

# Eldorado Gold Announces Positive Feasibility Study on Tocantinzinho Gold Project

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VANCOUVER, June 15, 2015 /CNW/ - [Eldorado Gold Corp.](#) ("Eldorado" or the "Company"), is pleased to announce the completion of the Feasibility Study ("FS" or the "Study") with its wholly owned subsidiary Brazauro Recursos Minerais S/A (Brazauro) for the Tocantinzinho Gold Project ("Tocantinzinho" or the "Project"). The Study was led by an internal team with technical support provided by various Canadian and Brazilian consultants. The Tocantinzinho project is located in the State of Pará, Northern Brazil.

"The Study results reflect the continued refinement of engineering and cost estimation on the Tocantinzinho Project. The Company has successfully operated in Brazil since 1996 and the significant experience of our technical team in Brazil contributes to the integrity of the results. We will continue to further refine the development plan and complete the outstanding permitting in advance of a construction decision," stated Paul N. Wright, Chief Executive Officer of Eldorado Gold.

## Highlights

- 1.7 million oz of gold produced over the life of the project
- Using conventional open pit mining methods, mining a total of 41.1 million tonnes (Mt) of ore with a strip ratio of 3.5:1 over the mine life.
- Recoveries of 90.1% for primary ore and 75.0% for saprolite ore, utilizing a simple comminution, flotation and leaching process.
- Initial capital cost estimated at \$466 million and sustaining capital, including closure costs, estimated at \$64 million.
- Cash operating costs of \$572/oz.
- Generation of a positive NPV of \$245 million at a 5% discount rate and an IRR of 13.5%.

## Major Assumptions

- Gold price of \$1,250/oz
- Effective Tax Rate of 15.25%
- Royalty Rate of 2.5%
- Transport & refining cost of \$15.00/oz Au
- Discount rate of 5%
- Exchange rate of US\$1 = 2.7 BRL

## Mineral Resources and Reserves

The mineral resources and reserves of the Tocantinzinho deposit were classified using logic consistent with the CIM definitions referred to in National Instrument 43-101.

The mineral resource block model, which serves as the basis of the Mineral Resources and Mineral Reserves in the Study, were developed utilizing 3D lithology models. Table 1 summarizes the Mineral Resources for the Tocantinzinho project as of December 31, 2014. The mineral resource is reported at a 0.3 g/t Au cut-off grade.

**Table 1 &ndash; Tocantinzinho Mineral Resources**

| Mineral Resource Category | Tonnes (x 1000) | Grade (Au g/t) | In Situ Gold (oz x 1000) |
|---------------------------|-----------------|----------------|--------------------------|
| Measured                  | 17,530          | 1.51           | 851                      |
| Indicated                 | 31,202          | 1.26           | 1,264                    |

|                    |        |      |       |
|--------------------|--------|------|-------|
| Measured+Indicated | 48,732 | 1.35 | 2,115 |
| Inferred           | 2,395  | 0.90 | 69    |

The pit optimization was produced using Minesight software which utilizes the industry standard Lerchs Grossman algorithm for analysis. Updated cost and recovery inputs in conjunction with new geotechnical parameters and ramp design from the prefeasibility study were incorporated in the final pit design process.

The base case \$1,250 gold shell was selected for the ultimate pit design. The final pit contains approximately 41.1 Mt of ore consisting of 1.9 Mt of saprolite ore and 39.2 Mt of primary ore, with 145.0 Mt of waste resulting in an overall strip ratio of 3.5:1.

Table 2 summarizes the Project Mineral Reserves effective as of June 15, 2015. Reserves were calculated using a \$1,250 per oz gold price and the corresponding cut-off grade of 0.41 g/t for primary ore and 0.43 g/t for saprolite ore.

**Table 2 – Tocantinzinho Mineral Reserves**

| Mineral Reserve Category | Tonnes (x 1000) | Grade (Au g/t) | In Situ Gold (oz x 1000) |
|--------------------------|-----------------|----------------|--------------------------|
| Proven                   | 17,173          | 1.53           | 847                      |
| Probable                 | 23,918          | 1.35           | 1,040                    |
| Total Proven+Probable    | 41,091          | 1.43           | 1,887                    |

## Mining

The deposit is projected to be mined utilizing owner-operated conventional open pit mining methods. Mining will be completed using 5 meter benches in the saprolite zone and 10 meter benches in the primary zone. Updated pit wall angle designs and Brazilian mining regulations were incorporated into the mine plan. The mine is estimated to produce sufficient ore to maintain a steady state of feed to the process of 4 million tonnes per annum (tpa) for 10 years, stockpiling a small amount of saprolite ore to be processed in year 11.

## Mineral Processing

The process design for the Tocantinzinho Project is based on extensive metallurgical testwork. Results from the work have established that high gold recoveries can be achieved with a conventional process of comminution, gravity concentrate, flotation and flotation concentrate leaching.

Tocantinzinho ore is projected to be treated at a rate of 4.0 Mt per annum through a three stage crushing and ball mill comminution circuit. Overall recoveries from the flotation and cyanide leach circuits are expected to be 90% and 75% for primary ore and saprolite ore, respectively. Over the life of the mine an average of 165,000 oz Au per annum will be produced as doré.

## Project Economics

Cost estimates were developed to a feasibility level of accuracy. Budget quotations for mobile and plant equipment were obtained from international suppliers. Unit rates for material commodities (earthworks, concrete, and steel) in the Para State area were verified by Brazilian contractor and supplier quotations. Construction and labour costs applicable for the region were built up from first principles for salaries, burdens and overhead. Contingency was applied to each item based on the source and accuracy of the estimate data, resulting in an overall initial contingency of 13%. The Initial Capital Cost Summary is included in Table 3.

**Table 3 – Initial Capital Cost Summary**

| Area | Description   | Initial (\$ x 1,000) |
|------|---------------|----------------------|
| A    | Overall Site  | 12,958               |
| B    | Mine          | 90,393               |
| D    | Process Plant | 107,689              |

|                      |                         |         |
|----------------------|-------------------------|---------|
| E                    | Tailings                | 19,062  |
| H                    | Infrastructure          | 23,780  |
| J                    | Ancillary Facilities    | 16,324  |
| K                    | Off Site Infrastructure | 36,438  |
| Total Direct Costs   |                         | 306,644 |
| Indirect Costs       |                         | 91,909  |
| Owner's Costs        |                         | 14,741  |
| Contingency          |                         | 53,064  |
| Total Installed Cost |                         | 466,358 |

Operating costs were also developed from first principles, inclusive of labour, consumables, fleet maintenance and repair, and general and administration costs, and data from current operations in Amapa State. The estimated Operating Cost is summarized in Table 4.

**Table 4 &ndash; Operating Cost Summary**

| Operating Costs       | Units      | LOM Average |
|-----------------------|------------|-------------|
| Mining Cost (mined)   | \$/t mined | 2.21        |
| Mining Cost (ore)     | \$/t ore   | 9.24        |
| Processing Cost       | \$/t ore   | 10.38       |
| G&A                   | \$/t ore   | 3.41        |
| Direct Operating Cost | \$/t ore   | 23.03       |

The Project economic analysis has been carried out for a range of gold prices with \$1,250 per ounce selected as the base case. The analysis demonstrates that the Project is expected to generate a positive NPV at a 5% discount rate of \$245 million and a positive IRR of 13.5%. Sensitivity of the Project to fluctuations in gold price are illustrated in Figure 1 below. Figure 1 demonstrates that the project is expected to realize a significant increase in both the IRR and NPV with a modest increase in the price of gold. At a \$1,400 per ounce gold price, the Project NPV increases by 63% to \$400 million and the IRR increases to 18%.

[Click here to view Figure 1 - Sensitivity to Gold Price](#)

Sensitivity of the NPV and IRR to changing capital or operating costs for the base case is illustrated in Table 5 and Table 6 below. While the base case demonstrates a positive return at the Feasibility capital and operating costs, the tables demonstrate further opportunities for improving the economics of the Project by investigating Capital and Operating cost savings. Tables 5 and 6 indicate a 10% decrease in initial capital will result in a 16% increase in NPV and a 15% increase in IRR, while a 10% decrease in Operating cost realizes a significant increase of 38% in NPV and 22% in IRR. Eldorado is confident that the capital and operating costs can be further optimized, improving the value of the project

**Table 5 &ndash; Sensitivity of NPV to Capital and Operating Costs**

|              |      |       |       |       |       |       |
|--------------|------|-------|-------|-------|-------|-------|
| NPV 5% CAPEX | 373  | 420   | 466   | 513   | 560   |       |
| OPEX         | 80%  | 90%   | 100%  | 110%  | 120%  |       |
| 18.43        | 80%  | 504.2 | 464.6 | 425.0 | 385.4 | 345.8 |
| 20.73        | 90%  | 418.1 | 378.5 | 338.8 | 299.1 | 259.4 |
| 23.03        | 100% | 324.7 | 284.9 | 245.1 | 205.3 | 165.4 |
| 25.34        | 110% | 223.7 | 183.7 | 143.8 | 103.7 | 63.5  |
| 27.64        | 120% | 114.8 | 74.5  | 34.0  | -7.5  | -52.2 |

**Table 6 &ndash; Sensitivity of IRR to Capital and Operating Costs**

|           |     |       |       |       |       |       |
|-----------|-----|-------|-------|-------|-------|-------|
| IRR CAPEX | 373 | 420   | 466   | 513   | 560   |       |
| OPEX      | 80% | 90%   | 100%  | 110%  | 120%  |       |
| 18.43     | 80% | 25.1% | 22.0% | 19.4% | 17.2% | 15.3% |
| 20.73     | 90% | 21.8% | 19.0% | 16.6% | 14.6% | 12.8% |

|       |      |       |       |       |       |       |
|-------|------|-------|-------|-------|-------|-------|
| 23.03 | 100% | 18.1% | 15.6% | 13.5% | 11.6% | 10.0% |
| 25.34 | 110% | 14.1% | 11.9% | 10.0% | 8.4%  | 6.9%  |
| 27.64 | 120% | 9.7%  | 7.8%  | 6.2%  | 4.8%  | 3.4%  |

## Permitting

The permitting process for the Tocantinzinho Project continues to advance with positive support of the local communities and government authorities of Itaituba Municipality and State of Para. The Environmental Impact Assessment (EIA) was approved in September 2012, with the granting of the Preliminary Environmental License, which includes the mining, ore processing and support infrastructure.

The next step in the permitting process is to obtain the Installation License and the approval of the Economic Exploitation Plan. The preparation of documents for these permits will be completed during the engineering phase of the Project. Granting of the Installation License allows construction on site to commence. The approval of the Installation License and the Economic Exploitation Plan documents is a condition to receiving the Exploitation Concession and the Operation License which will allow operation to commence.

## Summary

Eldorado is pleased to have demonstrated a positive economic performance for the Tocantinzinho Project. The remote location of the project presents challenges to the costs; however, a conventional approach to mining and processing provides a solid platform on which to develop this well-defined gold deposit. Opportunities to improve the economics and value of the project have been identified during the course of the study. These areas will continue to be investigated as development of the project continues.

## About Eldorado Gold

Eldorado is a leading low cost gold producer with mining, development and exploration operations in Turkey, China, Greece, Romania and Brazil. The Company's success to date is based on a low cost strategy, a highly skilled and dedicated workforce, safe and responsible operations, and long-term partnerships with the communities where it operates. Eldorado's common shares trade on the Toronto Stock Exchange (TSX: ELD) and the New York Stock Exchange (NYSE: EGO).

*Certain of the statements made herein may contain forward-looking statements or information within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws. Often, but not always, forward-looking statements and forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negatives thereof or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements or information herein include, but are not limited to the Positive Feasibility Study on Tocantinzinho.*

*Forward-looking statements and forward-looking information by their nature are based on assumptions and involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. We have made certain assumptions about the forward-looking statements and information and even though our management believes that the assumptions made and the expectations represented by such statements or information are reasonable, there can be no assurance that the forward-looking statement or information will prove to be accurate. Furthermore, should one or more of the risks, uncertainties or other factors materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in forward-looking statements or information. These risks, uncertainties and other factors include, among others, the following: gold price volatility; discrepancies between actual and estimated production, mineral reserves and resources and metallurgical recoveries; mining operational and development risk; litigation risks; regulatory restrictions, including environmental regulatory restrictions and liability; risks of sovereign investment; currency fluctuations; speculative nature of gold exploration; global economic climate; dilution; share price volatility; competition; loss of key employees; additional funding requirements; and defective title to mineral claims or property, as well as those factors discussed in the sections entitled "Forward-Looking Statements" and "Risk Factors" in the Company's Annual Information Form & Form 40-F dated March 27, 2015.*

*There can be no assurance that forward-looking statements or information will prove to be accurate, as*

*actual results and future events could differ materially from those anticipated in such statements. Accordingly, you should not place undue reliance on the forward-looking statements or information contained herein. Except as required by law, we do not expect to update forward-looking statements and information continually as conditions change and you are referred to the full discussion of the Company's business contained in the Company's reports filed with the securities regulatory authorities in Canada and the U.S.*

### **Cautionary Note Regarding Mineral Reserves and Mineral Resources**

*The terms "Mineral Reserve", "Proven Mineral Reserve" and "Probable Mineral Reserve" used in this release are Canadian mining terms as defined in accordance with National Instrument 43-101 &ndash; Standards of Disclosure for Mineral Projects under the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council on August 20, 2000 as may be amended from time to time by the CIM. These definitions differ from the definitions in the United States Securities & Exchange Commission ("SEC") Guide 7. In the United States, a mineral reserve is defined as a part of a mineral deposit which could be economically and legally extracted or produced at the time the mineral reserve determination is made.*

*The terms "Mineral Resource", "Measured Mineral Resource", "Indicated Mineral Resource", "Inferred Mineral Resource" used in this release are Canadian mining terms as defined in accordance with National Instrument 43-101 &ndash; Standards of Disclosure for Mineral Projects under the guidelines set out in the CIM Standards. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.*

*For a detailed discussion of resource and reserve estimates and related matters see the Company's reports, including the Annual Information Form and Form 40-F dated March 27, 2015 and technical reports filed under the Company's name at [www.sedar.com](http://www.sedar.com) and [www.sec.gov](http://www.sec.gov) respectively.*

### **Cautionary Note to US Investors Concerning Estimates of Measured, Indicated and Inferred Resources**

*Note to U.S. Investors. While the terms "mineral resource", "measured mineral resource", "indicated mineral resource", and "inferred mineral resource" are recognized and required by Canadian regulations, they are not defined terms under standards in the United States and normally are not permitted to be used in reports and registration statements filed with the SEC. As such, information contained in this report concerning descriptions of mineralization and resources under Canadian standards may not be comparable to similar information made public by U.S. companies in SEC filings. With respect to "indicated mineral resource" and "inferred mineral resource" there is a great amount of uncertainty as to their existence and a great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "indicated mineral resource" or "inferred mineral resource" will ever be upgraded to a higher category. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into reserves.*

*There can be no assurance that forward-looking statements or information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, you should not place undue reliance on the forward-looking statements or information contained herein. Except as required by law, we do not expect to update forward-looking statements and information continually as conditions change and you are referred to the full discussion of the Company's business contained in the Company's reports filed with the securities regulatory authorities in Canada and the U.S.*

(all figures in US dollars unless otherwise noted)

ELD No. 15-09

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