

# Industry Note

Equity Research

August 5, 2020

Metals &amp; Minerals

## Uranium Weekly: Production Resumes; Market Remains in Deficit

**Ux Consulting's (UxC) weekly price indicator declined slightly this week to US \$32.10/lb (from US\$32.20/lb).** The weekly price indicator has declined from its most recent peak of US\$34/lb in late-May on softer activity in the spot market, which is not unusual over the summer months. We remain encouraged that despite weaker activity in the spot market, the spot price has remained at US\$32/lb or higher since late-April, possibly indicating that a new higher range is being established.

**Kazatomprom to ramp up ISR operations this month.** On August 3, Kazatomprom stated that it plans to begin mobilizing employees back to the operations in the first half of August. Management noted that there is typically a four to nine month lag between well field development and production phases in ISR mining and that the H1/20 safety measures are expected to predominantly impact production during H2/20. Kazatomprom's 2020 production guidance of 19,000tU-19,500tU remains unchanged, but the company notes that H2/20 production levels will be significantly impacted by the recent 4-month shutdown. Management has not provided any indication what the impact of the delayed well field development will have on 2021 uranium production.

**Cameco announced in July 29 that it is planning to restart production at the Cigar Lake operation in September, approximately one month earlier than we had expected.** Based on our forecasts, the restart of Cigar Lake will not materially impact our 2020 market supply/demand balance estimates. Including the restart, we expect the market to be in deficit by ~26mm lbs this year. We are forecasting a supply deficit of ~23mm lbs for 2021 (Exhibit 12), although the deficit could be larger since we have not adjusted our forecasts for mine production from Kazakhstan next year given the lack of guidance from Kazatomprom.

**Reported term activity remains low compared with prior years.** Year-to-date, UxC is reporting that >25mm lbs of uranium has been contracted in the term market; this compares with average utility term contracting volumes over the past five years through to the end of July of ~36mm lbs. That being said, in recent years, term contracting volume has been very volatile with a peak of ~54mm lbs to the end of July in 2017 and low of just ~16mm lbs in 2018. During the peak term contracting years from 2006 through 2012, average annual term volume was ~176mm lbs.

**The catalyst that could support the next up-leg in spot and term prices would be a meaningful return of utilities to the term contracting market, in our view.** UxC has noted a recent pick-up in term contracting interest from both U.S. and non-U.S. utilities.

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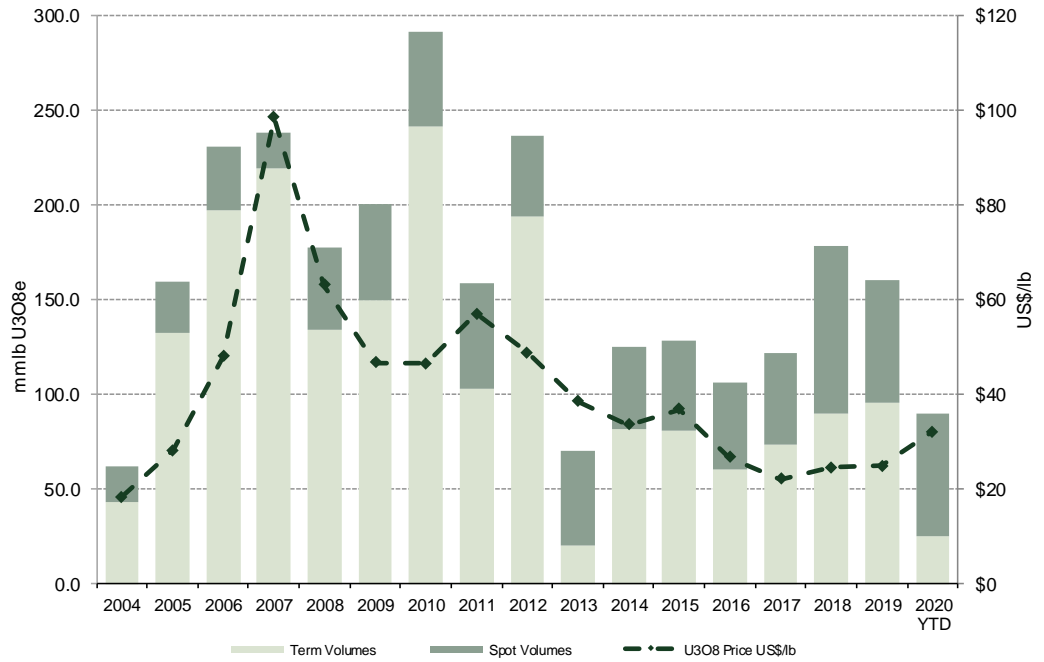


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**Exhibit 1. Term Contracting Volumes Lagging in 2020**



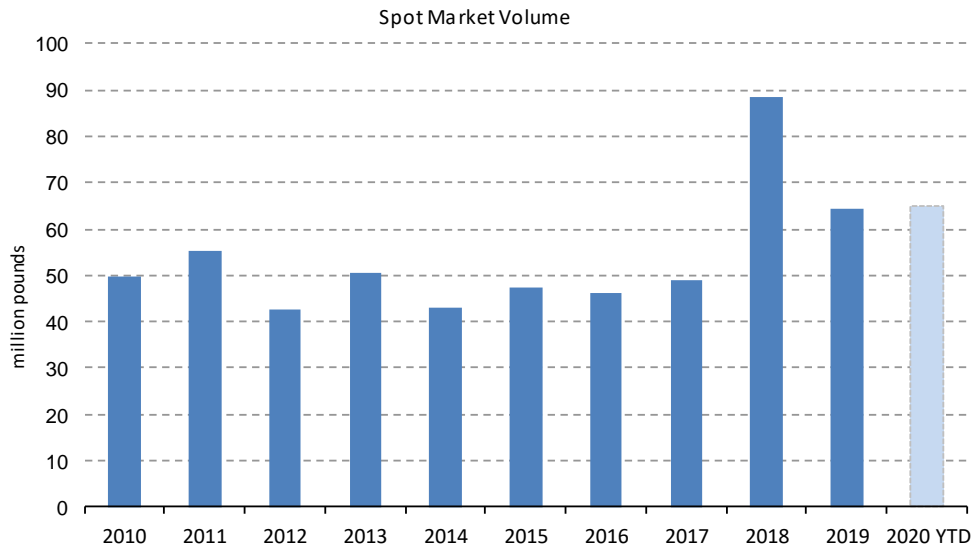
Source: UxC

**Exhibit 2. Historical vs. 2020 Cumulative Monthly Spot Volumes**



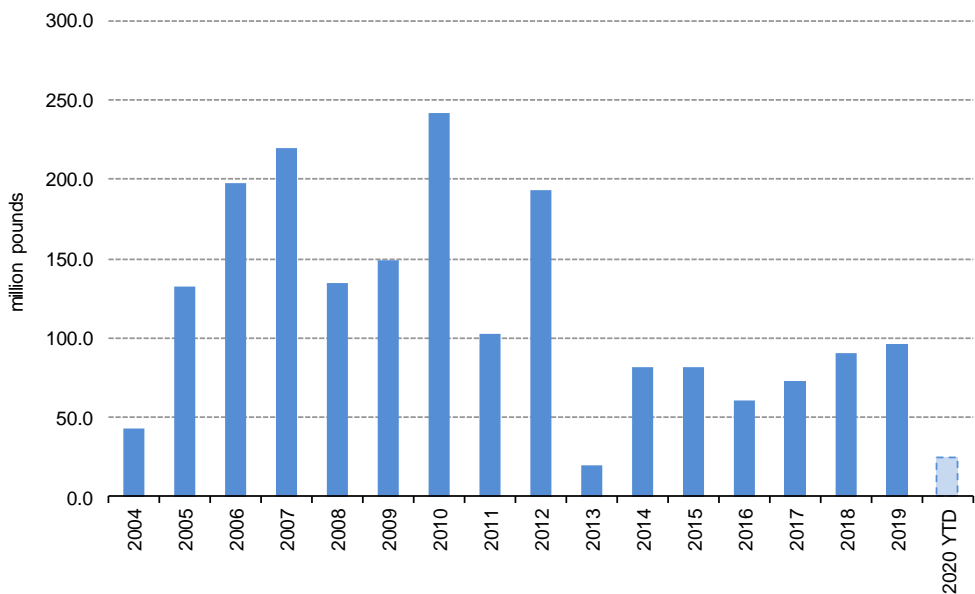
Source: UxC

**Exhibit 3. Historical vs. 2020 (YTD) Spot Volumes**



Source: UxC

**Exhibit 4. Historical vs. 2020 (YTD) Term Volumes**



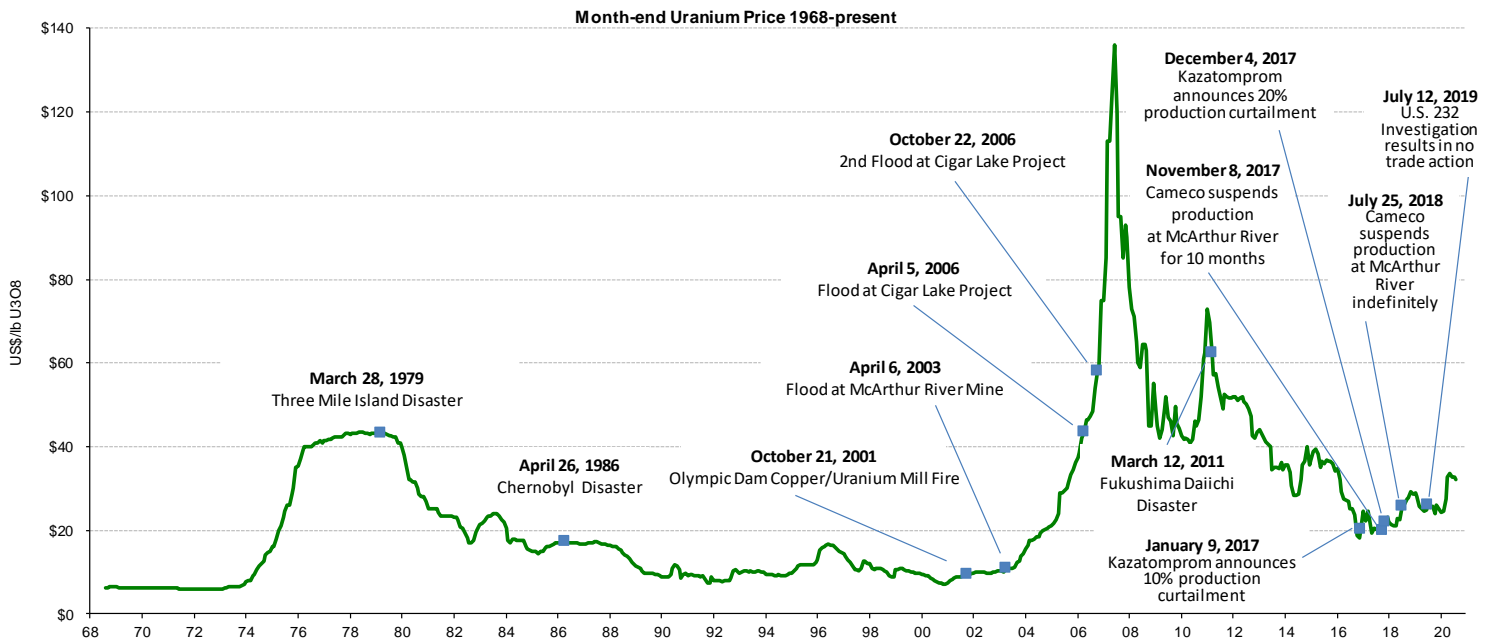
Source: UxC

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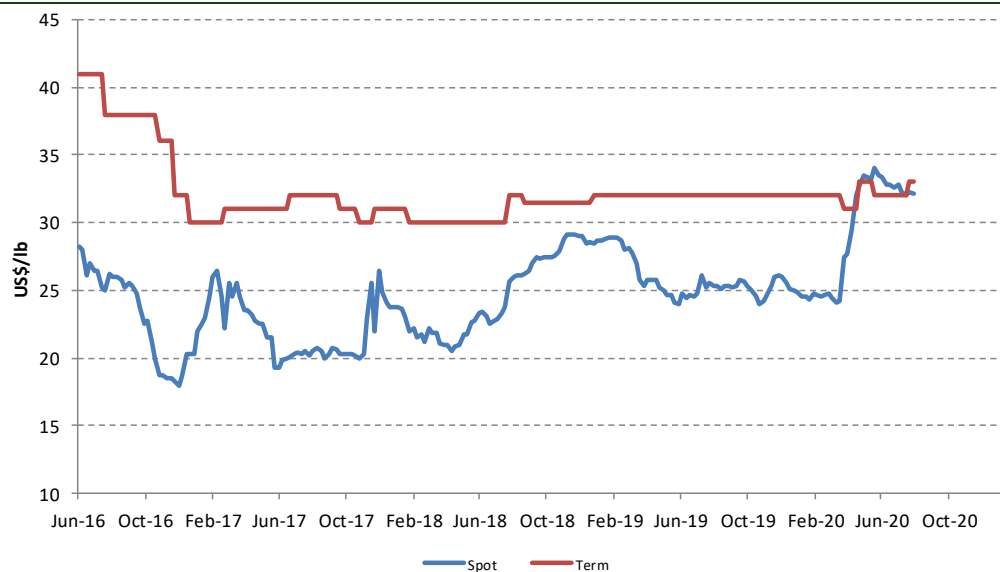
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**Exhibit 5. Historical Spot Price and Market Impacting Events (US\$/lb)**



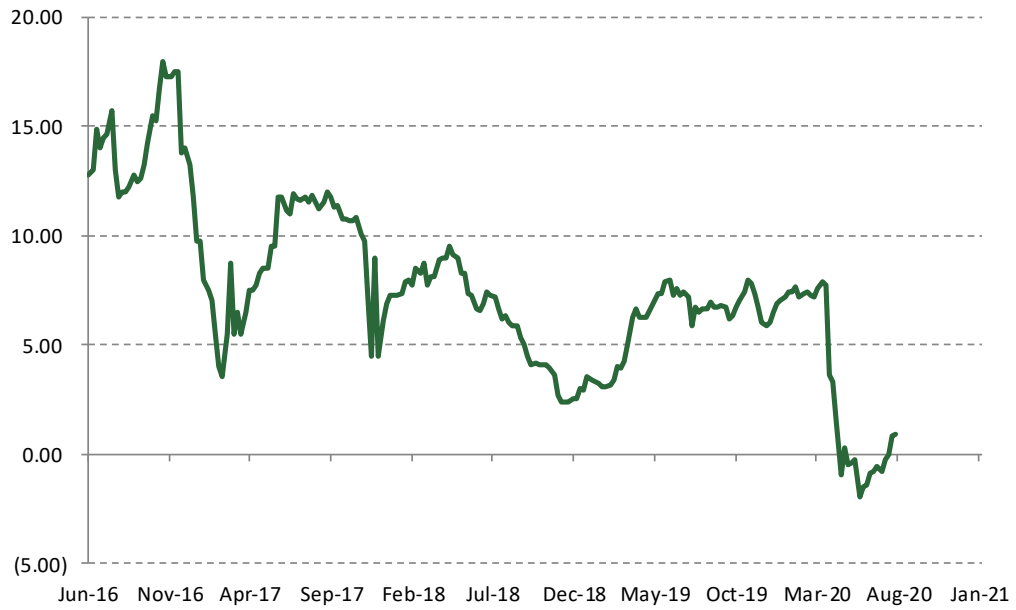
Source: UxC, Companies, TD Securities Inc.

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



Source: UxC

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



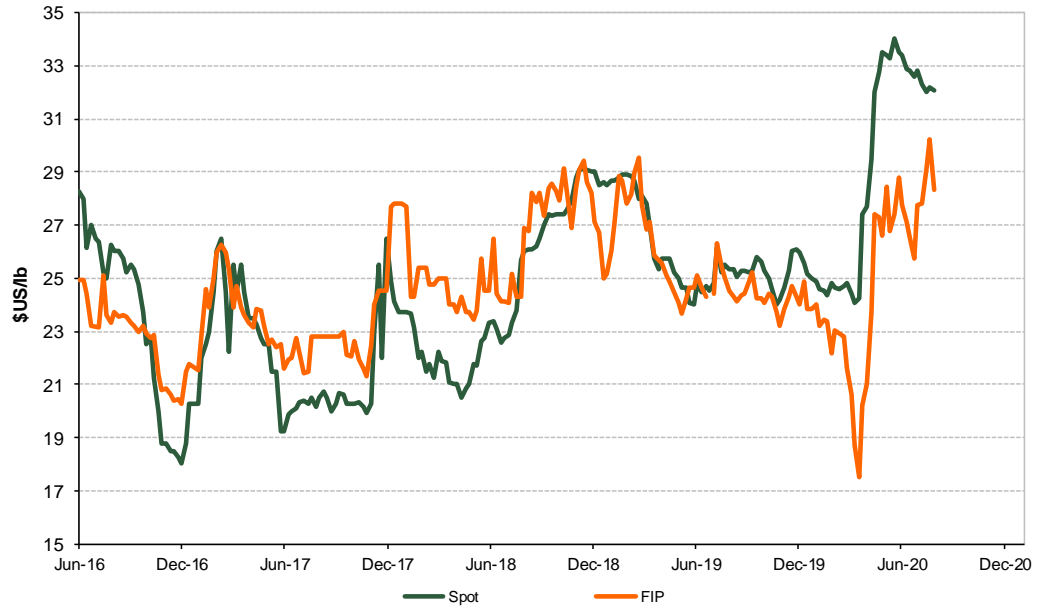
Source: UxC

**Exhibit 8. Uranium Prices – Spot, 3yr Fwd and 5yr Fwd**



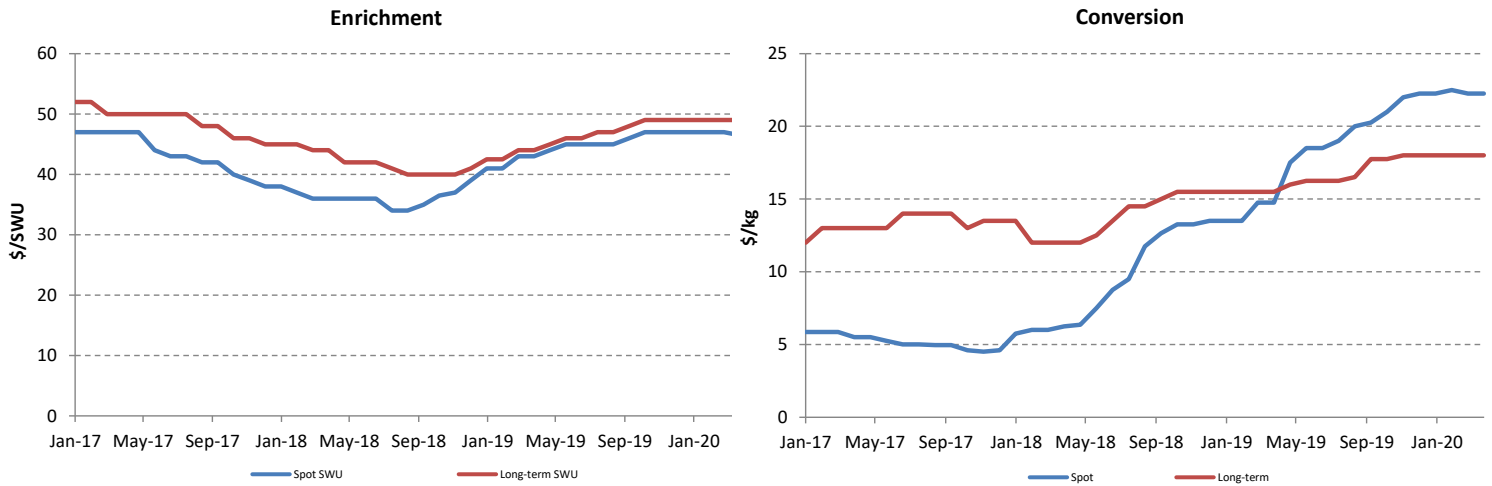
Source: UxC

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



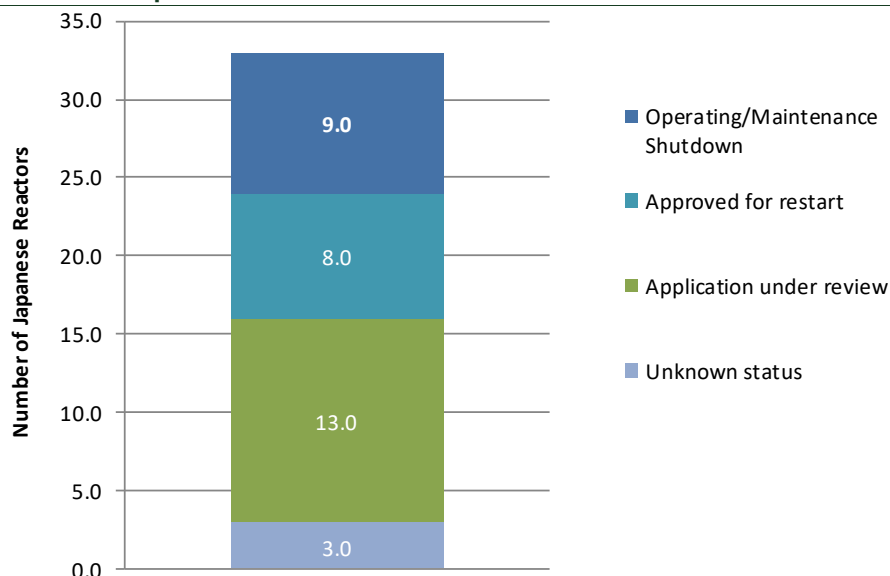
Source: UxC

**Exhibit 10. Monthly SWU and Conversion Pricing**



Source: UxC

**Exhibit 11. Japanese Reactor Status**



Source: UxC, Bloomberg, World Nuclear Association

**Exhibit 12. TD Securities Uranium Supply/Demand Model**

	2015	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E
<b>Mine Supply - Western World (mm lbs U3O8)</b>										
Total Mine Supply - Western World	106	104	100	83	85	75	81	80	85	88
Net Eastern Mine Supply (lbs U3O8)	57	62	54	54	55	44	49	60	60	66
<b>Total World Mine Supply (mmlb U3O8)</b>	<b>163</b>	<b>166</b>	<b>154</b>	<b>138</b>	<b>140</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>145</b>	<b>154</b>
YoY % change	12.2%	2.1%	-7.6%	-10.2%	1.7%	-14.7%	8.3%	7.8%	3.5%	6.8%
<b>Secondary Supply</b>										
Global underfeeding and tails re-enrichment*	20	18	19	18	18	16	16	15	15	14
Mixed Oxide Fuel (MOX)*	4	5	5	5	6	6	6	6	6	7
US government sales (DOE Proposed)*	7	4	3	2	2	1	0	0	0	0
Additional Russian secondary supply*	2	2	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
<b>Total Secondary Supply (mmlb)</b>	<b>34</b>	<b>29</b>	<b>27</b>	<b>24</b>	<b>26</b>	<b>24</b>	<b>22</b>	<b>21</b>	<b>21</b>	<b>21</b>
Secondary supply as % of global reactor demand	21%	17%	16%	14%	15%	13%	12%	12%	12%	11%
<b>Mobilization of Commercial Inventory</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>
<b>Total Supply</b>	<b>205</b>	<b>202</b>	<b>187</b>	<b>169</b>	<b>173</b>	<b>150</b>	<b>159</b>	<b>168</b>	<b>173</b>	<b>183</b>
<b>Total World Demand</b>										
Total World Nuclear Generating Capacity (MWe) *	345,377	351,271	358,819	368,571	372,978	374,420	384,508	385,211	389,242	394,906
Uranium requirements per MWe	464	474	472	472	472	472	472	472	472	472
Uranium demand (mmlb)	160	167	169	174	176	177	181	182	184	186
First Core Requirement (2 year lead)	-	-	-	-	-	-	-	-	-	-
<b>Total World Demand (mmlbs U3O8)</b>	<b>160</b>	<b>167</b>	<b>169</b>	<b>174</b>	<b>176</b>	<b>177</b>	<b>181</b>	<b>182</b>	<b>184</b>	<b>186</b>
YoY % change	3.4%	3.9%	1.7%	2.7%	1.2%	0.4%	2.7%	0.2%	1.0%	1.5%
<b>Supply / Demand Balance (mmlb)</b>	<b>44</b>	<b>35</b>	<b>18</b>	<b>-5</b>	<b>-3</b>	<b>-26</b>	<b>-23</b>	<b>-14</b>	<b>-11</b>	<b>-4</b>
<b>Spot Uranium Price (US\$/lb U3O8)</b>	<b>\$36.89</b>	<b>\$26.57</b>	<b>\$22.12</b>	<b>\$24.82</b>	<b>\$25.94</b>	<b>\$31.30</b>	<b>\$36.00</b>	<b>\$37.50</b>	<b>\$40.00</b>	<b>\$40.00</b>

\* 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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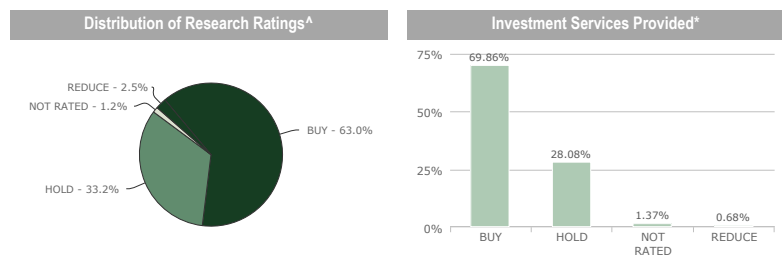
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Current as of: August 5, 2020

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