BRIGHTSTAR

ASX ANNOUNCEMENT



6 September 2023

MENZIES AND LAVERTON GOLD PROJECT MINE RESTART STUDY

ROBUST SCOPING STUDY DEFINES PATHWAY TO LOW CAPEX, LONG-LIFE GOLD PRODUCTION

Highlights:

- Positive mine restart study completed for the development of the 100%-owned Menzies and Laverton Gold Projects in Western Australia
- Initial mine production target of approximately **5.28Mt @ 2.00g/t Au for 322,617 oz** over approximately 8 years
- Average recovered ounces of +45koz pa in first five years, with average LOM production of ~40kozpa and strong potential to increase production profile and mine life
- The staged mine plan provides early cashflow from the Menzies Gold Project to organically fund the restart of the Laverton Gold Project
- Total project pre-production capital of approximately **\$22 million**
- **Rapid restart** with first Menzies gold within six months of mining commencement and first Laverton gold within nine months from the commencement of processing plant upgrades
- Study highlights robust financials and a competitive cost profile utilising conservative pricing assumptions and current cost environment:
 - Net Present Value (unlevered, pre-tax, 8%) of approximately A\$103 million using a gold price of A\$2,900/oz
 - Pre-tax internal rate of return (IRR) of approximately 79%
 - $\circ~$ NPV_8 at current spot gold price (A\$3,000/oz) of approximately A\$128m and IRR of approximately 106%
 - **Payback period of approximately 1.5 years**, underpinned by 70% of material processed being Measured and Indicated Mineral Resources
 - All-In Sustaining Costs (AISC) of **approximately A\$2,041/oz**
- Strong returns on investment driven by low capital start-up metrics delivers a readily fundable project development:
 - \circ NPV / Capex ratio of approximately 4.6x
 - Capital Intensity of A\$559/oz

(pre-production capital divided by annual gold production)



IMPORTANT NOTE

The Scoping Study ("**Study**") referred to in this announcement has been undertaken to determine the viability of open pit and underground mining at Brightstar's deposits in Western Australia, with processing undertaken at Brightstar's Laverton Gold Processing Plant and third-party toll treatment of selected deposits (the "**Project**"). The Study is a preliminary technical and economic assessment of the potential viability of the Project. It is based on low level technical and economic assessments, (+/- 35% accuracy) and is insufficient to support estimation of Ore Reserves. Further evaluation work and studies are required before Brightstar will be in a position to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Study will be realised.

The Study includes existing JORC 2012 Code Indicated and Inferred Mineral Resources defined within the Project, with a production target comprising Measured/Indicated (66%) and Inferred Mineral Resources (34%) over the life of mine. Investors are cautioned that there is a low level of geological confidence in Inferred Mineral Resources and there is no certainty that further drilling will result in the determination of Measured or Indicated Mineral Resources, or that the production target will be realised. Of the Mineral Resource tonnages scheduled for extraction in this Study production target plan during the payback period, approximately 70% is classified as Measured or Indicated and 30% as Inferred over the initial 1.5 year payback period. Brightstar has concluded that the financial viability of the Project is not dependent on the inclusion of the Inferred Resources.

The Study is based on the material assumptions outlined in this announcement, including assumptions about the availability of funding in the order of approximately \$22M. Investors should note that there is no certainty that Brightstar will be able to raise the required amount of funding when needed. It is also possible that said funding may only be available on terms that may be dilutive to or otherwise effect the value of Brightstar's shares. It is also possible that Brightstar could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Project. This could materially reduce Brightstar's proportionate ownership of the Project. While Brightstar considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved.

Notwithstanding many components of this study, such as pit shell design, capital costs, processing operating costs and other amounts may be more accurate than +/- 35%, Brightstar has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes it has a 'reasonable basis' to expect it will be able to complete the development of the Project as outlined in the attached Study (**Appendix B**). This announcement has been prepared in compliance with the JORC Code 2012 Edition (JORC 2012) and the ASX Listing Rules. All material assumptions on which the forecast financial information is based have been provided in this announcement and are also outlined in the attached JORC 2012 table disclosures. Given the uncertainties involved and listed above, investors should not make any investment decision based solely on the results of the Scoping Study.



Brightstar Resources Limited (**Brightstar** or the **Company**) (ASX: BTR) is pleased to announce the results of a positive Scoping Study from the +1Moz combined asset base (the "**Project**") at the Menzies & Laverton Gold Projects located in WA's Goldfields region.

Brightstar's Managing Director, Alex Rovira, commented *"It is pleasing to announce the results of our scoping study, which outlines a low-capital pathway to production from our assets. We have delineated four key deposits within our Menzies & Laverton Gold Projects which will deliver an executable +8 year LOM plan which will result in Brightstar becoming a meaningful gold producer in the WA Goldfields.*

The staged mined development has been optimised to minimise up-front capital costs, utilising operational cash flow to organically fund the refurbishment of the Laverton processing facility to minimise equity dilution and limit onerous debt and/or hedging exposure associated with large capex builds magnifying commissioning risks. The mine plan has been designed to minimise risks associated with ramp up and deliver a profitable gold producer in WA with significant upside to expand on the production profile and mine life.

More importantly, when assessing key financial metrics for the return on investment in a challenging capital environment, the development of these gold projects is peer-leading in the WA gold development sector. Key profitability metrics such as internal rate of return (IRR) and a ratio of the net present value divided by the capex (NPV/capex) are exceptional and speak to the development ethos being employed by Brightstar to ensure that this project is appropriately fundable and mitigating all operational risks where possible.

Whilst we're pleased to release the results of our Scoping Study and are progressing with a pre-feasibility study, we continue to advance exploration efforts across the portfolio with the intent of finding additional ounces to add to the mine plan. We look forward to continuing our dual focus of development and exploration in the Goldfields, and building WA's next gold producer."

Scoping Study Summary

- All Mineral Resources included in this study are contained within granted Mining Leases in the Tier-1 mining jurisdiction of Western Australia
- Payback of all pre-production capital expected to occur in 1.5 years. The Mineral Resource tonnages contained within the mine plan for the first 1.5 years are 70% Indicated classification
- Initial mine production target of **322koz @ 2.00g/t Au** to be mined over an eight year life of mine
- Revenue of approximately ~\$935M with robust Operating Cashflow (after all capital and before tax) of \$153M
- Brightstar has an accumulated tax loss position of approximately \$53 million that can be utilised to offset future profits
- Pre-Tax Net Present Value ("NPV") of approximately \$103M and Internal Rate of Return ("IRR") of approximately 79% at a gold price of \$2,900/oz
- Assumed Study gold price is currently ~A\$100/oz below spot gold price, representing significant upside potential to financial metrics and outcomes



- Rapid commencement and generation of cashflow is possible, with first gold within four months of mining due to utilisation of 3rd party processing facilities in the Kalgoorlie-Leonora region
- Potential extensions of mine life from multiple sources, including:
 - Organic growth at Brightstar's existing large assets via upgrading Inferred resources and drilling mineralisation outside of and adjacent to current Resource envelopes and optimised pit shells
 - o Inorganic growth through M&A opportunities in the Leonora-Laverton district
 - Continuing assessment for low-risk mining opportunities for smaller deposits similar to the Selkirk JV presently underway with BML Mining Ventures Pty Ltd
- Low risk start-up with utilisation of 3rd party processing facilities at project commencement eliminating 'new build' construction and commissioning risks, associated high capital burdens and onerous debt / hedging conditions
- Main activities considered in the Study include:
 - o Open Pit mining at Lady Shenton System (Menzies), followed by Cork Tree Well (Laverton)
 - Shallow underground mining of the Yunndaga Deposit at Menzies to <200m depth, with historic workings beyond 600m vertical depth producing 270koz at grades of 16g/t Au providing immense upside potential to extend mine life at depth and along strike of currently delineated resources
 - Leveraging existing processing plants within the Goldfields to monetize Menzies assets, with production target of +2.5Mt material attractive to multiple parties seeking consistent ore feed
 - Upgrading and refurbishing Brightstar's Laverton Gold Plant to a throughput of +480ktpa capacity of fresh (hard) rock material, to provide viable processing solution for +500koz of wholly-owned resources within 70km; along with unlocking 3rd party assets within trucking distance allowing opportunities for revenue via toll-treatment or inorganic M&A opportunities.
- In the current market environment, the Study has focused on delivering high quality outcomes at a low upfront capital cost. The following presents upside to the financial outcomes:
 - Only 30% of combined Mineral Resource is included in the mining production target of this Study, providing additional opportunities to extend Project life and increase the LOM production target rate
 - Further infill and extensional exploration to increase near surface resource size, grade and confidence classification that can optimise into future mine plans
 - Underground resource growth: Yunndaga resource remains open down dip and along strike. Current mine plan is down to ~200m vertical depth, whereas the Yunndaga has been mined down to 600m below surface level historically in one lode.



 Significant strike length of the Menzies Shear Zone and the Company's Laverton tenure is largely untested by historic exploration. Regional deposits have the potential to contribute to longer term mining material



Figure 1 - Brightstar Tenure and regional infrastructure



Executive Summary

This positive Scoping Study has highlighted the strong economic case for recommencing mining operations at Brightstar's Laverton and Menzies Gold Projects, with all Mineral Resources included in this study contained within granted Mining Leases in the Tier-1 mining jurisdiction of Western Australia.

The total estimated net revenue for the project is estimated as \$899.6M using a gold price of AUD \$2,900/oz fixed for the life of the project. C1 costs for the project were estimated as \$570M with total operating unit cash costs of \$1,765/oz produced. The estimated net free cash produced is approximately \$153M over an eight year production period.

The mining material included within the life of mine plan contemplated in this Study are comprised of 66% in the Measured or Indicated Mineral Resources category, and 34% classified as Inferred Mineral Resources.

Key consultants were engaged in the delivery of the Study, including GR Engineering Services (**GRES**) and ABGM Pty Ltd (**ABGM**), responsible for the processing and mining study components, respectively. Brightstar engaged GRES to undertake a process plant assessment and ABGM to complete optimisations for open pit and underground mining scenarios along with subsequent mine designs and schedules. Brightstar's internal team were responsible for the remaining components including infrastructure, ESG and financial modelling.

The study considers the mining of four separate deposits across the Menzies and Laverton Gold Projects, with Menzies preferentially mined first due to low capital requirements, access to existing processing facilities within trucking distance, and advanced knowledge due to existing information including open pits mined in the late 1990's and more recently in 2023 at the Selkirk Mining JV. Brightstar has utilised current (June quarter 2023) market rates for mining, haulage and processing costs with relevant quotes from external contractors and consultants as appropriate.

Planned future mining operations at Menzies will be one large open pit complex at Menzies within the Lady Shenton System, and a shallow underground mine at Yunndaga, approximately 7km south of Lady Shenton. Supporting infrastructure will include a leased camp, mining contractor facilities and Brightstar offices all located within 10km of Menzies, with ore hauled to offsite 3rd party processing plants.

Planned mining operations at Laverton will include four open pits at Cork Tree Well (two cut backs and two virgin open pit developments) and a shallow underground mine at Alpha. Both deposits are located within 70km of Brightstar's processing facility located ~30km south of Laverton, WA. Infrastructure at Laverton will include mining contractor facilities at both deposits, the utilisation of existing accommodation facilities at Brightstar and Laverton, and processing operations at Brightstar.

Brightstar is relying on past metallurgical testwork for the Menzies Gold Project (previously announced by Kingwest Resources Ltd on 24 March 2021) which was completed and supervised by IMO Metallurgy Pty Ltd as part of Kingwest's Scoping Study for the Menzies Gold Project released in 2021. The Company is not aware of any new information or data that materially affects the information included in the 24 March 2021 announcement. The Cork Tree Well and Alpha deposits that are included in the Laverton



Gold Project mine plan have previously been mined, and production records exist informing the historical recoverability of the mineralisation.

Recommended next steps include detailed studies on technical work streams including geotechnical and metallurgical work on some deposits, hydrology and environmental studies at feasibility level, obtaining formal pricing from suppliers and detailed mine infrastructure planning such as WRD/landform designs.

Significant upside exists at the projects, highlighted by Cork Tree Well which is open along strike to the North for over three kilometres representing a compelling target for near-surface oxide mineralisation, whilst the Yunndaga mine plan at Menzies has underground development and mining levels to <200m depth which compares favourably to the historically mined levels beyond 600m depth. These deposits, and many other exploration targets, will be strategically advanced over the life of the mine with the intent of extending mine life at both Projects to generate additional gold ounces and cashflow.

The Mineral Resources assessed for the study were completed by Mark Zammit of Cube Consulting Pty Ltd (Menzies Gold Project), Kevin Crossling of ABGM Pty Ltd (Cork Tree Well Gold Deposit) and Richard Maddocks (Alpha & Beta Gold Deposits) and announced to the ASX on 23 June 2023. Messrs Zammit, Crossling and Maddocks are the Competent Persons for these Mineral Resources with relevant information supplied within the disclosure released by the Company on 23 June 2023. The consolidated Mineral Resource Estimate was first disclosed by Brightstar on 6 April 2023 and updated on 23 June 2023. Brightstar confirms that it is not aware of any new information or data that materially affects the information contained in these disclosures, and that the material assumptions and technical parameters underpinning the disclosure continue to apply and have not materially changed.



Mining Physicals

Table 1 – Summary of Physicals

	Units	Lavert	on	Men	zies	Combined
Open Pit Mines, Processing facility		Cork Tree Well Brightstar		Lady Shent Toll 1	•	2x open pits
Underground Mines, Processing facility		Alpha Brightstar		Yunndaga Toll Treat		2x undergrounds
Mining Phase	Quarters *excludes Pre- Production		Cork Tree Well: 12 Lady Shent Alpha: 10 Yunndaga			8 Years + Pre- Production
		стw	Alpha	Lady Shenton	Yunndaga	
Ore mined	Kt	2,270	431	1,916	651	5,284
Ore grade	g/t Au	1.85	3.03	1.62	2.91	2.00
Gold in ore	Koz	136	42	100	61	339
Recovery	%	Ave. 9	5%	Ave 95%		95%
Recovered Gold	Koz	129.5	39.8	94.8	58.4	322.6
Processing Rate ^Fresh, *Blend	Ktpa	550*	480^	600*	350^	900ktpa peak (MGP) 550ktpa peak (LGP)



Figure 2 – Gold Production by Project Year vs Cumulative Net Cash Flow (A\$M)



Production Target

Total payable metal over the life of the Project is forecast to be approximately 322koz, annual numbers with the breakdown of Indicated and Inferred Mineral Resources is shown in Figure 3. Of the Mineral Resources scheduled for extraction in this Scoping Study production target, approximately 66% are classified as Measured or Indicated and 34% as Inferred over the eight (8) year life of mine.

Payback of all pre-production capital costs is expected to occur 1.5 years after commencement of production. Of the Mineral Resource tonnages scheduled for extraction in this Scoping Study production target plan during the payback period, approximately 70% are classified as Measured or Indicated and 30% as Inferred over the initial 1.5 year payback period.

Accordingly, Brightstar has concluded that it is satisfied that the financial viability is not dependent on the inclusion of Inferred Resources early in the production schedule given an estimated payback period (from commencement of production) of 1.5 years.

The Menzies and Laverton Gold Projects have been mined successfully over multiple mining campaigns with approximately 900koz Au produced across the two project areas. The Company therefore considers the Menzies and Laverton Gold Projects to be very mature projects which increases the confidence of converting the current Mineral Resources into Ore Reserves.



Figure 3 – Annual Production by Resource Category



Project Costs & Financial Outcomes

Capital costs are derived from a number of sources including quotes and budget pricing from suppliers and estimates based on recent actual pricing from WA similar mines. They include all pre-production site, process plant, tailings dam, and mining development related including dewatering, as well as sustaining capital post production target start-up.

Brightstar has utilised current (June quarter 2023) market rates for mining, haulage and processing costs with relevant quotes from external contractors and consultants as appropriate.

Table 2 – Summary of estimated Capital Costs

Capital Costs	A\$m
Pre-Production Capital	22.4
Growth Capital	94.4
Sustaining Capital	53.3
Capital Costs	170.2

Table 3 – Summary of estimated Costs Breakdown

Operating Costs	A\$M	A\$/t Milled	A\$/oz Produced
Open Pit Mining	195	56	871
Underground Mining	85	49	866
Mining Cost	280	53	869
Ore Processing	270	51	837
Site Overheads / G&A	17	3	52
Resource Development Drilling	2.3	1	7
C1 Cash Operating Costs	570	108	1,765
Royalties	36	7	111
Sustaining Capital	53	10	165
All-in Sustaining Costs (AISC)	659	125	2,041





LOM C1 CASH COST AND AISC BREAKDOWN¹



Table 4 – Summary of estimated Financial Metrics

Financial Metrics	Units	Outcome
Gold Price Assumed	A\$/oz	2,900
Discount Rate	%	8
Gross Revenue	A\$M	935
Net Operating Cashflow	۵¢۱4	152
(after all capital, pre-tax)	A\$M	153
Pre-Tax NPV	A\$M	103
Pre-Tax IRR	%	79
Capital Intensity	A\$/oz	559
NPV ₈ / Pre-Production Capital	x	4.6

Table 5 – Summary of Project Sensitivities on Gold Price Assumptions

Sensitivity	Units	\$2,800 / oz	Base Case \$2,900 / oz	Spot Price \$3,000 / Oz
NPV ₈	\$M	78	103	128
IRR	%	56	79	106
Payback	Years	1.8	1.5	1.3
Annual EBITDA	\$M	15.1	19.1	23.1
LOM EBITDA	\$M	121	153	185





Figure 5 – Sensitivity Analysis of Inputs

Funding

To achieve the range of outcomes indicated in the Scoping Study, project funding in the order of \$26M will likely be required, which includes all pre-production costs of which the pre-production capital requirement is approximately \$22M with further funding required for working capital purposes.

Brightstar considers there is a reasonable basis to conclude that the project funding will be available when required, on grounds including the following:

- The Project has strong technical and economic fundamentals which provides an attractive return on capital investment and generates robust cashflows at conservative (including below current spot price) gold prices. This provides a strong platform to source debt and equity funding.
- The Company has received interest from various financial institutions regarding financing for the project, with preliminary discussions occurring for securing debt financing for a large portion of the pre-production capital requirements.
- The Board of Brightstar has a strong track record of raising equity funds as and when required to further the exploration and evaluation of the Menzies and Laverton Gold Projects.

There is, however, no certainty that the Company will be able to source funding as and when required. Typical project development financing would involve a combination of debt and equity. It is possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.



Conclusions and Recommendations

The Scoping Study provides justification that the development of the Menzies and Laverton Gold Projects is a commercially viable stand-alone mining operation and accordingly the Board of Brightstar Resources Limited has approved progression of the Projects to a Preliminary Feasibility Study ("**PFS**").

PFS work has commenced in parallel with infill drilling at the Menzies and Laverton Gold Projects to convert Inferred Mineral Resources to Indicated Mineral Resources, ongoing extensional exploration and resource growth.

This ASX announcement has been approved by the Managing Director on behalf of the board of Brightstar.

For further information, please refer to the Company's ASX announcements or email info@brightstarresources.com.au

Alex Rovira Managing Director

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ABOUT BRIGHTSTAR RESOURCES

Brightstar Resources Limited is a Perthbased gold exploration and development company listed on the Australian Securities Exchange (**ASX: BTR**).

In May 2023, Brightstar completed a merger with Kingwest Resources Limited via a Scheme of Arrangement which saw the strategic consolidation of Brightstar's Laverton Gold Project and Kingwest's Menzies Gold Project. Hosted in the prolific eastern goldfields of Western Australia and ideally located proximal to significant regional infrastructure, Brightstar has a significant **JORC Mineral Resource of 21Mt @ 1.5g/t Au for 1,016,000 ounces Au.**

Importantly, Brightstar owns the Brightstar processing plant (currently on care and maintenance), 60-man а accommodation and camp nonprocessing infrastructure, located 30km SE of Laverton and within 60km of the Company's 511,000oz Au JORC Resource within the Laverton Gold Project.



Figure 6 – Laverton & Menzies Gold Project Location

The Menzies Gold Project includes the high-grade gold field which has historically produced 787,200oz at 18.9g/t Au from intermittent production between 1895-1995. In 2023, Brightstar commenced mining operations at the Menzies Gold Project via a Profit Share Joint Venture with BML Ventures Pty Ltd.

Brightstar aims to grow its mineral resource inventory with the view to becoming a substantial future ASX gold developer and producer.



Location			Measure	d		ndicated			Inferred			Total	
	Au Cut-off (g/t)	Kt	g/t Au	Koz	Kt	g/t Au	Koz	Kt	g/t Au	Koz	Kt	g/t Au	Koz
Alpha	0.5	623	1.6	33	374	2.1	25	455	3.3	48	1,452	2.3	106
Beta	0.5	345	1.7	19	576	1.6	29	961	1.7	54	1,882	1.7	102
Cork Tree Well	0.5	-	-	-	3,036	1.6	157	3,501	1.3	146	6,357	1.4	303
Total – Laverton	0	968	1.6	52	3,986	1.6	211	4,917	1.6	248	9,691	1.6	511
Lady Shenton System (Pericles, Lady Shenton, Stirling)	0.5	-	-	-	2,770	1.3	119	4,200	1.3	171	6,970	1.2	287
Yunndaga	0.5	-	-	-	1,270	1.3	53	2,050	1.4	90	3,310	1.3	144
Yunndaga (UG)	2.0	-	-	-	-	-	-	110	3.3	12	110	3.3	12
Lady Harriet System (Warrior, Lady Harriet, Bellenger)	0.5	-	-	-	520	1.3	22	590	1.1	21	1,110	1.2	43
Selkirk	0.5	-	-	-	30	6.3	6	140	1.2	5	170	2.1	12
Lady Irene	0.5	-	-	-	-	-	-	100	1.7	6	100	1.7	6
Total – Menzies	0	-	-	-	4,590	1.4	200	7,190	1.3	305	11,770	1.3	505
Total – BTR		968	1.7	52	8,516	1.5	411	12,107	1.4	553	21,461	1.5	1,016

Table R6 – Consolidated JORC Resources of Laverton & Menzies Gold Projects

Pericles, Lady Shenton & Stirling consolidated into Lady Shenton System; Warrior, Lady Harriet & Bellenger consolidated into Lady Harriet System.

Note 1: The consolidated mineral resource estimate was first disclosed by Brightstar on 6 April 2023 and updated on 23 June 2023. Brightstar confirms that it is not aware of any new information or data that materially affects the information contained in these disclosures, and that the material assumptions and technical parameters underpinning the resource continue to apply and have not materially changed.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Brightstar Resources Limited's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Brightstar believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that further exploration will result in the estimation of a Mineral Resource.

Compliance Statement

With reference to previously reported Exploration Results and Mineral Resources, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



Reasonable Basis for Forward-Looking Statements

No Ore Reserve has been declared. This ASX release has been prepared in compliance with the JORC Code (2012) and the ASX Listing Rules. All material assumptions on which the Scoping Study production target and projected financial information are based have been included in this release and disclosed in the table below.

Consideration of Modifying Factors in the format specified by JORC Code (2012) Section 4 is contained in Appendix B.



BRIGHTSTAR RESOURCES LIMITED



MENZIES & LAVERTON GOLD PROJECTS

MINE RESTART STUDY

SEPTEMBER 2023



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INTRODUCTION

Brightstar wholly owns the Menzies ("**Menzies**") & Laverton ("**Laverton**") Gold Projects, both located in the Western Australian Goldfields region, located on granted mining leases.

Menzies is located ~130km of the major regional town of Kalgoorlie and covers a contiguous land package containing over fifteen strike kilometres of the Menzies Shear Zone, where series of structurally controlled high-grade gold deposits have been historically mined and display extensive exploration potential for high-grade extensions. Modern exploration since closure over 20 years ago has been limited, with recorded historical production of 787,200 oz Au of which 643koz at 22.5g/t was from underground mining and a further 145koz at 2.6g/t was from open pit mining between 1995 and 1999.

The Laverton Gold Project is centred on Laverton, with the +303koz Cork Tree Well resource approximately 30km North of Laverton and Brightstar's gold processing plant ("**Brightstar Plant**") and adjacent Beta deposit approximately 30km South of Laverton. A third deposit, Alpha, is located ~15km North-East of the Brightstar Plant accessed by Brightstar haul roads. Modern mining has occurred at Cork Tree Well with two shallow open pits mined in the late 1980's with Beta and Alpha open pits mined approximately ten years ago and processed through the 485ktpa (oxide) Brightstar Plant which is presently on care & maintenance.

Considerable information, including detailed metallurgical studies was completed in 2021 as part of a scoping study for the Menzies Gold Project. The 2021 Study was completed by Kingwest Resources Ltd (now a wholly owned subsidiary of Brightstar) which proposed open pit mining at Menzies and ore haulage to 3rd party processing facilities over a 31 month term.



Figure 1 – WA Goldfields Map with Project Locations



STUDY SCOPE

Brightstar owns +1Moz of gold resources in Western Australia, including the 303koz Au Cork Tree Well deposit located ~30km North of Laverton, and the 287koz Lady Shenton system at Menzies which is ~130km north of the major regional town of Kalgoorlie. Total gold endowment at Menzies is approximately 1.3Moz, with 505koz in JORC2012 compliant Resources and a further 787koz mined at 18.9g/t between 1895 and 1999 including the major deposits of Lady Shenton and Yunndaga which was mined to 600m depth pre-WWI. Past production was reported of 51koz at Cork Tree Well and 32koz from Alpha & Beta.

The scope of this study is to mine and recover 153koz from Menzies and 169koz at Laverton from a number of deposits, using open pit and underground mining techniques prior to ore haulage to process plants with gold doré produced onsite for further refinement.

Existing infrastructure and assets owned by the Company comprise the Brightstar Plant including associated non-process infrastructure such as a tailings storage facility, process water dam, and accommodation village with 60 rooms; two houses in Menzies; along with light and heavy vehicles including a crane and FEL.

The scope of this study investigated scenario analyses of several mining and processing options:

- underground and open pit mining at Menzies, with ore processing at the Brightstar plant and 3rd party toll treatment plants
- underground and open pit mining at Laverton, with ore processing at the Brightstar plant

These analyses were conducted in parallel with assessing:

- Brightstar Plant Refurbishment Restart (485ktpa oxide throughput)
- Brightstar Plant Refurbishment and Upgrade (480ktpa fresh throughput)
- Brightstar Plant relocation to Menzies and expansion to 500ktpa

Following detailed investigation of these scenarios, the best economic outcome was toll-treatment of Menzies ore with a Brightstar Plant Upgrade which resulted in highly profitable operations over an eight year LOM.

It is envisaged that Brightstar will utilise respected mining contractors for surface and underground mining operations, haulage contractors for ore haulage, and use an owner-operator model for processing, technical services and administrative functions providing guidance and direction to the various contractor organisations.

This study has identified that four mining areas across Menzies and Laverton will be exploited, namely:

- Lady Shenton System, Menzies (via open pit methods)
- Yunndaga, Menzies (via underground mining methods)
- Cork Tree Well, Laverton (via open pit methods)
- Alpha, Laverton (via underground mining methods)



Lady Shenton and Yunndaga will be hauled offsite for processing at 3rd party plants within the Goldfields for early cashflow, which will then be utilised for refurbishment and expansion of the Brightstar Plant to process ore from Cork Tree Well and Alpha.

STUDY TEAM

Brightstar engaged respected industry consultants for key work areas as outlined in Table 1 below, whilst internal resources were deployed to engage with various suppliers for budget pricing and conduct scenario analyses of various options to arrive at pragmatic economic outcomes.

Table 1 – Study Team

Area	Resource (Internal unless noted)	Scope
Mineral Resources	Menzies – Mark Zammit, Cube Consulting Cork Tree Well – Kevin Crossling, ABGM Alpha, Beta – Richard Maddocks, Auralia	Mineral resource estimation of gold resources at various deposits within the Menzies and Laverton Gold Projects
Mining	External – ABGM Pty Ltd Anton von Wielligh FAusIMM	Open Pit & Underground Optimisations, Mine Design & scheduling
Processing	External – GR Engineering Stewart Findlay	Process Plant & NPI Site Inspection, Refurbishment & Expansion studies
Permitting, Environment & Heritage	Tim Clarke	Review of existing approvals including gap analysis
Haulage	Dean Vallve	Option analysis, indicative quotations from suppliers
Tailings & NPI	Dean Vallve	Option analysis and review using industry benchmarks
Financial Modelling Scoping Study Management	Alex Rovira, Dean Vallve	Collation and integration of consultant data

ESG, PERMITTING & APPROVALS

Tenure

Both Menzies and Laverton Gold Projects are located on granted mining tenements, with previous mining occurring within and adjacent to these tenements. Brightstar will also utilise associated tenements including wholly owned miscellaneous and general purpose leases to allow Brightstar to undertake mining activities unimpeded.

Due to previous history of modern mining in the 1980's and 1990's, and historic mining at the turn of the century over 100 years ago, the project areas have significant enduring environmental disturbances due to existing pits, shafts and underground mines, waste rock dumps and tailings storage facilities.



Existing Studies

Due to previous background work being undertaken by Kingwest at Menzies, there are a significant proportion of baseline studies which have already been undertaken, whilst operations at Beta and Alpha by previous owners rely on older baseline studies. It is intended that a combination of existing and new baseline studies will facilitate permitting submissions for both projects in a staged approach in the coming years such that approvals are gained in a timely manner. Existing footprints will be maintained as per these legacy operations, reducing additional baseline surveys required before mining permit applications can be submitted.

There are no expected impediments relating to baseline studies or approvals for either project given the advanced status of the projects.

Environmental Philosophy

Currently the environmental impact of currently planned disturbances is small, however this will increase as operations ramp up. As the project progresses through scoping and feasibility, Brightstar is investigating ways to minimize future environmental impacts. These include the use of hybrid equipment such as crushers, utilisation of renewable energy, enhanced water recovery through the tailings dam design and processing plant thickener to reduce environmental water requirements, and progressive rehabilitation of all waste rock dumps including disturbed land from exploration activities.

Hydrology & Hydrogeology

Baseline hydrology and hydrogeology studies are scheduled for commencement in late 2023 for the Menzies project and in 2024 for the Laverton project. At the present time, there is sufficient water within the mined voids of Lady Shenton and Yunndaga (Menzies) along with Cork Tree Well, Alpha & Beta (Laverton). It is anticipated that this water will be extracted and used for dust mitigation and usage during mining operations.

It is expected that water will be recycled during ore processing activities at the Brightstar Plant, thereby reducing the impact on local water sources within the broader Laverton region via the harvesting of water from the tailings storage facilities.

All projects are currently protected by existing flood bunds. It is expected that all future infrastructure will be sited within flood protected areas.

Social & Heritage

Brightstar is working closely with the traditional owners of each project to ensure that cultural heritage is identified and preserved. Further, local businesses and contractors are utilised to establish and maintain strong community connections in each region with current sponsorship of local events and sporting teams expected to continue through into production.

Consultation has commenced with local council authorities around Brightstar's intent to recommence operations with introductory meetings planned with other Government bodies such as DMIRS and DWER.



GEOLOGY & MINERALISATION

Menzies

<u>Regional Geology</u>: The Menzies area is made up of a granite-greenstone assemblage, dominated by granitoid and granitic gneiss (Groenwald et al 2000). The sequence is located within the north north-westerly trending Norseman-Wiluna greenstone belt of the WA Archaean Yilgarn Province. The greenstone belt is a northern extension of the sequence comprising the Bardoc Tectonic Zone, which lies to the south of the Comet Vale Monzogranite. Outcropping Archaean rocks comprise a minor part of the landscape, whilst much of the area is covered by regolith and Cainozoic sedimentary deposits.

The Menzies Gold Project covers an area from about 4km to the north and about 11km to the south of Menzies townsite wholly within a NNW trending greenstone belt. Menzies occupies a small portion of the eastern limb of the Goongarrie-Mt Pleasant Anticline. This Archaean greenstone belt can be traced semicontinuously from southwest of Siberia, north of Menzies through to Lake Ballard.

The greenstone package has been metamorphosed to mid-to-upper amphibolite facies with the intensity of metamorphism gradually increasing to the north. The dominant rock types in the area are amphibolites with lesser basaltic lavas and tuffs, talc chlorite and chlorite schists, volcanogenic sediments and minor feldspar porphyry intrusions.

Two techno-stratigraphic domains are recognised at Menzies (Swager, 1994). They are characterised by internally coherent stratigraphic successions that are separated by major faults or shears and are referred to as the Western and Eastern Domains.

Local Mine Geology: The Menzies Gold Project is located along the western margin of the Menzies greenstone belt and, apart from the Lady Irene prospect, within a broad (2km – 5km wide) zone of intense ductile deformation often referred to as the Menzies Shear Zone. This broad highly deformed shear zone is probably the northern continuation of the Bardoc Tectonic Zone and is a major crustal feature of the Eastern Goldfields. The gold deposits within the MGP and those further south (e.g. at Goongarrie and Bardoc) have many similar characteristics. The Lady Irene prospect is west of the Menzies Shear Zone and thus within the Ora Banda domain, in a similar geological setting to the Sand Queen Gold Mine at Comet Vale, south of Menzies.

Gold mineralisation is widespread and occurring within a broad range of host rocks in 3 general styles:

- 1. Single, larger quartz veins (i.e. "quartz reefs"). These tend to contain only small amounts of sulphides, but the vein selvages are commonly more sulphidic. These veins vary from about 10cm up to about 2m thickness, 20m to about 200m in length and typically pinch and swell repeatedly along strike and down-dip.
- 2. Close-spaced sheeted quartz vein zones. These are comprised of multiple, typically close-spaced quartz veins or veinlets in a schistose matrix, constituting a distinct shear zone that may be concordant with lithological boundaries or cross-cutting 2 or more rock types. These mineralised shear zones appear as distinctly banded siliceous, sulphidic rocks and are typically mylonitic. These sheeted vein zones are commonly from 1m to 3m thick and up to a few hundred metres in length.



3. Sulphidic biotitic shear zones. These are comprised of schist containing variable amounts of brown-to-bronze biotite and small thin irregular quartz veinlets ("stringers"), along with diffuse silica-flooding and disseminated sulphides. These shear zones are usually about 1m to 3m thick and can be a few hundred metres in length.

The 3 styles are closely linked, and one style can merge with another, such that a sulphidic biotitic shear zone, with increasing silica develops into a close-spaced sheeted vein zone. Similarly, with greater fracturing and more intense silicification, a close-spaced sheeted vein zone evolves into a shear zone containing a large vein. Considering these points, the gold mineralisation within the MGP is perhaps best described as follows:

Narrow (1m-3m) shear zones within which biotite and pyrite are ubiquitous and there is variably abundant quartz veining, sometimes including a distinct large vein or repetitions of lenticular veins. The gold mineralisation is associated with low levels (about 1% - 5%) of sulphides, mainly pyrite and less commonly arsenopyrite. Galena is present in small amounts where gold mineralisation is of higher grades.

It is important to note that pyrrhotite is the most common and widespread sulphide mineral and may be an innate part of the layered sequence, e.g. a component of sulphidic metamorphosed sedimentary rocks. Furthermore, pyrrhotite is also associated with an early phase of carbonate alteration that pre-dated the gold mineralisation. Although pyrrhotite is often present in mineralised veins and shears, it is reasonably common elsewhere also and is not a reliable indicator of the presence of gold mineralisation.

Laverton

<u>Regional Geology:</u> The Laverton Project area is located in the north Laverton Greenstone Belt on the southern extremity of the Duketon Greenstone Belt (DGB) in the north-eastern sector of the Eastern Goldfields Superterrane of the Yilgarn Craton.

The geology of the Alpha Project is comprised of foliated basalt and mafic schist. The upper tertiary surface can be up to 10m thick. Beneath the surface layer is saprolite which has been described as soft, machine-rippable, indurated in places. Basement rock within the area is comprised of mafic volcanic rocks with interleaved narrow units of ultramafic rocks, some dolerite and interflow volcanogenic sediments.

The Beta Project is centred on the Burtville Shear that trends from near Sunrise Dam to Burtville. In the area of Beta this shear is known as the Mikado Shear. The deposit occurs along the Eastern Margin of the Laverton Tectonic zone, which hosts the major gold occurrences (> 1Moz) of Granny Smith, Sunrise Dam, Keringal, and Red October (all owned by other companies). The dominant rock types include a sequence of a metamorphosed ultramafics, high magnesian basalt, tholeitic basalts, dolerite, gabbros, plus minor greywacke and siltstone. Lithological contacts are generally intensely sheared and altered.

The Cork Tree Well deposit within the Duketon Greenstone Belt lies along the western limb of the Erlistoun synclinal structure. The sequence includes mafic volcanic lavas, tuffs, and tuffaceous sediments with minor interflow graphitic shales and banded iron formation. Outcrop is poor with alluvial, eluvial and aeolian cover to the north and south of the open pit areas. The cover is up to 20 metres thick in the northern part of the tenement.

<u>Local Mine Geology – Cork Tree Well</u>: The gold mineralisation in the open pits is associated with steep east dipping sedimentary units, in particular the chert horizon located on the footwall of the sediment sequence. The mine area consists of footwall, high magnesium basalts altered to chlorite schist overlain by shales containing chert and banded iron beds and younger hanging wall tholeiitic pillow basalts.



Mineralisation at the Cork Tree Well mine was contained within interflow cherts and sediments which contained pervasive pyrite, pyrrhotite and magnetite mineralisation The sediments which host the gold mineralisation have been intruded by concordant porphyry sills which extend the length of the mineralised zone. The sediment sequence has been traced south of the existing pits where it is truncated south of the tenement boundary by granite intrusives.

To the north of the pits the interflow sediments pinch out and are truncated by north-northeast to northeast (030° to 040°) trending shears. The mineralisation at Cork Tree North (Delta) is associated with a sheared quartz dolerite within a talc chlorite schist host. Gold is associated with quartz stringers within the quartz dolerite.

<u>Local Mine Geology – Alpha:</u> The mineralized resource at Alpha is based on a single shallow north plunging shear hosted lode. The lode is NNE dipping within the oxide position, and steepens to around 50 to 60 degrees in fresh rock. The shear geometry plunges around 10 to 150 deg to the northwest (300 deg). The resource subcrops in the south east and progressively deepens along the plunge trend to the northwest.

The main Alpha orebody is disrupted by cross faulting, with two main lodes that extend beyond this to the Alpha north mineralization. These tend to be flat lying at relatively shallow depths, and steepen in fresh rock to around 50 to 65° to the northwest which form the basis of the underground mining target.

METALLURGY

Independent Metallurgical Operations Pty Ltd (IMO) were engaged by Kingwest in 2021 to carry out initial gold recovery test work on a selection of samples from the Kingwest Resources drilling. The 24-hour leach test work was carried out using a pulverised grind size, tap water, and a 40% solid mixture. There were in total 16 samples tested all taken from RC chip samples with weights from 2.7kg to 4.7kg. The calculated gold recovery rates ranged from 93.6% to 99.2% as summarised in Table 2 and announced on 24 March 2021. The Company confirms that it is not aware of any new information or data that materially affects the information included in the 24 March 2021 announcement.

Material Type	Lady Shenton	Yunndaga
Oxide	96.0%	Ref: Fresh
Transitional	94.5%	Ref: Fresh
Fresh	96.0%	96.0%

Table 2 – 2021 Metallurgical Testwork Summary (Menzies) for Study deposits

Processing of Cork Tree Well and Alpha material was undertaken onsite at the Cork Tree Well and Brightstar plants respectively as announced on 23 June 2023 (p11, Cork Tree Well Mineral Resource Upgrade) and February 14 2023 (Appendix 3, RIU Presentation). Due to successful processing results from Austwhim's Cork Tree Well and A1 Minerals Brightstar plants, where it is understood from historic records that both deposits were processed with good recoveries, it was determined to use a 95.0% recovery for these deposits in the absence of new information. The Company confirms that it is not aware of any new information or data that



materially affects the information included in the announcements of 23 June 2023 and February 14 2023. Further testwork is planned for all deposits including comminution and further metallurgical studies to obtain feasibility-level standards.

OPEN PIT MINING

Optimisation

Brightstar undertook a conventional process for open pit optimisations, which resulted in the Company's Mineral Resource Estimates being provided to ABGM for economic analysis with a summary of key optimisation inputs and modifying factors are provided below.

Economic cut-off grades were generated during this process, completed using Datamine's NPVS software, with results typically around 0.5 – 0.6g/t Au for the various deposits.

Item	Unit	Lady Shenton	Cork Tree Well	Comments
Revenue Factor (1.0)	\$/oz Au	\$2,750	\$2,750	
State Royalty	%	2.5% Gross	2.5% Gross	
Other Royalty	%	n/a	3% NSR	
Material Densities				As per block models: Menzies typically 1.5, 2.3, 2.7 (OX,TR,FR) Laverton typically 1.85, 2.55, 2.75 (OX, TR, FR)
Geotechnical Parameters				Slope Angles for all pits: OX 40°, TR 45°, FR 50°
Ore Loss & Dilution				All pits: 10% Mining Dilution, 5% Ore Loss
Mining Costs				\$11.00/BCM for optimisation purposes only
Processing, Haulage & G&A costs	\$/t	\$44.25 - \$54.25 (OX to FR)	\$51.60 - \$54.60 (OX to FR)	Menzies – 3 rd party toll treat Laverton – 480ktpa fixed throughput all ore types
Metallurgical Recovery	%	94.5% - 96.0%	95.0%	Refer Table 2 in Metallurgy section

Table 3 – Open Pit Optimisation Inputs

Following coding and interrogation of the block models by ABGM, a range of economic pit shells were exported at various revenue factors with \$2,750 AUD/oz selected based upon recent ASX peer releases and taking a conservative view of the long-term Australian dollar gold price. These were further enhanced to



facilitate practical mining and safe pit access. The pit shell was then used for further assessment and reporting, which encompassed Measured, Indicated and Inferred Mineral resources across various oxidation/weathering states.



Figure 2 – Location of Lady Shenton System, Menzies





Figure 3 – Lady Shenton Mining Areas looking North-East (Oblique view)

Operational Parameters

Mining is assumed to be similar to conventional WA Goldfields style operations, whereby drilling & blasting of material is subsequently followed by load & haul activities. Open pit mining activities are expected to be conducted by an experienced third-party contractor on continuous 24 hour per day shifts operating 7 days per week, with supervision provided by contractors and direction provided by Brightstar technical personnel.

At Menzies, ore will be mined across 2x 2.5m flitches on 5.0m benches which will allow material to be cleanly mined by 100-150t class excavators and hauled via 100t class rigid dump trucks to a centralised ROM Pad or Waste Rock Dump (WRD).

Due to orebody geometry, the wider ore zones at Cork Tree Well will facilitate larger mining equipment which is anticipated to be 200t-250t class excavators matched with 150t class rigid dump trucks, thereby allowing greater mining efficiencies whilst maintaining clean ore mining techniques during the mining process. It is anticipated that the selected mining contractor will have suitable equipment readily available with personnel and common items shared across both operations as applicable.

Designs were constructed in such a way that the bulk of the open pit material would be mined via a 22m double-lane ramp with minor volumes hauled with a single lane (10m) wide ramp typically at the base or bottom third of the pit.

Mine Design & Scheduling

Following the optimisation process, mine designs were then undertaken using the selected pit shells and geotechnical parameters (wall angles) listed in Table 3 and visually shown in Figure 4 in this section. These designs were then re-interrogated against MAO (Material Allocation Optimiser) to arrive at an ideal schedule which accounts for various constraints such as throughput and bench sink rates.





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Figure 4 – Example of Mine Designs (Cork Tree Well shown)



Figure 5 – Cork Tree Well Pit Locations





Figure 6 – Cork Tree Well Resource Long Section (by grade Au g/t)

Mining Fleet

The mine plan consists of two mining areas, namely the Lady Shenton System and the Cork Tree Well deposits. At Lady Shenton, mining will be undertaken with a 100t class truck fleet moving approximately 300-350kBCM per month. At Cork Tree Well, the four open pits will be mined at various times which is expected to manifest as multiple work areas enabling high efficiencies and utilisation rates of larger equipment allowing movement rates of 400-450kBCM per month. The two fleets are summarised below in Table 4 with the selected mining contractor supplying 'best for project' equipment as deemed appropriate.

Machine Type	Lady Shenton	Cork Tree Well
Excavator	Komatsu PC1250 – Liebherr 9150 (100-150t class)	Hitachi EX1900 – Hitachi EX2500 (200-250t class)
Dump Truck	CAT 777 / Komatsu 785 (100t class)	Komatsu 1500 (150t class)
Drill Rig	Sandvik DP1100i	Sandvik DP1500i
Explosive Truck	MMU (Emulsion)	MMU (Emulsion)
Dozer	CAT D9	CAT D10
Grader	CAT 16	CAT 16
Water Cart	er Cart 20kL Articulated	



UNDERGROUND MINING

Due to orebody geometries, Brightstar elected to utilise underground mining methods for the Yunndaga and Alpha deposits at Menzies and Laverton Projects respectively. Underground mining is based on a mechanised retreat mining method which is considered common across WA in similar narrow vein gold mining operations. The method involves standard 1 in 7 down decline access from the footwall to levels spaced 15m apart on a floor-to-floor basis of ore drives.

Ore drives are developed along strike to the extents of the known mineral resource, with subsequent retreat longhole open stopes mined using uphole production holes from the extents back to the main cross-cut.

Optimisation

The mine design is based on MSO (mineable stope optimiser) stope shapes using the following design parameters:

- Nominal 15m level spacing
- 20m stope strike length
- 3.5m minimum true stope width (including planned overbreak dilution)
- Strike Drives Profile 4.0m wide by 4.0m high
- Development Dilution 10%, and Recovery 100%
- 76mm diameter production up holes
- 2.0 g/t Au cut-off grade
- Hangingwall Dilution 0.5m
- Footwall Dilution 0.5m
- Stoping production material loss 8% (accounting for in stope and low grade pillars)
- Stoping production material loss 12% (Where crown pillar retreat stopes are close to the pit bottom)
- Decline Profile 5.2mW x 5.2mH
- Decline Gradient 1 in 7 down
- Level Access, Stockpiles, and Return Airway Access Profiles 5.0mW x 5.0mH
- Return Airway Rises raisebore 4.0m diameter or longhole rise (LHR) 4.0m by 4.0m

Table 5 - Indicative Underground Mining Fleet (or equivalent by other suppliers)

Machine Type	Yunndaga & Alpha



Development Drill	Sandvik D421-1	
Production Drill	Sandvik DL430	
LHD	CAT 1700G	
Truck	CAT AD40B	
IT	Volvo 120H	
Grader	CAT 140	
Raisebore	External Contractor supplied	



Figure 7 – Yunndaga Underground Mine Design (Long Section looking East)

Operational Parameters

Mining is assumed to replicate other conventional WA Goldfields style operations, where Brightstar technical personnel will operate the mine supported by reputable underground mining contractors. Mining and haulage activities are expected to be conducted by experienced specialist contractors on continuous 24 hour per day shifts operating 7 days per week, with ore mined from underground operations placed on a nearby ROM (Run of Mine) Pad before being hauled offsite for processing.

PROCESSING



Menzies - Toll Treat

Material from Menzies is proposed to be transported by haulage contractors to a preferred offsite, 3rd party processing plant in the region as shown in Figure 1. A scenario analysis was conducted with on-road and offroad haulage costs and distances considered against toll treatment costs and announced processing costs from ASX-listed peers in the WA Goldfields to arrive at current (June quarter 2023) market rates for processing & haulage on a \$/t basis relative to each deposit.

Menzies benefits from its adjacent location to the sealed Goldfields Highway, which allows exceptional availability due to its all-weather capability and ready access to processing plants near Kalgoorlie and Leonora at approximately equal distances; along with other, closer mills on unsealed dirt roads.

A cap of 600ktpa ore material movement was placed as a constraint for the Lady Shenton open pit schedule, with no cap placed on Yunndaga underground ore. Peak haulage and processing of ~912 kt is achieved in Year Two representing a maximum average monthly run rate of 76 kt during this period.

It is assumed that the ore haulage would be carried out by an experienced haulage contractor with manpower of up to twelve persons working two weeks on one week off roster with vehicle maintenance conducted locally in Kalgoorlie where required. Up to three "Quad Trailer Side Tippers" were assumed to be required with each road train capable of moving on average 30,000t per month with added surge capacity available where required by local suppliers.

A review of current and recent processing terms has been conducted by Brightstar, with additional proposals for other commercial agreements (e.g. ore purchase agreements) discussed at an early stage with other parties. Processing costs have been found to vary by some margin, with benefits gained from the anticipated terms and parcel sizes that Menzies can deliver to these facilities under the contemplated mine plan.

Laverton - Processing

Brightstar's gold processing plant and associated infrastructure is presently on care and maintenance since ceasing full-time operations in 2012. Subsequent maintenance activities on the processing plant included the refurbishment of various items including generators, replacement of a new 450kW ball mill, and the addition of a brand-new gravity gold circuit and elution circuit.

A refurbishment report by Como Engineers in 2021 was reviewed by Brightstar personnel in light of cost escalations experienced across the WA mining sector, and subsequently GR Engineering Services (GRES) were engaged to provide an update to 2023 pricing scenarios.

Three scenarios were investigated, namely a Plant Restart, Plant Upgrade & Refurbishment, and Plant move to Menzies. Given the outcomes of GRES' study, Brightstar elected the Plant Upgrade & Refurbishment solution which proposes a capital cost of \$18.5M for a 480ktpa (Fresh Ore) throughput rate.

Process Flow Summary

The process plant utilises existing infrastructure and will utilise conventional technology to process a minimum of 480ktpa of gold-bearing ore through the plant with higher throughputs anticipated for softer



materials such as transitional and oxide ores. In order to de-risk future operations, GRES have proposed that the existing crushing circuit is proposed to be replaced with a modular, 3 stage crushing plant that either uses track or trailer mounted equipment for primary crushing, secondary crushing, screening and tertiary crushing. This is a different scope to the 2021 Como Engineers Report which assessed the refurbishment of the crushing circuit.

A larger, modular crushing plant will allow ROM ore to be crushed to a finer P₈₀ than achieved in the existing two stage crushing plant that will, in turn, enable the existing mills to process ore at a higher throughput rate. Brightstar has engaged with suppliers for electric and hybrid crushing solutions which is anticipated to result in a reduced carbon footprint and greater efficiencies.

The \$18.5M capital costs for the refurbishment and expansion of the Brightstar Plant also includes a cost allocation for a new, larger 550kW replacement ball mill to complement the existing 450kW ball mills on site. Post crushing, this grinding circuit will operate on a 24/7 basis with industry standard utilisation rates to achieve annualised throughput targets with slurry then directed to the existing leach tank where 30% CN solution is added. Discharge from the leach tank overflows into the first of five CIL tanks with subsequent flows from the last CIL tank resulting in pulp from the CIL tanks pumped over the loaded carbon screen to wash and dewater the loaded carbon which is then discharged direction into the elution column.

An installed gravity circuit will recover gravity gold, with the remainder to be leached and adsorbed onto activated carbon using conventional Carbon in Leach ('CIL') technology. CIL tailings will be pumped outside the process plant footprint, initially to the adjacent Beta open pit void and thence to a new TSF in future years once the pit void is full. Water will be recovered from the pit void and TSF cell and returned to the process facility for re-use. It is anticipated that gold recovery will be undertaken frequently with gold doré bars smelted onsite and stored onsite until transportation for sale offsite.

Laverton - Tailings Storage

The existing TSF onsite is located south of the Brightstar Plant, with approvals allowing the ability to raise to the planned maximum height of 10m which will provide approximately 700kt capacity if required.




Figure 8 – Brightstar Plant Site (M38/9) Overview





Figure 9 – Brightstar LOM Tailings Solution Options

It is intended that the pit voids at Beta will be utilised first, which will provide sufficient storage of >2.8M m³ which equates to a capacity of 4.5Mt using a tailings deposition SG of 1.6t per m³. In addition, a conceptual new LOM TSF location has been delineated within 1km of the process plant with a potential design capacity of 4.2M m³ with a starter cell composed of 2.1M m³ volume allowing deposition of 3.3Mt and overall volume allowing over 6.5Mt of capacity. This TSF cell construction has been designed but is not accounted for in the financial model as the existing pit void has sufficient capacity for the LOM.

With planned throughputs of ~0.5Mtpa, the in-pit capacity allows approximately nine years of deposition whilst the new TSF cell capacity of 6.5Mt (LOM) allows another thirteen years capacity if required, with further studies and approvals required which will be investigated as part of future feasibility studies.

NON-PROCESS INFRASTRUCTURE

Except for a constructed internal haul road within the Menzies tenements, there are limited other Brightstarowned infrastructure items onsite at Menzies. It is proposed that operational facilities will be temporary and removed at the completion of mining and haulage activities. Other infrastructure items will include a leased accommodation facility either located in Menzies townsite or onsite within Brightstar's leases, along with the use of the public Goldfields Highway for ore haulage activities and access for personnel from Kalgoorlie or other regional centres.



Existing infrastructure at the Brightstar Plant consists of an existing 60 man camp, borefield, process water dam, workshops, bunded bulk storage area for fuels and oils, refurbished generators, freshwater tanks, and associated buildings. It is proposed that the accommodation facilities at Brightstar will require modest upgrades to accommodate personnel for refurbishment and operational activities, whilst GRES' scope included NPI components such as Administration Buildings & Offices, and Water Storage and Reticulation and others.

It is expected that future work will include trade-off studies between CAPEX & OPEX of key areas, which will include fuel storage & distribution, power generation and utilising infrastructure in Laverton such as existing accommodation facilities. These studies will include the provision of renewable energy solutions which can be readily installed on Brightstar tenure.

CAPITAL EXPENDITURE

Capital costs were derived from various sources, including GRES and ABGM who utilised their expertise to identify and quantify unit volumes and costs applicable to their scope of works. This information was combined with quotes from other suppliers with first principle estimating used to compare against similar operations within the WA Goldfields region. Capital Expenditure is defined as either pre-production, sustaining capital or growth capital which will allow Brightstar to commence and continue operations for the LOM.

Pre-Production Capital

Pre-production capital costs are all costs prior to the commencement of production. The initial capital associated with the development costs of the initial pre-stripping and open pit mining at Lady Shenton has been capitalised as a pre-production capital item, along with Owners costs such as the initial costs of vehicle fleets, software and other miscellaneous items completed on a First Principles basis.

Full capitalisation of the Yunndaga underground costs for the first quarter of the schedule has also been allocated to Pre-Production capital with information provided by Brightstar's mining consultant indicating activities centred on non-ore producing activities such as decline development.

Item	Units	Pre-Production
Surface Mining Costs (Capitalised Open Pit Mining Costs & associated Owner costs)	A\$m	13.0
Underground Capital	A\$m	9.4
Pre-Production Capital	A\$m	22.4

Table 6 – Estimated Pre-Production	Capital
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Sustaining Capital

Sustaining Capital is defined as capital costs required for the ongoing operations of activities at the Menzies Gold Project, which includes camp infrastructure (leasing) and Yunndaga capital development.



Competitive proposals have been received from camp builder & suppliers for the long-term lease of camp infrastructure, which can either be placed within the Menzies town footprint or onsite within Brightstar's tenure. These proposals indicate competitive and flexible terms whereby capital can be repaid over the life of the project and thus allocated as Sustaining Capital. Optionality remains to monetise these assets upon completion of mining and hauling activities at Menzies or relocate them to the Laverton Gold Project which will be further investigated in future studies.

Growth Capital

Growth Capital has been defined as capital costs required for the expansion of activities to the Laverton Gold Project, which includes provisions for camp infrastructure moves, GRES' capital cost estimate for refurbishing and upgrading the Laverton Processing Plant, and 'early works' mining establishment costs.

Item	Units	Growth Development Capital
Infrastructure Capital (Laverton Processing Plant Upgrade Refurb. & NPI)	A\$m	19.5
Mine Establishment Costs (Cork Tree Well Pre-Strip Mining)	A\$m	41.5
Alpha Underground Capital Development	A\$m	33.4
Growth Capital	A\$m	94.4

Table 7 – Estimated Growth Capital

Infrastructure Capital Costs

Based on the description of the required works and a site visit, GRES prepared an estimate of the cost to recommission and upgrade the existing processing plant at Laverton. This estimate includes allowances for the equipment, materials, site labour, design and project management required to complete the works. It has been assumed that any equipment, parts or materials required for the works will be available 'in stock' within Western Australia as needed.

Approximately \$8M is required for a new crushing circuit, consisting of the procurement and installation of a suitably sized mobile crushing circuit (Lokotrak or equivalent) to replace the existing primary crushing circuit; along with an upgrade to the existing grinding circuit via the installation of a larger ball mill to achieve +480ktpa fresh throughput rates at required grind sizes.

Approximately \$2.2M of services (water/air/power) upgrades have been accounted for, along with entirely new administration buildings, offices and ablution facilities at a cost of approximately \$1.8M. The remainder of the items relate to project management, drafting, supervision, mobilisation/demobilisation and allied costs.

Mine Establishment Costs

Open pit development at Cork Tree Well has been capitalised until the mine reaches the average expected strip ratio which occurs approximately after two quarters.



Alpha Underground Capital Development

The development cost of the Alpha underground mine was estimated using ABGM's database of recent applicable mining contracts from specialised underground contract miners, with the initial capital associated with the development of the decline to first stoping of ore being capitalised.

OPERATING COSTS

Operating costs have been derived from various sources including quotations and budget pricing supplied by suppliers, GRES and ABGM, estimates based on similar WA mining operations, and pricing built up from processing plant suppliers scaled by accepted methods.

Operating Costs	A\$M	A\$/t Milled	A\$/oz Produced	
Open Pit Mining	195	56	871	
Underground Mining	85	49	866	
Mining Cost	280	53	869	
Ore Processing	270	51	837	
Site Overheads / G&A	17	3	52	
Resource Development Drilling	2	1	7	
C1 Cash Operating Costs	570	108	1,765	
Royalties	36	7	111	
Sustaining Capital	53	10	165	
All-in Sustaining Costs (AISC)	659	125	2,041	

Table	8 – Estimated	Operating Costs
TUDIC	o Lotiniatea	operating costs

Mining

Pit Shells and block models were interrogated and reported at various 5.0m bench heights, oxidation states (Oxide/Transitional/Fresh) and resource confidence (Measured/Indicated/Inferred Mineral Resources) with a spreadsheet developed which reported key parameters for further assessment.

Several open pit contractors were engaged to provide indicative pricing and equipment schedules, with a 100t class fleet chosen at Menzies due to slightly narrower orebodies requiring small-medium (100-150t class) excavators compared to Laverton which allowed larger machinery to operate. As a result, overall unit rates for Menzies came to \$11.01/BCM whilst Laverton was \$9.51/BCM for 'full service' (drill & blast, load & haul and site management) contractors.

Underground mining costs were calculated from mining schedules with attributable physicals being allocated a unit rate from recent and relevant mining tenders supplied by suitably competent mining contractors to ABGM. Costs were allocated to activity-based productivities with suitable provisions for maintenance, administration & supervision, UG infrastructure and other items.



Overall UG operating costs per ore tonne were \$63.24/t for Yunndaga and \$57.69/t for Alpha.

Additional amounts for mining-related G&A were added, being calculated from 2023 labour rates and first principles which accounted for technical services & supervision with a higher oncost (30%) being utilised to account for attributable admin costs such as messing & flights.

Resource Drilling

In order to provide sufficient geological information in time to convert lower-confidence resource material into higher-confidence material, a provisional amount of \$2.2M was utilised within the financial model to account for drilling based on a LOM weighted amount of \$0.84/ore tonne split across both mining methods.

Processing & Haulage

Due to the dual strategy of toll treating and owner-processing, Brightstar has engaged with several 3rd party processing plants within the Goldfields to obtain indicative rates for processing Menzies ore with rates provided for different parcel sizes which represent cost discounts for softer or higher tonnage amounts.

Based on their recent and relevant experience with gold processing plants, GRES provided indicative OPEX rates for the refurbished and upgraded Laverton plant at a fresh throughput rate of 480ktpa, with modest cost savings modelled for oxide and transitional material. These rates encompassed all costs including but not limited to power generation, labour costs, consumables and provisions for sufficient maintenance.

Activity	Unit	Menzies (Toll Treat)	Laverton (Owner Processing)
Process & Haul Cost – Oxide	\$/t	44	48
Process & Haul Cost – Transitional	\$/t	49	49
Process & Haul Cost – Fresh	\$/t	54	52
Process & Haul Cost – Fresh (Alpha)	\$/t	n/a	44
Average LOM Process & Haul Cost	\$/t	53	49

Table 9 – Estimated Process & Haulage rates

General & Admin

Depending on the mining activities occurring at both the Menzies and Laverton Gold Projects, General & Admin costs have been applied to process & haulage operations where no mining is occurring to reflect expected levels of Brightstar supervision and associated costings in line with statutory requirements.

Royalties

The State Government Royalty of 2.5% has been applied to all recovered ounces, along with a private 3.0% Net Smelter Royalty on Laverton tenements with over \$21M in royalties provided to the State Government.



FINANCIAL EVALUATION

Based on the capital and operating cost estimates generated, a financial model has been developed for the purpose of evaluating project economics.

Based on a conservative (below spot) fixed gold price of \$2,900/oz AUD over the life of mine, the Project is forecast to generate a robust unleveraged and pre-tax NPV8 of approximately \$103 million and an unleveraged and pre-tax IRR of 79%.

The financial summary is presented below:

Key Financial Metrics		
Financial Assumptions		
Gold Price Assumed	A\$/oz	2,900
Discount Rate	%	8
Project Valuation	· · ·	
Gross Revenue	A\$M	935
Net Operating Cashflow (after all capital, pre-tax)	A\$M	153
Pre-Tax NPV ₈ ¹	A\$M	103
Pre-Tax IRR	%	79
Capital Intensity ²	A\$/oz	559
NPV ₈ / Pre-Production Capital	x	4.6
Payback Period ³	Years	1.5
Mine Life	Years	8

Table 10 – Key Financial Metrics

NOTE:

1. Pre-tax, unlevered Net Present Value using 8% WACC

2. Capital intensity is calculated by dividing pre-production capital by annual payable gold production.

3. Payback period calculated from the first month of gold production

Two key financial metrics utilised to assess a projects return on invested capital is to analyse the ratio between the pre-production capital costs (capex) and the net present value, and the capital intensity (being the pre-production capital required divided by the annual gold production).

These are illustrated in Table 10 above, where Brightstar's development considered within this Study has an NPV / Capex ratio of 4.6x, and a low capital intensity of A\$559/oz. These financial metrics are in line or superior to recent mines funded, developed and now operating in Western Australia.



Given the current spot gold price is approximately A\$3,000/oz, Brightstar has completed a sensitivity analysis utilising the current spot price and a downside case of A\$2,800/oz to illustrate the financial viability of the Projects under a range of scenarios – displayed in Table 11 – Sensitivity Analysis Based on Gold PriceTable 11 and Figure 10 below.

Sensitivity	Units	A\$2,800 / oz	Base Case A\$2,900 / oz	Spot Price A\$3,000 / 0z
NPV ₈	\$M	78	103	128
IRR	%	56	79	106
Payback	Years	1.8	1.5	1.3
Annual EBITDA	\$M	15.1	19.1	23.1
LOM EBITDA	\$M	121	153	185

Table 11 – Sensitivity Analysis Based on Gold Price



SENSITIVITY ANALYSIS

Figure 10 – Sensitivity Analysis





Figure 11 – Annual Production and Cumulative Net Cash Flow

OPPORTUNITIES

There are numerous opportunities to enhance the operations and financial outcomes in future studies, including:

- Increasing mine life via Resource extensions and further conversion of the open pit and underground Resources. Drilling is planned at multiple locations around key production sources where Resources remain open at depth and along strike, with the pit shells and underground shapes generated during this Study to vector efforts;
- Additional exploration and brownfields drilling is also planned across the Menzies and Laverton portfolios which both have strong potential for resource growth;
- Obtaining feasibility level geotechnical advice to generate steeper wall angles, reduce waste movement and overall improved open pit project economics;
- Reviewing processing assumptions based on new and expanded metallurgical test work (including recovery and comminution) for deposits feeding the Brightstar Plant;
- Engaging with power suppliers to review power generation requirements and investigate renewable energy sources such as solar power to reduce Brightstar's carbon footprint;
- Following updated geotechnical and metallurgical testwork, recalibrating the pit shells and MSO shapes to generate pragmatic mine designs for contractor budgeting purposes as part of future studies; and



• Engaging with camp providers and local Shires (Menzies & Laverton) to identify suitable locations for mining camps in or outside town boundaries, with selected options anticipated to provide local community benefits and employment opportunities.



Figure 12 – Yunndaga Cross Section with Mine Plan vs Historical underground mining

Figure 12 above highlights the opportunity for further Resource growth that may allow for high confidence Resource classification and ultimately lead into the declaration of, and conversion into, Ore Reserves underground. The mine plan contemplated by this Study has a maximum vertical depth extent of 190m below surface (See UG development on the left of Figure 12 above). Yunndaga has previously been mined down to 600m below surface, with a historical production of 270koz @ 16g/t Au. Given the mineralisation is above at depth down dip, significant opportunity exists to add Resources and mine life once in underground development and mining in the future.

NEXT STEPS

The Scoping Study provides justification that the development of the Menzies and Laverton Gold Projects is a commercially viable stand-alone mining operation and accordingly the Board of Brightstar Resources Limited has approved progression of the Projects to a Preliminary Feasibility Study.

PFS work has commenced in parallel with infill drilling at the Menzies and Laverton Gold Projects to convert Inferred Mineral Resources to Indicated Mineral Resources, ongoing extensional exploration and resource growth.

Figure 13 in this section illustrates the exploration efforts and development timeline that Brightstar will be pursuing.





Figure 13 – Gannt Chart of Development Timeline

FUNDING

Will likely be required, which includes all pre-production costs of which the pre-production capital requirement is approximately \$22M with further funding required for working capital purposes.

The grounds on which this reasonable basis is established include:

- The Project has strong technical and economic fundamentals which provides an attractive return on capital investment and generates robust cashflows at conservative (including below current spot price) gold prices. This provides a strong platform to source debt and equity funding.
- The Company has received interest from various financial institutions regarding financing for the project, with preliminary discussions occurring for securing debt financing for a large portion of the pre-production capital requirements.
- The Board of Brightstar has a strong track record of raising equity funds as and when required to further the exploration and evaluation of the Menzies and Laverton Gold Projects.

There is, however, no certainty that the Company will be able to source funding as and when required. Typical project development financing would involve a combination of debt and equity. It is possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.



APPENDIX A – MINERAL RESOURCE ESTIMATE

Location			Measure	d		ndicated			Inferred			Total	
	Au Cut-off (g/t)	Kt	g/t Au	Koz	Kt	g/t Au	Koz	Kt	g/t Au	Koz	Kt	g/t Au	Koz
Alpha	0.5	623	1.6	33	374	2.1	25	455	3.3	48	1,452	2.3	106
Beta	0.5	345	1.7	19	576	1.6	29	961	1.7	54	1,882	1.7	102
Cork Tree Well	0.5	-	-	-	3,036	1.6	157	3,501	1.3	146	6,357	1.4	303
Total – Laverton	0	968	1.6	52	3,986	1.6	211	4,917	1.6	248	9,691	1.6	511
Lady Shenton System (Pericles, Lady Shenton, Stirling)	0.5	-	-	-	2,770	1.3	119	4,200	1.3	171	6,970	1.2	287
Yunndaga	0.5	-	-	-	1,270	1.3	53	2,050	1.4	90	3,310	1.3	144
Yunndaga (UG)	2.0	-	-	-	-	-	-	110	3.3	12	110	3.3	12
Lady Harriet System (Warrior, Lady Harriet, Bellenger)	0.5	-	-	-	520	1.3	22	590	1.1	21	1,110	1.2	43
Selkirk	0.5	-	-	-	30	6.3	6	140	1.2	5	170	2.1	12
Lady Irene	0.5	-	-	-	-	-	-	100	1.7	6	100	1.7	6
Total – Menzies	0	-	-	-	4,590	1.4	200	7,190	1.3	305	11,770	1.3	505
Total – BTR		968	1.7	52	8,516	1.5	411	12,107	1.4	553	21,461	1.5	1,016

Table 12 – Consolidated JORC Resources of Laverton & Menzies Gold Projects

Pericles, Lady Shenton & Stirling consolidated into Lady Shenton System; Warrior, Lady Harriet & Bellenger consolidated into Lady Harriet System.

Note 1: The consolidated mineral resource estimate was first disclosed by Brightstar on 6 April 2023 and updated on 23 June 2023. Brightstar confirms that it is not aware of any new information or data that materially affects the information contained in these disclosures, and that the material assumptions and technical parameters underpinning the resource continue to apply and have not materially changed.

Compliance Statement

With reference to previously reported Exploration Results and Mineral Resources, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



APPENDIX B – REASONABLE BASIS FOR FORWARD LOOKING STATEMENTS

No Ore Reserve has been declared. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions on which the Scoping Study production target and projected financial information are based have been included in this release and disclosed in the table below.

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	The Mineral Resource estimate on which the scoping study is based was separately and previously announced on 6 April 2023 and 23 June 2023 by Brightstar. No Ore Reserve has been declared as part of this scoping study.
Parties participating in the Scoping Study and Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	A list of personnel involved in this study is within the Study Team section. Brightstar personnel including the Chief Operating Officer frequently visits deposits at both project sites including those mentioned in this Study. GRES personnel visited the Laverton Gold Project for two days in February 2023. ABGM personnel have not conducted a site visit.
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	The Study is a scoping level study. No Ore Reserve has been declared.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	Cut-off parameters have been estimated on expected revenues at \$2,750 AUD / oz and other parameters as outlined within the Optimisation sub- sections of the Mining chapters.

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Table 13 – Consideration	of Moalfying Factors (in the	form of Section 4 of	the JORC Code (2012) Table 1)



Criteria	JORC Code explanation	Commentary
	• The method and assumptions used as reported in the Pre- Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	No Ore Reserve has been declared. Appropriate consideration has been given to the selected mining methods, with
	 The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and preproduction drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). 	conservative wall angles used to represent IRSA (inter-ramp slope angles) for optimisation purposes, with conventional WA Goldfields mining parameters used for underground mining which are considered conservative given the shallow depth of planned mining.
	 The mining dilution factors used. The mining recovery factors used. 	Mining dilution and ore recovery factors are considered appropriate, with smaller
	 Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. 	mining fleet utilised at Menzies to ensure these industry- standard factors and assumptions are met.
Mining factors or assumptions	• The infrastructure requirements of the selected mining methods.	Minimum mining widths were utilised for optimisations with practical constraints such as equipment size considered.
		Block model reports have captured the split of Measured, Indicated and Inferred Mineral Resources. The mine schedule has been modified to ensure that suitably high confidence material (Measured and Indicated) is front-ended to reduce risk.
		A total of 34% Inferred Mineral Resource is within the Production Target, with provision made within the Study for resource definition drilling to increase knowledge and confidence in this material to upgrade into Indicated Mineral Resource or better.
		The financial viability of the Project is not dependent on the inclusion of Inferred Mineral Resources in the Production Target.



Criteria	JORC Code explanation	Commentary
		Infrastructure will be supplied and utilized by the mining contractor which are expected to be temporary and removed at the end of mining activities.
		For more detail, refer to the Open Pit Mining & Underground Mining Sections, along with the Mining Subsection within Operating Costs for further details.
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	Processing methodologies are conventional WA Goldfields CIP methods with high recoveries typical of this method. Menzies ore is likely to go to one or two processing facilities within 100km of the deposits, with both facilities presently operational. Independent Metallurgical Operations Pty Ltd (IMO) were engaged to carry out initial gold recovery test work in 2021 for Kingwest Resources Ltd for Menzies deposits. Limited current testwork exists for the Laverton deposits, however given historic production records at Cork Tree Well and Alpha there is a reasonable basis to form an assumption of similar outcomes. No deleterious elements are present. No bulk sampling or pilot testwork was done, although there are considerable historic production amounts from deposits across both Menzies and Laverton. For more detail, refer to the
		Metallurgy and Processing Sections,
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste	Gold mineral resources are all within granted mining leases



Criteria	JORC Code explanation	Commentary
	rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	which have already disturbed land by previous mining, with activity undertaken in the 1990's (Menzies) and from 1980's to 2010's (Laverton) along with historic (pre-WWI) activity at both sites.
		Julia Mines completed numerous environmental surveys across the Menzies area in the 1990's along with Brightstar and predecessor companies in the 2000's to 2010's period for Laverton.
		Existing WRD and tailings facilities are present on some tenements at Menzies and Laverton.
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	Menzies is located 130km north of Kalgoorlie via the sealed Goldfields Highway, with appropriate land available for mining infrastructure. Kalgoorlie has suitable labour, accommodation and other services (e.g. commercial flights) for required activities.
		Current infrastructure onsite is limited to haul roads, whilst proposed infrastructure will be temporary and used for mining activities and allied support services. Menzies Town has appropriate services and room available for a camp footprint, however there is potential to place the camp within wholly owned mining leases outside of the Town boundary.
		The Laverton projects are located ~30km North and ~30km South of Laverton respectively. There is sufficient room available at these projects for planned activities, whilst personnel, equipment and supplies can readily be sourced via a well maintained road network and airport at Laverton.



Criteria	JORC Code explanation	Commentary
		Mining infrastructure will be temporary and used for supporting mining activities, whilst processing infrastructure will be permanent with an existing processing plant and NPI already onsite on M38/9.
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	Capital Costs have been estimated by GRES and ABGM, external consultants to Brightstar, using 2023 (June quarter) pricing from their databases. Operating Costs have also been provided by GRES & ABGM for the planned scope of operations, with items estimated by Brightstar personnel derived from first principles and/or supplier quotes. No deleterious elements exist. All amounts are in Australian dollars (AUD) as at June 2023. It is assumed that gold doré will be transported from site for refining in Perth with no other transport-related costs applicable. Brightstar has allowed for the 2.5% State Government Royalty for all projects, with a further 3% Net Smelter Royalty applicable to deposits within the Laverton Gold Project.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and coproducts. 	The derivation of feed grades comes from the Mineral Resource estimates with the application of dilution modifying factors as outlined above. Gold doré bars will be produced on site, further refined offsite and sold at \$2,900 per ounce. No revenue has been allocated to other co-product metals such as silver.



Criteria	JORC Code explanation	Commentary
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the 	Gold is sold readily on the open market, with purchasers including the Perth Mint and ABC Refinery amongst others.
	identification of likely market windows for the product.Price and volume forecasts and the basis for these	
	 forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. 	For this study, a discount rate of 8%, and nil inflation has been assumed.
	 NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	Economic analysis includes a sensitivity analysis on various scenarios around costs, revenues and discount rates.
		Refer to Financial Evaluation and Funding sections for more detail.
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	All activities are on wholly owned Brightstar mining leases with significant historical mining disturbance.
		Considerable stakeholder engagement is occurring at various Government levels and within local community and traditional owner groups.
		Refer to the ESG, Permitting and Approvals section for more detail.
Other (incl Legal and Governmental)	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	No Ore Reserve has been declared.
	Any identified material naturally occurring risks.	
	• The status of material legal agreements and marketing arrangements.	
	• The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of	



Criteria	JORC Code explanation	Commentary
	any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories.	No Ore Reserve has been declared.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	
	• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates	No Ore Reserve has been declared.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	No Ore Reserve has been declared.
	• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	• Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	
	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	