

Completion of the Feasibility Study for the ATO Gold Project Successfully Demonstrates a Robust, Long Life Operation

ULAANBAATAR, MONGOLIA – October 27, 2021 – **Steppe Gold Ltd (TSX: STGO) (OTCQX:STPGF) (FSE:2J9) (“Steppe Gold” or the “Company”)** is pleased to announce the positive results of the Feasibility Study on the 100% owned ATO Gold Project in Mongolia (the “Feasibility Study”), comprising a further two years at the producing oxide phase and a 10.5 year expansion (“Phase 2 Expansion”), for a 12.5 year aggregate mine life. The results reinforce the Company’s current Phase 2 Expansion plans with construction already underway, and existing permitting and infrastructure in place.

All amounts are in US dollars unless otherwise indicated.

HIGHLIGHTS

- **Pre-Tax NPV_(5%) of \$320 million with an IRR of 109% and a Post-Tax NPV_(5%) of \$232 million with an IRR of 67%, driven by rapid payback of three years from initial capital outlay**
- **Total gross revenue of \$1.72 billion and EBITDA of \$584 million over 12.5 years, with first concentrate production anticipated in Q4 2023.**
- **106k oz of annual gold equivalent ounce production in years 1-5 of the Phase 2 Expansion, following depletion of the oxide zone**
- **Average site AISC of \$853/gold equivalent ounces, with solid plans to optimize, notably with grid power**
- **Initial capital expenditure, prior to optimisations, is expected to be \$128 million (including a \$12 million contingency)**
- **Phase 2 Expansion assumes processing 2.2 million tonnes per annum incorporating crushing, grinding and flotation of concentrates**
- **Gold recovery is forecast to be 79% with further recoveries of up to estimated 10% through CIP/CIL plant in later years**

Mr. Bataa Tumur-Ochir, President and CEO commented, “Following our highly encouraging resource update earlier this year, we are very pleased to share the Feasibility Study results. These results reinforce Steppe Gold’s commitment to creating shareholder value from our exciting and growing portfolio of precious metal assets. We are confident that our flagship asset, the ATO Gold Project, will deliver significant upside for all stakeholders with the robust economics from this project and infrastructure already in place.

The 2021 Feasibility Study highlights a positive economic project for the Phase 2 Expansion at the ATO Gold Mine. This has confirmed an expanded life of mine to 12.5 years producing gross revenues of \$1.72 billion, EBITDA of \$584 million with an initial capex of \$128 million and site AISC of \$853/oz of Au Eq.

With a conservative metal prices modelled, including \$1,610 per gold ounce, the ATO Gold Project is shown to deliver a solid set of results, featuring strong cash flows and a rapid payback of capital.

Importantly, Steppe Gold has already started construction work which will benefit the Phase 2 Expansion, with a new 2.5Mt per annum fixed crusher now being installed and expanded infrastructure underway. The Phase 2 Expansion project has all major permits in hand and we anticipate first concentrates in Q4 2023.

We have numerous plans underway to further optimize the Phase 2 Expansion to include planned connection to grid power, optimization of construction and engineering costs, and further exploration and remodelling to support higher conversion of resources to reserves.

Furthermore, with planned production in 2022 and 2023 for a total of 100k oz, at Site AISC of \$687/oz, from the oxide zone we have a strong position to source the required additional capital.

As communicated in previous shareholder updates, discussions with project lenders are advancing. Timely debt financing will allow the Phase 2 construction that is already underway, to continue uninterrupted."

Mr. Matthew Wood, Executive Chairman commented, "This very exciting study supports our long held view that the ATO Gold Project would show strong economics at conservative metal prices. We consider this to be a strong base line economic view for the project as currently scoped but we are most excited about the plans underway to continue improving on the scope, scale and economics of the project with expanded drilling, interpretation, cost savings measures and optimization of processing. We know we can improve on gold recovery overall and we have still only scratched the surface of the precious metals potential at the exciting Mungu deposit."

Table 1: Feasibility Study Highlights

<u>Return Metrics</u>		<u>Pre-Tax</u>	<u>After-Tax</u>
Net Present Value (5% Disc. Rate)	(\$'000s)	\$319,966	\$232,084
Internal Rate of Return	(%)	108.8%	66.6%
Payback Period	(years)	2.5	3.0
<u>Operating Costs</u>			
Total LOM Operating Cost	(\$'000s)	\$668,642	
Opex Ore Mined	\$/t ore	\$2.23	
Opex Waste Mined	\$/t waste	\$1.79	
Process Plant + Heap Leach OPEX	\$/t ore	\$13.17	
G&A	\$/t ore	\$5.51	
Total LOM Operating Cost	\$/t ore	\$25.64	

Cash Cost Metrics (\$/oz Au eq):

<u>Cash Costs (\$/oz)</u>	<u>Site AISC (AuEq)</u>
\$833	\$853

The technical report related to the Feasibility Study results will be filed on SEDAR within 45 days, in accordance with National Instrument 43-101 (“NI 43-101”) The study has been prepared with input from the following independent consultants:

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GeoRes	Mineral Resources
DRA Global Ltd	Mining, Mineral Reserves, Geochemistry, Processing Plant and Infrastructure
Ulzii Environmental LLC	Environmental and Social
Knight Piésold Pty Ltd	Tailings Facilities, Hydrology and Tailings Facility Geotechnical
DRA Global Ltd and CRU Consulting	Economic Evaluation / Financial Modelling

Tailings Management

The TSF has been designed by Knight Piésold Pty Ltd to ANCOLD guidelines and the Global Industry Standard on Tailings Management (GISTM). The TSF will comprise an initial starter cell of 3.6 Mt (18 month capacity) and with a final capacity of 14.8 Mt at an average annual throughput rate of 2.38 Mt/y. Subsequent to Stage 1, the TSF will be constructed in annual raises to suit storage requirements, however this may be adjusted to biennial raises to suit mine scheduling during the operation.

The ANCOLD Dam Failure Consequence Category is identified as ‘High C’ on the basis of a potential population at risk in the range of ‘≥1 to <10’ and a Severity Level of ‘Major’. An ANCOLD Environmental Spill Consequence Category of ‘Low’ was determined on the basis of a potential PAR being ‘<1’ and a severity level of ‘Medium’ in the event of a spillway discharge.

The TSF is located in a south-east facing valley approximately 2 km south-east of the pit and will comprise a high-density polyethylene (HDPE) lined cross-valley storage facility formed by multi-zoned earth fill embankment. Downstream raise construction methods will be utilised for all TSF embankment lifts. Construction materials for the TSF embankment will be principally sourced from local borrow material within the basin area and mine waste.

Tailings will be discharged into the TSF by sub-aerial deposition methods, using a combination of spigots at regularly spaced intervals from the TSF embankment and other specified locations, to locate the supernatant pond at the decant towers.

The site experiences low rainfall and average temperatures are below freezing for five (5) months of the year (November to March). A decant return / process water shortfall is expected to occur under average and design dry climatic conditions and all make-up water requirements will be provided by groundwater abstraction from the borefield.

As part of the operation of the TSF, extensive monitoring of all aspects of the operation should be undertaken.

Capital Costs

The estimated capital costs for the Phase 2 Expansion of the ATO Project were primarily built up from quotations and proposals from equipment and service providers. The Feasibility Study costs currently assume a contract mining fleet. All financial analysis for the Life of Mine includes the total design, construction and commissioning, production, and closure.

Project Opportunities

The Feasibility Study work has been completed based upon the development of the Phase 2 Expansion of the ATO Gold project with minimal tonnage from the Mungu deposit. Further exploration and development work on the Mungu resource, with an effective date of March 30, 2021, could further extend the life of the operation while utilising the same infrastructure and processing capabilities already in operation.

Table 2: ATO 2021 Mineral Reserve Estimate

The Mineral Reserve Estimate uses a base gold price of \$1,610/oz, silver price of \$21/oz, zinc price of \$2,515/t and lead price of \$1,970/t.

Category	Material	Ore	Grades					Contained Metal		
			AuEq	Au	Ag	Pb	Zn	Au	Ag	AuEq
		(kt)	(g/t)	(g/t)	(g/t)	(%)	(%)	(k oz)	(k oz)	(k oz)
Combined (ATO and Mungu)										
Proven	Oxide	1,618	1.54	1.45	12.81	0.54	0.40	75	666	80
	Fresh & Transition	13,277	2.10	1.26	8.58	0.53	0.94	536	3,657	897
Probable	Oxide	1,324	1.16	1.01	19.45	0.26	0.20	43	828	49
	Fresh & Transition	10,186	1.69	0.98	13.79	0.37	0.69	316	4,344	550
Proven & Probable	Oxide	2,942	1.37	1.25	15.80	0.41	0.31	118	1,494	130
	Fresh & Transition	23,462	1.93	1.14	10.78	0.46	0.84	849	8,002	1,448
Total		26,404						968	9,491	1,579
Average			1.86	1.14	11.18	0.46	0.78			

1. Mineral Reserves estimate was based on Measured and Indicated Resource Estimate by R. Rankin, QP and effective March 30, 2021.
2. ATO and Mungu Mineral Reserves are effective as of June 30, 2021
3. Mineral Reserves are included in Mineral Resources
4. Mineral Reserves are reported in accordance with CIM and NI 43-101 guidelines
5. Ore dilution is estimated at 3% and ore loss is 2%
6. Contained metal estimates have not been adjusted for metallurgical recoveries
7. The open pit mineral reserves are estimated using a cut-off grade of 0.42 g/t AuEq for oxide material and 0.45 g/t AuEq for transition and fresh material
8. Mineral Reserves are contained within an optimised pit shell based on a gold price of \$1,610 per ounce
9. A conversion factor of 31.103477 grams per troy ounce and a conversion factor of 453.59237 grams per pound are used in the resource and reserves estimates
10. AuEq has been calculated using the following metal prices: \$1,610/oz gold, \$21/oz silver, \$1,970/t lead, \$2,515/t zinc
11. Oxide AuEq calculation: $AUEQ_{(g/t)} = Au_{(g/t)} + \frac{Ag_{(g/t)} \times 21 \times 0.4}{1,610 \times 0.7}$
12. Transition and fresh AuEq calculation: $AuEq_{(g/t)} = Au_{(g/t)} + \frac{Ag_{(g/t)} \times 21 \times 0.858}{1,610 \times 0.8} + \frac{Pb_{(\%)} \times 1,970 \times 0.88}{1,610 \times 0.8} + \frac{Zn_{(g/t)} \times 2,515 \times 0.88}{1,610 \times 0.8}$
13. Totals may not match due to rounding
14. The Mineral Reserves are stated as dry tonnes processed at the crusher

The QPs are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially impact the Mineral Reserves Estimate.

Tim Fletcher (P. Eng.), David Frost (FAusIMM), Daniel Gagnon (P. Eng.), and Ghislain Prevost, (P. Eng.) from DRA Global Ltd, Richard Jupp from Knight Piesold Pty Ltd, Ulziibayar Dagdandorj and Dan Michaelsen (FAusIMM (CP)) from Ulzii Environmental LLC, and Robin Rankin (MSc DIC MAusIMM (CP)) are all Qualified Persons as defined by National Instrument 43-101, and have approved the scientific and technical information in this release. Mr. Robin Rankin was responsible for the mineral resource estimate of the Feasibility Study. Mr. Rankin confirmed that he has reviewed the information in this press release as it relates to the mineral resource estimate. The effective date of the mineral resource estimate is March 30, 2021.

The full technical report, which is being prepared in accordance with NI 43-101, will be available on SEDAR (www.sedar.com) under the Company's issuer profile within 45 days from this press release.

The technical and geoscientific content of this press release has been compiled, reviewed and approved by Enkhtuvshin Khishigsuren, Vice President of Exploration of the Company and a Qualified Person as defined in NI 43-101.

NON-IFRS PERFORMANCE MEASUREMENT

Non-IFRS Performance Measurement: Earnings before interest, taxation, depreciation and amortisation ("EBITDA") and all-in sustaining cost (AISC) are non-IFRS performance measurements. C1 cash costs and AISC are included because these statistics are widely accepted as the standard of reporting cash costs of production in North America. These performance measurements do not have a meaning within IFRS and, therefore, amounts presented may not be comparable to similar data presented by other mining companies. These performance measurements should not be considered in isolation as a substitute for measures of performance in accordance with IFRS.

COVID-19

The health and safety of our employees, contractors, vendors, and consultants is the Company's top priority. In response to the COVID-19 outbreak, Steppe Gold has adopted all public health guidelines regarding safety measures and protocols at all of its mine operations and corporate offices. In addition, our internal COVID-19 Taskforce continues to monitor developments and implement policies and programs intended to protect those who are engaged in business with the Company.

Through care and planning, to date the Company has successfully maintained operations, however there can be no assurance that this will continue despite our best efforts. Future conditions may warrant reduced or suspended production activities which could negatively impact our ability to maintain projected timelines and objectives. Consequently, the Company's actual future production and production guidance is subject to higher levels of risk than usual. We are continuing to closely monitor the situation and will provide updates as they become available.

About Steppe Gold

Steppe Gold is Mongolia's premier precious metals company.

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Cautionary Note Regarding Forward-Looking Information

This news release contains "forward-looking information" within the meaning of applicable Canadian securities laws, which may include, but is not limited to, statements with respect to the future financial or operating performance of the Company and its projects. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "estimates", "forecasts" or variations (including negative 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, and includes information regarding the Company's estimates, expectations, forecasts, capital costs and other information contained in this news release. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements contained herein are made as of the date of this press release and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances, management's estimates or opinions should change, except as required by securities legislation. Accordingly, the reader is cautioned not to place undue reliance on forward-looking statements.

The Toronto Stock Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of the content of this news release.