SLR Consulting is a leading consultancy operating within the mining, minerals and extractive industries sector and advises companies and funding agencies throughout the world. We have extensive experience within the metaliferous mining sectors, coal and uranium, building aggregates, cement, building products and industrial minerals.

We provide a full range of technical and environmental services throughout the project life cycle from initial site assessment and exploration, geology, identification and acquisition through detailed design, engineering, environmental impact assessment, planning, permitting and compliance, to final restoration and afteruse, including alternative afteruse development and enhanced residual development value.

SLR’s mining expertise is founded on a wide range of skills including geologists, valuation experts, environmental scientists and engineers.

The mining and minerals sector offers unique challenges over the life cycle of a mine and many of our staff have provided decades of specialist services to the mining industry. We also provide a wide range of inter-related environmental and professional services that combine to offer a unique package from a single provider. SLR offers ongoing management, planning and permitting support throughout the life cycle of a mine and also offers specialised engineering services for the design, construction, operation, decommissioning and restoration of mine waste and water management facilities.

Careful planning of mine development maximises reserves and reduces extraction and restoration costs. SLR’s geologists use advanced computer techniques, backed by many years of practical experience, to produce practical working schemes for mines and quarries.

Our engineers have also worldwide experience in the minerals and mining sector having advised both mine operators, funding companies and agencies.

Ongoing technical support covers a wide and diverse range of areas from design of large tailings dams, heap leach pads and excavated slopes to ecological surveys and post closure landscaping for nature conservation or recreational after use of sites. We recognise the importance of maximising site value and minimising post-closure liabilities. SLR has been responsible for successful promotion of residential, commercial and industrial property development as well as recreation schemes on old mineral sites.

Of growing importance is the management of energy and emissions to comply with climate change agreements and other emissions trading requirements. SLR advises mining and mineral sector clients on the development of renewable energy resources as this sector is a relatively intense energy user.

In addition to its technical expertise, SLR advises minerals and mining clients relating to negotiation advice and support for all manner of commercial agreements and transactions. Such advice includes mineral and property valuations, prospecting and mining licenses, mineral leases, insurance issues and cost estimates for decommissioning in accordance with relevant accounting standards. SLR has also provided technical, environmental and economic advice on mining and mineral related due diligence projects.
The services offered by SLR broadly fall into the technical disciplines listed to the left. Each technical discipline is supported across one or more offices and by teams of experts that work within and across the technical disciplines. SLR operates worldwide as one seamless integrated company, thus able to offer or support mining projects over a wide range of geographies, climates and mining commodities. SLR will source the best technical experts and use the extensive in-house capability to execute projects and integrate project teams, which often comprise both local and international specialists.
SLR provides a wide range of services internationally. Our purpose is to ensure that we provide the best possible service to our clients and ensure that we provide the best possible project team, taking cognisance of geographic and other constraints.

Range of mining services:
- Exploration
- Feasibility
- Detailed Design & Construction
- Operational Services
- Decommissioning

Services are provided at each phase of development or stage of life cycle of a mine or quarry such as exploration, feasibility, design, financing, construction, operation through to closure and after-use. SLR services may be required during any or multiple stages and are presented in terms of the stage of a mine life cycle during which they are most commonly sought by clients.

Mining projects are located in a diverse range of geographies, climates and environments. SLR has a network of offices covering many of the major mining centres including:

**Asia - Pacific:** 13 offices including Sydney, Brisbane, Melbourne, Perth, Newcastle, Rockhampton, Townsville and Singapore.

**Europe:** 24 offices many of which are within easy reach of central London.

**Africa:** 5 offices including Johannesburg, Cape Town, and Windhoek.

**United States & Canada:** 33 offices including Vancouver, Toronto, Seattle, Calgary and Fairbanks.
Exploration services
Mineral targeting & project design
Exploration programme management
Geological mapping, 3D modelling
Geochemical orientation & interpretation
Petrographic analysis
Geophysical services & modelling
Geophysical interpretation (mag, EM, IP, gravity)
Seismic Data Modelling
Data Management/GIS (MapInfo/ArcInfo/Surpac)

Drilling services
Core logging and storage
Targeting and programme management
QA & QC programmes

Topographical survey
Mine/quarry surveying
Landscape survey

Geological data analysis
Resource & reserve calculation and modelling
(Datamine/Vulcan/Gemcom etc)
Joint Ore Reserve Committee “JORC” Code compliant assessments

Baseline environmental studies
Acoustics
Fauna and flora
Climate profile
Surface and ground water
Environmental geochemistry
Soils
Erosion prediction and modelling
Heritage
Air quality
Traffic

Visual assessments and visual modelling
Socio economic surveys.
Valuation and property advisory services
Resource and reserve valuations by licensed valuers
Sales brokerage
Competent Persons Reports (CPR)
Licensed/registered valuers in a range of jurisdictions

Strategic advisory
Exit and acquisition due diligence
Mergers, acquisitions and sales due diligence
Financial modelling
Investment strategies
Sales brokerage & property negotiation
Sale leaseback analysis and negotiation
Joint venture analysis and negotiation
Bankable feasibility studies
Feasibility study co-ordination
Specialist inputs including resource and reserve estimates, environment, water supply and dewatering, mine waste

Mine/quarry planning and design
Preliminary mine/quarry design
Assessment of extractable reserves

Mine water supply and dewatering
Hydrological and hydrogeological studies
Drilling supervision and logging
Artificial groundwater recharge schemes

Mine drainage quality and quantity prediction
Source term characterisation
Runoff and seepage characterisation
Groundwater and contaminant transport modelling

Mine waste and water management facility design
Feasibility level design of facilities
Water and salt balances
Dam safety classification and registration
Tailings rheology, beaching, pumping and thickening studies
Design review and optimisation
Impact mitigation design
Water and salt balances
Seismic assessments
Seepage models and stability assessments
Heap leach pad and pregnant liquor collection and re-circulation systems
Geometric design
Materials handling and stacking
Facility design
Detoxification modeling and design
Mining geotechnics
Rock mechanics and stability assessments
Subsidence prediction and assessment

Stakeholder engagement
Conflict management and risk communication
Legal process management
Stakeholder consultation

Social and environmental impact assessments and management plans
Co-ordination and management of specialist environmental and social studies

Legal process management
Authority and stakeholder liaison

Conceptual mine closure plan and liability assessment
Strategic advice concerning residual infrastructure development and post closure land use
ICME closure process

Permitting and licensing
License applications including mining, water use, nuclear regulators and dam safety

Valuations
Financial reporting
Funding, insurance taxation and business advice
Sales, mergers and acquisitions.

Competent persons reports (CPR)
Due diligence and reviews
Co-ordination of specialists input to the CPR
Geology, resource and reserve evaluation
Environmental, mine waste and water management aspects
Mine waste and water management facilities
Flow slide and dam break analysis
Stage capacity and volumetric design
Geotechnical, hydraulic and structural design
Construction drawings and specifications
Slurry thickening and pumping systems
Tender letting and adjudication
Construction monitoring and project management
Commissioning

Mine drainage treatment facilities
Geochemical and hydrological characterisation of mine drainage
Mine drainage quality prediction and optimisation
Process, civil & mechanical design of the water treatment facility

Return water and slurry pumping
Pipeline and pump sizing and optimisation
Rheology
Slurry thickening/dewatering studies

River diversions
Hydrological modeling and sizing
Risk assessment
Alignment design, bed and bank design
Flow attenuation design

Mine safety
Underground and open pit mine safety plans
Development and implementation of management systems
Risk management
Quality management
Safety and health management
Environmental management
Assistance with the implementation and achievement of ISO

Mine facility review and monitoring
Environmental monitoring
Dam safety monitoring

Energy management
Geothermal energy
Energy from waste (solid and gas)

Carbon management
Carbon footprint, life cycle analysis, carbon sequestration

Non-mining waste management
Integrated waste management plans (Industrial, domestic and hazardous waste)
Waste facility designs
Energy from waste projects and CDM registration

On site environmental management
Environmental manager services provided by our environmental management specialists

Audits and reviews
Mine grade control
Equator principles
Carbon, energy and water use audits
Permit condition compliance
Safety audits
Resource and reserve estimates
Sustainability audits and reporting (Global reporting initiative)
Blast control

Optimisation studies
Water, energy, carbon emissions
Emission reduction
Sustainable development - policy and strategic advice

Closure liability/provision assessment update
As required in various jurisdictions and according to accounting standards
Decommissioning, Mine Closure and Afteruse Stage

Mine closure plans
Landscape planning and visualisation
Stakeholder engagement
Geomorphological evolution and landform development modelling
Closure liability assessments

Mine drainage
Mine decant location, quality and quantity assessment
Mine water treatment studies
Impact reduction and mitigation studies

Contaminated site cleanup
Pollution plume migration modeling
Risk assessments
Investigation, remediation design and monitoring

Monitoring and performance evaluation
Landscape function analysis
Water, soil, fauna and flora and air quality monitoring
Performance audits
Mine air quality

Valuation and property advice - post decommissioning
Strategic advice on quarry and mine after-use
Identification of development opportunities
Feasibility analysis
Market analysis
Site attributes
Planning analysis
Development concepts
Business financial analysis
SLR is a dynamic, responsive and fast growing consultancy with an unrivalled reputation for providing high quality tailored services.

Internationally recognised reputation in the mining and minerals sector for the provision of geological, environmental, engineering and valuation services.

Access to specialist in-house skills - geologists, mining engineers, environmental scientists, tailings and heap leach engineers and other relevant industry professionals.

Personnel with respected reputations in the relevant marketplace.

Nationwide and international coverage and experience, allowing seamless and consistent client service.

Personnel with industry specific professional accreditation and qualifications.

Our clients include BHP Billiton, Barrick, AngloGold Ashanti, CRH Plc, Xstrata, Rio Tinto, Lonmin, Impala and Gold Fields. SLR also has junior and mid-tier mining, quarrying and mineral exploration companies among its clients.

We have successfully completed mining projects in a wide range of countries, climates and environments.