



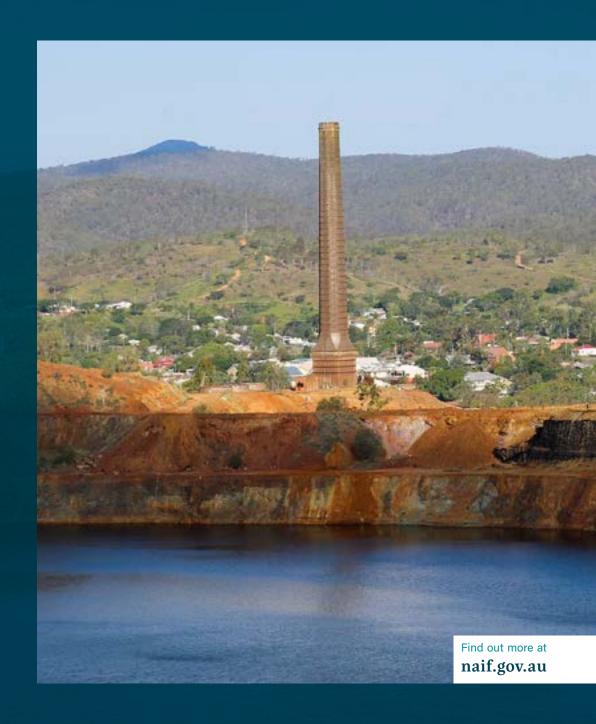
# Case Study

**HERITAGE MINERALS** 

# Mount Morgan Tailings Processing and Rehabilitation Project

**NOVEMBER 2025** 





#### **HERITAGE MINERALS**

# Mount Morgan Tailings Processing and Rehabilitation

The famed Mount Morgan mine was once one of the world's largest gold producers, yielding approximately 262 tonnes of gold, 37 tonnes of silver and 387,000 tonnes of copper until its closure in the 1990s.

The Northern Australia Infrastructure Facility (NAIF) is providing up to \$66 million in lending to support Heritage Minerals' construction of tailings processing and rehabilitation infrastructure in Mount Morgan, Queensland.

The project will deliver a processing facility incorporating proprietary technology and operational expertise to recover gold and copper from legacy tailings, and a water treatment plant to improve water quality in the Dee River and Fitzroy River catchment. It is expected to deliver broad public benefits, including job creation, local procurement opportunities, and long-term environmental improvements for the Central Queensland region.

With strong support from the local community and regional government, the technical approach adopted

by Heritage Minerals has also attracted global attention and may serve as an example for the future rehabilitation of other legacy mine sites in Australia.

There are currently around 100 abandoned mines throughout Queensland alone, many of which hold tailings and in-ground resources with the potential for re-commercialisation in a similar manner.

As an innovative project that makes mine rehabilitation economically viable and technically feasible, the Mount Morgan project will help meet increasing demand for the resources required for the clean energy transition, while also improving environmental outcomes for the region and industry.







OpenStreetMap

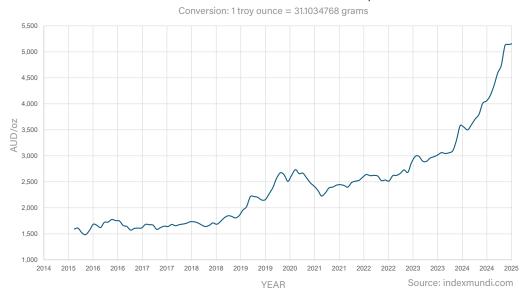
# Sustainable gold & copper for a green economy

In a world transitioning to a green economy, the use of gold and copper in renewable energy technologies and efficient electricity transmission has made them crucial commodities. As global dependency on gold and copper grows, international prices rise higher.

Gold is one of Australia's most valuable mineral exports, generating around \$47 billion in export revenue in 2024–25. With around 21 per cent of the world's known gold reserves, Australia remains one of the leading global producers and a key supplier to international markets. Increasing demand, combined with changes in processing technology have improved the economic viability for the redevelopment of the Mount Morgan mine. Its success could also pave the way for other Australian abandoned mine sites to be rehabilitated in the same way.

Over the years, there have been several attempts to revitalise the Mount Morgan mine, but these have been hampered by economic and technological limitations. Heritage Minerals' plan to reopen the site was underpinned by GreenGold Engineering's state-of-the-art RECYN technology to recover materials from the mining tailings.

#### 10 Year Gold Price in Australian Dollars per Ounce



RECYN uses a resin-bead absorbent to recover cyanide from the treatment of the plant tailings, reducing overall cyanide usage by around 50%. The recovered cyanide is then recycled back into a leach circuit, separating the valuable metal. At the same time, this process detoxifies the tailings stream to meet water discharge standards.

Additionally, harvesting gold and copper from an existing waste product reduces the need for grinding rock which in turn lowers carbon emissions for an overall more sustainable result.

Redeveloping the site is technically challenging, with multiple legacy issues resulting from more

than a century of historical mining methods. The project required extensive technical due diligence before NAIF was able to reach an Investment Decision in support of the project.

Heritage Minerals predicts an average annual production of 60,000 ounces of gold and 1,700 tonnes of copper over seven years. Earthworks to clear the project site were completed in November 2024 with construction of the processing plant's foundations commencing shortly thereafter. As of October 2025, the construction is well advanced and first gold pour is due in mid-2026.

# How we helped

## NAIF has committed up to \$66 million in debt to support the Mount Morgan Project.

Funding via the commercial bank market was not available due to the technical complexity of tailings reprocessing combined with the short mine life.

We played a central role in de-risking the project, with our early support encouraging private co-investment and providing confidence to commercial partners. Following our Investment Decision to support the project, Merricks Capital formalised its role as a co-lender.

An independent public benefit assessment has estimated the project will deliver \$849 million in economic benefit to the Rockhampton region over seven years.

It is expected to create 250 direct jobs during construction and around 150 ongoing operational roles, while also supporting local procurement and employment through engagement plans.

In addition to its economic benefit, the project will help to deliver environmental remediation to the region, help preserve cultural heritage, and open potential tourism opportunities at the historic Mount Morgan mine site. The Queensland Government contributed grant funding towards the project and, in September 2020, transferred the existing Mount Morgan mining leases to Heritage Minerals. Once the project becomes operational, it is expected to generate almost \$40 million in new mining royalties for the Queensland Government over the first seven years.

"Our government and community partners have helped us enormously. We couldn't be more pleased with what we have achieved over the last six years.

And we know many people in Australia and around the world with an interest in re-commissioning abandoned mines are paying close attention to our success. Much hard work is behind us, and first production is less than a year away."

Peter Mellor,
Managing Director, Heritage Minerals

**\$66**м

**NAIF LOAN** 

\$849<sub>M</sub>

PUBLIC BENEFIT OVER 7 YEARS **\$157**м

TOTAL PROJECT VALUE

400

FORECAST JOBS







#### **SECTOR INSIGHTS**

## Resources

Australia's mineral wealth is often concentrated in areas far from established infrastructure, amenities, and skilled workforces, making development both costly and complex.

Mount Morgan is located in Central Queensland, close to Rockhampton, and therefore benefits from access to regional infrastructure and labour. However, projects in these regional areas still face a range of challenges. These include the need for specialised transport and logistics, management of high fixed costs, and ensuring competitiveness against global peers by maintaining low operating costs.

In addition, legacy mine sites such as Mount Morgan involve complexities such as environmental rehabilitation and tailings management solutions,



the need for reliable utilities, insurance coverage, and resilient supply chains capable of withstanding Queensland's highly seasonal climate.

### **New Technology Risks**

While innovations like the RECYN cyanide-recycling process provide significant upside, there are also risks that must be managed. New process technologies often face scale-up challenges, where success in laboratory or pilot scale facilities may not necessarily translate to successful industrial scale plants (e.g. variations in tailings chemistry, operating conditions - especially where new technology has not previously been used in northern Australia's climate - or material handling). Reliability of resin absorbent materials over time, consistent performance under variable tailings feed, maintenance needs and reagent supply are further vulnerable areas. Regulatory approval, community

acceptance, environmental compliance, and accurate cost forecasting are essential for successful delivery.

On the contrary, underestimated operating costs or delays can materially affect project viability.

Heritage Minerals works closely with Green Gold Engineering as their mineral project development and production partner. As the creators of the RECYN technology and with over 45 years of experience in cyanide recovery, Green Gold offers a holistic approach to maximising returns on mineral projects while reducing risks and costs. By partnering with the leader in this recovering technology, Heritage Minerals gains access to innovative technology which has been tested and proven on an industrial scale across two sites in Asia. This partnership allows Heritage Minerals to benefit from decades of operational experience through the Green Gold Advisory Group.

#### **INDIGENOUS ENGAGEMENT**

# At the heart of the community

The project has been supported by Rockhampton Regional Council and will deliver substantial benefits to the surrounding communities through Heritage Minerals' use of procurement from local businesses.

The company has also implemented an Indigenous Engagement Strategy (IES) as part of its financing agreement with NAIF which includes ongoing engagement with the Gangulu Traditional Owners, targeted employment pathways for First Nations peoples supported by workplace mentoring and cultural support, and a minimum employment target of five per cent - with a goal of reaching 18 per cent. The strategy includes a specific commitment to support First Nations women and youth employment outcomes.

Heritage Minerals is also fostering First Nations procurement opportunities through a project-specific supplier database, simplified procurement processes, and participation in business forums and early tender briefings to encourage local supplier involvement. Additional commitments include exploring opportunities for Traditional Owner ranger groups and service providers, as well as embedding ongoing mentoring, skills development, and flexible workplace policies. These initiatives are supported by regular monitoring through an evaluation plan to ensure delivery on the IES commitments.







# Building a future for northern Australia

The Mount Morgan Project shows how innovative approaches can create opportunities to address the legacy issues of historic mine sites while contributing to regional development.

By reprocessing tailings, the project will produce gold and copper, commodities that support the global shift to lower-emissions technologies, while helping to improve environmental outcomes in Central Queensland.

The project is expected to deliver enduring benefits for the Rockhampton region, including construction and operational jobs, opportunities for local businesses, and pathways for Indigenous participation and procurement.

NAIF's financing support alongside Merricks Capital, plus support from the Queensland Government, has helped overcome key technical and financial barriers, enabling a viable rehabilitation model for one of Australia's most historic mining sites. The Mount Morgan project illustrates the role of tailored public finance in supporting industry innovation, environmental restoration and regional outcomes across northern Australia.

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#### **FIND OUT MORE**

- → Northern Australia Infrastructure Facility
- → Heritage Minerals







# Investing for impact in northern Australia

### **Contact Us**





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