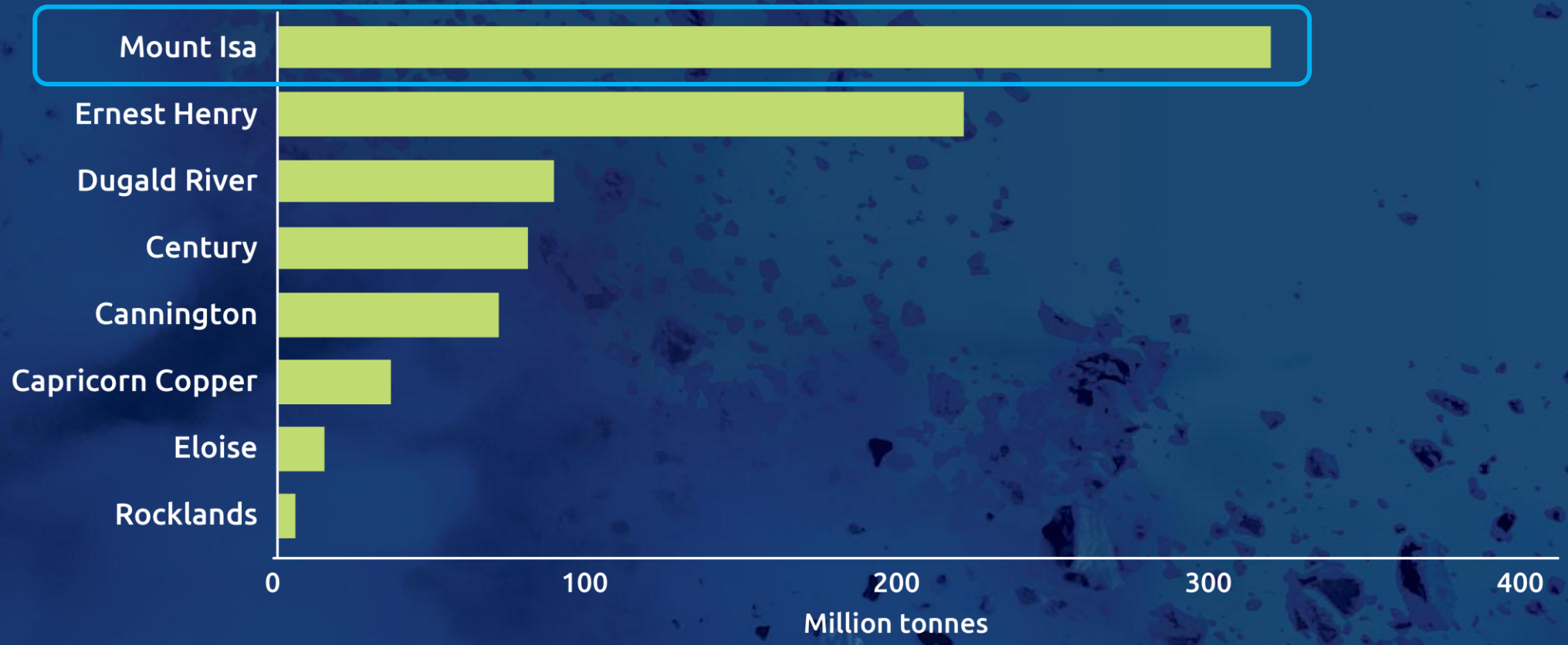
- Pyrite in tailings
- Close proximity to where acid will be used

Local Source – Reprocess pyrite-rich mine tailings

- Sufficient pyrite to meet demand
- Environmental benefit from removing pyrite from tailings/waste stockpiles
- No port or long-distance transport upgrades required
- Not affected by global price cycles

Pyrite Feedstocks

Estimated tailings size comparison



Re-processing routes

Roaster + Acid Plant to make Sulphuric Acid:

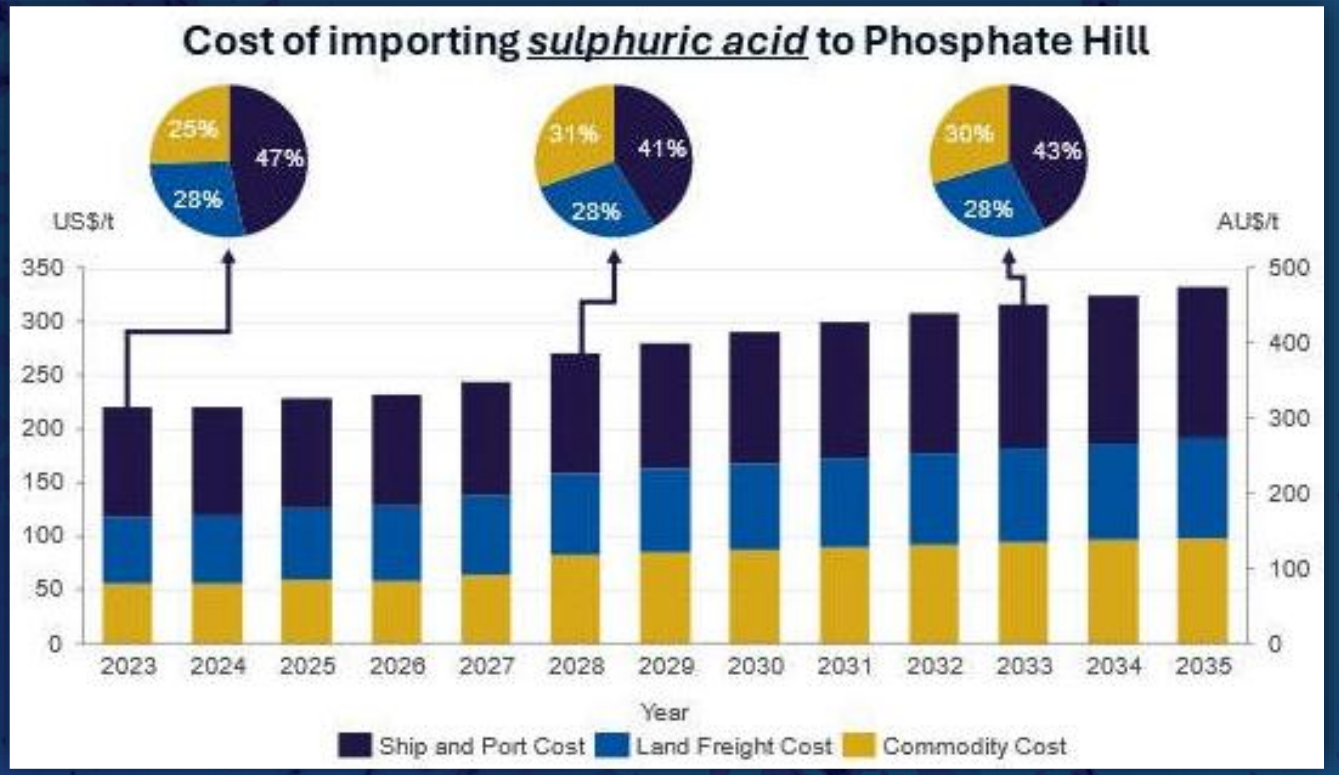
- Conventional route – known technology
- Produces S off-gas for acid plant
- Metals can be extracted from roaster calcine
- High toxic emissions (e.g. Pb, As)
- High capital cost

Cobalt Blue process:

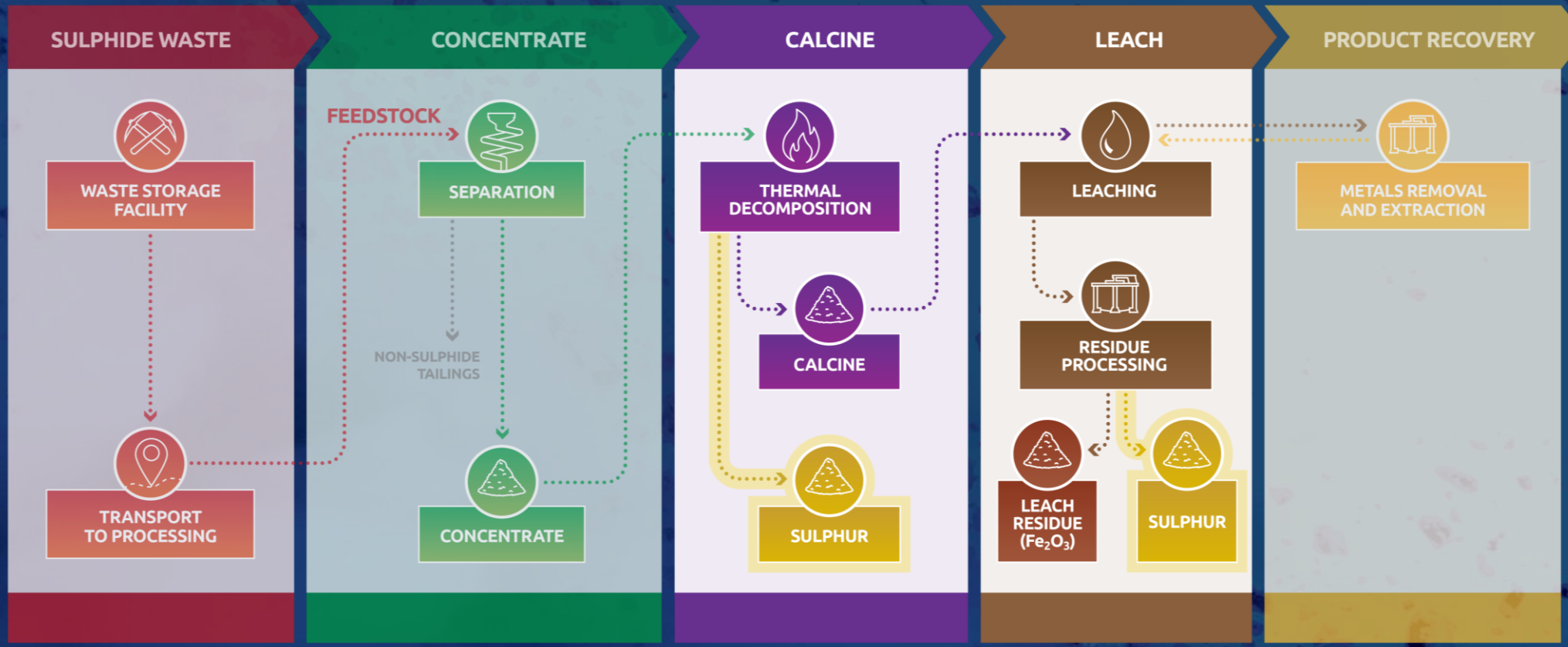
- No toxic emissions
- Flexible process – makes sulphur or sulphuric acid plus metals
- Proven at demonstration scale – risk of unknowns during upscale?
- Unknown costs… we can answer these questions! (hint: less than a roaster)

Economics of sulphuric acid

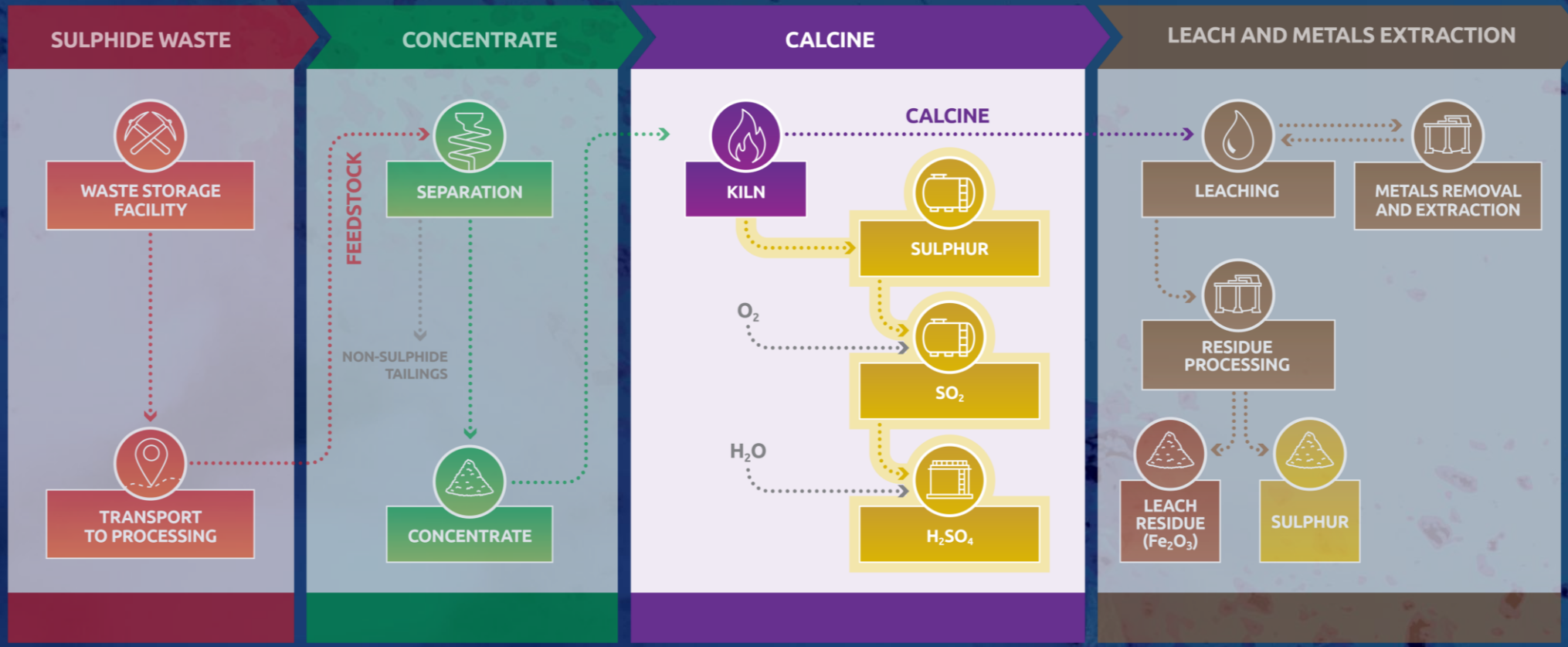
- Very low value material
- ~$50/tonne sale price vs $200+/tonne cost to consumer
- 70% of cost is transport
- Not profitable on its own
- Processing + acid plant capital cost
- Balance economics by co-producing valuable metals
  - Gold
  - Copper
  - Zinc
  - Lead
  - Cobalt



The Cobalt Blue flow sheet – sulphur prill



The Cobalt Blue flow sheet – sulphuric acid



MICC + COB – The MOU

The Aim

- To deliver a local, commercially viable solution to the sulphuric acid shortage

How it will work

COB will:

- provide advice to MICC on the requirements, challenges and barriers to a potential pyrite tailings re-processing operation to produce sulphuric acid.
- perform testwork on a range of samples from local pyrite-tailings sources.
- assess the commercial and operational viability of different technologies, feedstocks, and outputs.

MICC + COB – The MOU

- **How it will work**
  - MICC will:
    - set aside land upon which to build and operate a pilot-scale plant .
    - Work with state and federal agencies to overcome barriers to tailings re-processing.
    - Provide advice to COB on community, infrastructure and planning requirements or restrictions.

MICC + COB – The MOU

The Outcomes

- A solution that combines technical, commercial and community expertise.
- A commercially viable, low impact solution to acid supply, that simultaneously.
  - Alleviates long term environmental liabilities.
  - Generates critical and other metal revenue through tailings re-processing is in the interest of all stakeholders.
  - Provides long term employment and economic security to the region.

Mt Isa's Future Ready Economy Roadmap

Strong and Resilient Economy

- ensuring ongoing viability of regional mining operations that rely on sulphuric acid
- providing an alternative source of employment for Mt Isans into the future

Circular Design

- re-purposing mine waste; creating value from a liability

Decarbonisation

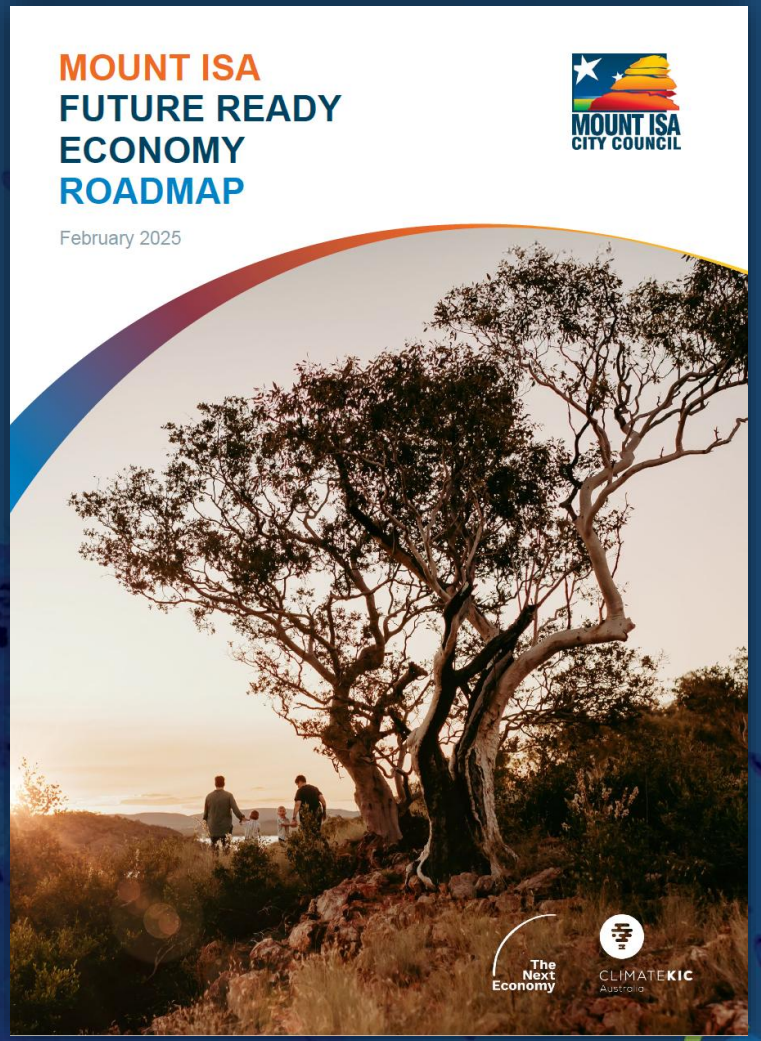
- Critical minerals for the renewable energy technology and batteries

Environmental Impact and Regeneration

- Reducing risk of acid mine drainage and improving impacts of mining

Liveability and Social Wellbeing

- Long term employment opportunities create personal and community security



CobaltBlue

ReMine+
Positive impact
from mine waste

Contact us

Dr Andrew Tong
CEO
E: andrew.tong@cobaltblueholdings.com

Heath Porteous
Geology Manager
E: heath.porteous@cobaltblueholdings.com
W: www.cobaltblueholdings.com/projects/remine-plus