

Industry Note

Equity Research

April 14, 2021

Metals & Minerals

Uranium Weekly: Spot Market Slows after Torrid March

The Ux Consulting (UxC) weekly spot price indicator, published earlier this week, declined to US\$29.95/lb (down \$0.90/lb), or -2.9% versus the previous week. Year-to-date, the spot price is effectively flat. According to UxC, spot market activity since the start of April has slowed significantly versus the torrid pace set in March. Just 0.7 million pounds of uranium have been transacted so far in April, which compares with ~10.9 million pounds in March. Over the past five years, excluding 2020, an average of ~5.0 million pounds had been transacted in the spot market in April. April 2020 was highly unusual, coinciding with the early days of the COVID-19 pandemic and the temporary closure of the Cigar Lake operation due to COVID-19 restrictions and concerns; total spot market volume in April 2020 was ~27.5 million pounds.

In our view, weaker spot market volumes and prices so far in April are the result of two factors: (1) purchasing by uranium funds and pre-producers funded via equity issuance has been exhausted (for now) and (2) last Friday evening, Cameco announced the restart of the Cigar Lake operation.

Although the Cigar Lake restart announcement came earlier than some market participants had expected, Cameco management has been clear in recent months that the decision to restart Cigar Lake would be contingent on the ability to safely manage COVID-19 protocols and not contingent on commercial considerations (e.g. holding production off the market to boost prices). The company noted that it will not be able to provide updates on the production outlook for the mine for 2021 until production resumes and there is a better understanding of the rate at which the mine will be able to sustainably operate. Our forecasts currently assume that production will resume by mid-Q2/21, but full production will not be achieved until Q4/21. We are forecasting Cameco's share of 2021 production at ~3.7mm lbs, or 40% of normal levels.

Cameco reported with its year-end results that it expected to purchase 4mm-6mm lbs of uranium in 2021, excluding purchases from the Inkai JV and the impact of the temporary closure of Cigar Lake. The four-month closure of Cigar Lake will boost purchasing requirements by at least 3.0mm lbs, and possibly more, given that we expect a relatively slow ramp-up.

We believe that the missing piece of the puzzle for a sustained upward move in the uranium term price remains the resumption of a term-contracting cycle. Uncovered utility demand is quite low for 2021 and 2022; uncovered demand for 2021 appears to be only several million pounds. Utilities seem to be prepared to meet this demand on a discretionary basis, while continuing to manage inventories.

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Industry Note

Equity Research

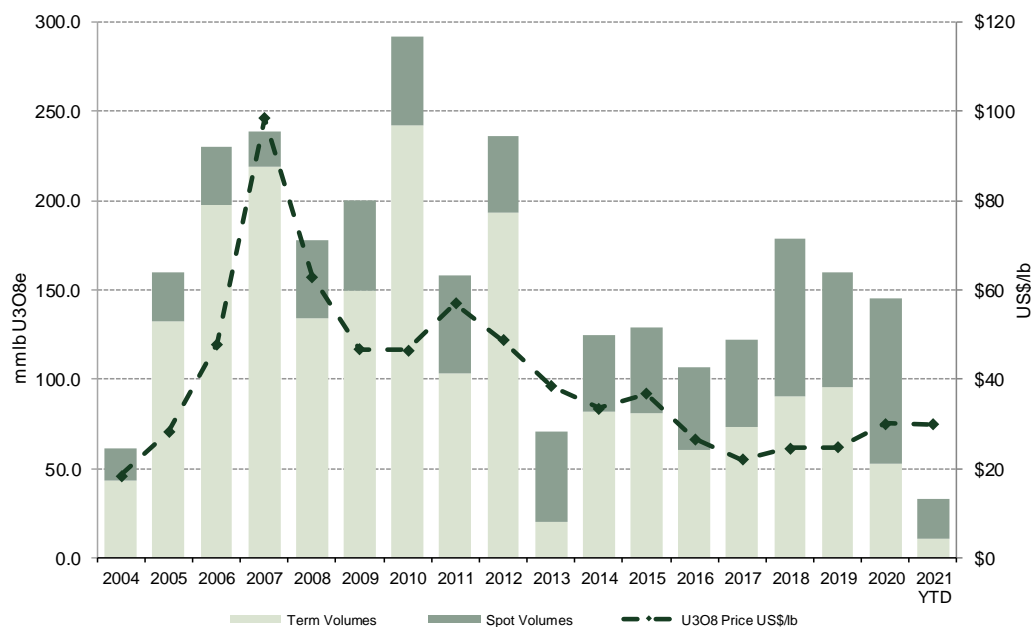
April 14, 2021

Exhibit 1. Uranium Company Equity Offerings and Uranium Purchases

Company	Date Equity Offering Announced	Equity Offering (US\$ millions)	Uranium Purchased or Planned to Purchase (million pounds)	Estimated Average Price of Uranium Purchases (Planned or Actual) (US\$/lb)
Yellow Cake	25-Feb-21	140.0	3.5	28.95
Denison Mines	15-Mar-21	86.0	2.50	28.50
Uranium Energy	17-Mar-21	30.5	1.4	29.00
Boss Energy	29-Mar-21	46.0	1.25	30.15
Uranium Energy	6-Apr-21	12.0	0.705	31.70
Total/Average		302.5	9.355	29.20

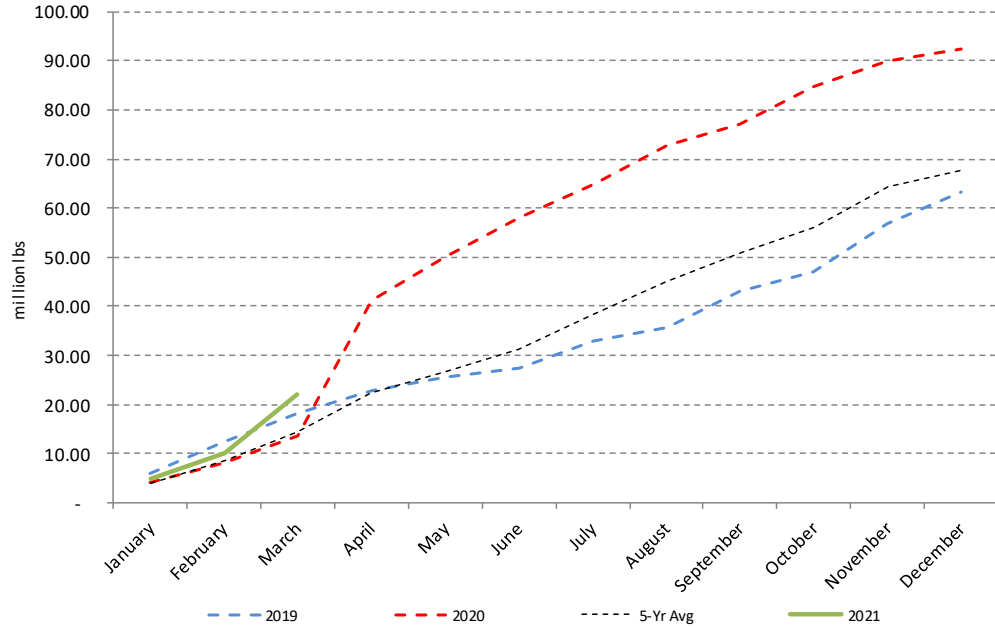
Source: Company reports; TD Securities Inc. estimates

Exhibit 2. Spot and Term Volumes



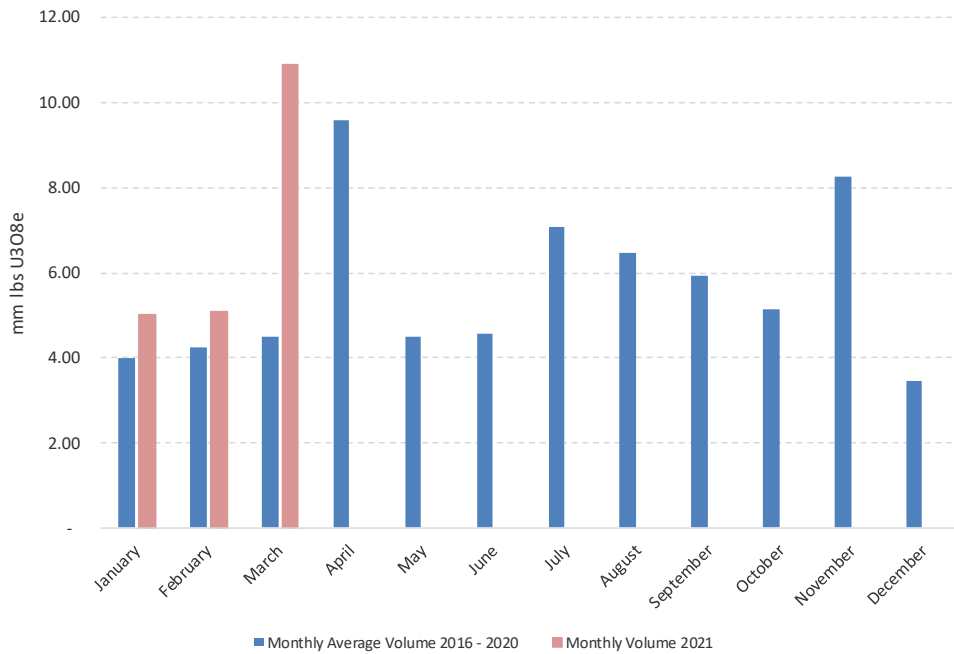
Source: UxC

Exhibit 3. Historical vs. 2021 Cumulative Monthly Spot Volumes



Source: UxC

Exhibit 4. Monthly Average Spot Volumes



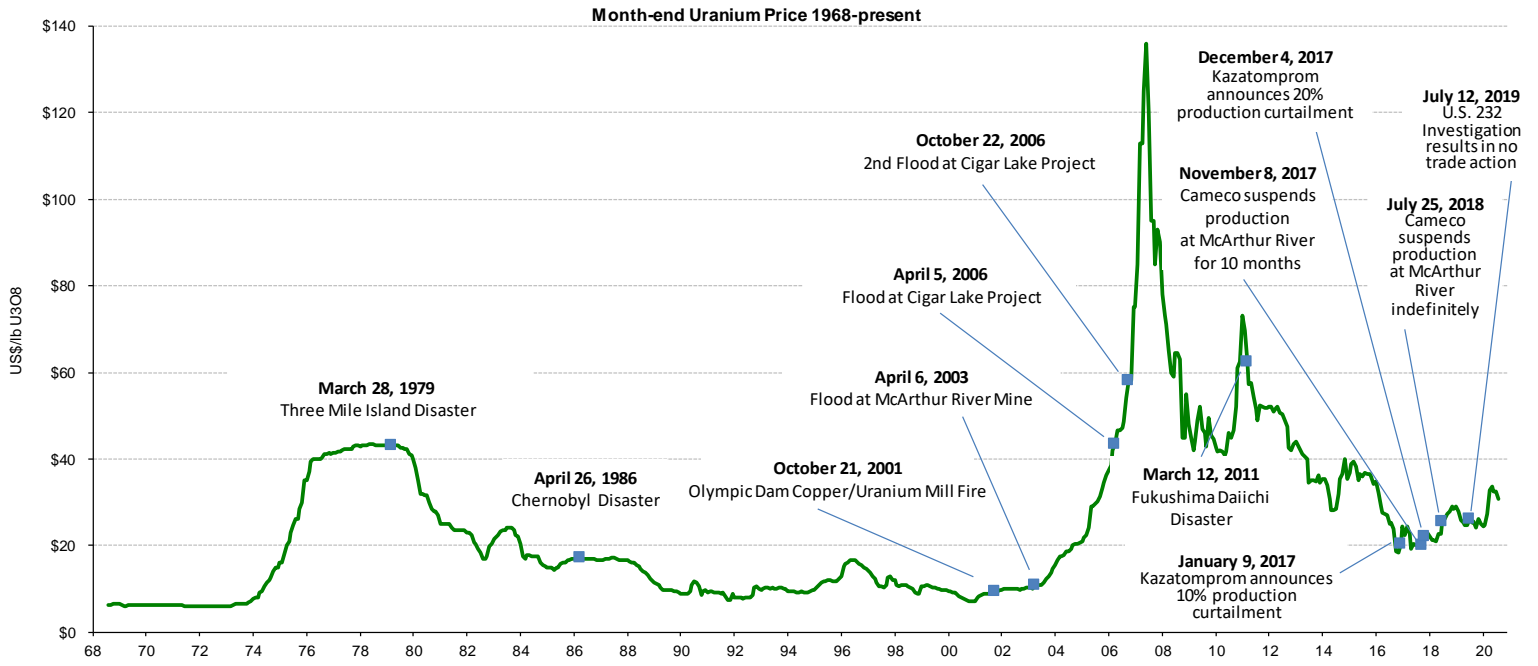
Source: UxC

Industry Note

Equity Research

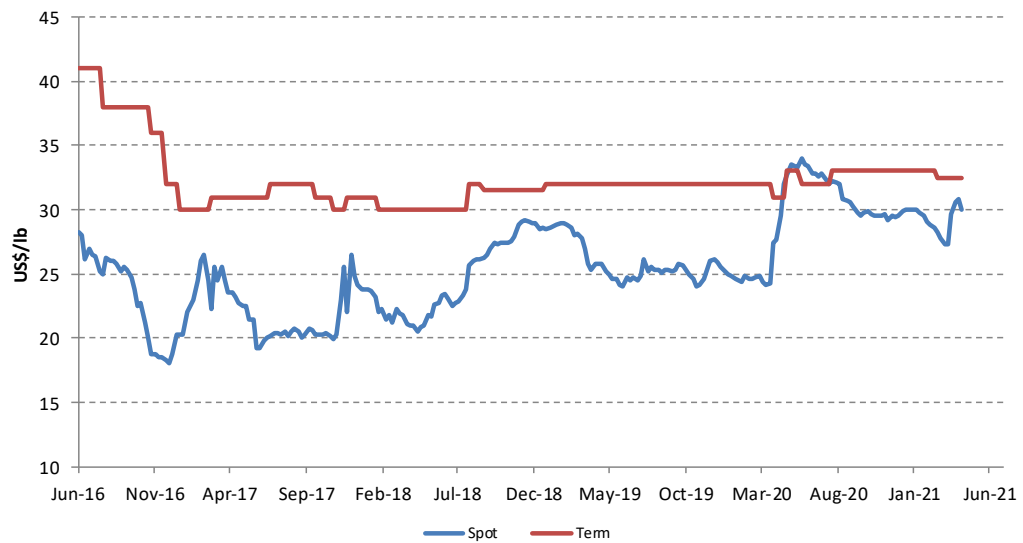
April 14, 2021

Exhibit 5. Historical Spot Price and Market-affecting Events (US\$/lb)



Source: UxC, Companies, TD Securities Inc.

Exhibit 6. Spot and Term Uranium Prices (US\$/lb)



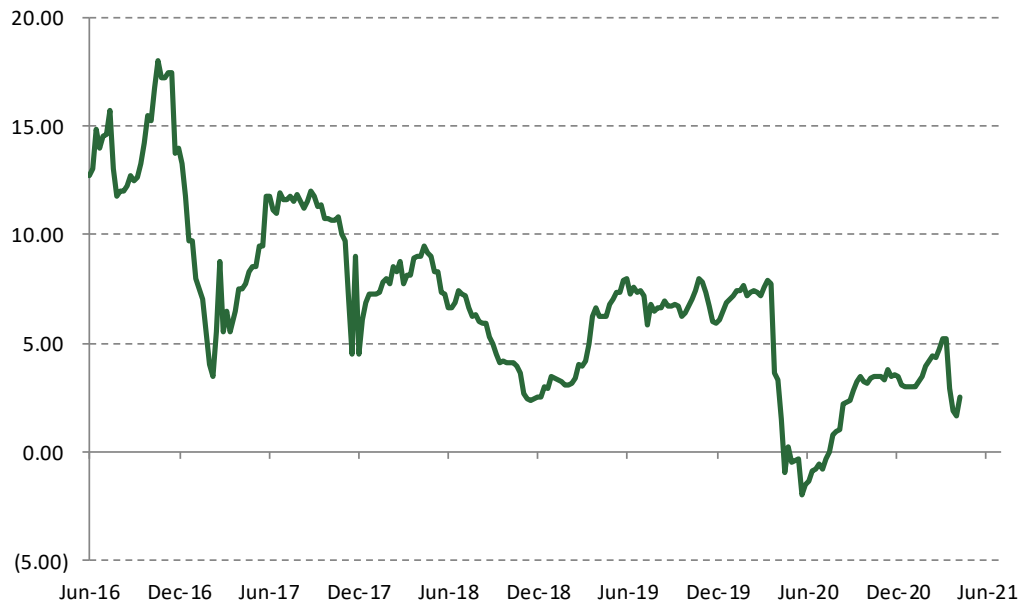
Source: UxC

Industry Note

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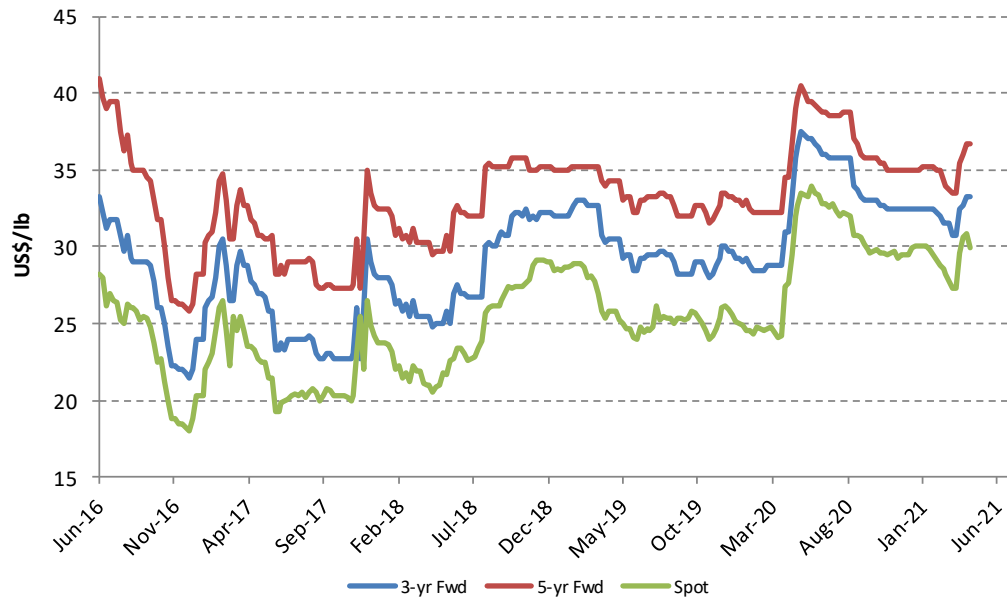
April 14, 2021

Exhibit 7. Uranium Term Price Premium to Spot (US\$/lb)



Source: UxC

Exhibit 8. Uranium Prices — Spot, 3-year Forward and 5-year Forward



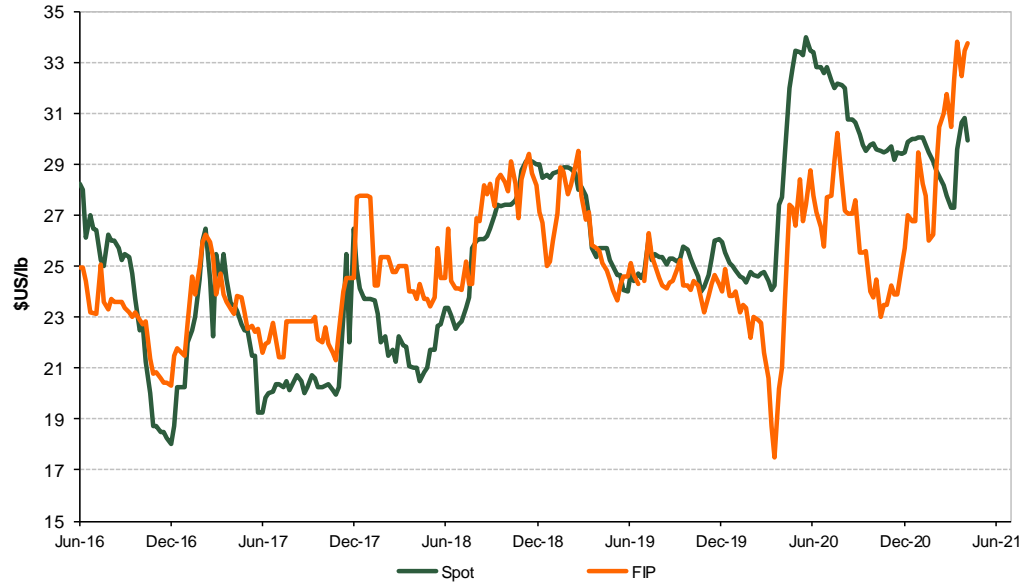
Source: UxC

Industry Note

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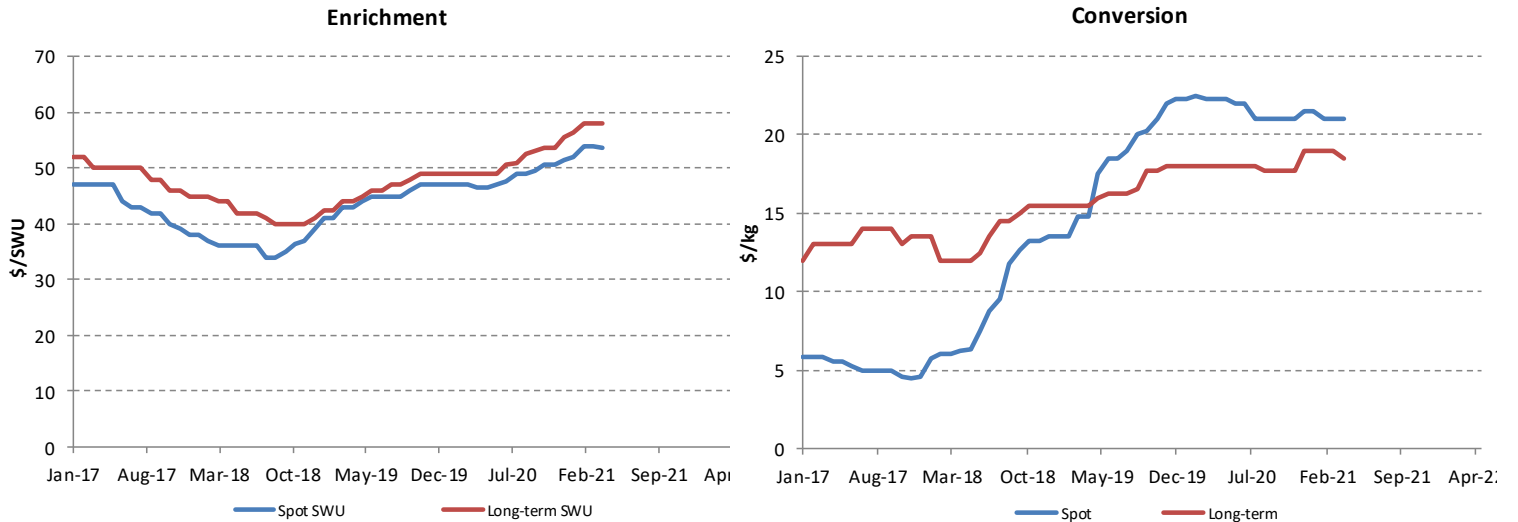
April 14, 2021

Exhibit 9. Fund Implied Price (FIP) and Spot Price



Source: UxC

Exhibit 10. Monthly SWU and Conversion Pricing



Source: UxC

Industry Note

Equity Research

April 14, 2021

Exhibit 11. TD Securities Uranium Supply/Demand Model

	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E
Mine Supply - Western World (Mlb U3O8)									
Total Mine Supply - Western World	100	83	85	75	73	80	85	88	86
Net Eastern Mine Supply (lbs U3O8)	54	54	55	44	52	53	60	66	72
Total World Mine Supply (Mlb U3O8)	154	138	140	119	126	132	145	154	158
YoY % change	-7.6%	-10.2%	1.7%	-15.2%	5.8%	5.3%	9.1%	6.8%	2.6%
Secondary Supply									
Global underfeeding and tails re-enrichment*	19	18	18	16	16	15	15	14	14
Mixed Oxide Fuel (MOX)*	5	5	6	6	6	6	6	7	8
US government sales (DOE Proposed)*	3	2	2	1	0	0	0	0	0
Additional Russian secondary supply*	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Total Secondary Supply (Mlb)	27	24	26	24	22	21	21	21	21
Secondary supply as % of global reactor demand	16%	14%	15%	13%	12%	12%	12%	11%	11%
Mobilization of Commercial Inventory	7	7	7	7	7	7	7	7	7
Total Supply	187	169	173	150	155	161	173	183	187
Total World Demand									
Total World Nuclear Generating Capacity (MWe) *	358,819	368,571	372,978	374,420	384,508	385,211	389,242	394,906	398,885
Uranium requirements per MWe	472	472	472	472	472	472	472	472	472
Uranium demand (mmlb)	169	174	176	177	181	182	184	186	188
First Core Requirement (2 year lead)	-	-	-	-	-	-	-	-	-
Total World Demand (Mlb U3O8)	169	174	176	177	181	182	184	186	188
YoY % change	1.7%	2.7%	1.2%	0.4%	2.7%	0.2%	1.0%	1.5%	1.0%
Supply / Demand Balance (Mlb)	18	-5	-3	-27	-27	-21	-11	-4	-2
Spot Uranium Price (US\$/lb U3O8)	\$22.12	\$24.82	\$25.94	\$29.52	\$32.94	\$36.00	\$38.00	\$40.00	\$45.00

* Source: World Nuclear Association - Nuclear Fuel Report 2019-2040 Reference Case

Note - TD LT price assumption starts in 2025; a flat US\$45/lb price is assumed for 2025 and beyond.

Source: UxC, Bloomberg, World Nuclear Association, TD Securities Inc.

Industry Note

Equity Research

April 14, 2021

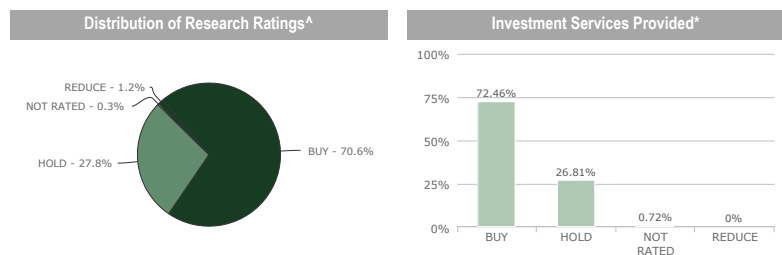
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Industry Note

Equity Research

April 14, 2021

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Industry Note

Equity Research

April 14, 2021

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