

“We often have challenges in cyanide supply and costs. We saw the GlyCat™ process as an opportunity to reduce our reliance on cyanide and to use a more eco-friendly alternative that provides sustainability.”

Peter Thompson  
Chief Executive Officer,  
Bayan Airag Exploration LLC

## CASE STUDY: REVOLUTIONIZING GOLD AND SILVER MINING FOR INCREASED GOLD RECOVERY AND SUSTAINABILITY

A Draslovka client, Bayan Airag Exploration LLC (Bayan Airag), sought to address the challenges in cyanide supply and overall costs. Draslovka recommended the use of GlyCat™ to reduce cyanide consumption, reduce processing costs and improve their ESG footprint.



**NAME:** Bayan Airag Exploration LLC  
**LOCATION:** Mongolia  
**TYPE:** Gold and Silver mine  
**APPLICATION:** GlyCat™ for Heap Leaching

### THE CLIENT

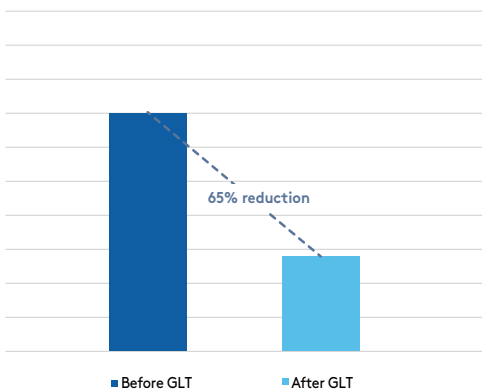
Bayan Airag is a Mongolian mining company, operating since 2014 at a rate of 1M tonnes of ore per year, and the first mining project operating in the Zavkhan province. Bayan Airag is committed to delivering sustainable development to host communities through responsible mining, protection of the environment and an unwavering focus on safety. The company has implemented numerous projects to support and develop host communities, including infrastructure, development of small businesses, livestock and pasture land management, cultural heritage, education and community health.

### THE PROBLEM

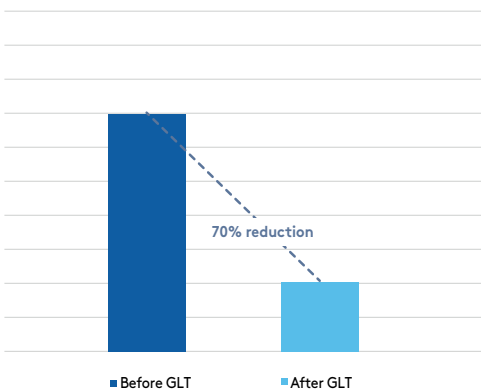
Bayan Airag were frequently encountering difficulties with reliable cyanide supply and management. Wanting to move to a more cost effective and environmentally friendly solution, they recognized the opportunity to invest in improved sustainability and process efficiency. They approached Draslovka with a straightforward goal - to reduce their costs and dependency on cyanide.



CYANIDE CONSUMPTION



REAGENT COSTS



THE SOLUTION

After the initial scope of work and testing proved successful, Draslovka recommended GlyCat™. GlyCat™ is a revolutionary leaching process from Draslovka which combines glycine (a non-toxic, bio-degradable chemical), with sodium cyanide to leach precious metals such as gold, silver and platinum group metals (PGM's). The GlyCat™ process can reduce cyanide consumption and improve recovery, while minimizing or eliminating the need for cyanide detoxification. This is because glycine selectively leaches certain base and precious metals with minimal dissolution of contaminants.

The decision to fully implement the technology on its heap leach operations was made following site-based testing which culminated in a 1000-tonne trial heap leach. Bayan Airag's operation in Mongolia is the world's first commercial heap leach application of GlyCat™.

THE RESULTS

The recent heap leach trial demonstrated higher recoveries than conventional cyanidation, with **78% overall gold recovery**. This was achieved with a **65% reduction in cyanide usage** and high recyclability of the glycine.

Overall, due to high cyanide unit costs, the total reagent costs are projected to be **reduced by over 70%**.



WHY DRASLOVKA

Bayan Airag chose Draslovka due to its pioneering GlyCat™ technology, which offered a sustainable and eco-friendly leaching option for gold and silver recovery. This innovative approach aligns with Bayan Airag's commitment to reducing cyanide reliance, ensuring sustainability, and enhancing community outcomes.

"Working with the Bayan Airag team has been a fantastic collaboration and is an exciting milestone for Draslovka. GlyCat™'s use in heap leaching applications demonstrates equivalent or better recoveries and step change reduction in operating costs. This provides opportunities for our clients to extend mine life and convert uneconomic ores and wastes into viable metal production opportunities. We look forward to expanding our strong relationship with Bayan Airag as it considers other projects in its area of operations and as a foundation for further applications in Mongolia." - **Ivor Bryan**, Chief Technology Officer of Draslovka Mining Solutions