

Golden Star Exceeds 2015 Production Guidance, Provides Operations Update and Guidance for 2016

Toronto, ON – January 11, 2016 – Golden Star today announces 2015 fourth quarter and full year production results for the Prestea and Wassa mines and guidance for 2016.

- Achieved 103% of the top end 2015 gold production guidance, as the Company produced 222,416 ounces of gold in 2015
- Gold production was 108,266 ounces and 114,150 ounces from Wassa and Bogoso/Prestea, respectively, for the full year 2015
- Fourth quarter gold production of 52,140 ounces with Prestea South open pit mining yielding a significant contribution to the quarter
 - 31,395 ounces from Wassa and 20,745 ounces from Prestea
- Cash and cash equivalents balance as of December 31, 2015 totaled US\$35 million after drawdown of US\$20 million of RGLD Gold AG ("Royal Gold") stream financing and US\$7 million on the Ecobank loan in December 2015

Operations and Projects Update:

Wassa Mine continued operations as normal and processed approximately 2.5 million tonnes of ore grading 1.46 grams per tonne with metallurgical recovery of 93% to produce 108,266 ounces of gold for the year.

Mining of the Prestea South surface oxide pits commenced in August 2015. Fourth quarter ore processed totaled 317,764 tonnes grading 2.36 grams per tonne, and achieved 83% recovery for 20,745 ounces of gold sold. It is expected that this level of oxide production will continue beyond the first quarter of 2017. Drilling is expected to continue in the Prestea South area to further expand the Company's knowledge of those deposits and potentially increase mineral resources in this part of the concession.

While the operating costs have not yet been finalized, they are expected to be significantly lower than achieved in 2014, in keeping with the cost trend reported in the prior three quarters. The operating costs for both Prestea and Wassa Mines will be reported in February with the release of the fourth quarter and full year 2015 results.

The Wassa Underground project has made substantial progress during 2015, with approximately 885 meters of the twin decline advance completed to date. Infill drilling early in 2015 was successful in expanding the F Shoot target. The up plunge projection of the F Shoot zone was intersected in both declines and further drilling will be conducted to determine grade and thickness up plunge from the planned stoping area. Stope development of the upper mineralization is expected to commence in the second quarter of 2016 with first ore production expected in the second half of 2016.

The Feasibility Study on the Prestea Underground project was completed towards the end of 2015 and confirmed the project economics are robust in the current gold price environment. Work on the Prestea Underground project advanced significantly during 2015 with Central Shaft rehabilitation and refurbishment work on 17 and 24 levels progressing as scheduled. All the bearer sets in Central Shaft were replaced during 2015, a critical step forward to full hoisting operations. First ore production is expected in early 2017.

Commenting on this operational performance, President and CEO Sam Coetzer said:

"The hard work and determination of our management and personnel has enabled Golden Star to weather the difficult market conditions over the last year and put the Company firmly on its path of transforming into a lower cost producer. The operations have performed extremely well in the second half of the year, particularly in the fourth quarter, with Golden Star exceeding its production guidance for 2015. I look forward to reporting our results in February as we anticipate the cost reduction trend reported in the first three quarters of the year to continue through the fourth quarter. The Wassa and Prestea Underground projects have made excellent progress in 2015, and we are excited about the next 12 months as we continue to execute the transformational strategy for Golden Star we set out two years ago."

2016 Full Year Production and Financial Guidance:

The following tables set out Golden Star's production and cash operating cost guidance, as well as capital expenditure guidance, for 2016.

	Production '000 ounces	Cash operating costs US\$ per ounce ⁽¹⁾
Wassa Open Pit	100 - 110	800 - 900
Wassa Underground	20 - 25	N/A ⁽²⁾
Prestea Open Pit	60 - 70	840 - 970
Combined	180 - 205	815 - 925

Notes:

(1) See "Non-GAAP Financial Measures".

(2) Costs incurred at Wassa Underground will be capitalized until commercial production is achieved. As a result, these costs are reflected in the Company's development capital expenditure guidance set out in the table below and are not included in the Company's cash operating cost per ounce guidance set out in the table above.

	Wassa	Prestea	Combined
Sustaining capital expenditure (US\$ millions)	6	3	9
Development capital expenditure (US\$ millions)	45	36	81
Total capital expenditure (US\$ millions)	51	39	90

All in sustaining costs for 2016 are expected to be \$1,000 – \$1,120 per ounce (see "Non-GAAP Financial Measures").

Golden Star expects to release its fourth quarter and full year 2015 Financial Results on February 23, 2016.

Company Profile:

Golden Star Resources (NYSE MKT: GSS; TSX: GSC; GSE: GSR) ("Golden Star" or the "Company") is an established gold mining company that holds a 90% interest in the Wassa and Prestea gold mines in Ghana. As of December 31, 2014 Golden Star had Mineral Reserves of 1.9 million ounces and 6.6 million ounces in Measured and Indicated Mineral Resources. The Company is developing two brownfield projects at Wassa and Prestea mines which are expected to transform Golden Star into a lower cost producer. As such, the Company offers

investors leveraged exposure to the gold price in a stable African mining jurisdiction with significant development upside potential.

For further information regarding Golden Star's Mineral Reserves and Mineral Resources, see Golden Star's Annual Information Form for the year ended December 31, 2014, available on SEDAR at www.sedar.com.

For further information, please visit www.gsr.com or contact:

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Cautionary note regarding forward-looking information:

This report contains "forward looking information" within the meaning of applicable Canadian securities laws and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995, concerning the business, operations and financial performance and condition of Golden Star. Generally, forward-looking information and statements can be identified by the use of forward-looking terminology such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "believes" or variations of such words and phrases (including negative or grammatical variations) or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof. Forward-looking information and statements include, but are not limited to, information or statements with respect to: the Company's strategy of transforming its business to being a lower cost producer; Prestea South production continuing beyond the first quarter of 2017; the impact of drilling at Prestea South on mineral resources; the Company's expectations regarding 2015 operating costs relative to operating costs in 2014 and the prior three quarters of 2015; the timing of the release of 2015 operating costs for both Prestea and Wassa Mines; additional drilling at F Shoot zone and the impact on grade and thickness up plunge from the planned stoping area; the timing of Wassa Underground stope development and first production; the timing of Prestea Underground first production; and production, cash operating cost, capital expenditure and all in sustaining cost estimates for 2016.

Forward-looking information and statements are made based upon certain assumptions and other important factors that, if untrue, could cause the actual results, performances or achievements of Golden Star to be materially different from future results, performances or achievements expressed or implied by such statements. Such statements and information are based on numerous assumptions regarding present and future business strategies and the environment in which Golden Star will operate in the future, including the price of gold, anticipated costs and ability to achieve goals. Forward-looking information and statements are subject to known and unknown risks, uncertainties and other important factors that may cause the actual results, performance or achievements of Golden Star to be materially different from those expressed or implied by such forward-looking information and statements, including but not limited to: risks related to international operations, including economic and political instability in foreign jurisdictions in which Golden Star operates; risks related to current global financial conditions; risks related to joint venture operations; actual results of current exploration activities; environmental risks; future prices of gold; possible variations in mineral reserves, grade or recovery rates; mine development and operating risks; accidents, labor disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of development or construction

activities and risks related to indebtedness and the service of such indebtedness. There can be no assurance that future developments affecting the Company will be those anticipated by management. Please refer to the discussion of these and other factors in our Annual Information Form for 2014. The forecasts contained in this press release constitute management's current estimates, as of the date of this press release, with respect to the matters covered thereby. We expect that these estimates will change as new information is received and that actual results will vary from these estimates, possibly by material amounts. While we may elect to update these estimates at any time, we do not undertake to update any estimate at any particular time or in response to any particular event. Investors and others should not assume that any forecasts in this press release represent management's estimate as of any date other than the date of this press release.

Non-GAAP Financial Measures

In this press release, we use the terms "cash operating cost per ounce" and "all in sustaining cost per ounce". These should be considered as non-GAAP financial measures as defined in applicable Canadian and United States securities laws and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with GAAP. "Cash operating cost per ounce" for a period is equal to "Cost of sales excluding depreciation and amortization" for the period less royalties and production taxes, minus the cash component of metals inventory net realizable value adjustments divided by the number of ounces of gold sold during the period. Golden Star uses cash operating cost per ounce as a key operating indicator. Golden Star monitors this measure monthly, comparing each month's values to prior quarters' values to detect trends that may indicate increases or decreases in operating efficiencies. Golden Star provides this measure to investors to allow them to also monitor operational efficiencies of the Company's mines. Since cash operating costs do not incorporate revenues, changes in working capital and non-operating cash costs, they are not necessarily indicative of operating profit or cash flow from operations as determined under International Financial Reporting Standards ("IFRS").

"All-in sustaining costs" commences with cash operating costs and then adds sustaining capital expenditures, corporate general and administrative costs, mine site exploratory drilling and greenfield evaluation costs and environmental rehabilitation costs. "All-in sustaining costs per ounce" is that amount divided by the number of ounces of gold sold during the period. This measure seeks to represent the total costs of producing gold from current operations, and therefore it does not include capital expenditures attributable to projects or mine expansions, exploration and evaluation costs attributable to growth projects, income tax payments, interest costs or dividend payments. Consequently, this measure is not representative of all of the Company's cash expenditures. In addition, the calculation of all-in sustaining costs does not include depreciation expense as it does not reflect the impact of expenditures incurred in prior periods. Therefore, it is not indicative of the Company's overall profitability.

These non-GAAP financial measures are not representative of all of Golden Star's cash expenditures as they do not include income tax payments or interest costs. There are material limitations associated with the use of such non-GAAP financial measures. Since these measures do not incorporate all non-cash expense and income items, changes in working capital and non-operating cash costs, they are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS.

Source: Golden Star Resources Ltd.