



*Add value  
to your operation.  
Add confidence to  
your investment  
decision.*

**Xenith**

## PROJECT, CONCEPT AND FEASIBILITY STUDIES



Project, Concept & Feasibility Studies  
Resource Evaluation & Geological Modelling  
Operations Planning, Design & Scheduling  
Due Diligence & Technical Reviews  
Coal Industry Consulting  
Valuation & Corporate Advisory  
Metals & Minerals Industry Consulting  
Business Optimisation, Financial Modelling & Cost Review  
Infrastructure & Project Management  
Exploration Management  
Land Rehabilitation  
Environment & Approvals



# PROJECT, CONCEPT AND FEASIBILITY STUDIES

XENITH PROVIDES A FULL MULTI-DISCIPLINARY CONSULTING SERVICE FROM RESOURCE TARGET GENERATION AND EXPLORATION MANAGEMENT THROUGH TO GEOLOGICAL MODELLING, MINE OPERATIONAL SUPPORT, FEASIBILITY STUDIES AND DETAILED MINE PLANNING, INCLUDING SPECIALIST FINANCIAL ANALYSIS, INFRASTRUCTURE DESIGN AND CORPORATE ADVISORY FUNCTIONS.

**Xenith's study team services are internationally recognised and are supported through our offices in Brisbane, Sydney, and the Hunter Valley.**

Feasibility studies have been undertaken for mining projects around the world in multiple commodities. The evaluation of our client's mining projects from exploration through development and production can be a lengthy and complicated process. The technical feasibility and economic viability of each project are determined during the phases of mine development with more detailed engineering data required at each stage with typically three levels of study (scoping or conceptual, pre-feasibility and feasibility). Feasibility studies have been undertaken with specialists in geology, mine engineering, process engineering, geotechnical, environment, infrastructure, financial analysis and mineral economics to produce a concise, cohesive study for the client.

## Fields of Expertise

**Feasibility Studies** – Xenith specialise in mining feasibility studies. The “bankability” of our work has long been recognised by mining houses, financial institutions and resource industry investors.

Xenith's consultants are experts in geology, mining engineering, infrastructure, and financial analysis. For other specialist areas such as geotechnical, hydrological, environmental and product specification and markets Xenith call on a number of highly regarded business associates as required.

**Concept, Pre-feasibility and other** – The mining group provides a diverse range of services in the fields of mine design, mine planning, mine operation and mine evaluation.

## CASE STUDY

Xenith recently completed a JORC resource estimate followed by a concept study for an Australian manganese project. The project is likely to progress to a PFS study during 2021.

This study focused on the following areas:

- Definition of pits and selection of the most appropriate mining method
- Equipment selection
- Ore processing and tailings management
- Definition of the site and logistical infrastructure requirements and locations
- Financial analysis and VALMIN report.

