

Action Note

Equity Research

August 23, 2022

Metals & Minerals

Denison Mines Corp.

(DML-T) C\$1.38

Resuming Coverage Following Bid for UEX Corp.

Craig Hutchison, P. Eng

Nicholas Clarke, CFA (Associate)

Event

We are resuming coverage of Denison following a period of restriction. We have also updated our estimates to reflect the company's Q2/22 financial results and outlook.

Denison was engaged in a bidding process for UEX Corp. (UEX-T, not covered), releasing two offers in July and August after rival bidder UEC Corp. (UEC-N, not covered) announced an offer for UEX in June. Denison's final bid was ultimately superseded by an offer from UEC, which was accepted by the UEX Board on August 15. One of UEX's main assets was the remaining 5% effective interest in Denison's 95%-owned flagship Wheeler River project.

Impact: NEUTRAL

- Q2/22 highlights** – Denison completed the sale of 40,000lbs of U3O8 for revenues of \$3.0mm from production at the McLean Lake JV in relation to the SABRE test mining program in 2021. No further sales are expected in 2022. The company also announced that it has entered into a Participation and Funding Agreement with Kineepik Métis Local #9 (KML), in relation to the development of Wheeler River. No changes were made to the size of the company's physical uranium investments q/q, which remained at 2.5mmlbs. **Denison ended Q2 well capitalized with cash of \$57mm and \$163mm in long-term uranium holdings.**
- Subsequent to Q2, Denison received regulatory approval to construct and operate the Feasibility Field Test (FFT) at Phoenix, as well as the substantial completion of the metallurgical test work to define the mechanical components of the planned Phoenix processing plant in preparation for the upcoming feasibility study. The metallurgical program has confirmed the ability for the operation to produce a yellowcake (U3O8) product meeting industry standards.

TD Investment Conclusion

We are maintaining our **SPECULATIVE BUY** rating and **\$2.25 target price**. We continue to forecast higher uranium prices over the next several years as utilities grapple with the difficult process of de-risking and repositioning their nuclear fuel supply chains away from Russian supply, in what is already a tightly supplied market. In addition, we believe that Russia's actions have highlighted energy security, particularly in Europe, further bolstering the case for nuclear power. These underlying macro conditions should benefit developers such as Denison that have projects in stable jurisdictions.

Recommendation:	SPEC BUY
Risk:	SPECULATIVE
12-Month Target Price:	C\$2.25
12-Month Dividend (Est.):	C\$0.00
12-Month Total Return:	63.0%

Market Data (C\$)

Current Price	C\$1.38
52-Week Range	\$1.18 - \$2.65
Mkt Cap (f.d.) (\$mm)	\$1,151.3
EV (\$mm)	\$1,195.2
Current Dividend	\$0.00
Dividend Yield	0.0%
Avg. Daily Trading Vol.	3,990,613

Financial Data (C\$)

Fiscal Y-E	December
Shares O/S (f.d.)(mm)	834.3
Float Shares (mm)	818.3
NAVPS	\$2.22
Working Cap (\$mm)	\$55.2

Estimates (C\$)

Year	2020A	2021A	2022E	2023E
EPS (f.d.)	(0.03)	(0.03)	(0.03)	(0.03)
EPS (f.d.) (old)	-	-	(0.02)	-

EPS (f.d.) Quarterly Estimates (C\$)

Year	2020A	2021A	2022E	2023E
Q1	(0.01)	(0.01)	(0.01)	-
Q2	0.00	(0.01)	0.00	-
Q3	(0.01)	0.00	(0.01)	-
Q4	(0.01)	0.00	(0.01)	-

Supplemental Data

Year	2020A	2021A	2022E	2023E
U3O8 (US\$/lb)	30	35	51	55

All figures in C\$, unless otherwise specified



Company Profile

Denison Mines Corp. has a diversified portfolio of uranium assets, including an interest in the McClean Lake milling operation; development projects; an environmental management division; and exploration properties located in Canada's Athabasca Basin.

Details

Unsuccessful bid for UEX – On July 29, Denison announced that it had made a 'Superior Proposal' for an all-share acquisition of UEX, although terms were not disclosed. The offer followed UEC's original proposal announced on June 13 to acquire UEX in an all-share transaction that implied a value of \$0.43/sh. for UEX. UEC subsequently amended and increased its bid on August 5 to an implied price of \$0.49/sh.

On August 9, Denison countered by increasing its bid for UEX to an implied value of \$0.51/sh. representing a market capitalization for UEX of \$270mm. Ultimately, the UEX Board recommended in favour of the UEC bid, which was approved by shareholders on August 15.

We calculate that Denison would have paid an implied price of US\$1.44/lb for UEX's uranium resources. This compares to Denison's JCU (Canada) acquisition last year in which they paid US\$0.33/lb and the median transaction value of US\$3.09/lb over the last 15-years.

Denison's rationale for the transaction was to:

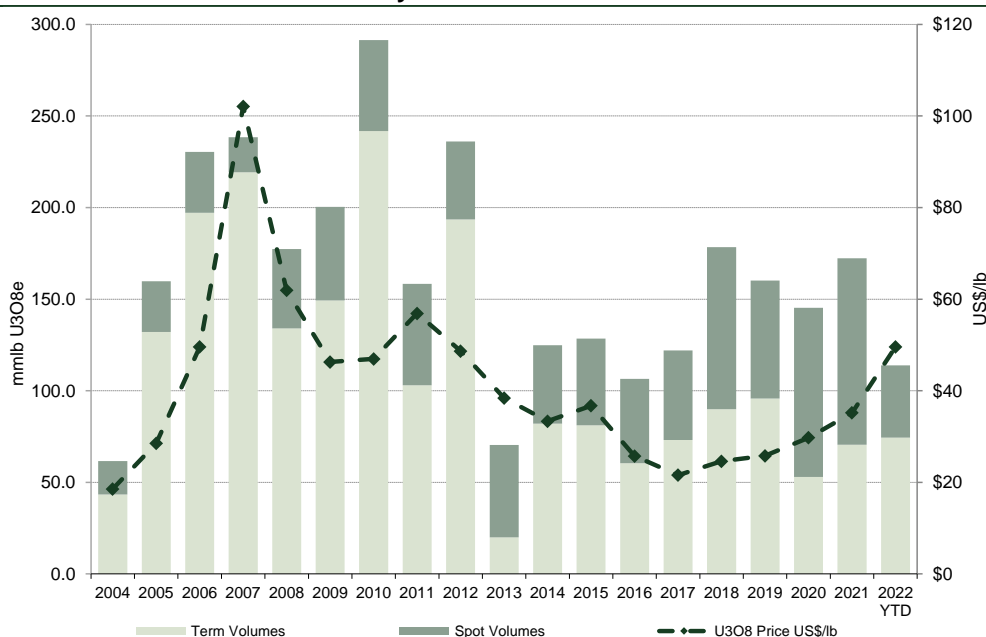
- Consolidate a 100% interest in its flagship Wheeler River project (currently 95%).
- Consolidate a 100% interest in JCU Canada, which includes an ~30.1% interest in Cameco's majority owned Millennium project, an ~33.8% interest in the Kiggavik project, and an ~34.4% interest in the Christie Lake project (UEX ~65.5%). Denison currently has a 50% ownership interest in JCU.

FFT scheduled for completion in Q4/22 - The FFT, which aims to support the novel application of ISR mining in the Athabasca Basin, is designed to utilize the commercial-scale ISR test pattern installed in 2021 in the facilitation of a combined hydraulic flow and leaching characteristic assessment of the Phoenix deposit.

Nuclear thesis further supported by Inflation Reduction Act – Although spot and term markets have remained quiet of late, the recent signing of the Inflation Reduction Act by U.S. President Joe Biden is being touted as a landmark step in the fight against climate change and includes additional support for nuclear power in the United States. The legislation includes ~US\$30bln in tax credits for nuclear power plants over a decade-long period, and US\$700mm for HALEU (high-assay low-enriched uranium) funding.

We continue to forecast an average uranium price of ~US\$51/lb in 2022, increasing to US\$55/lb in 2023, and US\$65/lb 2024. Our long-term (≥2025) incentive price of US\$60/lb is also unchanged.

Exhibit 1. Uranium Market Activity



Source: UxC, TD Securities

Exhibit 2. Spot and Term Uranium Prices (US\$/lb)



Source: UxC, TD Securities

Outlook

Outlook supported by well-funded balance sheet as FFT efforts progress - Denison spent \$3.7mm on exploration in H1/22, with 15,893m of drilling completed across 47 holes at Ford Lake, McClean Lake, Waterfound, and Wolly.

Expenditures on project evaluation, which encompass development activities at Wheeler River including the FFT and other feasibility study preparation work, totaled \$11.7mm in

Action Note

Equity Research

August 23, 2022

H1/22. The company is guiding for additional spending of ~\$20mm across the balance of the year.

Exhibit 3. Denison 2022 Budget

Business Segment	2022 Budget	2022 Outlook May Revised	2022 Outlook August Revised	Actual Through H1/22	Commentary
Mining Segment					
Mineral Sales	\$2,044	\$2,775	\$2,736	\$2,736	Revenues of SABRE test mining program
Development and Operations	(\$1,704)	(\$1,704)	(\$1,704)	(\$789)	Midwest JV and legacy mine site expenditures
Exploration	(\$7,213)	(\$7,213)	(\$7,503)	(\$3,706)	Various projects
Mineral Property Exploration & Evaluation	(\$20,356)	(\$23,544)	(\$25,820)	(\$11,673)	Largely spending at Wheeler River FFT
JCU Cash Contributions	(\$713)	(\$859)	(\$964)	\$0	Related to JV spending
	(\$27,942)	(\$30,545)	(\$33,255)	(\$13,432)	
DES Segment					
DES Environmental Services	\$1,185	\$1,185	\$1,185	\$477	
	\$1,185	\$1,185	\$1,185	\$477	
Corporate and Other Segment					
Corporate Administration & Other	(\$9,477)	(\$9,477)	(\$9,032)	(\$5,014)	
	(\$9,477)	(\$9,477)	(\$9,032)	(\$5,014)	
Total Forecasted Cash Outflow	(\$36,234)	(\$38,837)	(\$41,102)	(\$17,969)	

Source: company, TD Securities

2022/2023 Milestones/Catalysts

Advancing the completion of the feasibility study (FS) at Phoenix. Launched in late 2021 with an estimated 12–18-month time frame, the FS will focus on:

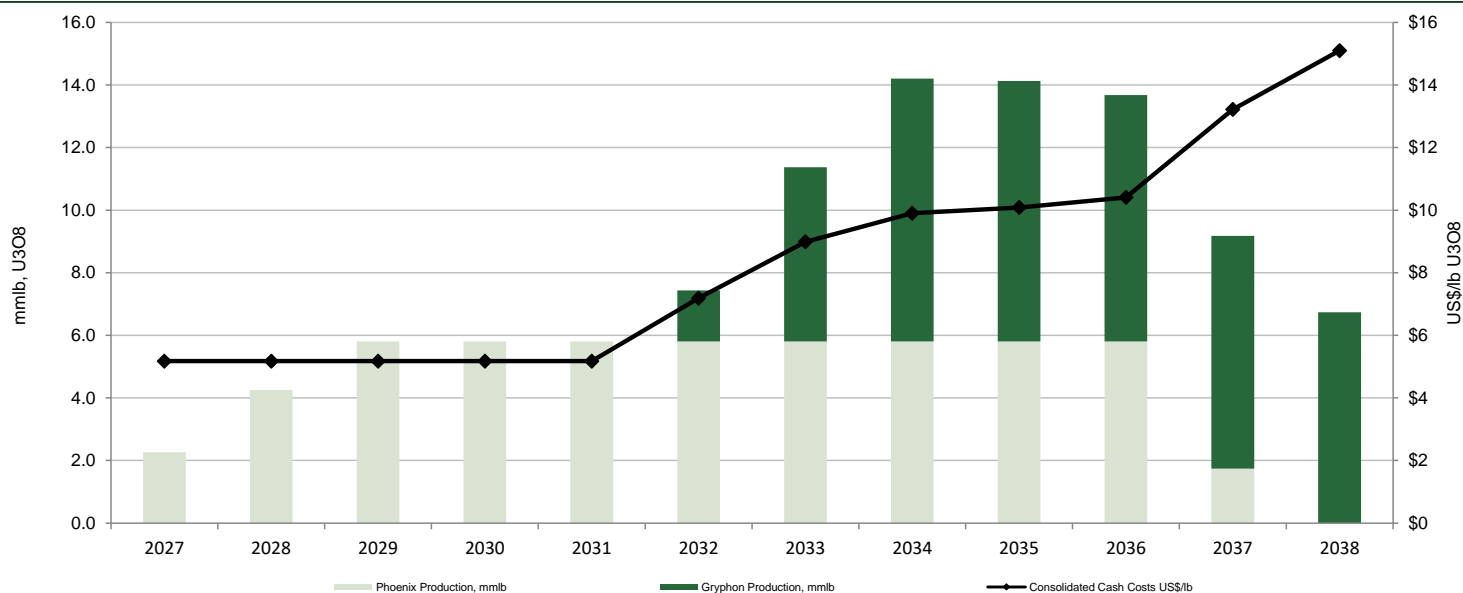
- Environmental stewardship
- Updating the project's 2018 mineral resource estimate
- Mine design optimization
- Processing plant optimization
- Class 3 capital cost estimate

Action Note

Equity Research

August 23, 2022

Exhibit 4. Wheeler River Production Profile



Source: Company, TDS

Valuation

Denison is trading at 0.62x our 10%NAVPS estimate of \$2.22 versus the base metal developers in our coverage universe at 0.55x. We also ascribe US\$5.50/lb to Denison mineral global resources.

Denison is also trading at an EV/lb of US\$4.65 (M+I+I) based on its total resources, compared to its peer average currently trading at an EV/lb multiple of US\$5.14.

Justification of Target Price

Our \$2.25 target price is based on 1.0x our mining 10%NAVPS estimate and 1.0x our corporate adjustments weighted 100%.

Key Risks to Target Price

Relative to the other companies in our equity coverage universe, we believe that an investment in Denison Mines is subject to a SPECULATIVE level of risk. Our recommendation is subject to forecast, financial, technical, political, and deposit-size risks. These include risks related to uranium prices; fuel cost; the governing fiscal and legislative regimes in the countries it operates in; the timing of key developments; market conditions; capital and operating costs; foreign exchange rates; resources; access to capital; operating parameters; permitting; environment; indigenous people; and staffing and key personnel retention. Denison's assets could be negatively affected by the ongoing restrictions to travel, social-distancing measures, and other challenges related to the COVID-19 pandemic.

Action Note

Equity Research

August 23, 2022

Exhibit 5. Company Snapshot

Financial Data	2020A	2021A	2022E	2023E
Average share price (C\$)	0.96	1.57	1.54	1.38
Wt. Avg. S/O (mm)	637.5	783.7	815.4	818.3
EPS (f.d.) (C\$/sh)	(0.03)	(0.03)	(0.03)	(0.03)
CFPS bf WC (C\$/sh)	(0.02)	(0.03)	(0.04)	(0.03)

Income Statement (C\$mm)	2020A	2021A	2022E	2023E
Revenues	14.4	20.0	17.5	12.1
Operating Costs	10.6	12.9	11.6	10.4
Royalty	0.0	0.0	0.0	0.0
Depreciation	2.5	2.6	3.9	4.0
Exploration	9.0	20.0	35.0	20.0
Reclamation	0.0	0.0	0.0	0.0
G & A	3.3	4.3	6.1	5.0
Interest Expense	4.2	4.1	1.6	0.0
Unrealized Gains (losses) on Uranium	0.0	41.4	31.1	8.9
UnRealized Hedge Gain (loss)	0.0	0.0	0.0	0.0

EBITDA	(5.8)	28.5	14.4	(11.4)
EBIT	(8.2)	25.9	10.5	(15.4)
EBT	(12.5)	21.8	8.9	(15.4)
Taxes (recovery)	(0.9)	(2.0)	(0.8)	0.0
Effective tax rate	na	na	na	na
Minority interest	-	-	-	-
Reported net earnings	(16.3)	19.0	7.6	(15.4)
Adjusted net earnings	(16.3)	(22.5)	(23.5)	(24.3)
EPS Reported (C\$/sh.)	(0.03)	0.02	0.01	(0.02)
EPS (Adjusted) (C\$/sh.)	(0.03)	(0.03)	(0.03)	(0.03)

Revenues By Metal (C\$mm)	2020A	2021A	2022E	2023E
Uranium/Tolling	3.6	3.2	10.0	4.5
Vanadium	0.0	0.0	0.0	0.0

Cash Flow Statement (C\$mm)	2020A	2021A	2022E	2023E
Operating CF bf. ch. in WC	(13.2)	(21.0)	(35.1)	(22.8)
CF from operating activities	(13.5)	(21.2)	(33.7)	(22.8)
CF from financing activities	30.5	159.8	9.1	0.0
CF from investing activities	0.3	(99.0)	(3.2)	0.0
CAPEX	(0.3)	(1.2)	(3.6)	0.0
CFPS bf. ch. in WC (C\$/sh)	(0.02)	(0.03)	(0.04)	(0.03)

Balance Sheet (C\$mm)	2020A	2021A	2022E	2023E
Cash	25.0	64.0	36.5	13.7
Current assets	49.4	86.9	53.9	31.1
Total assets	320.7	510.3	502.9	485.0
Current liabilities	11.8	16.4	19.1	19.1
Long term debt	0.0	0.0	0.0	0.0
Total liabilities	93.4	113.6	86.4	81.9
Non Controlling Interest	0.0	0.0	0.0	0.0
Working Capital	37.6	70.5	34.8	12.0
Shareholders' equity	227.3	396.7	416.5	403.1

Realized Metal Prices & Costs	2020A	2021A	2022E	2023E
Uranium, U3O8 (US\$/lb)	29.52	35.19	50.55	55.00
Forex CAD to USD	0.74	0.80	0.79	0.79

Production and Sales	2020A	2021A	2022E	2023E
Total U3O8 Production (000' lbs)	0	0	0	0

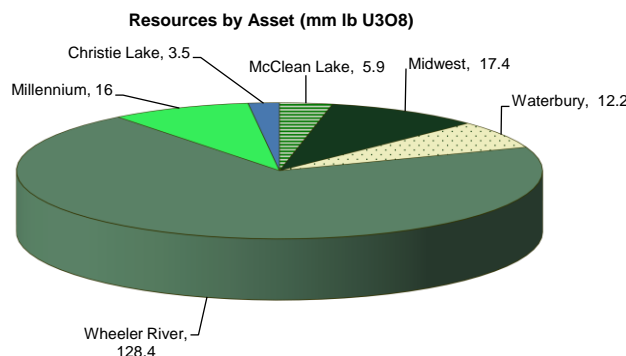
NAV Analysis	8% Discount		10% Discount	
	\$mm	\$/sh	\$mm	\$/sh
Mining Assets				
McClellan Mill Complex (22.5%)	50.0	0.06	50.0	0.06
Athabasca Basin Resources (22.5% to 60%)	799.1	0.96	799.1	0.96
Phoenix (95%)	731.9	0.88	587.5	0.70
Gryphon (95%)	242.5	0.29	167.0	0.20
Hook-Carter Property	3.8	0.00	3.8	0.00
Total Project NAV	1827.3	2.19	1607.4	1.93

Other Tangible Assets				
Physical Uranium Holdings (12-month Forward)	173.1	0.21	173.1	0.21
Investment - GoviEx	8.2	0.01	8.2	0.01
Total Other Assets	181.3	0.22	181.3	0.22
Corporate Adjustments				
Working Capital	55.2	0.07	55.2	0.07
Long Term Debt	0.0	-	0.0	-
In the Money Options/Warrants	11.8	0.01	11.8	0.01
Estimated Working Capital Changes	0.0	-	0.0	-
Estimated Debt Additions	0.0	-	0.0	-
Total Corporate Adjustments	66.9	0.08	66.9	0.08
Total Net Asset Value C\$/sh.		2.49		2.22

Asset	Tonnes kt	Grade %	Interest %	Contained mmlb
McClellan Lake - Athabasca Basin	977	1.24	22.5	6
Midwest Deposit - Athabasca Basin	1,865	1.68	25.17	17
Wheeler River - Athabasca	1,891	3.24	95.0	128
Waterbury - Athabasca	291	1.50	65.9	12
Millennium	1,854	2.57	15.0	16
Christie Lake	588	1.57	17.2	4
Total Resources (all categories, M+I+H)	5,025	3.30		183

US\$ EV/lb Athabasca Basin and categories (M+I+H) **\$4.65**

Resources



Source: Company, TD Securities Inc.



Action Note

Equity Research

August 23, 2022

TD Securities Equity Research Disclosures

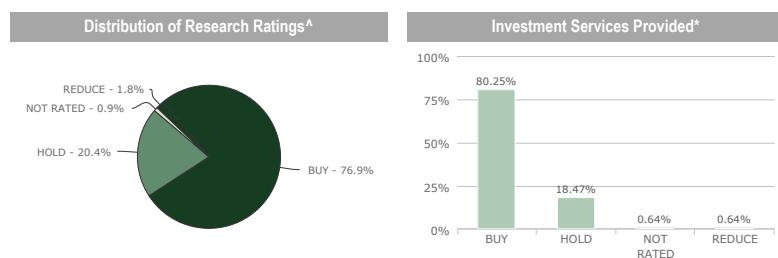
Company	Ticker	Disclosures
Denison Mines Corp.	DML-T	n/a

1. TD Securities Inc., TD Securities (USA) LLC or an affiliated company has managed or co-managed a public offering of securities within the last 12 months with respect to the subject company.
2. TD Securities Inc., TD Securities (USA) LLC or an affiliated company has received compensation for investment banking services within the last 12 months with respect to the subject company.
3. TD Securities Inc., TD Securities (USA) LLC or an affiliated company expects to receive compensation for investment banking services within the next three months with respect to the subject company.
4. TD Securities Inc. or TD Securities (USA) LLC has provided investment banking services within the last 12 months with respect to the subject company.
5. A long position in the securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control.
6. A short position in the securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control.
7. A long position in the derivative securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control.
8. A short position in the derivative securities of the subject company is held by the research analyst, by a member of the research analyst's household, or in an account over which the research analyst has discretion or control.
9. TD Securities Inc. and/or an affiliated company is a market maker, or is associated with the specialist that makes a market, in the securities of the subject company.
10. TD Securities Inc. and/or affiliated companies own 1% or more of the equity securities of the subject company.
11. A partner, director or officer of TD Securities Inc. or TD Securities (USA) LLC, or a research analyst involved in the preparation of this report has, during the preceding 12 months, provided services to the subject company for remuneration.
12. This security has Subordinate voting shares.
13. This security has Restricted voting shares.
14. This security has Non-voting shares.
15. This security has Variable voting shares.
16. This security has Limited voting shares.

Additional Important Disclosures

Price Graphs

Full disclosures for all companies covered by TD Securities can be viewed at <https://portal.tdsecurities.com/alpha/important-disclosures> by TD Securities' institutional equity clients.



Current as of: August 23, 2022

[^] Percentage of subject companies under each rating category: BUY (covering ACTION LIST BUY, BUY and SPECULATIVE BUY ratings), HOLD, and REDUCE (covering TENDER and REDUCE ratings) and NOT RATED (covering UNDER REVIEW, SUSPENDED, and NOT RATED).

^{*} Percentage of subject companies within each of the four categories (BUY, HOLD, REDUCE, and NOT RATED) for which TD Securities Inc. has provided investment banking services within the last 12 months.

Definition of Research Ratings

ACTION LIST BUY: The stock's total return is expected to exceed a minimum of 15% (with higher thresholds for less liquid, more risky securities) over the next 12 months and it is a top pick in the Analyst's sector.

BUY: The stock's total return is expected to exceed a minimum of 10% (with higher thresholds for less liquid, more risky securities) over the next 12 months.

SPECULATIVE BUY: The stock's total return is expected to exceed a minimum of 30% over the next 12 months (with higher thresholds for less liquid securities); however, there is material event risk associated with the investment that could result in a significant loss.

HOLD: The stock's total return is expected to be between 0% and 10%, (with higher thresholds for less liquid, more risky securities) over the next 12 months.

Action Note

Equity Research

August 23, 2022

TENDER: Investors are advised to tender their shares to a specific offer for the company's securities or to support a proposed combination reflecting our view that a superior offer is not forthcoming.

REDUCE: The stock's total return is expected to be negative over the next 12 months.

SUSPENDED: Due to evolving circumstances, we can no longer generate what we consider a defensible target price and rating at the current time.

UNDER REVIEW: Our rating is under review pending additional information and/or analysis. The prior rating should not be relied on.

NOT RATED: We do not currently produce a recommendation and a target price on this security.

Risk ratings are relative to other companies in the TD Securities Equity Research coverage universe. In order of increasing risk, our risk ratings are **LOW, MEDIUM, HIGH, and SPECULATIVE**. These risk ratings are not meant to be compared to ratings on other securities and asset classes outside our Equity Research coverage universe.

Overall Risk Rating in order of increasing risk: Low (6.7% of coverage universe), Medium (41.7%), High (44.2%), Speculative (7.4%)

Research Dissemination Policy

TD Securities makes its research products available in electronic and/or printed formats. If there are any subsequent material changes to the reports it publishes, TD Securities will as soon as practicable distribute such reports with the relevant changes to its institutional clients who are entitled to receive them. Entitled institutional clients may also receive our research via third-party platforms including, but not limited to, Bloomberg, FactSet, Refinitiv, and S&P Capital IQ. All research is available by password to entitled institutional clients at <https://portal.tdsecurities.com/alpha> TD Securities may also update proprietary models; these models may be obtained by entitled institutional clients by contacting the research analyst directly. There is no planned frequency of updates to these models.

Analyst Certification

Each analyst of TD Securities Inc. whose name appears on page 1 of this research report hereby certifies that (i) the recommendations and opinions expressed in the research report accurately reflect the research analyst's personal views about any and all of the securities or issuers discussed herein that are within the analyst's coverage universe and (ii) no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the provision of specific recommendations or views expressed by the research analyst in the research report.

Disclaimer

This material is for general informational purposes only and is not investment advice nor does it constitute an offer, recommendation or solicitation to buy or sell a particular financial instrument. It does not have regard to the specific investment objectives, financial situation, risk profile or the particular needs of any specific person who may receive this material. No representation is made that the information contained herein is accurate in all material respects, complete or up to date, nor that it has been independently verified by TD Securities. Recipients of this analysis or report are to contact the representative in their local jurisdiction with regards to any matters or questions arising from, or in connection with, the analysis or report.

Historic information regarding performance is not indicative of future results and investors should understand that statements regarding future prospects may not be realized. All investments entail risk, including potential loss of principal invested. Performance analysis is based on certain assumptions, the results of which may vary significantly depending on the modelling inputs assumed. This material, including all opinions, estimates and other information, constitute TD Securities' judgment as of the date hereof and is subject to change without notice. The price, value of and income from any of the securities mentioned in this material can fall as well as rise. Any market valuations contained herein are indicative values as of the time and date indicated. Such market valuations are believed to be reliable, but TD Securities does not warrant their completeness or accuracy. Different prices and/or valuations may be available elsewhere and TD Securities suggests that valuations from other sources be obtained for comparison purposes. Any price or valuation constitutes TD Securities' judgment and is subject to change without notice. Actual quotations could differ subject to market conditions and other factors.

TD Securities disclaims any and all liability relating to the information herein, including without limitation any express or implied representations or warranties for, statements contained in, and omissions from, the information. TD Securities is not liable for any errors or omissions in such information or for any loss or damage suffered, directly or indirectly, from the use of this information. TD Securities may have effected or may effect transactions for its own account in the securities described herein. No proposed customer or counterparty relationship is intended or implied between TD Securities and a recipient of this document.

TD Securities makes no representation as to any tax, accounting, legal or regulatory issues. Investors should seek their own legal, financial and tax advice regarding the appropriateness of investing in any securities or pursuing any strategies discussed herein. Investors should also carefully consider any risks involved. Any transaction entered into is in reliance only upon the investor's judgment as to financial, suitability and risk criteria. TD Securities does not hold itself out to be an advisor in these circumstances, nor do any of its representatives have the authority to do so.

The information contained herein is not intended for distribution to, or use by, any person in any jurisdiction where such distribution or use would be contrary to applicable law or regulation or which would subject TD Securities to additional licensing or registration requirements. It may not be copied, reproduced, posted, transmitted or redistributed in any form without the prior written consent of TD Securities.

If you would like to unsubscribe from our email distribution lists at any time, please contact your TD Securities Sales Contact. If you are located in Europe, Asia, Australia or New Zealand you may also unsubscribe by emailing us at Privacy.EAP@tdsecurities.com.

For more information, refer to our [Privacy Policy](https://www.tdsecurities.com/ca/en/privacy-security). <https://www.tdsecurities.com/ca/en/privacy-security>

Australia

If you receive this document and you are domiciled in Australia, please note that this report is intended to be issued for general information purposes only and distributed through Toronto Dominion (South East Asia) Limited ("TDSEA"). TDSEA does not hold itself out to be providing financial advice in these circumstances. TD Securities is a trademark and represents certain investment dealing and advisory activities of Toronto-Dominion Bank and its subsidiaries, including TDSEA. The Toronto-Dominion Bank is not an authorized deposit-taking or financial services institution in Australia. TDSEA is a holder of an Australian Financial Services Licence (528885) and is regulated in Australia by the Australian Securities and Investments Commission.

Canada

Canadian clients wishing to effect transactions in any security discussed herein should do so through a qualified salesperson of TD Securities or TD Securities Inc. TD Securities Inc. is a member of the Canadian Investor Protection Fund.

China, India, and South Korea

Insofar as the document is received by any persons in the People's Republic of China ("PRC"), India and South Korea, it is intended only to be issued to persons who have the relevant qualifications to engage in the investment activity mentioned in this document. The recipient is responsible for obtaining all relevant government regulatory approvals/licenses themselves, and represents and warrants

Action Note

Equity Research

August 23, 2022

to The Toronto-Dominion Bank that the recipient's investments in those securities do not violate any law or regulation, including, but not limited to, any relevant foreign exchange regulations and/or overseas investment regulations. The Toronto-Dominion Bank has a representative office in Shanghai, Mumbai and Seoul which should be contacted for any general enquiry related to The Toronto-Dominion Bank or its business. However, neither any of the Toronto-Dominion Bank offshore branches/subsidiaries nor its representative offices are permitted to conduct business within the borders of the PRC, India and South Korea. In locations in Asia where the Bank does not hold licenses to conduct business in financial services, it is not our intention to, and the information contained in this document should not be construed as, conducting any regulated financial activity, including dealing in, or the provision of advice in relation to, any regulated instrument or product. This publication is for general information only, without addressing any particular needs of any individual or entity, and should not be relied upon without obtaining specific advice in the context of specific circumstances.

Hong Kong SAR (China)

This document, which is intended to be issued in Hong Kong SAR (China) ("Hong Kong") only to Professional Investors within the meaning of the Securities and Futures Ordinance (the "SFO") and the Securities and Futures (Professional Investor) Rules made under the SFO, has been distributed through Toronto-Dominion Bank, Hong Kong Branch, which is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission.

Japan

For Japanese residents, please note that if you have received this document from The Toronto-Dominion Bank entities based outside Japan, it is being provided to qualified financial institutions ("QFI") only under a relevant exemption to the Financial Instruments and Exchange Act.

If you have received this document from TD Securities (Japan) Co., Ltd., it is being provided only to institutional investors. TD Securities (Japan) Co., Ltd. is regulated by the Financial Services Agency of Japan and is distributing this document in Japan as a Type 1 Financial Instruments Business Operator registered with the Kanto Local Finance Bureau under registration number, Kinsho 2992, and a member of Japan Securities Dealers Association.

New Zealand

The Toronto-Dominion Bank is not a "registered bank" in New Zealand under the Reserve Bank Act 1989.

Singapore

This report is distributed in Singapore by The Toronto-Dominion Bank, Singapore Branch, and recipients in Singapore of this report are to contact The Toronto-Dominion Bank, Singapore Branch in respect of any matters arising from, or in connection with, this report. The Toronto-Dominion Bank, Singapore Branch is regulated by the Monetary Authority of Singapore. Where this report is issued or promulgated in Singapore, it is only intended for distribution to a person who is an accredited investor, expert investor or institutional investor as defined in the Securities and Futures Act (Cap. 289), the Securities and Futures (Prescribed Specific Classes of Investors) Regulations 2005, or the Securities and Futures (Classes of Investors) Regulations 2018 issued by the Monetary Authority of Singapore.

United Kingdom and Europe

This document is prepared, issued or approved for issuance in the UK by TD Securities Limited and in Europe by TD Global Finance unlimited company in respect of investment business. The Toronto-Dominion Bank is authorised by the Prudential Regulation Authority and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. TD Securities Limited is authorised and regulated by the Financial Conduct Authority. TD Global Finance unlimited company, trading as TD Securities, is regulated by the Central Bank of Ireland. Insofar as the document is issued in or to the United Kingdom, it is intended only to be issued to persons who (i) are persons falling within Article 19(5) ("Investment professional") of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("High net worth companies, unincorporated associations, etc.") of the Financial Promotion Order, or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated. Insofar as the document is issued in or to the European Union, it is intended only to be issued to persons categorised as 'Per Se Professional' or 'Eligible Counterparties' as defined in S.I. No 375 of 2017, European Union (Markets in Financial Instruments) Regulations 2017, Schedule 2. Clients in the United Kingdom wishing to effect transactions in any security discussed herein should do so through a qualified salesperson of TD Securities Limited. European clients wishing to effect transactions in any security discussed herein should do so through a qualified salesperson of TD Global Finance unlimited company. Insofar as the information in this report is issued in (i) the UK, it has been issued with the prior approval of TD Securities Limited and (ii) in Europe, it has been issued with the prior approval of TD Global Finance unlimited company. Article 20 Market Abuse Regulation 596/2014 ("MAR") requires market participants who produce or disseminate Investment Recommendations or other information recommending or suggesting an investment strategy to take reasonable care that such information is objectively presented, and to disclose their interests or indicate conflicts of interest. In accordance with the MAR requirements, see the [Investment Recommendations Disclaimer](#) for relevant information in relation to The Toronto-Dominion Bank – London Branch, TD Bank Europe Limited, TD Securities Limited and TD Global Finance unlimited company. <https://www.tdsecurities.com/tds/document/MAR-IR-Disclaimer>

United States

U.S. clients wishing to effect transactions in any security discussed herein must do so through a registered representative of TD Securities (USA) LLC.

TD Securities is a trademark of The Toronto-Dominion Bank and represents TD Securities Inc., TD Securities (USA) LLC and TD Securities Limited and certain investment and corporate banking activities of The Toronto-Dominion Bank and its subsidiaries.

© Copyright 2022 The Toronto-Dominion Bank. All rights reserved.

Full disclosures for all companies covered by TD Securities can be viewed at <https://portal.tdsecurities.com/alpha/important-disclosures>