



**Fission**  
URANIUM CORP.

**Management's Discussion & Analysis**

**Fission Uranium Corp.**

**For the Three Month Period Ended  
March 31, 2021**

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## **Fission Uranium Corp.**

Management's Discussion and Analysis  
For the three month period ended March 31, 2021  
(Expressed in Canadian dollars, unless otherwise noted)

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### **Introduction**

The following Management's Discussion and Analysis ("MD&A"), prepared as of May 13, 2021, should be read in conjunction with the unaudited condensed interim financial statements and accompanying notes of Fission Uranium Corp. (the "Company" or "Fission Uranium") for the three month period ended March 31, 2021. The reader should also refer to the audited financial statements for the year ended December 31, 2020.

The Company's condensed interim financial statements are unaudited and have been prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board ("IFRS"), applicable to the preparation of interim financial statements, IAS 34, Interim Financial Reporting ("IAS 34") and do not contain all of the information required for annual financial statements.

Additional information related to the Company, including the most recent Annual Information Form ("AIF"), is available for viewing on SEDAR at [www.sedar.com](http://www.sedar.com). Further information including news releases and property maps are available on the Company's website at [www.fissionuranium.com](http://www.fissionuranium.com), or by requesting further information from the Company's head office located at 700 - 1620 Dickson Ave., Kelowna, British Columbia, Canada, V1Y 9Y2.

### **Forward looking statements**

Statements in this report that are forward looking could involve known and unknown risks and uncertainties, which could cause actual results to vary considerably from these statements. Should one or more of these unknown risks and uncertainties, or those described under the headings "Risk Factors" in the Company's AIF, which can be found on the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com), and those set forth in this MD&A under the heading "Cautionary notes regarding forward-looking statements" and "Risks and uncertainties" materialize, or should underlying assumptions prove incorrect, then actual results may vary materially from those described in forward-looking statements.

### **Scientific and technical disclosure**

Scientific and technical information in this MD&A was reviewed and approved by Ross McElroy, P. Geol., CEO of Fission Uranium. Ross McElroy is a qualified person as defined by Canadian National Instrument 43-101 *Standards of Disclosure for Mineral Projects* ("NI 43-101").

### **Description of business**

Fission Uranium is a resource issuer specializing in uranium exploration and development in Saskatchewan's Athabasca Basin in Western Canada. The Company was incorporated on February 13, 2013 under the laws of the Canada Business Corporations Act in connection with a court approved plan of arrangement to reorganize Fission Energy Corp. Fission Uranium's common shares are listed on the Toronto Stock Exchange under the symbol "FCU", the OTCQX marketplace in the U.S. under the symbol "FCUUF" and on the Frankfurt Stock Exchange under the symbol "2FU".

The Company's primary asset is the Patterson Lake South ("PLS") project, which hosts the Triple R deposit – a large, high-grade and near-surface uranium deposit that occurs within a 3.18km mineralized trend along the Patterson Lake Conductive Corridor. The deposit has one of the largest lateral mineralized footprints of comparable deposits in the Athabasca Basin region and remains open in multiple directions. The property comprises 17 contiguous claims totaling 31,039 hectares and is located geographically in the south west margin of Saskatchewan's Athabasca Basin, notable for hosting the highest-grade uranium deposits and operating mines in the world.

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### **Corporate goals**

Management firmly believes that global uranium demand is rising, driven by an ongoing nuclear reactor construction boom. Uranium sentiment, as evidenced by government investment in SMR and traditional reactors, and strongly supportive political statements from countries like the US, UK, and China, is strengthening. This is a result of the rapidly growing focus on clean energy, and the continually increasing global electrical energy demand. In addition, years of low uranium prices have led to the shuttering of higher OPEX uranium operations and minimal investment in new sources of production. In 2017, the number of nuclear reactors in the combined construction, planning and proposal stages, reached the highest level in 25 years and the amount of uranium required by utilities, currently uncovered by contracts, continues to increase rapidly. The result is a tightening of the supply and demand balance. As such, management is optimistic about the long-term prospects for the uranium market and is committed to developing its Triple R deposit at PLS, while continuing to explore for additional high-grade occurrences on the property. Fission Uranium is fortunate to have its property located in the politically stable and investment friendly province of Saskatchewan, Canada. The Fraser Institute publishes an annual report of mining and exploration companies and ranks geographic regions globally in an attempt to assess how mineral endowments and public policy factors, such as taxation and regulatory uncertainty, affect exploration investment. Saskatchewan is consistently rated amongst the best jurisdictions in the world for mining investment, being rated number one globally by the Mining Journal in 2020.

Continued exploration and development success over the past seven years has enabled the Company to fund its operations primarily through share equity financing in a difficult uranium sector and challenging capital market environment for mineral exploration companies.

In addition to progressing the Company's exploration and development plans, management will continue to seek strategic opportunities to add further shareholder value and appropriately monetize the PLS property and Triple R deposit for shareholders.

Specific growth plans include:

- Continuing to develop the Triple R deposit towards the feasibility stage; and
- Improving and de-risking the strong economic parameters of the Triple R deposit (as defined by the 2019 prefeasibility study) by work designed to further increase the certainty of the resource and viability of mine design in addition to expanding the overall footprint of the Triple R deposit, discovering and/or defining new mineralization.

### **Summary of significant accomplishments for the three month period ended March 31, 2021 and subsequent**

In May 2021, the Company announced that it has closed a bought deal financing consisting of 57,500,000 units (the "Units") at a price of \$0.60 per Unit for gross proceeds of \$34.5 million, inclusive of the full exercise of the over-allotment option held by the Underwriters (the "Offering"). Eight Capital and Sprott Capital Partners LP acted as co-lead underwriters on behalf of a syndicate of underwriters including Canaccord Genuity Corp., BMO Nesbitt Burns Inc. and H.C. Wainwright & Co., LLC (collectively, the "Underwriters"). Each Unit consisted of one common share of the Company and one half of one common share purchase warrant (each whole warrant, a "Warrant"). Each Warrant shall entitle the holder to purchase one common share of the Company (each, a "Warrant Share") at a price of \$0.85 at any time on or before 5:00 pm on May 11, 2024. In connection with this financing, Sprott Resource Lending II (Collector) L.P. provided a waiver of the Company's obligation to repay a portion of the Credit Facility with 25% of the net proceeds.

In April 2021, the Company announced results from the first of its 2021 drill programs on the R780E zone of the high-grade Triple R deposit at its' PLS project. Twenty holes were completed in 7,147.8m, including 1 hole restarted due to excessive deviation. All twenty holes hit wide mineralization in multiple stacked intervals, with thirteen intercepting significant intervals of >10,000 cps radioactivity.

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In March 2021, the Company announced that it entered into an engagement and capacity agreement (the "Agreement") with the Clearwater River Dene Nation ("CRDN"). Fission's PLS project is within the CRDN's traditional land use area in the Athabasca Basin. The Agreement will strengthen the already positive working relationship between Fission and CRDN and provide a process for the parties to meaningfully engage in respect of the PLS Project. Fission and CRDN will identify potential impacts to Indigenous rights, culture, traditional and land resource use, and community interests and explore options to address those impacts. The Agreement will facilitate the sharing of information between Fission and CRDN, and provides CRDN an opportunity to review and provide advanced feedback on related regulatory submissions. Fission will provide funding for all of these processes, including studies addressing the potential interactions between the PLS Project and CRDN Indigenous rights, knowledge, culture, and traditional land use. Together, these processes will establish a foundation for Fission and CRDN to negotiate a long term impact benefit agreement if the PLS Project is approved.

In February 2021, the Company announced drilling plans for 2021, which would include a 43-hole (12,640m) program at its PLS property. The fully funded program aims to increase the Indicated classified resource of the Triple R deposit's R780E zone, and also upgrade to Indicated the large R840W zone, located on land, ~500m west of Patterson Lake. The R840W zone is at present substantially drilled to Inferred classification, and thus not currently included in the resource used in the prefeasibility study. The completed winter program consisting of 20 holes targeting the R780E zone was announced on April 7, 2021. The summer program will include 23 holes targeting the R840W zone.

In January 2021, the Company announced the appointment of uranium mining expert, Gary Haywood, P.Eng., as VP Project Development. Mr. Haywood is a professional Mining Engineer with 35 years' experience, including seven years with Cameco as General Manager at the McArthur River and Senior Mine Engineer at the Eagle Point uranium mining operations in Saskatchewan, Canada. He will be responsible for taking the lead role in the next phases of advancement for the PLS project.

### **Winter 2021 Drill Program**

In April, the Company announced the completion of a 20 hole drill program on its PLS project. A total of 7,147.8 meters were drilled and all 20 holes hit wide mineralization in multiple stacked intervals. The goal of the winter program was to upgrade key sections of the Triple R deposit's R780E zone to "indicated" category by increasing drill hole density where the resource is largely classified as Inferred. Assay results are pending, and after which, the results will be used to update the resource model. These recently completed holes have the potential to increase the Indicated category resource which may positively impact the planned feasibility study. The holes include PLS21-606 (line 900E), which intersected 118.0m of total composite mineralization, including 1.35m of total composite radioactivity >10,000 cps (with a peak of 23,400 cps) and PLS21-597 (line 900E) with 92.0m total composite mineralization, including 4.80m total >10,000 cps (with a peak of 51,400 cps).

#### **Drilling Highlights:**

- 20 holes hit significant mineralization over wide intervals. 21 holes were drilled (7,147.8m) including 20 holes completed (7,046.8m) with 1 abandoned and redrilled due to deviation from target.
- Triple R deposit resource drilling. Drilling successfully targeted an important mainly "inferred" categorized area of the eastern R780E zone between lines 900E and 1125E, using step out and infill drilling to achieve spacing of ~15m x 20m (horizontal / vertical), with the aim of conversion from Inferred to Indicated.
- Hole PLS21-597 (line 900E)
  - 92.0m total composite mineralization over a 214m interval (between 117.0m to 331.0m), including
    - 4.8m of total composite mineralization >10,000 cps
- Hole PLS21-605 (line 930E)
  - 110.0m total composite mineralization over a 272.5m interval (between 105.5m to 378.0m), including
    - 4.15m of total composite mineralization >10,000 cps

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- Hole PLS21-595 (line 1050E)
  - 46.0m total composite mineralization over a 73.5m interval (between 264.0m to 337.5m), including
    - 4.75m of total composite mineralization >10,000 cps

Natural gamma radiation in drill core that is reported in this news release was measured in counts per second (cps) using either a hand-held RS-230 or RS-125 Scintillometer, both manufactured by Radiation Solutions, which are capable of discriminating readings up to 65,535 cps. Natural gamma radiation in the drill hole survey that is reported in this news release was measured in counts per second (cps) using a Mount Sopris 2GHF-1000 Triple Gamma probe, which allows for more accurate measurements in high grade mineralized zones. The Triple Gamma probe is preferred in zones of high-grade mineralization.

The reader is cautioned that scintillometer readings are not directly or uniformly related to uranium grades of the rock sample measured, and should be used only as a preliminary indication of the presence of radioactive materials. The degree of radioactivity within the mineralized intervals is highly variable and associated with visible pitchblende mineralization. All intersections are down-hole. All depths reported of core interval measurements including radioactivity and mineralization intervals widths are not always representative of true thickness. The orientation of the mineralized intervals tend to follow that of lithologic contacts, and generally dip steeply to the south. Within the Triple R deposit, individual zone wireframe models constructed from assay data and used in the resource estimate indicate that all 5 zones have a complex geometry controlled by and parallel to steeply south-dipping lithological boundaries as well as a preferential sub-horizontal orientation.

Samples from the drill core will be split in half sections on site and where possible, samples will be standardized at 0.5m down-hole intervals. One-half of the split sample will be sent to SRC Geoanalytical Laboratories (an SCC ISO/IEC 17025: 2005 Accredited Facility) in Saskatoon, SK for analysis which includes U3O8 (wt %) and fire assay for gold, while the other half remains on site for reference. All analysis includes a 63 element ICP-OES, uranium by fluorimetry and boron.

### Near-term Plans

#### *Summer 2021 Drill Program Highlights:*

- Resource Upgrading and Expansion: R840W Zone
  - The second 2021 infill drilling program is expected to commence in June 2021 and be completed during Q3, 2021.
  - 23 holes planned (5,440m).
  - The R840W zone is located ~500m west of Patterson Lake. It is the 2nd largest of the mineralized zones after the R780E zone and due to its predominantly Inferred resource categorization, is not included in the prefeasibility resource.
  - At a cut-off of 0.25% U3O8 the R840W has a resource estimate of:
    - Indicated: 3.3 Million lbs U3O8 @1.68% U3O8 in 88,000 tonnes
    - Inferred: 11.5 Million lbs U3O8 @1.86% U3O8 in 280,000 tonnes
  - Drilling will result in intersection spacing of ~15m x 20m (horizontal / vertical), between holes, which has the potential to convert the majority of the R840W zone to Indicated category and thus the potential to be included in the feasibility study resource.

#### *Feasibility Study*

In 2019, the Company completed first a "hybrid open-pit and underground" development scenario and followed up with an "underground-only" prefeasibility study. While both mining studies showed positive results, the results of the "underground-only" study show stronger merits in most measurable criteria. The report titled "Technical Report on the Prefeasibility Study on the Patterson Lake South Property Using Underground Mining Methods, Northern Saskatchewan, Canada" dated November 7, 2019 with an Effective Date of September 19, 2019 is the current technical report (the "U/G PFS"). With the completion of the prefeasibility studies, the next major steps for the PLS project are to;

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- Initiate a Feasibility Study;
- Enter into the Environmental Assessment ("EA") phase; and
- Advance activities with respect to permitting, environmental and social governance ("ESG").

The U/G PFS recommended that the Company advance the PLS project to a feasibility study. The company's goal is to begin the field work on the feasibility study in 2021. The Company will have to choose an engineering group to lead and conduct the feasibility study.

The Company will continue with its plans to complete its baseline environmental study, and enter into the EA phase, which aims to ready the project for eventual environmental impact assessment. The EA phase will be triggered when the Company submits a "project description" and a draft "terms of reference" to submit to the Province of Saskatchewan, which is expected to be filed in the first half of 2021. The Company will also continue to ramp up its efforts to update and familiarize local rightsholders and stakeholders in the area about the status of the project, and possible future plans.

### PLS property

Details of the Company's PLS project as of March 31, 2021 are shown below:

Property	Location	Ownership	Claims	Hectares	Stage	Carrying value
Patterson Lake South	Athabasca Basin, SK	100%	17	31,039	PFS	\$ 324,816,853

In January 2016, the Company executed an offtake agreement with CGN Mining Company Limited ("CGN Mining"). Under the terms of the agreement, CGN Mining will purchase 20% of annual U<sub>3</sub>O<sub>8</sub> production with an option to purchase up to an additional 15% U<sub>3</sub>O<sub>8</sub> production from the PLS property, after commencement of commercial production.

### PLS mineralized trend & Triple R deposit summary

Uranium mineralization of the Triple R deposit at PLS occurs within the Patterson Lake Conductive Corridor and has been traced by core drilling over ~3.18km of east-west strike length in five separated mineralized "zones" which collectively make up the Triple R deposit. From west to east, these zones are: R1515W, R840W, R00E, R780E and R1620E. Through successful exploration programs completed to date, Triple R has evolved into a large, near surface, basement hosted, structurally controlled high-grade uranium deposit. The discovery hole was announced on November 5, 2012 with drill hole PLS12-022, from what is now referred to as the R00E zone.

The R1515W, R840W and R00E zones make up the western region of the Triple R deposit and are located on land, where overburden thickness is generally between 55m to 100m. R1515W is the western-most of the zones and is drill defined to ~90m in strike-length, ~68m across strike and ~220m vertical and where mineralization remains open in several directions. R840W is located ~515m to the east along strike of R1515W and has a drill defined strike length of ~430m. R00E is located ~485m to the east along strike of R840W and is drill defined to ~115m in strike length. The R780E zone and R1620E zones make up the eastern region of the Triple R deposit. Both zones are located beneath Patterson Lake where water depth is generally less than six metres and overburden thickness is generally about 50m. R780E is located ~225m to the east of R00E and has a drill defined strike length of ~945m. R1620E is located ~210m along strike to the east of R780E, and is drill defined to ~185m in strike length.

Mineralization along the Patterson Lake Corridor trend remains prospective along strike in both the western and eastern directions. Basement rocks within the mineralized trend are identified primarily as mafic volcanic rocks with varying degrees of alteration. Mineralization is both located within and associated with mafic volcanic intrusives with varying degrees of silicification, metasomatic mineral assemblages and hydrothermal graphite. The graphitic sequences are associated with the PL-3B basement Electro-Magnetic (EM) conductor.

The Triple R deposit remains open in several directions. Recent drilling during the 2018 winter program has expanded the footprint of the Triple R deposit's R1515W zone. High-priority drill targets are located further west on-trend, towards the high-grade boulder field, as well as elsewhere on the PLS property.

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In September 2019, the Company announced the results of a prefeasibility study for an underground-only mining scenario at PLS, conducted by Roscoe Postle Associates Inc. ("RPA"), and entitled "Pre-Feasibility Study on the Patterson Lake South Property Using Underground Mining Methods" (the "U/G PFS"). The U/G PFS follows the results of an earlier PFS report outlining a hybrid mine approach using both open pit and underground techniques (the "Hybrid PFS" – SEDAR filed in May 2019). The U/G PFS highlights a substantial reduction in CAPEX and time requirements for construction of the Triple R mine due to simplified water control measures for underground mining. With the U/G PFS, access to the deposit is envisaged via a decline from land. The revised mining method eliminates the need for a system of dykes and slurry walls, dewatering and overburden removal and results in a reduction of 90% of total mine-related earth movement from the Hybrid PFS to the U/G PFS. The reduced earth movement results in reduced surface piles and overall minimized surface footprint. With a projected OPEX of just US\$7.18/lb, an IRR of 34% (pre-tax) / 25% (after-tax) and an NPV at 8% of C\$1.33B (pre-tax) / C\$0.7B (after-tax), the U/G PFS outlines the potential for highly economic production at PLS.

While the U/G PFS only considers Indicated Resources from the R780E and R00E zones, the mine plan has been deliberately designed to easily accommodate additional material from the R1515W, R845W and R1620E zones based on potential future conversion of Inferred Resources to Indicated Resources. The majority of mineralization at these three, on-strike, high-grade zones is currently defined as Inferred Mineral Resource classification and thus not considered for inclusion in the U/G PFS mine plan. As proven by the Company's drilling at the Triple R deposit's R00E and R780E zones, Fission has an excellent track record of converting Inferred-category resources to Indicated-category. As a result, there is a clear path for growing the deposit, potentially leading to an increased resource as well as a longer mine life.

### **PLS U/G Prefeasibility Study highlights:**

#### **Reduced Capital Costs, Low Operating Costs, and Robust Economics**

- Substantially reduced earthworks as a result of eliminating the dyke, slurry wall, dewatering, and overburden removal that was envisaged in the Hybrid PFS
- Construction timeline reduction of 1 year from 4 years (Hybrid PFS) to 3 years (U/G PFS)
- 21% reduction in capital costs from \$1.50B (Hybrid PFS) to \$1.18B (U/G PFS)
- Seven-year production life
- Average unit operating costs of US\$7.18/lb U<sub>3</sub>O<sub>8</sub>
- Economics:
  - o IRR of 34% (pre-tax) / 25% (after-tax)
  - o NPV of C\$1.33B (pre-tax) / C\$0.7B (after-tax) at 8% discount rate
  - o Payback in 2.2 years (pre-tax) / 2.5 years (after-tax)

#### **Demonstrated Scope for Substantial Growth**

- **Additional Zones:** The PFS mine plan has been designed specifically to accommodate all five currently defined mineral zones based on potential future conversion of Inferred Resources to Indicated Resources. These include the three high-grade, on strike zones - R1515W, R845W and R1620E – that are not yet part of Mineral Reserves.
- **Zone Expansion:** The R780E is open at depth and along plunge to the east and further opportunity exists to continue to grow the resource in those directions, potentially extending the underground mine life.
- **Mineralization Upgrade:** The PFS mine plan does not include areas of Inferred Mineral Resource in the R00E and R780E zones.

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### Reduced Environmental Impact

- The U/G PFS mine plan completely eliminates the need for a ring dyke, slurry wall, dewatering, and overburden removal that was included in the Hybrid PFS.
- Recovery of reserves near the overburden and bedrock contact (the crown pillar) will utilize artificial ground freezing technology drilled remotely from shore, which eliminates any disturbances into Patterson Lake. Artificial ground freezing has been used extensively at uranium deposits in the Athabasca Basin.
- Other than a freshwater intake pump, and treated effluent discharge point, all other infrastructure related to mining at PLS is set back a minimum of 100 m from the shoreline of Patterson Lake.
- The revised mining method results in a reduction of approximately 90% of total mine-related earth movement from the Hybrid PFS to the U/G PFS (51.2Mt in the Hybrid PFS compared to 5.4 Mt in the U/G PFS), and a 58% reduction to the total disturbed area.

### Uranium outlook

Management believes that the development of the PLS high-grade uranium property presents an opportunity to increase shareholder value based on the following categories, including but not limited to supply / demand fundamentals, geopolitics and clean, baseload power generation. This "greening", or decarbonization, is being accelerated as countries look for ways to stimulate economic recovery in the wake of the Covid-19 pandemic and, as shown with statements from the EU and individual nation states, nuclear has a critical role to play.

- *Clean and in demand*

As emissions figures conclusively prove, nuclear power is one of the cleanest forms of energy available. It is on par with, and in some cases superior to, renewable energy when it comes to carbon emissions. It also provides baseload energy, which is crucial for the large power grids that cities around the world rely upon.

Nuclear currently provides just over ten percent of the world's electricity requirements<sup>1</sup> and as a result, it prevents the emission of 2.1 billion tonnes of CO<sub>2</sub> equivalent every year<sup>1</sup>.

According to the highly respected Intergovernmental Panel on Climate Change, a minimum of 80% of the world's electricity needs to be low carbon by 2050<sup>2</sup> if we are to prevent global temperature increases beyond 2°C.

However, with global electricity demand forecast to grow between 80% and 130% by 2050<sup>1</sup>, studies show that without nuclear energy, significant carbon emission reduction will not be possible.

The world's largest economies, including the USA and China, are already major users of nuclear energy, and they are not alone. Russia, UK, France, Canada, South Korea, India and Belgium, all rely heavily on nuclear energy. Even countries like the United Arab Emirates – the home of big oil – have nuclear power stations in operation, and have more in the proposal stage.

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<sup>1</sup> International Energy Association

<sup>2</sup> Intergovernmental Panel on Climate Change



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### Uranium outlook (continued)

- *Clean and in demand (continued)*

The following is a list of selected countries with nuclear reactors that are either under construction, planned or proposed:

Country	In Operation	Under construction	Planned	Proposed
China	49	17	38	168
India	23	6	14	28
Russia	38	2	25	21
USA	94	2	3	18
Canada	19	-	-	2
Japan	33	2	1	8
Saudi-Arabia	-	-	-	16
South Korea	24	4	-	2
UAE	1	3	-	-
Ukraine	15	2	-	2
Others	147	16	19	60
<b>Total</b>	<b>443</b>	<b>54</b>	<b>100</b>	<b>325</b>

Source: World Nuclear Association (World Nuclear Reactors & Uranium Requirements - [www.world-nuclear.org](http://www.world-nuclear.org) - Updated April 2021)

As the numbers demonstrate, nuclear energy is not only well established, it is in a continued state of expansion. In fact, the most recent World Nuclear Association's Fuel Report, 2020, shows a 26 percent increase in uranium demand over the next decade.

- *Supply has weakened*

While uranium demand prospects have continued to strengthen in recent years, uranium production has been suffering. For nearly a decade, a state of oversupply, combined with large, end-user stockpiles, resulted in years of low uranium prices. Eventually, the pricing environment forced major supplier action, such as:

- Kazatoprom – the world's largest uranium supplier has cut production by 20%.
- Cameco, the 2<sup>nd</sup> largest supplier in the world, has shut down its flagship McArthur River - the world's highest grade uranium mine.
- Rio Tinto, one of the world's largest mining companies, has all but exited the uranium business – selling and winding down uranium operations and removing 6 million lbs of annual uranium production from the market.
- Investment has dried up for any project or expansion that does not show highly competitive operating costs.

Additional factors include:

- The Covid-19 pandemic led to periodic, temporary mine and mill closures.
- In order to fulfill contractual obligations, Cameco has purchased material on the spot market rather than increase production.
- Investment funds holding uranium inventories sold double the amounts they purchased in 2020, leading to a large drawdown of low cost inventories available.

As a result, prices in 2020 enjoyed the largest jump in five years and they are currently substantially higher than the 16-year low in 2016.

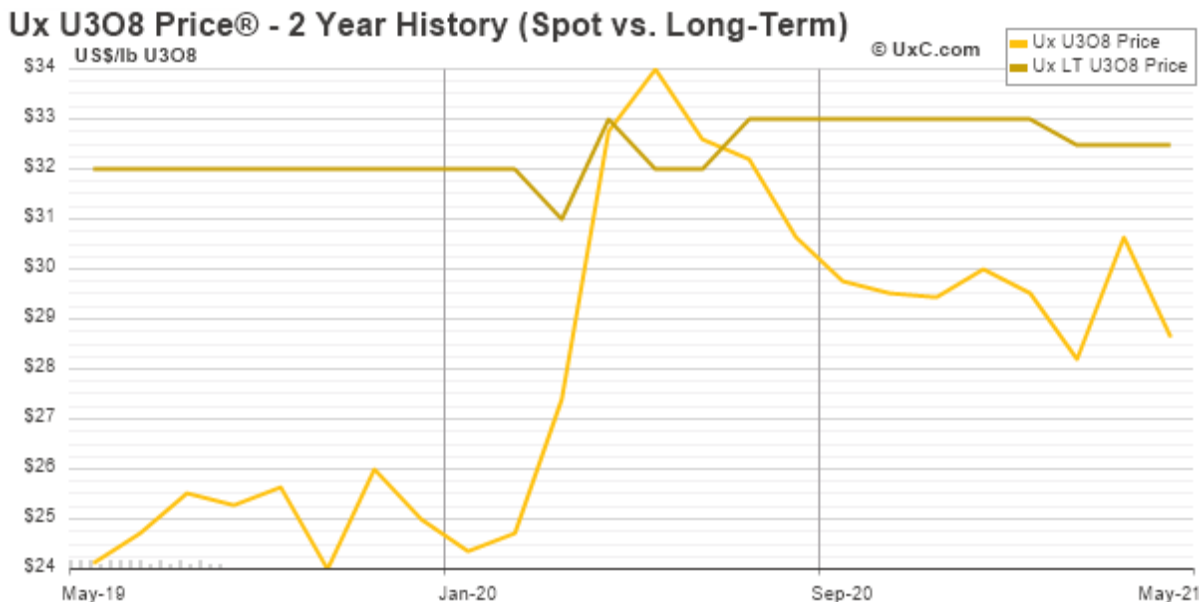
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### Uranium outlook (continued)

- *Supply has weakened (continued)*



Source: Ux Consulting Company LLC ("UxC", www.uxc.com: May 2021)

- *Looking to the future*

According to the UxC, an estimated 70% of uranium is produced at below \$30 per lb (the current approximate spot price), leaving 30% above the spot. Further analysis by UxC shows that, past 2025, higher cost production must be brought online because of declining inventories and depletion of reserves.

However, producers have made it clear that they will not risk capital to bring idle or new projects online at current price levels. For example, Cameco still refuses to set a date for restarting the McArthur River mine. In addition, Kazatomprom has extended its production cut through 2022.

To compound the problem for uranium fuel customers, Long-term contracting between 2014 and 2020 only occurred at a moderate level. Producers were slow to reduce supply because they were protected by higher price contracts and the high inventories protected consumers from temporary shortfalls. These factors are no longer in play to the same degree and analysts such as UxC believe that we could be approaching the start of a much larger contracting lifecycle, which will place upwards pressure on prices.

As the inventories and reserves continue to deplete, attention will inevitably turn to bringing on new sources of low-cost production. As highlighted by the Company's prefeasibility study, Fission Uranium's PLS project has the potential to become one of the lowest cost sources of uranium production.

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### Selected annual information

The financial information presented below for the current and comparative periods was derived from financial statements prepared in accordance with IFRS and is expressed in Canadian dollars.

Certain comparative figures have been reclassified to conform with the current year presentation.

	Year Ended December 31 2020	Year Ended December 31 2019	Year Ended December 31 2018
	\$	\$	\$
Net loss and comprehensive loss	(9,008,140)	(5,399,758)	(5,187,490)
Total assets	351,567,107	322,724,264	328,531,626
Current liabilities	821,875	420,336	1,094,156
Non-current liabilities	9,857,300	322,463	291,247
Shareholders' equity	340,887,932	321,981,465	327,146,223
Basic and diluted loss per common share	(0.02)	(0.01)	(0.01)

### Summary of quarterly results

The financial information presented below for the current and comparative periods was derived from annual financial statements prepared in accordance with IFRS or interim financial statements prepared in accordance with IFRS applicable to the preparation of interim financial statements, *IAS 34, Interim Financial Reporting*.

	March 31 2021	December 31 2020	September 30 2020	June 30 2020
	\$	\$	\$	\$
Exploration and evaluation assets	324,816,853	320,185,305	318,964,201	318,250,538
Working capital	26,281,397	29,370,554	11,946,422	13,814,153
Net loss and comprehensive loss	(3,088,936)	(3,794,159)	(2,330,609)	(1,572,730)
Net loss per share basic and diluted	(0.01)	(0.01)	(0.00)	(0.01)
	March 31 2020	December 31 2019	September 30 2019	June 30 2019
	\$	\$	\$	\$
Exploration and evaluation assets	317,551,428	316,812,426	315,921,679	314,551,875
Working capital	2,562,452	4,583,481	6,410,167	9,061,315
Net loss and comprehensive loss	(1,310,642)	(1,062,784)	(1,682,267)	(1,204,957)
Net loss per share basic and diluted	(0.00)	(0.00)	(0.00)	(0.00)

The increase in net loss and comprehensive loss for the three month periods ended March 31, 2021 and December 31, 2020 is primarily the result of stock based compensation recognized in those periods.

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### **Results of operations**

The expenses incurred by the Company are typical of exploration and development companies that do not have established cash flows from mining operations. Changes in these expenditures from quarter to quarter are impacted directly by non-recurring activities or events.

#### *Comparison of the three months ended March 31, 2021 and March 31, 2020*

The Company had a net loss and comprehensive loss of \$3,088,936 (\$0.01 basic and diluted loss per share) compared to a net loss and comprehensive loss of \$1,310,642 (\$0.00 basic and diluted loss per share). The change in net loss is primarily attributable to the following factors:

- Share based compensation increased to \$1,570,185 from \$1,179 due to the vesting of stock options granted during the current period.
- Professional fees decreased to \$127,484 from \$471,560 due to additional, non-recurring legal and accounting services required during the prior year.
- Financing costs increased to \$357,338 from \$nil pursuant to the credit facility agreement entered into during Q2 of the prior year.
- Unrealized loss on warrant liability increased to \$536,180 from \$nil due to fair value changes during the period.

### **Liquidity and capital resources**

Fission Uranium is an exploration and evaluation stage company and has not yet determined whether its exploration and evaluation assets contain ore reserves that are economically recoverable. The recoverability of the amounts shown for exploration and evaluation assets, including the acquisition costs, is dependent upon the existence of economically recoverable reserves, the ability of the Company to obtain necessary financing to complete the development of those reserves, and future profitable production.

The Company's ability to meet its obligations and fund exploration programs depends on its ability to raise funds. The Company anticipates being able to raise funds, as necessary, primarily through the issuance of common shares or debt. To date the Company has been successful in raising funds however there are no assurances that the Company will be successful in raising funds in the future. On an ongoing basis, the Company monitors and adjusts, when required, exploration programs as well as general and administrative costs to ensure that adequate levels of working capital are maintained. The Company has no exploration and evaluation asset agreements that require it to meet certain expenditures.

#### *Credit Facility*

In April 2020, the Company entered into a senior secured credit facility (the "Facility") with Sprott Resource Lending II (Collector) L.P. ("Sprott"). Under the terms of the Facility, Sprott advanced the Company a gross amount of US\$10,000,000 (net cash proceeds were subject to a 3% discount) with a four-year term and no obligation to make any principal repayments until April 2024 (the "Maturity Date"). The Company also has the option to extend the term of the Facility by one year, subject to certain terms and conditions contained in the Facility. The Facility bears interest at a rate of 10% per annum, payable monthly with the option to pay a portion of the interest due by way of common shares. The Company may voluntarily repay the Facility in whole or in part anytime before the Maturity Date, provided that a minimum of 24 months interest has been paid. The Company is also required to repay the Facility with 25% of the net proceeds from any equity financings (excluding flow-through financings) closed during the term.

As of March 31, 2021, the outstanding principal of the Facility was \$8,776,860 (US\$6,971,658).

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### Liquidity and capital resources (continued)

#### *Bought Deal Financings*

In November 2020, the Company closed a bought deal financing of 62,090,303 units at a price of \$0.275 per unit for gross proceeds of \$17,074,833. Each unit consists of one common share and one half of one common share purchase warrant. Each whole warrant is exercisable into one common share at a price of \$0.41 for a period of 24 months. The Company incurred share issuance costs of \$1,490,074 in connection with this financing.

The fair value of the common shares was determined based on the closing trading price on November 17, 2020 and the fair value of warrants was determined using the Black-Scholes pricing model. A total of \$15,416,781 was recorded in share capital in relation to the common shares and \$1,658,052 was recorded in other capital reserves in relation to the warrants. A total of \$144,694 was reclassified from unit issuance costs to other capital reserves for the proportionate share of financing costs related to the warrants in the units issued. The fair value of the warrants was determined using the following assumptions: volatility of 94.98%; risk-free interest rate of 0.27%; expected life of 1.0 years; and a dividend rate of 0%.

Pursuant to the terms of the credit facility agreement, the Company was required to repay a portion of the outstanding principal with 25% of the net proceeds from this financing. A total of \$4,470,809 (US\$3,443,057) was paid which included \$3,932,302 (US\$3,028,342) in principal and \$538,507 (US\$414,715) in early repayment interest.

In December 2020, the Company closed a bought deal financing of 17,073,171 flow-through units at a price of \$0.41 per unit for gross proceeds of \$7,000,000. Each unit consists of one common share and one half of one common share purchase warrant. Each whole warrant is exercisable into one common share at a price of \$0.50 for a period of 24 months. The Company incurred share issuance costs of \$667,213 in connection with this placement. This flow-through financing was excluded from the obligation to repay a portion of the credit facility.

The fair value of the common shares was determined based on the closing trading price on December 21, 2020 and the fair value of warrants was determined using the Black-Scholes pricing model. A total of \$6,096,706 was recorded in share capital in relation to the common shares and \$903,294 was recorded in other capital reserves in relation to the warrants. A total of \$86,099 was reclassified from unit issuance costs to other capital reserves for the proportionate share of financing costs related to the warrants in the units issued. The fair value of the warrants was determined using the following assumptions: volatility of 97.78%; risk-free interest rate of 0.23%; expected life of 1.0 years; and a dividend rate of 0%.

#### *Changes in working capital for the three months ended March 31, 2021*

At March 31, 2021, the Company had a working capital balance of \$26,281,397 as compared to \$29,370,554 at December 31, 2020. The decrease in working capital is primarily due to PLS program expenditures in addition to regular administrative expenses, partially offset by proceeds on warrant and stock option exercises.

#### *Cash flow for the three months ended March 31, 2021*

Cash and cash equivalents for the three months ended March 31, 2021 decreased by \$2,737,240 as a result of:

- Cash outflows from operating activities of \$1,109,803;
- Cash outflows related to exploration and evaluation asset additions of \$3,358,242;
- Cash outflows related to share issuance costs of \$238,439;
- Cash inflows from the exercise of warrants of \$1,814,657;
- Cash inflows from the exercise of stock options of \$180,833; and
- Cash outflows from lease obligation payments of \$26,246.

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### Related party transactions

The Company has identified the former CEO, current President and CEO, current and former CFO, VP Project Development, VP Exploration, and the Company's directors as its key management personnel during all or part of the periods presented below.

	<b>Three Months Ended March 31 2021</b>	Three Months Ended March 31 2020
	\$	\$
<i>Compensation Costs</i>		
Wages, consulting and directors fees paid or accrued to key management personnel and companies controlled by key management personnel	<b>311,250</b>	434,417
Share-based compensation pursuant to the vesting schedule of options granted to key management personnel	<b>1,269,165</b>	-
	<b>1,580,415</b>	434,417
Exploration and administrative services billed to Fission 3.0, a company with common directors and management	<b>5,586</b>	64,840

The Company has a Directors Remuneration Plan (the "DRP Plan") whereby a portion of director fees can be paid through the issuance of common shares ("Director Remuneration Shares") in lieu of the payment of cash or other means of remuneration. Included in compensation costs is the value of shares issued under the DRP Plan. During the three months ended March 31, 2021, the Company issued Nil shares with a total value of \$Nil under the DRP Plan (March 31, 2020 - Nil shares valued at \$Nil).

Included in accounts payable at March 31, 2021 is \$46,813 (December 31, 2020 - \$16,625) for wages payable and consulting fees due to key management personnel and companies controlled by key management personnel.

Included in amounts receivable at March 31, 2021 is \$4,113 (December 31, 2020 - \$5,415) for exploration and administrative services and expense recoveries due from Fission 3.0.

Transactions with CGN Mining, which is deemed to be a related party as it accounts for its investment in the Company as an investment in an associate, have been disclosed in the "PLS property" section of this MD&A.

These transactions were in the normal course of operations.

### Outstanding share data

As at May 13, 2021, the Company has 644,601,197 common shares issued and outstanding, 38,889,602 incentive stock options outstanding with exercise prices ranging from \$0.31 to \$0.85 per share and 70,363,019 warrants outstanding with exercise prices ranging from \$0.17 to \$0.85.

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### **Internal controls over financial reporting**

The Company's management is responsible for designing and maintaining an adequate system of internal controls over financial reporting as required under National Instrument 52-109 – *Certification of Disclosure in Issuers' Annual and Interim Filings*. Management designed the internal control system based on the Internal Control – Integrated Framework (2013) published by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). From this framework, an evaluation of the internal control system was completed, and management concluded that the system of internal controls over financial reporting was effective as at December 31, 2020.

Any internal control system, no matter how well designed, has inherent limitations. Therefore, internal controls can only provide reasonable assurance with respect to financial statement preparation and presentation.

There have not been any significant changes in the Company's internal control over financial reporting during the three month period ended March 31, 2021 that have materially affected or are reasonably likely to materially affect the Company's internal controls over financial reporting.

### **Disclosure controls and procedures**

The Company's disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by the Company is recorded, processed, summarized and reported within the time periods specified in the securities legislation. The Company's management has concluded that the disclosure controls and procedures were effective as at December 31, 2020.

Any control system, no matter how well designed, has inherent limitations. Therefore, disclosure controls and procedures can only provide reasonable assurance with respect to timely disclosure of material information.

### **Financial assets**

All financial assets are initially recorded at fair value and categorized into the following two categories for subsequent measurement purposes: amortized cost and fair value through profit or loss ("FVTPL").

A financial asset is classified at 'amortized cost' only if both of the following criteria are met: a) the objective of the Company's business model is to hold the asset to collect the contractual cash flows; and b) the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

The Company has classified its cash and cash equivalents and amounts receivable at amortized cost for subsequent measurement purposes. The Company has classified its investment in Fission 3.0 Corp. and the Fission 3.0 warrants within short-term investments at FVTPL for subsequent measurement purposes.

### **Financial liabilities**

Financial liabilities include accounts payable and accrued liabilities, credit facility and warrant liability and are initially recorded at fair value. Subsequently, certain financial liabilities are measured at amortized cost using the effective interest rate method. The warrant liability is measured at FVTPL for subsequent measurement purposes.

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### **Key estimates and judgments**

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Company based its assumptions and estimates on parameters available when the financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Company. Such changes are reflected in the assumptions when they occur.

#### *Exploration and evaluation assets*

The application of the Company's accounting policy for exploration and evaluation assets requires judgment in the following areas:

- (i) Determination of whether any impairment indicators exist at each reporting date giving consideration to factors such as mining title expiration dates, budgeted expenditures on the PLS property, discontinuation of activities in any area and evaluation of any data which would indicate that the carrying amount of exploration and evaluation assets is not recoverable; and
- (ii) Assessing when the commercial viability and technical feasibility of the project has been determined, at which point the asset is reclassified to property and equipment.

#### *Warrant liability*

Share purchase warrants issued in connection with the credit facility are considered a derivative liability, the fair value of which is estimated using the Black-Scholes pricing model. The significant inputs used in the Black-Scholes model to calculate the fair value of warrants include volatility, expected term and the forfeiture rate.

### **Significant accounting policies**

A summary of the Company's significant accounting policies is included in Note 2 of the audited financial statements for the year ended December 31, 2020.

### **Cautionary notes regarding forward-looking statements**

Certain information contained in this MD&A constitutes "forward-looking statements" and "forward-looking information" within the meaning of Canadian legislation.

Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur", "be achieved" or "has the potential to".

Forward looking statements are based on the opinions and estimates of management as of the date such statements are made, and are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking statements. The Company believes that the expectations reflected in this forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking information included in this MD&A should not be unduly relied upon. This information speaks only as of the date of this MD&A. In particular, this MD&A may contain forward-looking information pertaining to the following: the net present value, metal recoveries, capital costs, operating costs, production, rates of return, payback and impact of the R1515W, R840W and R1620E zones on the operations; the likelihood of completing and benefits to be derived from corporate transactions; the estimates of the Company's mineral resources on its PLS property; estimated exploration and development expenditures; expectations of market prices and costs; supply and demand for uranium; possible impacts of litigation and regulatory actions on the Company; exploration, development and expansion plans and objectives; expectations regarding adding to its mineral resources through acquisitions and exploration; and receipt of regulatory approvals, permits and licences under governmental regulatory regimes.



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### **Cautionary notes regarding forward-looking statements (continued)**

There can be no assurance that such statements will prove to be accurate, as the Company's actual results and future events could differ materially from those anticipated in this forward-looking information as a result of the factors discussed below in this MD&A under the heading "Risks and Uncertainties".

Accordingly, readers should not place undue reliance on forward-looking statements. These factors are not, and should not, be construed as being exhaustive. Statements relating to "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions, that the mineral resources described can be profitably produced in the future. The forward-looking information contained in this MD&A is expressly qualified by this cautionary statement. The Company does not undertake any obligation to publicly update or revise any forward-looking information after the date of this MD&A or to conform such information to actual results or to changes in the Company's expectations except as otherwise required by applicable legislation.

### **Cautionary notice to US investors regarding mineral resource estimates**

Disclosure of mineral resource estimates and mineral classification terms herein are made in accordance with the Canadian National Instrument 43-101 *Standards of Disclosure for Mineral Projects*. NI 43-101 is a rule established by the Canadian Securities Administrators ("CSA") that sets the standards for all public disclosure by issuers regarding scientific information and technical data concerning mineral projects. These standards differ significantly from the mineral reserve disclosure rules of the Securities and Exchange Commission ("SEC"). As a result, the Company's mineral resource estimate is not comparable to similar resource information that would be generally disclosed by US based companies under the rules of the SEC. The terms mineral resource, measured mineral resources, indicated mineral resources and inferred mineral resources, are reporting classification standards in Canada. Furthermore, inferred mineral resources have a greater amount of uncertainty as to whether they can be mined economically, legally, or whether they exist at all.

In accordance with Canadian rules, inferred mineral resource estimates cannot form the basis of pre-feasibility or feasibility studies. There are no guarantees and it cannot be assumed that any classification of mineral resources: measured, indicated, inferred, in whole, or in part, will ever be upgraded to a higher classification. Mineral resources, which are not mineral reserves, do not have demonstrated economic viability.

### **Risks and uncertainties**

The Company is subject to a number of risks and uncertainties, including: uncertainties related to the impact of the COVID-19 pandemic on capital markets and supply chains; uncertainties related to exploration and development; uncertainties related to the nuclear power industry; the ability to raise sufficient capital to fund exploration and development; changes in economic conditions or financial markets; increases in input costs; litigation, legislative, environmental and other judicial, regulatory, political and competitive developments; technological or operational difficulties or inability to obtain permits encountered in connection with exploration activities, labour relations matters, and economic issues that could materially affect uranium exploration and mining. The cost of conducting and continuing mineral exploration and development is significant, and there is no assurance that such activities will result in the discovery of new mineralization or that the discovery of a mineral deposit will be developed and advanced to commercial production. The Company continually seeks to minimize its exposure to these adverse risks and uncertainties, but by the nature of its business and exploration activities, it will always have some degree of risk.