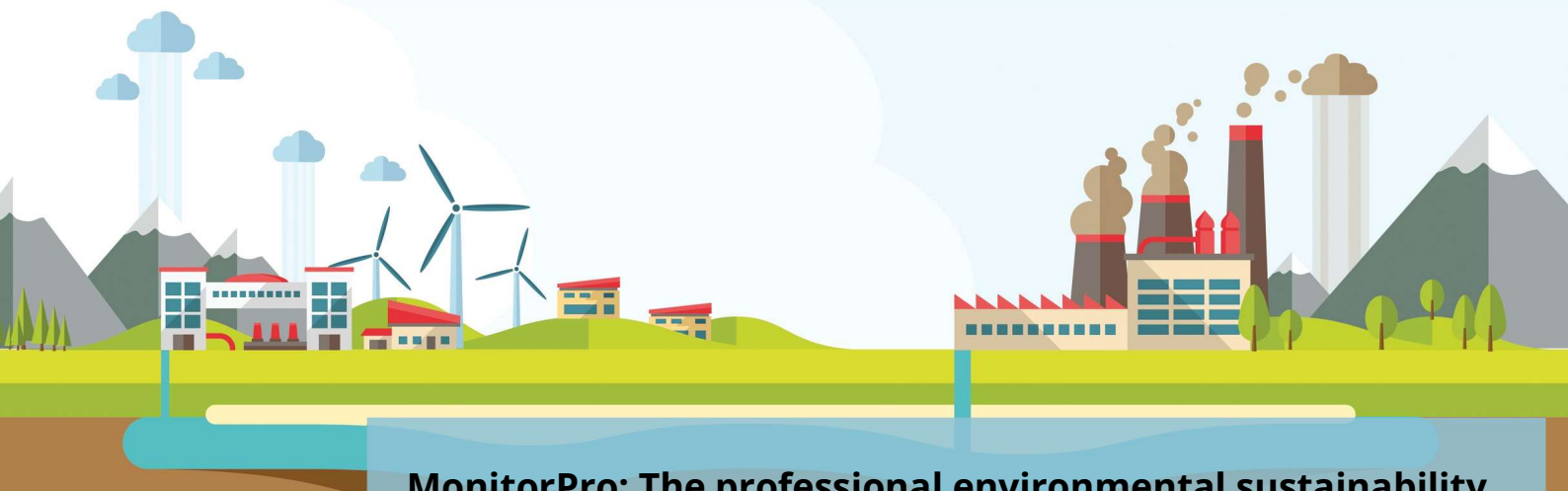


MonitorPro Case Study: Lithium Mining and MonitorPro



MonitorPro: The professional environmental sustainability and management solution, trusted by thousands of users worldwide.

As the world's transition from fossil fuels accelerates, battery storage is starting to play an increasingly key part in both transportation and renewable energy delivery.

What is Lithium?

Lithium is an alkali metal found in rock and brine deposits. In 2009 it was estimated that 13% of worldwide reserves of lithium were contained within in rock deposits and 87% found within brine deposits (USGS,2024).



Why is Lithium Mining Important?

Lithium is the key component of lithium-ion batteries which are currently the mainstream rechargeable batteries. Forecasts indicate a substantial increase in the demand for lithium over the next decade, necessitating increased mining activities to meet this growing need.

This increased demand is a result of several factors including the impact of climate change, and the resulting effect of carbon dioxide emissions from vehicles. This has created a market to produce electric and hybrid cars, and as a result requires the development of large batteries to power vehicles. Also, the demand for mobile phones and laptops continues to rise and rechargeable batteries are also required to meet this demand.

Although the distribution of Lithium is diverse, the predominant areas of production are the salt-lake brines of South America and the pegmatite sources in Australia, with the largest lithium producing countries being Australia, Chile, China, and Argentina.

MonitorPro and Lithium Mining

Lithium mining sites can potentially take up large areas of land and as a result can have a significant impact upon the environment in that location. Therefore, lithium mines have several governmental regulations associated with them, with obligations relating to impacts on flora and fauna, the terrestrial environment, surface and groundwater quality, air quality, and also social implications through noise and visual appearance.

To meet all these requirements a comprehensive monitoring system must be in place and MonitorPro is the ideal solution for managing this. These regulations will also vary between countries depending upon the local laws in place and MonitorPro's flexibility ensures its suitability for application in different states and countries, including multi-site operations spanning different regulatory areas.

To meet governmental regulations MonitorPro enables all data, from surface water, groundwater, flora/restoration, waste rock, or a range of other requirements, to be seamlessly collated into a single system for users to analyse, report, and present via a range of inbuilt and integrated tools.

