

# **GROUP PRODUCTION TARGET STATEMENT**

Aurelia Metals Limited ("Aurelia" or the "Company" or the "Group") is pleased to report updated Production Targets for its Peak, Hera and Dargues Mines. A maiden Production Target for the proposed Federation Mine has been prepared following the completion of a Feasibility Study.

The Group's Production Target tonnage has increased from 7.8Mt at 30 June 2021 to 9.3Mt at 30 June 2022 after allowance for mining depletion (Table 1 and Figure 1). The tonnage increase reflects the inclusion of the Federation Mine, adjustments for mining depletion at the operating mines, geological model updates and modifications to economic parameters.

#### Group

- Group Production Target tonnage of 9.3Mt, a 19% increase from 30 June 2021, driven by the successful completion of the Federation Mine Feasibility Study leading to the declaration of a maiden 4.0Mt Production Target for the proposed Federation Mine (Table 1 and Figure 1).
- Inclusion of Federation Mine, and increased cut-off values at Peak Mine, lifts the Group Production Target NSR from A\$210/t at 30 June 2021 to A\$260/t at 30 June 2022.

#### Peak Mine

- Higher cut-off values at Peak Mine increase the Peak Production Target NSR from A\$220/t at 30 June 2021 to A\$240/t at 30 June 2022.
- Successful near-mine drilling identified a further 210kt of material that was added to the Peak Mine Production Target of 4.1Mt at 30 June 2022.

#### Hera Mine

 92% of the 640kt Hera Production Target is included in the Ore Reserve Estimate, as the Hera Mine operates towards depletion.

#### Dargues Mine

• 90% of the contained gold in the 640kt Dargues Production Target is reported from the higher confidence Measured and Indicated portions of the Mineral Resource Estimate.

### Federation Mine

- Maiden Federation Production Target of 4.0Mt at 1.0g/t Au, 0.3% Cu, 5.1% Pb, 8.6% Zn and 6g/t Ag.
- High lead and zinc grades at Federation significantly enhances Aurelia's portfolio, emphasised by the A\$310/t NSR value of the Federation Production Target at 30 June 2022. The higher grade material significantly elevates the average NSR relative to the prior year's Group Production Target (\$A210/t NSR at 30 June 2021) and is the primary contributor the Group Production Target NSR of \$A260/t at 30 June 2022.

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| Category          | Tonnes<br>(kt) | NSR<br>(A\$/t) | Au<br>(g/t) | Cu<br>(%) | Pb<br>(%) | Zn<br>(%) | Ag<br>(g/t) |
|-------------------|----------------|----------------|-------------|-----------|-----------|-----------|-------------|
| Measured portion  | 1,800          | 250            | 2.8         | 0.5       | 2.2       | 2.8       | 14          |
| Indicated portion | 5,200          | 280            | 1.5         | 1.0       | 3.0       | 4.9       | 7           |
| Inferred portion  | 2,400          | 250            | 0.9         | 1.0       | 2.9       | 5.0       | 6           |
| Production Target | 9,300          | 260            | 1.6         | 0.9       | 2.8       | 4.5       | 8           |

#### Table 1. Group Production Target as at 30 June 2022.

Note: Net Smelter Return (NSR) is an estimate of the net recoverable value per tonne including offsite costs, payables, royal ties and metal recoveries. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

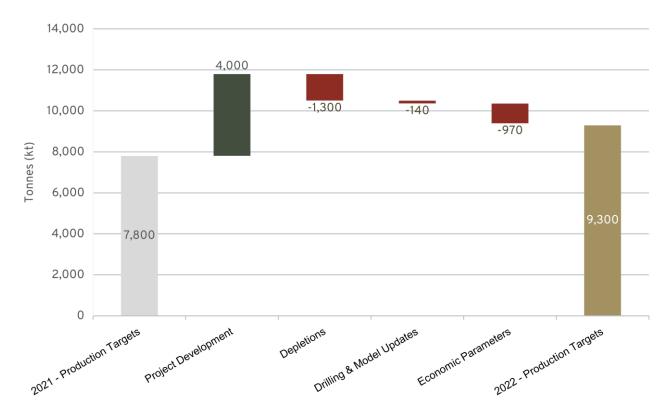


Figure 1. Change in Aurelia Group Production Target tonnage relative to 30 June 2021. Note that values are reported to two significant figures which results in rounding discrepancies in the totals.

A Production Target is a projected estimate of potentially mineable mineralised material based on the application of mining modifying factors. The process and assumptions used to establish the Production Targets for Aurelia's mining operations and development projects are those used to prepare the Group's Ore Reserve Estimate reported as at 30 June 2022 (refer to the announcement "Group Mineral Resource and Ore Reserve Statement" released on 10 October 2022 which is available to view on www.aureliametals.com.au and www.asx.com.au). Production Targets are derived from Measured, Indicated and Inferred Mineral Resource classifications whereas the Group's Ore Reserve Estimate excludes material from the Inferred Mineral Resource classification. The Company has been guided by ASX Listing Rules Chapter 5.16 to 5.19 for the preparation of Production Targets.

The Company highlights the following cautionary statement in relation to confidence in the estimation of Production Targets that incorporate Mineral Resources from the Inferred classification:

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target

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itself will be realised. The stated Production Targets are based on the Company's current expectations of future results and events and should not be solely relied upon by investors when making investment decisions.

The Group Production Target is derived from 32% of the Group's Mineral Resource Estimate tonnage reported at 30 June 2022. Tonnage from the Inferred Mineral Resource classification makes up 25% of the Group Production Target. The Group's Ore Reserve Estimate, reported at 30 June 2022, represents 61% of the Production Target tonnage.

The Production Target tonnage reported for the Peak Mine (Table 2) has decreased to 4.1Mt which is a 27% decrease relative to the 30 June 2021 estimate. The decrease is attributable to mining depletion and a lifting of cut-off values, partially offset by additional mineable tonnage identified through near-mine extensional drilling.

NSR Cu Pb Aa Category (kt) (A\$/t) (q/t) (%) (%) (%) (q/t)3.5 Measured portion 1,000 280 2.6 0.9 3.0 16 Indicated portion 2,200 240 1.6 1.9 0.9 1.0 9 Inferred portion 860 230 1.2 2.5 0.1 0.1 8 **Production Target** 4.100 240 1.8 1.8 1.2 1.4 10

Table 2. Peak Mine Production Target as at 30 June 2022.

Note: The Peak Mine Au-Cu Production Target utilises an A\$80/t NSR cut-off for development and A\$175-215/t NSR for stoping depending on the mine area. The Peak Mine Pb-Zn Production Target utilises an A\$80/t NSR cut-off for development and A\$185/t NSR for stoping. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

The Production Target tonnage of 640kt for the Hera Mine (Table 3) has decreased by 36% relative to the 30 June 2021 estimate predominantly due to mining depletion.

Table 3. Hera Mine Production Target as at 30 June 2022.

| Category          | Tonnes<br>(kt) | NSR<br>(A\$/t) | Au<br>(g/t) | Pb<br>(%) | Zn<br>(%) | Ag<br>(g/t) |
|-------------------|----------------|----------------|-------------|-----------|-----------|-------------|
| Measured portion  | 460            | 160            | 1.5         | 2.1       | 3.2       | 20          |
| Indicated portion | 150            | 180            | 2.0         | 1.8       | 2.5       | 18          |
| Inferred portion  | 30             | 65             | 0.3         | 1.0       | 2.1       | 5           |
| Production Target | 640            | 160            | 1.6         | 2.0       | 3.0       | 19          |

Note: The Hera Mine Production Target utilises an A\$80/t NSR cut-off for development and A\$100/t NSR cut-off for stoping. Values have been rounded to two significant figures which may result in rounding discrepancies in the totals.

The Production Target tonnage of 640kt for the Dargues Mine (Table 4) has decreased by 51% relative to the 30 June 2021 estimate. This variance arose from mining depletion and revised geological interpretation using the results from infill drilling, partially offset by additional mineable tonnage arising from updated economic parameters.

Table 4. Dargues Mine Production Target at 30 June 2022.

| Category          | Tonnes<br>(kt) | NSR<br>(\$A/t) | Au<br>(g/t) |
|-------------------|----------------|----------------|-------------|
| Measured portion  | 320            | 260            | 5.1         |
| Indicated portion | 180            | 150            | 3.1         |
| Inferred portion  | 140            | 84             | 1.7         |
| Production Target | 640            | 190            | 3.8         |

Note: The Dargues Mine Production Target utilises an A\$80/t NSR cut-off for development and A\$120/t NSR cut-off for stoping. Values are reported to two significant figures which may result in rounding discrepancies in the totals

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The declaration of a maiden 4.0Mt Production Target for the proposed Federation Mine (Table 5) is supported by findings from the recently completed Feasibility Study and progress with regulatory approvals for mining.

| Category          | Tonnes<br>(kt) | NSR<br>(A\$/t) | Au<br>(g/t) | Cu<br>(%) | Pb<br>(%) | Zn<br>(%) | Ag<br>(g/t) |
|-------------------|----------------|----------------|-------------|-----------|-----------|-----------|-------------|
| Measured portion  | 0              | 0              | 0           | 0         | 0         | 0         | 0           |
| Indicated portion | 2,600          | 320            | 1.2         | 0.3       | 5.1       | 8.6       | 6           |
| Inferred portion  | 1,300          | 290            | 0.6         | 0.2       | 5.1       | 8.8       | 5           |
| Production Target | 4,000          | 310            | 1.0         | 0.3       | 5.1       | 8.6       | 6           |

Table 5. Federation Mine Production Target as at 30 June 2022.

Note: The Federation Production Target utilises an A\$80/t NSR cut-off for development and A\$140/t NSR for stoping. Values have been rounded to two significant figures which may result in rounding discrepancies in the totals.

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# This announcement has been approved for release by the Board of Directors of Aurelia Metals.

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#### About Aurelia

Aurelia Metals Limited (ASX: AMI) is an Australian mining and exploration company with a highly strategic landholding and three operating gold mines in New South Wales. The Peak and Hera Mines are located in the Cobar Basin in western NSW, and the Dargues Mine is in south-eastern NSW.

Our vision is to be a mining business recognised for creating exceptional value through our people and a portfolio of gold and base metals assets. At Aurelia, we value Integrity, Certainty, Courage and Performance for the safety and wellbeing of our people, and for the benefit of our shareholders and the communities in which we operate.

In FY22, Aurelia produced 98,461 ounces of gold at a Group all-in sustaining cost (AISC) of A\$1,707 per ounce. Both the Peak and Hera cost bases benefit from substantial by-product revenue credits from base metal production (including zinc, lead and copper).

#### IMPORTANT INFORMATION

This report includes forward looking statements. Often, but not always, forward looking statements can be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", "outlook" and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of the Company, anticipated production or activity commencement dates and expected costs or production outputs. Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs of production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits, and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory environment, environmental conditions including extreme weather conditions, recruitment and retention of key personnel, industrial relations issues and litigation. Forward looking statements are based on the Company and management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control. Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law, including any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements

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# PREPARATION AND REPORTING OF PRODUCTION TARGETS

A Production Target is a projected estimate of potentially mineable mineralised material based on the application of mining modifying factors. The process and assumptions used to establish the Production Targets for Aurelia's mining operations and development projects are those used to prepare the Group's Ore Reserve Estimate reported as at 30 June 2022 (refer to the announcement "Group Mineral Resource and Ore Reserve Statement" released on 10 October 2022 which is available to view on www.aureliametals.com.au and www.asx.com.au).

Production Targets are derived from Measured, Indicated and Inferred Mineral Resource classifications whereas the Group's Ore Reserve Estimate excludes material from the Inferred Mineral Resource classification. The Company has been guided by ASX Listing Rules Chapter 5.16 to 5.19 for the preparation of Production Targets.

The Company highlights the following cautionary statement in relation to confidence in the estimation of Production Targets that incorporate Mineral Resources from the Inferred classification:

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised. The stated Production Targets are based on the Company's current expectations of future results and events and should not be solely relied upon by investors when making investment decisions.

The Company's Production Targets are prepared from the Mineral Resource Estimate prepared for each mine and reported as at 30 June 2022. The Ore Reserve Estimate for each mine as at 30 June 2022 is wholly included in, and forms a portion of, the Production Target.

The estimated Mineral Resource and Ore Reserve Estimates that underpin the Production Targets have been prepared by Competent Persons in accordance with ASX Listing Rules Appendix 5A. The Inferred portion of the Production Targets is not the determining factor in each mine's viability and does not feature as a significant proportion early in the mine plan.

Material assumptions used to prepare the Ore Reserve Estimate as at 30 June 2022 were also adopted for preparation of the Production Targets. These are described in the 2022 "Group Mineral Resource and Ore Reserve Statement" and Appendix 1 of this statement.

Material from the Measured, Indicated and Inferred classifications of the Mineral Resource Estimate has been assessed for inclusion in the Production Target. Mining shapes that have more than 80% of tonnage from the Measured, Indicated and/or Inferred classifications have been reported in the Production Target. The selected shapes were interrogated against the Mineral Resource block model with the resulting confidence classifications shown in the Production Target tables.

The Production Target is reported from mining shapes that include dilution that has been allocated a confidence classification in the Mineral Resource block model. Dilution is reported in the Production Target under the confidence classification assigned from the Mineral Resource block model. Diluting material may be below the Mineral Resource cut-off value and therefore not reported in the Mineral Resource Estimate.

Mining shapes that inform the Production Target may include some unclassified material. The metal value associated with unclassified material was removed so that the unclassified material tonnage remains in the Production Target as zero grade dilution. Dilution from unclassified material is prorated into the Production Target's Measured, Indicated and Inferred categories based on tonnage.

Prior Production Targets are described in the "2021 Group Production Target Statement" released to the ASX on 23 July 2021.

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## PEAK MINE PRODUCTION TARGETS

The Peak Mine extracts and treats gold bearing lead-zinc and copper sulphide mineralisation. These two dominant mineralisation types are batched and processed separately to maximise metallurgical recovery and metal payability in concentrate products. Separate Production Targets are therefore reported for the Peak Mine to represent the relative contribution of each sulphide feed type (Table 6 and Table 7).

#### Table 6. Peak Mine Au-Cu Production Target as at 30 June 2022.

| Category          | Tonnes<br>(kt) | NSR<br>(A\$/t) | Au<br>(g/t) | Cu<br>(%) | Pb<br>(%) | Zn<br>(%) | Ag<br>(g/t) |
|-------------------|----------------|----------------|-------------|-----------|-----------|-----------|-------------|
| Measured portion  | 470            | 240            | 2.4         | 1.5       | 0.2       | 0.2       | 9           |
| Indicated portion | 1,800          | 230            | 1.5         | 2.3       | 0.0       | 0.1       | 7           |
| Inferred portion  | 810            | 230            | 1.1         | 2.6       | 0.0       | 0.1       | 8           |
| Production Target | 3,100          | 230            | 1.5         | 2.2       | 0.1       | 0.1       | 7           |

Note: The Peak Mine Au-Cu Production Target utilises an A\$80/t NSR cut-off for development and A\$175-215/t NSR for stoping depending on the mine area. Values have been rounded to two significant figures which may result in rounding discrepancies in the totals.

Table 7. Peak Mine Pb-Zn Production Target as at 30 June 2022.

| Category          | Tonnes<br>(kt) | NSR<br>(A\$/t) | Au<br>(g/t) | Cu<br>(%) | Pb<br>(%) | Zn<br>(%) | Ag<br>(g/t) |
|-------------------|----------------|----------------|-------------|-----------|-----------|-----------|-------------|
| Measured portion  | 560            | 310            | 2.8         | 0.3       | 5.3       | 6.3       | 21          |
| Indicated portion | 400            | 250            | 2.1         | 0.3       | 4.6       | 5.3       | 20          |
| Inferred portion  | 50             | 170            | 2.7         | 0.1       | 0.7       | 1.1       | 4           |
| Production Target | 1,000          | 280            | 2.5         | 0.3       | 4.8       | 5.6       | 20          |

Note: The Peak Mine Pb-Zn Production Target utilises an A\$80/t NSR cut-off for development and A\$185/t NSR for stoping. Values have been rounded to two significant figures which may result in rounding discrepancies in the totals.

The following cautionary statement applies to the Production Target at the Peak Mine:

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised.

The aggregated Production Target of 4,100kt for Peak Mine (Table 2) was prepared from the 2022 Mineral Resource Estimate of 19,000kt. The Production Target represents 22% of the tonnage reported in the Mineral Resource. The Ore Reserve proportion of the Production Target is 61%. The Inferred proportion of the Production Target is 21%. A positive economic evaluation of the Production Target is not dependent on the Inferred category material.

The tonnage reported in the Peak Mine Production Target decreased relative to the prior (30 June 2021) estimate, as illustrated in Figure 2. Changes were caused by mining depletion and the positive results from updated data and geological modelling. The most substantial change is due to economic factors resulting in an increase in cutoff values. This has resulted in lower grade material being removed from the Production Target, when compared with the previous estimate.

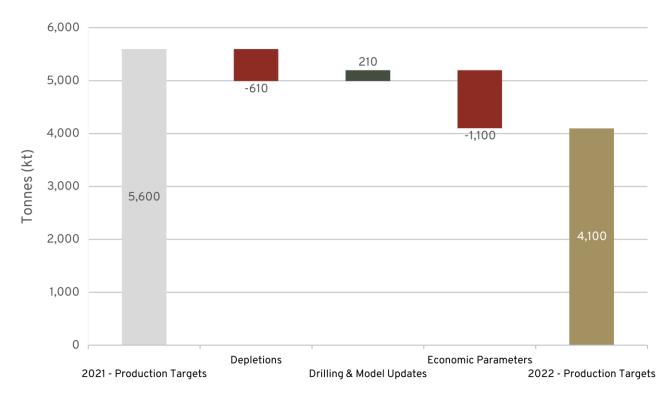


Figure 2. Change in Peak Mine Production Target tonnage relative to 30 June 2021.

Long sections of the mining shapes reported in the Production Target are presented in Figure 3 and Figure 4.

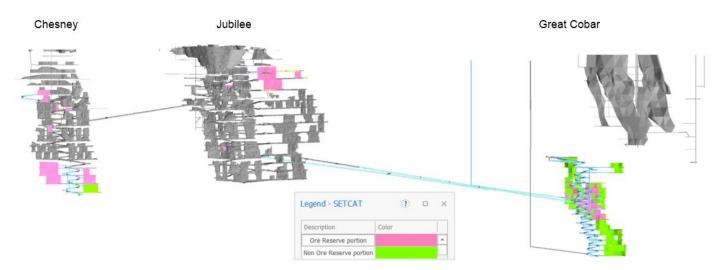


Figure 3. Long section facing west of the Peak North Mine Production Target areas.

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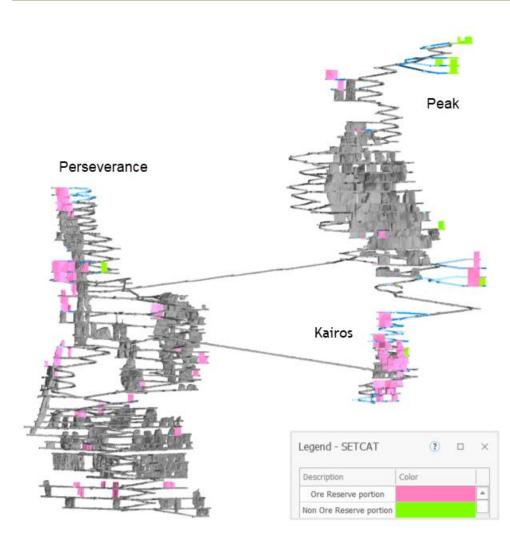


Figure 4. Long section facing west of the Peak South Mine Production Target areas.

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# HERA MINE PRODUCTION TARGETS

A Production Target of 640kt for the Hera Mine (Table 8) was prepared from the 2022 Mineral Resource Estimate of 1,700kt with 38% of the Mineral Resource tonnage reported in the Production Target. The Inferred proportion of the Production Target is 5%. The Ore Reserve proportion of the Production Target is 92%.

Table 8. Hera Production Target as at 30 June 2022.

| Category          | Tonnes<br>(kt) | NSR<br>(A\$/t) | Au<br>(g/t) | Pb<br>(%) | Zn<br>(%) | Ag<br>(g/t) |
|-------------------|----------------|----------------|-------------|-----------|-----------|-------------|
| Measured portion  | 460            | 160            | 1.5         | 2.1       | 3.2       | 20          |
| Indicated portion | 150            | 180            | 2.0         | 1.8       | 2.5       | 18          |
| Inferred portion  | 30             | 65             | 0.3         | 1.0       | 2.1       | 5           |
| Production Target | 640            | 160            | 1.6         | 2.0       | 3.0       | 19          |

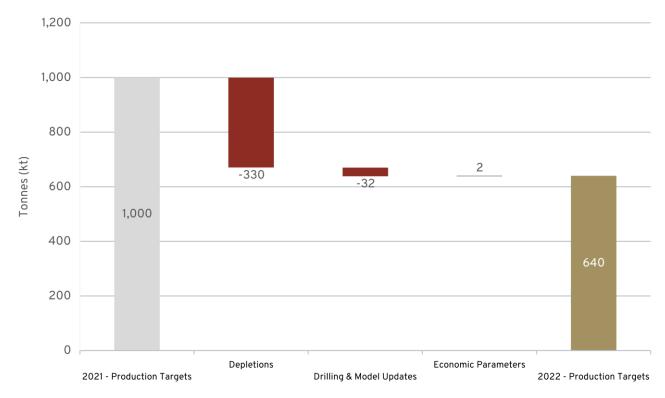
Note: The Hera Mine Production Target utilises an A\$80/t NSR cut-off for development and A\$100/t NSR cut-off for stoping. Values have been rounded to two significant figures which may result in discrepancies in the totals.

The following cautionary statement applies to the Production Target at the Hera Mine:

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised.

The majority of the Production Target tonnage (72%) is reported from the highest confidence Measured portion of the Mineral Resource Estimate, reflecting the mature state of the Hera Mine. The Inferred proportion of the Production Target is 5% by tonnage. A positive economic evaluation of the Production Target is not dependent on the Inferred category material.

The tonnage reported in the Hera Mine Production Target has decreased by 36% relative to the prior (30 June 2021) published estimate, as illustrated in Figure 5. The tonnage reduction is predominantly attributable to mining depletion.





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The Production Target is reported using the NSR cut-off value adopted for the most recent Life of Mine Plan for the Hera Mine which incorporated an updated mine design and the latest economic assumptions.

A long section of the mining shapes reported in the Production Target is presented in Figure 6.

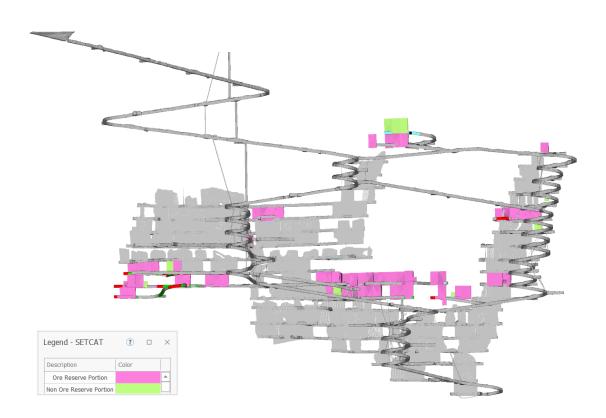


Figure 6. Long section facing west of the Hera Mine Production Target areas.

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# DARGUES MINE PRODUCTION TARGETS

A Production Target of 640kt for the Dargues Mine (Table 9) has been prepared from the 2022 Mineral Resource Estimate of 1,400kt. 46% of the Mineral Resource tonnage is reported in the Production Target. The Ore Reserve proportion of the Production Target is 66%.

Table 9. Dargues Mine Production Target at 30 June 2022.

| Category          | Tonnes<br>(kt) | NSR<br>(\$A/t) | Au<br>(g/t) | Au<br>(koz) |
|-------------------|----------------|----------------|-------------|-------------|
| Measured portion  | 320            | 260            | 5.1         | 52          |
| Indicated portion | 180            | 150            | 3.1         | 18          |
| Inferred portion  | 140            | 84             | 1.7         | 7           |
| Production Target | 640            | 190            | 3.8         | 77          |

Note: The Dargues Mine Production Target utilises an A\$80/t NSR cut-off for development and A\$120/t NSR cut-off for stoping. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

The following cautionary statement applies to the Production Target at the Dargues Mine:

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised.

Notably, 500kt of the Production Target, having a gold grade of 4.4g/t, is reported from the Measured and Indicated portions of the Mineral Resource Estimate, equating to 90% of the contained gold. The Inferred proportion of the Production Target is 21% by tonnage and 10% of the contained gold. A positive economic evaluation of the Production Target is not dependent on the Inferred category material.

The tonnage reported in the Production Target has decreased by 660kt (51%) relative to the prior 30 June 2021 estimate, as illustrated in Error! Reference source not found.

Error! Reference source not found.. Change in Dargues Mine Production Target tonnage relative to 30 June 2021.

Mining depletion accounted for 370kt of the reduction in the Production Tonnage. Resource drilling, geological interpretation and modelling have reduced the Production Target tonnage by a further 410kt. The adjustment of economic factors, including price assumptions and NSR cut-off value changes, yielded a 120kt increase.

A long section of the mining shapes reported in the Production Target is presented in Figure 7.

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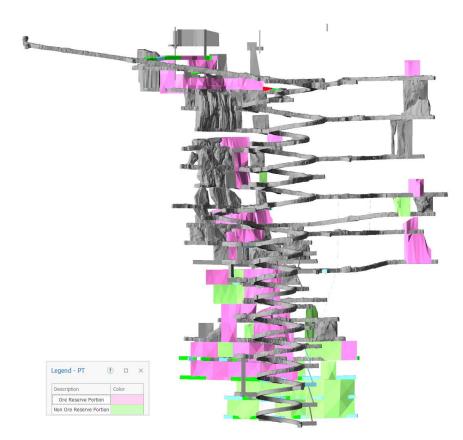


Figure 7. Long section facing north of the Dargues Mine Production Target areas.

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# FEDERATION MINE PRODUCTION TARGET

A Production Target of 4,000kt for the proposed Federation Mine (Table 10) has been prepared from the 2022 Mineral Resource Estimate of 5,000kt. 80% of the Mineral Resource tonnage is reported in the Production Target. The Ore Reserve proportion of the Production Target is 55%. The Inferred proportion of the Production Target is 33% by tonnage. A positive economic evaluation of the Production Target is not dependent on the Inferred category material. A long section of the mining shapes reported in the Production Target is presented in Figure 8.

Table 10. Federation Mine Production Target as at 30 June 2022.

| Category          | Tonnes<br>(kt) | NSR<br>(A\$/t) | Au<br>(g/t) | Cu<br>(%) | Pb<br>(%) | Zn<br>(%) | Ag<br>(g/t) |
|-------------------|----------------|----------------|-------------|-----------|-----------|-----------|-------------|
| Measured portion  | 0              | 0              | 0           | 0         | 0         | 0         | 0           |
| Indicated portion | 2,600          | 320            | 1.2         | 0.3       | 5.1       | 8.6       | 6           |
| Inferred portion  | 1,300          | 290            | 0.6         | 0.2       | 5.1       | 8.8       | 5           |
| Production Target | 4,000          | 310            | 1.0         | 0.3       | 5.1       | 8.6       | 6           |

Note: The Federation Production Target utilises an A\$80/t NSR cut-off for development and A\$140/t NSR for stoping. Values have been rounded to two significant figures which may result in rounding discrepancies in the totals.

The following cautionary statement applies to the Production Target at the Federation Mine:

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised.



Figure 8. Long section facing north of the Federation Mine Production Target areas.

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# APPENDIX – MATERIAL ASSUMPTIONS

# PEAK MINE

# Mineral Resource Estimate for Conversion to Production Target

The Peak Mine Production Target is prepared from the Mineral Resource Estimate reported at 30 June 2022. The Mineral Resource Estimate is inclusive of the Production Target.

# **Operational Status**

The Peak Mine is an operating mine. It has a current Life of Mine plan and annual budget that has considered material matters relating to the ongoing operation of the Peak Mine.

# Cut-off Parameters

A NSR cut-off of A\$80/t was applied for development material. The stoping cut-off varies by mine area, reflecting the relative complexity of the different mining areas (Table 11). The economic viability of the NSR cut-off values has been demonstrated through cashflow modelling completed for the Peak Life of Mine plan and budget.

| Mineralisation Type | Deposit                                     | NSR Cut-off (A\$/t) |  |
|---------------------|---|---------------------|--|
| Lead-zinc           | All   | 185                 |  |
|                     | Jubilee, New Cobar,<br>Chesney, Great Cobar | 175                 |  |
| Copper              | Perseverance Deeps                          | 215                 |  |
|                     | All others                                  | 185                 |  |

Table 11. NSR cut-off values used for the Peak Mine Production Target.

These are marginal cut-off values assessed during the Life of Mine Planning process. Cut-off values consider the full cost of development, stoping, haulage and processing. Costs beyond the mine gate including concentrate haulage, port facilities, shipping, treatment charges, penalties and royalties are netted from revenues of gold and concentrates and form the NSR estimates.

#### Mining Factors or Assumptions

The Life of Mine plan and annual budget include material from the Inferred Mineral Resource classification that is also included in the Production Target. The inclusion of the Inferred material is not material to the viability of the operation.

The Peak Mine uses a combination of uphole and downhole stoping with rockfill, progressing in a bottom up sequence. This mining method and Peak's mine development design were used for the Production Target.

Stope shapes are a combination of current mine design shapes and stope shapes created using SO software. The mine design shapes are used in preference, and updated using the SO shapes if changes to the geology model caused material changes to the stope shapes.

Settings used in the SO included 0.5m hangingwall and footwall dilution with a minimum mining width of 3m. Stope strike lengths and heights vary across the operation and have been aligned with current mine designs.

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Additional mining dilution and recovery factors have been applied. Development has 15% mining dilution applied and 100% recovery. Downhole stoping has 5% mining dilution applied with 95% recovery. Uphole stoping has 2% mining dilution applied with 75% recovery. Sill pillar mining has 2% mining dilution applied with 60% recovery.

Stope shapes that are current mine design shapes have recovery and dilution parameters applied by deposit as shown in Table 12.

| Recovery<br>(%) | Dilution (%)                            |
|-----------------|---|
| 90              | 10                                      |
| 90              | 14                                      |
| 92              | 18                                      |
| 85              | 12                                      |
| 90              | 16                                      |
| 92              | 16                                      |
| 92              | 12                                      |
|                 | (%)<br>90<br>90<br>92<br>85<br>90<br>92 |

The mining methods selected are consistent with those currently used at the operation. As such the infrastructure requirements are largely in place, and well understood. These include orebody access, ventilation, pumping, power, water, communications and secondary means of egress.

#### Metallurgical Factors or Assumptions

Ore is to be processed through the Peak processing facility that can operate at a nominal throughput rate of 800ktpa. The processing facility incorporates a gravity gold recovery circuit, a two-stage flotation circuit and a CIP circuit to produce a gold-silver doré and separate copper, lead and zinc concentrates.

Gold (and silver) is recovered in a gravity circuit via Knelson concentrators. The gravity concentrate is leached in an In-line Leach Reactor with the precious metals recovered from solution by electrowinning and smelting to produce gold-silver doré bars.

When treating copper ore any floatable gold and silver not recovered in the gravity circuit is recovered with copper to a copper concentrate utilising a single stage flotation circuit.

When treating lead and zinc ore any floatable gold and silver not recovered in the gravity circuit is recovered with lead to a lead concentrate and with zinc to a zinc concentrate as part of a two-stage flotation circuit.

Flotation tailings are processed in a conventional CIP circuit to leach any remaining gold. Gold in solution is recovered via electrowinning and smelted to produce gold doré bars.

The main deleterious elements present at the Peak Mine deposits are silica (SiO<sub>2</sub>), iron (Fe), sulphur (S) and bismuth (Bi). Iron as pyrite is present in the sulphides treated and is also a diluent in the respective concentrates. Pyrrhotite is an iron sulphide and increases cyanide consumption as it oxidises easily. High pyrrhotite levels can also hinder the recovery of gold in the leaching process as well as copper, lead and zinc in the flotation process. Bismuth is a penalty in copper concentrate when high levels are present in the ore deposits.

Metallurgical recovery assumptions are based on current site operating ranges and are shown in Table 13.

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| Parameter              |        |
|------------------------|--------|
| Au Recovery - Gravity  | 30-43% |
| Au Recovery - Total    | 80-95% |
| Ag Recovery - Total    | 60-80% |
| Pb Recovery            | 60-88% |
| Zn Recovery            | 60-68% |
| Cu Recovery            | 75-95% |
| Cu Grade - Concentrate | 25%    |
| Pb Grade - Concentrate | 20-55% |
| Zn Grade - Concentrate | 45-52% |

Table 13. Peak Mine metal recovery and concentrate grade parameters.

#### Environmental

Peak Gold Mines Pty Ltd (Peak) (a subsidiary of Aurelia Metals Ltd) owns and operates the Peak Mine. There are several development consents and mining leases that govern the operation of the Peak Mine. The development consents are supported by environmental assessments that identify the potential impacts of mining and processing operations. The environmental assessment has been shared with regulatory authorities and the community and mitigating actions developed and implemented in consultation with these stakeholders.

Waste rock generated at the Peak Mine is stored and managed in waste rock emplacements onsite. In addition, there are legacy waste rock emplacements and process residue storages. The facilities contain potentially acid forming and non-acid forming residues and/or waste rock. The facilities are designed to mitigate these impacts. The facilities are approved via various development consents and other regulatory approvals.

Peak has numerous environmental monitoring requirements including air quality, greenhouse gas emissions, groundwater, surface water, noise, blasting, meteorological and biodiversity. A range of techniques including realtime monitoring are utilised in assessing potential impact.

#### Infrastructure

All surface infrastructure required for the full extraction of the Production Target is in place. Ongoing sustaining capital and infrastructure underground including declines, level accesses, escapeways, vent accesses and rises are required for the full extraction of the Production Target. These works have been included in the Life of Mine Plan and Budget processes.

The Great Cobar PFS documented the additional infrastructure required for the extraction of the Great Cobar deposit, inclusive of a twin decline access, a return air rise, an underground primary fan installation and dewatering of the Great Cobar historic workings (refer to the announcement "Great Cobar PFS Outcomes & Peak Ore Reserve Increase" released on 27 January 2022 which is available to view on www.aureliametals.com.au and www.asx.com.au).

#### Costs

Capital and operating costs have been estimated based on historical actual costs, and forecast costs, as part of the Life of Mine and Budgeting process. Contracts are in place that allow reliable estimates of transport costs, treatment costs and refining costs, including penalties that may be applicable.

The Great Cobar PFS used cost estimates supplied by contractors, consultants, equipment manufacturers and suppliers to a ±25% accuracy.

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No allowance has been made for deleterious elements. All deleterious elements are expected to remain within tolerances and no penalties have been applied to cash flow estimations.

Allowances have been made for NSW State Government Royalty payable at 4% on the assessable value of metals.

#### **Revenue Factors**

The metal price and exchange rate assumptions used in the preparation of the Production Target (Table 14) have been benchmarked against industry peers and based on consensus forecasts.

Table 14. Peak Mine metal price and exchange rate assumptions.

| Metal  | Unit     | US\$ 2022 |
|--------|----------|-----------|
| Gold   | US\$/oz  | 1,450     |
| Silver | US\$/oz  | 18.0      |
| Copper | US\$/t   | 6,800     |
| Lead   | US\$/t   | 1,975     |
| Zinc   | US\$/t   | 2,629     |
| FX     | US\$/A\$ | 0.73      |

#### Market Assessment

The Peak Mine has in place all necessary contracts and logistics arrangements for the transportation of concentrate to customers. The transport contracts are renewable on standard commercial terms. The concentrate offtake agreements are tendered competitively on an annual basis.

Gold and silver doré products produced on site are transported to the receiving mint for refining under a refining agreement and the refined metals are either delivered into hedge book commitments and contracts or sold directly into the spot gold market.

Peak's concentrates are trucked to Hermidale, NSW, then rail-hauled to Port Botany or the Port of Newcastle before being transferred to ships and sold into markets in Asia.

#### Economic

Peak is an operating mine. The Life of Mine Plan and Budgeting process includes the completion of cash flow models. Inputs to these models are based on a combination of historical actual costs and forecast future costs. The cash flow models demonstrate a positive Net Present Value.

For more information, contact us at:

## HERA MINE

# Mineral Resource Estimate for Conversion to Production Target

The Hera Mine Production Target is prepared from the Mineral Resource Estimate reported at 30 June 2022. The Mineral Resource Estimate is inclusive of the Production Target.

#### **Operational Status**

The Hera Mine is an operating mine. It has a current Life of Mine plan and annual budget that has considered material matters relating to the ongoing operation of the Hera Mine.

#### **Cut-off Parameters**

A NSR cut-off of A\$100/t was applied for material to be extracted by stoping methods and A\$80/t for development. These cut-offs remain unchanged from last year's estimate. The economic viability of the cut-off value has been demonstrated through cashflow modelling completed for the Hera Life of Mine plan and budget.

Cut-off values consider development, stoping, haulage, and processing. Costs beyond the mine gate including concentrate haulage, port facilities, shipping, treatment charges, penalties and royalties are netted from revenues of gold and concentrates and form the NSR estimates.

#### Mining Factors or Assumptions

The Life of Mine plan and annual budget include material from the Inferred Mineral Resource classification that is also included in the Production Target. The inclusion of the Inferred material is not material to the viability of the operation.

Hera uses a bottom-up longhole stoping mining method with rockfill. This mining method and Hera's mine development design was used for the Production Target.

Stope shapes were created using Deswik's SO software with 0.4m hangingwall and footwall dilution allowances and 15m strike length at a minimum 2m mining width. Additional mining dilution and recovery factors were then applied. For development, 15% mining dilution and 100% recovery was assumed. 10% mining dilution with 95% recovery was applied to downhole stopes while 2% mining dilution with 75% recovery was used for uphole stopes. Sill pillar mining used 2% mining dilution with 60% recovery.

The mining methods selected are consistent with those currently used at the operation. As such the infrastructure requirements are in place, and well understood. These include orebody access, ventilation, pumping, power, water, communications and secondary means of egress.

#### Metallurgical Factors or Assumptions

Ore is processed through the Hera processing facility at a nominal throughput rate up to 480ktpa. The processing facility incorporates a gravity gold recovery circuit, a bulk lead-zinc flotation circuit and a concentrate leach to produce a gold-silver doré and a lead-zinc concentrate.

Gold (and silver) is recovered in a gravity circuit via Falcon concentrators. The gravity concentrate is leached in an In-line Leach Reactor with the precious metals recovered from solution by electrowinning and smelting to produce gold-silver doré bars.

Any floatable gold and silver not recovered in the gravity circuit is recovered with lead-zinc to a bulk lead-zinc concentrate utilising a single stage flotation circuit.

Flotation concentrate undergoes a cyanide leach to dissolve any remaining gold and silver. Precious metals in solution are recovered via the Merrill Crowe process, electrowinning and smelted to produce doré bars.

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The main deleterious elements present at the Hera Mine deposits are silica (SiO<sub>2</sub>), iron (Fe) and arsenic (As). All deleterious elements are expected to remain within accepted ranges. Silica is a penalty in respective concentrates when high levels are present in the ore deposits.

Metallurgical recovery assumptions are based on current site operating ranges and are shown in Table 15.

| Table 15. Hera Mine meta | l recovery assumptions |
|--------------------------|------------------------|
|--------------------------|------------------------|

| Metal  | Recovery |
|--------|----------|
| Gold   | 60-95%   |
| Silver | 88-93%   |
| Lead   | 90-95%   |
| Zinc   | 90-95%   |

#### Environmental

Hera Resources Pty Ltd (Hera) (a subsidiary of Aurelia Metals Ltd) owns and operates the Hera Mine. There are several development consents and mining leases that govern the operation of the Hera Mine. The development consents are supported by environmental assessments that identify the potential impacts of mining and processing operations. The environmental assessment has been shared with regulatory authorities and the community and mitigating actions developed and implemented in consultation with these stakeholders.

The Hera Mine has active waste rock emplacements and process residue storages. The facilities contain potentially acid forming and non-acid forming residues and/or waste rock. The facilities are designed to mitigate these impacts. The facilities are approved via development consent and other regulatory approvals.

Hera has numerous environmental monitoring requirements including air quality, greenhouse gas emissions, groundwater, surface water, noise, blasting, meteorological and biodiversity. A range of techniques including realtime monitoring are utilised in assessing potential impact.

#### Infrastructure

All surface infrastructure required for the full extraction of the Production Target is in place. Ongoing sustaining capital and infrastructure underground including declines, level accesses, escapeways, vent accesses and rises are required for the full extraction of the Production Target. These works have been included in the Life of Mine Plan and Budget processes.

#### Costs

Capital and operating costs have been estimated based on historical actual costs, and forecast costs, as part of the Life of Mine and Budgeting process. Contracts are in place that allow reliable estimates of transport costs, treatment costs, refining costs, including penalties that may be applicable.

No allowance has been made for deleterious elements. All deleterious elements are expected to remain within tolerances and no penalties have been applied to cash flow estimations.

Allowance has been made for NSW State Government Royalty payable at 4% on the assessable value of metals. In addition, production of the first 250,000 ounces of gravity gold through the Hera process plant is subject to a 4.5% royalty payable to CBH Resources Ltd. as part of the purchase of the Hera project.

### **Revenue Factors**

The metal price and exchange rate assumptions used in the preparation of the Production Target (Table 16) have been benchmarked against industry peers and based on consensus forecasts.

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| Metal  | Unit     | US\$  |
|--------|----------|-------|
| Gold   | US\$/oz  | 1,450 |
| Silver | US\$/oz  | 18.0  |
| Lead   | US\$/t   | 1,975 |
| Zinc   | US\$/t   | 2,629 |
| FX     | US\$/A\$ | 0.73  |

Table 16. Metal price and exchange rate assumptions used for the Hera Mine Production Target.

#### Market Assessment

The Hera Mine has in place all necessary contracts and approvals for the transportation of concentrate to customers. The transport contracts are renewable on standard commercial terms. The concentrate offtake agreement is for the life of the Hera Mine.

Gold and silver doré products produced on site are transported to the receiving mint for refining under a refining agreement and the refined metals are either delivered into hedge book commitments and contracts or sold directly into the spot gold market.

#### Economic

Hera is an operating mine. The Life of Mine Plan, and Budgeting process includes the completion of cash flow models. Inputs to these models are based on a combination of historical actual costs and forecast future costs. The cash flow models demonstrate a positive Net Present Value.

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## DARGUES MINE

#### Mineral Resource Estimate for Conversion to Production Target

The Dargues Mine Production Target is prepared from the Mineral Resource Estimate reported at 30 June 2022. The Mineral Resource Estimate is inclusive of the Production Target.

#### **Operational Status**

The Dargues Mine is an operating mine. It has a current Life of Mine plan and annual budget that has considered material matters relating to the ongoing operation of the Dargues Mine.

#### **Cut-off Parameters**

A NSR cut-off of A\$120/t was applied for material to be extracted by stoping methods and A\$80/t for development. The economic viability of the cut-off value has been demonstrated through cashflow modelling completed for the Dargues Life of Mine plan and budget.

These are marginal cut-off values assessed during the Life of Mine Planning and budget process. Cut-off values consider full operating costs which include development, stoping, haulage, processing and administration. Costs beyond the mine gate including concentrate haulage, port facilities, shipping, treatment charges, penalties and royalties are netted from gold revenue to form the NSR estimates.

## Mining Factors or Assumptions

The Life of Mine plan and annual budget include material from the Inferred Mineral Resource classification that is also included in the Production Target. The inclusion of the Inferred material is not material to the viability of the operation.

Dargues uses a combination of uphole and downhole stoping with hydraulic fill, progressing bottom up. This mining method and Dargue's mine development design was used for the Production Target.

Detailed stope design has been completed for the Life of Mine Plan, and these shapes have been used where available. Mining dilution and recovery estimates for the various stoping types are applied. These include remnant stoping (30% mining dilution, 70% recovery), longitudinal stoping (15% mining dilution, 95% recovery), transverse stoping (10% mining dilution, 95% recovery) and narrow stoping (25% mining dilution, 95% recovery).

In addition, the geology model has been assessed by creating stope shapes using Deswik's SO software. Parameters used include 0.4m hangingwall and footwall dilution allowances, with stope strike length of 15m and a minimum mining width of 2.5m. These shapes are used where new drilling and modelling updates haven't been captured by the Life of Mine planning process. Mining dilution and recovery factors applied to these shapes includes downhole stopes (2% mining dilution with 95% recovery), uphole stopes (2% mining dilution with 90% recovery), and sill pillar mining (10% mining dilution with 85% recovery).

Development has 15% mining dilution applied with 100% recovery.

The mining methods selected are consistent with those currently used at the operation. As such the infrastructure requirements are largely in place, and well understood. These include orebody access, ventilation, pumping, power, water, communications and secondary means of egress.

### Metallurgical Factors or Assumptions

Ore is processed through the Dargues processing facility at a nominal throughput rate of 355ktpa. The processing facility incorporates a single stage flotation circuit producing a gold-rich pyrite concentrate. The concentrate is filtered and transported off-site where further gold extraction occurs (by others).

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All deleterious elements are expected to remain within tolerances.

Metallurgical recovery assumptions are based on current site operating ranges and are shown in Table 17.

Table 17. Dargues Mine metal recovery assumptions

| Metal | Recovery |
|-------|----------|
| Gold  | 90-98%   |

#### Environmental

Big Island Mining Pty Ltd (BIM) (a subsidiary of Aurelia Metals Ltd) owns and operates the Dargues Mine. There are several development consents and mining leases that govern the operation of the Dargues Mine. The development consents are supported by environmental assessments that identify the potential impacts of mining and processing operations. The environmental assessment has been shared with regulatory authorities and the community and mitigating actions developed and implemented in consultation with these stakeholders.

The Dargues Mine has active waste rock emplacements and process residue storages. The facilities contain potentially acid forming and non-acid forming residues and/or waste rock. The facilities are designed to mitigate these impacts. The facilities are approved via development consent and other regulatory approvals.

Dargues Mine has numerous environmental monitoring requirements including air quality, greenhouse gas emissions, groundwater, surface water, noise, blasting, meteorological and biodiversity. A range of techniques including real-time monitoring are utilised in assessing potential impact.

#### Infrastructure

All surface infrastructure required for the full extraction of the Production Target is in place. Ongoing sustaining capital and infrastructure underground including declines, level accesses, escapeways, ventilation accesses and rises are required for the full extraction of the Production Target. These works have been included in the Life of Mine Plan and Budget processes.

#### Costs

Capital and operating costs have been estimated based on historical actual costs, and forecast costs, as part of the Life of Mine Plan and budgeting process. Contracts are in place that allow for reliable estimates of transport costs, treatment costs and refining costs, including penalties that may be applicable.

No allowance has been made for deleterious elements. All deleterious elements are expected to remain within tolerances and no penalties have been applied to cash flow estimations.

Allowance has been made for NSW State Government royalty payable at 4% on the assessable gold revenue. In addition, allowance has been made for a perpetual third party royalty payable to Triple Flag Precious Metals Group. The Triple Flag royalty is paid at a rate of 5.5% of gross gold revenue until cumulative production reaches 170koz; it then increases to 9.9% until 305koz; and thereafter reduces to 5.0%.

#### **Revenue Factors**

The metal price and exchange rate assumptions used in the preparation of the Production Target (Table 18) have been benchmarked against industry peers and based on consensus forecasts.

| Table 18. Dargues | Mine metal | price and | exchange | e rate assumption | S |
|-------------------|------------|-----------|----------|-------------------|---|
|-------------------|------------|-----------|----------|-------------------|---|

| Metal | Unit     | Value |
|-------|----------|-------|
| Gold  | US\$/oz  | 1,450 |
| FX    | US\$/A\$ | 0.73  |

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|-----------------------------|-------------------|
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#### Market Assessment

The Dargues project has in place all necessary contracts and approvals for the transportation of concentrate to customers. The transport contracts are renewable on standard commercial terms. A concentrate offtake agreement was established during June 2021 for a term of two years following a tender with various international traders.

#### Economic

Dargues is an operating mine. The Life of Mine Plan, and Budgeting process includes the completion of cash flow models. Inputs to these models are based on a combination of historical actual costs, and forecast future costs. The cash flow models demonstrate a positive Net Present Value.

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### FEDERATION MINE

#### Mineral Resource Estimate for Conversion to Production Target

The Federation Mine Production Target is prepared from the Mineral Resource Estimate reported at 30 June 2022. The Mineral Resource Estimate is inclusive of the Production Target.

#### Study Status

A Feasibility Study (FS) evaluation of the Federation deposit was completed in August 2022. The FS has determined a detailed mine plan that is technically achievable, including consideration of material modifying factors. The FS demonstrates an economically viable outcome.

The FS evaluated the development of the Federation deposit as a greenfield underground mine with minerals processing to recover saleable base metals concentrates and gold doré. The FS involved:

- Geological drilling and data collection
- Geological modelling for mine planning
- Mine geotechnical data collection and assessment
- Mining method selection, access optimisation, mine design and production schedule development
- Mine infrastructure design and reticulation (power, dewatering, ventilation and communications)
- Mineralogical and metallurgical test work
- Design of a new processing facility and evaluation of processing through Aurelia's existing Cobar Basin facilities
- Tailings storage capacity assessment and design
- Surface infrastructure design
- Development of an operational organisational structure
- Project approvals scope and process
- Project implementation strategy
- Capital and operating cost estimates
- Financial analysis
- Risk assessment.

#### **Cut-off Parameters**

A NSR cut-off value of A\$140/t was applied for material to be extracted by stoping methods and A\$80/t for development. The cut-off value was selected from a "Hill of Value" assessment performed during the FS. The economic viability of the cut-off value has been demonstrated through cashflow modelling completed for the FS.

#### Mining Factors or Assumptions

The Federation mine design uses a combination of uphole and downhole stoping methods with rockfill, cemented rockfill and paste backfill, progressing in a bottom up sequence. The uphole and downhole stoping methods are consistent with the mining method used at the nearby Hera and Peak mining operations, and are considered appropriate for the Federation orebody. Longitudinal retreat longhole stoping where the deposit is narrow and transverse longhole stoping where the deposit is wider.

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Geotechnical assessment for the Federation FS resulted in selection of level spacing, offset distances to capital infrastructure and a ground support regime. Various level spacings and stope strike lengths were adopted to account for variable ground conditions and dominant geological structures. The typical stope height is 30m floor to floor with a 25m stope strike length. In areas of identified weaker rock mass conditions, stope heights of 20m or 25m and a stope strike length of 20m were adopted to promote excavation stability and effective mining operations.

The geology model has been assessed by creating stope shapes using Deswik's SO software. Parameters used include 0.5m hangingwall and footwall dilution allowances, with stope strike length of up to 25m and a minimum mining width of 2.0m. Mining dilution and recovery factors applied to these shapes includes downhole stopes (5% mining dilution with 95% recovery), uphole stopes (5% mining dilution with 90% recovery), and sill pillar mining (10% mining dilution with 85% recovery). Areas where faults are expected to reduce geotechnical stability have had modified factors applied, including downhole stopes (10% mining dilution with 85% recovery), uphole stopes (10% mining dilution with 70% recovery).

Development designs had 15% mining dilution applied with 100% recovery.

The FS considered important elements of the mine design, equipment and support services that included:

- Surface boxcut and portal
- Decline and lateral development for level access
- Vertical development for fresh air, return air and secondary egress
- Ore stockpiles and waste rock dumps
- Pastefill system and associated underground reticulation
- Fixed infrastructure including shotcrete batch plant, ventilation fans, dewatering pumps and pipes, raw water pipes, underground substations, and high voltage power supply.

## Metallurgical Factors or Assumptions

Federation ore will be processed through both the Hera and Peak processing facilities with higher value ore prioritised through the Peak facility. Crushed ore will be transported to the process plants by road train.

Ore processed through the Peak processing facility will be at a nominal throughput rate of 100t/h. The processing flowsheet will be similar to that used for treatment of Peak's lead-zinc ore and incorporates a gravity gold recovery circuit, a two-stage flotation circuit and a CIP circuit to produce a gold-silver doré and separate lead-copper and zinc concentrates.

Gold (and silver) recovered in the gravity circuit will be leached in an In-line Leach Reactor with the precious metals recovered from solution by electrowinning and smelting to produce gold-silver doré bars.

When treating Federation ore any floatable gold and silver not recovered in the gravity circuit is recovered by flotation with lead and copper minerals to a lead-copper concentrate and with zinc to a zinc concentrate.

Flotation tailings are processed in a conventional CIP circuit to leach any remaining gold with gold in solution being recovered via electrowinning and smelted to produce doré bars.

Metallurgical recovery assumptions for processing through Peak are based on laboratory testwork and existing Peak operational performance (where appropriate) and shown in Table 19.

| Table 19. | Federation Mine – Peak plant | processing metal reco |
|-----------|------------------------------|-----------------------|
| Metal     | Recovery                     |                       |
| Gold      | 60-95%                       |                       |

Table 19. Federation Mine – Peak plant processing metal recovery assumptions

 Gold
 60-95%

 Silver
 60-85%

 Copper
 75-95%

 Lead
 80-95%

 Zinc
 80-95%

Ore treated through the Hera processing facility will be at a nominal throughput rate of 340ktpa. The processing flowsheet will be similar to that for Hera ore treatment and incorporates a gravity gold recovery circuit and a lead - zinc flotation circuit to produce a bulk lead-zinc concentrate.

Gold (and silver) recovered in the gravity circuit will be leached in an In-line Leach Reactor with the precious metals recovered from solution by electrowinning and smelting to produce gold-silver doré bars. No leaching of Federation lead-zinc concentrate is proposed.

A tailings filtration circuit and storage shed will be constructed at the Hera site to recover process water and generate tailings for use in pastefill. Filtered tailings will be backhauled by road train to the Federation site. Surplus tailings will be deposited in the Hera TSF.

Metallurgical recovery assumptions for processing through Hera are based on laboratory testwork and existing Hera operation performance (where appropriate) and shown in Table 20.

Table 20. Federation Mine – Hera plant processing metal recovery assumptions

| Metal  | Recovery |  |
|--------|----------|--|
| Gold   | 40-65%   |  |
| Silver | 76-81%   |  |
| Lead   | 90-95%   |  |
| Zinc   | 90-95%   |  |

All deleterious elements are expected to remain within accepted ranges.

#### Environmental

An environmental impact statement (EIS) has been prepared and submitted for the Federation project to support a state significant development (SSD) application for development consent under the Environmental Planning and Assessment Act 1979 (EP&A Act). The EIS was submitted to the Department of Planning and Environment (DPE) in February 2022.

The EIS includes the following assessments:

- Biodiversity
- Indigenous Heritage
- Soils and Land Capability
- Geochemistry
- Subsidence
- Preliminary Hazard Analysis
- Traffic and Transport
- Air Quality
- Acoustics and Vibration
- Surface Water

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- Groundwater
- Human Health Risk Assessment
- Rehabilitation
- Economics
- Social.

Federation is an active exploration prospect with preparatory works for the exploration decline development underway. There is a boxcut excavation at the Federation site and a waste rock emplacement which contains oxidised material (non-acid forming). The waste rock emplacement is governed by the technical assessments completed as part of the regulatory approvals for exploration activities.

There are no process residue storages at Federation.

#### Infrastructure

The mineralogy of the Federation deposit is amenable to treatment through Aurelia's Cobar Basin process plants. Use of the existing process plants enables an accelerated mine production ramp-up and reduces upfront capital expenditure and project implementation risk.

Fixed infrastructure at the Federation site will include administration buildings, mobile equipment workshop, laydown areas, shotcrete batch plant, pastefill plant, primary ventilation fan, electrical systems, fuel storage facility, water storage dam and water reticulation systems.

Filtered tailings will be used in cemented pastefill to backfill stope voids. The remaining tailings will be stored within the established Hera and Peak tailings storage facilities. The Hera TSF will require at least one embankment raise to accommodate the remaining tailings generated from the Hera Mine and tailings generated from Federation ore that is not used for backfill.

Power will be supplied from islanded liquid natural gas generators supplemented by a solar farm and battery energy storage system. The hybrid power solution will target a 25% reduction in carbon dioxide (CO<sub>2</sub>) emissions relative to an exclusively gas fired power station.

Project development will be implemented over three main phases including enabling works, mine development and plant construction. The Hera accommodation village was expanded in late 2021 while work underway at the Federation site includes surface clearing and drainage works, boxcut excavation, building construction and other preparatory works for the exploration decline development. These activities are occurring under the exploration licence. Aurelia is advancing the regulatory approval process for the Federation project and reasonably expects to receive a development consent, mining lease and associated approvals from the NSW government to enable commercial production.

#### Costs

The Federation Mine's capital cost estimates are based on scope options described in the FS report. The estimates include direct costs which are based on quantities and pricing, engineering, common distributable charges, temporary construction facilities, freight, management and owner's costs.

Operating costs for the Federation project are estimated over the life of mine using first principles derivation of mining, processing and haulage costs, market rates for third party provision of power and crushing activities, actual costs for consumables and first principles build-up of salaries. The estimate has been grouped into four major cost centres:

- Mining: mine operations inclusive of power requirements, technical services and surface ore and tailings haulage
- Processing: minerals processing including power requirements and ore crushing
- General and administration (G&A): management, finance, supply and procurement, health and safety, environment and community, and insurance

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• Concentrate transport: road haulage, rail, port and ocean freight.

Operating cost estimates were developed in Australian dollars (\$). Contract rates from Aurelia's Hera and Peak Mines have been used for:

- Concentrate transport and port operations
- LNG supply
- Consumables (diesel, grinding media, mill reagents)

Current market rates were obtained for:

- Power supply
- Primary and secondary crushing.

Salaries not included in contract rates have been built up from first principles.

Operating unit costs have been benchmarked with Aurelia's existing operations in the Cobar Basin.

No allowance has been made for deleterious elements. All deleterious elements are expected to remain within tolerances and no penalties have been applied to cash flow estimations.

Allowance has been made for NSW State royalty paid at a rate of 4.0% on assessable gold revenue and the outstanding balance of the 4.5% royalty payable to CBH Resources Ltd over the first 250,000 ounces of gravity gold recovered through the Hera process plant.

#### Revenue Factors

The metal price and exchange rate assumptions used in the preparation of the Production Target (Table 21) have been benchmarked against industry peers and based on consensus forecasts.

| Table 21. Federation metal price and exchange rate assumptions | Table 21 | . Federation | metal price | and exchange | rate assumptions. |
|--|----------|--------------|-------------|--------------|-------------------|
|--|----------|--------------|-------------|--------------|-------------------|

| Metal  | Unit     | 2022  |
|--------|----------|-------|
| Gold   | US\$/oz  | 1,450 |
| Silver | US\$/oz  | 18.0  |
| Copper | US\$/t   | 6,800 |
| Lead   | US\$/t   | 1,975 |
| Zinc   | US\$/t   | 2,629 |
| FX     | US\$/A\$ | 0.73  |
|        |          |       |

#### Market Assessment

Federation expects to be able to use existing contractual arrangements in place for Hera and approvals for the transportation of concentrate to agreed customers. The transport contracts are renewable on standard commercial terms.

Gold and silver doré products produced on site are transported to receiving mint for refining under a refining agreement and the refined metals are either delivered into hedge book commitments and contracts or sold directly into the spot gold market.

Federation's concentrate will be trucked to Hermidale, NSW, then rail-hauled to the Port of Newcastle and/or Port Botany before being transferred to ships and sold into markets in Asia.

Lead-zinc concentrate produced from Federation ore is expected to be sold under a new life of mine offtake agreement. Lead-copper and zinc concentrates produced from Federation ore through the Peak process plant are

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expected to be sold to traders under annual contracts linked to benchmark terms, consistent with Aurelia's established concentrate marketing strategy for the Peak Mine.

#### Economic

The FS includes the economic analysis of the Federation mine development, which was undertaken using discounted cash flow analysis. The analysis returns a positive post-tax NPV.

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