

EXECUTIVE SUMMARY



Founded in 2020 in Kitwe, Zambia, Arête Mining & Consultancy Limited is a premier technical services and resource enterprise. We bridge the gap between heavy field engineering and modern minerals and metals merchantry. Our strategic mandate is to accelerate Sub-Saharan Africa's integration into clean energy, battery, and automotive manufacturing systems. We operate as an agile, technology-driven merchant handling unrefined ores and processed metal products. Our ecosystem integrates field engineering directly with our proprietary digital marketplace, FringeMetals ([://fringemetals.com](http://fringemetals.com)), connecting regional producers directly with off-takers and investment partners



VISION:
To be a highly responsible, inclusive, and tech-driven mining leader that integrates Africa into the green energy supply chain.



MISSION:
To unlock sustainable value for industrial suppliers by combining elite engineering advisory with a transparent, secure digital marketplace.

OUR BUSINESS MODEL

STRATEGIC OPERATING MODELS

Arête drives value across four integrated business pillars



TECHNICAL CONSULTANCY

Providing specialized, high-end commercial field engineering across geological modelling, mine design, rock mechanics, and environmental compliance directly to B2B clients.



STRATEGIC MINING PARTNERSHIPS:

Entering into joint ventures and operating partnerships with mineral concession holders, tenement proprietors, and institutional and private mining investors, injecting our specialized technical services and operational expertise.



MINERALS & METALS MERCHANTRY:

Sourcing raw minerals and refined metals proactively from artisanal, small, and medium producers via back-to-back delivery agreements. We actively partner with strategic investors in the mining and metals industry to co-finance, scale, and conduct trading operations.



FRINGEMETALS MARKETPLACE:

Commercializing an automated matching, technical vetting, and secure digital escrow ecosystem to facilitate frictionless trade.



TECHNOLOGY-INTEGRATED



MINING



MINERALS & METALS
MERCHANTRY



ENGINEERING
ADVISORY

THINK EXCELLENCE.
THINK **ARETE.**



CLIENT CONSULTANCY & TECHNICAL SERVICES

Profitable mining demands an independent, experienced, long-term perspective. Arête provides world-class external technical services to commercial clients to yield bankable project answers. (Note: These independent services are offered on a fee-for-service basis directly to external clients and are distinct from our internal joint-venture partnerships).

ONGOING FIELD ENGINEERING FOR CLIENTS

Mine Planning & Design Optimization:
Weekly operational layouts, drill & blast designs, fragmentation analysis, production /pit optimization, and rolling Life of Mine (LoM) scheduling.

Mine Planning & Design Optimization:
Advanced 3D geological modelling, tailored sampling strategies, real-time grade control support, and aggressive dilution reduction programs.

Extractive Metallurgy & Mineral Processing
Process flowsheet development, laboratory and pilot-scale test work, geometallurgical services, and operational plant troubleshooting to convert raw minerals into market-grade metals

Environmental Footprint Management:
Navigating complex statutory regulations, Environmental Impact Assessments (EIA/ESIA), compliance monitoring, water/air quality controls, and rehabilitation or mine closure planning.

Regulatory Compliance Reporting:
Flawless preparation of mandatory Programs of Operations, quarterly/annual cadastre filings, and monthly production or explosives safety returns.



Project-Based & Once-Off Client Engineering

- Bankable Feasibility Studies & Technical Due Diligence supporting formal funding applications.
- Rock Mechanics, Slope Stability assessments, and Tailings Storage Facility (TSF) engineering design.
- Mineral Exploration Strategies, regional geophysical/geochemical surveys, and drilling program management.
- Statutory Acquisition Support for Exploration, Mining, and Mineral Processing Licenses.

Supply Chain as a Service (SCaaS)

We offer mineral and metal merchants, mining firms, and end-users a highly flexible service model to realize virtual economies of scale on day one without heavy up front capital investments in people, processes, or equipment:

Variable Cost Structures
Low-cost access to elite professionals with direct experience solving specific extraction and refining problems.

Execution Risk Mitigation:
Leverage our established in-house logistics desk to secure smooth transport moving bulk ore and refined metal cargo safely from local collection points to coastal ports.

Instant Scalability:
Immediate operational agility to capture fleeting, time-sensitive market openings and accelerate product speed-to-market

FringeMetals: The Digital Commodity Marketplace

FringeMetals (://fringemetals.com) addresses traditional transparency and security gaps found in commercial trade through forward-thinking digital marketplace innovation.

AUTOMATED MATCHING:
Efficiently pairs verified mineral and metal inventories directly with premium off-taker demand, removing predatory middlemen friction.

RIGID TECHNICAL VETTING:
Leveraging Arête's in-house engineering and metallurgical expertise, every batch of ore or processed metal listed undergoes rigid quality validation to guarantee contracted grade specifications.

SECURE ESCROW INFRASTRUCTURE:
Built-in financial clearance infrastructure safely holds transaction assets until final delivery and independent quality verification are satisfied.

MINING INVESTMENTS, JOINT VENTURES & PARTNERSHIPS

We focus heavily on acquiring mispriced upstream real asset opportunities that require low upfront CAPEX and offer high margins with low technical risk. Rather than offering basic consultancy to our partners, we deeply align our interests with concession holders and mining investors by taking an active operational role.



INVESTMENT FRAMEWORKS

JOINT VENTURES WITH CONCESSION HOLDERS & TENEMENT PROPRIETORS:

We partner with mineral concession owners to fast-track deposits into active, profitable production by deploying our comprehensive in-house technical and operational field teams.

CO-INVESTMENT WITH MINING INVESTORS:

We co-invest alongside institutional and private mining investors, acting as the dedicated technical engine and hands-on operational partner to safeguard and maximize project returns.

GREENFIELD PROJECT FUNDING:

Facilitating and directly financing principal acquisitions and the development of early-stage resource projects.

EXPANSION & OPTIMIZATION FINANCE:

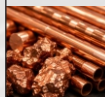
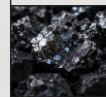
Deploying development finance directly to operational partner mines to upgrade equipment, scale processing infrastructure, and eliminate recovery bottlenecks.

STRUCTURED TRADE FINANCE:

Securing trade flows through working capital provisions, pre-financing solutions, and robust off-take agreements.

MINERALS & METALS PORTFOLIO

We specialize in the origination, financing, and safe transformation of critical raw materials demanded across Asia, Europe, and the Americas for electric vehicle production, specialist steel manufacturing, and grid-scale battery networks. We manage both run-of-mine ores and value-added processed products:

MANGANESE  High-grade industrial raw ore, with processed fines (Origin: Zambia, DRC)	ZINC  Premium industrial ore, and concentrate sourcing (Origin: Zambia)	COPPER  Cathode, Blister, Concentrate & Ore (Origin: DRC, Zambia)	COBALT  Cathode, Blister, Concentrate & Ore (Origin: DRC, Zambia)	EXTENDED PORTFOLIO ➤ Chrome, ➤ Ferrochrome, ➤ Ferromanganese, ➤ Lithium, ➤ Nickel, ➤ Vanadium.
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CONTACT US

PHYSICAL HEADQUARTERS:
Plot No. 121 Central Street,
Nkana East, Kitwe, Zambia.

GEOSPATIAL COORDINATES:
35 L 0633701
UTM 8582601.

CALL / WHATSAPP SUPPORT DESK:
+26 0978070789 | +26 0961986866.

DIRECT CORPORATE MAILBOXES:
info@aretemining.com
chanda@aretemining.com
princechanda13@gmail.com.

Platform Domains:
aretemining.com | fringemetals.com.
CONNECTING AFRICA'S MINERAL
WEALTH TO GLOBAL MARKETS

CORPORATE LEADERSHIP

Our elite multi-disciplinary personnel possess decades of combined frontier market execution experience across the complete mining and processing lifecycle.

Prince Chanda Chanda
(CEO & Principal Consultant):
Oversees total executive strategy, shapes relationships with regulatory authorities, drives off-taker agreements, and directs the core engineering and consultancy deliverables.

Mike Kachema
Chief Technology Officer (CIO)
Leads the FringeMetals Platform Unit, software development lifecycles, system architecture, core UI/UX build, and corporate data security.

Maurice Lembela
Chief Financial Officer (CFO):
Manages corporate FP&A, trade finance execution, escrow administration, tax compliance, and legal underwriting of joint-venture frameworks.

Mainza Mahachi
Acting Chief Operations Officer (COO)
Directs the physical Minerals & Metals Merchantry Unit, local warehouse management, regional logistics tracking, and field joint-venture operational lifecycles.