



## Orezone Announces Positive Preliminary Economic Assessment

January 22, 2014 – Orezone Gold Corporation (ORE:TSX) is pleased to announce the results of an independent Preliminary Economic Assessment (the “Study”) for its wholly owned Bomboré Gold Project in Burkina Faso, West Africa. The Base Case financial model yields a robust after tax IRR of 23.9 % to Orezone with a mine plan optimized to deliver better grade in early years, revenues using a \$1250 gold price and current costs based on operations in the region. The after tax IRR improves to 37.1 % from revenues at a \$1,500 gold price, based on the same mine plan. Orezone expects to complete detailed heap leach (“HL”) metallurgical and geotechnical studies in June, update the social and environmental assessments by September and be in a position to complete a full feasibility study and apply for a mining permit before year end.

“The results of the Study are quite compelling and the project benefits from size, location, low reagent consumption, rapid leaching kinetics, low capital requirements and low all-in operating costs,” said Ron Little, CEO of Orezone. “Bomboré is one of the largest and most advanced undeveloped deposits in the region that is truly multi-phase. Commencing with a HL operation positions the Company to move and grow rapidly with a carbon-in-leach (“CIL”) expansion if warranted under better capital market and gold price conditions.”

The Study was completed by G Mining Services Inc. of Montreal, Canada (“G Mining”) and included Kappes, Cassiday and Associates, and Golder and Associates of Reno, Nevada. The NI 43-101 compliant Study was based on the resource estimate prepared by SRK Consulting (“SRK”) of Toronto and reported in Orezone’s [press release dated April 29, 2013](#), which includes 139.9 Mt of M&I resources grading 1.01 g/t for 4.6 Moz plus 18.4 Mt Inferred resources grading 1.22 g/t for 0.7 Moz. The HL mineable resource is limited to only the measured and indicated near-surface saprolite and transition resources (average depth of 45 m) which includes 44.7 Mt grading 0.88 g/t for 1.3 Moz. The sulphide resources, although extensive, indicate relatively poor heap leach gold recoveries and can be processed later under a CIL expansion scenario. G Mining did not audit the SRK NI 43-101 resource.

## Summary of Base Case Financials:

The Base Case assumptions include revenues using a gold price of \$1,250 and current prices for fuel, reagents, labor, mining and other current costs from operations in the region as of Q32013. The financial highlights are as follows:

| Base Case Financials Description   | Heap Leach |
|--|------------|
| Mineral Resource used in Mine Plan (ounces)  | 1,271,567  |
| Average Grade (g/t)  | 0.88       |
| Processing Throughput (Mt/yr)  | 5.5        |
| Mine Life (years)  | 8.1        |
| Average Annual Production (ounces)   | 123,000    |
| Gold Production (ounces recovered)   | 1,008,000  |
| Waste to Ore Strip Ratio   | 1.63       |
| Gross Revenue (\$M)  | \$1,256.2  |
| Direct Cash Cost (\$/oz)   | \$627      |
| Operating Cost (\$/oz)   | \$677      |
| Initial Capital (\$M)  | \$180.0    |
| Sustaining Capital (\$M)   | \$53.8     |
| Closure Costs (\$M)  | \$10.0     |
| <b>Orezone <sup>(1)</sup></b>  |            |
| NPV after tax (0%) (\$M)   | \$246.6    |
| NPV after tax (5%) (\$M)   | \$158.9    |
| IRR after tax  | 23.9%      |
| <b>Government <sup>(2)</sup></b>   |            |
| NPV (0%) with taxes (\$M)  | \$135.5    |
| NPV (5%) with taxes (\$M)  | \$102.3    |
| <p><i>(1) Represents Orezone's Burkina Faso subsidiary cash flows net of royalties and local taxes. The Government of Burkina Faso benefits from its 10% free-carried shareholding, the gold royalty, corporate tax and withholding taxes.</i></p> <p><i>(2) Government cash flows are underestimated as customs fees and duties on imports and indirect taxes built into the delivered fuel price have not been incorporated.</i></p> <p><i>All figures in USD.</i></p> <p><i>Exchange Rates: XOF : USD = 485</i></p> |            |

This Study constitutes a Preliminary Economic Assessment for NI 43-101 purposes, is considered preliminary in nature but does not use inferred resources. Mineral resources that are not mineral reserves have not demonstrated economic viability.

## Mineral Resources used in the Mine Plan

Final pits were designed to account for access ramps and compatible pit slopes, which then produced the following total diluted mineral resource to be used in the mine plan:

| Category          | Cut-off g/t | Measured Mineral Resource |             |                  | Indicated Mineral Resource |             |                  | Measured +Indicated |             |                  |
|-------------------|-------------|---------------------------|-------------|------------------|----------------------------|-------------|------------------|---------------------|-------------|------------------|
|                   |             | Tonnes Mt                 | Grade g/t   | Contained Ounces | Tonnes Mt                  | Grade g/t   | Contained Ounces | Tonnes Mt           | Grade g/t   | Contained Ounces |
| <b>North:</b>     |             |                           |             |                  |                            |             |                  |                     |             |                  |
| Laterite/Oxide    | 0.33        | 12.70                     | 0.89        | 365,500          | 8.35                       | 0.83        | 222,500          | 21.06               | 0.87        | 588,000          |
| Transitional      | 0.32        | 5.37                      | 0.91        | 157,500          | 1.08                       | 1.11        | 38,000           | 6.45                | 0.94        | 195,500          |
| <b>Sub-total</b>  |             | <b>18.08</b>              | <b>0.90</b> | <b>523,000</b>   | <b>9.43</b>                | <b>0.86</b> | <b>260,500</b>   | <b>27.50</b>        | <b>0.89</b> | <b>783,500</b>   |
| <b>South:</b>     |             |                           |             |                  |                            |             |                  |                     |             |                  |
| Laterite/Oxide    | 0.32        | 8.33                      | 0.85        | 227,000          | 2.81                       | 0.87        | 78,000           | 11.13               | 0.85        | 305,500          |
| Transitional      | 0.31        | 4.30                      | 0.87        | 120,500          | 0.70                       | 1.07        | 24,000           | 5.01                | 0.90        | 144,500          |
| <b>Sub-total</b>  |             | <b>12.63</b>              | <b>0.86</b> | <b>347,500</b>   | <b>3.51</b>                | <b>0.91</b> | <b>102,500</b>   | <b>16.14</b>        | <b>0.87</b> | <b>450,100</b>   |
| <b>Southeast:</b> |             |                           |             |                  |                            |             |                  |                     |             |                  |
| Laterite/Oxide    | 0.34        | 0.27                      | 1.14        | 10,000           | 0.40                       | 0.94        | 12,000           | 0.67                | 1.02        | 22,000           |
| Transitional      | 0.33        | 0.20                      | 1.47        | 9,500            | 0.21                       | 0.99        | 6,500            | 0.40                | 1.23        | 16,000           |
| <b>Sub-total</b>  |             | <b>0.47</b>               | <b>1.28</b> | <b>19,500</b>    | <b>0.61</b>                | <b>0.96</b> | <b>18,500</b>    | <b>1.08</b>         | <b>1.10</b> | <b>38,000</b>    |
| <b>Combined:</b>  |             |                           |             |                  |                            |             |                  |                     |             |                  |
| Laterite/Oxide    | 0.33        | 21.30                     | 0.88        | 602,500          | 11.56                      | 0.84        | 313,000          | 32.86               | 0.87        | 915,000          |
| Transitional      | 0.32        | 9.87                      | 0.91        | 287,500          | 1.98                       | 1.08        | 69,000           | 11.86               | 0.93        | 356,500          |
| <b>Total</b>      |             | <b>31.17</b>              | <b>0.89</b> | <b>890,000</b>   | <b>13.54</b>               | <b>0.88</b> | <b>381,500</b>   | <b>44.71</b>        | <b>0.88</b> | <b>1,271,500</b> |

Note: Some categories may not balance due to rounding

## Estimated Annual Gold Production for Base Case

The HL scenario assumes an average mining rate of 15 M tonnes per year and a rate of ore placement on the leach pad of 5.5 M tonnes per year. Gold production and operating costs for each year are summarized as follows:

| Year              | -1   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | Total        |
|-------------------|------|------|------|------|------|------|------|------|------|------|--------------|
| Gold Prod'n (koz) | 3    | 125  | 128  | 131  | 120  | 121  | 123  | 119  | 119  | 19   | <b>1,008</b> |
| Head Grade (g/t)  | 0.83 | 0.94 | 0.91 | 0.93 | 0.85 | 0.87 | 0.88 | 0.85 | 0.85 | 0.83 | <b>0.88</b>  |

## Summary of Operating Costs

| Category                | Heap Leach       |                       |                  |
|-------------------------|------------------|-----------------------|------------------|
|                         | Total Costs \$M  | Avg. Cost \$/t milled | Avg. Cost \$/oz  |
| Mining                  | 276.6            | 6.25                  | 275              |
| Processing              | 246.3            | 5.57                  | 245              |
| General Services        | 101.8            | 2.30                  | 101              |
| Transport & Refining    | 2.5              | 0.06                  | 3                |
| CSR                     | 3.1              | 0.07                  | 3                |
| <b>Total (C1 Costs)</b> | <b>\$630.3 M</b> | <b>\$14.25 /t</b>     | <b>\$627 /oz</b> |
| Royalties               | \$50.3           | \$1.14                | \$50             |
| <b>Total (C2 Costs)</b> | <b>\$680.6 M</b> | <b>\$15.39 /t</b>     | <b>\$677 /oz</b> |

### Initial Project Capital Cost Estimates

Initial capital costs were estimated on the basis of Q42013 quotes on equipment and databases for similar projects in West Africa and South America adjusted for inflation.

| Project Capital Area             | US\$M            |
|----------------------------------|------------------|
| Infrastructure                   | 11.1             |
| Power                            | 5.4              |
| Water                            | 4.5              |
| Mining and Support Equipment     | 32.3             |
| Process Plant                    | 39.6             |
| Indirects                        | 17.3             |
| Resettlement                     | 5.6              |
| General Services                 | 29.4             |
| Pre-production                   | 12.8             |
| Contingencies                    | 22.0             |
| <b>Total Capital Costs (\$M)</b> | <b>\$180.0 M</b> |

Total Capital includes a total contingency of \$22M based on rates that varied per item.

### Sustaining Capital Cost Estimates

Sustaining capital costs were estimated on the basis of Q42013 quotes on equipment and databases for similar projects in West Africa and South America adjusted for inflation. Taxes and freight are included along with contingencies that are varied per item (20% on leach pads).

| Project Sustaining Capital Area | US\$M    |
|---------------------------------|----------|
| Mining and G&A                  | 8.6      |
| Plant                           | 0.9      |
| Leach Pads                      | 31.2     |
| Resettlement                    | 5.5      |
| Contingencies                   | 7.5      |
| Total                           | \$53.8 M |

## Project Sensitivities

The project is sensitive to gold price, and to a lesser extent the fuel price, as demonstrated in the following table:

| Gold Price (per oz)          | \$1000 | \$1100 | <b>\$1250</b> | \$1400 | \$1500 |
|------------------------------|--------|--------|---------------|--------|--------|
| <b>To Orezone</b>            |        |        |               |        |        |
| NPV (0%) After tax (\$M)     | 85.3   | 151.2  | <b>246.6</b>  | 344.3  | 399.8  |
| NPV (5%) After tax (\$M)     | 27.1   | 82.1   | <b>158.9</b>  | 236.5  | 280.4  |
| IRR After tax                | 8.2%   | 14.9%  | <b>23.9%</b>  | 32.4%  | 37.1%  |
|                              |        |        |               |        |        |
| <b>To Gov't Burkina Faso</b> |        |        |               |        |        |
| NPV (0%) After tax (\$M)     | 46.2   | 80.6   | <b>135.5</b>  | 188.2  | 232.9  |
| NPV (5%) After tax (\$M)     | 36.4   | 60.4   | <b>102.3</b>  | 143.2  | 178.3  |
|                              |        |        |               |        |        |

Full details of the Preliminary Economic Assessment in the form of a NI 43-101 technical report will be filed on SEDAR within the next 45 days.

## Development Timetable

Orezone has completed over 400,000 metres of drilling and much of the full feasibility level technical studies required for a CIL and HL operation. In order to finalize a HL full feasibility study by year end additional metallurgical tests are required including but not limited to column and compaction tests. Some geotechnical follow-up on the new HL pad site location is also required. This work is expected to be completed in Q2 2014. Social and environmental studies will continue in parallel in order to prepare an application for a mining permit based on the latest project footprint and design.

## Qualified Person

The Preliminary Economic Assessment was prepared by G Mining under the supervision of Réjean Gourde, Richard Taylor of Kappes, Cassidy and Associates, Todd Minard of Golder Associates Inc., and Glen Cole of SRK Consulting Inc. whom are "qualified persons" under the standards set forth in NI 43-101. [All four are independent of Orezone for purposes of NI 43-101.] Dr. Pascal Marquis, Senior Vice President Exploration, and Ron Little, President and CEO, are the Company's designated Qualified Persons for the purposes of the Study. All parties have reviewed and approved their respective content of this press release.

## Conference Call

Orezone will be hosting a conference call on Wednesday January 22, 2014 at 11:00 am EST where representatives from senior management and G Mining will discuss the Study and be available to respond to questions from analysts and investors. Those interested in participating in the conference call should dial in at 1-800-743-4304 (Canada, USA) and an operator will direct participants to the call.

## About Orezone Gold Corporation

Orezone is a Canadian company with a gold discovery track record of +12 Moz and recent mine development experience in Burkina Faso, West Africa. The Company owns a 100% interest in Bomboré which is situated 85 km east of the capital city, adjacent to an international highway. Mineral resources are constrained within CIL optimized open pit shells that span 11 km, and include 4.6 Moz of measured and indicated (140 Mt @ 1.01 g/t) and 0.7 Moz of inferred resources (18 Mt @ 1.22 g/t) with an average depth of drilling to only 120 meters. The Company is continuing with various technical studies in order to be in a position to complete a full feasibility study and an application for a mining permit before year end.

**For further information please contact Orezone at (613) 241-3699 or Toll Free: (888) 673-0663**

Ron Little, CEO, [rlittle@orezone.com](mailto:rlittle@orezone.com)

Pascal Marquis, S.V.P. Exploration, [pmarquis@orezone.com](mailto:pmarquis@orezone.com)

*Pascal Marquis, SVP Exploration and Ron Little, CEO are Qualified Persons under National Instrument 43-101 have reviewed the information in this release.*

*FORWARD-LOOKING STATEMENTS AND FORWARD-LOOKING INFORMATION: This news release contains certain “forward-looking statements” within the meaning of applicable Canadian securities laws. Forward-looking statements and forward-looking information are frequently characterized by words such as “plan”, “expect”, “project”, “intend”, “believe”, “anticipate”, “estimate”, “potential”, “possible” and other similar words, or statements that certain events or conditions “may”, “will”, “could”, or “should” occur. Forward-looking statements in this release include statements regarding, among others; completing detailed HL metallurgical and geotechnical studies for Bomboré in June 2014, completing environmental and social studies for Bomboré in September 2014, applying for a mining permit and completing a FS at Bomboré by the end of 2014, and becoming a mid-tier gold producer.*

*FORWARD-LOOKING STATEMENTS are based on certain assumptions, the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. These factors include the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drilling results and other geological and geotechnical data, fluctuating metal prices, the possibility of project cost overruns or unanticipated costs and expenses, the ability of contracted parties (including laboratories and drill companies to provide services as contracted); uncertainties relating to the availability and costs of financing needed in the future and other factors. The Company undertakes no obligation to update forward-looking statements if circumstances or management’s estimates or opinions should change. The reader is cautioned not to place undue reliance on forward-looking statements. Comparisons between any resource model or estimates with the subsequent drill results are preliminary in nature and should not be relied upon as potential qualified changes to any future resource updates or estimates.*

*Readers are advised that National Instrument 43-101 of the Canadian Securities Administrators requires that each category of mineral reserves and mineral resources be reported separately. Readers should refer to the annual information form of Orezone for the year ended December 31, 2012 and other continuous disclosure documents filed by Orezone since January 1, 2013 available at [www.sedar.com](http://www.sedar.com), for this detailed information, which is subject to the qualifications and notes set forth therein.*