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# ETANGO-8

SCOPING STUDY PRESENTATION

August 2020



# IMPORTANT NOTICES



## Cautionary Statement

The Scoping Study referred to in this ASX release has been undertaken for the purpose of initial evaluation of a potential 8Mtpa development of the Etango uranium deposit, owned by Bannerman Resources Limited (**Bannerman**). It is a preliminary technical and economic study of the potential viability of a smaller initial-scale configuration of the Etango Project, which has previously been the subject of Definitive Feasibility Study at a larger 20Mtpa development scale. The Scoping Study outcomes, production target and forecast financial information referred to in this release are based on low accuracy level technical and economic assessments that are insufficient to support estimation of Ore Reserves. While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised. Further exploration and evaluation work and appropriate studies are required before Bannerman 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.

Of the Mineral Resources scheduled for extraction in the Scoping Study production plan, approximately 13.7% are classified as Measured, 83.9% as Indicated and 2.4% as Inferred. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. Inferred Resources comprise less than 2.2% of the production schedule in the first year of operation and an average of less than 2.1% over the first three years of operation. Bannerman confirms that the financial viability of the Etango Project is not dependent on the inclusion of Inferred Resources in the production schedule.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). The Competent Person's Statement is found in the following slide. For full details of the Mineral Resources estimate, please refer to Bannerman ASX release dated 11 November 2015, Outstanding DFS Optimisation Study Results. Bannerman 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 ASX release continue to apply and have not materially changed.

To achieve the range of outcomes indicated in the Scoping Study, pre-production funding in excess of A\$250M will likely be required. There is no certainty that Bannerman will be able to source that amount of funding when required. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Bannerman's shares. It is also possible that Bannerman could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Etango Project. These could materially reduce Bannerman's proportionate ownership of the Etango Project.

No Ore Reserve has been declared. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC modifying factors, on which the production target and forecast financial information are based have been included in the ASX release dated 5 August 2020.

# IMPORTANT NOTICES

## Forward Looking Statements

This presentation includes various forward looking statements which are identified by the use of forward looking words such as “may”, “could”, “will”, “expect”, “believes”, “intend”, “plan”, “estimate”, “anticipate”, “continue”, and “guidance”, or other similar words and may include, without limitation statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. Statements other than statements of historical fact may be forward looking statements. Bannerman believes that it has reasonable grounds for making all statements relating to future matters attributed to it in this presentation.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of resources or reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation. Investors should note that any reference to past performance is not intended to be, nor should it be, relied upon as a guide to any future performance.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Actual results, values, performance or achievements may differ materially from results, values, performance or achievements expressed or implied in any forward looking statement. None of Bannerman, its officers or any of its advisors make any representation or warranty (express or implied) as to the accuracy or likelihood of fulfilment of any forward looking statement, or any results, values, performance or achievements expressed or implied in any forward looking statement except to the extent required by law.

Forward looking statements in this release are given as at the date of issue only. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

## Competent Person Statement

### Exploration Results and Resources

The results of the Scoping Study with the technical report titled “8 Mtpa Etango Project Scoping Study” dated 5 August 2020 (the “Technical Report”) by Bannerman Resources Limited and the Etango Uranium Resources that underpin the production targets are based on, and fairly represent, information and supporting documentation reviewed by Mr Werner Klaus Moeller.

Mr Werner K Moeller is since 2016 a Director and Principal Mining Engineer of Qubeka Mining Consultants CC based in Klein Windhoek, Namibia. Prior to 2016 he was a Director and Principal Mining Engineer of VBKom Consulting Engineers (Pty) Ltd based in Centurion, South Africa. He is Member of the following professional associations:

- South African Institute of Mining and Metallurgy - MSAIMM nr. 704793.
- Australian Institute of Mining and Metallurgy - MAusIMM nr. 329888.
- Canadian Institute of Mining, Metallurgy and Petroleum – MCIM nr. 708163;

Mr Werner K Moeller is a graduate of University of Pretoria, South Africa and hold a Bachelor degree, majoring in Mine Engineering (2001) and an Honours degree, majoring in Industrial Engineering (2002). He is practising as a mining engineer and has practiced his profession continuously since 2002. My relevant experience for the purpose of the Scoping Study review is:

- Operational experience on numerous mines in Africa and Namibia including three years at Rio Tinto's Rössing Uranium Mine.
- Mine planning and study experience on a large number of uranium projects, including Rio Tinto's Rössing Uranium Mine, Swakop Uranium's Husab Mine and Forsys Metal Corp's Valencia Project,
- Project manager for numerous feasibility studies all over Africa.

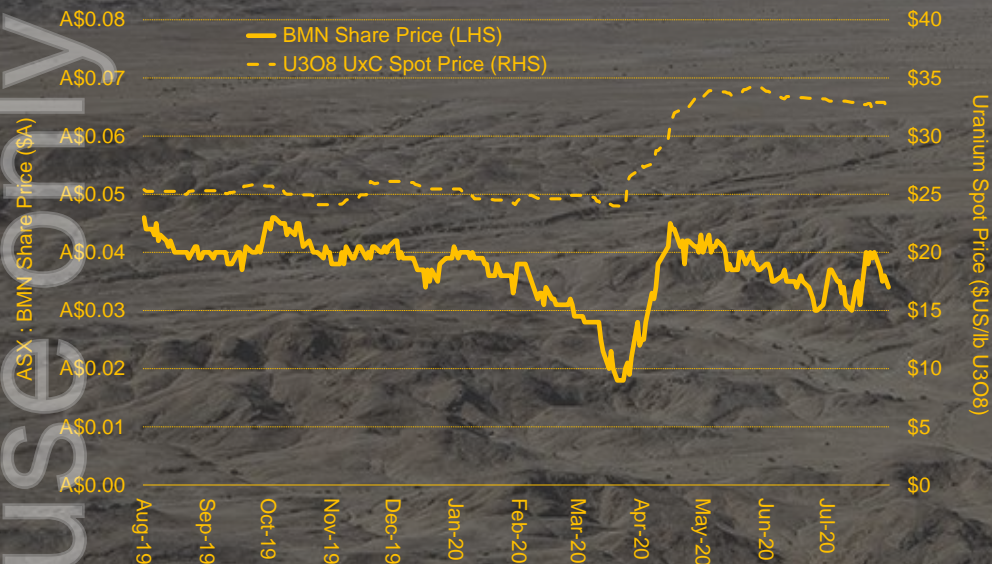
He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person, as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Werner K Moeller has 18 years' experience in exploration and mining of uranium deposits. He consents to the inclusion of the Scoping Study results disclosed by the Company in the form in which it appears.

Neither Mr Werner K Moeller nor Qubeka Mining Consultants CC have a direct or indirect financial interest in, or association with Bannerman Resources Limited, the properties and tenements reviewed in this statement, apart from standard contractual arrangements for the review of this report and other previous independent consulting work. In reviewing this Scoping Study, Qubeka Mining Consultants CC has been paid a fee for time expended. The present and past arrangements for services rendered to Bannerman Resources Limited do not in any way compromise the independence of Qubeka Mining Consultants CC with respect to this estimate.



# BANNERMAN AT A GLANCE

## SHARE PRICE CHART (ASX:BMN)



## SHARE REGISTER (AT 30 JUNE 2020)

Tibeca	9%
Uranium Funds	13%
Institutional	22%
Board and Management	10%

ASX:BMN OTCQB:BNNLF NSX:BMN

## CAPITAL STRUCTURE

ASX share price	A\$0.035
12 month share price range	A\$0.015 – A\$0.056
Shares on issue	1,059 million
Market capitalisation	A\$37M
Options and performance rights	68 million
Average daily volume (ASX 1-month)	2.7 million
Cash (30 June 2020)	A\$4.2M
Debt	Zero

## BOARD

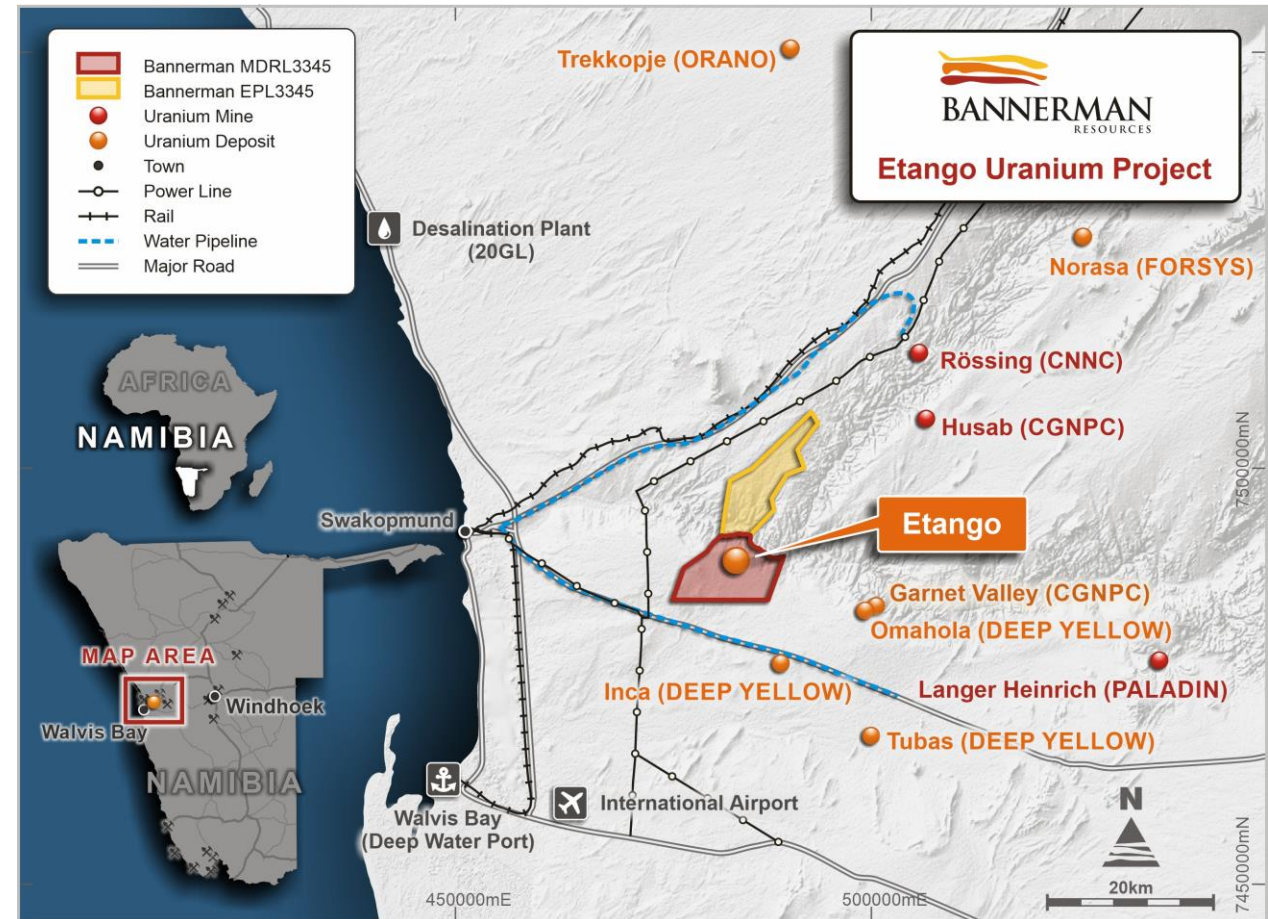
Independent Chairman	Ronnie Beevor
Chief Executive Officer/MD	Brandon Munro
Independent NED	Mike Leech
Independent NED	Ian Burvill
NED	Clive Jones

# ETANGO-8 URANIUM PROJECT



## A world-class uranium asset

- Globally large-scale resource endowment
- Low technical risk
- Excellent supporting infrastructure
- Established uranium operating jurisdiction
- Strong in-country presence and engagement
- High scalability





1

## KEY SCOPING OUTCOMES

An accelerated project development with strong financial returns



# STUDY RATIONALE AND TEAM

## A substantial body of existing technical and feasibility work



### Etango Project advanced study history

- Definitive Feasibility Study 2012 (DFS 2012); 20Mtpa throughput; estimation accuracy of  $\pm 15\%$
- DFS Optimisation Study (OS 2015); 20Mtpa throughput; estimation accuracy of  $\pm 15\%$
- Heap Leach Demonstration Plant at site (operated from 2015); industrial scale plant that validated metallurgical parameters

### Preliminary evaluation of various project scaling and scope opportunities commenced in 2019

### Etango-8 Scoping Study completed in August 2020; 8Mtpa throughput; estimation accuracy of $\pm 30\%$

- Heavily informed by detailed study work undertaken as part of the DFS 2012 and OS 2015
- Maintains the real option of eventual expansion; potentially to the 20Mtpa scale evaluated in the DFS 2012 and OS 2015

Contributor	Discipline
Qubeka Mining Consultants	Geology review, pit inventory estimates, mine planning and financial analysis
DRA-Senet	Process plant design and related infrastructure, plant capital cost estimate
A. Speiser Environmental Consultants	Environmental and social impacts and management
Genis Business Consulting	External infrastructure
Nuclear Fuel Associates LLC	Uranium marketing and advisory
Fivemark Partners	Commercial and strategic advisory

# KEY CONCLUSIONS

**A lower pre-production capital intensity and a higher rate of return (at a lower price)**

- US\$65/lb U<sub>3</sub>O<sub>8</sub> LOM price utilised (versus US\$75/lb in DFS 2012 and OS 2015)
- The Scoping Study has demonstrated that the accelerated, Etango-8 Project is strongly amenable to development – both technically and economically
- The 8Mtpa initial scale allows for a significantly lower upfront capital requirement while still delivering efficient and attractive projected financial returns
- The long-term scalability of the world-class Etango Project (up to 20Mtpa) remains, as confirmed by previous definitive level technical studies at such scale
- The Bannerman Board has approved commencement of a Pre-Feasibility Study (PFS) on the Etango-8 Project
- Given the breadth of existing study work that exceeds a PFS level of detail, completion of the PFS is targeted for 2Q 2021



# PHYSICAL OUTCOMES

Highly robust technical parameters

**14+ years**

Initial mine life

**1.93 : 1**

Strip ratio (waste:ore)

**8 Mtpa**

Throughput capacity

**87.8%**

Processing yield

**3.5 Mlb U<sub>3</sub>O<sub>8</sub>**

Average annual production

**51 Mlb U<sub>3</sub>O<sub>8</sub>**

Total production

Key physical parameters	Unit	Total / LOM	Annual average
<b>Operations</b>			
Construction period	months	24	NA
Initial production life	years	14.4	NA
<b>Mining</b>			
Ore mined	Mt	114.1	7.9
Strip ratio	x	1.93	1.93
Waste mined	Mt	220.0	15.3
<b>Processing</b>			
Ore processed	Mt	114.1	7.9
Average uranium head grade	ppm U3O8	232	232
Forecast uranium recovery	%	87.8%	87.8%
<b>Output</b>			
Uranium production	Mlbs U3O8	48.5 – 53.7	3.4 – 3.7

Of the Mineral Resources scheduled for extraction in the Etango-8 Scoping Study production plan, approximately 13.7% are classified as Measured, 83.9% as Indicated and 2.4% as Inferred. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. Inferred Resources comprise less than 2.2% of the production schedule in the first year of operation and an average of less than 2.1% over the first three years of operation. Bannerman confirms that the financial viability of the Etango-8 Project is not dependent on the inclusion of Inferred Resources in the production schedule.

# FINANCIAL RETURNS

Strong projected economics

**US\$65/lb**

LOM U<sub>3</sub>O<sub>8</sub> price

**US\$212M**

Post-tax NPV<sub>8%</sub>

**21.2%**

Post-tax IRR

**3.6 years**

Payback (post-tax)

**US\$254M**

Pre-production capex

**US\$37/lb**

Cash opex (ex royalties)

Key financial outcomes	Unit		
Price inputs			
LOM average uranium price	US\$/lb U <sub>3</sub> O <sub>8</sub>	-	65
US\$/N\$	N\$	-	16
Valuation, returns and key ratios		Range	Mid point
NPV8% (post-tax, real basis, ungeared)	US\$M	201 - 223	212
NPV8% (pre-tax, real basis, ungeared)	US\$M	354 - 392	373
IRR (post-tax, real basis, ungeared)	%	20.1 - 22.2	21.2
IRR (pre-tax, real basis, ungeared)	%	25.5 - 28.1	26.8
Payback period (post-tax, from first production)	years	3.4 - 3.8	3.6
Payback period (pre-tax, from first production)	years	3.2 - 3.6	3.4
Pre-tax NPV / Pre-production capex	x	1.4 - 1.5	1.5
Pre-production capital intensity	US\$/lb U <sub>3</sub> O <sub>8</sub> pa capacity	67 - 75	71
Cashflow summary		Range	Mid point
Sales revenue (gross)	US\$M	3,154 - 3,486	3,320
Mining opex	US\$M	(813 - 899)	(856)
Processing opex	US\$M	(816 - 902)	(859)
G&A opex	US\$M	(134 - 150)	(143)
Product transport, port, freight, conversion	US\$M	(53 - 59)	(56)
Royalties and export levies	US\$M	(139 - 153)	(146)
Project operating surplus	US\$M	1,197 - 1,323	1,260
Pre-production capital expenditure	US\$M	(241 - 267)	(254)
LOM sustaining capital expenditure	US\$M	(29 - 33)	(31)
Project net cashflow (pre-tax)	US\$M	926 - 1,024	975
Tax paid	US\$M	(352 - 390)	(371)
Project net cashflow (post-tax)	US\$M	574 - 634	604

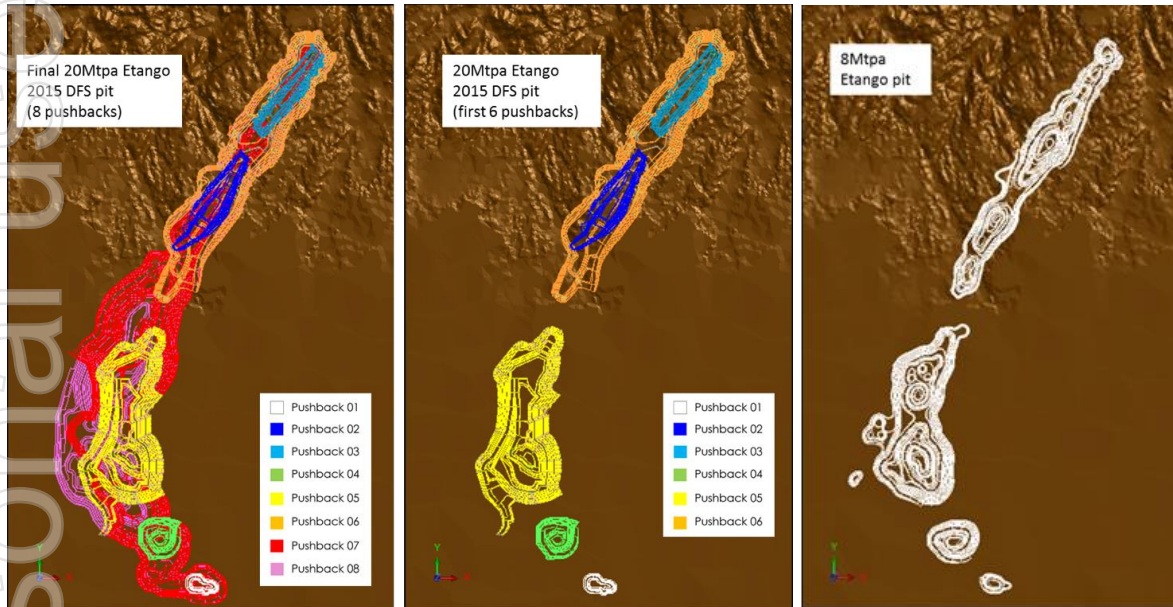
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# KEY UPSIDE OPPORTUNITIES

## Substantial value enhancement potential

### 1 Future life extension and/or scale-up expansion

- Globally large resource of 271Mlbs U<sub>3</sub>O<sub>8</sub> (14.4Mlbs Measured, 150.2Mlbs Indicated and 106.1Mlbs Inferred)\*
- 8Mtpa development retains flexibility to expand to larger throughput (up to 20Mtpa) post operations commencing



### 2 Processing efficiency and cost upside

- Testwork at the Etango Heap Leach Demonstration Plant indicates potential for further optimisation of acid consumption, reagent use and uranium recovery



\* For full details of the Mineral Resources estimate, please refer to Bannerman ASX release dated 11 November 2015, *Outstanding DFS Optimisation Study Results*. Bannerman 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 ASX release continue to apply and have not materially changed.



# SOCIAL LICENCE TO OPERATE

Strong position due to historical body of work and engagement

- Environmental baseline in place since 2008
- High-quality, peer reviewed Environmental and Social Impact Assessment completed in 2009
- Environmental approvals granted in 2010 (Etango Project) and 2012 (Linear Infrastructure)
- Bannerman is acknowledged as a leader in Corporate Social Responsibility in Namibia
- Trusted relationship with local communities
- Bannerman's flagship Learner Assistance Program has assisted 3,000 learners over the past ten years across schools throughout Namibia
- One Economy Foundation is a 5% shareholder in Bannerman Mining Resources (Namibia) (Pty) Ltd
- Strong government support at all levels



Recipients of Bannerman's Learner Assistance Program in the Kunene Region of Namibia

# THE PATH FORWARD

## Progression to PFS approved

- Etango-8 PFS set to commence with targeted completion by Q2 2021
- No further exploration drilling planned given ~150Mlb U<sub>3</sub>O<sub>8</sub> already in M&I resource classification
  - Focus group meetings with key stakeholders during the PFS phase to amend Environmental Clearance
- Following completion of the PFS, it is estimated that a DFS would take a further 9 – 12 months
- Upon completion of a DFS, an application to convert the Mineral Deposit Retention Licence 3345 to a Mining Licence can then be submitted to the Namibian Ministry of Mines and Energy
- Forecast construction period of 18 – 24 months

Months to delivery	+3	+6	+9	+12	+15	+18	+21	+24	+27	+30	+33	+36	+39	+42	+45	+48
<b>PFS</b>																
<b>DFS</b>																
<b>Approvals</b>																
<b>Engineering</b>																
<b>Construction</b>																



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## MINING AND PROCESSING

Low-strip mining with a heavily de-risked process route

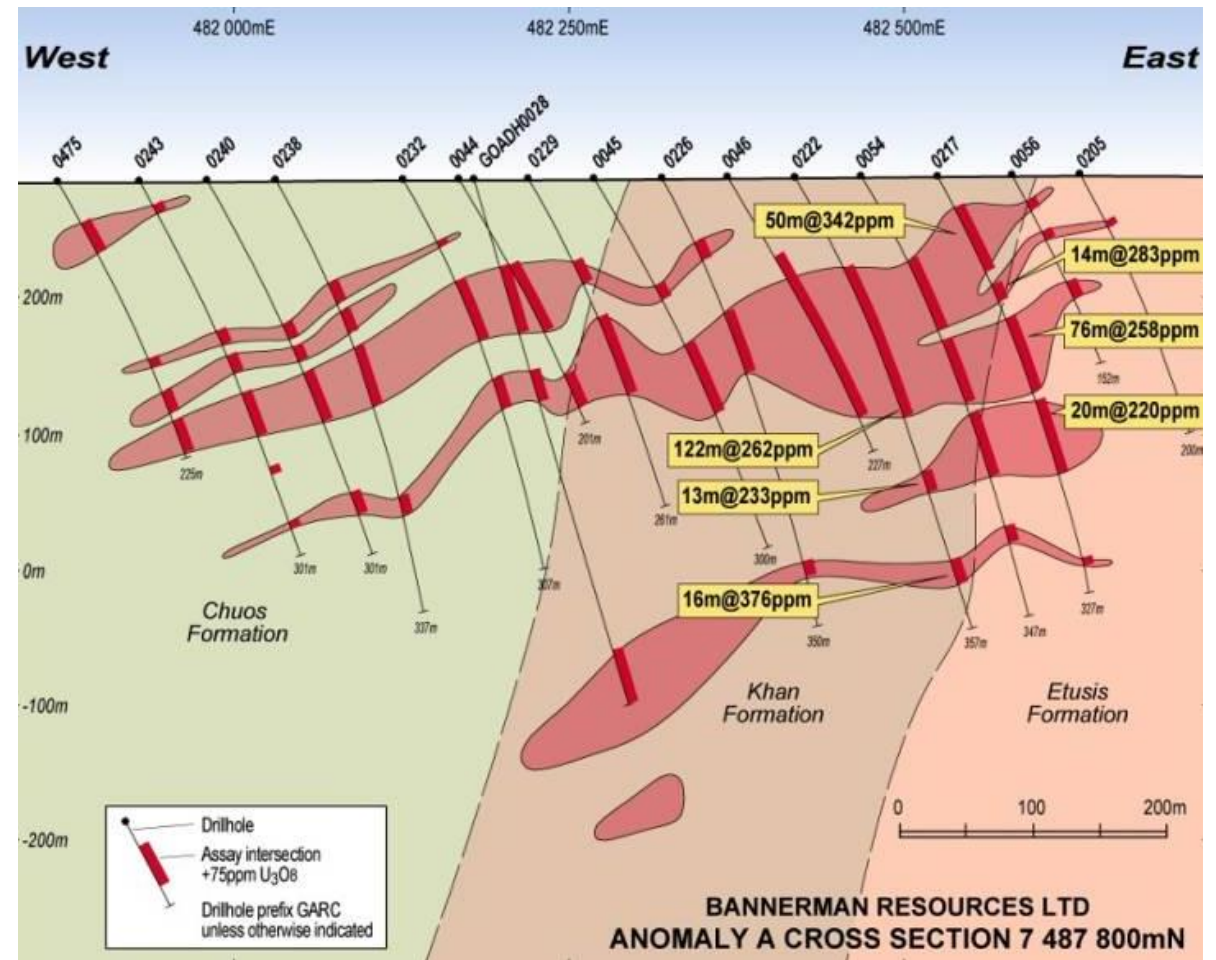




# GEOLOGY

## Simple alaskite hosted uranium geology

- Uranium mineralisation predominantly hosted by a stacked sequence of leucogranitic bodies (alaskite)
- Uranium defined within an approximately +5km long zone trending south-east to north-east that dips moderately (30° to 50°) to the west
- Dominant primary uranium mineral is uraninite ( $\text{UO}_2$ )
- Approximately 90% of logged mineralised intervals (>50 ppm  $\text{U}_3\text{O}_8$ ) at the Etango Project occur within alaskite
- Minor uranium mineralisation is also found in the metasedimentary sequences



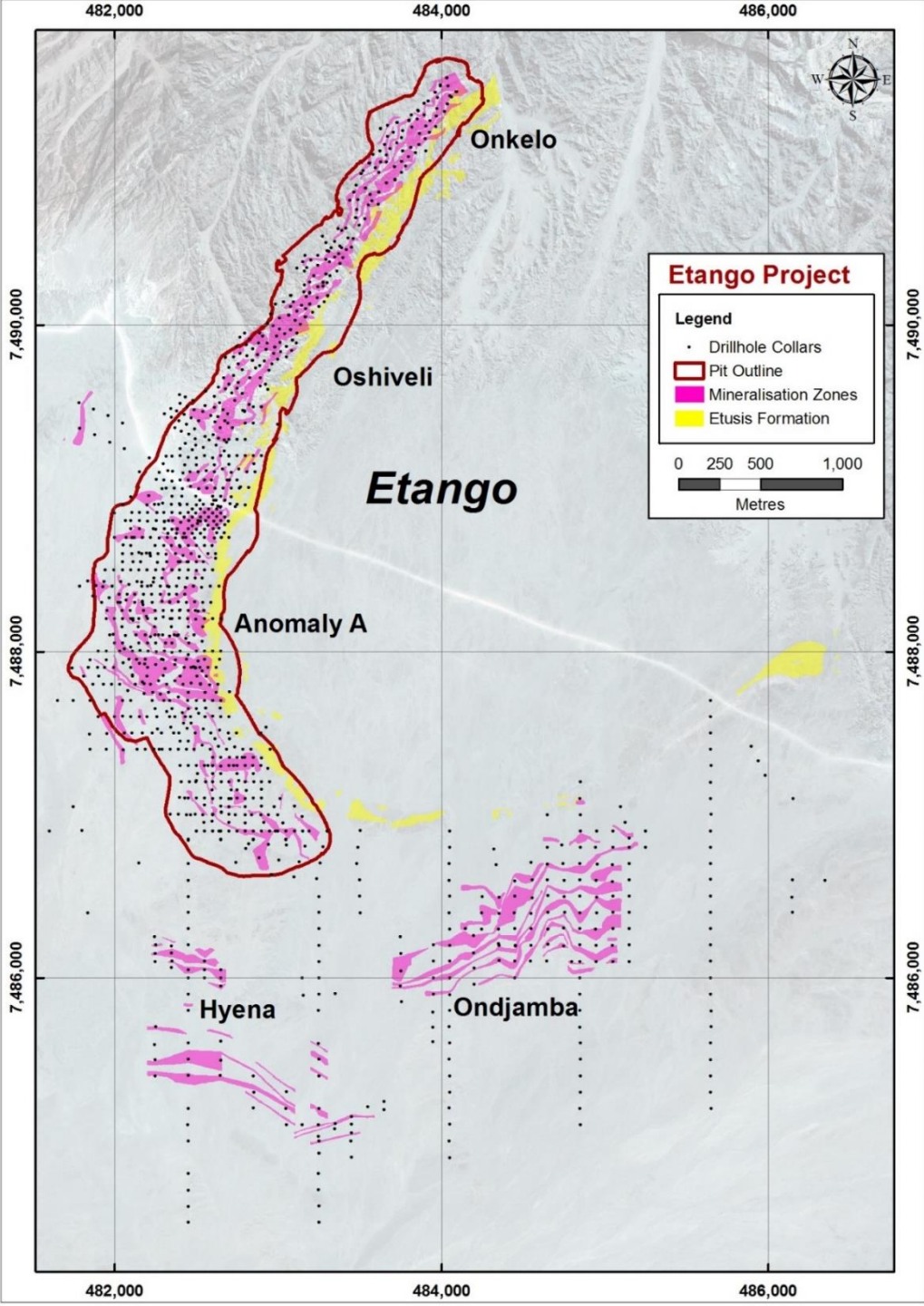
# MINERAL RESOURCE

## A world-class uranium resource

- Drillhole database of 939 holes (105 diamond and 834 RC) for 239,032 m
- Etango Mineral Resource update completed in 2015 (IRS and Optiro)
- Parent blocks of 25 x 25 x 8m, sub-celled to 6.25 x 12.5 x 4m (the SMU)
- Uniform Conditioning (UC) applied to calculate the recoverable resource
  - Closely reflects proposed grade control and mining approach of gamma probing of blastholes supplemented by truck scanning
  - Reflects best practice for uranium mineralisation; highly effective system at both the large Rössing and Ranger open-pit mines

Etango Project Mineral Resource Estimate (2015)			
Resource Category	Tonnes (Mt)	Grade (U <sub>3</sub> O <sub>8</sub> ppm)	Contained U <sub>3</sub> O <sub>8</sub> (Mlb)
Reported at a cut-off grade of 55 ppm U <sub>3</sub> O <sub>8</sub> , constrained within the resource pit shell			
Measured	33.7	194	14.4
Indicated	362	188	150.2
Inferred	144.5	196	62.5
<b>Total</b>	<b>540</b>	<b>191</b>	<b>227</b>

For full details of the Etango Mineral Resource estimate, please refer to ASX release dated 11 November 2015, *Outstanding DFS Optimisation Study Results*. Bannerman 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 resource estimate continue to apply and have not materially changed.



# PIT PARAMETERS AND MINE DESIGN

## Conventional mining operation

- Conventional truck and shovel open pit operation
- Contract mining; expected fleet requirement of 20 – 24 haul trucks (100t) and 4 – 5 excavators (200t)
- Radiometric truck scanning employed as the definitive grade control process, as is common practice in large scale open pit uranium mines in Australia and Namibia
- Fresh rock mass conditions are good and allow for steep slopes to be excavated
- As per DFS 2012, adopted 12m benches mined in 3 – 4m flitches to minimise ore loss and dilution
- Design allows for progression to larger equipment in the event of expanded production rates in the future
- Hydrogeology – groundwater not expected to present a significant issue for mining activities

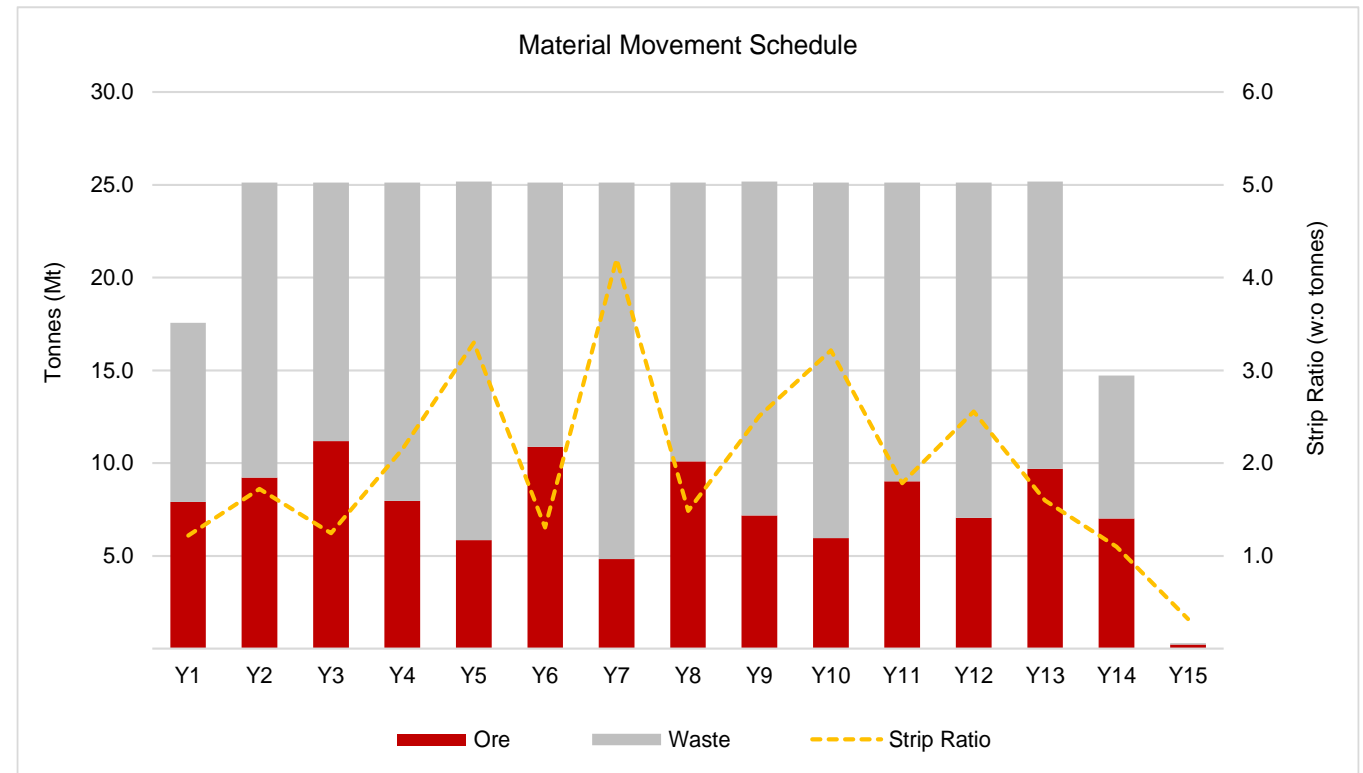




# MINE SCHEDULE

Low average LOM strip ratio of 1.9x

- Total ore mined of 114.1Mt at 232 ppm  $U_3O_8$
- Approx. 14 year initial life of mining operations
- Average strip ratio of 1.93
- Still delivers real optionality for potential future phases of expansion, including up to 20Mtpa throughput production rate and scheduled pit pushbacks laid out in the OS 2015



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# METALLURGY AND PROCESS INPUTS

## Heavily studied metallurgical parameters

- DFS-standard met testwork programs previously conducted at both ALS Ammtech and Bureau Veritas
- Comminution, heap leach column and cribs, acid usage, SX, Ion Exchange (IX) and Nano-Filtration (NF) testwork all conducted
- Construction and operation of Heap Leach Demonstration Plant at Etango also demonstrated, at scale, the robustness of the process assumptions used in DFS 2012 and OS 2015
- Average acid consumption of 14.7kg/t was achieved at the Heap Leach Demonstration Plant
- Taking into account scale-up factors, and downstream acid consumption, a final acid consumption input of 16.8 kg/t has been utilised; clear potential for this to be further optimised
- Membrane Study testwork completed in early 2020 confirmed substantial advantages of IX followed by NF; design of the NF plant has already been completed to definitive level

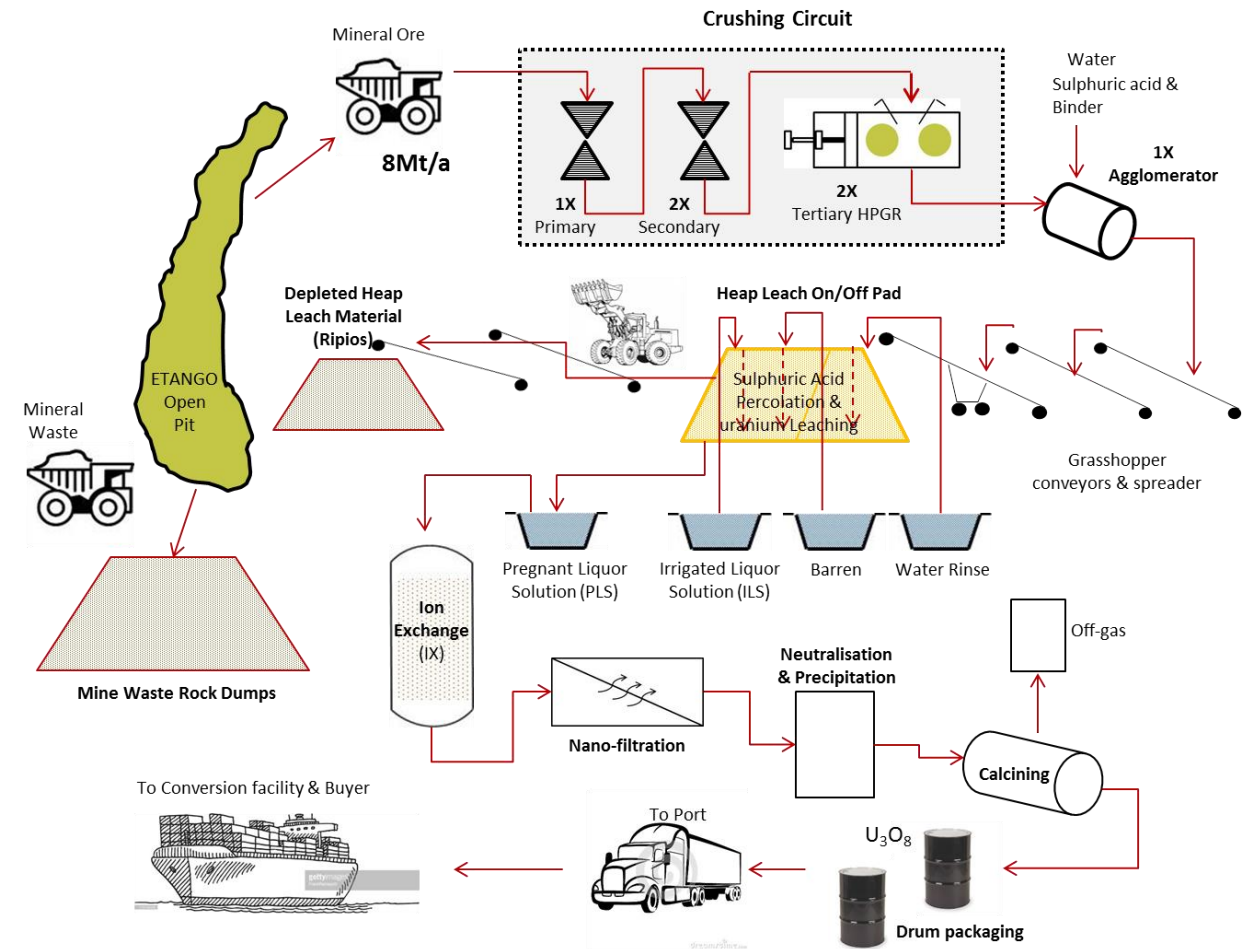
### Key process design parameters

Heap leach crush size	P <sub>80</sub> 5.3 mm
Leach duration	30 – 32 days
U <sub>3</sub> O <sub>8</sub> recovery	87.8%
Acid consumption	16.8 kg/t
Heap leach pad height	5 m
Heap irrigation rate	12.6 L/m <sup>2</sup> /hr

# PROCESS FLOWSHEET AND PLANT DESIGN

## A highly de-risked process route

- Gyratory primary crusher, two secondary cone crushers and two tertiary HPGR (high pressure grinding roll) units
- Water, sulphuric acid and binder agent are then added, and the agglomerated ore is transferred to the heap leach stacking system
- Ore is stacked in modules and undergoes leaching to produce Pregnant Leach Solution (PLS)
- PLS is pumped to IX columns for the recovery of uranium, and the barren solution is recirculated to the heap to build up uranium tenor
- Following the IX process, the uranium bearing solution proceeds through NF, precipitation and drying/calcining
- Triuranium octoxide ( $U_3O_8$ ) is the final saleable product
- Filling, lidding, washing and weighing of the product transportation drums is largely automated

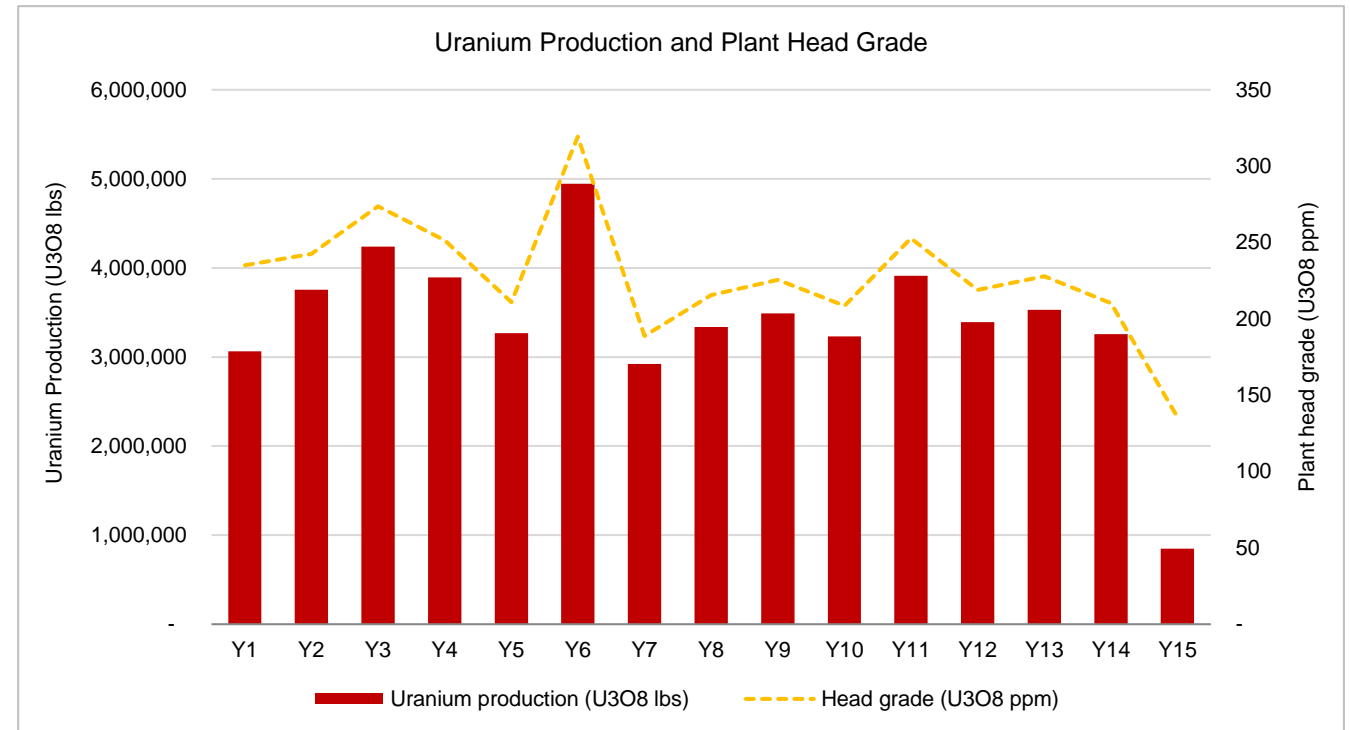




# PRODUCTION SCHEDULE

Forecast average annual production of over 3.5 Mlbs

- Strategic ROM ore stockpile used to manage tonnage and grade of ore feed to the plant
- Initial plant ramp-up period of 12 months to attain nameplate capacity of 8 Mtpa throughput and recovery of 87.8%
- Forecast average LOM  $U_3O_8$  production is 3.55 Mlbs per annum, with a peak in Year 6 of 4.94 Mlbs



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## INFRASTRUCTURE AND LOGISTICS

A premium location

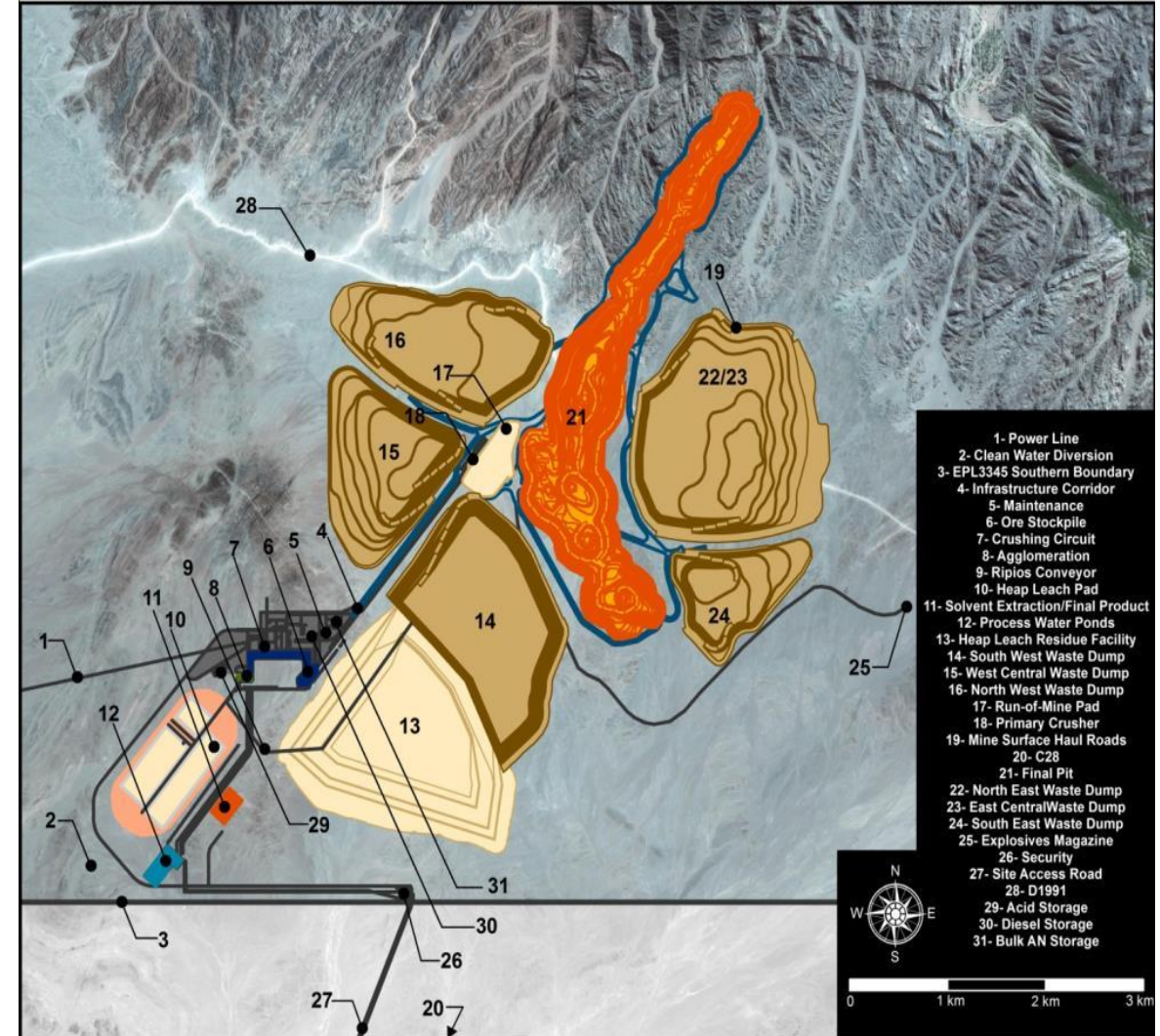




# SITE LAYOUT

In-line with previously optimised configuration

- Plant location same as in the OS 2015
- Waste rock dumps sited adjacent to the open pit and as far as possible to the south of the Swakop river catchment
- Primary crusher located adjacent to the open pit and is linked to the process plant by a 3km overland conveyor
- Heap leach pads are located southwest of the main plant to suit the topography of the site and minimise earthworks
- Heap leach residue facility located at the southern extremity of the waste rock dumps, adjacent to the heap leach pad





# POWER AND WATER

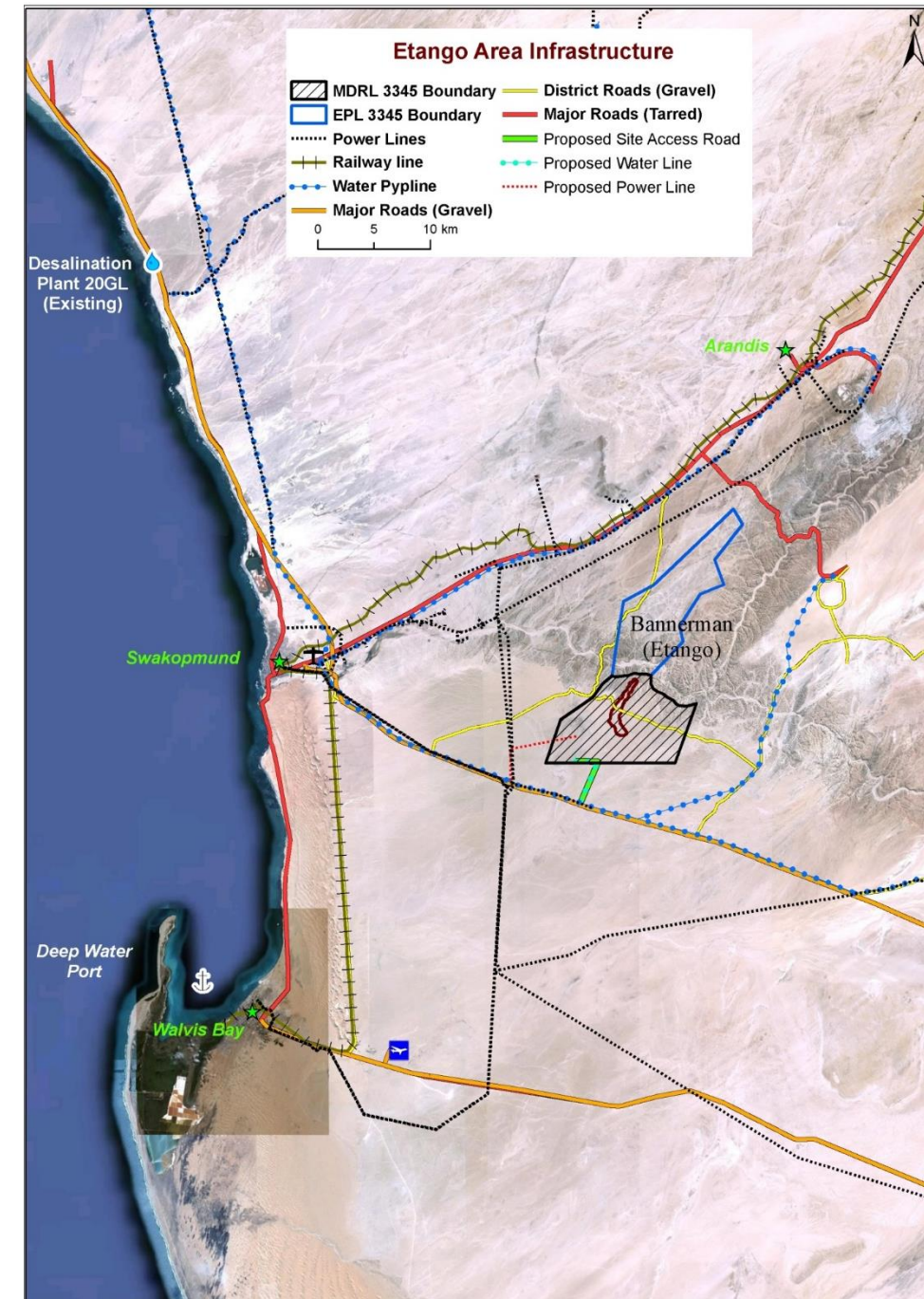
## Readily available power and water solutions

### Power

- Power to be provided by Nampower, the national power utility company
- Significant upgrades of Nampower's generation and distribution capacity have taken place since 2015
- Planned 29 km, 132 kV transmission line from the Kuiseb substation to the Etango site

### Water

- Water to be sourced from NamWater, the national water utility company
- Planned pipeline and pumping system from NamWater's Base Reservoir in Swakopmund
- Pipeline route to follow the corridor as provided for in the Environmental Clearance Certificate



# PRODUCT TRANSPORT AND PORT LOGISTICS

## Established, safe and efficient uranium export infrastructure



- C28 road from Swakopmund passes ~10km to the south of Etango; planned construction of a spur road to site, parallel to the power line and water pipeline services route
- D1984 is currently being upgraded to a sealed double highway with a safe fly-over onto the C28; provides a safe route for trucking of final product to Walvis Bay (and sulphuric acid to site)
- Port of Walvis Bay is a highly established uranium export facility that has been handling Class 7 cargo for over 40 years
- Specific areas within the controlled port environment have been designated for uranium export, which Bannerman can utilise
- Regular container services operate to Europe, Asia and the US
- Sulphuric acid to also be imported via Walvis Bay; planned storage tank at port and road transport to site



Port of Walvis Bay (Courtesy Namibia Ports Authority)



4

## SOCIAL LICENCE TO OPERATE

Strong community engagement and support





# ENVIRONMENT AND COMMUNITY

## Established and deep in-country presence and engagement

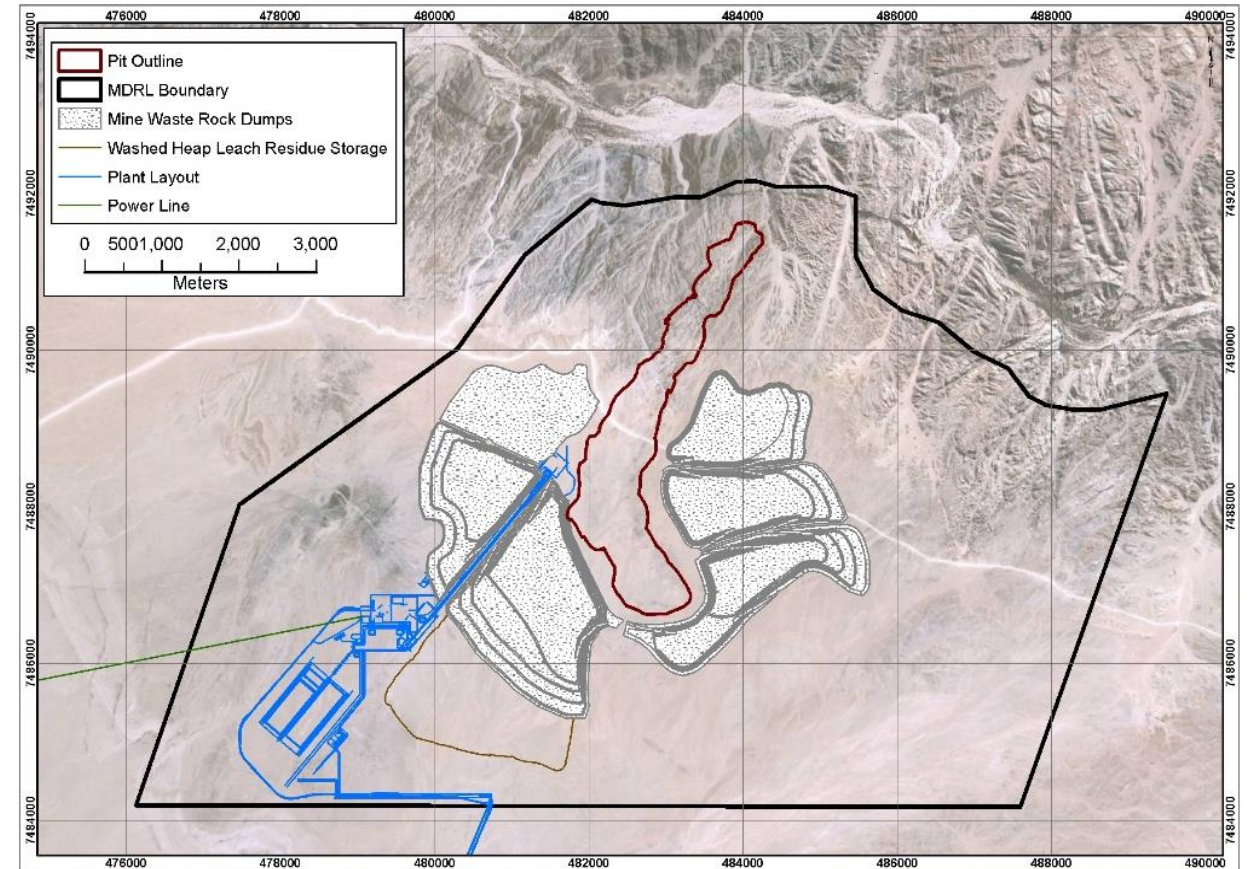


- Environmental and Social Impact Assessment (ESIA), reflecting the DFS 2012, renewed and currently valid until October 2021
- Environmental Clearance for linear infrastructure renewed and currently valid until June 2022
- Etango-8 Scoping Study is a reduced-impact version of the larger 20Mtpa project – significantly reduces the risk attached to additional required approvals
- Baseline environmental monitoring in place since 2008
- Bannerman core value to build enduring and mutually beneficial relationships with our neighbouring communities in Namibia
- Bannerman has invested in Namibia since 2006 and has contributed substantially to the communities in which it operates
- Selected long-term initiatives include:
  - Early Learner Assistance Program
  - Pioneering cooperation with the Hospitality Association of Namibia and Coastal Tourism Association of Namibia
  - One Economy Foundation a 5% shareholder in Bannerman Mining Resources (Namibia) Pty Ltd

# TENURE AND PERMITTING

## Well delineated and understood tenure and approvals processes

- Bannerman currently holds a Mineral Deposit Retention Licence (MDRL) over the Etango Project area (7,295 ha)
- MDRL 3345 provides strong and exclusive rights to tenure and the right (without obligation) to continue with exploration or development work
- It has a five-year extendable term with an initial expiry date of 6 August 2022
- Upon completion of a DFS, an application to obtain a Mining Licence (ML) would be submitted to the Namibian Ministry of Mines and Energy
- The conversion of the MDRL to a ML would be expected to be a relatively short process





5

## CAPITAL AND OPERATING COSTS

A substantially reduced pre-production capital hurdle





# CAPITAL COST

Highly attractive pre-production capital intensity of approx. US\$71/lb pa capacity

- Forecast pre-production capex of US\$254M
- Estimated at  $\pm 30\%$  accuracy level
- Delivers a globally attractive pre-production capital intensity of approx. US\$71 per pound of average annual  $U_3O_8$  production capacity
- Total forecast sustaining capital across initial 15-year LOM is US\$31M (equates to ~US\$0.27/t ore)

Description	US\$'000	%
Direct Processing Plant capital	131,875	52%
External & Internal Infrastructure	34,023	13%
Accuracy provision	31,460	12%
Pre-production owners & EPCM	17,754	7%
Mining - owner's cost	11,206	4%
Owners direct cost	11,473	5%
Temporary Services, Construction Camp	9,752	4%
Commissioning, operational & insurance spares	6,802	3%
<b>Total</b>	<b>254,344</b>	<b>100%</b>

# OPERATING COST

## Robust construction of forecast opex

- Projected LOM operating cost (ex royalties/levies) of US\$37.4/lb U<sub>3</sub>O<sub>8</sub>
- Forecast contract unit mining cost of US\$2.48/t material mined (US\$2.56/t inclusive of owners' costs)
  - Compares with OS 2015 owner mining unit cost of US\$1.69/t material mined
  - Based on bottom-up contract mining cost model by Qubeka and benchmarked against similar sized contractor operations in Namibia and South Africa
- Forecast price of sulphuric acid (delivered to Walvis Bay) of US\$75/t, plus US\$13/t transport cost to Etango site
- Water tariff of US\$3.5/m<sup>3</sup> based on discussions with NamWater; includes estimated cost of desalination
- Utility power cost input is US\$0.0129 per kWh, represents the blended energy cost based on Nampower's Time of Use tariff schedule (all charges)

Description	LOM US\$M	US\$/t ore	US\$/lb	%
Mining - Contractor	829	7.3	16.2	43%
Maintenance & consumables	190	1.7	3.7	10%
Power	172	1.5	3.4	9%
Sulphuric acid	168	1.5	3.3	9%
Reagents (not including acid)	127	1.1	2.5	7%
Raw Water	94	0.8	1.8	5%
General & Admin expenses	83	0.7	1.6	4%
Corporate & Owner's Labour	59	0.5	1.2	3%
Labour - Plant Operations	50	0.4	1.0	3%
Labour - Plant Maintenance	37	0.3	0.7	2%
Mining - Owner's cost	27	0.2	0.5	1%
Miscellaneous	17	0.1	0.3	1%
Product transport, port, conversion	56	0.5	1.1	3%
<b>Total (ex-royalties/levies)</b>	<b>1,908</b>	<b>16.7</b>	<b>37.4</b>	<b>100%</b>

Unit cash operating costs		Range	Mid Point
Mining	US\$/t material mined	-	2.56
Mining	US\$/lb U <sub>3</sub> O <sub>8</sub>	-	16.8
Processing	US\$/t ore	-	7.53
Processing	US\$/lb U <sub>3</sub> O <sub>8</sub>	-	16.8
G&A	US\$/lb U <sub>3</sub> O <sub>8</sub>	-	2.8
Product transport, port, freight, conversion	US\$/lb U <sub>3</sub> O <sub>8</sub>	-	1.1
<b>Total cash operating cost (ex royalties, levies)</b>	<b>US\$/lb U<sub>3</sub>O<sub>8</sub></b>	<b>35.5 - 39.3</b>	<b>37.4</b>
Royalties and export levies	US\$/lb U <sub>3</sub> O <sub>8</sub>	2.8 - 3.0	2.9
Total cash operating cost	US\$/lb U <sub>3</sub> O <sub>8</sub>	38.3 - 42.3	40.3
<b>All-in-sustaining-cost (AISC)</b>	<b>US\$/lb U<sub>3</sub>O<sub>8</sub></b>	<b>38.9 - 42.9</b>	<b>40.9</b>

6

# FINANCIAL FORECASTS

Strong project economics

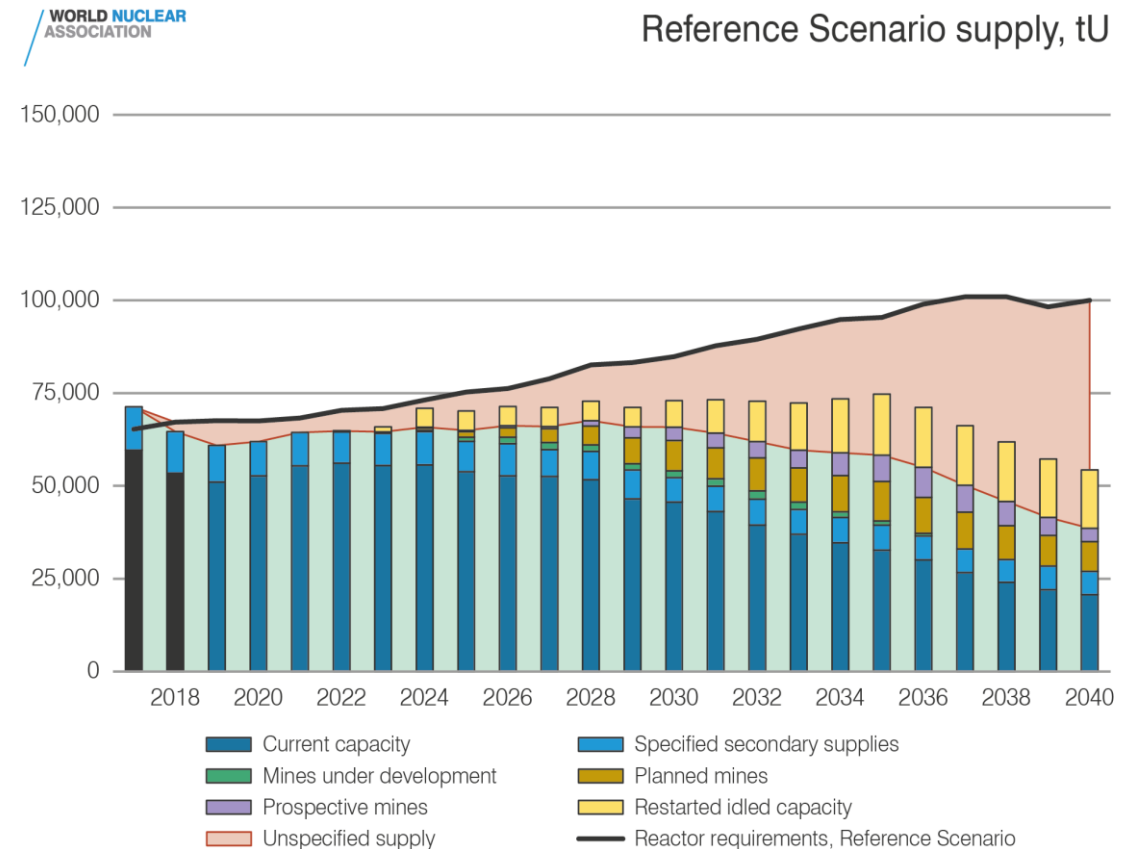




# URANIUM PRICE AND MARKET OUTLOOK

## Key industry perspectives

- Most market commentators expect uranium long term contract prices to substantially and sustainably increase to their assumed long-run price forecast or beyond in the next 24-48 months
- LOM uranium price input of US\$65/lb (US\$75/lb in OS 2015)
  - Consensus 2024 spot uranium price forecast: US\$47.10/lb
  - Forecast term-to-spot price premium of 37.5% (10-year monthly range of -2% to +89%, with an average of 32.5%)
  - Results in LOM term uranium price assumption of US\$65/lb
- Consistent with industry practice, Bannerman will seek a diversified portfolio of long-term contracts with a blend of fixed escalated prices and market price mechanisms, subject to floors



Source: World Nuclear Association, The Nuclear Fuel Report: Global Scenarios for Demand and Supply Availability 2019-2040

# KEY FINANCIAL METRICS

## Robust economic parameters

- Discounted cashflow model
- Contract mining with plant and other items owner-operated
- Real discount rate of 8%
- Costs quoted in real US\$ 2020 terms
- Uranium sales revenue assumed to be realised on a 4-months lag
- All assessments on 100% project basis (BMN attrib. 95%)
- All costs stated exclusive of VAT
- Namibian Government royalties (3%) and export levy (0.25%) applied to gross revenue
- External party royalties (1.17%) applied to pre-tax cashflow
- Namibian corporate tax (37.5%) applied to pre-tax, post-royalty cashflow

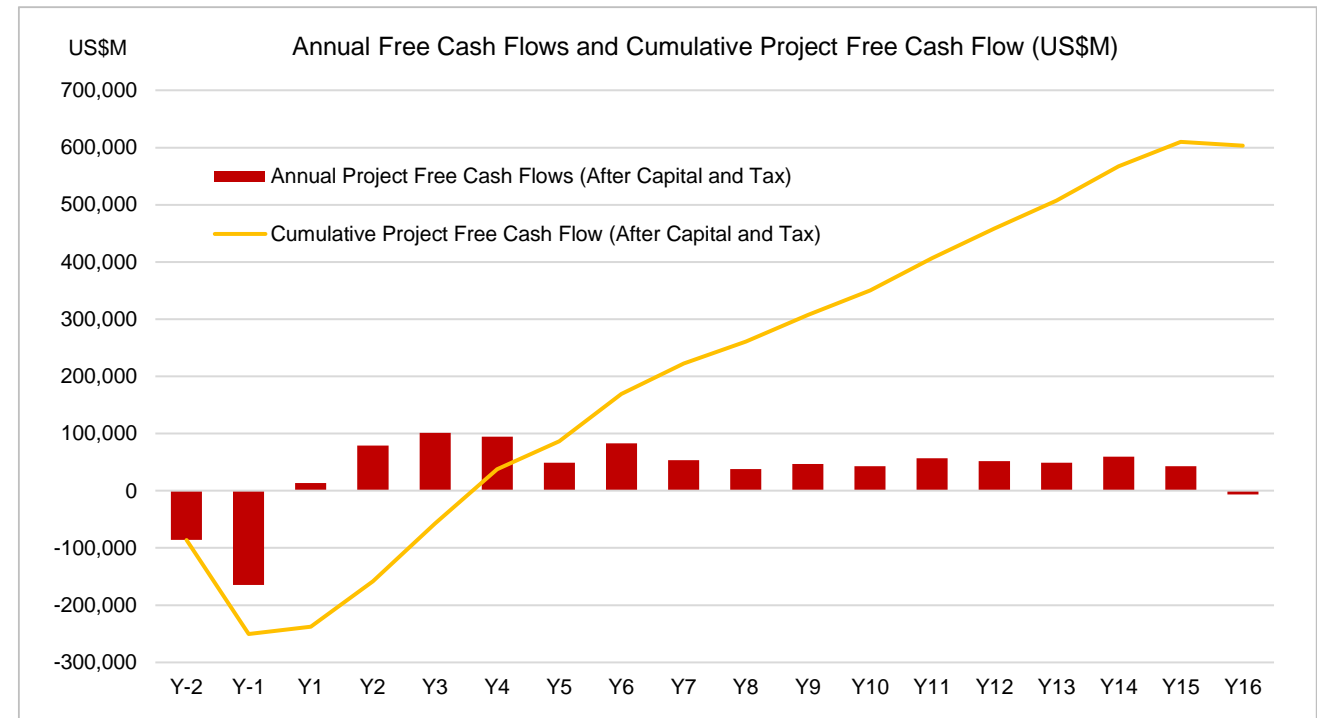
Key financial outcomes	Unit		
<b>Price inputs</b>			
LOM average uranium price	US\$/lb U <sub>3</sub> O <sub>8</sub>	-	65
US\$/N\$	N\$	-	16
<b>Valuation, returns and key ratios</b>		<b>Range</b>	<b>Mid point</b>
<b>NPV8% (post-tax, real basis, ungeared)</b>	<b>US\$M</b>	<b>201 - 223</b>	<b>212</b>
NPV8% (pre-tax, real basis, ungeared)	US\$M	354 - 392	373
<b>IRR (post-tax, real basis, ungeared)</b>	<b>%</b>	<b>20.1 - 22.2</b>	<b>21.2</b>
IRR (pre-tax, real basis, ungeared)	%	25.5 - 28.1	26.8
<b>Payback period (post-tax, from first production)</b>	<b>years</b>	<b>3.4 - 3.8</b>	<b>3.6</b>
Payback period (pre-tax, from first production)	years	3.2 - 3.6	3.4
Pre-tax NPV / Pre-production capex	x	1.4 - 1.5	1.5
Pre-production capital intensity	US\$/lb U <sub>3</sub> O <sub>8</sub> pa capacity	67 - 75	71
<b>Cashflow summary</b>		<b>Range</b>	<b>Mid point</b>
<b>Sales revenue (gross)</b>	<b>US\$M</b>	<b>3,154 - 3,486</b>	<b>3,320</b>
Mining opex	US\$M	(813 - 899)	(856)
Processing opex	US\$M	(816 - 902)	(859)
G&A opex	US\$M	(134 - 150)	(143)
Product transport, port, freight, conversion	US\$M	(53 - 59)	(56)
Royalties and export levies	US\$M	(139 - 153)	(146)
<b>Project operating surplus</b>	<b>US\$M</b>	<b>1,197 - 1,323</b>	<b>1,260</b>
Pre-production capital expenditure	US\$M	(241 - 267)	(254)
LOM sustaining capital expenditure	US\$M	(29 - 33)	(31)
<b>Project net cashflow (pre-tax)</b>	<b>US\$M</b>	<b>926 - 1,024</b>	<b>975</b>
Tax paid	US\$M	(352 - 390)	(371)
<b>Project net cashflow (post-tax)</b>	<b>US\$M</b>	<b>574 - 634</b>	<b>604</b>

# LIFE-OF-MINE CASHFLOW PROFILE

## Heightened cash generation in first four years

- Forecast pre-production capital intensity of approx. US\$71 per pound of average annual  $U_3O_8$  production capacity

- Post-tax payback of 3.6 years from first production



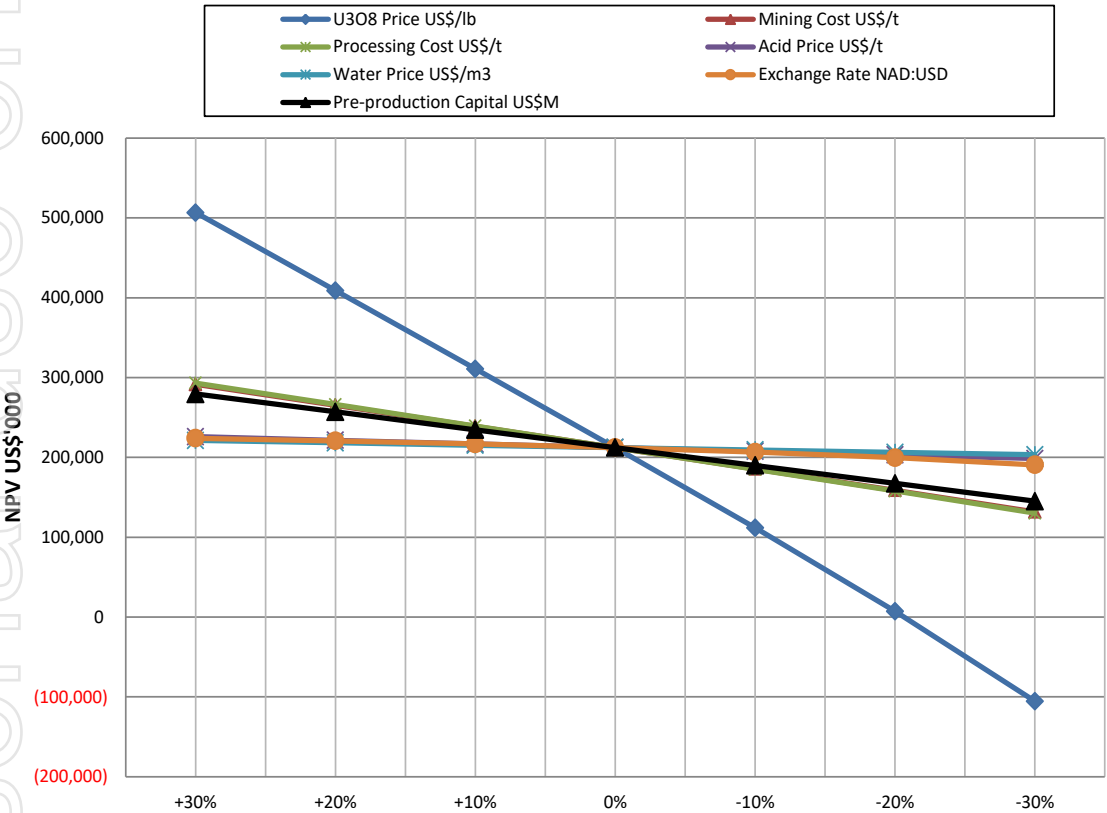


# VALUATION AND RETURN SENSITIVITIES

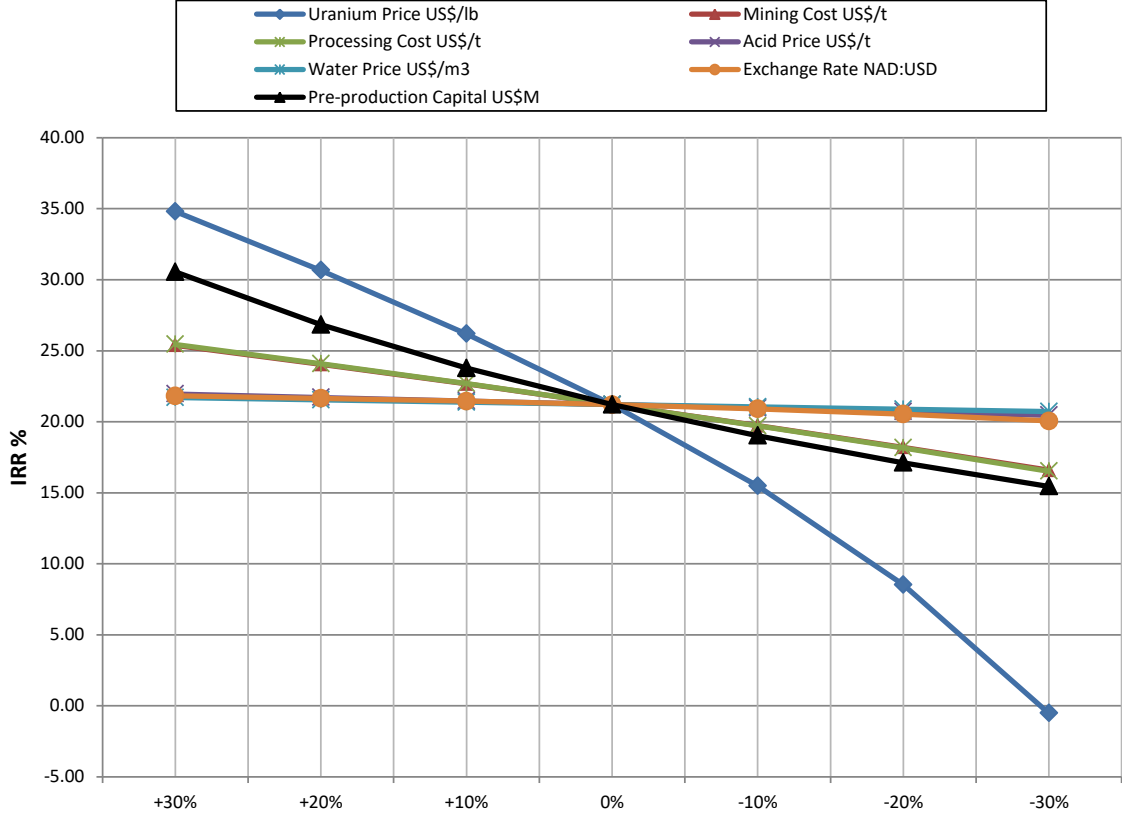
Strong leverage to potential uranium price increases



8Mtpa Etango sensitivities - NPV US\$'000



8Mtpa Etango sensitivities - IRR %



# KEY OPPORTUNITIES

## Strong real option on future expansion



### 1 Future life extension and/or scale-up expansion

- Globally large-scale resource of 271Mlbs  $U_3O_8$  (14.4Mlbs Measured, 150.2Mlbs Indicated and 106.1Mlbs Inferred)
- 8Mtpa development retains the flexibility to expand to larger throughput (up to 20Mtpa) post operations commencing
- Enabled via subsequent construction of a second (and potentially third) processing stream and undertaking of cutbacks 7 and 8 of the OS 2015 20Mtpa pit shells
- In this way, the long-term scalability of the world-class Etango deposit, including the leveraging of such a large resource base into higher production volumes at higher potential uranium price levels, is not precluded by construction of the Etango-8 Project

### 2 Processing efficiency and cost upside

- Testwork at the Heap Leach Demonstration Plant indicates potential for further optimisation of acid consumption, reagent use and uranium recovery
- The estimates used for the Etango-8 Scoping Study may be conservative in light of:
  - The crib heap leach test work has repeatedly shown that achievable uranium recovery is above 90%
  - Acid consumption has also been shown to be sub-14kg/t in various column tests



# KEY RISKS

Solid understanding and mitigation strategies given depth of previous study work

## Risks addressed in the Etango-8 Scoping Study

- $U_3O_8$  price
- Exchange rate exposure
- Operating cost estimates
- Capital cost inflation
- Geological interpretation and resource
- Utility supply
- Labour and training
- Royalties, levies and taxes
- Permitting



Etango Heap Leach Demonstration Plant with Rossing Mountain to the north



7

## SUMMARY

A world-class uranium asset





# A WORLD-CLASS URANIUM ASSET

Globally significant output of 3.5 Mlbs pa with further expansion scalability

Robust economics and low hurdles to development

Environmental approvals with strong community and government support

Namibia a premier uranium mining jurisdiction with excellent infrastructure

Low technical risk through prior definitive study work and demonstration plant

Streamlined development path to meet forecast U sector deficits from 2025

# CONTACT



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# APPENDICES



# APPENDIX A: BANNERMAN TEAM



## STRONG AND EXPERIENCED BOARD

- Ronnie Beevor**  
(Non-Executive Chairman)
- 30+ years' investment banking experience incl. head of Rothschild Australia.
  - Extensive listed co experience including past director of successful gold-copper developer, Oxiana Ltd.

- Mike Leech**  
(Non Executive Director)
- 30+ years' mining industry experience, Rio Tinto.
  - Deep Namibian uranium operating experience.
  - Former roles include MD and CFO at Rössing Uranium.
  - Former President of Namibian Chamber of Mines.

- Clive Jones**  
(Non Executive Director)
- 20+ years in mineral exploration and founding/developing/transacting ASX companies.
  - One of original vendors of Etango project to BMN.

- Ian Burvill**  
(Non Executive Director)
- 30 years of mining industry experience starting as a process plant engineer.
  - Former senior VP with Resource Capital Funds.

- Twapewa Kadhikwa**  
(NED - Namibia)
- High profile Namibian businesswoman.
  - Respected SME advisor to government.
  - Speaker and business mentor.

## SKILLED MANAGEMENT WITH NAMIBIAN EXPERTISE

- Brandon Munro**  
(CEO & Managing Director)
- 20 years' transactional and financing experience as a corporate lawyer and resources executive.
  - Co-Chair of World Nuclear Association Nuclear Fuel Demand sub-group.
  - Lived in Namibia for 5+ years as GM to Bannerman and MD of Kunene Resources Ltd.

- Werner Ewald**  
(Managing Director – Namibia)
- 25+ years' experience in uranium, diamond, coal mining
  - Prior to joining BMN was Manager Mining at Rössing Uranium.
  - Namibian born Electrical Engineer based in Swakopmund.

- Robert Orr**  
(Company Secretary)
- 30+ years' experience as chartered accountant incl. big four firm specialising in tax and audit.
  - Previously CFO and CoSec for several ASX listed mining entities with a background in corporate compliance and governance, project development and capital markets.

- John Turney**  
(Project Adviser – Etango)
- 35+ years in major mining/engineering companies, including Project Director of Bannerman.
  - Led development of, for example, Cowal gold mine (Australia) and Tulawaka gold (Tanzania).

- Dustin Garrow**  
(Strategic Uranium Marketing Adviser)
- 40+ years experience in the uranium and nuclear sector, including 12 years marketing Namibian uranium for Paladin Energy.
  - Respected international uranium marketing expert.