

## Quarterly Activities Report FOR THE PERIOD ENDED 31 MARCH 2021

Bannerman Resources Limited (ASX:BMN, OTCQB:BNNLF, NSX:BMN) (**Bannerman** or **the Company**) is pleased to report on a quarter in which Bannerman raised capital into a strengthening market whilst retaining focus on its Pre-Feasibility Study (PFS) for the 8Mtpa development<sup>1</sup> of its flagship Etango Uranium Project in Namibia (**Etango-8**).

### HIGHLIGHTS

- **Etango-8 PFS nearing completion according to plan**
  - **Etango-8 PFS on target for completion in the June 2021 quarter**
  - **Several work streams are complete while finalisation of capital and operating costs is now in progress**
  - **PFS benefits from vast body of technical work previously undertaken at Etango to a definitive level; all resource drilling, metallurgical and environmental work complete**
- **Completed well supported capital raising of A\$12 million gross proceeds**
  - **Issued at A\$0.105 per share, more than double previous raise price (A\$0.046 in 2018)**
  - **Ongoing financial discipline since last raising enabled timing with improved uranium market sentiment since December 2020**
- **Cash balance of A\$13.2M at quarter end.**
  - **Funded to projected completion of both the Etango-8 PFS and anticipated Definitive Feasibility Study**
- **Bannerman included in the Index Composition for the Global X Uranium ETF (URA)**
- **Uranium market experienced secondary demand from investment funds, producers and juniors as demand grows and key mines close**

**Bannerman Managing Director and Chief Executive Officer, Brandon Munro, said:**

*“Amidst elevated equities sentiment and decarbonisation targets pushing nuclear power, Bannerman remains on track with our Etango-8 PFS after completing a well supported capital raising of \$12 million during the quarter. Secondary demand has been a strong feature of the uranium market in recent months, with unexpected buying from juniors adding to the impact of Yellow Cake plc’s uranium acquisitions ahead of producers executing buy-to-deliver strategies. All the while, future demand requirements are growing on the back of ambitious expansion plans for nuclear energy in China and bipartisan support for nuclear in the US.”*

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.

## Etango-8 Uranium Project

### Background: Etango-8 Scoping Study (August 2020)

Bannerman has focused on its Etango Uranium Project since 2006, including feasibility work on the large-scale development of Etango that culminated in the 2012 Definitive Feasibility Study (**DFS 2012**) and 2015 DFS Optimisation Study (**OS 2015**). As part of this development process Bannerman obtained environmental clearance for the proposed Etango mine (2012) and all associated external infrastructure (2014). In 2015 Bannerman completed construction of its Etango Heap Leach Demonstration Plant, which it ran as a pilot plant until 2020, comprehensively de-risking the proposed heap leaching processing method, optimising the processing parameters and generating a large database of processing data.

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 Scoping Study, completed in August 2020, 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 DFS 2012 and the OS 2015 and subsequent processing optimisation test-work at the Heap Leach Demonstration Plant.

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 in September 2020 and is on schedule to complete the Etango-8 PFS in the June 2021 quarter.

During the quarter, several of the consulting teams completed their work packages. External infrastructure designs and cost estimates for the water and electricity supply, access road to the site and acid supply infrastructure were completed.

Qubeka Mining Consultants finalised the pit design and production schedules. Contract mining proposals have been received from reputable contractors. The real option to expand to the larger Etango mine in a rising uranium price scenario has been confirmed, while the mining costs are expected to remain in line with previously reported estimates.

Wood plc (**Wood**) has completed the process plant design work and is currently finalising the capital and operating cost estimates. The extensive historical metallurgical testing done at the Heap Leach Demonstration Plant has greatly assisted Wood in optimising the process designs and reagent consumptions.

The PFS remains on budget, with anticipated total costs of approximately A\$1.0M (excluding internal costs such as Bannerman personnel).

### Additional acid consumption testwork

During the quarter the Company completed additional acid consumption testwork at its Heap Leach Demonstration Plant. This testwork was designed to test the impact of lower acid concentrations in the heap leach irrigation solution and the impact on extraction of uranium and overall acid consumption. Two cribs each filled with 30 tonnes of Etango ore were operated (one with 12g/L and one with 10g/L sulphuric acid concentration in the irrigation solution). After 20 days irrigation it was again confirmed that the Etango deposit does not consume excessive acid in achieving desired uranium extractions and that the parameters used in the Etango-8 Scoping Study (for instance, a 15g/L acid concentration in the leach solution) have potential for optimisation. The resulting uranium extraction and acid consumption for each crib are shown below.

	Uranium extraction %	Acid consumption kg/t
Crib 1 (12g/L H <sub>2</sub> SO <sub>4</sub> )	92.1%	13.6
Crib 2 (10g/L H <sub>2</sub> SO <sub>4</sub> )	88.2%	12.1



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



## Corporate

### Capital Raising completed

During the quarter Bannerman raised A\$12 million gross proceeds through the placement of 114,285,716 new Bannerman shares at an issue price of A\$0.105 per share (**Placement**). These funds were raised at a significant uplift to the previous raising price – Bannerman raised gross proceeds of A\$8M at A\$0.046 per share in 2018.

Consistent financial discipline over that period enabled a patient approach that allowed funds to be raised into an improving equity market environment and at a substantial premium to the average BMN share price for the 12 months prior to the raise (approximately A\$0.06 per share).

The Placement was completed in one tranche pursuant to the Company's capacity under ASX Listing Rule 7.1 (114,285,716 shares). Funds raised from the Placement are planned to be used to complete the Etango-8 PFS, undertake and complete a Definitive Feasibility Study, continue product marketing and for general working capital and corporate purposes (including financing and offtake initiatives).

### Cash balance of A\$13.2 million and continued focus on prudent cost control

Bannerman's cash balance at 31 March 2021 was A\$13.2 million (31 December 2020: A\$3.0 million). The Company has no debt (other than typical creditor balances) or convertible instruments. Total exploration and development expenditure for the quarter was A\$540,000, 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 quarter to related parties (totalling A\$150,000) were comprised of directors' fees and salary.

### Bannerman included in Global X Uranium ETF (URA)

The Company was included in the January ordinary index rebalancing of the Solactive Global Uranium & Nuclear Components Total Return Index (**Index**). The Index is tracked by the largest uranium sector ETF, the Global X Uranium ETF (NYSE:URA), which currently has total assets under management of approximately US\$570 million – of which 70% is allocated to pure-play uranium companies. Bannerman is already included in the index composition for the North Shore Global Uranium Mining ETF (NYSE:URNM) and the Horizons Global Uranium Index ETF (TSX:HURA).

### 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.

### Issue of securities during the quarter

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

- 114,285,716 ordinary shares were issued on 19 February 2021.

### Issued securities

At the date of this report, the Company has on issue 1,189,137,778 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.

## Uranium market

### Market activity

The uranium market experienced limited volatility on generally thin volumes during the quarter. The spot price commenced the year at US\$30.40/lb, traded as low as US\$27.40/lb before increasing to US\$31.25/lb by 31 March 2021 on an uptick in volume driven by purchasing activity by uranium development companies (see below).

Operating challenges caused by COVID-19 continue to distract utility fuel buyers, with further inventory draw down utilised in preference to fresh procurement. On the supply side, Cigar Lake remained on care and maintenance throughout the quarter, with Cameco announcing on 9 April 2021 that it would resume production.

The drift in spot prices intra-quarter was largely due to thin demand with utility and trader buying absent at times and otherwise muted during the quarter. In the context of low trading volumes, motivated selling from a small number of uranium producers enabled spot prices to remain lower than the cost of production for a substantial proportion of the industry.

Term contract activity remains subdued, with very few on-market transactions being reported, despite slowly increasing off-market term contracting by existing producers.

Converdyn's February announcement that it will restart the Metropolis Works Facility, with UF<sub>6</sub> production to commence in 2023, was an important event for debottlenecking the nuclear fuel cycle. Converdyn's 2017 decision to suspend the only conversion facility in the US resulted in a deficit in global conversion capacity leading conversion prices 400-500% higher. Since that event the market has fully drawn down excess UF<sub>6</sub> inventory that built up after Fukushima. The decision to resume conversion services in 2023 (which ensures contracted uranium can be progressed through the fuel cycle) and the eradication of excess UF<sub>6</sub> inventories (which were substitutable for U<sub>3</sub>O<sub>8</sub>) are strong positives for the uranium market.

### Nuclear fuel demand milestones

China's commitment to nuclear energy as a key source of emissions free power was confirmed in the 14<sup>th</sup> Five Year Plan. Following China's commitment to decarbonise its economy by 2060, the plan set a specific target of 70GWe of nuclear energy capacity by 2025, a substantial increase on the current capacity of approximately 48GWe. Whilst targets beyond 2025 are expected to emerge later this year, China's NEA predicts that China will have 200GWe in production or construction by 2035.

China announced during the quarter that the first Hualong One indigenous technology reactor commenced commercial operation at the Fuqing nuclear power plant, in addition to completion of the first export Hualong One reactor at Karachi in Pakistan. Chinese state-owned nuclear utility CNNC announced that it was developing the Hualong Two reactor, a refinement of the indigenous technology, that would be constructed in 4 years at a construction cost equal to US\$2,000 per installed KWhr of capacity, improving the economic competitiveness of nuclear power and increasing the scalability of nuclear power in China.

The prospective increase in China's demand for nuclear power has continued to drive acquisitions of foreign uranium resources, with China General Nuclear agreeing to acquire a 49% interest in Kazatomprom's Ortalyk LLP subsidiary, the operator of the Central Mynkuduk mine and developer of the Zhalpak project, for US\$435 million.

The nuclear energy industry's prospects in the US have lifted considerably with the Biden administration demonstrably supporting nuclear power as an essential part of the US clean energy mix. Since inauguration in January, the Biden administration has joined the Paris accord, set a 2050 decarbonisation target, and enacted (with bipartisan support) a series of measures to promote nuclear energy technology including Small Modular Reactors and introduced extensive infrastructure spending bills. Measures are being developed at a federal and state level to save "at risk" reactors from closure, with the outcome of efforts to prevent the closure of reactors at Dresden and Byron nuclear power plants expected in the June

quarter. In addition to direct demand effects from maintaining reactors in production, these bipartisan support measures have contributed to improved investor sentiment.

### **Secondary demand emerges as a market driver**

Secondary demand accounted for more than 10 Mlbs of purchasing during the quarter, led by Yellow Cake plc, which exercised its 2021 option to acquire US\$100M of uranium from Kazatomprom after allowing its 2020 option to lapse. Yellow Cake plc raised US\$140M of fresh equity to fund the acquisition and to buy additional uranium.

Uranium development companies emerged as an unexpected source of demand with Denison Mines Corp, Uranium Energy Corp and Boss Energy Ltd raising new equity to buy almost 6 Mlbs in total, in addition to smaller purchases from Uranium Royalty Corp (350,000 lbs) and Encore Energy Corp (200,000 lbs).

Peninsula Energy Limited reported the acquisition of 450,000 lbs for contract delivery, although producer buying has not yet exerted significant demand pressure in 2021. Cameco continues to require large volumes of purchased uranium for delivery into its contracts, particularly to offset production disruption at Cigar Lake. Kazatomprom is also likely to purchase uranium during 2021, given its inventory levels were at the lower limit of their comfort zone before Yellow Cake plc exercised its option.

Beyond funding the acquisition of uranium by Yellow Cake plc and development companies, financial investors may become a further source of secondary demand during the year, either through funding further acquisitions by existing companies, the establishment of new uranium investment vehicles or direct purchases through trader accounts.

### **Key mine closures herald the supply depletion decade**

Two of the world's largest uranium mines by historical production closed during the quarter. The Ranger mine in Australia and COMINAK's mining operations in Niger were in production for decades, more recently producing more than 5 Mlbs per annum in combination. Several other major uranium mines globally are expected to exhaust their ore bodies during the current decade.

The capacity for the industry to adequately replace this production – and meet new demand - is severely hindered by prevailing low uranium prices disincentivising investment in exploration and development.

Political restrictions on uranium mining continue to exacerbate the supply threat. Greenland appears likely to become the latest jurisdiction to ban uranium mining after anti-mining election campaigning during the quarter led to a change of government in April 2021. Implementation of a uranium mining ban would sterilise the proposed Kvanefjeld REE mine, which was to produce uranium as a by-product. The Kvanefjeld resource contains one of the largest inventories of uranium globally (593 million pounds  $U_3O_8$ ). Substantial uranium resources have recently been politically sterilised in Sweden and Kyrgyzstan and the re-election of state Labor governments in Queensland and Western Australia has extended uranium mining bans in two significant global uranium provinces.

Neither of the nuclear power sector's primary mitigations of uranium supply risk – inventory holdings and long term contracting – are trending in the right direction for utilities given the extent of forecast production depletion. COVID related supply disruption in 2020 expanded structural supply deficits and necessitated inventory drawdown of approximately 40 Mlbs globally. Drawdown is expected to continue in 2021 due to further COVID-19 production disruption, continued supply discipline by Kazatomprom and Cameco, idled production remaining offline due to low prices, mine closures and financial buying.

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

Brandon Munro, Managing Director and Chief Executive Officer

28 April 2021

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## 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
<b>Etango</b>	Mineral Deposit Retention Licence (MDRL) 3345	Namibia	95%	-
<b>Etango</b>	Exclusive Prospecting Licence (EPL) 3345	Namibia	95%	-