

IDENTIFYING TECHNOLOGIES FOR REDUCING THE MINING SECTOR'S GHG EMISSIONS



A Mining Industry Support Group

The Client came to PreScouter for help in identifying possible solutions that could help its members in meeting the mining industry's greenhouse gas (GHG) reduction goals.



CHALLENGE

The aim of this Research Support Service (RSS) Project was to map the landscape of new technologies such as carbon capture, green hydrogen, and non-emitting electricity that could be implemented in the next 10-20 years to decarbonize the mining sector. The focus was to understand which of these technologies would work best to diminish the overall GHG associated with potash and uranium.



APPROACH

PreScouter first gathered information about technologies applicable to the mining environment. PreScouter identified and studied over 30 technologies, focusing on maturity, scale, cost, yield, etc.

PreScouter then consulted with 4 Subject Matter Experts with a combined 100 years of experience in transitioning to lower emission technologies in mining or mining-related industries.

Based on the insights garnered from these two steps, PreScouter selected 5 key areas seen to have the greatest benefit and conducted a deep-dive investigation, looking at key players, implemented projects, startups, and other relevant factors. Additionally, PreScouter identified experts who could provide the Client with non-publicly available information about the selected technologies and their implementation.



OUTCOME

PreScouter down-selected to the Client 3 technologies that would result in the best sustainability / cost efficiency ratio. The insights provided by PreScouter were used by the Client to develop a roadmap for how to help its members bring these technologies to maturity in the next 10 years.