



Securing the mineral supply chain  
from earth to tech

# Message from the CEO

Minerals are fundamental for today's modern society. They are in all electronics, from smartphones to electric cars. But we must confront an unacceptable reality, that the minerals driving our clean tech revolution go through an opaque and outdated value chain, which risks funding conflict and child labour, while African countries are losing more in mineral tax evasion than they gain in foreign aid.

It is the most unsophisticated \$100bn market in the world. But now advances in technology, such as blockchain, drones and digital payments, give us an opportunity to reshape this sector, from the moment a mineral comes out of the ground, tracing its journey into our consumer goods.

Minexx is securing the mineral supply chain from earth to tech – with traceability, transparency and trust. Our blockchain platform - with its global application – transforms and re-designs the value chain bringing benefits to miners, smelters, traders, tech companies and governments while directly impacting 10 of the 17 Sustainable Development Goals.

We aim to connect 500,000 miners to the platform by 2025. Minexx's Artisanal Transformational Investment Fund will catalyse and transform the sector.

Through Minexx we can re-frame the world's relationship with commodities to solve this fundamental challenge in our society.

**Marcus Scaramanga**  
CEO – Co-Founder Minexx



# Securing the mineral supply chain from earth to tech - with traceability, transparency and trust

## The Problem

Opaque and outdated value chain for the 30% of strategic minerals from small-scale sites.

## The Opportunity

Most unsophisticated \$100Bn market in the world ripe for value chain redesign whilst positively impacting 250 million lives.

## The Solution

Integrated blockchain platform to **transform trading, compliance & financing** across the value chain.

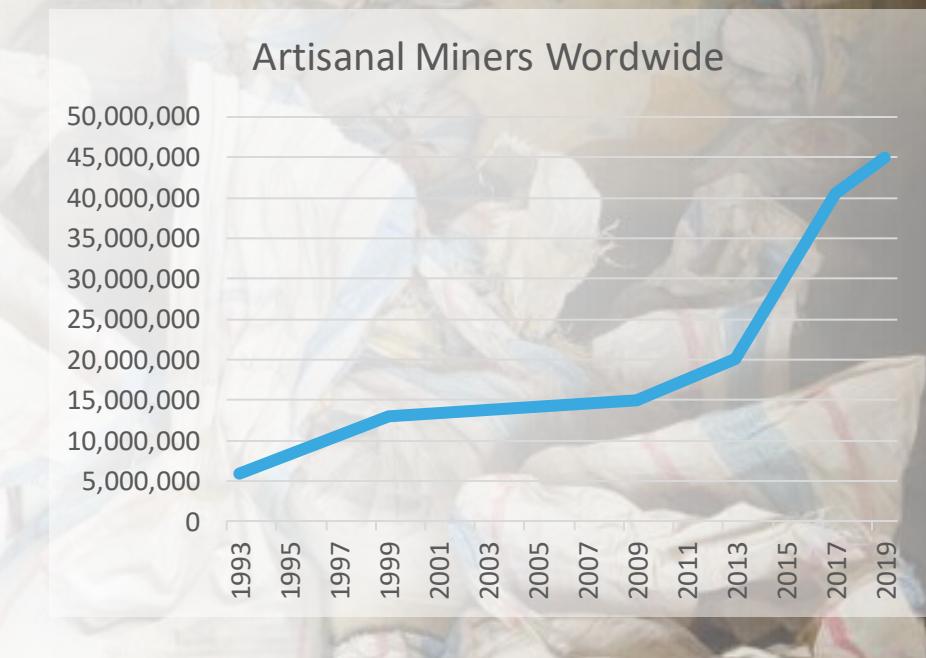
# Market Drivers

These are the key challenges facing miners, governments and tech companies.

**Miners** are at the start of an opaque and outdated value chain. They work in high risk, for low pay and have no access to loans, expertise or life improving services. With high birth rates in mineral rich countries more miners will enter the market. 40% of miners are women, yet they don't receive equal pay or opportunity.

**Governments** want to formalize small-scale mining and bring it into the economic system. They need to reduce fraud and tax evasion whilst managing KYC/AML risks. They focus on driving investment to industrialize sites whilst keeping the artisanal miners on side.

**Tech Companies** face a compliance nightmare and struggle to stay ahead of conscious consumer sentiment given the spotlight on the clean tech transition. The market is becoming increasingly competitive, forcing tech companies to engage further upstream to secure critical minerals. In an \$800 smartphone, the raw materials cost just \$1. This demonstrates the unfair nature of the value chain.



2021 EU regulations ensure companies importing tin, tungsten, tantalum and gold, meet international responsible sourcing standards set by the OECD.



# Mineral market

The clean tech revolution has created fierce competition to source minerals putting pressure on an already insecure supply chain.

**Tin** – solder, the glue in electronics and electric car batteries. Critical supply risk mineral.

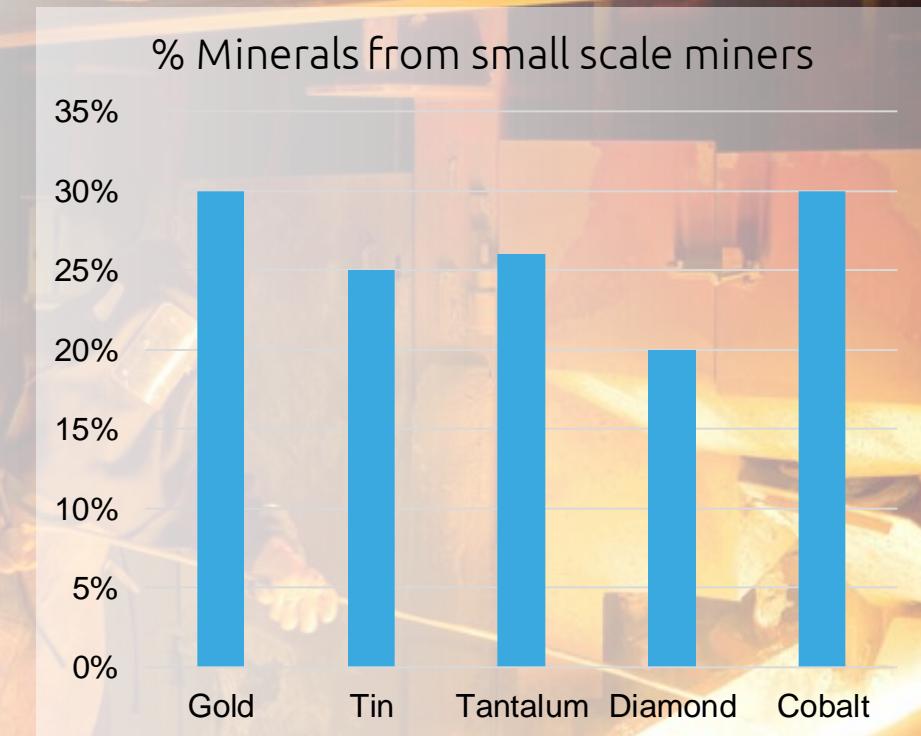
**Coltan** – used in capacitors in electronics and medical devices. Covered by EU law on conflict minerals. Critical supply risk mineral.

**Cobalt** – batteries in electric cars, cobalt gives the highest power density of any battery design. Over 60% from DRC

**Copper** – cabling and electronics. Mined together with cobalt.

**Gold** – used as a currency, in jewellery and electronics. Almost always smuggled to Dubai or India to evade tax payments

**Coloured gemstones & Diamonds** – jewellery, conscious consumers driving fair trade product demand. 80% of gemstones and 30% of diamonds found through artisanal means.

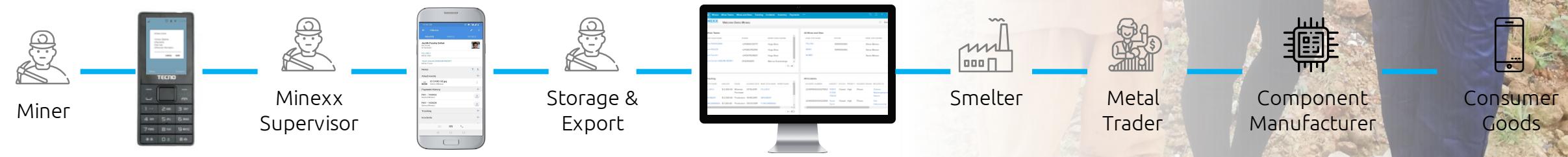


\$100Bn+  
Transactions

# This is Minexx

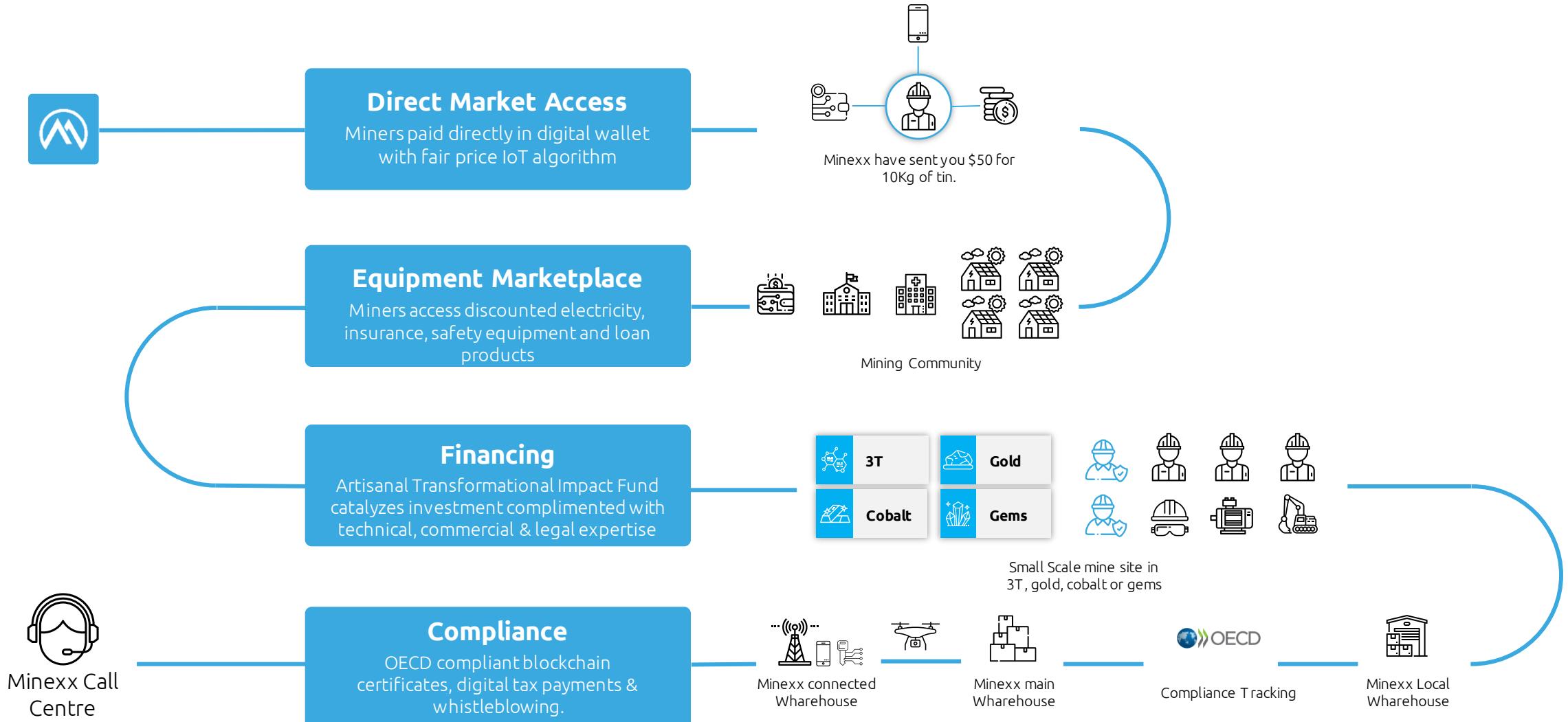
We are an integrated trading, compliance and investment platform connecting tech companies and small-scale mine sites through a secure supply chain.

1. Register miners on our blockchain platform
2. Purchase minerals with digital payments from miners, and manage compliance KYC/AML risks
3. Miners benefit because they get a better price due to direct trade
4. Tech companies benefit because they get a transparent supply chain
5. Governments benefit because this formalizes an informal economy
6. Once miners are registered Minexx provides additional beneficial services
7. Impact & SDGs integrated into the business model



# The vision

Minexx transforms trading, compliance and financing of small-scale sites to benefit miners, government & mineral buyers





# The technology

We have developed a blockchain platform with global application.

It enables pioneering direct purchasing business models and connecting disparate ends of a complex value chain.

Integrated platform revolutionizes trade, compliance, financing, and impact.

The image shows a desktop computer monitor displaying the MINEXX platform's web interface. The interface includes several sections: "All Miner Teams" listing teams like Team RUKAGANA, Team ROGER, Team Faustin, and Team Daniel HABUMUREMYI; "All Mines and Sites" listing sites like FILLON I, BIRIKI, and NUMBI; "All Tracking" showing transactions for FILLON II, MISUMARI, and FUNGAMWAKA; and "All Incidents" showing incidents like PERTE D'UNE TAGUE. To the right of the monitor, two smartphones are shown side-by-side, displaying the mobile version of the MINEXX app. The top smartphone is an iPhone showing a "Miners" screen with a list of miners and their details. The bottom smartphone is a feature phone (Tecno) showing a screen with a numeric keypad and some text at the top.



# Traction

In just 12 months since operations launched, Minexx has:

- Completed a world first: export from DRC with full financial transparency from mine to smelter
- Developed pipeline of projects to roll out technology and investment platform
- Been supported with \$150k grant funding by the UK Government's FCDO
- Formed strategic partnerships across value chain with traders, smelters, tech companies and government
- Platform licensed to export and conduct traceability in DRC

We've done it before



We previously built Bboxx, a next generation utility, that transforms lives of 1.3 million people each day through energy access. We've scaled to 2,000 staff in 14 African countries and raised \$200M of funding. We've built relationships with governments in DRC, Togo and Rwanda and created Pulse a blockchain enabled, IoT platform that processes 1 million digital payments a week.



# Business Model

Minexx deploys a blockchain trade facilitation platform to transform trading, compliance and financing.

Minexx's market entry strategy is to conceive, launch and grow projects that use the Minexx platform to get an edge. Projects have a specific >[commodity](#)< and >[geography](#)< scope and are often done in conjunction with a strategic partner.

Minexx's first project is cassiterite in Eastern DRC where it has launched a digitalized, direct trading company. Minexx has built an extensive project pipeline and will use grow projects with funding provided through the Artisanal Transformational Impact Fund.

Minexx has integrated impact, community benefits and delivery against the SDGs into our model.



# Artisanal Transformational Impact Fund

Investment fund to transform artisanal sites to semi-industrial sites to benefit miners, governments and mineral buyers. Combination of Minexx's technology platform and investment fund catalyzes the sector.

- **Scale** – invests in Minexx projects in different minerals and geographies and catalyze rollout of impactful technology.
- **Leveraging technology** – only deployed to sites that use Minexx technology to create trust and transparency and drive responsible sourcing movement.
- **Impact** – funds working capital and equipment to transform sites for safer working conditions. Solves access to finance challenge.
- **Securing supply** – mineral buyers can invest to secure supply of responsibly sourced minerals
- First closing: of \$10M USD, mid 2021. Final closing of \$25M

# Team



**Marcus Scaramanga**  
CEO & Co-Founder (ex Bboxx)



**Emmanuel Beau**  
Chief Investment Officer (ex EAV)



**Hugo Budaho**  
Head of Operations (ex Airtel)



**Sylvie Ndamiana**  
Product Manager (ex Google)

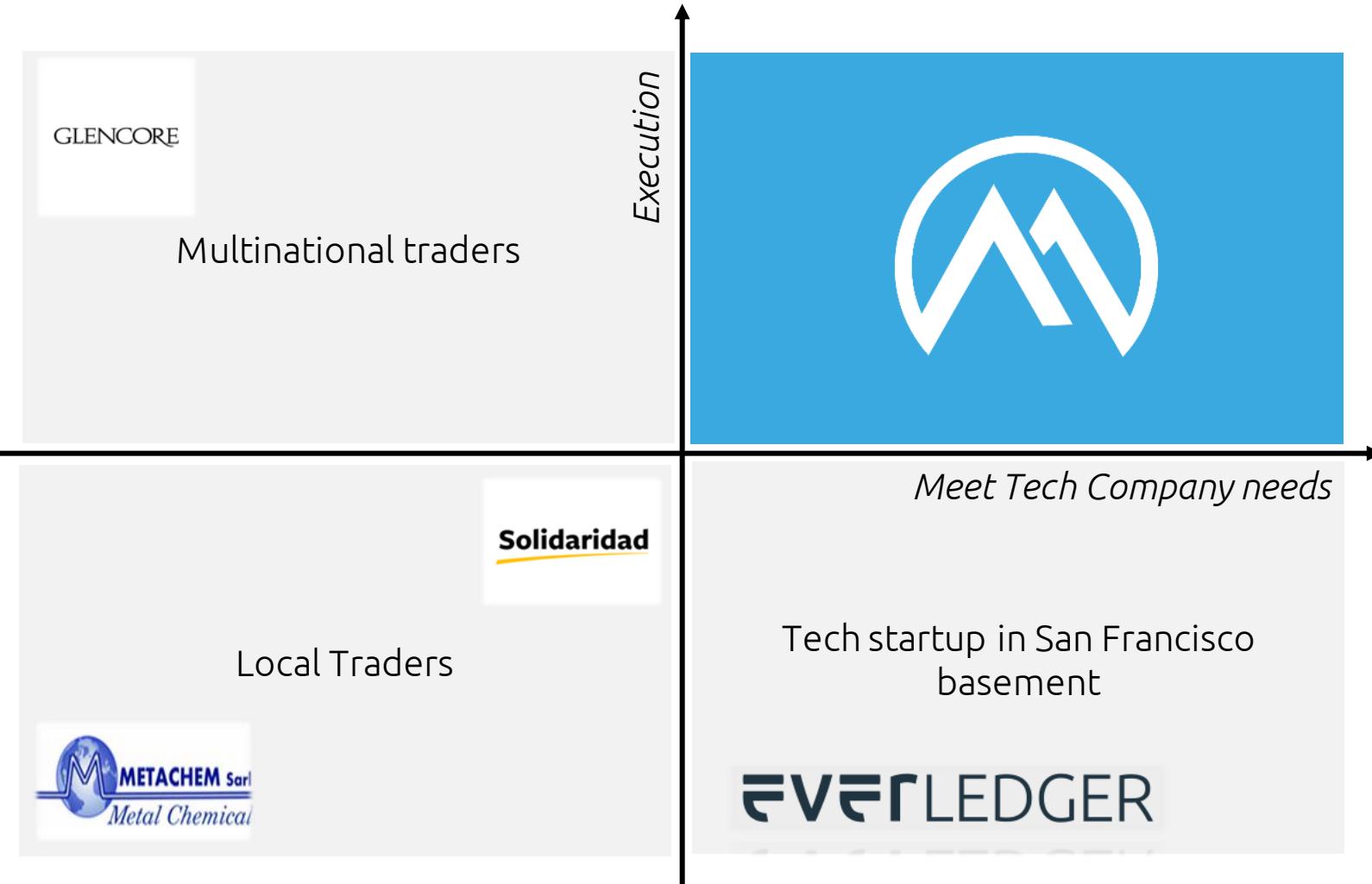


**Mansoor Hamayun**  
Co-Founder & NE Chairman  
Bboxx CEO



**Laurent Van Houcke**  
Co-Founder & NE Director  
Bboxx COO

# Minexx's strategic positioning



Increasing regulation & conscious consumers create fundamental changes to market dynamics.

Existing players can't adapt.

Minexx creates new space in the ecosystem benefiting the sector and the supply chain.



# Investment rationale



## Impact & SDGs

Directly impact the 250 million people dependent on the industry through integrating SDGs into the business model.



## Technology

Invest in the our differentiated blockchain technology platform to digitalize and transform opaque and outdated supply chains.



## Growth

Massive growth potential in the world's most unsophisticated \$100bn industry.

# Appendix

16. Market Drivers

30. Project Pipeline

43. Technology

54. Business model

61. Impact

69. Financials & organization





# Market Drivers



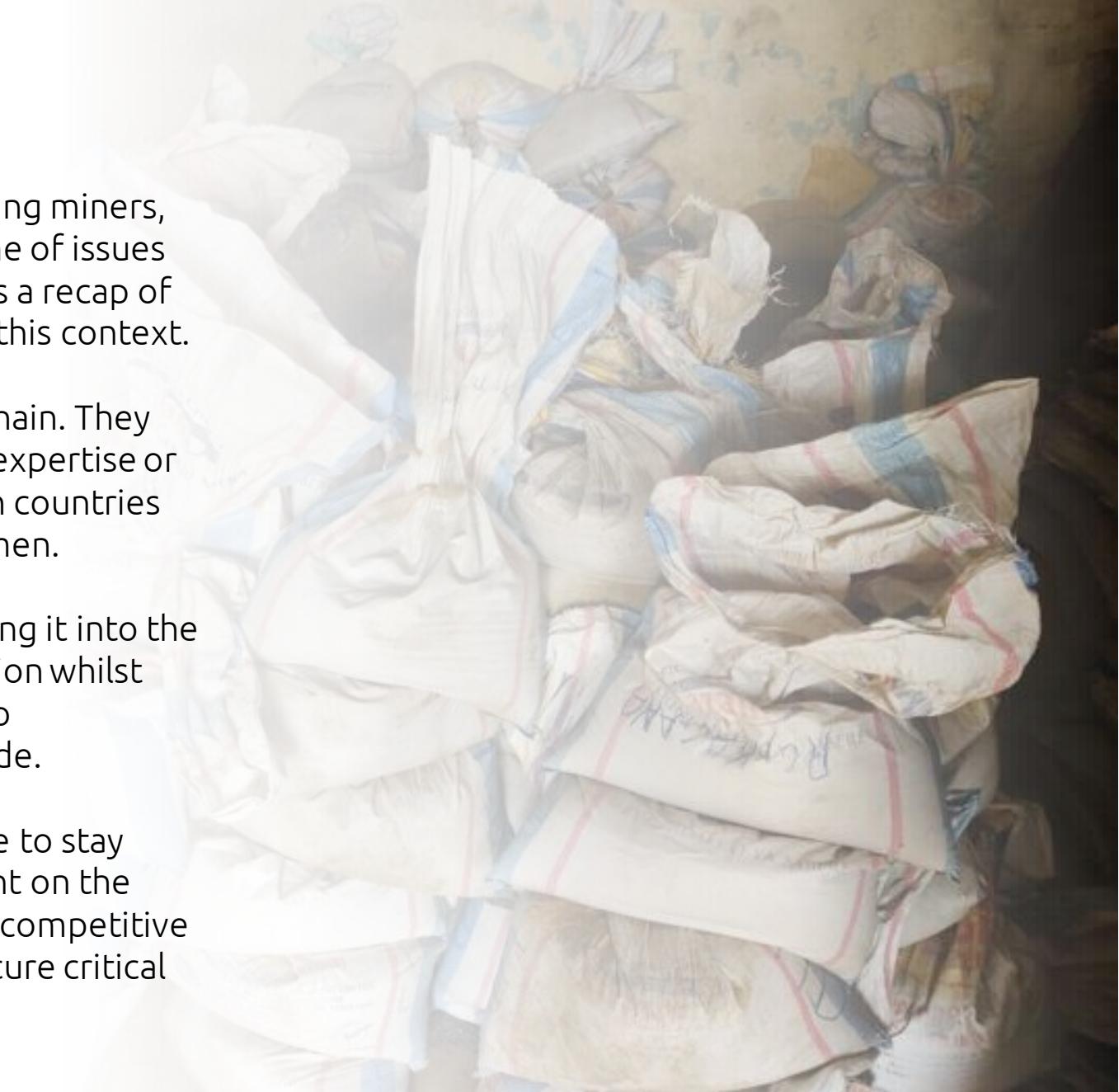
# Market Drivers

This section explores in more detail the key challenges facing miners, governments and tech companies. This section covers some of issues facing these different interconnected groups. The below is a recap of the state of play and the market drivers should be seen in this context.

**Miners** are at the start of an opaque and outdated value chain. They work in high risk, for low pay and have no access to loans, expertise or life improving services. With high birth rates in mineral rich countries more miners will enter the market. 40% of miners are women.

**Governments** want to formalize small-scale mining and bring it into the economic system. They need to reduce fraud and tax evasion whilst managing KYC/AML risks. They want to drive investment to industrialize sites whilst keeping the artisanal miners on side.

**Tech Companies** face a compliance nightmare and struggle to stay ahead of conscious consumer sentiment given the spotlight on the clean tech transition. The market is becoming increasingly competitive forcing tech companies to engage further upstream to secure critical minerals.



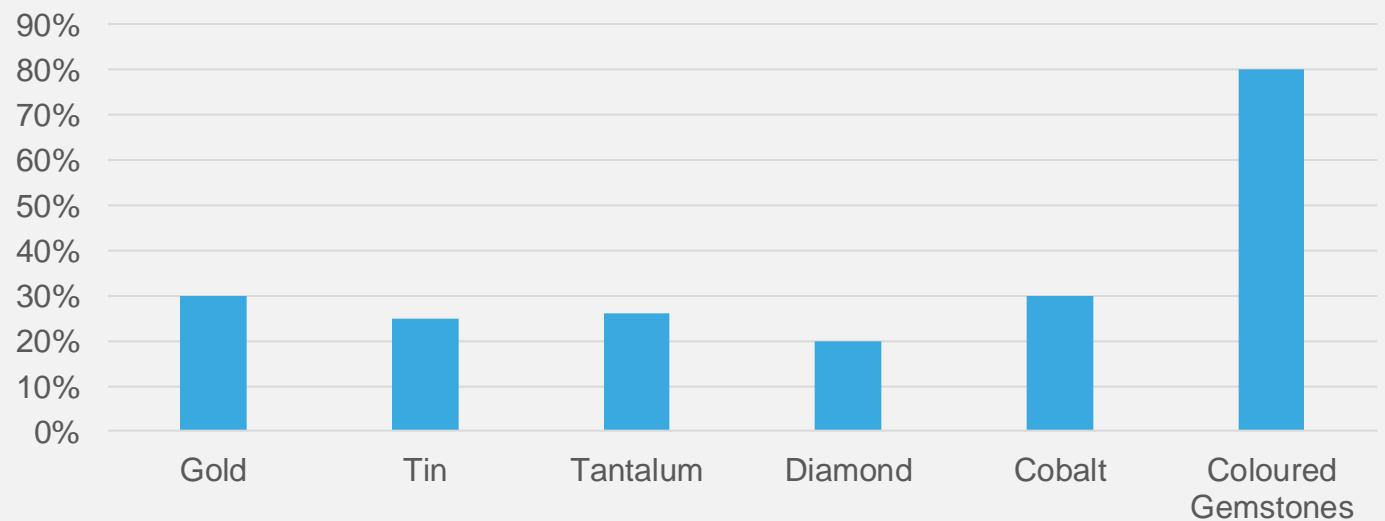
# Market size

The market is significant in terms of the numbers involved in artisanal mining, as well the sheer scale of the transactions. It is the most unsophisticated \$100Bn market in the world.

 **250 Million**  
People Impacted

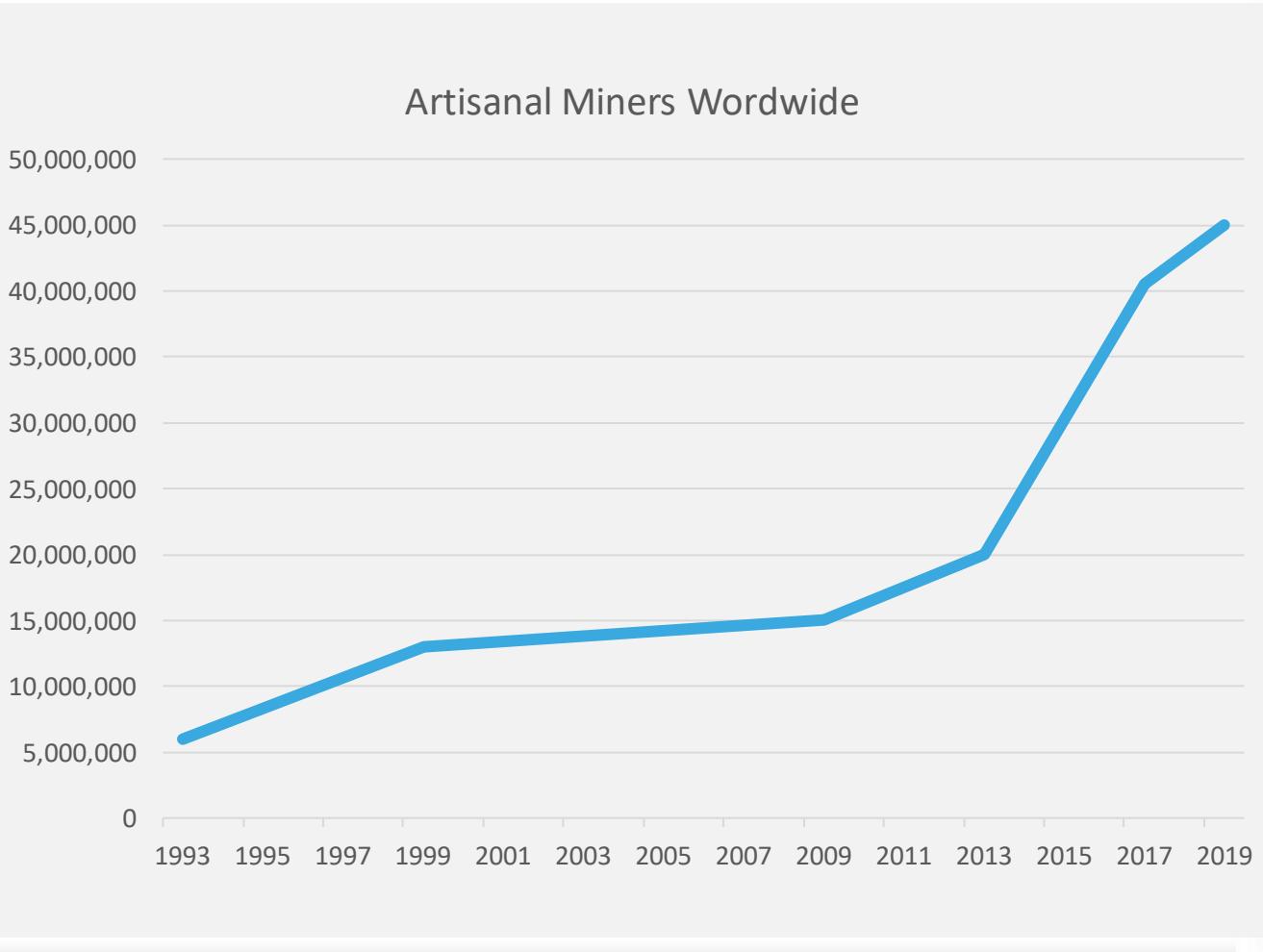
 **\$100Bn+**  
Transactions

% Minerals from small scale miners



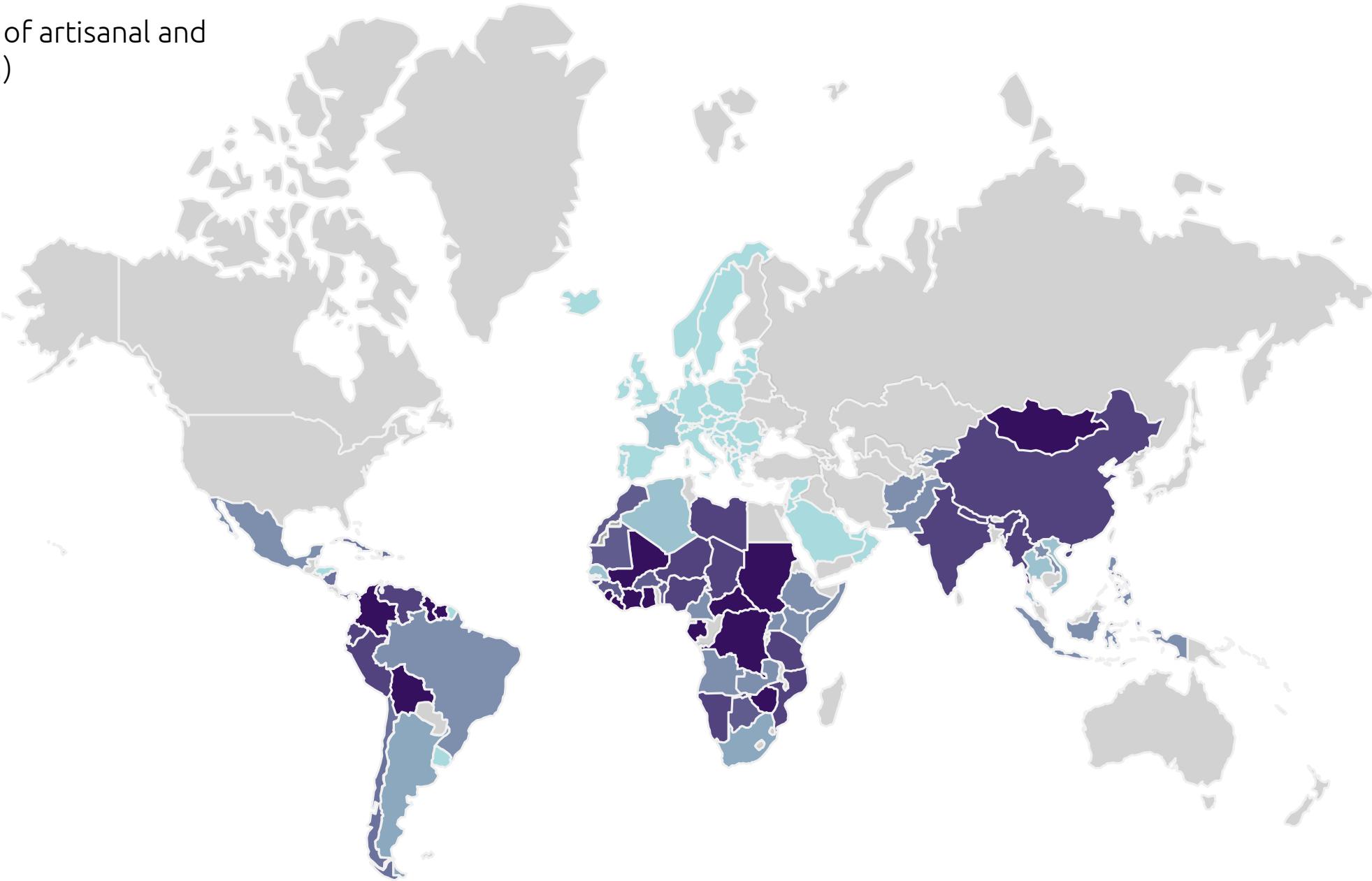
# Market growth

Growth with rising demand for tech metals and high birth rates in mineral rich countries.



## Global scale and spread of artisanal and small-scale miners (ASM)

- No significant ASM miners
- Likely no ASM
- <5k
- 5k-10k
- 10k-50k
- 50k-100k
- 100k-250k
- 250k-500k
- 500k-1m
- >1m



# Cash is a huge challenge

Cash is inefficient, enables illegal activity, and has no KYC & AML protection.



## Withdrawning cash impossible

Impossible to withdraw more than \$10,000 per day and 5% charge on withdrawals. Mineral buyers need millions each month so are forced to use many banks or bypass local banks entirely.



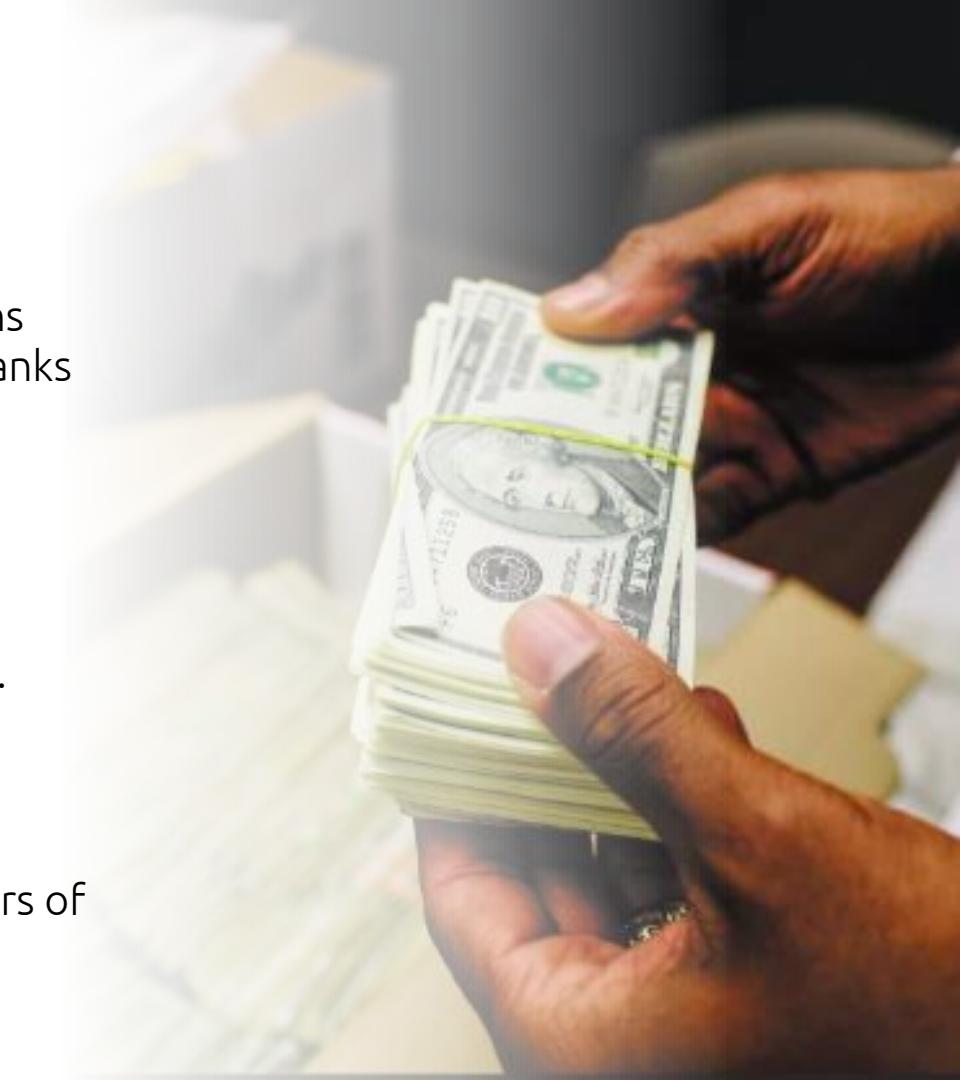
## Fraud hotspot

USD entering DRC to purchase minerals does not match mineral value exported. Transparency demanded by central bank.



## KYC & AML nightmare

US correspondent banks require KYC reporting to know where billions of dollars of USD entering DRC go.



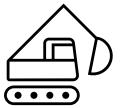
# Mineral wealth doesn't benefit miners

250M people depend on an informal industry that provides minerals critical to the modern economy. Miners earn 3x what they would do from farming.



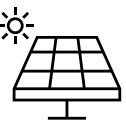
## Unfair payment

Price is low as minerals travel through opaque, outdated and fragmented value chain to reach the international market.



## Un-bankable

Miners and cooperatives have no track record and can't get financing. Financing essential to purchase much needed equipment.



## No services

Lack of expertise leads to health and safety risks. Miners can't access services such as electricity or insurance – over 100,000 miners die each year without insurance.



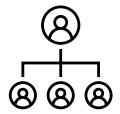
# Women lack equal pay and opportunity

40% of artisanal miners are women but they are subject to unfair treatment.



## Unequal payment

Women don't receive the same pay as men; often seen as less productive.



## Unequal opportunity

Women typically have processing, not digging roles which pay less. Women are often not allowed to own the pits or have a management role.



## Health issues

Poor sanitary facilities and health issues with mercury disproportionately affect women given their role in processing. Women are often not allowed on mine site whilst menstruating.

# Conflict between industrial and artisanal mining

The Economist

In Congo the little guys are jailed  
for stealing minerals

More powerful pilferers stay free

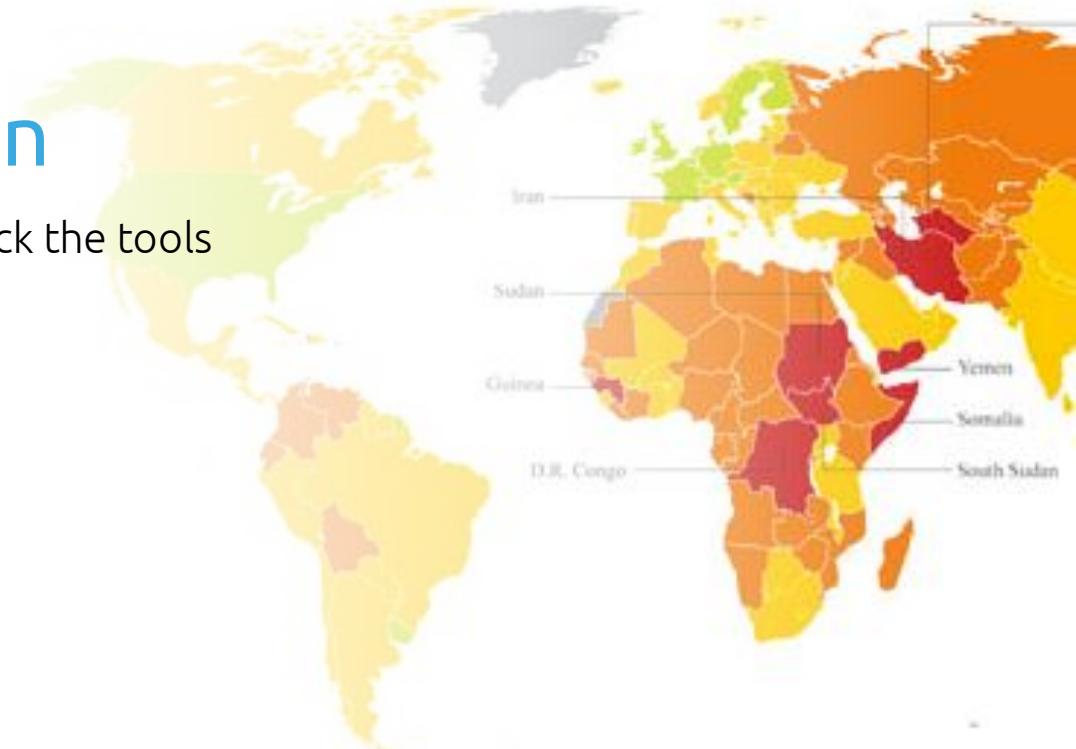
- Relationship between artisanal mining community and industrial sites is main risk to industrial sites.
- Industrial mining creates good jobs and funds building of major infrastructure that transforms communities.
- Artisanal miners don't see benefit of mineral wealth or received promised services.
- Community mining model essential to ensuring country develops and artisanal miners see benefits.



# Government drive for nationalization

Governments need to increase tax revenue through formalization, but lack the tools

- Governments want to increase mining contribution to GDP
  - Zimbabwe \$4bn exports in 2023 up from \$1bn today
  - Kenya 10% GDP contribution by 2030, up from 2% today
  - Nigeria 5% GDP contribution by 2025, up from 0.3% today
- Driven by mineral smuggling, tax evasion and ESG concerns, governments nationalize buying through buying stations.
- Tanzania, Zimbabwe and Zambia have all setup national gold buying programs in last two years.
- DRC announced national cobalt buying program in 2020.
- To get higher production governments want semi-industrialization but also want to keep artisanal miners on side.
- Governments lack tools and tech to manage this: major opportunity to leverage technology to bring the sector from informal to formal economy.



Legend		Rank	Country	Rating
Extreme risk	■	1	Somalia	Extreme
High risk	■	2	DR Congo	Extreme
Medium risk	■	3	South Sudan	Extreme
Low risk	■	4	Sudan	Extreme
No Data	■	5	Myanmar	Extreme

# A supply chain in the spotlight

The  
Economist

Why it's hard for Congo's coltan miners to abide by the law

FT

FINANCIAL  
TIMES

## Congo, child labour and your electric car

Informal workers produce almost a third of the country's cobalt. Can mining groups address the problem?

Telegraph.co.uk

Business

## Like it or not, we are complicit in use of child labour

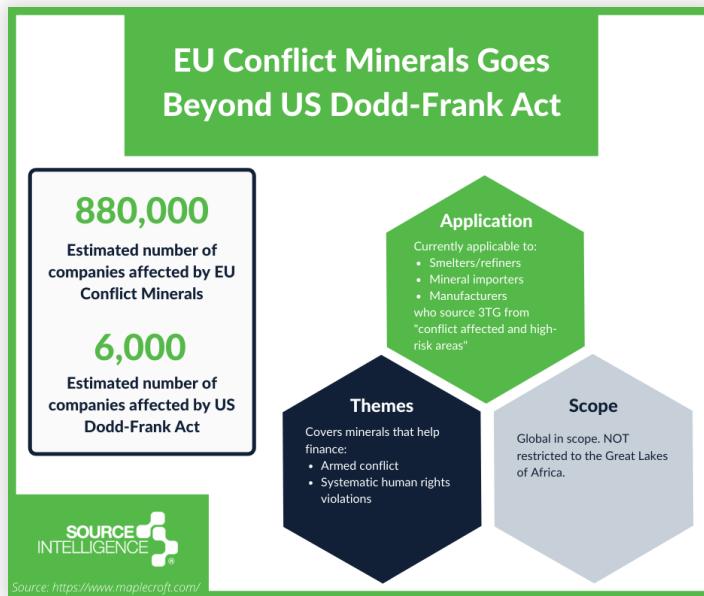


Save 2

In a rare interview, PX Precinox CEO Philippe Chave defends his company's record in Peru and says abandoning artisanal miners is not the way to achieve more sustainable and transparent mining practices.



# New EU law impacts 1 million companies

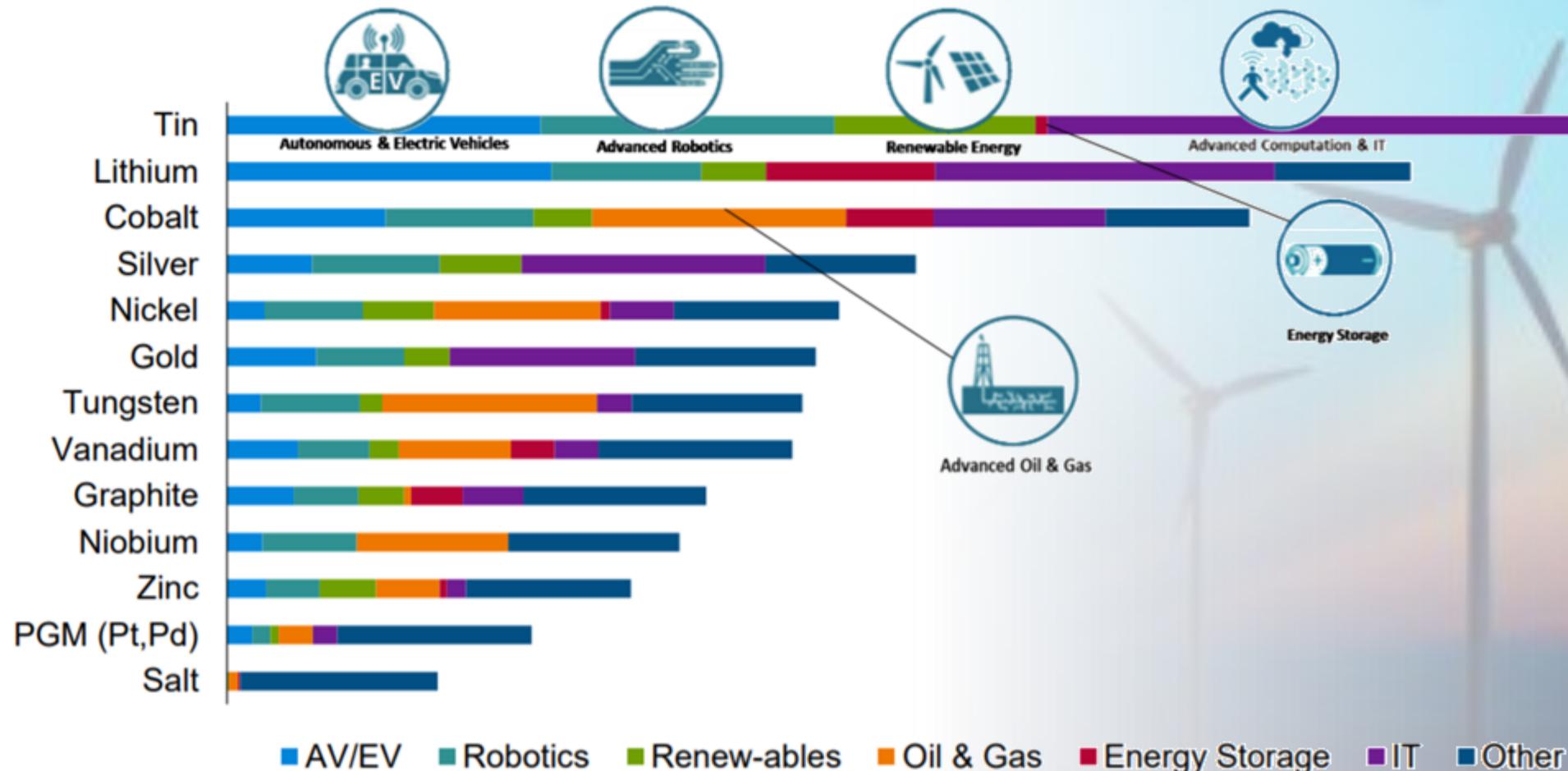


- Effective 1<sup>st</sup> January 2021
- Global scope, main tech minerals
- Prove no human rights violation or funding of conflict
- Builds upon Dodd Frank Act in 2010



# Growth in mineral demand with new technologies

Tin, cobalt, tungsten and gold all critical to new technologies. MIT review of minerals most impact by new technologies.



Data from MIT & Rio Tinto

# Tech companies moving to secure supply

Concerns over a supply shortage and ESG have forced tech companies to go directly to the miners to secure their supply.

**WALL STREET  
JOURNAL**

**EV Surge Sends Cobalt Prices Soaring**

**Bloomberg**

**Apple in Talks to Buy Cobalt Directly From Miners**

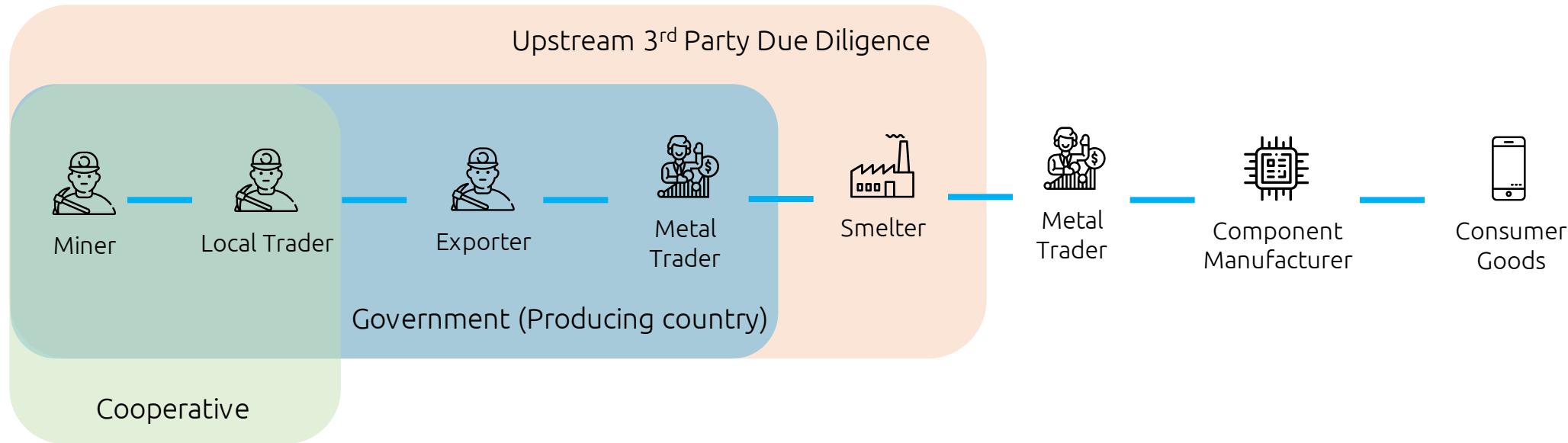
**Forbes**

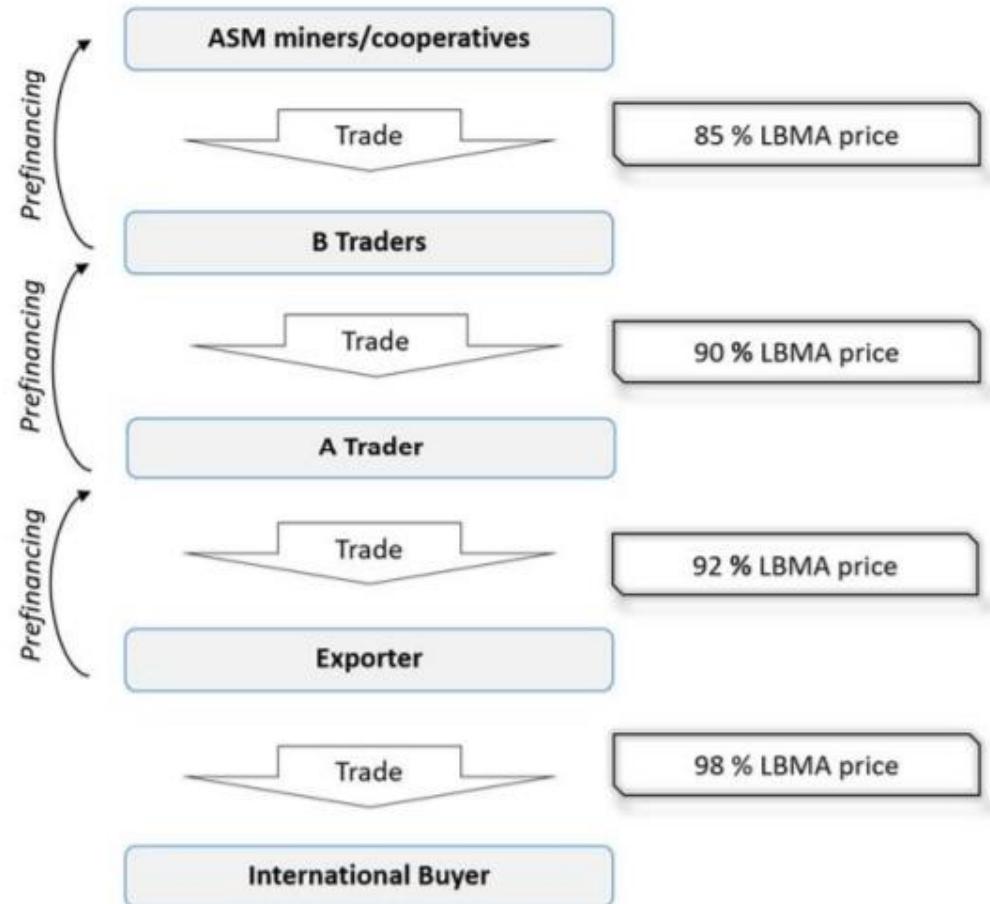
**Tesla Supercharges Africa's Cobalt Concerns With New Glencore Deal**



# This is Minexx

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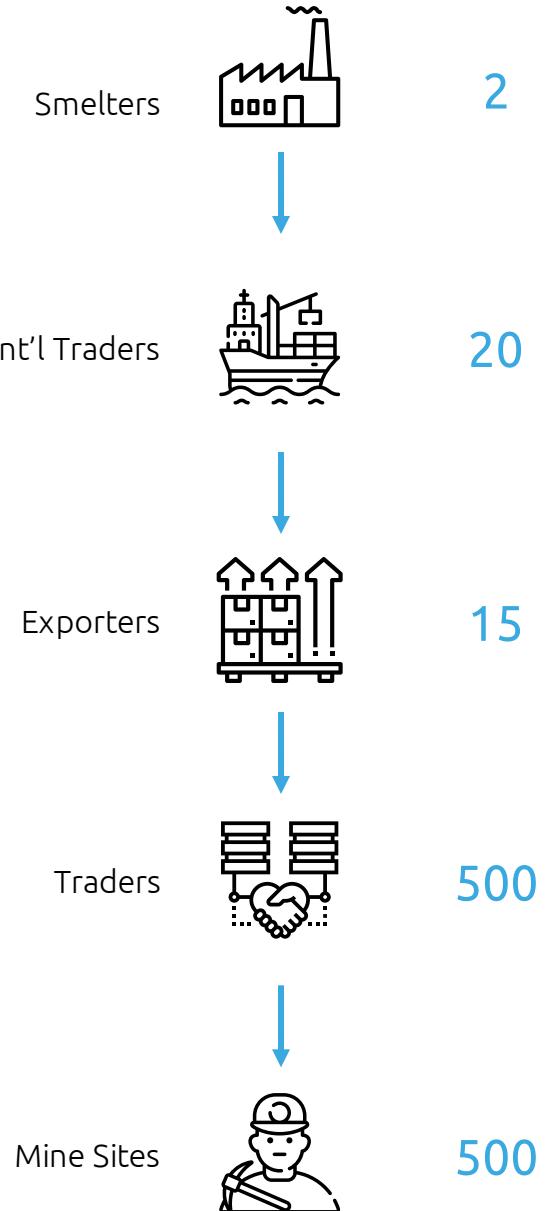


**Figure 3:** Schematic ASM gold supply chain as applicable for the Kampene pilot site in Maniema Province. Note that buying price variations may exist for other supply chains.

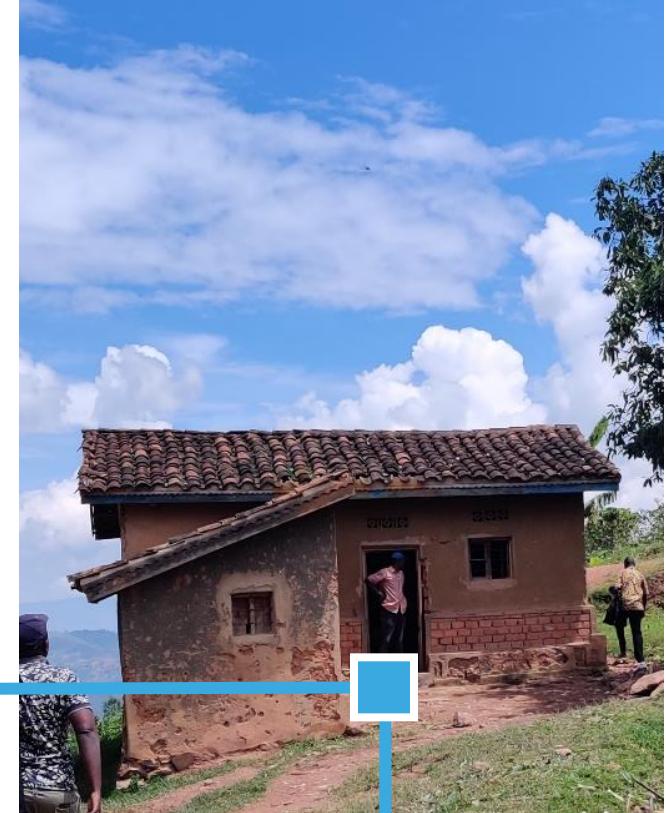
# Market introduction



- Cassiterite (tin) used in solder in electronics, coltan (tantalum) in capacitors in electronics and medical devices. 'Critical' supply risk from EU.
- Traders manage payments and last mile logistics. They direct supply from sites to exporters. They bypass existing traceability schemes.
- All cash transactions, often pre-financed. Exporters pre-finance traders who pre-finance mine sites. Traders typically carry \$60,000 to mine sites 5hrs away.
- Sakima is main concession holder in East DRC with 42 concessions. These are all artisanal cooperatives and sell to a variety of traders.
- No access to finance in the sector. Banks do not lend to cooperatives or miners so impossible for them to industrialize. Government want semi-industrialization.
- Due diligence required to export to international market. ITSCI dominates with effective monopoly and charges 5% levy. Government opened due diligence market.



# Photos start to finish



# DRC Copper & cobalt today



**1 Million**

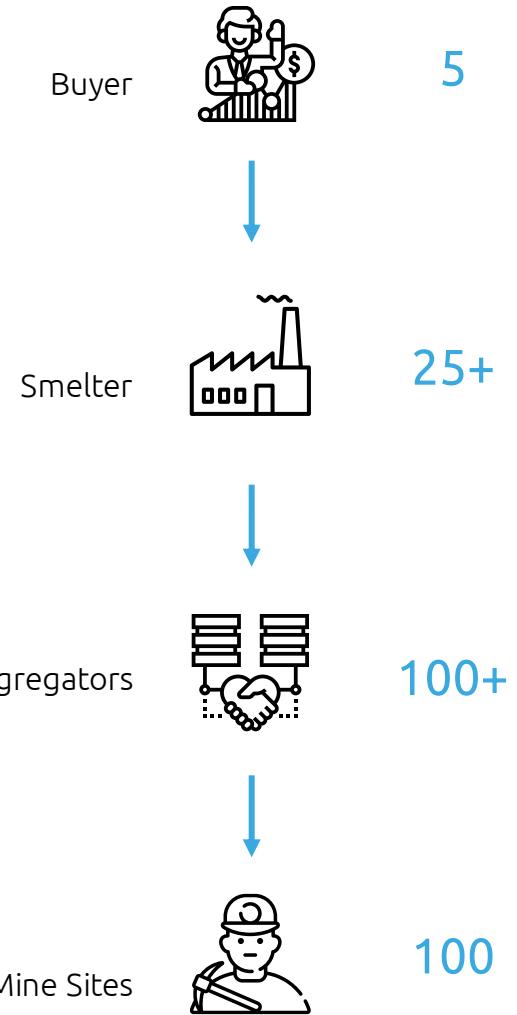
People Impacted



**\$600M**

Transactions

- Cobalt used in anode in batteries, gives highest power density possible. Huge focus due to demand from electric cars.
- Chinese traders and buyers dominate the market. Gecamines own 30% of mine site, others independent cooperatives. Often pre-financed by traders.
- Market all cash based. Aggregators need millions of dollars to purchase and use many local banks or bypass entirely to get access to cash.
- Due diligence not legally required to export but increasingly demanded by buyers.
- Artisanal copper market is of equal value to cobalt market (cobalt 3x more expensive per Kg but copper has 3x more volume.)
- Government looking to formalize activities and have created warehouse location for aggregators. Government gave exclusive cobalt offtake to Trafigura in return for \$80M pre-financing.



# Burkina Faso Gold



**2,000,000**

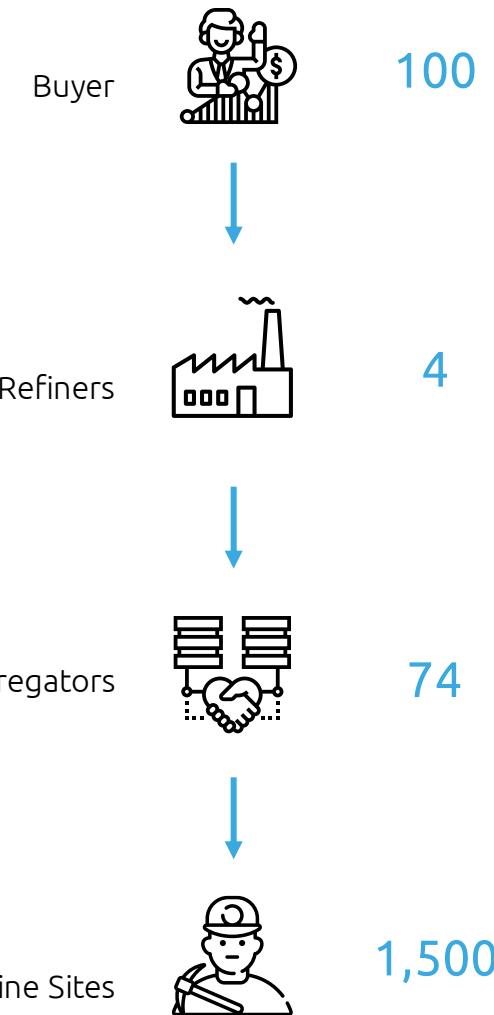
People Impacted



**\$1.5Bn**

Transactions

- \$1.5bn of gold smuggled out, loss of \$100M in royalties
- 74 registered gold traders today, none export legitimately. Most 99% of gold smuggled out
- Government launch buying programme but it lacks tools and resources to properly regulate the sector.
- Taxes: 5% royalty, 1.75% customs & 0.2% assay
- Security challenge: Half of mine sites within 25Km where militants have launched attacks. Gold mining stopped in North and East with a state of emergency declared in 14 of 45 provinces.
- Now must prove OECD compliance due to 2021 EU law in order to access international market.



# Gold continental trends

- Gold used primarily as currency by governments then jewellery and electronics. Rising 'responsible gold' movement driven by jewellery companies.
- \$20Bn of gold smuggled abroad each year made easy with high value, liquid mineral. Smuggling centre is Dubai.
- Africa countries lose more money from mineral tax evasion than they receive in foreign aid. UN
- OECD compliance required to sell to Europe due to January 2021 EU law
- Lack of formal route to market leads to creation of national gold buying programmes such as in Tanzania, Zimbabwe and Burkina Faso.

## ASGM Production in Africa

**SUDAN ~80 t in 2018**

[Source: Ministry of Mines, Sudan; Pact comm. w/ corporate individuals directly involved in gold production in N. Sudan]

**MALI ~15 t in 2018**

from approx. 350 mines [Source: Pact interviews with FNOM and DNGM, September 2018]

**BURKINA FASO ~20 t in 2018**

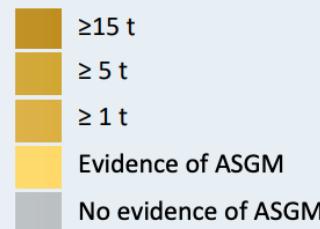
from approx. 800-1200 mines [Source: Pact interviews with ANEEMAS, June 2018]

**TANZANIA ~13.75 t in 2017**

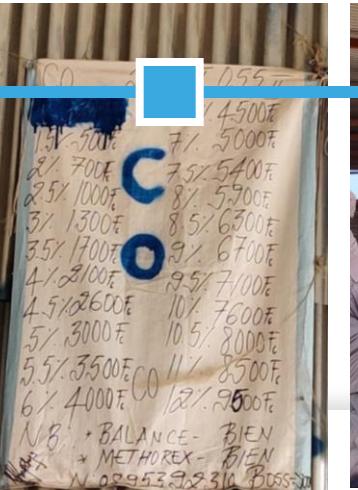
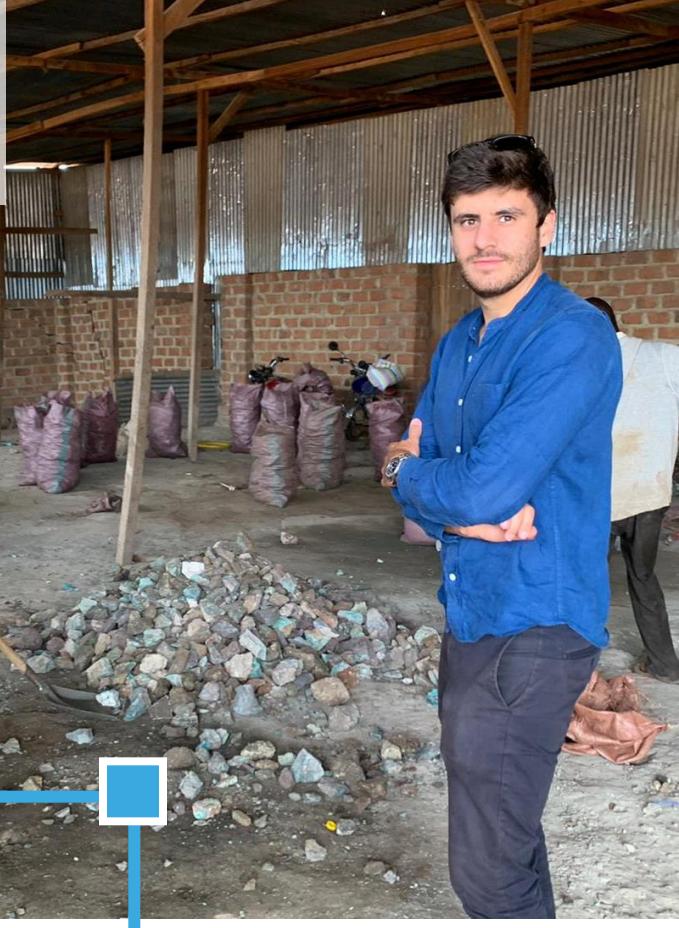
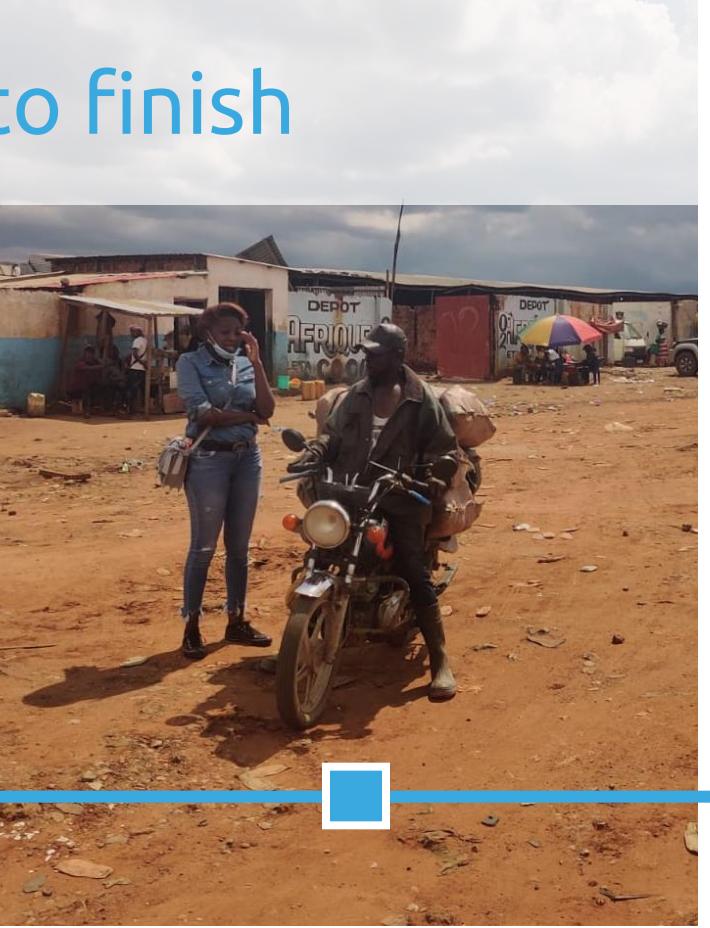
from unknown # of mines [Source: IIED and MTL Report, 2018]

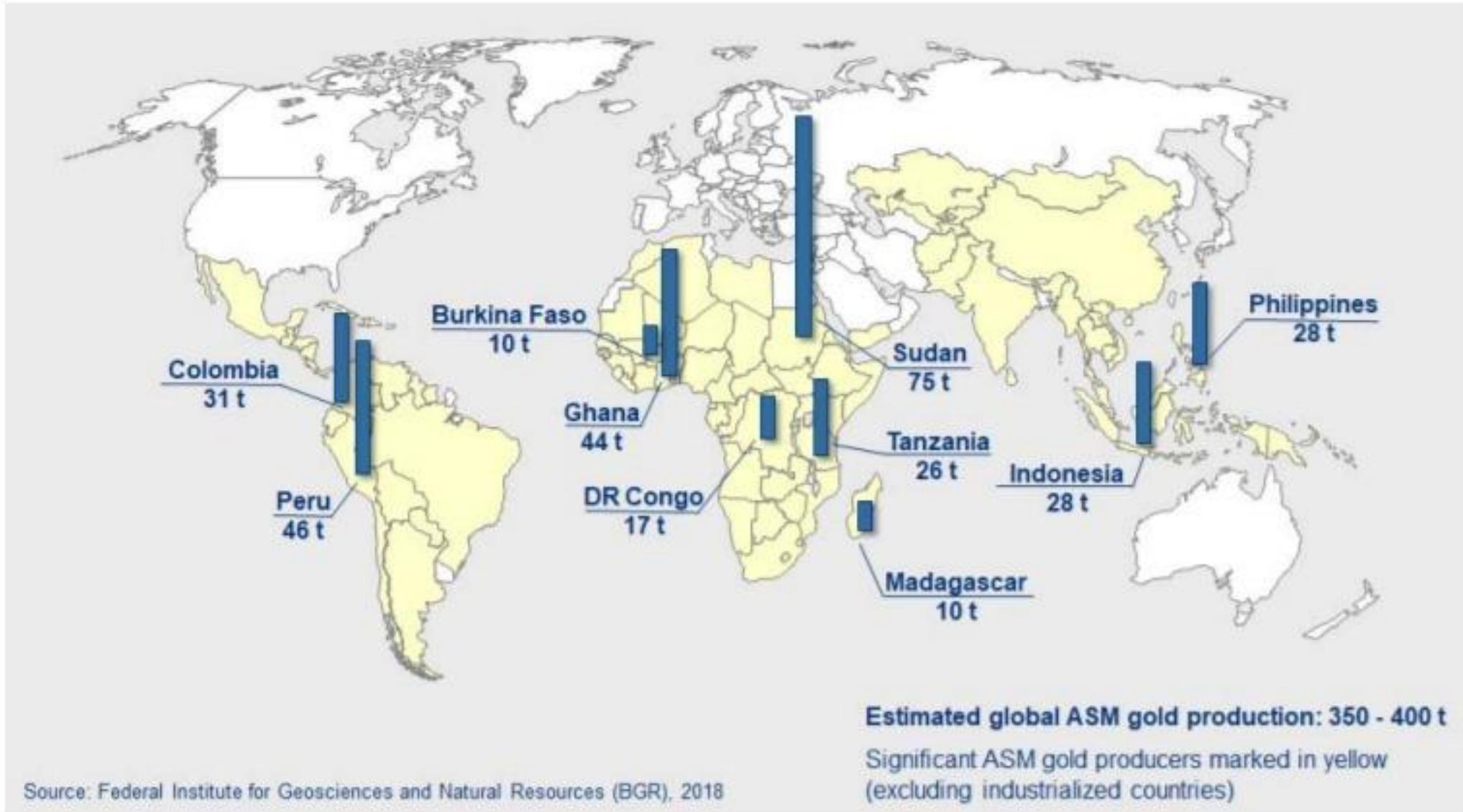
**ZIMBABWE ~25 t in 2018**

from unknown # miners, but processed through 12 gov sanctioned buying centers; ASGM now exceeds LSM production in the country [Source: ZMF, 2018]



# Cobalt & copper from start to finish





Source: Federal Institute for Geosciences and Natural Resources (BGR), 2018

**Figure 1:** Estimated global ASM gold production in 2016 or 2017. Figures for ten large ASM gold producing developing countries based on literature review and internal BGR estimates (2018).

# Market Resources

Online resources detailing small-scale mining market

**Delve Database** – market data and a comprehensive resource library

<https://delvedatabase.org/>

**IPIS Map** – interactive map showing mine sites in Eastern DRC

<https://www.ipisresearch.be/mapping/webmapping/drcongo/v6/>



Technology





## The technology

We have developed a blockchain platform with global application.

It enables pioneering direct purchasing business models and connecting disparate ends of a complex value chain.

The image shows a large tablet displaying the MINEXX platform interface, which includes sections for All Miner Teams, All Mines and Sites, All Tracking, and All Incidents. Below the tablet, two smartphones are shown, one displaying the mobile app's礪矿者 (Miners) screen and the other displaying the dial pad screen.

**All Miner Teams**

MINER TEAM NAME	PHONE	MINER TEAM OWNER
Team RUKAGANA	+243899335777	Hugo Bora
Team ROGER	+243853412990	Hugo Bora
Team Faustin	+243971924825	Hugo Bora
Team Daniel HABUMUREMYI	0912456876	Marcus Scaramanga

**All Mines and Sites**

MINE/ SITE NAME	PHONE	MINE/ SITE OWNER
FILLON I	0999506983	Demo Minexx
BIRIKI	0999506983	Demo Minexx
NUMBI		

**All Tracking**

BATCH NAME	AMOUNT	STAGE	CLOSING DATE	MINE/ SITE NAME	MINER NAME
FILLON II	\$ 2,000.00	Minerals Purchase	07/16/2019	FILLON II	
MISUMARI	\$ 2,500.00	Production	10/08/2019	MISUMARI	
FUNGAMWAKA	\$ 1,200.00	Production	09/30/2019	FUNGAMWAKA	

**All Incidents**

INCIDENT NUMBER	SUBJECT	STATUS
223014000000271052	PERTE D'UNE TAGUE	CLOSED
223014000000224140	Head Torch	CLOSED



# Role of blockchain

Revolutionizes compliance, financing, and impact



## Compliance Certification

Downstream buyers see mineral provenance data required for OECD compliance. Data entered at source and cannot be modified.



## Security Tokens

Investors (trader, tech companies or individuals) purchase tokens tied to future mineral production. Drives liquid pre-financing market enabled by trust created in platform.



## Smart Contracts

Downstream buyers transact directly with miners through platform to include fair floor-price and long-term contracts to support communities that include electricity and insurance.

# Digital payments benefit traders, govt & regulators



More profitable  
trading

Digital payments reduce cash losses, transaction fees and shorten working capital time.



Less fraud and built-in KYC

Digital payments can be controlled to ensure payments and minerals reconcile. KYC and AML risk mitigated.



Transform  
communities and lives

Digital payment cause 51% reduction in corruption. 21% increase in output of BoP consumers. Gender pay gap reduction

BETTER THAN CASH  
ALLIANCE

Digital payments partners

**RAWBANK**



**airtel**

# Digitalised Transactions

Breakdown of transactions to different roles

Payment to	Frequency	Size	Verification
Miner	Daily	\$10	Payment processor & 2-way SMS
Team Leader	Daily	\$10	Payment processor & 2-way SMS
Traders	Weekly	\$100	Payment processor & 2-way SMS
Local Transport	Weekly	\$100	Payment processor & 2-way SMS
Taxes	Weekly	\$1000	Govt (through application)

# Drones transform logistics and supply chain

We are actively exploring the use of drones to further secure the supply chain



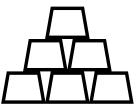
More profitable  
trading

Reduction in transport, illegal tax  
payments and middle-men.



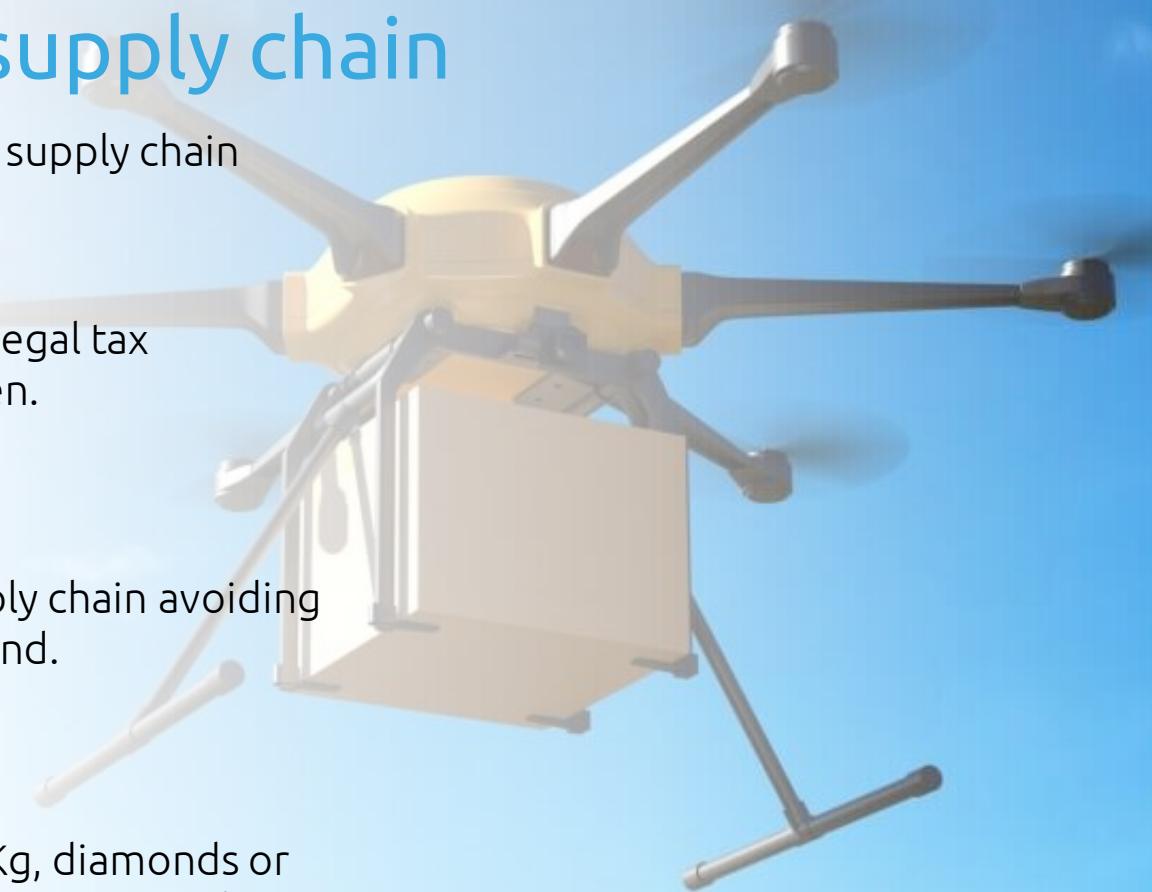
Increase security

Improves security of supply chain avoiding  
minerals travelling overland.



High value is best

Gold worth \$50,000 per Kg, diamonds or  
gemstones are most prone to smuggling.  
Drones provide a solution.



# Minexx Features

Key functionalities of MineSmart today include:

- Registering miners, team and sites
- Recording and managing inventory
- Record and managing incidents
- Inventory tracking and warehouse registration
- Viewing the data and analytics associated with different mine sites<sup>20</sup>
- Integrated SMS
- Integrated digital payments
- Export certification and digital taxation
- Blockchain compliance certification
- Buyer-login gives view for mineral buyer

All Containers Tracking

<input type="checkbox"/> CONTAINER NAME	CONTAINER OWNER
<input type="checkbox"/> CONTAINER.7.2020	Buyer 1 Test
<input type="checkbox"/> CONTAINER.6.2020	Marcus Scaramanga
<input type="checkbox"/> CONTAINER.5.2020	Buyer 2 Test
<input type="checkbox"/> CONTAINER.3.2020	Eric Mwangilwa
<input type="checkbox"/> CONTAINER.2.2020	Buyer 2 Test
	Buyer 1 Test

Total Count: 6

# Redesigning the value chain

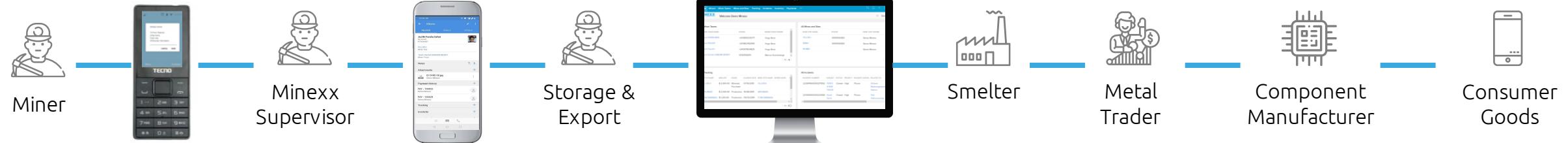
Opaque, outdated and fragmented upstream value chain

TODAY



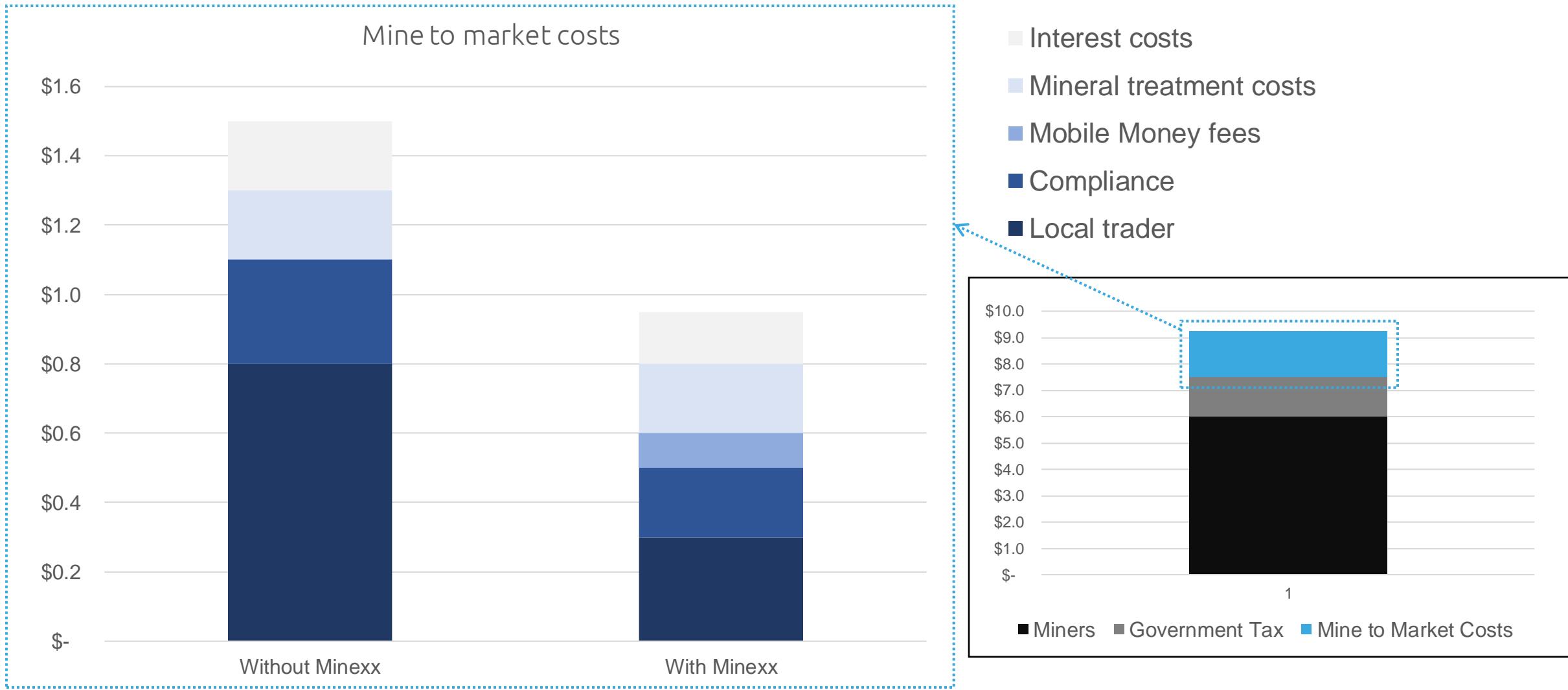
Minexx digitalized operations shortens and secures the supply chain from earth to tech

**MINEXX**



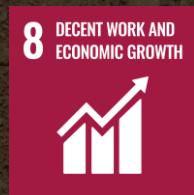
# Transforming trading economics

Digital payments and direct purchasing transform mine to market economics



# Impact built in

Impact & SDGs integrated into business model with Minexx impacting 10 of 17 SDGs



21st Century  
technology built with  
19th Century practices



African countries lose more  
money in mineral tax evasion  
than they gain in foreign aid  
*UNCTAD*



Connecting miners to the  
world to access finance,  
services, equipment and  
the market

# Impact on the miner

Minexx leverages financial and physical relationships to connect miners to the world.

## Payments



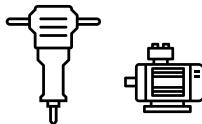
Before	After
Cash payments based on mineral price assessed by eye by middleman. Miners migrate often based on rumor and can go for months without pay.	Minexx doubles a miner's monthly income. 15% to 50% more paid per Kg due to fair analysis. Further increase due to regular purchasing pattern instead of stop/start purchasing of traders. Miners paid directly to mobile wallet and can provide fixed basic amount to ensure miners stay secure during lean periods.

## Torch



Before	After
Cheap torch with disposable batteries	Lithium super bright rechargeable torch

## Equipment



Before	After
Local hammer	Basic soil analysis done to help miners focus on strategic locations. Jackhammers and solar water pumps will be financed.

## Safety Gear



Before	After
None	Helmet, overall, first aid kit, gloves, mask, boots.

## Insurance



Before	After
None, 100,000+ miners die each year without insurance.	With a large enough number of miners on the platform we will partner with local insurance providers and NGOs to provide life and medical insurance.

## Training



Before	After
None	Training of latest techniques, geology and health and safety

## Other



Before	After
None	We partner with services like PAYG solar, banks & schools to provide other life changing services to the miners.

# Impact Metrics

Measuring impact of bottom of pyramid consumers

Target by 2025



## Miners on platform

Number of cooperatives, miners, traders, washers, transporters on platform. Gender of miners (typically 40% women).

500,000 miners, 40% women



## Payment increase

Payment metrics: Size of payment, cost from mine to market; time to process payment; payment disparity male v female miners.

50% increase in miner monthly income



## Access to services

Percentage of miners with access to safety equipment, insurance and electricity.

100,000 lithium headtorches  
300,000 safety equipment  
150,000 with insurance



## Digital taxation

Number of taxes, % of taxes paid digitally.

\$1bn increase in govt revenue

# Community mining

Minexx pioneers a community mining approach to semi-industrialize key sites.

Minexx leverages technology to invest in equipment (diggers and washing plant) to merchandise activities on key sites. Data gathered on platform informs Minexx of best sites with highest grade to de-risk investment decision.

Community benefits:

- Infrastructure investment (building roads, schools, health centres).
- Shared use of equipment to remove top soil for artisanal sites to mine more productively and safely.
- Platform use to provide services such as electricity and insurance to miners and community members and manage artisanal transactions.
- Meets government objectives to semi-industrialise sites and develop rural areas.

Community mining is powered by the security tokens Minexx issue, which bring liquidity, trust and transparency to the market.



# Management



**Marcus Scaramanga**

CEO & Co-Founder (ex Bboxx)

Marcus is passionate about how technology can improve lives at a global scale and has extensive experience building tech in Africa, spending 5 years building Bboxx. Marcus holds a 1st class MEng in Mechanical Engineering from University of Bristol, UK.



**Emmanuel Beau**

Chief Investment Officer (ex EAV)

Emmanuel previously co-founded a \$90M energy access fund and was a pioneer of the energy access industry. He is passionate about designing financial products to serve frontier markets. Emmanuel holds a degree in Political Sciences and speaks French, English, German, Portuguese, Wolof, and Swahili



**Sylvie Ndashimana**

Product Manager (ex Google)

Sylvie is a rigorous product manager and team lead. She has spent the last 10 years working in Product Development in France, UK and Belgium for Google and Fujitsu. Sylvie holds a Masters in Applied Finance for University of Quebec in Canada. Sylvie speaks fluent Kinyarwanda, Swahili, English and French.

# DRC



**Hugo Budaho**

Head of Operations (ex Airtel)

Growing up in DRC, Hugo knows the potential beneficial impact resources can have. Hugo has spent the last 5 years at Airtel, a pan-African telco where he focused on Human Resources. Hugo holds a degree in Human Resources from Institute Roger Guibert, Belgium.

# Board Members



**Mansoor Hamayun**

Co-Founder & Non-Executive  
Chairman Bboxx CEO

Mansoor is currently Chief Executive Officer at Bboxx, a next generation utility company providing 1.5 million people with electricity each day, which he co-founded in 2010. Mansoor is influential in the intersection of social impact, technology and business and regularly speaks on such topics and was elected a member of the Young Presidents' Organisation. Mansoor holds a degree in Electrical and Electronic Engineering from Imperial College London.



**Laurent Van Houcke**

Co-Founder & Non-Executive  
Director Bboxx COO

Laurent is currently Chief Operating Officer at Bboxx, which he co-founded in 2010, along with Mansoor Hamayun. Laurent has extensive experience starting and growing operations in the 14 countries Bboxx operates in. Laurent holds a first-class degree in Electrical and Electronic Engineering from Imperial College London.



Securing the mineral supply chain  
from earth to tech