DEVELOPING A NEW HIGH-GRADE GOLD DISTRICT
THE KHUNDII GOLD PROJECT
Q1 2020

@ErdeneRes
@ErdeneResource
Erdene Resource Development Corp.
www.erdene.com
FORWARD LOOKING STATEMENTS: This presentation contains certain forward-looking information and statements which may not be based on fact, including without limitation, statements regarding the Company’s expectations in respect of its future financial position, business strategy, future exploration and production, mineral resource potential, exploration drilling, permitting, access to capital, events or developments that the Company expects to take place in the future. All statements, other than statements of historical facts, are forward-looking information and statements. The words “believe”, “expect”, “anticipate”, “contemplate”, “target”, “plan”, “intends”, “continue”, “budget”, “estimate”, “may”, “will” and similar expressions identify forward-looking information and statements. In addition to the forward-looking information and statements noted above, this presentation includes those that relate to: the expected results of exploration activities; the estimation of mineral resources; the ability to identify new mineral resources and convert mineral resources into mineral reserves; ability to raise additional capital and complete future financings; capital expenditures and costs, including forecasted costs; the ability of the Company to comply with environmental, safety and other regulatory requirements; future prices of precious metals; the ability of the Company to obtain all necessary approvals and permits in connection with the development of the Khundii Project.

Such forward-looking information and statements are based upon a number of estimates and assumptions that, while considered reasonable by the Company as of the date of such information and statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking information and statements. Such factors include, but are not limited to, fluctuations in the price of gold and other commodities, the inability of the Company to raise sufficient monies to carry out its business plan, changes in government legislation, taxation, controls, regulations and political or economic developments in Mongolia, the accuracy of the Company’s current estimates of mineral resources and mineral grades and its preliminary economic assessment, the accuracy of the geology and vein structures at the Khundii Project, risks associated with mining or development activities, including the ability to procure equipment and supplies, including, without limitation, drill rigs, the speculative nature of exploration and development, including the risk of obtaining necessary licenses and permits. Many of these uncertainties and contingencies can affect the Company’s actual performance and could cause actual performance to differ materially from those expressed or implied in any forward-looking information and statements made by, or on behalf of, the Company.

Readers are cautioned that forward-looking information and statements are not guarantees of future performance. There can be no assurance that such information and statements will prove to be accurate and actual results and future events could differ materially from those presented in such information and statements. Forward-looking information and statements is subject to a variety of risks and uncertainties which could cause actual events or results to differ in the forward-looking information and statements. Such risks include, but are not limited to, the volatility of the price of gold, uncertainty of mineral resources, exploration potential, mineral grades and mineral recovery estimates, delays in exploration and development plans, insufficient capital to complete development and exploration plans, risks inherent with mineral acquisitions, delays in obtaining government approvals or permits, financing of additional capital requirements, commercial viability of mineral deposits, cost of exploration and development programs, risks associated with competition in the mining industry, risks associated with the ability to retain key executives and personnel, title disputes and other claims, changes in governmental and environmental regulation that results in increased costs, cost of environmental expenditures and potential environmental liabilities, accidents and labour disputes. Should one or more of these risks and uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking information and statements. Please see the Company’s Annual Information Form dated March 27, 2019 available on the Company’s website at www.erdene.com or on the Company’s SEDAR profile at www.sedar.com, for details of other risks facing the Company. The Company disclaims any intention or obligation to update or revise any forward-looking information and statements whether as a result of new information, future events or otherwise, except to the extent required by applicable laws.

Peter Dalton, P.Geo. (Nova Scotia), Senior Geologist for Erdene and a “Qualified Person” under National Instrument 43-101, has reviewed and approved the scientific and technical information in this presentation. All currencies are reported in Canadian dollars unless otherwise specified.
Moving the high-grade, near-surface, 100%-owned, gold deposits with strong economics towards production.

The New Khundii Gold District provides exceptional discovery potential in an expanding mining region.

We are the longest-standing international mining & exploration company in Mongolia with a Mongolia-focused team and a strong social license to operate.
Giant gold & copper deposits in prospective porphyry and epithermal terranes:

The Central Asia Orogenic Belt hosts some of world’s largest gold and copper deposits and remains largely unexplored in Mongolia.
Leading prospector in southwest Mongolia for over a decade
- Staked licenses covering 542,000 ha
- Compiled largest proprietary geologic database of the region
- Interpreted landsat and aster data
- Completed geochemical sampling program over 4,000,000 ha

Established three greenfield gold and copper deposits
- Zuun Mod – 2011
- Altan Nar – 2015
- Bayan Khundii – 2018

Improved infrastructure in a growing mining region
KHUNDII GOLD DISTRICT

Three deposits, multiple prospects, limited exploration

Fast tracking to production

Altan Nar (Au, Ag, Zn, Pb)
Oyut Khundii
Khundii West
Ulaan
Bayan Khundii (Au)

Altan Arrow North
Altan Arrow
Khar Mori
Khundii North

Nomin Tal

Altan Nar Prospects

Fast tracking to production

ERD License
Mineralized trend

0 5 10 kilometers

Zuun Mod (Cu, Mo)

Bayan Khundii (Au)

KHUNDII GOLD DISTRICT

Three deposits, multiple prospects, limited exploration

Fast tracking to production
Cut-off grades for Altan Nar are 0.7 g/t AuEq above a pit and 1.4 g/t AuEq below the same pit shell and for Bayan Khundii are gold only 0.6 g/t gold for 2018 and 0.55 for 2019.
Our objective is to become a major regional gold producer, initially through development of a 60,000 ounce per year, high-grade, open-pit mine at Bayan Khundii, while continuing exploration and acquisition efforts to significantly expand operations.
BAYAN KHUNDII DEPOSIT

Diluted Head Grade 3.7 g/t Au
Stripping Ratio 10.5:1
Mine Feed 422,000 ounces

Recovery 91%
382,000 ounces production
BAYAN KHUNDII: PRE-FEASIBILITY STUDY RESULTS (OCTOBER 2019)

**NPV (5%)**
US$ 97 million
@5% discount and $1,300 gold price

**LOM Head Grade**
3.7 g/t Au
91% average recovery

**IRR**
42%
1.8 year payback

**Capital Expenditure**
US$ 40 million

**All in Sustaining Cost (AISC)**
US$ 746/oz

**Average Annual Production**
61,000 ounces

**Life of Mine (LOM)**
7 years

**NPV (5%) WITH RISING GOLD PRICE**

<table>
<thead>
<tr>
<th>Gold Price</th>
<th>NPV (5%)</th>
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<tbody>
<tr>
<td>$1,300</td>
<td>$97</td>
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<tr>
<td>$1,400</td>
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<td>$1,600</td>
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<tr>
<td>$1,700</td>
<td>$187</td>
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<tr>
<td>$1,800</td>
<td>$210</td>
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</table>

**IRR WITH RISING GOLD PRICE**

<table>
<thead>
<tr>
<th>Gold Price</th>
<th>IRR (%)</th>
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<tr>
<td>$1,300</td>
<td>42%</td>
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<tr>
<td>$1,400</td>
<td>50%</td>
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<tr>
<td>$1,500</td>
<td>58%</td>
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<tr>
<td>$1,600</td>
<td>66%</td>
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<tr>
<td>$1,700</td>
<td>73%</td>
</tr>
<tr>
<td>$1,800</td>
<td>81%</td>
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Refer to Erdene’s news release dated October 21, 2019 for additional information on the Pre-Feasibility Study.
BAYAN KHUNDII
A High-return, Low Capital Project
Fast tracking to production

Initial Capex-PFS (Million US$)

After-tax IRR-PFS (%) (US$1300 Au Price)

Source: Select public company filings, development stage gold companies

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BAYAN KHUNDII
A High-grade, High-recovery Open Pit Development
Fast tracking to production

Source: Select public company filings for development stage gold companies
1. Wood MacKenzie Global Gold Mine Cost database for open pit gold mines, August 2018
2. Refer to Erdene’s news release dated October 21, 2019 for additional information on the Pre-Feasibility Study.
Bayan Khundii deposit average LOM head grade

3.73 g/t

World average grade for open pit gold mines

1.03 g/t

1. Source: Wood Mackenzie Global Gold Mine Cost database for open pit gold mines, August 2018
2. Refer to Erdene’s news release dated October 21, 2019 for additional information on the Pre-Feasibility Study.
Bayan Khundii Mine Site Facilities
KHUNDII GOLD PROJECT
BAYAN KHUNDII
SITE PLAN
1,800 TPD CIP PLANT
• Hong Kong listed firm providing natural resources consulting, business valuation and risk advisory  
  • FS Scope: Study lead, resource geotech and hydro, financial modeling

• Philippines based consulting group formed out of Ausenco’s operations offering full suite design and engineering services  
  • FS Scope: Process plan design and engineering

• Vancouver based metallurgical testwork, interpretation, and design consulting  
  • FS Scope: Metallurgy

• Perth-based experts in mining engineering and resource modeling  
  • FS Scope: Mine design (including closure) and mineral reserves statement

• Australian specialists in life-of-mine waste rock and tailings management; design and operating experience at Oyu Tolgoi  
  • FS Scope: Mineral waste facility design and closure

• Ulaanbaatar-based mining and financial advisory and execution services; Management of local design partner  
  • FS Scope: Internal mine design, Non-process infrastructure, procurement Facilities drawing permitting

• International-Mongolian consortium of environmental and social impact assessment and management; Deep experience across commodities/cycle in Mongolia and globally  
  • FS Scope: Environmental and social impact assessment; hydrogeology
### BAYAN KHUNDII

#### Rapid Development Timetable

*Fast tracking to production*

<table>
<thead>
<tr>
<th>Key Milestone</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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<tbody>
<tr>
<td>Resource Estimate</td>
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<tr>
<td>Khundii Project PEA Study</td>
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<tr>
<td>Bayan Khundii Mining License</td>
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<td>Mongolian Feasibility</td>
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<td>Khundii Pre-Feasibility Study</td>
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<td>ESIA &amp; DEIA</td>
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<td>Bankable Feasibility Study</td>
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<td>Project Finance</td>
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<td>Construction Permits</td>
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<tr>
<td>Earthworks and Construction</td>
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<tr>
<td>Production</td>
<td></td>
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</tbody>
</table>

- **Completed**
- **Planned**
- **In Progress**

[View on Erdene.com](www.erdene.com)
- 422,000 ounces @ 3.7g/t gold
  Proven and Probable Reserve
- M&I 521,000 ounces @ 3.16g/t gold
- Inferred resource of 103,000 ounces @ 3.68 g/t gold outside of pit
- Very high gold grades near surface in SW not defined
- Potential extensions south and north of the pit
BAYAN KHUNDII
Multiple Prospects On License
Fast tracking to production

ALTAN ARROW GOLD PROSPECTS:
Shallow drilling returned multiple high-grade intersections including 2m of 70 g/t Au and 2m of 23 g/t Au

ULAAN:
Gold bearing tourmaline breccia intersected in Q4-2019 drilling

KHAR MORI PROSPECT:
Multiple high-grade gold in rock (up to 87.8 g/t Au) and soil samples expand area to ~3km²

BAYAN KHUNDII GOLD DEPOSIT:
1.5 km long soil and rock chip gold anomaly
Eighteen targets over a 5.6km trend
- Exploration has been focused on Union North and Discovery Zone prospects
- Gold anomalies located along structural trend east of Discovery Zone are most prospective

Intermediate sulphidation epithermal style deposit with significant depth potential
- Average drill depth of 150 metres
- Several intense geochemical and geophysical anomalies remain untested

<table>
<thead>
<tr>
<th>Resource</th>
<th>Category</th>
<th>Au Oz (1.9g/t)</th>
<th>Ag Oz (~10g/t)</th>
<th>Pb lbs (~0.6%)</th>
<th>Zn lbs (~0.6g/t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altan Nar 0.7g/t AuEq cut-off</td>
<td>Indicated</td>
<td>318,000</td>
<td>2,350,000</td>
<td>63,800,000</td>
<td>69,520,000</td>
</tr>
<tr>
<td></td>
<td>Inferred</td>
<td>186,000</td>
<td>866,000</td>
<td>49,060,000</td>
<td>52,140,000</td>
</tr>
</tbody>
</table>
ALTAN NAR – DISCOVERY ZONE

Q1 2020 Results Return Exceptionally High Grades

Fast tracking to production

45 g/t GOLD OVER 7 METRES INTERSECTION DEMONSTRATES THE POTENTIAL OF ALTAN NAR’S 5.6 KM LONG MINERALIZED TRENDS

TND-101:
23 metres of 2.69g/t Au

TND-69:
7 metres of 5.37g/t Au

TND-135:
23 m of 17 g/t Au beginning 70 m from surface vertically; includes 7 m of 45.7 g/t Au, 93 g/t Ag and 4.9% combined Zn & Pb

Central Zone Gap Results from Q1 -2019

www.erdene.com 22
The most sparsely populated country in the world: 3.2 million people over 1.5 million km\(^2\)

**MONGOLIA OVERVIEW**

**Country at a Glance**

*Fast tracking to production*

- **Growing democracy between China and Russia**
  - GDP growth of **5.1%** in 2019
  - 30-year history of democratic elections
  - Well educated, young population with **98%** literacy rate
  - +40,000 mining professionals – 97% of Oyu Tolgoi’s ~15,000 staff are Mongolian

- **Emerging mining region**
  - Mining represents **21%** of GDP, and **85%** of exports
  - 70% of the country’s land is under-explored
  - Mine permitting of **3-5 years**

- **Supportive regulatory regime**
  - 5% gold royalty rate and **25%** corporate income tax
  - **Double tax treaty** with Canada and ~20 other nations
  - Canada-Mongolia Foreign Investment Promotion and Protection Agreement (FIPA)

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ERDENE AND MONGOLIA
Growing Hard Rock Mining
Fast tracking to production

BAYAN AIRAG
Bayan Airag LLC
1 Moz open pit, heap leach. Production started in Q2-2014.

ZAAMAR
Artisanal mining
Alluvial mining along 50 km section of Tuul River.

BOROO
Centerra
Produced 1.5 Moz @ approx. $500/oz cash cost.

GATSUURT
OZD
1.6 Moz reserve, open pit development. Permitting stage.

ATO
Steppe
0.7 Moz Au (+5 Moz Ag), @ 1.3 g/t Au. Advanced stage.

TSAGAAN TSAKHIR
Naran Mandal
Commenced production in early 2016.

BAYAN KHUNDI & ALTAN NAR
Erdene Resource Development
Emerging gold district. High-grade, early stage.

BAYANKHONGOR
Artisanal mining
Alluvial mining activity.

OYU TOLGOI
Turquoise Hill
61 Moz gold resource, open pit / underground. Produced 65.3k oz in 2015.

OYUT ULAAN
Xanadu
Emerging gold district. High-grade, early stage.
ERDENE AND MONGOLIA

Strong Technical and Social License to Operate

Fast tracking to production

Principals in Mongolia since 1997

Strategic investment by the European Bank for Reconstruction and Development ("EBRD")

First company cross-listed on the MSE with over 6,000 Mongolian shareholders

15 years investing in community development and environmental stewardship
MONGOLIAN AND INTERNATIONAL STAKEHOLDERS

Support from the EBRD and Mongolian investors

Fast tracking to production

EBRD Financing (2019)

- Secured US$5 million convertible loan from the European Bank for Reconstruction and Development\(^1\) in November 2019
- The EBRD is one of the largest foreign investors in Mongolia, has invested over €1.7 billion to date
- The EBRD’s investment followed extensive technical, environmental and social due diligence.

MSE Listing (2018)

- Erdene was the first company to cross-list on the Mongolian Stock Exchange\(^2\)
- Over 6,000 Mongolian shareholders, including all residents in the local community, as well as major Mongolian institutions
- Oversubscribed Mongolian financing in 2018 (C$1.38 million)

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\(^1\) See Company’s October 15, 2019 news release
\(^2\) See Company’s June 8, 2018 and June 14, 2018 news releases
BOARD OF DIRECTORS

Pioneers In Mongolia’s Modern Exploration Period

Fast tracking to production

Peter Akerley
President & CEO
Mining executive and geologist with 25 years experience in exploration, corporate finance, project development & management of public resource companies.

Layton Croft
Chairman
25 years of leadership and management experience in Mongolia, 16 years of global mining experience with Ivanhoe Mines, Rio Tinto, Peabody Energy and Pancontinental Resources.

Dr. Anna Biolik
Director
Diplomat with 30+ years experience including acting as Canadian Ambassador to Mongolia, Kazakhstan, Kyrgyzstan & Tajikistan.

David Mosher
Director
Mining executive and geologist with 35 years international experience. Former President & CEO of High River Gold Mines where he developed gold mines in Burkina Faso and Russia.

John Byrne
Director
Finance professional with 30+ years experience in the Canadian banking industry. President of Petroleum Corp of Canada Exploration since 1997.

Kenneth MacDonald
Director
A Chartered Professional Accountant with 34 years of mining finance experience, including 17 years as Executive VP and CFO of Erdene.

Hedley Widdup
Director
Geologist and investment manager with 20 years experience in the evaluation and development of mining projects.

Cameron McRae
Director
Mining executive, with 28 years at Rio Tinto, including as President of Oyu Tolgoi where he led construction of the US$6 billion copper-gold mine in southern Mongolia.

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1. US$5M convertible loan from the European Bank for Reconstruction and Development ("EBRD"). Conversion of the loan principle by the EBRD would result in the issuance of approximately 33M shares.
Refer to Erdene’s news release dated October 21, 2019 for additional information on the results of the Pre-Feasibility Study.
ERDENE RESOURCE DEVELOPMENT
Value, Growth & People
Fast tracking to production

VALUE
- Two high-grade gold deposits exposed at surface
- Triple the average grade of open-pit gold mines
- Near term, low capex, high return project with rapid payback

GROWTH
- Existing gold deposits have significant expansion potential
- Multiple untested prospects on license
- Experts in an under-explored portion of one of the world's great gold belts

PEOPLE
- Engaged in the community development for over a decade
- Experienced team in all aspects of development
- Over 6,800 Mongolian shareholders

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