

# **Precious Metals Report 2023**

Everything you need to know about gold, silver, platinum and palladium!



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Editor
Swiss Resource Capital AG
Poststr. 1
9100 Herisau, Schweiz
Tel: +41 71 354 8501
Fax: +41 71 560 4271
info@resource-capital.ch
www.resource-capital.ch

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Editorial staff
Jochen Staiger
Tim Rödel

Layout/Design Frauke Deutsch

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Editorial Deadline: 01/31/2023

Cover: shutterstock\_1664547556
Page 11: shutterstock\_30211121
Page 12: Fotolia\_16885023
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Dear Readers.

It is with great pleasure that we present you our special report on precious metals and this time also with a silver special in addition to our successful battery metals and uranium reports.

Precious metals are indispensable today - in times of high inflation, with simultaneously rising interest rates that are likely to bring many a state to the brink of insolvency very soon. Some augurs think that gold and its little brother silver have lost their "safe haven status" because they did not perform well last year. However, first and foremost they are always an independent wealth preservation insurance. Performance comes when you don't expect it. The manipulations in the futures markets could end with a bang, namely when the physical stocks are no longer available for delivery and service. For silver in particular, we see massive shortages looming as early as 2023. This is because silver is indispensable for the energy transition, e-mobiles, high-tech and above all photovoltaics. The years-long policy of cheap money by the global central banks, including zero interest rate policy make life hell for savers, pensioners and tenants. One may now pay the bill for the moronic central bank policy, above all an ECB in Frankfurt, where it seems that one first denies inflation, then slowly rowing back and then simply wondering why this has come to stay. We have seldom seen so much ignorance of macroeconomics and monetary theory as in the last 3 years. Instead, topics such as gender and climate protection are on the ECB's agenda, for which it has no mandate at all. The bottom line: zero return on savings and exorbitantly rising prices at the same time. The spectre of stagflation is haunting us and causing additional worry lines.

With gold, but also with platinum and palladium, you can weather many a storm to preserve your wealth. We look positively into the future and take gold as a store of value and inflation protection. Platinum and palladium are facing revaluations, as here the Russia sanctions lead to a shortage on the world market. There is also a lack of new mines for the hydrogen future.

Mining companies are still far too cheaply valued. Especially budding precious metal producers have an enormous leverage on the respective metal price, but also established producers that already pay dividends are massively undervalued.

In this precious metal report, we will introduce you to some interesting companies that are suitable for speculation on rising precious metal prices. We also want to give you the necessary basic knowledge by means of our general part, so that you can make your own decisions.

Swiss Resource Capital AG has made it its business to inform commodity investors, interested parties and those who would like to become one, up-to-date and comprehensively about the most diverse commodities and mining companies. On our website www.resource-capital.ch you will find more than 35 companies and a lot of information and articles about commodities.

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My team and I hope you enjoy reading the Special Report on Precious Metals and hope to be able to provide you with a lot of new information, impressions and ideas. Only those who inform themselves in a versatile way and take their investment matters into their own hands will be able to win in these difficult times and preserve their assets. Precious metals have endured for thousands of years and will continue to do so.

Yours, Jochen Staiger



Jochen Staiger is founder and CEO of Swiss Resource Capita AG. located in Herisau. Switzerland. As chief-editor and founder of the first two resource IP-TV-channels Commodity-TV and its German counterpart Rohstoff-TV. he reports about companies, experts, fund managers and various themes around the international mining business and the correspondent



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# The FIAT currency system is reaching its limits – Central banks in particular are buying gold like there's no tomorrow!

### Gold: store of value in difficult times

Gold has always been considered the number 1 store of value! Especially in times like these, in which an explosive mixture of high inflation, threatening recession, completely out of control debt levels, war behavior including (energy) price explosion represent a constantly growing danger for the savings. In addition, it seems that a zero more or less no longer matters. Whereas in 1983 it was possible to save an entire state with the now seemingly ridiculous sum of 1 billion German marks (the Strauss deal with the GDR. the equivalent of around 511 million euros), today there is a quick 100 billion euros for the "rescue" of the German army. Years ago, former Fed chief Ben Bernanke coined the term "helicopter money," in which central bank money created out of thin air is paid out directly to the state or citizens. Long frowned upon, we now have this for some time in rough quantities. Of course, somewhat differently packaged, as "Corona emergency aid", "gas price brake" or "tank rebate", so that it is not immediately so noticeable. All this means that the FIAT currency system as we know it is irrevocably reaching its limits. This can be seen well in the US debt ceiling, which has once again been reached (at US\$31.4 trillion) and means that the US will not be allowed to take on any more new debt for the time being. Nor should they, since a whopping US\$853 billion in interest payments was incurred in the fourth guarter of 2022 alone. So additional debt and another rate hike should be urgently avoided if the US\$ is not to implode completely. Meanwhile, the global gold supply cannot be increased at will, which meant that gold could also serve as a valuable store of value in 2022. The price of gold is likely to rise sharply at the latest when global key interest rates are expected to fall, delighting investors not only for the purpose of storing value but also, and above all, with gains on corresponding precious metal shares.

### Silver: Electrical industry and investment sector set new demand records

Unlike gold, more than 50% of total silver demand recently came from the industrial sector, while the remainder was mainly demanded by professional investors in the form of bars and coins and by the jewelry industry. Demand continued to rise sharply last year, with the existing supply deficit now increasingly attributable to ever higher demand from industry and - as in previous years - no longer exclusively from the investment sector. Constantly increasing demand from emerging or still young boom hightech industries such as electromobility, photovoltaics and 5G technology clearly make silver one of the metals most in demand in the current decade, whereby production has not been able to keep pace for a long time and de facto has not been able to be covered by recycling for several years. In the future, the energy sector in particular

will play a dominant role. The use in many new components of more and more electric vehicles, in photovoltaic systems (installed over several decades), but also in 5G networks and in the medical sector, will cause industrial demand to rise sharply in the coming years.

# <u>Platinum:</u> The supply surplus will most likely turn into a supply deficit in 2023

Platinum has not performed well in recent years but has been showing relative strength again for several months. The increasing shift away from diesel as the number one combustion engine led to a decline in demand for platinum, which is mainly used in diesel catalytic converters. However, there is increasing substitution of palladium by platinum, which is boosting demand. In the future, platinum will be increasingly used in catalysts to accelerate the reaction of hydrogen and oxygen in fuel

cells. The supply chain problems of recent years have largely dissipated, so a strong increase in demand can be expected from the automotive industry. In addition, investment demand is expected to pick up further. For both platinum and palladium, a supply slump is to be expected in the coming years, as the important South African mines in particular will not be able to maintain their production to the usual extent. Even rising prices are unlikely to contribute to an improvement.

# <u>Palladium:</u> Downward price adjustment is not yet too complete

Palladium is mainly an industrial metal. It is mainly used in catalytic converters of gasoline vehicles, which is why palladium developed very well in recent years – in terms of price. This changed about a year ago, when a price decline began, which is still continuing. The reasons for this are complex, but still mainly to be found in the price. Because palladium can be substituted in certain parts by platinum, which is still much cheaper. In addition, palladium is used almost exclusively in the construction of catalytic converters for gasoline vehicles. And these are losing more and more market

share to diesel vehicles, but above all to electric vehicles. Nevertheless, there is a ray of hope for palladium, because production has been declining for years. Russia is the world's largest palladium producer, with just under 40%. In addition, the production of the second largest producer, South Africa, is declining more and more. There is a risk that western countries will experience a massive undersupply. Rising prices are likely to be the consequence.

### What are precious metals?

From a purely chemical point of view, precious metals are metals which are corrosion-resistant, i.e., which are permanently chemically stable in a natural environment under the influence of air and water. The group of precious metals primarily includes gold and silver, as well as the so-called platinum metals platinum, palladium, ruthenium, rhodium, osmium and iridium. Mercury is also a precious metal. In addition, there are a number of so-called semi-precious metals, including copper. A third group is formed by the so-called short-lived (radioactive) transition metals, such as Darmstadtium or Roentgenium, which, however, play virtually no role in practice.





# **Gold: Facts & Figures**

Gold is a chemical element with the element symbol Au and the atomic number 79. Due to its moderate melting temperature, it is very easy to work mechanically and does not corrode. It is extremely rare, and its yellow luster is also durable, which is why it is considered imperishable and is therefore largely processed into jewelry or used in coin or bar form to store value. Gold is also considered to be easily alloyable, which makes it very attractive as a material. Gold has proven its worth as a store of value for thousands of years and is therefore mainly considered an investment.



Main properties: Appearance, corrosion resistance, good workability, good contact

Not only in the form of investment objects such as jewelry or coins, but also in medical applications, gold scores above all with its corrosion resistance. In dental prosthetics, for example, additional precious metals such as platinum are added to achieve the necessary hardness. In industry, gold is used primarily in the construction of circuits as a gold-plating additive for wires, printed circuit boards, switching contacts and connectors.

### Occurrence and extraction

Gold occurs very rarely in nature, but it is pure. On average, there are only 4 grams of gold per 1,000 tons of rock in the earth's crust. It is found in primary raw material deposits as gold-bearing rock (gold ore) as well as in secondary deposits, among others in placer deposits. Up to 20% of the gold mined annually is extracted as a by-product, mainly from copper, nickel or other precious metal mines.

# **Supply situation**

According to the World Gold Council, a total of 3,474.7 tons of gold was mined in 2020 and 1,292.3 tons was recovered from recycling. Thus, the total gold supply (including recycling and hedging) fell by about 187 tons to 4,721.1 tons compared to 2019. In 2021, 3,546.2 tonnes of gold were mined

and 1,136.2 tonnes were recycled. In 2022, 3,610.4 tonnes were mined and 1,144.1 tonnes were recycled.

The main gold mining regions are currently China, Russia, Australia, the USA and Canada, which together account for almost half of the total annual output. They are followed by Peru, Ghana, South Africa, Mexico and Brazil. In Europe, only Sweden and Finland have significant gold production.

# Gold production remains below peak

Since the turn of the millennium, gold production has risen every year until 2018, but has recently been weakening more and more. While around 2,862 tons of the yellow metal were extracted from the earth worldwide in 2011, the figure was 3,336 tons in 2015. Since then, production rose to 3,667.8 tons in 2018, then fell to 3,531.8 tons in 2019. In 2020, another drop occurred to only 3,474.7 tons, mainly due to plant closures caused by the Covid 19 pandemic. In 2021, an increase occurred again, reaching 3,546.2 tons. Finally, 2022 saw a mine production of 3,610.4 tons, which was still below the peak from 2018.

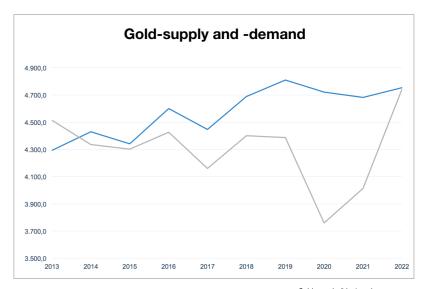
It can be assumed that the gold peak, i.e., the annual gold production has reached its peak in 2018. In all likelihood, this will not change in 2023 either.

# The eligible average grades are getting lower and lower

Several factors contribute to this.

First, more and more deposits are reaching the end of their life. Those that have not yet been fully exploited have to be expanded at ever greater expense in order to access further gold-bearing material. Some mines already reach depths of 4,000 meters and more.

The gold content continues to decline steadily. Currently, gold deposits are still being exploited at an average of just over 1 gram of gold per ton of rock (g/t). However, there are already indications that this mark will fall to below 0.9 g/t in a few years for depo-



Gold-supply (blue) and -demand (grey) (Source: own representation)

sits that have not yet been developed.

A third point is the (lack of) discovery of new deposits. While more than one billion

new deposits. While more than one billion ounces of gold were discovered in the 1990s, between 2000 and 2014, only slightly more than 600 million ounces were discovered. Since then, new discoveries have once again plummeted. This is mainly due to the fact that in the past few years, due to the slump in gold prices at the time, the gold producers have concentrated primarily on reducing mining prices. Particular savings were made in exploration, which led to the fact that hardly any larger deposits were discovered in recent years.

# **Demand situation**

In 2020, global demand for gold was only around 3,759.6 tons, almost 627 tons or 14.3% less than in 2019. In 2021, however, the gold sector then experienced a rebound in demand to a total of 4,017.8 tons. In 2022, there was a further jump in demand of a whopping 18% to 4,741 tons, almost matching the previous record year of 2011 (4.746 tons).

The jewelry sector played a major role in the surge in demand following the 2020 corona year, consuming 2,221 tons in 2021, up 67% from 2020. In 2022, global demand from the jewelry industry was around 2,190

tons of gold. Thus, demand from this sector remains at a high level.

The investment sector (bars and coins) recorded an increase of over 30% to 1,191 tonnes in 2021, an 8-year high. In 2022, this increased again and recorded a demand of 1,218 tons. Global gold ETFs, which saw net outflows of 189 tons in 2021 after gaining 892 tons in 2020, experienced only slight outflows of 110 tons in 2022, with increased inflows just towards the end of the year.

Demand from the technology sector was also strong, increasing by 9% to 330 tons in 2021, despite the continued existence of Corona-related production losses. This showed that gold is increasingly finding its way into the electromobility sector in particular. A circumstance which, in view of an incipient electric (mobility) revolution, is likely to lead to continued strong growth in demand from the technology sector in the future. In 2022, the industry demanded around 309 tons of gold.

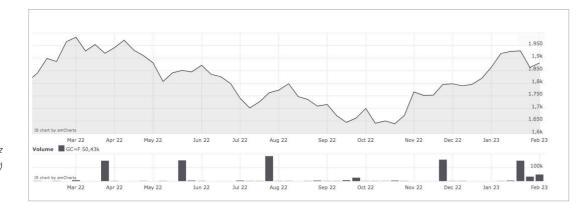
# Central banks buy gold like there is no tomorrow

After decades of selling gold since 2010, central banks are back on the buying side – and how! Central banks increased their gold stocks by 656.6 tons in 2018. That was 73% more than in 2017, and central bank purchases totaled about 605 tons in 2019. Thus, a large amount of supply was taken off the market by central banks alone, once again acting on the demand side

rather than the supply side. In 2020, central bank gold purchases initially fell sharply due to a lack of money because of the Corona pandemic. In 2021, global central banks reported net purchases of 463 metric tons, up 82% from 2020 and pushing central bank gold holdings to nearly a 30-year high. 2022 eclipsed all of that once again. Central banks added 1,136 tons of gold, for example, which was a 55-year high. In the fourth quarter of 2022 alone, they bought 417 tons of new gold.

# Summary: Central banks set the direction: Storing value and moving away from FIAT money are trumps!

The global central banks are thus clearly setting the direction: Value storage and above all foreign exchange or FIAT money reduction are currently trump! The gold price was able to regain some ground in recent weeks, although it will now depend on how quickly the central banks tighten their monetary policy and when they will herald the turnaround in interest rates. Interest rate hikes often mean headwinds for the gold price, but their initially negative effect on the gold price can turn into the opposite quite quickly. The fourth quarter of 2022 in particular, which showed total gold demand of 1,337 tons (an all-time record), shows that investors will continue to be on the safe side with gold in the future.



Goldprice US\$/oz (Surce: JS by amChart)



# **Silver: Facts & Figures**

Silver is a chemical element with the element symbol Ag and the atomic number 47 and belongs to the so-called transition metals, to which the precious metals also belong. From a purely chemical point of view, precious metals are metals which are corrosion-resistant, i.e. which are permanently chemically stable in a natural environment under the influence of air and water.



Silver is a soft, easily malleable heavy metal with unique properties, such as the highest electrical conductivity of all elements and the highest thermal conductivity of all metals. It is precisely these properties that make it an indispensable metal in industrial applications. The metal is finding its way into more and more high-tech areas such as photovoltaics or the electric car, but also in medical applications, which experienced

an immense technological boost during the Corona crisis in particular.

But silver is much more than that: unlike gold, it is sometimes bonded for many years in appropriate applications (e.g., photovoltaic panels), with the sheer volume of potential applications growing steadily as technology advances.

In addition to being an industrial metal, silver is also an investment object (hence the term "hybrid metal"). Like gold, it is basically money and serves to preserve value. It can also be seen as a kind of hedge against progressive inflation.

# Main applications: Electronics, alloys, photography, pharmaceuticals/medicine, photovoltaics, electromobility

Its top values in important properties (highest electrical conductivity of all metals, high thermal conductivity and pronounced optical reflectivity) make silver indispensable above all in the fields of electrics (photovoltaics), electronics (electromobility) and optics or photography. In addition, there are applications as silver alloys (with copper, zinc, tin, nickel, indium), which are used in electrical engineering and soldering technology as soldering alloys (so-called hard

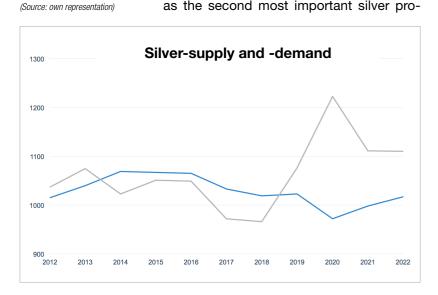
soldering), contact materials (especially in relays) and conductive materials (for example as capacitor coatings).

Since silver has antibacterial and antiviral effects, it is already considered a potential savior in medical and pharmacological applications of the future.

# **Supply situation**

According to "The Silver Institute ", global silver production reached its all-time high of around 900 million ounces in 2016. Since then, annual silver production fell steadily to around 836 million ounces in 2019. In the first corona year 2020, global silver production slumped to just 781 million ounces due to corona, falling below the 800-million-ounce mark for the first time since 2012. In 2021, there was an increase from an extremely low level to 821 million ounces. For 2022, the experts at "The Silver Institute" calculated production of 830 million ounces, which would bring it back to the pre-crisis level of 2019. This development is primarily supported by higher production from primary silver mines.

With annual production of around 196 million ounces, Mexico ranked first among the producing nations in 2021, followed by China (113 million ounces) and Peru (108 million ounces). China thus replaced Peru as the second most important silver pro-



Silversupply (blue) und

Silverdemand (grey)

ducer. These three countries were thus together responsible for around 50% of global silver production.

# Silver is mainly extracted as a by-product

Only about a quarter of the annual silver production comes from mines in which silver is the primary raw material. Most of it comes from mines where silver is only a by-product, i.e., mainly from zinc/lead mines, but also from copper and gold mines.

# Base and precious metal prices influence silver production in both directions

For many years, this heavy dependence primarily on base metals such as lead, zinc and copper meant that weak base and precious metal prices and the associated closure of mines or at least reduction in the corresponding base metal production also had a negative impact on the production of silver as a by-product. In recent years, price declines - above all for copper, but also for lead - have caused silver production to fall. A recent increase in base and precious metal prices will lead to an increase in supply from secondary mines in the short term, but several medium to large zinc/lead mines are expected to close in the coming years, which means that silver volumes are likely to decline. Furthermore, there is still an investment backlog which has accumulated in the past years due to the weak price development. Corresponding mining projects have been put on hold and only insufficiently developed. As a result, these projects are likely to be brought into production only after a long delay.

### Recycling share continues to rise

Silver recycling fell from 233 million ounces in 2011 to just 146 million ounces in 2016. Since then, the recycling sector has been able to make some gains again, increasing

its supply to 176 million ounces of silver by 2021. For 2022, an increase to around 185 million ounces was calculated. This means that the recycling sector will still not be able to make up the existing supply deficit in 2022.

# Silver supply rising overall

Overall, global silver supply in 2022 (including recycling) recorded an increase of around 2% or 19 million ounces to 1.017 billion ounces. Silver production (excluding recycling) increased by 1%, recycling by 5%.

# **Demand situation**

Total silver demand including ETPs (exchange traded products, physically deposited) reached a record high of around 1,063 million ounces in 2013 and fell to around 954 million ounces by 2018. In 2020, although there was a Corona-related slump in demand excluding ETPs to 887 million ounces, at the same time there was demand from ETPs of around 331 million ounces, resulting in record demand of 1,218 million ounces of silver. In 2021, total demand fell to about 1.111 million ounces. For 2022, "The Silver Institute" calculated demand excluding ETPs of 1,210 million ounces of silver, which decreased by 110 million ounces to a total demand of 1.100 million ounces due to silver outflows. Overall. demand for silver in 2022 increased in all key sectors, with only ETPs struggling with a decline in demand.

# Demand from jewelry sector and industry continues to soar after record growth in 2021

The strongest increase in demand in 2021 was recorded by physical silver investments in the form of bars and coins with 278 million ounces (+36%), followed by silverware with +32% and the jewelry industry

with +21%. Demand from the industrial sector (excluding photography) increased by 8% to a record high of 511 million ounces

This trend continued in 2022, where an increase in demand from industry of 5% and for silverware of 72% was calculated. Demand for jewelry increased again by around 29% in 2022. Physical silver investments are estimated to have increased by 18% to a record 329 million ounces of silver.

# Photovoltaics and electromobility cause rapid growth in demand

Since 2011, the photovoltaic sector has played a major role in silver demand. This rose from 48.4 million ounces in 2014 to 113.7 million ounces in 2021. The Silver Institute has even calculated further growth to 127 million ounces for 2022. In recent years, many governments around the world have issued ambitious plans to expand their photovoltaic fleets. Experts expect demand from the photovoltaic sector to increase to up to 160 to 180 million ounces per year by 2025. Importantly, this means that more and more silver will be tied up in corresponding solar modules for several decades!

Additional demand is coming from the automotive sector. Silver is increasingly being used in a wide range of electronic components, the sheer number of which is greatly increased in electric vehicles – compared to vehicles with internal combustion engines. A fully equipped car may have more than 50 silver-tipped switches to activate such things as the engine, power steering, brakes, windows, mirrors, locks and other electrical accessories. In addition, silver is considered an important conductor in battery packs and solar panels for car roofs. The automotive sector alone demanded 52 million ounces in 2021. In 2010, there were iust 10 million ounces, and about one million in 2000. By 2025, leading silver producers expect demand to rise to over 100 million ounces per year. Just emerging is demand from the 5G sector. Here, the increase in silver demand from the 5G revolu-

tion will not be driven so much by the direct introduction of 5G-enabled hardware but will manifest itself primarily through an expanded range of capabilities in which silver can play a significant role. Overall, the electrical and electronics industry demanded 330 million ounces of silver in 2021. 60 million more than 10 years earlier. This reflects the increasingly rapid expansion of the electric mobility fleet. In the coming years, double-digit percentage leaps in demand for silver can be expected from this sector.

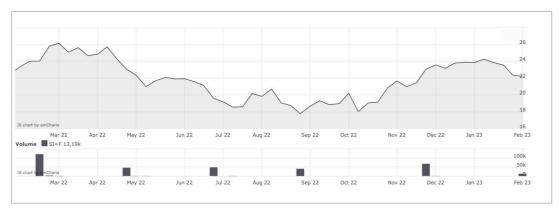
# Summary: New industrial developments will continue to create high supply deficits

In the silver sector, there was an oversupply until 2018, which turned into a supply deficit again from 2019 - initially thanks to increased inflows into silver-backed silver ETPs. In 2020, including ETPs, a supply deficit of 262 million ounces was even recorded, and in 2021 a supply deficit of around 113 million. Although 2022 saw net outflows from ETPs of 110 million ounces, a supply deficit of around 84 million ounces was still recorded. This resulted from a massive increase in silver demand, mainly from the industrial and jewelry sectors. Above all, India's continuing hunger for jewelry and the gradual resolution of supply chain problems are creating more industrial demand. And even the threat of recession does not seem to be hurting demand for the miracle metal silver. Too many new technical applications are now coming on stream at the same time.

The supply side has recently picked up again, which is not surprising after the extremely weak year 2020. However, the highs of past years could not be reached again. In recent years, most primary silver producers focused primarily on reducing mining prices due to a persistent bear market in silver prices. Particular savings were made in exploration, which resulted in very few major deposits being discovered in recent years. Price weaknesses in several base metals meant that the development of mines producing silver as a by-product was initially put on hold. In 2022, the increase in production was just 1%, with no significant jumps expected in 2023 either, as many mines, especially in South America, will report declining production volumes.

On the other hand, there is a good chance of a strong expansion in demand due to an expected upswing, especially from hightech boom industries, and on the other hand, additional demand from the investment sector, as many investors want to protect their savings from increasing currency devaluation and will invest in silver.

Even in the event of a prolonged recession and the associated demand restraint, the inflation-related increase in mining costs is likely to ensure that supply will not rise further either. A rising supply deficit is therefore the most likely option for the coming years.



Silverprice US\$/oz (Surce: JS by amChart)



# **Platinum: Facts & Figures**

Platinum is not so much an investment object, but above all an important building material in the automotive industry. The silver-gray metal is a chemical element with the element symbol Pt and the atomic number 78.



# Main properties: forgeability, ductility and corrosion resistance

It has an extremely high density, but at the same time it is very malleable and ductile. Its gray-white color has fascinated people since time immemorial, probably also because platinum has remarkable corrosion resistance and therefore does not tarnish. Due to its high durability, tarnish resistance and rarity, platinum is therefore particularly suitable for the production of high-quality jewelry.

### The possible uses are broad

Platinum finds its way into a whole range of very different applications. By far the most common use of platinum is in the automotive industry, where it is used in the form of autocatalysts. In addition to the classic diesel oxidation catalysts, platinum is also increasingly finding its way into catalysts in fuel cells or as a substitute for the far more expensive palladium, which could be an enormous demand driver in the future. The second major area of application in industry is the chemical sector. Platinum is also used in alloys, for glass production (crucibles), in the electrical sector in resistors and for medical applications and equipment.

Another large field of application is the jewelry industry, where platinum is often alloyed with other metals, mainly gold. The fourth major area is the investment sector.

### Occurrence and extraction

Platinum occurs naturally in the form of elements. Metallic platinum (platinum soap) is practically no longer mined today. Although a large proportion of the platinum mined is from primary deposits in a few places, its extraction as a by-product in the producti-

on of non-ferrous metals (copper and nickel) is becoming increasingly important. There, the platinum group metals are produced as a by-product of nickel refining.

# **Supply situation**

There is extensive and significant primary platinum mining only in the South African Bushveld complex, as well as in the Stillwater complex in Montana/USA and in Russia. 74.4% of the platinum mined worldwide in 2021 came from South African mines. This was followed by Russia with around 10.3%, and all other countries with a total of around 15%. Overall, platinum mining is a relatively small sector, with only about 5.64 million ounces mined in 2022, for example. For 2023, the World Platinum Investment Council assumes a similar production of about 5.73 million ounces.

# High recycling rate

Although a certain amount of gold is also recycled, recycling accounts for an extremely high percentage of platinum. In 2022, approximately 1.666 million ounces were recovered from recycling.

# Supply slumped in 2020, almost back to pre-crisis level in 2021, weaker in 2022, higher in 2023

Overall, the global platinum supply in 2020 really collapsed due to Covid 19. While around 7.8 million ounces of platinum were

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Platinumprice US\$/oz

(Source: JS by amChart)

on ounces came from mining and just under 2 million ounces from recycling), around 8.2 million ounces of platinum entered the open market in 2019 (mining: 6.1 million ounces, recycling: 2.1 million ounces). In 2020, platinum supply fell to 6.64 million ounces (mining: 4.94 million ounces, recycling: 1.70 million ounces). In 2021, platinum supply recovered and almost reached the pre-crisis level of 2019. A total of 6.20 million ounces of platinum were mined in 2021 and 1.66 million ounces of platinum were recovered from recycling. As a result, total platinum supply in 2021 was 7.86 million ounces. In 2022, the total platinum supply recorded a decline to 7.32 million ounces. For 2023, the World Platinum Investment Council expects a small increase in supply to 7.466 million ounces.

available in 2013 (of which around 5.8 milli-

# **Demand situation**

Similar to silver, platinum has a kind of hybrid function. This means that about two-thirds of total platinum demand comes from industry, while the rest comes primarily from the jewelry industry and from investors in the form of bars and coins.

# The main demand is from the automotive industry followed by the jewelry industry

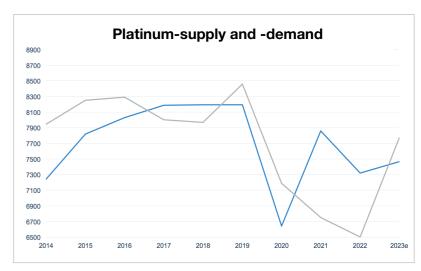
In terms of figures, it is the automotive sector that demanded the most platinum in 2022, 2.964 million ounces were used for catalytic converter construction. In 2023. demand is expected to increase to 3.288 million ounces, mainly because the supply chain problems of previous years have improved massively. The jewelry industry demanded 1.953 million ounces in 2022, which is expected to remain at the same level in 2023. Demand from the rest of the industry reached 2.11 million ounces in 2022, which was about 340,000 ounces less than in the record year of 2021, and industrial demand is expected to reach 2.316 million ounces in 2023.

The investment sector, which saw demand plummet from a net 361,000 ounces in 2017 to just 67,000 ounces in 2018, experienced a true renaissance in 2019, with demand really exploding to 1.13 million ounces. Despite Corona, this trend was maintained, with around 1.02 million ounces of platinum still flowing into the investment sector in 2020. In 2021, there was a net outflow of 28,000 ounces from the investment sector, primarily due to outflows from ETFs and central bank sales. In 2022, there were approximately 525,000 ounces of net outflows from the investment sector. A net inflow of 212,000 ounces is expected for 2023.

Overall, platinum demand fell by around 490,000 ounces from 2021 to 2022 to 6.502 million ounces. This results in a supply surplus of around 840,000 ounces of platinum for 2022. For 2023, on the other hand, the experts of the World Platinum Investment Council assume a supply deficit of 303,000 ounces (supply: 7.466 million ounces, demand: 7.770 million ounces).

# Future demand drivers continue to come from the automotive sector

For the future, platinum is seen above all as a metal that will continue to be used in the automotive sector, albeit less in combustion models and increasingly in fuel cell vehicles. Innovative hydrogen storage technologies are already being researched in several countries. Power generation using platinum electrodes is the big issue here. Cost-effective hydrogen storage systems for fuel cell vehicles and portable applications are still dreams of the future, but China alone plans to produce two million hydrogen fuel cell vehicles by 2030. In Germany, the world's first hydrogen fuel cell train has entered service. A major platinum company is already investing in the development of hydrogen compression technology together with Shell Technology. These so-called platinum electric vehicles, as the name suggests, need platinum as their basic raw material. Leading experts predict



that by 2030 at the latest, the purchase cost of a fuel cell-powered truck will be lower (Source: own representation)

In addition, more and more expensive palladium is being substituted by platinum. While this figure was already around 340,000 ounces in 2022, it is estimated to be over 500,000 ounces by 2023.

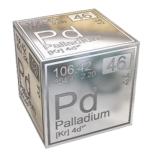
# Summary: Supply surplus likely to turn into supply deficit soon

In 2022, a global decline in demand was recorded, almost entirely attributable to the investment sector and industry, which recorded high ETF outflows on the one hand and fell back from record demand levels on the other. In 2023, on the other hand, demand is expected to increase – especially from the automotive sector and the investment sector, coupled with falling production rates, especially in South Africa. The still too low platinum price should stabilize the investment sector again before new technological developments – above all in the area of mobility – will further boost demand in the following years.



# Palladium: Facts & Figures

Palladium is a chemical element with the element symbol Pd and atomic number 46. It is considered by many experts to be a substitute for platinum in several applications, mainly in the production of catalysts, as it is very similar to platinum in chemical behavior.



# Main properties: Low melting point, reactivity and absorbency

Palladium has the lowest melting point among the platinum metals and is also the most reactive. At room temperature, it does not react with oxygen. It retains its metallic luster in air and does not tarnish, which makes it interesting for jewelry and, to a lesser extent, for the investment sector. Its low melting point makes it easier to process than platinum. Palladium also has the highest absorption capacity of all elements for hydrogen. At room temperature, it can bind up to 3,000 times its own volume.

### Main applications: Exhaust gas catalysts, alloys, electrode materials

Finely divided, palladium is an excellent catalyst for accelerating chemical reactions, in particular for the addition and elimination of hydrogen and for cracking hydrocarbons. By far the most important application for palladium is thus in the field of exhaust gas catalysts for gasoline engines. Around 82.6% of the palladium demanded in 2021 was required for catalytic converter construction. Furthermore, palladium is frequently used for alloys in the jewelry sector; here especially in combination with gold, resul-

ting in so-called white gold. Palladium is also used as an electrode material for fuel cells and as a contact material for relays.

### Occurrence and extraction

Metallic palladium and palladium-bearing alloys are mainly found in river sediments as geological placers, but these are largely exploited. Most of it is extracted as a by-product from nickel and copper mines.

# **Supply situation**

South Africa and Russia have emerged as the clearly dominant palladium producing nations in recent years. In 2022, Russia accounted for 37.7% of total production, followed by South Africa with 36.6%. Most of the remaining palladium production was shared by the U.S. and Canada, as well as Zimbabwe. Overall, platinum mining is a relatively small sector, with, for example, only about 7.18 million ounces produced in 2022.

# High recycling rate

Similar to platinum, a large recycling quota for palladium also helps to cover most of the demand. In 2022, a total of 3.01 million ounces of palladium were recycled.

### Supply on the rise again

The palladium supply showed stable to declining trends in the past three years – accelerated again by Corona-related production cuts – with this rising again significantly after the exceptional year 2020. This is attributable to several decisive factors. Palladium production still rose moderately by 92,000 ounces from 2018 to 2019 to 7.117 million ounces, but in 2020 it collapsed completely. In total, only 6.16 million ounces were produced in 2020. In 2021, there was an increase to 6.99 million oun-

ces and in 2022 to 7.18 million ounces. Recycling rose above 3 million ounces for the first time in 2018, exactly 3.11 million ounces were recycled in 2018. Finally, in 2019, 3.40 million ounces. This was followed by a dip to 3.14 million ounces in 2020, with recycling yields of 2.78 million ounces in 2021 and 3.01 million ounces of palladium in 2022.

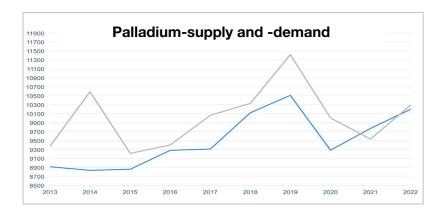
Net returns from the investment sector, mainly from corresponding palladium-backed ETFs, turned into net inflows in 2021. For example, 659,000 ounces of palladium returned to the open market in 2015, 646,000 ounces in 2016, 386,000 ounces in 2017, and about 574,000 ounces in 2018. In 2019, net returns were only 87,000 ounces, in 2020 190,000 ounces, and in 2021 a net 17,000 ounces even flowed back into corresponding ETFs. For 2022, a net zero sum game is to be assumed.

This caused total palladium supply (including recycling) to increase from 9.214 million ounces in 2015 to as high as 10.50 million ounces in 2019, before collapsing to just 9.31 million ounces in 2020. An expected increase to 9.77 million ounces then occurred in 2021 and to 10.22 million ounces of palladium in 2022.

As is the case with platinum, the recycling rate for palladium is expected to have increased in recent years, but production will decline.

# **Demand situation**

A significant supply deficit has prevailed in the palladium market for years, amounting to about 721,000 ounces in 2017 and about 216,000 ounces in 2018. In 2019, this then jumped to about 936,000 ounces, while in 2020 this amounted to 647,000 ounces. In 2021, on the other hand, 235,000 more ounces were offered than demanded. This was a surprise, mainly due to the fact that South Africa produced almost 800,000 ounces more palladium than a year earlier. In 2022, on the other hand, a slight supply deficit of 90,000 ounces was again recorded.



Palladium-supply (blue) and -demand (grey).
(Source: own presentation)

# Car manufacturers demand almost as much palladium as before the crisis

The main reason for an almost constant supply deficit is the strong increase in demand from the automotive sector. While in 2015 there was demand for 7.7 million ounces of palladium, mainly for use in catalytic converters, in 2016 it was already 7.98 million ounces, in 2017 as much as 8.42 million ounces and in 2018 8.84 million ounces. Finally, 2019 saw another jump of 800,000 ounces to 9.65 million ounces. Although "only" 7.40 million ounces of palladium were still in demand in 2020 due to Corona, catalyst manufacturers ordered slightly more palladium again in 2021 with 7.69 million ounces. In 2022, the automotive sector recorded global palladium demand of around 8.50 million ounces. If demand for gasoline engines declines, however, palladium demand will also fall. This may be offset by the use of fuel-cell-powered vehicles, but these are still a long way off.

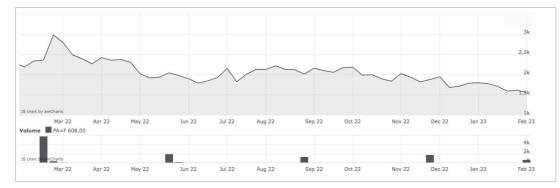
# Summary: Steadily declining production meets rising demand

For palladium, a (partly) high supply deficit prevailed for many years. This was mainly due to a steady decline in production and a simultaneous increase in demand. The extent to which this will continue or dissipate in the coming years depends not only on the palladium price, but also on how the gasoline combustion engine will continue. Palladium's dependence on the automotive industry is unmistakably high, making it a riskier investment than gold, for example. In addition, the high price ensures that more palladium will be replaced by the less expensive platinum.

# The best precious metal stocks promise multiplication potential!

Precious metal stocks are still strongly undervalued compared to the major (standard) indices. We have taken this as an opportunity to present some promising precious metal companies to you in the following. We focus mainly on development companies with extremely promising projects and on already producing mining companies with established and profitable deposits.







You do not have to be a stock market professional to make wise investment decisions. Invest together with Swiss Resource Capital AG and Asset Management Switzerland AG in the megatrend commodities. Since 05.03.2020 the experts' specialist knowledge has been available as a Wikifolio certificate:

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# **Interview with David Garofalo**

# Chairman & CEO of Gold Royalty Corp. and Chairman & CEO of the Marshall Precious Metals Fund



David Garofalo, Chairman and CEO of Gold Royalty Corp. and Chairman and CEO of the Marshall Precious Metals Fund.

Mr. Garofalo, you are one of the great personalities in the precious metals sector. Can you give us a brief overview of your CV?

I currently serve as Chairman & CEO of Gold Royalty Corp. and Chairman & CEO of the Marshall Precious Metals Fund. I also recently joined GoldMining Inc as Co-Chairman of the Board of Directors. Prior to that, I was CEO. President and Director of Goldcorp (2016-2019), culminating in the largest merger (US\$32 billion) in gold mining history. I also served as President & CEO and Director of Hudbay from 2010, Senior Vice President and CFO and Director of Agnico-Eagle from 1998 and Treasurer of Inmet Mining from 1990. I was recognized as The Northern Miner's Mining Person of the Year for 2012 and awarded Canada's CFO of the Year by Financial Executives International Canada in 2009.

# The gold price has recently been able to regain ground. What are the reasons for this?

The primary driver of the gold price has historically been related to real interest rates and that is no different today. As real interest rates go down or into negative territory, gold rises. We saw some downward pressure on the gold price through 2022 as the Fed and other central banks looked to increase interest rates to combat inflation. Now in early 2023 we are seeing central banks signal the end of these rate hikes and inflation still holding strong over 6%. This results in negative real rates for the foreseeable future which is fundamentally strong for the price of gold.

Currently, everything and everyone seems to be glued to the lips of the FED. Initially, the Fed opened the floodgates to money, but then it rowed back again by means of massive interest rate hikes and sought an answer to record inflation rates. Now there is the threat of a massive recession. What do you think about all these developments?

While we saw interest rates rise in 2022, the signaled end of these interest rate increases in 2023 was inevitable given the amount of debt that has been strapped on to the global economy. During the last major inflationary cycle in the late 70s and early 80s when we saw nominal rates around 20% to combat inflation, global debt to GDP was only at 100%. Global debt to GDP currently sits around 350%. Given this debt burden, there is no conceivable way for nominal rates to increase to a sufficient level to combat entrenched inflation without bankrupting nations, corporations, and individuals.

The prospect of an upcoming recession in 2023 is of course concerning, but more pervasive is the ongoing trend of inflation. The central banks I spoke of earlier intend to inflate the debt away as the value of fiat currency is further eroded. An upcoming recession would also likely lead to further nominal rate cuts, which is a strong fundamental indicator for gold.

# What would you currently advise investors who are invested in the precious metals sector or want to invest in it?

The case for hard assets is obvious. If your savings are in a currency that is rapidly losing its purchasing power due to inflation, it only makes sense to shift some of that exposure to precious metals which will see a relative increase in value.

The next question you need to ask yourself is what is the best way to play the rising price of gold. The royalty and streaming model is the best way to play the price of gold for numerous reasons:

"The case for hard assets is obvious. If your savings are in a currency that is rapidly losing its purchasing power due to inflation, it only makes sense to shift some of that exposure to precious metals which will see a relative increase in value."

- Exposure to rising gold prices with free upside exposure to exploration, mine life extensions, and operating capacity expansions.
- 2. Minimal overhead costs royalty companies do not require large operating teams. Gold Royalty currently has 8 full time employees, and we could run a company 10 times the size with the same headcount.
- Insulation from cost inflation Royalties and streams provide top line exposure and company profits are not exposed to rising mine site operating or capital costs.

When choosing individual royalty and streaming companies to invest in, the most important aspect is asset quality. Investing in companies with high-quality, diversified long-life assets, with strong operators, in favourable mining jurisdictions is the best way to have exposure to reliable revenues tied to the price of gold.

Gold Royalty Corp is a leader in all of these respects, with a diversified portfolio of over 200 royalties in the Americas driving the highest growth rate in revenue in the precious metal royalty sector and with a concentration of royalties in some of the largest, longest-life gold mines in North America.



# Interview with Prof. Dr. Torsten Dennin -

# **CIO Asset Management Switzerland AG**



Prof Dr Torsten Dennin is Head of Asset Management and Member of the Board of Directors of Asset Management Switzerland AG. Since 2003. Prof. Dr. Dennin has been analyzing the international financial markets with a focus on commodities as well as the equity sectors Oil&Gas and Metals&Mining. Dr. Dennin studied economics at the University of Cologne, Germany, and at Pennsylvania State University, USA, and received his PhD in commodity markets from the Schumpeter School of Business and Economics. As a professor of economics he teaches at several universities in Germany and Switzerland, Torsten Dennin is the author of several books. His latest book. From Tulips to Bitcoins, is published worldwide in seven languages. Torsten is married and lives with his wife and daughter

in Switzerland

Mr. Dennin, precious metals have recently shown a clear upward trend. In your opinion, what are the reasons for this rise?

Despite all adversities, gold and silver proved to be a rock in the past year. The outbreak of war between Russia and Ukraine catapulted the gold price well above the US\$2,000 mark in Q1, but gold and silver trended weaker from here for months. In the balance of 2022 as a whole, however, precious metals were able to maintain their value, while equities and bonds each posted painful losses for investors. The longterm fundamental conditions for precious metals are right, which makes gold and silver an indispensable part of any portfolio. High inflation, rising sovereign debt, negative real interest rates and geopolitical uncertainties are fundamental value drivers of this development. And since October 2022, the almighty U.S. dollar has also been losing strength. This in turn is the decisive short-term factor for both gold and

Quantitative easing, key interest rate hikes, inflation, the threat of recession, etc. Currently, many economic terms are buzzing through the media landscape, with hardly anyone being able to see through the exact interrelationships. Can you bring some order into this jumble of technical jargon and explain what influence the individual parameters have on the gold price?

These are enormously exciting times in which we live. Unconventional money printing and hidden government financing on an ever-increasing scale (commonly referred to as quantitative easing) is the answer to the financial crisis of 2008, the sovereign debt crisis of 2010, and the Corona pandemic of 2020. In the future, it will also be the answer to the energy crisis of 2023, climate change, and the green energy revolution of 2025. But one has to see this development

in a larger context, namely against the backdrop of the abolition of the gold peg of the U.S. dollar with the Nixon Shock and the end of Bretton Woods in 1971. This is the birth of our current international monetary system and the ability of sovereigns to incur debt without restraint. The turnaround in interest rates now being implemented by the world's major central banks, i.e., the increases in key interest rates in the USA and Europe, could come to an abrupt end as early as this year against the backdrop of a weakening economy. This would be another positive factor for the price development of precious metals such as gold and silver.

What are currently the driving forces in supply and demand in the precious metals sector and when will we see new highs in gold, silver & Co.

Anyone comparing the gold price forecasts of leading banks on Bloomberg at the beginning of the year does not come to the conclusion that gold could be a worthwhile investment. The estimates of 16 analysts range between US\$ 1,650 and US\$ 2,150 for the year 2023, implying an increase in value of just 10% to the most optimistic price estimate. However, the current driving forces in gold and silver rather suggest a strong movement in the price. This picks up on a report that gained attention just before Christmas 2022 on CNBC titled "Gold at \$4,000?" against the backdrop of a looming recession and still high inflation numbers. This is reminiscent of the stagflation environment of the 1970s, a period of high inflation - caused by rising energy prices - coupled with stagnant economic output. By comparison, in the 1970s, the price of gold rose from US\$35 to US\$680 (+1.800%) and silver from US\$1.50 to over US\$36 (+2,300%). Adjusted for inflation, by the way, the all-time high for gold is around US\$2.600 and for silver even around US\$140.

"These are enormously exciting times in which we live. Unconventional money printing and hidden government financing on an ever-increasing scale is the answer to the financial crisis of 2008, the sovereign debt crisis of 2010, and the Corona pandemic of 2020. In the future, it will also be the answer to the energy crisis of 2023, climate change, and the green energy revolution of 2025."

What advice would you currently give to investors who want to invest in the precious metals sector?

Two things: Have staying power and trust a solid fundamental analysis that you can understand with your common sense. Because the sector is for marathon runners, not sprinters. This is as true for precious metals as it is for gold and silver mining stocks. Because while greed and fear determine the ups and downs on the stock markets in the short term, it is the fundamental data that prevails in the long term. And these clearly speak in favor of precious metals. For this reason, with the Angelmountain Precious Metals Fund and the SRC Mining and Special Situations Certificate (ISIN DE-000LS9PQA9) in cooperation with Swiss Resource Capital AG, we have two investment vehicles that follow this long-term trend. The Angelmountain Fund specializes in gold and silver mines, while the investment universe in the SRC Certificate is somewhat broader in the commodity universe. It's an approach that has already paid off, with +29% value growth here since launch in September 2019, despite the Corona crisis and the Russia-Ukraine war.

In addition to your involvement in the commodities sector, you are also a very successful book author. Your current book "From Tulips to Bitcoins", which deals with all kinds of speculation and financial bubbles, is a bestseller. Your latest work "Games of Greed" is already in the starting blocks. What does it deal with and when will it be available?

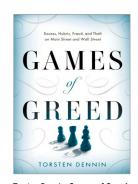
I am delighted that "From Tulips to Bitcoins" has had such a broad appeal and has now been translated into seven languages. The unifying theme is speculation and financial bubbles: The tulip mania in Holland in the 17th century was considered the biggest bubble in the financial markets for almost 400 years – bigger than the dot. com crash or the price drops during the 2008 financial crisis – until the Bitcoin bubble burst in modern times.

In my new book "Games of Greed", which will be published in spring 2023 almost simultaneously in the USA and in Germany, I take up the topic of greed in the capital market. Fear and greed are known to be among the most important drivers of stock market activity. And here the circle closes to the precious metals, because gold and silver have always proven to be a stable value anchor for asset protection, regardless of the ups and downs of prices and emotions on the stock markets.



Torsten Dennin

From Tulips To Bitcoins
Greenleaf Publishing
May 2019,
ISBN 9781632992277



Torsten Dennin, **Games of Greed** Greenleaf Book Group ISBN-13: 9781632996411 US\$20.95 (hardcover)

# **Calibre Mining**

# Low-cost and sustainable gold production meets gigantic resource potential

Calibre Mining is a Canadian mining development company specializing in the mining of gold deposits in Nicaragua and Nevada. There, the company pursues a "huband-spoke" strategy and extracts gold cost-effectively from several mines. The company currently has excess capacity in Nicaragua, which will allow Calibre Mining to greatly increase recovery in the coming years. In addition to a high resource base, the company has a disproportionately higher resource potential, as recent drilling results impressively demonstrate. With the acquisition of the Pan Mine in Nevada, Calibre Mining is preparing to establish a second hub-and-spoke operation. In 2022, it was able to produce just under 222,000 ounces of gold. For the current year, the company is targeting an expansion of production to 250,000 to 275,000 ounces of

# Hub-and-spoke strategy and growth targets

The company's hub-and-spoke strategy is to process material from multiple mines (spokes) at a central processing plant (hub). At Calibre Mining, the plant base in Nicaragua accordingly includes multiple ore sources, an installed mill capacity of 2.7 million tonnes per year in two processing plants, excellent infrastructure, and favorable transportation costs. Resources from the Limon and Payon mines are transported to the Libertad "hub", with transportation costs from Limon/Pavon to Libertad only around US\$25 to US\$30 per ton. There is immense growth potential here, as there is currently around 1.5 million tons of excess capacity per year.

# El Limón mine and processing plant

El Limón comprises a mining permit of 12,000 hectares plus the Bonete-Limón, Guanacastal III, San Antonio and Guanacastal II exploration permits, which are adjacent to the mining permit and cover a total area of 8,147 hectares, and the Villanu-

eva 2 exploration permit, which covers 1,200 hectares. The deposit currently hosts approximately 1.175 million ounces of gold in the indicated category (including 529,000 ounces of gold in reserves) plus 177,000 ounces of gold in the inferred category.

Mining is carried out in the conventional Limón Central open pit mine and in the Santa Pancha underground mines. The annual throughput is about 500,000 tons per year and the historical recovery is 94% to 95%

El Limón has a high exploration potential, which has been impressively confirmed by recent drilling. In the Panteon North zone, for example, 17.8g/t gold were encountered over 7.3 meters, as well as 66.03g/t gold over 5.6 meters and 52.59g/t gold over 3.8 meters. Recent drilling has also intersected high grade gold mineralization in previously undrilled areas, including 22.5g/t gold over 4.9 metres, 17.8g/t gold over 7.9 metres and 11.6g/t gold over 9.3 metres.

# La Libertad mine and processing plant

La Libertad has a mining concession covering an area of 10,937 hectares and also includes the Buenaventura and Cerro Quiroz exploration concessions, which are adjacent to the La Libertad mining concession and cover a total area of 4,600 hectares. The project hosts approximately 631,000 ounces of gold in the indicated category (including reserves of 484,000 ounces of gold) plus inferred resources of 726,000 ounces of gold, according to the latest estimates.

The project is located about 110 kilometers east of Nicaragua's capital Managua and is accessible by road. The La Libertad processing plant is capable of processing approximately 2.25 million tons per year, with current gold recoveries of approximately 94% to 95%. Currently, the plant is fed with ore from Limon and Pavon, as well as ore mined near the mill at the Jabali underground mine. The Jabali Antenna and San Antonio mines, which were operated in the past, are also planned to be reactivated in the future.



Calibre Mining has embarked on an extensive exploration program at La Libertad focused on resource expansion and discovery. La Libertad has a total of 411 square kilometers. Most recently, exploration activities indicated shallow open pit potential in several target areas. Amalia and El Nispero are located approximately 30 kilometers from the Libertad mill.

### **Pavon Mine**

Pavon is located within the Natividad and Las Brisas exploration concessions with a total area of 31.5 square kilometers located approximately 300 kilometers on paved highways from the Libertad processing plant. Pavon was or is designed to feed the La Libertad processing plant, supplying approximately 320,000 tons of rock per year. In addition to reducing overcapacity at La Libertad, work at Pavon is focused on increasing resources. Currently, the project has 230,000 ounces of gold in the indicated category (including 200,000 ounces of gold in reserves) plus 62,000 ounces of gold in the inferred category.

Pavon represents an emerging gold district in Nicaragua, in a region largely unexplored by modern methods. Recent drilling (including 12.4 meters at 11.56g/t gold) confirmed the high-grade nature of the mine. Pavon is expected to start production in the first half of 2023. The company has already received the environmental permit required for this.

### **Eastern Borosi Gold-Silver Project**

The Eastern Borosi gold-silver project, located in northeastern Nicaragua in a low-sulphidation epithermal area and hosting numerous high-grade gold-silver vein systems, covers approximately 176 square kilometers. The vein systems, which host the current inferred resource of 700,500 ounces of gold and 11,359,000 ounces of silver, can be further expanded along with numerous undrilled targets. Several gold-bearing zones promise immensely

high resource potential. For example, the Cadillac zone, which yielded 2.6 meters averaging 8.93g/t gold and 57.4g/t silver, the San Cristobal zone, which yielded 5.7 meters averaging 10.92g/t gold and 859.0g/t silver, the Veta Loca zone, which vielded 5.4 meters averaging 10.15g/t gold and 6.9g/t silver, and the La Luna South zone, which yielded 12.7 meters averaging 5.75g/t gold and 34.3g/t silver. In October 2022, Calibre Mining received the key environmental permits for the development and production of the open pit and underground mines at Eastern Borosi. Calibre is currently advancing the high-grade satellite deposits, which are expected to be in production later in the current year 2023 and will feed into the Company's Libertad processing plant. Eastern Borosi is Calibre's third major mine development permit in just three years.

### Pan Mine

Pan is a Carlin-style heap leach open pit mine located in east-central Nevada, approximately 28 kilometers southeast of the town of Eureka, on the prolific Battle-Mountain - Eureka gold trend. The mine achieved gold production of 45,397 ounces in 2021, benefiting from an expansion of the heap leach pad and primary crushing circuit. Pan hosts proven and probable reserves and measured and indicated resources of 290,500 ounces and 427,400 ounces, respectively. An additional 61,000 ounces are in the inferred category. Recent drilling confirmed the mine's tremendous exploration potential. Among others. 3.35g/t gold was encountered over 18.3 meters, as well as 1.36g/t gold over 13.7 meters and 0.61g/t gold over 18.3 meters. The latter results came from an area that had never been drilled before.

### Gold Rock

Gold Rock is a government-approved project with a grade 30% higher than the Pan Mine, located about 30 kilometers away. In





2020, the former operator Fiore Gold published a positive PEA. Based on an achievable gold price of US\$1,600/ounce, the project yields an after-tax net present value (NPV5%) of US\$77.2 million and an internal rate of return (IRR) of a strong 32.5%, with a mine life cash flow of US\$149.0 mil-

Gold Rock has indicated resources of 403,000 gold ounces, in addition to the inferred resource of 83,000 gold ounces, with excellent potential to expand the resource. Recent drilling returned impressive results of 2.19g/t gold over 44.2 meters, as well as 6.8g/t gold over 4.6 meters and 6.6g/t gold over 5.8 meters, among others. Anticipated production at Gold Rock, combined with Pan, could organically increase Nevada production to over 100,000 ounces annually.

### Golden Eagle

Located in Washington State, the Golden Eagle project is 100% owned by Calibre Mining and hosts a resource of 2 million ounces of gold in the measured and indicated category and 200,000 ounces in the inferred category. In January 2023, the company landed a real bull's eye there by detecting 4.30g/t of gold over 92.4 meters, among other results. This grade of mineralization is about three times higher than the previously known resource (1.38g/t gold grade) and leaves a lot of speculation for a huge upside potential at Golden Eagle.

### **Summary: Conveyor expansion will** further reduce costs

Calibre Mining has mill overcapacity of approximately 1.5 million tonnes in Nicaragua alone. As a result, the company will continue to optimize its mine and processing plans in 2023, while taking a "hub-andspoke" approach to maximize value and enable the company to quickly translate exploration successes into production and cash flow. Particular focus will initially be on Pavon and Eastern Borosi, both of which are expected to come online in the current 2023 year. This is likely to be followed by the extremely high-grade Pantheon North zone and the Gold Rock project, which will further increase production and depress costs even further. The exploration potential is almost gigantic, which is impressively proven again and again by the large drilling programs as well as steady full hits. Calibre Mining recently published documentation that impressively underlines the company's sustainability and social commitment:

### www.calibremining.com/investors/videos/

Calibre Mining has a high cash position, no debt and is highly undervalued compared to peer group companies.



Darren Hall CEO

# **Exclusive interview with Darren Hall, CEO** of Calibre Mining

What have you and your company achieved in the past 12 months?

1. In January 2022 we completed the transaction to acquire Fiore Gold. By doing so we demonstrated our commitment to deliver on our growth strategy of becoming a mid-tier, Americas focused gold producer. The assets included are

the Pan Mine. a 40.000 - 50.000 ounce/ year gold producer in Nevada with strong potential for expansion, the Gold Rock project which sits adjacent to the Pan mine and has potential for a multi million ounce target and the Golden Eagle project in Washington which, with a 2 million ounce resource, has the potential to provide significant value to shareholders.

## 2. At the end of 2021 we increased our Nicaraguan Mineral Reserves to over 1 million ounces of gold, a 254% increase net of production depletion since acquisition at the end of 2019. We look forward to another increase at the end of 2022.

- 3. New discovery and bonanza grade gold results from our Panteon North Zone within the Limon Complex, demonstrating strong potential to add resources and expand the Panteon mine. In addition, a new discovery along the Panteon North/ VTEM geophysical corridor located about 2.5 km north of Panteon North, reaffirming the potential of this area.
- 4. Receipt of the environmental permit for development and operation of the high grade Pavon Central open pit mine which is expected to reach production in Q2 2023
- 5. Receipt of environmental approval for development and operation of the high-grade open pit and underground mines within the Eastern Borosi gold project which are expected to be in production during 2023 feeding the Company's Libertad processing facility.

### What are the most important company catalysts for the next 6 to 12 months?

- 1. Multi year grade driven production outlook for 2023 and beyond. We increased our production auidance over last year to 250,000 to 275,000 ounces in 2023.
- 2. Production from our high-grade open pit Pavon Central mine in Q2 2023
- 3. Production from our Eastern Borosi project mid-2023.
- 4. Mineral Reserve and Resource statement is expected in Q1 2023 with positive contributions from the Panteon north deposit.
- 5. Continued expansion and discovery drilling at Pan mine. Gold Rock. Panteon mine/zone and Eastern Borosi to add to our organic production growth.

## How do you see the current situation on the market for precious metals?

- Risk-reward proposition for the mining equities remains attractive.
- With many trading well below YTD highs in late 2022 and at attractive multiples. these are well positioned to rebound in
- GDXJ and GDX were both down in 2022 while gold prices remained flat.
- With very minimal debt CXB is not exposed to higher interest rates which bodes
- Inflationary environment will be positive for gold and silver and Calibre's cost guidance is right inline with sector avera-
- Historically the US Fed rate cycle has been a significant factor supportive of higher gold prices. Over several decades gold has done well during an easing cycle following the last rate hike. It appears we could be in a similar environment in 2023.

# Calibre Mining Corp.

ISIN: CA13000C2058 WKN: A2N8JP FRA: WCLA TSX: CXB

Fully diluted: 495.6 million

### Contact:

+1-604-681-9944 calibre@calibremining.com www.calibremining.com

# **Eloro Resources**

# Huge polymetallic project awaits lifting



Eloro Resources is a Canadian mining development company with high-caliber silver, gold and base metal projects in Bolivia, Peru and Quebec. The company's primary focus is on the promising metals of silver and tin. The flagship project Iska Iska is considered highly underexplored, but holds a high resource potential, as recent drilling has impressively shown. In recent months, for example, the company has repeatedly been able to report high-grade silver equivalents over several hundred meters in some cases. An expansion of Iska Iska provides additional exploration potential.

# Flagship project Iska Iska – location and infrastructure

Eloro Resources flagship project is called Iska Iska and is located in Bolivia, a country known for exceedingly large deposits of gold, silver, iron ore, zinc, tin, lead and lithium, such as Cerro Rico de Potosi, Silver Sand, San Bartolomé, Pulacayo, San Cristobal and San Vicente. The Iska Iska concession is an easily road-accessible, royalty-free project and is located approximately 48 kilometers north of the town of Tupiza in the province of Sud Chichas in the department of Potosi. The Iska Iska project, which has grown to 483.75 square kilometers through several acquisitions and claim staking, is located in the middle of the Eastern Cordillera, which hosts a number of large polymetallic mines and mineral deposits.

### Flagship Project Iska Iska – Geology, Exploration Activities and First Discoveries

Iska Iska is a large silver-tin polymetallic porphyry epithermal complex associated with a Miocene, presumably collapsed/churned caldera, overlying rocks with large breccia pipes, and hydrothermal breccias. The age of the mineralization is similar to Cerro Rico de Potosí, the largest silver de-

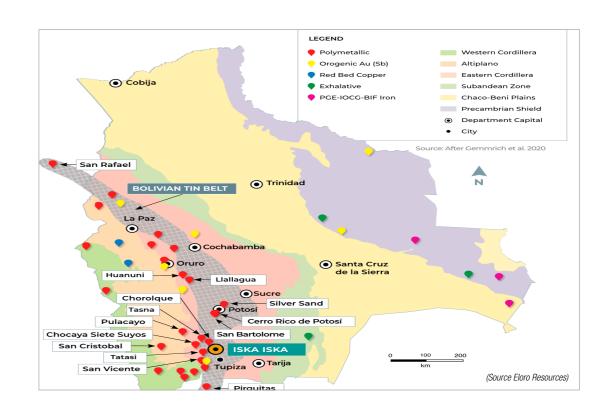
posit in the world, which has produced approximately 2.1 billion ounces of silver since the 16th century and is still in production. The initial drilling campaign led to the discovery of the Huayra Kasa Breccia Pipe in November 2020.

Drilling there returned 129.60g/t silver equivalent over 257.5 meters directly from surface, 79.00g/t silver equivalent over 121.33 meters and 74.16g/t silver equivalent over 40.88 meters, among others.

The project was further shown to host multiple vents (pipes), some with diameters of several hundred meters. Drilling has confirmed a diameter of 400 meters for the Santa Barbara Pipe, with a further mineralized envelope of 100 meters around the vent for an effective mineralized diameter of 600 meters. The adjacent Central Breccia pipe to the south has a surface dimension of 400 metres by 700 metres. It appears likely that the Santa Barbara and Central Breccia pipes merge at depth. A wide range of metals, including silver, zinc, lead, copper, tin, indium, bismuth and gold represent exactly the type of composition one would expect to find in a significant "Potosi-type" depo-

Eloro Resources made its first real hit in April 2021 when it reported 166 meters at 442g/t silver equivalent including 56.2 meters at 1,092g/t silver equivalent. Further intersections encountered during the year included 53.20 metres at 234.19g/t silver equivalent and 27.53 metres at 342.98g/t silver equivalent as well as 194.14 metres at 160.22g/t silver equivalent and 51.09 metres at 318.15g/t silver equivalent. The longest mineralized interval returned 171.57g/t silver equivalent over 373.40 metres. There has been a very clear consistency in both the widths and grades of the mineralization, particularly in the most recent drilling.

Furthermore, the company was able to identify an additional significant vent. This is called the Porco (South) Breccia Pipe, which is approximately 600 meters in diameter and has a similar signature to the Santa Barbara Breccia Pipe and the Central



Breccia Pipe, confirming the likelihood that it is a large Breccia Pipe.

# Flagship Iska Iska Project – Recent Drilling Successes + Resource Estimate

Eloro Resources has been working all year on additional drilling to test the breccia pipes at depth. This has already resulted in several high-grade discoveries in 2022 such as 160g/t silver equivalent over 251 meters, 133g/t silver equivalent over 289 meters. 146a/t silver equivalent over 88 meters, 188g/t silver equivalent over 349 meters, 198g/t silver equivalent over 134.5 meters, 108g/t silver equivalent over 111 meters, 122g/t silver equivalent over 210 meters and 150g/t silver equivalent over 441 meters. All of these results were from the Santa Barbara Zone. A magnetic inversion model also confirmed an extensive mineralized system at Iska Iska extending over a strike length of 2.4 kilometers. An initial resource estimate is expected to be released shortly.

The recent acquisition of the Mina Casiterita and Mina Hoyada properties brings further upside potential. For example, 521g/t silver equivalent over 103 meters was recently detected in trenching adjacent there. In addition, 69.85 tonnes averaging 50.60% tin were recovered in the Mina Casiteria area between 1962 and 1964. Eloro Resources will commence a drilling campaign there in the first quarter of 2023.

# La Victoria Gold-Silver Project – Location and Infrastructure

Eloro Resource's second potentially high-caliber project is called La Victoria (Eloro holds 82%), is located in central Peru and comprises 16 claims totaling 8,930 hectares. La Victoria is surrounded by projects from major mining companies such as Fresnillo, Teck, Anglo American and Vale. Due to its location in the highly mineralized belt of northern and central Peru, the project has access to a well-developed infrastructure including road access.



# **Exclusive interview with Tom Larsen, CEO of Eloro Resources**



### La Victoria Gold-Silver Project – Geology and Exploration Activities

La Victoria hosts epithermal gold-silver mineralization. Magnetic surveys have outlined 18 main target zones in 3 major tectonic blocks. The current main target areas are in 3 main blocks: San Markito, Rufina-Victoria & Southern Blocks. Eloro Resources previously conducted initial diamond drilling at Rufina in 2017 and 2018. These intersected a large gold-bearing low to medium epithermal system with a width of 600 meters and a vertical extent of 700 meters and a strike length of 600 meters. Significant drill results included 7.31g/t gold over 3.4 metres, 4.31g/t gold over 1.6 metres, as well as 4.31g/t gold over 1.0 metre and 8.67g/t gold over 0.4 metres. Further investigation showed that epithermal gold-silver mineralization at La Victoria extends to a vertical depth of 1.5 kilometers.

In addition to this, a target area of over 4 kilometers strike length and at least 1 kilometer width was proven in the San Markito area. The best values from surface trenching returned 8.91g/t gold over 0.5 meters and 3.90g/t gold over 1.53 meters.

### Top management team

Eloro Resources is led by an excellent management team of which two personalities stand out in particular.

CEO Tom Larsen has more than 40 years of experience in the investment industry, specializing in corporate finance and management of junior resource companies. In 2006, Larsen was the founder, Chairman and CEO of Champion Minerals Ltd. and subsequently assumed the position of President and Chief Executive Officer of Champion Iron Limited, a position he assumed following the completion of the merger between Australian-based Mamba Minerals Ltd. and TSX-listed Champion Iron Mines Limited.

Technical & Senior Business Advisor Dr. Quinton Hennigh is an economic geologist with 25 years of exploration experience. He is the founder and current Chairman and President of Novo Resources Corp. which recently poured its first gold bar. Earlier in his career, Dr. Hennigh prospected for major mining companies such as Homestake Mining Company, Newcrest Mining Ltd and Newmont Mining Corporation. Dr. Hennigh was also instrumental in Kirkland Lake Gold's acquisition of the Fosterville Gold Mine, located in Australia and previously owned by Newmarket Gold Inc.

### Summary: Resource estimate lifts Eloro to new valuation level

Iska Iska hosts a massive porphyry-epithermal system, that much is already certain. Several vents have a strong tinporphyry affinity and probably overlie a large tin-gold-silver porphyry in the core of the massive Iska Iska system. In terms of metal content and geological setting, Iska Iska is comparable to neighboring wor-Id-class polymetallic systems, including Cerro Rico de Potosi, San Vicente, Choro-Ique, Tasna and Tatasi, which, however, do not have the large and notable mineralized breccia pipes of Iska Iska, providing great scope for a substantial deposit. An initial indication of the extent of this system will be provided by the resource estimate to be released shortly. This should show a very high resource base and thus raise Eloro Resources to a completely new valuation level. Eloro Resources has an ample financial cushion, which was increased by CA\$9.775 million in May 2022 by means of a widely oversubscribed financing and by CA\$10.9 million in January 2023, also by means of an oversubscribed financing.

# What have you and your company achieved in the past 12 months?

It has been an extremely productive 12 months for Eloro. Firstly, results from our drill program, that have exceeded management expectations, were completed in December. A total of 85,000 meters have been drilled to date and all 122 holes have encountered some degree of mineralization. More exciting to us, is that we have yet to define the limit of this deposit.

Continued success in the field, has helped provide Eloro with the ability to finance this exploration with minimal equity dilution. It also made possible the planned graduation of Eloro's stock to the TSX from the venture exchange.

Eloro has further used this year to develop and expand our already high-quality exploration team in Bolivia for an exciting 2023 program outside of the Santa Barbara region of Iska Iska.

# What are the most important company catalysts for the next 6 to 12 months?

The next six months to a year could arguably be the most exciting period in Eloro's history. Our delay in reporting our maiden resource, the result of continued drilling successes, should provide investors with a visible window as to the true potential of this deposit, both in terms of size and profitability. Expect this by the end of April.

High profile drilling targets are also planned throughout the year, namely deeper targets under our initial Santa Barbara resource plus the surrounding areas of the collapsed caldera. Drill targets are also planned for other areas of our properties: Domo San Juan, Mina, and the newly acquired Mina Casiterita.

Initial exploration work is scheduled for several other properties held in Bolivia, as we currently hold over 484 km2 in total, most of which is underexplored.

# How do you see the current situation on the market for silver?

After what was arguably a less than stellar performance period for the first six months of 2022, upward pricing in silver definitely appeared through the final months of the year. Although, forecasting commodity prices proves as often to be wrong as right, there has been a clear positive shift in investor sentiment as of late. This does provide support and give credence to the investment thesis for holding precious metals.

The prospects for silver are probably more bullish in our view over gold given the additional push to decarbonize our global economy. The push for more renewables and new technologies provides a strong backdrop for silver and one of our other key metals, tin, both of which are supply challenged.

Tom Larcon CEI

## Eloro Resources Ltd.



ISIN: CA2899003008

WKN: A12C1E FRA: P2QM TSX-V: ELO OTCQX: ELRRF

Fully diluted: 85.1 million

### Contact

+1-416-868-9168 info@elororesources.com www.elororesources.com

# **Endeavour Silver**

# Annual production target pulverized + additional mine plans well advanced

ENDEAVOUR SILVER

Endeavour Silver is a Canadian silver mining company and also one of the largest silver producers in North America. The company was able to produce a total of around 9 million ounces of silver equivalent from its two Mexican mines in 2022 and literally pulverize its own annual production target. And this despite the fact that the planned production for the whole of 2022 had already been increased to up to 8 million ounces of silver equivalent. Furthermore, Endeavour Silver plans to build another (and then the largest) mine as soon as the financing for it is secured. The acquisition of the huge Pitarrilla silver deposit (over 845 million ounces silver equivalent) provides an additional strengthening of the development and growth pipeline.

### Guanaceví silver/gold mine

Endeavour Silver's Guanaceví plant produced 5.34 million ounces of silver and 15,735 ounces of gold in 2022. At the end of 2022, reserves were 22.97 million silver equivalent ounces and resources (excluding lead and zinc) were 25.89 million silver equivalent ounces.

Guanacevi has several particularly high-grade areas. The Company encountered up to 1,831g/t silver equivalent in the Porvenir Norte area, up to 1,181g/t silver equivalent in the Porvenir Centro area and up to 3,903g/t silver equivalent within the Santa Cruz Vein. In the El Curso vein area, results included 5,372g/t silver and 15.22g/t gold over 0.5 meters and 1,278g/t silver and 5.83g/t gold over 7.5 meters. Endeavour Silver was recently able to publish the highest results ever received.

### Bolañitos silver/gold mine

Endeavour Silver's second mining complex is called Bolañitos. In total, Endeavour Silver mined 622,892 ounces of silver and 21,813 ounces of gold there in 2022. At the end of 2022, reserves were 4.56 million silver equivalent ounces and resources were 17.61 million silver equivalent ounces.

In 2019, Endeavour Silver published spectacular drill results from the two ore veins Plateros and San Miguel. In the Plateros area, the company encountered up to 1,903g/t silver equivalent, in the San Miguel area even up to 6,497g/t silver equivalent. Most recently, the company was able to prove up to 4,736g/t silver equivalent.

The 2021 drill program returned additional high-grade discoveries of, among others, 8.08g/t gold and 151g/t silver over 1.67 meters and 1.26g/t gold and 342g/t silver over 0.96 meters.

### Terronera - Reserves/Resources

At the San Sebastian project acquired in 2010, Endeavour Silver discovered high-grade silver-gold mineralization called Terronera, which has since given the project its name. There are at least four large silver vein systems, each over three kilometers long. The highest concentration to date was an incredible 18,000 grams of silver equivalent per ton of rock! In total, Terronera had 68.81 million ounces of silver equivalent in reserves plus 13.56 million ounces of silver equivalent in resources at the end of 2020.

### Terronera – Final Feasibility Study

In September 2021, Endeavour Silver published a final feasibility study for Terronera. This is based on a production capacity of 1,700 tpd. Initial capital costs were estimated at US\$175 million. An average of 5.9 million silver equivalent ounces is expected to be produced annually over the 12-year mine life. An after-tax IRR of 21.3% was calculated for the underlying prices of US\$20.00 per ounce of silver and US\$1,575 per ounce of gold. The net present value (NPV) for these assumptions would be US\$174 million (discount rate: 5%) and the after-tax free cash flow would be US\$311 million. All-in sustaining costs, including the gold credit, would be only US\$3.24 per ounce of silver. For a gold price of US\$1.800 and a silver price of US\$24 per ounce, there

would even be an after-tax IRR of 30.0% and an NPV of US\$282 million, as well as an after-tax free cash flow of US\$467 million. The all-in sustaining costs for this case, including the gold credit, would be only US\$1.15 per ounce of silver.

### Terronera – mine plans

In June 2019, Endeavour Silver announced that it had received final approval for Terronera. Endeavour Silver plans to make a production decision for Terronera and secure financing as soon as possible. Initial construction has already begun, including the erection of a temporary camp and preparation for forestry work and site clearing. Full construction will commence following a formal development decision after completion of the project financing package.

Front-end engineering and design work is well advanced, and procurement activities for long delivery schedules are underway. The major permits required to start construction have been issued and minor permit amendments and extensions are being submitted to meet current feasibility planning. Terronera could go into production in 2024 and become Endeavour Silver's next

### Major project Pitarrilla

and largest mine.

In July 2022, Endeavour Silver completed the purchase of the Pitarrilla project in Durango State, Mexico, through the acquisition of SSR Durango, S.A. de C.V. for total consideration of approximately US\$70 million in cash and shares and a 1.25% NSR Royalty. Pitarrilla is a large undeveloped silver, lead and zinc project located 160 kilometers north of Durango City in northern Mexico. Pitarrilla covers 4,950 hectares in five concession areas and has extensive infrastructure with direct access to utilities. Furthermore. Pitarrilla hosts a recently released indicated mineral resource (open pit and underground) of 693.9 million silver equivalent ounces and an inferred mineral resource of 151.2 million silver equivalent



Guanaceví is the first and highest-grade silver mine (Source: Eneavour Silver)

tion, the company plans to evaluate various production alternatives, including an underground option that would strengthen the company's long-term production profile and provide significant value to shareholders.

ounces. Endeavour Silver will invest at least

US\$10 million in exploration expenditures

at Pitarrilla over the next five years. In addi-

### Parral

In addition to the mines and Terronera, Endeavour has other potentially high-caliber development projects. For example, Parral, which has a total of 38.44 million ounces of silver equivalent resources (excluding lead and zinc). Recent drilling has returned high-grade results such as 644g/t silver equivalent over 1.96 meters, 428g/t silver equivalent over 3.48 meters and 747g/t silver equivalent over 5.56 meters. In the areas of the historic El Verde and Sierra Plata mining districts, extensions of mineralized zones at depth and along strike continue to be reviewed. The focus for the remainder of the year will be to test the northern portion of the project with a surface drilling program on various north to





south trending structures such as the northern extension of the Veta Colorada, San Alberto and El Cabezón systems, as well as the resumption of drilling on the San Patricio vein.

### **Further development projects**

The newly acquired Bruner Gold Project, located in Nevada and hosting historic resources of 320,000 ounces of gold, covers 1,457 hectares and shows signs of multiple gold-bearing mineralizations at once.

In addition, they own the right to explore and mine precious metals on Capstone Mining's 181-hectare Toro del Cobre concessions, which are located above 2,000 meters above sea level. Among other things, 0.5 meters with a fabulous 16,350g/t silver equivalent were encountered there!

Furthermore, a portfolio of potentially high-caliber exploration projects in Chile was secured in 2019. The three projects Aida, Paloma and Cerro Marquez are located in the north of Chile and are expected to be drilled soon.

# Summary: Terronera as a short-term mine + Pitarrilla as a long-term project

Endeavour Silver has two profitable mines that produced far more silver and gold than expected in 2022. In 2024, another mine. Terronera, could come on stream, which would then be by far the company's largest mine. At the same time, the new mine at Terronera will drastically reduce all-in sustaining costs. The acquisition of Pitarrilla was a coup that fits perfectly with Endeavour Silver's experienced regional team, which has a track record of successful development, exploration and underground mining. Accordingly, Pitarrilla, together with the Terronera and Parral projects, form the key cornerstones of Endeavour Silver's medium to long-term growth profile. In addition, Guanacevi is steadily delivering new, high-grade silver equivalent grades, which should lead to lower mining costs in the future and has already been reflected in higher production rates. These should continue to pick up in the current year. For example, the company plans to produce up to 9.5 million silver equivalent ounces in



Dan Dickson, CEO

# **Exclusive interview with Dan Dickson, CEO of Endeavour Silver**

What have you and your company achieved in the past 12 months?

2022 was a very successful year and we made progress on many fronts.

Firstly, from an operational standpoint, we delivered our highest annual production in over 4 years, totalling 9.0 million ounces of silver equivalent metal (70% silver, 30% gold). This achievement is attributable to significantly elevated grades at Guanacevi, as the mine continues to enjoy its strongest operational performance, in parallel with continuous improvement in safety.

At Terronera, the board approved a \$41 million development budget, ahead of a formal construction decision, while Management continued with financial due diligence to secure a financing package. 2022 preconstruction activities included onsite delivery of mobile mining equipment, procurement of major equipment purchases, and early earthworks. Earthworks included site clearing, road upgrades and underground mine access prep.

Additionally, this past August, we completed the acquisition of the Pitarilla project, adding a new project to the growth

pipeline. The project was purchased from SSR mining for \$70 million and is one of the worlds largest undeveloped silver deposits. Most recently, we published a current resource of nearly 600 million ounces of silver, plus lead and zinc as by product metals.

# What are the most important company catalysts for the next 6 to 12 months?

As we look to the year ahead, our commitment to creating shareholder value will continue by way of growth. We have an industry leading growth profile with multiple opportunities across our portfolio in Mexico, Chile and the US.

Our most immediate catalyst, which paves the way for near term growth, is at our Terronera development project. Terronera will become our next cornerstone mine, effectively doubling consolidated production and significantly reducing our cost profile. An additional \$26 million development budget was approved until Q1 2023 to continue advancing the project, ahead of a formal construction decision, subject to completion of a financing package.

Additionally, we will be spending \$3 million at Pitarrilla, to conduct a 5000-metre drill campaign targeting the high-grade zones of the existing resource. We will use the data collected to guide our next steps, with the expectation to assess this project as an underground silver mine.

We are also spending \$1.5 million at Parral, which is a historic silver mine, to expand resources and initiate a preliminary economic assessment. Encouraging drill results to date have been indicating resource expansion at depth and along strike in the Veta Colorado structure.

### How do you see the current situation on the market for silver?

We believe that the silver market is very attractive right now – the best is yet to come. Particularly, because last year was full of surprises as a combination of higher interest rates, slowing global growth, inflation, and instability in financial markets have weighed silver down. However, traditionally speaking, safe-haven assets are supposed to be uncorrelated to the broader market, and global conditions such as these, are supposed to catalysts for precious metals. None-the less, perhaps we are now starting to see these assets behave as expected, with silver starting off the year on high note. As market perceptions and monetary policy reverse, investors will look for an uncorrelated asset class - silver could be re-priced higher. Additionally, as the USD begins to weaken (after hitting a 40 year high in 2022) marginal increases in silver buying can potentially send prices to historical highs. The best example of this was the rise in the crypto-currency sector once capital flowed in. The silver market is a tiny fraction of the size of the crypto market, which creates massive leverage to the silver price.



ISIN: CA29258Y1034 WKN: A0DJ0N

FRA: EJD TSX: EDR NYSE:EXK

Fully diluted: 195.1 million

### Contact::

Telefon: +1-604-640-4804 gmeleger@edrsilver.com www.edrsilver.com

# **First Majestic Silver**

# Record production in 2022, with prospect of up to 45 million silver equivalent ounces by 2024



First Majestic Silver is a Canadian mining company focused on producing silver and gold from its four highly profitable mines in Mexico and Nevada. In 2022, the company reported record production of 31.3 million silver equivalent ounces (including gold by-products), a 16% increase over 2021. For 2023, First Majestic Silver is targeting another record production of between 33.2 and 37.1 million silver equivalent ounces from its three Mexican and U.S. mines. By 2024, the company aims to reach the 45 million silver ounce mark, which would nearly double the 2021 production rate.

### San Dimas Silver/Gold Mine

The San Dimas operation is First Majestic Silver's largest and lowest-cost silver mine. In the fourth quarter of 2022, the mine produced a total of approximately 3.05 million silver equivalent ounces. San Dimas had measured and indicated resources of 113.4 million silver equivalent ounces (including reserves of 76.6 million silver equivalent ounces) and inferred resources of 74.6 million silver equivalent ounces at the end of 2021. The new HIG mill uses rotating grinding discs with ceramic balls to finely grind ore to 20 to 50 microns, which has been shown to significantly increase recovery.

Dual Circuit of the Santa Elena Mine (Source: First Maiestic Silver)



HIG mills feature low energy consumption and reduced maintenance requirements compared to standard ball mills. The mine operation receives 50% of the required energy from low-cost and environmentally friendly hydropower, with the option to increase this share up to 100%.

### Santa Elena Silver/Gold Mine

The Santa Elena operation produced a total of approximately 2.30 million silver equivalent ounces in the fourth guarter of 2022. Santa Elena (including its Ermitaño satellite project) had measured and indicated resources of 70.8 million silver equivalent ounces (including reserves of 54.3 million silver equivalent ounces) and inferred resources of 49.9 million silver equivalent ounces at the end of 2021. First Majestic Silver has already installed a 3,000 tpd HIG mill at Santa Elena, and silver and gold recovery rates have increased significantly to 93% and 96%, respectively. As of March 2021, the operation is largely powered by liquefied natural gas "LNG", saving the Company approximately US\$1 million per month or US\$1.50 - US\$2.00 per ounce. Currently, the company is working on a significant expansion of LNG capacity.

### Santa Elena - Ermitaño

Santa Elena reported record production in the fourth quarter of 2022, primarily due to the establishment of the Ermitaño satellite mine.

A prefeasibility study completed in November 2021 calculated an after-tax NPV/5% of US\$64.8 million and an after-tax IRR of 34% for Ermitaño for the base case (US\$1,700/ounce gold, US\$22.50/ounce silver).

In early November 2021, First Majestic Silver was pleased to announce the first doré pour from Ermitaño from development reserves at the Santa Elena plant. Ore pro-

duction from this new mine is expected to increase during 2022 and into 2023.

Ermitaño has additional exploration potential. For example, drill results from the Ermitaño project included 13 meters of 1,003 g/t silver equivalent, 9.9 meters of 1,209 g/t silver equivalent, 9.1 meters of 1,447 g/t silver equivalent and 2.3 meters of 3,391 g/t silver equivalent. First Majestic Silver has an additional 100,000+ hectares of land in the vicinity of the Santa Elena Mine that offer further potential for new discoveries.

### La Encantada Silver Mine

La Encantada, a near 100% silver mine, produced a total of approximately 813,649 silver ounces in the fourth quarter of 2022. La Encantada had measured and indicated resources of 32.8 million ounces of silver (including 12.3 million ounces of silver reserves) and inferred resources of 20.5 million ounces of silver at the end of 2021. First Majestic Silver is currently working to modify the roasting circuit to recycle tailings, which is expected to result in additional production of 1.5 million ounces of silver per year. The operation receives 90% of its required power from low-cost LNG generators.

### **Jerritt Canyon Gold Mine**

The Jerritt Canyon Gold Mine is located in Nevada, USA, was discovered in 1972, has been in production since 1981, and has produced over 9.7 million ounces of gold in its 40-year production history. The mine is currently operated as an underground mine and has one of only three permitted roasters in Nevada. The processing plant has a capacity of 4,500 tons per day. The Company produced 16,845 ounces of gold, or the equivalent of approximately 1.39 million ounces of silver equivalent, from the Jerritt Canyon Gold Mine in the fourth quarter of 2022. At the end of 2021, Jerritt Canyon



Roaster Jerritt Canyon (Source: First Majestic Silver)

had measured and indicated resources of 115.5 million silver equivalent ounces (including reserves of 34.3 million silver equivalent ounces) and inferred resources of 89.9 million silver equivalent ounces.

In 2022, the West Generator and Saval II mines were restarted. This will lead to an increase in the head grade and a doubling of the processed rock to over 3,000 tons per day. This will allow a significant reduction in AISC to be achieved.

The project site consists of a large, undeveloped land package covering 30,821 hectares. First Majestic Silver has identified several opportunities to improve both the cost and production profile of Jerritt Canyon, as well as near-term brownfield potential between the SSX and Smith mines and long-term cross-property exploration potential.

Recently, the Jerritt Canyon Company announced some impressive drill results. Among others, 29.7 meters of 8.39g/t gold and 23.2 meters of 19.35g/t gold were encountered in close proximity to the current SSX/Smith underground mine. Further in-



# **Exclusive interview with Keith Neumeyer, CEO of First Majestic Silver**



tercepts included 11.81g/t gold over 13.7 meters and several long intercepts with more than 2.00g/t gold in places. In total, the first drill program at Jerritt Canyon covers 135.000 meters.

# Springpole Stream + Metalla share package

In June 2020, First Majestic Silver entered into a silver stream agreement with First Mining Gold to acquire 50% of future silver production from the Springpole project. The agreement includes ongoing cash payments of 33% of the silver spot price per ounce, up to a maximum of US\$7.50 per ounce. In return, First Majestic Silver will pay a total of US\$22.5 million in cash and shares over three milestone payments. The project is expected to produce approximately 18 million ounces of silver over the life of mine. The deal offers significant upside potential at higher silver prices. Springpole also has significant exploration potential at its 41.913-hectare project.

In November 2022, First Majestic Silver sold a royalty package to Metalla Royalty & Streaming. This mainly included NSRs on non-producing mines or projects. In return, First Majestic Silver received 4.168 million Metalla shares, which had an equivalent value of US\$20 million at the time the transaction was completed.

### Regular dividend payment

In December 2020, First Majestic Silver announced its first dividend policy. Accordingly, the Board of Directors adopted a dividend policy under which the Company intends to pay quarterly dividends to shareholders equal to 1% of the Company's net sales, with dividends effectively linked to silver prices and production rates. Most recently, First Majestic Silver shareholders received a dividend of US\$0.0061 per share for the fourth quarter of 2022.

# Focus on exploration, mine expansion and Ermitaño development

Intensive work is currently being carried out on modernization and expansion measures at all mines, focusing not only on increasing production and reducing operating costs, but also on the use of environmentally friendly energy. In 2023, the company plans to invest a total of almost US\$200 million, consisting of US\$83.9 million for sustainable investments and US\$115.6 million for expansion projects.

The Company plans to increase exploration and underground drilling to approximately 286,000 meters in 2023. The focus will be on San Dimas and Jerritt Canyon.

At the same time, First Majestic continues to advance the Ermitaño project to bring it to high-capacity utilization of up to 2,500 tons per day as quickly as possible.

# Summary: Higher funding, falling costs, more participations

First Majestic Silver operates four profitable mines and intends to utilize the existing (excess) capacities even more efficiently. This has recently led to new production records, with Santa Elena/Ermitaño and Jerritt Canyon in particular set to expand production in the coming months. This is expected to increase production by up to 50% within the next two years while dramatically dropping the AISC, making First Maiestic Silver a top investment. The company recently divested non-strategic assets such as its royalty package as well as the idled La Parrilla silver mine, which brought or will bring the company well over US\$50 million in shares and cash. The company is thus increasingly becoming a shareholder in emerging development and royalty companies and will gain much better leverage on its own dead capital in the future.

# What have you and your company achieved in the past 12 months?

Accomplishments over the past 12 months include –

Produced a record 31.7 million silver equivalent ounces in 2022 which consisted of 10.5 million ounces of silver and 248,394 ounces of gold.

- Successfully completed the commissioning of the dual-circuit processing plant at Santa Elena, which includes the new 3,000 tonne per day ("tpd") filter press, designed to improve the leaching performance of Ermitaño ores.
- Expanded Santa Elena's liquid natural gas ("LNG") powerplant from 12 MW to 24 MW to supply low-cost, clean power to the Ermitaño mine and the recently completed dual-circuit plant.
- ▶ The Santa Elena operation was awarded the prestigious "Silver Helmet Award" in the category of "Underground Mining of More Than 500 Workers" by the Mining Chamber of Mexico for its outstanding performance in occupational safety and health.
- ▶ Sold a record 444,576 ounces of silver bullion, representing a 27% increase compared to 2021 and approximately 4.2% of the Company's total silver production, on First Majestic's online bullion store at an average silver price of \$26.20 per ounce for total proceeds of \$11.6 million.

# What are the most important company catalysts for the next 6 to 12 months?

Major catalysts for First Majestic in 2023 will include -

- ► Continued production ramp up at Santa Elena's Ermitaño mine to 2,500 tpd.
- At Jerritt Canyon, production is set to ramp up at the West Generator & Saval II underground mines as well as the recently discovered high grade Smith

Zone 10 improving overall throughputs and grades.

- Gold production at Jerritt is expected to range between 119,000 to 133,000 ounces in 2023, representing a mid-point increase of 74% compared to 2022's quidance.
- Continued improvements in metallurgical recoveries through implementation of fine grinding and other R & D



Keith Neumeyer, CEO

# What sets First Majestic apart from the other silver producers?

First Majestic, a senior silver producer, is known for its focus on silver purity and its strong leverage to silver prices. The Company owns and operates four doré-producing mines and is projecting to grow production to 45 million silver equivalent ounces per year by the end of 2024.



ISIN: CA32076V1031 WKN: A0LHKJ FRA: FMV TSX: FR

Fully diluted: 286.0 million

### Contact::

NYSE: AG

Telefon: +1-604-688-3033 info@firstmajestic.com www.firstmajestic.com

# **Gold Line Resources**

# High gold potential in the north of Europe



Gold Line Resources is a Canadian mining development company focused on acquiring mineral properties with exceptional exploration potential in the most prolific gold producing regions of Fennoscandia. The Company currently holds a prospective portfolio of advanced and early-stage gold exploration properties in Sweden and Finland, including the Oijärvi Project, which comprises the Kylmäkangas deposit in the Oijärvi Greenstone Belt in Finland; the Solvik Gold Project in Sweden, the Kankberg Norra property in the Skellefteå Belt, the Långtjärn property (comprising the Stojuktan North and Storjuktan South licenses), the Blabarliden property and the Paubacken property, all located in the Gold Line Mineral Belt in Sweden. Gold Line has a strategic shareholder, EMX Royalty Corp. which is involved in the execution of the exploration programs and provides technical advice. Furthermore, Sprott and Agnico Eagle, among others, are also strategic investors.

Paubäcken

The Paubäcken project consists of three contiguous licenses covering 17,097 hectares located in the central part of the Gold Line belt. The project site is strategically located between Barsele and Fäboliden

Oijärvi greenstone belt The Oijärvi greenstone belt is located in northwestern Finland in the Meso- to Neoarchaic Pudasjärvi Complex. It was discovered in the early 1990s by the Geological Survey of Finland (GTK) using regional magnetic geophysics and is one of the least studied greenstone belts in the region. Initial exploration work by GTK, which included mapping, soil geochemistry and diamond drilling, led to the discovery of the Kylmäkangas gold-silver deposit. The Oiiärvi project was acquired by Agnico Eagle in 2006 and by Gold Line Resources in 2021. In the process, Gold Line Resources acquired five exploration permits for the Kylmäkangas deposit in the central portion of the belt.

target, located three kilometers northeast of

the Svartliden site. The Aida target consists

of a shear corridor over 5 kilometers long

identified from magnetic geophysical data.

Regional drilling above bedrock in 2021

identified gold and pathfinder anomalies

coincident with the structural corridor. An

initial drill program completed in November

2021 immediately intersected 22.5 metres

of 2.4 g/t gold. In 2022, Gold Line Resour-

ces conducted extensive exploration cam-

paigns including geophysical surveys, geo-

chemical sampling and drilling. These inclu-

ded assaying 14.55 metres at 2.44g/t gold,

including 0.85 metres at 9.60g/t gold and

and is adjacent to the Svartliden Mine, with only 292 shallow drill holes totaling whose mill is located 3 kilometers to the 51,854 meters drilled to date. These holes southwest. The project covers 22 kilomeintersected 22.6 g/t gold and 126.3 g/t silters of the regionally significant Gold Line ver over 11 meters, among others. structure, which can be traced over 200 ki-The regional potential of the Oijärvi Greenslometers in the regional geophysical data. tone Belt is significant, and Gold Line Re-All mineralization discovered to date has a sources aims to unlock the potential thspatial relationship to this structural corrirough systematic exploration along promidor. The Paubäcken project hosts the Aida sing structural corridors by conducting

Kylmäkangas

high priority targets.

The Kylmäkangas gold-silver deposit is the largest known gold deposit in the underexplored Oijärvi Greenstone Belt. This has a NI 43-101 compliant indicated and inferred resource of 311,000 gold equivalent ounces grading 3.6 g/t gold equivalent released in 2022. A total of 19,580 meters were drilled in 75 diamond drill holes at the deposit. Kylmäkangas is an orogenic gold deposit with shear zones. The known mineralization is located over a strike length of 1.5 kilometers within a northeast to southwest trending, strongly deformed shear corridor that forms a second order branch of the main Karakha shear corridor. One of the last holes drilled in 2010 intersected similar mineralization to the Kylmäkangas deposit and extended the zone approximately 1.8 kilometers to the southwest. This may indicate that previously unidentified mineralization exists along the entire shear zone. Regional exploration drilling conducted by Agnico Eagle intersected mineralization with gold grades ranging from 1-97g/t at the Kylmäkangas West, Karahka and Kompsa targets where strongly altered, pyrite mineralized and gold anomalous felsic intrusive porphyritic rocks were encountered. The Main Mineralized Zone consists of several parallel zones of quartz-sericite breccias and friable quartz veins. Major ore minerals include chalcopyrite, galena, tetrahedrite-tennantite, sphalerite and tellurides in quartz-carbonate veins and breccias. Mineralization is open along strike in both directions and at

world class geophysical interpretation, soil

geochemical surveys, drilling above be-

drock and follow-up diamond drilling on

depth within steeply dipping veins that dip shallowly to the northeast. The Kylmäkangas deposit has only been drilled to an average depth of 215 vertical metres and there is significant potential for resource ex-

In 2023, Gold Line Resources plans to. among other things, conduct induced polarization surveys along prospective corridors and up to 20,000 meters of infill and definition diamond drilling to extend the existing Kylmäkangas deposit along strike and to a depth of 400 meters. The target here is stacked, down-dip zones of high-grade gold mineralization and doubling the resource to 500,000 ounces of indicated and inferred resources.

### Storjuktan

The Storjuktan project consists of seven contiguous licenses covering 31,428 hectares located in the northern part of the Gold Line belt. Excellent infrastructure exists with regional highways, rail lines and a hydroelectric power plant within 50 kilometers of the license package. Storjuktan is a large early-stage project strategically located north of the Barsele deposit. The project covers over 60 kilometers of the regionally significant Gold Line structure, which can be traced over 200 kilometers in the regional geophysical data. All mineralization discovered to date has a spatial relationship to this structural corridor.

### Cliffs

The Cliffs Project consists of two contiguous licenses covering 10,400 hectares located in the southern portion of the Gold Line belt. It covers more than 15 kilometers of an interpreted second-order splay structure that diverges from the main Gold Line structural corridor. Historical work identified a 5 kilometer long and 400-metre-wide gold-arsenic-copper-zinc anomaly in shallow glacial debris that coincides with the structural corridor identified from airborne magnetic data. Subsequent top-of-ground

1.10 metres at 9.41g/t gold.

Subsequently, Gold Line Resources applied for and received an exploration reserve permit for the remainder of the 17.600-hectare Oijärvi greenstone belt, adding the entire belt to Gold Line Resources' portfolio. Limited exploration work has been conducted at Oijärvi beyond the current resources,

Drilling program at Paubäcken

(Source: Gold Line Resources)



# Exclusive interview with Adam Cegielski, CEO of Gold Line Resources



and diamond drilling has confirmed in-situ mineralization beneath a small portion of the anomaly, with several kilometers of the structural corridor yet to be sampled. Historical sampling encountered up to 31.4g/t gold.

### Solvik

The Solvik project consists of ten licenses covering 9,240 hectares in the Mjøsa-Vänern belt in southwestern Sweden. The belt extends north-south along the border with and into Norway. Mineralization within the belt has been identified in the past, but the belt has only recently been explored. Agnico Eagle's historical work has included structural interpretation using magnetic geophysics and LiDAR data, extensive bedrock mapping, heavy metal prospecting, soil, outcrop and boulder sampling, and diamond drilling with the best intercept of 19.4 metres at 2.5g/t gold. Sampling returned up to 90g/t gold.

# Top management team

Gold Line Resources has a highly experienced and successful management team. CEO Adam Cegielski has more than 20 years of venture capital experience in mineral exploration, technology, healthcare and education. He began his career developing an industrial mineral project in Uganda, which he later sold to Rio Tinto. Mr. Cegielski was a founding director of Cayden Resources, which was sold to Agnico Eagle Mines for \$205 million.

Chairman Toby Pierce is currently CEO and director of TAG Oil Ltd, a TSX-listed oil and gas producer in Australasia. Pierce has over 25 years of geological and financial experience in the resource sector. He has been a founder, CEO or director of numerous private and public mining and resource companies including: Benchmark Metals, New Placer Dome Gold, Gold Line Resources, Crest Petroleum, North Country Gold, Brilliant Resources, Red Tail Metals, Kingfisher Metals and numerous shell companies in

the Canadian and London markets.

Director Greg McCunn is a senior mining executive with extensive experience as a board member of publicly traded companies listed on both the TSX and NYSE. He has over thirty years of experience in the mining industry, including more than thirteen years in the role of CFO and CEO. In the past, he has held leadership positions in finance, operations, corporate development and research and development. He has raised more than \$600 million in equity and debt capital in the Canadian and U.S. capital markets and has completed over \$1 billion in merger and acquisition transactions for several junior mining companies in the precious and base metals

### Summary: High newsflow is a foregone conclusion in 2023

Gold Line Resources has secured several potentially high-caliber gold projects within two highly prospective, yet underexplored gold belts in Scandinavia. Historical and proprietary exploration activity indicates that several projects may hold significant gold deposits. 2023 will therefore be marked by a number of exploration campaigns that should provide increased newsflow. The projects are located within very well-developed infrastructure and are accessible throughout the year. Gold Line Resources' management team has a wealth of experience in developing, managing and marketing resource companies. This has not gone unnoticed by some strategic investors such as Sprott, EMX Royalty and Stephens, who together with management hold approximately 25% of all outstanding shares.

# What have you and your company achieved in the past 12 months?

Over the last 12 months we have made a new discovery at our 100% owned Paubacken Project in Northern Sweden. This winter we followed up with a 1,500-meter drill program and drilling intersected Au mineralization over 250 metres and confirmed structural corridor over 650 metres. This confirms the structural corridor is mineralized over 250 meters with over 4.5km of structure remaining to test. Gold line holds 85km of the first order structure representing one of the largest exploration property holders in the Gold Line Belt.



Oijärvi rock sample (Source: Gold Line Resources)



(Source: Gold Line Resources)

# What are the most important company catalysts for the next 6 to 12 months?

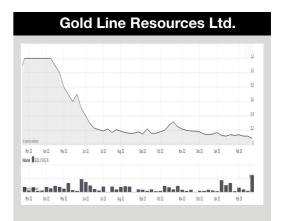
The most important catalysts for the company are the base of till drilling and diamond drilling in 2023. This drilling is what will further define the size of the discovery, and our ability to build out a multi-million-ounce resource.



Adam Cegielski, CEO

How do you see the current situation on the market for precious metals?

The precious metals market in my opinion is entering a significant bull market. We have \$1850/oz gold price, and significant decrease in minable ounces across all the major mining companies. We have seen decreasing reserves now for 10 years with very few new discoveries. The new base for gold is \$1800 and I see a strong 4–5-year opportunity to build out new discoveries globally.



ISIN: CA38063G2071 WKN: A3DMJC FRA: 4UZA TSX-V: GLDL

Fully diluted: 38.5 million

### Contact:

+1-855-465-3575

info@goldlineresources.com www.goldlineresources.com

### **GOLDMINING**

# First project profitably optioned

GoldMining is a Canadian mining development company specializing in promising gold projects in North and South America. The company's business model is to buy up high-caliber projects at the best possible terms during bear markets and to sell them at the highest possible price during bull markets or to generate development partners for them. In 2022, the first major option deal was successfully concluded when the Almaden project was sold to Nev-Gold. This deal can earn GoldMining up to CA\$16.5 million, whereas GoldMining had to pay just CA\$1.15 million for it in 2020. In addition, there is enormous upside potential from a block of shares received from NevGold. In total, GoldMining currently holds over 15 projects in its portfolio. In addition, the company holds a high stake in the royalty company Gold Royalty, which guarantees a high annual dividend yield.

# Around 32 million ounces of gold equivalent on the credit side

GoldMining has already made several high-profile acquisitions in recent years, demonstrating a resource base that now exceeds 25 million ounces of gold. Including all other commodities, namely silver and copper, GoldMining's projects even have more than 30 million ounces of gold equivalent. The most important projects are presented below.

### Para State Projects - Brazil

7 projects are located within or just outside the Brazilian state of Para State. 4 of them already have a combined resource base of almost 3.5 million ounces of gold.

With 711,800 ounces of gold in the indicated category and 716,800 ounces in the inferred category, Sao Jorge is the leading of the Para State Projects. It is an open pit project with average indicated grades of 1.55 grams of gold per tonne of rock (g/t). Cachoeira has 692,000 ounces in the indicated category and 538,000 ounces in the inferred category and a total of three sepa-

rate deposits in the western license area. The eastern portion of the shear zone, on the other hand, has not been adequately explored. The holes drilled to date have been advanced to an average length of 100 meters. This gives Cachoeira a high exploration potential at depth.

The other 5 projects have only been sporadically explored for gold occurrences to date, with no resource estimate at all available for three of them.

Para State boasts an excellently developed infrastructure. In addition, the state has a very low corporate tax rate of only 15.25%. By comparison, most other Brazilian states charge 34%. The state therefore offers a very good environment for interested development companies.

# Titiribi & La Mina Gold Project – Colombia

The so-called Mid-Cauca Belt runs from north to south across Colombia. This is considered one of the most prospective gold belts in the world and has yielded discoveries of about 100 million ounces of gold in the past 10 years alone. Nevertheless, the entire gold belt is considered under-explored compared to other regions of South America. The two gold-copper porphyry and epithermal gold deposits, Titiribi and La Mina, respectively, are located about 100 kilometers southwest of Medellin and are 100% owned by GoldMining. They are connected to excellent infrastructure and already host offices, drill core storage and a power supply. Several drill areas have been identified but have not yet been further explored for corresponding deposits. A PEA published in 2022 calculated an after-tax NPV 5% of US\$231 million and an after-tax IRR of 15%. Initial capital costs were reported at US\$300 million, and all-in sustaining costs at just under US\$700 per ounce. Relatively conservative price assumptions of US\$1,600 per ounce of gold, US\$21 per ounce of silver and US\$3.39 per pound of copper provide further upside. GoldMining recently received very good drill results at La Mina. These include 345 metres at

0.74g/t gold equivalent and 431 metres at 0.73g/t gold equivalent and 118 metres at 1.01g/t gold and 118 metres at 1.01g/t gold equivalent in the La Garrucha target area. The most recent resource estimate returned an indicated resource of 1.15 million ounces of gold and an inferred resource of 1.45 million ounces of gold for La Mina alone. Titiribi has 7.88 million gold equivalent ounces in the measured and indicated categories and 3.62 million gold equivalent ounces in the inferred category.

### Yarumalito Project - Colombia

The Yarumalito Gold Project is located approximately 60 road kilometers south of Titiribi and covers 1,453 hectares. It has an inferred resource of 1.23 million ounces of gold and 129 million pounds of copper. Drilling work has proven several intercepts with high gold grades. For example, 2.10 meters at 12.67g/t and 1.85 meters at 33.75g/t gold. More importantly, however, are the low-grade, long intercepts of 257 metres at 0.51g/t, 250 metres at 0.51g/t and 141.4 metres at 0.77g/t gold, among others, suggesting high tonnage. Successfully bought back a 1% net smelter royalty in March 2022.

### Crucero Project - Peru

The Crucero Project is located in the very southeast of Peru, within what is known as the Orogenic Gold Belt, and comprises three mining licenses and five exploration licenses on 4,600 hectares. The A1 deposit hosts at least 993,000 ounces of gold in the indicated category and 1.147 million ounces in the inferred category. In addition, the project has high exploration potential as several other targets have not been drilled to date.

# Yellowknife Gold Project – Northwest Territories, Canada

The Yellowknife Gold Project consists of several properties (Nicholas Lake, Ormsby, Goodwin Lake, Clan Lake and Big Sky) covering portions of the Yellowknife Greenstone Belt from 17 to 100 kilometers north of the city of Yellowknife. Gold-Mining's project areas have a history of over \$60 million in exploration, underground development and camps. Adjacent to the former Discovery Mine are the two high-grade target areas of Ormsby and Bruce, with the Nicholas target area approximately 10 kilometers away. In March 2019, GoldMining was able to present its first own resource estimate for Yellowknife. According to this, the project has at least 14.1 million tonnes of rock averaging 2.33g/t gold (equivalent to 1.059 million ounces) in the indicated category and 9.3 million tonnes averaging 2.47g/t gold (739,000 ounces) in the inferred category.

# Whistler Project – Alaska, USA – Spin-off to U.S.GoldMining

The Whistler Project is located approximately 150 kilometers northwest of Anchorage and has an airstrip, as well as the ability to access the Donlin Gas Pipeline. The project has district character with an area of 170 square kilometers and hosts several near-surface porphyry deposits. Currently, Whistler's resource base consists of 2.99 million gold equivalent ounces in the measured and indicated category and 6.45 million gold equivalent ounces in the inferred category. In addition, there is significant potential for high-grade epithermal mineralization. Although 70,000 meters have been drilled, some areas remain poorly explored. Several areas need to be explored in more detail, including one area where previous drilling has returned 435.2 meters averaging 0.72g/t gold and 0.12 copper. GoldMining is currently working to better

GoldMining is currently working to better evaluate the full potential of Whistler by spinning off the project into a separate company called U.S. GoldMining. This should – similar to Gold Royalty – lead to an improved market valuation and also provide more attention as an independent company, especially in the USA.

### Rea Uranium Project - Alberta, Canada

Another potential trump card up the sleeve is the Rea uranium project in the western Athabasca Basin, currently the hottest uranium hot spot in the world. With its 125,000 hectares, it has district potential. It surrounds Orano's (ex-AREVA) high-grade Maybelle deposit, which has already produced 17.7% U3O8 over 5 meters, among other grades. Orano is actively exploring the Maybelle project there. Rea is 75% owned by GoldMining, with Orano holding the remaining 25%. Similar to Whistler, Rea could be spun off into a separate company in the future. The prerequisite for this is a further increase in uranium prices.

# Summary: More deals are only a matter of time

GoldMining was able to assemble a considerable portfolio of projects, which to-

gether amount to more than 30 million ounces of gold equivalent. At the same time, the projects have not even been completely explored, and the deposits have not yet been delineated in several directions and at depth. GoldMining was able to announce a first option deal in June 2022, when the Almaden project was sold to NevGold. In return, the company initially received CA\$3 million in NevGold shares. Additional payments could generate another CA\$13.5 million. A good deal for GoldMining, the Almaden project cost just CA\$1.15 million in 2020. GoldMining's successful management team is also working on other deals. This also involves additional acquisitions. After all, they have had a new at-the-market program approved, which allows the company to issue up to \$50 million worth of common shares to the public from time

With a further increase in the gold price, GoldMining should also be able to sell further projects or find development partners for them. To unlock value of one of our most significant assets, the Whistler gold-copper project in Alaska, we have created a new subsidiary called US GoldMining Inc. which will be solely focused on advancing the project and will operate as a separate public company through an initial public offering or similar transaction planned for H1 2023.

Finally, we enhanced our management team and board of directors during the year. Tim Smith joined the GoldMining team as Vice President, Exploration and as CEO of US GoldMining Inc to prioritize and lead our exploration programs. Katherine Arblaster was brought on as Vice President ESG to lead our ESG strategy and disclosure. And David Garofalo, Chairman and CEO of Gold Royalty Corp. also joined our board of directors as Co-Chair alongside the company's founder, Amir Adnani.

# What are the most important company catalysts for the next 6 to 12 months?

2023 is going to be an exciting year for GoldMining Inc. At La Mina, we plan to complete a new PEA study in 2023 that includes the recent La Garrucha discovery

At the Whistler gold-copper project, we intend to launch US GoldMining Inc through an IPO or similar transaction during the year. This will fund US GoldMining Inc to launch a fully permitted exploration program advancing and de-risking the asset to unlock value.

We are also advancing our São Jorge project in Brazil with a planned exploration program that aims to build upon the success of our core resampling program in 2022. São Jorge is in the established Tapajos region with several producing mines and development stage projects in the area. The recent C\$350 million investment by Franco-Nevada into the Tocantinzinho project, which is currently in construction and located northwest of São Jorge, is a validation of the potential of the region.

To compliment our project advancements, M&A and strategic partnerships will continue to be a core part of our strategy. We constantly seek option or JV opportunities to unlock value from various projects in our portfolio all located in established mining jurisdictions.

### How do you see the current situation on the market for precious metals?

Gold has always been a safe haven asset which makes me very bullish on the gold market in the near term. Demand for gold is accelerating while supply from mines is limited. The backdrop of inflation and the inability of central banks to increase rates due to the amount of debt in the global economy is very constructive for the price of gold. The outlook of a potential recession in 2023 may lead to rate cuts which could further support a higher gold price.

Alastair Still CF

# **Exclusive interview with Alastair Still, CEO of GoldMining**

What have you and your company achieved in the past 12 months?

GoldMining Inc had a very productive year as we advanced and unlocked value across several assets across our portfolio of gold and gold-copper projects in the Americas.

At our La Mina project in Colombia, we published an updated preliminary economic assessment (PEA) which outlined an after-tax NPV of US\$231 million for the project. We then completed a resource expansion drill program targeting the adjacent La Garrucha deposit. The drill program successfully led to a new discovery, and we announced an updated La Mina mineral resource estimate which tripled

the inferred resources and plan to complete an updated PEA study that includes the La Garrucha discovery.

In addition to creating value through advancing our projects, we also assess opportunities for strategic partnerships to unlock further value of our assets. Our most recent strategic partnership is with NevGold who has entered an option agreement that allows them to acquire the Almaden project in Idaho for certain work commitments and total consideration of C\$16.5 million. This transaction represents a significant return for GoldMining shareholders and demonstrates the substantial value embedded in our extensive resource portfolio.

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ISIN: CA38149E1016 WKN: A2DHZ0 FRA: BSR TSX: GOLD

Fully diluted: 166.4 million

Contact:

+1-855-630-1001 bnicholson@goldmining.com www.goldmining.com

# **Gold Royalty Corp.**

# Dividend payer receives royalty payments for more and more projects

Gold Royalty is a Canadian royalty and streaming company specializing in precious metals and providing financing solutions to the metals and mining industries. Gold Royalty's diversified portfolio consists of more than 200 royalties located in mining-friendly jurisdictions across the Americas. In 2022, this has already enabled the company to achieve revenues of US\$5.7 million, exceeding its target. The trend is strongly increasing, as more and more (large) projects are brought into production, in which Gold Royalty holds corresponding royalty rights.

### Focus on Nevada and Quebec

Within the portfolio, the main focus is clearly on the top mining jurisdictions of Nevada and Quebec, as evidenced by the current core projects, which are presented in more detail below.

# Canadian Malartic – Quebec/Canada

Gold Royalty holds a 2.0 -3.0% net smelter royalty (NSR) on the Odyssey underground expansion at Canada's largest gold mine, Canadian Malartic. The expansion of the Quebec mine, operated by Agnico Eagle and Yamana Gold, is currently in the construction phase and is expected to produce first gold deposits in 2023. The NSR covers the East Malartic, Jeffrey Zone and Barnat Extension areas. Yamana Gold most recently reported an updated mineral resource for the Odyssey underground project of 2.35 million ounces of gold in indicated mineral resources and 13.15 million ounces of gold in inferred mineral resources. The Odyssey underground project is expected to produce approximately 500,000 ounces of gold per year over a mine life of more than 18 years, with potential for additional expansion.

### Jerritt Canyon - Nevada/USA

First Majestic Silver's Jerritt Canyon Mine in Nevada is currently operating as an underground mine and has a capacity of 4,500 tons per day. The Company produced 68,567 ounces of gold from the Jerritt Canyon Gold Mine in 2021 and planned for total gold production of between 116,000 and 129,000 ounces in 2022. Gold Royalty holds a 0.5% NSR and a sliding royalty per tonne (PTR).

The project site consists of a large, undeveloped land package covering 30,821 hectares. First Majestic Silver has identified several opportunities to improve both the cost and production profile of Jerritt Canyon, as well as near-term brownfield potential between the SSX and Smith mines and long-term cross-property exploration potential.

### Marigold - Nevada/USA

Marigold is located on the Battle Mountain-Eureka gold trend in eastern Nevada and consists of 205 unpatented mining claims covering 7.8 square kilometers within SSR Mining's operations. SSR Mining has delineated three resources within the Marigold claims: 8N, 8D and 8 South Extension. Based on the updated mine life plan, the mine is expected to produce an average of approximately 211,000 ounces of gold per year going forward. Gold Royalty holds a 0.75% NSR in Marigold.

### Côté Gold - Ontario/Canada

For IAMGold's Côté Gold Project, Gold Royalty holds a 0.75% NSR on the southern portion of the proposed open pit. This covers zones of higher-grade mineralization that are expected to be mined in the initial production phases. Côté is located in Ontario and hosts approximately 7.2 million ounces of gold. The mine is in the construction

phase and is expected to begin production in the second half of 2023. Expected production is approximately 489,000 ounces of gold in the first 5 years and 367,000 ounces of gold per year over the life of mine. Furthermore, the project has high exploration potential.

### REN - Nevada/USA

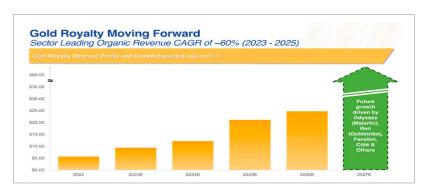
Nevada Gold Mines REN Project has an inferred resource of 1.24 million ounces of gold at average grades of 7.3g/t gold. Among the outstanding drill results was a 40.2-meter intercept grading 27.60 g/t gold. Nevada Gold Mines has highlighted that REN represents future growth for the Carlin Complex and has the potential to contribute to the mine life plan in the near future. Gold Royalty holds a 1.5% NSR and a 3.5% net profit interest (NPI).

### Lone Tree - Nevada/USA

Lone Tree is owned by i-80 Gold and is expected to become the "hub" of the Company's "Hub and Spoke" development plan in Nevada. The goal here is to become one of Nevada's largest gold producers and eventually produce over 500,000 ounces of gold annually. Autoclave studies and residual leaching programs are underway with first gold production expected shortly. I-80 Gold has a world-class management team with a track record of operational excellence in Nevada. Gold Royalty holds a 1.5% NSR in Lone Tree.

### Granite Creek + Bald Mountain

Gold Royalty entered into an agreement with Nevada Gold Mines LLC in August 2022 to acquire several royalty interests in Nevada properties for a total consideration of US\$27,500,000, which was settled at closing through the issuance of 9,393,681



(Source: Gold Rovalty)

common shares of the Company. This is a 10% NPI in the high-grade producing Granite Creek Mine, payable upon cumulative production of 120,000 ounces of gold or its equivalent from this project. Further, a 2.00% NSR on the Bald Mountain project operated by Kinross Gold Corporation, payable upon production of 10 million ounces of gold from the properties and a 1.25% NSR on the Bald Mountain joint venture zone, also operated by Kinross.

### Fenelon - Québec/Canada

The Fenelon Project is owned by Wallbridge Mining and is located in Quebec, within the Detour-Fenelon Gold Trend. It hosts at least 2.13 million ounces of gold in the indicated category and another 1.47 million ounces of gold in the inferred category. The objective is to expand the resources and prepare a feasibility study. Gold Royalty holds a 2% NSR in Fenelon.

### Beaufor - Quebec/Canada

The formerly producing Beaufor Mine is expected to be restarted shortly. Operator Monarch Mining is currently seeking to expand the approximately 340,000-ounce gold resource. Gold Royalty holds a 1% NSR on a portion of the mine and a PTR (CA\$3.75 per tonne processed from Beaufor + CA\$1.25 per tonne processed from the other areas).

### Borden - Ontario/Canada

The Borden mine is operated by Newmont near Chapleau, Ontario, Borden's production was 103.524 ounces of gold in 2021, and the most recent available Mineral Reserve and Mineral Resource statement shows Proven and Probable Mineral Reserves of 0.95 million ounces of gold, Measured and Indicated Mineral Resources of 0.56 million ounces of gold, and Inferred Mineral Resources of 0.41 million ounces of gold. The royalty covers a five-kilometer area of interest with a 0.50% NSR on certain claims. In July 2022, it was confirmed that mining was taking place at the Borden Mine on the relevant claims and Newmont has therefore commenced royalty payments.

# Annual sales growth of 60% is targeted + Quarterly dividend

In each of the next three years, Gold Royalty is targeting revenue growth of 60%. Gold Royalty pays a quarterly dividend of US\$0.01 per share.

# **Summary:**

# More and more projects are coming online, driving rising royalty pay-

Gold Royalty has an attractive royalty portfolio with some important core projects, some of which are already generating revenues, such as Borden. However, things will only get really interesting in the current year 2023, when major projects such as Canadian Malartic/Odyssey, Côté. REN. Fenelon and some others are launched or - as in the case of Nevada Gold Mines Royalties - achieve corresponding production figures. With royalty revenues picking up quickly, there is an additional opportunity for an increase in the quarterly dividend. Gold Royalty possesses the expertise and the financial means to generate further blockbuster royalties a la Côté or Nevada Gold Mines. Only recently, the company was able to secure a package of royalties in the productive Abitibi Greenstone Belt. In the future. Australia could also become the focus of gold royalties.

# **Exclusive interview with David Garofalo, CEO of Gold Royalty** What have you and your company achie-

David Garofalo, CEO

ved in the past 12 months?

Since our IPO in March 2021, we've acquired nearly 200 royalties, bringing our total royalty count to 216 as it stands today. 2022 was a year of continued growth for Gold Royalty with several key acquisitions during the year.

In March, we acquired a royalty over IAM-GOLD's Côté Gold Proiect in Ontario. which is expected to be one of Canada's largest gold mines when it goes into production in 2024.

In September, we acquired a portfolio of royalties from Nevada Gold Mines (Barrick and Newmont's Nevada Joint Venture), including a royalty on i-80's high-grade Granite Creek Project, a high-grade asset that will supplement our cash flow in the midterm. This transaction also brought Nevada Gold Mines on as our second largest shareholder.

In addition to growing our portfolio, we also initiated a quarterly dividend in 2022 which yields roughly 1.5% at our current share price. As more assets in our portfolio enter production and our organic revenue growth is crystalized, we will look at opportunities to increase this dividend in the years ahead.

Finally, we enhanced our management team in 2022 with the recruitment of Katherine Arblaster as Vice President, ESG and Andrew Gubbels as CFO.

### What are the most important company catalysts for the next 6 to 12 months?

Several key assets are expected to enter production over the next 12 months including two of our most important royalties: Odyssey and Côté. Odyssey is the underground extension of Canada's largest gold mine, Canadian Malartic, and production from Odyssey South is expected to begin in Q1 2023. At Côté, construction is advancing and the asset is expected to enter production in early 2024.

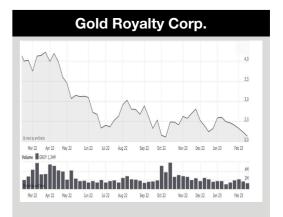
One of our most promising development stage assets is the Ren project, which is the underground extension of Nevada Gold Mines Goldstrike mine in Nevada. The current mineral resource of 1.2 million ounces is expected to grow in 2023 and Barrick recently outlined exploration upside of up to 3.5 million ounces at the project.

Gold Royalty also had exposure to over 700,000 meters of exploration drilling across our portfolio of over 200 royalties in 2022. This is the equivalent to over \$200 million in exploration investments that Gold Royalty benefits from without spending a dollar. This significant exploration investment is expected to result in resource growth across several assets in our portfolio.

In addition to the revenue and resource growth expected in 2023, Gold Royalty will also be publishing our inaugural ESG Report and Asset Handbook in the first half of 2023.

### How do you see the current situation on the market for precious metals?

The fundamentals for gold are very strong looking forward. Inflation is still at its highest levels in 40 years, but unlike the last major inflationary cycle, global debt levels have made it impossible for central banks to increase nominal rates in to a sufficient level to combat inflation. We've already seen this start to unfold in early 2023, with the Fed starting to signal the end of rate hikes and I expect this theme to continue throughout the year. Inevitably real rates will dive further into negative territory and gold prices will be driven higher as a result. Adjusting for inflation, gold's all time high is roughly US\$3,000 per ounce which I expect will be exceeded in the near term.



ISIN: CA38071H1064 WKN: A2QPLC FRA: 6LS0 **NYSE:** GROY

Fully diluted: 163.2 million

### Contact:

+1-604-396-3066 Info@GoldRoyalty.com www.goldroyalty.com/

# **MAG Silver**

# Flagship project becomes cash cow + New discoveries spark exploration fantasies



MAG Silver is a Canadian mining company and recently brought its Juanicipio project into production with partner Fresnillo. At the end of 2022, the company's own processing plant was connected to the Mexican power supply and commercial silver production was started. Full production capacity is expected to be reached in Q2 2023. The production costs are expected to be only US\$5 per silver ounce. Continuous new discoveries only hint at the extent of the further silver potential. The second silver project Deer Trail recently also provided good results and a solid new discovery.

# Juanicipio Silver Project – Proportioning + Infrastructure

The Juanicipio project is 44% owned by MAG Silver and 56% by Fresnillo, one of the largest silver producers in the world, which operates several other large projects directly adjacent to Juanicipio. Juanicipio is surrounded by high-caliber mining projects within the Fresnillo Silver Trend, which to date have produced more than four billion ounces of silver, or over 10% of the world's total silver production. Due to its proximity to the city of Fresnillo, Juanicipio is directly linked to a very well-developed infrastructure.

# Juanicipio Silver Project – Resource

The project, which hosts multiple veins, has current resources within the Bonanza Zone alone of approximately 8.17 million tonnes of ore at 550g/t silver for 145 million ounces of silver in the indicated category and 1.98 million tonnes of ore at 648g/t silver for 41 million ounces of silver in the inferred category. In addition, there are approximately 848 million pounds of zinc and lead in the indicated category. The Deep Zone has 4.66 million tonnes of

ore at 209g/t silver for 31 million ounces of silver in the indicated category and 10.14 million tonnes of ore at 151g/t silver for 49 million ounces of silver in the inferred category. Add to this another 790 million pounds of zinc and lead in the indicated category and 1.73 billion pounds of zinc and lead in the inferred category. Juanicipio also contains over 1.5 million ounces of gold homogeneously distributed in the mineralized system. However, the known resource is still open on several sides, so it is far from completely delineated.

## Juanicipio Silver Project – Top economic study underscores lowcost production

The very high grades are also the main reason why Juanicipio will become a lowcost mine. According to the latest economic feasibility study (PEA) from November 2017, based on a conservative silver price of US\$17.90 per ounce, a gold price of US\$1,250 per ounce, a zinc price of US\$1.00 per pound and a lead price of US\$0.95 per pound, as well as a daily production rate of 4,000 tonnes and a mine life of 19 years, the all-in sustaining cash cost is US\$5.02 per silver equivalent ounce. The payback period is only 1.8 years, the after-tax NPV is US\$1.138 billion, and the after-tax IRR is a very strong 44%. Even for much worse underlying values of US\$14.50 per ounce of silver, US\$1,000 per ounce of gold, and US\$0.75 per pound each of zinc and lead, Juanicipio still shows very good economic metrics. The payback period for this scenario is 2.6 years, the after-tax NPV is US\$635 million, and the after-tax rate of return is 30%. For higher, currently nevertheless conservative prices of US\$23 per ounce of silver. US\$1,450 per ounce of gold, US\$1.15 per pound of lead and US\$1.20 per pound of zinc, this results in a payback period of 1.2 vears, an after-tax NPV of US\$1,729 billion and an after-tax IRR of 61%.

# Juanicipio silver project – Production

The Juanicipio Mine is an underground mine. In 2022, a total of approximately 646,000 tonnes of mineralized material was processed, resulting in a recovery of 9.25 million ounces of silver and 22,253 ounces of gold, plus lead and zinc. Most of the processing did not yet take place in the company's own 4,000 tpd plant, but only on a daily basis in the Saucito and Fresnillo mills of the partner of the same name, Fresnillo.

### Juanicipio Silver Project – Exploration and Production Expansion Potential!

Juanicipio has unprecedented exploration potential. Looking at the immediate vicinity of the Joint Venture area, it is easy to see that Fresnillo has identified several more ore veins to the east of it. These run parallel to the Valdecanas and Juanicipio mineralizations and are likely to extend into the Joint Venture area.

### Juanicipio Silver Project – Drilling Successes Provide Higher Resource Base

Since the release of the last resource estimate in 2017, the Company has announced on several occasions that significant silver/gold mineralization has been encountered in drilling to expand the Valdecanas Deep Zone West. This included 11.6 meters of 783g/t silver, 2.57g/t gold, 6.52% lead, 9.46% zinc, 0.32% copper, 5.20 meters of 333g/t silver. 16.87g/t gold, 4.47% lead, 3.77% zinc, 1.04% copper, including 1.44 meters of 854g/t silver, 54,67g/t gold, 3.21% lead, 2.72% zinc, 2.28% copper and 5.60 meters of 177g/t silver, 7.36g/t gold, 2.39% lead, 6.31% zinc, 0.12% copper, including 3.15 meters of 283g/t silver, 12.62g/t gold, 3.62% lead, 8.42% zinc, 0.17% copper. MAG Silver was able to demonstrate higher gold grades in particular, as well as a shift from silver to high-grade copper, lead and zinc zones.

In addition, a parallel mineralization called Pre-Anticipada was detected. This contained up to 3.2 meters of 472g/t silver,



Juanicipio (Source: MAG Silver)



# **Exclusive interview with George Paspalas, CEO of MAG Silver**



0.31g/t gold, 0.39% lead, 0.43% zinc and 0.03% copper.

2019 also saw the announcement of the discovery of the Venadas Vein. This is the first mineralized vein in the Fresnillo District to be oriented at a high angle (northeast) to the historically mined northwest oriented veins. Drilling returned up to 1,485g/t silver and up to 25.10g/t gold.

In 2020, the Deep Zone was able to report another bull's eye. Among other things, a sensational 3,884g/t silver, 8.4g/t gold, 6.5% lead and 9.7% zinc were encountered within a 5.7-meter intercept. The 2020 drill program returned other outstanding results including 1.0 meter of 7,920g/t silver and 4.3g/t gold plus lead, zinc and copper, 3.95 meters of 3,584g/t silver, and 5.7g/t gold plus base metals, and 8.60 meters of 1,356g/t silver and 3.3g/t gold. Longer intercepts were also encountered including 37.85 meters of 357g/t silver plus by-products.

# Deer Trail project yields first new discovery

The Deer Trail Project is located in Utah and comprises 111 patented and 682 unpatented claims (approximately 5,600 hectares) covering the historic Deer Trail Mine and adjacent Alunite Ridge area. MAG Silver anticipates that the high-grade silver, gold, lead, zinc and copper CRD sulfides at the Deer Trail Mine are linked by miles of continuous mineralization to a porphyry copper-molybdenum center located west near Alunite Ridge. Initial drilling encountered 0.50 meters of 426g/t silver, 6.5g/t gold and 17.1% lead and zinc, and 1.90 meters of 952g/t silver, 38.2g/t gold and 9.2% lead and zinc, among others.

In 2022, the Company discovered a previously unknown zone called Carissa during step-out drilling approximately 1 kilometer southwest of the Deer Trail Mine Corridor. The discovery included 273.8 meters of multiple mineralized layers containing up to 266g/t silver, up to 5.5% copper, up to 1.5% lead and up to 5.2% zinc.

### Larder project

The Larder Project hosts three high-grade gold deposits along the Cadillac-Larder Lake Break, 35 kilometers east of Kirkland Lake in Northern Ontario. The project is 100% owned by MAG Silver and consists of patented and unpatented claims, leases and mining licenses in the communities of McVittie and McGarry. The 3,370-hectare project area is located 7 kilometers west of the Kerr Addison mine. All portions of the Larder property are readily accessible, and MAG Silver expects the existing exploration team, acquired from Gatling Exploration, to continue to operate.

# Summary: After the ramp-up phase is complete, the money printing begins

MAG Silver owns Juanicipio, one of the highest-grade silver deposits in the world, and has now started commercial silver production. High grades, very well financed, minimal political and development risks, very good metallurgy as well as access to sufficient energy and water and the connection to the existing infrastructure near Fresnillo leave little room for downside potential. On the other hand. the upside potential is even higher with the possibility of further parallel mineralization trends and expansion opportunities to depth. Commercial production startup, including completion of the ramp-up phase, will provide the company with positive cash flow in the coming months. From then on, money will literally be printed, as Juanicipio is one of the lowest cost producing silver mines in the world. With the Deer Trail project and the Larder project, MAG Silver has a good development pipeline, including diversification to three countries and a lot of exploration upside. With a recent \$60 million financing, the company is very well funded.

# What have you and your company achieved in the past 12 months?

2022 was a very active year for MAG Silver. We continued to process mineralized material from the Juanicipio underground mine through the neighbouring Fresnillo processing facilities in Zacatecas – producing 9.25million ounces of Silver (on a 100% basis) at an average head grade of 520g Ag/tonne. Whilst this processing realized significant silver, gold, lead and zinc production, and welcomed cash flow, the real value to this exercise was proving up Juanicipio to be the high-grade deposit we know it to be, and to confirm the ability to achieve design milling rates and metallurgical recoveries.

In May 2022 we announced the acquisition of the Larder property, on the Larder-Cadilliac break in the prolific Abitibi region of Canada. We are currently drilling and expect to announce the results of the Phase 1 drill program in Q1 2023. We embarked on the Phase 2 exploration drill program at the Deer Trail property in Utah, following very encouraging results that we publish from the Phase 1 program. We announced the discovery of the Carissa zone in early January 2023, and drilling continues on the property.

# What are the most important company catalysts for the next 6 to 12 months?

The most important catalyst is the ramp up of the Juanicipio process plant to nameplate capacity during 2023. We expect to declare commercial production, and then look to debottle-neck the process plant and determine what the ultimate capacity may become.

Exploration will continue on the Juanicipio property. We have explored only 5% of the surface area of this property, and there are compelling indicators that may lead to future discoveries on the property. Application permits for further explo-

ration are with the authorities, and we await their approval.

We are well ensconced in Phase 2 exploration drilling at Deer Trail and will be following up the recently announced Carissa zone discovery, as well as testing other targets on the vast property.



George Paspalas, CEO

# How do you see the current situation on the market for silver?

I feel the market for silver is very positive. Successive years of supply deficit, combined with growing demand in EV and green technologies bodes very well for the price of silver over the medium to long term.



ISIN: CA55903Q1046 WKN: 460241

FRA: MQ8 TSX: MAG NYSE MKT: MAG

Fully diluted: 104.4 million

### **Contact:**

+1 604-630-1399 info@magsilver.com www.magsilver.com

# **Revival Gold**

# 4 million ounces of gold secured, pre-feasibility study nearing completion



Revival Gold is a Canadian mining development company working on the development of its flagship gold project in the US state of Idaho. This hosts a former producing mine and therefore has excellent infrastructure and processing facilities. The most recent resource estimate vielded more than 4 million ounces of gold. which can be recovered primarily by surface mining. The goal is to establish relatively quickly a production of about 72,000 ounces of gold per year - with the possibility to expand this to more than 200,000 ounces of annual production. The company is currently working on a pre-feasibility study that will catapult the company to a completely new level.

# Flagship Beartrack-Arnett project: location and past support

Revival Gold's flagship project is called Beartrack-Arnett and is located in the U.S. state of Idaho, within the Great Falls Tectonic Zone. Idaho is considered one of the top 10 jurisdictions in the world for the mining industry. The Beartrack-Arnett Gold Project was formed from a merger of Revival Gold's Arnett Gold Project with the adjacent, formerly producing Beartrack Gold Mine. This was operated by Meridian Beartrack from 1994 to 2000 and produced approximately 600,000 ounces of gold during this period, an average of 100,000 ounces of gold per year. The mine operated at a capacity of 13,600 tonnes per day and achieved an 88% recovery over the life of the mine based on the cyanide soluble portion of the ore processed during heap leaching. The mine was closed at a time when the gold price fell below US\$300 per ounce.

# Flagship Beartrack-Arnett project: acquisition and expansion

In June 2017, Revival Gold acquired a 100% interest in the original Arnett Gold Project through earn-in and purchase agreements. In September 2017, Revival

Gold announced the completion of an earn-in agreement and related share purchase agreement with Meridian Gold Company, a subsidiary of Yamana Gold Inc. whereby Revival acquired a 100% interest in Meridian Beartrack Co. the owner of the past producing Beartrack open pit heap leach gold mine. Subsequent to the agreements completed in 2017, Revival Gold expanded the Beartrack-Arnett land position through a combination of claim staking and acquisition agreements, increasing the contiguous land position to approximately 5,800 hectares comprising a combination of patented and unpatented mineral claims in a historic mining district. In September 2022, the Company acquired a 100% interest in the ACE Claims. consisting of 68 unpatented mineral claims totaling approximately 571 hectares. The ACE claims are adjacent to the known mineral resources at Beartrack-Arnett and host several other prospective gold exploration targets.

# Flagship Beartrack-Arnett project: resource + PEA + pre-feasibility study

In May 2022, Revival Gold released the most recent resource estimate to date, which included all drilling to the end of 2021. According to this, Beartrack-Arnett has an indicated resource of 2.11 million ounces of gold (at an average of 1.01g/t gold) and an additional 1.94 million ounces of gold (at an average of 1.31g/t gold) in the inferred resource category. The majority of these resources (approximately 3.74 million ounces) can be recovered by surface mining.

In November 2020, Revival Gold announced the results of a preliminary economic assessment (PEA) for a first phase of heap leach operations restart to be followed by a potential second phase of mill operations. Utilizing the significant existing mine infrastructure at Beartrack-Arnett (including power lines, roads, an ADR facility and an 11,000 square foot core facility), the PEA envisions production of 72,000

ounces of gold per year over a total mine life of 7 years. Initial capital costs to restart operations have been estimated at US\$100 million. Based on a gold price of US\$1,550 per ounce, which is conservative from today's perspective, an after-tax net present value (NPV5%) of US\$88 million and an after-tax internal rate of return (IRR) of 25% were calculated. All-in sustaining costs were estimated at US\$1,067, resulting in an overall payback period of 3.0 years. For a gold price of US\$1,950 per ounce, Beartrack-Arnett arrives at an after-tax NPV of US\$211 million and an IRR of 49%. A further pre-feasibility study has been commissioned and is expected to be completed in mid-2023.

# Flagship Beartrack-Arnett Project: Geology and Resource Potential

Beartrack-Arnett is considered a so-called orogenic deposit and hosts gold mineralization over a known trend of more than 5 kilometers in length and includes another 10 kilometers of favorable structures to explore. Previous mining was by open-pit methods and focused on the Beartrack North and South pits. To the southwest of these, close to the existing leach pads, is the Joss target, which has recently become the focus of exploration campaigns. This is because Joss produced some extremely high-grade drill results, such as 13.7 meters of 12a/t gold and 11.8 meters of 8.8a/t gold. Drilling confirmed 4 to 11a/t gold in 18 holes over a strike length of 1 kilometer, with widths ranging from 1 to 5 meters. Longer gold-bearing intercepts revealed an average of 2.7g/t gold over approximately 40 meters. Management hopes Joss will generate 1 to 2 million additional gold ounces that could be mined underground. Mineralization is open along strike to the north and south and at depth at Beartrack.

Going forward, the Company will also focus on the Haidee pit in the Arnett subdivision. This is because Haidee in particular produced some very good results in the 2020/21 exploration campaigns, revealing

a very large soil anomaly that extends well beyond the pit used in the PEA. The Company encountered 7.2 meters at 6.74g/t gold and 1.5 meters at 9.18g/t gold, among others, but also longer intercepts such as 44.1 meters at 0.75g/t gold and 48.5 meters at 0.86g/t gold. The resource at Haidee is still open on all sides. In addition, at least 5 other targets were encountered which, including Haidee itself, are only a maximum of 5 kilometers from the processing plant and can serve as a satellite project for future mining.

# Flagship Beartrack-Arnett project: current exploration successes and next catalysts

A 2022 drill program, which included 22 holes totaling 5,500 meters, returned strong 6.2g/t gold over 14.2 meters at Joss, within 51.5 meters of 3.6g/t gold, and 3.49g/t gold over 115.4 meters, including 10.12g/t gold over 11.4 meters. Joss has now been extended to a length of 1,000 meters and assayed to a depth of 500 meters. The southern end of the southern pit encountered 2.02a/t gold over 47.4 metres and 7.9g/t gold over 2.9 metres, among others. Haidee returned further continuous near surface infill results of approximately 1.12g/t gold over 18 metres as well as 0.81g/t gold over 30.1 metres and 1.5g/t gold over 15.8 metres. The primary focus is currently on a pre-feasibility study leading to the first phase of resumption of heap leach operations at Beartrack-Arnett producing 72,000 ounces of gold per year. Subsequently, actual production from the pits and also from underground is expected to commence to ensure the target production of 200,000 ounces per annum and above.

# Strong shareholder structure + Good cash position

Revival Gold has an extremely strong shareholder structure. For example, about 42% of all outstanding shares are held by





institutional investors, such as Donald Smith, Gold2000/Konwave, Aegis Financial, US Global and Adrian Day Asset Management. Another 20% is held by highnet-worth investors, 10% by management, and another 5% is held by Yamana Gold. Only about 23% of all outstanding shares are in the hands of retail investors.

Furthermore, Revival Gold has a good cash position. The company was able to close a CA\$3 million financing at the end of 2022, in which several management members also participated.

# Summary: Pre-feasibility study will take a lot of risk off the project

Revival Gold owns Beartrack-Arnett, a gold project with existing infrastructure in-

cluding a processing plant, leach ponds, green power and a resource of more than 4 million ounces of gold that can be recovered primarily by surface mining plus a massive resource potential that is currently still being verified. Many of the targets are either still open on several sides or have only been sporadically explored by drilling to date. To the south of the project area is a 6-kilometer area that has not been explored at all. Management is extremely disciplined in financing and has extensive experience in bringing a high-profile gold project into production. Achieving this is also the Company's stated goal. The next milestone will be the pre-feasibility study currently underway, which should result in immense risk mitigation and a revaluation of Revival Gold's stock.



Hugh Agro, CEO

# Exclusive interview with Hugh Agro, CEO of Revival Gold

What have you and your company achieved in the past 12 months?

- 5,400 meters of core drilling in 22 infill and exploration drill holes during the 2022 field season at our flagship Beartrack-Arnett gold project located in Idaho, USA.
  - Follow-up exploration drilling in the high-grade Joss underground zone intersected 11.4 meters grading 10.1 g/t gold within 115.4 meters grading 3.5 g/t gold approximately 200 meters below previously known mineralization
  - At the Haidee near surface oxide deposit, infill, and resource expansion drilling continued to de-risk the project ahead of mine planning for a Preliminary Feasibility Study (PFS). Drill results included 1.5 g/t gold over 15.8 meters and 1.07 g/t gold over 18 meters at Haidee.

- Wrapped up an eighteen-month metallurgical program on 2.7 MM tonnes of sample material in 12-column leach tests with results indicating recoveries generally in line with, or better than anticipated for the heap leach phase of the project.
- Completed geotechnical studies to advance open pit and leach pad design criteria.
- Consolidated 100% ownership of the Arnett land position with the execution of final property earn-in and purchase rights during the year.
- Continued to build team competency and capabilities with the addition of Tim Warman, P.Geo. and former President & CEO of Fiore Gold, to the Company's Board of Directors.
- ► The Company received an aggregate of C\$13 million in equity funding during 2022 and welcomed Donald Smith Value Fund, LP as a significant new shareholder.

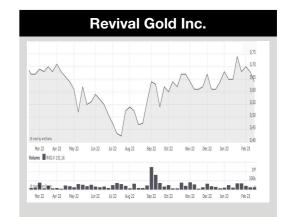
# What are the most important company catalysts for the next 6 to 12 months?

- Revival Gold is focused on completing a PFS on a first-phase restart of heap leach operations at Beartrack-Arnett.
- Targeting 65 to 75,000 ounces of gold production per year over a 7 to 9 year mine life.
- Additionally, Revival Gold will complete an updated Mineral Resource estimate incorporating both heap leach and mill resources.
- Meanwhile, exploration activities continue. Mineralization is open to the north and south and at depth on the main Pather Creek Shear Zone trend at Beartrack and in all directions on the satellite deposit at Haidee.

# How do you see the current situation on the market for precious metals?

- ► The underlying business case for gold has never been better – we have record inflation, massive and growing debt, and cracks appearing in the US hegemony. This creates tremendous pressure on the US dollar and other fiat currencies around the globe. In the present environment, gold can be expected to outperform.
- Senior and intermediate gold producers and royalty companies are in great shape with pristine balance sheets, and strong margins and are generating record dividends.
- And yet, there is a large and growing gap between the pace of global gold production and the rate of discovery – let alone permitting and financing – of new gold projects in good locations to feed producer demand.
- ► The result is that high-quality, low geopolitical-risk gold companies such as Great Bear, Fiore Gold, and even Yamana have been snapped up or consolidated over the past year for large sums.
- For investors the situation spells opportunity especially given the valuation difference between exploration/develop-

- ment companies trading at \$10-30/ounce or 0.1-0.2x P/NAV and their larger brethren trading at \$40-\$100/ounce and 0.8-1.1x P/NAV
- Revival Gold's Beartrack-Arnett project has several important advantages over its peers making it a compelling riskreward opportunity for investors:
  - Jurisdiction Top-10 in the world
  - Existing infrastructure roads, power, gold processing facility
- 1st phase HL PEA economics modest capex, low execution risk, high return
- Exciting high-grade exploration potential with a significant extent of mineralization over a 5 km trend, open to the north, south, and at depth
- Finding cost to date of about US\$5/ ounce
- Current share price of about C\$0.70 cents/share implying a market valuation of just \$12/ounce resource



ISIN: CA76151P1018 WKN: A2H7F3 FRA: 76V TSX-V: RVG

Fully diluted: 108.4 million

### Contact:

+1-416-366-4100 info@revival-gold.com www.revival-gold.com

# Sibanye-Stillwater

# One of the largest PGM producers diversifies into the battery metals sector

Sibanye-Stillwater is a South African gold and platinum group (PGM) producer with mines in South Africa and the USA. The company is considered one of the three largest PGM producers in the world. In addition to pure gold and PGM production, it also operates a PGM recycling plant and owns a majority stake in a company that recovers metals from surface residues. In recent months, it has also secured several (majority) stakes in companies and plants in the battery and green metals sectors. Sibanye-Stillwater pays a regular dividend.

# Platinum Group Mining in South Africa

The company owns several PGM mines in South Africa. Rustenburg has both surface and underground production and in the first 9 months of 2022 produced a total of 484,310 ounces of 4E PGM (equivalent to platinum, palladium, rhodium + gold) at an all-in sustaining cost of approximately US\$1,200 per ounce. As of December 31, 2021, Rustenburg (including tailings) had 15.5 million ounces of 4E PGM in mineral reserves and 81.6 million ounces of 4E PGM in mineral resources. The mine life extends beyond 2050.

Marikana has both surface and underground production and produced a total of 498,859 ounces of 4E PGM in the first 9 months of 2022 at an all-in sustaining cost of approximately US\$1,300 per ounce. As of December 31, 2021, Marikana (including tailings) had 22.3 million ounces of 4E PGM in mineral reserves and 128.0 million ounces of 4E PGM in mineral resources. The mine life currently extends to 2034.

Kroondal is an underground mine and produced a total of 149,435 ounces of 4E PGM in the first 9 months of 2022 at an all-in sustaining cost of approximately US\$950 per ounce. Kroondal had 1.7 million ounces of 4E PGM in reserves and 7.6 million ounces of 4E PGM in mineral resources as of December 31, 2021. The mine life extends to approximately 2030.

Platinum Mile is a tailings processing facility located on the Rustenburg lease near Kroondal. The plant recovers PGMs from Rustenburg. In the first 9 months of 2022, Platinum Mile recovered 37,121 ounces of 4E PGM at an all-in sustaining cost of approximately US\$650 per ounce.

Mimosa is an underground mine and produced a total of 86,224 ounces of 4E PGM in the first 9 months of 2022 at an all-in sustaining cost of approximately US\$1,050 per ounce. Mimosa had 3.6 million ounces of 4E PGM in reserves and 14.7 million ounces of 4E PGM in mineral resources as of December 31, 2021. The mine life extends to 2032 but can be extended through further development and expansion.

### **Gold operations in South Africa**

In addition to the PGM mines, Sibanye-Stillwater operates the Driefontein, Kloof, Beatrix and Cooke gold mines. In addition, the company holds majority shares in DRDGOLD. From all operations combined, the company could generate a total of 1.073 million ounces of gold in 2021.

# Stillwater Mine + Recycling - Montana/USA

The Stillwater Mining Complex is located in the US state of Montana and consists of the Stillwater and East Boulder mines. which have both surface and underground production. These produced a total of 315,928 ounces of 2E PGM (equivalent to platinum and palladium) in the first 9 months of 2022 at an all-in sustaining cost of approximately US\$1,600 per ounce. As of December 31, 2021, U.S. PGM operations had 27.3 million ounces of proven and probable 2E PGM mineral reserves and 89.6 million ounces of 2E PGM mineral resources. Stillwater has a current mine life to 2046 and East Boulder to 2060, with the adjacent Blitz project coming into closer focus in the future.



Sibanye-Stillwater also owns and operates a smelter and base metal refinery in Columbus, between the Stillwater mine and the town of Billings, Montana. The Columbus Metallurgical Complex is one of the world's largest producers of PGMs from recycled automotive exhaust catalysts. A 2E PGM-rich filter cake is produced there, which is further refined into palladium and platinum group metals by a precious metals refinery.

# Diversification into the battery metals sector

### **SFA Oxford and Johnson Matthey**

In 2019, Sibanye-Stillwater acquired SFA Oxford, a leading metals market analysis consultancy and globally recognized authority on platinum group metals, to provide detailed market intelligence on battery materials and precious metals for industrial, automotive and smart city technologies. In doing so, the company set an early course towards becoming a future supplier of battery metals in order to participate in the ever-growing market for electromobility and storage.

Further, Sibanye-Stillwater entered into a strategic partnership with Johnson Matthey to, among other things, support the development of science and technologies for new products and markets that will underpin sustainable supply chains for a low-carbon future, including clean hydrogen production and fuel cells.

### **Keliber Lithium Project**

In 2021, Sibanye-Stillwater could take its first real step into the battery metal sector with an investment in Keliber Oy. Keliber owns the eponymous Keliber lithium project in the Kaustinen region of Finland, one of the most important lithium-bearing areas in Europe. Sibanye-Stillwater aims to develop the project into the first vertically integrated lithium producer in Europe. Keliber



(Source: Sibanye-Stillwate

has 105,100 tons of LCE (lithium carbonate equivalent) resources. Through several transactions, Sibanye-Stillwater has now increased its stake in Keliber to 84.96%. At the end of 2022, the company was able to announce that it would invest 588 million euros in the construction of the mine and the facilities. At the same time, the company announced the start of construction of the Kokkola lithium hydroxide refinery. This is to produce 15,000 tons of lithium hydroxide per year. Furthermore, Sibanye-Stillwater plans to build a concentrator and two mines.

# Sandouville nickel processing plant

In February 2022, Sibanye-Stillwater completed the acquisition with Eramet SA of 100% of the Sandouville hydrometallurgical nickel processing plant, for an effective price of approximately €85 million. The Sandouville facility is located in the industrial heart of Europe in Le Havre, France's second largest industrial port, with strategic access to extensive logistical infrastructure, including shipping, rail and major highways that support future supply to European end-use markets. Current facilities include a hydrometallurgical nickel refinery with a production capacity of 12,000 tons per year



# **Exclusive interview with Neal Froneman, CEO of Sibanye-Stillwater**





(Source: Sibanye-Stillwater)

of high-purity nickel metal, 4,000 tons per year of high-purity nickel salts and solutions, and approximately 600 tons per year of cobalt chloride. In the first half of 2022, Sandouville produced about 3,500 tons of nickel metal and 1.066 tons of nickel salts.

### **Rhyolite Ridge Lithium Boron Project**

2021, Sibanye-Stillwater, entered into an agreement with ioneer Limited to form a joint venture company in respect of the Rhyolite Ridge lithium boron project. As a result. Sibanve-Stillwater will earn a 50% interest in the joint venture, with ioneer retaining a 50% interest and operational management responsibility for the joint venture. Rhyolite Ridge is a large, shallow lithium boron deposit located near existing infrastructure. Rhyolite Ridge is expected to be one of the first large lithium projects in the U.S. to enter production, currently expected in the second half of 2024. The final feasibility study for Rhyolite Ridge, completed in April 2020, supports 22,000 tonnes of lithium hydroxide and 174,000 tonnes of boric acid of average annual production over a mine life of 26 years, with costs in the lowest quartile. In January 2023, ioneer Limited received a conditional commitment from the United States Department of Energy for a loan to support the Rhyolite Ridge development. This loan is for up to US\$700 million and would cover a large portion of the capital costs to build the mine and related facilities.

## Investment in zinc producer New Century Resources

Also in 2021, the Company also announced a 19.99% strategic investment in New Century Resources Limited. New Century is a leading tailings management and remediation company that currently owns the Century tailings in Queensland, Australia. The company is a top 15 zinc producer globally with annual zinc production of 128,000 tons

# Summary: Precious metals remain main business, battery metals come online from 2024 onwards

Sibanye-Stillwater has undergone an amazing development since its foundation in 2012. From a relatively manageable Gold Fields spin-off to an almost over-indebted gold player to a leading gold and PGM producer with record EBITDA. Thus, in a very short time, they have built a veritable precious metals empire that has not only risen to become one of the largest precious metals producers but is also big in PGM recycling and tailings processing. Since 2021, the company has been taking the next big step, into the upcoming boom sector of battery or green metals. Lithium, cobalt and nickel have already been covered, as well as an investment in a zinc producer and a nickel processing plant. Although precious metals remain the mainstay, battery metal investments in particular are likely to generate a good deal of imagination in the future. New collective agreements concluded in 2022 with terms of up to 5 years provide medium-term planning security.

# What have you and your company achieved in the past 12 months?

- ▶ Due to the strategic growth and diversification, we have achieved, with our successful expansion into the Platinum Group Metals (PGMs) sector, and more recently into the battery metals sector, we have created a robust, truly international mining and processing organisation, which is much more resilient.
- ► The Group's safety improvement initiatives which commenced in H2 2021 resulted in continued improvements in all safety indicators in 2022 with a significant decrease in fatalities.
- Despite of the deterioration in the global geopolitical environment, a challenging period due to strike disruptions experienced at the SA gold operations and a 1:200 year flood event at our US PGM operations, the Sibanye-Stillwater Group's resilience is evident in earnings for H1 2022 (R22.6bn (US\$1.5bn) and normalised earnings of R11.2bn (US\$726m) which enabled the payment of an interim dividend of R3.9bn (US\$254m), at the upper end of the 25-35% policy range and representing a 7% annualised dividend yield.
- Positive cash flow enabled a strong balance sheet to be maintained with a R7.9bn (US\$487 million) net cash position and net cash: adjusted EBITDA of 0.2x at H1 2022.



- Significantly, a historic 5-year inflation linked wage agreement was reached at the SA PGM operations key Rustenburg and Marikana operations. These agreements should result in greater operational stability and peace in the coming years. This agreement followed a 3 month peaceful strike at the SA gold operations, which resulted in unions agreeing to a fair 3-year inflation linked increase and was a catalyst for the subsequent positive outcome at the SA PGM operations.
- ▶ A solid operational performance within guidance was achieved at the flagship SA PGM operations in H1 2022 with the continued focus on cost management, resulting in the operations continuing to migrate meaningfully down the industry cost curve.
- A robust de-risked plan allowing greater flexibility was announced at the US PGM operations to reposition the operations for the changing macro economic environment with a focus on sustainable cost management and production growth to 700,000+ 2Eoz at less than US\$1000/2Eoz by 2027.
- We delivered on all aspects of the capital allocation framework, positioning the company conservatively in anticipation of a potential economic slowdown in 2023. However, we advanced the Marikana K4 (1st tonnes hoisted in May) and Burnstone projects, maintained a strong balance sheet, paid dividends at the upper end of policy and approved an amount of 1.5% of declared dividends to be invested in social upliftment projects. Importantly, Moody's upgraded our credit rating from Ba3 to Ba2 with positive outlook.
- We continued to advance our green metals strategy with the integration of the Sandouville nickel refinery at Le Havre in France, following the completion of the transaction in February 2022. We are assessing further opportunities at Sandouville (discussed below).



Neal Froneman CEC





- ▶ We increased our shareholding in Keliber Oy in Finland from 30% to 85% in a series of transactions. A definitive feasibility study updated in October 2022, confirmed the robust economics of the Keliber lithium project and in November the Board approved the project, with construction of the Keliber lithium refinery commencing in January 2023.
- ▶ In January 2023, ioneer's Rhyolite Ridge lithium-boron project in Nevada received a conditional loan commitment of US\$700m from the US Department of Energy, a strong underpin of support for the project consistent with recent legislation promoting the advancement of local industry and supply chains.
- Recognising the significant growth of the company over the past few years, a regionalised executive management structure has been implemented which will ensure sufficient capacity and appropriate regional operational focus and ensure delivery on our strategic essentials.

# What are the most important company catalysts for the next 6 to 12 months?

- Normalisation of Operations: With production from both the SA gold and US PGM operations normalising after the gold strike and weather disruptions during 2022, the outlook for the Group's production in 2023 will be significantly better than for 2022, with the recent wage agreements offering improved prospects for stability.
- Despite continued global economic uncertainty, commodity prices remain elevated and well above historic levels with the gold price recently above R1 million/kg and PGM prices continuing to provide substantial margins. Provided precious metal prices remain well supported, which we anticipate, normalised earnings and dividends paid

- should increase substantially relative to 2022.
- Another positive factor which will drive higher cash flow, is that Sibanye-Stillwater has been paying out 35% of free cashflow from the Rustenburg operation to Anglo American Platinum as a deferred payment following the acquisition of Rustenburg Platinum Mines (RPM) in November 2016. This obligation ceased at the end of 2022 with the final annual payment due in March 2023, which will result in a material upliftment in free cashflow for the Group from 2023 onwards.
- Advancement of battery metals strategy:
- Construction of the Keliber lithium refinery in Kokkola, Finland commenced in early January and with an approximate 2.5-year construction period, it should be the first integrated producer of lithium hydroxide supplying into the European ecosystem by 2026.
- Construction of the Päiväneva concentrator and the initial two open pit mines, the Syväjärvi mine followed by the flagship Rapasaari mine will commence once all the environmental permits are confirmed. The commencement of construction of the Keliber lithium refinery will deliver significant benefits for the Finland fiscus and regional stakeholders, with meaningful local investment and support for regional suppliers.
- Keliber will employ around 300 people (including contractors) at steady state with around 500 people involved in the construction phase, approximately half of them at the Kokkola refinery.
- In Q1 2023 Keliber is expected to execute a capital raise to achieve the desired debt to equity ratio of around 50% and conventional debt facilities are under discussion to match the €250 million equity contribution to

- fully fund construction of the project.
- Sandouville continues to debottleneck its operations to increase production and it is anticipated that pre-feasibility studies on producing battery grade nickel sulphate, autocatalysts recycling and battery metals recycling will be completed during the year.
- At Rhyolite Ridge, a conditional commitment for a \$700 million loan has been made by the US Department of Energy, signalling strong support for the project and our strategy to supply into regional battery ecosystems in the Americas. Submission of a revised mine development plan and progress on the environmental permitting should be significant value catalysts for the development of the project.
- The market should gain confidence that Sibanye-Stillwater battery metals strategy was well timed and rapidly evolving in order to provide low carbon green metals directly into European and North American supply chains.

# How do you see the current situation on the market for precious metals?

- 2022 was characterised by extreme volatility which may continue, but the outlook for precious metals is very constructive.
- On PGM supply, the Ukraine-Russian conflict has had little discernible impact on PGM supply from Russia- however the unavailability of capital equipment could constrain growth with Norilsk recently downgrading 2023 guidance. In South Africa Anglo Platinum smelter issues and continued Eskom electricity supply problems threaten SA supply. Recycling is expected to be at least 10% lower in 2022 due to fewer cars being scrapped, logistics constraints, fuel costs and lower metal prices impacting collector costs structures.

- PGM demand should improve with the emerging consensus that a global recession will not be deep and may be a soft landing. Supply chain issues are dissipating, and China growth is picking up after the Covid-19 lockdowns.
- We have not seen any discernible changes in buying patterns and PGM demand remains well supported. Internal combustion engines have a strong future this decade despite the growth in battery electric vehicle share and tightening emission regulations support PGM demand in hybrid and ICE vehicles.
- Gold has recently been supported by strong Central Bank buying and views that inflation has peaked and therefore the pace of interest rate rises will moderate. The US dollar has therefore come under some pressure triggering a rise in most commodities.



ISIN: ZAE000259701 WKN: A2PWVQ FRA: 47V

JSE: SSW NYSE: SBSW

Fully diluted: 2.830 billion

### Contact:

+27 83 453 4014 ir@sibanyestillwater.com www.sibanyestillwater.com

# Sierra Madre Gold & Silver

# Possibility of rapid production start-up given by mine acquisition



Sierra Madre Gold & Silver is a Canadian mining development company focused on silver and gold deposits in Mexico. There, it has secured several highly prospective projects with a high, historic resource. Initial drill results indicate high-caliber deposits. In addition, the company secured an established silver mine in 2022, including a modern and ready-to-operate production facility.

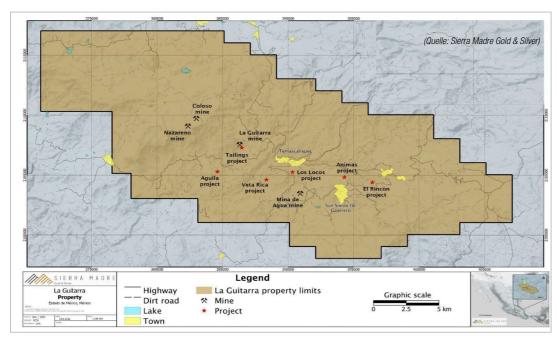
### La Guitarra Silver Gold Mine

This mine, including a fully permitted and ready-to-start processing plant, was secured in 2022 through the issuance of approximately 69 million treasury shares, making First Majestic Silver the largest single shareholder. La Guitarra is located in the southeastern part of Mexico's silver belt and covers approximately 39,700 hectares; an underground mine operated there until August 2018. Past production was in the range of 1 million to 1.5 million silver equivalent ounces per year between 2015 and 2018. Current infrastructure includes two underground centers (La Guitarra and Colo-

so), the 500 tonne per day flotation mill, a permitted tailings facility, several work buildings, equipment and related infrastructure. La Guitarra hosts historical Measured and Indicated Mineral Resources of approximately 7.45 million silver equivalent ounces and historical Inferred Mineral Resources of approximately 10.02 million silver equivalent ounces. Several management members operated the mine from 2006 to 2009 and believe that the mine could host one of the largest underground deposits of silver in all of Mexico. For example, the project site hosts 15 kilometers of known structures that have not yet been tested.

# Tepic project – location and infrastructure

Sierra Madre Gold & Silver's other flagship project is called Tepic and is located 22 kilometers south of the city of Tepic, which is the capital of the Mexican state of Nayarit. Tepic has a population of well over 300,000 and its own airport, located just 15 kilometers from the Tepic project. The surrounding area, considered very mine friendly, has a



specialized workforce familiar with heavy equipment and mining in the area. Due to its proximity to the town of Tepic, Sierra Madre's project has close access to the national power grid. In addition, industrial suppliers, machinery and factories are readily available in Tepic. The Tepic project covers approximately 2,612.5 hectares.

# Tepic Project – geology, resource and historical exploration work

Tepic hosts a near-surface, low-sulphidation epithermal gold and silver deposit located within the Sierra Madre geological province. The main focus is on silver deposits, with gold as a by-product. A historical technical report already exists for the project from 2013, prepared in accordance with Canadian Mining Standard NI 43-101, with an indicated resource of 7.1 million ounces averaging 201g/t silver equivalent and an inferred resource of 3.1 million ounces averaging 181g/t silver equivalent. Approximately two-thirds of these resources are silver and one-third gold.

Further resource potential comes from a reinterpretation of drill results that strongly suggest that, contrary to previous belief, the two Dos Hornos structures are not truncated but open along strike. Furthermore, the experienced Sierra Madre management team believes that the strike length continues much further and that the known ore body also has further potential at depth. The project also has good preliminary metallurgical test results for the recovery of gold and silver. Flotation tests and cyanide leaching of tailings have identified recoveries of up to 94% for gold and 90% for silver.

# Tepic Project – own Drilling and Upcoming Catalysts

Prior to the April 2021 listing, Sierra Madre identified more than 10 kilometers of hydro-

thermal mineralized structures on the project property, with several identified zones of mineralization extending over one kilometer with widths up to 200 meters. Reconnaissance sampling returned silver values ranging from <0.5 to 648 grams per tonne and gold values ranging from < 0.005 to 7.43 g/t. Following the IPO, the Company commenced an extensive drilling program in May. This initially involved drilling 21 holes for which permits were already in place. In September 2021, the company was able to present drill results for the first time, and they were quite impressive. Among others, 15.2 meters with 2.23g/t gold and 263g/t silver as well as 22.9 meters with 1.47g/t gold and 119g/t silver were encountered. Further, October 2021 intersections included 9.2 meters of 54.2g/t silver and 6.52g/t gold. Thus, the company was able to prove that the already known mineralization is even larger than previously assumed. In addition, 6 additional potentially high-grade areas have been identified. After completion of the second phase of the drilling campaign. Sierra Madre intends to quickly present a first resource estimate for Tepic. Thereafter, an initial economic feasibility study is to be prepared quickly. The company also intends to quickly acquire additional projects that should lead to a significant increase in the resource base.

### La Tigra project

La Tigra is located 148 kilometers north of Tepic in the Mexican state of Nayarit. The project consists of seven mining concessions with a total area of 357 hectares, covering most of the historic mines in the Distrito Minero Del Tigre. La Tigra has excellent infrastructure and is accessible by a road that leads to 10 kilometers onto the highway.

Sierra Madre began an extensive exploration program immediately after the acquisition, which quickly led to initial successes. The first soil sample results were reported



# Exclusive interview with Alex Langer, CEO of Sierra Madre Gold & Silver



as early as October 2021. There were 319 exploration samples taken, with values ranging from <0.005 to 18.2 grams per tonne gold. The average gold grade of all samples received to date was 0.48 g/t gold, with 32 samples greater than 1.0 g/t gold and 10 samples greater than 3.0 g/t gold. Silver values ranged from <0.5 to 65.2 g/t silver and averaged 3.99 g/t silver with 30 samples greater than 10 g/t silver and 4 samples greater than 30 g/t silver. Overall, two structural systems were identified.

Further trenching by the Company included 12.8 metres at 1.57g/t gold equivalent, including 5.3 metres at 3.69g/t gold equivalent. In addition, 12.0 metres at 2.91g/t gold equivalent, including 4.5 metres at 7.05g/t gold equivalent were encountered.

This work was to prioritize drill targets, for which approval has already been received to drill 30 drill pads. Drilling for this began in early March 2022 and quickly yielded initial positive results including 22.9 meters of 1.85g/t gold and 24.2 meters of 1.63g/t gold, including 4.7 meters of 5.64g/t gold. Further, 32 meters of 1.05g/t gold equivalent including 4 meters of 3.04g/t gold equivalent were encountered.

# Top management with many years of experience

The fact that Sierra Madre Gold & Silver has attracted many institutional investors right from the start is probably also related to the high-caliber management.

Executive Chairman Gregory Liller has more than 40 years of experience in exploration and mine development. He has served as an officer or director of publicly traded companies including Prime Mining, Genco Resources, Gammon Gold and Oracle Mining. During his career, he played a key role in the discovery and development of more than 11 million ounces of gold and 600 million ounces of silver, as well as securing more than \$300 million in equity financing and \$100 million in debt financing.

CEO Alex Langer is a successful public markets specialist with over 15 years of experience. He began his career as an Investment Advisor at Canaccord Genuity, where he was involved in the financing of over 100 private and public companies, including the IPOs of Endeavour Silver, Fortuna Silver and Great Panther. Most recently, he was co-founder and Vice President of Prime Mining and Millennial Lithium, where he managed the capital markets for both companies.

### Summary: Mining acquisition should lead to revaluation

Sierra Madre Gold & Silver is still a pure early-stage story, which, however, has several prerequisites for a real high-caliber project. For example, the flagship Tepic project already has a very near-surface resource with average grades of about 200g/t silver equivalent, which is extremely high grade for a surface project. Further, the project has excellent potential to increase resource size and grade due to poor drill core recovery by previous owners. The second potentially high-grade project, La Tigra, has also already generated increased newsflow. With the acquisition of the La Guitarra mine including processing plant, which can be operated immediately, the company landed an additional coup, which can quickly provide positive cash flow. What's more, there are several people in management who already know La Guitarra and believe it has high exploration potential. Last but not least, Sierra Madre Gold & Silver has an experienced and successful management team that has proven several times in the past that it can lead early-stage projects to production. Most recently, the company raised approximately CA\$6.2 million in financing, which will fund further steps for months to come.

# What have you and your company achieved in the past 12 months?

- December 2022: Sierra Madre shareholders approve the acquisition of the past-producing La Guitarra mine from First Majestic
- ► <u>September 2022:</u> Closing of the first tranche of the C\$10M private placement conducted together with the La Guitarra acquisition
- July 2022: Sierra Madre appoints Kenneth Scott to the CFO role, experienced with mining producers with international operations, as part of its preparations for operating La Guitarra and becoming a silver producer.
- May 2022: The Company signs a definitive agreement to acquire the permitted, 500 t/d, La Guitarra mine in the Temascaltepec mining district, Mexico from First Majestic Silver. The high-grade underground mine operated till August 2018 and includes an on-site process facility. The acquisition covers 39,714 ha with 15 km of known and untested structures. Key members of the Sierra Madre team operated La Guitarra between 2006 and 2009.
  - All-share, US\$35M transaction: Sierra Madre issuing 69,063,076 of its common shares to First Majestic at C\$0.65 per share
- On closing, First Majestic would become Sierra Madre's strategic and largest shareholder with a 19.9% interest.
- May 2022: Maiden core drilling at La Tigra, Mexico, returns 32 metres of 1.05 g/t AuEq
- May 2022: Core drilling at Tepic, Mexico, intersects 6.35 metres of 424 g/t AgEq and 6.05 metres of 470 g/t AgEq

# What are the most important company catalysts for the next 6 to 12 months?

- Q1 2023: Closing of the La Guitarra acquisition
- ► <u>H2 2023:</u> New resource report for La Guitarra
- Phase 2 Tepic results: pending
- ▶ Phase 1 La Tigra results: pending

# How do you see the current situation on the market for silver?

Positive based on fundamentals and technicals:

- ▶ Fundamentals: Based on the 2022 World Silver Survey, industrial demand makes up just under 50% of silver's demand, followed by physical investment at ~25%.
- Both of these components of demand have strengthened, as the metal is key to the decarbonization movement (used in solar panels and electric vehicles) and a sought-after real asset, purchased to preserve value and diversify portfolios.
- Technicals: As of mid-January 2023, trading at just over US\$24 an oz., up ~4% over the past 30 days, based on a ~5% appreciation over a year strong recent momentum



Alex Langer CFO

# Sierra Madre Gold & Silver Inc.

# Resumption of listing shortly

ISIN: CA8263XP1041 WKN: A3CM97 FRA: 409 TSX-V: SM

Fully diluted: 135 million

# Contact:

+1-604-765-1604

investor@sierramadregoldandsilver.com www.sierramadregoldandsilver.com

# **Steppe Gold**

# Rapidly growing gold producer in the heart of Asia



Steppe Gold is a Canadian mining development company focused on producing gold in exceedingly mining-friendly Mongolia. The company began production in 2020 and could produce 34,000 ounces of gold at an all-in sustaining cost of US\$800 from its flagship Altan Tsagaan Ovoo (ATO) project in 2022. In 2023/2024, this project is expected to produce 90,000 ounces of gold. The Company has completed a safe feasibility study for the expansion of the ATO gold mine, targeting approximately 90,000 to 100,000 ounces of gold per year from the development of underground new deposits. To this end, it is currently working on a Phase 2 - expansion of facilities and mine infrastructure.

### ATO Gold Mine – Location and Resource

The Altan Tsagaan Ovoo (ATO) gold and silver project is located in the Tsagaan Ovoo Soum area of Dornod Province in eastern Mongolia. It consists of a mining license covering an area of 5,492 hectares. A resource estimate released in February 2021 indicated reserves of 1.58 million gold equivalent ounces (including silver, lead, and zinc grades) and resources of 2.45 million gold equivalent ounces for ATO (and the adjacent Mungu satellite project).

# ATO Gold Mine – Past and Planned Oxide Production

Steppe Gold already started phase 1 mining of oxides in 2018. The actual processing started in 2020, with about 33,000 ounces of gold being produced in that year. After a hiatus, they were able to ramp up production again in the second quarter of 2022 to produce 33,500 ounces of gold for the remainder of the year, which was a 180% increase over 2021.

The state-of-the-art stationary crushing plant, which is substantially complete and

scheduled for startup in April 2023 due to winter conditions, will increase Steppe's current capacity fourfold, up to 4 million tons per year at 50% of its capacity. In 2023 and 2024, a further combined total of approximately 90,000 ounces of gold equivalent is expected to be produced from oxides prior to commencing mining of the fresh ore. Further, Steppe Gold was able to enter into an agreement in 2022 to provide grid power for the ATO Phase 2 expansions to achieve significant energy savings. The Company expects this to re-

duce expected Phase 2 cash costs by

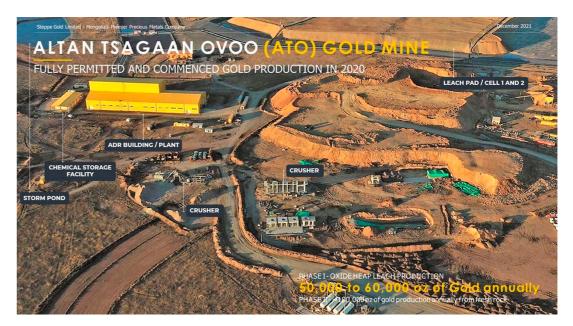
more than US\$100 per ounce of gold.

### ATO Gold Mine – Planned Expansion to 100,000 Ounces Annual Production

The planned Phase 2 expansion assumes annual production of 100,000 gold equivalent ounces from the fresh ore. The projected gold recovery is 79%, with the CIP/CIL plant expected to achieve a further recovery of up to 10% in later years. Steppe Gold expects to start Phase 2 in 2024.

## ATO Gold Mine – Feasibility Study Delivers Top Figures

In October 2021, Steppe Gold published a feasibility study for the ATO project. This indicated an after-tax NPV of US\$232 million and an after-tax IRR of a very high 67% for a two-phase mine life of 12.5 years and based on average gold grades of 1.14g/t, average silver grades of 11.18g/t, average lead grades of 0.46% and average zinc grades of 0.78%. All-in sustaining costs were estimated at a very low US\$853 per gold equivalent ounce, which was actually undercut by Steppe Gold 2022. EBITDA was estimated at US\$584 million and total gross revenue over the mine life at US\$1.72 billion. The capital cost for



ATO Gold Mine Infrastructure Expansion (Source:Steppe Gold)

Phase 2 is approximately US\$128 million and the payback period is 3 years.

# ATO Gold Mine – High Grade Zinc Discoveries Provide Exploration Fantasy and Improved Economics

resulted in the rediscovery of several high-grade zinc-sulfide intercepts adjacent to existing ATO gold deposits. In doing so, Steppe Gold recorded exceptional results including 20.95 meters at 10.56% zinc and 3.13% lead, 10.62 meters at 9.2% zinc and 4.3% lead, 55.4 meters at 4.23% zinc and 1.83% lead, as well as 15 meters at 8.0% zinc and 5.87% lead and 23.5 meters at 6.28% zinc and 1.63% lead. The Company is currently working on a drilling campaign to further test and fol-

Over the past several months, drilling has

# Mungu Satellite Project

The Mungu gold and silver discovery is located immediately northeast of the current resource on the ATO project. It is a

low up on this high grade new discovery.

structurally controlled epithermal gold-silver system with localized bonanza grades. The high grade gold-silver mineralization in the northern portion of ATO Pipe #4 has been interpreted by Steppe Gold to have a steeply west dipping structural control with a similar northeast strike trending towards and possibly associated with the Mungu mineralized zone. This implies that continuous mineralization may exist between Mungu and the ATO Pipes. Initial drill results included 46 meters of 14.98g/t gold and 82a/t silver, including 23 meters of 26.18g/t gold and 68.8g/t silver. Overall, the zone of mineralization continues for approximately 20 kilometers and offers much potential for further high-grade mineralization.

### **Uudam Khundii Gold Project**

In addition to ATO, Steppe Gold owns another high-profile project called Uudam Khundii (UK). Accordingly, Steppe Gold holds 14,400 hectares under an 80/20 joint venture with the Bayankhongor provincial government. Initial results from 18 trenching events over 933 meters in the Milky



Way and Altan Soum areas have revealed a mineralized system at least 700 meters long and up to 12 meters wide, with individual sample results up to 1.49g/t gold, 450g/t silver, 2.98% copper, 3.98% lead and 0.31% zinc. An initial drill program started in 2022 and covered 3,000 meters. This identified 4 high grade areas which will now be explored in more detail.

Furthermore, there is a partnership with the state-owned Erdenes Alt Resource LLC to develop the prospective Khurentsav Gold Project, which is adjacent to the Steppe Gold Uudam-Khundii Gold Project. In addition, Steppe Gold is currently reviewing over 200,000 hectares of exploration licenses for further acquisition.

### **Current plans and catalysts**

Steppe Gold has set its sights high for the current year and beyond. The initial focus is on maximizing gold production from existing stockpiles, with a healthy supply of reagents built up and the new supply lines working well. A new, fully operational boiler house will allow production of 1,500 to 2.000 ounces over the winter months. There will also be further announcements on the ongoing Phase 2 expansion work, including the chimney expansion and plant design, which will ultimately enable annual production of over 100,000 ounces of gold equivalent by the end of 2024. Last but not least. Steppe Gold plans to begin discussions with international and Mongolian lenders and traders for project financing opportunities for Phase 2 of the gold production expansion. The Bank of Mongolia continues to pay a 5% premium for gold purchases, which is a significant costing

# Mining-friendly Mongolia with unexplored raw material potential and major location advantages

Mongolia is generally considered a very mining-friendly country. Overall, Mongolia's mining industry contributes 20% to Mongolia's GDP and 80-90% to the country's exports. The big advantage is that it is a neighbor of two huge markets: China & Russia. For the raw material companies, especially the low transport costs to the Chinese raw material markets are a big location advantage. Moreover, for decades there was no historical exploration of battery metals. The current government emphasizes an investment-friendly environment: the Mongolian People's Party (MPP) won another resounding victory in 2020, with a majority mandate for four years. Low corporate income tax and state royalties are the result. The government's anti-investment regulations were lifted in 2014. The country has untapped and unlimited potential for raw materials: no historical exploration in and new, little-explored projects for minerals, but at the same time a geologically well-equipped and high-quality destination or jurisdiction.

# Summary: Phase 2 will triple current funding

Steppe Gold has become a serious gold producer in Asia. Within a very short time, the company was able to establish a mine that now produces over 30,000 ounces of gold per year. By 2024/25, however, gold production is expected to triple, which will happen with the planned Phase 2 expansion. This will lift Steppe Gold to a completely new valuation level, especially as production costs are well below US\$1,000 per ounce. Additional exploration potential is provided by the Munau satellite project, which is located not far from the current deposits. With the UK project, the company has an additional hot iron in the fire, which can expand the production pipeline in the future. Several major shareholders - including Sprott, Management, Fidelity, family offices and Mongolian nationals - provide a stable capital structure and further financial iniections.

# Exclusive interview with Aneel Waraich, Executive Vice President & Director of Steppe Gold



What have you and your company achieved in the past 12 months?

Steppe Gold's last 12 months have been very exciting, on the heels of a strong foundation laid in 2021. We doubled our resources, released a robust FS adding another 10.5 years of mine life at double the current production profile, and secured a landmark US \$60M financing package.

Through 2022, Steppe had paid-for inventory and a healthy cash flow and made rapid progress in our Phase 2 expansions infrastructure at our flagship ATO gold mine. We installed a boiler house that enabled winter production, and a new fixed crusher that will increase Steppe's capacity by 4 times, up to 4Mt per annum/ at 50% of its power.

Last year, we also furthered our plans to create a new, multi-million ounce exploration potential, gold district in Bayankhongor province, achieved a 180% increase in gold production from 2021 at low costs (~\$850 AISC), and entered a landmark power agreement to drive significant operational energy savings to reduce cash costs in excess of \$100/oz for Phase 2. We ended 2022 having mined 958,288 tonnes and with 922,051 tonnes of gold crushed and stacked.

# What are the most important company catalysts for the next 6 to 12 months?

Steppe Gold's 2023 focus is to maximize gold production from our strong inventory on hand, and complete discussions with international lenders to finance our Phase 2 expansion. Our Phase 2 work will see camp expansions, further plant design and the construction of a new flotation plant to increase annual production at our 100% owned flagship asset, to over 100,000 oz Au Eq by the end of 2025 while maintaining similar low costs at ~\$850 AISC.

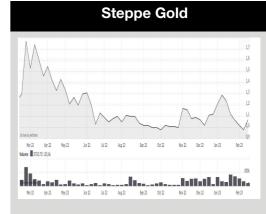
Steppe will inevitably be the largest, primary precious metal producer in Mongolia. Steppe's 2023 theme is to unlock our potential across all licences, while seeking out new opportunities. With our Uudam Khundii project's regional leading position, we plan

to accelerate its exploration and development work this year. We have only explored and operates on about 10% of our assets; there's so much more potential to continue to use our cash flow for our Company's rapid growth strategy. Steppe Gold hopes to continue to de-risk our pipeline of assets, with a projection of +300,000 oz Au Eq in the next 3-5 years.

Executive Vice President & Director

## How do you see the current situation on the market for precious metals

Gold is the longest standing currency, historically retaining its value in times of financial and geopolitical uncertainty. Today is no diferent with our current market realities. In Q3 of 2022 alone, central banks bought record amounts of gold worth ~\$20 Billion. This reinforces the long-term value of this precious metal and that it continues to act as a hedge against inflation. Overall, gold has outperformed most major asset classes in the last 20 years, and the Steppe Gold team is optimistic that it will continue to do so!



ISIN: CA85913R2063 WKN:A2JMMP FRA: 2J9

Fully diluted: 85.1 million

### Contact

TSX: STGO

+1-647-697-0577 Info@steppegold.com www.steppegold.com









