Spreading fertilizer in Russia



In a grey, dusty field three hours drive from the "hero" city of Volgograd, better known by its old war time name of Stalingrad, a brand new derrick rises above the melting snow that marks the site of the biggest investment in Russia outside of the oil and gas sector.

The derrick is the entrance to the VolgaKaliy mine shaft, which will drop more than a kilometre below the surface to one of the richest potash deposit in the world. EuroChem Mineral and Chemical Company, a Russian fertiliser maker, is in the midst of investing \$7bn into a brand new mine in Volgograd and at a second site in Perm, that once operational in 2017 will make the company the world's fourth biggest player in the business.

All around the entrance to the mine are pens filled with sections of cast iron wall cladding and other equipment at the ready. The shaft is already over 500 metres deep and is sinking by another two to three metres a day as the small team of miners work three shifts around the clock.

EuroChem was founded in 2001 and is Russia's largest mineral fertilizer producer by profitability. The company bought the VolgaKaliy licenses in 2005 for \$106m together with the rights to a second site at Perm in 2008, which is shallower and is being developed in parallel. When both these sites are at full production – sometime after 2020 – they could double the company's output.

But it is still early stages for VolgaKaliy and sinking the shaft to the deposit is the riskiest part of the operation. At VolgaKaliy two storage buildings are already mostly completed, while the foundations for a processing plant have already been set and await their walls and equipment that will be arriving in the next two years.

EuroChem is owned by legendary Russian banker Andrey Melnichenko (92%) and the EuroChem's CEO Dmitry Strezhnev (8%), who have already invested \$1.1bn out of the estimated \$2.6bn needed to complete the first phase of the mine. Melnichenko is better known for founding MDM Bank, which became Russia's most successful commercial bank after surviving the 1998 crisis, but in 2007 he switched out of banking and into industry with what in retrospect was immaculate timing.

Russia is nothing if not a cornucopia of mineral resources, which is wealth simply waiting to be dug out of the ground. But the VolgaKaliy project is unusual even by Russian standards in a number of ways.

The established potash producers, including the Russian rival UralKali, pooh-poohed Melnichenko when he first floated the idea of the Volgograd mine, as he had little experience in the business. But Melnichenko has gone at the project like he does everything else – at 100%. He has assembled an experienced team headed by veteran US miner Clark Bailey, who has worked all over the world. Melnichenko persuaded Bailey to come out of retirement to take this job, and the consummate miner seems as at home on the edge of the tundra struggling with the Russian language as he would on his porch back in Austin, Texas. "One of the most attractive things about VolgaKaliy is at its 39.7% ore grade, this deposit is of exceptionally high quality, which will adds to the mine's profitability once it is in production," says Bailey in his Texan drawl.

And finally, while most mining operations in Russia are brownfield deals where the game is to upgrade Sovietera equipment and techniques, VolgaKaliy is a greenfield project, a mine built from scratch to the highest international environmental and safety standards. EuroChem is sparing no expense on equipment and has even begun construction of an entire town at the cost of \$300m to house some 4,500 workers plus their families for the 46-year lifetime that the mine is expected to have. "EuroChem's VolgaKaliy is recognised as the most advanced greenfield potash project globally," Bailey says.

Water works

So far there is not much to see other than the derrick and the foundations of the storage and processing building that will surround the mine when the first potash sees daylight. A giant metal bucket is lowered into the shaft and descends rapidly to the floor 570 metres below. The walls are lined by curved iron panels bolted together to hold back the sandy soil and then has concrete pumped in behind them to make the shaft permanent.

The main problem is water, which can build up against the side of the shaft and either blow it inwards or at least cause flooding at the bottom of the mine. The company has adopted a technique first developed in Poland: smaller holes are bored in parallel around the shaft and four giant refrigeration units close to the mine head pump coolant down to form a wall of ice around the shaft before the iron panels and concrete are put in place. The inside of the shaft is covered with brilliant white ice until you get to the bottom where hot fresh air is pumped down to where the digging into the floor of the shaft is going on.

The two deposits in Volgograd and Perm hold a total of 1.613bn tonnes of potash and VolgaKaliy will be able to produce 2.3m tonnes a year in the first phase and 4.6m tonnes in the second when a second shaft is sunk sometime after 2017. The second phase of work is due to be finished in 2020 and the mines will be working at full capacity from 2022. The total investment of \$7bn will be financed out of EuroChem's cash flow from its other business lines.

And the company will be producing into a rising market. The first 1.4m tonnes a year will be used internally by EuroChem; last year it bought a fertiliser plant in Antwerp that processes potash, but EuroChem currently buys all of the potash it needs on the open market. However, the mine is also playing into a global mega-trend of rising demand for agricultural products. The advent of bio-fuels has put pressure on agro-producers and the governments around the world have seen their stocks/demand ratios plummet to multi-year lows. The rest of VolgaKaliy's production will go into a global market where demand is currently running at 55-56m tonnes a year and rising by about 2% a year, according to experts. "Eventually we want to start processing the potash and producing speciality products," says Bailey.

But even without the rising demand VolgaKaliy should be a money-spinner. "VolgaKaliy is cheap. Part of our advantage comes from the very high quality of the ore, but another important part is the very short link to the port. We are going to be hard to beat on price," reckons Bailey.

The mine is only 500km from the Black Sea where EuroChem has already built a port terminal at Tuapse that can handle 2.5m tonnes a year of potash and the company owns a small fleet of ships that can deliver it to customers around the world, including the traditional buyers in Brazil and India. The nearness of the port means EuroChem's potash could be the cheapest on the international market.

Although the financing and profitability of the project has never been an issue, the company clearly has its eye on an eventual IPO. The attention to international best practises of the mine facilities and accommodation for the workers has also been applied to the plants environmental impact and finances. "Safety is a core value for our company. I don't say a 'priority' as priorities in companies tend to change over time, but our attitude to safety will not," says Bailey. "We want to be the 'best in class' for the entire mining business."

The same is true for the company's corporate governance. Despite it being a privately held company with only one bond issued last December for \$750m, it reports its international audited financials quarterly and publishes them on its website. The senior management also regularly meet with investors and speak at conferences. In short, the company runs a very open and transparent ship. All of this will play well with investors in a sector that is usually marred by opacity and dependence on government ties.

An IPO is not possible until the shaft is sunk. Then EuroChem expects to float, probably on the London Exchange, and should be able to raise several billion dollars.

<u>http://www.bne.eu/</u> <u>http://www.intellinews.com/spreading-fertilizer-in-russia-500017500/?archive=bne</u>