

Growth and Diversity: The Changing Face of Global Mining

Speech by Mr Denis Morozov, CEO of Norilsk Nickel,
to China Mining conference, Beijing, 14th November 2007

Introduction

Ladies and Gentlemen. It is an honour for Norilsk Nickel to present at this conference. This is our first major corporate presentation in China.

Could I begin by extending my congratulations to the organisers for the work they have put into the preparation of the conference and for helping to reinforce the reputation of China Mining as one of the premier events in the mining industry's calendar.

For those not familiar with the name, Norilsk Nickel is Russia's leading mining company and the world's largest producer of nickel and palladium. It is also a major producer of copper, cobalt, platinum, and a host of minor metals from operations in the far north of Russia on the Taimyr and Kola peninsulas.

The company's principal mining operations, located around the town of Norilsk, are extremely remote from other centres of population in Russia and exposed to some of the harshest conditions faced by miners anywhere in the world.

Winter lasts for nine months of the year and includes a Polar Night of forty-five days. The average temperature for the year is minus ten degrees centigrade, though the range goes from minus fifty-seven degrees to plus thirty-six. The reason that these mines can be worked, and indeed are highly profitable, is because of the exceptional richness of the ore. This is truly one of the great ore bodies of the world.

An era of change

Like China, Russia has been going through some major economic changes in recent years. And, as in China, the role of natural resources has played an important part in these changes.

The role that they have played, however, has been very different. While China has emerged as the world's largest consumer of mineral raw materials, Russia has emerged – more strictly, re-emerged – as one of the world's key suppliers of these materials.

The last five years have been some of the most extraordinary in the history of mining. An industry which during much of the previous quarter of a century offered slow growth and little interest for investors has once again rediscovered its dynamism and captured investors' imaginations.

Even now, it is hard to grasp the scale of what is going on and the speed of the transformation the industry has undergone.

What we are witnessing is nothing less than a doubling of the global workforce engaged in international markets and a consequent explosion of the world's industrial production capacity.

At the same time, we are witnessing the addition of over one billion new consumers, which is to say, those with disposable incomes of over \$5000 a year. How could this not have profound implications for the world's raw materials needs?

The scale of what is happening simply has no precedent in world history.

China lies at the heart of these changes and its industrialisation has had an enormous impact on the markets in which Norilsk Nickel is involved. At the end of the 1990s, China used around forty thousand tonnes of nickel a year and accounted for less than four percent of global demand. This year, it will use more than eight times that amount of nickel and account for some twenty-three percent of global nickel demand.

Over the same period, China has emerged at the world's largest producer of stainless steel - the main end-use sector for nickel - with a production growth rate which has averaged an astonishing fifty percent a year.

China has also played an important role in the fortunes of another core Norilsk Nickel product, palladium. Norilsk Nickel currently accounts for over half of the world's mined output of palladium.

In addition to its use in autocatalysts and various other industrial applications, palladium's qualities as a shiny, white, corrosion-resistant metal is making it increasingly popular in jewellery.

Largely as a result of China, the demand for palladium for use in jewellery has grown to one million ounces a year, or around fifteen percent of total palladium use. Norilsk Nickel is working with other producers and with the Chinese jewellery industry to secure this market and assist it to grow further.

The returning spirit of growth

Growth in demand for mineral products may not have been as dramatic for the world as a whole as it has been in China, but it has been solid and sustained and it has persistently outrun the capacity of the mining industry to respond with new supply.

The industry's capacity to grow was established in a different era when growth was slower and operating margins narrower. It was a time when real metal prices seemed to be in permanent decline and there were few incentives for making large investments.

Success in these conditions was all about driving down costs and keeping capital spend to a minimum. Growth and adventure were the preserve of the younger, technology, sectors.

The transformation of the industry which has come about in the last four years has seen mining once more become a growth business. The pursuit of greater volumes has come to offer better returns than simply pushing down further on costs.

Companies have accordingly turned their minds to expansion and we have seen released the energy and ambition that comes from thirty years of being held back. Something of the old pioneering spirit in mining has been recaptured. No less importantly, mining has become once more an exciting place for young people to be.

Constraints on growth

The problem that the industry confronts in becoming more growth-minded is that it is running up against the constraints of a diminishing pool of good quality resources, a shortage of people with the necessary skills, as well as a variety of institutional barriers to development.

Although the world is by no means running out of mineral resources, increasingly it is the case that the deposits that remain are smaller, deeper or more remote from infrastructure than those currently in production.

This can be illustrated by reference to Norilsk Nickel's core products. Historically, world nickel production has come mostly from large deposits of massive sulphides, such as those which Norilsk Nickel mines at its operations in northern Russia.

However, with the depletion of the reserves of massive sulphides, future production is going to have to be based more on lower grade, disseminated, sulphide ores and on nickel oxide ores. Oxides, while generally easier to mine than sulphides, are technologically more demanding and energy intensive to process, and thus more costly.

Much the same tendency is apparent with the platinum group metals. The principal source of growth for these metals is South Africa. While substantial resources of these metals remain, the new generation of mines are smaller than those which came before and are required to work lower grade ores in more difficult mining conditions.

As regards the shortage of good quality human resources in the industry, this is an inevitable result of the slow growth and poor image of mining in developed countries during the previous quarter century and of the consequent withdrawal of support for mining education in these countries. Mining education may be expanding in many emerging economy countries but not fast enough to fill the gap.

As for institutional barriers, these have gradually been tightening over time, partly as a result of a legitimate concern to ensure that mining takes place in an environmentally

acceptable fashion. In other cases, greater government involvement in the industry has been driven by financial or political considerations.

But whatever the motives, it remains the case globally that tightening requirements for mine permitting are adding to the risks of mining investment and imposing an additional drag on mine development.

Strategies for growth and diversity

Mining companies have been seeking to respond to these changed circumstances through strategies of growth and diversity; growth to capture the opportunities arising from expanding demand, diversity to mitigate the associated risks.

In pursuit of this strategy, many large international mining companies have sought to use the cash flows from higher commodity prices to accelerate the development of projects in their project pipelines and to acquire other companies with world class resources.

In contrast to growth achieved through exploration and development, growth achieved through acquisition allows companies to expand much more quickly and to get access to the cash flows from the companies acquired whilst prices are still cyclically high.

The strategy has permitted companies at the same time to diversify their risk across commodities. The effect of this has been particularly evident in the nickel sector where three of world's the largest nickel producers have in the past three years been acquired by companies previously having little or no exposure to nickel.

What the strategy of corporate growth through acquisition does not do, unfortunately, is add new production capacity at the industry level.

Enter the 'emergers'

The other notable feature of the mining industry's response to improved market conditions has been the increasing role played by mining companies based in emerging market economies. Four of the world's top ten largest mining companies by value of production are now based in such economies. These include Norilsk Nickel.

For these companies too, the key drivers of recent strategy have commonly been growth and diversity, although the focus of diversification has often been as much about geographic diversity as about commodity diversity.

Many emerging economy companies have historically been largely confined to their home countries, whether because of political constraints, lack of knowledge and experience of conditions elsewhere, or lack of access to capital. Investment overseas, which many are now pursuing, potentially allows them to improve their risk profile, and thus reduce their borrowing costs, by achieving a wider spread of assets.

Investment in overseas assets by companies from emerging market economies can also bring other benefits, such as securing raw materials for domestic smelting and refining activities - a particular priority for Chinese companies it would seem - and the acquisition of skills and management from the acquired companies.

The transition of Norilsk Nickel

Norilsk Nickel has been playing a full and energetic part in this unfolding story of growth and diversity.

Norilsk Nickel's early history, as a state company with extensive social responsibilities, has meant that it has had a number of obstacles to overcome in order to put itself in a position to expand and develop.

It has had to transfer its historic responsibilities for running the towns around its operations to properly constituted governmental authorities. It has had to secure transfer of its power supplies and its infrastructure from state-run bodies to give itself control over its future development.

It has had to fight for the removal of restrictions on international trade in its products and on the publication of information on its production and reserves. It has had to institute appropriate systems of corporate governance, organisational control and financial reporting.

And all this while having to deal with the consequences of years of underinvestment in its operations.

Many of these obstacles have now been overcome, or are in the final stages of being overcome, and Norilsk Nickel has been able to begin to shape its destiny as one of the world's leading global miners, and as one of Russia's most progressive companies.

A measure of the extent of its success is Norilsk Nickel's achievement of the highest combined credit rating amongst Russia's large private companies from the main credit rating agencies, S&P, Moody's and Fitch. The market capitalisation of the company has increased five times in just three years.

Strands of Norilsk Nickel's strategy

There are three main strands to Norilsk Nickel's strategy going forward.

The first is the modernisation and development of its existing assets. In mid 2006, the company announced that it proposed spending almost one billion dollars a year over the period 2007 to 2010 to upgrade its core operations on the Taimyr and Kola peninsulas.

While this will not add significantly to production, it will ensure that current levels of production can be maintained for many years into the future even as ore grades at the

main mines decline. It will also lead to a significant reduction in the pollution associated with these operations.

The second strand of the strategy concerns the development of mineral resources in other parts of Russia. An early focus of this undertaking was gold, where Norilsk Nickel succeeded in building up Russia's largest gold company, Polyus Gold, before spinning it off to investors at the beginning of last year.

The current focus of exploration and development is broad, as it needs to be. Russia is the world's largest country, covering some seventeen million square kilometres. To evaluate what is available and what is economically mineable, Norilsk Nickel currently has over two thousand geologists working for it around Russia.

One of the major areas of interest is a series of copper deposits in Chita province, near to the border with China, which it is expected will become a major copper-producing region in years to come. The Russian government is helping to promote the economic development of this region by providing significant support for infrastructure.

Another project of interest is the Kingash nickel and copper deposit in the Sayansky region in east-central Russia near the border with Mongolia which is currently the subject of detailed investigation by the Norilsk Nickel.

In view of the scale of the country and of the opportunities it presents, and to speed up the process of discovery and development of exploration projects around Russia, Norilsk Nickel last year teamed up in joint ventures with two of the world's leading mining companies, Rio Tinto and BHP Billiton. These are progressing well.

While the scope for project development in Russia is huge, and while this is the region where Norilsk Nickel has its primary competitive advantage, it will take a while for these projects to come to production and to deliver growth for the company.

Hence the third strand of Norilsk Nickel strategy, which is to seek to achieve nearer term growth through acquisition. Where these acquisitions are overseas, this serves another corporate objective; that of diversifying Norilsk Nickel geographically.

In pursuit of this part of its strategy, Norilsk Nickel earlier this year completed the acquisition of the nickel business of the US-based OM group. This brought into the company a modern sixty thousand tonne a year refinery at Harjavalta in Finland, a small nickel mine in Australia and a share in a large low-grade nickel project, Talvivaara, also in Finland.

Then, in July of this year, Norilsk Nickel acquired LionOre, a Canadian-based nickel miner, in what was the biggest-ever overseas acquisition by a Russian company.

LionOre currently produces around forty thousand tonnes of mined nickel a year so it will serve to maintain Norilsk Nickel's position as the world's number one producer of nickel

globally. Its operations in Botswana, South Africa and Australia also offer significant expansion potential over the next few years. In fact, expansions at the Tati mine in Botswana and the Nkomati mine in South Africa have been committed since the company was acquired.

The acquisition also bring into the Norilsk Nickel group a promising technology for the treatment of low grade nickel ores, Activox, which LionOre has been developing over several years, as well as LionOre's high quality management.

In addition to their contributions to Norilsk Nickel's growth, the completion of the OMG and LionOre acquisitions will see a significant change in the geographic profile of the company. The proportion of Norilsk Nickel's revenues originating in Russia will fall from ninety-eight percent of the total to just over eighty percent.

New models of collaboration

The fast-growing industrialising countries of the world, like China, share a strong common interest with the world's leading miners in ensuring a sufficient and expanding supply of metals and minerals.

The challenge of achieving this should not be underestimated. The unusually high metal prices of recent times are symptomatic of the scale of the challenge and the difficulty the mining industry has been having in meeting it.

Most of the higher grade and more accessible resources of the world have been developed. Many of the remaining, undeveloped, resources lie in the seventy-five percent of the globe occupied by emerging and developing countries. As such, they often bring with them large infrastructure requirements and high capital costs. Some of them also bring major institutional challenges and geopolitical risk.

The mining industry has been responding to this challenge with significantly increased levels of investment. The achievement of greater diversity should enable the leading companies to manage the heightened risks they will encounter when they take on the large and difficult mining projects that the world economy will need.

A wider spread of assets typically contributes to greater stability of corporate earnings, reduces borrowing costs, and makes producers less subject to disruption by events in any one country or in any one commodity.

The new economic and political landscape is creating new relations of mutual dependence and mutual interest which require companies to adapt to new forms of risk-sharing and collaboration.

In resource-rich countries with challenging institutional environments, companies with technical and project skills are aligning themselves with those having access to the resources and the local knowledge required to develop them. This creates a requirement

for the parties - which may the products of very different business cultures - to find a common language and a common set of business principles to work around.

For its part, Norilsk Nickel is working closely with investors seeking to share in Russia's resource development while at the same time seeking to assist with the development of resources in other regions, notably South Africa, Botswana, Australia and Finland.

Other forms of dependence and collaboration - and a consequent desire to share risks - are growing up between producers and their customers. Historically, such relationships have tended to be between consumers in developed countries and producers from the developing world.

No longer. Many of the current relationships being developed are between emerging economies. This year, significantly, the iron ore pricing settlement was for the first time struck between two emerging market economies, China and Brazil.

Many of China's large metal producers have been seeking to secure their futures by tying up long term relationships with suppliers of raw materials and, in some cases, actually investing in their own overseas sources of supply in other parts of the world, including, particularly, South East Asia, Latin America and Africa.

Producers, at the same time, are seeking to ensure they have the long term markets they require to justify the large investment they are making in new capacity by working with customers to obtain off-take agreements and to develop new applications and markets for their products. Norilsk Nickel's investments in fuel cells which use platinum and palladium and in the development of palladium jewellery are examples of this tendency.

As miners, we have a responsibility to ensure that the global economy has sufficient raw materials available to it to support its growth and the rising standards of living of its peoples. This is a responsibility we take seriously.

To meet the challenge, we are having to think hard about the shape and form of our industry and the manner in which we will operate in future. It is my belief is that growth and diversity will remain guiding principles of the mining industry for some years to come.

At Norilsk Nickel, we are working hard to ensure that our company plays a full part in this enterprise, through effective collaboration with our business partners and through our performance as a reliable supplier of high quality, cost-effective, raw materials to our customers throughout the world, including, of course, those in China.