INVESTING IN MINING

Scarce, expensive cobalt essential for electric cars

Cobalt briquettes produced at Sherritt International's refinery in Fort Saskatchewan, Alta. The hard, lustrous, grey metal is used in the production of high-temperature and wear-resistant super alloys, magnetic alloys, rechargeable batteries and chemicals.

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The recent market turmoil has knocked back the value of most asset classes. But one group has held up surprisingly well. After rising dramatically in 2017, certain scarce metals, such as cobalt and lithium, continue to be hot commodities. In fact, the price of cobalt has set a new record high.

So what is driving this rally, can it continue, and how can investors benefit?

The key factor driving these metals is surging demand for lithium-ion batteries. These power sources are the most popular kind of rechargeable batteries used in home electronics, as well as electric vehicles. Production and sales of these batteries have taken off as global sales for these products surge.

As the name indicates, one of the key ingredients in lithium-ion batteries is lithium. The price of the silvery-white metal, sometimes called "white gold," has spiked by nearly 500 per cent over the past five years, though it has pulled back in the first part of this year. Australia and South America are the main lithium producers.

But arguably the bigger story related to lithium battery demand is cobalt. The mineral has been used for thousands of years to add blue colour in ceramics, glass and pottery, but now its main demand is as a crucial ingredient in rechargeable batteries in electric vehicles where it extends battery life.

The rising demand for cobalt has fuelled a dramatic increase in the metal's price. Cobalt prices on the London Metals Exchange more than doubled in 2017, and rose to a record high early this year.

The supply side of the price equation is also boosting cobalt's price. Cobalt is mostly retrieved as a byproduct from copper and nickel production. The price of those metals has been persistently falling, making production at many locations uneconomic. As well, a significant amount of the world's reserves are located in the Democratic Republic of Congo (DRC) and that country is also by far the world's leading cobalt producer. But there are serious concerns about child labour, worker exploitation and environmental problems in DRC. Electric auto maker Tesla has pledged to source its cobalt exclusively from North America.

Canada is currently the world's third-biggest producer of cobalt, with output of 7,300 metric tonnes in 2016; China is the second-biggest producer of cobalt with an output slightly larger than Canada's; while the DRC produces roughly 65 per cent of global cobalt supplies estimated at around 100,000 tonnes this year.

Canada's cobalt comes mostly as a byproduct of large nickel and copper mining at locations such as the Kidd Mine in Timmins, Ont. (owned by Glencore PLC), the Sudbury mines owned by Glencore and Vale S.A., and the Raglan mine in northern Quebec (Glencore).

Many investment professionals who watch the sector closely see the upward move for cobalt continuing.

"Ordinarily, I would be cautioning about potential new supply and that high prices won't last," says Jon Hykawy, a long-time Bay Street analyst, currently president of Stormcrow Capital Ltd. "But in this case, cobalt is a scarce material, is dependent on the political stability of the DRC, and isn't easy to substitute for. It represents a significant issue for the next few years."

There are a handful of companies positioned to benefit from the cobalt trend. Dr. Hykawy says that for many investors, buying shares in Anglo-Swiss mining giant Glencore (GLEN) is an easy way to invest in cobalt – though the diversified miner isn't a pure play. Glencore has a major presence in the DRC's cobalt mining industry and owns the country's top-producing copper-cobalt mine, as well as a majority ownership in TSX-listed Katanga Mining Ltd. (KAT).

Some money-managers see investing directly in Katanga, which operates in the DRC, as a better way to benefit from cobalt's rise.

"Katanga is the one real cobalt deal among a cluster of small names in the Canadian market," says Michael Smedley is executive vice-president and chief investment officer at Morgan Meighen & Associates.

He notes the company is the only one of the junior firms coming on the Canadian scene with a currently operating mine producing cobalt. He also highlights the sizable investment from Congolese sources, and Katanga's experienced board and management team with deep experience in the region.

Mr. Smedley also favours Sherritt International Corp. (S) as a way to play cobalt. Unlike the upstart players, Sherritt has a long history, with roots stretching back about 90 years. It has operating mines in Cuba and Madagascar, as well as a refinery in Fort Saskatchewan, Alta. The company mainly produces nickel, but in 2017 it also produced just under 3,000 tonnes of cobalt.

Mr. Smedley notes that, as one of the world's Top 10 producers, Sherritt will benefit from any future surge in cobalt pricing. He also says that

Sherritt is one of the few nickel companies producing nickel of high enough grade that, when used in lithium-ion batteries, less cobalt is required.

This "substitution effect" may be a storm cloud on the horizon for cobalt. Mr. Smedley notes that an ever-increasing price for a metal inevitably encourages development of other minerals and processes as a substitute. If the use of high-grade nickel in batteries grows, the reduced demand for cobalt may lead to a drop in the metal's price.

In addition to Sherritt and Katanga, there are other companies with Canadian connections looking to make their mark in the cobalt world. They include First Cobalt Corp. (FCC), which plans to revive activity in the Cobalt Camp area in central Ontario, and Cobalt 27 Capital Corp. (KBLT) which invests in physical cobalt as well as production streams. There are also reports Brazilian miner Vale is looking to raise about $500-million for the rights to future cobalt production at its Voisey's Bay nickel mine in Labrador.