Gold Mining In Russia

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This report will focus on the following two issues:

- Examination of the prospect and variants of the development of the Russian gold mining industry in a global context
- An introduction to the Closed Joint Stock Company “Gold Mining Company Polyus” and its development strategy.

Section 1: Russia and the Global Gold Mining Industry

The Russian gold mining industry has a history of over 300 years long. The first gold bullion was poured following metallurgical processing of complex ores at Nerchinsky mines in 1702.

About 16.2 thousand tonnes of gold have been mined in the Russian Empire, Soviet Union and Russian Federation, approximately 11.3% of the total amount of gold that has been produced historically (about 143.2 thousand tonnes).

In contrast to other countries, Russia has very specific raw material sources: about 70% of gold has been mined from alluvial deposits, 23% from hard rock ones and 7% at composite deposits. Gold is now simultaneously extracted from hard rock and composite deposits worldwide.

Until recently, gold mining in Russia was a completely state monopolised industry. The process of privatisation, mergers and redistribution of mining companies began during the 1990s. The rapid reorganisation and privatisation of the Soviet gold mining industry initially resulted in the breakdown of one large production association into more than 600 small, poorly equipped alluvial producers with an annual production of the first hundred kilos of gold. This disintegration of the industry had a long-term negative effect: small producers had no access to long-term financial resources, and the sharp decrease in investments became an obstacle to the development of hard rock deposits.

The sharp devaluation of the national currency in 1998 and a lack of effective investment instruments fuelled the interest of Russian banks to fund alluvial gold production. The increased activity of national banks resulted in increased gold production.

The correlation between placer and alluvial deposits began to change in the middle of the 90s. The increase of production costs and taxes led to a situation where the profitable share of alluvial deposits was reduced to 60% of balance reserves. Nevertheless, experts believe that the potential of alluvial deposits in Russia could provide the extraction of 60-70 tonnes of gold annually during a period of 10-15 years. This period would be enough for the re-orientation of the gold mining industry to hard rock deposits.

As regards the allocation of gold mining in the Russian territories, the most productive region is Magadan (33.5 tonnes in 2002), Krasnoyarsk Territory (29.3 tonnes), Yakutia (17.5 tonnes), Irkutsk Territory (16.3 tonnes), Khabarovsk Territory (15.3 tonnes) and Amur region (12.7 tonnes).

Section 2: The Current State of the Gold Mining Industry in Russia

Today the world gold mining industry faces the following long-term challenges:

- The depletion of reserves and the absence of new prospects and highly remunerative deposits
- An increase in the cost of financial resources due to a negative public opinion of the gold mining sector
- A decrease in countries and provinces that welcome large-scale gold mining operations
- Fears of political and social instability in the leading gold producing regions.
Russian Gold Mining Industry: A New Stage of Development

- Thanks to improved macroeconomic and political conditions, Russia has once again joined the group of the five leading gold producing countries
- This trend will have a long-term effect if it is supported by a strong gold price increase and the commencement of new mines
- Experts believe that Russia’s unique resource potential can enable annual production of about 300 tonnes of gold (9.6 million ounces)
- Today Russia has a highly skilled labour potential and advanced technology in the mining and processing of gold ore
- There is a stable increase of extraction volume.

Russia is among the few countries that have stably increased gold mining during the last four years. In 2002, gold production increased 21.1% to 158.7 tonnes. About 35 tonnes of gold are consumed for the needs of jewellery. Gold is also used in electronics and additionally, it is an important export item: Russian banks sell abroad more than 60 tonnes per annum.

The increase in extraction is attributed primarily to the launch of several new hard rock projects:
- The largest deposit in Eurasia, Sukhoy Log, (398 million tonnes, average content – 2.6 g per ton, reserves – 1100 tonnes) is still unavailable for development. This deposit can provide an additional 30 tonnes of gold annually and will be among the world’s largest gold operations
- The principal modernisation of the deposit Natalka, which is licensed to the joint-stock company “Rudnik Imeni Matrosova”, (243 million tonnes, average content is 2.85 g per tonne, probable reserves are 1,000 tonnes or more), will provide an increase in output of 24 tonnes a year
- Aldan group of deposits Kuranakh (240 tonnes, average contents is 2 g per tonne)
- The development of such deposits as Sukhoy Log and Mayskoye will replenish alluvial reserves and help Russia obtain a leading position in the global gold mining industry.

The Improved Investment Climate

Economic and political stabilisation, tax reform and a thorough improvement of the investment climate during the previous two years have strengthened the position of Russia in the world economy. During last two years, the Russian state worked hard for the liquidation or, at least, the lowering of the so-called “Russian discount”. The cancellation of a 5% export duty for refined gold contributed to increased investment in the industry and a rise in precious metal output.

The Consolidation of the Industry

The Mining and Metallurgical Company Norilsk Nickel has taken a 100% stake in the largest Russian gold mining company, Polyus. The new corporation will rank amongst world’s first-rate gold mining companies.

This event inaugurated a new stage in gold mining industry development in Russia; the industry can meet the requirements of today’s reality and market. The example of Norilsk Nickel is typical of the consolidation process. Polyus is an effective company; its net profit can be directed to the development of production. In addition, aiming to expand activities, the high financial and international prestige of Norilsk Nickel can contribute to capital formation.

Positive Public Perception and Personnel Potential

The positive public perception of this industry favourably distinguishes Russia from other gold mining countries. Gold mining is of exceptional importance for budget revenues in some regions, for example, Magadan, Irkutsk, Amur and Chita, which is why its development enjoys the support and approval of local authorities and public opinion.

Russian gold mining regions are the most distant from economically developed regions and noted for their extreme climate. In fact, gold mining determines the industrial potential of these territories. Besides that, Russian gold miners never forget the tremendous social significance of this industry: every one tonne of gold mined directly or by implication ensures employment for one thousand people. The development of machinery, construction industry, prospecting and jewellery depends on gold mining. It is of principal importance to us that the gold mining industry should provide life for the territories where it is carried out.
Thanks to the special position historically held by gold mining in the Soviet Union, the industry today has exceptionally trained and experienced personnel at its disposal. The first-rate qualifications of Russian geologists and mining engineers are recognised around the world and are never in doubt.

### THE LARGEST RUSSIAN GOLD MINING COMPANIES

#### OUTPUT OF GOLD IN 2002

<table>
<thead>
<tr>
<th>Company</th>
<th>Region</th>
<th>Basic deposits</th>
<th>Volume of output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyus and Norilsk Nickel</td>
<td>Krasnoyarsk</td>
<td>Olympiadinskoye, Taimyr, Kola Peninsula</td>
<td>18,500, 19,620, 29,600</td>
</tr>
<tr>
<td>Omolon Gold Mining Co.</td>
<td>Magadan</td>
<td>Kubaka</td>
<td>13,900, 13,502, 12,500</td>
</tr>
<tr>
<td>Lenzoloto</td>
<td>Irkutsk</td>
<td>Alluvials</td>
<td>5,700, 7,053, 9,200</td>
</tr>
<tr>
<td>Susuman Zoloto</td>
<td>Magadan</td>
<td>Alluvials</td>
<td>4,000, 4,526, 5,800</td>
</tr>
<tr>
<td>Mnogovershinnoye</td>
<td>Khabarovsk</td>
<td>Mnogovershinnoye</td>
<td>3,200, 4,799, 5,700</td>
</tr>
<tr>
<td>Buryatzoloto</td>
<td>Buryatia</td>
<td>Zun-Kholba, Barum-Kholba</td>
<td>3,954, 4,578, 4,700</td>
</tr>
<tr>
<td>Polymetal</td>
<td>Ural</td>
<td>Vorontsovskoye, Ducat</td>
<td>917, 2,584, 4,200</td>
</tr>
<tr>
<td>Amur</td>
<td>Khabarovsk</td>
<td>Alluvials</td>
<td>800, 2,966, 4,000</td>
</tr>
<tr>
<td>Pokrovsky Rudnik</td>
<td>Amur</td>
<td>Pokrovskoye</td>
<td>1,600, 2,814, 2,300</td>
</tr>
</tbody>
</table>

Russia today is one of few countries where the dynamic development of gold mining companies is possible due to:

- Unique high quality long-term gold ore reserves
- Improved investment climate and tax regime stabilisation
- Positive authorities’ and non-governmental organisations’ attitude to industry development.

### SECTION 3: PROSPECTS FOR GOLD MINING IN RUSSIA

#### The Formation of a World Standard Mining Company

Russia’s extremely favourable competitive position in today’s world markets can only be preserved by:

- Setting world class deposits – Sukhoy Log, Natalka, Aldan Group – into industrial operation
- Executing effective exploration programmes and replenishing gold reserves
- Financing prospective research efforts
- Having available a skilled and well-trained labour force.

Only a mining company with the proper financial and technical resources can achieve all these goals.

The independent geological prospecting of gold is an important direction of Russian gold mining companies’ investment policy. During the last ten years, the overwhelming majority of Russian enterprises were developing deposits explored during the Soviet period. The state, and, therefore, all taxpayers, cannot and should not assume the risks related to exploration, construction and financing of R and D programmes of commercial significance.

The gold mining company Polyus is facing the task of developing exploration in the Krasnoyarsk Territory and other regions and has enough potential to do that. The company will increase output in this region by 10-15 tonnes of gold due to prospecting works. Several licensed districts for exploration are at the disposal of Norilsk Nickel in Taimyr. Polyus is about to receive some new prospecting licenses in other regions.

### Closed Joint Venture Gold Mining Company Polyus Today

Polyus is the largest gold mining company in Russia and has abundant experience in construction works and the exploitation of large-scaled mining complexes. Some details:
output of gold came to 25,000 kg. in 2002; together with Norilsk Nickel, it was 29,600 kg.

- revenues amounted to $250 million a year
- a complex able to process refractory gold-sulphide ores by means of bio-leaching has been constructed for the first time in Russia
- the company self-finances exploration works and has an in-house geological service
- together with the main shareholder, Norilsk Nickel, Polyus has enough financial resources to develop large gold deposits.

The company has the following strategic tasks on agenda for the next four to five years:

- preserve and strengthen its leading position in Russian gold mining
- maintain high profitability of production
- form a horizontally-integrated gold mining company
- provide long-term competitive advantages
- become one of the world’s largest mining companies.

Taking into account the above-mentioned tasks, it is expected to:

- increase economic output up to 100 tonnes of gold within four – five years
- increase the reserve base up to two thousand tonnes in two – three years
- construct three to four new mining complexes.

The above-mentioned tasks and targets can be achieved by:

- further development of the Olimpiada deposit and increasing the processing facility
- acquisition of prospective gold mining companies and promising exploration licenses
- participation in tenders and auctions for the subsoil use
- development and accomplishment of an effective exploration programme.

Achieving the above-mentioned goals will allow the company to:

- increase and diversify its reserve base to secure control over deposits of long-term importance for the gold mining industry in Russia
- eliminate its dependence on conditions and peculiarities of one-deposit exploitation
- enter into new regions, creating a platform for further corporation development on a countrywide scale
- secure leading position in process of gold mining consolidation
- position itself in the world market as one of the largest gold producers in Eurasia.

Polyus has every reason to participate in the exploitation of the largest Russian deposits, Sukhoy Log, Natalka and Kuranakh. In the event that Polyus receives the right to develop the above-mentioned projects:

- approximately $1 billion will be invested in their development
- they will be run by a first-rate company armed with the necessary manpower, financial and technical resources
- short-term speculation and change of owners will be impossible
- three new world standard mining complexes will be constructed in a timely manner
- putting the largest Russian deposits into operation will raise Russia’s output of gold to 230 tonnes.

Conclusions

Gold still plays its special “reserve” or “stabilising” role in the world economy.

The Russian gold mining industry is restoring its formerly lost competitive position and is becoming one of the mostly inviting and dynamically developing industries within the world mining community.

A new stage of industry development is connected with the consolidation of companies, projects and the foundation of large national gold-mining companies of world-class level.

Only large national mining companies will have the ability to let Russia preserve its competitive advantages and solve new tasks, such as geological subsoil study, R and D work and manpower training. ■