

Completion of three new
Return Water Dams (RWDs)
water pipelines

Laying groundwork for future mining

Infrastructure support by Knight Piésold

Image: Knight Piésold

As global demand for critical minerals continues to surge, mining companies face increasing pressure to bring new projects online efficiently, sustainably, and safely. At Knight Piésold Consulting, we understand that infrastructure is the backbone of any new mine development. From remote greenfield sites to complex brownfield expansions, we work closely with our clients to deliver integrated mining solutions that lay the groundwork for long-term operational success.

With over a century of consulting excellence and strong roots globally, Knight Piésold supports mining companies through every stage of development. Our multidisciplinary teams unite mining, geotechnical, environmental, civil, and structural expertise to meet the evolving infrastructure needs of modern operations.

Access is everything

Our design of haul and access roads ensures reliable connectivity to regional networks under the toughest conditions. Whether through mountainous terrain or across remote desert plains, our transport solutions are built to last.

Securing sustainable resources

Knight Piésold designs water supply infrastructure including boreholes, pipelines, and reservoirs, with careful attention to sustainability and community impact. Our hydrogeologists conduct comprehensive studies on water quality, geochemistry, and long-term availability. For power, we engineer grid connections,

and renewable energy systems, ensuring robust and cost-effective energy supply for operations and camps.

Smart site development

We support efficient mine layout and site development with design services that include plant terracing, hard-standing areas, and contractor as well as permanent camps. Our geotechnical teams perform foundation investigations and construction material assessments to ensure stability and cost-effectiveness from the ground up.

Environmental responsibility from the start

Our integrated teams conduct preliminary environmental and economic assessments early in the planning process. These include environmental and social impact studies that consider both regulatory compliance and community expectations, critical to long-term project approval and success.

Rail, runways, and beyond

For complex projects, we design runways and railways that integrate with

mining operations, delivering reliable transport infrastructure worldwide.

Resilient water management and tailings solutions

Stormwater management and pollution control dams are critical components of any mine. Our expertise in hydrology and dam engineering ensures the protection of downstream environments and compliance with evolving environmental regulations. We provide stormwater, pollution control, and full Tailing Storage Facility solutions—from design to closure.

Engineering for longevity

Our structural engineers design the core buildings that enable mining operations to thrive. We also specialise in structural steel and concrete designs for processing plants, ensuring structural integrity under heavy-duty use.

Partnering for success

At Knight Piésold Consulting, we see infrastructure as a strategic enabler of mining success—integrating design with environmental, geotechnical, and civil expertise to build resilient, efficient, and responsible mines. **MRA**