

ABN 34 113 017 128

Suite 7, 245 Churchill Avenue Subiaco, WA 6008

T +61 8 9381 1436 E info@bannermanresources.com.au

bannermanresources.com.au

Quarterly Activities Report

FOR THE PERIOD ENDED 31 DECEMBER 2020

Bannerman Resources Limited (ASX:BMN, OTCQB:BNNLF, NSX:BMN) (**Bannerman** or **the Company**) is pleased to report on a quarter in which Bannerman progressed its Pre-Feasibility Study (**PFS**) for the 8Mtpa development¹ of its flagship Etango Uranium Project in Namibia (**Etango-8**).

HIGHLIGHTS

- Etango-8 PFS workstreams proceeding to plan
 - Scoping Study demonstrated the strong technical and economic viability of conventional open pit mining and heap leach processing of the Etango deposit at 8Mtpa throughput¹
 - Etango-8 provides an alternative, streamlined development model to the 20Mtpa development of Etango assessed to Definitive Feasibility Study level in 2015²
 - Completion of the PFS is expected during the June 2021 quarter
- High quality consultants engaged to complete the PFS including:
 - Wood plc appointed for processing plant design
 - Qubeka Mining Consultants appointed for mining studies
- PFS benefits from vast body of technical work previously undertaken at Etango to a definitive level; all resource drilling, metallurgical and environmental work complete
- Cash balance of A\$3.0M at quarter end. Estimated PFS cost is approx. A\$1.0M
- Uranium market tightening in both short and long term as COVID-19 supply disruption extends into 2021 and under-investment affects long term supply prospects

Bannerman Chief Executive Officer, Brandon Munro, said:

"Bannerman has commenced 2021 exceptionally well positioned, with Etango-8 progressing smoothly through the feasibility process, uranium deficits widening and barriers to future mine supply remaining high. All the while nuclear energy is on the cusp of a new renaissance as carbon neutral targets in the world's largest economies drive political support for the clean, emissions-free and safe electricity generation that nuclear delivers around the clock. It is satisfying to see an investor sentiment switch that has provided support to uranium equities and patient shareholders. The Bannerman team will continue to progress the Etango-8 Pre-Feasibility Study towards completion in mid 2021 and continue our tradition of high quality, robust technical work."

- 1. Bannerman advised of the completion of a Scoping Study for an 8Mtpa development of its flagship Etango Uranium Project in Namibia in an ASX announcement dated 5 August 2020. Bannerman is not aware of any new information or data that materially affects the information included in this ASX release, and Bannerman confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the estimates in this release continue to apply and have not materially changed.
- 2. See Bannerman's ASX announcement dated 11 November 2015 entitled "Outstanding DFS Optimisation Study Results".



Etango-8 Uranium Project

Background: Etango-8 Scoping Study (August 2020)

In 2019, Bannerman commenced an evaluation of various Etango Project scaling and scope opportunities under a range of potential development parameters and market conditions. Indicative outcomes of this work highlighted strong potential for a scaled-down initial development of the Etango Project. As a result, Bannerman commenced work on a scoping study into such a development (**Scoping Study**).

The completed Scoping Study provided an early stage assessment of the technical and commercial viability for development of the Etango Project at an 8Mtpa throughput rate (**Etango-8**). Importantly, much of this Scoping Study evaluation was heavily informed by the detailed study work undertaken across all relevant disciplines as part of the 2012 Definitive Feasibility Study (**DFS 2012**) and 2015 DFS Optimisation Study (**OS 2015**).

Developing the world-class Etango Project at an initial 8Mtpa throughput offers significant advantages. It sharply reduces the upfront capital and funding hurdle compared to that associated with the original 20Mtpa Etango development evaluated in the DFS 2012, and the OS 2015. It also enables the Company to predominantly mine shallower, higher-grade ore, which significantly reduces stripping and lifts the average feed grade to the processing facility. The combined result is that the upfront capital intensity of Etango-8 per pound of annual production capacity is substantially lower whilst maintaining robust project economics. The Etango-8 development also, critically, maintains the real option of modular expansion.

Full details of the Scoping Study can be found in Bannerman's ASX release dated 5 August 2020, titled "Etango-8 Project Scoping Study".

Etango-8 Pre-Feasibility Study (PFS)

Bannerman commenced working on the Etango-8 PFS during the September 2020 quarter and all PFS workstreams proceeded to plan during the December 2020 quarter. PFS completion is scheduled for the June 2021 quarter.

During the quarter, the Company completed the process of appointing consultants after undertaking a competitive process. The consulting team comprises leading specialists with detailed and relevant knowledge of their specific subject matter, ensuring a robust process that will produce a high quality technical study.

The PFS team is led and managed by Bannerman personnel with the following key external contributors and consultants:

Wood plc Process plant design and related infrastructure, plant capital cost estimate

Qubeka Mining Consultants Geology review, pit inventory estimates, mine planning and financial

analysis

A. Speiser Environmental Environmental and social impacts and management; Community and

Consultants stakeholder liaison

Genis Business Consulting Water supply

Addiza Power Consultants External electrical supply

Nuclear Fuel Associates LLC Uranium marketing and advisory
Fivemark Partners Commercial and strategic advisory

Wood plc (**Wood**) is a global leader in the delivery of project, engineering and technical services, with offices in all major resources centres including Perth and Johannesburg. Wood, through its legacy companies Amec and Amec Foster Wheeler, has been involved with the Etango Project since 2009, including the 2012 Etango Definitive Feasibility Study, the 2015 DFS Optimisation Study and the 2017



Processing Options Study. In addition to the value of this continuity and context, Wood has ensured that the key technical experts involved in that work, who are all leaders in their respective fields, are working on the Etango-8 PFS.

Qubeka Mining Consultants cc (**Qubeka**) is a specialist mining engineering firm with deep experience in deposits similar to Etango. Qubeka was engaged to complete the geology review, pit inventory estimates, mine planning and financial analysis for the Etango-8 Scoping Study.

Key work streams

The process of completing the PFS will benefit significantly from the fact that the Etango Project has already been the subject of a definitive level of feasibility study, at a larger scale, in recent years.

Bannerman is fortunate that the PFS will not require several workstreams that typically introduce significant expense, risk and time into the technical study process, namely:

- Resource drilling. No resource drilling is required as the Etango-8 Scoping Study is based on a high level of resource confidence with life of mine production comprising 100% Measured and Indicated resources.
- **Metallurgical proof-of-concept.** The Etango Heap Leach Demonstration Plant has comprehensively de-risked the acid heap leach processing route to a definitive level, so no further proof-of-concept work is required.
- Environmental impact assessments and approvals. Bannerman has been granted environmental approvals for the originally proposed 20Mtpa Etango mine (approved in 2010) and all external infrastructure (approved in 2012). These approvals have been renewed and remain valid for the reduction in scale as proposed by the Etango-8 Project.

Bannerman anticipates that the total cost of completing the PFS, based on quotes and estimates received from various consultants, is approximately A\$1.0M (excluding sunk costs such as Bannerman personnel). Given Etango-8 is still a large-scale development project, this is an outstanding result that reflects the substantial investment already made in definitive level studies of the Etango Project.



Figure 1: The Etango Heap Leach Demonstration Plant has comprehensively de-risked the acid heap leach processing route

Exclusive Prospecting Licence (EPL) 3345

During the quarter, the Company continued a systematic soil sampling program over prospective lithologies on its 95% owned EPL 3345. More than 2000 samples were taken, including infill sampling over areas of initial interest. Results are being finalised and, once complete, will guide the next steps to be undertaken.



Corporate

Cash balance of A\$3.0 million and continued focus on prudent cost control

Bannerman's cash balance at 31 December 2020 was A\$3.0 million (30 September 2020: A\$3.7 million). The Company has no debt (other than typical creditor balances) or convertible instruments. Total exploration and development expenditure for the quarter was A\$320,000, which included work on completion of the PFS and EPL3345 exploration work.

Management continues to maintain a focus on prudent cost control. For the purpose of item 6.1 of the Appendix 5B, the aggregate payments during the December quarter to related parties (totalling A\$186,000) were comprised of directors' fees and salary.

No disruption to Bannerman operations from COVID-19

The Company has not experienced any significant disruption to its business or operations as a result of measures taken to date in either Namibia or Australia in response to the COVID-19 pandemic. Bannerman continues to implement various measures to protect Bannerman employees, their families and the broader community from transmission of the COVID-19 virus.

Cancellation and issue of securities during the quarter

The Company advised during the quarter that the following securities in Bannerman were cancelled or issued:

- 13,731,200 unlisted options expired unexercised and therefore lapsed and were cancelled.
- 808,363 unlisted employee performance rights have, pursuant to the terms of the Employee Incentive Plan (EIP), been forfeited and cancelled following non-satisfaction of the relevant performance criteria.
- 16,070,366 fully paid ordinary shares were issued upon vesting of unlisted employee performance rights in accordance with the terms of the EIP and Non-Executive Director Share Incentive Plan (**NEDSIP**).
- 22,966,200 unlisted performance rights and 9,559,200 unlisted options were granted in accordance with the EIP and NEDSIP as approved by shareholders on 22 November 2019 and 20 November 2020.

Issued securities

At the date of this report, the Company has on issue 1,074,852,062 fully paid ordinary shares, 47,592,601 performance share rights and 22,495,400 unlisted options. The share rights and options are subject to various performance targets and continuous employment periods.

Annual General Meeting

Bannerman held its Annual General Meeting on 20 November 2020. As previously announced, all resolutions put to shareholders at the Annual General Meeting were duly carried by poll.



Uranium market

Market activity

The uranium market was again muted during the quarter, with the U₃O₈ spot price remaining around US\$30/lb on low volumes and no appreciable movement on term contract prices.

By the end of 2020, utilities had addressed regulatory adjustments required by COVID-19 and most associated operating challenges. Nonetheless, second wave infections and consequent government responses have remained a distraction for power producers, resulting in fuel-buyers deferring procurement strategies in favour of further inventory draw down.

Geopolitical uncertainty also weighed on utility confidence for much of the quarter, in particular the lead up to the US Presidential election and subsequent instability. Nonetheless, the victory by President-Elect Biden and his decision to rejoin the Paris climate accord has been welcomed by the industry.

COVID-19 supply disruption extended into 2021

Cameco announced on 14 December that it would, again, temporarily suspend operations at Cigar Lake, the world's largest operating uranium mine. Cigar Lake was initially suspended in March 2020 for an indeterminant period that lasted for six months. Cameco did not place a timeframe on the latest suspension but noted that restarting the mine will depend on availability of required workforce, pandemic trends in Northern Saskatchewan and the views of public health authorities. Cameco plans to increase its purchases of uranium in the spot market to meet its contract deliveries.

Kazatomprom has continued to operate its Kazakh uranium mines after production was resumed following a four-month suspension of well-head development in 2020. However, production disruption is likely to continue into 2021 given that in-situ recovery has a lag effect and capacity production can take several months to achieve following the resumption of full operations.

This supply disruption is expected to necessitate further destocking by utilities of strategic inventory, after 2020 total inventory drawdown amounted to approximately 40Mlbs U₃O₈, almost a quarter of 2020 uranium consumption (Bannerman estimates).

Longer term supply threatened by under-investment and mine depletion

Market conditions continued to constrain supply, with the closure of all three Ukrainian uranium mines after the parent company became insolvent, and US domestic production almost reducing to zero. Further, prevailing spot and term price levels have been insufficient to incentivise the return of production from mines placed into care and maintenance. Given the substantial lead times between a decision to recommence idled mining and the production of uranium, further stagnation of uranium prices is likely to threaten assumed production from idled mines in 2022 and 2023. A large source of future uranium supply growth was lost during the quarter with the shelving of plans to expand production at Australia's Olympic Dam copper-gold-uranium mine

The 28th edition of the biennial "Red Book" was published by the International Atomic Energy Agency and OECD Nuclear Energy Agency in late December (*Uranium 2020: Resources, Production and Demand*). The publication noted that worldwide uranium exploration and mining development has continued its downward trend over several years, with expenditure falling by 75% compared with 2012, because of "persistently depressed uranium prices". The report notes that prospective producers "will have to overcome a number of significant and, at times, unpredictable issues in bringing new production facilities on stream, including geopolitical and local factors, technical challenges and legal and regulatory frameworks. To do so, strong market conditions will be critical for achieving the required industry investment."

Western access to future uranium supply was tightened as China General Nuclear announced that it would acquire from Kazatomprom a 49% interest (including equivalent off-take rights) in the Ortalyk LLP



joint venture. Ortalyk comprises the operating Central Mynkuduk uranium mine and the Zhalpak development project in Kazakhstan.

Uranium supply availability over the medium to longer term will be further impacted by mine depletion, including the closure of Australia's Ranger uranium mine in early January 2020 and planned closure of Niger's Cominak uranium mine during the March 2020 quarter. Future uranium supply is forecast to further deplete as a result of mine closures, declining production rates from Kazakh in-situ recovery operations and a decrease in secondary supply as excess capacity in the enrichment market tightens.

Nuclear Fuel demand profile continues to improve

China has continued the expansion of its nuclear reactor fleet. Notably, the first of its indigenous designed reactors, the Hualong One, began commercial operation during the quarter at Fuquing Nuclear Power Plant, laying a foundation for series construction of nuclear reactors for both domestic and export markets. Several Hualong One reactors are in construction in China, including at San'ao Nuclear Power Plant where construction of the first of six such reactors commenced during the quarter. The timing is important given the early 2021 release of China's 14th Five Year Plan. Given China's plan to become carbon neutral by 2060, nuclear power must play a critical role in meeting electricity demand growth and displacing coal.

Russian nuclear energy generation set a new annual record, accounting for more than 20% of the country's energy mix. Russian nuclear giant Rosatom currently has 3 domestic reactors in construction and an export order book that includes 35 reactors at various implementation stages. Rosatom is currently constructing reactors in Bangladesh, Belarus, China, Egypt, Finland, Hungary, India and Turkey.

India has taken the first step towards fleet mode construction of 10 indigenous designed 700MWe pressurised heavy water reactors, with the first of such reactors, Kakrapar 3, connected to the grid in early January. India's Department of Atomic Energy announced that 17 nuclear power reactors are planned in addition to the 7 units already under construction.

In the US, bipartisan support for nuclear energy has resulted in benefits for both utilities and uranium miners. The Democrat clean energy election platform included endorsement of existing nuclear energy generation and funding for development of advanced and small modular reactors (SMRs). Given this bipartisan approach and a strengthened climate mitigation imperative, there is a good prospect of government support to preserve and extend the existing nuclear fleet, including reactors at risk due to competition from cheap fossil fuels. Congress also approved US\$75 million funding to establish the Strategic Uranium Reserve.

Similarly, the UK released a new "Energy White Paper" which supports the construction of conventional nuclear reactors and allocates funding for the development and deployment of UK-built SMRs.

This ASX release was authorised on behalf of the Bannerman Board by:

Brandon Munro, Chief Executive Officer 19 January 2021

CONTACT DETAILS:

Investors

Brandon Munro
Chief Executive Officer
+61 8 9381 1436
info@bannermanresources.com.au

Media

Michael Vaughan
Fivemark Partners
+61 422 602 720
michael.vaughan@fivemark.com.au



ABOUT BANNERMAN RESOURCES (ASX:BMN, OTCQB:BNNLF)

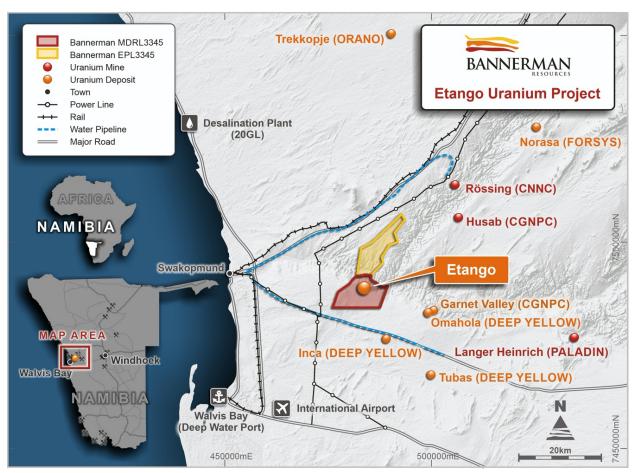
Bannerman Resources Limited is an Australian and Namibian listed uranium development company. Its flagship asset is the advanced Etango Uranium Project located in the Erongo Region of Namibia.

Etango has benefited from extensive exploration and feasibility activity over the past 15 years. The Etango tenements possess a globally large-scale uranium mineral resource*. A 20Mtpa development at Etango was the subject of a Definitive Feasibility Study (**DFS**) completed in 2012 and a DFS Optimisation Study completed in 2015*. Bannerman constructed and operated a Heap Leach Demonstration Plant at Etango, which comprehensively de-risked the acid heap leach process to be utilised on the Etango ore.

Namibia is a premier uranium investment jurisdiction, with a 45-year history of uranium production and export, excellent infrastructure and support for uranium mining from both government and community. As the world's fourth largest producer of uranium, Namibia is an ideal development jurisdiction boasting political stability, security, a strong rule of law and an assertive development agenda.

Bannerman has long established itself as an ESG leader. Etango has all environmental approvals for the proposed mine and external infrastructure, based on a 12-year environmental baseline. Bannerman is a CSR leader within Namibia and exercises best-practice governance in all aspects of its business.

In August 2020, Bannerman completed a Scoping Study on an 8Mtpa development of Etango (**Etango-8 Project**)**. The Scoping Study has demonstrated that this accelerated, streamlined project is strongly amenable to development – both technically and economically. A Pre-Feasibility Study on the Etango-8 Project is underway with targeted completion during 2Q 2021.



^{*} For full details of the Mineral Resources estimate, please refer to Bannerman ASX release dated 11 November 2015, *Outstanding DFS Optimisation Study Results*. ** Refer to Bannerman's ASX release dated 5 August 2020, *Etango-8 Project Scoping Study*. 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.



Forward Looking Statements

The information in this announcement is not intended to guide any investment decisions in Bannerman Resources Limited. This material contains certain forecasts and forward-looking information, including possible or assumed future performance, costs, production levels or rates, reserves and resources, prices and valuations and industry growth and other trends. Such forecasts and information are not a guarantee of future performance and involve many risks and uncertainties, as well as other factors. Actual results and developments may differ materially from those implied or expressed by these statements and are dependent on a variety of factors. The Company believes that it has a reasonable basis for making the forward looking statements in the announcement, based on the information contained in this and previous ASX announcements.

Bannerman is not aware of any new information or data that materially affects the information included in this ASX release, and Bannerman confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the estimates in this release continue to apply and have not materially changed.

Competent Person's Statement

The information in this announcement as it relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Mr Marthinus Prinsloo. Mr Prinsloo is a full time employee of Bannerman Resources Limited and is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Prinsloo has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activities, which he is undertaking. This qualifies Mr Prinsloo as a "Competent Person" as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and a Qualified Person as defined by Canadian National Instrument 43-101. Mr Prinsloo consents to the inclusion in this announcement in the form and context in which it appears. Mr Prinsloo holds shares and performance rights in Bannerman Resources Limited.

Listing Rule 5.3.3 tenement schedule:

BANNERMAN RESOURCES LIMITED CONSOLIDATED BASIS				
SCHEDULE OF INTERESTS IN MINING TENEMENTS				
Project	Mining tenements held	Location of tenements	Beneficial % interest at end of the quarter	Change in the quarter
Etango	Mineral Deposit Retention License (MDRL) 3345	Namibia	95%	-
Etango	Exclusive Prospecting License (EPL) 3345	Namibia	95%	-