



## Mining Activities



From exploration to full-scale production, THEOMNIVOLT provides end-to-end mining design, planning, financing, and operational excellence. Our team of engineers, and mining specialists guarantees sustainable, profitable, and world-class project execution.



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**THEOMNIVOLT**  
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## Core Mining Profile



**“THEOMNIVOLT”** *Where Power Meets The Potential*







# Mining Activities

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# 1. About Mining



Mining is the essential industrial process for extracting Geological Materials and valuable commodities, such as metals, industrial minerals, and construction aggregates, that cannot be artificially synthesized. The selection of the extraction technique is governed by economic viability, geological factors, and ore body characteristics.

## The Four Primary Methods of Mineral Extraction

### 1. Surface Mining (Opencast) :

- I. Surface Mining.
- II. Strip Mining.
- III. Open-Pit Mining.
- IV. Mountaintop Removal (MTR).
- V. Dredging.
- VI. Highwall Mining.

### 2. Underground Mining (Subsurface)

- I. Room and Pillar Mining.
- II. Narrow Vein Stopping.
- III. Block Caving.

### 3. Placer Mining

- I. Panning.
- II. Dredging.

### 4. In-Situ Recovery (ISR)

- I. Environmental Profile.
- II. Safety and Cost.



The final selection of a mining methodology—be it mechanical surface work, complex underground development, alluvial separation, or chemical recovery—is ultimately determined by a comprehensive assessment of the ore body's geometry, depth, grade, and the necessary economic justification to manage high capital expenditure and environmental costs.

For FULL DETAILS of "About Mining", please email us your Project Report.



## 2. Major Factors in Global Mining Project Viability

### 1. Economic and Market Dynamics

- Commodity Price Volatility and Forecasting,
- Offtake Agreements and Marketing.
- Cost Control and Inflation.

### 2. Geopolitical and Regulatory Framework

- Permitting and Licensing Security,
- Fiscal Regime and Taxation.
- Foreign Investment Protection.

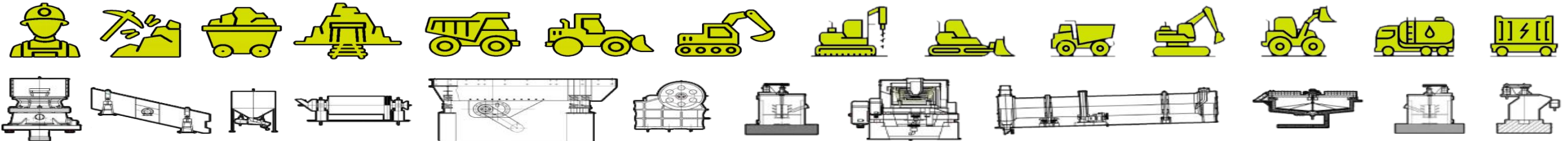
### 3. Human Capital and Talent Management

- Specialized Talent Pool.
- Local Content and Skills Transfer.
- Health and Safety Culture (Beyond Compliance).

### 4. Infrastructure and Digital Integration

- Energy and Decarbonization.
- Logistics and Transportation Infrastructure.
- Digitalization and Cybersecurity,

**For FULL DETAILS about “Major Strategic Factors in Global Mining Project Viability”, please email us your Project Report.**





# 3. Core Policy Statements for Human Rights & Sustainability in Mining



## 1. Corporate Human Rights and Social License to Operate (SLO) Policy

Statement: We formally adopt and commit to the UN Guiding Principles on Business and Human Rights (UNGPs) and the International Finance Corporation (IFC) Performance Standards as the minimum standard for all project activities. Our commitment is to exercise continuous human rights due diligence to identify, prevent, mitigate, and account for potential adverse impacts. We shall proactively engage with stakeholders to maintain a robust and measurable Social License to Operate (SLO) throughout the full life cycle of every project.

## 2. Environmental Stewardship and Community Health Policy

Statement: We recognize the fundamental Right to a Healthy Environment and the Right to Health for all affected communities. We are committed to minimizing our ecological footprint by implementing certified Environmental Management Systems (EMS), strictly controlling air and noise emissions, and adhering to rigorous standards for habitat restoration and biodiversity conservation. Furthermore, we shall proactively assess, mitigate, and remediate any project-induced health risks, ensuring that our operations do not contribute to social diseases or strain local public health infrastructure.

## 3. Water Stewardship and Resource Protection Policy

Statement: We uphold the Right to Water by prioritizing community and ecosystem water needs over our operational requirements. Our policy mandates the development and public disclosure of a comprehensive, transparent Water Management Plan for every site. We commit to implementing closed-loop systems, maximizing water recycling, and investing in state-of-the-art treatment technologies to prevent chemical contamination, acid rock drainage, and hydrological depletion of local surface and groundwater sources.

## 4. Indigenous Peoples and Free, Prior, and Informed Consent (FPIC) Policy

Statement: Where our activities may affect the lands, territories, or resources of Indigenous Peoples, our paramount commitment is to the principle of Free, Prior, and Informed Consent (FPIC), in line with IFC Performance Standard 7. We shall engage with traditional governing structures and provide culturally appropriate consultation, ensuring that all agreements are based on the community's self-determined development goals, protect their cultural heritage, and include binding terms for equitable long-term benefit sharing.

## 5. Ethical Labor and Security Management Policy

Statement: We maintain zero tolerance for child labor and forced labor, adhering strictly to the International Labour Organization (ILO) Core Conventions across our entire supply chain and workforce. We ensure fair wages, safe working conditions, and the right to freedom of association. Additionally, we mandate that all private and public security personnel comply with the Voluntary Principles on Security and Human Rights (VPs), prohibiting the use of excessive force and maintaining transparent protocols to ensure the safety of both personnel and community members.





# 4. Our Trajectory



**VISION :** To emerge as a distinguished leader in the mining sector by consistently exceeding expectations and upholding our commitments.

**MISSION :** Safely and sustainably extract the essential mineral resources required to advance global industry while delivering maximum value for our stakeholders..

## SOCIAL RESPONSIBILITY :

- ★ Prioritizing safe, clean, and healthy environments.
- ★ Complying with environmental regulations.
- ★ Contributing positively to society and sustainability.

## STRATEGIC APPROACH :

- ★ We target Tier 1 deposits with proven long-term potential.
- ★ The approach integrates digital and autonomous technologies for efficiency.
- ★ We prioritize decarbonization across all phases of operation.
- ★ xtraction methods are geologically tailored for maximum recovery.
- ★ We secure and maintain a robust social license to operate.

## TEAMWORK :

- ★ Respectful communication and collaboration are our foundations.
- ★ We value individual contributions within a cohesive team.
- ★ Embracing diverse perspectives to drive innovation.
- ★ A culture anchored in integrity, respect, and teamwork.

## COMMERCIAL EXCELLENCE :

- ★ Fostering a profit-driven, efficient business mindset.
- ★ Implementing best practices for optimal performance.

## TRUSTED PARTNER :

- ★ Building strong relationships with stakeholders.
- ★ Promoting collaboration and mutual trust.
- ★ Aligning with governments, partners, customers, etc.





## 5. Flexible Mining Cadence

- A. Strategic Project Planning**
- B. Comprehensive Financial Structuring**
- C. Mine Design & Engineering**
- D. Supply Chain & Logistics Management**
- E. Procurement of Mining Plant, Equipment etc.**
- F. Regulatory & Compliance Navigation**
- G. Sustainable Mining Practices**
- H. Operation Management & Execution**
- I. Technology Integration**
- J. Risk Management & Mitigation**
- K. Mineral Processing & Metallurgy**
- L. Security & Asset Protection**
- M. Commodity Trading & Market Access**





## 5.A. Strategic Project Planning

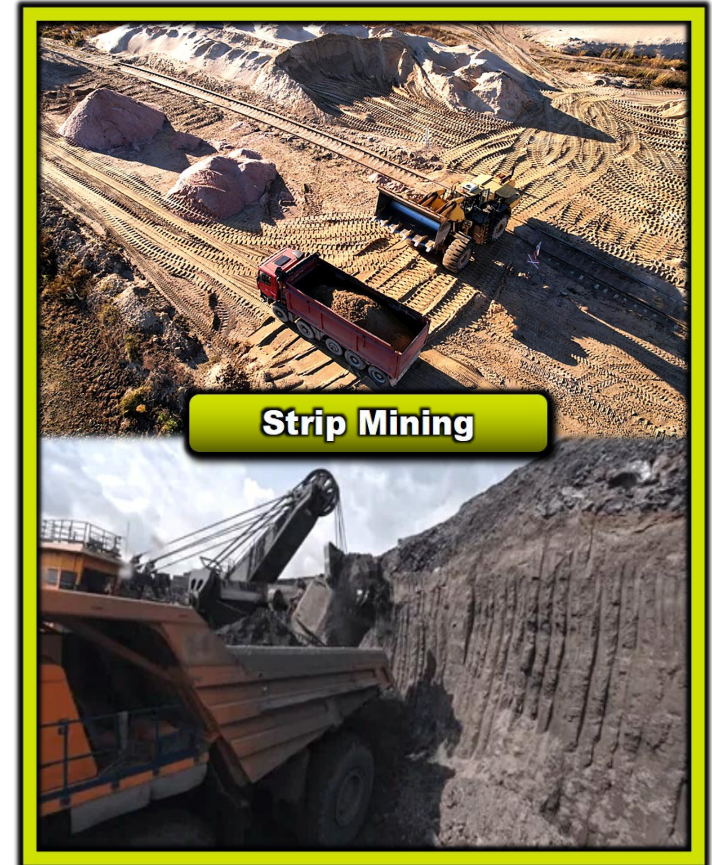
- ➔ **Feasibility Studies:** Conducting detailed technical, economic, and financial feasibility studies to validate a project's viability.
- ➔ **Resource Estimation:** Using advanced geological modeling to accurately estimate the quantity and quality of mineral reserves.
- ➔ **Location and Infrastructure Analysis:** Assessing the site's logistical viability, including access to power, water, and transport routes.
- ➔ **Community and Social Impact Assessment:** Evaluating and planning for social and environmental impacts to secure local support and regulatory approval.
- ➔ **Environmental Baseline Studies:** Establishing a clear understanding of the pre-mining environmental conditions to guide future reclamation and mitigation efforts.
- ➔ **Permitting and Licensing Strategy:** Developing a clear, step-by-step plan to acquire all necessary permits from local and national authorities.
- ➔ **Tailings Management Planning:** Designing secure and sustainable plans for managing mine waste from the project's inception.
- ➔ **Risk Assessment and Mitigation:** Identifying and creating strategies for all potential risks, from geological to financial and political.
- ➔ **Stakeholder Engagement:** Establishing and maintaining open communication with all stakeholders, including government bodies, local communities, and investors.
- ➔ **Project Timeline and Budgeting:** Creating a realistic timeline and detailed budget to guide the project from exploration to operation.
- ➔ **Market and Commodity Pricing Forecast:** Analyzing global market trends to forecast future commodity prices and ensure the project's long-term profitability.
- ➔ **Security Assessment:** Evaluating and planning for the physical security of the site, equipment, and personnel.
- ➔ **Post-Mining Reclamation Plan:** Designing a comprehensive plan for the rehabilitation of the mine site after operations cease.





## 5. B. Comprehensive Financial Structuring

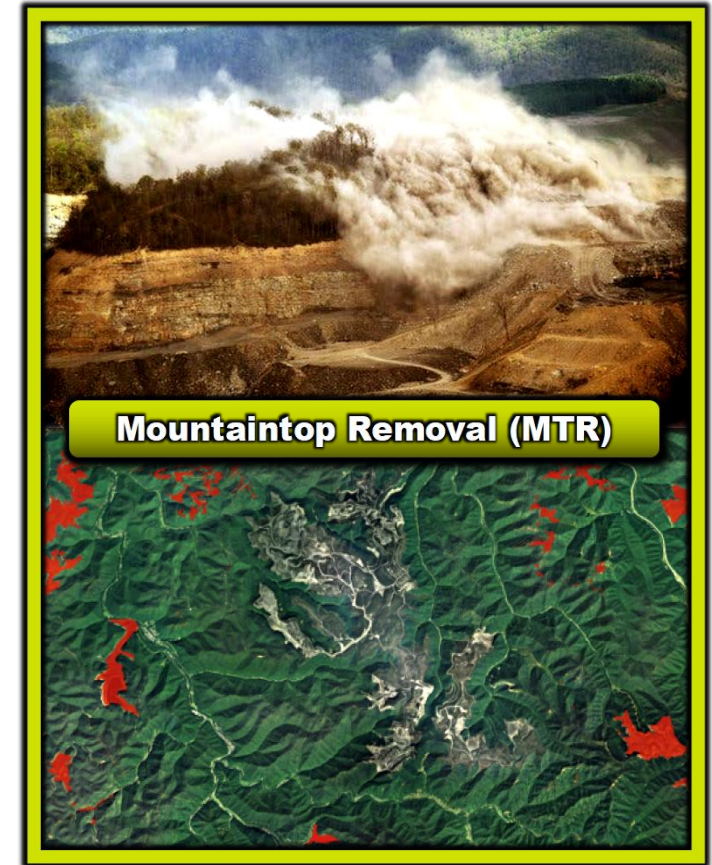
- ➔ **Capital Expenditure (CAPEX) Modeling:** Creating detailed models to forecast all capital investments required for the project.
- ➔ **Operational Expenditure (OPEX) Analysis:** Providing a clear breakdown and forecast of all costs associated with daily mining operations.
- ➔ **Project Finance Arrangement:** Securing and structuring financing through loans, bonds, or private equity investments tailored to the project's needs.
- ➔ **Equity and Debt Allocation:** Determining the optimal balance between equity and debt to fund the project while minimizing risk.
- ➔ **Investor and Joint Venture Agreement Negotiation:** Crafting and negotiating terms that protect the interests of all financial partners.
- ➔ **Revenue Forecasting and Sensitivity Analysis:** Predicting future revenue streams and analyzing how changes in commodity prices and production affect profitability.
- ➔ **Taxation and Royalty Planning:** Developing a strategy to manage tax obligations and government royalties in the host country.
- ➔ **Financial Reporting Framework:** Implementing a robust system for transparent and accurate financial reporting to investors and regulators.
- ➔ **Cash Flow Management:** Establishing procedures for managing the project's cash flow to ensure liquidity and sustainability.
- ➔ **Hedging Strategies:** Utilizing financial instruments to hedge against commodity price volatility.
- ➔ **Cost Control and Management Systems:** Implementing systems to track and control project costs in real-time.
- ➔ **Exit Strategy Planning:** Developing a clear plan for investors to exit the project, such as through a sale or IPO.
- ➔ **Insurance and Financial Guarantees:** Securing the necessary insurance policies and financial guarantees to protect against unforeseen financial losses.





## 5.C. Mine Design & Engineering

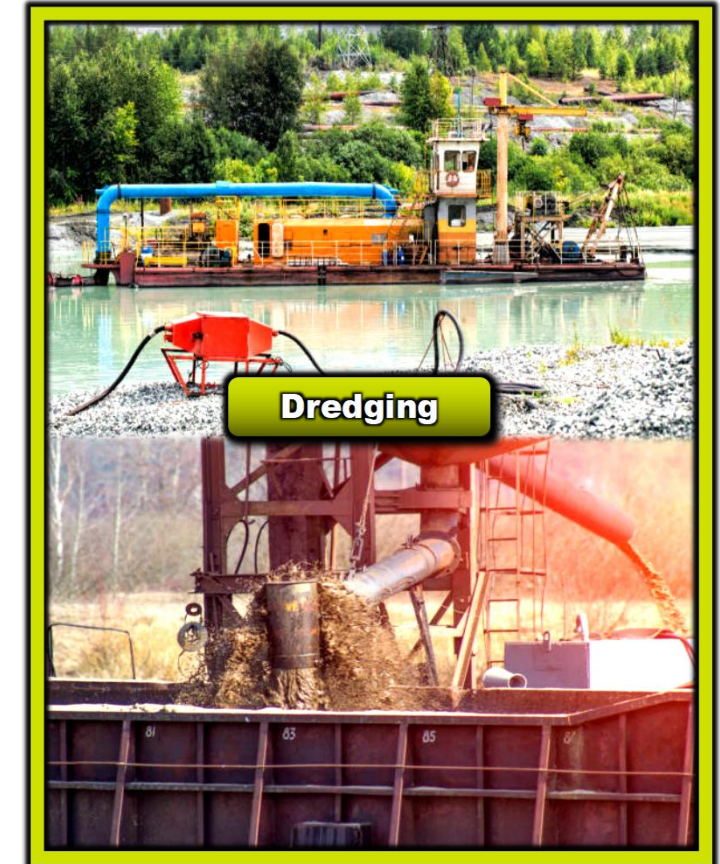
- ➔ **Geological Modeling:** Creating 3D models of ore bodies to determine optimal mining locations and methods.
- ➔ **Geotechnical Assessment:** Analyzing rock and soil stability to ensure the safety of open-pit walls and underground tunnels.
- ➔ **Mine Layout and Infrastructure Planning:** Designing the physical layout of the mine, including roads, shafts, and processing areas.
- ➔ **Ventilation and Safety Systems:** Engineering robust ventilation systems for underground mines and ensuring all safety protocols are integrated into the design.
- ➔ **Equipment Selection:** Choosing the most appropriate type and size of machinery and equipment for the specific geological conditions and mining method.
- ➔ **Water Management Systems:** Designing systems for managing water on-site, including dewatering, runoff control, and water treatment.
- ➔ **Tailings Storage Facility (TSF) Design:** Engineering a stable and environmentally sound TSF to store mine waste safely.
- ➔ **Material Flow and Handling Systems:** Optimizing the movement of ore and waste rock to maximize efficiency.
- ➔ **Blasting and Excavation Planning:** Creating detailed plans for blasting patterns and excavation sequences to minimize disruption and maximize yield.
- ➔ **Automation and Robotics Integration:** Incorporating automated systems and robotics to enhance safety and efficiency in high-risk areas.
- ➔ **Energy and Power Supply Planning:** Designing a reliable and sustainable energy solution for the mine's operations.
- ➔ **Waste Rock Management:** Creating a plan for the safe and compliant disposal of waste rock.
- ➔ **Closure Planning:** Integrating mine closure and rehabilitation plans into the initial design.





## 5. D. Supply Chain & Logistics Management

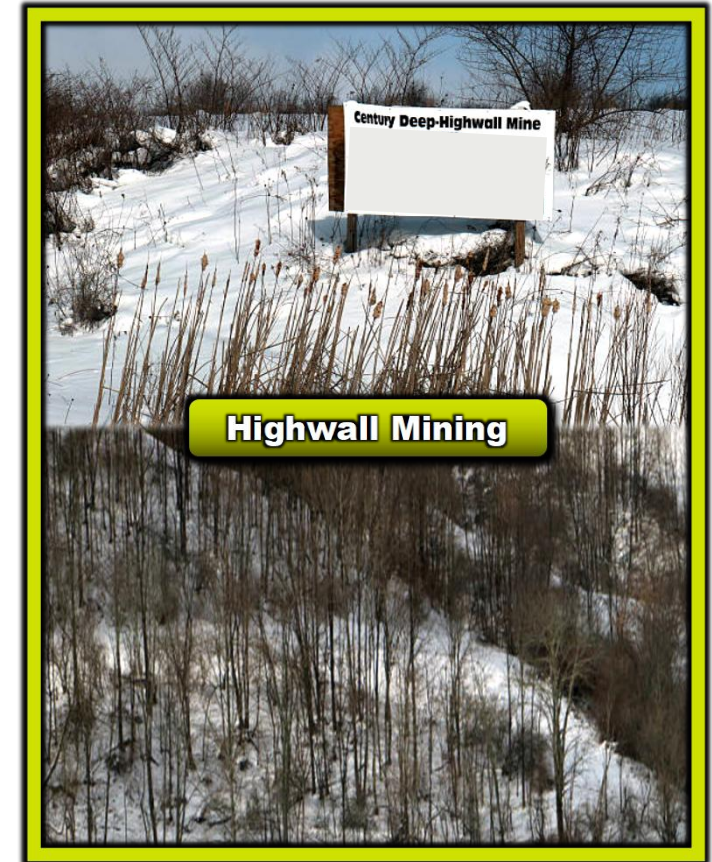
- ➔ **Global Sourcing Strategy:** Establishing a network of trusted international suppliers to source all required materials and equipment.
- ➔ **Vendor and Supplier Management:** Managing relationships and contracts with all suppliers to ensure timely and cost-effective delivery.
- ➔ **Freight and Transport Coordination:** Coordinating all modes of transport, including air, sea, and land, to move goods to and from the mine site.
- ➔ **Inventory and Warehouse Management:** Implementing a system to track and manage all materials and equipment in storage to prevent shortages and waste.
- ➔ **Customs and Import/Export Compliance:** Handling all necessary customs documentation and procedures to ensure smooth cross-border logistics.
- ➔ **Just-in-Time (JIT) Delivery:** Optimizing logistics to ensure critical components and consumables arrive exactly when needed, reducing storage costs.
- ➔ **Reverse Logistics Planning:** Managing the return or disposal of used equipment, parts, and waste.
- ➔ **Security of Goods in Transit:** Implementing measures to protect valuable assets during transportation from theft or damage.
- ➔ **Real-Time Tracking:** Utilizing GPS and other tracking technologies to monitor the location and status of all shipments.
- ➔ **Cost Optimization:** Continuously analyzing logistics routes and methods to identify opportunities for cost savings.
- ➔ **Performance Metrics (KPIs):** Tracking key performance indicators such as delivery time, cost per shipment, and supplier reliability.
- ➔ **Emergency Logistics Plan:** Developing a plan to respond to unforeseen logistical disruptions, such as transport delays or natural disasters.
- ➔ **Sustainable Logistics Practices:** Choosing environmentally friendly transport options and partners to reduce the carbon footprint of the supply chain.





## 5. E. Procurement of Mining Plant, Equipment etc.

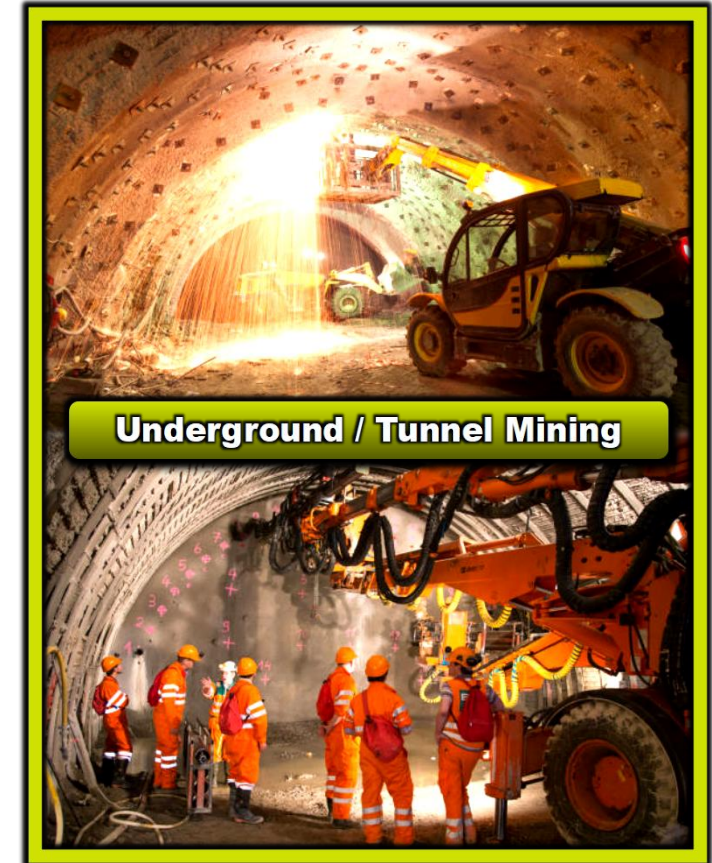
- ➔ **Needs Assessment and Specification:** Accurately defining the project's exact requirements for machinery and equipment.
- ➔ **Vendor and Manufacturer Selection:** Identifying and evaluating top-tier global manufacturers and suppliers to ensure quality and reliability.
- ➔ **Price and Contract Negotiation:** Securing the most competitive prices and favorable contract terms, including warranties and maintenance agreements.
- ➔ **Lease vs. Buy Analysis:** Evaluating whether it is more cost-effective to purchase, lease, or rent specific equipment.
- ➔ **Financing and Payment Management:** Structuring the financing for large-scale equipment purchases and managing payment schedules.
- ➔ **Customization and Fabrication:** Overseeing the customization of equipment to meet the unique demands of the project's geological conditions.
- ➔ **Quality Control and Inspection:** Performing independent inspections of equipment before shipment to ensure it meets all specifications.
- ➔ **Shipping and Transport Logistics:** Managing the complex logistics of transporting large and heavy equipment to the mine site.
- ➔ **On-Site Assembly and Commissioning:** Supervising the assembly and testing of the mining plant and equipment on-site to ensure it is operational.
- ➔ **Spare Parts Inventory:** Establishing a comprehensive inventory of critical spare parts to minimize downtime from equipment failure.
- ➔ **Maintenance and Service Agreements:** Securing long-term service agreements with manufacturers to ensure ongoing maintenance and support.
- ➔ **Asset Management System:** Implementing a system to track and manage the lifecycle of all assets, from purchase to disposal.
- ➔ **Depreciation and Tax Planning:** Strategically planning for equipment depreciation to optimize tax benefits.





## 5. F. Regulatory & Compliance Navigation

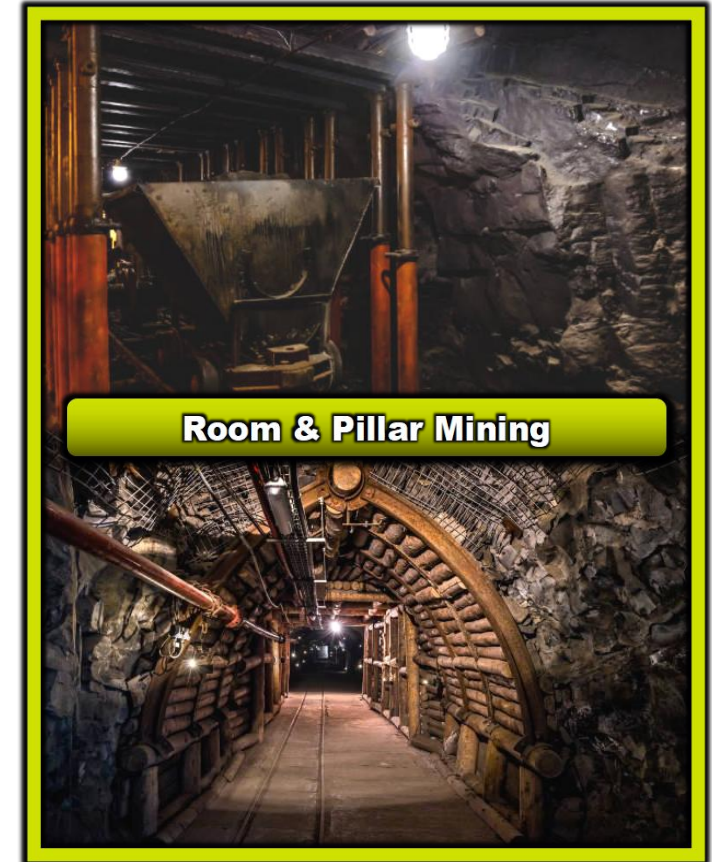
- ➔ **Permitting and Licensing:** Securing all necessary permits, licenses, and approvals from government and environmental agencies.
- ➔ **Environmental Impact Assessment (EIA) Submission:** Preparing and submitting detailed EIAs to demonstrate a project's environmental sustainability.
- ➔ **Social and Community Engagement Protocols:** Implementing formal protocols to manage community relations, including consultation and benefit-sharing agreements.
- ➔ **Health and Safety Regulation Compliance:** Ensuring all operations adhere to strict national and international health and safety standards for mining.
- ➔ **Labor Law Compliance:** Complying with all local and national labor laws, including those related to wages, working hours, and union relations.
- ➔ **Reporting and Disclosure Requirements:** Submitting regular reports and disclosures to regulatory bodies as required by law.
- ➔ **Waste Management Regulations:** Adhering to all regulations concerning the storage, handling, and disposal of mine waste and tailings.
- ➔ **Water Use and Discharge Permits:** Securing permits for water use and ensuring compliance with all water quality and discharge regulations.
- ➔ **Land Use and Zoning Compliance:** Ensuring the project operates within the designated land use and zoning regulations.
- ➔ **Security Regulations:** Complying with all security regulations related to the storage and transport of high-value minerals.
- ➔ **Customs and Trade Compliance:** Managing all import and export regulations for equipment and final products.
- ➔ **Auditing and Inspection Preparation:** Preparing for and managing audits and inspections by regulatory agencies.
- ➔ **Legal Dispute and Arbitration Management:** Having a clear legal framework and strategy to handle any disputes that may arise.





## 5. G. Sustainable Mining Practices

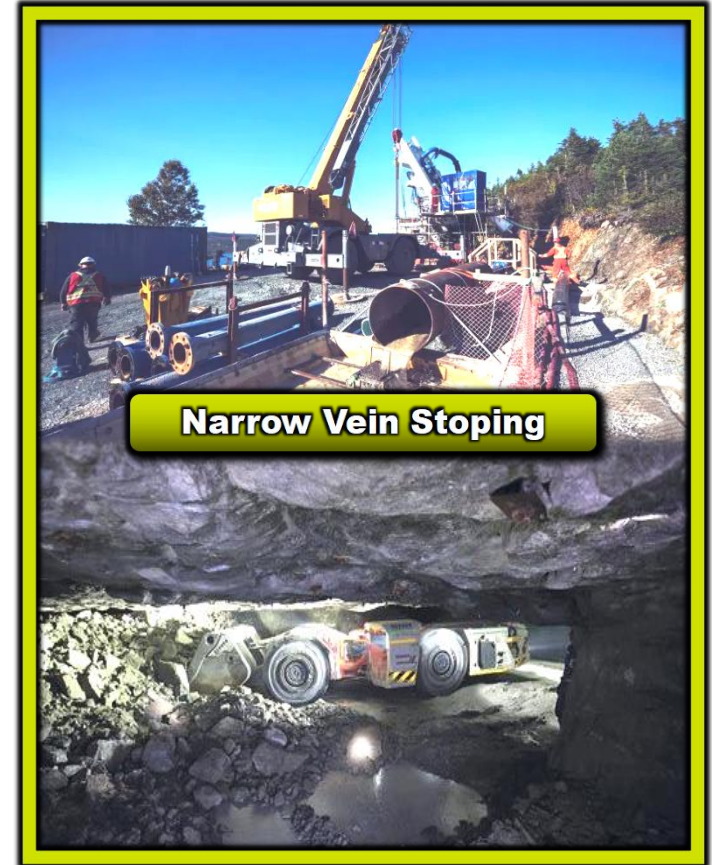
- **Environmental Management System (EMS):** Implementing an ISO-certified or similar EMS to systematically manage environmental performance.
- **Water Conservation and Recycling:** Designing systems to minimize water consumption and recycle process water wherever possible.
- **Land Reclamation and Biodiversity Conservation:** Implementing a plan to restore mined land to its natural state and protect local biodiversity.
- **Energy Efficiency and Renewable Energy Integration:** Reducing energy consumption and exploring the use of renewable energy sources to power operations.
- **Tailings and Waste Management:** Using advanced methods to stabilize and safely store tailings, minimizing environmental risk.
- **Carbon Footprint Reduction:** Developing strategies to reduce greenhouse gas emissions throughout the mining lifecycle.
- **Dust and Noise Control:** Implementing systems to control dust and noise pollution from operations, protecting both workers and local communities.
- **Social License to Operate (SLO):** Actively engaging with communities to build trust and secure the social permission needed for the project to succeed.
- **Worker Health and Safety Programs:** Going beyond compliance to implement proactive health and safety programs that protect all personnel.
- **Post-Closure Planning and Financial Provision:** Setting aside a financial provision to ensure a thorough and complete closure and rehabilitation of the site.
- **Waste Heat Recovery:** Capturing and utilizing waste heat from operations to improve overall energy efficiency.
- **Responsible Sourcing and Certification:** Adhering to standards for responsibly sourced minerals and working towards relevant certifications.
- **Transparent Reporting:** Publicly reporting on sustainability performance, including environmental metrics and community benefits.





## 5. H. Operational Management & Execution

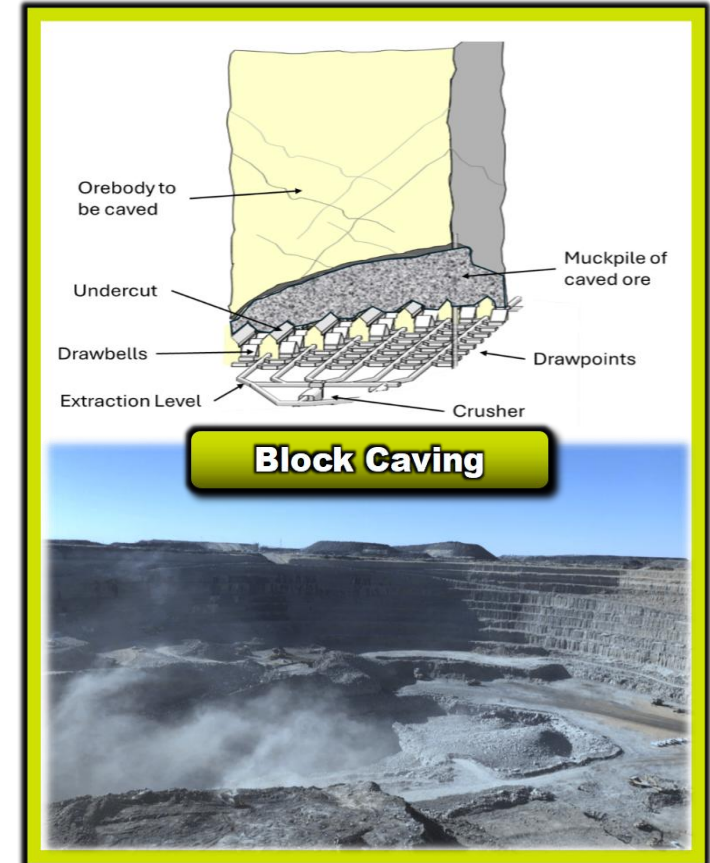
- ➔ **Production Planning and Scheduling:** Creating detailed production schedules to meet targets for mineral extraction and processing.
- ➔ **Fleet and Equipment Management:** Maximizing the uptime and efficiency of all machinery through proactive maintenance and real-time monitoring.
- ➔ **Workforce Management:** Managing personnel, from training and recruitment to scheduling and performance evaluation.
- ➔ **Safety Protocol Implementation:** Enforcing strict safety protocols, including regular safety audits and training programs.
- ➔ **Real-Time Performance Monitoring:** Using sensors and data analytics to monitor operational performance in real-time and make immediate adjustments.
- ➔ **Quality Control:** Implementing procedures at every stage to ensure the final mineral product meets all quality specifications.
- ➔ **Maintenance and Repair:** Designing and executing a comprehensive preventive maintenance plan to minimize equipment downtime.
- ➔ **Cost Control:** Continuously monitoring and managing operational costs to ensure the project remains within budget.
- ➔ **Resource Optimization:** Maximizing the recovery of minerals from the ore body through efficient extraction and processing techniques.
- ➔ **Blasting Optimization:** Fine-tuning blasting patterns to improve fragmentation and reduce energy consumption.
- ➔ **Environmental Performance Monitoring:** Continuously monitoring environmental metrics such as water quality and air emissions to ensure compliance.
- ➔ **Communication and Reporting:** Establishing clear communication channels and reporting procedures for all on-site activities.
- ➔ **Emergency Response Planning:** Developing and regularly practicing an emergency response plan to handle any potential incidents.





## 5.1. Technological Integration

- ➔ **Automation and Robotics:** Implementing automated drilling, hauling, and processing equipment to enhance safety and efficiency.
- ➔ **Internet of Things (IOT) Sensors:** Deploying sensors on equipment and in the mine to collect real-time data on performance, safety, and environmental conditions.
- ➔ **Data Analytics and Business Intelligence:** Using big data and analytics to gain insights into operational performance and optimize decision-making.
- ➔ **Drone and Satellite Imaging:** Utilizing drones and satellites for high-resolution mapping, geological surveys, and environmental monitoring.
- ➔ **Digital Twin Technology:** Creating a virtual replica of the mine to simulate operations, test new strategies, and train personnel in a safe environment.
- ➔ **Remote Operation Centers:** Establishing remote centers to control and monitor equipment and operations from a safe, off-site location.
- ➔ **Predictive Maintenance Software:** Using software to predict equipment failures before they occur, scheduling maintenance to prevent costly downtime.
- ➔ **Mine Planning Software:** Utilizing specialized software to create and update mine plans, geological models, and production schedules.
- ➔ **Advanced Communication Systems:** Deploying robust communication systems, including mesh networks and satellite links, to ensure reliable connectivity across the mine site.
- ➔ **Augmented and Virtual Reality (AR/VR):** Using AR/VR for hands-on training and visualizing complex geological data.
- ➔ **Enterprise Resource Planning (ERP) Systems:** Implementing ERP systems to manage all business processes, from procurement to finance.
- ➔ **Cybersecurity Measures:** Protecting all digital infrastructure and data from cyber threats.
- ➔ **Blockchain for Supply Chain Transparency:** Using blockchain technology to create a secure and transparent record of the commodity's journey from mine to market.





## 5.J. Risk Management & Mitigation

- ➔ **Geological Risk Assessment:** Evaluating the risk of unexpected geological conditions that could affect mining operations or reserve estimates.
- ➔ **Market and Price Risk Hedging:** Using financial derivatives to protect against volatility in commodity prices.
- ➔ **Political and Geopolitical Risk Analysis:** Assessing the stability of the host country and managing risks related to changes in government policy or regulations.
- ➔ **Environmental and Tailings Risk Management:** Implementing engineering and operational controls to prevent environmental accidents, such as tailings dam failures.
- ➔ **TSF and Environmental Protection (EP) Monitoring:** Continuously monitoring the stability of tailings facilities and the overall environmental impact of the mine.
- ➔ **Health and Safety Risk Assessment:** Proactively identifying and mitigating risks to worker health and safety on the mine site.
- ➔ **Financial Risk Modeling:** Building financial models to stress-test the project's profitability under various economic scenarios.
- ➔ **Operational Risk Mitigation:** Creating contingency plans for operational failures, such as equipment breakdowns or power outages.
- ➔ **Social Risk Management:** Proactively addressing community concerns to prevent social unrest or opposition to the project.
- ➔ **Natural Disaster Preparedness:** Developing a plan to respond to and recover from natural disasters such as floods, earthquakes, or hurricanes.
- ➔ **Security Risk Assessment:** Evaluating the risk of theft, sabotage, or other security threats and implementing protective measures.
- ➔ **Insurance and Indemnification:** Securing comprehensive insurance policies and indemnification clauses to protect against losses.
- ➔ **Crisis Communication Plan:** Having a clear communication plan to manage public perception in the event of an incident or crisis.





## 5. K. Mineral Processing & Metallurgy

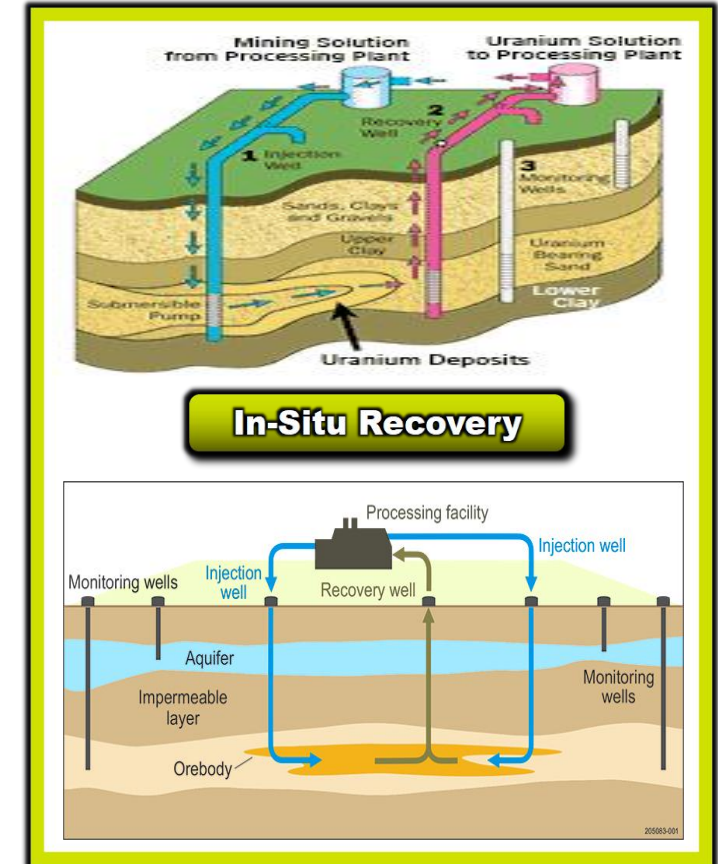
- ➔ **Ore Characterization:** Thoroughly analyzing the ore to determine its mineralogical properties and develop the most effective processing method.
- ➔ **Process Plant Design:** Engineering a specialized processing plant tailored to the specific ore body and desired final product.
- ➔ **Crushing and Grinding Optimization:** Implementing efficient crushing and grinding circuits to prepare the ore for mineral separation.
- ➔ **Flotation and Gravity Separation:** Utilizing these processes to physically separate target minerals from waste rock.
- ➔ **Leaching and Chemical Extraction:** Using chemical processes to dissolve and extract precious metals like gold or silver from the ore.
- ➔ **Refining and Smelting:** Managing the final stages of purification to produce a high-purity metal or concentrate.
- ➔ **Tailings Management from Processing:** Designing a system to handle the waste generated during the processing stage.
- ➔ **Reagent Management:** Sourcing, handling, and managing the chemicals used in the processing plant in a safe and efficient manner.
- ➔ **Water Management within the Plant:** Implementing a closed-loop water system to minimize water consumption and treat wastewater.
- ➔ **Energy Consumption Monitoring:** Continuously monitoring the energy consumption of the processing plant to identify opportunities for efficiency improvements.
- ➔ **Quality Control and Assaying:** Performing regular assays and quality checks on the final product to ensure it meets market specifications.
- ➔ **Process Optimization:** Continuously analyzing the processing circuit to identify ways to improve recovery rates and reduce costs.
- ➔ **By-Product Recovery:** Exploring and implementing methods to recover valuable by-products from the waste stream.





## 5. L. Security & Asset Protection

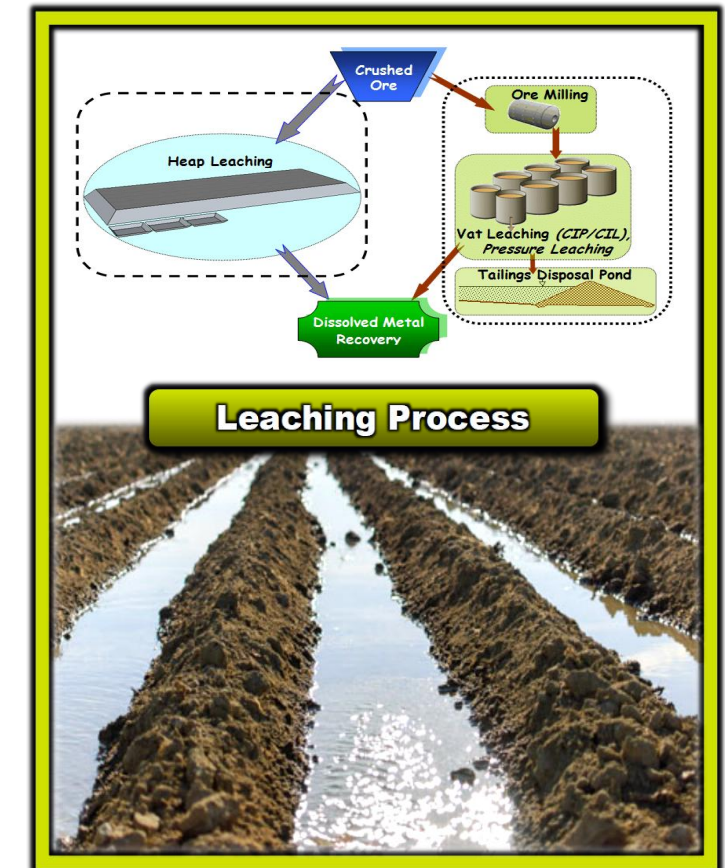
- ➔ **Site Security Planning:** Designing and implementing a comprehensive security plan for the entire mining site, including fences, gates, and access control.
- ➔ **Patrol and Surveillance:** Deploying security personnel and advanced surveillance technology to monitor the site 24/7.
- ➔ **Asset Tracking and Management:** Using technology to track the location and status of all high-value assets, including equipment and vehicles.
- ➔ **Mineral Transport Security:** Implementing strict security protocols for the transport of minerals from the mine to the refinery or port.
- ➔ **Cybersecurity:** Protecting the project's digital infrastructure, including operational technology and financial data, from cyber threats.
- ➔ **Insider Threat Mitigation:** Establishing protocols to prevent internal theft or sabotage.
- ➔ **Emergency Response Protocols:** Creating and training teams on protocols for responding to security incidents, such as theft, vandalism, or trespassing.
- ➔ **Access Control Systems:** Implementing biometrics, smart cards, and other access control systems to restrict access to sensitive areas.
- ➔ **Physical Barriers and Hardening:** Constructing physical barriers and hardening critical infrastructure to deter unauthorized access.
- ➔ **Intelligence Gathering:** Monitoring local and regional intelligence to anticipate and respond to potential security threats.
- ➔ **Personnel Vetting:** Conducting thorough background checks on all employees and contractors with access to sensitive areas.
- ➔ **Audit and Compliance:** Conducting regular security audits to ensure all protocols are being followed.
- ➔ **Community Engagement for Security:** Collaborating with local communities and law enforcement to create a secure environment around the project.





## 5. M. Commodity Trading & Market Access

- ➔ **Market Research and Analysis:** Continuously monitoring global commodity markets to identify pricing trends, supply/demand shifts, and trading opportunities.
- ➔ **Off-take and Sales Agreements:** Negotiating long-term contracts with buyers to secure a stable and predictable revenue stream for the project's output.
- ➔ **Financial Hedging Strategy:** Using financial instruments (futures, options) to lock in prices and protect against market volatility.
- ➔ **Global Distribution and Logistics:** Managing the distribution of final mineral products to buyers worldwide, ensuring timely and cost-effective delivery.
- ➔ **Broker and Exchange Relationship Management:** Building and maintaining strong relationships with commodity brokers and exchanges to ensure optimal trading conditions.
- ➔ **Trading Platform Integration:** Utilizing advanced digital platforms to execute trades, track positions, and manage risk in real-time.
- ➔ **Price Discovery:** Employing sophisticated models and market intelligence to determine the fair value of commodities and optimize selling prices.
- ➔ **Contract Negotiation and Management:** Drafting and managing all sales contracts to ensure favorable terms and clear obligations for all parties.
- ➔ **Quality and Certification Compliance:** Ensuring that the final product meets the quality standards and certifications required by global buyers.
- ➔ **Market Access Expansion:** Strategically expanding into new markets and regions to diversify the client base and reduce dependency on a single market.
- ➔ **Client Relationship Management:** Building and maintaining strong relationships with buyers and end-users to secure repeat business.
- ➔ **Legal and Regulatory Compliance:** Adhering to all international laws and regulations governing commodity trading and exports.
- ➔ **Strategic Advisory Services:** Providing clients with expert advice on commodity portfolio management and market timing.





## 6. Essential Procedural Points for Geochemical Studies



1. Objective Definition and Scoping.
2. Sampling Design and Strategy.
3. Sample Collection and Quality Control (QA/QC).
4. Sample Preparation and Sub-sampling.
5. Analytical Method Selection and Suitability..
6. Data Validation and QA/QC Review.
7. Geochemical Data Interpretation and Modeling.
8. Baseline Environmental Geochemistry.
9. Predictive Geochemistry (ARD/ML).
10. Documentation, Mapping, and Reporting.
11. Essential Elements of a Water Management Plan.



For **FULL DETAILS** about “Essential Procedural Points for Geochemical Studies”, please email us your Project Report.



## 7. General Exploration Activity Chart

ACTIVITY	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH	MONTH
	1	2	3	4	5	6	7	8	9	10	11	12
PLANNING AND COMPILATION. WORKING PROTOCOLS												
ROAD CONSTRUCTION IMPROVEMENTS												
LIDAR												
ROAD, TRAILS, LINECUTTING												
CONSTRUCTION CAMP												
FIELD STUDIES: GEOLOGICAL, GEOPHYSICS												
ROCK SAMPLING, TRENCHING												
DRILLING AND SAMPLING (Contingent on results)												
SAMPLE ANALYSIS												
EQUIPMENT PURCHASE AND DELIVERY IN GUYANA												
MINING EQUIPMENT SET UP												
MINING EXPLOITATION												
EVALUATION AND REPORTING												

For MORE DETAILS, please email us your Project Report.





## 8. Risk Assessment & Human Resources (HR) Impact



- A. Risk Assessment (Applicable Social And Environmental Standards).**
- B. Not Applicable Social And Environmental Standards.**
- C. Right To A Healthy Environment.**
- D. Community Self-Assessment Questions (Healthy Environment).**
- E. Right To Health6. Community Self-Assessment Questions (Right To Health).**
- F. Right To Water.**
- G. Community Self-Assessment Questions (Right To Water).**
- H. Additional Considerations (Cross-Cutting Risks).**
- I. Indigenous Community Self-Assessment Questions.**

**For FULL DETAILS of "Risk Assessment & Human Resources (HR) Impact", please email us your Project Report.**

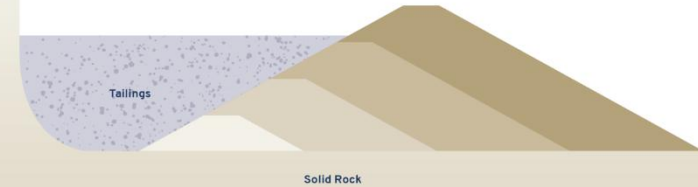




## 9. Critical Procedures for Tailings Management



**Downstream construction with upstream lift**



**In-pit storage and capping**



**Paste backfill**



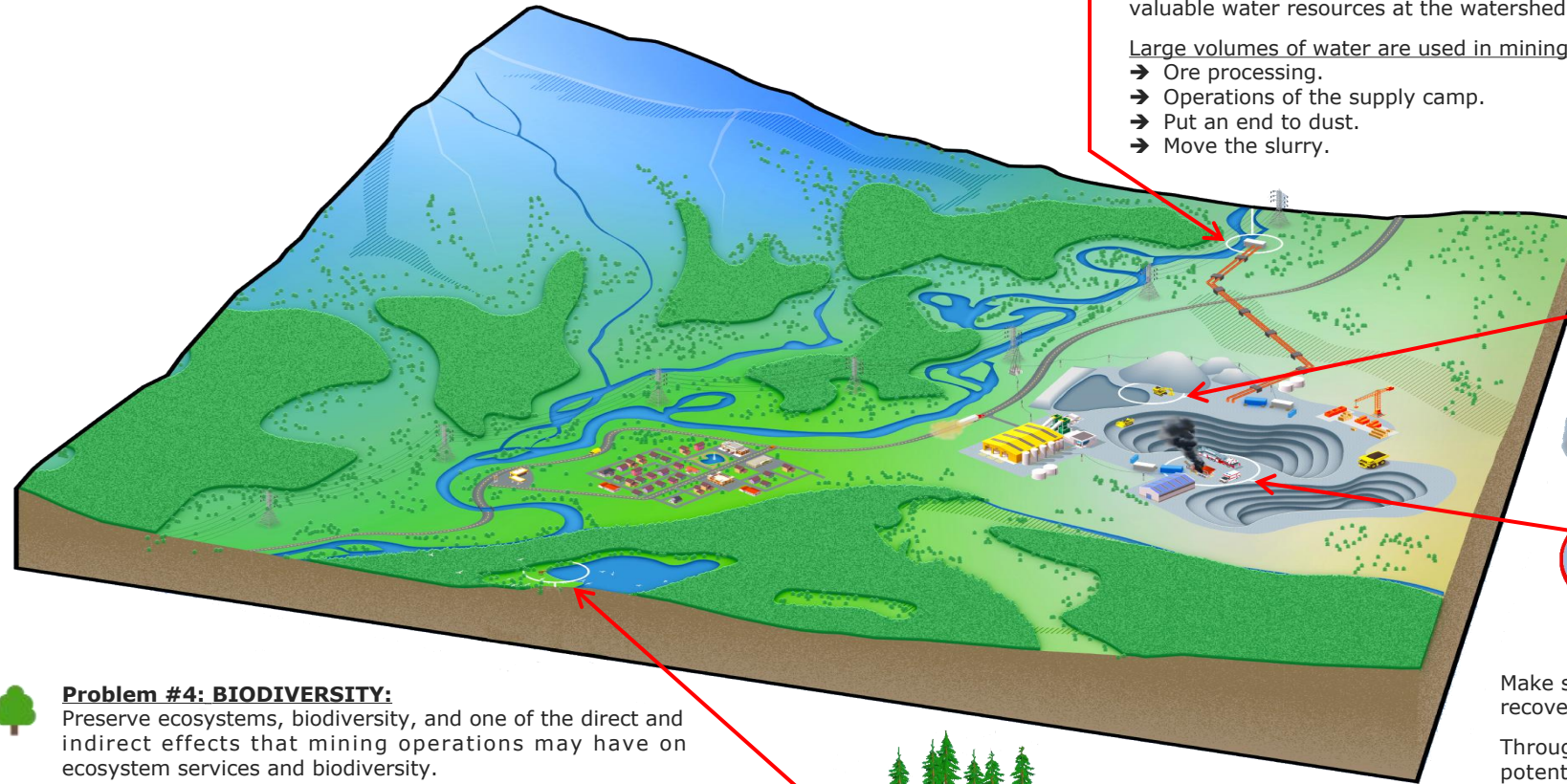
For FULL DETAILS about "Tailings Management", please email us your Project Report.



# 10. Sustainable Mining Requires Rigorous Environmental Oversight



Four important factors should be taken into account while managing the environment in mining, according to the Guidance for Governments: **Environmental Management and Mining Governance.**



## **Problem #1: WATER**

Manage the amount and quality of water resources for all users and the ecosystems they depend on in an efficient and fair manner.

In addition to controlling water consumption, discharges, and quality, governments must control the extraction of valuable water resources at the watershed level.

Large volumes of water are used in mining operations to:

- Ore processing.
- Operations of the supply camp.
- Put an end to dust.
- Move the slurry.



## **Problem #2: MINE WASTE**

Assure the long-term chemical and physical stability of all mine waste, including:

- Waste rock.
- Tailings and associated facilities.
- Facilities and spent heap leach pads precipitates and sludges from mineral recovery or water treatment.
- Dirt / Dust.

Waste facilities and systems must be designed to reduce risk and exposure to people, land, crops, vegetation, and animals, as well as to remove the possibility of failure.



## **Problem #3: PREPAREDNESS AND RESPONSE TO EMERGENCY**

Make sure that everyone involved is ready to handle, avoid, respond to, and recover from emergencies.

Throughout the mine life cycle, national governments must make sure that all potentially impacted parties recognize and comprehend possible dangers and are equipped to handle and respond to them. Programs for emergency response and preparedness should consist of:

- Evaluation of risk.
- Plans for prevention and readiness Reaction strategies.
- Plans for recovery.
- Communications plans for crises.



## **Problem #4: BIODIVERSITY:**

Preserve ecosystems, biodiversity, and one of the direct and indirect effects that mining operations may have on ecosystem services and biodiversity.

- Loss of habitat
- Degradation and fragmentation of ecosystems.
- Pollution of soil, water, air, and noise.
- The expansion of the human population.
- More hunting, collecting, and clearing of land for farming.
- Inadvertent introduction of invasive species.



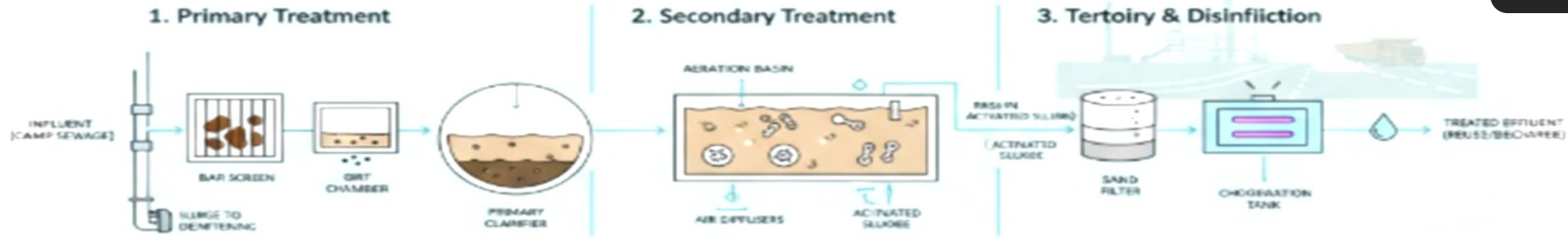
Source and Purpose: The content of this protocol is based on guidance from the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). Any included imagery serves purely to aid visualization.

**For FULL DETAILS about "Universal Environment Protection Plan (EPP) Framework / EPP Compliance Checklist," please email us your Project Report.**





# 11. Universal Mining Sewage / Waste Water Management



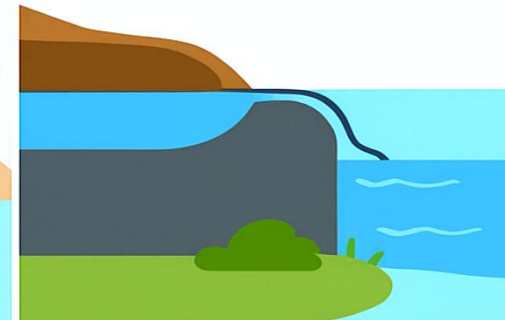
**TAILINGS  
MANAGEMENT**



**WATER  
TREATMENT**



**REUSE &  
RECYCLING**



**DISCHARGE**



For FULL DETAILS, regarding the following please email us your Project Report.

1. "Detailed Universal Mining Sewage Treatment Framework"
2. "Advanced STP Technologies and Industrial Mining Wastewater Issues"



## 12. Mobile Water Treatment Plant as per World Health Organization Standard



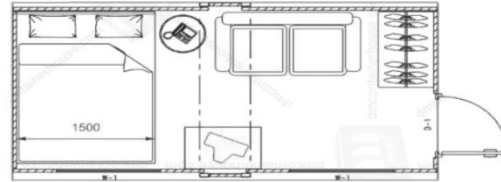
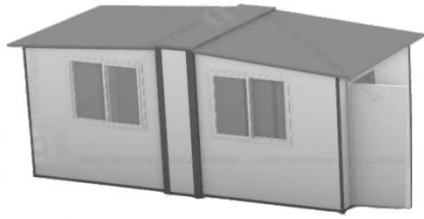
For FULL DETAILS about "Mobile Water Treatment Plant", please email us your Project Report.



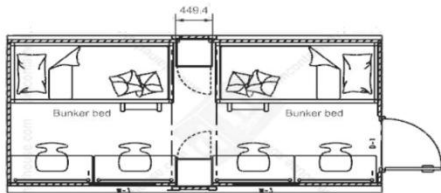
## 13. Mobile Accommodation



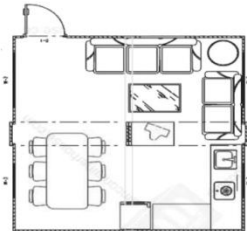
## 14. Mobile Medical Camp



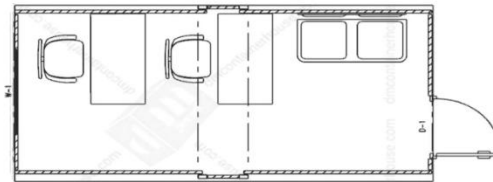
A. Management Room - 6 Persons - 6 containers.  
1\* 1.5m bed, 1\*sofa, 1\* wardrobe, 1 \* bed table



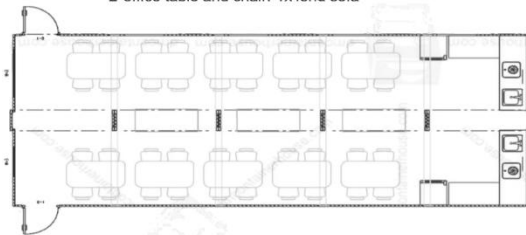
B. Staff Accommodation - 40 Persons - 10 containers  
2\*bunker bed, 2\* two layer cabinet, 4\*Computer desk



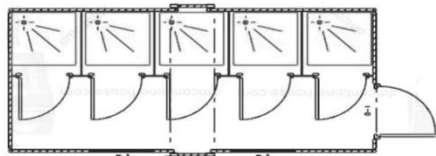
D. Management Dining Room - 2 containers join as one bigger house  
1 x L shape kitchen, 1x refrig, 1 sofa, 1 coffee table, 1 x dinner table set



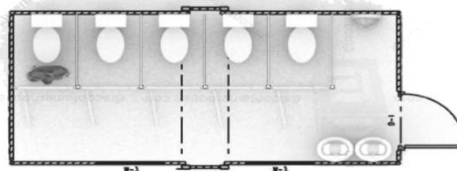
C. Management Office - 4 Containers  
2\*office table and chair, 1x long sofa



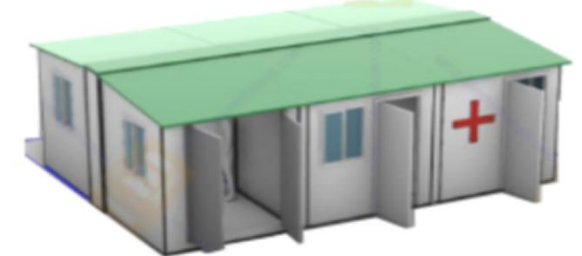
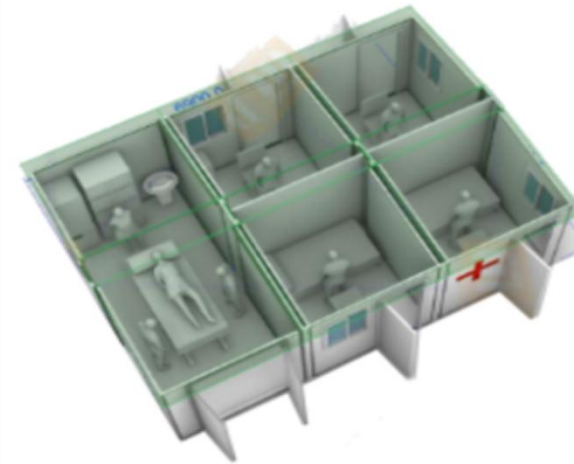
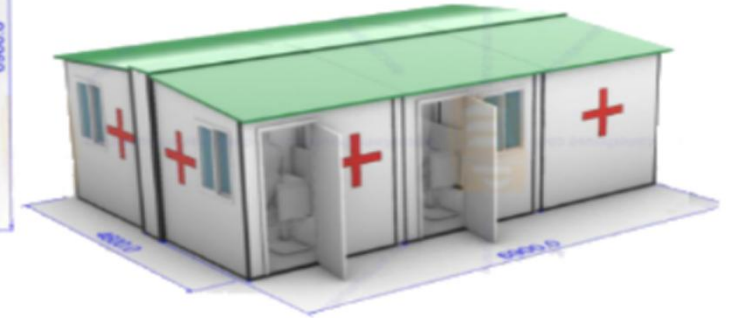
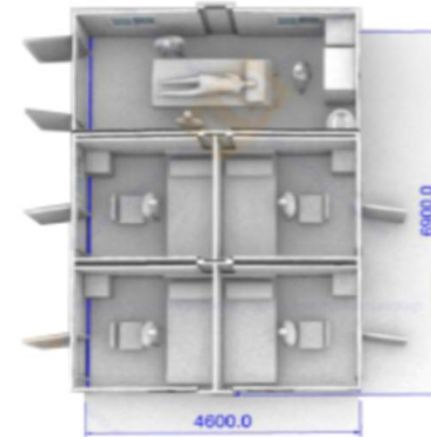
E. Staff Dining Room + Kitchen - 40 Persons 5\* winghouse join together  
10 table set each with 4 chair, 2 \* L shape kitchen, 2\* refrig



F. Staff Shower - 5 Persons per container - 2 containers  
5 bathroom with partition wall and doors



G. Staff Toilet - 5 Persons per container - 2 Containers



For MORE DETAILS, please email us your Project Report.





# 15. Surface / Open-Pit : Equipment / Safety & Productivity



Automation Centre	Automation	Teleremote	Line-Of-Sight	Machine Interface Control (MIC)	Fuel cap isolation	Tray warning systems	Payload management	Park brake alarm	Speed limiters
Fatigue warning systems	Excess Idle timer	Engine protection	Machine monitoring	Machine Data Gateway	Pedestrian Alert System	Camera Systems	Live fuel lockouts	Fire controllers	SmarTrack Fleet Management

For MORE DETAILS, please email us your Project Report.



# 16. Underground / Tunnel Mining: Equipment / Safety & Productivity

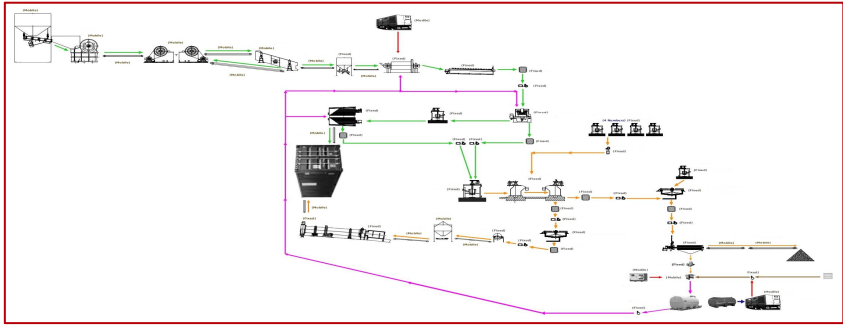


<b>Automation Centre</b> 	<b>Automation</b> 	<b>Teleremote</b> 	<b>Line-Of-Sight</b> 	<b>Machine Interface Control (MIC)</b> 	<b>Digital comms</b> 	<b>Fuel cap isolation</b> 	<b>Tray warning systems</b> 	<b>Payload management</b> 	<b>Park brake alarm</b> 
<b>Speed limiters</b> 	<b>Fatigue warning systems</b> 	<b>Excess Idle timer</b> 	<b>Engine protection</b> 	<b>Machine monitoring</b> 	<b>Machine Data Gateway</b> 	<b>Pedestrian Alert System</b> 	<b>Camera Systems</b> 	<b>Live fuel lockouts</b> 	<b>Fire controllers</b> 

For MORE DETAILS, please send us your Project Report via Email.



# 17. Mining Plant Design & Equipment

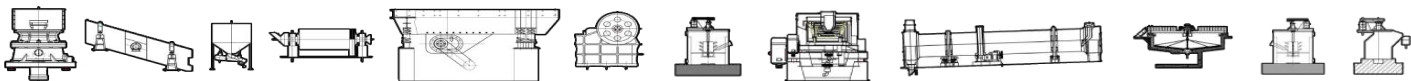


We provide **Specialized Technical, Operational, and Financial Solutions**, reinforced by **Authorized Distributorship** from a reputable, **40-Year-Old Mining Plant & Equipment Manufacturer**.





# Jaw Crusher



**MOBILE CRUSHING AND SCREENING STATION**  
STASIUN PENGHANCURAN DAN PENYARINGAN MOBILE



**CJ SERIES EUROPEAN TYPE JAW CRUSHER**

PENGHANCUR RAHANG TIPE EROPA SERI CJ



**IMPACT CRUSHER**

MESIN PENGHANCUR IMPAK



**HD SERIES GERMAN TYPE JAW CRUSHER**

PENGHANCUR RAHANG TIPE JERMAN SERI HD



**HDX SERIES GERMAN TYPE JAW CRUSHER**

PENGHANCUR RAHANG TIPE JERMAN SERI HDX



**SINGLE CYLINDER HYDRAULIC CONE CRUSHER**

PENGHANCUR KERUCUT HIDROLIK SILINDER TUNGGAL



**MULTI CYLINDER HYDRAULIC CONE CRUSHER**

PENGHANCUR KERUCUT HIDROLIK MULTI SILINDER



**For MORE DETAILS, please email us your Project Report.**





## Power Grinding Mill



**VERTICAL  
GRINDING MILL**



**ULTRA-FINE VERTICAL  
GRINDING MILL**



**INTELLIGENT  
GRINDING MILL**



**RAYMOND  
MILL**



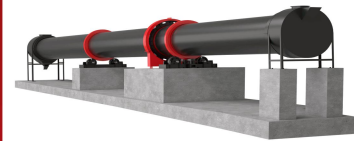
**MICRO POWDER RING  
ROLLER MILL**



## Ore Processing Equipment



**BALL MILL  
PENGGIJING BOLA**



**ROTARY DRYER  
PENGERING PUTAR**



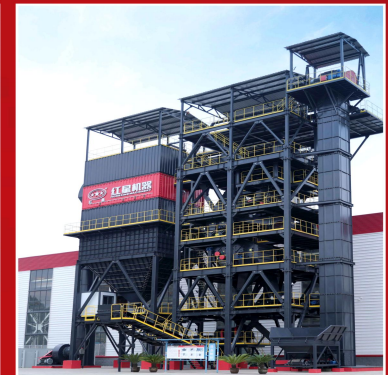
**SPIRAL CLASSIFIER  
KLASSIFIER SEKRUP**



## Sand Making Equipment



**SAND MAKING MACHINE  
MESIN PEMBUAT PASIR**



**For MORE DETAILS, please email us your Project Report.**





# Mobile Mining Plant

The customized mobile stations are distinguished by their aesthetically pleasing design and high-quality construction. Equipped with the latest host technology, they deliver stable, reliable, and high-output performance. A key feature is the inclusion of a large, vehicle-mounted conveyor belt, which eliminates the need for external conveyor belts and contributes to a tidy and organized worksite. Furthermore, each mobile station is fitted with a track plate device, allowing for rapid on-site installation and commissioning and significantly reducing setup time.



# Modular Mining Plant

The customized modular and integrated design provides greater flexibility in equipment layout, leading to a more streamlined and efficient site. The high level of integration allows for quick production startup with minimal on-site installation, requiring only simple lifting operations. The frame structure eliminates the need for a concrete foundation, significantly reducing both the cost and time associated with pre-production site preparation. This results in a substantial decrease in overall project setup time and investment.

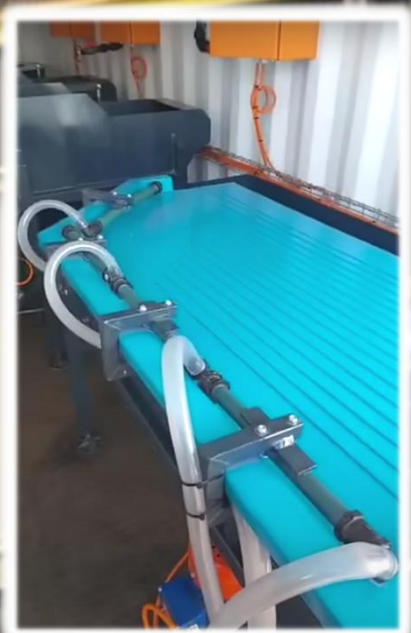


For MORE DETAILS, please email us your Project Report.

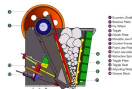




# Containerized Gold Room

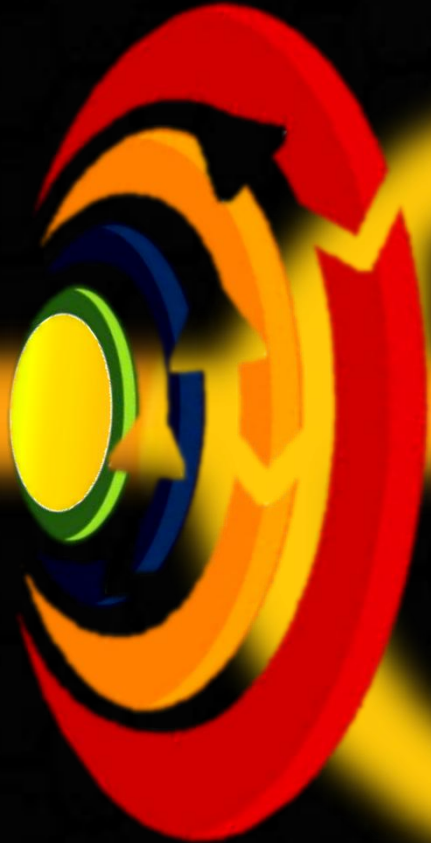


For MORE DETAILS, please email us your Project Report.





# Synergistic Ventures



## Marine Services



THEOMNIVOLT stands as the premier choice for global marine services, offering expertise in multiple diversified marine services with a team of Captains and Chief Engineers. With unmatched reliability and compliance, we ensure safe, efficient, and timely solutions across every ocean.

## Commodity Trading



In the world of commodity trading, THEOMNIVOLT is your trusted partner for fuel, minerals, and resources across global markets. We combine transparency, speed, and strategic insight to deliver maximum value and secure opportunities for our partners.





## Diversified Marine Activities

- ➔ Ship Building
- ➔ Chartering
- ➔ Sale & Purchase
- ➔ Ship-to-Ship (STS ) Operation
- ➔ Decarbonization Management
- ➔ Technical Management
- ➔ Crew Management
- ➔ Repairs & Maintenance
- ➔ Dry Dock
- ➔ Pre-SIRE Inspection
- ➔ Vessel Audit
- ➔ Tanker Management Self Assessment (TMSA)
- ➔ Agency & Husbandry Service



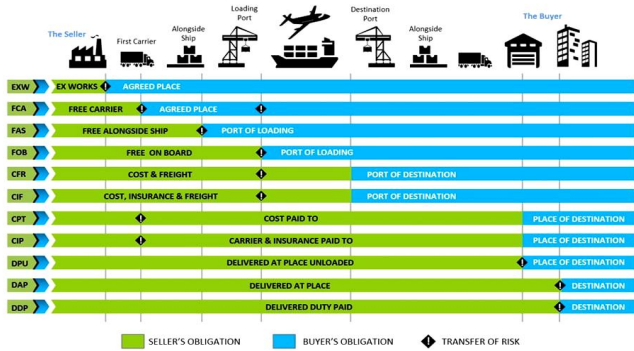


# Commodity Trading



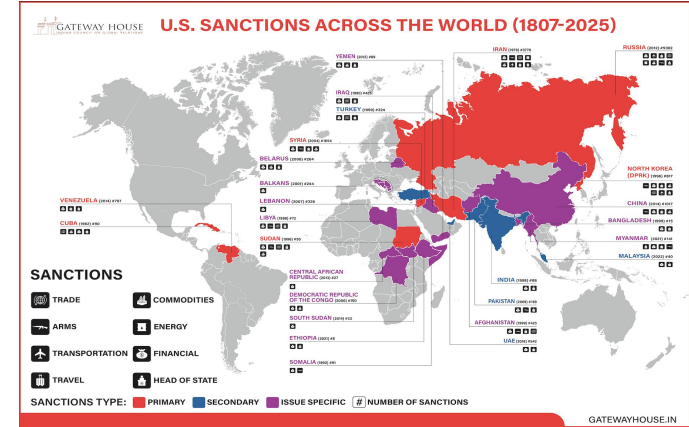
## INCOTERMS 2020

Point of Delivery and Transfer of Risk



Based on the current geopolitical landscape and recent policy announcements, the US sanctions framework significantly impacts global commodity sales in 2025:

- ➔ The US Treasury's Office of Foreign Assets Control (OFAC) has intensified restrictions on Russia's energy sector, specifically targeting major oil producers and the affiliated maritime logistics networks to suppress commodity revenue streams.
- ➔ Compliance risk for commodity traders remains elevated due to the increased scrutiny of the shadow fleet and the potential for secondary sanctions on international actors facilitating the illicit transport of sanctioned crude oil and petroleum products.



## GASOIL (EN590)

ULTRA LOW SULFUR



DIESEL (ULSD)



## LPG



## BUNKER FUEL

1. Ship-To-Ship (STS)
2. Truck-To-Ship (TTS)
3. Port/Pipe-To-Ship (PTS)



## BITUMEN

Penetration / Viscosity Grade



## PALM OIL

CP - 10 / 8 / 6



## MINERAL ORES

Chromite / Copper / Nickel



"THEONIVOLT" Where Power Meets The Potential

www.theomnivolt.biz



# Reach Us



## **Website:**

**www.theomnivolt.biz**

## **Email:**

**business@theomnivolt.biz**

## **GUIDELINES**

### **Email Subject:**

Mention exact requirement, keep them brief (around 5-9 words), personalize them, incorporate keywords, and urgency (if required)

### **Email Matter:**

Keep it brief and straightforward. Just the most crucial details should be included.



**THEOMNIVOLT**

