

# ERDENE ANNOUNCES 2019 FINANCIAL RESULTS AND PROVIDES KHUNDII GOLD PROJECT UPDATE

#### **Press Release**

Halifax, Nova Scotia 2020.03.17

Erdene Resource Development Corp. (TSX:ERD; MSE:ERDN) ("Erdene" or the "Company") announces operating and financial results for the year ended December 31, 2019, and provides an update on its Khundii Gold Project, including potential impacts of the novel coronavirus (COVID-19). This release should be read in conjunction with the Company's 2019 Financial Statements and MD&A, available on the Company's website or SEDAR.

### Quotes from the Company:

"Erdene's exploration and pre-development successes over the past year have positioned the Company to advance rapidly through the initial stages of the Bankable Feasibility Study ("BFS") for the high-grade, near-surface, Khundii Gold Project," said Peter Akerley, Erdene's President and CEO. "During the past year we delivered both the Preliminary Economic Assessments ("PEA") for two deposits and the Pre-Feasibility Study ("PFS") for Bayan Khundii, established an open-pit mineable reserve of over 400,000 ounces grading 3.7 g/t gold, secured two mining licenses, registered water resources, obtained land use permits and added ounces through exploration."

"With the financial support of the European Bank for Reconstruction and Development ("EBRD"), we remain committed to Mongolia's growth and development, the generation of strong return for our investors, and shared benefits for all our stakeholders in Mongolia and internationally," continued Mr. Akerley. "We remain on track for delivery of the BFS in mid-2020, with permitting and development readiness activities ongoing in advance of financing and construction decisions in 2020, targeting first gold production as early as 2021."

## 2019 Highlights and Subsequent Events:

## Potential Impacts of COVID-19 on the Khundii Gold Project

In late January 2020, Erdene adopted protective measures which included travel restrictions, instituted remote working and extended health care support for our Mongolian and international teams to minimize the impact of COVID-19 on staff, stakeholders and our operations. Although we remain largely on track for the delivery of the BFS, there is the potential for delays, which we are closely monitoring. We will provide updates on our actions and the implications to our Company of COVID-19 as further information becomes available.

## Khundii Gold Project – 100% Erdene

- > Announced robust results within a NI 43-101 Technical Report led by Tetra Tech, Inc, comprised of the Bayan Khundii ("BK") PFS and an updated Altan Nar ("AN") PEA (results at US\$1,300/oz gold price, unless noted):
  - > Post-tax Net Present Value at a 5% discount rate ("NPV5%") of US\$97 million and a 42% Internal Rate of Return ("IRR") for the BK PFS.
  - > Post-tax NPV5% of US\$144 million and 58% IRR at current (US\$1,500/oz) gold prices for the BK PFS.



- > Incremental post-tax NPV5% and IRR of US\$24 million and 92%, respectively, for the updated AN PEA, reflecting the second phase of the development utilizing BK infrastructure.
- > BK Life of Mine ("LOM") Earnings Before Interest, Taxes and Depreciation of US\$211 million.
- > LOM head grade of 3.73 g/t gold for the BK PFS and 3.46 g/t gold for the updated AN PEA.
- > BK Measured and Indicated Resources of 520,700 ounces gold at an average grade of 3.16 g/t gold, a 20% increase from the September 2018 resource estimate.
- > BK Proven and Probable Reserves of 422,000 ounces gold at an average grade of 3.7 g/t gold.
- > Project life of 11 years, comprising of a one-year pre-production period, six-year operating life for BK, three-year operating life for AN, and one-year mine closure.
- > Average annual gold production of 61,000 ounces in the BK PFS and 45,300 ounces of gold and 205,000 ounces of silver in the updated AN PEA.
- > All-in sustaining cost ("AISC") of US\$746/ounce of gold recovered for the BK PFS, and for the updated AN PEA, US\$931/ounce of gold equivalent (see press release dated October 21, 2019 for "AuEq" definition).
- > BK PFS Initial Capital US\$40 million and US\$2 million incremental capital at year-7 for AN PEA.
- > Payback period of less than two years for the BK PFS.
- > Significant benefits to Mongolia, including royalties and taxes of US\$82 million for LOM and 300 local jobs.
- > Launched the BFS and Front-End Engineering and Design ("FEED") in December 2019 required for permitting, project finance, and board approval to commence construction of the Khundii Gold Project:
  - > Studies will be delivered by a consortium of international and Mongolian consultants and will incorporate an updated mine design study, FEED for the processing plant and associated infrastructure, a hydrogeological study, detailed waste management plans, and an updated economic model.
  - > BFS results scheduled to be announced in mid-2020.
- > Received the Khundii Mining License on August 5, 2019, and the Altan Nar Mining License on March 5, 2020:
  - > Mining licenses are valid for an initial term of 30 years and can be extended to 70 years, providing long-term tenure over the land package underpinning the Khundii Gold District.
- > Completed hydrological drilling and established water resources for the Khundii Gold Project:
  - > During 2019, five (5) process-water production boreholes were established within 3.2 kilometres of the proposed location of the Bayan Khundii processing facility.
  - > A water resource sufficient to meet the anticipated process plant requirement for the life of the BK facility has been registered and approved by the Ministry of Environment and Tourism.
  - > Water well has been established, registered and approved within 200 metres of the proposed camp.
- > Concluded the BFS geotechnical drill program in Q4 2019 for Bayan Khundii:
  - > Six (6) geotechnical drill holes (745 metres) were bored in Q4 2019 to assess the strength and stability of the various lithologies within the proposed Bayan Khundii open-pit.
  - > Results will be incorporated into the BFS and are expected to result in a safe steepening of pit walls, as the PFS slopes were conservative in the absence of geotechnical data.
- > Conducted additional metallurgical testing on Bayan Khundii ore:
  - > Blue Coast Research in British Columbia, Canada, performed further testing to optimize the comminution (grinding) circuit; to determine the ideal grind size for optimized gold recovery; determine the most efficient dewatering procedures to maximize water recovery; determine carbon adsorption characteristics; optimize percent solids of the process plant slurry, and; detoxification test work designed to minimize cyanide in tailings.
  - > Test work to date confirmed the high recovery rates of gold across the BK deposit and largely corroborated key assumptions in the comminution and tailings handling circuits of the proposed process plant.



- > Initiated procurement work-stream for the BFS costing:
  - > Request for Proposal packages for key plant and equipment have been developed and are scheduled to be released to pre-qualified suppliers and contractors within the next two weeks.
  - > Responses are due to be received by mid Q2.
- > Advanced the Environmental and Social Impact Assessment ("ESIA"), led by Sustainability East Asia LLC:
  - > The study assessed potential impacts on local climate and air quality, water resources, traffic, and the economy in the context of nearby communities and on-site personnel, and is largely complete.
  - > Given the Project's modest initial scale and industry-leading avoidance and mitigation measures, benefits are expected to outweigh the low and moderate residual anticipated impacts from operations.
  - > The ESIA is expected to be disclosed in the first half of 2020, following Board and lender reviews.
  - > The Mongolian statutory Detailed Environmental Impact Assessment ("DEIA) for BK, built upon the ESIA, is mainly complete in advance of the public consultation, which is scheduled to take place in H1 2020.
- > Obtained several key permits and regulatory approvals required for construction:
  - > Mineral Resource and Petroleum Authority approved the BK Statutory Technical and Economic Assessment ("Mongolian Feasibility Study").
  - > Mongolian Ministry of Environment and Tourism approved a water reserve and flow rate to be utilized for the planned processing plant and infrastructure of the Khundii Gold Project.
  - > Land Arrangement Plan is approved by the local community granting access to the 100-hectare area required to construct the BK open-pit and associated surface infrastructure.

# **Exploration**

- > Completed the 2019 exploration campaign, drilling 22 holes totaling 4,367 metres at Bayan Khundii and Altan Nar which returned some of the highest grade intersections\* to date:
  - > Bayan Khundii Midfield Zone: Confirmation drilling for the PFS Resource intersected 112 metres of 5.9 g/t gold, including 8 metres of 45 g/t gold and 1 metre intervals of 81, 95 and 129 g/t gold at BKD-261
  - > Bayan Khundii Striker and Midfield Zones: Definition drilling intersected 32 metres of 2.4 g/t gold in BKD-269 and 37 metres of 1.7 g/t gold in BKD-270 demonstrating continuity of mineralization within the BK deposit.
  - > Bayan Khundii South Extension: Step-out drilling, under cover, 350 metres south of the BK deposit. BKD-268 intersected anomalous gold mineralization up to 1 metre of 2.45 g/t gold within the same altered volcanic unit which hosts the high-grade BK gold deposit.
  - > Altan Nar Discovery Zone: Expanded the high-grade portion of the Central Gap Zone with 45.7 g/t gold, 93.4 g/t silver, 1.54% lead and 3.40% zinc over 7 metres beginning at approximately 70 metres vertical depth, within 23 metres grading 17 g/t gold at TND-135.
  - > Altan Nar Discovery Zone: Confirmed high-grade mineralization north of the Gap Zone with 12.2 g/t gold over 10 metres, including 2 metres of 52.9 g/t gold at TND-134 and 10 metres of 4.68 g/t gold at TND-138.
  - > Dark Horse (Khar Mori) New, high-grade gold discovery on the Khundii Mining license, 3.5 kilometres north of the BK deposit, with high-grade surface rock samples grading up to 87.8 g/t gold.

#### **Corporate**

> Raised C\$11.9 million in 2019 through a convertible loan and equity financings to complete the Bayan Khundii Gold Project Pre-Feasibility and Feasibility Studies, the repurchase of the Sandstorm NSR royalty, exploration and general working capital:

<sup>\*\*</sup> Result intervals (metres) represent measured widths – please refer to individual news releases for projected true widths.



- > Closed a US\$5 million (C\$6.6 million) convertible loan financing with the European Bank for Reconstruction and Development ("EBRD") in November 2019.
- > Raised \$5.3 million in equity through a series of non-brokered private-placement offerings.
- > Current working capital of \$3.8 million will fund the Company through completion of the Bankable Feasibility Study.
- > Repurchased 50% of the Khundii NSR royalty from Sandstorm Gold on April 12, 2019:
  - > The implied value of the NSR royalty is well in excess of the C\$1.2 million repurchase price.
- > Recorded a net loss of \$2,683,292 for the year ended December 31, 2019, compared to a net loss of \$3,656,990 for the year ended December 31, 2018:
  - > Exploration and Evaluation expenditures, including capitalized costs, of \$6,694,914 in 2019 exceeded costs of \$5,958,692 for the prior year as increased technical consultant costs associated with the Khundii Gold Project PEA, the Bayan Khundii PFS and the updated Altan Nar PEA more than offset lower exploration activity.
  - > Corporate and administrative expenses, excluding non-cash, share-based compensation and depreciation were \$1,142,956 in 2019 versus \$1,407,536 in 2018 primarily due to lower staffing costs as a result of personnel changes and reduced marketing spend.

# Potential Impacts of COVID-19 on the Khundii Gold Project

In late January 2020, Erdene initiated measures, including travel restrictions, remote work and supplemental health care for our Ulaanbaatar based and international staff in response to the reported spread of the COVID-19 virus. These measures have been recently expanded to include our Canadian head office staff following Canadian federal and provincial Government advice. Since mid-January, the Mongolian government has restricted the movement of people and goods within the country, as well as internationally in an effort to protect its citizens from the virus.

Although the full impact of the COVID-19 virus will not be known for some time, the Company remains largely on track for the delivery of its BFS by mid-2020. Permitting and exploration also continues, though travel and public gathering restrictions have led to delays. Further details on potential impacts the Company is monitoring are as follows:

- > Bankable Feasibility Study: The BFS is well progressed with the remaining work-streams largely desktop focused, following the completion of field based and laboratory studies in late 2019 and early 2020. Costing work can be completed remotely, and procurement is focused on Chinese and Mongolian vendors, where restrictions related to COVID-19 have been recently relaxed. Although minor delays are anticipated in finalizing the BFS, Erdene continues on track to announce results of the BFS in mid-2020, and delivery of the full study within 45 days of the announcement.
- > Permitting: The Ulaanbaatar based team continues to make significant progress on permitting, as evidenced by the recent receipt of the Altan Nar mining license. Restrictions around public gatherings are delaying a public meeting required for the development approval of the DEIA; however, Erdene has received the preliminary signoff from the Ministry. Assuming no further restrictions are enacted, permitting is expected to remain on track.
- > Exploration and Field Activities: Following the successful exploration results announced in January 2020, work over the past few months has been desktop focused. Mapping, geochemical and geophysical surveys are planned for Q2 at the Dark Horse project assuming no travel restrictions. Surveying work is also expected to commence this week in support of permitting.
- > Liquidity and Financing: With the receipt of the proceeds from the US\$5 million EBRD convertible loan financing in November 2019, Erdene is fully funded through the delivery of the BFS. The Company intends to secure project



finance in 2020 but recognizes the potential for delays given current market condition. Erdene is implementing costs saving measures and developing contingencies to maintain momentum and protect its key assets.

# **Background on the Khundii Gold Project Development**

Erdene's deposits are located in the Edren Terrane, within the Central Asian Orogenic Belt, host to some of the world's largest gold and copper-gold deposits. The Company has been the leader in exploration in southwest Mongolia over the past decade and is responsible for the discovery of the Khundii Gold District comprised of multiple high-grade gold and gold/base metal prospects, two of which are being considered for development: the 100%-owned Bayan Khundii and Altan Nar projects. Together, these deposits comprise the Khundii Gold Project.

In October of 2019, Erdene announced the results of an independent Technical Report for the Khundii Gold Project (press release here), which included a Pre-feasibility Study ("PFS") for the Bayan Khundii deposit and an updated Preliminary Economic Assessment ("PEA") for the Altan Nar deposit. The PFS and the updated PEA results include an after-tax Net Present Value at a 5% discount rate and a US\$1,300/oz gold price of US\$97 million and US\$24 million, Internal Rate of Return ("IRR") of 42% and 90% for Bayan Khundii and Altan Nar deposits, respectively. The PFS envisions an open-pit mine at Bayan Khundii from Years 0-7, producing an average of 61,000 oz gold per year at a head grade of 3.73 g/t gold, and an open-pit operation at Altan Nar during Years 7-10, for an average annual production of 48,000 oz gold at an average head grade of 3.46 g/t gold, utilizing a conventional Carbon In Pulp processing plant at the Bayan Khundii mine. Erdene has secured a mining license for the Bayan Khundii deposit in August of 2019 and plans to start producing gold in late 2021.

The Altan Nar PEA is by nature, a preliminary economic study, based in part on Inferred Resources. Inferred Resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, which is required for a pre-feasibility or feasibility study. Mineral resources that are not mineral reserves do not have demonstrated economic viability and there is no certainty that the PEA will be realized.

# **Qualified Person and Sample Protocol**

Peter Dalton, P.Geo. (Nova Scotia), Senior Geologist for Erdene, is the Qualified Person as that term is defined in National Instrument 43-101 and has reviewed and approved the technical information contained in this news release. All samples have been assayed at SGS Laboratory in Ulaanbaatar, Mongolia. In addition to internal checks by SGS Laboratory, the Company incorporates a QA/QC sample protocol utilizing prepared standards and blanks. All samples undergo standard fire assay analysis for gold and ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) analysis for 33 additional elements. For samples that initially return a grade greater than 5 g/t gold, additional screen-metallic gold analysis is carried out which provides a weighted average gold grade from fire assay analysis of the entire +75 micron fraction and three 30-gram samples of the -75 micron fraction from a 500 gram sample.

Erdene's drill core sampling protocol consisted of collection of samples over 1 or 2 m intervals (depending on the lithology and style of mineralization) over the entire length of the drill hole, excluding minor post-mineral lithologies and un-mineralized granitoids. Sample intervals were based on meterage, not geological controls or mineralization. All drill core was cut in half with a diamond saw, with half of the core placed in sample bags and the remaining half securely retained in core boxes at Erdene's Bayan Khundii exploration camp. All samples were organized into batches of 30 including a commercially prepared standard, blank and either a field duplicate, consisting of two quarter-core intervals, or a laboratory duplicate. Sample batches were periodically shipped directly to SGS in Ulaanbaatar via Erdene's logistical contractor, Monrud Co. Ltd.



#### **About Erdene**

Erdene Resource Development Corp. is a Canada-based resource company focused on the acquisition, exploration, and development of precious and base metals in underexplored and highly prospective Mongolia. The Company has interests in three mining licenses and three exploration licenses in Southwest Mongolia, where exploration success has led to the discovery and definition of the Khundii Gold District. Erdene Resource Development Corp. is listed on the Toronto and Mongolia stock exchanges. Further information is available at <a href="https://www.erdene.com">www.erdene.com</a>. Important information may be disseminated exclusively via the website; investors should consult the site to access this information.

# **Forward-Looking Statements**

Certain information regarding Erdene contained herein may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements may include estimates, plans, expectations, opinions, forecasts, projections, guidance or other statements that are not statements of fact. Although Erdene believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to have been correct. Erdene cautions that actual performance will be affected by several factors, most of which are beyond its control, and that future events and results may vary substantially from what Erdene currently foresees. Factors that could cause actual results to differ materially from those in forward-looking statements include potential impacts of COVID-19 on the Company's operations, ability to obtain required third party approvals, market prices, exploitation and exploration results, continued availability of capital and financing and general economic, market or business conditions. The forward-looking statements are expressly qualified in their entirety by this cautionary statement. The information contained herein is stated as of the current date and is subject to change after that date. The Company does not assume the obligation to revise or update these forward-looking statements, except as may be required under applicable securities laws.

#### NO REGULATORY AUTHORITY HAS APPROVED OR DISAPPROVED THE CONTENTS OF THIS RELEASE

#### **Erdene Contact Information**

Peter C. Akerley, President and CEO, or Robert Jenkins, CFO

Phone: (902) 423-6419

Twitter: https://twitter.com/ErdeneRes

Facebook: https://www.facebook.com/ErdeneResource

LinkedIn: <a href="https://www.linkedin.com/company/erdene-resource-development-corp-/">https://www.linkedin.com/company/erdene-resource-development-corp-/</a>

YouTube: https://www.youtube.com/channel/UCILs5s9j3SLmya9vo2-KXoA