

Liminal | Mining

Corporate development, transactions and venture building in mining and minerals technology.

CONTEXT

As resource development becomes harder and global supply chains more geopolitically complex, technology is becoming the primary driver of value in the minerals and mining sector.

WHO WE ARE

Liminal operates at the intersection of mining, technology and capital markets. Banks and corporate advisers cannot assess a flowsheet or a processing route. Technology companies do not understand orebodies, mineralogy, or how a mining company buys. Technical consultancies do not structure deals or raise capital. Founders feel this directly: they cannot find an investor or adviser able to run the technical diligence, and are steered into decisions that do not survive contact with an operating asset.

We bring technical depth to assess technology, the networks to position it, and the capital markets experience to fund and structure it. The combination gives us access to deals and the basis on which to assess them. Behind it sits a network of technology companies, asset owners, capital providers and specialist firms, built over twenty years by partners who have worked across mining, capital and technology.

WHAT WE DO

Corporate development. A retained, fractional corporate development function for technology companies, at board and CEO level.

Market entry into mining. How a technology company enters the sector, engages mining companies and their assets, and closes its first commercial contracts.

Transactions and capital. M&A, listing pathways, capital strategy and structure, offtake and hedging, and alternative structures such as JVs and earn-in agreements.

Portfolio support. Operating and strategic support for mining technology positions held by investors and family offices.

Assets and feedstock. Identifying, qualifying and securing the assets a technology needs, and matching technologies to the assets an owner already holds.

Technology and asset assessment. For investors, corporates and platforms: what a technology can do, on what feed, and whether the asset fits.

Venture building and spin-outs. Building companies from research-institution, corporate and defence IP.

HOW WE ENGAGE

Board and CEO level.

A small number of companies at a time, worked directly by the partners. There is no associate layer.

Weighted to outcomes.

Retainer plus success fee, or equity where we are building. Compensation is weighted to what the engagement produces rather than time spent.

Specialists per engagement.

A small core team, with M&A, listing, legal, technical and commercialisation specialists engaged specific to an engagement.

WHERE THE NETWORK IS



● BASE

Perth, with the mining majors and much of the world's junior sector on the doorstep.

● REGULAR PRESENCE

London, New York, Sydney, Singapore and Hong Kong.

○ NETWORK

Technology companies, asset owners, capital providers and specialist firms across Australia, North America, Latin America and Asia.

KEY EXPERIENCE

Technology assessment. Eleven years designing and running technology commercialisation programmes for the major miners, including BHP, Rio Tinto, Vale, Anglo American and Ma'aden, working from their operating priorities back to the technologies that fit them.

Technology commercialisation. Ten years supporting mining technology companies with go-to-market, commercialisation, capital raising and customer engagement.

Venture building and capital. US\$35M raised from family offices, institutions and venture funds, and chair or board roles in technology companies.

Global reach. Standing relationships with execution experts in M&A, US, Australian and Asian capital markets, asset identification and diligence, research commercialisation, and rare earth supply chains.

Asset development and evaluation. Ten years experience in mineral exploration, resource and project development, and project evaluation globally and across multiple commodities.

Deal structuring and diligence. Transaction structuring across capital raises, asset acquisition, offtake and listing pathways, and support for up to US\$11B of M&A diligence and capital decisions in mining and energy.

Global operating experience. Including Australia, the UK, Latin America, the US and Canada, across technology and mineral assets.

PRINCIPALS

Ash Kirvan

MANAGING DIRECTOR, LIMINAL

Environmental engineering and physics by training, with more than 20 years across mining, resources and finance. Seven years at Worley, an EPCM engineering firm, working in Australia, China and Canada and running its ESG and risk practice in Canada. Co-founder of Polymath Ventures in Colombia, Latin America's first venture studio, building six companies across Colombia, Peru, Mexico and China. Chair or board member of technology companies, including executive hiring and operating oversight. Leads corporate development, transactions and deal structuring.

Holly Bridgwater

PARTNER, LIMINAL

Ten years as a geoscientist in exploration, resource development and project evaluation before founding Unearthed eleven years ago to connect the technology ecosystem with the mining industry. At Unearthed, she has designed and led technology and innovation programmes for companies including BHP, Rio Tinto, Vale, Anglo American and Ma'aden, translating strategic priorities into targeted technology, investment and commercialisation opportunities. Her work spans technology and asset origination, technical and commercial assessment, venture building and the identification of technologies capable of unlocking new value from mineral assets.