Erdene Announces Positive Pre-Feasibility Study Results for the Bayan Khundii Gold Project

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HALIFAX, Oct. 21, 2019 - Erdene Resource Development Corp. (TSX:ERD; MSE:ERDN) ("Erdene" or the "Company") is pleased to announce the results of an independent Technical Report for the 100%-owned, high-grade, open-pit, Khundii Gold Project in southwest Mongolia, including a Pre-Feasibility Study ("PFS") for its Bayan Khundii Gold Deposit ("Bayan Khundii" or "BK") and an updated Preliminary Economic Assessment ("PEA") for its Altan Nar Deposit ("Altan Nar" or "AN"), located 16 km from Bayan Khundii. The Technical Report also includes an updated mineral resource as well as a statement of mineral reserves for Bayan Khundii. The Technical Report was prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") by Tetra Tech Inc. ("Tetra Tech"). The Technical Report, pursuant to NI 43-101 guidelines, will be filed on SEDAR within 45 days.

NI 43-101 Technical Report Highlights (US$1,300/oz Gold Price)

- Post-tax Net Present Value of US$97 million (NPV$_{5\%}$) and a 42% Internal Rate of Return (IRR), for the BK PFS
- Post-tax NPV$_{5\%}$ and IRR of US$24 million and 92%, respectively, for the updated AN PEA, reflecting the second phase of the development, and utilizing the BK infrastructure
- BK PFS Life of Mine Earnings Before Interest, Taxes and Depreciation of US$211 million
- BK Measured and Indicated Resources of 520,700 ounces gold at an average grade of 3.16 g/t gold, a 20% increase from the September 2018 resource estimate
- BK Proven and Probable Reserves of 422,000 ounces gold at an average grade of 3.7 g/t gold
- Life of mine head grade of 3.73 g/t gold for the BK PFS and 3.46 g/t gold for the updated AN PEA
- Project life of 11 years, comprising one year pre-production period, six-year operating life for BK, three-year operating life for AN, and one year mine closure
- Average annual gold production of 61,000 ounces in the BK PFS and 45,300 ounces of gold and 205,000 ounces of silver for the updated AN PEA
- All-in sustaining cost ("AISC") of US$746/ounce of gold recovered for the BK PFS and for the updated AN PEA, US$931/ounce of gold equivalent ("AuEq"; see definition in note 4, Table 1)
- BK PFS Initial Capital US$40 million and US$2 million incremental capital for AN PEA
- Payback period of less than 2 years for BK PFS
- Significant benefits to Mongolia, including Life of Mine royalties and taxes of US$82 million and approximately 300 new jobs in Bayankhongor Province

Quotes from the Company:

"With exceptionally high gold grades, a growing resource and low capital and operating costs, the Khundii Gold Project will generate strong returns for investors," said Peter Akerley, Erdene's President and CEO. "Bayan Khundii PFS results provide a compelling base development case, and the updated Altan Nar PEA demonstrates the significant upside in our Khundii Gold District."

"Our recently announced financing, led by the European Bank for Reconstruction and Development ("EBRD"), will fund the Feasibility Study, engineering and permitting work required to reach a development decision in 2020," stated Mr. Akerley. "EBRD's investment was due in part to our approach to sustainable development. Through taxes and local economic participation, the benefits of the Project will be shared by the Mongolian government, residents of Bayankhongor Province, and shareholders, many of whom hold shares listed on the Mongolian Stock Exchange."

"Erdene is targeting first gold production in 2021, as the first step in our journey to become a major

regional gold producer," continued Mr. Akerley. "The Khundii Gold District remains largely unexplored and we see the potential for significant growth through continued exploration and acquisition."

NI 43-101 Technical Report Overview

The Technical Report is comprised of a PFS for Bayan Khundii and an updated PEA for Altan Nar. The Technical Report incorporates an updated resource estimate for Bayan Khundii and the resource estimate, completed in May 2018, for Altan Nar, located 16 kilometres northwest of Bayan Khundii (see news release dated May 10, 2018). The PFS includes 3.5 million mineable tonnes from the Bayan Khundii resource at an average head grade of 3.73 g/t gold, all of which are Proven and Probable Reserves. The Altan Nar PEA contributes 1.8 million mineable tonnes at an average head grade of 3.46 g/t gold and 17 g/t silver, of which 66% are Indicated Resources.

The Technical Report envisions a high-grade, open-pit mine, beginning at surface at Bayan Khundii, and expanding northward into adjacent zones within the Bayan Khundii deposit. The development incorporates conventional crushing and grinding separation and a carbon in pulp plant with processing capacity of 1,800 tonnes per day. Altan Nar resources will be mined by open-pit mining following the completion of mining at Bayan Khundii, in years 8 to 10 of the Khundii Gold Project mine life.

Financial modelling for the Altan Nar PEA has been completed as a marginal analysis, assuming the use of processing infrastructure at Bayan Khundii. Standalone financial modelling of Altan Nar resources has not been undertaken.

The base case assumes a gold price of US$1,300/oz and US$17.50 for silver. All references to dollars within this release are US Dollars (US$), unless stated otherwise. The Technical Report, pursuant to NI 43-101 guidelines for the Bayan Khundii PFS and the updated Altan Nar PEA will be filed on SEDAR within 45 days.

Key metrics from the Technical Report are presented in Table 1 below.

Table 1. Khundii Gold Project Key Metrics

		BK PFS	AN PEA
Gold Price	US$/oz	1,300	1,300
Production Profile			
Average Head Grade Over Life of Mine[1]	g/t gold	3.73	3.46
Project Life[2]	years	7	4
Operating Life	years	6	3
Target Production Rate Per Day[3]	tpd	1,800	1,800
Average Annual Saleable Gold[4]	oz	61,000	48,000
Peak Annual Saleable Gold[4]	oz	75,000	53,200
Average Gold Recovery Rate Over Life of Mine	%	91%	67%
Strip Ratio	t:t	10.2	7.6
Operating Costs			
Life of Mine ("LOM") Average Cash Cost[5]	US$/oz	741	929
LOM Cash Cost plus Sustaining Cost (AISC)[5]	US$/oz	746	931
Pre-Tax Net Present Value			
5% discount rate	US$M	124	31
7.5% discount rate	US$M	107	24
10% discount rate	US$M	92	19
After-Tax Net Present Value			
5% discount rate	US$M	97	24
7.5% discount rate	US$M	83	19
10% discount rate	US$M	71	15

Pre-Tax Internal Rate of Return	%	48%	110%
After-Tax Internal Rate of Return	%	42%	92%
Payback Period (After tax)	years	1.8	1.1
Capital Requirements	 	 	
Pre-production Capital Cost, including contingency	US$M	39.9	2.2
Life of mine (“LOM”) Remaining Capital Cost	US$M	2.5	nil

Notes:

1. Average diluted head grade of mineralized rock fed to process plant.
2. Project life comprising one year pre-production period, approximately nine years operating life and one year mine closure.
3. Assumes process plant operates for 8,000 hours per annum to achieve the target production rate of 600 ktpa.
4. Reported numbers for saleable gold for Bayan Khundii and gold equivalent (“AuEq”) for Altan Nar. For the purpose of the PEA, gold equivalent (AqEq) is based on saleable gold and silver only, at metal values of US$1,300 for gold and US$17.50 for silver. No value is assigned to lead and zinc as it is not recoverable in the current processing design.
5. Operating costs reported in terms of saleable gold ounces for Bayan Khundii and AuEq ounces for Altan Nar; cost includes Royalty and Charges at US$77/oz.

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

Technical Report Sensitivities

The following tables shows changes in the after-tax NPV and IRR over a range of gold prices and discount rates, demonstrating the impact of higher gold prices and the Project’s resiliency to lower prices.

Table 2A. Technical Report Sensitivities – After-Tax Gold Price Sensitivity Analysis – BK PFS

Gold Price Sensitivity Analysis	Units	US$1,200	US$1,300	US$1,400	US$1,500
NPV (5% discount rate)	US$M	73	97	121	144
NPV (7.5% discount rate)	US$M	61	83	105	125
NPV (10% discount rate)	US$M	50	70	91	109
IRR	%	34%	42%	50%	58%

Table 2B. Technical Report Sensitivities – After-Tax Gold Price Sensitivity Analysis – AN PEA

Gold Price Sensitivity Analysis	Units	US$1,200	US$1,300	US$1,400	US$1,500
NPV (5% discount rate)	US$M	18	24	30	37
NPV (7.5% discount rate)	US$M	14	19	24	29
NPV (10% discount rate)	US$M	11	15	19	23
IRR	%	71%	92%	113%	134%

Resource and Reserve EstimatesThe following table provides the total resources for the Khundii Gold Project and was calculated by adding the resource from both the Bayan Khundii and Altan Nar deposits and calculating the weighted average grades. Details of the resource estimates for each of the deposits is provided below in Tables 4 and 5.

Table 3. Khundii Gold Project – Mineral Resource Estimate Summary

Cut-off Grade[1]	Resource Classification	Quantity (Mt)	Grade (Au g/t)	Gold (Koz)
0.4	Measured & Indicated	14.0	1.91	863

Cut-off Grade[1]	Resource Classification	Quantity (Mt)	Grade (Au g/t)	Gold (Koz)
	Inferred	4.8	1.91	295
Recommended[2]	Measured & Indicated	10.1	2.59	839
	Inferred	4.3	2.10	289
1.0	Measured & Indicated	6.5	3.65	762
	Inferred	3.6	2.38	275
1.4	Measured & Indicated	5.2	4.33	727
	Inferred	3.2	2.56	266

Notes:

1. Cut-off grades for Altan Nar are AuEq^2 (as defined in Note 8; Table 6) and for Bayan Khundii are gold only.
2. Tetra Tech recommended cut-off grade for Bayan Khundii is 0.55 g/t gold and RPM recommended cut-off grade for Altan Nar is 0.7 g/t AuEq^2 above a pit and 1.4 g/t AuEq^2 below the same pit shell.

Updated Bayan Khundii Mineral Resource Estimate

The Bayan Khundii updated Mineral Resource Estimate (“Mineral Resource”) was prepared in accordance with NI 43-101 by Tetra Tech and is dated effective October 1, 2019. The reported Mineral Resource (Table 4) 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. A final National Instrument 43-101 (NI 43-101) Technical Report will be filed on SEDAR within 45 days. The Mineral Resource incorporates 266 diamond drill holes totaling 44,556 metres, completed between Q4-2015 and Q2-2019. The Mineral Resource is contained within a near-surface, shallow-dipping and mineralized system (intercepts up to 2,200 g/t gold) that extends along strike over a distance of 1.2 kilometres (NE-SW) and is up to 400 metres wide (NW-SE).

The Mineral Resource estimate 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 Mineral Resources were estimated using a non-rotated block model with parent blocks of 5m x 5m x 5m, split 5 times into sub-blocks. A composite size of 1 m was used in order to support the utilized block size. The QAQC sampling protocols and corresponding sample preparation and shipment procedures have been reviewed by Tetra Tech.

The Mineral Resource was estimated and classified in conformance with the CIM Definition Standards for Mineral Resources and Mineral Reserves. The confidence of the resource is based on an understanding of geological controls of the mineralization, the drill hole pierce point spacing in the resource area, the number of samples present, and the number of holes contained within each search ellipse.

The Mineral Resource estimate has been constrained to a conceptual pit shell and is reported at a cut-off grade of 0.55 g/t gold. The assumptions and parameters utilized to establish the cut-off grade and pit shell are reported below in notes to Table 4 and support reasonable prospects for eventual economic extraction.

Tetra Tech estimated the Bayan Khundii Mineral Resource at a number of gold cut-offs, however, Tetra Tech recommends reporting the Bayan Khundii Mineral Resource at a 0.55 g/t gold cut-off. A sensitivity analysis of the grade and tonnage relationships at different cut-off grades is shown in Table 4.

Table 4. Bayan Khundii Gold Deposit – Updated Mineral Resource Estimate Summary, October 1, 2019

Cut-off Grade[1]	Resource Classification	Quantity (Mt)	Grade (Au g/t)	Gold (Koz)
0.4	Measured	1.7	3.15	176
	Indicated	4.6	2.45	364
	Measured & Indicated	6.4	2.64	540
	Inferred	1.1	3.10	106
0.55	Measured	1.4	3.77	171

	Indicated	3.7	2.93	350
	Measured & Indicated	5.1	3.16	521
	Inferred	0.9	3.68	103
1.0	Measured	0.7	7.31	153
	Indicated	1.7	5.56	304
	Measured & Indicated	2.3	6.05	457
	Inferred	0.4	6.83	93
1.4	Measured	0.5	9.09	148
	Indicated	1.4	6.40	294
	Measured & Indicated	1.9	7.10	441
	Inferred	0.4	7.61	91

Notes:

1. The Statement of Estimates of Mineral Resources has been compiled under the supervision of Mr. Cameron Norton who is a full-time employee of Tetra Tech and a P. Geo. Mr. Norton 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.
2. All Mineral Resource figures reported in the table above represent estimates based on drilling completed up to April 22, 2019. 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.
3. Mineral Resources are reported on a dry in-situ basis.
4. The Mineral Resources is reported at a 0.55 g/t Au cut-off. Cut-off parameters were selected based on Tetra Tech’s internal cut-off calculator, which indicated that a break-even cut-off grade of 0.55 g/t Au, assuming an open cut mining method, a gold price of USD $1,350 per ounce, an open mining cost of USD $2 per tonne, a processing cost of USD $16 per tonne milled, a G&A cost of $5 per tonne, and a gold recovery of 0.95%.
5. The mineral resource estimate has been constrained to a preliminary optimized pit shell which assumed a gold price of USD $2,000 and the economic potential tested using the above parameters.
6. The mineral resource estimate assumes an average density of 2.66 t/m3 for the mineralized domains.
7. Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability.
8. Measured and Indicated mineral resources do not have demonstrated economic viability. Inferred mineral resources have a greater amount of uncertainty as to their existence and potential economic and legal feasibility, do not have demonstrated economic viability, and are exclusive of mineral reserves.

The updated Bayan Khundii resource estimate has resulted in a 20% increase in the grade and ounces of contained gold for the combined Measured and Indicated resources. This increase is due to the results of 2019 infill drilling that confirmed continuity of the high-grade mineralization and a reinterpretation of the geologic model by the Tetra Tech resource modeler.

BK Reserve Estimate

The Bayan Khundii October 15, 2019, PFS Mineral Reserve has been estimated by Qualified Person, Maurie Phifer, P.Eng., Manager, Mining, Tetra Tech, 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 total Mineral Reserve for the Bayan Khundii deposit is shown in Table 5. The Mineral Reserve is based on the updated October 1, 2019, Mineral Resource, reported herein. 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 October 15, 2019.

Table 5. Bayan Khundii Gold Deposit – Mineral Reserve Statement, October 15, 2019

	Tonnage (Mt)	Grade (g/t Au)	Contained Au (Koz)
Proven Mineral Reserves	1.1	4.4	165
Probable Mineral Reserves	2.4	3.4	256
Total Mineral Reserve	3.5	3.7	422

Notes:

1. The effective date of the Mineral Reserve estimate is October 15th, 2019. The QP for the estimate is Ms. Maurie Phifer, P.Eng. of Tetra Tech
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. Reserves are reported on a dry in-situ basis
5. 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. NSR cut-off was calculated to be $22.93, and includes 5% royalty deduction
6. Reserves are based on a gold price of $1267/oz, mining cost of $2.5/tonne, milling costs of $16.46/tonne feed, G&A costs of $6.58/tonne
7. Mineral Reserves include dilution of 9% and losses of 5%.

Altan Nar Resource Estimate

RPMGlobal (RPM) calculated the Mineral Resource estimate for Altan Nar in May 2018 at a number of gold cut-offs, however, RPM recommends reporting the Bayan Khundii Mineral Resource at cut-off of 0.7 g/t AuEq[2] (see note 8, Table 6) above a pit and 1.4 g/t AuEq[2] below the same pit shell. A sensitivity analysis of the grade and tonnage relationships at different cut-off grades is shown in Table 6. For further details on the Mineral Resource estimate please see the Company’s May 10, 2018 news release (click here).

Table 6. Altan Nar Deposit – Mineral Resource Estimate Summary, May 7, 2018

Cut-off AuEq g/t	Resource Classification	Quantity (Mt)	Grade					Contained Metal				
			Au g/t	Ag g/t	Zn g/t	Pb g/t	AuEq[2] g/t	Au Koz	Ag Koz	Zn Kt	Pb Kt	AuEq[2] Koz
0.4	Indicated	5.6	1.8	13.5	0.6	0.5	2.6	323	2,412	33.2	29.9	464
	Inferred	3.7	1.6	7.5	0.7	0.6	2.3	189	901	24.5	22.8	283
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
1.0	Indicated	4.2	2.3	16.6	0.7	0.7	3.2	306	2,212	28.6	27.4	431
	Inferred	3.2	1.8	8.2	0.7	0.7	2.7	182	837	22.8	21.5	270
1.4	Indicated	3.3	2.7	18.9	0.8	0.8	3.8	285	2,002	24.9	25.2	398
	Inferred	2.9	1.9	8.6	0.8	0.7	2.8	176	795	21.5	20.4	259

Notes:

1. The Mineral Resources have been constrained by topography and a cut-off of 0.7 g/t AuEq[2] above a pit and 1.4 g/t AuEq[2] 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 2 ("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.

Mining

The BK PFS 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 3.5 million tonnes at an average diluted head grade of 3.73 g/t gold and strip ratio of 10.2:1 (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. Underground mining below the current open cut pit is not within the PFS scope of work but will be examined in future studies. 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 adjacent to the pit, and ore hauled to a crusher or run-of-mine ("ROM") pad adjacent to the processing plant.

The updated Altan Nar PEA is based on the selective open-pit mining, also targeting 600,000 tonnes per year of mill feed. The total mineable mineralized plant feed is 1.8 million tonnes at an average diluted head grade of 3.46 g/t gold and 17 g/t silver, at a strip ratio of 7.6:1. Resources from Altan Nar, with a 20 kilometre road distance to the processing plant means that ore hauled from the pit will need to be placed nearby and transferred by articulated trucks to Bayan Khundii.

Processing

The PFS assumes processing of ROM material via a conventional crush and grind circuit and a carbon in pulp plant. 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 3.5 million tonnes at an average diluted head grade of 3.73 g/t gold. Using an estimated mill recovery of 91%, total recovered gold over the life of the Bayan Khundii deposit is 382,000 ounces.

For the updated PEA base case, ore from Altan Nar will be processed at the Bayan Khundii processing plant, utilizing the same conventional crush and grind circuit and carbon in pulp plant. Total mineralized material from Altan Nar processed in the Bayan Khundii plant over the course of the Altan Nar mine life is 1.8 million tonnes at an average diluted head grade of 3.46 g/t gold and 17 g/t silver. For the Altan Nar deposit, which includes arsenopyritic ore locally, with associated low recoveries, ore mined will only include the free-milling portions of the resource with an average recovery of 67% gold and 62% silver, resulting in a total recovered gold of 136,000 ounces and total recovered silver of 616,000 ounces over the life of the Altan Nar mine, or 144,000 AuEq ounces.

Operating Costs

Operating costs are based on the mining and processing scenarios outlined above and assumes contract mining. All other activities are assumed to be owner-operated. The AISC for Bayan Khundii is estimated at $746/oz and the AISC for Altan Nar is $931/oz AuEq.

Table 7. Operating Costs

Operating Costs	Bayan Khundii PFS			Altan Nar PEA		
	Life of Mine ($ millions)	US$/oz	US$/tonne	Life of Mine ($ millions)	US$/oz AuEq	U
Mine Operating Cost	125	327	35	59	406	3
Processing Cost	113	295	32	56	388	3
G&A	15	40	5	8	60	5
Total Site Operating Costs	253	662	72	123	854	6

Royalty and Charges	30	77	8	11	77	6
Sustaining Capital & Closure Costs	2	7	1	-	-	-
All-In Sustaining Cost	285	746	81	134	931	7

Capital Costs

The initial capital cost (Year 0), primarily comprising construction of supporting infrastructure and the process plant, is estimated at US$40 million. The estimates include a 15% contingency. The PFS contemplates the lease of fleet equipment, which if purchased outright, would add $16 million to capital costs. All major facilities including the process plant are proposed to be located at the Bayan Khundii site.

In Year 6 the supporting infrastructure for the Altan Nar site, primarily a haul road and updates to the processing circuit, is constructed at an estimated cost of US$2.2 million, including a 20% contingency.

Sustaining capital of US$1.2 million has been included in the mine plan and mine closure costs are estimated at US$1.3 million. Total capital expenditures across the Khundii Gold Project life are estimated at US$44.6 million.

Table 8. Capital Costs

Item	Bayan Khundii PFS ($ millions)	Altan Nar PEA ($ millions)
Mine	1.9	1.3
Process Plant	12.1	0.1
Site Buildings	3.9	-
Accommodation Village	1.4	-
Project Services	2.2	-
Early Earthworks	3.0	0.3
Engineering & Support	4.3	-
Pre-Production Costs	10.9	0.5
Subtotal Plant and Infrastructure	39.9	2.2
Mine Closure	1.3	-
Sustaining Capital	1.2	-
Total	42.4	2.2

Note: Rounding may cause some computational discrepancies

Opportunities to Enhance Project Value

The Company sees the following opportunities to enhance value at the Khundii Gold Project:

- Additional Resources at Bayan Khundii: The Bayan Khundii Resource includes an Inferred Resource of 103,000 ounces of gold at a grade of 3.68 g/t gold which could be added to reserves through additional drilling. Additionally, very high gold grades observed in trenching and drilling in the southwestern portion of the deposit have the potential to provide additional high-grade resources during initial production should closer spaced drilling improve continuity. Recent drilling south of the deposit has intersected high gold grades (greater than 50 g/t) outside the resource boundary that provide expansion targets.
- Additional Resources at Altan Nar: The mine plan in the updated PEA incorporates only a portion of the mineral resources defined at Altan Nar. Further metallurgical work test work to enhance recovery of gold, silver and base metals could demonstrate the potential to economically extract additional resources.
- Exploration: The Bayan Khundii and Altan Nar deposits are situated in a highly prospective region that has received minimal historical exploration. On the Bayan Khundii property, multiple high-grade targets have been established through limited shallow drilling and surface sampling within 4 kilometres of the deposit. The 5.5 kilometre Altan Nar target area remains open along strike and at depth. Additional exploration is required to determine the full potential of both deposits.

- Geotechnical Studies: A conservative pit slope has been utilized in the PFS. Additional geotechnical drilling, scheduled for Q4 2019, could support steeper pit walls, reducing the stripping ratio at Bayan Khundii.
- Recoveries: Although a 91% gold recovery has been utilized in the BK PFS, test work on material at the current head grade has recovered an average of 93%. Furthermore, master composite sample testing indicated that recoveries of up to 99% are possible from ultra high-grade material (greater than 22 g/t gold). Further metallurgical test work, scheduled for Q4 2019, could support higher recoveries.
- Higher Grade Upside: The very high-grade nature of the Bayan Khundii deposit provides upside should continuity of the ultra high-grade zones be established during mining.
- Mine Planning: The BK PFS and AN PEA represent steps toward addressing the viability of a mining operation at the Khundii Gold Project. Further work may identify opportunities for creating cost savings, such as improved pit sequencing through pit phasing, waste haul optimization, reduced dilution and loss through application of more selective mining techniques and interim pit design targeting improved early grades.
- Mine Equipment Selection: There is opportunity to utilize Tier 2 suppliers for non-critical equipment, reducing capital and operating costs.

Qualified Person and Sample Protocol

The information in this press release that relates to the financial models for the Bayan Khundii Feasibility Study and the Altan Nar Preliminary Economic Assessment is based on information compiled and reviewed by Mark Horan, who is a P.Eng. and is an employee of Tetra Tech Inc. The information in this press release that relates to the process design and costing for the Bayan Khundii Feasibility Study and the Altan Nar Preliminary Economic Assessment is based on information complied and reviewed by Hassan Ghaffari, who is a P.Eng. and is an employee of Tetra Tech Inc. The information in this press release that relates to the Bayan Khundii resource estimate is based on information compiled and reviewed by Mr. Cam Norton, who is a P.Geo, and is an employee of Tetra Tech Inc. The information in this press release that relates to the Bayan Khundii reserve estimate is based on information compiled and reviewed by Ms. Maurie Phifer, who is a P.Eng., and is an employee of Tetra Tech Inc. Each of Mr. Horan, Mr. Ghaffari, Mr. Norton and Ms. Phifer 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. Horan, Mr. Ghaffari, Mr. Norton and Ms. Phifer is not aware of any potential for a conflict of interest in relation to this work with Erdene.

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

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

Background on the Khundii Gold Project Development

Erdene’s deposits are located in the Edren Terrane, within the Central Asian Orogenic Belt, host to some of the world’s largest gold and copper-gold deposits. The Company has been the leader in exploration in southwest Mongolia over the past decade and is responsible for the discovery of the Khundii

Gold District comprised of multiple high-grade gold and gold/base metal prospects, two of which are being considered for development: the 100%-owned Bayan Khundii and Altan Nar projects. Together, these deposits comprise the Khundii Gold Project.

About Erdene

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

Forward-Looking Statements

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

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

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