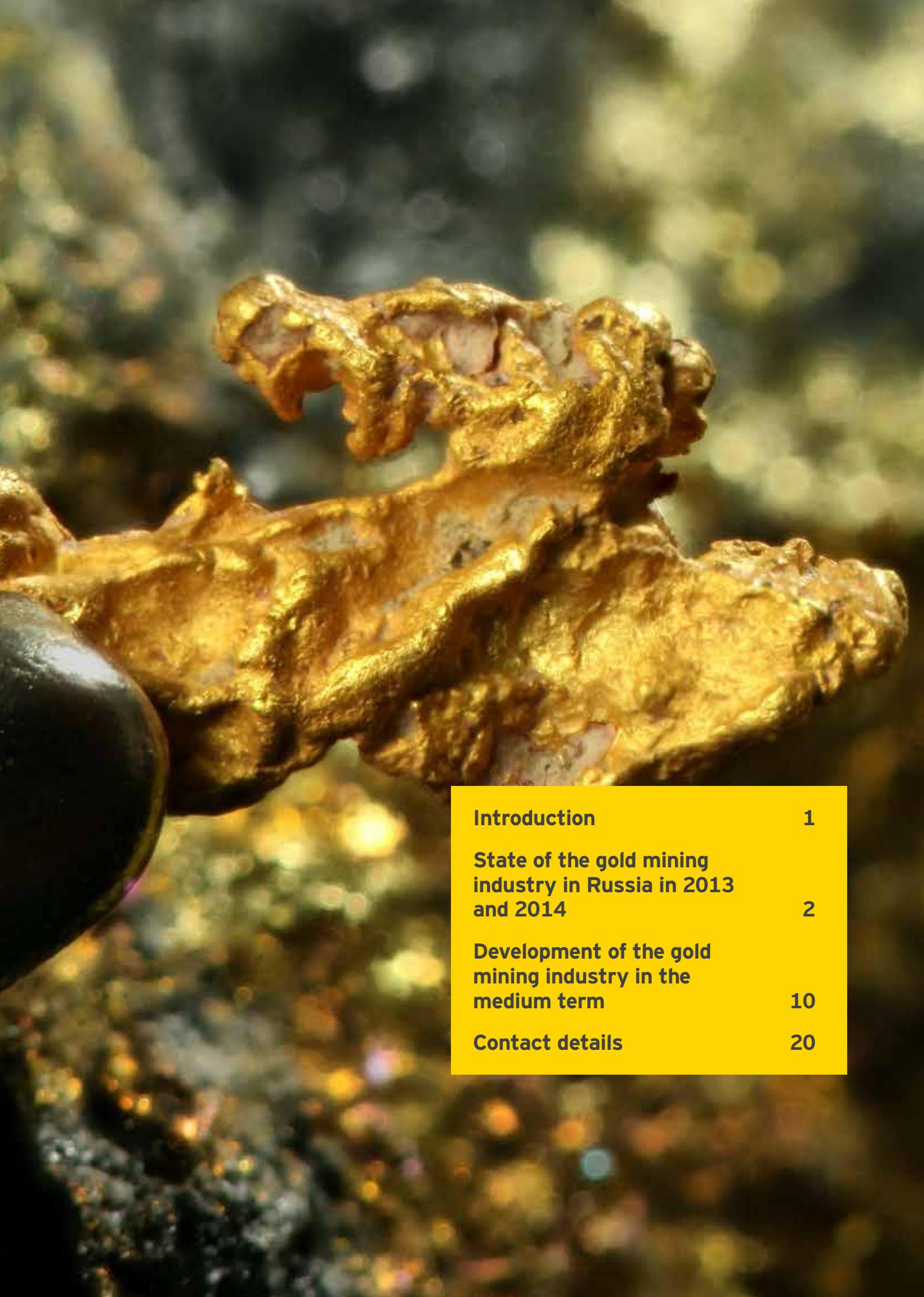


**Overview of
the gold mining
industry in Russia
in 2013-2014**



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Introduction



This overview was prepared by EY with the assistance of Union of Gold Producers of Russia, who is celebrating their 20th anniversary this year.

From 1995 to 2014, the Russian gold mining industry changed dramatically, almost doubling its volume of extraction; at the same time, wholly state-controlled regional conglomerates of small local gold producers conducting primarily seasonal placer gold mining operations were replaced by private companies with no state ownership. Some of these have grown into large international holdings with modern gold ore production, which is the driving force of the Russian gold mining industry today.

Falling global gold prices in 2013, followed by the political and economic changes in 2014, brought forth new challenges for the industry. In this review, we analyze whether the Russian gold mining industry is able to respond to these challenges and what it may expect in the future.

In 2014, the executives of gold producers were careful in assessing market prospects. How will the industry develop in the near term? What problems need to be solved? To get answers to these and other questions, EY, together with Union of Gold Producers of Russia, interviewed Russian gold producers and prepared an overview that reflects the trends and problems in the industry's development. We would like to thank all of the survey participants for their contribution, and hope that they become our regular respondents.

A handwritten signature in black ink, appearing to read 'Evgeni Khrustalev'. The signature is stylized with a large, sweeping initial 'E' and a long, horizontal flourish extending to the right.

Evgeni Khrustalev
Partner, Head of the Mining & Metals Group
in the CIS

State of the gold mining industry in Russia in 2013 and 2014

Russia's gold reserves exceed 12.9 thousand tonnes,¹ making it the world's second- or third-largest gold reserve alongside China, depending on the classification of reserves in both countries.



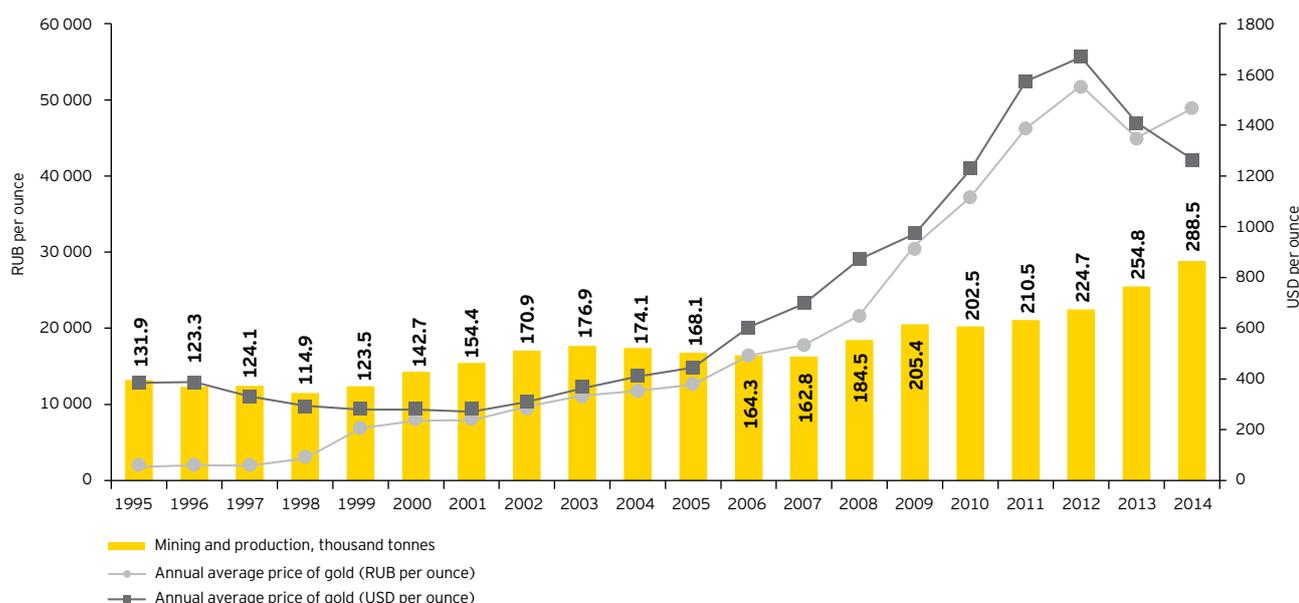
The gold mining industry in Russia

The Russian gold mining industry has developed gradually since 1998, when gold mining was at an all-time low. In 2008-09, the industry saw a period of rapid growth in both prices and gold mine production, leading to today's current period of high production growth and rising gold prices in rubles due to the devaluation of the national currency (global gold prices in US dollars remain low).

From 1995 to 2014, Russia's gold mine production increased more than twofold.

According to Union of Gold Producers of Russia, Russia produced 288.5 tonnes of gold in 2014 (including byproduct and secondary gold production), a 13.2% increase from the previous year. The production of gold bullions from primary gold deposits (or mines) increased 6.9% (to 230.7 tonnes); from byproduct gold, this figure increased 1.5% (to 16.2 tonnes) and from secondary gold by 101.6% (to 35.8 tonnes). The production of gold-containing concentrates for sale rose by 7.2%, reaching 5.8 tonnes.

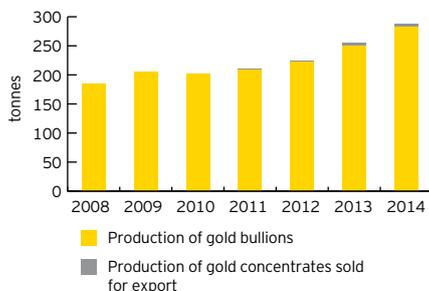
Russian gold mining and production



Source: Union of Gold Producers of Russia

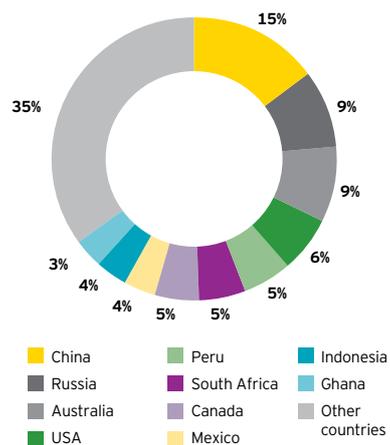
¹ According to State Reserve Balance as of 1 January 2014

Gold production in Russia in 2008-14



Source: Union of Gold Producers of Russia

Ten largest gold mining countries in 2014



Source: Thomson Reuters GFMS, Union of Gold Producers of Russia

Key indicators of the Russian gold market in 2008-14

	2008	2009	2010	2011	2012	2013	2014
Mined, tonnes	163.9	178.4	176.3	185.9	197.4	215.7	230.7
Byproduct, tonnes	12.5	14.5	12.7	14.5	15.5	16.0	16.2
Secondary, tonnes	8.1	12.4	12.6	7.9	8.5	17.8	35.8
<i>Total production of gold bullions, tonnes</i>	<i>184.5</i>	<i>205.4</i>	<i>201.5</i>	<i>208.3</i>	<i>221.4</i>	<i>249.4</i>	<i>282.7</i>
<i>Production of gold concentrates sold for export, tonnes</i>	<i>-</i>	<i>-</i>	<i>1.0</i>	<i>2.2</i>	<i>3.3</i>	<i>5.4</i>	<i>5.8</i>
Total production of gold bullions and gold concentrates, tonnes	184.5	205.4	202.5	210.5	224.7	254.8	288.5
Gold bullion production growth rate, %		11.3%	-1.9%	3.4%	6.3%	12.7%	13.2%
Gold concentrate production growth rate, %				115.5%	50.4%	65.0%	7.2%
Gold bullion and gold concentrate production growth rate, %		11.3%	-1.4%	3.9%	6.7%	13.4%	13.2%

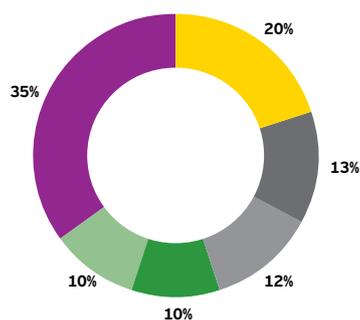
Source: Union of Gold Producers of Russia

Gold production increased following the implementation of new and the development of existing facilities at deposits in the Omolon Hub, and at the Mayskoye and Albazino deposits (Polymetal Int.), the Verninskoye deposit (Polyus Gold Int.), the Albyn deposit (Petropavlovsk Plc.), the Dvoynoye deposit (Kinross Gold), the Gross and Berezitovy deposits (Nordgold), the Belaya Gora (Highland Gold), Svetlinskoye and Bereznyakovskoye deposits (Uzhuralzoloto Group of Companies) and others. The increase is also attributable to the higher volumes of gold extracted in the process of separating gold from ore at the Olympiadinskaya, Verninskaya and Kuranakhsкая gold processing plants (Polyus Gold Int.), Omsukchanskaya and Lunnaya gold processing plants and Mayskaya gold processing plant (Polymetal Int.), and other deposits.

The twofold increase in secondary gold production was the result of a rise in the processing of scrap and waste at Ekaterinburg Non-Ferrous Metal Processing Plant JSC and the Krastsvetmet JSC refinery plant.

According to Union of Gold Producers of Russia, in 2014 Russia became the second-largest gold mining country in the world after China, accounting for 8.7% of that year's global mined gold output.

Five largest gold mining regions in Russia



- Krasnoyarsk Territory
- Chukotka Autonomous District*
- Amur Region
- Magadan Region
- Sakha Republic (Yakutia)
- Others

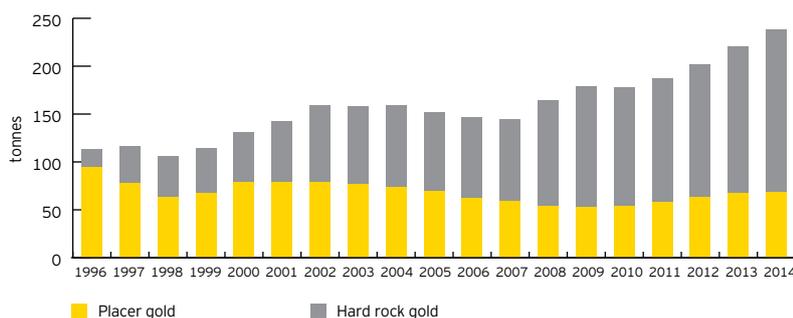
Source: Union of Gold Producers of Russia

* The data includes gold-containing concentrates exported from the Russian Federation

Gold is mined in 22 Russian regions. In 2014, Russia's gold output totaled 236.5 tonnes, including 5.8 tonnes produced in the form of gold-containing concentrates. Thirteen Russian regions extract more than 1 tonne of gold each year.



Gold mining from placer and hard rock sources in Russia



Source: Union of Gold Producers of Russia

Five largest gold mining regions in Russia

	2008	2009	2010	2011	2012	2013	2014
Krasnoyarsk Territory	33.5	33.8	36.1	39.6	44.0	47.3	47.2
Chukotka Autonomous District*	20.1	31.2	24.9	20.1	18.0	21.4	30.3
Amur Region	18.8	21.9	19.8	29.1	28.7	30.7	29.3
Magadan Region	13.9	13.7	15.6	15.4	19.6	21.1	23.9
Sakha Republic (Yakutia)	18.9	18.6	18.6	19.4	20.8	22.0	23.1
Other regions	58.7	59.2	62.3	64.6	69.6	78.7	82.6
Total	163.9	178.4	177.3	188.1	200.7	221.1	236.5

Source: Union of Gold Producers of Russia

* Data is provided taking into account the production of gold concentrates exported from Russia.

Krasnoyarsk Territory remains the largest gold mining region in the country. Following the depletion of reserves at the Kupol mine, the Chukotka Autonomous District saw a permanent drop in production in 2011-12, but the full-scale development of the Dvoynoe deposit put it in second place. Amur Region came in third. As a result of increased rock mass processing at placers and mine production growth at hard rock deposits in the Omolon Hub (the Sopka Kwartsevaya, Dalneye and Tsokol Kubaka), Magadan Region moved into fourth place. The Sakha Republic (Yakutia), Kamchatka Territory, Kemerovo Region and other regions are looking to boost gold mine production.

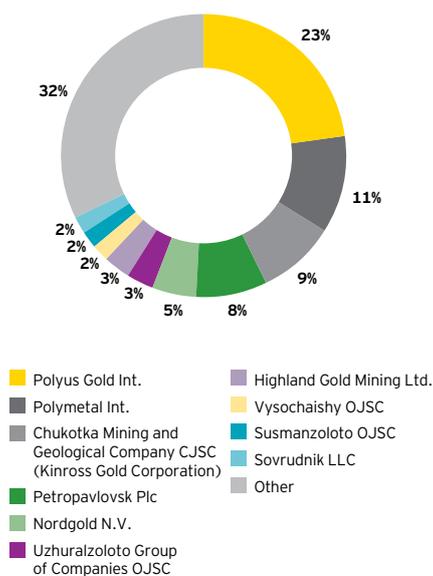
In 2014, gold mining from hard rock deposits increased by 10.4% (to 169.7 tonnes) and from placer deposits by 1.4% (to 68 tonnes) year on year. It worth noting that 2009 saw the lowest placer gold mining rate (52.7 tonnes). For the first time since 2000, there has been modest but sustainable growth in placer gold mining.

Leading Russian gold mining companies

The volume of gold mined by Russian companies has been on the rise for several years, and 2014 was no exception. Both industry leaders and smaller businesses managed to increase their mined gold output.

Based on the results of 2014, 29 companies with an annual gold output of over 1 tonne account for 82% of total gold mine production in Russia. The ten largest Russian gold producers represent 68% of the market.

Ten largest Russian gold mining companies in 2014



Source: Union of Gold Producers of Russia

Twenty largest Russian gold mining companies by gold mine production, tonnes

	2012, tonnes	2013, tonnes	2014, tonnes	Share in 2014, %	Growth rate in 2013/2014, %	Forecast for 2015, tonnes
Polyus Gold Int.	48.8	51.3	52.7	22.8%	2.7%	50.7 - 53.2
Polymetal Int.	15.2	21.7	26.3	11.4%	21.2%	27.0
Chukotka Mining and Geological Company CJSC (Kinross Gold Corporation)	14.9	15.6	19.5	8.5%	25.0%	22.0
Petropavlovsk plc	22.1	23.1	19.4	8.4%	-16.0%	21.1 - 21.8
Nordgold N.V.	10.2	9.9	10.6	4.6%	7.1%	10.8
Uzhuralzoloto Group of Companies OJSC	6.4	7.0	7.3	3.2%	4.3%	7.5
Highland Gold Mining Ltd.	6.0	6.2	6.8	2.9%	9.4%	7.0 - 7.4
Vysochaishy OJSC	5.3	5.4	5.5	2.4%	0.7%	5.5
Susmanzoloto OJSC	3.7	3.9	4.0	1.7%	2.0%	3.9
Sovrudnik LLC	4.0	4.2	4.0	1.7%	-4.3%	4.0
Seligdar OJSC	3.0	3.7	3.6	1.6%	-1.6%	3.8
OME Zapadnaya CJSC	2.2	2.3	2.6	1.1%	12.6%	2.7
Poisk LLC, mining cooperative	2.3	2.7	2.4	1.0%	-10.4%	2.3
Vitim, mining cooperative	2.2	2.4	2.4	1.0%	1.7%	2.3
Tal LLC, mining cooperative	0.6	1.6	2.3	1.0%	43.8%	2.3
Priisk Solovyevsky OJSC	2.5	2.2	2.2	1.0%	1.4%	2.2
Berelekh Mining Company OJSC*	-	-	2.1	0.9%	No data	2.0
Arbat Concern CJSC	1.1	1.6	2.0	0.9%	28.8%	2.0
Zoloto Kamchatki OJSC (Renova Group)	1.5	1.2	1.8	0.8%	49.6%	1.8
Karalveem Mine OJSC (Leviev Group)	1.4	2.0	1.6	0.7%	-20.6%	1.5
Other companies	43.8	47.8	51.6	22.4%	8.1%	
Total **	197.4	215.7	230.7		7.0%	233

Source: Union of Gold Producers of Russia

* In 2012-13, Berelekh Mining Company OJSC was part of the Petropavlovsk Group. Since 2014, Kolymanefteprodukt LLC owns 76.62% of Berelekh's share capital.

** Without byproduct and secondary gold

Union of Gold Producers of Russia expects 2015 gold mine production in Russia to rise by no more than 1% year on year.

Russian gold mining companies with foreign participation

The gold mining industry in Russia and the CIS has been open to foreign investment since the mid-1990s. Today, we can say that the Russian gold mining industry is much better integrated into the global economy than other national industry sectors.

The companies with foreign participation considered in this overview have different ownership structures. For example, Chukotskaya Mining & Geological Co., a leading gold mining company in Russia, is wholly owned by major global gold producer Kinross Gold Corp., and for that reason we refer particularly to the latter in our overview. A number of smaller companies have the same foreign ownership. Other companies

(including Polyus Gold, Polymetal, and Petropavlovsk) are technically registered in foreign jurisdictions, and as a result of listing abroad have significant foreign ownership, while being largely controlled by their Russian shareholders. There are also companies with a smaller share of foreign ownership.

The main difference between companies with and without foreign participation is their management and corporate reporting system. For companies with foreign participation, their system is equivalent with international standards and practices, and very similar to the one used in international companies around the world.

The share of Russian companies with foreign participation in total gold mined in Russia has been growing since the mid-1990s, and it remained relatively high in 2008-14, accounting for 54%-60% of the aggregate gold mined in Russia.

In 2014, these companies accounted for 59.7% of total gold mining and production in Russia. In addition, gold mined by Russian companies with foreign participation increased by 7.1% year on year to 141.2 tonnes in 2014.

In 2014, shares of Russian companies with foreign participation and their assets in Russia were traded on the following platforms: Polymetal Int., Polyus Gold Int., Petropavlovsk Plc and Nord Gold N.V. were traded on the London Stock Exchange (LSE); Kinross Gold Corp. was traded on the New York Stock Exchange (NYSE); Auriant Mining AB was on the Stockholm Stock Exchange and American over-the-counter market (NASDAQ); and Mangazeya Mining Ltd. was on the Toronto Stock Exchange (TSX-V). Highland Gold Mining and Trans-Siberian Gold were listed on the Alternative Investment Market (AIM), which is part of the London Stock Exchange.

Gold mined by companies with foreign participation and assets in Russia

Companies	2008, tonnes	2009, tonnes	2010, tonnes	2011, tonnes	2012, tonnes	2013, tonnes	2014, tonnes	Growth rate in 2013/2014, %
Polyus Gold Int.	38.3	38.0	39.7	42.8	48.8	51.3	52.7	2.7%
Polymetal Int.	8.9	9.3	11.1	11.0	15.2	21.7	26.3	21.2%
Kinross Gold Corp	15.4	25.6	19.9	16.1	14.3	14.9	21.3	42.6%
Petropavlovsk Plc	12.2	14.8	15.8	19.6	22.1	23.3	19.4	-16.5%
Nord Gold N.V.	6.0	9.8	9.3	10.6	10.2	9.9	10.6	7.1%
Highland Gold Mining Ltd*	5.1	5.1	6.3	5.9	6.0	6.2	6.8	9.4%
Leviev Group	1.2	2.0	1.9	1.4	1.4	2.0	1.6	-20.8%
Angara Mining Plc **	1.1	0.9	0.9	No data				
Auriant Mining AB ***	0.8	0.4	0.6	0.4	0.6	1.1	1.1	-5.9%
Mangazeya Mining Ltd****	No data	No data	No data	0.5	0.5	0.5	0.3	-33.1%
Trans-Siberian Gold	No data	No data	No data	0.2	0.9	0.9	1.1	21.6%
Total	89.1	106.0	105.4	108.5	120.1	131.8	141.2	7.1%
<i>% of total Russian output</i>	<i>54.4%</i>	<i>59.4%</i>	<i>59.5%</i>	<i>57.7%</i>	<i>59.9%</i>	<i>59.6%</i>	<i>59.7%</i>	

Source: Union of Gold Producers of Russia

* Including gold-containing concentrates produced by the Novosheokinsky Mine and exported from the Russian Federation.

** In 2010, Gazprombank acquired an interest in Vasilievsky Mine CJSC and Angara Mining Plc.

*** Auriant Mining AB is the former name of Central Asia Gold AB.

**** Mangazeya Mining Ltd is the former name of White Tiger Gold Ltd.

Over the past 10-15 years, the number of Russian companies with foreign participation and foreign companies with Russian shareholders and assets in Russia has grown steadily; the same can be said for their gold mine production in Russia.

Some companies that built up their businesses with Russian assets and later became formally international made successful attempts to acquire foreign assets and eventually became major international players in the gold mining industry.

Based on the results of 2014, apart from Kinross (5th) the list of top 30 global gold producers also included Polyus (9th), Nord Gold (19th), Polymetal (21th) and Petropavlovsk (27th).

Investment in the industry

Investment in the Russian gold mining industry comprises capital injections from market players. Key areas for investment are exploration, the development of new deposits, and the construction of mines and processing plants.

Gold mining industry respondents say that investment in the industry decreased in 2013, and that some high-capital projects were frozen following the drop in US dollar and ruble gold prices.

In 2014, the major investors in the industry were Polyus Gold Int., Polymetal Int. and Petropavlovsk plc, with a total investment input of over USD 800 million. The gold mining results for 2014 have shown that investment ensured an increase in Russia's gold mine production by 13%.

Many market participants expect companies to reduce capital investment in 2015.



M&A transactions

In 2014, eight transactions were made in the Russian gold mining sector - the lowest number of M&A deals in the Russian market in comparison with previous periods.

M&A

In April 2015, Mangazeya Mining LLC closed a deal to sell its stake in Geotsvetmet LLC to the Chinese corporation Tyan Khe. The total value of the transaction amounted to USD 9 million.

M&A activity in Russia's gold mining sector in 2012-14

Asset	Buyer	Seller	Transaction date	Country	Transaction value, USD mln	Size of stake acquired, %
Buryatzoloto OJSC	Nord Gold N.V.	Minority shareholders	19 Dec 14	Russia	4.3	8.2%
Seligdar OJSC	Direct Investments LLC	Unknown	09 Dec 14	Russia	No data	25.0%
Kara-Beldyr deposit	Auriant Mining AB (publ)	Centerra Gold Inc.	30 Oct 14	Russia	No data	70.0%
GeoProMining Investment	Sberbank Capital	GeoProMining Investment	12 Sep 14	Russia	No data	25.6%
Ural-Polymetal CJSC	Polymetal International Plc	Unknown	12 Sep 14	Russia	20.0	50.0%
Seligdar OJSC	Unknown	Diapolyus Project	25 Aug 14	Russia	No data	16.5%
Krasny Project	GV Gold (Vysochaishy OJSC)	Kopy Goldfields AB	13 Aug 14	Russia	7.0	51.0%
Berelekh Mining Company OJSC	Kolymanefteprodukt LLC	Susumanzoloto Susumansky Mining and Processing Works OJSC	06 Mar 14	Russia	No data	76.6%
Kavkaz and Prodolny deposits	Siberian-Ural Gold Mining Company LLC	Kopy Goldfields AB	23 Dec 13	Russia	1.5	100.0%
Priisk Solovyevsky OJSC	Private Investor	Unknown	01 Dec 13	Russia	No data	4.0%
Priisk Solovyevsky OJSC	Private Investor	Private investors	29 Nov 13	Russia	No data	9.5%
Berelekh Mining Company OJSC	Susumanzoloto Susumansky Mining and Processing Works OJSC	Petropavlovsk Group	29 Nov 13	Russia	25.0	76.6%
Sintek Inc.	Converge Global, Inc.	Unknown	05 Nov 13	Russia	2.3	100.0%
Polyus Gold International Limited	Private Investor	Private Investor	16 Aug 13	Russia	No data	18.5%
Central Part of the Taryn Ore Field	GV Gold OJSC	State	25 Jul 13	Russia	0.5	100.0%
Verkhnetisskaya Ore Mining Company CJSC	Krasnoyarskaya Mining and Geological Company OJSC	Unknown	28 Jun 13	Russia	No data	21.0%
Nevyanskaya Group CJSC	Polymetal International Plc	VTB Capital CJSC	31 May 13	Russia	6.9	75.0%
Zapadnaya Gold Mining Limited	VTB Capital CJSC	Unknown	24 Apr 13	Russia	32.0	13.2%
Seligdar OJSC	Private Investor	Unknown	09 Sep 13	Russia	No data	1.1%
Maminskaya Gornorudnaya kompania ZAO	Polymetal International Plc	Vitalex Investments Ltd, Arrowline Investments Ltd	09 Apr 13	Russia	96.5	100.0%
Bazovye Metally CJSC (Kekura)	Highland Gold Mining Ltd.	Unknown	02 Apr 13	Russia	212.0	100.0%
Polyus Gold International Limited	Receza Limited, Lizarazu Limited	ONEXIM Group	22 Feb 13	Russia	3,616.1	37.8%
Bazovye Metally CJSC	Stanmix Holding Limited	Unknown	24 Jan 13	Russia	212.0	100.0%
Olymp LLC (Olcha)	Polymetal International Plc	Ovoca Gold plc	24 Jan 13	Russia	13.6	100.0%
Taryn Ore Field	OJSC GV Gold	State	24 Jan 13	Russia	13.3	100.0%
Nevyanskaya Group CJSC	Polymetal International Plc, VTB Capital CJSC	Ubergot Investments Limited	17 Dec 12	Russia	10.0	100.0%

High River Gold Mines Ltd.	Nord Gold N.V.	Group of investors	08 Dec 12	Russia	294.4	24.9%
Omchak Gold Mining Company CJSC	Susumanzoloto Susumansky Mining and Processing Works OJSC	Petropavlovsk Group	04 Dec 12	Russia	21.7	65.0%
GV Gold Open Joint Stock Company	Unknown	Unknown	24 Aug 12	Russia	No data	2.0%
Zolotoy Standart LLC	Kingwell Group Limited	Private Investor	15 Aug 12	Russia	13.0	51.0%
Klen LLC	Highland Gold Mining Ltd.	Unknown	09 Jul 12	Russia	53.7	100.0%
Nord Gold N.V.	Private investors	Private Investor	02 Jul 12	Russia	16.3	1.0%
Seligdar OJSC	Private Investor	Unknown	29 Jun 12	Russia	No data	8.2%
Seligdar OJSC	Ladya-Finance LLC	Unknown	22 May 12	Russia	No data	11.6%
GRK Amikan LLC (Veduga)	Polygon Gold Inc.	Polymetal International Plc	14 May 12	Russia	60.0	100.0%
Polyus Gold International Limited	Chengdong Investment Corporation	Jenington International Inc	30 Apr 12	Russia	425.0	5.0%
Polyus Gold International Limited	VTB Bank CJSC	Jenington International Inc.	10 May 12	Russia	211.0	2.5%
Zapadnaya Gold Mining Limited	VTB Capital CJSC	Unknown	30 Apr 12	Russia	No data	No data
Seligdar OJSC	Unknown	Private Investor	23 Apr 12	Russia	No data	0.7%
Polymetal International Plc	PMTL Holding Limited	Group of investors	17 Feb 12	Russia	1,123.9	16.7%
GRK Amikan LLC	Polymetal International Plc	AngloGold Ashanti Ltd.	08 Feb 12	Russia	20.0	50.0%

Source: Capital IQ, Mergermarket, Union of Gold Producers of Russia, EY analysis

A sharp correction in the world price of gold in spring 2013 significantly decreased investor interest in gold mining and exploration projects around the world. Following the large-scale write-off of losses by industry players, investors are showing even less interest in this sector.

Current political and economic factors are putting more pressure on the value of Russian gold assets.

Most investors believe that the risk of investing in Russia has risen dramatically since 2014. As a result, investors have been reluctant to finance Russian gold mining projects, leading to a lower value of assets for mergers and acquisitions.

This is combined with the high and growing profitability of gold mining projects driven by the sharp devaluation of the Russian ruble and larger returns in rubles (and in foreign currency) while costs in rubles remain the same (costs in US dollars have substantially decreased). Today, beyond the period of our overview, these factors are more relevant than ever.

We may presume, however, that such rapid and diverse changes causing the absolute decline in Russian gold assets along with their high profitability may spark great interest among investors in other sectors and jurisdictions. This will stimulate more intense M&A activity in the Russian gold mining industry.

EY's opinion

We expect the Russian gold mining sector to be a hive of M&A activity in 2015-16. This will inevitably result in the consolidation of the industry, which is required in order for it to remain competitive.



Overview results: Development of the gold mining industry in the medium term



Survey participants

We surveyed a wide range of companies, including 12 leading industry players. Half of these companies are the leaders in mined gold output and reserves, while the other half deliver relatively lackluster performance. The respondents consisted of businesses with and without foreign participation, as well as public and non-public companies.

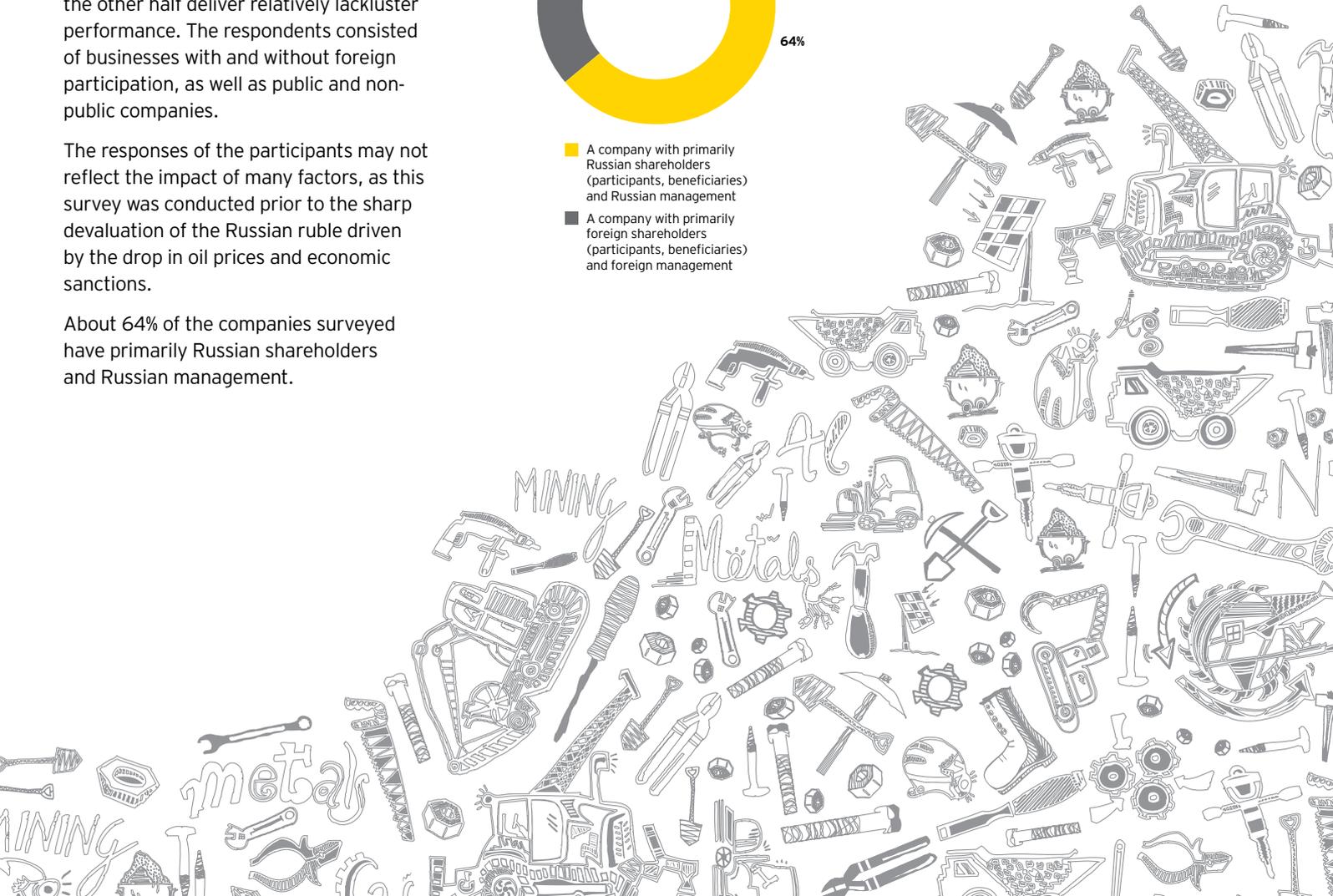
The responses of the participants may not reflect the impact of many factors, as this survey was conducted prior to the sharp devaluation of the Russian ruble driven by the drop in oil prices and economic sanctions.

About 64% of the companies surveyed have primarily Russian shareholders and Russian management.

Which of the following applies to your company?



- A company with primarily Russian shareholders (participants, beneficiaries) and Russian management
- A company with primarily foreign shareholders (participants, beneficiaries) and foreign management



Accession to the WTO and the introduction of economic sanctions

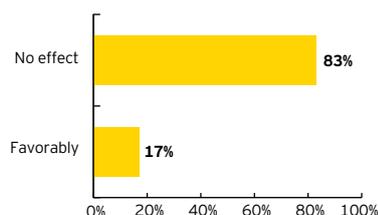
Russia's major WTO commitments:

- ▶ **Removal of the existing and a ban on new import restrictions** that contradict WTO rules, including quotas, bans and import permits.
- ▶ **Joining the WTO Government Procurement Agreement** within four years after accession to the WTO. The Agreement contains a whole set of rules and procedures for government procurement tenders and requires equal conditions for Russian and foreign vendors.
- ▶ **Restructuring subsidies in industry** with a view to abolishing the subsidies banned by the WTO or changing them in such a way that granting them is not dependent on whether the products are exported or whether Russian products are privileged over the imported ones.

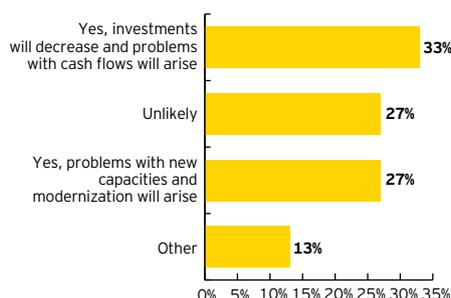
The opinion of gold producers on Russia's accession to the WTO and the effect of economic sanctions

In answering the question of how Russia's accession to the WTO affected their operations, 83% of respondents indicated that it had no influence on their business. At the same time, 17% said it had a favorable impact.

How did Russia's accession to the WTO affect your company's operations?



Will economic sanctions and/or limitations have an impact on your business in Russia?



Effect of sanctions

Market participants have different opinions with regard to the potential impact of economic sanctions on the gold mining business in the Russian Federation. For example, 27% of the respondents believe that the impact is unlikely.

Most companies believe that the situation will deteriorate and they will be affected by the economic sanctions to one extent or another, 33% expect a decrease in investment and problems with cash flows, and 27% think that there will be problems with new capacities and modernization.

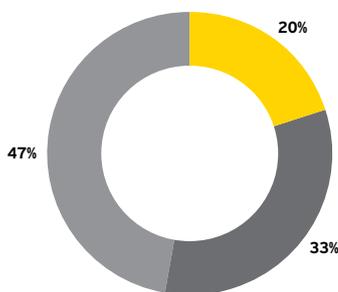
Among the other potential consequences of economic sanctions, 13% of the respondents mentioned a drop in the supply of high-tech equipment and in the number of laboratory and analytical centers, as well as less favorable loan terms.



Cost management, production and logistic efficiency

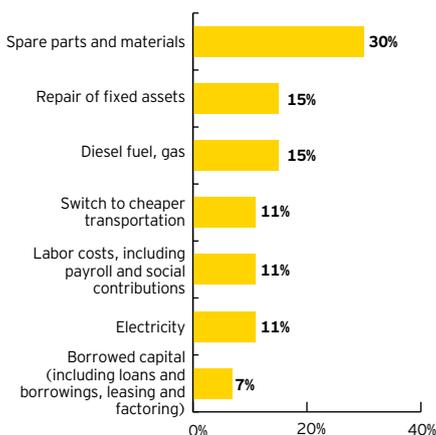
According to the survey participants, the most significant problems of the Russian gold mining industry pertain to rising energy tariffs, ineffective legislation on subsoil use, the lack of infrastructure required for the development of promising gold deposits, and low gold prices in US dollars. All of these issues make the industry less attractive for investment.

What is your company's attitude towards measures designed to reduce and optimize costs?

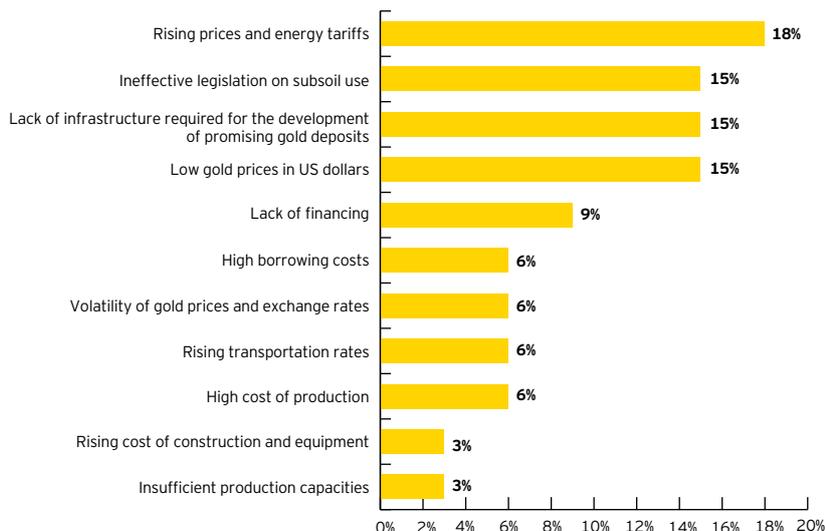


- Optimization was performed before 2013, results obtained in 2013
- Optimization was performed before 2013, results obtained in 2014
- Optimization is planned for 2014-15

What production costs do the measures designed to reduce and optimize costs relate to?



What are the most significant problems for your company at the moment?



Nearly half of the respondents (around 47%) began to optimize costs in 2014 and plan to continue in 2015.

Cost cutting and efficiency improvement in the global gold mining industry

EY's Global Center interviewed the heads of 60 global gold mining companies in order to understand:

- ▶ The key productivity challenges the sector is facing
- ▶ The key initiatives being developed to overcome these challenges
- ▶ Better practices to manage these initiatives in the post supercycle environment

The executives we interviewed told us that productivity is the number one challenge in the mining sector and is firmly on the CEO's agenda. The expected declines in labor, capital and material productivity all occurred, but an additional factor of economies of scale has played a big role in the decline.

EY has been tracking the strategic risks to the sector over the past seven years and publishes these in our annual report *Business risks facing mining and metals 2014-2015*.

A decade of higher prices concealed the impact of falling productivity in the sector, and it was only in 2013 when commodity prices softened that productivity improvement (along with margin protection) moved up to the number two spot of our risk ranking. The super cycle altered the DNA of mining companies to adapt the processes, performance measures and culture solely toward growth. Boards and CEOs are now realizing that regaining lost productivity and gaining new ground is critical for long-term return on capital employed, and requires a whole-of-business response. This is why in our *Business risks in mining and metals 2014-2015* report, productivity improvement is the top risk facing the sector.

In our report *Productivity in mining: a case for broad transformation*, we observed that the sector was still largely focused on point solutions and traditional cost-cutting exercises. Many mining companies have achieved excellent results in cost reduction as evidenced by commentary at the time of half yearly results:

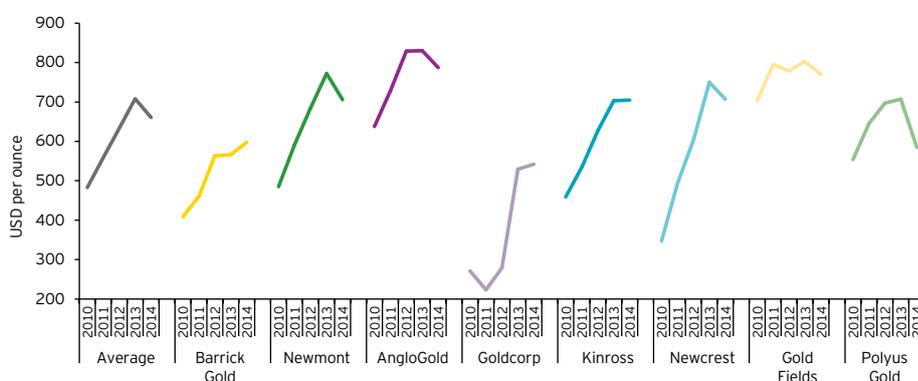
- ▶ Rio Tinto: “We have beaten our cost reduction targets, with USD 3.2 billion of sustainable operating cash cost improvements.”¹
- ▶ BHP Billiton: “We embedded productivity-led volume and cost efficiencies, exceeding our target by 61% or USD 1.1 billion.”²
- ▶ Anglo American: “Higher volumes across most of the portfolio, with cash costs down 2% in real terms.”³

We believe more still needs to be done. Many of the executives we interviewed believe that they will soon reach a ceiling on cost reduction. From our conversations with clients, we feel there is a real desire to address the productivity issue, but there is a lack of knowledge of where to begin and a reluctance to invest in fixing this situation when the promise of price increases may once again shift miners’ focus to production growth.

Global players’ cash costs

- ▶ In 2014, costs decreased but remained above average.
- ▶ Following the continuous growth of the past few years, cash costs dropped in 2014 due to falling oil prices and the US dollar’s strengthening against major currencies and the ruble.
- ▶ Cash costs exceed the average level mainly due to lower-grade gold and higher payroll, energy, and materials costs.
- ▶ In 2013, Barrick Gold’s cash costs remained stable and grew again in 2014. At the same time, Russian company Polyus Gold cut costs significantly in 2014.
- ▶ Over the year, Goldcorp and Newcrest’s cash costs rose more than 20%.
- ▶ Companies are aiming to contain costs by decreasing their share of high-cost assets and selling general purpose assets.

Movement in cash costs of the world leaders in gold mining



Source: EY global survey EY Mapping G360 and Focus30 gold accounts for EY opportunities, March 2015



¹ “Rio Tinto slide presentation,” 7 August 2014.

² “BHP Billiton Results - Year Ended 30 June 2014,” ft.com, 19 August, <http://announce.ft.com/Detail/?DocKey=1323-12056052-56JK3KJMOM3JV30P71M1AT1RBT>, accessed 23 September 2014.

³ Anglo American, 25 July 2014.

Movement in the costs of Russian gold mining companies

As the survey was conducted before December 2014, when major changes related to the devaluation of the Russian ruble took place, the below data does not reflect the current situation or new trends.

Due to the significant reduction in the value of the Russian ruble, the cost of gold mine production in Russia is lower than the global average.

The price of gold is calculated in US dollars, whereas many cost items related to gold mining and payroll are calculated in Russian rubles and don't change with the US dollar exchange rate. For this reason, most gold mining companies in Russia actually benefit from the weaker ruble.

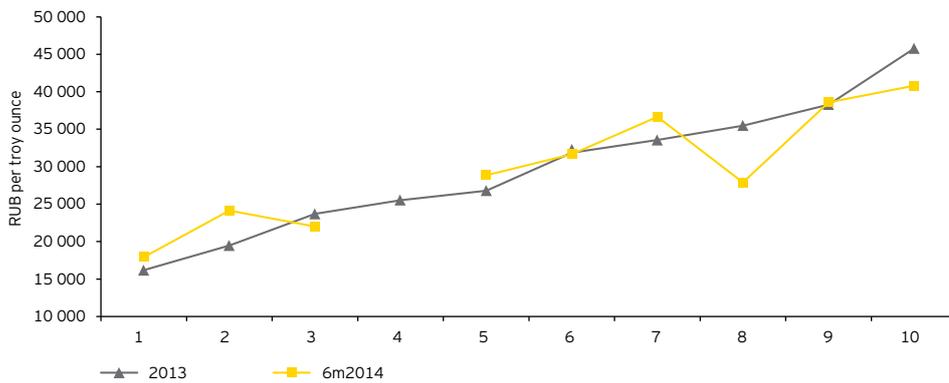
Expert opinion

At the end of 2014, the following conditions made reduced production costs possible for gold mining in Russia:

- ▶ Weakening of Russian ruble
- ▶ Lower oil and diesel prices
- ▶ Economic sanctions

By cutting gold mine production costs, Russian gold miners become more competitive with other global players.

Costs incurred by Russian companies in 2013 and 6m2014, RUB



Industry prospects

The majority of Russian respondents expect gold production to grow by 1%-5% in 2015-16. Commissioning new capacity will decrease by 2% 10% over the same period according to the respondents. Most believe that sale prices will grow by 5%-15% in 2015-16.

When asked what growth rates in Russian gold production they expect to see in 2015, about 50% of the respondents said that production may grow by 3% to 5%. Almost 16% of them expect zero growth in Russian gold production.

Market players expect a growing volume of M&A transactions among gold mining companies in the near term, as well as higher ruble and US dollar prices for their products.

According to major investment bank analysts, the US dollar gold price will go down in 2015 and then gradually pick up and grow in 2016-17.

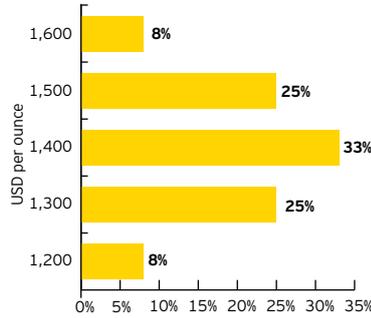
Industry consolidation

According to experts, further industry consolidation seems likely, as there are several independent players. This will eventually lead to the merging of production facilities and growing investment in gold mining.

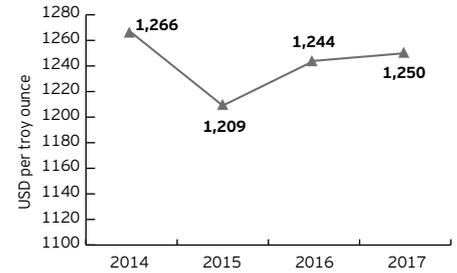
EY's opinion

Consolidation has almost been completed among major Russian gold mining companies. The industry still remains largely fragmented, however, and consolidation among small and medium-sized companies is imminent in the coming years.

What long-term price for gold is required for the sustainable development of the global gold mining industry?

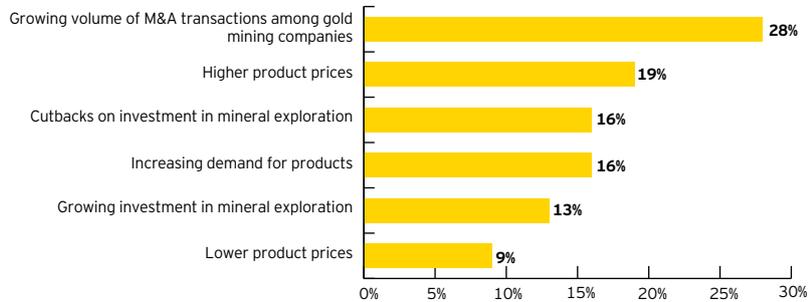


Consensus forecast for gold prices in 2015-17

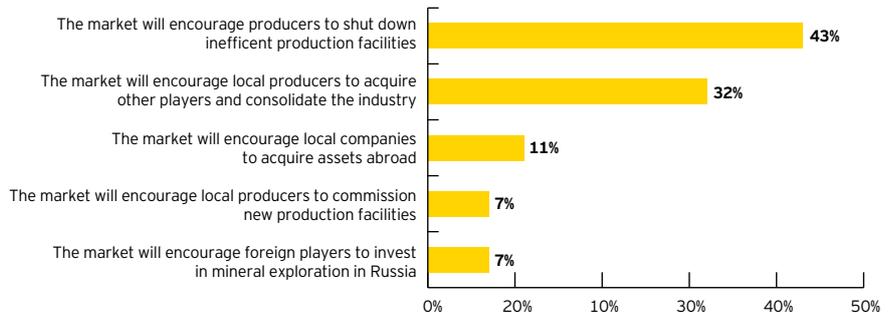


Source: Investment banks, EY analysis

What market developments do you expect in the near term?



How do you think the gold market will develop in the next five years?



The role of Government

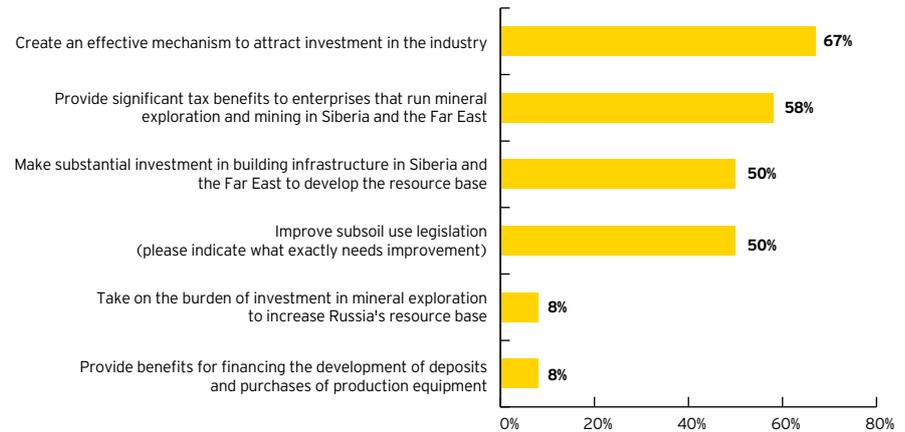
The Government recently took a number of steps to improve the investment climate in the mining and geological industry, starting with the implementation of an application-based (rather than auction-based) licensing of initial mineral exploration in the Far East regions, followed with its launch across the rest of Russia. This brought on a boom in activities around obtaining new licenses for prospecting and exploration. A zero income tax rate was established for newly commissioned mining facilities ("greenfield projects") in the Far East regions for up to 10 years from the time they are put into operation.

Regional governments also support the industry, e.g. by partially reimbursing the interest payments on loans used to finance the construction and reconstruction of mining enterprises. The federal government is making a considerable effort to improve current legislation by reducing administrative barriers and increasing the speed and quality of decision-making by government bodies when they grant various approvals and clearances to enterprises in the gold mining industry.

Steps are being taken to: develop new codes for estimating reserves and resources that are more aligned with similar international codes; develop codes for the evaluation of mineral resources to report this information to exchanges and other sources of capital and promote trading in the shares and derivatives of mining and geological entities; simplify the approval and clearance procedure for projects initiated by mining enterprises, etc. However, the majority of respondents still consider these steps to be insufficient in the current context.

According to the survey participants, the Government should take steps towards creating effective mechanisms to attract investment in the industry, as well as provide tax benefits to industry enterprises and invest in infrastructure.

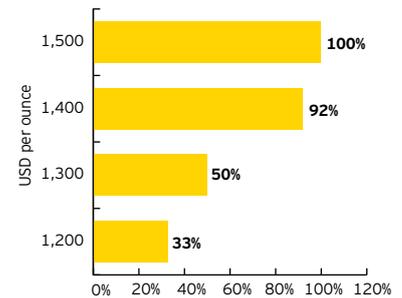
What first steps should the Government take to develop the gold mining industry in Russia?



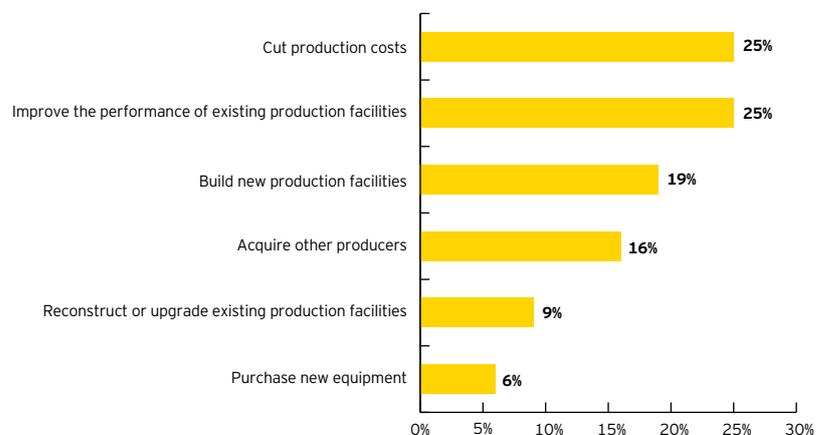
Investment projects

What do gold miners consider to be priority areas for investment? Most respondents indicate cutting production costs and improving the performance of existing production facilities. The next important tasks include constructing new facilities and reconstructing and upgrading existing ones.

What is the optimal gold price necessary for you to be ready to invest in long-term projects to develop new deposits and the construction of gold recovery plants?



What areas of activity will be a priority for your company?



The level of prices acceptable for investing in long-term projects to develop new deposits and the construction of gold recovery plants, according to almost 50% of

the respondents, starts at USD 1,300 per ounce. Only 33% of the companies surveyed are prepared to invest at a price of USD 1,200 per ounce.

Strategic development areas for global gold mining companies

According to the EY survey Mapping G360 and Focus30 gold accounts for EY opportunities, the key strategic areas for investment by global gold miners are as follows:

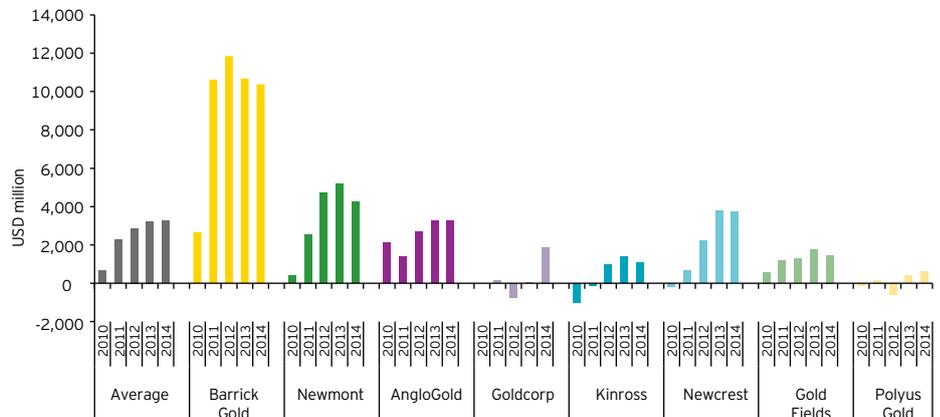
- ▶ Optimization of free cash flows in view of:
 - Returns to shareholders
 - Returns per ounce of product
- ▶ Cost management and productivity improvement
- ▶ Reduction of capital expenditures and a focus on mineral exploration under current projects
- ▶ Reduction of the debt burden and achievement of financial flexibility



Sources of finance

Net debt of global gold mining leaders

Key trends in the net debt of global gold mining leaders

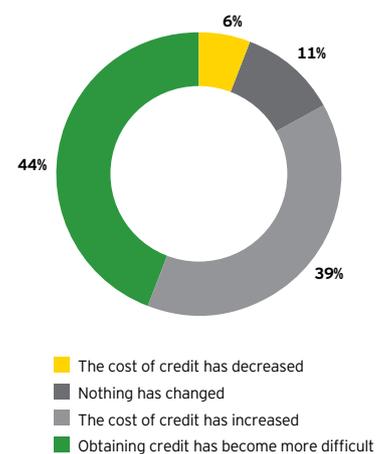


Source: EY global survey EY Mapping G360 and Focus30 gold accounts for EY opportunities, March 2015

- ▶ Gold mining majors are taking steps to reduce their debt.
- ▶ In recent years, the amount of debt has increased as companies relied on borrowings to finance deals designed to expand and diversify their investment portfolio. For example, the badly-timed takeover of a copper mining company by Barrick Gold at the peak of commodity prices substantially increased Barrick Gold's debt.
- ▶ Although some companies decreased their net debt slightly in 2014, the average level of net debt remains high across the industry.
- ▶ Major gold mining companies are active in implementing a policy of cutting capital expenditures in order to restore their financial stability.

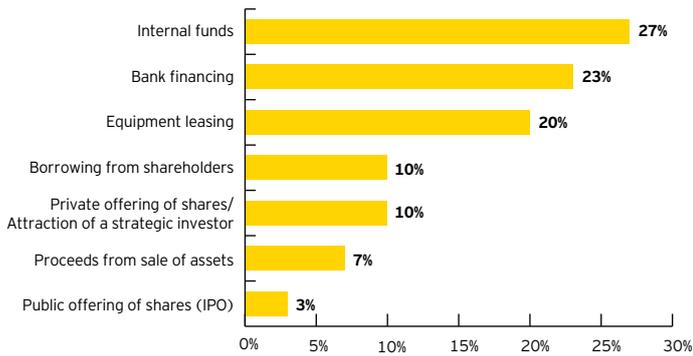
Over 80% of the Russian respondents have noted the rising cost of debt and difficulties in obtaining credit.

What is your assessment of credit availability in 2013-14 versus previous periods?



Source: Union of Gold Producers of Russia

What sources of finance is your company considering in 2014-15 in order to expand/maintain its activities?



EY's opinion

Many producers continue to consider bank loans as the main instrument for financing production and modernization.

Although many respondents have noted a deterioration in bank lending terms, 23% of them continue to consider bank loans as an option for raising funds to expand production and upgrade facilities.

About 13% of the survey participants believe that equipment leasing is also of interest to producers.

Unfortunately, the current IPO market is short of good opportunities for raising capital.



Tax factors

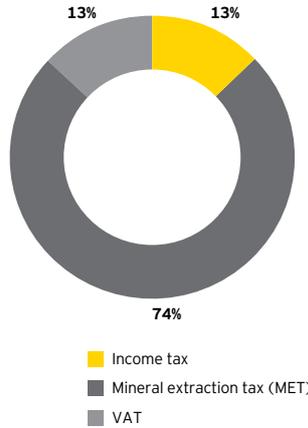
The most significant issue gold mining companies will face in the near term is business restructuring under the declared deoffshorization of the Russian economy. The new regulations that came into force as of 1 January 2015 are expected to affect the significant tax and non-tax aspects of their activities.

These include the adoption of rules on controlled foreign companies (CFC), which require Russian beneficiaries to pay Russian tax on the retained earnings of a CFC and inform the tax authorities about their CFCs. In addition, certain foreign companies that are managed from Russia may be treated as Russian tax residents, and will therefore be required to pay Russian income tax. The new regulations cover the taxation of cross-border payments of interest and dividends - these transactions may fail to qualify for tax benefits provided by double tax treaties if the income recipient has insufficient functions and incurs no risk.

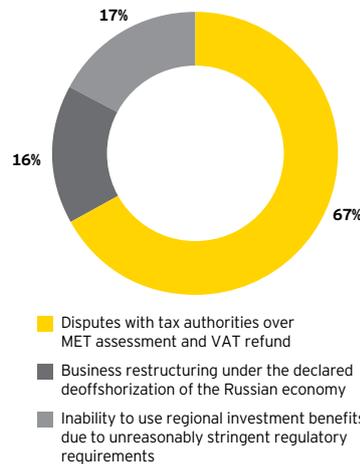
Special attention should be given to the non-tax factors of deoffshorization. Offshore companies affiliated with Russian beneficiaries may be excluded from public procurement or not be eligible for government guarantees or loans from state-controlled banks.

Survey participants noted that their businesses are still being significantly affected by the regulations on transfer pricing, tax benefits and preferences for investment projects, as well as the adoption of a requirement to calculate assets tax on certain property using their cadastral value.

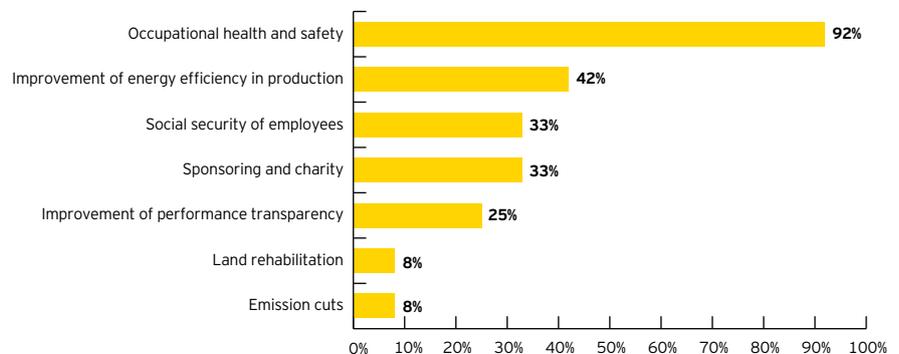
What tax benefits could best promote further investment in the Russian gold mining industry?



What tax regulation issues do you consider the most critical in 2015?



What corporate responsibility/sustainable development areas is your company planning to pursue in 2015?



Corporate responsibility

Focus on higher production safety and efficiency

The companies surveyed have named personnel and production safety as their top priority. Other matters significant to industry players in the current social and economic situation include looking for opportunities to improve performance efficiency through the rational use of resources, expanding the social package provided to employees, supporting local communities through sponsoring charity programs designed to help educational and health care institutions, senior citizens and veterans, and developing culture and sports.

Many market players realize the importance of improving performance transparency to third parties - industry partners, consumers, regional authorities and local communities. The companies are not currently planning to take any active steps in environmental protection, however.

Conclusion

The current high volatility in the markets and low prices for commodities, including metals, make the mining industry less attractive to investors.

Increased macroeconomic risks in Russia are still another hurdle in the effective attraction of investment. For this reason, the Russian gold mining industry, which relied on foreign investment in addition to other funding sources, is facing a deficit of investment capital and the need to streamline costs.

In addition, our analysis revealed the following trends and issues in the gold mining industry:

- ▶ Producers need to cut production costs, such as costs for spare parts and materials, repairing fixed assets, diesel fuel, etc.
- ▶ Production cost cutting at the end of 2014 was largely driven by the weakening ruble and a number of other factors, including tumbling oil prices and the introduction of economic sanctions.
- ▶ The key issues in the Russian gold mining industry, according to the respondents, include rising energy tariffs, ineffective subsoil use legislation, a lack of infrastructure and low gold prices.

Market players identify the following industry trends and prospects:

- ▶ The market will encourage producers to improve the performance of existing production facilities.
- ▶ Forecasts indicate a growing volume of transactions in the gold mining industry and increasing product prices in rubles and US dollars.
- ▶ Consolidation among small and medium-sized companies will lead to the merging of production facilities and create better conditions for building up investment in gold mining.
- ▶ The lack of investment capital gives rise to a risk of cutbacks on mineral exploration, and therefore specific measures, including government support, will be required to manage this risk.
- ▶ Industry players expect that the Government will create effective mechanisms for attracting investment in the industry and provide benefits to enterprises that run mineral exploration in Siberia and the Far East.

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