

# BELO SUN ANNOUNCES A PRELIMINARY ECONOMIC ASSESSMENT ON A STAGED DEVELOPMENT APPROACH FOR ITS VOLTA GRANDE GOLD PROJECT, BRAZIL

**TORONTO, February 20<sup>th</sup>, 2014** – **Belo Sun Mining Corp.** (BSX:TSX) (the "Company" or "Belo Sun") has completed a Preliminary Economic Assessment (PEA) of a staged development approach based on the updated mineral resource (see press release dated October 3<sup>rd</sup>, 2013), for its 100%-owned Volta Grande gold project in Para State, Brazil.

The PEA contemplates the construction of a 3.0 million tonne/year processing facility for the first seven years of production and an expansion of the facility to a nominal 6.0 million tonne/year processing facility from Year 9 to the end of mine life. Higher grade material will be processed in the initial years of mine life with lower grade material stockpiled to expedite the project payback. Mineral resources that are not mineral reserves do not have demonstrated economic viability

| Preliminary Economic Assessment          |                        |                 |              |  |  |  |
|--|------------------------|-----------------|--------------|--|--|--|
| Project Data                             | Units                  | Units Years 1-6 |              |  |  |  |
| Life of Mine                             | Years                  |                 | 21           |  |  |  |
| Average Annual Mining Rate               | Mtpa                   | 24.8            | 27.3         |  |  |  |
| Annual Mill Throughput                   | Mtpa                   | 3.0             | 4.9          |  |  |  |
| - ·                                      | %                      | 94.1%           | 4.9<br>92.8% |  |  |  |
| Metallurgical Recovery                   | oz recovered           |                 |              |  |  |  |
| Average Annual Gold Production           | Waste:Feed             | 147,900         | 167,309      |  |  |  |
| Average Waste to Mill Feed Strip Ratio   |                        | 6.32            | 4.30         |  |  |  |
| Average Waste to Mill Feed Strip Ratio   | Waste:(Feed+Stockpile) | 3.31            | 4.30         |  |  |  |
| Average Feed Grade (diluted)             | grams/tonne            | 1.66            | 1.14         |  |  |  |
| Mine Operating Costs                     |                        |                 |              |  |  |  |
| Per Feed Tonne                           |                        |                 |              |  |  |  |
| Mining                                   | US\$/tonne feed        | 19.27           | 13.25        |  |  |  |
| Process                                  | US\$/tonne feed        | 9.13            | 8.64         |  |  |  |
| General and Administration               | US\$/tonne feed        | 3.49            | 2.22         |  |  |  |
| Total Operating Cost                     | US\$/tonne feed        | 31.89           | 24.11        |  |  |  |
| Total Operating Cost including Royalties | US\$/tonne feed        | 32.53           | 24.55        |  |  |  |
| Per Gold Ounce                           |                        |                 |              |  |  |  |
| Mining                                   | US\$/oz gold recovered | 383             | 373          |  |  |  |
| Process                                  | US\$/oz gold recovered | 182             | 279          |  |  |  |
| General and Administration               | US\$/oz gold recovered | 69              | 63           |  |  |  |
| Total Operating Cost                     | US\$/oz gold recovered | 634             | 715          |  |  |  |
| Total Operating Cost including Royalties | US\$/oz gold recovered | 647             | 727          |  |  |  |
| CARITAL COST (including tay)             |                        | Pre-Production  | LOM          |  |  |  |
| CAPITAL COST (including tax)             |                        |                 | LOM          |  |  |  |
|  | US\$ ('000's)          | 328.7           | 1 a · -      |  |  |  |
| Sustaining CAPEX                         | US\$ ('000's)          |                 | 104.8        |  |  |  |
| Expansion CAPEX                          | US\$ ('000's)          |                 | 203.6        |  |  |  |



#### **Mineral Resources**

For the PEA, Belo Sun used the October 2013 mineral resource estimate (see press release dated October 3<sup>rd</sup>, 2013). Mineral resources that are not mineral reserves do not have demonstrated economic viability. External mining dilution is calculated at 12.3% at zero grade. The diluted life of mine mill feed grade will average 1.14 g/t gold with an average cutoff of 0.48 g/t gold. Based on current metallurgical testing, the average gold recovery is expected to be 92.8% overall for the life of mine. The ultimate pit design was based on an optimised pit shell using a US\$ 1020 /oz gold price. Internal phases were designed within that ultimate shell. For the purposes of the PEA, *only measured and indicated resources were included* in the PEA mine design.

| VOLTA GRANDE RESO<br>(OCT 20)                 |  | MEASURED                | INDICATED               | MEASURED<br>+<br>INDICATED | INFERRED                |
|---|--|-------------------------|-------------------------|----------------------------|-------------------------|
| Ouro Verde Pit Constrained                    | Tonnes ('000s)                                     | 24,036                  | 20,087                  | 44,123                     | 22,602                  |
|   | Grade (g/t Au)                                     | 1.78                    | 1.61                    | 1.70                       | 1.48                    |
|   | Ounces ('000s)                                     | 1,379                   | 1,037                   | 2,416                      | 1,079                   |
| Grota Seca Pit Constrained                    | Tonnes (´000s)                                     | 31,384                  | 15,671                  | 47,055                     | 18,265                  |
|   | Grade (g/t Au)                                     | 1.61                    | 1.56                    | 1.59                       | 1.59                    |
|   | Ounces ('000s)                                     | 1,620                   | 788                     | 2,408                      | 932                     |
| Total Pit Constrained<br>(0.5 g/t Au cut-off) | Tonnes (´000s)<br>Grade (g/t Au)<br>Ounces (´000s) | 55,420<br>1.68<br>2,999 | 35,758<br>1.59<br>1,825 | 91,178<br>1.65<br>4,824    | 40,867<br>1.53<br>2,011 |

(1) Audited mineral resource statement prepared by SRK Consulting (Canada) Inc. The effective date of the audited mineral resource statement is October 1, 2013. Mineral resources are not mineral reserves and have not demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates.

Open pit mineral resources are reported at a cut-off grade of 0.5 g/t gold. Cut-off grades are based on a number of parameters and assumptions including gold price of US\$1,400 per troy ounce, 94% metallurgical gold recovery for weathered and unweathered rock, open pit mining costs of US\$1.41/tonne, process costs of US\$11.98/ tonne, General and Administrative costs of US\$2.89/tonne and selling costs (refining, transport, insurance and environment) of US\$ 13.82 per troy ounce.

Mineral resources are constrained within low, medium and high grade domains delineated from drilling data within Ouro Verde and Grota Seca.

The quantity and grade of the reported inferred mineral resources are uncertain in nature and there has been insufficient exploration to define the inferred mineral resources as indicated or measured mineral resources and it is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.

The mineral resources have been classified according to the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves (November 2010).

SRK Consulting (Canada) Inc. is not aware of any legal, political, environmental or other risks that could materially affect the potential development of the mineral resources.



### Mining

The mine design, mining costs and mining fleet requirements for the Project were prepared by AGP Mining Consultants Inc. The PEA contemplates conventional open pit mining utilizing owner operated trucks and loaders to provide the initial 3.0 million tonnes per year of mill feed. Backhoe support is provided in each of the pits for assistance in grade control. Plant throughput will ramp up from 3.0 million tonnes to 6.0 million tonnes per year starting in Year 8 and reaching full production in Year 9. The ramp up coincides with planned mining equipment replacement. The mine is designed as a two pit operation with multiple phases in each pit mined over 21 years, plus a year of pre-production.

The average waste to mill feed strip ratio for the life of the mine is estimated to be 4.3:1. Bench heights of 10 meters will be mined initially using 14.5 m<sup>3</sup> loaders with 97 tonne haul trucks. This provides the greatest flexibility for grade control in the pit and flexibility of operations while maintaining reasonable operating costs and production capability. When the plant throughput increases, the fleet size will also be increased so production can be maintained in a cost effective manner while not sacrificing grade control. The smaller 97 tonne trucks will be replaced with larger trucks carrying 134 tonnes of material. The smaller loaders will be replaced with 19 m<sup>3</sup> loaders and 22 m<sup>3</sup> shovels. At both production levels, grade control support will be provided with backhoes and reverse circulation drilling.

Mill feed grade has been increased in the initial years using an elevated cutoff to assist with project payback. The lower grade material will be stockpiled near the primary crushing plant and fed to the plant in the later years of the project. Waste rock will be hauled to dedicated waste management facilities adjacent to the open pits. Saprolite feed material will be stockpiled and up to 10% will be fed to the plant annually.

## Metallurgy

Based on recent test work completed at SGS Chile, the run-of-mine feed material from the Ouro Verde and Grota Seca open pits feed material is amenable to conventional crush, grind, gravity concentration, CIP / CIL flow sheet. Test work results indicate that 40% to 50% of the gold is expected to be recovered in a gravity concentrate. Overall gold recovery is estimated between 92% and 94% depending on the head grade.

Other test work completed at SGS Chile included Bond work indices, JK drop weight and SMC tests. These results were used to model the Volta Grande grinding circuit and have confirmed that the feed material is amenable to a SAG / ball mill grinding configuration.



### Infrastructure

The Project is located in Para State in central Brazil approximately 60 kilometres south-east of the city of Altamira. The climate at Volta Grande is tropical, with a rainy season from January to April and a dry season extending from May to December. The mean temperature is nearly the same (25°C to 30°C) throughout the year. The relative humidity ranges from about 65% to 85%. Access to site will be via an existing 60 kilometer upgraded gravel road. Power for the project will originate from Belo Monte's Pimental distribution station requiring the construction of a 20 kilometer 230 kV high tension power line. Water sufficient to meet mining needs is readily available at the Project site.

In addition to the mine and process facilities, a camp will be established at the project site to house workers on a shift rotation basis. Provision will be made for the storage of critical supplies on site. Mineral resources that are not mineral reserves do not have demonstrated economic viability

| Pre Production Costs                 | Capital Cost<br>(US\$ millions) |
|--------------------------------------|---------------------------------|
| Open Pit                             | \$12.6                          |
| Processing                           | \$114.4                         |
| Infrastructure                       | \$76.0                          |
| Indirects, Contingency, Owners Costs | <u>\$97.3</u>                   |
| Subtotal                             | \$300.3                         |
| Tax                                  | \$28.4                          |
| Total                                | \$328.7                         |

| Post Tax Evaluation | Units        | Base Case | Sensitivity |
|---------------------|--------------|-----------|-------------|
| Gold Price          | US\$ Ounce   | 1300      | 1450        |
| NPV 0%              | US\$ Million | 1,062     | 1,472       |
| NPV 5%              | US\$ Million | 418       | 637         |
| IRR                 | %            | 16.1      | 21.1        |
| Payback             | years        | 4.2       | 3.3         |

Mark Eaton, President and CEO of the Company, commented, "Belo Sun has completed this study of a staged development approach in order to respond to the current financial environment for large capital gold projects and mitigate against some of the start-up risks of large tonnage projects. With the positive results of this PEA we anticipate using a staged development approach for the execution of the project."

## **Qualified Persons**

The scientific and technical information contained in this news release pertaining to the Project has been reviewed and approved by the following Qualified Persons under NI 43-101 who consent to the inclusion of their names in this release: Dr. Jean-Francois Couture, PGeo and Dr.



Oy Leuangthong, P.Eng (Mineral Resource), of SRK Consulting (Canada) Inc., Gordon Zurowski, P.Eng (Mining and Author Technical Report), and Lyn Jones P. Eng (Metallurgy and Process), of AGP Mining Consultants Inc, each of whom are independent of Belo Sun.

The technical report will be filed on SEDAR within 45 days of the date of this press release. The Company's previous prefeasibility study entitled "Pre-feasibility Study on the Volta Grande Project, Pará, Brazil, NI 43-101 Technical Report" dated June 21, 2013 is no longer current and should not be relied upon.

#### For further information, please contact:

Mark Eaton, President and CEO Belo Sun Mining Corp. (416) 309-2137

#### Forward Looking Information

This press release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, without limitation, mineral resource estimates regarding t the conclusions of the PEA and the projected economics of the project, the Company's understanding of the project; statements with respect to the development potential and timetable of the project; production forecast;, life of mine estimates; the estimation of mineral resources; realization of mineral resource estimates; the timing and amount of estimated future exploration; costs of future activities; capital and operating expenditures; success of exploration activities; currency exchange rates; government regulation of mining operations; and environmental risks. Generally, forward-looking information can be identified by the use of forwardlooking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forwardlooking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including risks inherent in the mining industry and risks described in the public disclosure of the Company which is available under the profile of the Company on SEDAR at www.sedar.com and on the Company's website at www.belosun.com. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.