



28 October 2019

SolGold plc  
("SolGold" or the "Company")

### **Copper Gold and Silver Recovery Improvements Drive Modelled Revenue Increases**

The Board of SolGold (LSE & TSX code: SOLG) is pleased to announce significant improvements in copper and gold recoveries from metallurgical testing at Alpala.

Improved recoveries in metallurgical tests across all valuable minerals indicates a major value uplift for Alpala.

The current metallurgical test programme has expanded on that conducted during the PEA and has produced substantial improvements in copper, gold and silver recovery and in copper concentrate grade. These results are supported by both locked cycle and leach diagnostic tests.

These results include:

- **An estimated 3.8% increase in copper recovery to achieve a life of mine average of 93.4% recovery**
- **An estimated 21.6% increase in gold recovery to achieve a life of mine average of 87.2% recovery**
- **An estimated 28.3% increase in silver recovery to achieve a life of mine average of 87.6% recovery**
- **An estimated 2.7% Cu increase in concentrate grade to achieve a life of mine average of 28.7% Cu, equating to a projected 9% decrease in transport and smelting charges per tonne of concentrate produced.**
- **Ongoing large-scale tests will also evaluate CAPEX and OPEX changes to update economics**

Commenting on the results, Nicholas Mather, SolGold's Chief Executive Officer said:

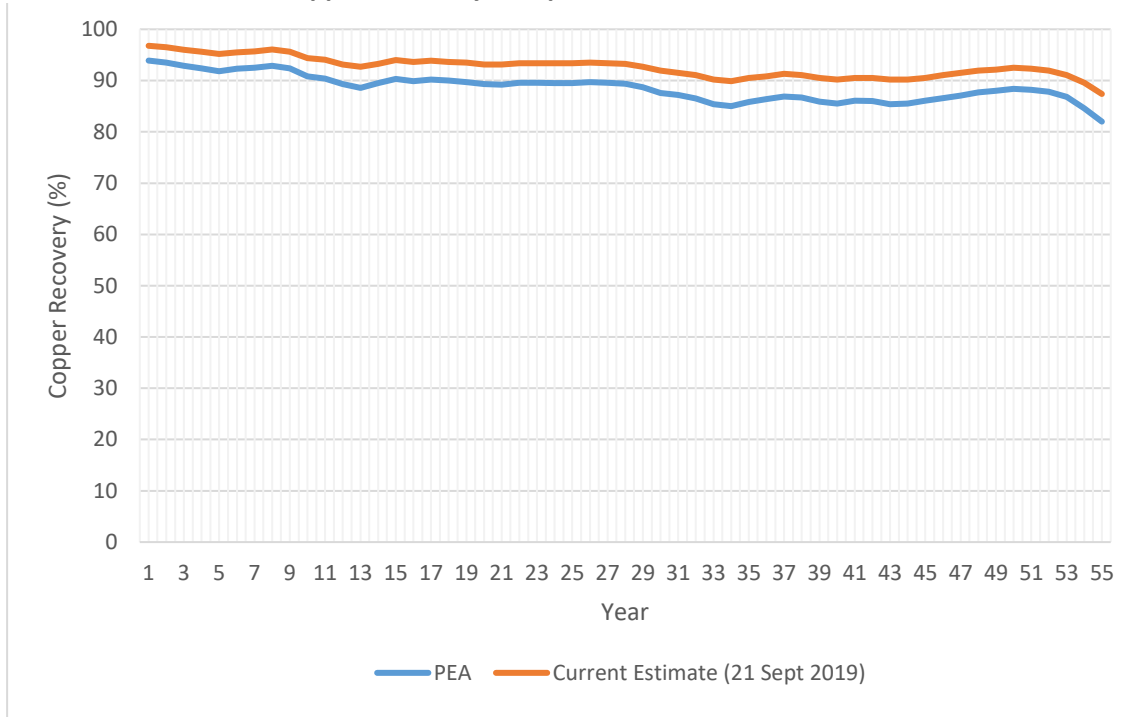
"The updated metallurgical recoveries for copper, gold and silver are very impressive indeed. Since the metallurgical recovery results adopted in the Preliminary Economic Assessment, the most recent recovery date points to recovery of an additional 4.4 million ounces of gold and 354,000 tonnes (792 million lbs) of copper and 24 million ounces of silver. At gold, copper and silver prices as adopted in the PEA (US\$1300/oz gold, \$3.30/lb copper, \$16/oz silver), a further \$8.7 billion in gross revenue would be indicated.

"SolGold is continuing large scale metallurgical tests and is continuing to assess changes to operating and capital cost estimates in order to evaluate any changes to profitability and project value that may arise as a result of delivery of any extra revenue indicated by upgraded recoveries."

"On top of copper gold and silver, we're still looking into molybdenum, rhenium, magnetite and pyrite recoveries. Not only is this orebody big, with a rich high-grade starter core, but it appears to be metallurgically beautiful."

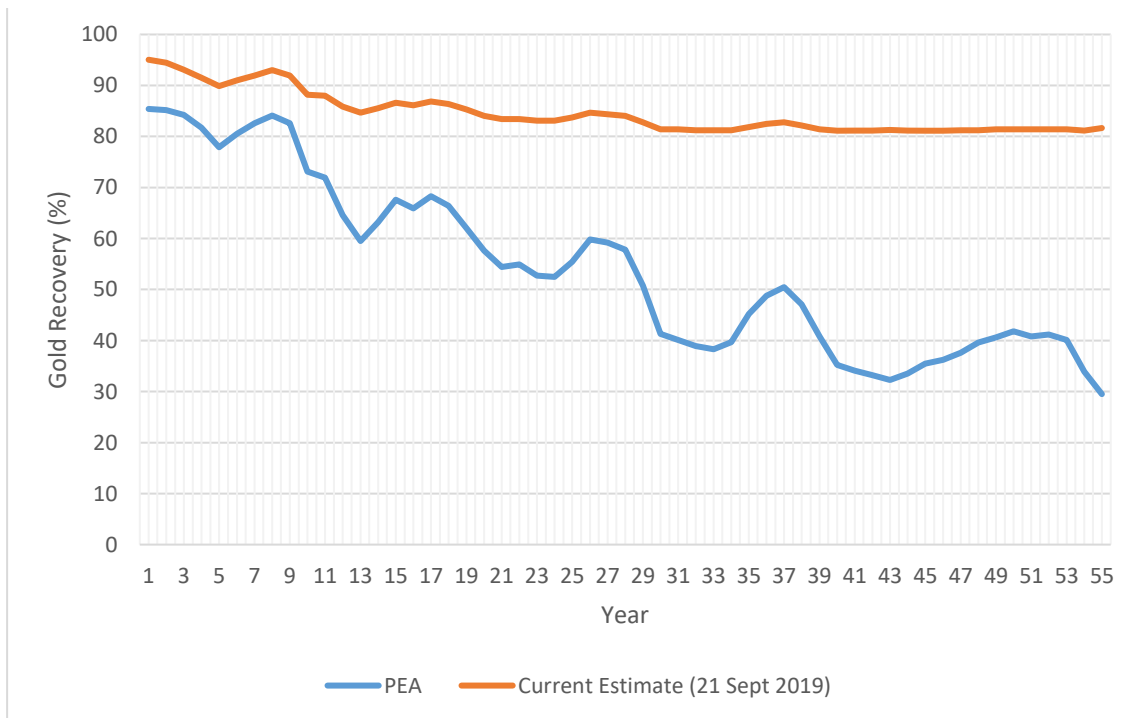
"Improvements in concentrate grades since that adopted in the PEA, point to reductions in concentrate volumes, so we are expecting further modelled cost reductions in that area, as well. In comparison to declining global concentrate grades and quality, SolGold is looking at some substantial competitive advantages at the Alpala project in comparison to other undeveloped copper gold resources around the world."

### Copper Recovery Comparison – 3.8% Increase from PEA



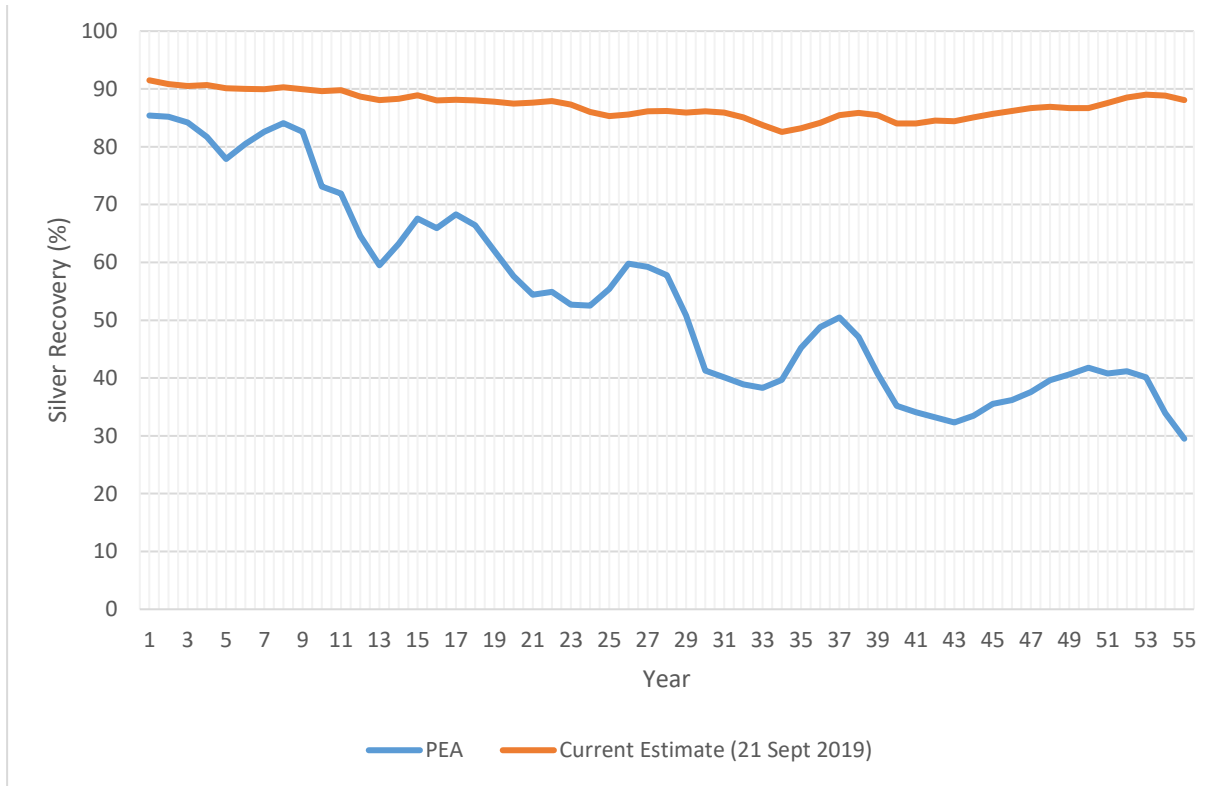
Based on Locked Cycle flotation and diagnostic leach tests (ALS).

### Gold Recovery Comparison - 21.6% Increase from PEA



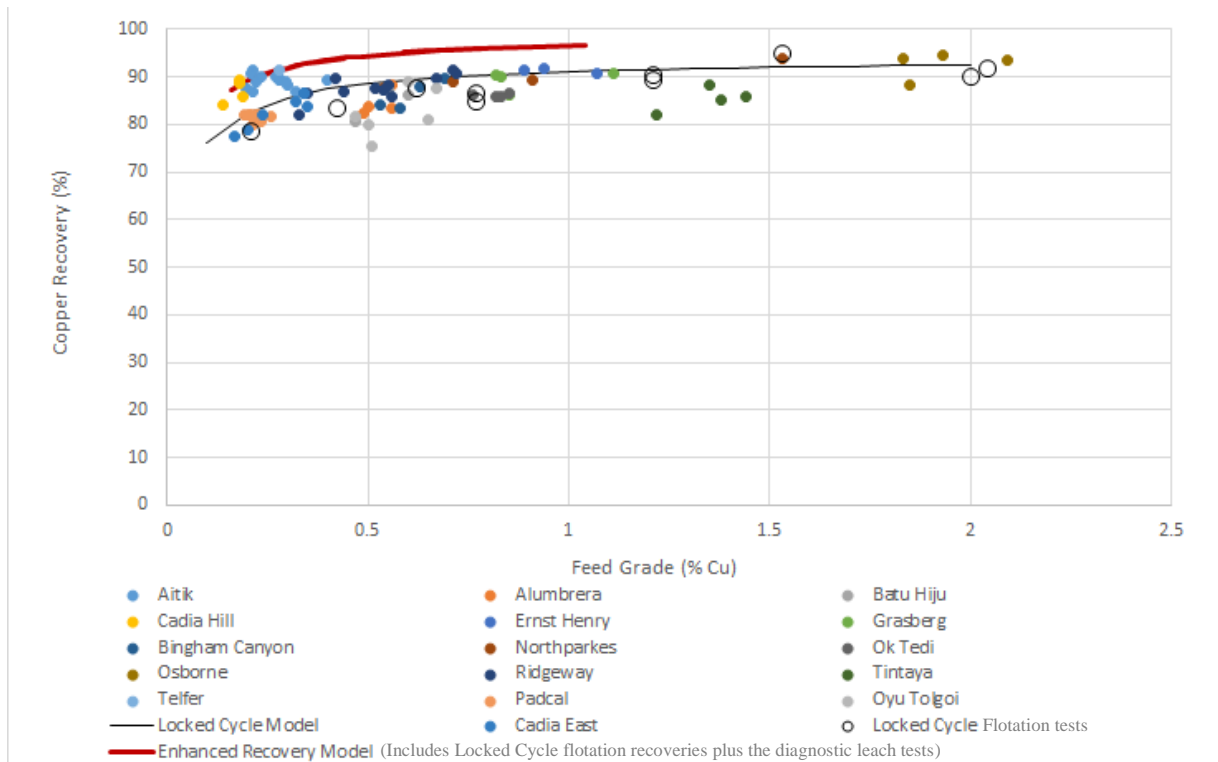
Based on Locked Cycle flotation and diagnostic leach tests (ALS)

## Silver Recovery Comparison – 28.3% Increase from PEA



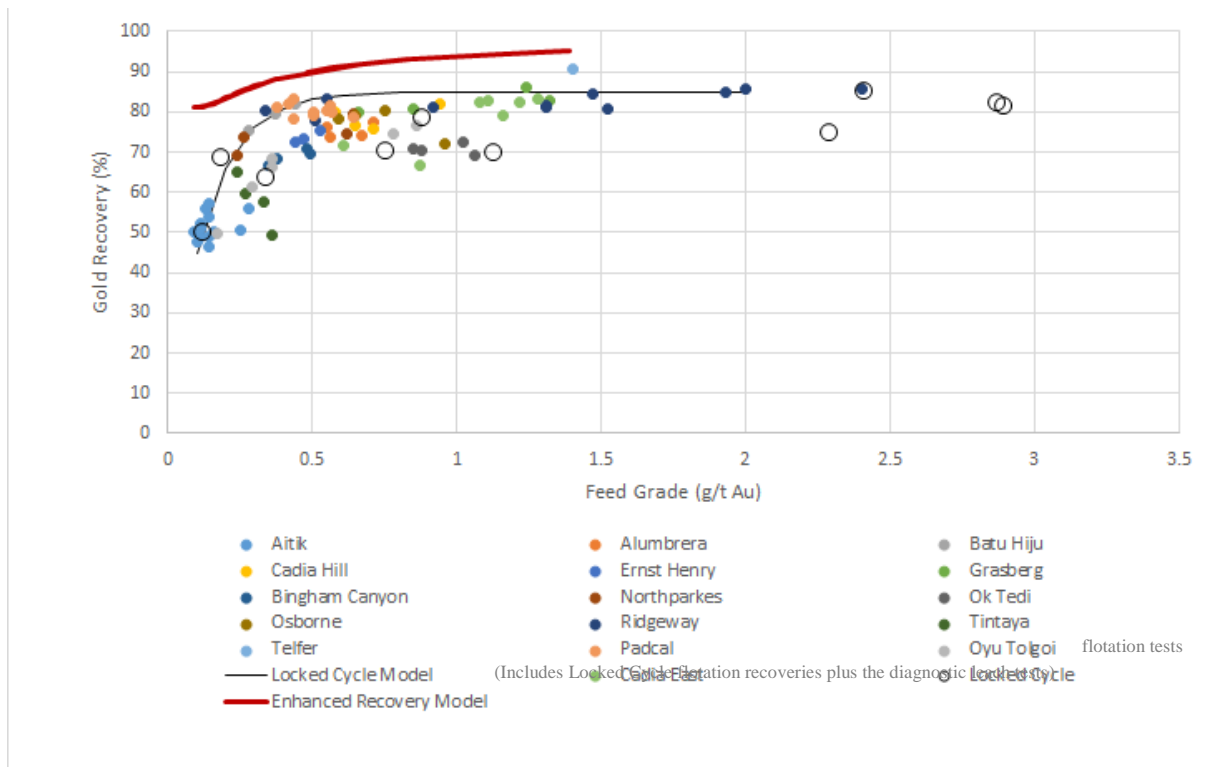
*Based on Locked Cycle flotation and diagnostic leach tests (ALS)*

### Copper Recovery Benchmarking



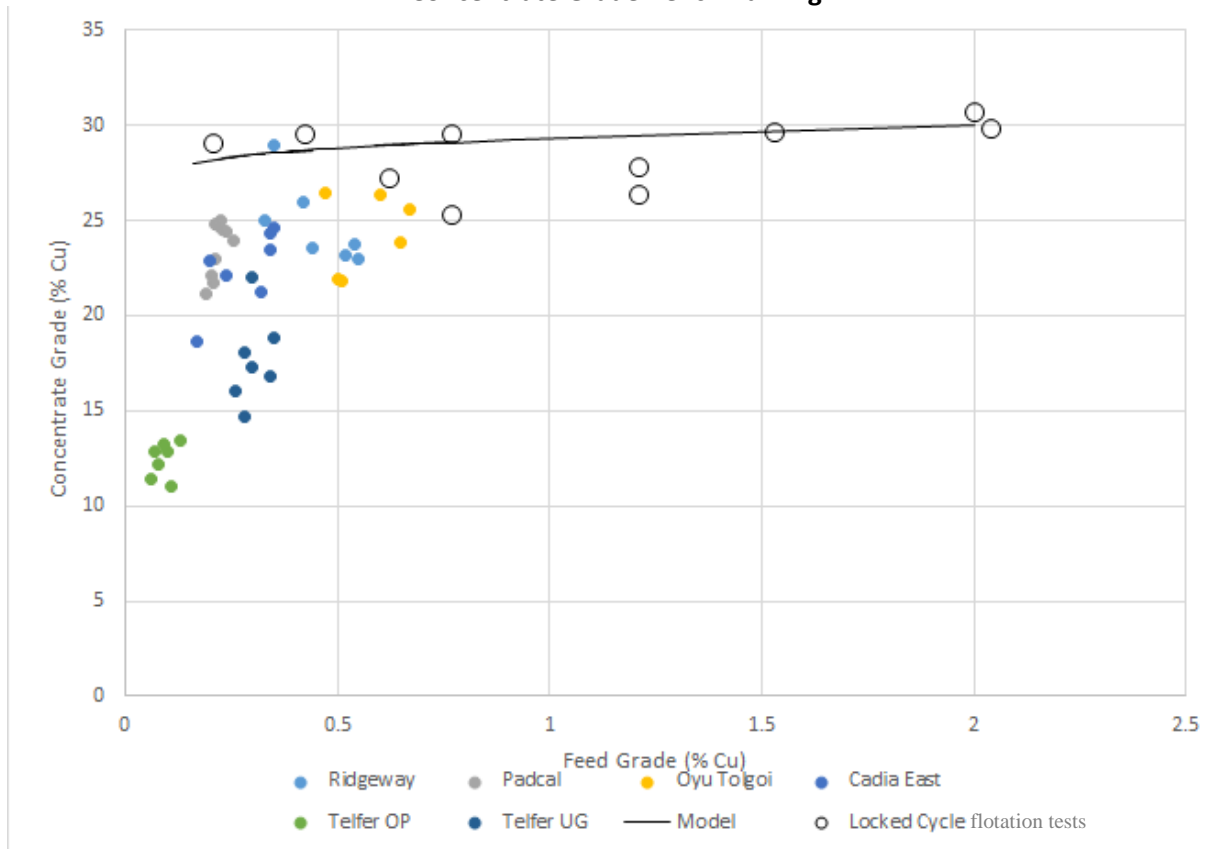
Data sourced from published third party Company Reports.

### Gold Recovery Benchmarking



Data sourced from published third party Company Reports.

### Concentrate Grade Benchmarking



Data sourced from published third party Company Reports.

In addition, Davis Tube Recovery (DTR) tests indicate that 60% of iron in tailing can be recovered to a rougher magnetic concentrate grading 50% Fe. This is comparable to operations where magnetite has been recovered as a by-product of copper treatment, such as Ernest Henry and Atlas Copper. Following regrind of concentrate it is anticipated that product grades >60% Fe can be achieved.

This is economically sensible plus also has a positive impact by reducing the material to be stored in tailing storage facilities.

#### Further Planned Test Work

During 2020 a pilot plant operation is planned, treating approximately 30 tonnes of core and coarse rejects. The material is currently being sourced and packaged. The pilot plant will allow for confirmation of the flowsheet at a larger design and provide copper sufficient concentrate to operate a molybdenum-rhenium recovery evaluation, conduct vendor thickening and filtration tests, measure rheological properties for concentrate pipeline design and measure transport moisture limits (TML) and supply samples for smelter evaluation. The large quantity of flotation tailing will allow testing of rougher recovery enhancements and magnetite recovery at a substantial scale, in addition to allowing for tailing deposition and environment tests. The production of significant pyrite concentrate allows for pilot testing of the cleaner recovery enhancement. The pilot is designed to be an effective blueprint for the first ten years of performance.

SolGold is continuing to assess any changes to CAPEX and OPEX to effect these increases in recoveries.

At the same time material flow tests will be conducted allowing for ore chute and stockpile design. It is anticipated that several hundred kilograms will also undergo ore sorting evaluation trials.



## Ore-Related Mineralogy drives excellent results

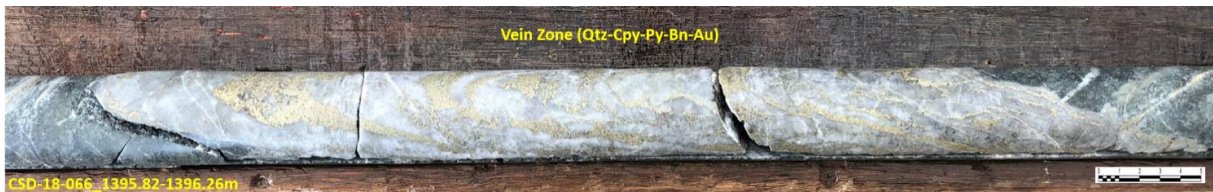
The mineralization of the Alpala deposit is considered a classic porphyry copper-gold system and the porphyry-related vein types and copper, gold and silver mineralization indicate a systematic development in time. Main-stage quartz veins typically contain chalcopyrite, magnetite and pyrite. Transitional-stage, chalcopyrite-rich veins (Figure 1) contain rare to minor bornite and cross-cut earlier vein types. These two vein types contribute to the majority of the gold, copper and silver in the deposit.

Late-stage, pyritic veins contain chalcopyrite, minor bornite and locally, molybdenite. Many of the later vein stages exploit and re-open earlier vein types. Anhydrite is a common vein constituent and re-opens earlier vein stages. Early-formed, hydrothermal magnetite occurs within main-stage quartz veins and as monomineralic veinlets, disseminated grains and replacements of magmatic hornblende. Magnetite is variably converted to metallic hematite and pyrite in the upper part of the deposit.

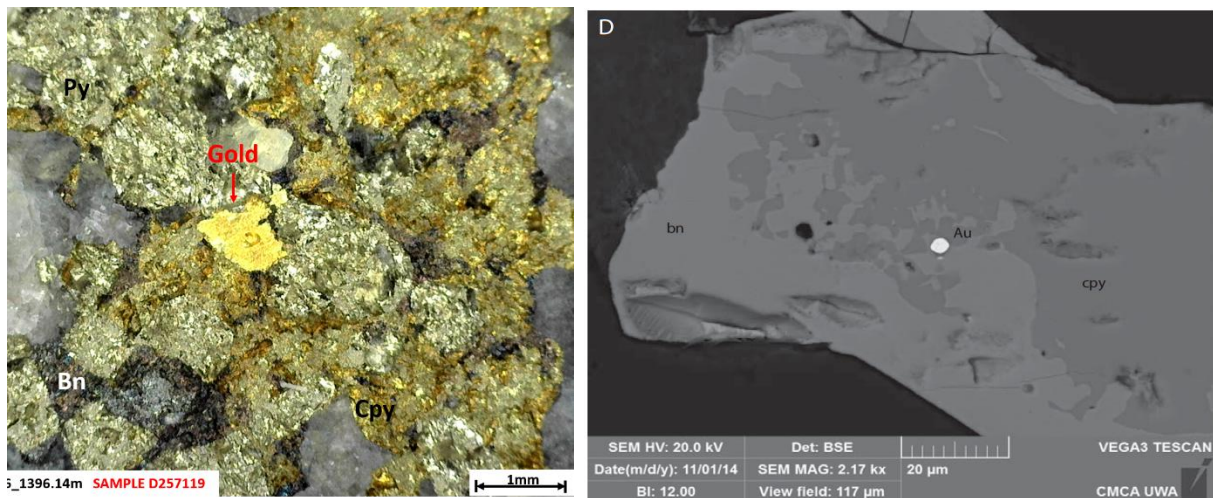
The earliest formed copper sulphide minerals observed in drill-core consists of abundant chalcopyrite and rare bornite in main-stage quartz veins. Chalcopyrite most commonly forms after, and surrounds, cubic and massive pyrite in transitional- and late-stage veins. It also occurs in anhydrite-rich veins and main-stage quartz veins that have been re-opened by later vein types. Bornite is in textural equilibrium with pyrite and chalcopyrite in transitional- and late-stage veins.

Scanning Electron Microscopy (SEM) techniques including Backscattered Electron (BSE) imaging and Energy Dispersive X-ray Spectroscopy (EDS) indicate that gold and silver occur as discrete grains of electrum (typically 60% to 85% Au, with the remainder as Ag) that range from 1 to 50 microns in diameter (Figure 2, right). Electrum is rarely coarse-grained and ranges up to 1000 microns (1.0 mm) in diameter (Figure 2, left). The electrum grains occur within chalcopyrite, bornite, pyrite and more rarely quartz and anhydrite. Grains of low-Ag gold (> 90% Au) that are 1 to 3 microns in diameter are associated with sulphide grains and occur locally within silicate gangue minerals.

In summary, the sulphide mineral ore assemblages at Alpala are characterized principally by chalcopyrite, pyrite and bornite, which are similar to the main-stage to transitional-stage sulphide mineral assemblages present at Grasberg, Indonesia and the El Salvador and Portrerillos mines in northern Chile. The simple chemical formulas of the ore minerals at Alpala contribute to enhanced metallurgical recoveries and clean concentrates that lack any significantly deleterious elements.



**Figure 1: Gold-bearing, chalcopyrite-rich quartz vein zone in CSD-18-066, 1395.8 m to 1396.3 m depth.**



**Figure 2: Left - Electrum (Au-Ag alloy) with chalcopyrite, pyrite and bornite in vein zone pictured in Figure 1; Right – Fine-grained electrum contained within chalcopyrite adjacent to bornite (BSE image).**

### Mineral Abundances Test Work in Cooperation with Dr. Ron Berry of CODES at the University of Tasmania (Hobart)

SolGold is working with Dr. Ron Berry of CODES at the University of Tasmania (Hobart) to calculate mineral abundances for chalcopyrite, bornite, pyrite, magnetite, hematite, anhydrite, calcite, chlorite, muscovite, kaolinite, pyrophyllite, montmorillonite, biotite, amphibole and other common silicate gangue minerals using the Company’s extensive database of four-acid digest geochemical results, ASD spectroscopy (TerraSpec 4), magnetic susceptibility and visual logging data.

To date, Dr. Berry has analyzed data that represents approximately 202 km of drill-core, including Aguinaga. The results of this analysis have been fed in to SolGold’s modelling process, such that several of these parameters will be included in 3D block models of the ore zones to provide improved geo-metallurgical and geotechnical constraints to the Alpala deposit.

Future work will include the electron microprobe analysis of the coarse rejects from about 20 drill-core samples distributed throughout the deposit to measure actual mineral compositions. This data will allow for more accurate estimates of the weight-percent mineral abundances in the 3D block model. In other words, SolGold will have a reasonable estimation of the abundances of sulphide- and oxide-minerals, clay-mica minerals, anhydrite and other minerals that typically effect blast dynamics, flotation kinetics, metal recoveries and other key aspects of mining and milling of porphyry-type ore.



## Market Abuse Regulation (MAR) Disclosure

Certain information contained in this announcement would have been deemed inside information for the purposes of Article 7 of the Regulation (EU) No 596/2014 until the release of this announcement.

### Qualified Person:

Information in this report relating to the exploration results is based on data reviewed by Mr Jason Ward ((CP) B.Sc. Geol.), the Chief Geologist of the Company. Mr Ward is a Fellow of the Australasian Institute of Mining and Metallurgy, holds the designation FAusIMM (CP), and has in excess of 20 years' experience in mineral exploration and is a Qualified Person for the purposes of the relevant LSE and TSX Rules. Mr Ward consents to the inclusion of the information in the form and context in which it appears.

By order of the Board  
Karl Schlobohm  
Company Secretary





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## ABOUT SOLGOLD

SolGold is a leading exploration company focussed on the discovery and definition of world-class copper and gold deposits. In 2018 SolGold's management team was recognised by the "Mines and Money" Forum as an example of excellence in the industry, and continues to strive to deliver objectives efficiently and in the interests of shareholders. SolGold is the largest and most active concession holder in Ecuador and is aggressively exploring the length and breadth of this highly prospective and gold-rich section of the Andean Copper Belt.

The Company operates with transparency and in accordance with international best practices. SolGold is committed to delivering value to its shareholders, while simultaneously providing economic and social benefits to impacted communities, fostering a healthy and safe workplace and minimizing the environmental impact.

### ***Dedicated stakeholders***

SolGold employs a staff of over 560 and at least 98% are Ecuadorean. This is expected to grow as the operations at Alpala, and in Ecuador generally, expand. SolGold focusses its operations to be safe, reliable and environmentally responsible and maintains close relationships with its local communities. SolGold has engaged an increasingly skilled and experienced team of geoscientists using state of the art geophysical and geochemical modelling applied to an extensive data base to enable the delivery of ore grade intersections from nearly every drill hole at Alpala. SolGold has 86 geologists, of which 11% are female, on the ground in Ecuador looking for copper and gold.

### **About Cascabel and Alpala**

The Alpala deposit is the main target in the Cascabel concession, located on the northern section of the heavily endowed Andean Copper Belt, the entirety of which is renowned as the base for nearly half of the world's copper production. The project area hosts mineralisation of Eocene age, the same age as numerous Tier 1 deposits along the Andean Copper Belt in Chile and Peru to the south. The project base is located at Rocafuerte within the Cascabel concession in northern Ecuador, an approximately three hour drive on sealed highway north of Quito, close to water, power supply and Pacific ports (**Figure 1**).

Having fulfilled its earn-in requirements, SolGold is a registered shareholder with an unencumbered legal and beneficial 85% interest in ENSA (Exploraciones Novomining S.A.) which holds 100% of the Cascabel concession covering approximately 50km<sup>2</sup>. The junior equity owner in ENSA is required to repay 15% of costs since SolGold's earn in was completed, from 90% of its share of distribution of earnings or dividends from ENSA or the Cascabel concession. It is also required to contribute to development or be diluted, and if its interest falls below 10%, it shall reduce to a 0.5% NSR royalty which SolGold may acquire for US\$3.5m.

Over 228,000m of diamond drilling has been completed on the project. With numerous rigs currently active on the project, SolGold produces up to approximately 10,000m of core every month. The Cascabel drill program is currently focussed on extending and upgrading the status of the Alpala Resource, as well as further drill testing of the rapidly evolving Aguinaga prospect. Drill testing of the Trivinio target has commenced, whilst the numerous other untested targets, namely at Moran, Cristal, Tandayama-America and Chinambicito, are flagged for drill testing as overall program demands allow.

The November 2018 Alpala MRE update, dated 15 November 2018, was estimated from 68,173 assays. Drill core samples were obtained from total of 133,576m of drilling comprising 128 diamond drill holes,



including 75 drill holes comprising, 34 daughter holes, 8 redrills, and 11 over-runs, and represents full assay data from holes 1-67 and partial assay data received from holes 68 to 75. In contrast, the Dec 2017 Maiden MRE was estimated from 26,814 assays obtained from 53,616m of drilling comprising 45 drill holes, including 10 daughter holes and 5 redrills.

The November 2018 Alpala updated Mineral Resource Estimate (MRE) totals a current:

- 2,050 Mt @ 0.60% CuEq (at 0.2% CuEq cut-off) in the Indicated category, and 900 Mt @ 0.35% CuEq (at 0.2% CuEq cut-off) in the Inferred category.
- Contained metal content of 8.4 Mt Cu and 19.4 Moz Au in the Indicated category.
- Contained metal content of 2.5 Mt Cu and 3.8 Moz Au in the Inferred category.

Investors should consult the technical report dated 3 January 2019 for a detailed account of the assumptions on which the estimates were based as well as any known legal, political, environmental and other risks that could materially affect the development of the resources.

### ***Getting Alpala advanced towards development***

The resource at the Alpala deposit boasts a high grade core which, in the event of the construction of a mine, is targeted to facilitate early cashflows and an accelerated payback of initial capital. SolGold is currently investigating development and financing options available to the company for the development of Cascabel on reaching feasibility.

The results of the PEA were published on 20 May 2019, highlighting the following key aspects:

- Net Present Value ("NPV") estimates range from US\$4.1Bn to US\$4.5Bn (Real, post-tax, @ 8% discount rate, US\$3.3/lb copper price, US\$1,300/oz gold price and US\$16/oz silver price) depending on production rate scenario.
- Internal Rate of Return ("IRR") estimates range from 24.8% to 26.5% (Real, post-tax, US\$3.3/lb copper price, US\$1,300/oz gold price and US\$16/oz silver price) depending on production rate scenario.
- Pre-production Capex estimated at approx. US\$2.4B to US\$2.8B, and total Capex including life of mine sustaining Capex of US\$10.1B to US\$10.5B depending on production rate scenario.
- Payback Period on initial start-up capital – Range from 3.5 to 3.8 years after commencement of production depending on production rate scenario.
- Preferred Mining Method – Underground low-cost mass mining using Block Cave methods applied over several caves designed on two vertically extensive Lifts.

Full results and all details of the PEA are available in the Company's market release of 20 May 2019.

### **SolGold's regional push**

SolGold is using its successful and cost efficient blueprint established at Alpala, and Cascabel generally, to explore for additional world class copper and gold projects across Ecuador. SolGold is the largest and most active concessionaire in Ecuador.

The Company wholly owns four other subsidiaries active throughout the country that are now focussed on thirteen high priority gold and copper resource targets, several of which the Company believes have the potential, subject to resource definition and feasibility, to be developed in close succession or even on a more accelerated basis from Alpala.

SolGold is listed on the London Stock Exchange and Toronto Stock Exchange (LSE/TSX: SOLG). SolGold is listed on the London Stock Exchange and Toronto Stock Exchange (LSE/TSX: SOLG). The Company has on issue a total of 1,846,321,033 fully-paid ordinary shares; 139,012,000 share options exercisable at 60p and 21,250,000 share options exercisable at 40p.



**Figure 1:** Location of Cascabel project in Imbabura Province, northern Ecuador, highlighting the significant capital advantages held by the project, with proximity to ports, road infrastructure, hydro-electric power stations and the trans-continental power grid.

See [www.solgold.com.au](http://www.solgold.com.au) for more information. Follow us on twitter @SolGold\_plc

#### CAUTIONARY NOTICE

News releases, presentations and public commentary made by SolGold plc (the "Company") and its Officers may contain certain statements and expressions of belief, expectation or opinion which are forward looking statements, and which relate, inter alia, to interpretations of exploration results to date and the Company's proposed strategy, plans and objectives or to the expectations or intentions of the Company's Directors. Such forward-looking and interpretative statements involve known and unknown risks, uncertainties and other important factors beyond the control of the Company that could cause the actual performance or achievements of the Company to be materially different from such interpretations and forward-looking statements.

Accordingly, the reader should not rely on any interpretations or forward-looking statements; and save as required by the exchange rules of the TSX and LSE or by applicable laws, the Company does not accept any obligation to disseminate any updates or revisions to such interpretations or forward-looking statements. The Company may reinterpret results to date as the status of its assets and projects changes with time expenditure, metals prices and other affecting circumstances.

This release may contain "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, but is not limited to, statements regarding the Company's plans for developing its properties. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved".

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: transaction risks; general business, economic, competitive, political and social uncertainties; future prices of mineral prices; accidents, labour disputes and shortages and other risks of the mining industry. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

The Company and its officers do not endorse, or reject or otherwise comment on the conclusions, interpretations or views expressed in press articles or third-party analysis, and where possible aims to circulate all available material on its website.



The Company recognises that the term "World Class" is subjective and for the purpose of the Company's projects the Company considers the drilling results at the growing Alpala Porphyry Copper Gold Deposit at its Cascabel Project to represent intersections of a "World Class" deposit. The Company considers that "World Class" deposits are rare, very large, long life, low cost, and are responsible for approximately half of total global metals production.

"World Class" deposits are generally accepted as deposits of a size and quality that create multiple expansion opportunities, and have or are likely to demonstrate robust economics that ensure development irrespective of position within the global commodity cycles, or whether or not the deposit has been fully drilled out, or a feasibility study completed.

Standards drawn from industry experts (1) Singer and Menzie, 2010; (2) Schodde, 2006; (3) Schodde and Hronsky, 2006; (4) Singer, 1995; (5) Laznicka, 2010) have characterised "World Class" deposits at prevailing commodity prices. The relevant criteria for "World Class" deposits, adjusted to current long run commodity prices, are considered to be those holding or likely to hold more than 5 million tonnes of copper and/or more than 6 million ounces of gold with a modelled net present value of greater than USD 1 Billion.

The Company and its external consultants prepared an initial mineral resource estimate at the Cascabel Project in December 2017. Results are summarised in **Table B** attached.

The Mineral Resource Estimate was completed from 53,616m of drilling, approximately 84% of 63,500m metres drilled as of mid-December 2017, the cut-off date for the maiden resource calculation. There remains strong potential for further growth from more recent drilling results, and continue rapid growth of the deposit.

Any development or mining potential for the project remains speculative.

Drill hole intercepts have been updated to reflect current commodity prices, using a data aggregation method, defined by copper equivalent cut-off grades and reported with up to 10m internal dilution, excluding bridging to a single sample. Copper equivalent grades are calculated using a gold conversion factor of 0.63, determined using an updated copper price of USD3.00/pound and an updated gold price of USD1300/ounce. True widths of down hole intersections are estimated to be approximately 25-70%.

On the basis of the drilling results to date and the results of the Alpala Maiden Mineral Resource Estimate, the reference to the Cascabel Project as "World Class" (or "Tier 1") is considered to be appropriate. Examples of global copper and gold discoveries since 2006 that are generally considered to be "World Class" are summarised in **Table A**.

#### References cited in the text:

1. Singer, D.A. and Menzie, W.D., 2010. *Quantitative Mineral Resource Assessments: An Integrated Approach*. Oxford University Press Inc.
2. Schodde, R., 2006. *What do we mean by a world class deposit? And why are they special*. Presentation. AMEC Conference, Perth.
3. Schodde, R and Hronsky, J.M.A, 2006. *The Role of World-Class Mines in Wealth Creation*. Special Publications of the Society of Economic Geologists Volume 12.
4. Singer, D.A., 1995, *World-class base and precious metal deposits—a quantitative analysis*: Economic Geology, v. 90, no.1, p. 88–104.
5. Laznicka, P., 2010. *Giant Metallic Deposits: Future Sources of Industrial Metal, Second Edition*. Springer-Verlag Heidelberg.

Deposit Name	Discovery Year	Major Metals	Country	Current Status	Mining Style	Inventory
LA COLOSA	2006	Au, Cu	Colombia	Feasibility - New Project	Open Pit	<sup>1</sup> 469Mt @ 0.95g/t Au; 14.3Moz Au
LOS SULFATOS	2007	Cu, Mo	Chile	Advanced Exploration	Underground	<sup>2</sup> 1.2Bt @ 1.46% Cu & 0.02% Mo; 17.5Mt Cu
BRUCEJACK	2008	Au	Canada	Development/Construction	Open Pit	<sup>3</sup> 15.6Mt @ 16.1 g/t Au; 8.1Moz Au
KAMOA-KAKULA	2008	Cu, Co, Zn	Congo (DRC)	Feasibility - New Project	Open Pit & Underground	<sup>4</sup> 1.3Bt @ 2.72% Cu; 36.5 Mt Cu
GOLPU	2009	Cu, Au	PNG	Feasibility - New Project	Underground	<sup>5</sup> 820Mt @ 1.0% Cu, 0.70g/t Au; 8.2Mt Cu, 18.5Moz Au
COTE	2010	Au, Cu	Canada	Feasibility Study	Open Pit	<sup>6</sup> 289Mt @ 0.90 g/t Au; 8.4Moz Au
HAIYU	2011	Au	China	Development/Construction	Underground	<sup>7</sup> 15Moz Au
RED HILL-GOLD RUSH	2011	Au	United States	Feasibility Study	Open Pit & Underground	<sup>8</sup> 47.6Mt @ 4.56 g/t Au; 7.0Moz Au
XILING	2016	Au	China	Advanced Exploration	Underground	<sup>9</sup> 383Mt @ 4.52g/t Au; 55.7Moz Au

Source: after MinEx Consulting, May 2017

<sup>1</sup> Source: <http://www.mining-technology.com/projects/la-colosa>

<sup>2</sup> Source: <http://www.angloamerican.com/media/press-releases/2009>

<sup>3</sup> Source: <http://www.pretivm.com/projects/brucejack/overview/>

<sup>4</sup> Source: <https://www.ivanhoemines.com/projects/kamoa-kakula-project/>

<sup>5</sup> Source:

[http://www.newcrest.com.au/media/resource\\_reserves/2016/December\\_2016\\_Resources\\_and\\_Reserves\\_Statement.pdf](http://www.newcrest.com.au/media/resource_reserves/2016/December_2016_Resources_and_Reserves_Statement.pdf)

<sup>6</sup> Source: <http://www.canadianminingjournal.com/news/gold-iamgold-files-cote-project-pea/>

<sup>7</sup> Source: <http://www.zhaojin.com.cn/upload/2015-05-31/580601981.pdf>

<sup>8</sup> Source: [https://mrdata.usgs.gov/sedau/show-sedau.php?rec\\_id=103](https://mrdata.usgs.gov/sedau/show-sedau.php?rec_id=103)

<sup>9</sup> Source: [http://www.chinadaily.com.cn/business/2017-03/29/content\\_28719822.htm](http://www.chinadaily.com.cn/business/2017-03/29/content_28719822.htm)

**Table A:** Tier 1 global copper and gold discoveries since 2006. This table does not purport to be exhaustive exclusive or definitive.

Grade Category	Resource Category	Tonnage (Mt)	Grade		Contained Metal			
			Cu (%)	Au (g/t)	CuEq (%)	Cu (Mt)	Au (Moz)	CuEq (Mt)
Total >0.2% CuEq	Indicated	2,050	0.41	0.29	0.60	8.4	19.4	12.2
	Inferred	900	0.27	0.13	0.35	2.5	3.8	3.2

**Table B:** Alcala Mineral Resource Estimate updated effective 16 November 2018.

#### Notes:

- Mr. Martin Pittuck, MSc, CEng, MIMMM, is responsible for this Mineral Resource estimate and is an "independent qualified person" as such term is defined in NI 43-101.
- The Mineral Resource is reported using a cut-off grade of 0.3% copper equivalent calculated using [copper grade (%)] + [gold grade (g/t) x 0.6] based on a copper price of US\$2.8/lb and gold price of US\$1,160/oz.
- The Mineral Resource is considered to have reasonable potential for eventual economic extraction by underground mass mining such as block caving.
- Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.



- *The statement uses the terminology, definitions and guidelines given in the CIM Standards on Mineral Resources and Mineral Reserves (May 2014).*
- *The MRE is reported on 100 percent basis.*
- *Values given in the table have been rounded, apparent calculation errors resulting from this are not considered to be material.*
- *The effective date for the Mineral Resource statement is 16 November 2018.*