

that was all held in Western Australia and offered the benefits of ESG (environmental, social and governance) to the global marketplace. That was the basis of listing in April 2022."

International Graphite commenced trading on the ASX following a \$10 million initial public offering (IPO), and within a month the company had unveiled a larger graphite R&D facility in Collie and announced a new memorandum of understanding (MoU) with ZEN Energy to explore renewable energy options for its downstream facilities.

Drilling saw International Graphite identify several high-grade discoveries at Springdale throughout 2022, including Springdale Central and Springdale South.

In October 2022, the company finalised a \$2 million financial assistance agreement with the WA Government to support the development of its Collie downstream facilities.

Worland said International Graphite could potentially commence importing concentrate before its Springdale project comes online.

"We can get that (our micronising plant) started on imported concentrates, and it may be, in time, a facility that we use to divert some Springdale material to as well," he said.

"We'll use that micronising facility to develop a customer base and generate cash flow into the company in 2024, before the feasibility study for Springdale and the feasibility studies for the battery anode material plant in Collie have been developed and completed."

International Graphite's strategy doesn't stop there, with the company taking a holistic view at its development to find the best pathway forward.

"One of the challenges that all development-stage resource companies have in looking to get downstream is the timing to market," Worland said. "This is certainly the case within the graphite industry."

"It takes a lot of integration of facilities and of course there's a qualification process which is reasonably unique to graphite from a battery anode perspective that all companies need to go through. This does delay your market entry point."

"What we think is a very nice way to bridge that market entry is through establishing this micronising facility, which will be profitable very quickly. This will generate cash flow for the business that will help develop the feasibility work that we need to complete for Springdale and Collie."

"Just as important as cash flow is the market intelligence in customer networking. It's the experience in sales and logistics that is something that doesn't sit within any development-stage companies at this point in time. It's a skill set that we'll have through operations that others won't."

QUANTUM GRAPHITE

The Uley mine in South Australia was the sole Australian graphite producer when it was up and running between 2014-15. Uley was placed on care and maintenance in December 2015 by Valence Industries, before the company was rebranded as Quantum Graphite in July 2017.

Quantum Graphite is advancing Uley to a restart - as Uley 2 - where it aims to produce 55,000 tonnes per annum (tpa) of flake graphite from its processing plant. This would be generated from 500,000tpa of feed. The expected mine life is 12 years.

The company has been undertaking significant site works at Uley 2 before installation of the new processing plant commences, which involved remediation of the Uley legacy plant.

Recent achievements for Quantum Graphite include the renewal of its Mikkira exploration licence until October 2027. Mikkira covers much of the southern tip of the Eyre Peninsula and includes Uley 2, as well as other prospects such as Salt Lake, Homestead, Kacey and Fishery.

In November 2022, Quantum Graphite announced the successful completion of an energy storage project undertaken at INEMET in Freiburg, Germany. This involved testing and measuring the thermal performance of QSP's flake graphite-based storage media under the same temperatures of the long-duration energy storage (LDES) battery developed by Sunlands Co.

QSP is a joint venture between Quantum Graphite and Sunlands Co. focused on the manufacture of flake graphite-based thermal storage media, with the flake to be exclusively sourced from Uley 2.

Thermal storage uses heat to store energy for later use, which offers a renewable source of energy and potentially reduces the reliance on fossil fuels for energy generation.

Quantum Graphite non-executive director David Trimball said the findings from the INEMET test work program were significant.

"These results now settle the scope of QSP's manufacturing of Uley media blocks," he said. "The big news is the uniformity in the heat storage results. This enables QSP to achieve efficiencies of scale in the size and type of Uley media blocks regardless of the configurations required by Sunlands Co. for its various LDES cells."

"Operationally the capability to utilise all the Uley 2 flake product range hands QSP significant operational control over the procurement process (eg timing, general market conditions etcetera) of Uley 2 flake inventory."

Quantum Graphite launched a takeover bid for graphite explorer Lincoln Minerals in August 2022, which was still active at the time of publication (mid-March 2023) and had been extended four times by Quantum.

In a letter to its shareholders in late February, Lincoln Minerals said Quantum Graphite's offer remained unsatisfactory, while highlighting its own attributes where it is fully funded for 2023 exploration.

Drilling at the Koppio graphite project and Kookaburra Gully graphite deposit was set to commence in March. **ARNS**



Graphite has a bright future as a key ingredient in lithium-ion batteries.

CLONCURRY

Two new mines in the making...

COPPER

150,000 tonnes of copper (phase-1 drilling target)

Duck Creek Project drilling results to date (MRE pending, drilling ongoing):

Copper zones: **70 drill holes, 690 mineralised intervals, average grade 1.9 % Cu**

Brownfield, open pit, copper sulphides.
Hundreds of priority targets, never drilled.
Globally significant copper district.

GOLD AND CRITICAL METALS

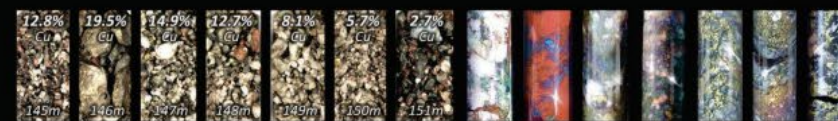
70,000 ounces of gold (phase-1 drilling target)

Highway Project drilling results to date (MRE pending, drilling ongoing):

Gold zones: **174 drill holes, 771 mineralised intervals, average grade 3.4 g/t Au**

Tungsten zones: **59 drill holes, 219 mineralised intervals, average grade 0.35 % WO₃**

Greenfield, open pit, gold, including by-products tungsten, magnet REEs (Nd/Pr, Dy/Tb) and cobalt. New 21km long, gold-rich mineral system, previously unknown to the region.



RC drill chips showing copper grade and depth

Diamond drill core (assays pending)

CORNERSTONE INVESTOR INVITED

Transition Resources Pty Ltd

P.O. Box 78, San Remo, 3925, VIC.

Email: corp.admin@transitionresources.com.au

Web: www.transitionresources.com.au



Cloncurry: Australia's key copper district

Transition Resources has spent just over four years exploring the highly prospective Cloncurry region near Mount Isa. The investment has paid off with the company recently unearthing a rare copper discovery.

Cloncurry is historically one of Australia's richest areas for base and precious metals production. That's why it was a surprise to Transition Resources when it began acquiring ground in the area in 2017 only to discover that many tenements sat uncontested.

Cloncurry, along with Mount Isa, sits within the North West Minerals Province (NWMP) in Queensland.

Transition now boasts more than 1100 square kilometres of highly prospective exploration and mining tenements in two project areas east and west of Cloncurry.

Transition founder and managing director David Wilson said the company's initial strategy was to take a closer look at some of the unique geological prospects in the region,

in hopes of identifying new deposits such as its Success cobalt mine, which has yielded ore at up to 50 per cent cobalt.

"The Cloncurry district – and the NWMP more generally – is a highly attractive exploration destination for a range of metals including rare earth elements, critical metals, base metals, precious metals, and actinides," he told *Australian Resources & Investment*.

"However, the NWMP still remains remarkably underexplored and significant exploration opportunities exist."

Transition's investment into the region paid off when the company unearthed significant copper and gold deposits in its new turf.

Wilson said that while Transition had many project opportunities, it was currently

focused on a handful of its advanced prospects in the region.

The Highway project in west Cloncurry is a 750m-long zone of high-grade gold with significant by-products of tungsten, cobalt, and rare earths.

"We subsequently linked the Highway project to a 21km-long gold-rich mineral system which was previously unknown to the region," Wilson said. "This is likely to host swarms of deposits similar to the Highway discovery."

Transition now plans to progress the Highway discovery towards a decision to mine.

The company also owns a number of tenements around Duck Creek in the NWMP, many of which have yielded exciting copper discoveries.

"Our Duck Creek tenements include some of the most densely mineralised areas of the Mount Isa Inlier," Wilson said. "We've identified over 550 historical prospects and dozens more are being identified every year as we continue exploration."

Though Duck Creek has historically been heavily explored, prior drilling was quite limited and typically localised to just a handful of prospects.

"The historical view has been that Duck Creek mineralisation is shallow, so earlier explorers drilled very few holes below 50m from the surface," Wilson said. "Our recent drilling efforts have intersected high-grade copper sulphides as deep as 280m, and it remains open at depth."

"But our most important zones have been intersected at depths less than 200m below surface, which offers cheaper open-pit mining options. The average copper grades so far are roughly double those of most undeveloped copper prospects in Cloncurry."

Internal modelling indicates the resource scale at Cloncurry is already enough to



Transition holds more than 1100 square kilometres of exploration and mining tenements in the Cloncurry region.

support a hub-and-spoke, mine-and-haul development model. But Transition believes its exploration results so far provide evidence of a more substantial system at depth.

Wilson said there was a lot more to its recent Duck Creek discovery than just luck.

"Transition's success follows four years of exhaustive research and development," Wilson said. "We are now converting this new knowledge into commercial opportunities."

The Duck Creek discovery hasn't changed Transition's plan moving forward. Instead, it's cemented the company's existing strategy.

"Our plan from the outset has been to define sufficient shallow sulphide resources to support near-term mining at the Duck Creek tenements," Wilson said.

"The new copper discoveries mean that Transition should soon be able to define mineral resources that will support mine planning."

Transition has also identified a 250m-long zone of shallow, high-grade rare earth elements (REEs), including high-grade magnet REEs, from drilling at the Toolebuc prospect in its east Cloncurry tenements.

"Mineralisation at Toolebuc remains open and the system is not yet understood," Wilson said.

"Geophysics has identified a large, 2km-wide conductive anomaly that aligns with a circular magnetic anomaly immediately east of the identified REE zone. These represent immediate ongoing drilling targets."

Wilson said as one of Australia's largest copper-producing regions, Cloncurry has an important role to play in global decarbonisation.

This has seen the region become a hotbed for consolidation, with recent deals including Evolution Mining buying the Ernest Henry copper-gold mine from Glencore, Harmony Gold's acquisition of Copper Mountain's Eva copper project and Aeris Resources' acquisition of Round Oak Minerals.

"Cloncurry has a rich history of copper production which has ebbed and flowed in concert with commodity cycles for more than 120 years," Wilson said.

"As the global investment community embraces the link between copper and a low-carbon future, producers are wondering how they will meet future demand."

Wilson said the looming copper supply squeeze, along with Glencore's recent copper divestments, were creating opportunities for smaller explorers in the region.

"We're seeing small to mid-tier groups positioning for future growth, each wanting to be the next big copper producer," Wilson said. "There are larger groups like Evolution, Harmony Gold and Aeris moving into the area through acquisitions."

"This is happening because organic growth – such as through the discovery of new deposits – is no longer a reliable business model. New discoveries are getting harder, which is what makes our Duck Creek and Highway discoveries so exciting."



Transition is exploring for a range of commodities in the Cloncurry region, including gold, copper and rare earths.

As it stands, Transition has 50 shareholders (12 of whom are staff) and a current market capitalisation of \$55 million. The fact most staff are also shareholders speaks to the company's commitment and passion.

"Everyone here is fully invested in the company's success for the sake of its shareholders," he said.

With hundreds of prospects yet to be tested, including multiple targets identified at depth, as well as a handful of bountiful discoveries, Transition has an exciting pipeline of projects in the Cloncurry region.

And the company has even hinted at a potential ASX listing either late this year or early next. **ARRI**



Transition has experienced plenty of exploration success in the Cloncurry region.

<https://www.australianresourcesandinvestment.com.au/latest-magazine/>

https://issuu.com/primecreativemedia-2016/docs/ari0423_lr