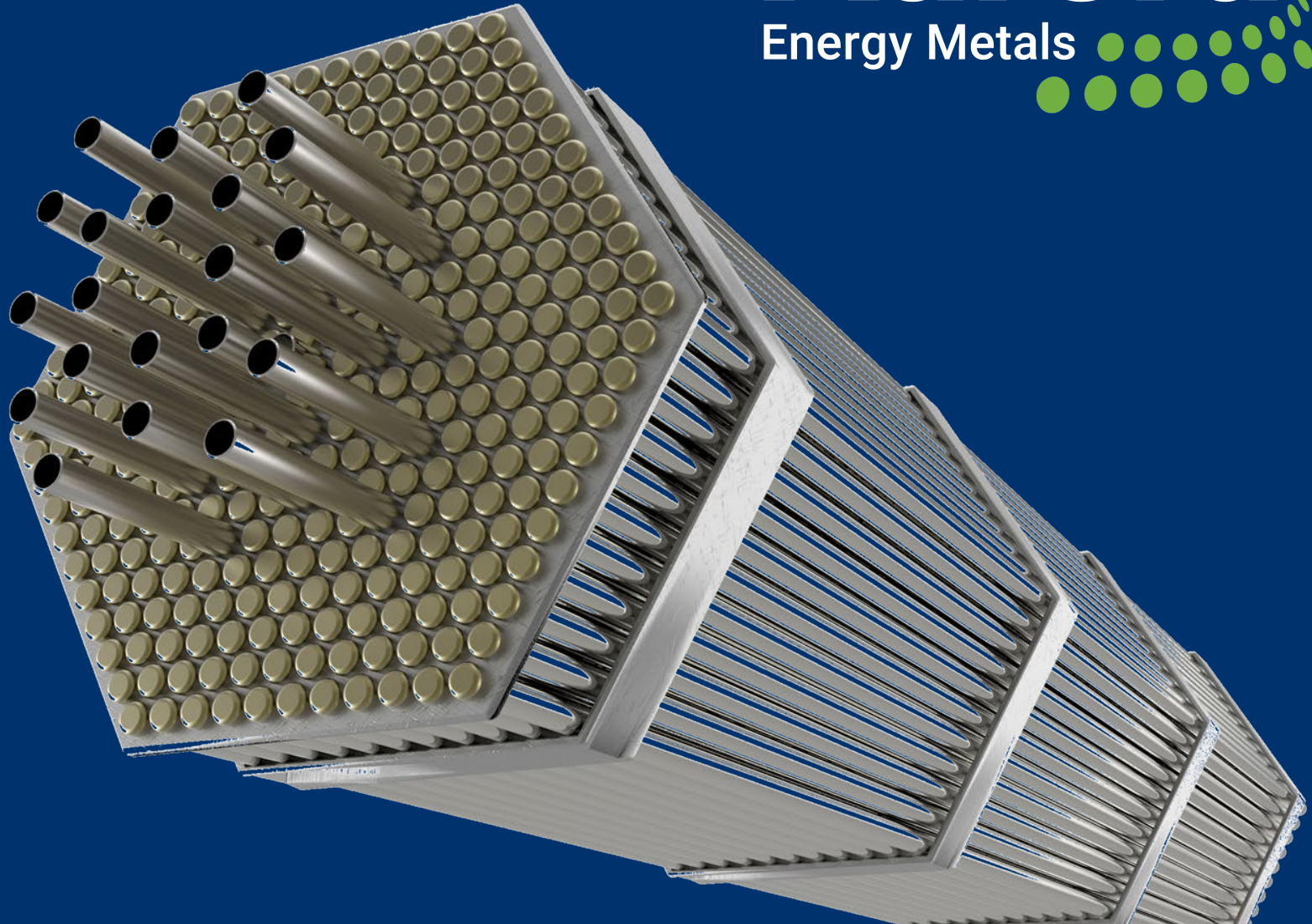


# Advancing the USA's largest measured uranium deposit



Corporate Presentation  
**Scoping Study Interim Update**

April 2024

# Disclaimer

This presentation has been prepared by and issued by Aurora Energy Metals Limited, to assist it in informing interested parties about the Company and its progress. It should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this presentation.

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This presentation includes certain "Forward- Looking Statements". The words "forecast", "estimate", "like", "anticipate", "project", "opinion", "should", "could", "may", "target" and other similar expressions are intended to identify forward looking statements. All statements, other than statements of historical fact, included herein, including without limitation, statements regarding forecast cash flows and potential mineralisation, resources and reserves, exploration results, future expansion plans and development objectives of Aurora Energy Metals Limited are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements.

The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The information contained in this presentation has been presented in accordance with the JORC Code and references to "Measured Resources", "Indicated Resources" and "Inferred Resources" are to those terms as defined in the JORC Code.

Information in this presentation relating to Exploration results and Mineral Resources is based on information compiled by Mr Lauritz Barnes (a consultant to Aurora Energy Metals Limited and a shareholder) who is a member of The Australian Institute of Mining and Metallurgy and The Australian Institute of Geoscientists. Mr Barnes has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Barnes consents to the inclusion of the data in the form and context in which it appears.

## Previous Disclosure:

Information in this announcement is based on the following Aurora Energy Metals Limited Announcements, which are available from the Company's website, [www.auroraenergymetals.com.au](http://www.auroraenergymetals.com.au) or the ASX website.

- 25 March 2024 – Scoping Study Interim Report
- 13 December 2023 – Aurora Uranium Project Scoping Study Update
- 29 August 2023 – Scoping Study Metallurgical Testwork Program Underway
- 26 April 2023 – Positive Review of Historical Uranium Testwork
- 22 February 2023 – Final Assay Results for 2022 Drilling
- 14 February 2023 – Further Assay Results for AEMP
- 17 January 2023 - Thick Lithium & Uranium Zones Returned - Maiden Drill Program
- 23 November 2022 – 34% Increase in Total Uranium Resource to 50.6 Mlbs Maiden Measured Resource Declared at Aurora Uranium Deposit
- 19 October 2022 – Drilling to Commence at Aurora Energy Metals Project
- 27 September 2022 – Aurora Energy Metals Project Update
- 16 June 2022 – Encouraging lithium assays received
- 16 May 2022 – Prospectus

This announcement has been authorised for release on the ASX by the Board of Directors.

# Corporate Snapshot

*Strong Board experience in uranium and development*

**Capital Structure** (on an undiluted basis, as at 29 March 2024)

**1AE**

ASX Code

**179m**

Shares on Issue (inc. 19.9m escrowed)

**A\$18m**

Market Cap  
(at A\$0.10 per share)

**30m**

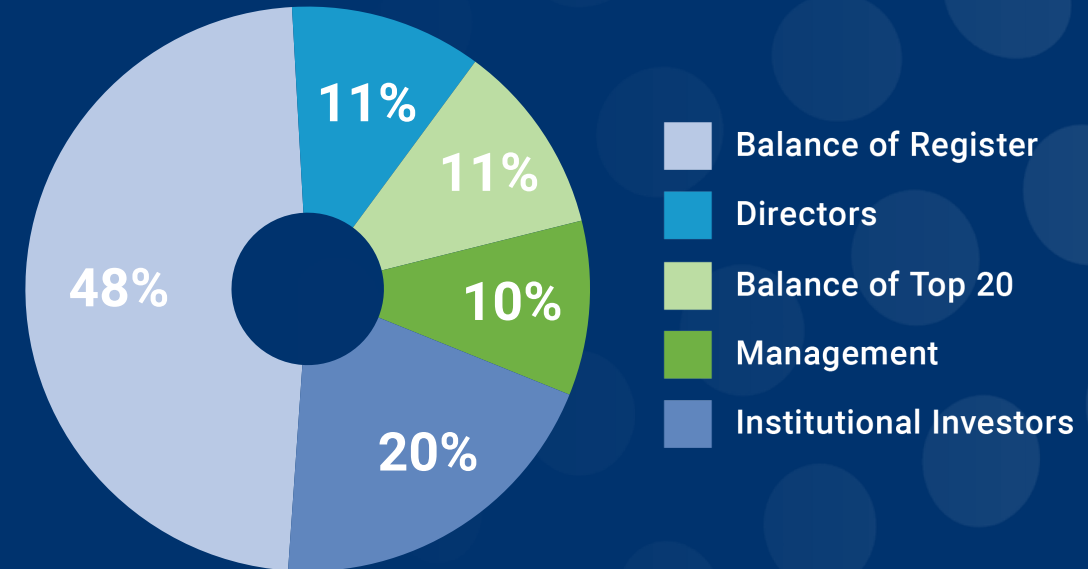
Options (21.2m @ \$0.15, 6m @ \$0.20,  
2.85m @ \$0.30)

**~A\$2.6m**

Cash (as at 31 Dec 2023)

**~A\$15.4m**

Enterprise Value



**PETER LESTER**



**Non-Executive  
Chairman**

**GREG COCHRAN**



**Managing Director  
(Resigned)**

**ALASDAIR COOKE**



**Non-Executive Director**

**JOHN GARDNER**



**Non-Executive Director**

**STEVEN JACKSON**



**CFO/Company  
Secretary**



# Investment Fundamentals

*Aurora Uranium Project (AUP) now largely technically de-risked*

- Large, well-defined, mineable 50Mlb Uranium resource  
81% Measured & Indicated: high-grade core of 19.2Mlb @ 485ppm
- Clear pathway to development in Tier 1 jurisdiction with no known impediments to permitting and regulatory approvals
- Excellent infrastructure and access in the immediate region
- Scoping Study largely complete with financial outcomes due early in Q2 2024
- Project production timing to align with looming US domestic supply crunch from 2028
- Aurora's low \$18m Market Cap<sup>(1)</sup> provides investors with significant leverage to:
  - US supply shortfall
  - Upswing in uranium price

(1) As at 29 March 2024.



# Scoping Study Interim Update

*Completed Scoping Study on track for early Q2, 2024*

- ✓ Mining studies completed; 11-year life of mine targeting 2 Mtpa ROM at low average strip ratio (2.1:1)
- ✓ Mine plan with progressive backfilling into open pit void
  - Minimising project footprint and environmental impact
- ✓ Independent advice confirms no federal, state or local regulatory or permitting issues identified
- ✓ Development strategy initially focused on near-surface, 'high-grade' uranium component
- ✓ Transport studies completed: assessed three technically-viable modes of transportation to the Nevada processing site
- ✓ Infrastructure and regulatory investigations confirm Nevada processing plant as a viable and practical solution
- ✓ Metallurgical studies defined three flowsheet options: modelled using historical and recent testwork results
  - Completion of the current testwork program will set a preferred flowsheet

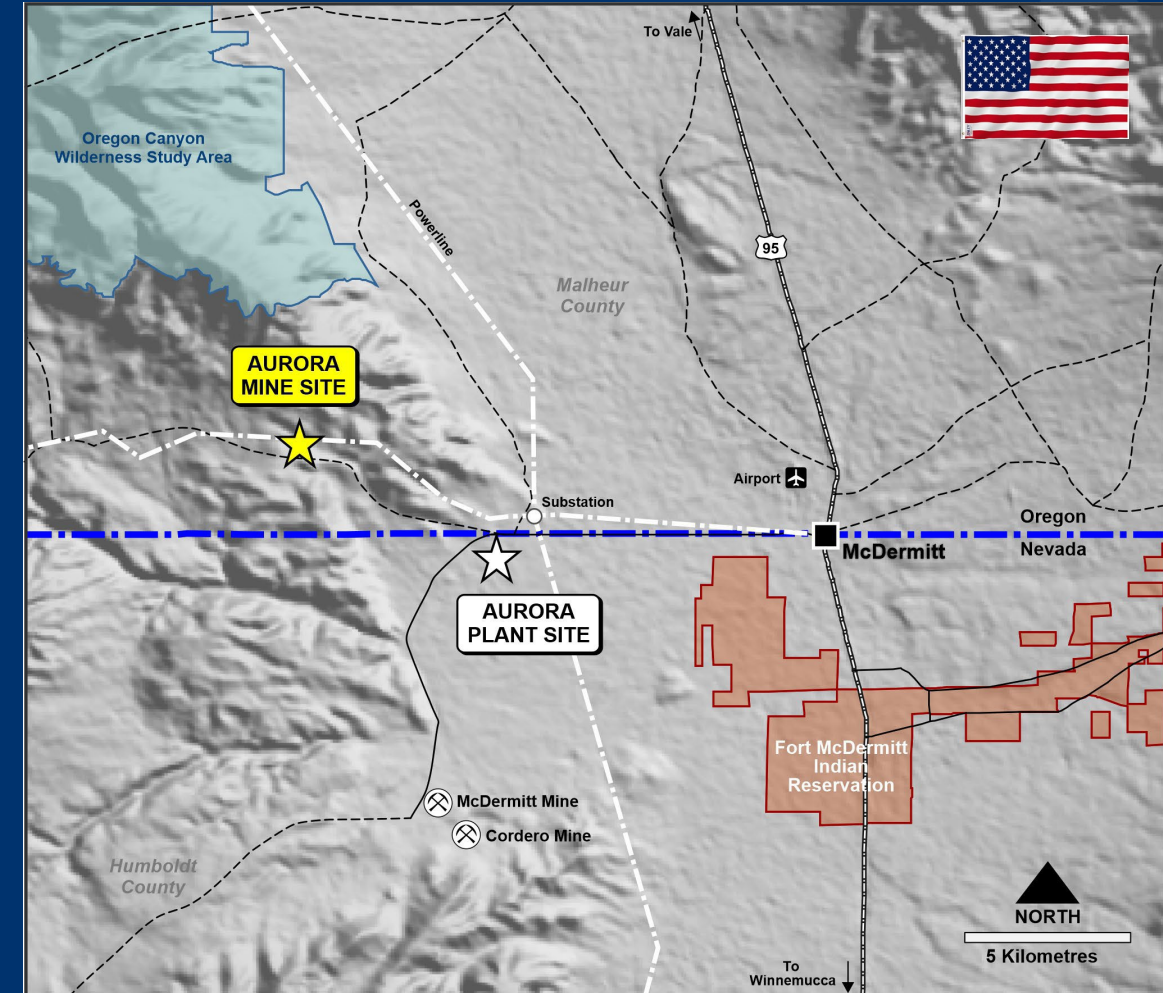


Site Layout: Oregon and Nevada.

# Aurora Uranium Project (AUP)

*Several competitive advantages*

- Historical mining district – excellent infrastructure
- 1970's discovery, extensively drilled and studied
- Large, well-defined resource (50.6 Mlb  $U_3O_8$ <sup>(1)</sup>)
  - 81% Measured and Indicated
- Focused on shallow, high-grade core
  - 18Mt @ 485 ppm  $U_3O_8$  for 19.2 Mlb  $U_3O_8$ <sup>(1)</sup>
- Low-cost hydro power close to Project
- Plant site on private land in Nevada
  - Only 8km from Oregon mine site
- Shallow, free dig overburden



(1). ASX 23 November 2022 – 34% Increase in Total Uranium Resource to 50.6 Mlbs Maiden Measured Resource Declared at Aurora Uranium Deposit.

# Why is US domestic Uranium production so important?

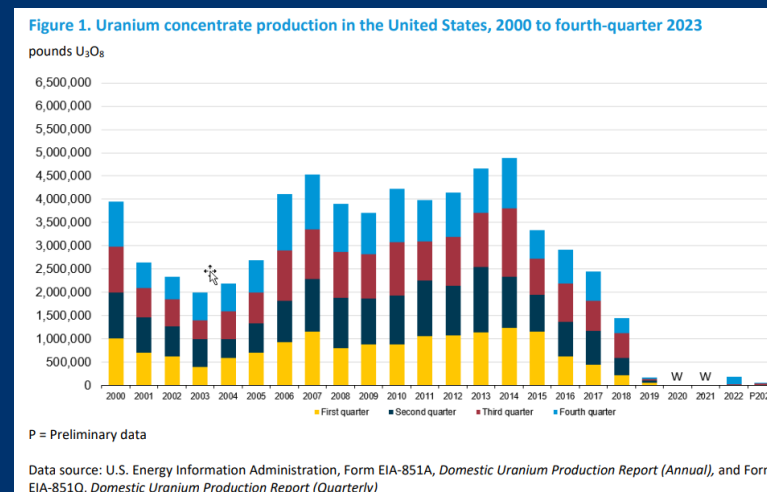
*Domestic production only 0.5% of demand*

- The US has the world's largest nuclear power fleet and is the world's largest uranium consumer.
- Negligible domestic production for years:
  - in 2022 was <0.5% of domestic demand.
- Domestic supply is a priority – supported by the US\$368B Inflation Reduction Act (IRA).
- Bipartisan support to reduce reliance on imports and improve domestic supply chain.
- Russian imports cease completely in 2028.

*“Doubling nuclear capacity is well within what might be required for our net-zero transition... it's a lot of reactors in the 2030's that we're going to have to build, particularly if we want to help with our 2035 goal of 100 percent clean electricity.”*

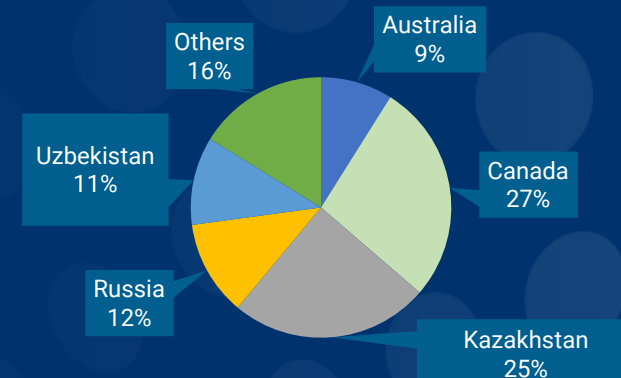
Kathryn Huff, Assistant Secretary, DOE Office of Nuclear Energy.  
5 November, 2022.

US domestic production in 2022 was **194,000 lbs.**  
Owners and operators of U.S. civilian nuclear power reactors purchased **40.5 million pounds** of  $U_3O_8$  (equivalent) from U.S. and foreign suppliers during 2022<sup>1</sup>.



*Negligible domestic production since 2018...*

## US Sources of Uranium<sup>1</sup> 2022

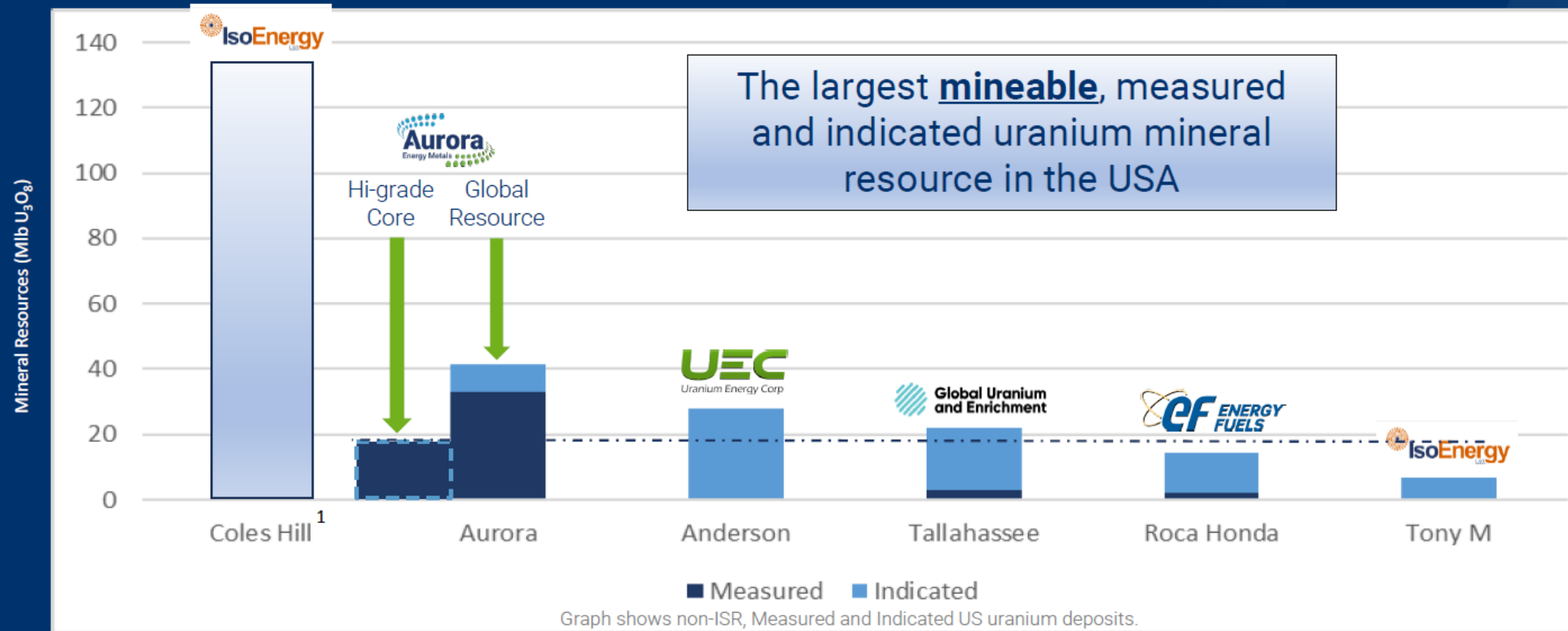




# One of the largest, mineable US Uranium Projects

Well-defined deposit in a Uranium-hungry, tier 1 jurisdiction

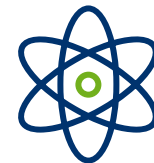
*Aurora's focus is on the shallow high-grade core: 18Mt @ 485 ppm  $U_3O_8$  for 19.2 Mlb  $U_3O_8$*



Note: 1. Coles Hill is in Virginia, which imposed a moratorium on uranium mining in 1982. This ban was upheld by the Supreme Court of Virginia in September 2021.



# Concluding Remarks



## US is a Tier 1 Jurisdiction

The world’s largest uranium consumer, with aggressive plans to re-establish domestic production.

## Asset Quality

Largest mineable Measured & Indicated uranium resource in the US.

## Infrastructure

Will enable accelerated development, with reliable, clean energy supply.

## Undervalued

50Mlb U<sub>3</sub>O<sub>8</sub> resource in Tier 1 jurisdiction on a pathway to permitting and development and only a \$18m<sup>(1)</sup> market cap.

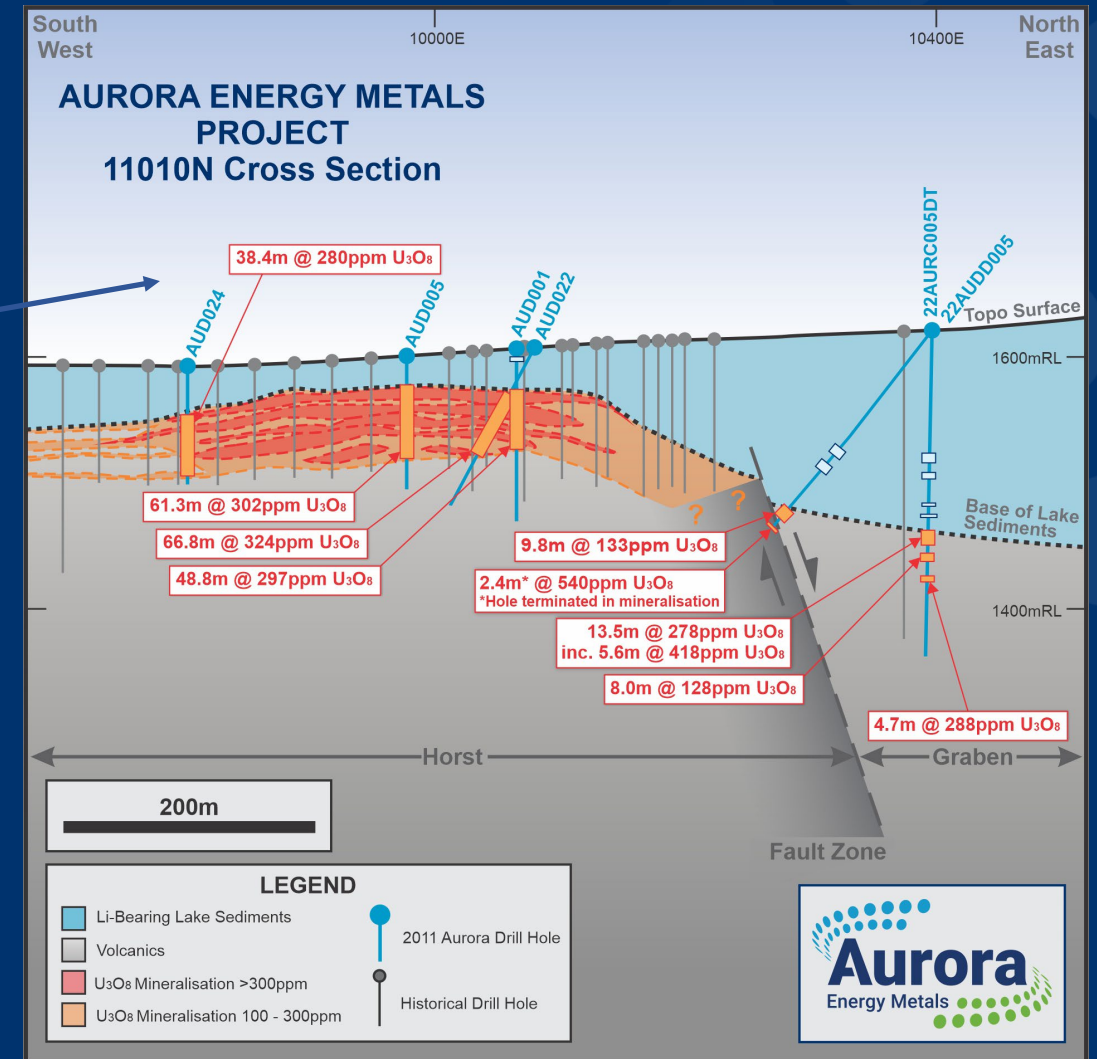
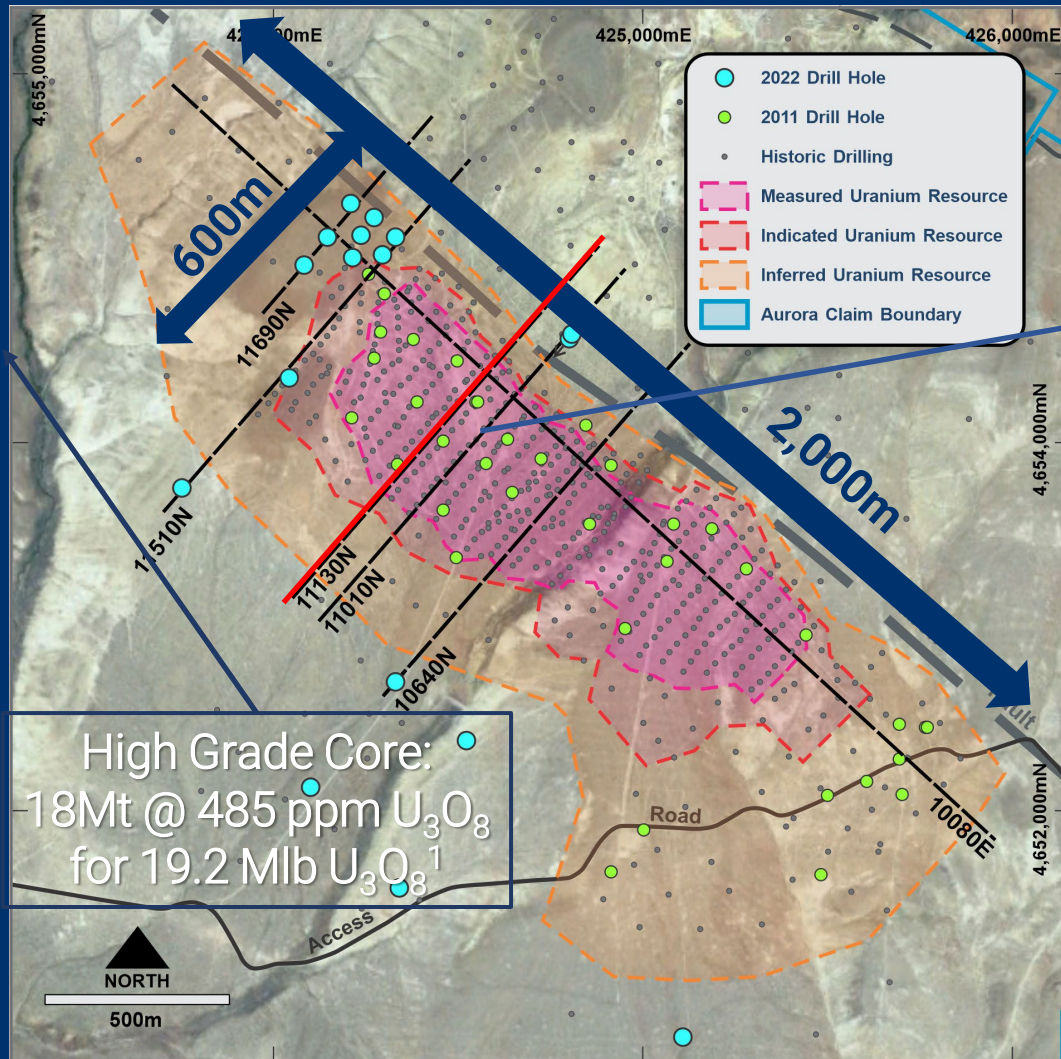
(1) As at 29 March 2024.

# Appendices

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# High Quality Uranium Resource

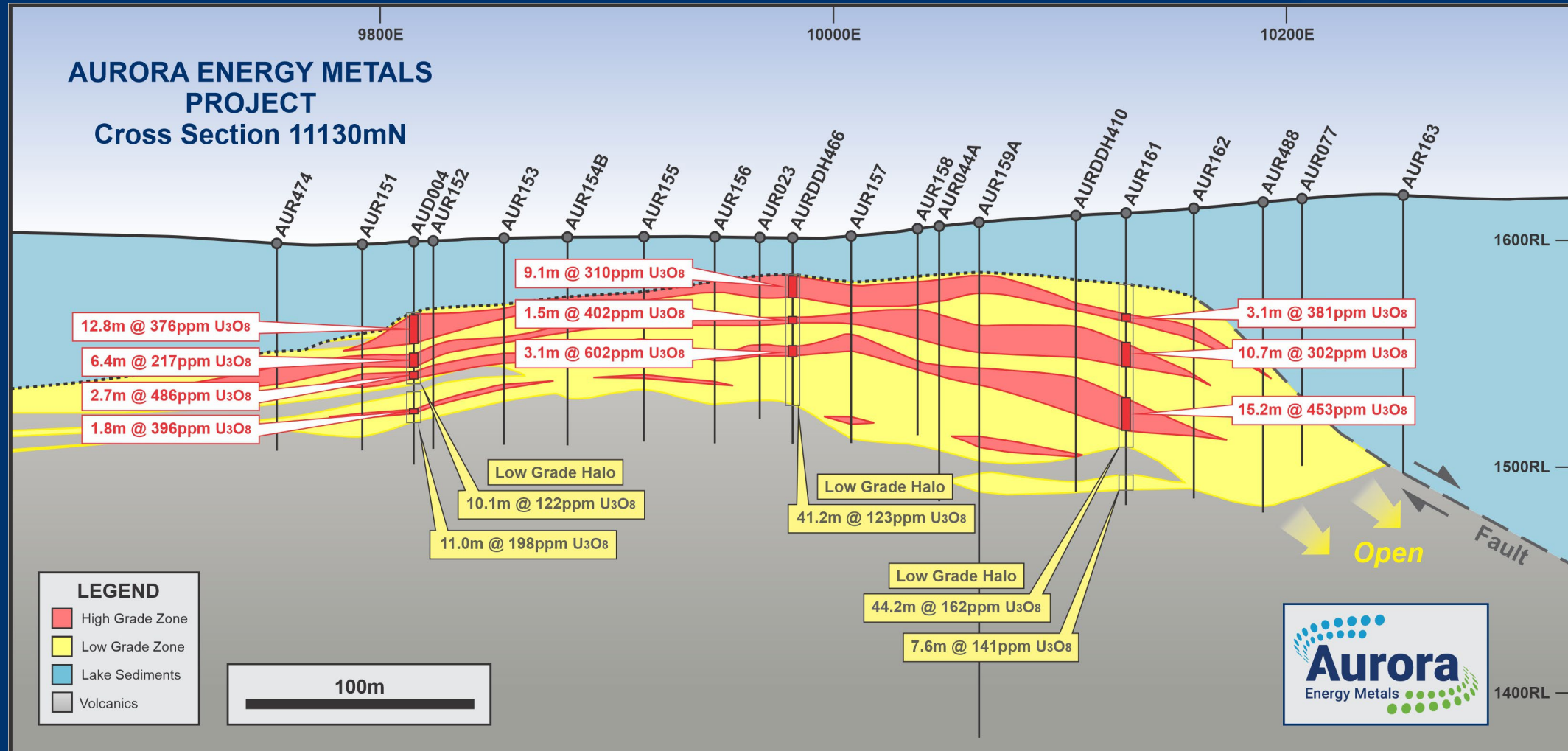
*Well understood, well defined Mineral Resource; over 600 holes drilled, still with some exploration upside<sup>1</sup>*





# Simple Mining – Low Geological Risk

Global resource ~82% Measured and Indicated, High grade core ~99.5% Measured and Indicated<sup>1</sup>





# Mining Study and Permitting

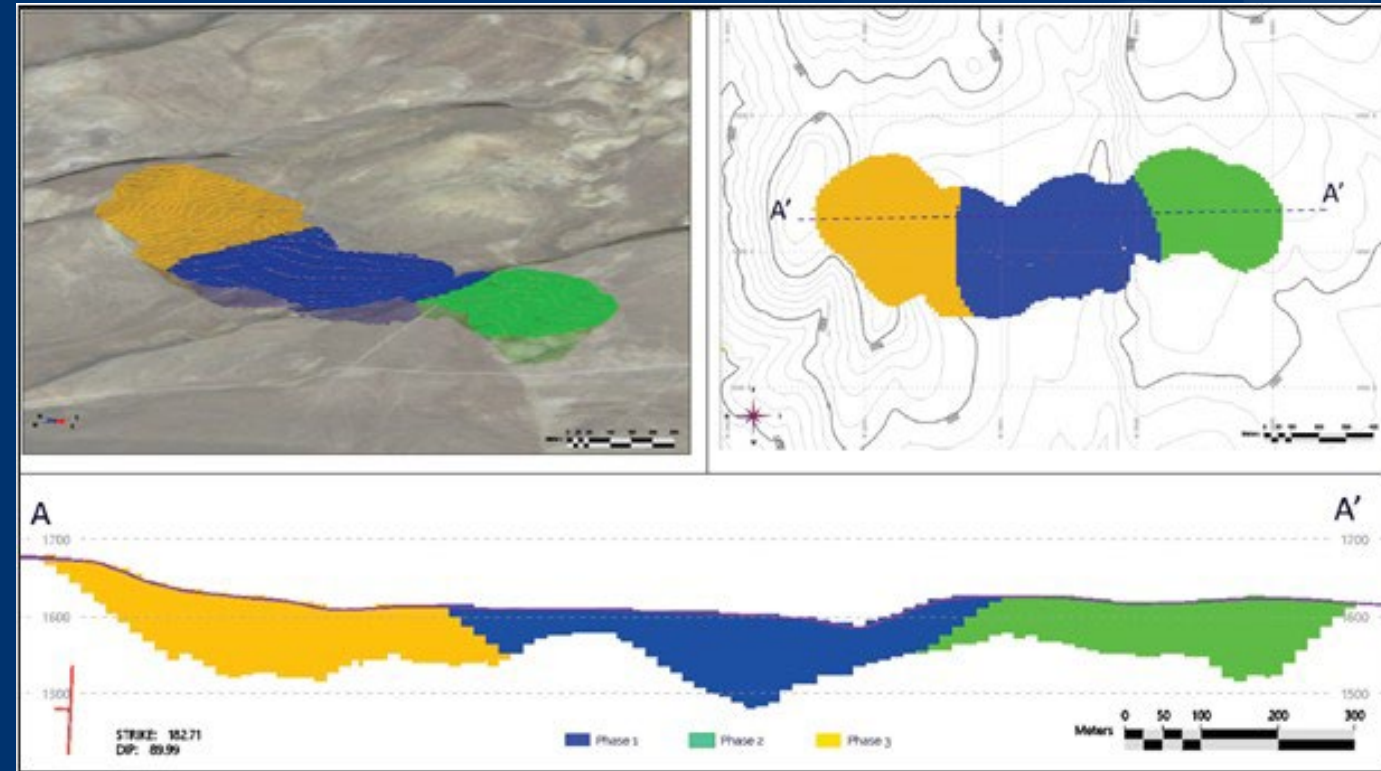
*orelogy™ has completed a scoping-level mining study*

## Mine Plan

- Targeting 2 Mtpa ROM at a low average strip ratio of 2.1:1 over 11 years
- 3 phases of mining to facilitate progressive backfilling waste into mined open pit
  - minimise project footprint and environmental impact

## Regulatory and Permitting

- Proposed Mine Plan a key component of regulatory submission through the Oregon Department of Geology and Mineral Industries (DOGAMI)
- Processing plant to be on land, privately-owned by the Company, in Nevada
- No federal, state or local regulatory or permitting issues identified that would preclude development approval
- Baseline environmental and cultural studies commenced



Open Pit Sequencing (Phases 1, 2 and 3).

# Transport and Infrastructure

*Mine and processing facility favourably located*

## Ore Transport

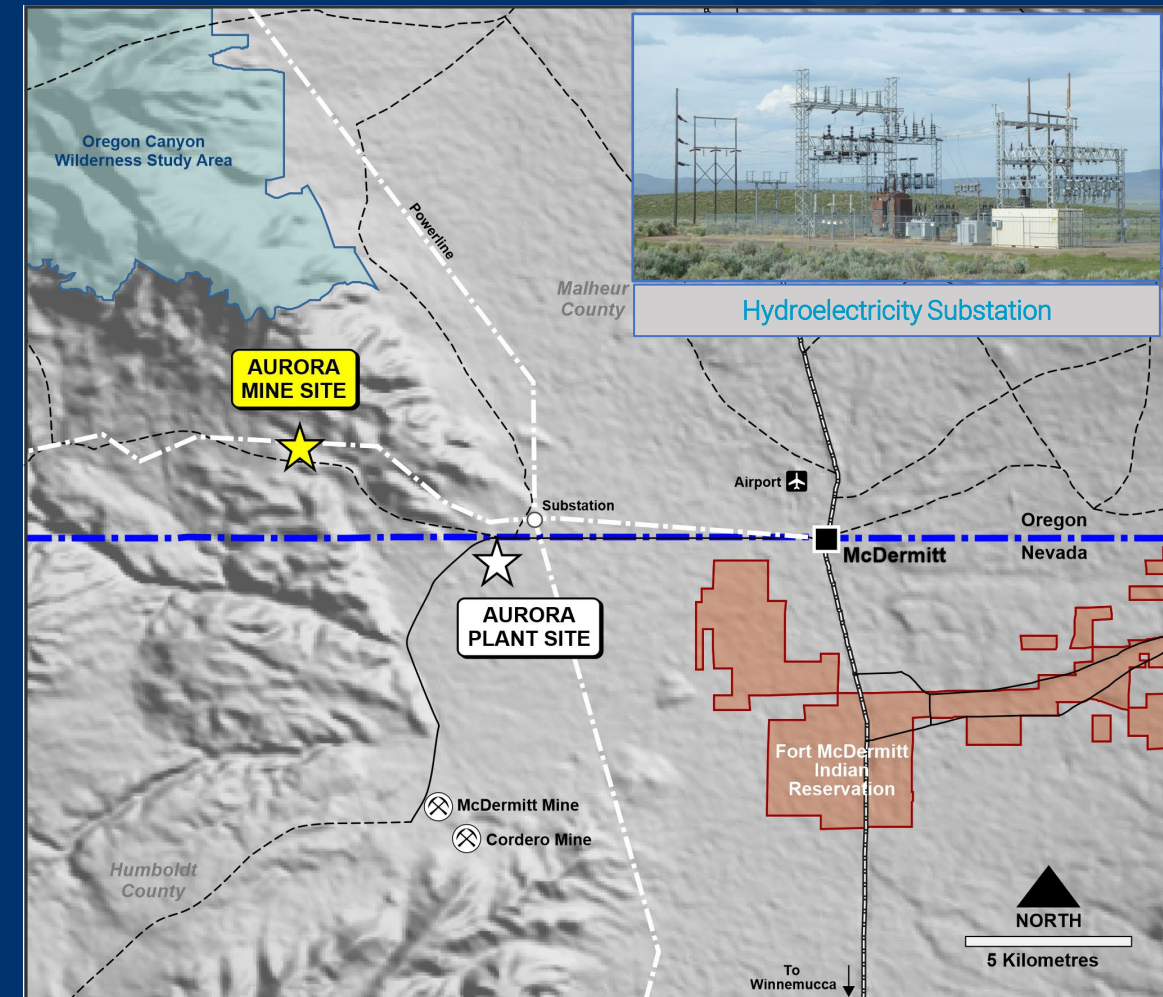
- All three assessed options for ore transportation – road, conveyer, pipeline – confirmed as technically viable.
- No restrictions on interstate transfer of ore ('Agreement States').

## Processing Facility

- Plant and tailings facilities located on privately held land in Nevada; 8km east of the AUP.

## Infrastructure

- Excellent access to all key infrastructure.
- Water: hydrogeological model completed; viable access to water confirmed.
- Power: existing local power substation located close to Aurora site.
- Established road and telecommunications networks across the region.



Excellent Regional Infrastructure.

# Metallurgical Studies

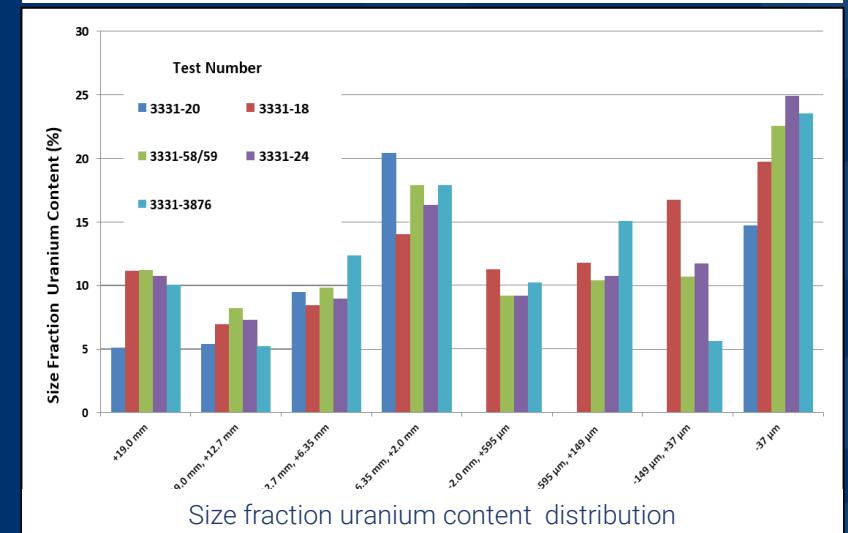
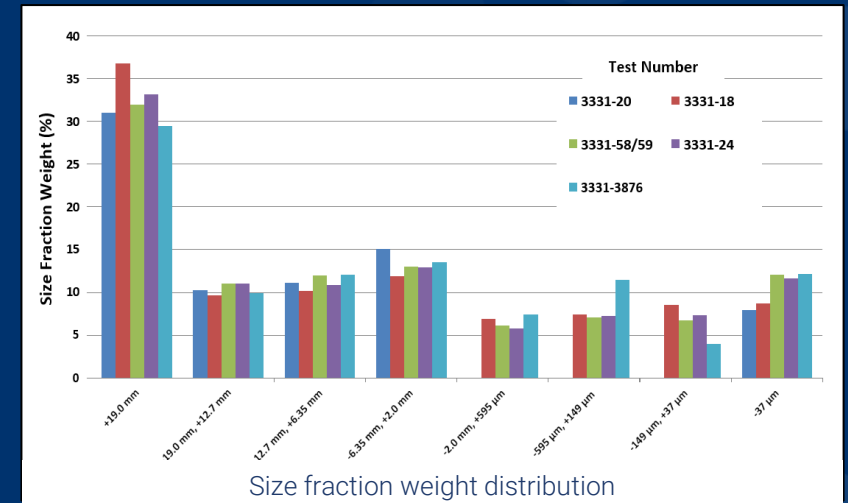
*Three flowsheet options have been costed and modelled*

1. Atmospheric leach
  2. Pressure leach
  3. Hybrid – various combinations involving separate treatment of middlings and clay fractions
- Each option incorporates a beneficiation step; rejecting hard, low-grade material.
  - Current testwork assessing
    - atmospheric leaching of course middlings and clays
    - pressure leaching of clays
    - aim to generate best economic option
  - Completion of the current testwork program is required before a preferred flowsheet is selected.
  - Completion of the Scoping Study is expected early this quarter, subject to laboratory turnaround times for testwork and assays.

# Ore Beneficiation by Scrubbing/Screening

*Potential to significantly improve forecast processing costs*

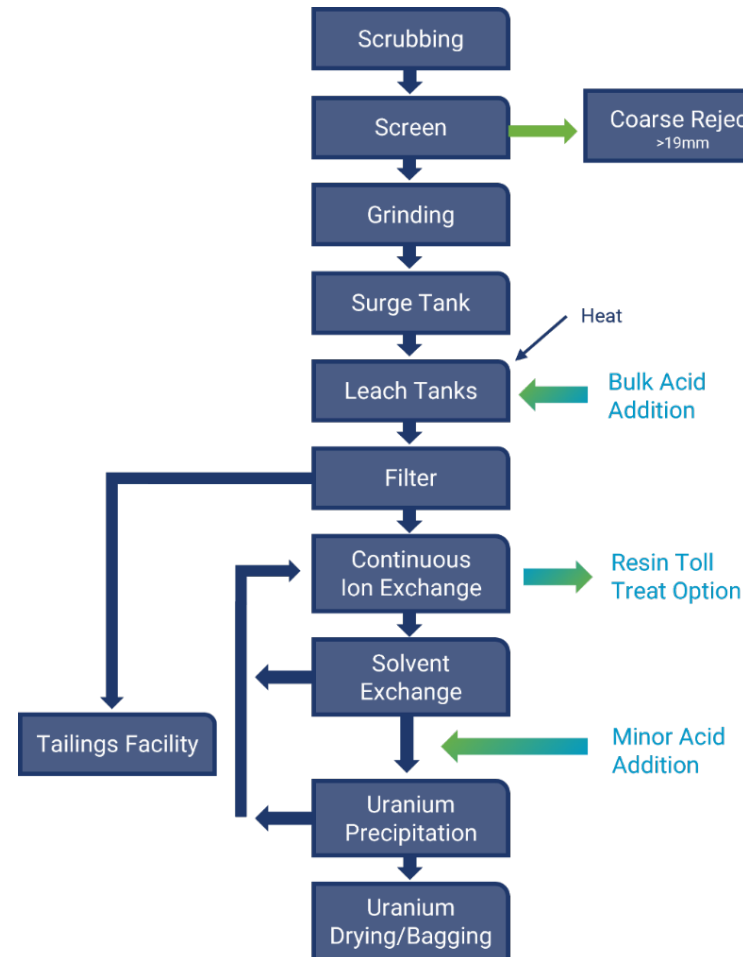
- Good results achieved in scrubbing and wet screening tests, supporting earlier test work.
- 30% mass reject with a 90% U3O8 recovery.
- Hard, low grade, low recovery material rejected.
- Capital costs likely to be lower due to reduced requirements for milling and leach circuit.
- Similarly, potential to reduce forecast operating costs due to lower power and reagent consumption.





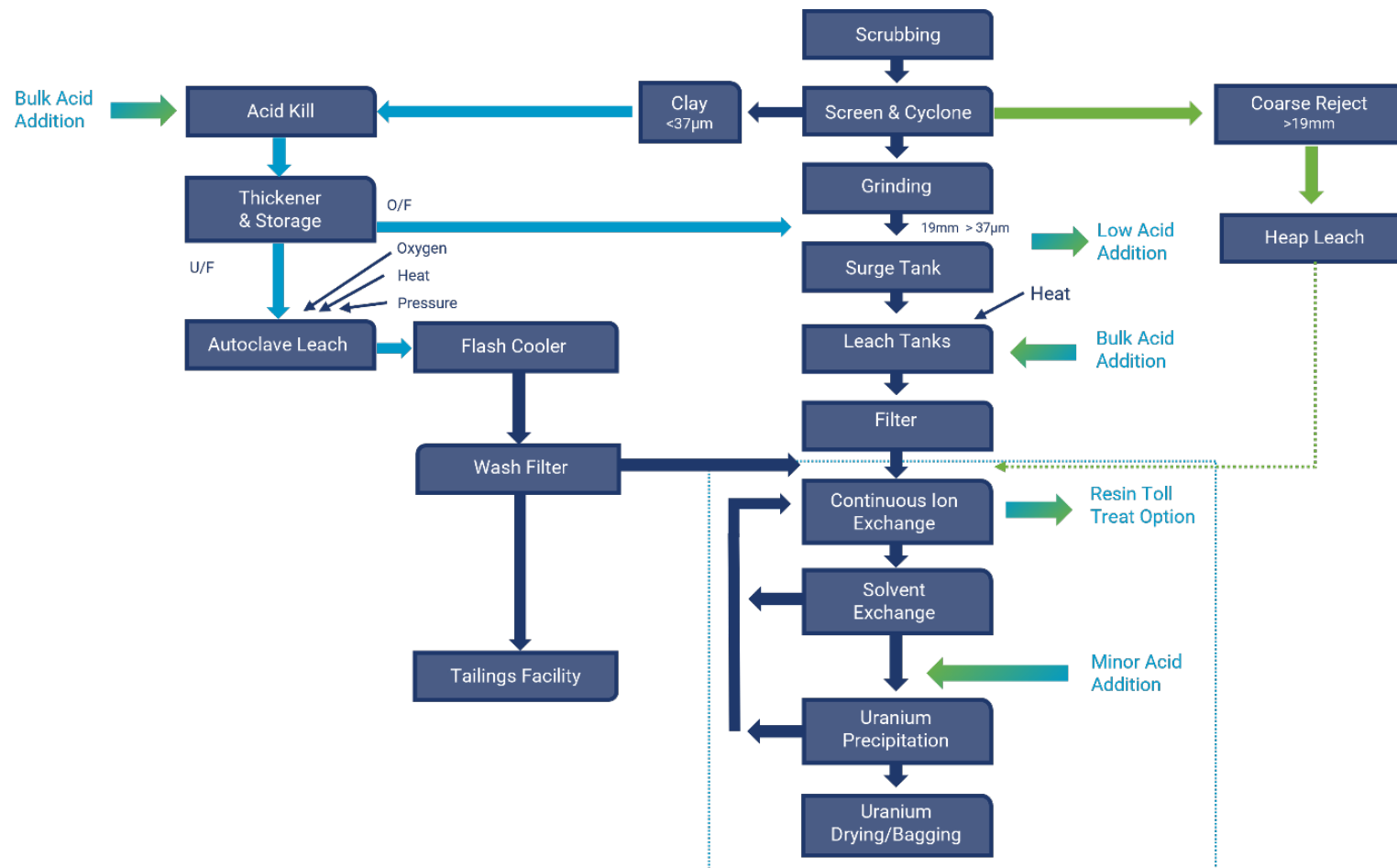
# Atmospheric Leach Flowsheet

*Final Metallurgical testing underway to confirm parameters*



# Hybrid Flowsheet

Hybrid approach to test optimal balance of recovery and cost



# 2024 Scoping Study Consultants

*AUP Scoping Study has been undertaken by the following parties, listed by work area:*

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- Trepanier Pty Ltd: resource modelling.
- DRA Global: metallurgical testwork supervision and flowsheet development.
- Amerston Consulting Ltd: independent metallurgical review and flowsheet development.
- ALS Global: metallurgical testwork and assay laboratory.
- orelogy™: mining studies.
- Fortin Pipelines: pipeline testwork, design and costing.
- Doppelmayr Transport Technology GmbH: RopeCon® design and costing.
- GSI Water Solutions: groundwater studies.
- WWC Engineering and Environmental Restoration Group, Inc: permitting and approvals.
- Stoel Rives LLP and Tonkon Torp LLP: permitting and approvals.

All other areas of the Scoping Study have been managed by Aurora personnel and contractors.

# Uranium Resource Summary<sup>1</sup>

Resource Zone	Measured			Indicated			Inferred			Total		
	Mt	U <sub>3</sub> O <sub>8</sub> ppm	MLb U <sub>3</sub> O <sub>8</sub>	Mt	U <sub>3</sub> O <sub>8</sub> ppm	MLb U <sub>3</sub> O <sub>8</sub>	Mt	U <sub>3</sub> O <sub>8</sub> ppm	MLb U <sub>3</sub> O <sub>8</sub>	Mt	U <sub>3</sub> O <sub>8</sub> ppm	MLb U <sub>3</sub> O <sub>8</sub>
High Grade Zone <sup>1</sup>	16.3	487	17.5	1.6	467	1.6	0.1	425	0.1	18	485	19.2
Low Grade Zone <sup>2</sup>	43.2	162	15.4	19.8	161	7	26.3	155	9	89.3	160	31.5
Total	59.5	251	32.9	21.4	184	8.7	26.4	157	9.1	107.3	214	50.6

1. High grade zone estimated using a 300 ppm U<sub>3</sub>O<sub>8</sub> cut-off
2. Low grade zone estimated using a 100 ppm U<sub>3</sub>O<sub>8</sub> cut-off
3. Appropriate rounding applied

## JORC Disclaimer:

Information in this announcement relating to Exploration Results and Mineral Resources is based on information compiled by Mr Lauritz Barnes (a consultant to Aurora Energy Metals Limited and a shareholder) who is a member of The Australian Institute of Mining and Metallurgy and The Australian Institute of Geoscientists. Mr Barnes has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Barnes consents to the inclusion of the data in the form and context in which it appears.

Information in this announcement relating to Mineral Resources is extracted from the Announcement released by the ASX on 23 November 2022. Aurora Energy Metals Limited confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource continue to apply and have not materially changed. Aurora Energy Metals Limited confirms that the form and context in which the Competent Persons' findings are presented in this announcement have not been materially modified from the original market announcement.

1. ASX 23 November 2022 – 34% Increase in Total Uranium Resource to 50.6 MLbs Maiden Measured Resource Declared at Aurora Uranium Deposit





Peter Lester  
Non-Executive Chairman

Alasdair Cooke  
Non-Executive Director

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