

SOIL RECLAMATION AND DUST SUPPRESSION TECHNOLOGIES FOR THE MINING SECTOR



A Multinational Mining Company

The Client was interested in finding the most well-suited solutions to address some of the environmental implications caused by mining activities, namely soil deficit and dust.



CHALLENGE

PreScouter's goal in this Research Support Service (RSS) Project was to evaluate mining technologies for both soil generation to replace lost soil during mining operations and dust suppression for operations to replace the use of water.

APPROACH

PreScouter built a team of Advanced Degree Researchers who scouted for all the different technologies and vendors to provide a baseline of opportunities. The team also obtained non publicly available information such as costs, delivery of different amounts, successful case studies, and recommendations. Subject Matter Experts in these fields were tapped to validate the results obtained, add any missing technologies or suppliers, and provide recommendations on the most cost-effective solutions for the Client as well as which vendors were in the best positions to provide those solutions.



OUTCOME

A total of 52 companies, with their corresponding technologies, were identified and studied for both dust suppression and soil generation. The PreScouter team classified the technologies into main categories and ranked the vendors on a scale from 1+ (best fit) to 4.

Based on these findings, PreScouter recommended 2 different sets of 3 vendors for each of the Client's mining sites, due to different conditions at the sites, as well as providing a roadmap of next steps to take in each case. Finally, PreScouter proposed 5 hypothetical scenarios of soil-condition combinations and corresponding solutions to those scenarios.

