

Industry Note

Equity Research

May 20, 2021

Metals & Minerals

Uranium Weekly: Avoiding the Summer Lull

The Ux Consulting (UxC) weekly spot price indicator, published earlier this week, rose to US\$30.55/lb (up \$0.15/lb), or +0.5% versus the previous week. Year-to-date, the spot price is up 1.7%. The month-end term price remained at US \$32.50/lb, which is unchanged since late-February.

Spot market volume was low last week after higher volumes were reported over the first week of May; the spot price has, however, remained supported above the US\$30.00/lb level, with more purchasing anticipated to enter the market from financial participants, producers, and limited utility buying. The uranium market may avoid its typical seasonal lull during the summer months this year because of the potential pent-up demand.

Cameco increased its guidance for uranium purchases for 2021 to 11mm-13mm lbs (from 8mm-10mm lbs) due to the unplanned closure of Cigar Lake during the period related to COVID-19. We note that Cameco's planned 2021 uranium purchases include related-party purchases from Inkai (~5Mlbs) and from Nukem's excess inventory (a few million lbs). To the end of March, Cameco reported that it has purchased 1.5mm lbs of uranium this year. This suggests that Cameco's purchasing requirements over the rest of the year (before any buying in 2021 for 2022 needs) should be in the range of 2.5mm-4.5mm lbs.

UxC reported that term buying so far in 2021 has now reached 21.9 million pounds under 24 transactions. Although term contract demand got off to a slow start, it is now effectively in line (in volume terms) with last year at this time. Cameco reported the recent signing of 9mm lbs of uranium under long-term contracts with its Q1/21 results. Although contract terms were not disclosed, the contract signings suggest that utilities are refocusing on their long-term needs again after a year of being mostly focused on managing COVID-19 risks. Management was hesitant to suggest that its off-market contract signings indicate the start of the long-awaited contracting cycle, saying that in its view, the market needs to see a steady flow of utility on-market RFPs to demonstrate that a contracting cycle has truly started — and the market is not quite there yet.

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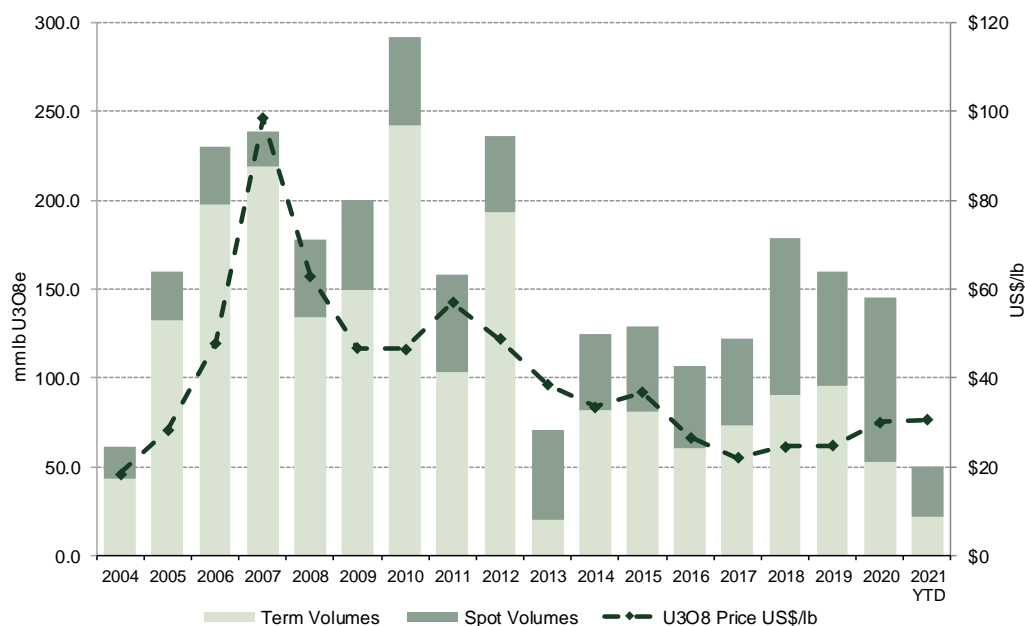
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Exhibit 1. Uranium company equity offerings and uranium purchases

Company	Date Equity Offering and/or Uranium Purchase 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	3.9	28.78
Denison Mines	15-Mar-21	86.3	2.50	29.61
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
Uranium Participation Corp.	3-May-21	58.0	not available	not available
Yellow Cake	11-May-21	n/a	0.343	29.15
Total/Average		372.8	10.098	29.40

Source: Company reports; TD Securities Inc. estimates

Exhibit 2. Spot and Term Volumes



Source: UxC, TD Securities Inc. estimates

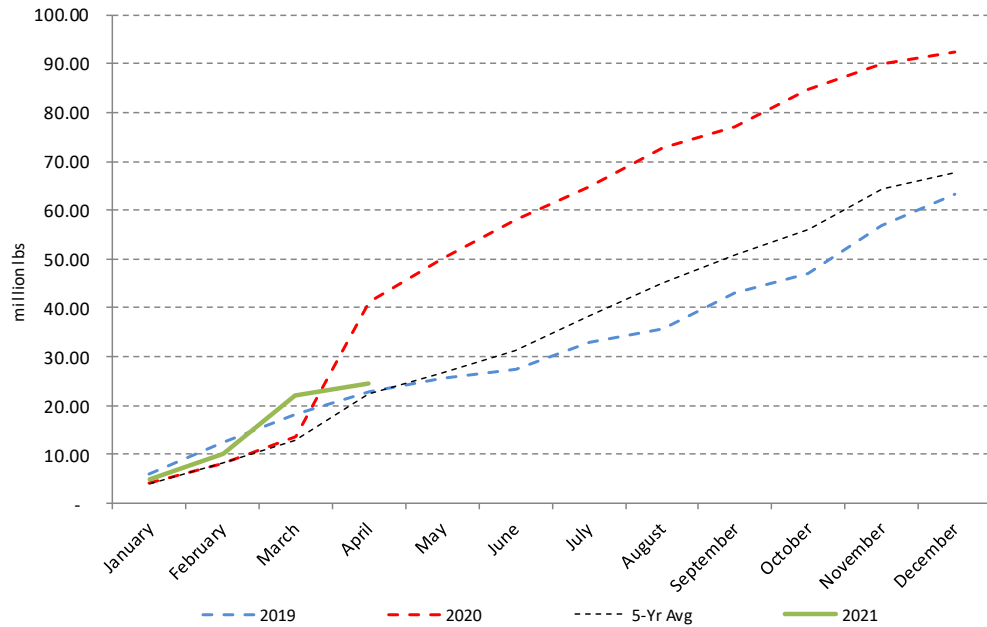


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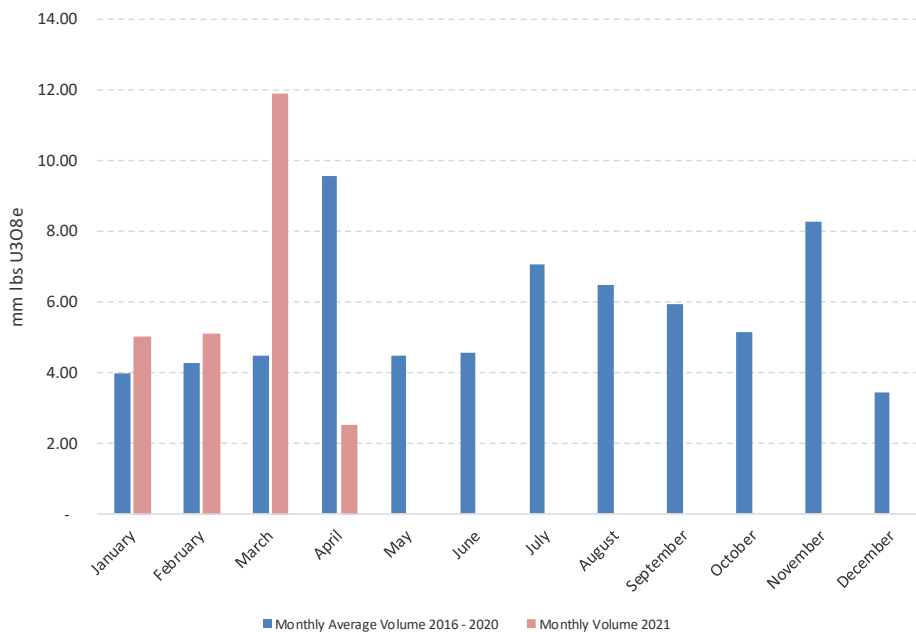
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Exhibit 3. Historical vs. 2021 Cumulative Monthly Spot Volumes



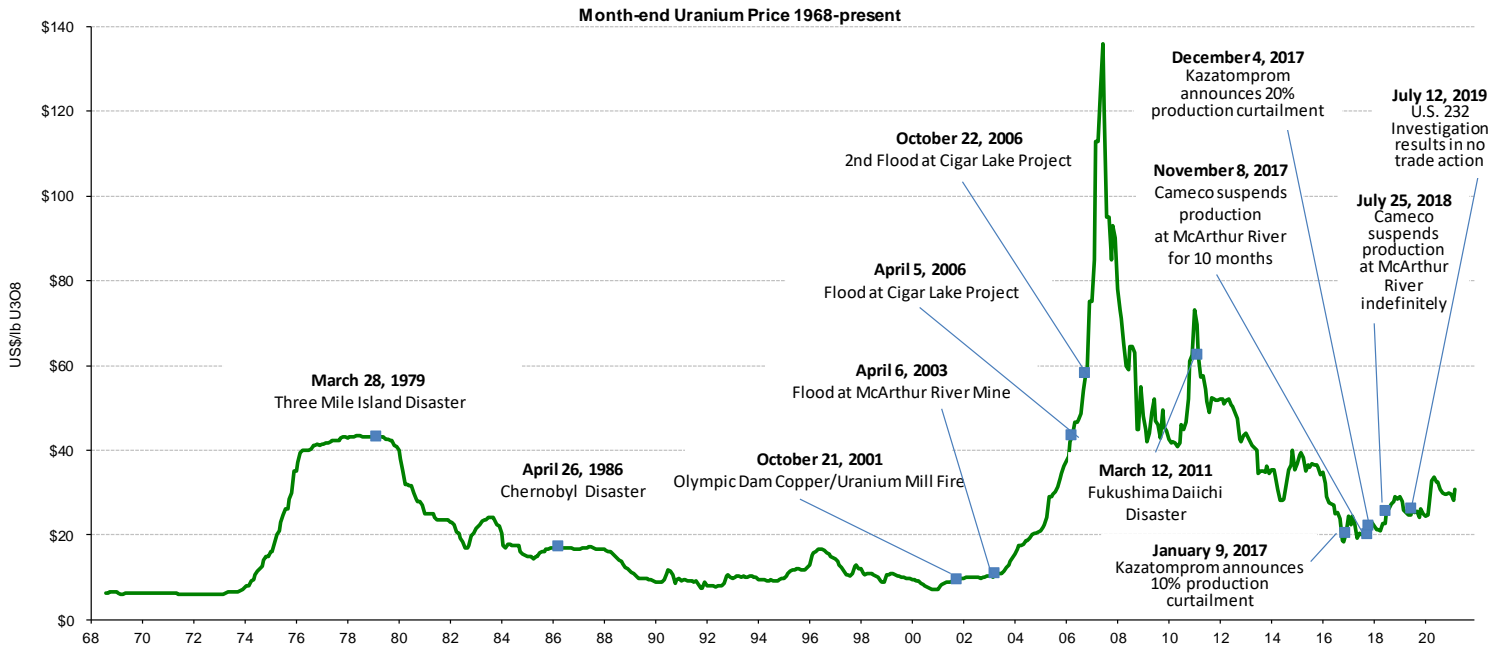
Source: UxC, TD Securities Inc. estimates

Exhibit 4. Monthly Average Spot Volumes



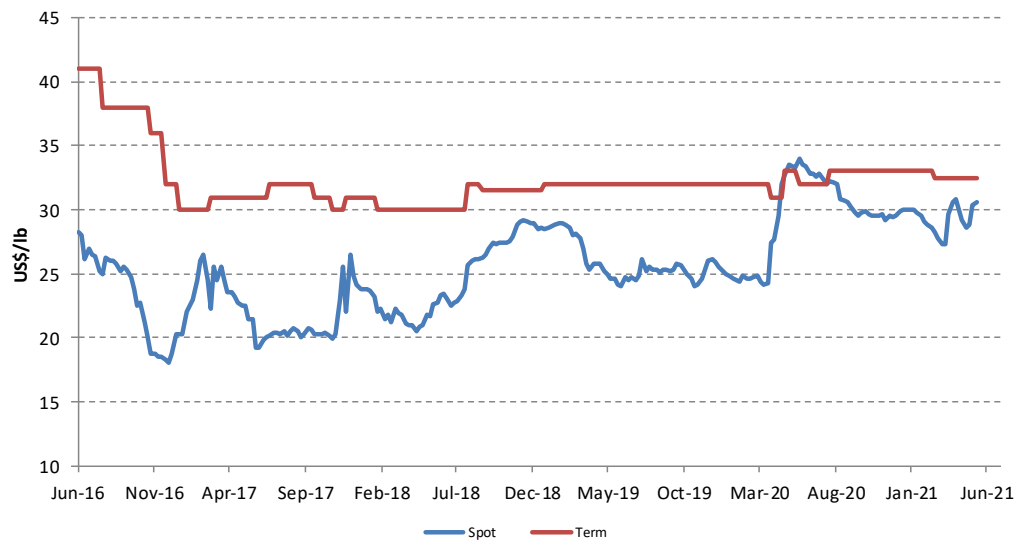
Source: UxC, TD Securities Inc. estimates

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



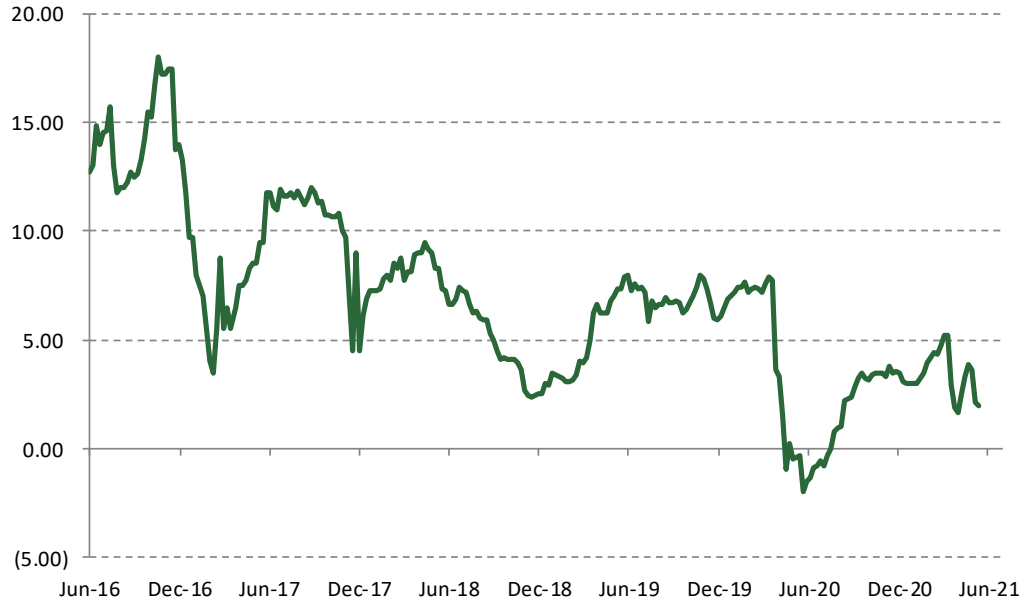
Source: UxC, companies, TD Securities Inc.

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



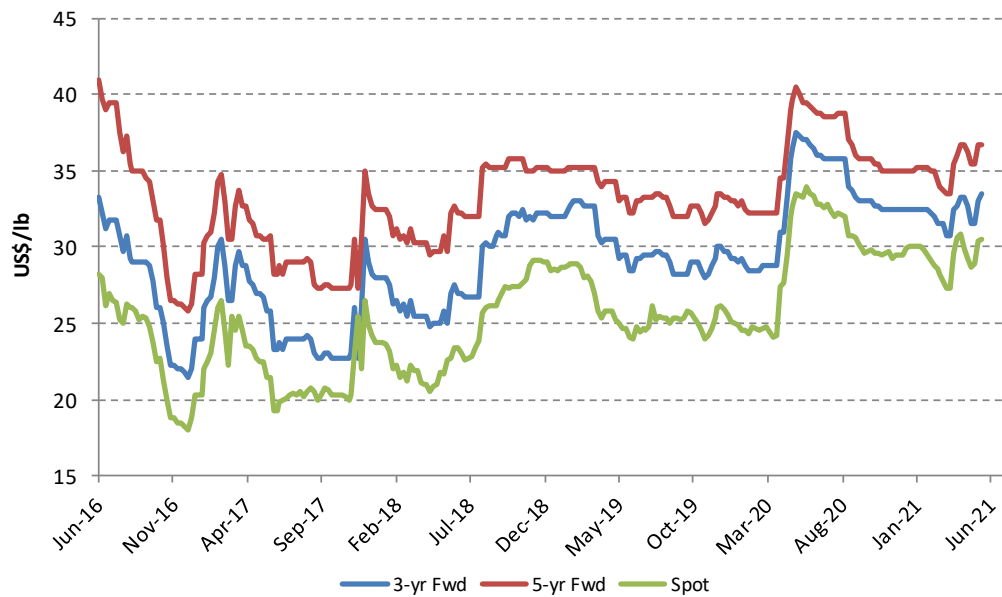
Source: UxC, TD Securities Inc. estimates

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



Source: UxC; TD Securities Inc. estimates

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



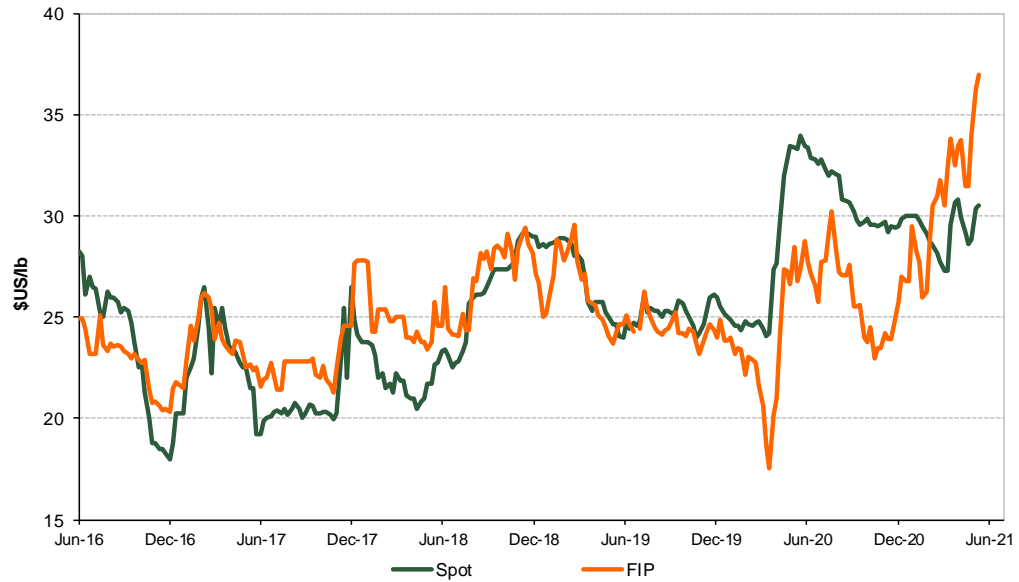
Source: UxC

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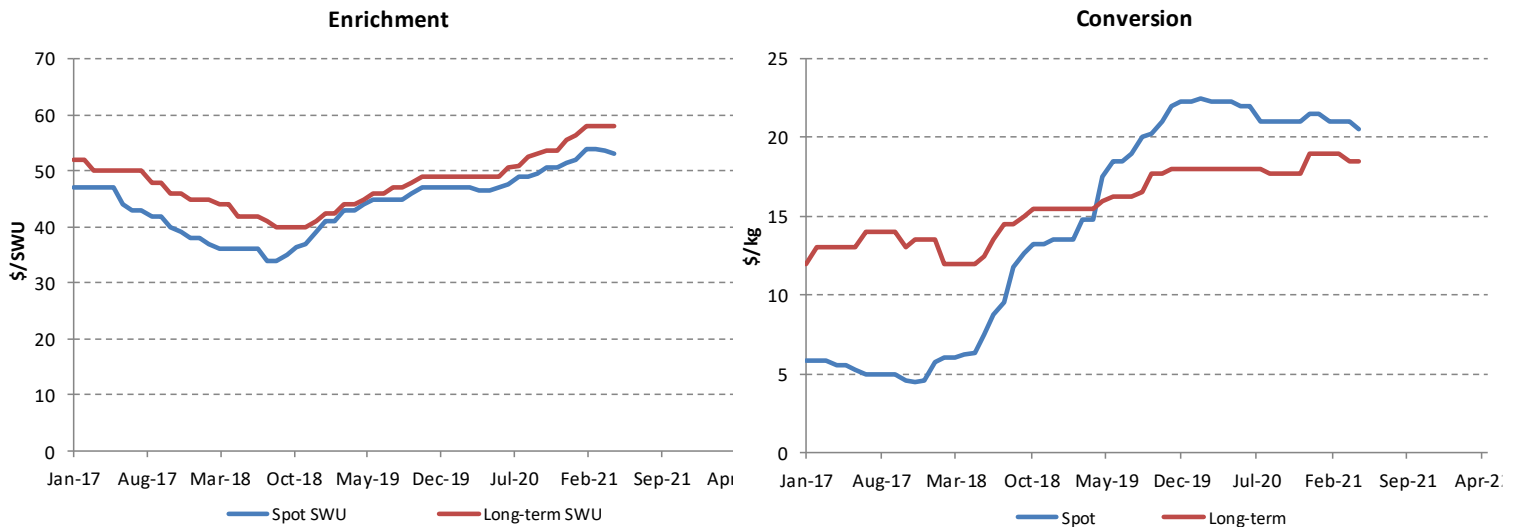
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Exhibit 9. Fund Implied Price (FIP) and Spot Price



Source: UxC, TD Securities Inc. estimates

Exhibit 10. Monthly SWU and Conversion Pricing



Source: UxC, TD Securities Inc. estimates

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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	81	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	125	126	132	145	154	158
YoY % change	-7.6%	-10.2%	1.7%	-10.9%	0.7%	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	156	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	-21	-27	-21	-11	-4	-2
Spot Uranium Price (US\$/lb U3O8)	\$22.12	\$24.82	\$25.94	\$29.52	\$32.99	\$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.

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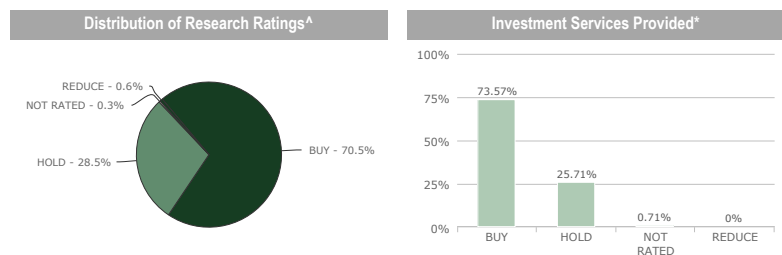
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