

**First modern mine
planned for Ethiopia:**

Tulu Kapi Gold Mine



AIM listed KEFI Minerals plc (KEFI) is focussed on gold and copper deposits, primarily in the highly prospective Arabian-Nubian Shield (ANS) area.

KEFI's vision is to be a dividend-paying high-growth mining leader in the ANS.

Shares on issue 553M

Market Capitalisation at 2.5p £14M

NPV of 54% of Tulu Kapi Open Pit only, at start construction £44M

NPV of 54% of Tulu Kapi Open Pit only, at start production £74M

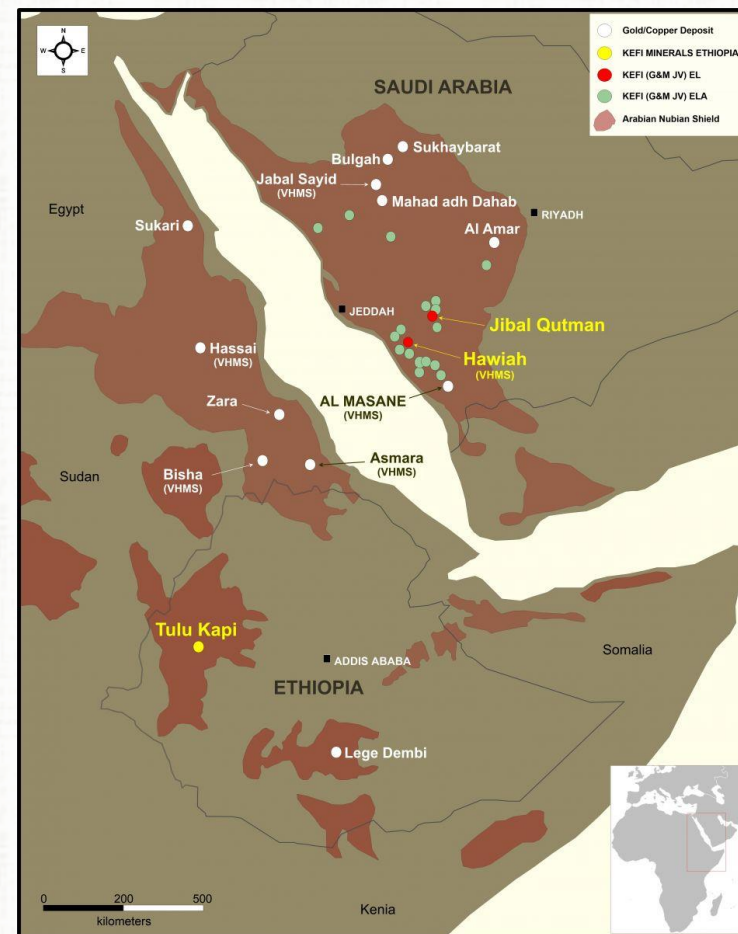
Underground extensions, satellite deposits and Saudi targets provide significant upside

Ethiopia – Tulu Kapi Gold Project.

- Full support of the Ethiopian Government, who are also an investing partner
- Open-pit reserve 1.0Moz at 2.1 g/t of resource totalling 1.7Moz
- Planned open-pit gold production of ~140koz p.a. at an AISC of c. \$800/oz over 7 years
- Further underground potential based on indicated 5g/t resource which is open at depth
- Significant district exploration potential for both gold and VMS gold & copper targets

Saudi Arabia – Jibal Qutman Gold Exploration Licence and large Wadi Bidah Metal Belt

- Saudi Government is pursuing a pro-minerals policy with mining friendly regulations
- Mining Licence application submitted for Jibal Qutman
- Initial resources totalling 0.7Moz at Jibal Qutman, with potential in surrounding district
- Co-investing 60% partner is Saudi conglomerate – ARTAR, via the Gold & Minerals JV
- Lodged applications over most of Wadi Bidah Metal Belt, containing many VMS targets



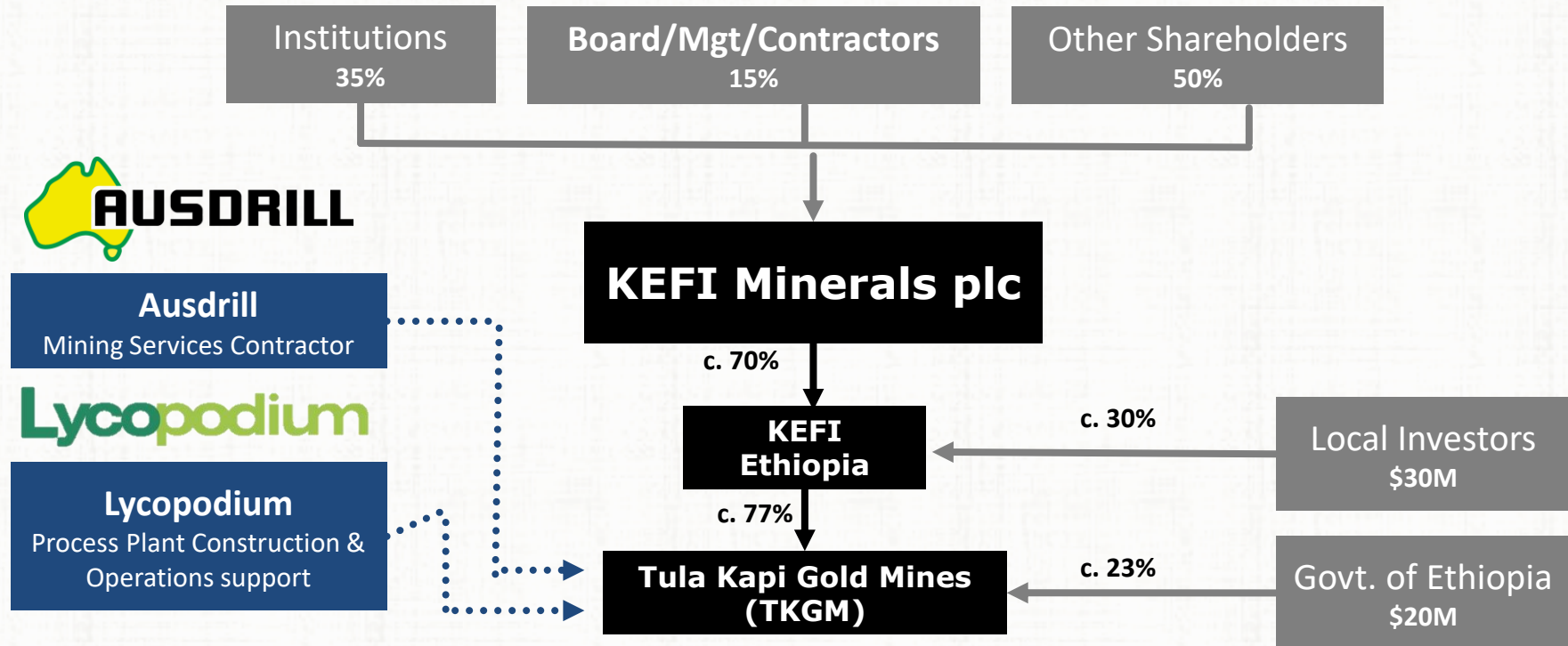
Location of KEFI's portfolio within the Arabian-Nubian Shield Area (ANS)

- ~100M people in a fertile country the size of France+Spain, about half the size of W. Australia
- Stable, never colonised base of African Union and UN Economic Commission for North Africa
- One of only two countries to satisfy the United Nations Millenium Developmental Goals
- World's Top 5 fastest growing economies – 15 years of growth GDP 8%pa and GDP per capita 11%pa
- Mining prioritised in 5-Year Growth&Transformation Plan, to generate of exports/foreign currency
- Highest level of regulatory and political engagement with KEFI, in a pro-development atmosphere
- Industrial production (textiles, electronics) transferring in from China, India, Turkey and...
- Received first credit rating in 2014 and closed the first East African bond issue
- 2018 is a year of transformative change in Ethiopia on many fronts. The installation of vigorous and progressive new Government leadership in April 2018 appears to be propitious for mining
- Ethiopian gold export revenues have shrivelled during 2017 and Tulu Kapi is a welcome initiative
- KEFI's Tulu Kapi gold project shaping up to be the first internationally finance mine development



- 10 years up to 2014, when KEFI took control: exploration and engineering designs at a cost of c. \$50M
 - 2015: KEFI Finance Plans approved by Central Bank and then all Plans approved by Council of Ministers
 - 2016: KEFI appointed specialist contractors for development of mine and on-site infrastructure
 - 2017: TKGM formed with Govt. Power and Roads Authority commit to install off-site infrastructure by 2019
 - 2018: KEFI replaced banks which withdrew in 1st State of Emergency and withstood 2nd State of Emergency
 - 2018: new Ethiopian leadership and KEFI has successfully aligned with local community, Govt and investors
 - 2018: plan to close finance, start community resettlement and trigger project development
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TKGM – Corporate Structure



All consortium parties are either listed companies or government entities (thereby providing transparency, suitable regulation and accountability at all levels). All parties will undertake both a project responsibility role and a project investment role:

- **TKGM** – to provide \$110M of equity funding and assume overall control of the project (past equity is \$60M and additional planned is \$50M)
- **Government of Ethiopia** – to provide \$20M funding and operate all off-site infrastructure
- **Ausdrill** – to supply and operate the mining fleet (on a cost per tonne basis)
- **Lycopodium** – performance guarantee on process plant designed and supplied for fixed price. Cost-based assembly with incentivised targets.
- **Additional Project Equity Investors** – Ethiopian investment syndicate plan to invest \$30M in KEFI Ethiopia

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LYCOPODIUM and AUSDRILL

INFRASTRUCTURE AND MINING CONTRACTOR



Lycopodium is mainly African-based, having built 57 gold plants and worked in over 20 African countries over a period of over 20 years. It has also worked in Australia, Asia and Europe.

Ausdrill / African Mining Services has developed a mainly African based business over a 27 year period where 97% of employees are nationals. It currently conducts mining operations for clients in Ghana, Mali, Burkina Faso, Senegal and drilling services in other countries also.

These contractors will be co-ordinated by TKGM and will train the local workforce with TKGM

- KME/TKGM has already provided a local school and water wells
- Majority local employment of current site teams
- Extensive consultation, as co-ordinated by Woreda, for resettlement compensation and actual move
- Facilitated selection of new host lands from 17 alternative sites offered by the authorities
- Committed to supporting development of new host lands
- Committed to Livelihood Restoration Programs
- Committed to Community Development Programs
- Committed to maximisation of local procurement and employment, with support for training
- We plan over 1000 local jobs by the end of 2019



- DIRECTORS, COMPANY SECRETARY AND LEGAL ADVISER OF TKGM:
 - DIRECTORS REPRESENTING KME:
 - HARRY ANAGNOSTARAS-ADAMS (CHAIR)
 - WAYNE NICOLLETO (MANAGING DIRECTOR)
 - Dr KEBEDE HAILU BELETE (COUNTRY MANAGER-TKGM)
 - DIRECTORS REPRESENTING MINISTRY OF FINANCE & ECONOMIC COOPERATION:
 - Dr MULUGETA DAMTEW
 - Dr SAID ERO
 - COMPANY SECRETARY- MULUKEN BELAY
 - LEGAL ADVISER – WONDENMARGEN G. SELASSIE
 - SENIOR MANAGEMENT TEAM OF KME/TKGM, TO BUILD AND TRAIN THE ETHIOPIAN TEAM
 - HARRY ANAGNOSTARAS-ADAMS ,EXECUTIVE CHAIR. (FORMER DEP CHAIR OF AUSTRALIAN GOLD COUNCIL)
 - WAYNE NICOLLETO - MANAGING DIRECTOR. (FORMER GM OF GOLD MINES IN WEST AFRICA, MONGOLIA, AUSTRALIA)
 - Dr KEBEDE HAILU BELETE - COUNTRY MANAGER-TKGM (GEOLOGIST AND HAS BEEN WITH PROJECT FOR 10 YEARS)
 - DAVID MUNRO - DEVELOPMENT AND OPERATIONS (FORMER MD BILITON AND OTHER MAJOR CORPORATIONS)
 - EDDY SOLBRANDT – SYSTEMS (FOUNDER OF GPR DEHLER INTERNATIONAL SYSTEMS SPECIALIST)
 - BRYAN HOSKING - HR AND TECHNICAL PLANNING (FOUNDER MEYER HOSKING HR AND TECHNICAL PLANNING)
 - JOHN LEACH – FINANCE (CHARTERED ACCOUNTANT CANADA, AUSTRALIA, EUROPE AND AFRICA)
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View a video summarising KME/TKGM's projects in Ethiopia:

<http://www.kefi-minerals.com/news/videos/2018/03/kefi-minerals-ethiopia>



TULU KAPI

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Tula Kapi Gold Project

The Tulu Kapi project lies 360 km due west of Ethiopian capital, Addis Ababa. Access is via a sealed road and the site benefits from main electricity grid access within 50km of the project. Tula Kapi has a probable ore reserve of 1.05Moz and mineral resources totalling 1.72Moz.

The project is fully permitted – the mining agreement formalised in Apr-15, with terms including a 20-year mining licence, 5% Government free carried interest and full permitting for development and operation. Minor ancillary licences are being processed for issuance once community resettled.

Planned gold production is 144koz p.a. for the first 3 years, with net operating cash flow c.\$78M p.a. (at assumed gold price \$1,300/oz) and life of mine open-pit gold production of 980koz at an AISC of c. \$800/oz.

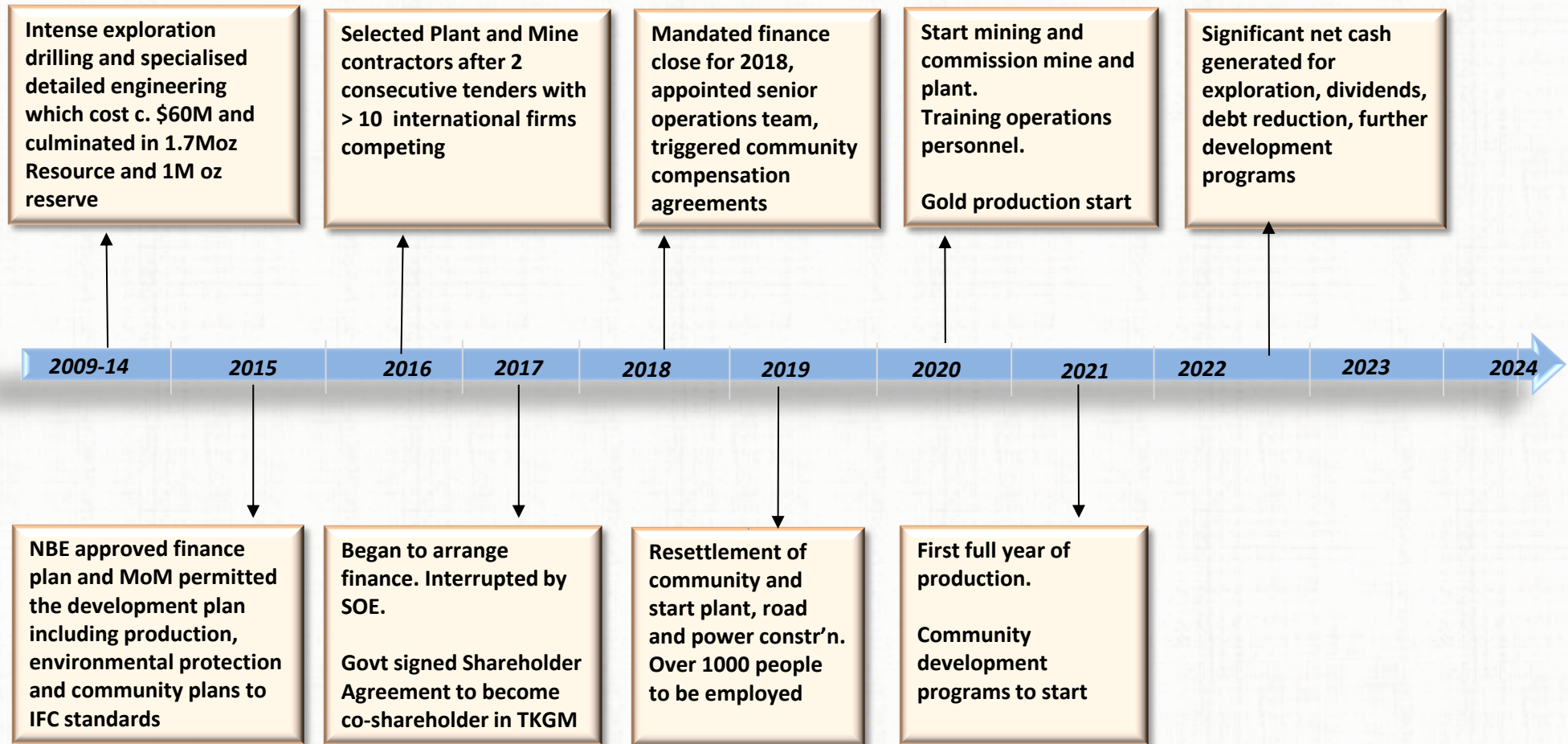
Project Timeline

- **1930s** Discovered and mined on a small scale by an Italian consortium
- **2009** Nyota Minerals Limited acquired the licences and undertook extensive exploration and drilling
- **2012** Nyota Minerals publish an initial DFS based on a 2.0 Mtpa processing plant, capex \$290M for ~100 Koz pa gold over 10 years
- **Dec-13** KEFI acquires 100% of the project for ~\$10M, equating to a cost of ~\$10/oz reserves for a project with ~\$50M historical expenditure
- **Jun-14**
- **2015** **Mining Licence Granted**
- **2015** DFS completed, evaluated conventional open-pit mining operation and carbon-in leach (CIL) processing
- **2016** International tenders to select project contractors
- **May-17** DFS update, incorporates due diligence and refinements on the 2015 DFS. Process plant capacity of 1.7-1.9Mtpa
- **Oct-17** KEFI announced increased process plant capacity to 1.9-2.1Mtpa, capex c. \$160M for ~140Koz pa gold over 7 years
- **2018** **Financing to start development**



Project development- 1930's to present day

TULU KAPI'S TIMETABLE



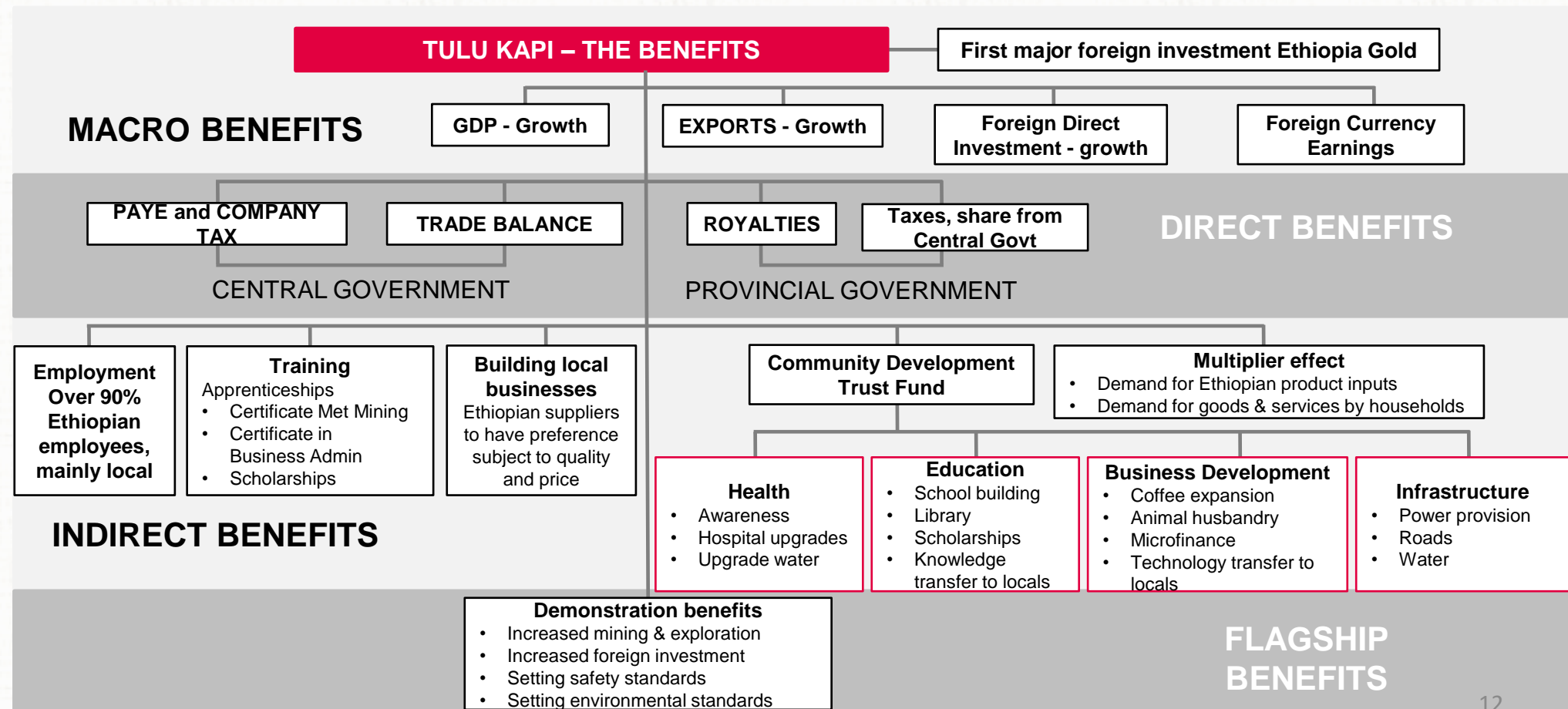
TULU KAPI

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CASE STUDY: BENEFITS OF TULU KAPI MINING PROJECT TO ETHIOPIA

Mining is a long-term activity and has high social impact

Mining represents c.20% of Africa's economic activity and minerals are the continent's second-largest export category



Geological Overview

- The Tulu Kapi region comprises typical greenstone characterised by prominent hills of intrusive rocks and deeply incised valleys hosting both metasediments and metavolcanic material
- Gold is hosted in quartz-albite alteration zones as stacked sub-horizontal lenses in a syenite pluton into which a swarm of dolerite dykes and sills have intruded
- Gold mineralisation extends over a 1,500m by 400m zone and is open at a depth of over 400m
- Relatively simple mineralogy comprises gold, silver, pyrite and minor sphalerite and galena – metallurgical recoveries of gold average ~ 93%



Examples of Mineralised Tula Kapi Drill Core

Reserves

	Cut-off (g/t)	Tonnage (millions)	Gold Grade (g/t)	Cont. Gold (Moz)
High grade	0.90	12.0	2.52	1.0
Low grade	0.50 - 0.90	3.3	0.73	0.1
		15.4	2.12	1.05

Resource

		Tonnage (millions)	Gold Grade (g/t)	Cont. Gold (Moz)
Indicated	Below 1,400m	17.7	2.49	1.4
Inferred		1.3	2.05	0.1
		19.0	2.46	1.5
Indicated	Above 1,400m	1.1	5.63	0.2
Inferred		0.1	6.25	0.0
		1.2	5.69	0.2
Indicated	Total	18.8	2.67	1.6
Inferred		1.4	2.40	0.1
		20.2	2.65	1.7

Note:

Resources were reported above and below 1,400m RL to reasonably reflect the portion of the resource that would likely be exploited via either open-pit or underground methods.

As part of the due diligence for financing, KEFI has agreed the 2018 Plan with the preferred financier and contractors.

Whilst resources and reserves and the mine plan remain essentially unchanged, the planned process plant has been expanded to a nameplate of 1.9-2.1Mtpa, to reduce stockpiles and expand cash flows.

The 2018 Plan is supported by the:

- draft mining services agreement with Ausdrill/African Mining Services
- draft plant design, supply and construction contracts with Lycopodium
- confirmations of commitment and schedule from Ethiopian Roads Authority and Ethiopian Electricity & Power Corp'n for roads and power
- draft operational arrangements with the explosives, fuel, laboratory services and other ancillary support services
- the draft report by the independent technical experts for the lenders

The implementation plans have been agreed on a base schedule of 24 months from drawdown of project finance to 1st gold pour. Incentivised arrangements are proposed for faster start-up.

2018 Plan compared with most recent DFS

Key mining and financial parameters from these studies are summarised in the table below.

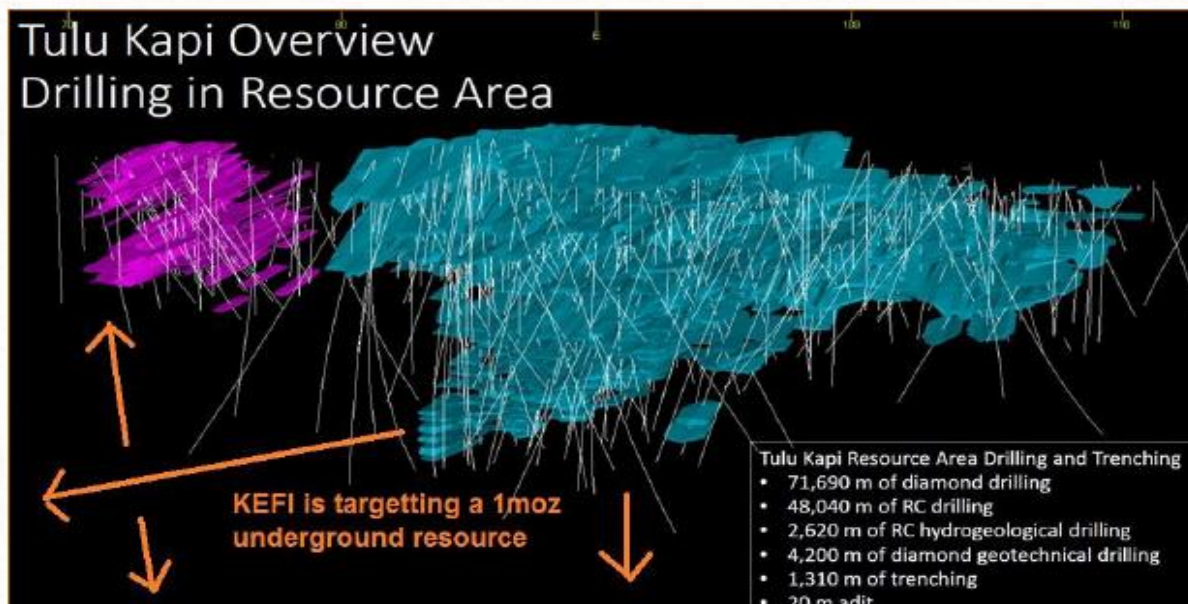
	2018 Plan	2017 DFS Update	2015 DFS
Stripping Ratio	7.4	7.4	7.4
Total Ore Processed	15,400 kt	15,400 kt	15,400 kt
LOM Head Grade	2.1 g/t	2.1 g/t	2.1 g/t
Gold Recovery	93.3%	93.3%	91.5%
Total Gold Production	980 koz	980 koz	961 koz
Process Plant Throughput	1.9-2.1 Mtpa	1.5-1.7 Mtpa	1.2 Mtpa
Avg. Gold Production (first 8 years)	135koz p.a.	115 koz p.a.	95 koz p.a.
Cash Operating Costs	\$701/oz	\$684/oz	
All-in Sustaining Costs	\$793/oz	\$801/oz	
All-in Costs (incl. initial capex)	\$973/oz	\$937/oz	
NPV at start of construction (8% real discount rate) (after debt)	\$115M/£82M	\$69M	
NPV at start of production (8% real discount rate) (after debt)	\$192M/£137M	\$159M	
NPV at start of production (8% real discount rate) (before debt)	\$337M	\$289M	
Payback Period	3 years	3 years	
Net Operating Cash Flow (average for first 8 years)	\$73M p.a.	\$60M p.a.	

Note: Both cases at a gold price of \$1,300/oz.

Tulu Kapi – Underground Potential

Gold mineralisation may extend both beneath the current drilling, and 600m to 800m further to the north – potential for 1 Moz below current open pit.

- Base Case Internal PEA on the August 2014 resource of 1.45Mt at 6.3g/t (333koz contained gold) extends beyond current open pit both laterally and horizontally
- Applied mining dilution of 15% at 0.75g/t gold and 10% ore losses
- Converted (76% conversion rate) to a mineable resource of 1.3Mt at 5.2g/t, (217koz gold)



View looking East

EXISTING UNDERGROUND RESOURCE

Ore mined	320,000 tpa at 5.2g/t
Life of Mine	4 years
Gold production	47,600 oz p.a.
CapEx	\$36.5M (initial)
Operating costs	\$85/t
All-in Cost (including capex)	\$765/oz
Cash flow A/Tax at \$1,300/oz	\$19M p.a.
After-Tax NPV (8%) at \$1,300/oz*	\$33M

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Exploration Upside

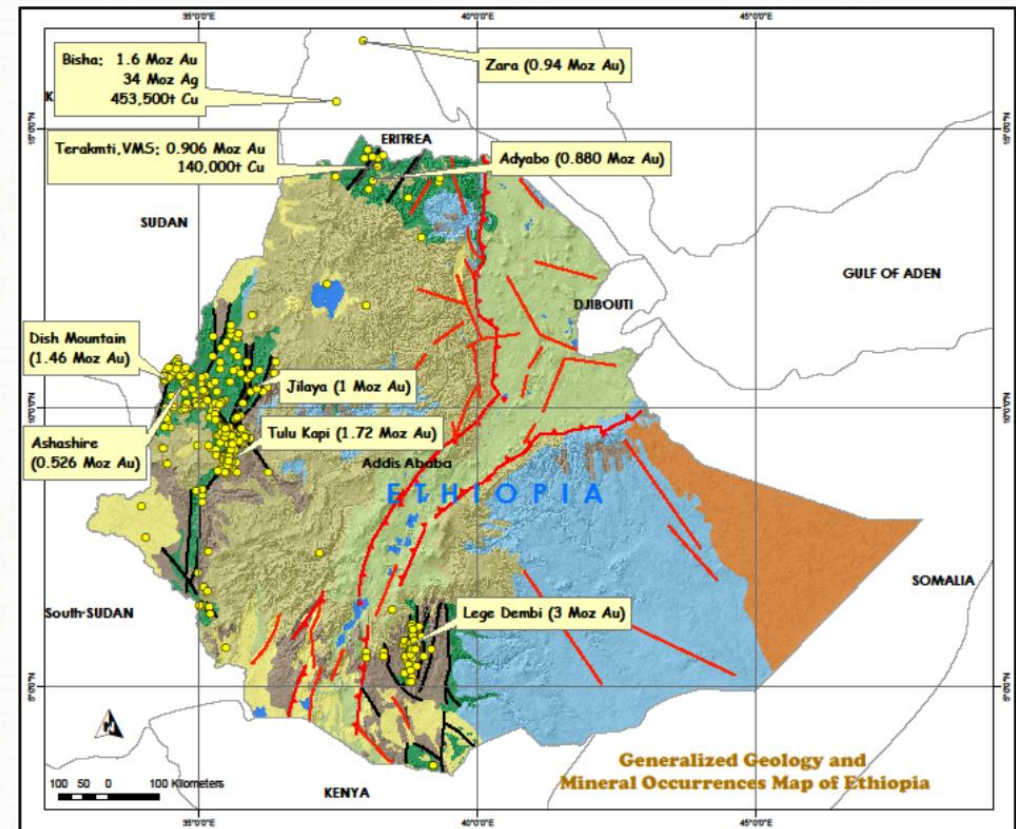
KEFI is well positioned to capitalize through to 2020 on its excellent portfolio of Ethiopian exploration projects whilst the Tulu Kapi Project undergoes concurrent development. KEFI has an area set aside in principle by Government, for exploration of prospects within trucking distance of Tulu Kapi, for grant upon commencement of development.

Ethiopia – an Emerging Gold Province

- Early days for the modern mining industry in Ethiopia
- Highly prospective with limited modern exploration undertaken
- Lege Dembi is the only operating gold mine
- Dish Mountain and Ashashire represent an undeveloped gold district of more than two million ounces
- East African's high-grade copper gold projects at Terakimti and Adyabo are now at the feasibility stage
- KEFI is targeting gold, base-metals and strategic metals throughout Ethiopia and has strong relationship with, as well as significant investment from, Ethiopian Government

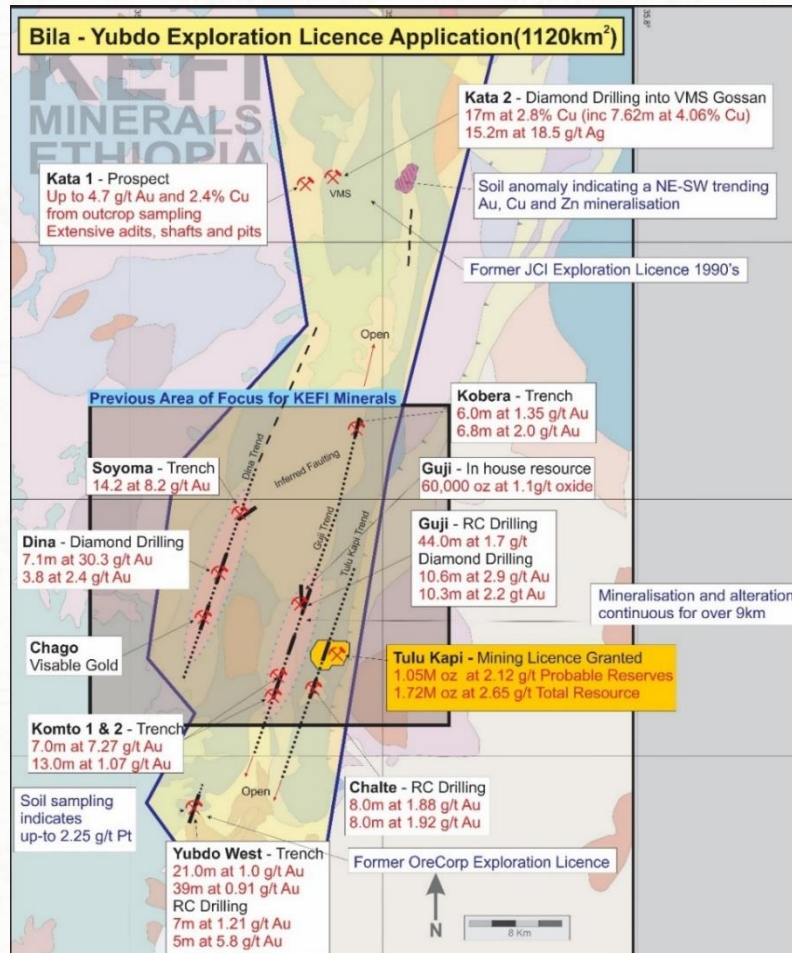
Current Exploration Potential

- High-grade underground indicated resource at Tulu Kapi has potential to expand to over a million ounces
- Low cost, open-pit satellite mines within 10km of Tulu Kapi have the potential to add 30-40koz per annum capacity relatively rapidly
- A new VMS copper district 50 km north of Tulu Kapi has been identified, historic drilling from the 1970s intersected high-grade copper (14.3m at 3.2% copper)



Artisanal mines, prospects and major Au and Cu deposits in Ethiopia

Opportunities for Satellite Deposits



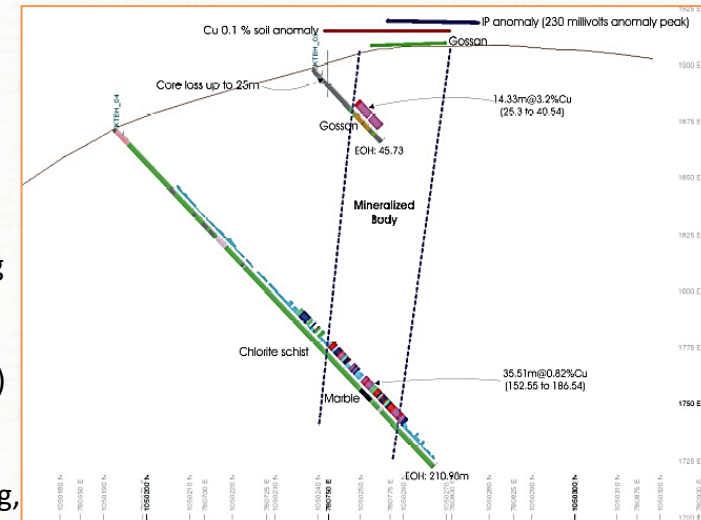
District Exploration Opportunities

KEFI can quickly add to Tulu Kapi open-pit gold production by developing:

- Potential for oxide ore in a series of shallow open-pits (40m depth) along the more than 9km of Komto-Guji Belt, all within trucking distance of planned TK plant
- Tulu Kapi plant has potential for elevated throughput rates on soft oxidised ore
- Preliminary metallurgical testing also indicates amenability for heap leach if TK plant capacity becomes restrictive

VMS Prospect

- High-grade copper in new VMS prospect within 50km of Tulu Kapi Mining Licence
- United Nations drilled six diamond holes in the 1970's along a 600m strike, mineralisation is open along strike and at depth, and soil geochemistry defines a >2km copper anomaly (gold not assayed)
- KEFI would twin some previous holes and extend the strike of the known 600m defined by UN drilling, mapping and IP



Saudi Arabian Projects

A 40/60 joint venture with Saudi conglomerate ARTAR

View a video summarising KEFI's projects in Saudi Arabia [here](#)



THE ARABIAN-NUBIAN SHIELD

The Arabian-Nubian Shield (ANS) is an exposure of Precambrian crystalline rocks on the flanks of the Red Sea.

Geographically the ANS includes Israel, Jordan, Egypt, Saudi Arabia, Sudan, Eritrea, Ethiopia, Yemen, and Somalia.

The ANS is believed to be the next major exploration frontier in Africa, with some likening its potential to that of the recent West African mineral exploration boom.

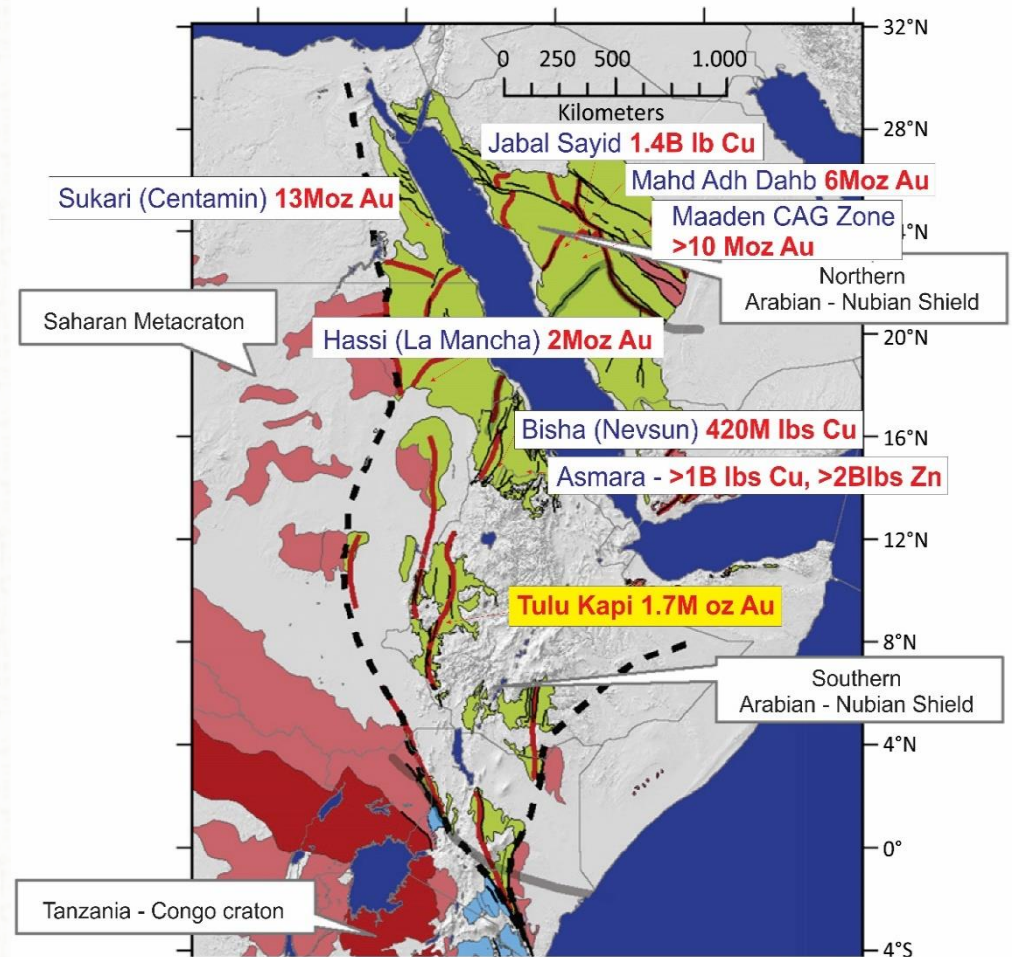
Much of the mineral potential has yet to be explored by modern techniques, but to date discoveries have included a variety of deposit types, including mesothermal gold or polymetallic, quartz vein gold and volcanogenic massive sulphide (VMS) ore deposits.

Some significant deposits in the Arabian-Nubian shield:

- **Sukari deposit in Egypt** – Centamin
- **Bisha deposit in Eritrea** – Nevsun Resources
- **Hassai deposit in Northern Sudan** – La Mancha Resources
- **Jabal Sayid in Saudi Arabia** – Barrick Gold

Regional explorers include Newmont and Menagem

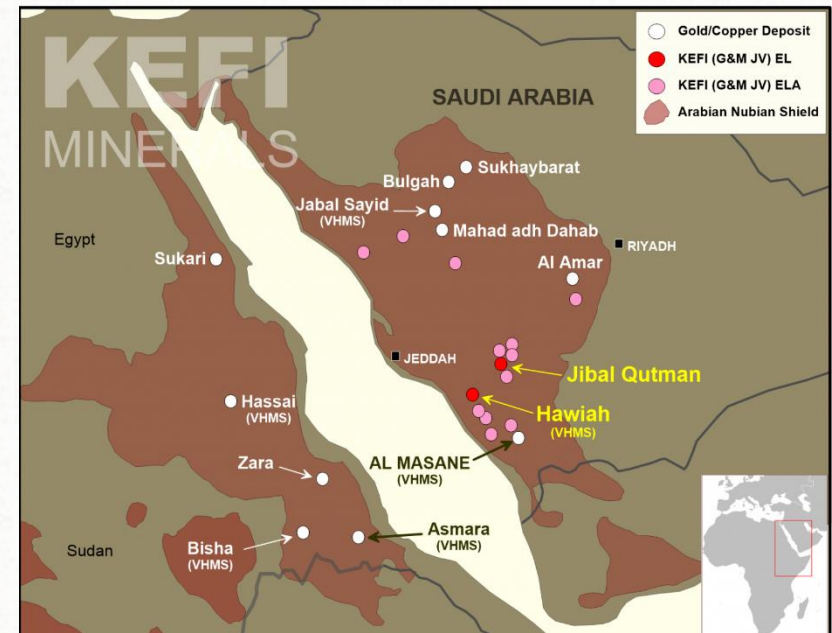
An example of growth potential is that Sudan's gold production has increased 20-fold in 10 years



ARTAR Partnership – Gold and Minerals Ltd (G&M) Joint Venture

- KEFI has been active in Saudi Arabia since 2008 and is partnered with ARTAR, a leading locally owned industrial group
- Saudi Arabia is instituting policies to encourage minerals exploration and development, resulting in a resurgence of the Kingdom's minerals sector
- KEFI, as 40% shareholder and technical partner in G&M, is well placed to advance and develop projects in line with the new regulations
- G&M's primary goal is the discovery and development of a one million ounce plus gold equivalent deposits. Currently the company is focused on two projects:
 - **Jibal Qutman** – Exploration Licence granted in Jul-12, since then KEFI has rapidly identified mineral resources totalling more than 700koz and is now evaluating gold production via an open-pit, heap leach operation
 - **Hawiah** – Exploration Licence granted in Dec-14, KEFI commenced exploration of an unusually large gossan for gold at the surface and a VMS copper-gold-zinc sulphide ore body at depth, the geological setting is analogous with the large VMS deposits in the Arabian-Nubian Shield that are known for well-preserved, mature oxidised zones enriched with near surface gold

Further exploration potential – G&M currently has Exploration Licences and pending applications covering more than 1,000km² and further exploration will target both gold and copper-gold mineralisation.



Tenement Locations in the Arabian Shield

