

Cautionary Statement: TIRIS FRONT END ENGINEERING DESIGN (FEED) STUDY

As the Front End Engineering Design ("FEED") analysis for Tiris Uranium Project utilises a portion of Inferred Mineral Resources, the ASX Listing Rules require a cautionary statement to be included in this announcement.

The FEED referred to in this announcement is based on a Mineral Resources Estimate reported in accordance with JORC guidelines 2012 in the ASX announcement entitled "Major Resource Upgrade at Aura Energy's Tiris Project" dated 14 February 2023.

The Company advises that the Tiris East Uranium Production Targets set out in this announcement uses Proved and Probable Ore Reserves, Measured Resources (32%) and Indicated Resources (35%), as well as Inferred Resources in the first 5 years (less than 10%) and over the 17-year life of mine (33%) for the Base Case. The Company is currently drilling a 15,000 metre drill program around the Tiris East mine plan.

In accordance with ASX Listing Rules 5.16 and 5.17, as well as the 2012 JORC Code reporting guidelines, a summary of the information derived from the Tiris FEED analysis is detailed in this report. The FEED analysis also draws on information from the ASX Release, "Tiris Uranium Project Enhanced Definitive Feasibility Study", 29th March 2023 which is available to be viewed at <u>auraenergy.com.au/investor-centre/asx-announcements</u>.

The Company confirms that the use of Inferred Resources is not a determining factor to the Tiris Project's economic viability.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration will result in an upgrade to Indicated Mineral Resources, or that the production targets reported in this announcement will be realised.

The Company confirms that it is not aware of any new information materially affecting the information included in the ASX announcement dated 14 February 2023, "Major Resource Upgrade at Aura Energy's Tiris Project". All material assumptions and technical parameters underpinning the Mineral Resources Estimates continue to apply. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The Announcement includes forward-looking statements. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties, and other factors, many of which are outside the control of Aura Energy Ltd, which could cause actual results to differ materially from such statements. Aura Energy Ltd makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of this announcement.

The Company has concluded that it has a reasonable basis for providing the forward-looking statements and production targets included in this announcement. The detailed reasons for this conclusion are outlined throughout this announcement, and in the ASX Release, "Tiris Uranium Project Enhanced Definitive Feasibility Study", 29th March 2023.



Energy Metals For Tomorrow, And Today

ASX:AEE AIM:AURA

ASX RELEASE

28 February 2024

FEED study confirms excellent economics for the Tiris Uranium Project

Tiris Uranium Project is a near term, low cost, long life mine with exceptional further growth opportunities.

KEY POINTS:

- Front End Engineering Design ("FEED") study confirms excellent economics and capital efficiency to develop Tiris into a globally significant near-term uranium operation:
 - NPV_{8%} of US\$366 million
 - IRR of 34% post tax and 2.5 year payback
 - \circ Uranium price of US\$ 80/lb U₃O₈
- Average base case production of 1.9Mlbspa U₃O₈ over a 17-year mine life
- Shallow free dig open pit mining and beneficiation delivers a low cost, highgrade leach feed averaging 1,997ppm U₃O₈ for first five years and 1,743ppm U₃O₈ life of mine
- Low AISC of US\$34.5/Ib U₃O₈ demonstrates strong margins
- Efficient capital cost of US\$230 million supporting a long mine life
- Final Investment Decision expected late in 2024 for an 18 month construction timeline to first production
- Processing facility designed for future expansion beyond 2Mlbspa
- Extensional drill program underway targeting further resource growth

Aura Energy Limited (**ASX: AEE, AIM: AURA**) ("**Aura**" or "the **Company**") is pleased to advise that the recently completed FEED study for the Tiris Uranium Project ("**Tiris**" or the "**Project**") in Mauritania has confirmed excellent economic returns. The study also updated the technical and financial parameters of the 2023 Enhanced Feasibility Study¹ ("EFS").

Importantly, the FEED study has confirmed the adoption of a 2Mlbspa U_3O_8 processing plant as the base case for the Project development confirming globally significant scale of the operation. The FEED study reinforces that the Project is a near term, low cost and long life mine.

¹ ASX and AIM Release: "Tiris Enhanced Definitive Feasibility Study" 29 March 2023



The exploration drilling program currently underway², aimed at expanding the Mineral Resources at Tiris East, aims to demonstrate the potential to extend the mine life beyond the initial 17 years, as well as the potential to expand production significantly above the current base case of 2.0 Mlbspa U_3O_8 production rate.

Aura's Managing Director and CEO Andrew Grove said,

"The FEED study clearly demonstrates that Tiris will be a low-cost, high value, near-term uranium producer with the ability to scale in a very strong uranium market. The market is in structural deficit and likely to continue that way for an extended period. The strong economics at Tiris are supported by the simple, low risk mining and beneficiation that delivers the high-grade, 1,750ppm to 2,000ppm U_3O_8 , ore to the leach plant and there are no requirements for crushing or grinding the ore. These high grades are only matched by the deep underground mines in Canada and exceeding any current or proposed open pit uranium mines worldwide."

"The Board believes the current exploration drilling is likely to deliver near term resource growth around Tiris East. This will enhance the strong economics delivered in the FEED study, and also provide optionality to further expand the production rate beyond the current design of 2Mlbs pa U_3O_8 and extend the mine life."

"Mauritania is open for business, and we look forward to working with the government and all our stakeholders to develop the Tiris Uranium Project."

Key highlights and outcomes of the FEED Study:

The FEED study progressed the design of the processing plant and infrastructure to enable a detailed capital and operating cost estimate to be prepared, with an accuracy level of between +10% and 15%.

- Robust base case project financial economics demonstrated by post-tax NPV₈ of US\$ 366M (A\$ 523M) IRR of 34%, and a 2.5 year payback at realised uranium price of US\$ 80/lb U₃O₈
- At uranium prices of US\$ 100/Ib U₃O₈ the economics increase to post-tax NPV₈ US\$ 596M (A\$ 851M) and IRR 49%
- Initial mine life of 17 years producing an average 1.9Mlbspa U_3O_8 from the 2.0Mlbspa capacity process plant
- Life of Mine (LOM) uranium production in this study was 30.1Mlbs U₃O₈
- 91% Measured and Indicated Mineral Resources in mining schedule during the first five years, LOM Inferred material totals 33% mostly beyond ten years in the mining schedule
- The open pit mining is a **simple**, **low-risk**, **shallow**, **free digging** operation **without the need for crushing and grinding**
- Beneficiation of the ore delivers a high-grade leach feed averaging 1,997ppm U₃O₈ (first 5 years) and 1,743ppm U₃O₈ (LOM) at a very low average cost of US\$ 8.1/lb U₃O₈
- AISC has increased to US\$ 34.5/lb U_3O_8 , an escalation of 16% on the 2023 EFS estimate³. This is largely due to a 40% increase in the fuel price
- CAPEX of US\$ 230M, an escalation of 29% on the 2023 EFS estimate⁶ as a result of industry wide escalation and increasing the filtering and water treatment capacity to allow for

² ASX Release: "Commencement of Extensional Drilling Program at Tiris" 5 January 2024

greater flexibility and lower risk when operating. CAPEX forecast includes a 12% contingency

- Uranium production planned within 18 months of Final Investment Decision
- FEED result confirms and delivers an upgraded process design to de-risk the Project
- Exploration drilling underway to expand Mineral Resources beyond the current 59Mlbs U₃O₈³ with a defined Tiris East Exploration Target of an additional 8-32Mlbs U₃O₈⁴
- Modular design provides opportunities for further capital efficient expansion and scalability
- The construction and operation of the Tiris Uranium Project will deliver significant and ongoing benefits to the people of Mauritania

	Units	2023 EFS⁵	FEED	FEED
		Base Case	Base Case	Spot Price
Uranium Price	US\$∕lb U₃O ₈	\$65	\$80	\$100
Valuations and Returns				
Post-tax NPV ₈	US\$M	226	366	596
Post-tax IRR	%	28%	34%	49%
Payback period	Years	4.5	2.5	1.8
Cashflow Summary				
Initial Life of Mine	Years	16	17	17
LOM Production	Mlbspa U ₃ O ₈	25.5	30.1	30.1
Annual Production	Mlbspa U ₃ O ₈	1.6	1.9	1.9
Gross Revenue (LOM)	US\$M	1,562	2,257	2,818
Free Cashflow pre-tax (LOM)	US\$M	906	1,327	1,876
Margin (LOM)	%	58%	58%	79%
Free Cashflow post tax (LOM)	US\$M	554	1,061	1,486
Unit Operating Costs				
All in Cost	US\$∕lb U₃O ₈	35.6	42.1	43.2
All-in Sustaining Costs	US\$/lb U₃O ₈	28.7	34.5	35.5
C1 Cash Cost	US\$/lb U₃O ₈	25.2	30.1	30.2
Capital Cost				
Development Capital	US\$M	178	230	230

Table 1 - Tiris Uranium Project Financial Summary demonstrates robust economics

³ ASX Release: "Major Resource Upgrade at Aura Energy's Tiris Project" 14 February 2023

⁴ ASX Release: "Aura identifies new uranium Exploration Target" 17 October 2023

⁵ ASX Release: "Tiris Enhanced Definitive Feasibility Study" 29 March 2023

Aura Energy ASX releases can be found at <u>auraenergy.com.au/investor-centre/asx-announcements</u>



Figure 1 – Tiris Uranium Project key operational parameters and systems

There is significant potential to grow the 59Mlbs U_3O_8 of Mineral Resources⁶ currently defined at Tiris. Tiris East Exploration targets⁷ outline potential for an additional 8-32Mlbs U_3O_8 and a 15,500m drill program is currently underway targeting extensions to the know mineralisation and testing previously un-drilled radiometric anomalies.

Phase 1 of the current drilling program was completed in late February 2024 with approximately 50% of the planned drilling completed. Initial results from the Phase 1 program are expected to be published shortly. Phase 2 drilling is underway and involves infill drilling the Phase 1 targets. The Phase 2 drilling program is expected to be completed by end of March 2024 followed by an update to the Mineral Resources planned for the second quarter of 2024.

The modular configuration of the processing plant is well suited to capital efficient and simple expansion to accommodate future growth in Mineral Resources as indicated below.

- > 2.0Mlbspa U_3O_8 production capacity = US\$ 230M development capital (Base Case)
- > 2.8Mlbspa U_3O_8 production capacity = US\$ 83M expansion capital (from 2 to 2.8Mlbpa)
- > 3.5 Mlbspa U₃O₈ production capacity = US\$ 166M expansion capital (from 2 to 3.5 Mlbpa)

Next Steps

The next steps in progressing towards the construction and development of the Project planned for 2024 include:

- Drilling and update to Mineral Resources currently underway
- Project funding inclusive of debt, strategic investors and equity
- Securing offtake contracts for future production
- Confirming water infrastructure to support future operations
- Further geometallurgy, engineering and design work to support development activities
- Drill results, resource re-estimation and mine plan optimisation
- Completion of Project Execution Plan
- Final Investment Decision

Authorised for lodgement by the Board of Aura Energy.

⁷ ASX Release: "Aura identifies new uranium Exploration Target" 17 October 2023



⁶ ASX Release: "Tiris Uranium Project Enhanced Definitive Feasibility Study" 29 March 2023

This Announcement contains inside information for the purposes of the UK version of the market abuse regulation (EU No. 596/2014) as it forms part of United Kingdom domestic law by virtue of the European Union (Withdrawal) Act 2018 ("UK MAR").

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About Aura Energy (ASX: AEE, AIM: AURA)

Aura Energy is an Australian-based mineral company with major uranium and polymetallic projects in Africa and Europe.

The Company is focused on developing a uranium mine at the Tiris Uranium Project, a major greenfield uranium discovery in Mauritania. The FEED has confirmed Tiris to be a potential high-value low-cost low-risk commercial scaled near term uranium mine.

Aura plans to transition from a uranium explorer to a uranium producer to capitalise on the rapidly growing demand for nuclear power as the world shifts towards a decarbonised energy sector.

Beyond the Tiris Project, Aura owns 100% of the Häggån Project in Sweden. Häggån contains a global-scale 2.5Bt vanadium, sulphate of potash ("SOP") and uranium resource. Utilising only 3% of the resource, a 2023 Scoping Study outlined a 27-year mine life based on mining 3.5Mtpa.

Disclaimer Regarding Forward-Looking Statements

This ASX announcement (Announcement) contains various forward-looking statements. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors which could cause actual values or results, performance or achievements to differ materially from the expectations described in such forward-looking statements. The Company does not give any assurance or guarantee that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.

Front End Engineering Design (FEED) Study Summary

The Tiris Uranium Project is a greenfield calcrete uranium project located in Mauritania that was first discovered by Aura Energy in 2008. It represents the first planned development in a significant new global uranium province in Mauritania with a Mineral Resource Estimate of 59Mlbs $U_3O_8^8$ and considerable exploration upside and project growth opportunities. The mineralisation is naturally suited to low capital cost development and low operating cost extraction of uranium, presenting an opportunity for near term development of the Project.

The FEED Study scope was to focus on improving engineering definition for each of the three modular circuit components of the Tiris Uranium Project, including the Beneficiation, Concentrate Processing and Precipitation and Packaging Circuits. The scope was defined in this manner to provide scalability to fully utilise additional Resources as they were defined.

All targeted outcomes were achieved by the FEED, including:

- Finalisation of key technical and strategic project decisions
- Produce foundation technical documents for detailed design
- Confirm product specifications
- Refine budget, scope, and schedule for the project
- Initiate project procedures and systems
- Prepare tenders for key long-lead procurement items

The FEED study focused on progressing the design of the processing plant and infrastructure to enable a detailed capital and operating cost estimate to be prepared to a level of accuracy of +10% -15%.

List of FEED Consultants

The independent consultants responsible for the FEED study scope of work have been summarised in Table 2.

Consultant	Scope
METS Engineering	Beneficiation circuit
	Infrastructure
	Engineering Integration
Wallbridge, Gilbert, Aztec (WGA)	Concentrate processing circuit
Adelaide Control Engineering	Precipitation and Packaging plant
Anandarasa Advisory	Financial modelling

Table 2 - FEED study contributors

Tiris Project Background

The Tiris Uranium Project is 100% owned by Tiris Ressources SARL, which is 85% owned by Aura Energy Ltd and 15% by the Mauritanian Government's Agence Nationale de Recherches Géologiques et du Patrimoine Minier ("ANARPAM").

A Scoping Study was completed in 2014. This was updated into a Feasibility Study ("FS") document in May 2017, to support an application for exploitation licences. FS and an extensive Environmental and Social Impact Assessment ("ESIA") were submitted on 24 May 2017 to the Mauritanian Ministry of

Aura Energy ASX releases can be found at auraenergy.com.au/investor-centre/asx-announcements

⁸ ASX and AIM Release: "Major Resource Upgrade at Aura Energy's Tiris Project" 14 February 2023

Aura Energy AIM releases can be found at https://auraenergy.com.au/investor-centre/aim-notifications/

Petroleum, Energy and Mines, and formally approved by the Mauritanian Government on 5th October 2017.

A Definitive Feasibility Study ("DFS") for a 1.25Mtpa mine and 230ktpa process plant was completed in 2019⁹. The process plant has been designed to take full advantage of the characteristics of the material which responds well to concentration of uranium by scrubbing and screening, whilst providing a low capital cost and rapid project development and construction.

The Capital Estimate for the DFS was updated in August 2021¹⁰. In March 2023 an Enhanced Definitive Feasibility Study ("EFS") was published including additional Ore Reserves and Mineral Resources defined in ASX and AIM releases, "Major Resource Upgrade at Aura Energy's Tiris Project", 14 February 2023 and ASX Release, "Tiris Uranium Project Enhanced Definitive Feasibility Study", 29 March 2023. The EFS presented a staged development approach, including a 2-year ramp up at 1.25Mtpa mined ore, expanding to 4.1Mtpa mined ore in year three to produce an average of 2Mlbspa U₃O₈.

Exploitation licences (2491C4 and 2492C4) for the Ain Sder and Oued El Foude permits, Figure 2, were granted on the 8 of February 2019¹¹ and Mining Conventions for these permits were signed in January 2023¹².

Resources and Reserves

The declared Ore Reserve Estimate, at a 110ppm U_3O_8 cut off is shown in Table 3. The definition of the Ore Reserve Estimate cut-off grade as set out in the ASX release, "Tiris Uranium Project Enhanced Definitive Feasibility Study", 29 March 2023. Aura completed numerous metallurgical and geometallurgical studies on composite samples of mineralisation at Tiris, which were summarised in ASX and AIM announcement, "Tiris Uranium Project DFS complete" 29 July 2019. These results together with updated mining and processing costs, and other cost inputs support the application of a marginal cut-off grade of 110ppm U_3O_8 . This cut-off is comparable to peer projects with similar mineralisation types and processing assumptions. Assessment of material assumptions has determined that changes in cost estimates presented in the FEED study were not material to the Ore Reserve Estimate.

⁹ ASX and AIM Release: "Tiris Uranium DFS Complete" 29 July 2019

¹⁰ ASX and AIM Release: "Capital Estimate Update Tiris Uranium project" 18 August 2021

¹¹ ASX and AIM Release: "Tiris Uranium Project Exploitation License Granted" 8 February 2019

¹² ASX and AIM Release: "Transformational Agreements for Tiris Project Mauritania" 31 January 2023

Description	Mt	U₃O ₈ (ppm)	U₃O ₈ (Mlbs)					
Lazare North								
Proved	0.9	298	0.6					
Probable	7.9	251	4.4					
Lazare South								
Proved	6.5	264	3.8					
Probable	2.6	291	1.7					
Hippolyte	Hippolyte							
Proved	5.7	270	3.4					
Probable	7.1	231	3.6					
Sadi								
Proved	6.1	232	3.1					
Probable	3.3	261	1.9					
Total Ore Reserve								
Proved	19.3	257	11.0					
Probable	21.3	251	11.6					
Total Ore Reserve	40.3	254	22.6					

Table 3 - Updated Ore Reserve Estimate

Notes to Table 1:

Ore Reserves are a subset of Mineral Resources

Ore Reserves conform with and use the JORC Code 2012 definitions

Ore Reserves are calculated using a uranium price of US\$65 /lb U₃O₈.

Ore Reserves are calculated using a cut-off grade of 110 ppm U_3O_8 .

All figures are rounded to reflect appropriate levels of confidence which may result in apparent errors of summation

The Ore Reserve Estimate was generated from the Mineral Resource Estimate produced by H&S Consultants (Sydney) in 2023 with the appropriate modifying factors to apply for mining dilution. This Resource model was used in an open pit optimisation process to produce a range of pit areas using operating costs and other inputs derived from previous studies. Mining costs were built up from estimates derived from equipment supplier and mining contractor submissions and applied to a detailed mine schedule.

Tonnages are reported including mining dilution



Figure 2 – Tiris East Resource outlines for the Tiris Uranium Project

This Ore Reserve is based upon consolidated Mineral Resources reported in the ASX announcement entitled "Major Resource Upgrade at Aura Energy's Tiris Project" released on 14 February 2023 and available to download from <u>asx.com.au</u> (ASX:AEE). In that report, Measured and Indicated Resources were listed at 62.1Mt of ore for 29.6Mlbs U_3O_8 , at 216ppm. The combined Mineral Resources Estimate, including an Inferred Resource Estimate, is 113Mt of ore at 236ppm for 58.9Mlbs U_3O_8 . All resources were reported at a 100ppm grade cut-off and summarised in Table 4.

Area ^{13, 14}	Class	Tonnes (Mt)	U₃O ₈ (ppm)	U₃Oଃ (Mkg)	U₃Oଃ (MIb)
	Measured	8.0	236	1.9	4.2
Hinnolyta North	Indicated	5.8	217	1.3	2.8
	Inferred	4.7	212	1.0	2.2
	Sub-Total	18.5	224	4.1	9.1
Hippolyte Marie & West	Inferred	8.2	310	2.5	5.6
	Indicated	4.6	192	0.9	2.0
Hippolyte South	Inferred	2.7	176	0.5	1.1
	Sub-Total	7.4	186	1.4	3.0
	Measured	1.0	282	0.3	0.6
Lazara North	Indicated	10.1	229	2.3	5.1
	Inferred	3.7	210	0.8	1.7
	Sub-Total	14.8	228	3.4	7.4
Longue Couth	Measured	8.6	233	2.0	4.4
	Indicated	5.2	226	1.2	2.6
	Inferred	4.8	222	1.1	2.3
	Sub-Total	18.6	228	4.2	9.3
	Measured	11.5	189	2.2	4.8
Sadi	Indicated	7.4	200	1.5	3.2
Jaul	Inferred	10.3	228	2.4	5.2
	Sub-Total	29.2	206	6.0	13.2
	Measured	29.1	218	6.4	14.0
All Deposits	Indicated	33.0	215	7.1	15.6
	Inferred	34.5	237	8.2	18.0
Total Tiris East		96.6	224	21.6	47.7
Total Tiris West:		16.4	205	с 1	11 7
Oum Ferkik	Inferred	10.4	305	5.1	11.2
Total Aura Resources		113.0	236	26.7	58.9

Table 4 - 2023 Mineral Resource Estimate

¹³ The information in this announcement is extracted from ASX announcement entitled "Major Resource Upgrade at Aura Energy's Tiris Project" released on 14 February 2023 and available to download from asx.com.au ASX:AEE. The Company is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement

¹⁴ This Tiris Resource Inventory aggregates the 2023 Mineral Resource Estimates by H&S Consultants Pty Ltd on the Lazare North, Lazare South, Hippolyte, and Hippolyte South deposits and the 2011 Mineral Resource Estimates by Coffey Mining on the Sadi, Ferkik West, Ferkik East, Hippolyte West and Marie deposits. The 2011 Resource Estimate was the subject of Aura ASX announcement dated 19 July 2011 "First Uranium Resource in Mauritania". The 2011 Mineral Resource Estimate was produced in compliance with the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Aura confirms that all material assumptions and technical parameters underpinning the 2011 Mineral Resource Estimates in the relevant market announcement continue to apply and have not materially changed.

Production Schedule

The sequencing and material inclusions for the proposed production schedule was published in ASX and AIM Release, "Tiris Uranium Project Enhanced Definitive Feasibility Study", 29 March 2023, where it was developed based on pit optimisation in the Ore Reserve Estimation. No material change was made to the production schedule, other than acceleration of mining for the first two years of operation.

Base Case Production Schedule

A base case production schedule was developed and initially outlined in ASX and AIM Release, "Tiris Uranium Project Enhanced Definitive Feasibility Study", 29 March 2023. The production schedule has been updated, without alteration of the pit shells or mining sequence, to accelerate mining in the first two years of operation to 4.1Mtpa, including a six month ramp up period (Figure 3). In addition, a small proportion of residual material in Inferred Resource category was included at the end of the mining schedule. The accelerated mining schedule includes 9% inferred material in the first five years and 15% in the first ten years of operation, all of which was sourced within existing pit shells. Over the Life of Mine ("LOM") a total of 33% Inferred material was included in the mining schedule. The Project remains strongly viable with removal of Inferred material.





Note: There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration or evaluation work will result in the determination of Indicated Resources or that the production targets reported in this announcement will be realised. The Company confirms that the use of Inferred Resources is not a determining factor to the Tiris Project's economic viability.

The Base Case concentrate grade profile for U_3O_8 has been presented in Figure 4, demonstrating an average concentrate grade to leaching of 1,743ppm U_3O_8 life of mine. A full description of concentration of uranium through the beneficiation circuit by scrubbing and screening, including recovery assumptions, can be found in ASX and AIM Release, "Tiris Uranium Project Enhanced Definitive Feasibility Study", 29 March 2023.



Figure 4 - Concentrate grade profile for base case mining schedule highlighting higher leach feed grade profile in early years. Average Concentrate production rate of 500,000tpa

The base case U_3O_8 production profile can be seen in Figure 5. Over the life of mine the average production rate has been estimated as 1.9Mlb U_3O_8 pa, ranging from 2.3Mlbpa in Year 2 to 1.5Mlb U_3O_8 in Year 13.





Process Configuration

The processing of mined material is undertaken in modular circuits, with design throughput capacity defined by the number of modules used in each section. The FEED study focused on improvement of engineering definition for a single train of modules, which may then be combined to achieve target throughput capacity to match the mining schedule.

A detailed process description and summary of module configuration can be found in ASX and AIM Release, "Tiris Uranium Project Enhanced Definitive Feasibility Study", 29 March 2023.

The design basis for the FEED study maintained the same design criteria for the beneficiation and precipitation and packaging plants as for the 2019 DFS¹⁵.

Design criteria for the concentrate processing plant was updated to include allowance for the results of the beneficiation pilot plant program¹⁶ and definition of the water source¹⁷. The outcomes of implementation of these risk mitigation measures were increased dilution within the leach and ion exchange circuits, leading to increased tank volumes. The total filtration capacity was increased based on outcomes of the beneficiation pilot program.

The layout of the Concentrate Processing Facility can be seen in Figure 6.

Additional water treatment capacity was included into the design to allow for processing of raw water sourced from the C22 water target identified in 2021¹¹.



Figure 6 - 3D FEED layout of concentrate processing facility

Capital Cost Estimate

The FEED Capital Cost Estimate ("CAPEX") for the development of Tiris was completed using a design basis of a single modular processing train, with units combined to generate an Estimate for total production capacity of 2Mlbpa U_3O_8 in Table 7. The total CAPEX was estimated to be US\$230 million (including a contingency allowance of approximately 12%), which is within 29% of the EFS estimate (US\$178M) presented 29th March 2023.

The level of confidence in the Capital Estimate has increased with completion of the FEED, summarised in Table 5.

¹⁷ ASX Release: "Liquid Gold in the Sahara – Substantial Water at Tiris" 13 December 2021



¹⁵ ASX Release: "Tiris Uranium DFS Complete" 29 July 2019

¹⁶ ASX Release: "Tests confirm Average 550% Upgrading of Uranium at Tiris" 23 June 2022

Using the modular design basis allows the Company to efficiently assess multiple growth scenario options with greater confidence.

Circuit	Single train capacity	Single train confidence	Additional train confidence
Beneficiation	1.25Mtpa Run of Mine ore	Class 3 (90-95% confidence)	Class 3 (90-95% confidence)
Concentrate Processing Plant (Leaching, ion exchange, precipitation)	250ktpa concentrate	Class 3 (90-95% confidence)	Class 4 (65-70% Confidence)
Precipitation and Packaging	3.5Mlb U ₃ O ₈ pa	Class 3 (90-95% confidence)	NA

Table 5 - Modular circuits available for Tiris project with engineering confidence

The final production scale capital cost estimate was developed based on combining modules to achieve the target capacity. A summary of the module configuration for throughput capacities assessed can be seen in Table 6.

Circuit	4.1Mtpa Base Case
	2Mlb U₃O ₈ pa
Beneficiation (5Mtpa)	4
Concentrate Processing plant (500ktpa)	2
Precipitation and Packaging (3.5Mlbs pa U_3O_8)	1
САРЕХ	US\$230M

Table 6 - Process configuration for Base case mining schedules.

A comparison of the Capital Estimate for the base case scenario between the EFS 2023 and FEED update can be seen in Table 7. This shows escalation of 29% overall, with the most significant variation in processing, infrastructure and EPCM costs.

Area	FEED 2024	EFS 2023
	US\$M	US\$M
Mining	4.3	4.9
Beneficiation	25.6	22.0
Processing	84.2	72.5
Infrastructure	54.1	37.1
EPCM	22.5	8.4
Owner's cost	19.3	21.3
Contingency	20.1	12.1
Total Capital Cost	230.0	178.2

Table 7 - Comparison of Project CAPEX between EFS 2023 and FEED 2024.



The variance of FEED capital cost to EFS is as shown in Figure 7.

Figure 7 - Tiris Project Capital Estimate

The primary drivers for variance in CAPEX were a combination of the global inflationary environment and several risk mitigation measures that were included in the FEED design. Primarily, based on outcomes of vendor test work on filtration¹⁸, which recommended increasing total filtration area. In addition, more water treatment capacity was included to manage the concentration of chloride anions in ion exchange, corresponding to recommendations from ANSTO Minerals to improve yellowcake purity¹⁹. These improvements will increase the flexibility of the process in operation, allowing acceleration of throughput increases.

Operating Cost Estimate

The operating cost estimate for the Tiris Project was developed by Aura Energy with input costs generated by METS Engineering, WGA and MiningPlus. The estimate is based on the LOM ore schedule, process design criteria, steady state mass and energy balance and metallurgical test work undertaken as part of the Feasibility Study.

The estimate includes all costs associated with production of an average 1.9 Mlbs U_3O_8 per annum after ramp-up, including:

- Owner mining
- Labour
- Fuel
- Power
- Reagents and consumables
- Maintenance

¹⁹ ASX Release: "Quality of Tiris Project Uranium Yellowcake Confirmed" 6 December 2022



¹⁸ ASX Release: "Tests confirm Average 550% Upgrading of Uranium at Tiris" 23 June 2022

- General and administration
- Product transport
- Sustaining capital
- World Bank Community contributions
- Royalties

The operating cost estimate is presented in US dollars and is considered to have an estimated accuracy level of between +15% and 10%. A 17-year LOM has been used in development of the operating cost estimate.

Cash costs were broken down into their fixed and variable components to accommodate cash flow scheduling. Variable costs were linked to uranium production.

Mining and key reagent costs, including diesel, sodium carbonate and sodium bicarbonate were updated for the 2024 FEED study. The mining costs were also validated against four mining contractor submissions allowing for the inclusion of a suitable profit margin.

The operating cost estimate has been summarised in Table 8. The average LOM C1 cash cost will be US\$ 30.2/lb U₃O₈ and LOM AISC, inclusive of royalties, LOM sustaining capital, insurances and product transport will be US\$ 34.5/lb U₃O₈. These costs have been estimated as an average of annualised expenditure.

The FEED operating costs for the first five years of operation have been presented in Table 8. These demonstrate higher efficiency through this period, with AISC of US\$ 33.8/lb U_3O_8 .

	FEED	FEED	EFS	Variati	on
		Q1 2024	Q1 2023	Absolute	%
Owner Mining	\$7.6	\$8.1	\$8.1	\$0.0	0%
Labour	\$1.8	\$2.0	\$2.0	-\$0.1	-3%
Reagents	\$6.3	\$6.9	\$6.9	\$0.0	1%
Power	\$9.3	\$8.6	\$5.0	\$3.6	73%
Maintenance	\$1.6	\$1.8	\$1.7	\$0.1	5%
Environment	\$0.3	\$0.4	\$0.3	\$0.1	47%
Site G&A	\$2.2	\$2.5	\$2.1	\$0.3	15%
CASH COST	\$29.2	\$30.2	\$26.1	\$4.2	16%
Transport & Marketing	\$0.5	\$0.5	\$0.5	\$-	0%
Royalties	\$2.7	\$2.7	\$2.2	\$0.5	22%
Communities	\$0.7	\$0.7	\$0.5	\$0.2	37%
Sustaining Capital	\$0.7	\$0.3	\$0.3	\$0.0	0%
ALL-IN-SUSTAINING COST	\$33.8	\$34.5	\$29.6	\$4.9	16%

Table 8 - FEED Operating Cost estimate, including comparison to EFS average OPEX.

A summary of the variance between the FEED study and 2023 EFS can be seen in Figure 8.



Figure 8 - Tiris Project All In Sustaining Costs

Savings were achieved in reagent usage and costs, as well as by optimising the owner mining model.

The increases were mainly in power costs. These were driven by a 40% increase in diesel price from US\$ 0.86 to US\$ 1.20 per litre following the removal of the government subsidy. In addition, moving to a BOOT power model added capacity charges for lease of power generation plant that were not included in EFS assumptions.

Work will continue in 2024 on the power generation optimisation with a focus on greater renewable energy storage with opportunities to reduce power costs.

Market Analysis

Aura has updated the comprehensive EFS²⁰ market assessment to develop a pricing forecast for Tiris. This has resulted in 3 pricing scenarios to assess the economic viability of the Tiris Project.

- i. **Low case**: TradeTech FAM 1 term forecast. Mean forecast term price to 2040 of US\$ 70/lb U₃O₈.
- ii. Base case: Base case price of US\$ 80/lb U₃O₈
- iii. **High case:** TradeTech FAM 2 term forecast. Mean forecast price to 2040 of US\$ 86/lb U₃O₈.

The FAM 1 based on a 'risk off' approach where published production target volumes are readily achieved, and FAM 2 based on a 'risk on' approach where there is a reduction in production volumes 148Mlbs between 2020 and 2040.

Financial Analysis

Financial analysis of the Tiris Project is inclusive of Mauritanian government royalties and commitments relating to the offtake agreement with Curzon Resources. This is outlined in the ASX announcement "Aura concludes offtake agreement", dated 29 January 2019.

Results are on an after-tax basis in \$USD, unless otherwise stated. Financial modelling is inclusive of all capital items, including mining mobilisation, process plant, project infrastructure and LOM sustaining capital.

The project financial analysis has been completed with a valuation date of 9 February 2024.

Table 9 shows the variance in NPV₈, IRR, payback period and net cashflows for a range of uranium contract prices, including commitments to Curzon Resources offtake agreement. At a base case uranium price of **US\$ 80/lb U₃O₈**, the post-tax NPV₈ of the Tiris Project is **US\$ 366M**. This is with a post-tax IRR of **34%**, and a project payback of **2.5 years** from commencement of production. At this price the project generates annual net cashflows (EBITDA) of **US\$ 78M pa**.

²⁰ ASX Release: "Tiris Uranium Project Enhanced Definitive Feasibility Study" 29 March 2023

		FEED	FEED	2023 EFS
	Units	Base Case	Spot Price	
Uranium Price	US\$ /lbs U₃O ₈	80	\$100	\$65
Avg Annual Production	Mlbspa U₃O ₈	2	2	2
Post-tax NPV ₈	US\$ M	366	596	227
Post-tax IRR	%	34	49%	28%
Average All-in Sustaining Costs	US\$ /lbs U₃O ₈	34.5	35.5	28.7
Annual average EBITDA	US\$ M	78	110	64.7
Initial Life of Mine	Years	17	17	15
Capital Expenditure	US\$ M	230	230	178
Payback period	Years	2.5	1.75	4.5

Table 9 - Summary of outputs recommended for presentation of FEED update results

Sensitivity Analysis

The sensitivity of the project to market and project factors was examined. Table 10 provides a comparison of project returns (NPV and IRR) at various throughput profiles and U_3O_8 price. This demonstrated robust returns for a range of pricing scenarios for both the Base and Growth scenarios. This analysis determined that the greatest capital efficiency could be achieved for the base case production profile, targeting 2Mlbs U_3O_8 pa production.

	Spot U₃O ₈ Price – US\$/lb.						
	65	70*	80	86#	90	100	110
NPV ₈ %	192	244	366	424	482	596	711
IRR	22%	25%	34%	36%	41%	49%	56%

Table 10 - Economic comparison at varying U₃O₈ price for Base Case 2Mlbs U₃O₈ pa production

* Tradetech Forward Availability Model (FAM) 1 average term price to 2040 (Real). Representing best case project development (supply) scenario.

Tradetech FAM 2 average term price to 2040 (Real). Representing restricted project development scenario.

The sensitivity of the project to key variables was examined in Figure 9. This showed that the Project was most sensitive to revenue drivers, including mined grade and U_3O_8 spot price. The Project was least sensitive to operating cost inputs.



Figure 9 - Tiris Project Sensitivity analysis

Growth Scenario

There is significant potential to grow the 59Mlbs U_3O_8 of Mineral Resources²¹ currently defined at Tiris. Tiris East Exploration targets²² outlined potential for an additional 8-32 Mlbs U_3O_8 A 15,000m drill program is currently underway targeting extensions to the know mineralisation.

The modular configuration of the processing plant is well suited to simple expansion as additional Resources are defined. Table 11 shows the incremental Capital requirement to progressively increase capacity in the beneficiation and concentrate processing circuits, to the point where it is expected the precipitation and packaging plant would be fully utilised.

Circuit	4.1Mtpa Base Case	6.25Mtpa Growth	7.0Mtpa Growth
	2Mlb U₃O ₈ pa	2.8Mlb U₃O ₈ pa	~3.5Mlb U₃O ₈ pa
Beneficiation	4	5	6
Concentrate Processing plant	2	3	4
Precipitation and Packaging	1	1	1
САРЕХ	US\$230M	US\$313M	US\$396M

Table 11 - Capital cost estimate for growth configurations of the processing circuits for the Tiris Project

In all the above scenarios it is expected that the operating costs would remain similar to the base case AISC of US\$ 34.5/lb U_3O_8 , with some cost efficiencies potentially realised through a more efficient workforce and consolidation of mining fleet.

²¹ ASX Release: "Tiris Uranium Project Enhanced Definitive Feasibility Study" 29 March 2023

²² ASX Release: "Aura identifies new uranium Exploration Target" 17 October 2023

Project Finance

The Tiris Uranium Project funding structure will be one of project financing to minimise risk to the Project, maintaining flexibility and preserving shareholder value. Aura will consider funding total preproduction capital and working capital by some or all of the following:

- Senior project debt
- Mezzanine debt
- Offtake prepayment
- Equity
- Royalty or stream funding

The structure will be dependent on general industry and market conditions, specific counterparty appetite and terms and Aura's views on optimal funding mix and balance sheet configuration.

Senior debt may be sourced from several alternate providers including commercial banks, export credit agencies, development financial institutions / multilaterals, credit funds and the project bond market.

The Company's Board and Management have a successful track record of developing and financing mineral resource projects globally.

The Company believes that there is reasonable basis to assume that future funding will be available as and when required. Investors should note that there is no certainty that the Company will be able to raise the amount of funding required to develop the Project when needed. It is also possible that such funding may only be available on terms that are dilutive or otherwise affect the value of the Company's shares, or that the Company may pursue other value realisation strategies such as a sale, partial sale or joint venture of the Project (which may reduce the Company's overall ownership of the Project).

Project Risk

The key risks with their mitigations, are identified as follows:

- 1. The Project's success is fundamentally linked to the price for uranium exceeding the operating cost for the project. Aura is in the process of seeking additional offtake agreements with suitable long-term pricing, but the market price risk is largely outside Aura's control.
- 2. The estimated capital costs for the project could prove optimistic, requiring additional funding. The Capex estimate was composed of 85% external pricing, so has a strong basis for its pricing. The project will rely on competent Project cost control by the EPC company overviewing the project.
- 3. OHS management risk of radioactive dust in the mining and front-end areas. Aura will ensure operators are in dust sealed cabins, use personnel badges and will rotate personnel if necessary.
- 4. There are potential risks in obtaining Mauritanian statutory permit approvals, in the time required. Aura would seek a high-level connection between Government authorities and its senior management, to supplement the usual project interfaces between Aura's local permitting supervisor and Government authorities. It is expected given Aura's focus on maximising local employment, that the Mauritanian Government will be quite supportive.
- 5. There are risks from terror groups in the Sahel region. Aura has provisionally arranged for military supported security to be permanently based close to the site. Aura will continue with its very close coordination with police/gendarmes/military guarding the area.

- 6. A risk remains of insufficient water being available for the project. A program designed to mitigate the risk that includes the drilling and test work of the Taoudeni basin is planned to be completed in 2024. The Taoudeni basin supplies water for the SNIM magnetite iron ore operations in Zouerate and First Quantum's Guelb Morghein Cu/Au/Fe mine in Akjout. Tiris' water requirements are between 2-3ML pa and it expected that there will be more than sufficient quantities of water available.
- 7. Aura's hybrid diesel and solar generation plant will be the only power source for the Project. Aura shall undertake rigorous engineering selection of the power generation supply and hire experienced and competent electrical support personnel to maintain the power plant.

Future Activities

The Company plans to undertake a series of activities throughout 2024 to further grow the Tiris project potential and support financing and Final Investment Decision. These will include:

- Securing offtake contracts for future production from major US utilities to de-risk future cashflows and support funding initiatives
- Completion of current drilling program and updating the Mineral Resources at Tiris East aimed at extending mine life and potentially increasing the scale of the Project
- Commencement of trial mining to confirm baseline assumptions for mining fleet and provide inputs for grade control and geometallurgical models
- Investigation and testing of water targets within the Taoudeni basin target expansion of water resources in line with expanded processing capacity
- Ongoing baseline environmental and radiation monitoring, along with commencement of community consultation along the product transport route
- Engineering optimisation for concentrate processing facilities to investigate potential capital cost efficiencies of expanding capacity for a single train circuit
- Completion of Project Execution Plan