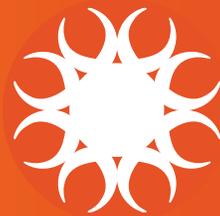


ASX: AGE

Annual General Meeting  
CEO Update – November 2023



**Alligator  
Energy**

## Disclaimer

This presentation contains projections and forward-looking information that involve various risks and uncertainties regarding future events. Such forward-looking information can include without limitation statements based on current expectations involving a number of risks and uncertainties and are not guarantees of future performance of the Company. These risks and uncertainties could cause actual results and the Company's plans and objectives to differ materially from those expressed in the forward-looking information. Actual results and future events could differ materially from anticipated in such information. These and all subsequent written and oral forward-looking information are based on estimates and opinions of management on the dates they are made and expressly qualified in their entirety by this notice. The Company assumes no obligation to update forward-looking information should circumstances or management's estimates or opinions change.

## Competent Person's Statement – Uranium

Information in this report is based on current and historic Exploration and Resource Drilling Results compiled by Dr Andrea Marsland-Smith, who is a Member of the AusIMM. Dr Marsland-Smith is employed by Alligator Energy as Chief Operating Officer (COO) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity she is undertaking (including 15 years working with ISR uranium development and operations) to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Marsland-Smith consents to the inclusion in this release of the matters based on her information in the form and context in which it appears.

## Competent Person's Statement – Nickel Cobalt exploration

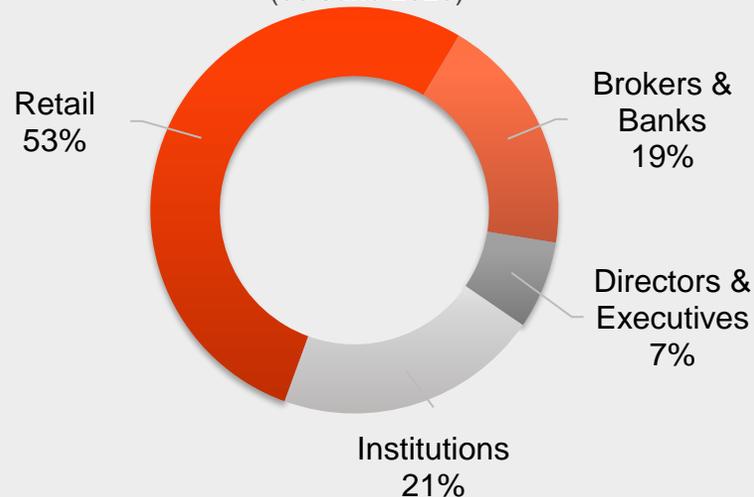
Information in this report is based on current and historic Exploration Results compiled by Mr Geoffrey Chapman who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Chapman is a Consultant Geologist with Alligator Energy Limited, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Chapman consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

## Capital Structure (at 23 November 2023)

Share Price	0.059
Ordinary Shares*	3,862.3 M
Performance Shares & Unlisted Options	175.3 M
Cash at 30 September* [Add'n \$3.26M from SPP on 20 Oct 2023]	~\$37.9 M
Market Cap	\$227.9 M

## Top 50 Shareholders

(30 June 2023)



## Leading Uranium Focussed Board

Member	Description
<b>Paul Dickson</b> Chairman	Paul is a finance and corporate advisory professional with more than 30 years' experience in the finance services industry. Paul has been an AGE Board member since inception and Chairman for 3 years.
<b>Gregory Hall</b> CEO & Managing Director	Greg is an experienced mining engineer and CEO with 35+ years' experience in uranium and other mine management. He previously held roles at WMC Olympic Dam & nickel mines, LKAB Iron Ore (Sweden), ERA Ranger & Jabiluka Uranium and international commodities marketing with Rio Tinto (ERA) Uranium, and Bauxite & Alumina groups. Greg was also founding CEO of Toro Energy Ltd.
<b>Peter McIntyre</b> Non-Executive Director	Peter is a civil engineer and experienced CEO. He previously held GM roles with WMC Ltd, including development of major mining projects. Peter was the founding MD of Extract Resources during the discovery and pre-feasibility of Husab Uranium mine in Namibia, sold for US\$2.2 billion.
<b>Fiona Nicholls</b> Non-Executive Director	Fiona has 30 years of experience working across a range of business functions including strategy, planning, ESG and operations, multi-country project development and approvals and due diligence processes. Fiona was previously on the Board of Rössing Uranium and alternate director for ERA uranium.
<b>Callum McIntyre</b> Alternate Non-Executive Director	Callum has extensive experience in the finance and technology industries, both in Australia and overseas. Previously based in London with international finance group Thomson Reuters.

\* Note as of 20 Sept 2023, AGE announced a successful placement of 491M shares to institutional and sophisticated investors at A\$0.052 for a raising of \$25.5M before costs. An SPP to all shareholders was subsequently undertaken raising an additional \$3.26M announced on 20 October 2023.

## Board and Management Team



**Paul Dickson**  
Non-Executive Chairman



**Gregory Hall**  
CEO & Managing Director



**Peter McIntyre**  
Non-Executive Director



**Fiona Nicholls**  
Non-Executive Director



**Callum McIntyre**  
Alternate Director



**Mike Meintjes**  
CFO & Company Secretary



**Dr Andrea Marsland-Smith**  
COO



**Mike Barlow**  
Exploration Manager

# Capital raise and share performance

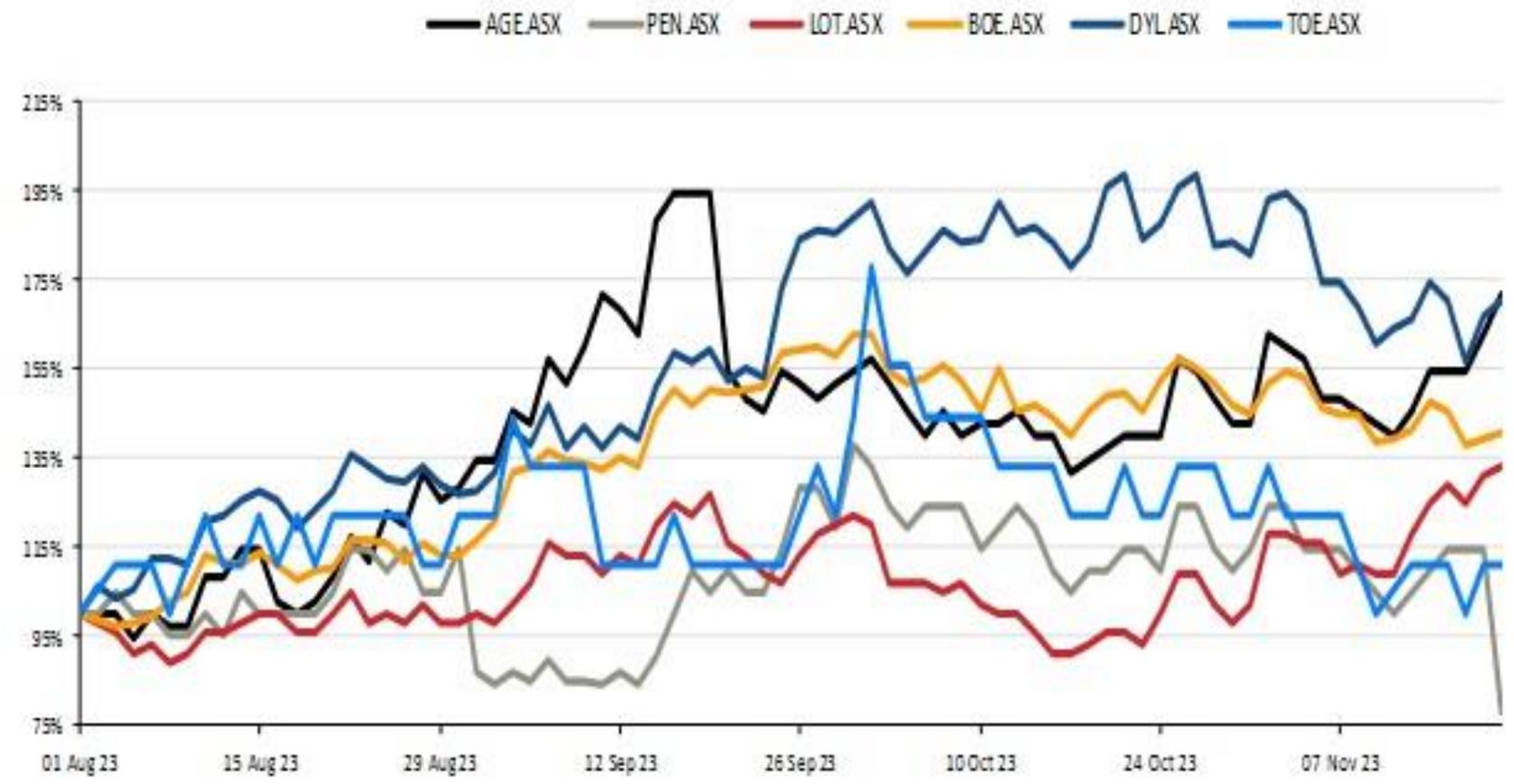
**June Quarterly report** - \$2.3M spend  
– \$18.5M cash –

Highlighted upcoming expenditure:

- ramp up of Samphire pilot plant procurement and fabrication, ongoing resource drilling, hydrogeological well drilling
- ARUP IP survey and increased drilling, BLU indigenous survey

**Sept Quarterly report** - \$4.5M spend  
- \$37.9M cash (\$14M retained plus \$23.9M net placement)

Additional \$3.26M SPP proceeds post quarter end



# Alligator Energy: Multi-Project Uranium & Energy Mineral Portfolio

## Samphire Uranium Project, SA

- Defined uranium JORC Resource and Scoping Study with competitive economics. Significant scope to expand resource.

## Alligator Rivers Uranium Province, Arnhem Land, NT

- Existing JORC Resource Estimate and exploration activity underway focused on area north of U40 Prospect.

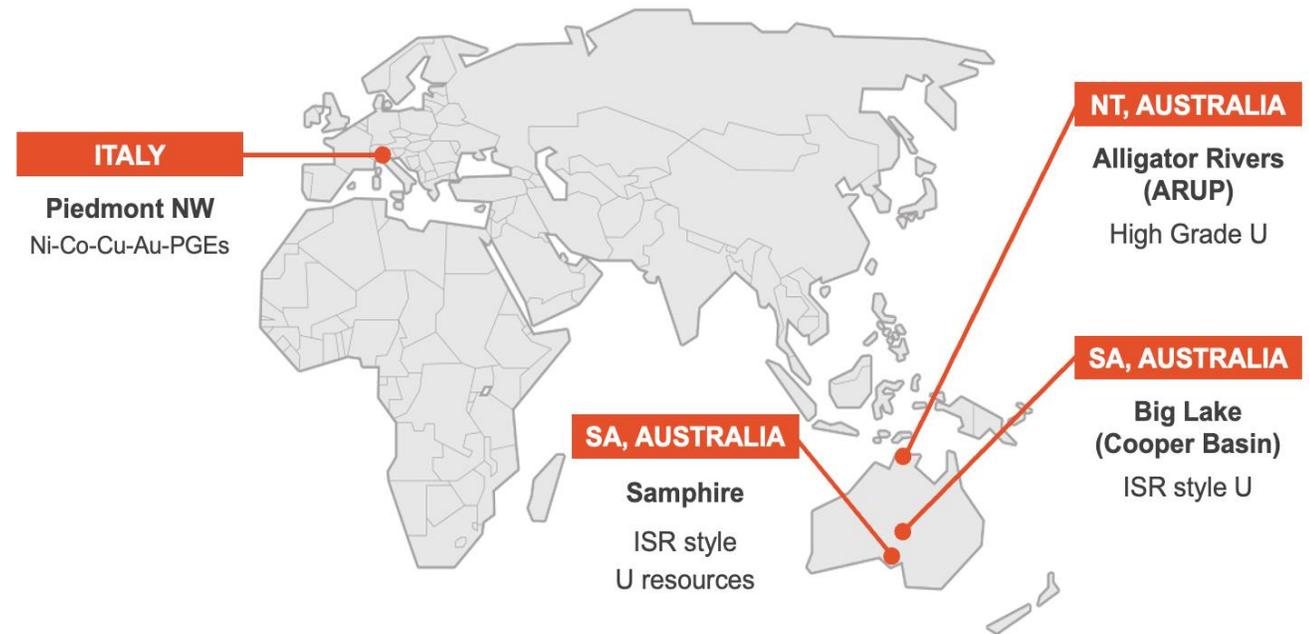
## Big Lake Project, Cooper Basin, SA

- ISR uranium model – Inaugural exploration program underway.

## Piedmont Project, Italy

- Nickel and cobalt exploration in historical mining region.

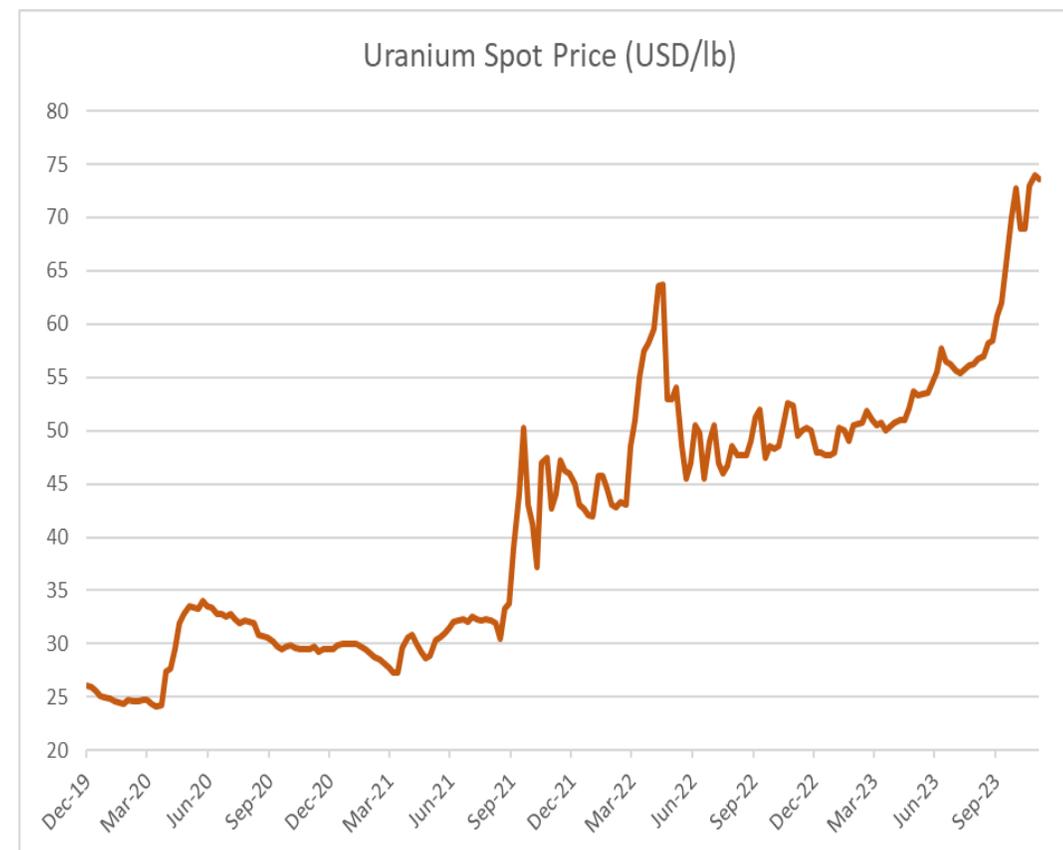
*AGE will continue to evaluate and acquire further uranium or energy mineral assets in key target regions.*



# Uranium and Nuclear Fuel - Commodity Price Drivers

## Key drivers behind the market and Uranium spot price:

- **Global Energy Transition – Net Zero by 2050 initiative**
  - Biden Administration and EU support for nuclear
  - 60 reactors under construction across 15 countries –
  - 11 reactors (33 still in commissioning) restarted in Japan
- **Increased global energy security concerns**
  - Ukraine war/Russian sanctions – reduction of EUP offtake from Russia
- **Inventory rundown – LT contracting up**
  - Limited new production, supply disruption (Niger) and emergence of EFTs (Sprott/Yellow Cake)
  - Conversion and enrichment supply issues
  - During 2022, 122 Mlbs put under LT contract
  - By Oct 2023, already 150 Mlbs under LT contract



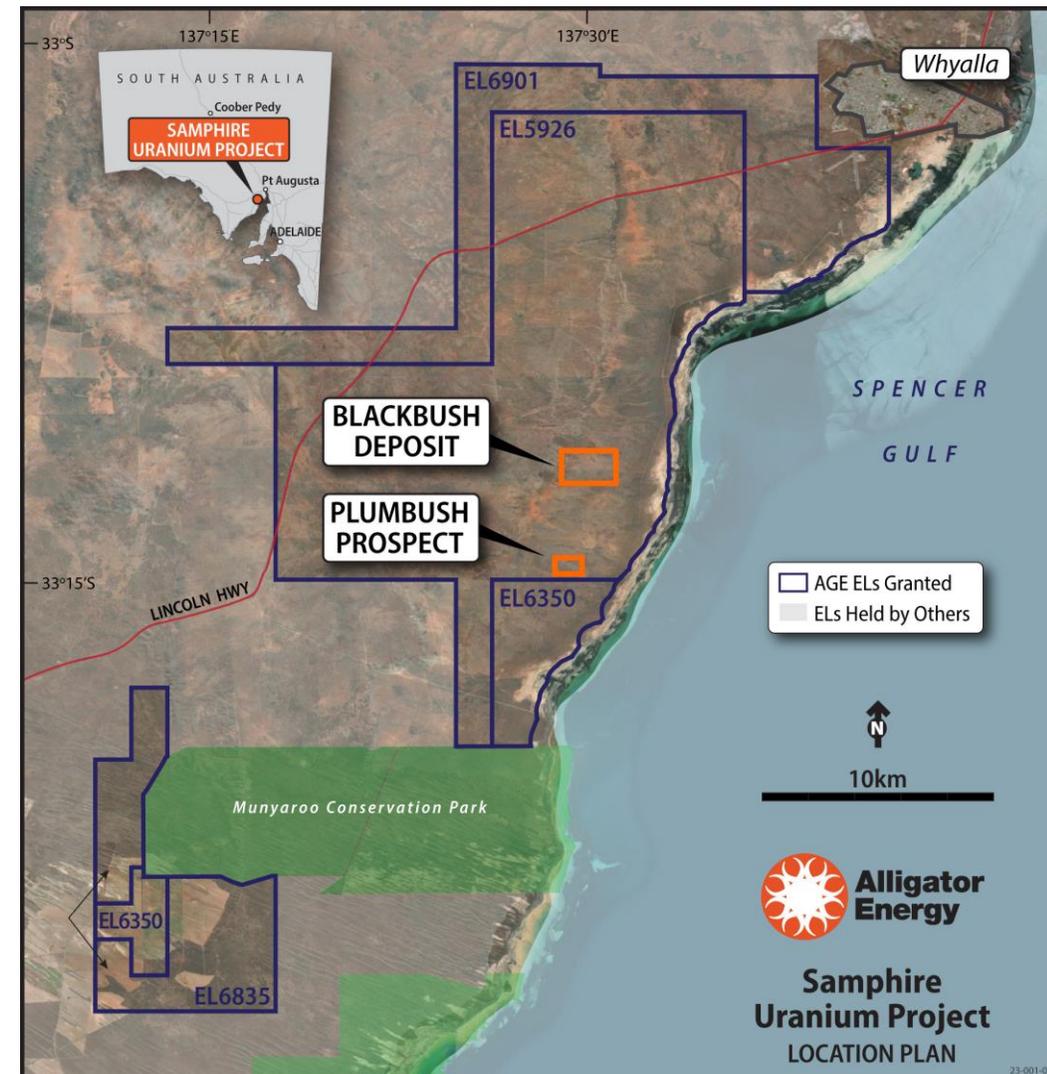
**Medium term influences** – advancing technologies – SMRs (< 300MW) and Micros (1-10MW)

# Samphire Uranium Project: Introduction

## ISR uranium project near Whyalla, with robust economics

- Proven In Situ Recovery (ISR) operation planned, allowing **very low impact mining**.
- JORC Resource Estimate of 18.1Mlbs U3O8.
- Robust initial Scoping Study based on 10Mlbs U3O8 over 12 years, using **Blackbush Deposit only**.
- Drilling ongoing to support a further Resource Estimate update at Blackbush.
- Scoping Study update in parallel targeting improved economics.
- Exploration target range (including Plumbush) being determined – **resource growth potential**
- Field Recovery Trial for 1H of 2024\* to confirm parameters to be used in a full feasibility study during 2024.

\* On receipt of all regulatory approvals



# Samphire Uranium Project Scoping Study: Key Metrics



**A\$129.3 m**

**CAPEX**  
(including contingency)



**3.5 years**

**Payback**



**29%**

**IRR\***  
(post-tax, real, ungeared)



**A\$152.0 m**

**NPV<sub>8</sub>\***  
(post-tax, real, ungeared)



**US\$30.20 /lb**

**AISC**  
(A\$ 43.2 /lb)



**US\$17.9 /lb**

**Cash Costs**  
(A\$25.6 /lb)

*\*Calculated using US\$65 per lb uranium price and 0.70 US/A\$ exchange rate inclusion of significant contingencies and inflation of 40%.*

**Currently undertaking Resource update, Scoping Study update targeting increased production target of 1.2Mlbs pa, and Exploration Target range estimates for Nov / early Dec announcement .**

## Current Resource

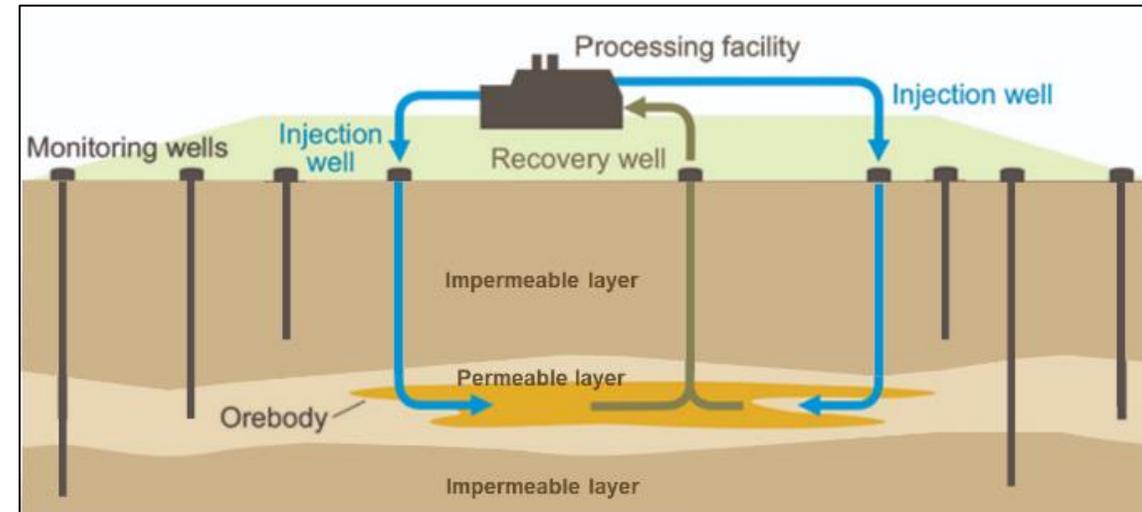
JORC Category	Mt	Grade (U <sub>3</sub> O <sub>8</sub> ppm)	U <sub>3</sub> O <sub>8</sub> Metal (KTonnes)	U <sub>3</sub> O <sub>8</sub> Metal (Mlbs)
Indicated	6.1	796	4.8	10.7
Inferred	5.3	633	3.4	7.4
<b>Total</b>	<b>11.4</b>	<b>720</b>	<b>8.2</b>	<b>18.1</b>

ASX Release – 2 March 2023

# Samphire Uranium project: Competitive and Optimisation Opportunities

- ISR - Low initial capital cost estimate, despite inclusion of significant contingencies and inflation of 40%.
- Low end AISC due to shallow deposit, excellent formation porosity, high leaching dynamics
- Location near Whyalla offers locally based workforce (no FIFO and camp), experienced mining services and business support, lower cost of key infrastructure.

## Conceptual Model of ISR



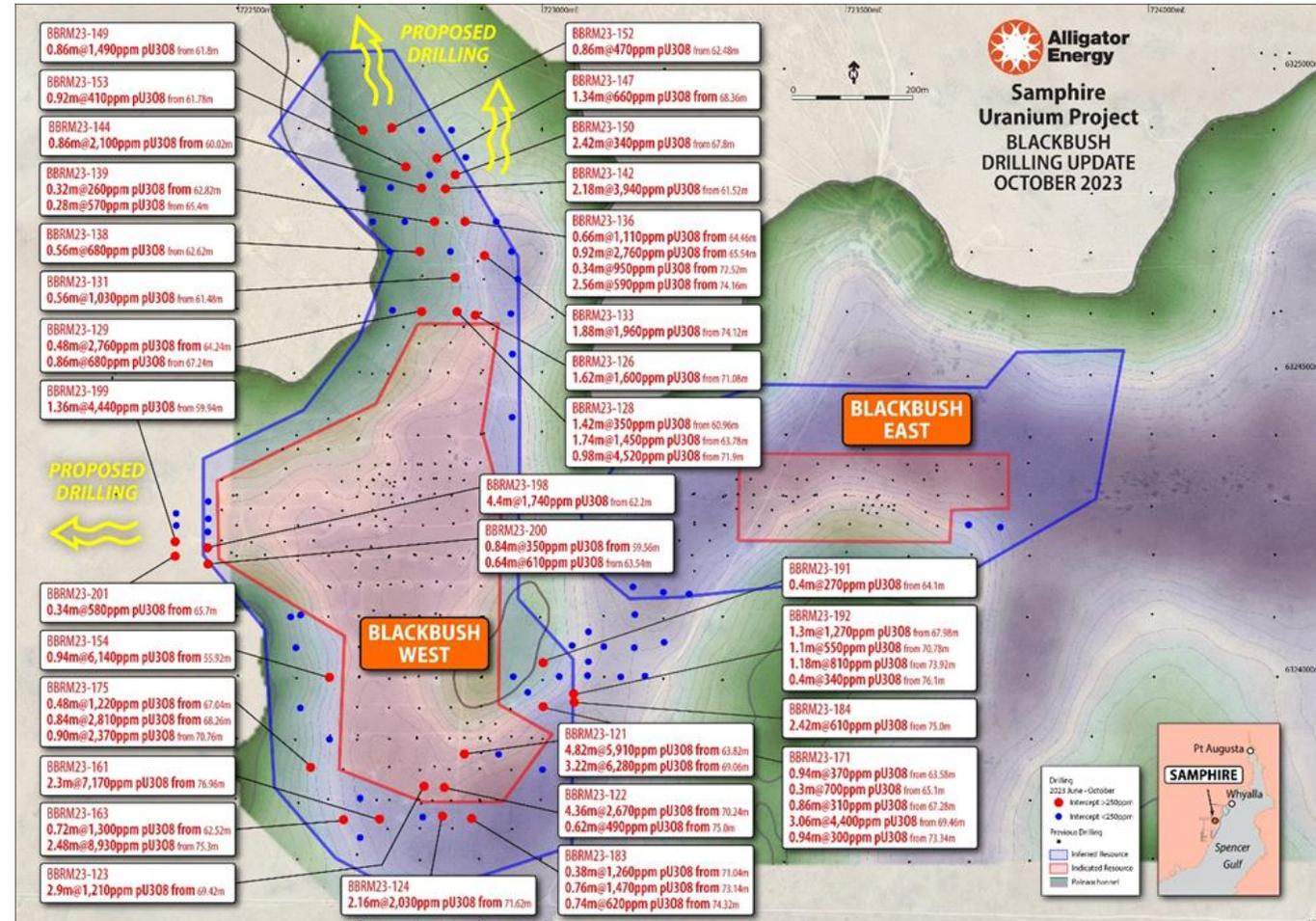
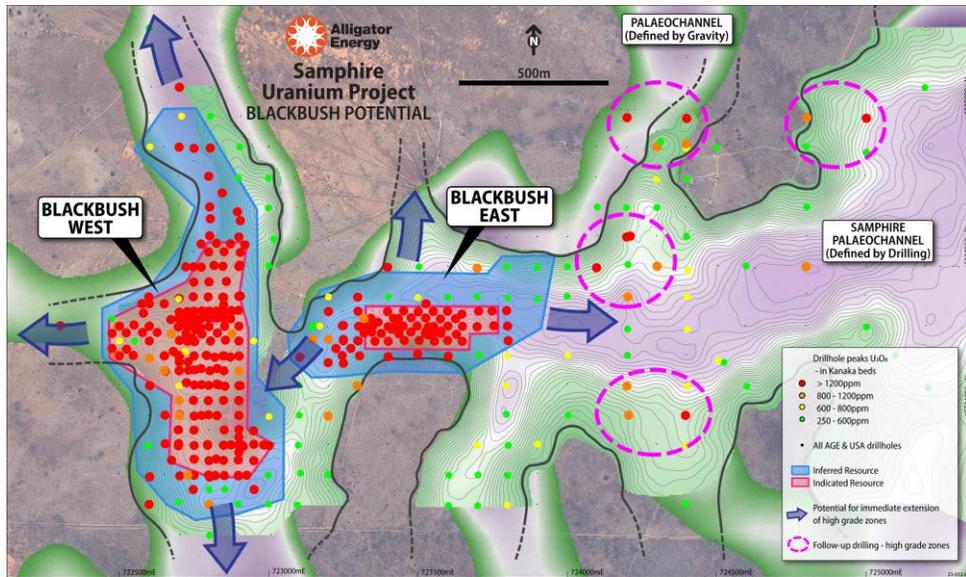
## Potential to scale and optimise plant

- Currently undertaking resource and Scoping Study update – plan for increased production target of 1.2Mlbs pa.
- Modular plant makes production capacity scalable.
- Further exploration potential for additional uranium at Blackbush deposit, then south to Plumbush deposit plus wider exploration on known channels.
- Scope for processing efficiencies, in particular to reduce costs around RO plant, and increase recovery rates.

# Samphire Uranium Project – Scope for Mineral Resource Growth

## Strong Resource growth potential at Blackbush

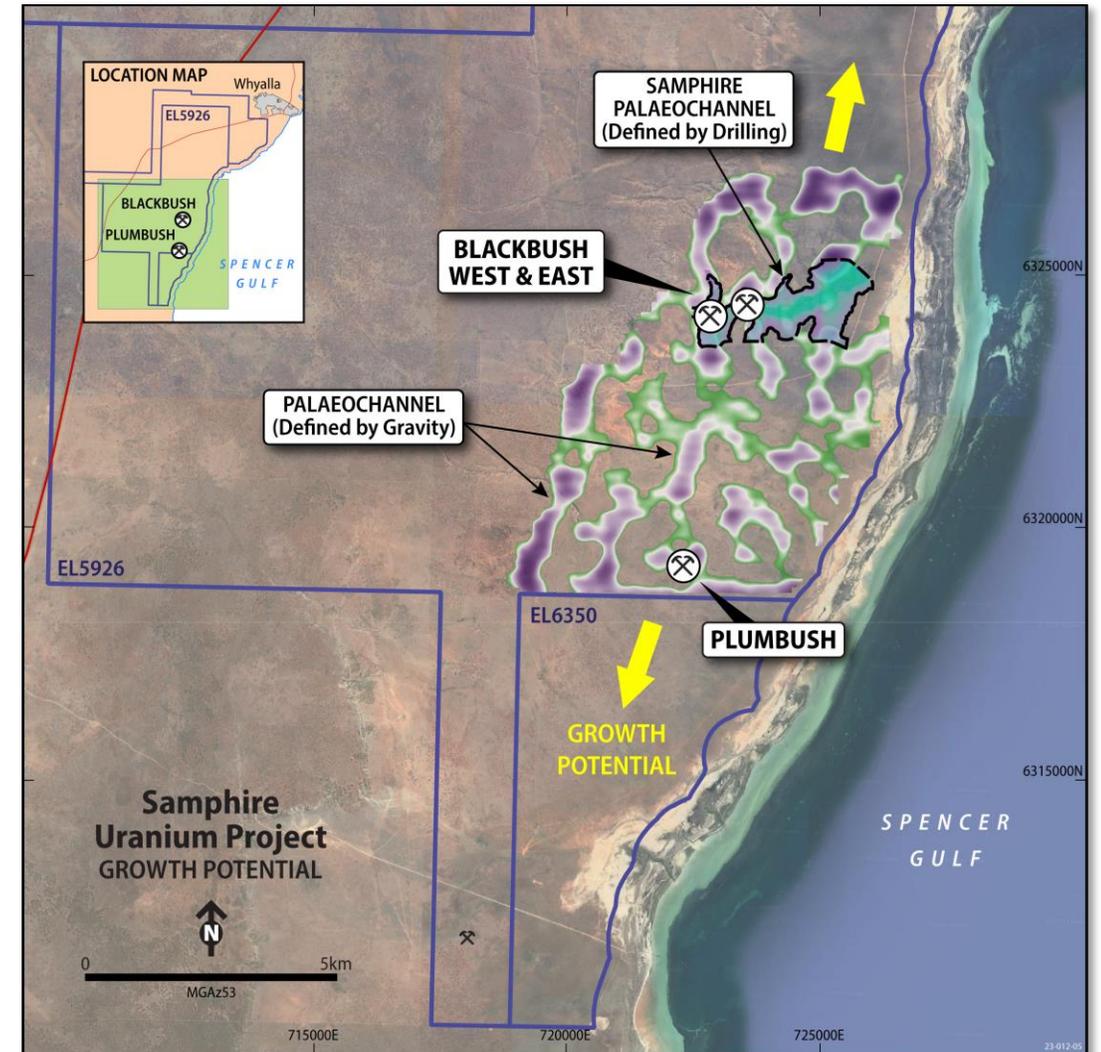
- Currently 18.1Mlbs U<sub>3</sub>O<sub>8</sub> from 11.4 million tonnes at 720 ppm U<sub>3</sub>O<sub>8</sub>.
- Coherent multi-level high-grade zones with cumulative strike length of >2,700m and width between 300-450m.



# Samphire Uranium Project – Scope for Resource Growth

## Local and district-scale resource growth potential

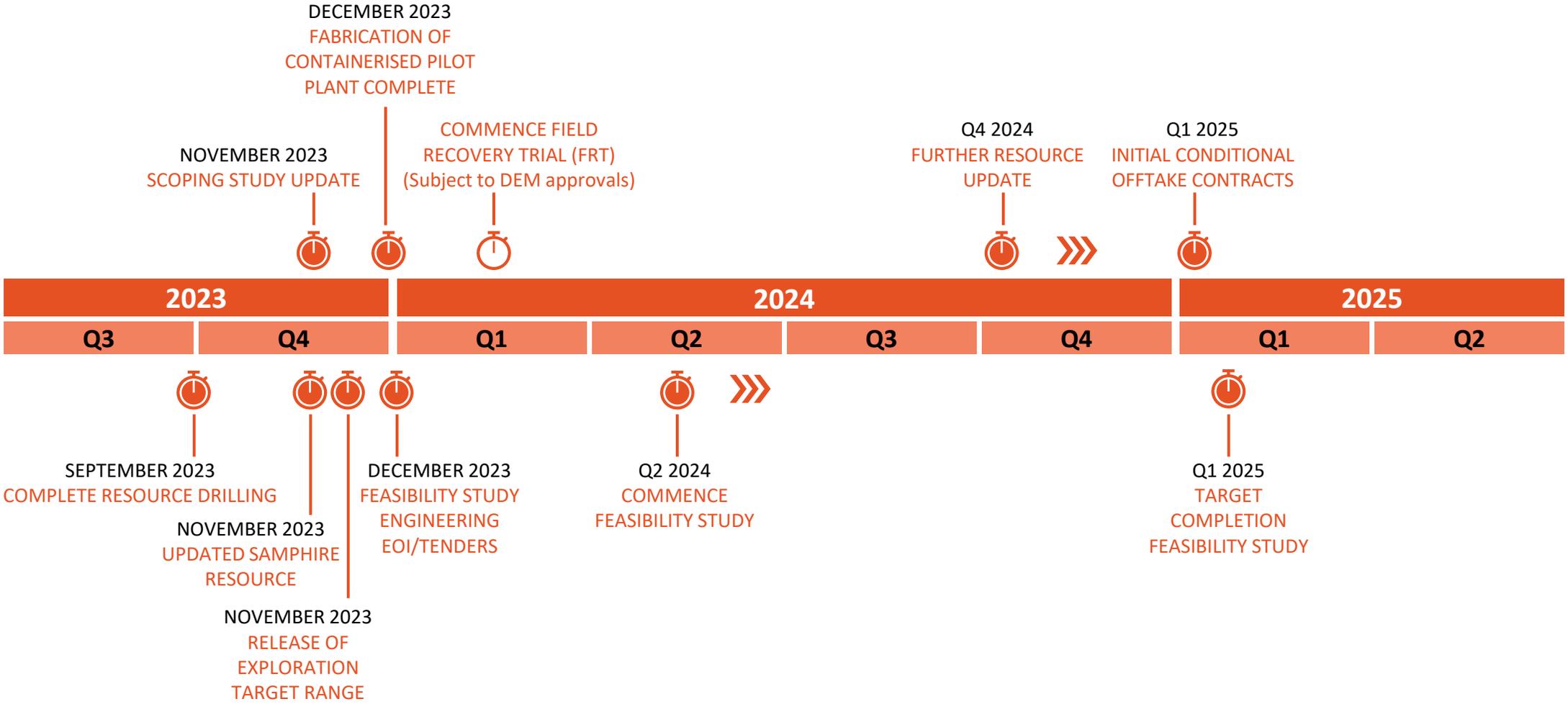
- Plumbush Deposit not adequately tested nor is its relationship to Blackbush Deposit known.
- High-resolution ground gravity acquired September 2022 to improve palaeochannel resolution.
- Regional ground gravity shows significant palaeochannel extensions.
  - Immediate focus for near-future drill programs
  - Potential for palaeochannel system to extend north and south of the current defined area
  - Potential for additional satellite deposits
- Developing an ‘exploration target range’ for the Project.



Regional filtered ground gravity showing potential palaeochannel extensions and Blackbush palaeochannel (defined by drilling).

# Samphire Uranium Project: Next steps

## Intention to rapidly progress next steps

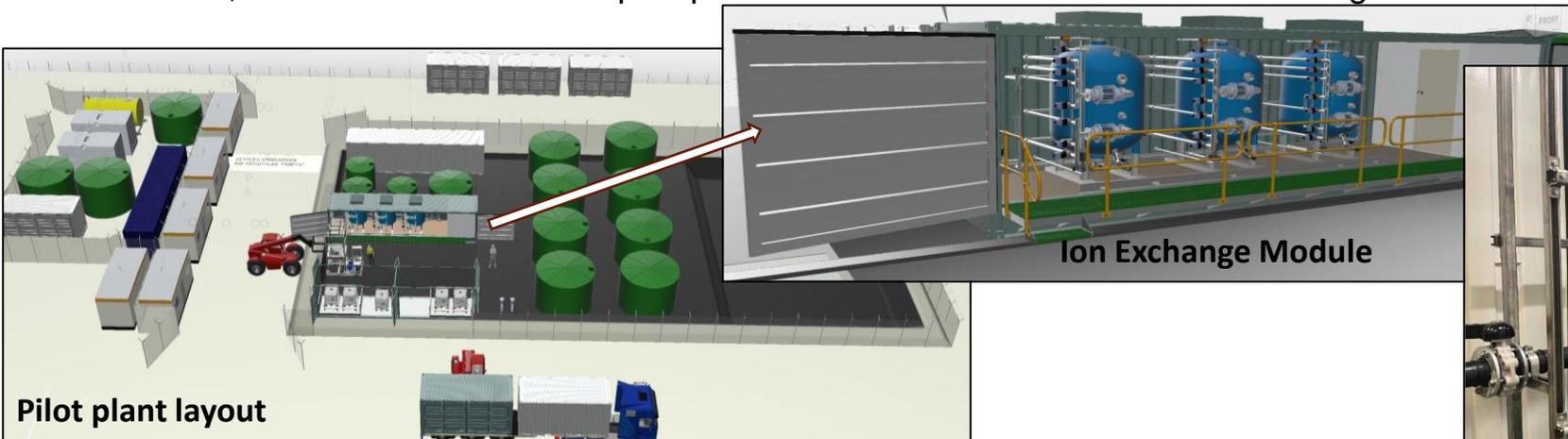
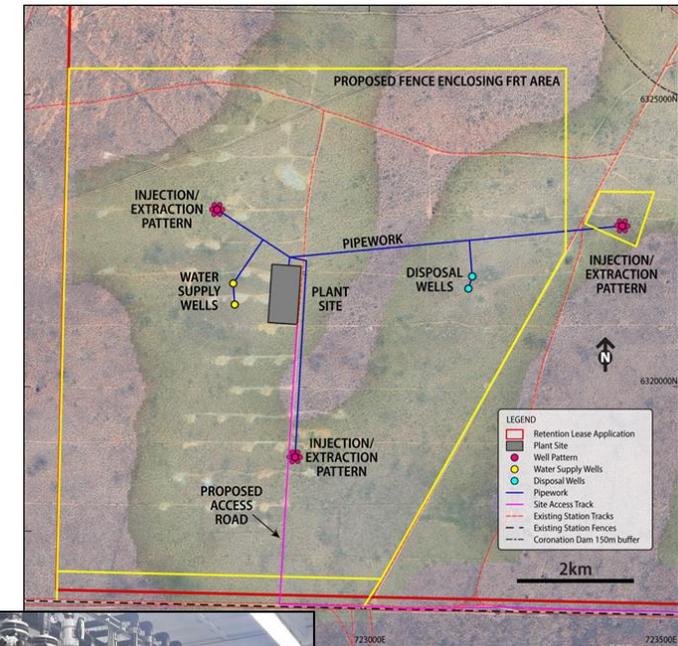


# Samphire Uranium Project – Field Recovery Trial (FRT)

**Field Recovery Trial for 1H of 2024\*** to confirm parameters to be used in a full feasibility study during 2024.

\* On receipt of all regulatory approvals

- FRT will finalise in-situ chemistry, hydrogeology, uranium recovery, environmental and economic factors for Feasibility Study.
- Approval for Retention Lease for FRT in progress – post public consultation now in final stage.
- Will consist of three producing wells and a containerised pilot plant (on for 3-4 months)
- Confirms data and information needed for Mining Lease approvals from State and Federal Governments.
- After planned and any future testing, well infrastructure and containerised pilot process plant removed, and area rehabilitated – pilot plant available for future satellite field testing.





# Other Projects

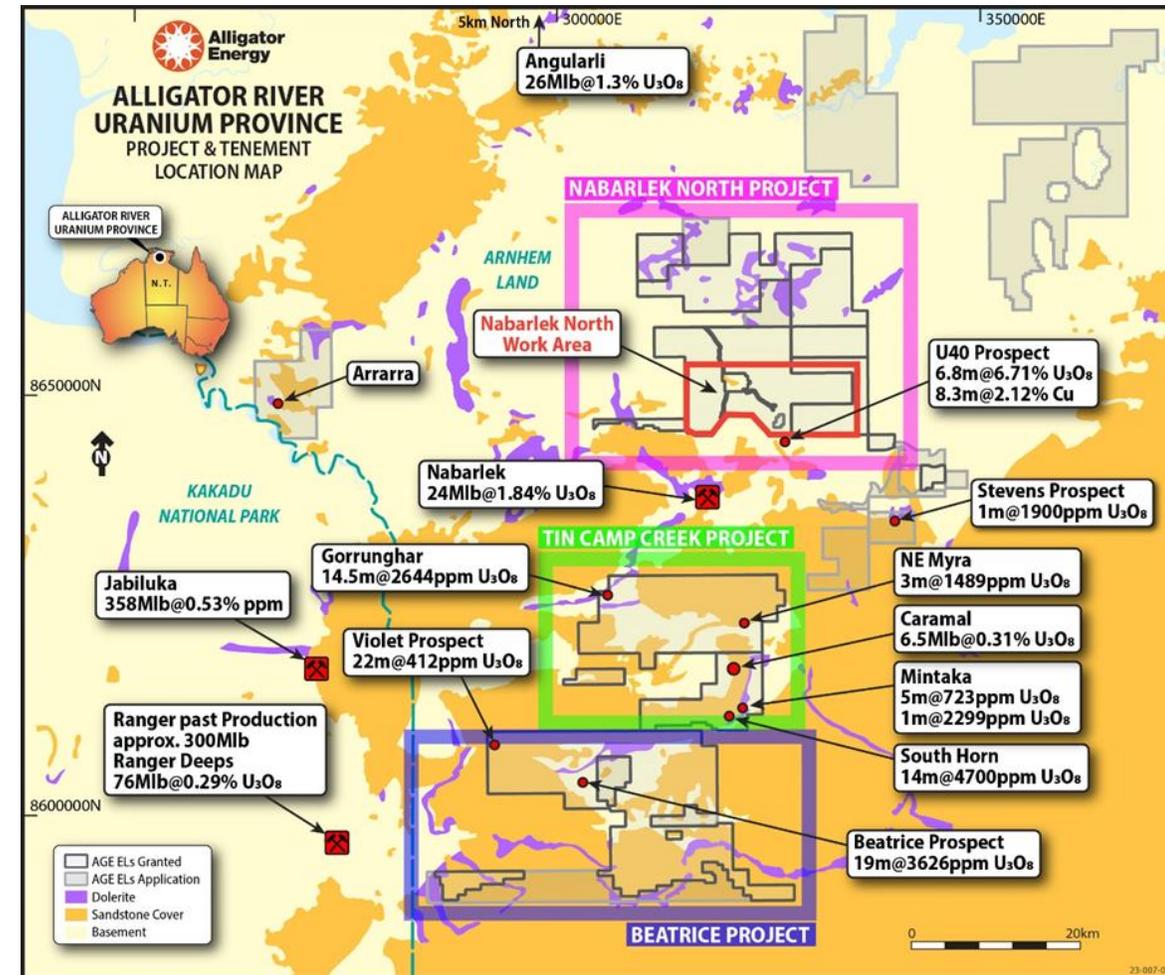
# Alligator Rivers Uranium Province, NT

- 100% owned project in Australia's premier **high-grade** uranium province.
- Province is host to existing high-grade deposits including Jabiluka (358Mlb @ 5,300ppm U<sub>3</sub>O<sub>8</sub>).
- Multiple uranium targets in well-defined regional uranium bearing zone including the Caramal Resource 6.5 Mlbs U<sub>3</sub>O<sub>8</sub> @3,100ppm.
- Extensive Nabarlek North exploration program underway – adjacent to U40 Prospect\*.

## Status of 2023 Work Program at Nabarlek North:

- Integration of airborne gravity, other geophysics, geology, geochemistry and drilling - collected in 2022
- Recently completed an extensive geochemical sampling program with RC, RAB, aircore and auger – **assay results awaited**
- Completed induced polarisation (IP) survey over broad areas seeking to identify alteration zones.
- **Data interpretation from recently completed work about to commence** with objective of moving to more-focussed targeting in 2024.
- Commence evaluation of the potential for strategic energy minerals.

\* Includes 6.3m at 7.23% U<sub>3</sub>O<sub>8</sub> and 8.3m @ 2.12% Cu (Uranium Equities Ltd now DevEx Resources Ltd release – 4 October 2017).

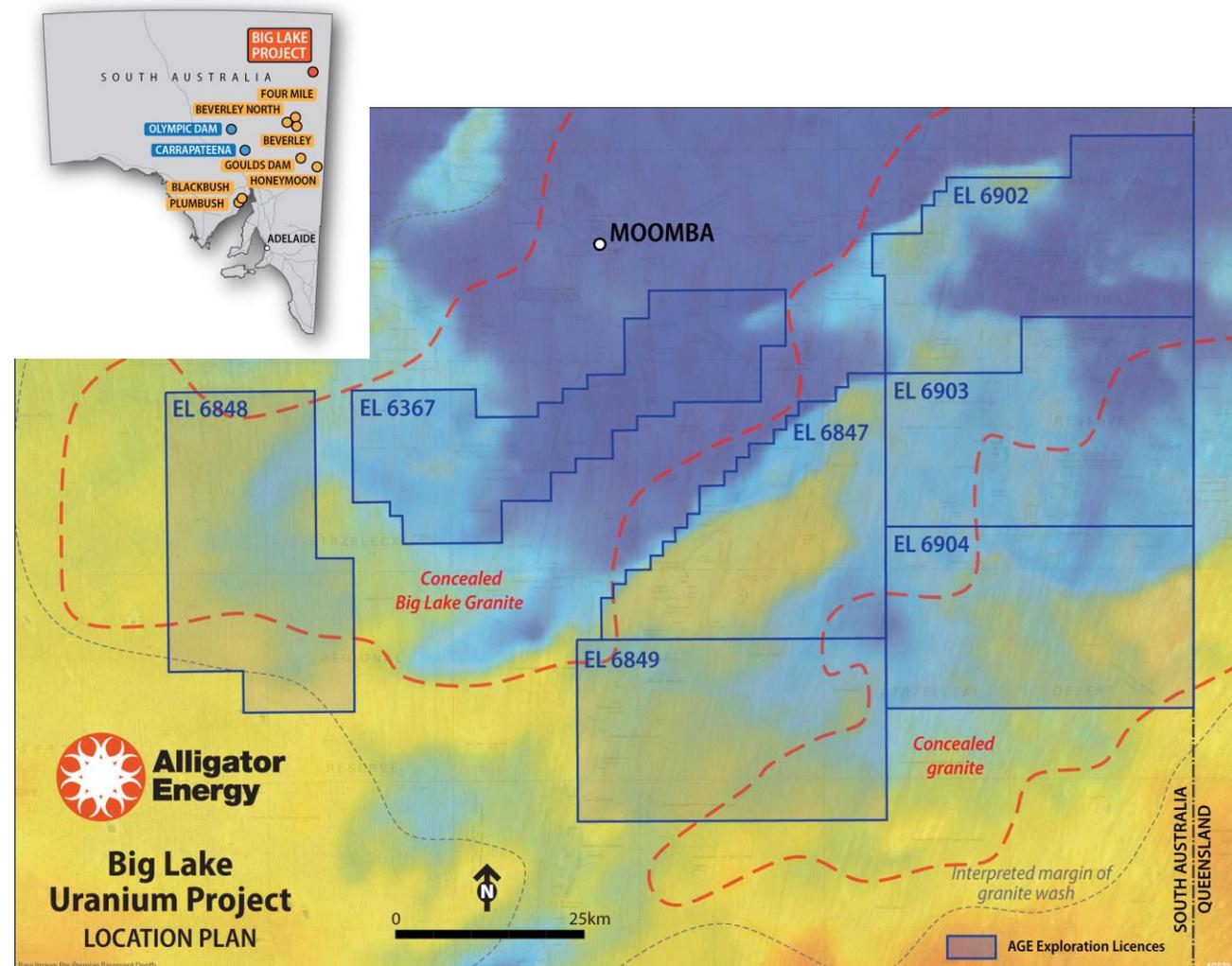


# Big Lake Uranium Project, SA

- Overlies Cooper Basin in NW SA – unexplored for uranium despite geological analogies to existing world-class ISR fields in hydrocarbon basins in Kazakhstan, Wyoming and Texas.
- Several potential uranium sources including; weathering / leaching of underlying ‘hot’ granite suite or distal migration of uranium bearing fluids toward basin depo-centres.
- EM results and analysis of publicly available 2D seismic data indicate potential presence of paleochannel systems.

## Status of 2023 Work Program:

- Interpretation of seismic and other datasets completed, continuing work towards a full 3D basin model.
- Selection of ~20 stratigraphic drill sites to test stratigraphy, paleochannel model and qualities of U-trap rocks – **testing to commence H1 2024.**
- Exploration access agreement in place with the Traditional Owners. **Clearances for proposed 2024 drilling completed.**
- Evaluation of potential across holding to host battery metals such as Li in condensates.



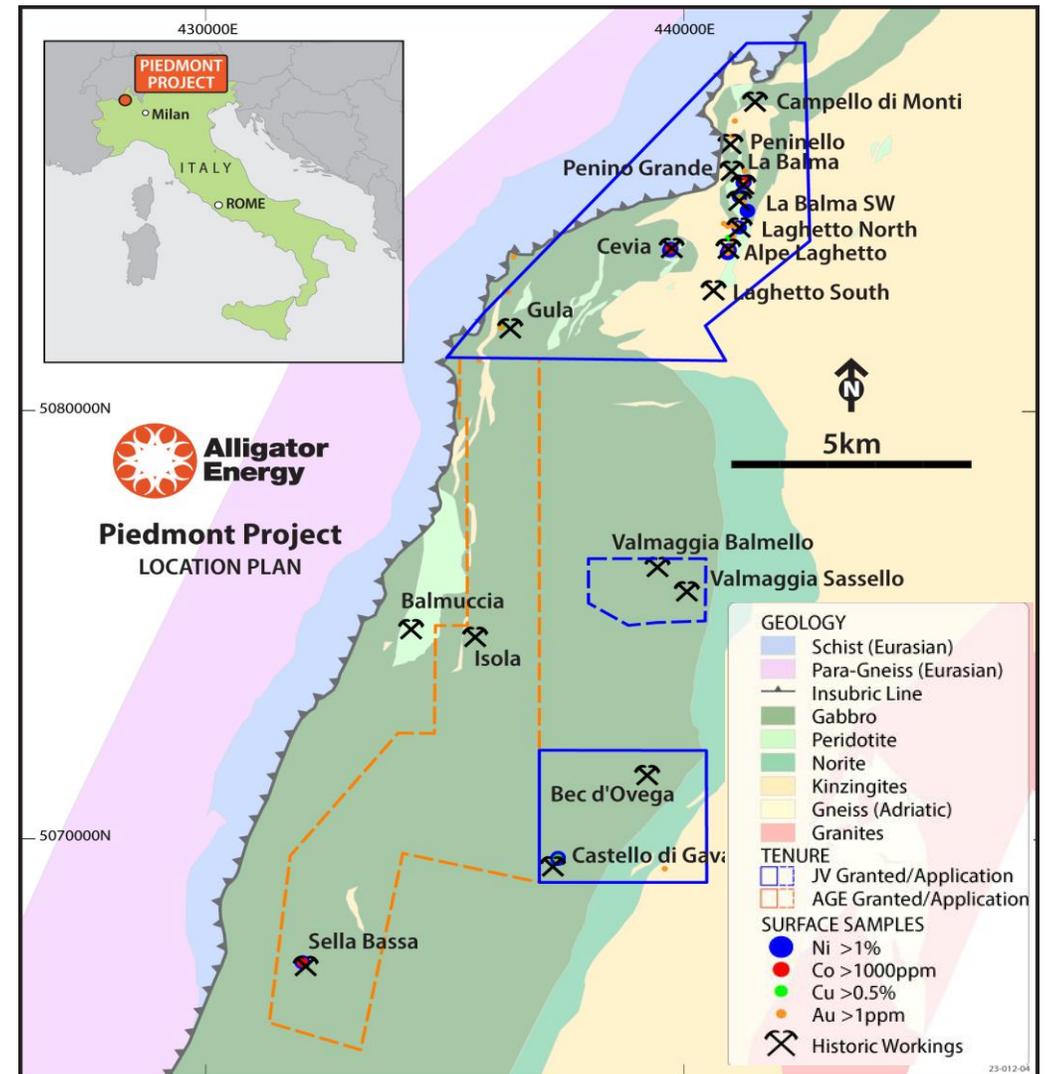
# Piedmont Ni Co Project Overview, Northern Italy

- Nickel exploration with notable Cobalt, Copper, PGE, Gold credits.
- Significant metal grades from surface rock sampling: 0.19 to 2.48% Ni, up to 0.19% Co and 0.07 to 6.38% Cu\*.
- Multiple Ni showings comparable to world class deposits.
- Ground EM survey across the Laghetto prospect undertaken in 2022.
- Early exploration drilling permits approved for Alpe Laghetto.

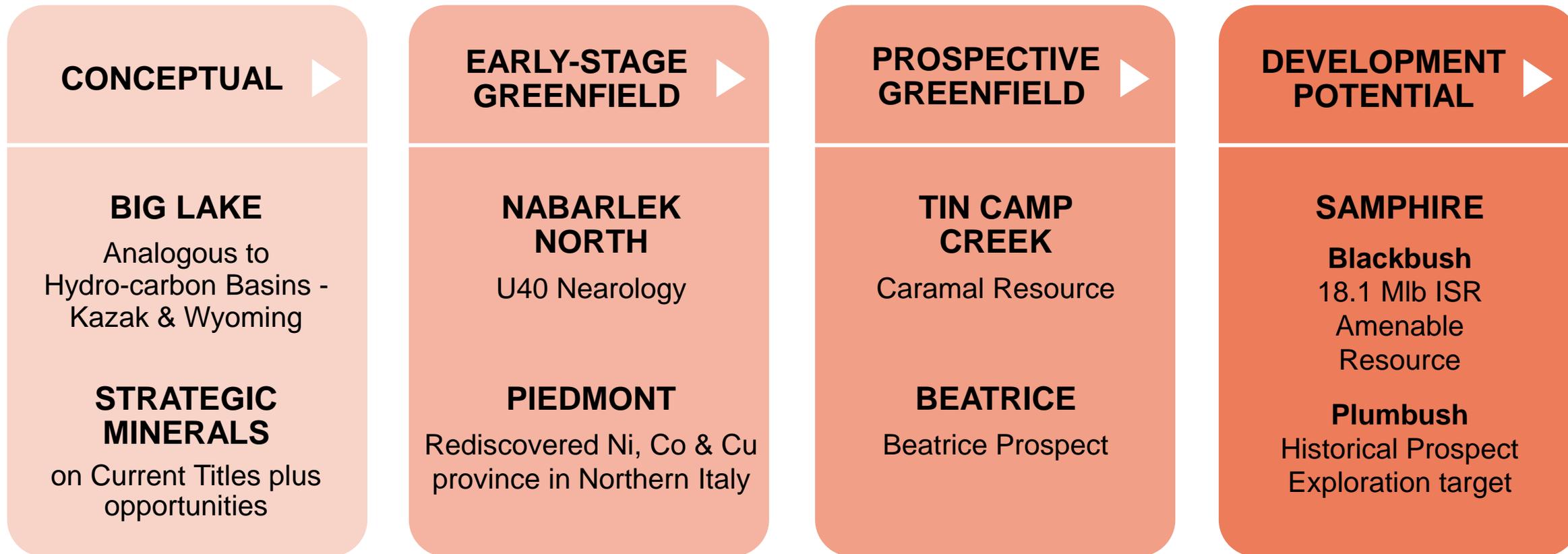
## Work underway or completed 2023:

- Additional assay, geology, petrology and petrophysics data integrated into understanding anomalies identified at Laghetto and La Balma.
- Continue to evaluate related opportunities, partnerships and projects in region.
- AGE holds 51% over JV tenements, 100% of other tenements.

\* AGE ASX Releases – 26 July and 14 September 2018



# Project Pipeline



**OTHER URANIUM + ENERGY MINERAL OPPORTUNITIES**



**M&A TEAM IN PLACE**



# ESG In Practice

# ESG in practice: Working with Stakeholders

- We aim to add value in all of our decision-making for **shareholders**.
- We wish to provide an engaging, challenging, enjoyable and respectful workplace for our **employees**.
- We respect the rights of **landowners** and **communities** and seek to collaborate for our mutual benefit.
- We respect the cultural heritage and connection to country of **Traditional Owners** and wish to create mutually beneficial opportunities.
- We aim for a low impact on the **environment**, through innovation, use of latest technology, and responsible land management techniques.



***Our aim is to discover, source and economically extract these needed commodities with an innovative approach, with either zero or minimal impact, and with positive value and experience for our stakeholders and communities.***

## Alligator Rivers

- Over 40 indigenous employees on drilling and exploration programs over 10 years.
- On country work and support for indigenous ranger groups – even when not exploring.
- Nabarlek North agreement – potential for TO groups to become 25% partner.
- Drilling at Nabarlek North in 2022/23– Indigenous owned and operated drilling company.
- Exploration rehabilitation after each program.

## Samphire Project

- Completed remaining historical rehabilitation during project acquisition.
- Ongoing drill hole rehab – targeting lifting of bush density to double the existing.
- Early and ongoing engagement with pastoralists, Indigenous group, Whyalla community.
- Working with pastoralists for weed and pest control, and with rangeland improvement initiatives.
- Early initiatives for low impact site facilities, sustainable energy opportunity.

## Big Lake Uranium

- Full draft agreement with YYTLOAC indigenous group.
- Plans for direct indigenous employment from first program in 2024.



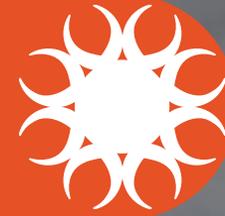
# Samphire Uranium Project: Opportunity for a near carbon-free energy project

## Potentially close to carbon free project

- Lower power consumption as ISR method has no rock / material movement, nor crushing / grinding of rock. Renewable power with backup adequate?
- Distance to Whyalla may allow all electric vehicles, light trucks, cranes etc to be used.
- Advances in battery on-highway prime movers may support the level of logistics and product transport needed.
- This potential opportunity aligns with SA Government Hydrogen Hub for Whyalla region and extensive potential renewable projects.
- We will be scoping this opportunity in parallel with our economic studies.



ASX: AGE



**Alligator  
Energy**

**Greg Hall *CEO***

**+61 (0) 7 3839 3904**

[gh@alligatorenergy.com.au](mailto:gh@alligatorenergy.com.au)

[www.alligatorenergy.com.au](http://www.alligatorenergy.com.au)