Fission Uranium

I. High Grade Resource Located in a Tier 1 Jurisdiction

II. Favourable Supply and Demand Environment Aligns With PLS Timeline

III. Positioned to Take Advantage of The Growing Nuclear Energy Industry

Entry Price	$0.45
Current Price	$0.59
Price Objective	$0.68
Implied Upside	+17.0%

Metals and Mining Team

Portfolio Manager	Analyst	Analyst	Analyst	Analyst	Analyst
Nathaniel Will	Kevin McCreary	Dylan Howse	Timothy Wang	Daniel Tortis	Keagan Hall
					
Nathaniel Will is a third-year student in Integrated Business and Humanities and is in his second year on Investment Council. He previously was an analyst for the Industrials team and is passionate about finance	Kevin McCreary is a third-year business student and this is his first year on the Investment Council. Kevin has previous experience working in the metals and mining industry, working at Kinross in Investor Relations this past summer	Dylan Howse is a third-year student in economics, and this is his first year on investment council. He has an interest in small start-up business growth and seeks to work in that area in the future	Timothy Wang is a second-year commerce student, this is his first year on the investment council. He is passionate about finance and GIS. In the future, he seeks to work in the natural resources industry	Daniel Tortis is a second-year commerce student. He is passionate about learning about finance as well as economics. This is Daniel's first year as an analyst for the DeGroote Finance and Investment Council	Keagan Hall is a first-year business student. Keagan is interested in finance, macroeconomics and innovation. Keagan desires to write about financial markets and news in the future

Company Overview

Premium High-Grade Uranium Miner

Patterson Lake South Project (PLS)

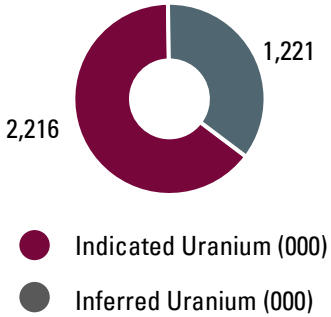
- Located in the Athabasca Basin in Saskatchewan, it is ranked as one of the top 10 jurisdictions in the world for mining investments
- Fission has 100% ownership of the project and has a highly supportive jurisdiction, as the region has 60 years of governmental support
- One of the world's largest low-cost Uranium mines as it's the basins only shallow mine; only 50m under spanning 3.18km
- The grade of the Uranium extracted is anywhere from 10 to 20 times higher than the global average, with still 80% unexplored

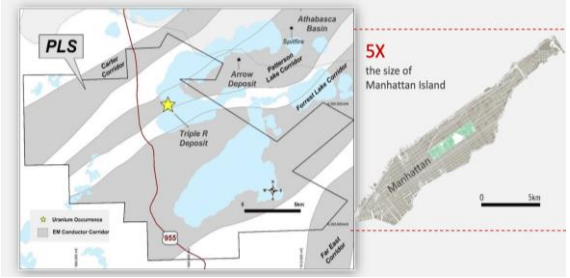
Stock Price	Market Cap	Enterprise Val	Dividend Yield
$0.58	$267.0M	$265.0M	N/A
52 Wk Range	**Cash**	**Net Debt**	**Target Price**
$0.34 – $0.62	$12.3M	$10.8M	$0.65

Leadership Team with a Track Record of Success

Ross McElroy, President and CEO	Gary Haywood, VP Project Dev.
P, Geol. formerly working at Cameco, Areva, BHP Billiton, McArthur River	P, Eng. with 35 years of experience as a professional mining engineer
PDAC Bill Dennis Award for exploration success and the Northern Miner 'Mining Person of the Year'	Manager at the Eagle Point and McArthur River with a specialty in high-grade uranium deposits

PLS Resources & Land



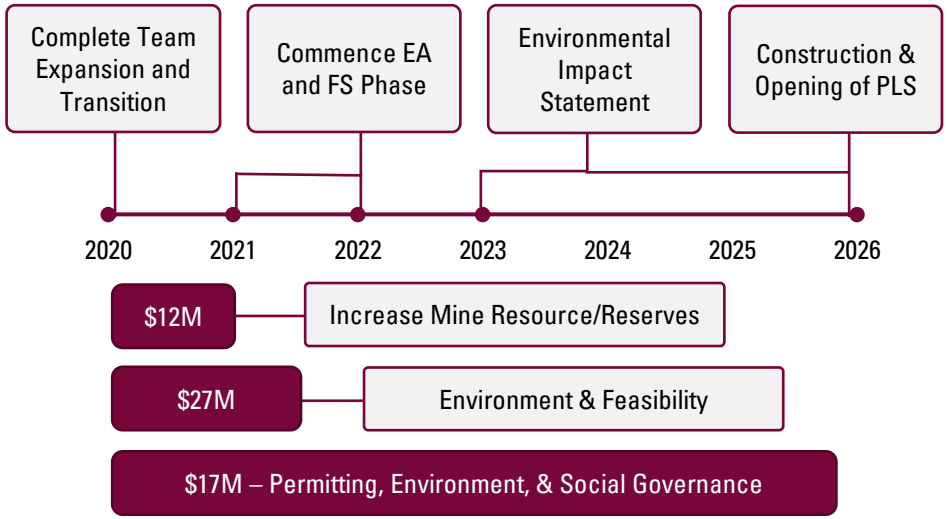


31,039 ha property in the Athabasca Basin district, with ~ 80% under explored

Fission is set to have their operating expense be in the bottom quartile of all Uranium mines at US $7.18 per pound of U_3O_8

The project is also projected to have a high IRR at 22% after tax with an impressive NPV of C$487.5M

Upcoming Timeline & Costs



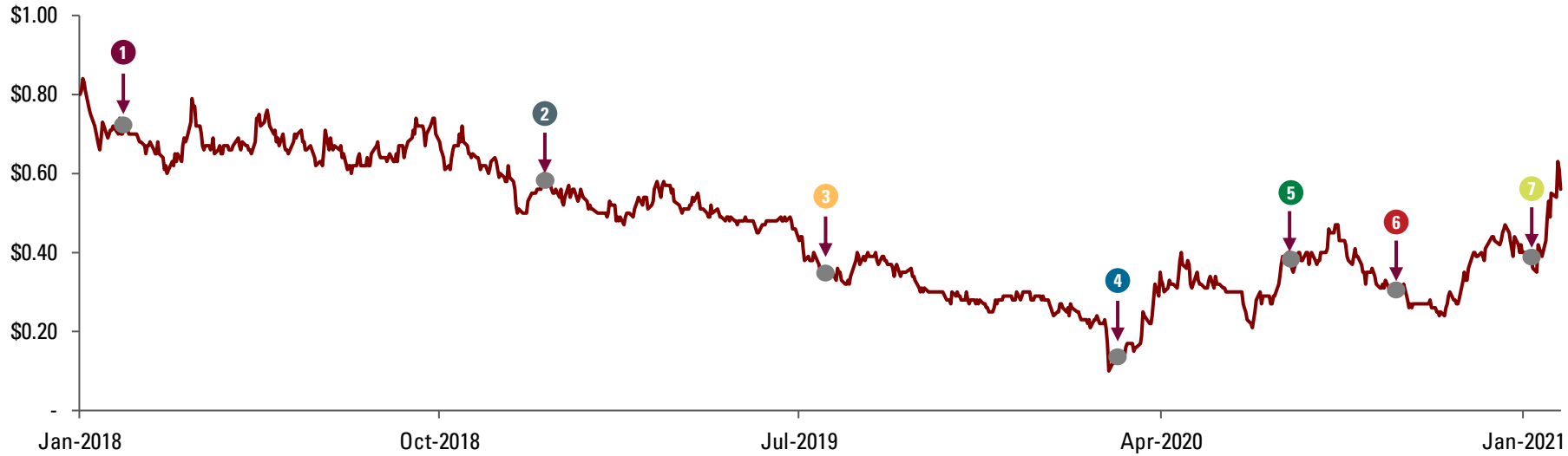
With its current resource size, low operating cost, unexplored content, and experience leadership, Fission has success in its future

Source: Fission's Annual Corporate Update Presentation, Pre-Feasibility Report and DFIC Research
Note: Metrics as at March 24, 2021

Further Analysis

Key Events

Share Price Since 2018 – Current Day



Key Events

	Date	Headline
1	February 20th, 2018	Fission Increases Indicated Resource
2	May 18th, 2018	Fission Announces Changes to the Board of Directors
3	August 14th, 2019	Fission Hits High Grade Uranium in Multiple Areas
4	February 20th, 2020	Covid-19 causes crash of U.S equities market
5	November 17th, 2020	$17.07 million bought deal offering occurs
6	November 19th, 2020	Pre-Feasibility Study Released and Team Expanded
7	February 1st, 2021	Project De-risking announced with 43 hole drill program

COVID-19 Impact

In 2019 Canada (Saskatchewan) supplied 13.2% of the world's uranium . Due to Covid-19, Canada's 2020 production will be significantly reduced

Due to Covid-19 measures taken by governments around the world, countries have seen a fall in electricity consumption of up to 25 percent during lockdown periods

There has been no enforced shutdown of a nuclear power reactor due to the effects of Covid-19 on the workforce or supply chains

At the Cigar Lake, the largest uranium mine in northern Saskatchewan, Canada, production was temporarily suspended. The facility placed in safe care and maintenance mode during the Covid-19 pandemic. This reduced the workforce onsite from around 300 to 35

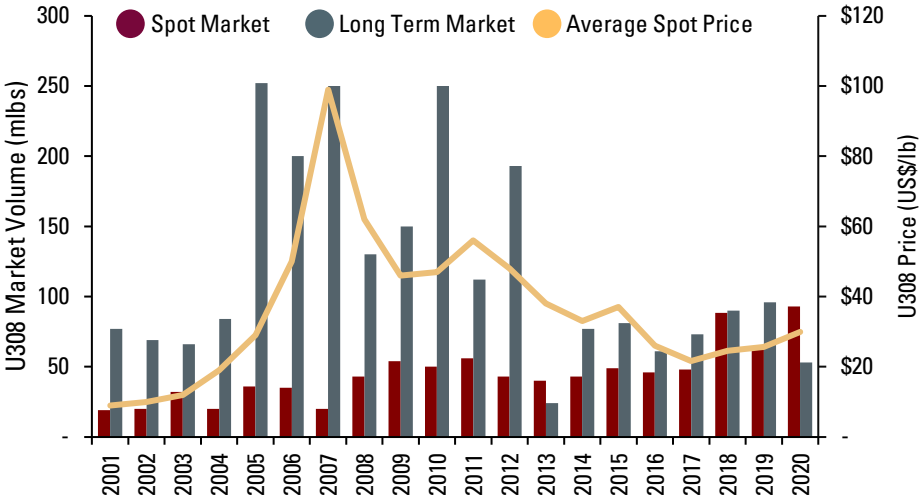
During the Covid-19 Pandemic, Fissions Stock Price took a hit and is now starting to recover back to pre-pandemic highs

Source: Company reports and publicly available information
Note: Information as at March 24, 2021

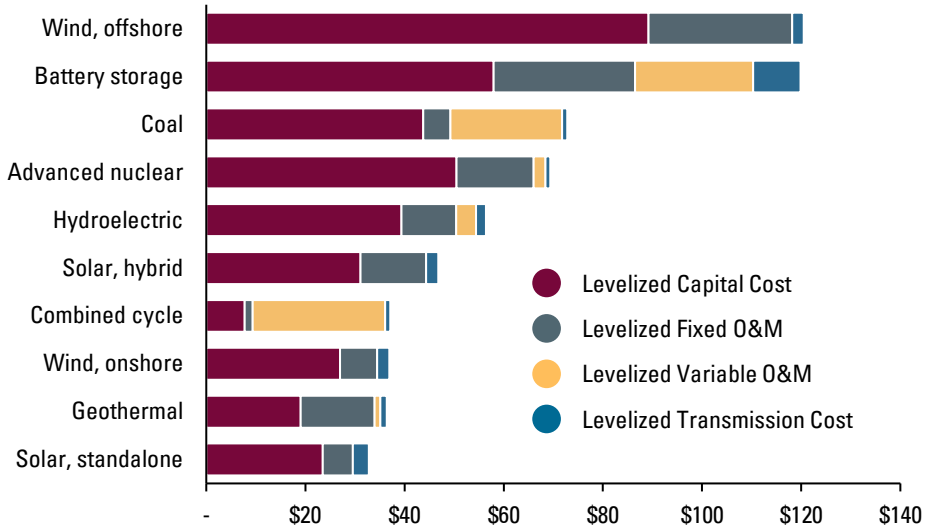
Industry Overview

Uranium Industry

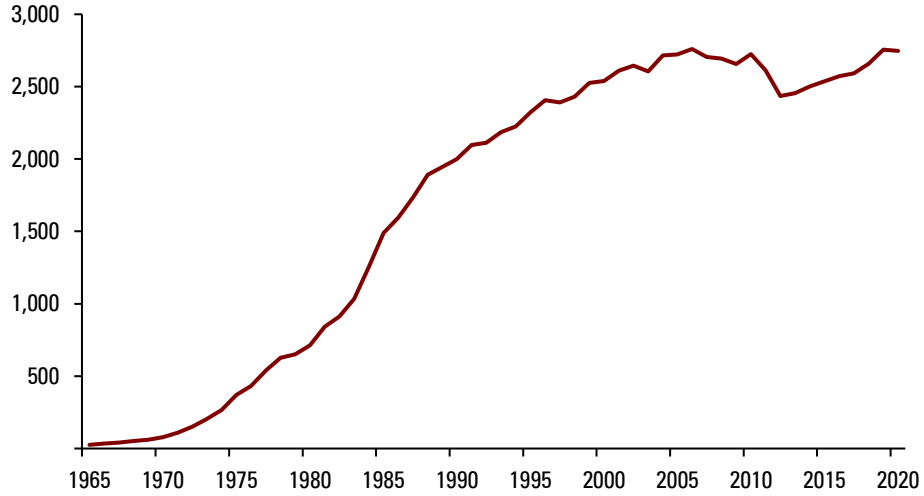
Historical Contracting Volumes and Price History



Levelized Cost of Energy (USD/kWh)



World Nuclear Energy Growth (TWh)



Key Industry Drivers

Still the only source of reliable emission-free baseload electricity source, uranium demand has risen past pre-Fukushima levels in recent years. Demand primarily driven by the construction of new reactors around the world

Global electricity demand is expected to rise 76% by 2030, and nuclear energy will no-doubt play an integral role in meeting the demand. There are 54 reactors currently under construction, and a further 439 reactors planned or proposed

The construction of new reactors require high capital costs, but their long service life allows costs to be amortized over time. Reactors have relatively low operating costs, and next generation reactors are expected to be even more efficient

Nuclear power is among the safest sources of energy at only 90 deaths/TWh. This is compared to 150 deaths/TWh for wind, 440/TWh for solar, 36000/TWh for oil and approximately 100,000 deaths/TWh for power generated from coal

Nuclear power plants fueled by uranium will pave a path for emission-free energy worldwide in the coming years

Source: World Nuclear Association, UxC, IAEA

Investment Thesis 1

High Grade Resource Located in a Tier 1 Jurisdiction

Athabasca Basin Jurisdiction

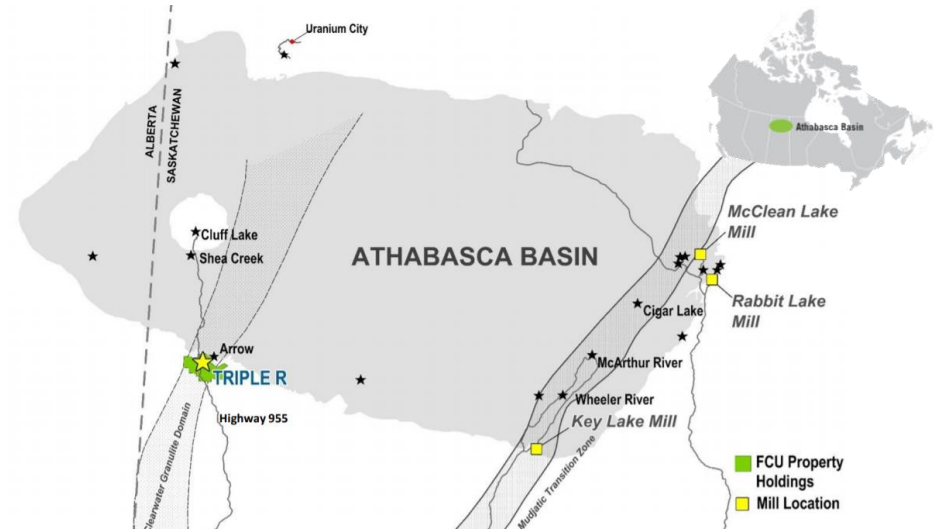
Situated in northern Saskatchewan and northeastern Alberta, the Athabasca basin hosts the world's richest source of uranium with average grades up to 21.2% uranium and supplies 20 % of the world's uranium

Saskatchewan consistently ranked in the Top 10 Mining Investment jurisdictions in the world. The Jurisdiction is known for well-trained aboriginal field workers and the project has excellent access to highway

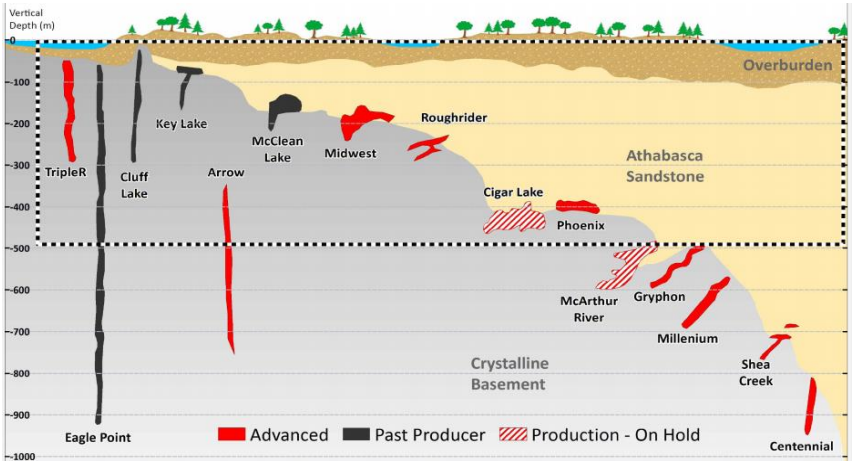
The province of Saskatchewan in Canada has a 60-year history of uranium mining and strong support exists at a local, regional and provincial level

It possesses stable, supportive government and communities, a skilled workforce and established infrastructure. It also has very straightforward permitting procedures

Map of Athabasca Basin

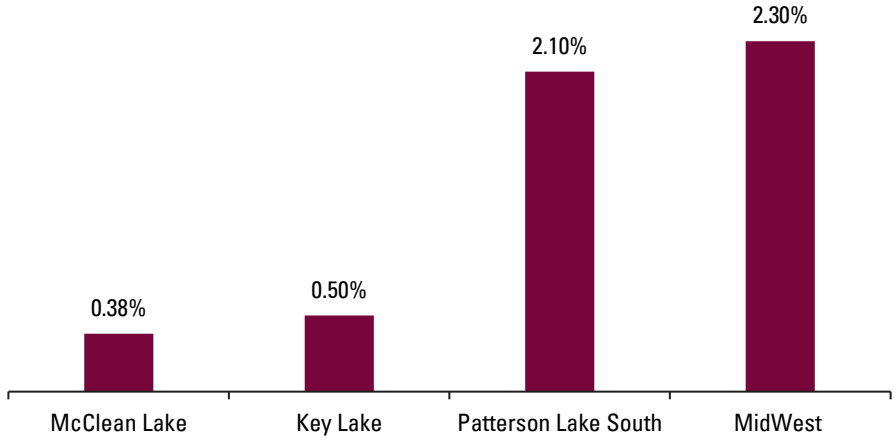


Alberta Jurisdiction



Fissions Triple R mine is the only remaining high grade deposit at shallow depth in the area

Average Indicated Ore Grade Percentage



Uranium above 2 % is considered high grade ore. Fission Indicated Resource is 2.1 % U308

Fission's location within a top mining jurisdiction and its high-grade ore makes it poised for success

Source: Company reports and publicly available information

Investment Thesis 2

Positioned to Take Advantage of The Growing Nuclear Energy Industry

Legislation Favourability Towards Nuclear

Japan's energy minister has said he considers nuclear energy "indispensable" if the country is to meet its target of reaching net-zero carbon emissions – Japan has released plans to implement SMR technology to their on-grid communities

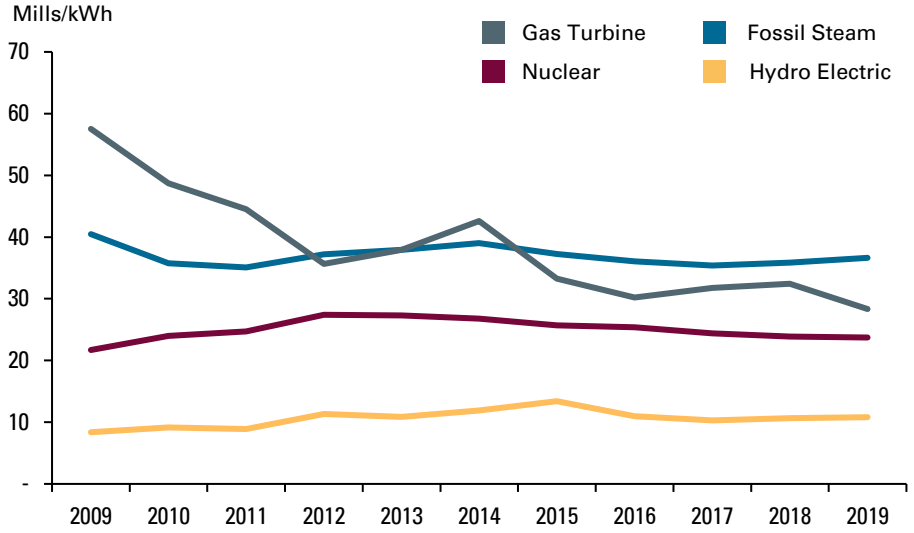
The Canadian government has dedicated significant support to companies working on nuclear technology – most recently $20 million to Saint John's ARC Clean Energy

China is investing capital into the construction of State-owned Nuclear energy facilities in an effort to move away from coal

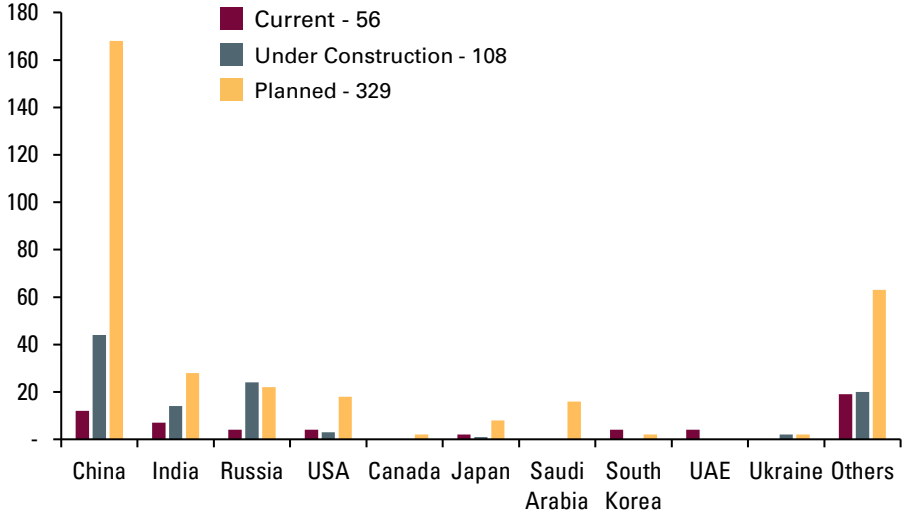
Like China, India has realized that the only solution in the renewable energy space that is feasible for their population is nuclear. They are seeking between 60-63 Gigawatts by 2032

As Nuclear becomes more economically feasible through SMR's, countries will have flexibility to implement nuclear energy without having to build full scale reactors. This is attractive to smaller countries

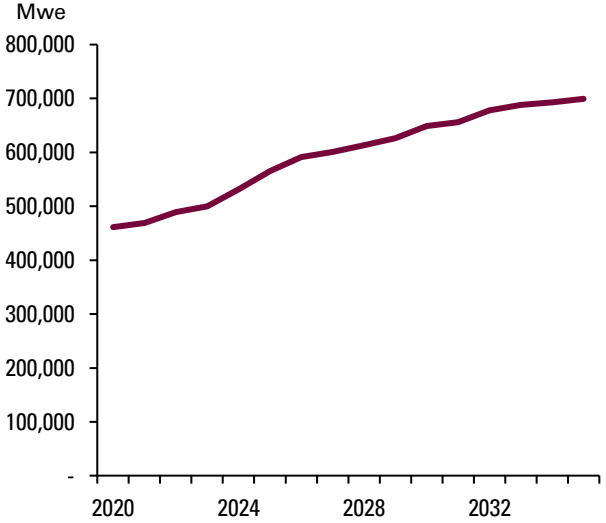
Total Plant Operating Expense



Global Nuclear Reactors



Growth in Feasibility of SMR's



The global market for SMR's is expected to be worth up to $150 billion by 2025

SMR's could be almost completely built in a controlled factory setting and installed module by module. This would improve the level of construction quality and efficiency

Three major nuclear markets (US, UK, Canada) Have signalled growing support for SMR's

There is a global gravitation towards the renewable source of energy that is feasible and efficient

Source: Publicly Available information
Note: Metrics as at March 1, 2021

Investment Thesis 3

Favourable Supply and Demand Environment Aligns With PLS Timeline

PLS Set to Exploit This Gap

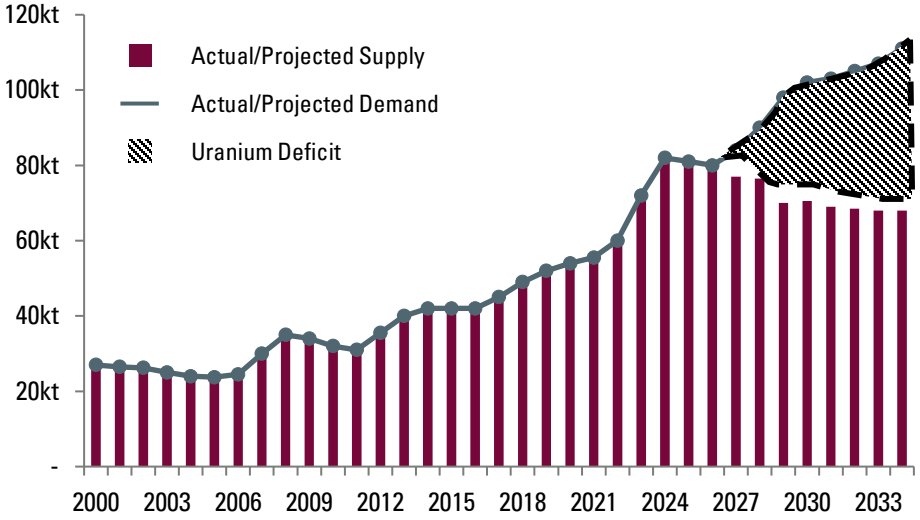
With the major supply deficit projected to occur in 2026 and Fission's timeline of starting production in 2026, it's the perfect time to take advantage of the market

UxC states that it is imperative for new production to meet accelerating demand and projects without economic, environmental, or geopolitical issues are rare, but are going to be in the spotlight

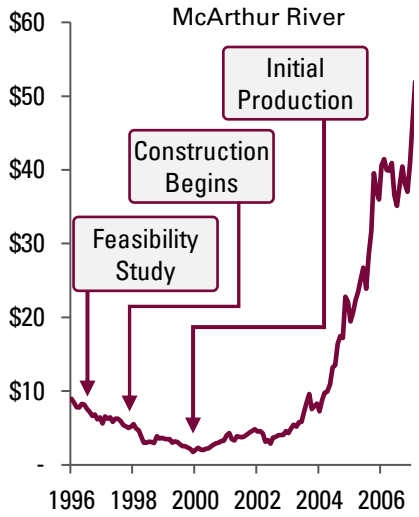
U_3O_8 prices have risen due to the global and Canadian decrease in production with the largest producers like Kazatomtrom and Cameco falling significantly off pace in recent years leaving the door open for a new supplier at high prices

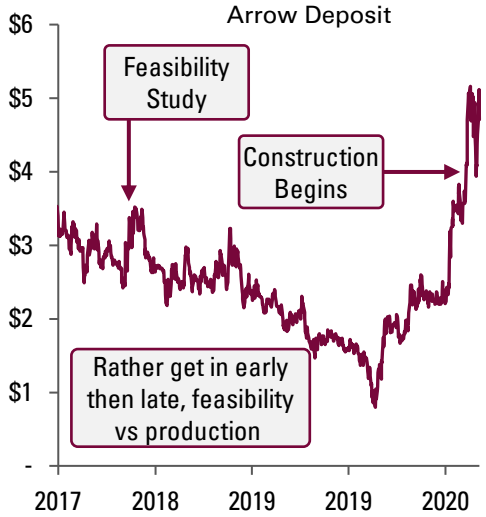
Fission's ability to produce reactor quality uranium with low estimated operating costs, located in the safest uranium jurisdiction in the world sets itself up to be a front runner to exploit the future supply-demand environment at highly profitable prices

Future Uranium Supply Deficit

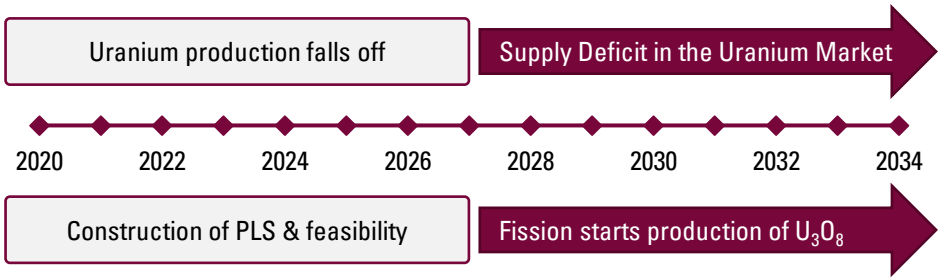


Historical Success For Others at this Point; Cameco & NexGen





Timeline of Success



"There will need to be a major price adjustment of uranium soon to accommodate an undersupplied market with growing demand" - Keith Bodnarchuck at IsoEnergy

"The market is preparing for imminent loss of production of two longstanding mines in Australia (Ranger) and Niger (Arlit)" - Philip Johnson at UxC

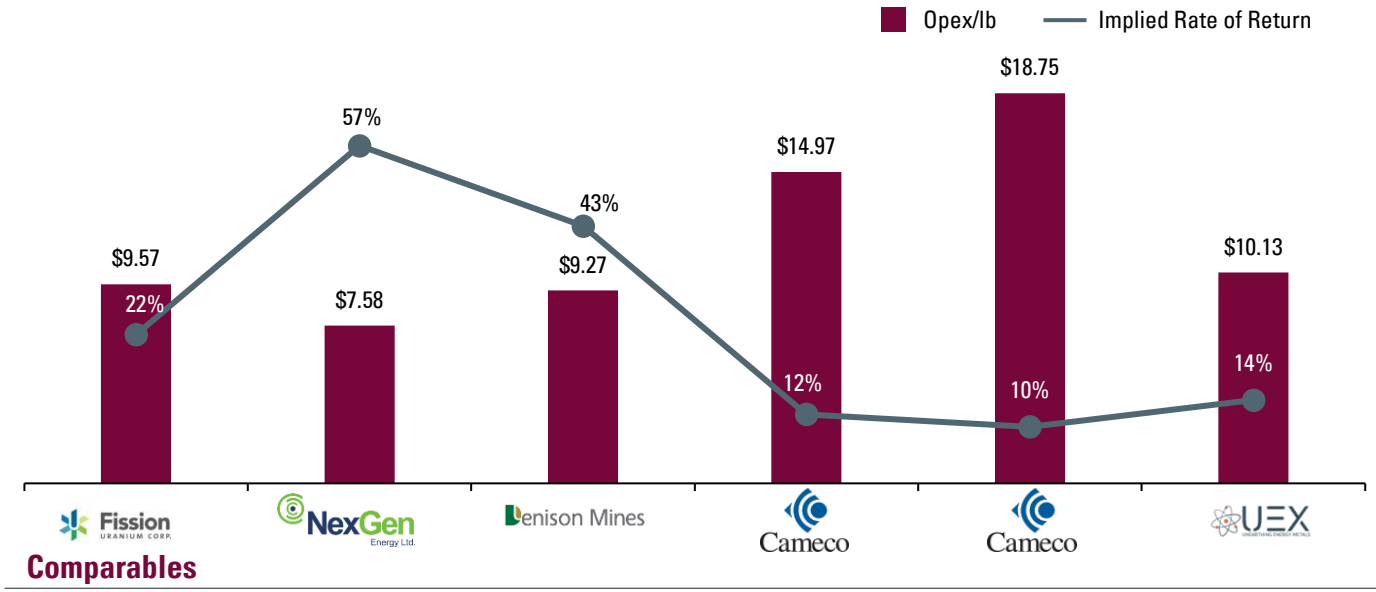
A severely undersupplied market sets the scene for Fission to take advantage in the future

Source: International Atomic Energy Agency Report, UxC, and Refinitiv

Comparable Analysis

Comparable Companies Analysis

IRR vs OPEX/lb Comparison – Canadian Peers [1]



Price assumptions differ between miners, therefore IRR estimates differ

The important point is the Opex/lb. Fission has a relatively conservative IRR and run very sustainable operating costs

For example, Denison assumes $54 Uranium for Wheeler River, but at $40 uranium, their IRR dropped to 19%

Fission operates in a manner that allows them to gain from positive changes in the environment, and adjust relatively less than their peers in the event of an external shock

Company Name	Ticker	Equity Value C$M	Enterprise Value C$M	Uranium Price C$/lb	Mine Life Years	Mine Stage	Net Debt C$M	Reserves mlbs	Resources mlbs	EV/Resources C$/lb
NexGen Energy	NXE	$1,190	$1,008	$54	9	Feasibility	$102	3.4	348	$2.7
Denison Mines	DML	$672	$335	$54	6	Late Exploration	($15)	1.5	157	$1.9
Skyharbour Resources	SYH	$17	$15	$42	13	PFS	$0	N/A	7	$0.6
Azincourt Energy	AAZ	$5	$4	$36	12	Early Exploration	$0	N/A	-	-
UEX Corp	UEX	$65	$63	$42	15	Exploration/PEA	($2)	N/A	100	$0.5
Uranium Energy Corp.	UEC	$527	$512	$42	11	PFS	$20	12.92	28	$18.3
Paladin Energy	PDN	$901	$698	$40	17	Exploration	$237	24	24	$29.3
Laramide Resources	LAM	$64	$54	$46	10	PEA	$10	N/A	51	$1.0
Mean		**$430**	**$336**	**$44**	**12**		**$44**	**10.5**	**102**	**$7.8**
Median		**$296**	**$199**	**$42**	**12**		**$5**	**18.5**	**51**	**$1.9**
Fission Uranium	**FCU**	**$300**	**$298**	**$50**	**10**	**Exploration/PFS**	**$10.8**	**N/A**	**133**	**$2.2**

Fission has a high price floor to accompany their growth potential

Source: Refinitiv, Sedar, and publicly available information
Note: In C$M unless specified; Information as at March 1, 2021

1. Information shown major mining projects

NAV Model

Model and Sensitivity Analysis

Fission URANIUM CORP.

Production Schedule

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Operating Costs ($/t)	$340	$340	$340	$340	$340	$340	$340
Royalties ($/lb)	$4.3	$4.3	$4.3	$11.6	$11.6	$10.33	$0
Sustaining Capex ($M)	$100.0	$30.1	$30.1	$30.1	$30.1	$14.3	$1.2
Daily Throughput (t/d)	1,005	1,005	1,005	1,005	1,005	1,005	1,005
Tonnes Processed (kt)	351,750	351,750	351,750	351,750	351,750	351,750	189,500
Uranium Grade (% U_3O_8)	1.50%	2.00%	2.00%	2.00%	2.00%	0.95%	0.14%
Uranium Recovery (%)	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
Total Uranium Production (mlbs)	11.3	15.0	15.0	15.0	15.0	7.1	0.6

NAV Table

		C$M	C$/sh
Triple R Mine	10.0%	$342.1	$0.44
In-Site Resources		$172.4	$0.22
Mining NAV		**$498.0**	**$0.66**
Cash and Cash Equivalents		$29.5	$0.04
Total Debt		$(10.8)	$(0.01)
Estimated Debt Additions		$0.0	$0.00
Estimated Equity Additions		$70.0	$0.09
Basic Working Capital		$0.0	$0.00
Discounted G&A Expense	8.0%	$(35.8)	$(0.05)
Reclamation Liability		$(40.0)	$(0.05)
Net Financial Assets		**$13.0**	**$0.02**
Total NAV		**$527.5**	**$0.68**

Risk Weighted Scenarios

Risk Weighted Scenarios	Weight	Share Price
Everything Goes Right: Accelerated construction, reserve additions, lower costs, higher uranium price, throughput expansion	7.5%	$1.32
Positive Further Expansion: Reserve additions, decreased risk, with slightly later production	7.5%	$1.23
Project is Cheaper than Projected: lower sustaining capex, lower operating costs, lower risk, higher throughput	15.0%	$1.07
Base Case:	35.0%	$0.68
Takes Time to Secure Funding: later production date, higher risk	15.0%	$0.46
Difficulties Starting Production: higher operating costs, lower throughput, later production, lower uranium price	15.0%	$0.43
Failure: Fission fails to secure funding/partnership and mine is not constructed	5.0%	$0.00
Risk Weighted Target Price	**100.0%**	**$0.72**

Based on our NAV valuation we derived a price objective of $0.68, implying a 17.0% discount to intrinsic value

Source: Public Information, H.C. Wainwright, Canaccord Genuity
Note: Sensitivity Tables in the Appendix; All Figures in C$M

DFIC

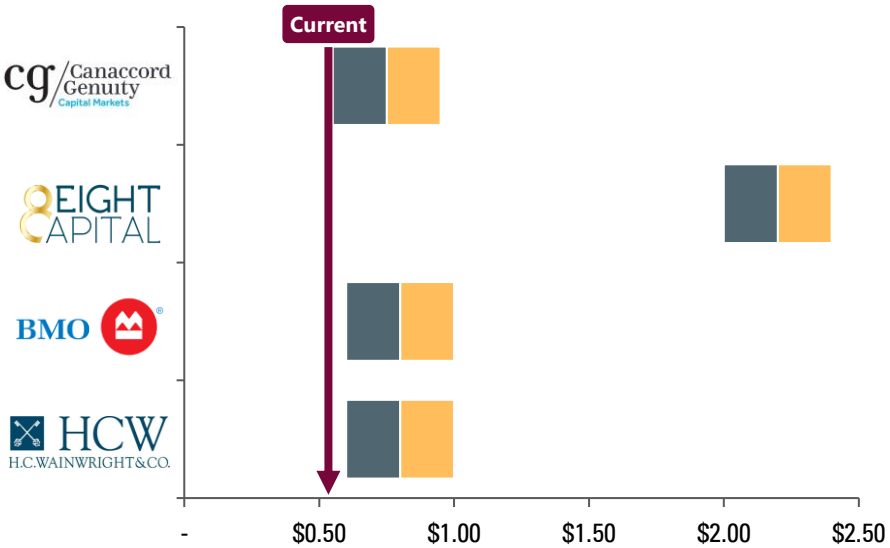
Conclusion

Fission Presents an Opportunity to Take Advantage of a Fast Growing Market for Uranium

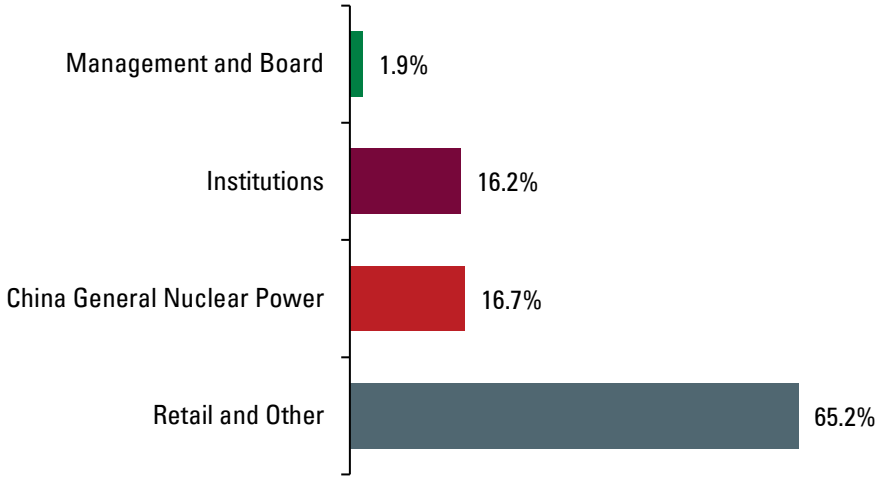
Investment Summary

High Grade Resource	High Grade Resource Located in a Tier 1 Jurisdiction
Favourable Supply and Demand Forecast	Favourable Supply and Demand Environment Aligns With PLS Timeline
Nuclear Industry Growth	Positioned to Take Advantage of The Growing Nuclear Energy Industry
Positive Comparison to Peers	Sustainable operating will allow them to profit even with a conservative price forecast
Trading at Discount	Opportunity to purchase at a discount before the forecasted shortage of uranium

Analyst Coverage and Estimates



Shareholder Breakdown



Outlook

"There will need to be a major price adjustment of uranium soon to accommodate an undersupplied market with growing demand." - Keith Bodnarchuck at IsoEnergy

"We estimate a 26% increase in uranium demand over 2020-30"
- World Nuclear Association

"The market is preparing for imminent loss of production of two longstanding mines in Australia (Ranger) and Niger (Arlit)." - Philip Johnson at UxC

"There is significant demand growth from 2026 to 2035 that will necessitate new production as resources are exhausted at several uranium projects."
- UxC Uranium Market Outlook Report

Considering all factors noted throughout this presentation, Fission Uranium is a solid buy with a target price of $0.68 (17.0% upside)

Source: Company reports and publicly available information
Note: Information as at March 24, 2021

Appendix

Sensitivity Analysis

An in Depth Sensitivity Analysis Shows Upside in Many Different Scenarios

Discount Rate

LT Uranium Price	2.50%	5.00%	7.50%	10.00%	12.50%	15.00%	17.50%
45	$0.72	$0.50	$0.34	$0.23	$0.14	$0.08	$0.03
50	$0.99	$0.72	$0.53	$0.38	$0.27	$0.18	$0.12
55	$1.25	$0.94	$0.71	$0.53	$0.39	$0.29	$0.21
60	$1.52	$1.16	$0.89	$0.68	$0.52	$0.39	$0.30
65	$1.79	$1.39	$1.07	$0.83	$0.64	$0.50	$0.39
70	$2.06	$1.61	$1.25	$0.98	$0.77	$0.60	$0.48
75	$2.33	$1.82	$1.43	$1.13	$0.89	$0.71	$0.56

Reserve Additions

Initial Production	0.0Mt	0.5Mt	1.0Mt	1.5Mt	2.0Mt	2.5Mt	3.0Mt
2023	$1.19	$1.48	$1.53	$1.71	$1.85	$1.98	$2.09
2024	$0.90	$1.04	$1.14	$1.29	$1.42	$1.54	$1.64
2025	$0.86	$0.92	$1.09	$1.22	$1.34	$1.45	$1.54
2026	$0.68	$0.87	$1.02	$1.14	$1.25	$1.35	$1.43
2027	$0.68	$0.84	$0.97	$1.09	$1.19	$1.28	$1.29
2028	$0.62	$0.76	$0.87	$0.98	$1.07	$1.10	$1.09
2029	$0.54	$0.66	$0.76	$0.86	$0.92	$0.90	$0.89

NSR Royalty Rate

Initial Production	0.0%	2.5%	5.0%	7.5%	10.0%	12.5%	15.0%
2023	$1.37	$1.31	$1.25	$1.18	$1.12	$1.06	$0.99
2024	$1.07	$1.01	$0.95	$0.89	$0.83	$0.77	$0.71
2025	$1.02	$0.96	$0.91	$0.85	$0.80	$0.74	$0.69
2026	$0.82	$0.77	$0.72	$0.68	$0.63	$0.58	$0.53
2027	$0.81	$0.77	$0.72	$0.67	$0.63	$0.58	$0.53
2028	$0.73	$0.69	$0.65	$0.61	$0.57	$0.53	$0.49
2029	$0.64	$0.60	$0.57	$0.53	$0.50	$0.46	$0.42

Discount Rate

Initial Production	2.5%	5.0%	7.5%	10.0%	12.5%	15.0%	17.5%
2023	$2.10	$1.74	$1.44	$1.19	$0.98	$0.81	$0.67
2024	$1.90	$1.49	$1.16	$0.90	$0.68	$0.51	$0.37
2025	$1.87	$1.44	$1.12	$0.86	$0.66	$0.50	$0.37
2026	$1.52	$1.16	$0.89	$0.68	$0.52	$0.39	$0.30
2027	$1.56	$1.17	$0.89	$0.68	$0.52	$0.40	$0.31
2028	$1.52	$1.12	$0.82	$0.62	$0.47	$0.36	$0.28
2029	$1.43	$1.02	$0.73	$0.54	$0.40	$0.31	$0.24

Operating Costs

Daily Throughput	95	170	245	340	395	470	545
255	-$0.21	-$0.23	-$0.26	-$0.29	-$0.32	-$0.34	-$0.37
505	$0.43	$0.38	$0.33	$0.28	$0.23	$0.18	$0.13
755	$0.71	$0.65	$0.59	$0.53	$0.47	$0.41	$0.34
1005	$0.89	$0.82	$0.75	$0.68	$0.61	$0.54	$0.47
1255	$1.23	$1.16	$1.08	$1.01	$0.94	$0.87	$0.79
1505	$1.36	$1.29	$1.21	$1.14	$1.06	$0.99	$0.91
1755	$1.45	$1.37	$1.29	$1.21	$1.13	$1.05	$0.98

Sustaining Capex

Operation Costs	0.50	1.00	1.50	2.00	3.50	5.00	6.50
95	$0.94	$0.92	$0.90	$0.89	$0.84	$0.79	$0.74
170	$0.87	$0.85	$0.84	$0.82	$0.77	$0.72	$0.67
245	$0.80	$0.78	$0.77	$0.75	$0.70	$0.65	$0.60
340	$0.73	$0.71	$0.70	$0.68	$0.63	$0.58	$0.53
395	$0.66	$0.64	$0.62	$0.61	$0.56	$0.51	$0.46
470	$0.59	$0.57	$0.55	$0.54	$0.49	$0.44	$0.39
545	$0.52	$0.50	$0.48	$0.47	$0.42	$0.37	$0.32

Significant upside opportunity through reserve additions, timeline acceleration, and project de-risking

Source: Company reports

ESG Perspective

Responsibility and Governance

Local Community Initiatives

Since the founding of the company in 2012, Fission Uranium has prioritized working with local firms and labour in projects and tasks such as:

- Geotechnical
- Carpenters, electricians & mechanics
- Security, catering & maintenance
- Accommodation & logistics support

Throughout its history, Fission Uranium has regularly provided additional support and funding for local community initiatives and events such as:

- Events and local sports sponsorships
- Covid-19 pandemic funding
- Donations to community initiatives
- Funding for local school programs

Indigenous Relations

Positive indigenous relations are paramount to project success, Fission Uranium is committed to building relationships with First Nations and Metis communities

Throughout the company's history, Fission has continuously worked with First Nations communities in events and tasks such as:

- Consultation and engagement with tribal councils when conducting new PFS
- Funding and donations to annual Metis – National Day celebrations

Most mining projects that fail today are no longer due to technical issues, they fail due to social or environmental oversight. Fission's commitments to the welfare of the environment and indigenous peoples will help mitigate such risks

Initiative & Exposure

Activity	Waste Capture	Expert BoD	Land Reclamation	Responsive to Feedback
Scale	Utilize drill cutting capture techniques when working on barges to prevent contaminates from entering lake water	ESG experts brought onboard to advise the Board in 2017 regarding sustainable development practices	Careful reclaiming of land in unused areas in order to minimize project footprint on existing land	After community feedback on hybrid plan, a new PFS was conducted that lowers the environmental footprint
Timeline	Triple R and Future Projects	Triple R and Future Projects	Triple R and Future Projects	Triple R and Future Projects

Fission Uranium is an environmentally and socially sustainable firm that implements various ESG policies

Source: Fission Uranium Corp. Investor Presentation, company website, company podcast
Note: Information as at March 2021