



## **MANAGEMENT'S DISCUSSION AND ANALYSIS**

For the three and nine months ended September 30, 2022, and 2021

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Three and nine months ended September 30, 2022

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*This Management Discussion and Analysis (“MD&A”), dated November 2, 2022, relates to the operating results and financial condition of Erdene Resource Development Corporation (“Erdene” or the “Company” or the “Corporation”) and should be read in conjunction with the Corporation’s unaudited condensed consolidated interim financial statements for the three and nine months ended September 30, 2022 and 2021, audited consolidated financial statements for the years ended December 31, 2021 and 2020, and the notes thereto. The consolidated financial statements of the Corporation have been prepared in Canadian dollars in accordance with International Financial Reporting Standards (“IFRS”).*

*This discussion includes certain statements that may be deemed “forward-looking statements”. All statements in this discussion, other than statements of historical fact, that address reserve potential, exploration drilling, exploitation activities, budgeted financial results and events or developments that the Corporation expects, are forward-looking statements. Although the Corporation believes the expectations expressed in such forward-looking statements are based on reasonable assumptions (including, but not limited to, assumptions in connection with the continuance of the Corporation and its subsidiaries as a going concern, general economic and market conditions, mineral prices, and the accuracy of mineral resource estimate), such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, exploration and evaluation results, continued availability of capital and financing and general economic, market or business conditions.*

*The risk factors identified above are not intended to represent a complete list of the factors which could affect the Corporation. Additional factors are noted under “Risk Factors” in the Corporation’s latest Annual Information Form, a copy of which is available on the Corporation’s SEDAR document page at [www.sedar.com](http://www.sedar.com).*

*Any financial outlook or future-oriented financial information in this MD&A, as defined by applicable securities legislation, has been approved by management of the Corporation as of the date of this MD&A. Such financial outlook or future oriented financial information is provided for the purpose of providing information about management’s current expectations and plans relating to the future. Readers are cautioned that such outlook or information should not be used for purposes other than for which it is disclosed in this MD&A.*

*In preparing this MD&A, the Corporation makes reference to “Exploration and evaluation expenditures”, a non-GAAP financial performance measure. Management believes Exploration and evaluation expenditures, comprised of capitalized and operating expenditures attributable to exploration and evaluation activities, is a valuable indicator of the total investment in the Corporation’s properties for the period of the financial statements. For a detailed reconciliation of this non-GAAP financial performance measure to the most directly comparable measures under IFRS, please see page 16 of this MD&A. The non-GAAP financial performance measure set out in this MD&A is intended to provide additional information to investors and does not have any standardized meaning under IFRS, and therefore may not be comparable to other issuers, and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.*

## Company Overview

Erdene Resource Development Corporation is a Canadian based resource company focused on the acquisition, exploration, and development of large, high-grade, near surface, precious and base metals deposits in underexplored and highly prospective Mongolia. The Company holds three mining licenses and an exploration license in southwest Mongolia, where exploration success has led to the discovery of the Khundii Gold District (“KGD”). The Company is focused on advancing its high-grade, open-pit Bayan Khundii gold project (“Bayan Khundii” or “BK”) to production, while expanding resources in the KGD. Erdene is listed on the Toronto Stock Exchange (TSX: ERD) and Mongolian Stock Exchange (MSE: ERDN).

Erdene’s deposits are located in the Trans Altai Terrane within the Central Asian Orogenic Belt, host to some of the world’s largest gold and copper-gold deposits. Although epithermal gold and porphyry copper-gold deposits are well documented in China and along the Belt’s western trend, exploration in Mongolia was limited until the mid-1990’s, when the country opened to foreign investment. Since that time, the world-class Oyu Tolgoi copper-gold deposit has been developed by Rio Tinto in Southeast Mongolia, and Erdene has discovered the KGD in the country’s southwest. Within the KGD, the Company has discovered multiple high-grade gold and base metal deposits and prospects, two of which are being developed: Bayan Khundii and Altan Nar (“AN”). In addition, the Company holds a large molybdenum-copper resource at its 100% owned Zuun Mod project, 33 kilometres east of Bayan Khundii.

During 2021, the Corporation made new discoveries at the Dark Horse and Ulaan Southeast (SE) prospects, located within 3 kilometres of Bayan Khundii. At Dark Horse, located 2.4 km north of Bayan Khundii, multiple holes intersected high-grade, near-surface gold, along a 1.5 km mineralized trend (Dark Horse Mane), that remains open along strike and at depth. Drilling at Ulaan SE, immediately west of the Bayan Khundii Project, intersected the thickest intervals of gold mineralization encountered in the KGD to date, including exceptionally high-grade zones. These discoveries support Erdene’s thesis that the Khundii-Ulaan alteration trend could host a multimillion-ounce gold deposit, which would significantly increase production from the Bayan Khundii Gold Project. Additionally, the presence of very high-grade oxide material that appears amenable to heap leach processing provides optionality for future development. Engineering work is underway to assess the changes required to fast track and scale up operations.

The Company announced results of an independent Bankable Feasibility Study (“BFS”) for BK in 2020, and since this time has progressed permitting, procurement, and construction readiness activities in advance of a construction decision. Over the past twelve months, Erdene has received regulatory approval for the Project’s detailed design, secured construction permits for the majority of the key facilities, and placed orders for critical long lead time items. Supported by the new discoveries at Dark Horse and Ulaan, Erdene is undertaking design and value engineering work to optimize plant throughput and bring forward grade, including evaluating the addition of a gravity circuit, targeting a 15 – 25% increase in average annual gold production compared to the BFS. Given this ongoing work, supply chain issues, particularly at Mongolia’s land borders with China which remains restricted, the Company will complete the expansion design and engineering work prior to making a construction decision. Erdene has recently solicited updated quotations for certain major plant equipment and non-process infrastructure items, and consistent with macro-economic trends, is seeing increases of 25 to 50% compared to BFS, though steel and other copper input prices have come off recent highs. Erdene will provide a fulsome project update in the coming months.

Erdene executed a mandate letter with Export Development Canada (“EDC”) for the senior secured debt component of the BK project finance in late 2020. Due diligence for the loan was slowed by COVID, but is largely complete, with EDC’s technical consultants delivering their report in January 2022. The debt package will be finalized upon the delivery of the final mine plan, schedule and budget, anticipated in early 2023. Concurrently, discussions continue with financiers to secure the balance of capital for development.

In April 2022, Erdene launched the first phase of its 2022 exploration program, following up on 2021’s success. Results from drilling at the Ulaan SE discovery in Q2 2022 intersected an interpreted high-grade, gold bearing feeder structure on the license. Additionally, a 278-hole reverse circulation (“RC”) program completed in the second quarter generated several new targets, particularly around Dark Horse, that were tested in Q3 2022, for which results are pending. Drilling during Q3 2022 in near surface zones at Bayan Khundii confirmed, and in some cases extended, the mineralization that is planned to be mined in the first phases of the Bayan Khundii development.

Erdene believes that recent drill success has increased resources and has engaged RPMGlobal to prepare an updated NI 43-101 report for the KGD. Management is targeting total resources of two million gold equivalent ounces, although modest drilling over the past year may see the Company achieve this target in 2023. Furthermore, Erdene sees the potential to add resources beyond this target through further discoveries in this under-explored portion of the prolific gold and copper producing Central Asian Orogenic

Belt. The KGD hosts the full spectrum of arc-related base and precious metal systems, including copper-molybdenum porphyries, intermediate sulphidation/carbonate base metal gold deposits, and low sulphidation epithermal gold and gold-silver systems providing significant exploration opportunity.

## **COVID-19**

In late January 2020, the Government of Mongolia instituted limitations on public gatherings, suspended in-person classroom learning, and implemented international border controls in response to COVID-19. The Canadian Government adopted similar measures in March 2020, as did most governments globally during 2020. While restrictions in Mongolia were eased in early 2021, precautionary measures were subsequently reintroduced in late Q1 2021 following an increase in the number of reported cases in Mongolia. Company staff and contractors returned to site in early August 2021, and work has continued without significant interruption due to COVID since this date. Additionally, Canadian and International staff and consultants resumed travel to Mongolia in Q3 2021. On February 14, 2022, the Government of Mongolia fully reopened its borders to vaccinated international travelers, allowing the Company's staff and key contractors to travel to the Country with minimal disruption. Despite an increase in reported cases in Mongolia and Canada, the Company has not seen a reintroduction of travel or operating restrictions within the countries in which it operates.

Although operations within Mongolia have largely returned to normal, the country continues to see disruptions at its land borders with China, given the latter's zero COVID policies. These disruptions have impacted the availability and price of industrial and consumer goods required for the construction of the Bayan Khundii Gold Project and has the potential to further delay and/or increase the costs of the development. The Company is monitoring the situation and assessing the impact on the Bayan Khundii Gold Project construction schedule and budget. Erdene does not intend to ramp up to full construction until there is certainty that supplies can readily be imported to Mongolia at reasonable cost. The Company will provide further details on the impact of COVID-19 on its operations and the Bayan Khundii Gold Project as they become available.

## **Highlights and Significant Subsequent Events**

### **Bayan Khundii Gold Project – 100% Erdene**

- Progressed construction readiness and engineering activities for the Bayan Khundii Gold Project
  - Completed preliminary works including camp expansion, communications infrastructure upgrade and project controls software implementation
  - Received updated quotations for major equipment supply and construction works
  - Launched optimization and value engineering studies focused on mine planning, gravity recovery and gold processing
  - Expanded hazard identification program and initiated participatory environmental monitoring
- Secured key permits and advanced regulatory approvals for mine development:
  - Received approval for process plant and integrated mineral waste facility (“IWF”) detailed designs
    - The IWF is the first in Mongolia to contain dry tailings within mine waste rock, reducing environmental risks and minimizing land disturbance
  - Obtained regulatory approval received for 11 major project facilities, eight of which include construction permits
- Continued local community programs in advance of full construction
  - Renewed the Local Cooperation Agreement with Provincial and Sub-Provincial governments, committing the parties to transparently supporting community development
  - Planted over 10,000 trees as part of the Company's one million tree commitment in support of the Mongolian President's Billion Trees Program
  - Trained over 100 local residents of whom nearly 30 were employed at site in 2022

## Exploration

- Completed approximately 4,200 metres of drilling in Q3 at Bayan Khundii, Dark Horse and Ulaan
  - Bayan Khundii drilling confirmed high-grade, near-surface mineralization in proposed starter pits
  - Results from drilling at Dark Horse and Ulaan are pending and expected in mid-Q4
- Reported results from Bayan Khundii starter pits, including multiple high-grade intersections
  - Drilling confirmed and locally extended high-grade zones modelled in BK economic pits
    - 29.6 g/t gold over 4m, within 16m of 8 g/t gold (BKD-358)
    - 68.0 g/t gold over 2m, within 10m of 14.4 g/t gold (BKD-361)
    - 32.6 g/t gold over 2m, within 20m of 10.4 g/t gold (BKD-369)
    - 67.5 g/t gold over 1m, within 7m of 11.8 g/t gold (BKD-354)
    - 39.6 g/t gold over 1m, within 10m of 5.7 g/t gold (BKD-356)
  - Also collected ore for gravity processing test work from these very high-grade zones
- Engaged RPM Global to update resources for the KGD
  - Targeting 2 million ounces gold equivalent from Bayan Khundii, Altan Nar, Ulaan and Dark Horse

## Corporate

- Closed a \$7.2 million financing led by \$2.0 million investment from Eric Sprott on July 21
  - Proceeds have been used to fund exploration, including follow up drilling at the recent Ulaan and Dark Horse discoveries, site establishment work for the Company's Bayan Khundii Gold Project development, and for general working capital purposes
- Progressed due diligence for the Bayan Khundii Project Finance with EDC and other financiers
  - EDC term sheet agreed, pending finalization of project mine plan, schedule and budget, anticipated in early 2023
  - Discussions are proceeding in parallel with Mongolian and International financiers on subordinated debt and other non-equity instruments
- Recorded a net loss of \$4,909,342 for the nine months ended September 30, 2022, compared to a net loss of \$3,831,404 for the nine months ended September 30, 2021
  - Exploration and evaluation expenditures totaled \$9,704,879, including capitalized expenditures of \$6,555,922, for the nine months ended September 30, 2022, compared to \$9,120,054, including capitalized expenditures of \$6,871,310, for the comparative prior year period, as increased salaries, camp and stakeholder relations costs due to a ramp-up in activity prior to construction more than offset lower drilling and analysis costs due to less exploration in the period and lower non-cash share-based compensation expenditures
  - Corporate and administration expenses totaled \$1,791,332 for the nine months ended September 30, 2022, compared to \$1,594,223 for the nine months ended September 30, 2021, as lower share-based compensation and investor relations and marketing expenditures were more than offset by higher administrative salaries, professional fees and travel and accommodations expenditures in support of pre-development and financing work for the Bayan Khundii Gold Project as well as increased regulatory fees driven by growth in the Company's market capitalization

## Strategy and Outlook

Erdene is focused on the development of multi-million-ounce gold deposits in the Khundii Gold District. The Company sees the BK mine as the foundation for building a leading, multi-asset precious metals producer. Erdene's two strategic priorities are advancing the BK Project to production and expanding precious and base metal resources in the Khundii Gold District through exploration and acquisition, with a near-term target of defining two million ounces of near-surface gold equivalent resources.

In July 2020, Erdene announced positive results of an independent BFS for the Bayan Khundii Gold Project. The Study envisions a high-grade, open pit mine, beginning at surface in the southern portion of the Bayan Khundii deposit (Striker and Gold Hill), and expanding northward into adjacent zones at Midfield and

Midfield NE. The development incorporates conventional crushing and grinding, leach and a Carbon in Pulp (“CIP”) plant with processing capacity of 1,800 tonnes per day. The Bayan Khundii Gold Project Feasibility Study NI 43-101 Technical Report, dated August 31, 2020, was filed on SEDAR on September 1, 2020.

In June 2020, the Company completed an independent Environmental and Social Impact Assessment (“ESIA”) in accordance with the Performance Requirements of the European Bank for Reconstruction and Development (“EBRD”). The study was led by Sustainability East Asia LLC, in consortium with Eco Trade LLC and Ramboll Australia Pty Ltd. The EBRD disclosed the ESIA for public comment on June 12, 2020, and on August 12, 2020, the disclosure period concluded. EDC disclosed the Project’s ESIA in June 2021, as part of its public consultation process.

The Mongolian statutory Detailed Environmental Impact Assessment (“DEIA”) for the Project was prepared by Eco Trade LLC in accordance with applicable national standards. Local stakeholder consultations on the DEIA were completed in late June 2021, and the Company executed a Local Cooperation Agreement with the Bayankhongor Provincial Government in late July 2021. On October 5, 2021, the Ministry of Environment and Tourism of Mongolia completed its technical review of the Project’s DEIA and in late November 2021, the Ministry formally approved the Company’s submission.

Erdene has obtained the majority of the permits required to construct the Bayan Khundii Gold Project. Erdene received Mining License MV-021444 for its Bayan Khundii resource on August 5, 2019, from the Mineral Resource and Petroleum Authority of Mongolia (“MRPAM”). The Khundii mining license covers 2,309 hectares, including the Bayan Khundii Reserve and the Dark Horse Prospect. The mining license is valid for an initial term of 30 years with the ability to extend to 70 years. On November 1, 2019, MRPAM council approved Erdene’s Altan Nar resource registration application and the Company received the Altan Nar mining license on March 5, 2020. Mongolian mining licenses are valid for an initial term of 30 years with the ability to extend to 70 years.

The Company’s Statutory Technical and Economic Assessment (“Mongolian Feasibility Study”) was approved by the Mineral Resource and Petroleum Authority in early 2020. The 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 Bayan Khundii Gold Project. Additionally, the Project’s Land Arrangement Plan and associated land use permissions have been approved by the local government, granting access to the 100-hectare area required to construct the BK open-pit and associated surface infrastructure. During the first half of 2022, the Company completed an expansion of its camp and erected two cellular towers at site to facilitate communications, in anticipation of full construction.

Detailed design and engineering for the Carbon-in-Pulp (“CIP”) Leach processing plant was completed in Q1 2021 and design work for the mine support infrastructure is progressing on schedule, with approximately 90% of the detailed design completed to date. In March 2021, the Company contracted with CITIC for the comminution circuit for the Project’s processing plant and Erdene contracted with COMO to provide the processing plant’s elution circuit in Q4 2021.

The general arrangement for the site has gone through regulatory review, alongside which the detailed drawings for key mine support facilities, including offices, mine dry, security guard house, workshop, warehouse, and permanent camp, have been submitted for approval, which was received in late February 2022. In late Q3 2022, the technical drawings for the processing plant and mineral waste facility received regulatory approval. Additionally, constructability, value engineering, and HAZOPS review are underway, following the completion of tender and re-pricing for most critical facilities and services. Preferred vendors have been identified for most major facilities, with contracting expected to commence alongside a project construction decision.

Environmental management work has been expanded in 2022, with the Company establishing a two-hectare nursery at site to cultivate endemic plants and trees, sowing 10,000 seedlings to date. Moving forward, the Company will harvest seed and transplant vegetation for landscape improvement at site as well as future rehabilitation. In April 2022, Erdene committed to plant one million trees by 2030, as part of Mongolia’s “Billion Trees” campaign.

Contributions to stakeholder engagement and community development continued during the period. The Company provided approximately US\$1M of funding for public health and community programs through its Local Cooperation Agreement (“LCA”) with the government of Bayankhongor, the province within which the Company’s projects are located, over the past year. In October 2022, Erdene announced the renewal of its LCA, committing a further US\$1.2M to community development initiatives in support of education, public health, environmental protection, and livelihoods improvement.

Erdene continues to work with HCF International, its Project Finance advisor, to close out the project finance package for its BK Gold Project. EDC is expected to provide the senior secured debt funding, pending the finalization of the Project's mine plan, schedule and budget, anticipated in early-2023. Concurrently, the Company is working with Mongolian and international financiers to secure the remaining capital required for development. Erdene expects to announce commitments for the entire project finance package in the coming months.

Exploration results to date suggest the greater Khundii-Ulaan alteration zone, including the BK Deposit, Dark Horse prospect and Ulaan, are part of the same, large, gold-bearing hydrothermal system, that shows the potential to host a multimillion-ounce gold deposit. Exploration in 2022 further supports this thesis, with high-grade intercepts at Dark Horse, Ulaan SE and Bayan Khundii, and positive results from regional RC and diamond drilling. These results, as well as those from drilling since the last Khundii District resource update in 2019, are being incorporated into an updated NI 43-101 report, prepared by RPM Global, expected in late Q4 2022 or early-2023.

Erdene continues to evaluate acquisition opportunities throughout the Khundii Gold District. Over the past decade Erdene has developed the largest proprietary geologic database of Southwest Mongolia's mineralization that has led to the identification of more than 20 high-priority targets for acquisition.

## Development and Exploration Projects

### NI 43-101 Technical Reports – Resources and Reserves

On September 15, 2018, the Company announced a resource estimate for the Bayan Khundii and Altan Nar deposits. On October 21, 2019, Erdene announced an updated Bayan Khundii Resource as well as a Bayan Khundii Mineral Reserve, as part of a Prefeasibility Study ("PFS") prepared by Tetra Tech, Inc. The reserve announced October 21, 2019, has been superseded by a Mineral Reserve estimate, dated July 1, 2020, prepared by Auralia Mining Consulting. In conjunction with the Company's MD&A for the three and six months ended June 30, 2021, and 2020, the Company announced an updated mineral resource estimate for the Bayan Khundii deposit with an effective date of June 17, 2021, prepared by Tetra Tech.

Apart from Zuun Mod, the Company's other targets are early stage and do not contain any mineral resource estimates, as defined by National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"). Except for those deposits already delineated, potential quantities and grades disclosed in this MD&A are conceptual in nature, and there has been insufficient exploration to define a mineral resource estimate for other targets disclosed herein. It is uncertain if further exploration will result in these targets being delineated as a mineral resource. Additional information about our projects is also summarized in our AIF and the respective NI 43-101 Technical Reports and can be viewed under the Company's issuer profile on SEDAR at [www.sedar.com](http://www.sedar.com).

### Khundii Gold District



The Khundii Gold District includes the Company's high-grade, near-surface Bayan Khundii and Altan Nar deposits. The Bayan Khundii gold project is located on Erdene's 100%-owned, 2,309-hectare Khundii mining license. The Khundii mining license includes the Bayan Khundii mineral resources reported in "Khundii Gold Project NI 43-101 Technical Report", dated December 4, 2019, and prepared by Tetra Tech, Inc., and an updated Mineral Reserve estimate, dated July 1, 2020, prepared by Auralia Mining Consulting and reported in "Bayan Khundii Gold Project Feasibility Study NI 43-101 Technical Report", dated August 31, 2020.

#### *Bayan Khundii Gold Deposit*

The Bayan Khundii deposit was discovered in Q2 2015, with initial drill results reported in Q4 2015; the first hole returned 7 metres of 27.5 g/t gold at 14 metres depth. Definition drill programs completed in 2016 through 2018 identified three main areas over an 800-metre strike length and within 150 metres of surface. These areas of very high-grade gold mineralization over significant widths include: Striker Zone, where mineralization starts from surface, and Midfield and North Midfield Zones that extend to the northeast under younger, post-mineralization cover. The Midfield and North Midfield Zones have returned some of the highest grades and widest mineralized intervals at Bayan Khundii. BKD-98 returned 80 metres of 6.0 g/t gold from 42 metres depth and BKD-261 returned 112 metres of 5.9 g/t gold, both in the Midfield Zone, and BKD-231 in North Midfield, returned 14 metres of 158 g/t gold, including one metre of 2,200 g/t gold.

Bayan Khundii is the highest priority project for the Corporation based on its grade, proximity to surface, and favorable metallurgy. The Corporation has advanced the project through independent studies to the bankable feasibility stage.

During Q1 2021, Erdene engaged Tetra Tech, Inc. ("Tetra Tech") to prepare an updated Mineral Resource Estimate ("Mineral Resource"), incorporating 2020 drilling at Striker West, Striker, Midfield and Midfield North, and reflecting prevailing gold prices.

The updated Bayan Khundii Mineral Resource incorporates 95 additional drill holes totaling 12,889 metres and an updated structural interpretation study completed by Erdene at Bayan Khundii since the previous October 1, 2019, mineral resource estimate was announced. In total, the updated Bayan Khundii Mineral Resource incorporates 350 diamond drill holes totaling 55,791 metres, along with 1,075 metres of trenching from 23 trenches.

The Bayan Khundii updated Mineral Resource conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards for Mineral Resources and Mineral Reserves. The Mineral Resource was prepared by Tetra Tech and has an effective date of June 17, 2021. The reported Mineral Resource is based on information provided to Tetra Tech by Erdene and verified where possible by Tetra Tech. Data verification and statistical analyses were carried out by Tetra Tech in support of the Mineral Resource. The details of the parameters used in preparing the updated Mineral Resource, including data verification, sample preparation, analysis and security, are included in the Company's Q2 2021 MD&A, available on the Company's website or SEDAR.

The June 2021 Mineral Resource for Bayan Khundii is provided below under the *Mineral Resources and Reserves* section of this MD&A.

In Q3 2022, Erdene completed a near surface drill program comprised of 25 PQ diamond core holes, totaling 612 metres (averaging 17 metres vertical depth) in three target areas within or near the planned Bayan Khundii economic pit. The objectives of this program were to establish higher confidence in continuity of grade and geometry of the shallow, very high-grade potential starter pit areas located at the Midfield Southeast, Striker South and Striker zones of the Bayan Khundii deposit and to collect material for gravity processing metallurgical test work. The drilling program intersected multiple high-grade intervals, confirming the continuity of near-surface high-grade gold mineralization at Midfield SE, Striker, and Striker South. Multiple holes returned assays greater than 10 g/t gold. These results will be incorporated into updated models and used for start-up mine planning purposes. Drill core from these holes will also be used for variability metallurgical testing to confirm the viability of gravity recoverable gold in addition to the currently planned CIP ore processing plant.

#### *Dark Horse*

The greater Dark Horse prospect area (approximately 20 square kilometres) is located in the northern portion of the Khundii mining and Ulaan exploration licenses and is characterized by elevated gold in soil anomalism with multiple surface rock-chip, trench and drill core samples assaying greater than 1 g/t gold. Trace element anomalism, geophysical anomalies related to alteration and mineralization, structures interpreted to represent conduits for mineralizing fluids, and alteration signatures supporting an epithermal mineralization model characterize the greater Dark Horse prospect area. To date the Company has



completed 21,673 metres of drilling in 190 holes ranging in vertical depths from 21 to 318 metres within the greater Dark Horse prospect portion of the Khundii mining license, including 126 holes totaling 11,608 metres in 2021.

Most of the drilling to date has been focused on the Dark Horse Mane discovered in early 2021. Erdene discovered the Dark Horse Mane, 2.4 kilometres north of the Bayan Khundii deposit, when initial drilling returned 6.0 g/t gold over 45 metres, beginning 10 metres downhole, including 8 metres of 27.1 g/t gold (AAD-58). Drilling over the past year has defined a 1.5-kilometre trend of alteration and gold mineralization within the Dark Horse Mane that remains open along strike to the north and south, and at depth. Highlight interceptions at Dark Horse Mane since the initial discovery include:

- AAD-126: 30 metres of 5.6 g/t gold, beginning 10 metres downhole, including 24.1 g/t over six metres, starting 26 metres downhole
- AAD-137: 24.5 metres of 9.4 g/t gold beginning 1.5 metres downhole, including 13.5 metres of 16.1 g/t gold
- AAD-138: 25 metres of 6.1 g/t gold beginning 18 metres downhole, including 8 metres of 17.1 g/t gold
- AAD-177: 23 metres of 11.4 g/t gold beginning 1 metre downhole, including 4 metres of 59.8 g/t gold within 8 metres of 32.2 g/t gold
- AAD-178: 15 metres of 42.8 g/t gold beginning 11 metres downhole, including 3 metres of 160.4 g/t gold within 5 metres of 123.5 g/t gold

The Dark Horse Mane is associated with a north-south trending, linear structural corridor which intersects deep seated northeast trending transform faults, believed to be a conduit for primary mineralizing fluids. The N-S structure has been traced over five kilometres, from the southern portion of the Bayan Khundii deposit to the northern extension of Dark Horse Mane. Gold mineralization is hosted within strongly altered tuffaceous and volcanoclastic rocks, crosscut by quartz and quartz-hematite veins and stockwork zones. The Dark Horse Mane shallow oxide zone begins at surface, hosting supergene enriched gold zones with values up to 195 g/t over 1 metre and ranging in thickness from 20 to 60 metres vertical depth with locally deeper oxidation along fractures. The high-grade oxide body exhibits strong continuity along a north-south strike. Mineralization remains open along strike and at depth.

The near surface oxide gold zones discovered at Dark Horse Mane are the result of oxidation of sulfide bearing epithermal veins and hydrothermal breccias within white mica altered host lithologies. Limited deeper drilling has gold bearing epithermal veins and associated white mica and sulfide alteration zones to a depth of up to 230 metres vertically, that remains open at depth. The gold mineralization near surface at Dark Horse Mane is related to broader areas of structurally controlled alteration and mineralization believed to be connected to feeder structures, distributing gold bearing fluids over a wide area as these fluids approached the paleo surface. Evidence for these feeder structures includes a series of exposed residual quartz lithocaps, associated locally with increasing copper anomalism at depth interpreted to predate the gold mineralization. These lithocaps are distributed along dominant NE trending structures believed to represent transform faults and potentially feeder conduits from a magmatic porphyry source at depth. The highest-grade gold bearing oxide zones at the southern end of the Dark Horse Mane are located proximal to the residual quartz lithocaps and hosted within tuffaceous to porphyritic volcanoclastic units.

RC drilling completed in Q2 2022 has identified several prospects within the broader Dark Horse Mane prospect. Multiple RC holes at East Mane, an 8-hectare area, 500 metres east of Dark Horse Mane, returned anomalous gold (up to 0.22 g/t gold over 3 metres) and pathfinder elements (antimony and arsenic). The East Mane area also exhibits structural and geological similarities to high-grade Dark Horse Mane South mineralization. Follow-up rock chip sampling at East Mane produced additional samples anomalous in gold (up to 0.57 g/t gold) and pathfinder elements (arsenic and antimony), further demonstrating the prospectivity of this target. East Mane was diamond drill tested in Q3 2022, for which results are pending and expected in Q4 2022.

#### *Ulaan Southeast*

In June 2021, the Company completed the maiden gold exploration program in the southern portion of the Ulaan license, reporting a significant new gold discovery just 300 metres west of the Bayan Khundii Deposit. Results to date, including follow-up drilling in Q2 2022, have confirmed a significant gold discovery at Ulaan SE. Multiple drill holes have returned hundreds of metres (up to 354 metres) of gold mineralization, often ending in mineralization, over an area 200 metres by 250 metres. Gold mineralization begins approximately 80 metres from surface with anomalous gold intersected as shallow as 4 metres depth (UDH-18) and remains open along strike to the west/northwest and at depth. Gold grades up to 156 g/t are related to intense quartz ± hematite veins and stockwork zones enveloped by the same gold bearing silicified, white

mica altered lapilli tuff sequence which hosts Erdene's Bayan Khundii epithermal gold deposit, located just east on the Khundii mining license. Structural controls are also similar with northwest striking, southwest dipping veins hosting the gold and intensifying adjacent to bounding structures and/or feeder conduits typically oriented northeast or north. Gold mineralization, particularly the low-grade envelope, also appears to be partially controlled by lithology with low permeability silicified ash tuffs focusing fluid flow and coarser lapilli tuffs acting as a preferred host to mineralization, stratigraphically dipping to the northwest.

Highlight interceptions at Ulaan SE since the initial discovery include:

- UDH-14: 217 metres of 1.1 g/t gold beginning 188 metres downhole, including 3.5 g/t gold over 53 metres
- UDH-21: 335 metres of 1.1 g/t gold beginning 115 metres downhole, including 8.7 g/t gold over 27 metres within 77 metres of 3.2 g/t gold
- UDH-22: 152 metres of 1.7 g/t gold beginning 85 metres downhole, including 3.1 g/t gold over 65 metres
- UDH-35: 23 metres of 13.7 g/t gold within 41 metres of 8.1 g/t gold, beginning 187 metres downhole
- UDH-36: 179 metres of 1.2 g/t gold, beginning 72 metres downhole, including several one-metre intervals, ranging from 10 to 33 g/t gold, and ending in mineralization at 350 metres
- UDH-53: 2 metres of 24.9 g/t gold within 27 metres of 3.5 g/t gold, beginning 248 metres downhole

Together with the Bayan Khundii deposit and Dark Horse prospect, results from drilling at Ulaan Southeast demonstrate the potential scale of mineralization within the nearly 4,000-hectare Khundii-Ulaan Hydrothermal system, which extends from Ulaan over 10 kilometres to the northeast onto the Khundii license.

#### *Altan Nar*

The 100%-owned Altan Nar deposits are located on the Corporation's 4,669-hectare Altan Nar mining license, 16 kilometres northwest of Bayan Khundii. The AN mining license was received on March 5, 2020 and is valid for an initial 30-year term with provision to renew the license for two additional 20-year terms. The license hosts 18 mineralized (gold, silver, lead, zinc) target areas within a 5.6 by 1.5-kilometre mineralized corridor. Two of the early discoveries, Discovery Zone ("DZ") and Union North ("UN"), host wide zones of high-grade, near-surface mineralization, and are the focus of a Resource Estimate released in Q2 2018.

Altan Nar is an intermediate sulphidation, carbonate-base metal gold ("CBMG") deposit, with similarities to prolific gold deposits such as Barrick Gold's Porgera mine (Papua New Guinea), Rio Tinto's formerly producing Kelian mine (Indonesia), Lundin Gold's Fruta Del Norte deposit (Ecuador), and Continental Gold's Buritica project (Colombia). CBMG deposits generally occur above porphyry intrusions in arc settings and may extend for more than 500 metres vertically.

Altan Nar received limited exploration over the past two years as the Company's resources were focused on the Bayan Khundii discovery. In late Q4 2019, the Company drilled five holes totaling 667 metres in DZ. Four holes tested the high-grade core area of the Discovery Zone, over a 130-metre strike length, 70 metres of which remains untested by drilling ("Gap Zone"). The fifth hole tested the southern extension of the deposit. Results from the 2019 program, including the intersection of 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, are amongst the strongest to date. Many of the 2019 high-grade intersections are locally outside or in areas of previously low-grade resource blocks and therefore expand the DZ high-grade core indicating consistency in high-grade mineralization within the identified ore horizon. These results are expected to positively impact the resource at Altan Nar and open the way for further expansion along strike and elsewhere in the district. The program also demonstrated continuity of anomalous gold and base metals along the structural corridor to the south of the DZ, which will be tested further in upcoming programs.

To date, Indicated Mineral Resources have been established for the Discovery Zone and Union North prospects. The remaining 16 targets at Altan Nar appear very prospective and the Company intends to complete further drilling on the license to increase its understanding of the system.

## Mineral Resources and Reserves

### Khundii Gold District

The total Khundii Gold District resource is calculated by adding the resource from both the Bayan Khundii and Altan Nar deposits and calculating the weighted average grades. The Bayan Khundii Mineral Resource Estimate, prepared by Tetra Tech, has an effective date of June 17, 2021. The Altan Nar Mineral Resource Estimate, prepared by RPMGlobal, has an effective date of May 7, 2018.

A summarized sensitivity analysis of the grade and tonnage relationships at various cut-off grades for the Khundii Gold District is shown in the table below<sup>1</sup>:

Cut-Off Grade <sup>(1,2)</sup>	Resource Classification	Quantity (Mt)	Grade (Au g/t)	Gold (Koz)
<b>Recommended</b> <sup>(3)</sup>	<b>Measured &amp; Indicated</b>	<b>13.3</b>	<b>2.12</b>	<b>903</b>
	<b>Inferred</b>	<b>3.9</b>	<b>1.76</b>	<b>222</b>
1.0	Measured & Indicated	6.3	3.77	768
	Inferred	3.3	1.99	211
1.4	Measured & Indicated	5.2	4.42	738
	Inferred	3.0	2.12	204

Notes:

(1) Combined resources from Bayan Khundii and Altan Nar.

(2) Cut-off grades for Altan Nar are AuEq2 and for Bayan Khundii are gold only. For the AN resource estimate, Gold Equivalent ("AuEq2") calculations assume metal prices of US \$1,310 per ounce gold, US \$18 per ounce silver, and US \$2,400 per tonne lead and US \$3,100 per tonne zinc.

(3) Tetra Tech recommended cut-off grade for Bayan Khundii is 0.40 g/t gold and RPM recommended cut-off grade for Altan Nar is 0.7 g/t AuEq2 above a pit and 1.4 g/t AuEq2 below the same pit shell.

### Bayan Khundii Gold Deposit

#### Resource

The 2021 Bayan Khundii Mineral Resource Estimate, prepared by Tetra Tech, is based on the combination of geological modeling, geostatistics, and conventional block modeling using the Ordinary Kriging method of grade interpolation in Datamine Studio RM™ software. The QAQC sampling protocols and corresponding sample preparation and shipment procedures have been reviewed by Tetra Tech.

The Mineral Resource Estimate has been constrained to a conceptual pit shell and is reported at a recommended cut-off grade of 0.40 g/t gold. The assumptions and parameters utilized to establish the cut-off grade and pit shell are reported in notes following the table below and support reasonable prospects for eventual economic extraction. Mineral Resources are inclusive of Mineral Reserves (reported below). For further details on the updated Bayan Khundii mineral resource estimate, please see the Company's Q2 MD&A dated August 12, 2021.

Cut-off Grade (1)	Resource Classification	Quantity (tonnes)	Grade Au g/t	Gold oz
<b>0.4 g/t Au</b>	Measured	3,031,000	2.39	232,700
	Indicated	5,269,000	2.08	352,400
	<b>Measured &amp; Indicated</b>	<b>8,301,000</b>	<b>2.19</b>	<b>585,100</b>
	Inferred	512,000	2.18	35,900

Notes:

(1) Cut-off grades have been calculated using a gold price of \$1,600 /ounce, milling and G&A costs of \$16.0 / tonne, and mining costs of \$3.0 / tonne, and an assumed gold recovery of 95%.

(2) Bulk density of 2.66 for mineralized domains.

(3) Numbers may not add exactly due to rounding.

(4) Conforms to NI 43-101, Companion Policy 43-101CP, and the CIM Definition Standards for Mineral Resources and Mineral Reserves.

(5) Mineral resources which are not mineral reserves do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate.

## Reserves

The total Bayan Khundii Mineral Reserve is shown below, as reported in Erdene's press release dated July 20, 2020. The Bayan Khundii July 1, 2020, BFS Mineral Reserve has been estimated by Qualified Person, Mr. Anthony Keers, Director, Auralia Mining Consulting, using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves to conform to the Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects. The Mineral Reserve is based on the October 1, 2019, mineral resource estimate. The Mineral Reserve includes both Proven and Probable Mineral Reserves that were converted from Measured and Indicated mineral resources. Tonnes and grades were calculated for the mining blocks, and allowances for dilution and mining recovery were applied to estimate the Mineral Reserve Statement. The effective date of the Mineral Reserve statement is July 1, 2020.

	Tonnage (Mt)	Grade (g/t Au)	Contained Au (Koz)
Proven Mineral Reserves	1.2	4.2	166
Probable Mineral Reserves	2.2	3.5	244
<b>Mineral Reserve</b>	<b>3.4</b>	<b>3.7</b>	<b>409</b>

### Notes:

- (1) The effective date of the Mineral Reserve estimate is July 1, 2020. The QP for the estimate is Mr. Anthony Keers of Auralia Mining Consulting
- (2) The Mineral Reserve estimates were prepared with reference to the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definition Standards) and the 2003 CIM Best Practice Guidelines.
- (3) Reserves estimated assuming open pit mining methods
- (4) Waste to ore cut-offs were determined using a NSR for each block in the model. NSR is calculated using prices and process recoveries for each metal accounting for all off-site losses, transportation, smelting and refining charges.
- (5) Reserves are based on a gold price of \$1400/oz.
- (6) Mineral Reserves were calculated from a diluted "mining" block model which included average dilution of 9% and losses of 1%.
- (7) The Mineral Reserve is based on the October 1, 2019, mineral resource estimate.

## Altan Nar Gold-Polymetallic Deposit

RPMGlobal calculated the mineral resource estimate for Altan Nar in May 2018 at a number of gold cut-offs, however, RPM recommends reporting the Altan Nar mineral resource at cut-off of 0.7 g/t AuEq2 (see definition for AuEq2 in note 8 below) above a pit and 1.4 g/t AuEq2 below the same pit shell. For further details on the Altan Nar mineral resource estimate, please see the Company's Altan Nar Gold-Polymetallic Project NI 43-101 Technical Report dated March 29, 2021.

Cut-off AuEq2 g/t	Resource Classi- fication	Quantity (Mt)	Grade					Contained Metal				
			Au g/t	Ag g/t	Zn g/t	Pb g/t	AuEq2 g/t	Au Koz	Ag Koz	Zn Kt	Pb Kt	AuEq2 Koz
0.7	Indicated	5.0	2.0	14.8	0.6	0.6	2.8	318	2,350	31.6	29.0	453
	Inferred	3.4	1.7	7.9	0.7	0.7	2.5	186	866	23.7	22.3	277

### Notes:

- (1) The Mineral Resources have been constrained by topography and a cut-off of 0.7 g/t AuEq2 above a pit and 1.4 g/t AuEq2 below the same pit shell.
- (2) The Mineral Resource Estimate Summary was compiled under the supervision of Mr. Jeremy Clark who is a full-time employee of RPM and a Member of the Australian Institute of Geoscientists. Mr. Clark has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
- (3) All Mineral Resource figures reported in the table above represent estimates as at May 7, 2018. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- (4) Mineral Resource grades are reported in accordance with the CIM Standards.
- (5) Mineral Resources reported on a dry in-situ basis.
- (6) No dilution or ore loss factors have been applied to the reported Resource Estimate
- (7) No allowances have been made for recovery losses that may occur should mining eventually result.
- (8) For the AN resource estimate Gold Equivalent ("AuEq2") calculations assume metal prices of US \$1,310 per ounce gold, US \$18 per ounce silver, and US \$2,400 per tonne lead and US \$3,100 per tonne zinc.

## **Technical Studies**

On July 20, 2020, Erdene announced the results of an independent Bankable Feasibility Study for the BK gold deposit. The report, titled “Bayan Khundii Gold Project Feasibility Study, NI 43-101 Technical Report”, dated August 31, 2020, was prepared by international and Mongolian firms with significant experience operating in Mongolia. The study incorporates detailed mine design and scheduling, front-end engineering and design for the processing plant and site infrastructure, a hydrogeological assessment, mineral waste facility design, comprehensive capital and operating cost estimation, and an updated economic model.

The BFS envisions a high-grade, open pit mine beginning at surface in the southern portion of the BK deposit (Striker and Gold Hill), expanding northward into adjacent zones at Midfield and North Midfield. The Project incorporates conventional crushing and grinding, leach and a Carbon in Pulp plant with processing capacity of 1,800 tonnes per day. The BFS includes 3.4 million mineable tonnes from the BK resource at an average diluted head grade of 3.7 g/t gold, all of which are Proven and Probable Reserves. The BK BFS is based on an open-pit mining operation targeting 600,000 tonnes per year of feed material for the processing plant. The total mineable mineralized plant feed is 3.4 million tonnes at an average diluted head grade of 3.7 g/t gold and average strip ratio of 9.1:1 (waste tonne: plant feed tonne). Mineralization starts at surface, with the majority of the deposit contained within the top 100 metres. The deposit structure, grades and depth suggest selective open cut mining will be utilized. Mining will use hydraulic excavators in backhoe configuration. Drilled and blasted material will be loaded into haul trucks, with waste rock deposited in an engineered Integrated Waste Facility (“IWF”) adjacent to the pit, and ore hauled to a crusher or run-of-mine (“ROM”) pad adjacent to the processing plant.

The BK BFS has assumed contract mining based on methodology and costing contained in proposals received from contractors with suitable experience in Mongolia in similar open-pit mining environments. In this scenario the contractor provides the full fleet and personnel to operate the project on a schedule of rates (US\$/tonne material moved) basis. The contractor is proposing a total of 4 x excavators (2 x ore, 2 x waste), 10 x 55t payload trucks, 3 x blasthole drills and a fleet of ancillary and support equipment to deliver the required material movement. The contractor’s workforce peaks at approximately 190 personnel to deliver the required schedule of production.

The BK BFS assumes processing of ROM material via a conventional crush and grind circuit and a carbon in pulp plant. Plant design by 360-Global has been based on testing at Blue Coast Research which has established optimal processing parameters, including; grind size of 80% passing 60 microns; design inputs for comminution circuit, low cyanide concentration in leach circuit (0.5 g/litre sodium cyanide); 36-hour retention time; carbon adsorption parameters and detoxification reagent dosages. The process circuit has been designed to maximize water recovery with the most efficient dewatering process (ceramic disc filters) to achieve targeted 15% moisture in tailings, minimize chemical and reagent usage and minimize environmental impact.

The ore-processing plant will be located adjacent to the Bayan Khundii open pit and throughput will target 600,000 ore-tonnes per year, nominally 1,800 tonnes per day. Total mineralized material from BK, processed in the plant over the course of the mine life, is 3.4 million tonnes at an average diluted head grade of 3.7 g/t gold. Using an estimated mill recovery of 93.1%, total recovered gold over the life of the Bayan Khundii deposit is 381,700 ounces.

Since the Company announced results of the BFS in mid-2020, Erdene has advanced permitting, procurement, and construction readiness activities to prepare for construction, while continuing to explore for additional resources. Supported by recent discoveries at Dark Horse and Ulaan, Erdene is undertaking design and engineering work to optimize plant throughput and bring forward grade, including evaluating the addition of a gravity circuit, targeting a 15 – 25% increase in average annual gold production compared to the BFS. Erdene is evaluating the impact of this work, as well as budgeted capital and operating costs, given macro-economic trends since the delivery of the BFS to determine if an updated NI 43-101 is required. The Company will provide a fulsome project update in the coming months as this work is completed.

## **District Area Exploration**

Erdene's deposits are in the Trans Altai 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 KGD comprised of multiple high-grade gold and base metal prospects, one of which is currently being developed, the 100%-owned Bayan Khundii Gold Project, and another which is being considered for development, the 100%-owned Altan Nar Project. In 2021, the Company discovered two new gold prospects, Dark Horse and Ulaan.

The Company is targeting total resources of two million gold equivalent ounces, based on current resources, as well as the results from recent drilling that are not yet incorporated into resources. RPM Global has been engaged to update the Khundii District resources and is scheduled to deliver an NI 43-101 report near the end of 2022. Furthermore, management sees the potential to add resources beyond this target through further discoveries in this underexplored portion of the prolific gold and copper producing Central Asian Orogenic Belt.

### ***Khundii-Ulaan Epithermal Gold Potential***

Results from recent exploration confirm that the Khundii Gold District hosts multiple zones of epithermal gold mineralization over a wide area. The Khundii mining license and adjoining Ulaan exploration license cover nearly 4,000 hectares of the Khundii-Ulaan hydrothermal alteration zone, which extends from Ulaan over 10 kilometres to the northeast. This alteration trend has a central zone of intense secondary silica with a peripheral halo of sericite alteration, and an outer zone of white mica and sericite, which hosts the Bayan Khundii gold deposit. This northeast trending alteration area, which incorporates the Ulaan, Bayan Khundii, Dark Horse and other mineralized targets in the area, is associated with a regional structural dilational jog and associated major volcano-plutonic centre, along a northeast trending transform fault. The various styles of alteration and mineralization within the Khundii-Ulaan target area are consistent with a fertile magmatic island arc, with evidence for possible arc migration, and overlapping or telescoped mineralization along major structures.

Exploration results to date suggest the greater Khundii-Ulaan alteration zone and known gold occurrences are part of the same, large, gold-bearing hydrothermal system which remains largely under-explored. Gold mineralization identified to date is hosted within an expansive, white mica and silica altered tuffaceous sequence exposed around the periphery of the Khundii-Ulaan hydrothermal alteration system. Quartz vein textures and clay alteration compositions indicate a large-scale epithermal type gold mineralizing environment existed within the Khundii-Ulaan system with the tuffaceous lithologies acting as preferred hosts for gold mineralization. Exploration planning is currently underway to test multiple high-priority geological, geochemical and geophysical targets across the Khundii-Ulaan target area.

Regional drilling has been restricted to shallow targets with average drill depths of about 100 metres with approximately 70% of regional drill holes having intersected anomalous gold mineralization (defined as >0.1 g/t gold). Success has been driven by the abundance of untested, near surface geochemical and geophysical targets in a region that has had no previous modern exploration. Recent exploration successes testing shallow targets, and the definition of three deposits, exposed at surface, are testament to the discovery potential of this new district. During Q2 2022, the Company completed a 278-hole RC drill program to test shallow targets across the greater Dark Horse area principally on the Khundii License. Results from this work generated multiple new targets, several of which were drill tested in Q3 2022. Results of this exploration work are pending and expected in mid-Q4.

Furthermore, Erdene continues to evaluate opportunities throughout the Trans Altai Terrane, within our licenses and elsewhere in the mineralized belt. This has led to the identification of prospects that are being explored through surface surveys on the Company's four licenses, drilling of selected targets and evaluation of acquisition targets on private and government held ground.

### ***Ulaan Copper-Gold Porphyry Target***

On August 30, 2017, the Corporation acquired a 51% interest in the 1,780-hectare Ulaan exploration license ("Ulaan Property"), immediately west of its high-grade Bayan Khundii deposit. In December 2020, Erdene acquired the remaining 49% interest in the property. The exploration license is in its seventh year of a maximum 12-year term and can be converted to a mining license at any time prior to the end of the twelfth year by meeting the requirements prescribed under the Minerals Law of Mongolia.

In addition to the Ulaan Southeast gold prospect discovery, the Ulaan license hosts a porphyry copper prospect primarily based on the broad (5km by 4km) zone of phyllic (quartz-sericite-pyrite) alteration at surface, with characteristics thought to be related to a porphyry intrusion at depth. Rock chip and stream sediment geochemical sampling identified anomalous concentrations of gold, copper and molybdenum in

the surrounding area, and recently completed geophysical surveys have produced a number of follow-up targets.

Three wide spaced holes were drilled in 2018, totaling 1,050 metres over a 1.3-kilometre area in the central portion of the license. These holes intersected volcanic to sub-volcanic rocks exhibiting propylitic to phyllic quartz-sericite-pyrite ("QSP") alteration with varying concentrations of pyrite and locally low-level copper mineralization (100 to 300 ppm over 60 metres).

A 700-metre, three-hole drilling program was completed in 2019 to test the alteration system at depth (to 650 metres), by extending a previous drill hole, and to investigate two shallower moderate IP chargeability targets (to 200 metres). The extension hole showed continuity at depth of the phyllic style alteration and ended within elevated copper, averaging 130 ppm over 22 metres. The entire second hole exhibited sericite alteration and pyrite mineralization with localized zones of tourmaline alteration and quartz veining within an andesite host, however no anomalous geochemistry was encountered. The final hole intersected a broad zone of intense tourmaline-silica-sericite alteration which hosts localized gold bearing quartz-tourmaline breccia and breccia veins from 140 to 202 metres (end of hole). Anomalous gold bearing intervals include: 2 metres of 1.3 g/t gold, 4 metres of 0.29 g/t gold, 2 metres of 0.5 g/t gold and 2 metres of 0.23 g/t gold or 40 metres of 0.15 g/t gold average grade. Anomalous copper, exceeding 400 ppm, was also intersected within the anomalous zone. The Erdene technical team is reviewing these results along with associated geology, geochemistry and geophysics to establish the basis for future drill testing of the Ulaan Copper-Gold Porphyry target.

### ***Zuun Mod Molybdenum-Copper Project***

The Zuun Mod Molybdenum-Copper Project is a porphyry molybdenum-copper deposit located in southwest Mongolia on the Company's Khuvyn Khar license. This project is approximately 950 kilometres southwest of Ulaanbaatar and 215 kilometres from railhead on the Mongolia-China border at Ceke. The property consists of a mining license totaling 6,041 hectares. The mining license is registered in the name of Anian Resources LLC, a wholly owned subsidiary of the Corporation, and has an initial term of 30 years. This project was acquired from Gallant Minerals Limited in 2005 and is subject to a net smelter returns royalty ("NSR Royalty") of 1.5%, subject to a buy-down provision.

In Q2 2011, the Corporation released a NI 43-101 compliant resource estimate for Zuun Mod containing a Measured and Indicated Resource of 218 million tonnes ("Mt") at an average grade of 0.057% molybdenum, and 0.069% copper at a cut-off grade ("COG") of 0.04% molybdenum. This equates to 273.5 million pounds ("M lbs") of contained molybdenum metal and 330.7 M lbs of contained copper metal. In addition, there is a 168 Mt Inferred Resource at an average grade of 0.052% molybdenum and 0.065% copper, equating to a further 191.8 M lbs of contained molybdenum metal and 240.5 M lbs of contained copper metal.

The Zuun Mod molybdenum-copper deposit has significant potential for development provided the molybdenum price remains strong. Market demand for molybdenum has recently improved, with the price of molybdenum oxide rising to approximately US\$19.00 per pound, compared to US\$7.25 per pound in 2017. In light of the rise in Molybdenum and Copper prices, Erdene engaged RPMGlobal to undertake an updated technical analysis of the project, and the broader Khuvyn Khar license. The results of this study were received in Q4 2021 and suggest strong economics for the project at current metals prices.

Further details on the Zuun Mod resource can be found in the "Technical Report Zuun Mod Porphyry Molybdenum-Copper Project, South-Western Mongolia, National Instrument 43-101 Independent Technical Report" dated June 2011, filed on SEDAR.

### ***Khuvyn Khar Copper-Silver Project***

The Khuvyn Khar copper-silver project is located on Khuvyn Khar license, approximately 2.2 kilometres north of the Zuun Mod molybdenum-copper porphyry deposit. Exploration work at Khuvyn Khar has included geological mapping, vein density mapping, geochemical sampling, geophysical surveys, and wide spaced drilling. Previous drilling intersected 34 metres of 1.3% copper and 9.24 g/t silver from 308 to 342 metres (ZMD-121). The Project has a very large copper mineralized zone trending over 900 metres with multiple zones in three drill holes returning assays in excess of 0.2% copper over significant widths (12 to 42 metres). As noted above, RPMGlobal has been engaged to undertake a technical and economic study of the Zuun Mod Molybdenum-Copper project, including a high-level analysis of the prospectivity of the broader Khuvyn Khar license.

## Acquisitions

Mongolia's Ministry of Mining and Heavy Industry periodically issues areas for exploration. Erdene has established the largest proprietary geologic database of Southwest Mongolia with a priority list of acquisition targets. The Company will participate in the tendering process as its priority targets are opened for tender. The Company has also been evaluating privately held licenses for acquisition.

## Discussion of Operations

### Three months ended September 30, 2022, and 2021

The tables below detail exploration and evaluation expenditures for the three months ended September 30, 2022, and 2021. The Bayan Khundii Gold Project was the focus of the Corporation's efforts during these periods.

Quarter ended Sept. 30, 2022	Bayan Khundii	Altan Nar	Ulaan	Zuun Mod & Other	General & Admin	Total
<b>E&amp;E expenditures</b>						
Exploration and field support	\$ 2,027,205	\$ 59,037	\$ 222,113	\$ (6,642)	\$ -	\$ 2,301,713
Mining studies and permitting	540,276	17,949	29,842	612	-	588,679
Mongolian office costs	-	-	-	-	261,060	261,060
Share-based compensation	-	-	-	-	367,831	367,831
Stakeholder relations	201,997	-	53	-	-	202,050
Travel and other	36,415	-	2,916	7,228	-	46,559
Total exploration expenditures	2,805,893	76,986	254,924	1,198	628,891	3,767,892
Capitalized expenditures	(2,536,040)	(76,603)	-	-	-	(2,612,643)
<b>Expensed exploration costs 2022</b>	<b>\$ 269,853</b>	<b>\$ 383</b>	<b>\$ 254,924</b>	<b>\$ 1,198</b>	<b>\$ 628,891</b>	<b>\$ 1,155,249</b>

<b>E&amp;E assets, July 1, 2022</b>	<b>\$ 33,248,250</b>	<b>\$ 4,229,524</b>	<b>\$ 1,726,475</b>	<b>\$ 962,597</b>	<b>\$ -</b>	<b>\$ 40,166,846</b>
Additions	2,536,040	76,603	-	-	-	2,612,643
Effect of movements in exchange rates	39,166	13,929	6,858	4,689	-	64,642
<b>E&amp;E assets, June 30, 2022</b>	<b>\$ 35,823,456</b>	<b>\$ 4,320,056</b>	<b>\$ 1,733,333</b>	<b>\$ 967,286</b>	<b>\$ -</b>	<b>\$ 42,844,131</b>

Quarter ended Sept. 30, 2021	Bayan Khundii	Altan Nar	Ulaan	Zuun Mod & Other	General & Admin	Total
<b>E&amp;E expenditures</b>						
Exploration and field support	\$ 1,077,304	\$ 68,703	\$ 755,108	\$ 132,487	\$ -	\$ 2,033,602
Mining studies and permitting	887,984	224	9,880	5,745	-	903,833
Mongolian office costs	-	-	-	-	177,318	177,318
Share-based compensation	-	-	-	-	129,865	129,865
Stakeholder relations	98,679	103,564	34,952	4,504	-	241,699
Travel and other	11,730	-	79	3,055	-	14,864
Total exploration expenditures	2,075,697	172,491	800,019	145,791	307,183	3,501,181
Capitalized expenditures	(2,009,192)	(69,248)	-	(56,902)	-	(2,135,342)
<b>Expensed exploration costs 2021</b>	<b>\$ 66,505</b>	<b>\$ 103,243</b>	<b>\$ 800,019</b>	<b>\$ 88,889</b>	<b>\$ 307,183</b>	<b>\$ 1,365,839</b>

<b>E&amp;E assets, July 1, 2021</b>	<b>\$ 26,858,037</b>	<b>\$ 4,089,009</b>	<b>\$ 1,777,729</b>	<b>\$ 922,287</b>	<b>\$ -</b>	<b>\$ 33,647,062</b>
Additions	2,009,192	69,248	-	56,902	-	2,135,342
Effect of movements in exchange rates	345,528	52,681	23,026	19,924	-	441,159
<b>E&amp;E assets, September 30, 2021</b>	<b>\$ 29,212,757</b>	<b>\$ 4,210,938</b>	<b>\$ 1,800,755</b>	<b>\$ 999,113</b>	<b>\$ -</b>	<b>\$ 36,223,563</b>

Exploration and evaluation expenditures, including capitalized expenditures, totaled \$3,767,892 for the three months ended September 30, 2022, compared to \$3,501,181 for the three months ended September 30, 2021.

Exploration and field support expenses of \$2,301,713 in Q3 2022 were \$268,111 greater than prior year quarter due to higher camp and other support costs following the expansion of the camp in advance of



construction, as well as higher salaries costs due to growth in the team to support pre-construction activities, partially offset by lower drilling costs as a result of reduced activity in the current year quarter.

Mining studies and permitting costs for the three months ended September 30, 2022, were \$315,154 less than the same quarter of 2021 largely due to a reduction in consulting expenditures related to detailed engineering and design as this work is largely complete in advance of a construction decision.

Mongolian office costs of \$261,060 for the three months ended September 30, 2022, were \$83,742 higher than the comparative prior year quarter primarily due to the recruitment of support staff in advance of construction as well as incremental expenditures on community engagement.

Share-based compensation expenditures for the quarter ended September 30, 2022, were \$237,966 greater than those in the prior year quarter due to the timing of the annual stock-based compensation grant to employees, which took place in the third quarter of 2022, compared to the second quarter of 2021.

Stakeholder relations costs of \$202,050 for the quarter ended September 30, 2022, were \$39,649 less than those in the prior year quarter due to the timing of payments under the Local Cooperation Agreement that Erdene executed in mid-2021 in support of construction of the Bayan Khundii Gold Project.

Travel and other costs for the period ended September 30, 2022, were \$31,695 greater than the prior year quarter as international travel picked up following a relaxation of COVID-19 related restrictions.

Erdene began capitalizing exploration costs for its Altan Nar Project in 2015 and commenced capitalizing costs for its Bayan Khundii Gold Project in 2016. For the three months ended September 30, 2022, and 2021, Erdene capitalized all exploration costs associated with these projects; however, exploration and evaluation expenditures associated with the Ulaan property were expensed in 2022 and 2021, consistent with Company's capitalization policy.

The following table summarizes corporate and administration expenses for the three months ended September 30, 2022, and 2021.

	<b>For the three months ended September 30,</b>		
	<b>2022</b>	<b>2021</b>	<b>Change</b>
Administrative services	\$ 258,936	\$ 209,109	\$ 49,827
Depreciation and amortization	9,526	9,369	157
Directors fees and expenses	25,250	29,458	(4,208)
Investor relations and marketing	33,576	54,702	(21,126)
Office and sundry	26,098	22,570	3,528
Professional fees	100,211	57,172	43,039
Regulatory compliance	13,796	12,925	871
Share-based compensation	395,887	168,510	227,377
Travel and accommodations	7,007	1,277	5,730
	<b>\$ 870,287</b>	<b>\$ 565,092</b>	<b>\$ 305,195</b>

Corporate and administration expenses totaled \$870,287 for the three months ended September 30, 2022, compared to \$565,092 for the three months ended September 30, 2021.

Administrative services expenditures of \$258,936 for the three months ended September 30, 2022, were \$49,827 higher than those in the prior year quarter primarily due to the recruitment of an investor relations professional, as well as cost of living salary increases for administrative personnel.

Investor relations and marketing expenditures for the three months ended September 30, 2022, were \$21,126 less than the comparative prior year quarter due to a reduction in fees to external IR consultants following the recruitment of an in-house investor relations professional.

Professional fees for the three months ended September 30, 2022, were \$43,039 greater than the prior year quarter, due to the engagement of equity and debt focused financial advisors.

Share-based compensation expenditures for the quarter ended September 30, 2022, were \$227,377 greater than those in the prior year quarter due to the timing of the annual stock-based compensation grant to employees, which took place in the third quarter of 2022, compared to the second quarter of 2021.

Depreciation and amortization, Directors' fees and expenses, Office and Sundry, Regulatory compliance and Travel and accommodations expenditures for the three months ended September 30, 2022, were not material or significantly different from those incurred in the prior year comparative quarter.

### ***Nine months ended September 30, 2022, and 2021***

The tables below detail exploration and evaluation expenditures for the nine months ended September 30, 2022, and 2021. The Bayan Khundii Gold Project was the focus of the Corporation's efforts during these periods.

<b>Period ended Sept. 30, 2022</b>	<b>Bayan Khundii</b>	<b>Altan Nar</b>	<b>Ulaan</b>	<b>Zuun Mod &amp; Other</b>	<b>General &amp; Admin</b>	<b>Total</b>
<b>E&amp;E expenditures</b>						
Exploration and field support	\$ 4,087,992	\$ 138,313	\$ 1,114,047	\$ 189,273	\$ -	\$ 5,529,625
Mining studies and permitting	2,013,621	87,099	57,836	56,159	-	2,214,715
Mongolian office costs	-	-	-	-	775,455	775,455
Share-based compensation	-	-	-	-	407,304	407,304
Stakeholder relations	615,793	944	375	12,825	-	629,937
Travel and other	107,282	11,341	10,153	19,067	-	147,843
Total exploration expenditures	6,824,688	237,697	1,182,411	277,324	1,182,759	9,704,879
Capitalized expenditures	(6,264,092)	(236,753)	(1,726)	(53,351)	-	(6,555,922)
<b>Expensed exploration costs 2022</b>	<b>\$ 560,596</b>	<b>\$ 944</b>	<b>\$ 1,180,685</b>	<b>\$ 223,973</b>	<b>\$ 1,182,759</b>	<b>\$ 3,148,957</b>

<b>E&amp;E assets, January 1, 2022</b>	<b>\$ 30,910,999</b>	<b>\$ 4,246,301</b>	<b>\$ 1,797,500</b>	<b>\$ 973,653</b>	<b>\$ -</b>	<b>\$ 37,928,453</b>
Additions	6,264,092	236,753	1,726	53,351	-	6,555,922
Effect of movements in exchange rates	(1,351,635)	(162,998)	(65,893)	(59,718)	-	(1,640,244)
<b>E&amp;E assets, September 30, 2022</b>	<b>\$ 35,823,456</b>	<b>\$ 4,320,056</b>	<b>\$ 1,733,333</b>	<b>\$ 967,286</b>	<b>\$ -</b>	<b>\$ 42,844,131</b>

<b>Period ended Sept. 30, 2021</b>	<b>Bayan Khundii</b>	<b>Altan Nar</b>	<b>Ulaan</b>	<b>Zuun Mod &amp; Other</b>	<b>General &amp; Admin</b>	<b>Total</b>
<b>E&amp;E expenditures</b>						
Exploration and field support	\$ 3,264,721	\$ 184,231	\$ 987,127	\$ 179,640	\$ -	\$ 4,615,719
Mining studies and permitting	2,986,581	200,388	41,810	63,028	-	3,291,807
Mongolian office costs	-	-	-	-	368,528	368,528
Share-based compensation	-	-	-	-	419,635	419,635
Stakeholder relations	223,772	137,042	34,979	7,891	-	403,684
Travel and other	11,730	-	79	8,872	-	20,681
Total exploration expenditures	6,486,804	521,661	1,063,995	259,431	788,163	9,120,054
Capitalized expenditures	(6,371,969)	(385,029)	(1,716)	(112,596)	-	(6,871,310)
<b>Expensed exploration costs 2021</b>	<b>\$ 114,835</b>	<b>\$ 136,632</b>	<b>\$ 1,062,279</b>	<b>\$ 146,835</b>	<b>\$ 788,163</b>	<b>\$ 2,248,744</b>

<b>E&amp;E assets, January 1, 2021</b>	<b>\$ 22,850,206</b>	<b>\$ 3,827,267</b>	<b>\$ 1,799,626</b>	<b>\$ 887,056</b>	<b>\$ -</b>	<b>\$ 29,364,155</b>
Additions	6,371,969	385,029	1,716	112,596	-	6,871,310
Effect of movements in exchange rates	(9,418)	(1,358)	(587)	(539)	-	(11,902)
<b>E&amp;E assets, September 30, 2021</b>	<b>\$ 29,212,757</b>	<b>\$ 4,210,938</b>	<b>\$ 1,800,755</b>	<b>\$ 999,113</b>	<b>\$ -</b>	<b>\$ 36,223,563</b>

The following table summarizes corporate and administration expenses for the nine months ended September 30, 2022, and 2021.

<b>For the nine months ended September 30,</b>			
	<b>2022</b>	<b>2021</b>	<b>Change</b>
Administrative services	\$ 552,817	\$ 412,938	\$ 139,879
Depreciation and amortization	28,573	27,905	668
Directors fees and expenses	94,504	80,381	14,123
Investor relations and marketing	100,885	169,176	(68,291)
Office and sundry	76,580	70,218	6,362
Professional fees	266,325	184,492	81,833
Regulatory compliance	114,353	77,622	36,731
Share-based compensation	514,408	568,903	(54,495)
Travel and accommodations	42,887	2,588	40,299
	<b>\$ 1,791,332</b>	<b>\$ 1,594,223</b>	<b>\$ 197,109</b>

## Summary of Quarterly Results

*Expressed in thousands of Canadian dollars except per share amounts*

	<b>Fiscal 2022</b>				<b>Fiscal 2021</b>			
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
	Sep	Jun	Mar	Dec	Sep	Jun	Mar	Dec
Net loss	\$1,980	\$1,698	\$1,231	\$1,739	\$1,936	\$1,279	\$617	\$1,525
Basic loss per share	\$0.01	\$0.01	\$0.00	\$0.01	\$0.01	\$0.00	\$0.00	\$0.00
Total assets	\$47,785	\$42,495	\$44,230	\$46,544	\$42,319	\$42,411	\$42,454	\$42,814

For the nine months ended September 30, 2022, the Corporation recognized a net loss of \$4,909,342 compared to a net loss of \$3,831,404 for the same period in 2021.

The Corporation's expenditures vary from quarter to quarter, largely due to the timing of its Mongolian exploration and evaluation programs. The Corporation is not aware of any other specific trends which account for fluctuations in financial results from period to period.

## Liquidity and Capital Resources

At the date of this MD&A, the Corporation had approximately \$2.6 million in working capital, calculated as current assets less current liabilities.

Funds raised have been used to advance the Corporation's projects in Mongolia and to meet administrative costs in support of those programs (see Development and Exploration Projects and Discussion of Operations). Management estimates current working capital is sufficient to fund the Corporation's planned expenditures into Q1 2023. The ability of the Corporation to continue with its exploration and development programs beyond this point is contingent upon securing additional funds through asset sales, formation of alliances, option and/or joint venture agreements, equity and debt financing and/or expenditure reductions. The timing and availability of additional financing will be determined largely by market conditions and the results of the Corporation's ongoing exploration programs.

The Corporation has minimal sources of income. It is therefore difficult to identify any meaningful trends or develop an analysis from the Corporation's cash flows. The Corporation is dependent primarily on the issuance of share capital and debt to finance its exploration and development programs.

Other than as discussed herein, the Corporation is not aware of any trends, demands, commitments, events or uncertainties that may result in the Corporation's liquidity or capital resources materially increasing or decreasing at present or in the foreseeable future. Material increases or decreases in the Corporation's liquidity and capital resources will be substantially determined by the success of the Corporation's Mongolian exploration and development programs and its ability to obtain sufficient financing.

## Outstanding Share Data

### Authorized

An unlimited number of common shares with no par value.

### Issued and Outstanding Share Capital

	November 2, 2022	December 31, 2021
Common shares issued and outstanding	318,373,532	294,379,845
Options outstanding	17,380,000	15,855,000
Warrants outstanding	12,203,670	44,845,052
DSU's outstanding	7,061,663	6,103,362
Total instruments outstanding	<b>355,018,865</b>	361,183,259

## Contractual Obligations

The following table summarizes the maturity of the Corporation's contractual obligations at September 30, 2022:

	Total	Less than one year	1 - 2 years
Office leases	\$ 106,944	\$ 74,827	\$ 32,117
Accounts payable and accrued liabilities	640,442	640,442	-
	<b>\$ 747,386</b>	<b>\$ 715,269</b>	<b>\$ 32,117</b>

## Other Financing Arrangements and Commitments

### Sandstorm Gold Ltd. Royalty Agreement

Sandstorm Gold Ltd. ("Sandstorm") holds a 1% net smelter returns royalty ("NSR Royalty") on Erdene's Altan Nar, Khundii and Ulaan licenses. Sandstorm has been given a right of first refusal on future stream or royalty financings related to these licenses.

### Other

Sandbox Royalties Corp. ("Sandbox") holds a 1.5% NSR Royalty on Erdene's Zuun Mod license. Erdene has the option to buy down a portion of the royalty if certain production milestones are achieved.

## Off-Balance Sheet Arrangements

As at September 30, 2022, the Corporation had no off-balance sheet arrangements such as guarantee contracts, contingent interests in assets transferred to an entity, derivative instruments obligations or any obligations that trigger financing, liquidity, market or credit risks to the Corporation.

## Critical Accounting Estimates

The preparation of financial statements in conformity with IFRS requires Erdene to establish accounting policies and to make estimates that affect both the amount and timing of the recording of assets, liabilities, revenues and expenses. Some of these estimates require judgments about matters that are inherently uncertain.

A detailed summary of all of the Corporation's significant accounting policies and the key sources of estimation uncertainty that have a risk of resulting in a material adjustment to the carrying amount of assets and liabilities within the next twelve months are included in Note 2 to the consolidated financial statements for the year ended December 31, 2021. While all of the key sources are important to the Corporation's consolidated financial statements, the following key sources have been identified as being critical:

- Recoverability of exploration and evaluation assets; and
- Share-based compensation.

## Recoverability of exploration and evaluation assets

In accordance with the Corporation's accounting policy, at the end of each reporting period, the Corporation assesses its exploration and evaluation assets to determine whether any indication of impairment exists. Judgment is required in determining whether indicators of impairment exist, including factors such as the period for which the Corporation has the right to explore, expected renewals of exploration rights, whether substantive expenditures on further exploration and evaluation of resource properties are budgeted and results of exploration and evaluation activities on the exploration and evaluation assets.

Where an indicator of impairment exists, a formal estimate of the recoverable amount is made, which is considered to be the greater of the fair value less cost of disposal and value in use. The impairment analysis requires the use of estimates and assumptions, such as long-term commodity prices, discount rates, future capital expenditures, exploration potential and operating costs. Fair value of exploration and evaluation assets is generally determined as the present value of estimated future cash flows arising from the continued use of the asset, which includes estimates such as the cost of future expansion plans and eventual disposal, using assumptions that an independent market participant may take into account. Cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessment of the time value of money and risks to the asset. If the Corporation does not have sufficient information about a particular mineral resource property to meaningfully estimate future cash flows, the fair value is estimated by management through comparison to similar market assets and, where available, industry benchmarks.

## Share-based payments

Equity-settled share-based payments issued to employees and directors are measured at fair value (excluding the effect of non-market based vesting conditions) at the date of grant. Fair value is measured using the Black-Scholes pricing model and requires the exercise of judgment in relation to variables such as expected volatilities and expected lives based on information available at the time the fair value is measured. The Corporation charged a total of \$921,712 of non-cash share-based compensation to the statement of comprehensive loss for the nine months ended September 30, 2022 (2021 - \$988,538).

## Adoption of New Accounting Standards and Future Changes in Accounting Policies

### *New and revised accounting standards adopted*

Erdene has adopted the following new and revised standards, along with any consequential amendments, effective January 1, 2022. These changes were made in accordance with applicable transitional provisions.

#### IAS 16 – Property, Plant and Equipment

The Corporation adopted the amendment to IAS 16 Property, Plant and Equipment, issued on May 14, 2020, by the IASB, that prohibit deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. The application of the amendment has been made on a prospective basis and did not have an impact on the Corporation.

#### IAS 37 – Provisions, Contingent Liabilities and Contingent Assets

The Corporation adopted the amendment to IAS 37 Provisions, Contingent Liabilities and Contingent Assets, issued on May 14, 2020, by the IASB, specifying which costs an entity includes in determining the cost of fulfilling a contract for the purpose of assessing whether the contract is onerous. The application of the amendment has been made on a prospective basis and did not have an impact on the Corporation.

#### IFRS 9 – Financial Instruments

The Corporation adopted the amendment to IFRS 9 Financial Instruments, issued on May 14, 2020, by the IASB, clarifying which fees to include in the test in assessing whether to derecognize a financial liability. The application of the amendment has been made on a prospective basis and did not have an impact on the Corporation.

### *New and revised accounting standards not yet adopted*

The IASB issued the following new and revised standards that have not been applied in preparing these condensed consolidated interim financial statements as their effective date falls within annual periods beginning subsequent to the current reporting period.

## IAS 1 – Presentation of Financial Statements

On January 23, 2020, the IASB issued an amendment to IAS 1 Presentation of Financial Statements providing a more general approach to the classification of liabilities. The amendment clarifies that the classification of liabilities as current or noncurrent depends on the rights existing at the end of the reporting period as opposed to the expectations of exercising the right for settlement of the liability. The amendments further clarify that settlement refers to the transfer of cash, equity instruments, other assets, or services to the counterparty. The amendments are effective for annual periods beginning on or after January 1, 2023, and are to be applied retrospectively, with early adoption permitted. The Corporation is currently assessing the financial impact of the amendments and the application of such amendments is not expected to have a material impact.

## **Financial Instruments and Other Risks**

### **Financial Instruments**

The fair values of the Corporation's financial instruments are considered to approximate the carrying amounts. Financial instruments, including cash and cash equivalents, receivables, and trade and other payables are measured at amortized cost on the Corporation's financial statements.

### **Credit Risk**

The Corporation manages credit risk by holding the majority of its cash and cash equivalents with reputable financial institutions in Canada, where management believes the risk of loss to be low. At September 30, 2022, \$144,686 or 5% of the balance of cash was held in banks outside Canada (December 31, 2021 - \$270,113 or 3%).

### **Liquidity Risk**

Liquidity risk is the risk that the Corporation will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Corporation's approach to managing liquidity is to ensure, to the extent possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions. The Corporation does not have sufficient working capital to meet budgeted expenditures for 2023 and must obtain additional financing to avoid disruption to its operations.

### **Market Risk**

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates, and commodity and equity prices.

#### *Interest rate risk*

As of September 30, 2022, the Corporation has no interest-bearing debt and is not exposed to any significant interest rate risk.

#### *Foreign Currency Risk*

The functional currency of the Corporation is the Canadian dollar, and the functional currency of the Corporation's subsidiaries is the Mongolian tugrik. Additionally, the Corporation incurs expenses in US dollars. Consequently, fluctuations of the Canadian dollar in relation to other currencies impacts the fair value of financial assets, liabilities and operating results. Financial assets and liabilities subject to currency translation risk primarily include US dollar denominated cash, accounts payable and accrued liabilities, as well as the Corporation's net investments in its Mongolian subsidiaries. The Corporation maintains US dollar bank accounts in Canada.

The Corporation's exposure to US dollar currency risk was \$10,362 as at September 30, 2022 (December 31, 2021 - \$3,038,230). A 10% change in the US dollar exchange rate would affect net loss and comprehensive loss and deficit by approximately \$1,000 (December 31, 2021 - \$303,800).

The Corporation's exposure to Mongolian Tugrik currency risk was \$29,695 as at September 30, 2022 (December 31, 2021 - \$61,212). A 10% change in the Mongolian Tugrik would affect net loss and comprehensive loss and deficit by approximately \$3,000 (December 31, 2021 - \$6,100).

#### *Price Risk*

The Corporation's financial instruments are not exposed to direct price risk other than that associated with commodity price fluctuations impacting the mineral exploration and mining industries as the Corporation has no significant revenues.

## Other Risks

In conducting its business, the principal risks and uncertainties faced by the Corporation relate primarily to exploration results, permitting, financing, availability and price of industrial and consumer goods required for the construction of the Bayan Khundii Gold Project and, to a lesser extent, metal and commodity prices. Exploration for minerals and development of mining operations involve many risks, many of which are outside the Corporation's control. In addition to the normal and usual risks of exploration and mining, the Corporation works in remote locations that lack the benefit of infrastructure and easy access. More information on risks is available in the Corporation's Annual Information Form available on SEDAR at [www.sedar.com](http://www.sedar.com).

## Disclosure Controls and Internal Controls over Financial Reporting

Erdene has established and maintains disclosure controls and procedures over financial reporting, as defined under the rules adopted by the Canadian Securities Regulators in instrument 52-109. The Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") have evaluated the design and effectiveness of Erdene's disclosure controls and procedures as of September 30, 2022 and have concluded that such procedures are adequate and effective to provide reasonable assurance that material information relating to Erdene and its consolidated subsidiaries would be made known to them by others within those entities to allow for accurate and complete disclosures in annual filings.

The Management of Erdene, with the participation of the CEO and CFO (collectively "Management"), is responsible for establishing and maintaining adequate internal controls over financial reporting. Erdene's internal controls over financial reporting are designed to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements in accordance with IFRS.

Management evaluated the design and effectiveness of Erdene's internal controls over financial reporting as of September 30, 2022. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in its report "Internal Control – Integrated Framework (2013)". This evaluation included reviewing controls in key risk areas, assessing the design of these controls, testing these controls to determine their effectiveness, reviewing the results and then developing an overall conclusion.

Based on management's evaluation, the CEO and the CFO have concluded that as of September 30, 2022, Erdene's internal controls over financial reporting were effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS.

However, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness in future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Qualified Person

Peter Dalton, P.Geo. (Nova Scotia) is a qualified person under NI 43-101 and supervises all of the Corporation's exploration programs. Samples are assayed at SGS Laboratory in Ulaanbaatar, Mongolia or Tianjin China, Central Geological Laboratory in Ulaanbaatar, Blue Coast Research Ltd in Parksville British Columbia, Canada, or ALS Chemex in Vancouver, Canada. In addition to internal checks by SGS Laboratory, Central Geological Laboratory and ALS Chemex, the Corporation incorporates a QA/QC sample protocol utilizing prepared standards, field and laboratory splits, and blanks.

The disclosure in this MD&A of scientific or technical information about mineral projects on the Corporation's properties has been reviewed and approved by Peter Dalton, P. Geo, who is not independent of the Corporation.

The information in this MD&A that relates to the financial models for the Bayan Khundii Feasibility Study is based on information compiled and reviewed by Kenny Li, CFA, who is an employee of ROMA Group Ltd. The information in this MD&A that relates to the capital and operating cost estimation for the Bayan Khundii Feasibility Study is based on information compiled and reviewed by Julien Lawrence, who is a FAusIMM and the Director of O2 Mining Ltd. The information in this MD&A that relates to the process design and recovery methods for the Bayan Khundii Feasibility Study is based on information compiled and reviewed by Jeffrey Jardine, who is a FAusIMM. and is engaged through O2 Mining Ltd. The information in this MD&A that relates to the Bayan Khundii resource estimate is based on information compiled and reviewed

by Mr. Cam Norton, who is a P. Geo. The information in this MD&A that relates to the Bayan Khundii reserve estimate is based on information compiled and reviewed by Mr. Anthony Keers, who is an MAusIMM (CP Mining) and a Director, Auralia Mining Consulting. Each of Mr. Li, Mr. Lawrence, Mr. Jardine, Mr. Norton and Mr. Keers has sufficient experience, which is relevant to the style of mineralization and type of deposit under consideration and to the activity which they have undertaken to qualify as a Qualified Person, as that term is defined by National Instrument 43-101. Each of Mr. Li, Mr. Lawrence, Mr. Jardine, Mr. Norton and Mr. Keers is not aware of any potential for a conflict of interest in relation to this work with Erdene.

## **Other Information**

Additional information regarding the Corporation, including the Corporation's Annual Information Form, is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on the Corporation's website at [www.erdene.com](http://www.erdene.com).