David Sadowski: Are You Ready for Upward Pressure on Uranium Prices?

The Mining Report 08/05/2014

COMPANIES MENTIONED

- Denison Mines Corp.
- **Fission Uranium Corp.**
- **MAG Silver Corp.**
- **Probe Mines Limited**
- Roxgold Inc.
- Ur-Energy Inc.

Streetwise Reports LLC
101 Second St., Suite 110
Petaluma, CA 94952
Tel.: (707) 981-8999 x311
Fax: (707) 981-8998
jluther@streetwisereports.com

THE ENERGY REPORT
THE GOLD REPORT
THE LIFE SCIENCES REPORT
THE MINING REPORT

Take advantage of the temporary bear market in uranium juniors, David Sadowski tells *The Mining Report*. The Raymond James mining analyst explains why uranium prices are low and why they will rise in the medium term. Hint: It has something to do with how orange juice is produced. And he talks about why a gold lining makes the metals market a solid bet.

Source: Peter Byrne of *The Mining Report*

The Mining Report: In past interviews with Streetwise Reports, you predicted that the price of uranium will rise this year. But that has not panned out. Why not?

David Sadowski: Simply put, there is a short-term supply problem in the uranium industry. We believe, however, in the long term, supply will not be able to keep up with demand growth. The point at which we previously expected demand to outstrip supply has been pushed out by a couple of years. That development has impacted the price in recent months, as well as Raymond James' outlook for the price going forward.

The three main reasons for continued global growth of uranium mine production are the persistence of long-term fixed-price sales contracts, the intransigence of government producers who believe that security of supply is more important than mine economics, and byproduct uranium production. Secondary supply sources also remain robust.

*"**Fission Uranium Corp** is our top pick among uranium juniors at current price levels."*

TMR: Would you explain how these situations interrelate?

DS: Demand is lagging because Japan has been slower than expected to resume operations at its nuclear reactors. The Japanese reactors are not consuming uranium at the moment, but the Japanese utilities are continuing to take delivery on many of their supply agreements, causing their inventories to rise. A belief in the market that uranium might be dumped has, in part, kept other global utilities on the sidelines, resulting in lower levels of uranium buying and lower prices. And while uranium oxide "yellowcake" deliveries have continued to Japanese buyers, those buyers have slowed the movement of that material into the rest of the fuel cycle, which has decreased demand for conversion and enrichment products.

On the enrichment side, excess capacity has resulted in "underfeeding." The centrifuges at the enrichment plants are always spinning. The plants are paid to supply a certain level of enrichment to their customers. And during times of lower demand, they can utilize otherwise empty centrifuges to squeeze out more uranium product.

An apt metaphor for this process is orange juice. Imagine that you are running a juice bar with 10 juicing machines that are always spinning. Your customers bring you oranges and sign a contract to take delivery of a set amount of juice from those oranges. But suddenly you lose 20% of your customers. They stop bringing you oranges and they no longer pay you for the juice. What are your options to make up for that lost revenue? Given that all 10 juicing machines must continue to run, you can take the oranges that would under normal circumstances be squeezed by eight machines and instead run them through 10 machines, squeezing more juice out of each orange. The juice in excess to what the eight remaining customers have agreed to buy is available to the juice bar owner to sell to other customers.

That is the same type of activity that is going on in the uranium space. Enrichers with excess capacity especially during a period of relatively weak enrichment or "SWU" prices can squeeze more enriched product out of the material being provided to them, which generates excess uranium that the enrichers sell to others. Given the protracted outage of Japanese nuclear reactors, this *squeezed* source of supply has been greater than expected. In part due to our revised estimate that only one-third of Japan's nuclear fleet will return to operations, we expect underfeeding to continue to exacerbate oversupply for some time.

*"**Probe Mines Limited** has a stellar underground deposit."*

TMR: What about the uranium extracted from Russian nuclear warheads?

DS: Similarly, with respect to Russia, the end of the Megatons to Megawatts high-enriched uranium (HEU) deal was long anticipated to usher in a new period of higher uranium prices. But the same plants that were used to down-blend those warheads can now be used for underfeeding and tails re-enrichment. In this way, the Russian HEU-derived source of supply that provided about 24 million pounds (24 Mlb) to the market did not disappear completely; the supply level was just cut roughly in half. Meanwhile, uranium mines, in aggregate, have increased their output—even though prices are now well below average production costs. Kazakhstan, for example, has continued to grow its uranium industry, despite recent guidance from officials in Kazakhstan to the contrary.

Furthermore, since Fukushima, only one major uranium mining operation has closed down due to weak prices, Paladin Energy Ltd.'s (PDN:TSX; PDN:ASX) Kayelekera in Malawi. The high-cost Ranger mine in Australia, which has been processing its stockpiles since 2012, has defied protests from locals and restarted production following a major accident in late 2013. And Cigar Lake in Canada and Husab in Namibia are charging into production, even in this oversupplied environment. The bottom line is that oversupply will persist until 2020.

TMR: How will that solemn reality affect future prices?

DS: Current prices are untenably low and some producers are refusing to sell at rock-bottom prices. Upward pressure on prices into the $35 per pound ($35/lb) range should occur as utilities buy more uranium in the marketplace, and as secondary trading activity among financial entities picks up. The biggest factor is the behavior of the end-users of uranium, the nuclear utilities. Given what we know from available data, global utilities are going to have to sign a lot of new supply contracts to meet their uncovered reactor requirements in the years 2017 and beyond.

*"**MAG Silver Corp.** is truly an asset-rich company."*

But looking at current utility-held inventories and the global supply/demand picture over the next five years, we predict that the utilities will not be rushing to sign new deals. A major upswing in prices toward mine incentivizing levels of $70/lb is thus at least a couple of years down the road. The spot price is $28/lb today. It should average $35/lb in 2015—a 20% rise and we see US$70/lb in 2018. Furthermore, it should be noted that this outlook can change in a split second. A flood at Cigar Lake, sanctions against Russian nuclear fuel exports, a major mine shutdown—if any of these events occur, the equation changes and prices could rise a heck of a lot faster, comparable to the rise in 2006–2007 and in late 2010.

TMR: What do you look for in a uranium mining junior?

DS: The best junior opportunities are to be found in companies with best-in-class assets, access to capital, and the potential for value-added news flow. Solid management teams, clean capital structures and trading liquidity are also key. For example, Denison Mines Corp. (DML:TSX; DNN:NYSE.MKT) has world-class discovery potential at Wheeler River, and also another high-grade project that it is aggressively exploring. Denison will generate up to $7 million ($7M) annually in Cigar Lake toll milling revenues. And the company could bring several deposits into production in the medium term. Valuation is an obvious consideration when looking at investing in the juniors, but after peaking in late February and early March, most of the junior equities are now trading at attractive levels. Denison is one of our top picks among juniors in the Athabasca Basin.

TMR: What other companies do you like in the Athabasca Basin?

DS: Fission Uranium Corp. (FCU:TSX.V) has similar qualities to Denison. Fission's Patterson Lake South has emerged as the best undeveloped uranium project in the world. There simply are no other high-grade, open-pit uranium assets left un-mined, so the value of Patterson Lake is off the charts. Based on assay results released by Fission through the winter program, we estimate 70–80 Mlb of contained metal has been defined. We anticipate that its aggressive summer exploration campaign will add even more to that total. All of the zones are wide open along the strike and to the north and south, not to mention the numerous coincident geophysical and radon anomalies in the region. There are question marks, such as the price and timeline to construct a new mill, but we look forward to seeing a maiden resource estimate at the project, which should come out in early 2015.

TMR: Fission Uranium spun out of Fission Energy Corp. (FIS:TSX.V) last year. Was that a good move?

DS: It was a great move. Fission Energy sold its Waterbury Lake and other uranium assets and spun out the Patterson Lake South project and ancillary assets, including a project on the Macusani Plateau in Peru. It turned out to be a fantastic deal for shareholders. Not only did they get shares in Denison Mines, they also got shares in Fission Uranium. Fission subsequently acquired Alpha Minerals Inc. and is now the 100% owner of the Patterson Lake South project, which in our view has lowered the hurdle for the company to get taken out. Fission is our top pick among uranium juniors at current price levels, with a Strong Buy rating and $2 target price.

TMR: Which uranium producers do you like in the United States?

DS: Ur-Energy Inc. (URE:TSX; URG:NYSE.MKT) is our top pick among uranium producers. Since starting up production in late 2013, its Lost Creek mine in Wyoming has performed exceedingly well. Ur-Energy has a good operating team, well-executed plant build, solid ore body and is in an attractive jurisdiction. One of the company's key advantages over its competitors is the high fixed prices in its contract book. Over the balance of 2014, we estimate that Ur-Energy will deliver into sales agreements with an average realized price of more than $60/lb. Meanwhile, cash costs are expected to be very close to $20/lb, implying a stellar operating margin.

In a higher uranium price environment, Ur-Energy looks even better with its ability to scale production to 1 Mlb/year at its core operation at Lost Creek. Plus, it can go to 2 Mlb/year by incorporating its low-cost satellite mining operation at Shirley Basin. The company is highly leveraged to improved uranium prices, but it is also downside protected by its attractively priced contracts, which extend to 2019.

TMR: Is there synergy in going after both uranium and gold?

DS: Uranium deposits can occur alongside other metals, improving mine economics. In South Africa and Australia, uranium is mined as a byproduct of gold with a positive impact at those mines. In other cases, gold, nickel, molybdenum, and other metals can be an encumbrance to primary uranium production and can negatively impact costs.

TMR: What gold success stories are out there?

DS: We like Probe Mines Limited (PRB:TSX.V). Its Borden gold discovery is 2 million ounces (2 Moz) at 5 grams per ton (5 g/t) amenable to bulk underground mining techniques one kilometer off a highway and 90 minutes from Timmins, Ontario. In fact, at its 3 g/t cutoff, the high-grade zone hosts 1.8 Moz at a 5.9 g/t average grade. We believe additional drilling along the strike to the east will further extend the deposit and underline what is already one of the best undeveloped gold assets in Canada.

The project also features a 2.3 Moz, 1 g/t pit-constrained low-grade zone that makes sense for open-pit mining, either in a higher gold price environment or as funded out of cash flow from the underground mine. The company is now closing a $26M flow-through financing, which will enable it to complete a maiden preliminary economic assessment at Borden in the fourth quarter, close an acquisition to tie up the regional land package, and facilitate aggressive exploration drilling through 2015. We believe Probe is a story that is seriously misunderstood. It is a real opportunity for investors looking at higher-grade, earlier-stage names.

TMR: How is Probe's share price performing?

DS: After being one of the darlings of the TSX Venture Exchange in 2013, Probe had a leg down this year. There were a few reasons for that. Agnico-Eagle Mines Ltd. (AEM:TSX; AEM:NYSE) had been viewed as a natural buyer for Probe. When Agnico made a bid for Osisko Mining, the market surmised that Agnico may not want to buy Probe in the short term. Also, some analysts regard Probe's recent resource update as ho-hum, a view I certainly do not agree with. Probe has a stellar underground deposit and maintains the open pit as a great option in a higher gold price environment.

TMR: What other gold firms do you have an eye on?

DS: We cover Kaminak Gold Corp. (KAM:TSX.V); it owns the Coffee gold project, a nice leaching deposit in the Yukon that could host a highly economic open-pit heap-leach mine. Roxgold Inc. (ROG:TSX.V) is advancing its high-grade Yaramoko project in Burkina Faso into development later this year. Orezone Gold Corporation (ORE:TSX) is moving its Burkina Faso Bomboré heap-leach gold project into the feasibility and permitting stages over the balance of 2014. We are bullish on each one of these companies.

TMR: What about precious metal plays in silver?

DS: MAG Silver Corp. (MAG:TSX; MVG:NYSE) is our top pick among silver juniors. MAG is truly an asset-rich company. It owns 44% of the world's highest grading silver project, Juanicipio, which is currently under development with its joint venture operating partner, Fresnillo Plc (FRES:LSE). We model production startup in 2018 with extremely low cash costs and low operational risk. Fresnillo has been engaged in very similar underground epithermal vein mining for decades, and it is one of the world's top silver producers.

MAG's second asset, 100%-owned Cinco de Mayo, is very intriguing. Cinco is a zinc-dominant carbonate replacement deposit or "CRD" target featuring very high zinc grades and a massive exploration upside. MAG has been temporarily expelled from the property by the locals, but we remain hopeful for resumption of drilling in the near future. It is an excellent undervalued company and we have a Strong Buy rating on it.

TMR: What will it take for MAG to reopen Cinco de Mayo?

DS: MAG is working to sign an agreement with the local ejidos in a small town called Benito Juárez, which is located in the Cinco de Mayo area. MAG negotiated a similar deal to restore access at its flagship Juanicipio project and given the particular circumstances surrounding Cinco, we believe an analogous outcome is likely.

TMR: Thanks for your time, David.

DS: My pleasure, Peter.

David Sadowski is a mining equity research analyst at Raymond James Ltd., and has been covering the uranium and junior precious metals spaces for the past six years. Prior to joining the firm, Sadowski worked as a geologist in western Canada with multiple Vancouver-based junior exploration companies, focused on base and precious metals. Sadowski holds a Bachelor of Science in geological sciences from the University of British Columbia.

Read what other experts are saying about:

- Fission Uranium Corp.
- MAG Silver Corp.
- Probe Mines Limited

Want to read more *Mining Report* interviews like this? Sign up for our free e-newsletter, and you'll learn when new articles have been published. To see recent interviews with industry analysts and commentators, visit our Streetwise Interviews page.

If you would like to comment on the content of this interview, engage with the interviewee or any of the companies discussed in this interview, or if you would like to be interviewed by *The Mining Report*, please contact Judy Luther of *The Mining Report* at jluther@streetwisereports.com, (707) 981-8999 x311.

IMPORTANT DISCLOSURES

1) Peter Byrne conducted this interview for Streetwise Reports LLC, publisher of *The Gold Report, The Energy Report, The Life Sciences Report* and *The Mining Report,* and provides services to Streetwise Reports as an independent contractor. He owns, or his family owns, shares of the following companies mentioned in this interview: None.
2) The following companies mentioned in the interview are sponsors of Streetwise Reports: Fission Uranium Corp., Probe Mines Limited and MAG Silver Corp. Streetwise Reports does not accept stock in exchange for its services.
3) David Sadowski: I own, or my family owns, shares of the following companies mentioned in this interview: None. I personally am, or my family is, paid by the following companies mentioned in this interview: None. Raymond James disclosures are available here. I was not paid by Streetwise Reports for participating in this interview. Comments and opinions expressed are my own comments and opinions. I had the opportunity to review the interview for accuracy as of the date of the interview, July 22, and am responsible for the content of the interview. All ratings, facts and figures are reflective of the date of the interview.
4) Interviews are edited for clarity. Streetwise Reports does not make editorial comments or change experts' statements without their consent.
5) The interview does not constitute investment advice. Each reader is encouraged to consult with his or her individual financial professional and any action a reader takes as a result of information presented here is his or her own responsibility. By opening this page, each reader accepts and agrees to Streetwise Reports' terms of use and full legal disclaimer.
6) From time to time, Streetwise Reports LLC and its directors, officers, employees or members of their families, as well as persons interviewed for articles and interviews on the site, may have a long or short position in securities mentioned. Directors, officers, employees or members of their families are prohibited from making purchases and/or sales of those securities in the open market or otherwise during the up-to-four-week interval from the time of the interview until after it publishes.

The Gold Report , *The Energy Report* and *The Life Sciences Report* do not render general or specific investment advice and do not endorse or recommend the business, products, services or securities of any industry or company mentioned in this report.

From time to time, Streetwise Reports LLC and its directors, officers, employees or members of their families, as well as persons interviewed for articles on the site, may have a long or short position in securities mentioned and may make purchases and/or sales of those securities in the open market or otherwise.

Streetwise Reports LLC does not guarantee the accuracy or thoroughness of the information reported.

Streetwise Reports LLC receives a fee from companies that are listed on the home page in the "Learn More About Companies in this Issue" section. Their sponsor pages may be considered advertising for the purposes of 18 U.S.C. 1734.

OTHER DISCLOSURES