

# **GROUP PRODUCTION TARGET STATEMENT**

Aurelia Metals Limited (**ASX:AMI**) (**Aurelia** or the **Company** or the **Group**) is pleased to report updated Production Targets for its Peak and Federation Mines.

The Group Production Target is presented in Table 1. Mine Production Targets are summarised in Table 2 and Table 3.

# GROUP

- Approximately 96% of Group Production Target tonnage is comprised of high-tenor Peak copper and Federation zinc-lead deposits, which are the cornerstones of the future Aurelia production profile.
- Group Production Target tonnage of 8.2Mt at A\$270/t NSR. Adjustments have been made for mining depletion and additions as a result of drilling and model updates.
- Dargues Mine has been removed from the 2024 Production Target as the mining operation has ceased. During FY25 the site will transition to closure, and then into a rehabilitation phase.

Table 1: Group Production Target as at 30 June 2024

Category	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Measured portion	730	310	1.3	2.9	1.2	0.8	9
Indicated portion	5,400	280	1.0	1.3	4.8	2.8	6
Inferred portion	2,100	230	1.2	0.5	3.9	2.3	6
Production Target	8,200	270	1.1	1.2	4.3	2.5	6

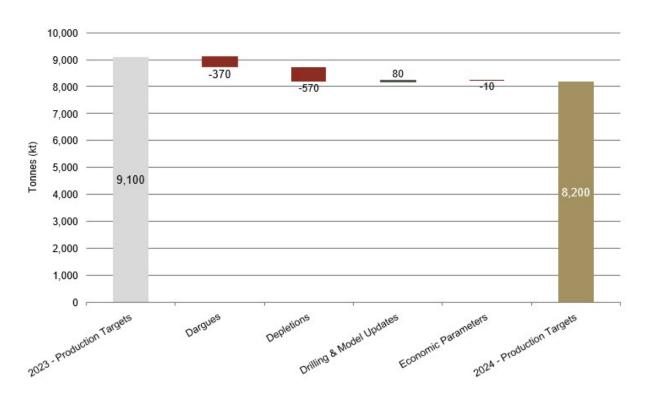
Note: Net Smelter Return (NSR) is an estimate of the net recoverable value per tonne including offsite costs, payables, royalties and metal recoveries. Values are reported to two significant figures which may result in rounding discrepancies in the totals.

# PEAK

- Peak is transitioning to a copper-dominant mining operation with copper ore now 93% of Peaks' Production Target by tonnage; strong potential for further growth with planned future underground drilling at Great Cobar.
- Production Target tonnage decreased by 11% to 4.2Mt due to mining depletion.

# FEDERATION

- Production Target tonnage unchanged at 4.0Mt. Ore drive development has commenced. First mine stope production expected Q1 FY25.
- Excellent potential for further growth in Production Target with planned future drilling from both surface and underground.



**Figure 1:** Change in Aurelia Group Production Target tonnage relative to 30 June 2023. *Note: 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 2024. 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 (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 Group Production Target is derived from 32% of the Group's Mineral Resource Estimate tonnage reported at 30 June 2024 and includes the Group's Ore Reserve Estimate reported at 20 June 2024. The Ore Reserve Estimate represents 57% of the Production Target tonnage. Tonnage from the Inferred Mineral Resource classification makes up 26% of the Group Production Target.

The Production Target tonnage reported for the Peak Mine (Table 2) has decreased to 4.2Mt which is a 11% decrease relative to the 30 June 2023 estimate. The decrease is attributable to mining depletion. The positive adjustment due to updated economic parameters were not sufficient to offset mining depletion.

For more information, contact us at:

Category	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Measured portion	730	310	1.3	2.9	1.2	0.8	9
Indicated portion	2,400	250	1.9	1.4	0.4	0.3	6
Inferred portion	1,100	230	2.1	0.9	0.1	0.1	6
Production Target	4,200	250	1.9	1.5	0.5	0.4	6

Table 2: Peak Mine Production Target as at 30 June 2024.

Note: The Peak Mine copper Production Target utilises A\$80/t NSR cut-off for development and A\$180-200/t NSR for stoping depending on the mine area. The Peak Mine zinc-lead Production Target utilises A\$80/t NSR cut-off for development and A\$190-200/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 4.0Mt for the Federation Mine (Table 3) is supported by findings from the Feasibility Study and associated updates. Both Development Consent and Mining Lease were issued by the NSW Government during 2023. Decline development continues, ventilation rises to surface are now in place, and services supplies continue to be increased and extended to meet demand. Ore drive development has commenced, with first stope ore expected in Q1 FY25.

 Table 3: Federation Mine Production Target as at 30 June 2024.

Category	Tonnes (kt)	NSR (A\$/t)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Indicated portion	3,000	300	8.3	4.8	0.3	1.2	6
Inferred portion	970	250	8.3	4.9	0.2	0.2	6
Production Target	4,000	290	8.2	4.8	0.3	0.9	6

Note: The Federation Mine Production Target utilises A\$80/t NSR cut-off for development and A\$146/t NSR for stoping. Values have been rounded to two significant figures which may result in rounding discrepancies in the totals.

#### 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 one operating mine in New South Wales (NSW). The Peak Mine is in the Cobar Basin in western NSW. The Dargues Mine in south-eastern NSW, ceased production in August 2024 and has been placed into care and maintenance. The Hera mining operation, also located in the Cobar Basin, ceased operations in March 2023 and the surface facilities have been placed into care and maintenance.

For more information, contact us at:

Level 17, 144 Edward Street Brisbane QLD 4000 office@aureliametals.com.au GPO Box 7 Brisbane QLD 4001 +61 7 3180 5000 aureliametals.com ABN: 37 108 476 384 In addition, Aurelia has two consented high grade development projects. The polymetallic Federation Project is currently under construction. The development of the Great Cobar copper deposit will follow.

In FY24, Aurelia produced 65,315 ounces of gold at a Group All-In Sustaining Cost of A\$2,035 per ounce. The Peak Mine's cost base benefits 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 or to advise of any change in events, conditions or circumstances on which any such statement is based.

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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 2024.

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 (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 2024. The Ore Reserve Estimate for each mine as at 30 June 2024 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 (JORC Code). 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 2024 were also adopted for preparation of the Production Targets. These are described in the 2024 "Group Mineral Resource and Ore Reserve Statement" and included in the Appendix of this statement.

Material from the Measured, Indicated and Inferred classifications of the Mineral Resource Estimate have 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 "2023 Group Production Target Statement" released to the ASX on 30 August 2023.

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# PEAK MINE PRODUCTION TARGETS

The Peak Mine (North Mine and South Mine) extracts and treats gold bearing copper and zinc-lead 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 4 to Table 6).

Table 4: Peak North Mine Copper Production Target as at 30 June 2024.

Category	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Measured portion	430	250	1.8	1.7	0.0	0.0	6
Indicated portion	2,100	210	1.9	1.1	0.0	0.0	5
Inferred portion	1,100	220	2.1	0.8	0.1	0.0	5
Production Target	3,600	230	2.1	1.1	0.0	0.0	5

Note: The Peak North Mine copper Production Target utilises A\$80/t NSR cut-off for development and A\$180-200/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 5: Peak South Mine Copper-Gold Production Target as at 30 June 2024.

Category	Tonnes (kt)	NSR (A\$/t)	Cu (%)	Au (g/t)	Zn (%)	Pb (%)	Ag (g/t)
Measured portion	130	370	0.6	5.2	0.2	0.2	5
Indicated portion	180	270	0.6	3.7	0.1	0.1	5
Inferred portion	20	160	0.4	2.1	0.1	0.1	3
Production Target	330	300	0.6	4.2	0.2	0.1	5

Note: The Peak South Mine copper-gold Production Target utilises A\$80/t NSR cut-off for development and A\$190-200/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 6: Peak South Mine Zinc-Lead Production Target as at 30 June 2024.

Category	Tonnes (kt)	NSR (A\$/t)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Measured portion	170	400	4.9	3.5	0.6	4.4	19
Indicated portion	170	280	5.4	4.6	0.4	2.3	21
Inferred portion	20	300	3.8	2.3	0.4	3.4	23
Production Target	360	340	5.1	3.9	0.5	3.3	20

Note: The Peak Mine zinc-lead Production Target utilises A\$80/t NSR cut-off for development and A\$190-A\$200/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.

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 4,200kt for Peak Mine (Table 2) was prepared from the 2024 Mineral Resource Estimate of 18,000kt. The Production Target represents 23% of the tonnage reported in the Mineral Resource. The Ore Reserve proportion of the Production Target is 55%. The Inferred proportion of the Production Target is 26%. 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 2023) estimate, as illustrated in Figure 2. Positive adjustments due to updated economic parameters were insufficient to offset mining depletion.

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

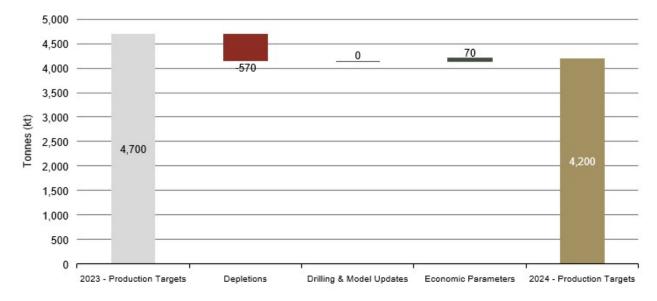


Figure 2: Change in Peak Mine Production Target tonnage relative to 30 June 2023.

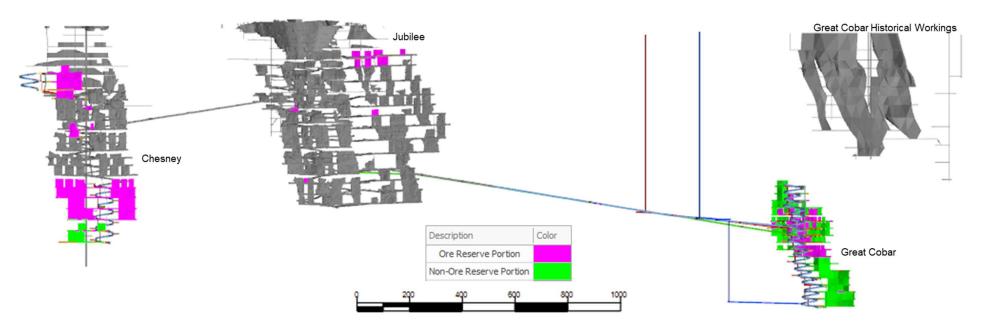


Figure 3: Long section facing west of the Peak North Mine Production Target areas.

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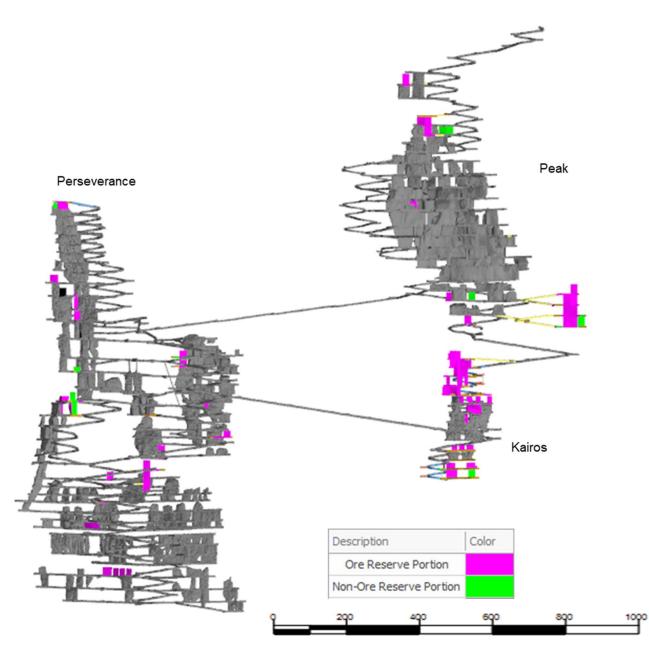


Figure 4: Long section facing west of the Peak South Mine Production Target areas.

# FEDERATION MINE PRODUCTION TARGET

A Production Target of 4,000kt for the proposed Federation Mine (Table 7) has been prepared from the 2024 Mineral Resource Estimate of 4,800kt. 83% of the Mineral Resource tonnage is reported in the Production Target. The Ore Reserve proportion of the Production Target is 60%. The Inferred proportion of the Production Target is 24% by tonnage. A positive economic evaluation of the Production Target is not dependent on the Inferred category material.

Category	Tonnes (kt)	NSR (A\$/t)	Zn (%)	Pb (%)	Cu (%)	Au (g/t)	Ag (g/t)
Indicated portion	3,000	300	8.3	4.8	0.3	1.2	6
Inferred portion	970	250	8.3	4.9	0.2	0.2	6
Production Target	4,000	290	8.2	4.8	0.3	0.9	6

 Table 7: Federation Mine Production Target as at 30 June 2024.

Note: The Federation Production Target utilises A\$80/t NSR cut-off for development and A\$146/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.

The tonnage reported in the Production Target has been maintained relative to the prior 30 June 2023 estimate, as illustrated in Figure 5. Resource drilling, geological interpretation and modelling have increased the Production Target tonnage by 80kt. The adjustment of economic factors, including price assumptions, yielded an 80kt decrease.

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

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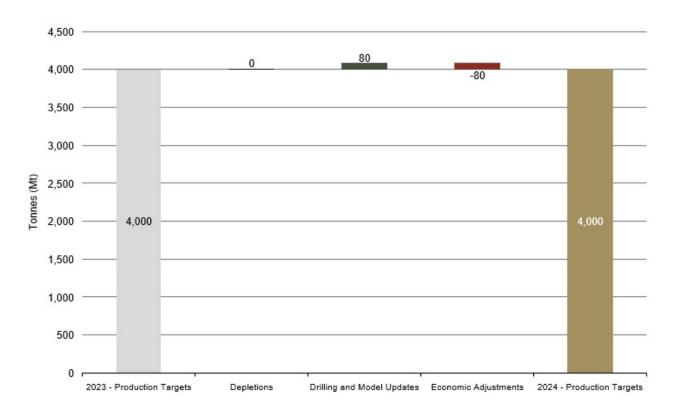


Figure 5: Change in Federation Mine Production Target tonnage relative to 30 June 2023.

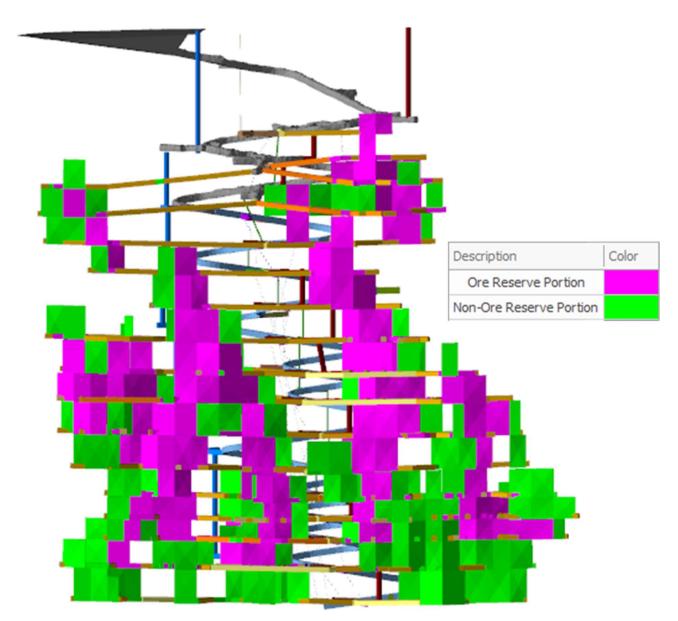


Figure 6: Long section facing north of the Federation Mine Production Target areas.

# **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 2024. 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 mineralised development material. The stoping cut-off varies by deposit to reflect the relative complexity of the different mining areas. The economic viability of the NSR cut-off values has been demonstrated through cash flow modelling completed for the Peak Life of Mine (LOM) plan and budget.

Table 8: NSR Cut-off Values used for the Peak Mine Production Target

Mineralisation Type	Deposit	NSR Cut-off (A\$/t)
Zinc-lead	Peak North	190
	All others	200
	Jubilee	180
Conner	Chesney	185
Copper	Great Cobar, Peak North	190
	All Others	200

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 Stope Optimiser (SO) software. The mine design shapes are used in preference and updated using the SO shapes if

changes to the geology model caused significant changes to the stope shapes.

Settings used in the SO allowed for 0.5m hangingwall (1.0m for Kairos, 0.7m for Chronos) and 0.5m footwall (0.7m for Chronos) 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.

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 9.

Table 9: Mining Factors by Deposit.

Deposits	Recovery (%)	Dilution (%)
Chesney, Great Cobar, Peak	90	10
Kairos	86	18
Chronos	92	20
Perseverance	90	30
Jubilee	91	14

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.

The Great Cobar PFS documented the additional infrastructure required for the extraction of Great Cobar, 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 <u>www.aureliametals.com.au</u> and <u>www.asx.com.au</u>).

#### Metallurgical Factors or Assumptions

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

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 zinc and lead 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 CIL circuit to leach any remaining cyanide leachable gold

and silver. Gold and silver in solution is recovered via carbon adsorption with the loaded carbon then recovered, stripped and the high grade gold/silver solution subjected to electrowinning and smelted to produce gold doré bars.

The main deleterious elements present at the Peak Mine deposits are Silica (SiO2), Iron (Fe), Sulphur (S) and Bismuth (Bi). Iron is present in varying proportions of pyrite and pyrrhotite in the sulphides treated and are both diluents in all of the concentrates. Bismuth is a penalty in copper concentrate when high levels are present in the deposits.

Metallurgical recovery assumptions are based on current site operating ranges and are shown in Table 10.

Parameter	Range
Au Recovery - Gravity	30-43%
Au Recovery - Total	80-95%
Ag Recovery - Total	60-80%
Pb Recovery	60-92%
Zn Recovery	60-82%
Cu Recovery	75-95%
Cu Grade - Concentrate	23-25%
Pb Grade - Concentrate	20-55%
Zn Grade - Concentrate	45-52%

Table 10: Peak Mine Metal Recovery and Concentrate Grade Parameters.

## Environmental

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

Waste rock generated from Peak and New Cobar 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/ New Cobar have 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

As an operating mine, most of the surface infrastructure required for the extraction of the Ore Reserve is in place. Including:

- Peak boxcut and portal
- New Cobar boxcut and portal
- Shaft and headframe
- Primary vent fan installations
- Emergency facilities
- ROM Pad
- Processing Facility

- Process water dams
- Concentrate Storage Facility
- Maintenance Facility
- Store
- All weather access roads
- Office facilities
- Waste rock dumps

The Tailings Storage Facility (TSF) has completed the Stage 5 raise. This gives the TSF sufficient capacity for the processing of the Ore Reserve. Life of Asset planning has been completed to 2036, with Stage 6 and Stage 7 at concept design stage.

The Great Cobar PFS documented the additional infrastructure required for the extraction of Great Cobar, 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).

Ongoing sustaining capital and infrastructure underground including declines, level accesses, escapeways, vent accesses and rises are required for the full extraction of the Ore Reserve Estimate. 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 for 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  $\pm 25\%$  accuracy.

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 11) have been benchmarked against industry peers and based on consensus forecasts.

Metal	Unit	US\$
Gold	oz	1,650
Silver	oz	21.5
Copper	t	8,265
Lead	t	1,984
Zinc	t	2,535
AUD/USD		0.70

Table 11: Peak Mine Metal Price and Exchange Rate Assumptions.

#### Market Assessment

The Peak Mine has in place all necessary logistics arrangements for the transportation of concentrate to customers. From 1 January 2024, a long-term offtake agreement with Trafigura Pte Ltd is in place for zinc, lead and copper concentrates.

Gold and silver doré products produced on site are transported to a refinery 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

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.

# 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 2024. 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 and updated in April 2023. 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 economic viability of the cut-off value has been demonstrated through cash flow modelling completed for the Feasibility Study.

#### 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 Peak mining operation and are considered appropriate for the Federation orebody. Longitudinal retreat longhole stoping is utilised where the deposit is narrow and transverse longhole stoping where the deposit is wider.

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 3.0m. 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).

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:

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

Where Federation ore is processed through the Peak processing facility it will be at a nominal throughput rate of 100t/h. The processing flowsheet will be similar to that used for treatment of Peak's zinc-lead 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 zinc and lead-copper 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 with lead and copper minerals to a lead-copper concentrate and with zinc to a zinc concentrate as part of a two-stage floation circuit.

Flotation tailings are processed in a conventional CIL circuit to leach any remaining cyanide leachable gold and silver. Gold and silver in solution is recovered via carbon adsorption with the loaded carbon then recovered, stripped and the high grade gold/silver solution subjected to electrowinning and smelted to produce gold doré bars.

Metallurgical recovery assumptions for processing through Peak are based on laboratory test-work and existing Peak operation performance (where appropriate) and shown in Table 12.

Table 12: Federation Mine -	- Poak Plant Processing	Motal Recover	V Assumptions
	- i cak i lant i loccooling		y Assumptions

Metal	Recovery
Gold	60-95%
Silver	60-80%
Copper	75-95%
Zinc	80-95%
Lead	80-95%

Where Federation ore is processed through the Hera processing facility it 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 bulk zinc-lead flotation circuit to produce a bulk zinc-lead 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 payment will be received for gold and silver in the bulk concentrate and is therefore excluded from the recovery assumptions.

Metallurgical recovery assumptions for processing through Hera are based on laboratory test-work and existing Hera operation performance (where appropriate) and shown in Table 13.

Metal	Recovery
Zinc	90-95%
Lead	90-95%
Gold	10-25%

 Table 13: Federation Mine – Hera Plant Processing Metal Recovery Assumptions.

All deleterious elements are expected to remain within accepted ranges.

3-10%

## Environmental

Silver

Hera Resources Pty Ltd (a subsidiary of Aurelia Metals Limited) owns and operates the Federation Mine. There is a development consent and mining lease that govern the operation of Federation. The development consent for the project was granted during 2023. The development consent application was supported by environmental assessments that identify the potential impacts of mining operations. The environmental assessments have been shared with regulatory authorities and the community and mitigating actions developed and implemented in consultation with these stakeholders.

The Federation Project is an active mining project. It has active waste rock emplacements. The facilities contain potentially acid forming and/or 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.

The Federation Project has numerous environmental monitoring requirements including air quality, greenhouse gas emissions, groundwater, surface water, noise, blasting, meteorological and biodiversity. A range of techniques are utilised in assessing the potential impacts.

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.

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

Various power options are currently being investigated, including diesel generators, gas generators, renewable power (solar) and variations of those proposed. The power solution for the Federation Project has not been finalised.

Aurelia has received development consent for the Federation Project and the mining lease was issued in October 2023. The boxcut and portal have been installed. Decline development continues, ventilation rises to surface are now in place, and services supplies continue to be increased and extended to meet demand.

#### Costs

The Federation Project's capital cost estimates are based on scope options described in the Feasibility Study. The capital cost estimates also include adjustments made since commencement of implementation activities and development of the access decline. 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. Updated costs have been included as part of the Life-of-Mine Plan and budgeting process.

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.

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

- Concentrate transport and port operations.
- 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 14) have been benchmarked against industry peers and based on consensus forecasts.

Metal	Unit	2024
Gold	US\$/oz	1,650
Silver	US\$/oz	21.5
Copper	US\$/t	8,265
Lead	US\$/t	1,984
Zinc	US\$/t	2,535
AUD/USD		0.70

Table 14: Federation Metal Price and Exchange Rate Assumptions.

#### Market Assessment

Federation expects to be able to use existing contractual arrangements or supply chains for the transportation of concentrate.

Concentrates produced from Federation ore are expected to be sold under long term offtake agreements.

#### 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.