

FEDERATION PROJECT PROCEEDS TO FEASIBILITY STUDY

Aurelia Metals Limited (ASX: AMI) (**Aurelia** or the **Company**) advises of the completion of a Scoping Study on its Federation Project, located 10km south of the Company's Hera Mine in the Cobar Basin, NSW.

HIGHLIGHTS

- Federation Scoping Study informed by technical, economic and sustainability considerations.
- Mine planning activities informed by data available at October 2020 comprising the maiden Mineral Resource Estimate (MRE) and an extra 12,500m of drilling.
- Deposit amenable to underground mining by longhole stoping methods with backfilling of stope voids.
- Preferred process flowsheet uses a gravity gold circuit with sequential copper, lead and zinc flotation.
- Processing facility to be located at the Hera Mine site with either a modification to the existing circuit or construction of a new facility to use existing infrastructure including the Tailing Storage Facility.
- Multiple project configurations and production rates were evaluated in response to continued growth of the Federation deposit from exploration programs.
- All assessed throughput alternatives delivered positive outcomes. The preferred mining method, flowsheet and expanded throughput from the Hera processing plant, or a new plant of higher capacity, provides confidence to proceed directly to Feasibility Study (**FS**).
- FS approved by Aurelia Board with expected completion by mid-2022.
- Deposit remains open in multiple directions with an intensive drilling program to continue through 2021. Further substantial resource growth and confidence targeted with clear project extension potential.
- Completion of Scoping Study supports prompt commencement of Environmental Impact Statement (**EIS**) and targeted progression through the NSW regulatory approvals process.
- Proposed exploration decline allows infill and extensional drilling from underground platforms and extraction of a 20kt bulk sample for metallurgical evaluation (pending permitting).

Commenting on progress of Federation, Aurelia Managing Director and CEO, Dan Clifford, said:

"Federation represents one of the most significant discoveries in the Cobar Basin in recent decades. Deposit scale continues to grow and the tenor of the mineralisation is outstanding. Completion of the Scoping Study has confirmed the sheer quality of this project development. It has also provided us with the confidence to immediately progress to a Feasibility Study and submit approvals for an exploration decline development."

"The Scoping Study was underwritten with the robust ESG framework that drives Aurelia's business-wide approach to operating sustainability. As such, it also delivers confidence that appropriate development of Federation offers the potential for long-lived net benefits across the Cobar Basin community and beyond."

"Finally, the gated drilling and progression of the Federation Project clearly demonstrates Aurelia's focus on financial discipline – including maintaining ongoing tension between the dollar deployed to exploration and discovery versus other investment alternatives. We believe the development of Federation represents a substantial opportunity for the delivery of further long term value and returns growth."

Federation Project: Scoping Study (March 2021) overview

The Federation Project Scoping Study mine schedule is predominantly comprised of Inferred Resources. There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources. As a result, disclosure of production targets or forecast financial metrics with respect to the Federation Project Scoping Study is not permitted under the existing ASX regulatory framework.

The Scoping Study referred to in this ASX release has been undertaken for the purpose of initial evaluation of a potential development of the Federation Project. It is a preliminary technical and economic study of the potential viability of the Project. The outcomes are based on low accuracy level technical and economic assessments that are insufficient to support estimation of Ore Reserves. Further exploration and evaluation work and appropriate studies are required before Aurelia will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

1. Project background

The Federation Project is based on the development of a base and precious metal deposit located in central-western NSW, approximately 100km south-southeast of the regional township of Cobar, 15km south of the Nymagee township and 10km south of Aurelia's existing Hera Mine.

The Federation Project is held by Hera Resources Pty Limited, a wholly owned subsidiary of Aurelia, and is located on Exploration License (EL) 6162. High-grade lead, zinc and gold mineralisation was discovered at Federation in April 2019.

The Scoping Study examined possible project development scenarios and identified a preferred configuration to be investigated in more detail at the next study phase. The study leveraged established infrastructure and operating knowledge at the nearby Hera Mine which provided greater confidence in, productivity, cost and commercial parameters relative to a full greenfield project development.

2. Geology

The Federation deposit occurs within a northeast-southwest (NE-SW) oriented fault corridor that links the Rookery Fault system to a parallel fault system down the western margin of the Erimera Granite. Mineralisation is epigenetic and structurally controlled with several steeply-plunging vein breccia to massive sulphide lenses/shoots of relatively short strike length (100 – 150m) developed within a broad NE-SW striking corridor of low-grade lead-zinc mineralisation. Away from the main breccia zones, there is a general progressive decrease in vein intensity from vein stockwork through fracture-controlled stringer-style mineralisation to selective replacement of pyrrhotite by sphalerite, galena and chalcopyrite in distal wallrocks.

The massive sulphide and sulphide breccia base-metal mineralisation is typically zinc rich and associated with intense cross-cutting black chlorite alteration in the lower parts of the known deposit, and with silica dominant infill in the upper parts. Known high grade gold mineralisation is best developed in steeply plunging shoots within the high-grade zinc and lead lenses. High-grade gold is empirically associated with massive zoned iron-rich (Fe-rich) to Fe-poor sphalerite and a distinctly coarse-grained galena infill phase.

3. Mineral Resource

A maiden Mineral Resource Estimate (**MRE**) for the Federation Project was completed in June 2020. Subsequent drilling and associated data, an extra 12,500m of drilling as at October 2020, was used to inform mine planning activities in the Scoping Study.

The updated February 2021 MRE (Table 1) was prepared while the Scoping Study was being finalised and did not inform the Scoping Study findings. The February 2021 MRE comprises Indicated and Inferred

Resources totalling 3.5Mt at 5.5% Pb, 9.8% Zn, 1.4g/t Au, 7g/t Ag and 0.3% Cu. The MRE includes a shallow oxide component of 0.08Mt at 6.0g/t Au and 2g/t Ag. Mineralisation reported in the MRE extends from 25 - 550m below surface with a total strike length of over 500m. The February 2021 MRE successfully delivered a 1.0Mt increase in Indicated Resources relative to the maiden MRE.

Table 1: Updated Federation MRE (February 2021)

Class	Tonnage (Mt)	Grade						Contained Metal				
		Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Cu (%)	ZnEq ¹ (%)	Pb (kt)	Zn (kt)	Au (koz)	Ag (koz)	Cu (kt)
Indicated	1.07	6.1	10.7	3.6	8	0.4	26.3	66	115	125	263	4
Inferred	2.41	5.2	9.4	0.4	7	0.3	16.6	127	227	32	552	6
Total	3.49	5.5	9.8	1.4	7	0.3	19.6	192	342	158	815	10

Note: The Federation MRE utilises a A\$120 NSR cut-off within mineable shape volumes that may include internal dilution. Tonnage estimates have been rounded to the nearest 10,000 tonnes. Contained metal estimates have been rounded to the nearest 1,000 tonnes/ounces. Estimates may not sum due to rounding.

¹ Zinc equivalent (ZnEq) was calculated using the formula $ZnEq\% = Zn(\%) + 1.063 \cdot Pb(\%) + 2.431 \cdot Cu(\%) + 2.221 \cdot Au(g/t) + 0.010 \cdot Ag(g/t)$. Both the NSR and zinc equivalent calculations factor in assumed metal prices, relative metallurgical recoveries, payabilities and other offsite costs - full details of which can be found on pages 7-8.

Full details of the Federation MRE are provided in Aurelia's ASX release dated 23 February 2021, *Updated Federation Mineral Resource Estimate*. Aurelia confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that release continue to apply and have not materially changed.

4. Site layout

The Hera Mine site is accessible via sealed public roads from Cobar and Hermidale. The Federation site is approximately 10km south of the Hera Mine site and is accessible via an unsealed public road (Burthong Road).

The Federation Project has two main areas: the Federation site where the underground mine will be located and the Hera site where mineral processing activities are expected to be undertaken.

The layout of facilities at these sites has been selected to limit environmental and cultural heritage impacts, facilitate timely regulatory approvals, reduce cost and locate infrastructure in areas with better foundation conditions.

Several transport corridors and linear infrastructure routes have been evaluated as part of the Scoping Study. These include mined material, tailings and concentrate haulage routes, water pipelines, electricity transmission line corridors and a gas pipeline route.

5. Mining operations

The preferred mining methods are longitudinal retreat longhole stoping, where the deposit is narrow, and transverse longhole stoping, where the deposit is wider. The oxide mineralisation reported in the February 2021 MRE was not considered in the mine design and represents an upside opportunity.

The preferred backfill method is paste fill with tailings being either filtered and trucked from a process plant at Hera or piped and dewatered at Federation.

Mineralised material is proposed to be hauled from the underground mine using 50t trucks to a surface stockpile and then transferred to the process plant by a separate surface trucking fleet.

A preliminary geotechnical assessment has concluded that the geotechnical conditions at Federation are expected to be similar to those at the Hera Mine. A sub-level spacing of 25m has been recommended. A 50m offset between the stoping limits and capital infrastructure has been recommended for mine planning purposes.

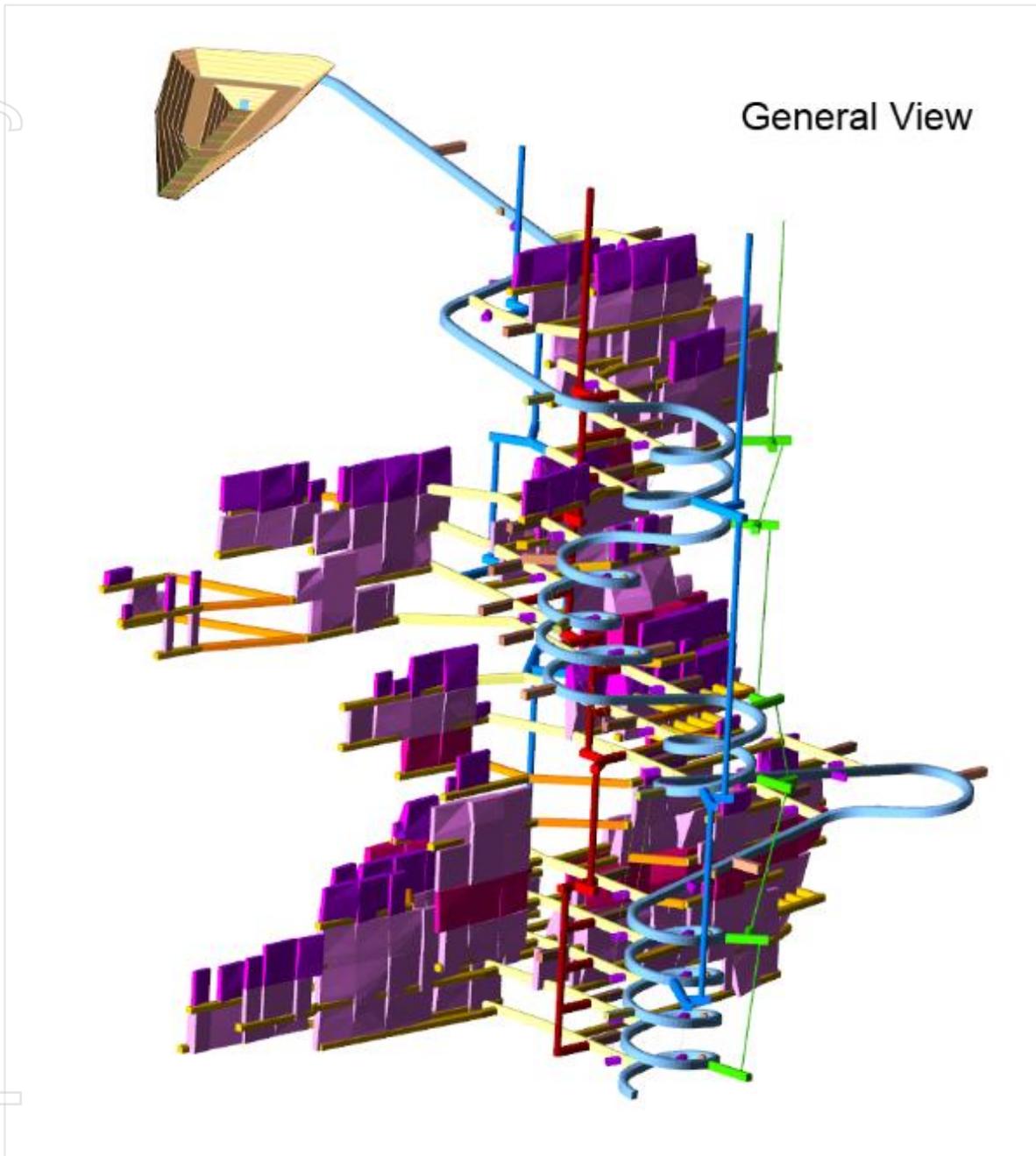
Key elements of the Federation mine design, equipment selection and support services include:

- Boxcut and portal development;
- Decline and lateral development to establish level access for stoping;
- Vertical development for fresh air, return air and secondary egress;
- Surface stockpile, waste rock dumps and explosive magazine;
- Tailings paste fill system and shotcrete batch plant;
- Conventional mechanised mining mobile equipment fleet; and
- Mining fixed infrastructure including ventilation fans, mine dewatering pumps and pipes, raw water pipes, underground substations, high voltage (HV) power supply and refuge chambers.

Preliminary ventilation modelling has been completed using the mine design, production schedule and mining fleet.

The underground dewatering infrastructure will consist of staged pump installations to dewater the underground workings via pipework up the decline discharging into the surface mine water dam.

Figure 1: Federation mine design looking north



6. Metallurgy and processing

To support the Scoping Study, samples of sulphide mineralisation were collected from a total of 12 drill holes and 221m of drill cores. These samples were used in a metallurgical test work program completed by an internationally recognised laboratory under the supervision of an experienced metallurgical consultant.

Key outcomes from the mineralogy analysis and metallurgical test work¹ include:

- Federation can produce saleable lead, zinc and copper concentrates with no deleterious elements identified. Relatively minor amounts of pyrrhotite and pyrite are present.

¹ Refer to ASX Release dated 23 February 2021 “Updated Federation Mineral Resource Estimate” for further metallurgical test work information

- Gold grains were relatively coarse with a high proportion of the gold expected to be recovered into the gravity gold circuit.
- Metallurgical recovery parameters for expected payable elements as shown in Table 2.
- The comminution results indicate that Federation sulphide material is expected to be softer than at Aurelia’s Hera and Peak mines.
- A primary grind size of 75µm is proposed with no regrind. There is an opportunity to increase the size of the primary grind and include regrind mills to reduce power consumption.

Table 2: Scoping Study metallurgical recovery parameters

Parameter	Recovery
Copper recovery to copper concentrate	60%
Lead recovery to lead concentrate	85%
Zinc recovery to zinc concentrate	85%
Gold recovery to doré	55%
Gold recovery to copper concentrate	10%
Gold recovery to lead concentrate	5%
Silver recovery to doré	1%
Silver recovery to copper concentrate	15%
Silver recovery to lead concentrate	60%

The Scoping Study considered both the modification of the Hera process plant and construction of a new process plant at the Hera site to recover gold in doré and produce separate copper, lead and zinc concentrates. The opportunity to treat some Federation material through the process plant at Aurelia’s Peak Mine was also identified.

The proposed process flowsheet will involve three stages of crushing followed by ball milling with hydrocyclone classification to achieve a final grinding product size of 80% passing 75µm, gravity concentration to recover gold from the grinding circuit recirculating load, followed by intensive cyanide leaching of the gravity concentrate, sequential flotation to produce separate copper, lead and zinc concentrates, and tailings disposal by both underground backfilling and surface storage.

7. Tailings

Two options have been considered for Federation tailings, being disposal of all tailings within the existing Hera TSF or use of tailings for paste backfill at Federation with the balance of tailings stored in the Hera TSF.

A tailings capacity assessment confirmed that the Hera TSF has sufficient capacity without increasing the footprint of the facility. Up to three TSF embankment raises are required to store all tailings generated from the Hera and Federation deposits.

Approximately 60% of tailings produced from processing the Federation material would be required if tailings paste backfill is used at the Federation mine. This would reduce the overall volume of tailings being deposited in the TSF and require only two embankment raises.

8. Power and water

A range of power supply alternatives were evaluated based on local generation and grid power connection. Several viable options, including hybrid gas and solar generation technology, were shortlisted for further analysis and selection.

Water will be sourced from groundwater inflow to the underground workings and both established and new surface bores. Water will be transferred by pipeline and pumps to the Hera Mine’s process water pond.

9. Supporting infrastructure

Onsite infrastructure for the Federation Project will include site roads, laydown and access control, mobile maintenance workshop and warehouse, hydrocarbon storage, vehicle wash bays, administration building, change house and laundry, surface water management, utilities and non-mining equipment.

Offsite infrastructure will include a haulage route and water pipeline between Federation and Hera and an expansion of the Hera accommodation village.

10. Environment and community

The Federation Project area is sparsely populated with three residences located in the immediate area, each approximately 5km from the Federation deposit. A small population resides in the rural township of Nymagee, 15km north of the Federation deposit. Land uses within and surrounding the Project area include sheep and goat grazing, forestry and mineral exploration and mining.

The Scoping Study sought to limit environmental impact by minimising the Project footprint and avoiding disturbance to identified heritage sites, ecological communities and landholders.

The Project configuration leverages established infrastructure at the Hera Mine site to minimise environmental impacts. Baseline environmental field surveys and desktop data analysis have been completed over much of the Project area for the exploration decline Review of Environmental Factors (**REF**), including biodiversity, heritage and soils.

A rehabilitation management plan will be developed for the Project. The final land use is expected to be similar to pre-mining (i.e. a mixture of grazing and native vegetation).

Aurelia has commenced stakeholder consultation which will extend to community information sessions, semi-structured interviews and email surveys, and Project updates.

11. Permitting and indicative development timeline

The Company submitted a Development Application (**DA**) to the Cobar Shire Council in early March 2021. The DA seeks approval to expand the existing Hera village to accommodate the additional workforce required to develop the Federation Project.

A REF for the proposed Federation exploration decline and associated surface infrastructure is being finalised for lodgement with the NSW Resources Regulator.

A State Significant Development (**SSD**) application for development consent under the NSW *Environmental Planning and Assessment Act 1979* will be required for the Federation Project. The development application for a SSD must be accompanied by an Environmental Impact Statement (**EIS**). A social impact assessment, including stakeholder engagement, will be prepared for the EIS. The EIS preparation process is expected to require approximately 12 months.

The Project's development consent process will be administered by the Department of Planning, Industry and Environment (**DPIE**) who will place the EIS on public exhibition to allow for stakeholder submissions. The development consent application may be referred to the Independent Planning Commission if objection thresholds are triggered. The Company will respond to submissions and, if necessary, amend the EIS so that DPIE can prepare an assessment report for final determination. The timing of the process, following lodgement of the EIS, is largely within the control of DPIE.

Following development consent, a number of secondary approvals and management plans are required from other government agencies, including mining leases, an environmental protection license, a water access licence, a mining operations plan and a rehabilitation cost estimate. These approvals will require several months following lodgement.

12. Funding

Aurelia has a reasonable basis to expect that it can fund development of the Federation Project as and when required. This basis is a function of Aurelia's current market capitalisation, operating asset base and forecast cashflows, and its proven ability to access debt and equity markets. The final mix of funding for the Federation Project will be a function of Aurelia's financial position and prevailing market conditions at the time of anticipated development approval.

13. Next steps

Aurelia's Board of Directors has approved the immediate commencement of a Feasibility Study (FS) based on the favourable Scoping Study findings and preferred mining method, flowsheet and leverage of Hera infrastructure including increasing the throughput of the Hera processing plant or a new plant with higher capacity which will minimise the social and environmental impacts of the project. The FS will gather additional information that will be used to further develop and refine the project configuration at a higher level of detail with the findings to be considered by Aurelia's Board at the next internal approval gate. Completion of the FS is expected by mid-2022.

The Company now plans to initiate an EIS program and advance the Project through the NSW regulatory approvals process.

Subject to regulatory and Board approval, additional accommodation capacity will be established at the Hera village and an exploration decline developed to allow infill and extensional drilling from underground platforms and extraction of a 20 kt bulk sample for metallurgical evaluation.

The Federation deposit remains open in multiple directions. An intensive infill and extensional drilling program will continue through 2021 to both upgrade and expand the MRE.

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

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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.

In FY20, Aurelia produced 91,672 ounces of gold at a group all-in sustaining cost (AISC) of A\$1,520 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).