



Metalloinvest

# Resources create opportunities

Annual report



# Contents

History	2
Metalloinvest's strengths	4
Chairman's Statement Farhad Moshiri	6
Message from the Chief Executive Officer Eduard Potapov	8
<b>1</b> Key Events of 2012	<b>10</b>
<b>2</b> Overview of the Iron Ore and Metallics Markets	<b>16</b>
<b>2.1</b> Iron Ore Market	<b>18</b>
<b>2.2</b> Pellet Market	<b>24</b>
<b>2.3</b> HBI/DRI Market	<b>28</b>
<b>3</b> Business Model	<b>30</b>
<b>3.1</b> Business Model	<b>32</b>
<b>3.2</b> LGOK	<b>36</b>
<b>3.3</b> MGOK	<b>40</b>
<b>3.4</b> Shipment of Iron Ore Products and HBI	<b>44</b>
<b>3.5</b> OEMK	<b>48</b>
<b>3.6</b> Ural Steel	<b>52</b>
<b>4</b> Strategy	<b>56</b>
<b>4.1</b> Strategy	<b>58</b>
<b>4.2</b> Investment Programme	<b>66</b>
<b>5</b> Corporate Governance, Capital Markets and Information Disclosure	<b>72</b>
<b>5.1</b> Corporate Governance System	<b>74</b>
<b>5.2</b> Capital Markets	<b>78</b>
<b>5.3</b> Changes to the Corporate Governance and Information Disclosure System	<b>80</b>
<b>6</b> People and the Environment	<b>85</b>
<b>6.1</b> Personnel	<b>86</b>
<b>6.2</b> Occupational Health and Safety and Environmental Protection	<b>92</b>
<b>6.3</b> Social Responsibility	<b>95</b>
<b>6.4</b> Social Programmes for the Benefit of Local Communities	<b>98</b>
<b>7</b> Results of 2012	<b>101</b>
<b>7.1</b> Macroeconomic Factors Affecting Metalloinvest Results	<b>102</b>
<b>7.2</b> Operational Results	<b>103</b>
<b>7.3</b> Financial Results	<b>112</b>
<b>7.4</b> Risk Management System	<b>125</b>

# History

## 2011

Metalloinvest raised a USD 3.1 billion syndicated loan (PXF), the largest in Russia in the post-financial crisis period.

Moody's assigned Metalloinvest a long-term rating of Ba3 with a Positive outlook.

Fitch assigned Metalloinvest a long-term rating of BB- with a Stable outlook.

Metalloinvest successfully placed a debut issue of Eurobonds, raising USD 750 million at 5 year maturity and a coupon of 6.50% per annum.

The Metalloinvest Memorandum on the Corporate Social Responsibility was signed.

## 2010

Metalloinvest was the first Russian metals and mining company to undergo registration according to REACH standards.

IMC confirmed an increase in Metalloinvest's proven and probable iron ore reserves from 13.8 billion tonnes to 14.9 billion tonnes according to JORC international classification.

Rolling Mill 350 finishing plant was put into operation at OEMK.

## 2009

Metalloinvest and the Russian Federal Agency for Subsoil Usage (Rosnedra) signed a licence agreement for the development of the Udokan copper deposit.

A government commission approved the decision to provide state support to LGOK, MGOK, OEMK and Ural Steel. The plants were among the first to return the right to utilise state support.

## 2008

Gazmetall was renamed Metalloinvest Holding Company and reorganised into an open joint-stock company.

Plate Mill and electric arc furnaces were reconstructed at Ural Steel.

## 2007

Construction of HBI-2 Plant was completed at LGOK.

Flotation technology was introduced at MGOK.

## 2006

Metalloinvest (MGOK and Ural Steel) and Gazmetall (LGOK and OEMK) were merged.

## Metalloinvest's strengths

### The absence of competition

from global mining companies on the domestic market

### Less volatility

in HBI price compared with iron ore price

### Premium

price of pellets compared to iron ore prices

## BUSINESS MODEL

**“Zero transport costs”** for iron ore supplies from LGOK to OEMK using the 26-km slurry pipeline

**Strategic location** of assets in the European part of Russia

**Diversified logistics:** Europe — rail and sea; China — rail and sea

**A diversified customer base** that allows for prompt shipments depending on market conditions

**Extensive geography of supplies,** including intragroup deliveries to Ural Steel and long-term contracts in Russia (NLMK, MMK, Severstal) and the markets of Europe (ArcelorMittal, TataCorus, US Steel) and Asia (Baosteel)

**The availability of a tariff discount factor** for supplies of products to China by rail transport through Zabaykalsk

**The conclusion of long-term contracts** with key customers (NLMK, MMK, Severstal)

**Unique crude steel production technology** at OEMK which does not use sinter or coke

**High quality** of iron ore concentrate and pellets

**High quality of steel products** (automotive industry, bearings production, bridge construction)

**Energy efficient and eco-friendly** HBI production technologies (reducing energy needs by 35% and emissions by 50%–60% compared with hot metal production)

**Own steelmaking facilities** ensure stability in times of crisis

**100% capacity utilisation** in HBI production during the crisis in 2009

**OEMK** is the only plant in Russia that worked at full capacity during the crisis in 2009

## STRATEGY

**One of the world's largest** iron ore reserve bases (14.6 billion tonnes and a reserve life of approximately 150 years at the current production level)

**Strategic focus on iron ore** high value-added products: pellets and HBI

**Relatively low level of competition** in the HBI segment (high-quality iron ore and large volumes of natural gas are required)

**A global leader in terms of production costs** for pellets and HBI (in the first quartile) according to CRU

**Advantages of using high-quality pellets** — a reduction in use of coke, increased productivity, and there is no need for sintering (a fall in expenses on additional processing and a reduction in emissions)

**The global steelmaking trend** of mini-mills development has led to increased demand for HBI

## CORPORATE GOVERNANCE

**A high level of transparency** for a private company (greater detail and frequency of information disclosure)

**Positive dynamics** in corporate credit ratings

## RESULTS

**#3 in the world** in pellet production

**#5 in the world** in iron ore production

**#1 supplier of HBI** to the global market (40% in 2012)

**The largest supplier** of pellets and iron ore to the Russian market

**The sole producer of HBI in Russia and the CIS**

**A conservative financial and investment policy**

**Negligible short-term debt** due to a conservative financial and investment policy

**Greater financial flexibility** and diversified sources of financing, including Eurobonds and RUB-denominated bonds

## Chairman's Statement

Farhad Moshiri



2012 was a challenging year principally due to the volatility in the global economy, and in particular a number of European countries. Against this backdrop, we successfully managed the business, including maintaining our leading positions in the global iron ore and HBI markets, and continuing to implement our investment programme.

The slowdown in the global economy, along with a decrease in iron ore and steel prices, has naturally affected our results, which, nevertheless, were positive overall. Our EBITDA was USD 2.6 billion, matching the level achieved in 2010 albeit with much weaker iron ore prices now, and the EBITDA margin was 31.2%. Net income increased significantly to USD 1.7 billion, up 20.4% year-on-year.

Our stable financial position and comfortable debt level have allowed us to proceed with our large-scale investment projects aimed at strengthening our position in the metals and mining industry.

During 2012, we took the decision to dispose of Metalloinvesttrans, our transportation operator. This transaction enabled us to secure additional liquidity whilst maintaining strict guarantees of our cargo transportation requirements. The deal made a positive contribution to our 2012 financial results.

In December 2012, we marked an important event in Metalloinvest's life. The Company purchased 24% of its shares, and Metalloinvest's major shareholders consolidated their assets under one holding company, USM Holdings, which as a result obtained full control over Metalloinvest.

After the end of the reporting period, we adopted a number of measures to further strengthen our corporate governance structure. We reduced the size of our Board of Directors from twelve to seven members, while increasing the share of independent and non-executive directors. I am delighted to report that Irina Lupicheva, a representative of USM Advisors, became the first woman to be elected to the Board. Furthermore, a non-executive director was elected as Chairman of the Finance, Budgeting and Strategy Committee, and the Audit Committee was established, headed by an independent director.

Within the framework of the Company's Social and Economic Partnership Programme, we continued to implement corporate social responsibility projects in the regions where we operate.

Looking forward, we are confident that with its efficient business model, experienced management team and clear strategy, Metalloinvest has all the elements in place for long-term sustainable growth. I would like to thank Metalloinvest's Board members, our management team and all our employees for their tireless work in ensuring the Company's continued success.

Farhad Moshiri

A handwritten signature in black ink that reads "H Moshiri".

## Message from the Chief Executive Officer

Eduard Potapov



2012 proved to be an extremely unstable year for the metals and mining industry due to the increased volatility of iron ore and steel prices. Despite a significant decline in average iron ore price to USD 130 per tonne compared with USD 170 per tonne in 2011, Metalloinvest achieved solid operational and financial results.

**We increased production of HBI/DRI to 5.2 million tonnes (+0.4% y-o-y<sup>1</sup>) and reached a record high level of pellet production — 22.6 million tonnes (+1.0%), which is one of the key products with high added value.** Pellet shipments to external customers grew by 3.3% reaching 14.1 million tonnes.

Last year, the Company increased product shipments to the domestic market due to long-term contracts signed in 2011-2012. In December 2012, the Company signed a new agreement with MMK for increasing supply of iron ore and pellets to MMK.

**It is important to note that in terms of our financial results we managed to keep our leading positions in the metals and mining industry in Russia and the CIS.** EBITDA for the year stayed high at USD 2.6 billion. Net income increased 20.4% year-on-year to USD 1.7 billion, while revenue reached USD 8.2 billion. Positive results were achieved largely due to our ongoing efforts to improve efficiency and maintain low production costs, which is one of the key competitive advantages of the Company.

In 2012, Metalloinvest continued implementation of investment programme aimed at increasing output of products with high added value. In August, we signed a contract to build HBI-3 Plant at Lebedinsky GOK with capacity of 1.8 million tonnes of HBI per year. This plant will be the largest HBI production module in the world. The project will be executed in partnership with Siemens and Midrex. Also the first stage of HBI-2 Plant modernisation was completed, resulting in the plant's production capacity increase of 58,000 tonnes of HBI per year (+4%).

**We commenced equipment installation at Pellet Plant #3 at Mikhailovsky GOK.** The new pellet plant will be commissioned in 2014, increasing pellet production capacity by 5 million tonnes per year. In November 2012, another maintenance phase at the crushing and sorting plant was completed at Mikhailovsky GOK, increasing its productivity by 10%.

**During the course of the year, we completed a number of capital markets transactions.** The Company raised RUB 25 billion through a debut issue of 9.0%

RUB-denominated bonds maturing in 2022 with an early redemption option in 2015. This allowed us to significantly improve our debt portfolio structure.

**For the first time, Metalloinvest arranged site visits at Lebedinsky GOK and OEMK for investors and analysts.**

It is extremely important for us, as a company that adheres to responsible way of doing business, to participate in creating conditions for the sustainable development of the regions where we operate, making them attractive for people to live in. This is an area of special focus for the Company. For the third year running, Metalloinvest, together with the governments of the Belgorod and Kursk regions, as well as the town administrations of Stary Oskol, Gubkin and Zheleznogorsk, has been developing and implementing Social and Economic Partnership Programmes. In this period, the project proved its effectiveness: the investments, assured by mutual commitments, were directed at the priority programmes for the regions' social development. Partnership means joint responsibility, common interests, and combining efforts to achieve mutual goals.

**In December 2012, the Company presented its new brand.** It is not simply a change of the logo, slogan and corporate colours for the unification of perception of our production assets. The new visual style symbolises the changes in our business philosophy, defining the vector for creation of a global efficient mining company, competitive in a changing economic environment, and a leader in its segment.

**The 2012 results have confirmed the viability of the chosen balanced production, financial and investment strategy.**

Eduard Potapov

A handwritten signature in black ink, appearing to be 'Eduard Potapov', written on a light-colored background.

<sup>1</sup> Hereinafter year-on-year changes, unless indicated otherwise.

# 1 Key Events of 2012

Share  
of the global  
merchant  
HBI market

40%



## Signing of the contract

for the construction of HBI-3 Plant at LGOK

## Debut placement

of RUB 25 billion 9.0% RUB-denominated bonds maturing in 10 years with an early redemption option in 3 years

## Sale

of Metalloinvesttrans for USD 569 million

## Acquisition

of 24% of own shares for USD 3,023 million

# 1 Key Events of 2012

## JANUARY

Metalloinvest paid dividends in the amount of USD 290 million for the 9 months of 2011.

Ural Steel successfully passed an audit of its quality management system for compliance with international standard ISO/TS 16949:2009 for producers of components for automotive industry.

## FEBRUARY

Metalloinvest signed Social Partnership Programmes for 2012 with the governments of the Belgorod and Kursk Regions as well as the town administrations of Stary Oskol, Gubkin and Zheleznogorsk.

## MARCH

The Company issued RUB 25 billion 9.0% RUB-denominated bonds maturing in 10 years with an early redemption option in 3 years.

## MAY

Metalloinvest sold captive transport operator Metalloinvesttrans to Globaltrans for USD 569 million. The transaction involved the conclusion of a contract under which Globaltrans will transport Metalloinvest's freight by rail during 3 years. (for details, see page 126)

Metalloinvest repaid ahead of schedule USD 700 million of the syndicated loan (Syndicated Pre-Export Finance Facility ("PXF")).

OEMK was awarded a gold medal and certificate for its contribution to environmental protection at the contest "100 Best Organisations of Russia. Ecology and Ecological Management".

**BB-****Outlook Positive.**  
S&P credit rating

## JUNE

Metalloinvest signed an agreement for the construction of an oxygen station at OEMK.

Fitch affirmed Metalloinvest's long-term credit rating at BB- with a Stable outlook.

The RUB-denominated bonds of Metalloinvest (series 01, 05 and 06) were included in the Lombard List of the Central Bank of the Russian Federation.

Metalloinvest and ChelPipe signed an agreement to increase supplies of flat products to ChelPipe.

## JULY

LGOK was declared the winner in the category "Most Dynamically Developing Russian Exporter in the Industry" at the contest "Best Russian Exporter — 2011" held annually by the Ministry of Industry and Trade of the Russian Federation.

OEMK successfully passed an audit of its ecology management system for compliance with international standard ISO 14001:2004.

Standard & Poor's assigned to Metalloinvest a BB-long-term credit rating with a Positive outlook.

## AUGUST

Sberbank opened to Metalloinvest a three-year credit facility for a total of RUB 50 billion.

Metalloinvest signed an agreement for the construction of HBI-3 Plant at LGOK.

## OCTOBER

The Company began installing the equipment of Pellet Plant #3 at MGOK.

Metalloinvest sold greenhouse gas emission reduction units as part of the Kyoto Protocol.

OEMK received the award "Supplier of 2012" from Schaeffler Group, one of the leading companies in the bearing industry.

## NOVEMBER

The first phase of the modernisation of HBI-2 Plant was completed at LGOK.

Vacuum degasser was put into commercial operation in the electric arc furnace plant at Ural Steel.

LGOK and MGOK successfully passed audits of their quality management and industrial safety systems for compliance with international standards ISO 9001:2008 and OHSAS 18001:2007.

LGOK and MGOK successfully passed audits of their environmental management systems for compliance with international standard ISO 14001:2004. LGOK also successfully passed an audit of its environmental management system for compliance with international standard GOST R ISO 14001:2007.

## DECEMBER

Metalloinvest presented a new corporate brand.

Metalloinvest signed a three-year contract with MMK to increase supply of iron ore concentrate and pellets to MMK.

Metalloinvest Ltd (a company of Metalloinvest Group) acquired 24% of the Company's shares. VTB Group withdrew as a Metalloinvest shareholder, and USM Holdings obtained control over 100% of the Company's shares.

## SIGNIFICANT EVENTS AFTER THE REPORTING DATE

In February 2013, Metalloinvest issued RUB 10 billion 8.90% RUB-denominated bonds maturing in 10 years with an early redemption option in 5 years.

In February 2013, Metalloinvest announced the election of the new Board of Directors.

In March 2013, the Board of Directors approved the committee members for the Audit Committee and the Finance, Budgeting and Strategy Committee.

In March 2013, Metalloinvest signed a three-year contract with Severstal for supplying approximately 3 million tonnes of iron ore concentrate.

In March 2013, the Company repaid ahead of schedule USD 250 million of the syndicated loan (PXF).

In March 2013, the RUB-denominated bonds of Metalloinvest (series 02 and 03) were included in the Lombard List of the Central Bank of the Russian Federation.

In April 2013, Fitch revised outlook to Positive on Metalloinvest's BB-long-term rating.

In April 2013, Standard&Poor's affirmed Metalloinvest's long-term rating at BB- with a Positive outlook.

In April 2013, Moody's upgraded Metalloinvest's long-term rating to Ba2 with a Stable outlook.

In April 2013, the Company issued USD 1 billion 5.625% Eurobonds maturing in 7 years.

In April 2013, Metalloinvest repaid ahead of schedule USD 1 billion of the syndicated loan (PXF).

In April 2013, Metalloinvest signed a purchasing contract for six Caterpillar dump trucks with an average carrying capacity of 180 tonnes.

In May 2013, the Company signed purchasing contracts for two Hitachi electrohydraulic excavators with a 23 cubic metre bucket.

In June 2013, the Company received new high-load BelAZ trucks with maximum load capacity of 160 and 220 tonnes.

## 2 Overview of the Iron Ore and Metallics Markets



5

Fifth iron ore producer in the world

## 2.1 Iron Ore Market

### GLOBAL IRON ORE MARKET



Iron ore is one of the most important commodities. Iron ore plays an essential role in the global economy and is the primary raw material used for the production of steel, which accounts for up to 95% of all metal consumption around the world. According to the United States Geological Survey, global iron ore reserves stood at more than 800 billion tonnes as of January 2013, while the content of pure iron in the ore exceeded 230 billion tonnes.

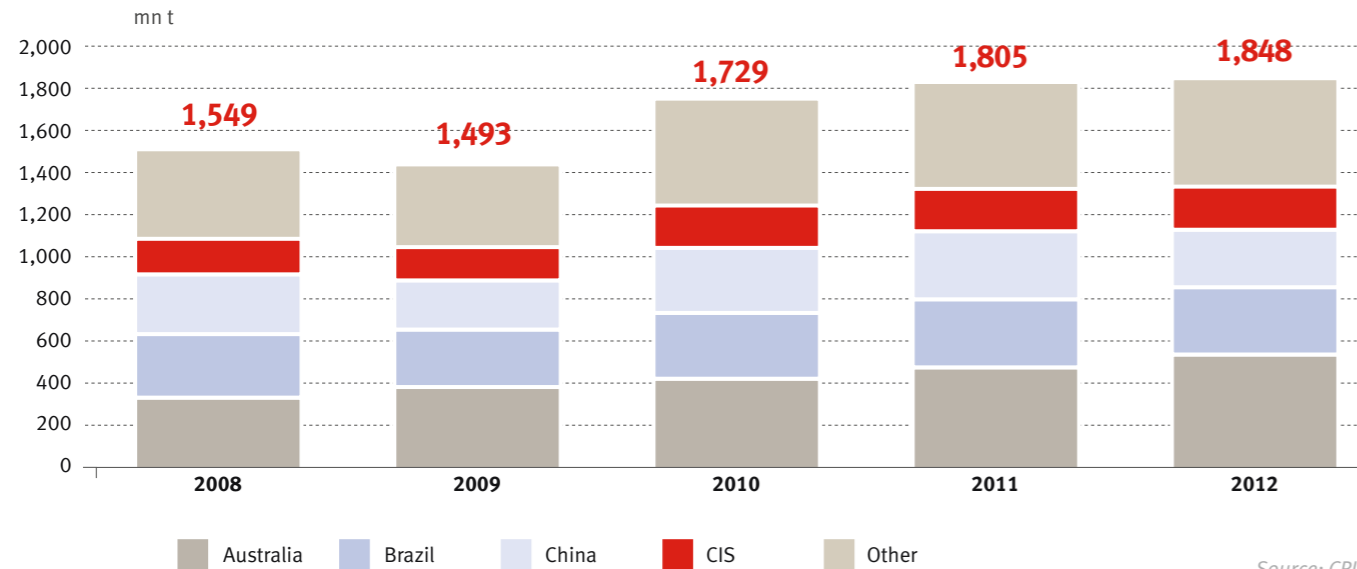
**800**  
bn tonnes  
world's proven  
iron ore reserves



Metalloinvest develops deposits with iron ore reserves among the largest in the world. Iron ore is found on all continents, but it is distributed unevenly and mainly located in Eurasia, Australia and South America. Vale and Metalloinvest hold the rights to develop the world's largest iron ore reserves. According to CRU, Vale has proven and probable reserves of 15.1 billion tonnes, while the proven and probable reserves of Metalloinvest amount to 14.6 billion tonnes. If the current level of production is maintained, the deposits operated by Metalloinvest will have a development period of approximately 150 years.

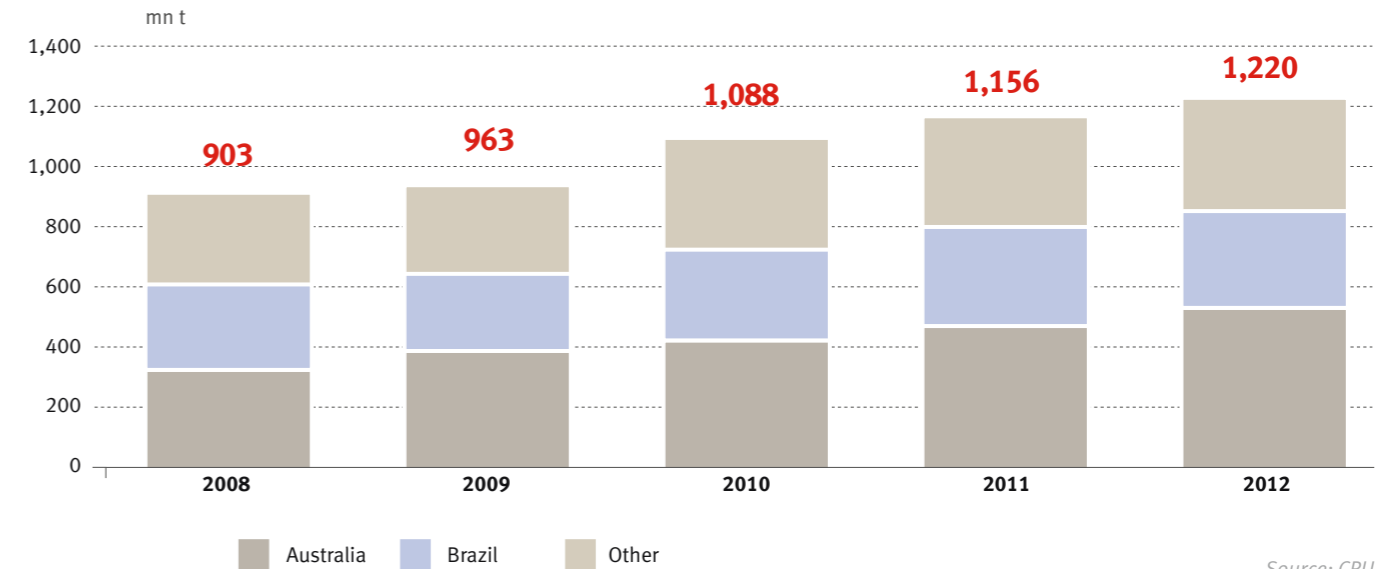
Average growth in global iron ore production was 4.5% per year from 2008 to 2012. Merchant iron ore is generally produced in the form of lump iron ore, iron ore fines or iron ore concentrate depending on the characteristics of a particular deposit. The growth in iron ore production that began in 2010 continued in 2012. Specifically, global iron ore production totalled 1.8 billion tonnes in 2012, a 2.4% increase compared with 2011. The average growth rate in iron ore production was 4.5% per year from 2008 to 2012.

Global iron ore production



Source: CRU

Global iron ore exports



Source: CRU

**Iron ore production is highly concentrated.** The main iron ore producing countries are Australia, Brazil, China and CIS countries, which accounted for a combined 73% of global output in 2012.

The world's largest iron ore producer is Brazil's Vale, which produced 320 million tonnes of iron ore in 2012. Other major producers include Rio Tinto and BHP Billiton, which manufactured 199 million tonnes and 161 million tonnes of iron ore last year respectively. Metalloinvest produced 40 million tonnes of iron ore in 2012, putting the Company among the world's five largest producers.

**Iron ore exports are outpacing growth in production.** In 2012, international iron ore trade totalled 1,193 million tonnes. Exports of iron ore have been increasing between 2008 and 2012 and did not decline even during the global economic crisis. The average growth rate in exports was 7.2% between 2008 and 2012, which is significantly higher than the average growth rate in iron ore production over this time.

**The concentration of iron ore exports is higher than that of production.** The main iron ore exporters are Australia and Brazil. In 2012, these two countries exported together 860 million tonnes of iron ore, or 72% of total global exports, although their share of iron ore production was only 47%.

**Demand for iron ore is on the rise thanks to China.** The main consumers of iron ore are steelmaking plants whose products are used in the automotive, construction, pipe manufacturing and hardware industries. In other words, iron ore consumption is closely connected with the level of business activity in the economy. After global iron ore consumption fell 3.6% year-on-year in 2009, a steady increase in demand has been seen since 2010. The average growth rates in iron ore consumption were 4.5% per year in 2008 – 2012, while overall consumption reached 1,848 million tonnes in 2012.

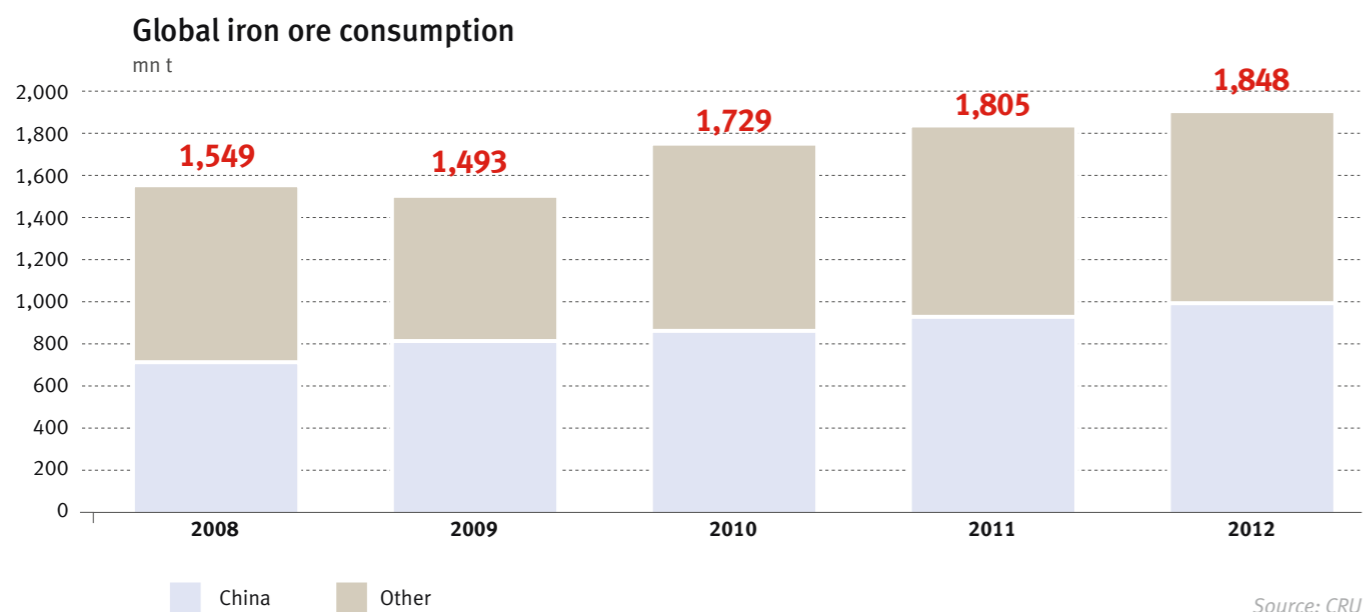
One of the primary factors behind the growth in iron ore consumption is the high level of demand from China, which accounts for approximately 54% of global consumption. In particular, whereas iron ore consumption in the United States and Europe declined by an average of 1.1% and 1.7% per year respectively in 2008 – 2012 and by 1.2% in Japan, iron ore consumption in China increased by an average of 9.0% per year in this period. In mid-2012, China saw a temporary decline in demand due to fears of a slowdown in national economic growth rates, which was followed by a reduction in iron ore stockpiles. By late 2012, demand from China had resumed due to the Chinese government's approval of a number of infrastructure projects with a total value of USD 158 billion.

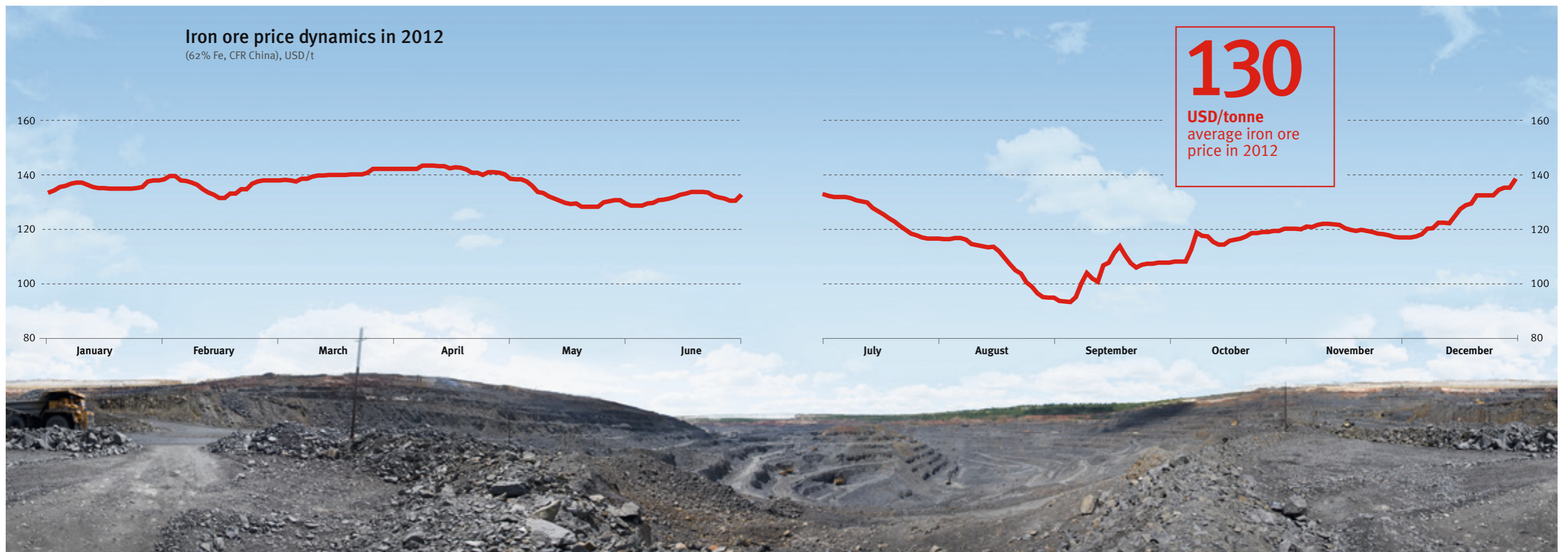
## IRON ORE MARKET OF CIS COUNTRIES

**Crude ore in CIS countries has low iron content.** Specific feature of the iron ore deposits of CIS countries is the relatively low iron content that is typical for magnetite ore from the region. The iron content in Russian deposits generally does not exceed 35–40%.

The Kursk Magnetic Anomaly is the main iron ore basin in Russia. The iron ore deposits developed by Metalloinvest are located in the Kursk and Belgorod regions close to the basin.

**Iron ore production is highly concentrated.** Iron ore production features a high degree of concentration both worldwide and in CIS countries. Three countries account for the bulk of production: Russia, Ukraine and Kazakhstan. Russia is the largest regional iron ore producer. In 2012, the CIS produced 203 million tonnes of iron ore with Russia accounting for 54% of that amount.





CIS iron ore exports are high. In general, CIS countries have substantial iron ore reserves. Their production capacity not only covers the internal demand of these countries for iron ore but also enables them to export up to 30% of their total production. In particular, Russia produced 109 million tonnes of iron ore in 2012 and exported 25 million tonnes; Ukraine produced 62 million tonnes and exported 36 million tonnes.

Iron ore imports to CIS countries are negligible for two reasons: firstly, the region has sufficient iron ore reserves and, secondly, high transportation costs significantly reduce the efficiency of imports. Russia imported only 8 million tonnes of ore in 2012, while Ukraine imported 2 million tonnes.

### PRICE DYNAMICS ON THE IRON ORE MARKET

Iron ore price remained relatively stable over the first half of 2012.

However, there was a sharp decline in price in the third quarter of 2012 due to diminished demand from Chinese steelmaking plants. In the fourth quarter of 2012, optimistic expectations related to planned large-scale investments in infrastructure in China had a positive effect on demand for iron ore products. Towards the end of the year, iron ore price grew to USD 145/tonne. Average iron ore price in 2012 was USD 130/tonne.

## 2.2 Pellet market

### GLOBAL PELLETT MARKET

**453**

mn tonnes  
global pellet  
production  
in 2012

Pellets are a high value-added iron ore product. They are similar to iron ore concentrate but have greater consumer value. Pellets can be used without any further treatment both in blast furnaces to smelt hot metal and in DRI units to manufacture HBI/DRI. In addition, smelting hot metal with the use of pellets instead of sinter reduces operating costs and makes production more eco-friendly.

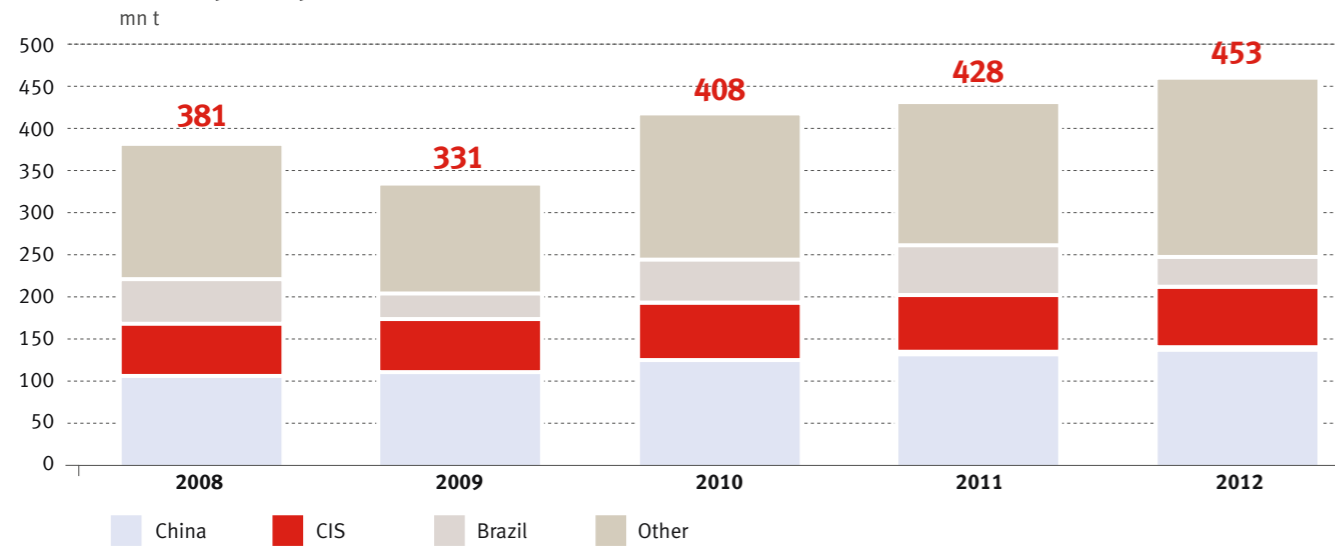
As a result, pellet prices are established at a premium to iron ore concentrate prices. For this reason, the long-term strategy of Metalloinvest provides for the development of pellet production.

**148**

mn tonnes  
global pellet  
exports  
in 2012

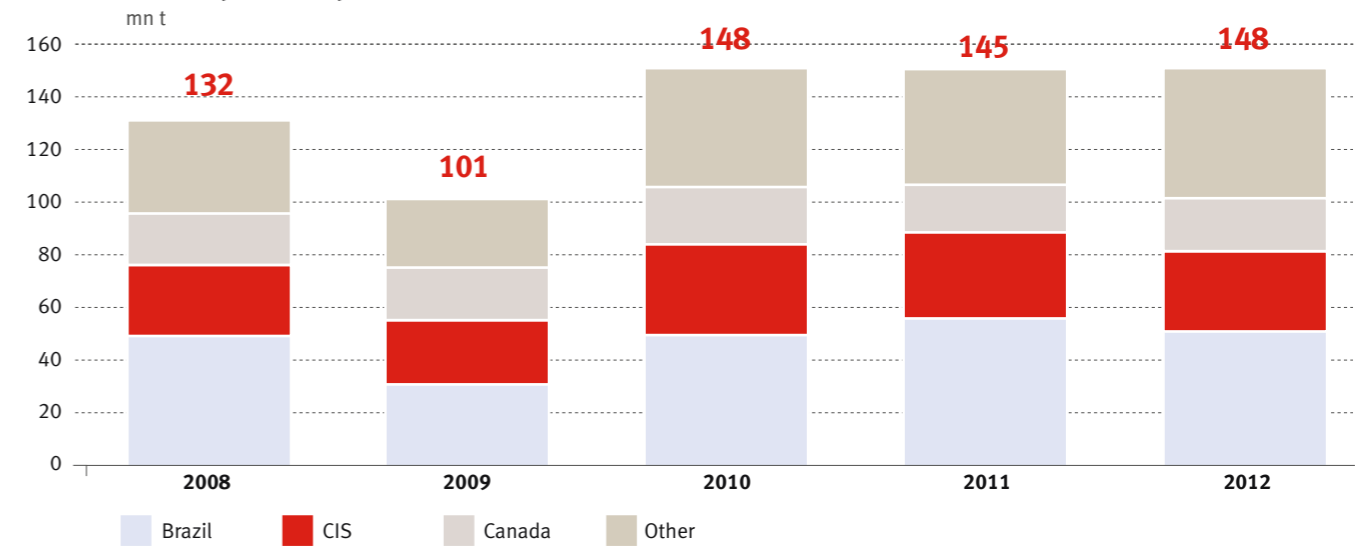


Global pellet production



Source: CRU

Global pellet exports



Source: CRU

Global pellet production is growing faster than iron ore production. Since 2010, the global pellet market has been showing signs of steady recovery following a slump in 2009. Pellet production grew 4.7% year-on-year in 2011 and 5.9% in 2012 compared with iron ore market growth of 4.4% and 2.4% respectively. The main reason for the accelerated growth in pellet production is high demand based on the favourable combination of price and consumer characteristics.

**Pellet production is highly concentrated.** Global pellet production totalled 453 million tonnes in 2012. The leading producing countries in 2012 were China (145 million tonnes), CIS countries (68 million tonnes) and Brazil (55 million tonnes). Unlike the iron ore market, the major producing countries, except Brazil, manufacture pellets primarily to meet their own needs for iron ore products. China produces pellets from imported iron ore.

In 2012, the biggest pellet producers were Vale (55 million tonnes), Cliffs Natural Resources (36 million tonnes) and Metalloinvest (23 million tonnes).

The concentration of pellet exports is higher than that of production. In 2012, the largest exporters (Brazil, CIS countries and Canada) accounted for 69% of global pellet exports.

**Pellet consumption growth rates are outpacing production growth.** Demand for pellets is largely determined by existing steelmaking technologies, the availability of other types of iron ore products and their prices, as well as several other factors among which the requirement for eco-friendly production is the most significant. In particular, while in 2008 – 2012 the average growth rate in pellet production was 4.4% per year, pellet consumption increased on average by 4.5% per year. According to CRU, global pellet consumption totalled 450 million tonnes in 2012, up 6% from the 2011 consumption. The increased demand mainly came from China, India, European countries and the United States. The major pellet importing countries are China, European countries and the United States; the combined share of pellet consumption by these countries totalled 61%.

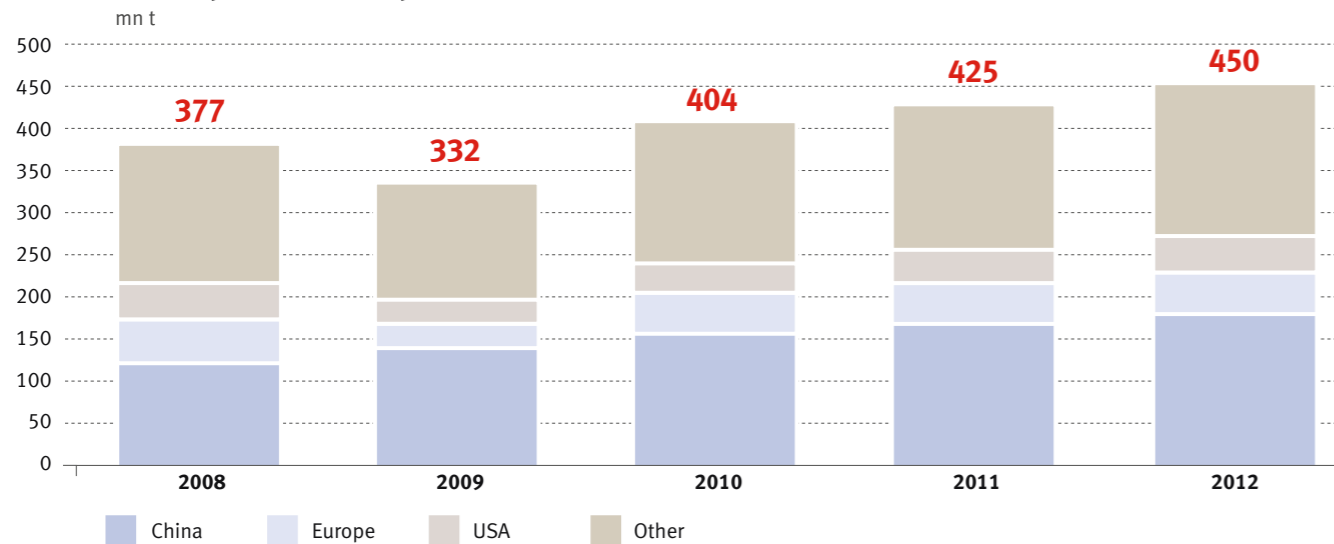


## PELLET MARKET OF CIS COUNTRIES

Metalloinvest is the regional leader on the pellet market. Among CIS countries, pellets are produced by Russia, Ukraine and Kazakhstan. Three of the five Russian plants producing pellets are part of Metalloinvest, ensuring that the Company holds leading positions in the regional market. In 2012, the Company produced 23 million tonnes of pellets. According to CRU, Metalloinvest is steadily increasing its market share and widening the gap with the other regional players. One of the main factors enabling the Company to strengthen its position in the industry is the high quality of its products. Pellets produced by Metalloinvest's plants have iron content of 62%–66.5%.

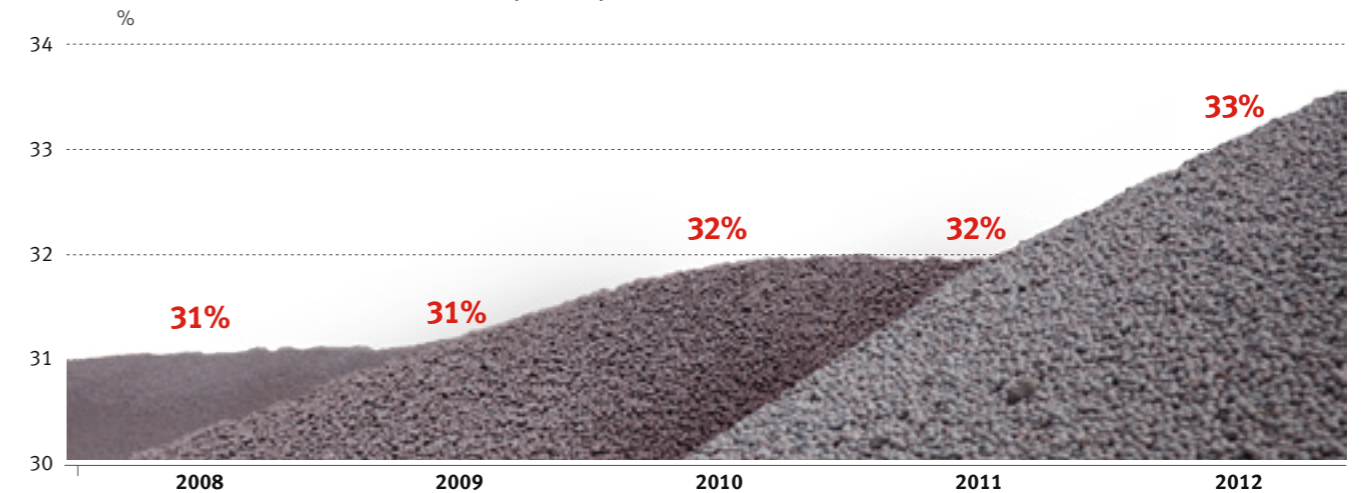
**Metalloinvest increased pellet shipments to the domestic market.** According to CRU, demand for pellets in the CIS countries fell from 44 million tonnes in 2008 to 32 million tonnes in 2012. Despite the decline in demand, Metalloinvest increased pellet shipments to the domestic market thanks to long-term contracts.

Global pellet consumption



Source: CRU

Share of Metalloinvest in CIS pellet production



Source: CRU

## 2.3 HBI/DRI Market

### GLOBAL HBI/DRI MARKET

HBI/DRI is a universal, high-quality and efficient alternative to pig iron and ferrous scrap. HBI/DRI has a vast scope of application. It can be used at integrated iron and steel works, both in blast furnaces and basic oxygen furnaces as well as at mini-mills in electric arc furnaces.

The low impurities content in HBI/DRI allows producing high-quality steel, which is crucial for several sectors, including automotive and engineering. Given the frequent fluctuations in the supply of scrap, the use of HBI/DRI ensures stable production of high-quality steel products.

Compared with the manufacturing of pig iron, HBI/DRI production does not require the use of coke, which results in considerable cost savings on energy consumption and also reduces greenhouse gas emissions into the atmosphere. In addition, the compact size and resistance of HBI to aggressive exogenous factors make it possible to ship HBI worldwide.

Due to its features, HBI/DRI is a high value-added product. The long-term strategy of Metalloinvest provides for the development of HBI production.

**HBI/DRI production requires high-quality raw materials and large quantities of natural gas.** Metalloinvest is a company with a unique level of access to these resources. The absence of such conditions for most global producers of iron ore products and metallics is a natural limitation in the growth of HBI/DRI production and it predetermines a relatively low level of competition in the industry along with slower growth rates compared to the pellet and iron ore markets. According to CRU, global HBI/DRI production grew since 2010 after a reduction in output in 2009: 8.0% in 2010, 4.1% in 2011 and 1.7% in 2012.

**HBI/DRI production is highly concentrated.** According to CRU, global HBI/DRI production totalled 75 million tonnes in 2012 with India, Iran, Saudi Arabia and Russia accounting for 58% of that amount. The sole producer of HBI/DRI in Russia and the CIS is Metalloinvest, which has the necessary resources and production capacity.



**5.2**  
mn tonnes  
Metalloinvest's  
HBI/DRI production  
in 2012

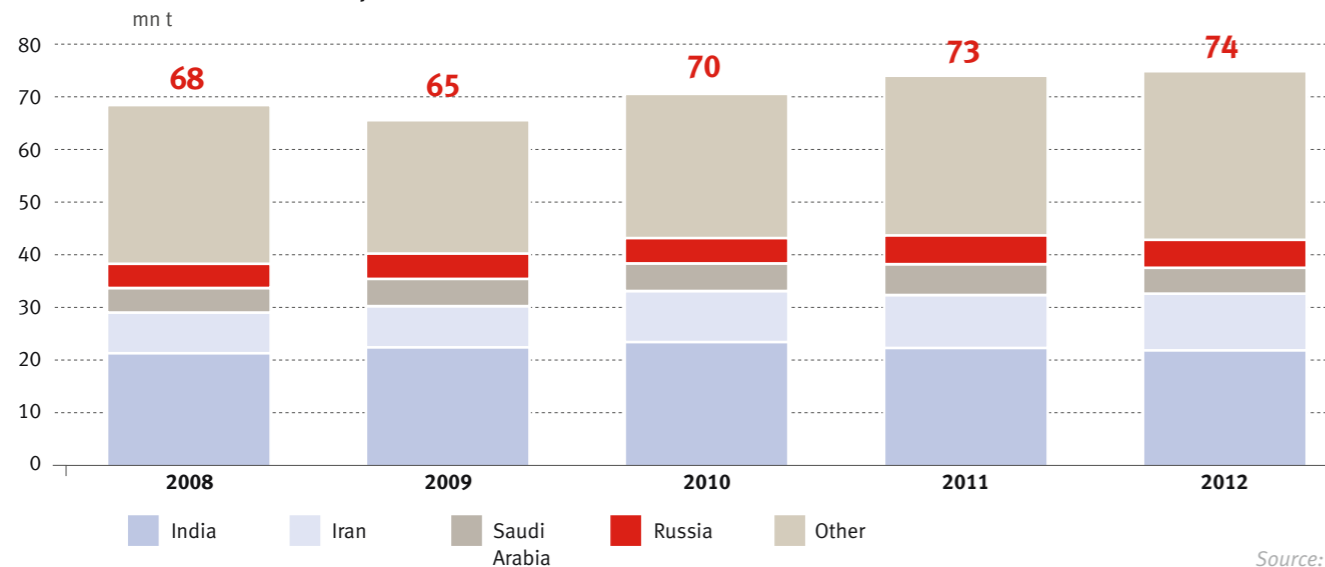
**Global HBI/DRI market has certain unique characteristics.** The bulk of the HBI/DRI produced (up to 80%) is consumed at the production site to meet the internal needs of steelmaking plants, and only a limited amount of the products is shipped to external customers. Metalloinvest delivers approximately 44% of the HBI/DRI it manufactures to steelmaking plants all over the world. The Company is the leader in the HBI market with a share of 40%.

The geography of HBI/DRI exports is driven by the need to produce high-quality steel. The main consumers are Japan and Malaysia, which import HBI/DRI from Russia and Venezuela. European and CIS countries import HBI/DRI from Russia and Africa. The United States is also a major consumer and imports HBI/DRI from Trinidad and Tobago, as well as from Venezuela.

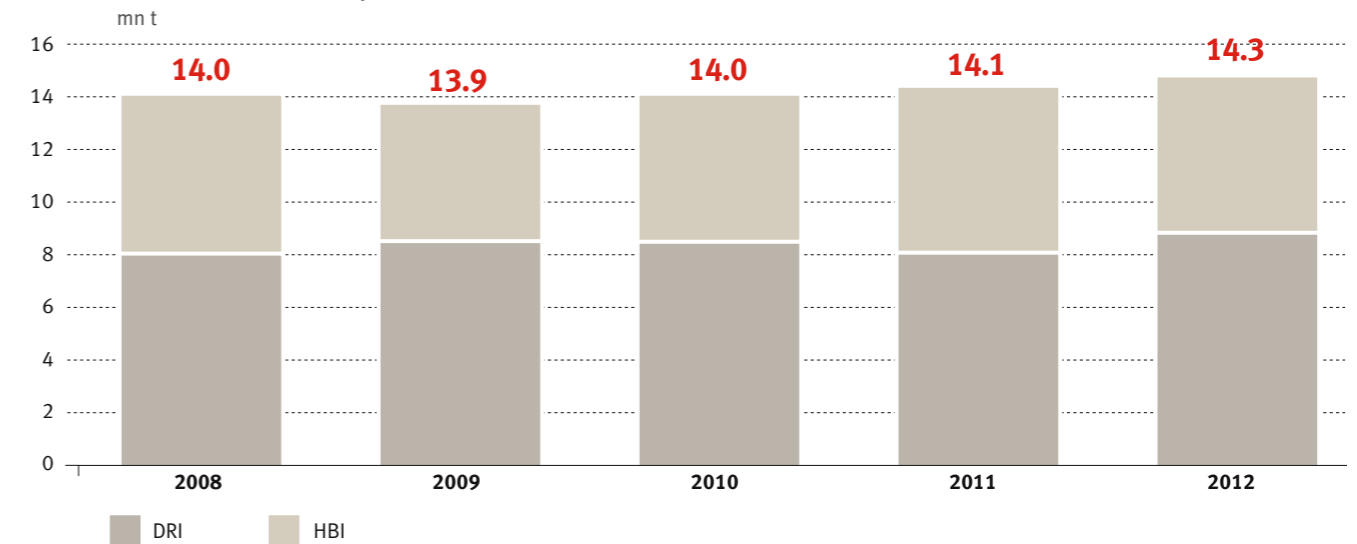
### HBI/DRI MARKET OF CIS COUNTRIES

**Metalloinvest is the sole producer of HBI/DRI in the CIS.** Metalloinvest's plants handle the production of HBI/DRI in CIS countries. In 2012, while operating at 100% capacity, the Company produced 5.2 million tonnes of HBI/DRI and shipped 2.3 million tonnes to external customers in Russia, Asia and Europe. The remaining volumes were used to produce steel at the Company's plants.

Global HBI/ DRI production



Global HBI/DRI exports



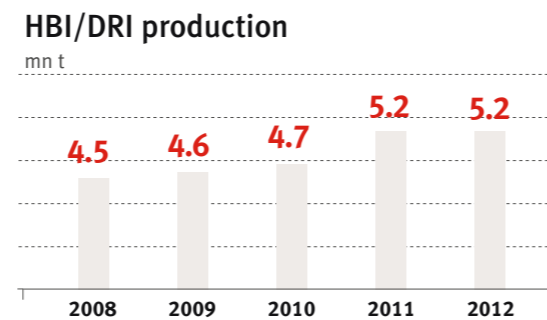
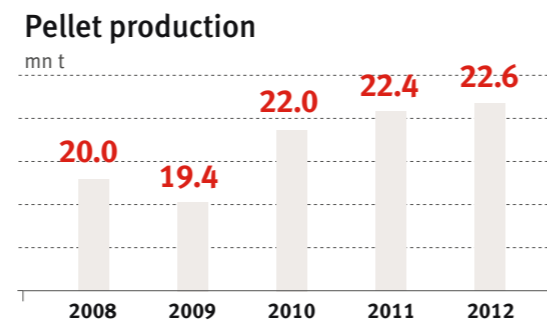
### 3 Business Model

14.6

bn tonnes  
iron ore  
reserves

### 3.1 Business Model

The business model of Metalloinvest represents a full production cycle from mining iron ore to producing high-quality steel products. Metalloinvest processes most of its iron ore into high value-added products: pellets and HBI/DRI (hot-briquetted iron/direct-reduced iron) which are used both for producing metallics and steel at the Company's plants and shipping to external customers.



Source: Company data



#### PELLETS: PRODUCTION AND USAGE

Pellets are one of the main types of iron ore products. They are porous balls with diameter of 5–30 mm and iron content of 61%–67.9%.

Pellets are produced by pelletising iron ore concentrate or iron ore fines. A mixture of iron ore concentrate with flux (limestone, lime) and binding agents (bentonite clay) is poured into the pelletising machines where “green” pellets are formed as they rotate. The “green” pellets are roasted at temperatures of 1,100–1,150°C to ensure they are durable for easy transportation and storage. Natural gas is used as fuel for pellet production.

The magnetite ore mined by Metalloinvest’s plants makes it possible to produce pellets in an energy efficient manner with minimum natural gas consumption: oxidation occurs during roasting, which leads to transformation of magnetite in “green” pellets into hematite with the release of a substantial amount of heat. The release of heat reduces fuel consumption, which is one of the main reasons for the Company’s leading position among global producers in terms of pellet production costs.

Pellets can be used without additional treatment in blast furnaces to produce hot metal and in DRI units to produce HBI/DRI.

## HBI / DRI: PRODUCTION AND USAGE

Direct-reduced iron (DRI) with iron content of 90% is produced by removing oxygen from the iron oxide (iron ore pellets) with the use of reducing gas obtained from natural gas. DRI is produced in the form of small porous balls with diameter of 4–20 mm.

Hot-briquetted iron (HBI) is DRI compressed at a high temperature into briquettes (with length of 100–120 mm, width of 45–55 mm and height of 30–40 mm) for easy storage and transportation.

The production of 1 tonne of HBI/DRI requires 1.4–1.5 tonnes of pellets and 300–350 m<sup>3</sup> of natural gas.

The raw materials used to produce HBI/DRI include pellets with iron content of at least 66% as well as reducing gas obtained from the processing of natural gas with separation into hydrogen and carbon monoxide.

The direct iron reduction process occurs in the DRI unit. The chemical reaction of the pellets with the reducing gas at a temperature of 900°C results in iron reduction (removal of oxygen from the iron oxide) with the release of water and carbon dioxide. If products are to be shipped to external customers, DRI is compressed into HBI.

HBI/DRI is a high value-added product and belongs to the group of metallics, which are used to produce steel in electric arc furnaces and basic oxygen furnaces. Metallics also include pig iron and ferrous scrap.

HBI/DRI is a high-quality substitute of scrap. Due to its low content of non-ferrous metal residuals (nickel, copper), HBI/DRI is the best metallic for producing high-quality steel grades.



## PRODUCTION PROCESSES AT METALLOINVEST PLANTS

Metalloinvest comprises Mining Segment, represented by Lebedinsky GOK (LGOK) and Mikhailovsky GOK (MGOK) and Steel Segment represented by OEMK and Ural Steel. Steel Segment also comprises Ural Scrap Company which processes ferrous scrap.

The Company's production assets are supplemented by auxiliary businesses (for details, see the Company's web-site [www.metalloinvest.com](http://www.metalloinvest.com)).

LGOK, MGOK and OEMK are located in the European part of Russia. Due to their proximity to developed transport infrastructure, these plants have access to key sales markets: CIS countries, Europe, the Middle East and North Africa. Ural Steel is located in the Urals close to the main regional pipe producers. Merchant products are shipped by rail.

## MINING SEGMENT

### Proven and probable ore reserves under JORC classification

Metalloinvest develops deposits with one of the world's largest proven iron ore reserve under JORC international classification — 14.6 billion tonnes, which at the current level of production guarantee an operating period of approximately 150 years.

The deposits under development by LGOK and MGOK are located in one of the world's largest iron ore basins, the Kursk Magnetic Anomaly, and primarily consist of magnetite ore with average iron content of 34–39%.

### Proven and probable ore reserves under JORC classification as of 31 December 2012\*:

(bn t)

LGOK	4.02
MGOK	10.61
<b>Total</b>	<b>14.63</b>

\* As of 1 July 2010, LGOK and MGOK had proven and probable reserves under JORC classification of 4.15 billion tonnes and 10.73 billion tonnes respectively. Over the period from 1 July 2010 to 31 December 2012, mined production at LGOK and MGOK totalled 127 million tonnes and 120 million tonnes, respectively.

Source: IMC

## 3.2 LGOK

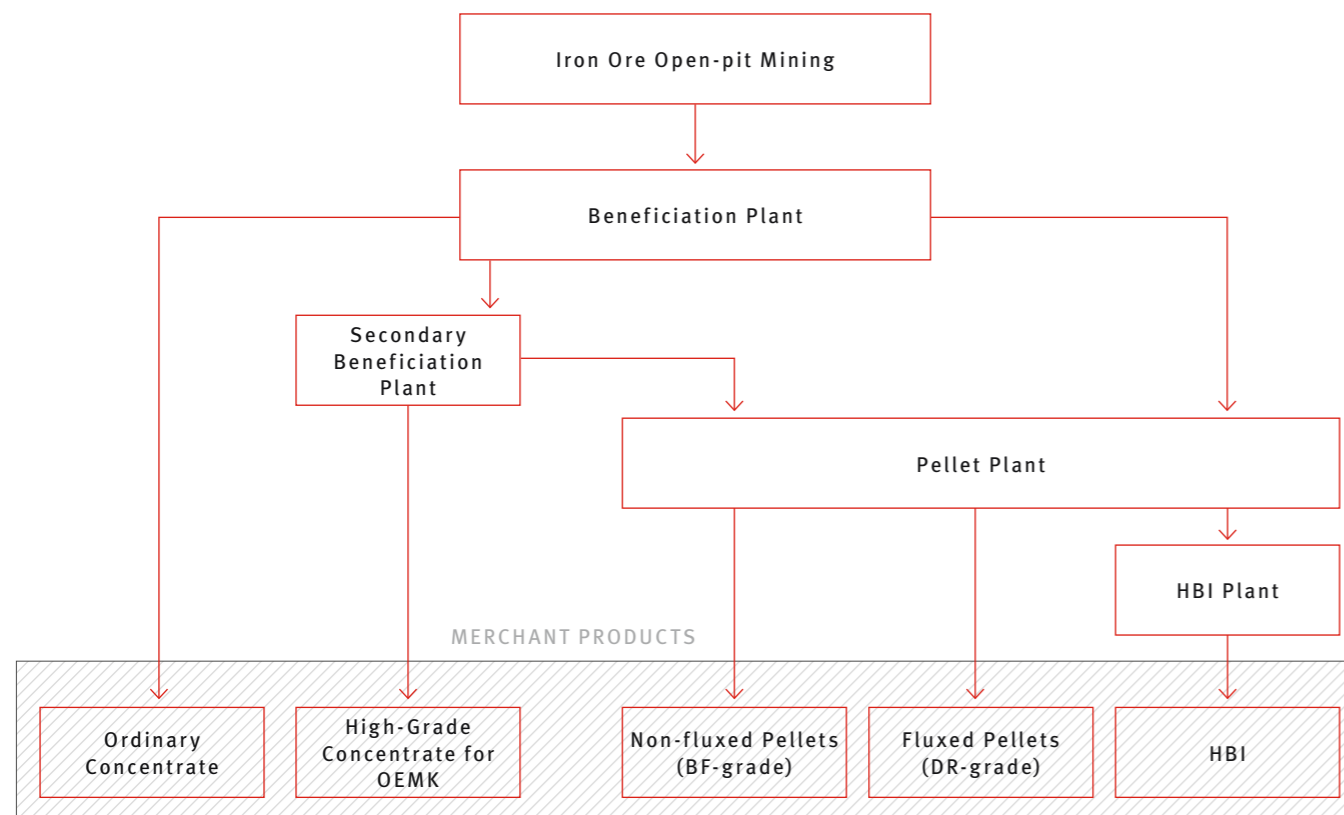
### MINING SEGMENT

LGOK is the largest iron ore mining and beneficiation plant in Russia and the CIS that produces high-quality iron ore products and metallics. LGOK is the sole producer of HBI in Russia and the CIS.

The main types of LGOK's merchant products are:

- iron ore concentrate
- non-fluxed pellets (BF-grade)
- fluxed pellets (DR-grade)
- HBI

#### Main process flows at LGOK



### MINING OPERATIONS

LGOK develops deposits in open-pit mines, using modern information technologies to plan the development of the pit and GPS tracking of railway locomotives and trucks.

Drilling and blasting are carried out in the pit before removing the iron ore. LGOK produces its own explosives using modern technologies. Storage and transportation of explosives as well as blasting operations are conducted in accordance with the established safety and environmental requirements.

The blasted iron ore is collected by excavators, loaded into dump trucks, and transported to in-pit transfer points, where it is loaded for railway transportation. The iron ore is then sent for concentrate production. LGOK mines iron ore with average iron content of 34%.

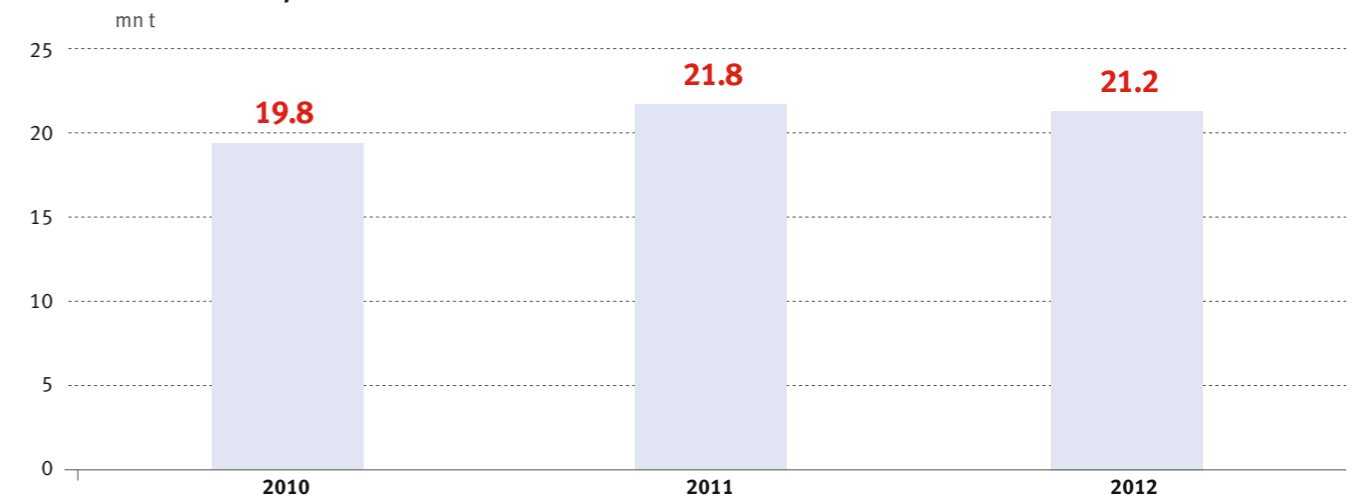
### CONCENTRATE PRODUCTION

LGOK produces ordinary concentrate with 68% iron content at the beneficiation plant. The main production process involves grinding the material in autogenous grinding mills followed by magnetic separation.

Part of the ordinary concentrate is sent on for pellet production. The rest of the concentrate is sent for secondary beneficiation in order to obtain concentrate with iron content of 70%. The high-grade concentrate, in turn, is used to produce HBI/DRI at LGOK and OEMK. The remaining ordinary concentrate is shipped to Ural Steel and external customers.

In winter, LGOK produces dried iron ore concentrate with average iron ore content of 68% in order to prevent freezing during transportation.

#### Concentrate production at LGOK



Source: Company data

## PELLET PRODUCTION

LGOK produces non-fluxed (BF-grade) and fluxed pellets (DR-grade) at four pellet plants that manufacture approximately 9 million tonnes of pellets per year.

Non-fluxed (BF-grade) pellets with iron content of 66% are produced from ordinary concentrate and used to produce hot metal. Fluxed (DR-grade) pellets with iron content of 66.5% are made from high-grade concentrate and used in the production of HBI/DRI.

Part of the pellets is sent for HBI production. The rest is shipped to Ural Steel and external customers.



## HBI PRODUCTION

LGOK is the sole producer of HBI in Russia and the CIS. At present, HBI is produced at two plants with total capacity of 2.4 million tonnes per year.

HBI-1 Plant with capacity of 1 million tonnes per year and HBI-2 Plant with capacity of 1.4 million tonnes per year operate based on the HYL-III and Midrex technologies respectively.

In 2012, LGOK carried out the first phase of modernisation of HBI-2 Plant, increasing production capacity by 58,000 tonnes per year.

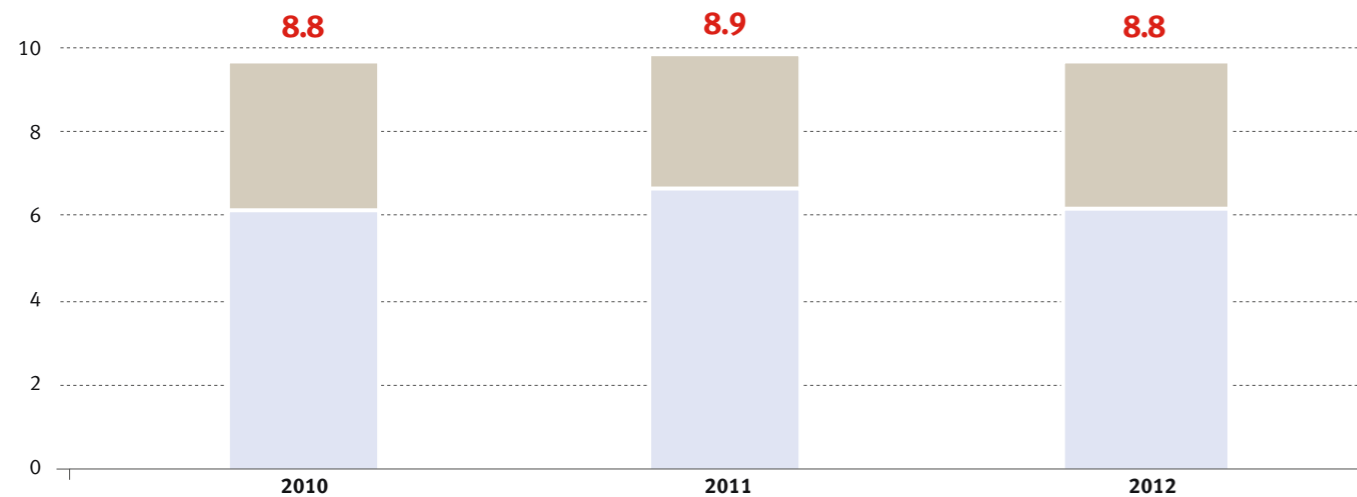
By 2017, the completion of the modernisation of HBI-2 Plant and the construction of the new HBI-3 Plant at LGOK will increase Metalloinvest's HBI production capacity by 2 million tonnes per year (for details, see pages 67–68).

LGOK produces HBI with average iron content of 90.6%.

Almost the entire volume of HBI is shipped to external customers.

Pellet production at LGOK

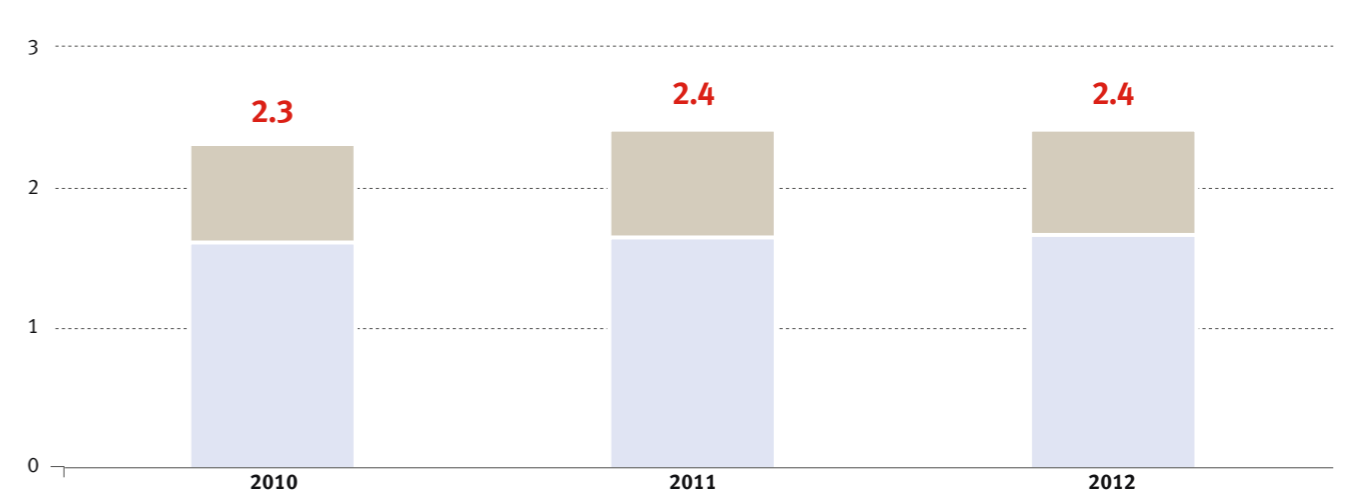
mn t



Source: Company data

HBI production at LGOK

mn t



Source: Company data

### 3.3 MGOK

MGOK is one of the largest iron ore mining and beneficiation plants in Russia and the CIS.

The main types of MGOK's merchant products are:

- sintering ore
- iron ore concentrate
- non-fluxed pellets (BF-grade)
- fluxed pellets (DR-grade)

#### MINING OPERATIONS

MGOK develops deposits using the open-pit method.

Drilling and blasting are carried out in the pit before removing the iron ore. MGOK produces its own explosives using modern technologies. Storage and transportation of explosives as well as blasting operations are conducted in accordance with the established safety and environmental requirements.



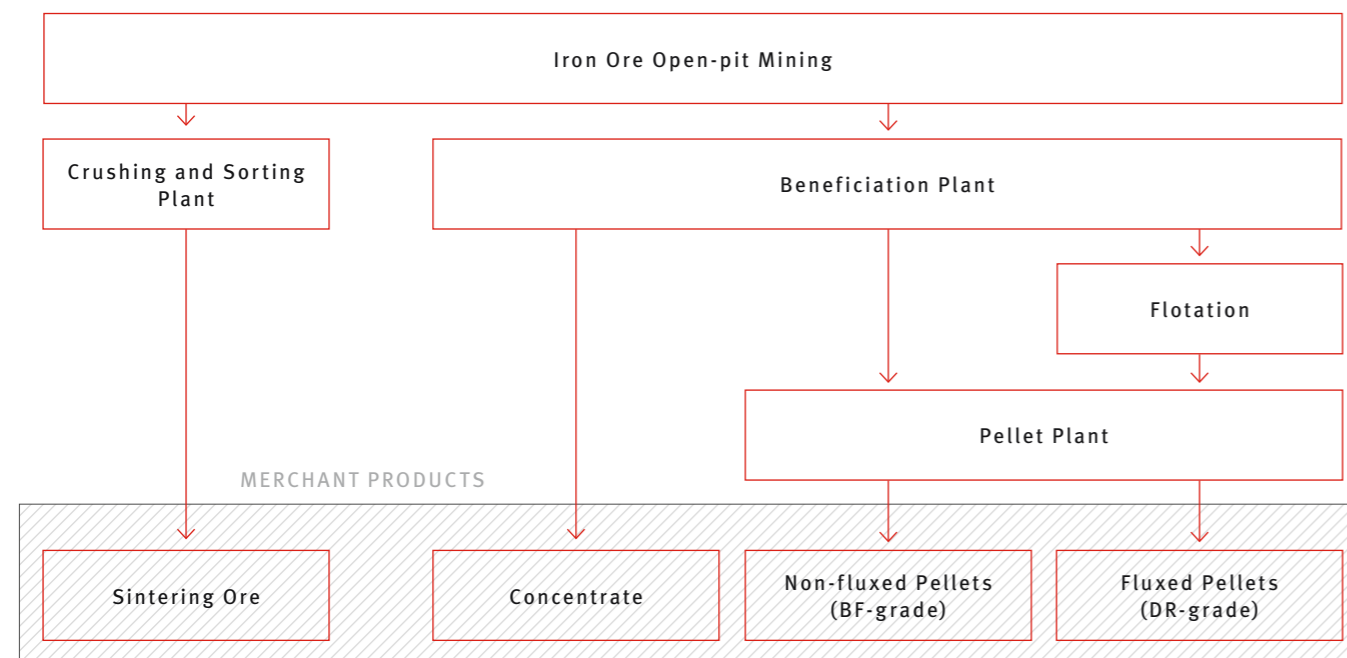
The blasted iron ore is removed by excavators and loaded into dump trucks. The ore is then shipped by rail to in-pit transfer points.

Most of the iron ore mined by MGOK has iron content of 39% and is sent for concentrate production. High-grade iron ore with iron content of 51% constitutes a smaller portion of output and is sent for the production of sintering ore.

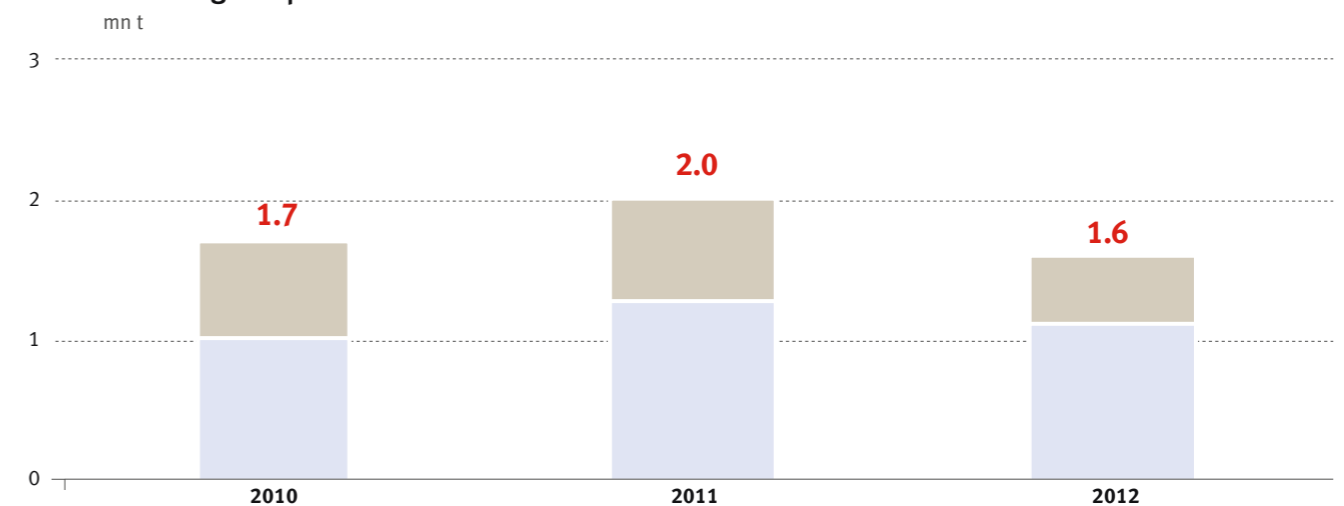
#### SINTERING ORE PRODUCTION

MGOK produces sintering ore with iron content of 52% at the crushing and sorting plant. In order to produce sintering ore, high-grade iron ore is crushed in several stages to chunks of no more than 10 mm in size. The sintering ore is shipped to Ural Steel and external customers.

#### Main process flows at MGOK



#### Sintering ore production at MGOK



Source: Company data



More than  
**17**  
mn tonnes  
of concentrate  
produced in 2012

## CONCENTRATE PRODUCTION

MGOK produces ordinary concentrate with iron content of 66% at the beneficiation plant, using iron ore with iron content of 39%. The main production process involves crushing the material in grinding ball mills followed by magnetic separation.

Most of the ordinary concentrate is sent on for pellet production. A smaller part is sent to flotation for the production of high-grade concentrate with iron content of 68%. High-grade concentrate is used to produce fluxed pellets (DR-grade) at MGOK. The remaining concentrate is shipped to Ural Steel and external customers.

In order to meet demand for iron ore concentrate in winter, MGOK produces dried iron ore concentrate with iron content of 66%. The low moisture content in the concentrate prevents it from freezing during transportation.

## PELLET PRODUCTION

MGOK comprises two pellet plants with total capacity of approximately 10 million tonnes per year.

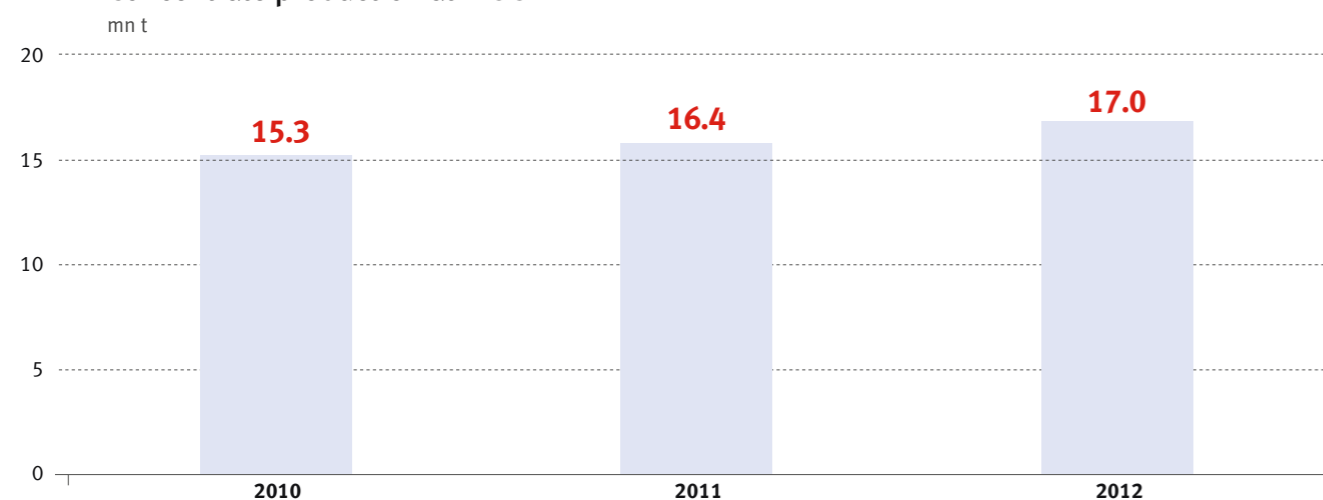
In 2010, MGOK launched construction of Pellet Plant #3 with production capacity of 5 million tonnes per year. The plant is to be put into operation in 2014 (for details, see page 67).

Non-fluxed pellets with iron content of 62% are produced from ordinary concentrate and used to produce hot metal. Fluxed (DR-grade) pellets with iron content of 66% are made from high-grade concentrate and used in the production of HBI/DRI.

In 2012, MGOK produced a record volume of pellets — more than 10 million tonnes.

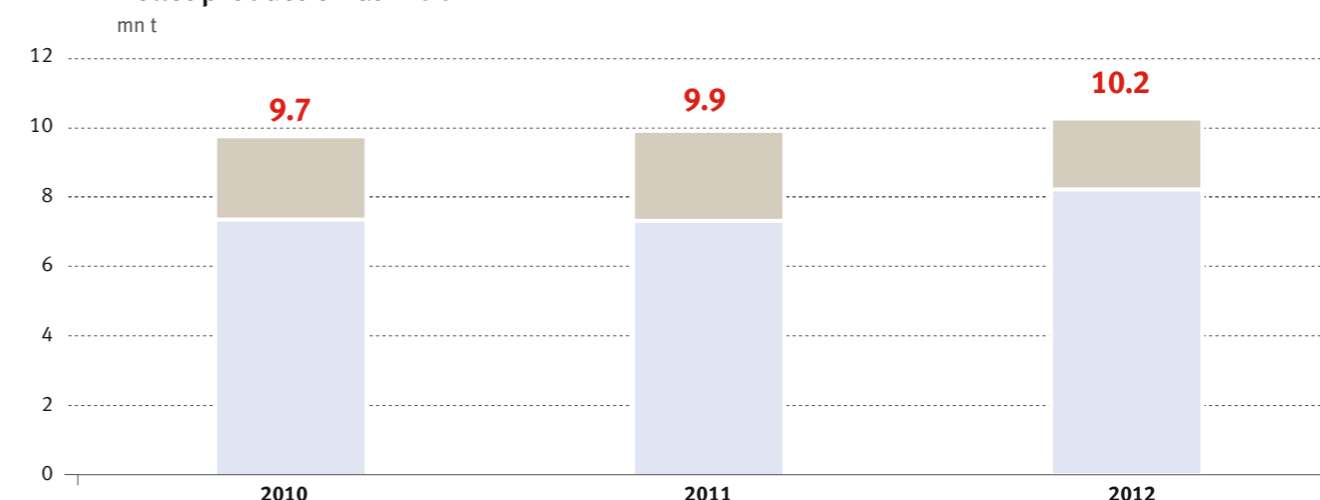
Pellets are shipped to Ural Steel and external customers.

Concentrate production at MGOK



Source: Company data

Pellet production at MGOK



Source: Company data

## 3.4 Shipment of Iron Ore Products and HBI

### INTRAGROUP SHIPMENTS

In 2012, intragroup shipments of iron ore products and HBI to OEMK and Ural Steel totalled 7 million tonnes (7.6 million tonnes in 2011).

### SHIPMENTS TO EXTERNAL CUSTOMERS

In 2012, the Company shipped 14.8 million tonnes of iron ore products and HBI to external customers located in Russia (9.1 million tonnes in 2011). The increase in shipments during the reporting period was due to the growing demand among the leading Russian steel companies: NLMK, MMK and Mechel. Metalloinvest also delivered iron ore products to companies such as Severstal, KOKS Group, Evraz and Kosogorsky Iron Works.

In February 2011, Metalloinvest signed a four-year contract with NLMK for supplying pellets produced by LGOK and MGOK.

In September 2011, Metalloinvest signed a contract with MMK for supplying iron ore concentrate and pellets produced by LGOK and MGOK. In December 2012, a new three-year contract was signed with MMK for an increase in iron ore products supplies.

In March 2013, Metalloinvest signed a three-year contract with Severstal for supplying approximately 3 million tonnes of iron ore concentrate.

Iron ore products and metallics are shipped to steelmaking plants located in Russia through direct sales. For most contracts, pricing is based on the Platts iron ore price index (62% Fe, CFR China).

In 2012, the Company exported 14.4 million tonnes of iron ore products and HBI (20 million tonnes in 2011). The main customers located outside of Russia are steelmaking plants in Asia (China, South Korea, Japan, India, Thailand and Indonesia) and Europe (Slovakia, Ukraine, the Czech Republic, the United Kingdom, Poland, Hungary, the Netherlands and Romania).

In 2012, the biggest consumers of Mining Segment products outside Russia were ArcelorMittal and US Steel Kosice. Other major customers included Jianlong I&S, Anyang I&S, Metinvest, Tata Steel, Xilin Group and Baosteel.

Metalloinvest exports iron ore products and HBI through its export operator Metalloinvest Trading AG.

Iron ore products and HBI are exported to Europe and the CIS through border rail terminals and seaports in the Baltic and Black seas.

Iron ore products are transported to China on Capesize and Panamax vessels through the Yuzhny Port in the Black Sea. The Novorossiysk and Ilyichevsk ports are used as alternatives. Approximately half of the shipments to China are carried out on CIF/CFR terms, while the remaining volume is shipped on a DAF basis through the Zabaykalsk border rail terminal.

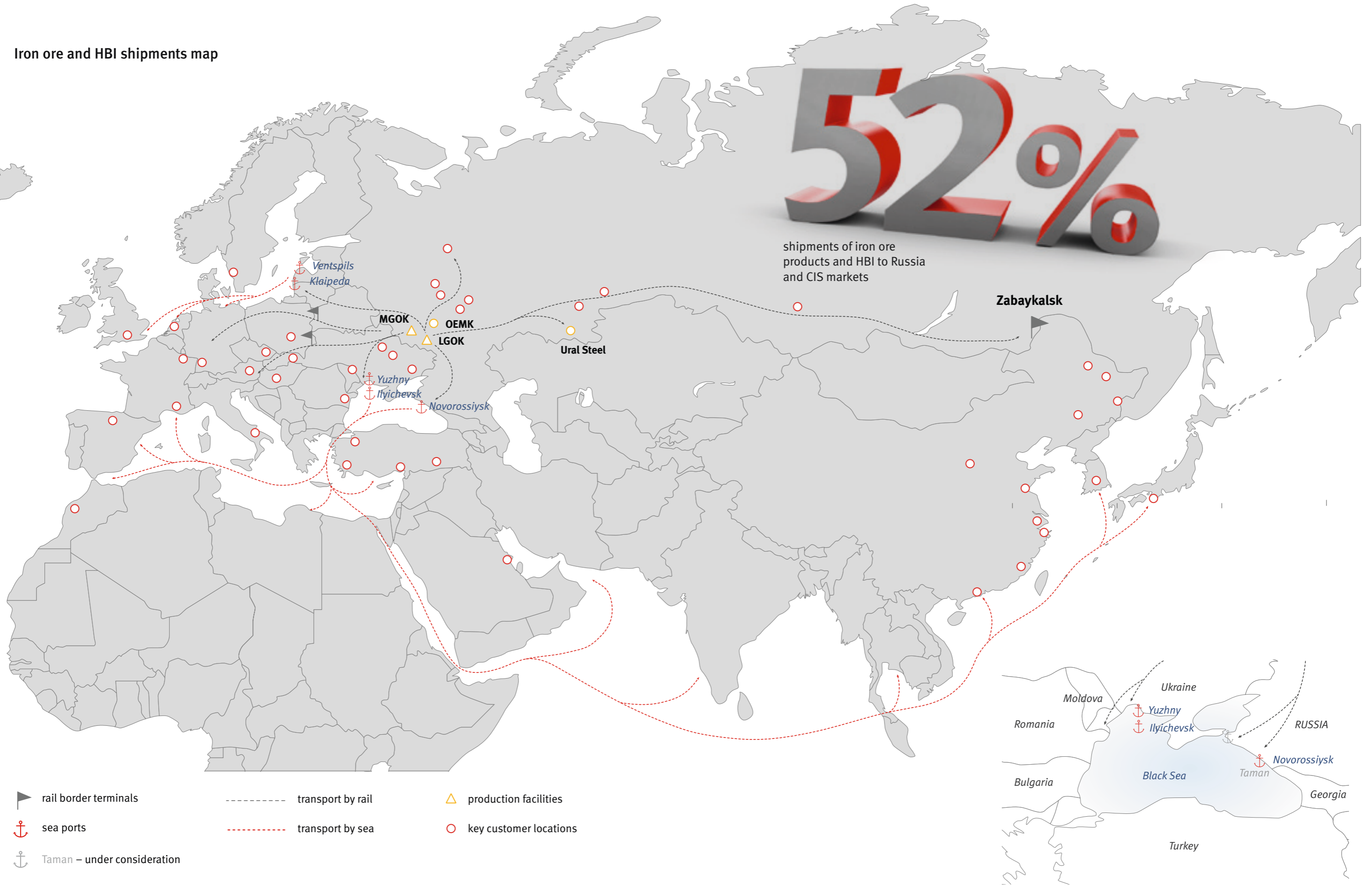
In order to increase exports to the rapidly growing markets of Asia and the Middle East, Metalloinvest is considering the feasibility of building the Taman Port in the Black Sea. With throughput capacity of up to 20 million tonnes of iron ore products per year, Taman Port will be capable of serving Capesize vessels.



Iron ore and HBI shipments map

52%

shipments of iron ore products and HBI to Russia and CIS markets



- rail border terminals
- transport by rail
- production facilities
- transport by sea
- key customer locations
- sea ports
- Taman – under consideration

## 3.5 OEMK

### STEEL SEGMENT

Metalloinvest Steel Segment comprises OEMK and Ural Steel, the leading regional producers of niche steel products, and also Ural Scrap Company.

OEMK is the only full-cycle steelmaking plant in Russia that uses the technology of direct iron reduction and smelting in electric arc furnaces, making it possible to produce metal that is virtually free of impurities and residuals.

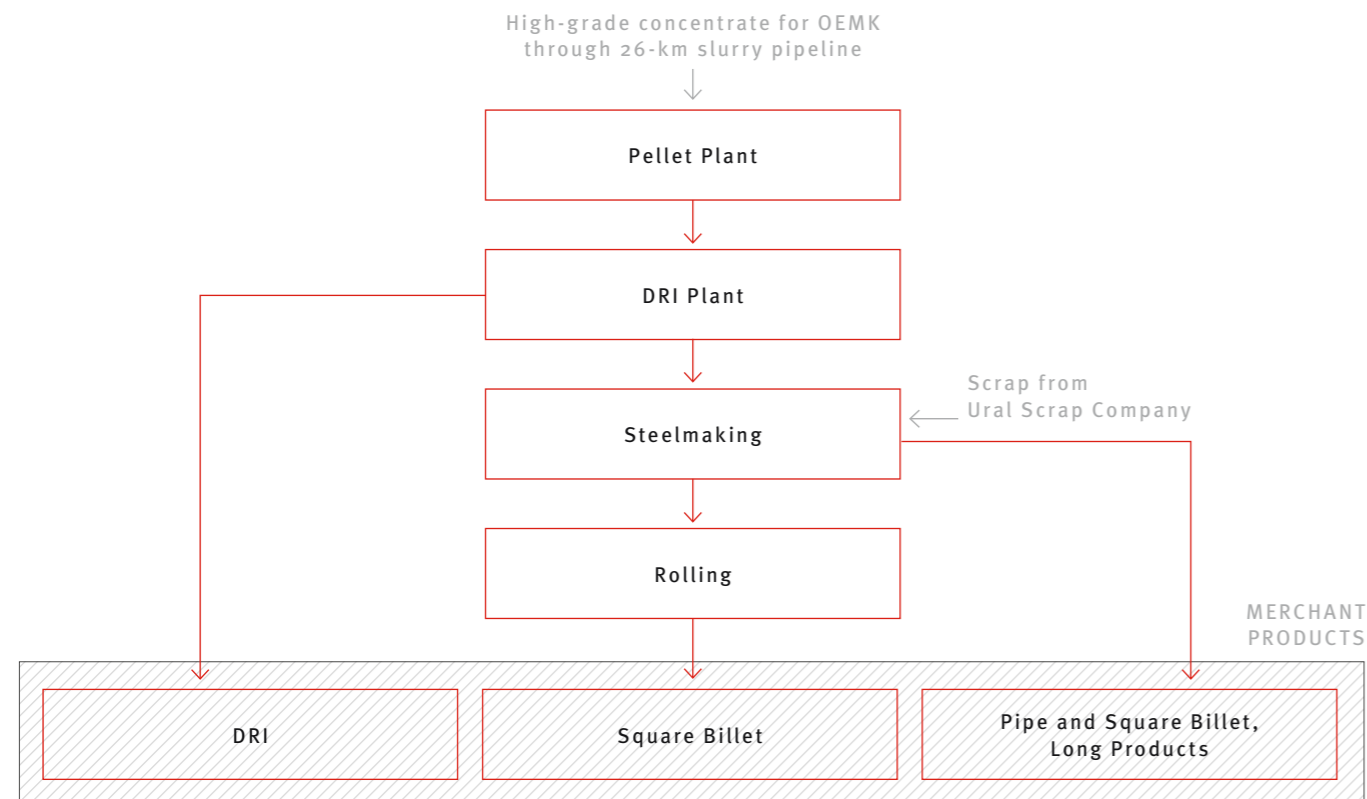
During the crisis year of 2009, OEMK was the only steelmaking plant in Russia that did not reduce the utilisation of its steelmaking capacity, while the rest of the industry saw a 20%–40% decline.

The main types of OEMK's merchant products are:

- DRI
- steel products
  - square billets
  - pipe billets
  - long products



### Main process flows at OEMK



### PELLET PRODUCTION

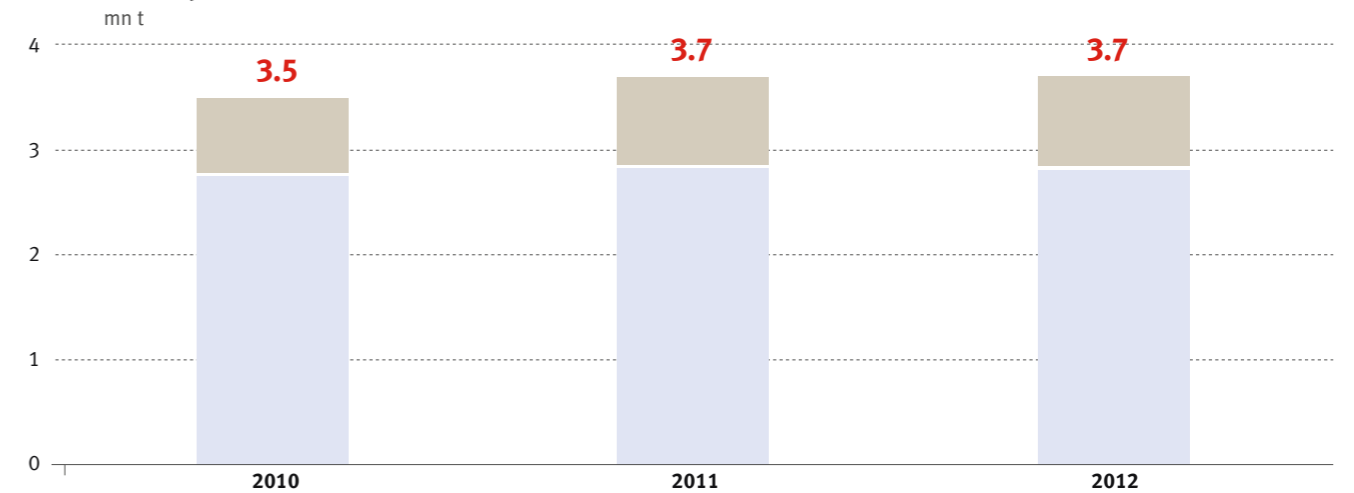
OEMK produces fluxed pellets (DR-grade) at a pellet plant with capacity of 3.7 million tonnes per year.

guarantees the stability of supply and reduces costs due to the absence of transportation expenses.

High-grade concentrate produced by LGOK is the raw material used to manufacture pellets. High-grade concentrate is fed into a 26-km slurry pipeline, which

Almost all of the pellets with iron content of 66% are used to produce DRI at OEMK.

### Pellet production at OEMK



Source: Company data

## DRI PRODUCTION

OEMK produces DRI at four DRI units with total capacity of 2.8 million tonnes per year.

Almost all of the DRI with iron content of 90% is used to produce steel at OEMK.

## CRUDE STEEL PRODUCTION

OEMK produces crude steel at four electric arc furnaces with total capacity of 3.3 million tonnes of steel per year.

OEMK is implementing a project to increase production capacity by 0.5 million tonnes of crude steel per year. The project involves modernisation of the arc power optimisation system at electric arc furnaces, replacement of transformers, modernisation of the electric arc furnace gas purification system, and modernisation of cooling water circuits. The project will not only make it possible to increase crude steel production at OEMK to 3.85 million tonnes per year, but also reduce the environmental impact and stabilise the production process (for details, see page 68).

Internally produced DRI accounts for approximately 70% of the raw materials used to produce crude steel, while the remaining 30% comes from ferrous scrap delivered by Ural Scrap Company. Using DRI makes it possible to produce high-quality steel with a low residual content in addition to considerable cost savings due to the lower cost of DRI compared to scrap.

Almost all the smelted crude steel undergoes additional treatment at ladle furnaces and vacuum degassers. This is followed by continuous casting.

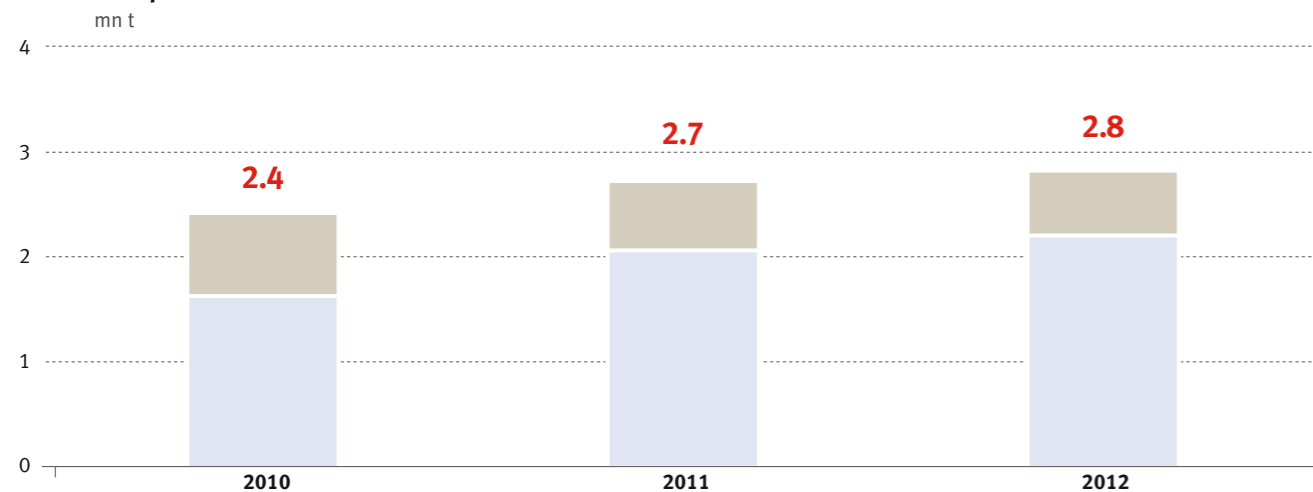
Most of the steel is sent on for rolling. The rest is shipped in the form of cast square billets to external customers.

## ROLLING

Rolling production facilities include Rolling Mill 700 and Rolling Mill 350, which produce pipe and square billets as well as long products (special bar quality – “SBQ”).

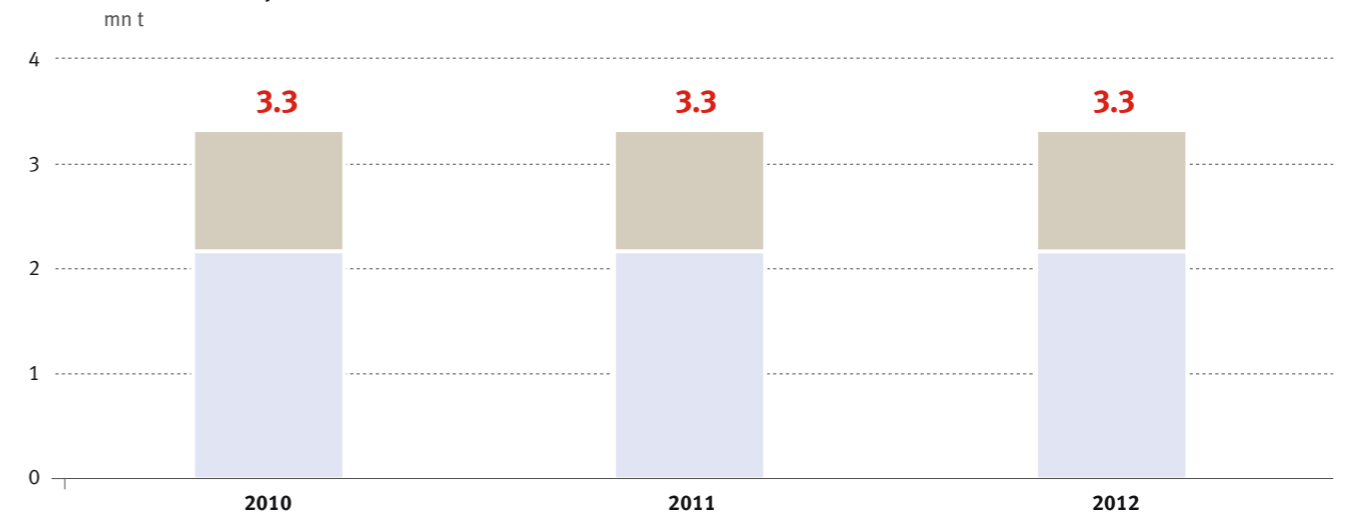
OEMK has successfully operated a finishing plant with total production capacity of 300,000 tonnes per year since 2010. The three finishing lines installed at the plant allow for processing rolled products of complex steel grades, and levelling, control and facing. OEMK’s products enjoy high demand among automotive producers.

DRI production at OEMK



Source: Company data

Crude steel production at OEMK



Source: Company data

## 3.6 Ural Steel

Ural Steel is an iron and steel works that includes sinter, coke and hot metal production as well as steelmaking and rolling facilities.

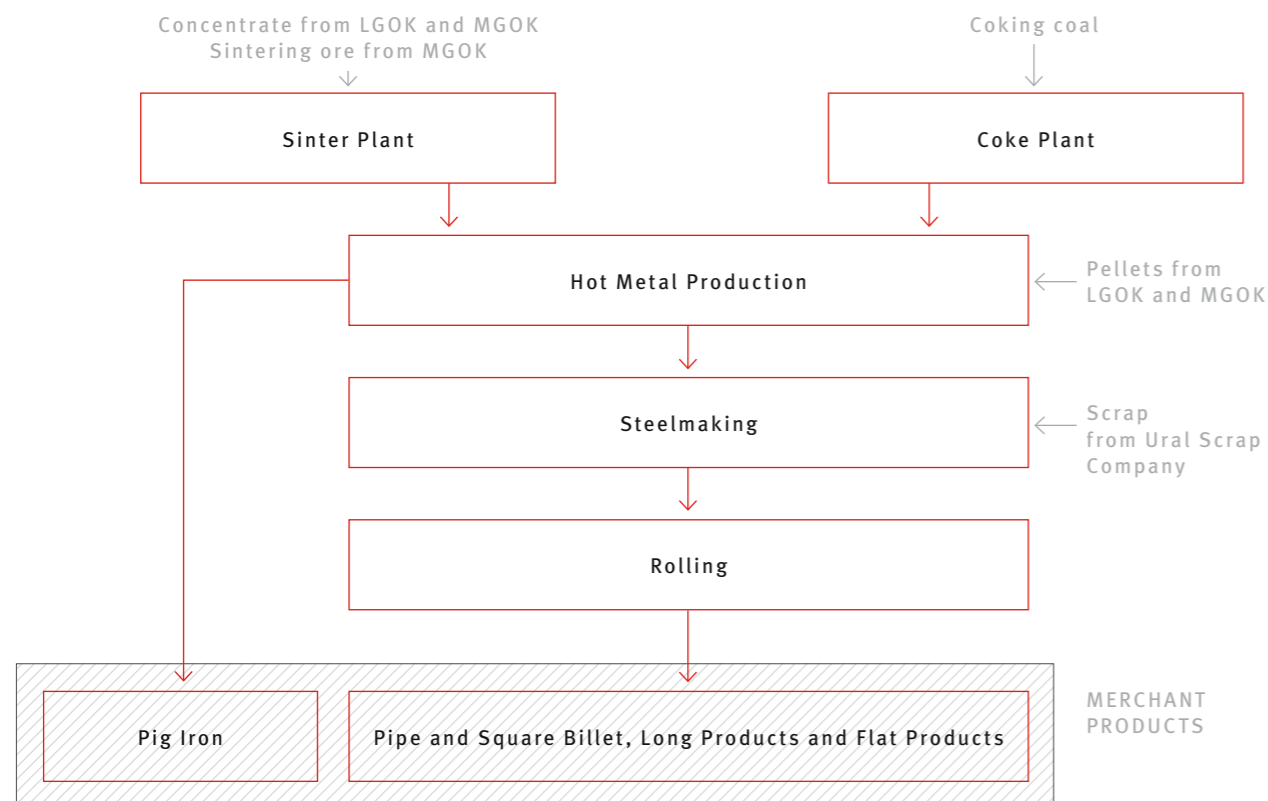
The main types of Ural Steel's merchant products are:

- pig iron
- steel products
  - square billets
  - pipe billets
  - long products
  - flat products (bridge steel, strips, heavy plate)

Ural Steel's facilities include a heat and power plant (HPP) that covers up to 50% of its electricity needs. The cost of generating electricity internally is considerably lower than the cost of outside purchases since the HPP uses the waste gas from hot metal and coke production along with natural gas as a raw material for electricity production.



### Main process flows at Ural Steel



### SINTER PRODUCTION

The sinter plant has four sintering machines with total capacity of 3.2 million tonnes per year.

The sintering ore from MGOK and iron ore concentrate from LGOK and MGOK are used as raw materials for sinter production.

All sinter is used as a raw material to produce hot metal at Ural Steel.

In 2012, Ural Steel modernised Sintering Machine #4, which made it possible to increase the sinter plant's capacity and improve the performance of the blast furnace by reducing the coke consumption required to produce hot metal due to sinter quality improvements.

### COKE PRODUCTION

The coke plant has four coke oven batteries with total capacity of 2 million tonnes per year.

Coking coal purchased from Russian miners in Kuzbass is used as a raw material for coke production.

Coke is used both as a fuel and as a reducing agent for hot metal production.

In 2011, Metalloinvest launched construction of Coke Oven Battery #6 at Ural Steel. The commissioning of the new battery will reduce the environmental impact as well as lower Ural Steel's dependence on external coke supplies, making it possible to optimise coke production costs (for details, see page 69).

## HOT METAL PRODUCTION

Ural Steel produces hot metal at four blast furnaces. At present, three of the furnaces are in operation.

Prepared raw materials are used for hot metal production: sinter and pellets from LGOK and MGOK.

Hot metal is used to produce steel at the plant and is also shipped to external customers in the form of pig iron.

In 2012, hot metal production at Ural Steel declined by 15.2% compared with 2011. The reduction was due to planned major repairs to Blast Furnace #3. It has a higher production capacity than Blast Furnace #1, which was put into operation instead.

## CRUDE STEEL PRODUCTION

Ural Steel produces most of its crude steel at the electric arc furnace plant, which includes two electric arc furnaces with total capacity of 2 million tonnes of steel per year, two ladle furnaces and two continuous casting machines.

In 2012, a vacuum degasser was put into operation, enabling the plant to expand its product range as well as improve its quality and competitiveness. The vacuum degasser is to process up to 1.2 million tonnes of steel per year.

In Q1 2013, open-hearth plant was closed in order to increase economic efficiency and environmental safety.

Most of the steel is sent for rolling. The rest is shipped in the form of cast square billets to external customers.

## ROLLING

Rolling production at Ural Steel includes Section Mill, Plate Mill and Strip Mill, which produce various types of steel products: pipe and square billets as well as flat and long products.

## SHIPMENT OF PIG IRON AND STEEL PRODUCTS

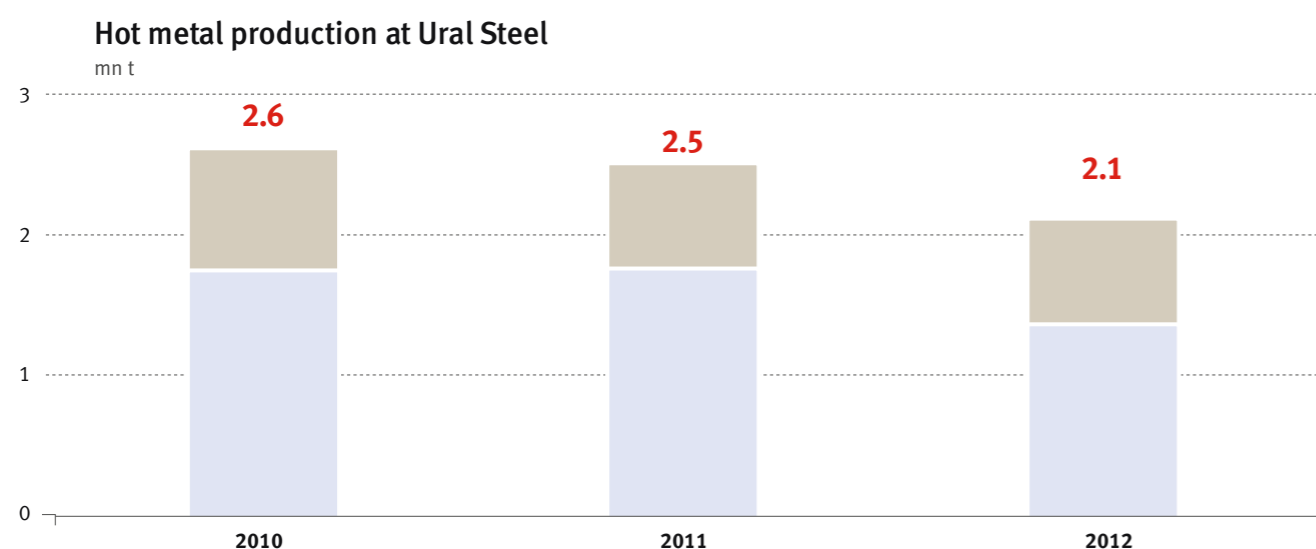
In 2012, the Company shipped 5.9 million tonnes of pig iron and steel products (6.4 million tonnes in 2011). The main consumers of steel products are enterprises working in the automotive, engineering, pipe, metal hardware and bearing industries.

OEMK won the “Supplier of 2012” category with Schaeffler Group, which is among the world’s leading producers of frictionless bearings and is a supplier to almost all global automotive producers.

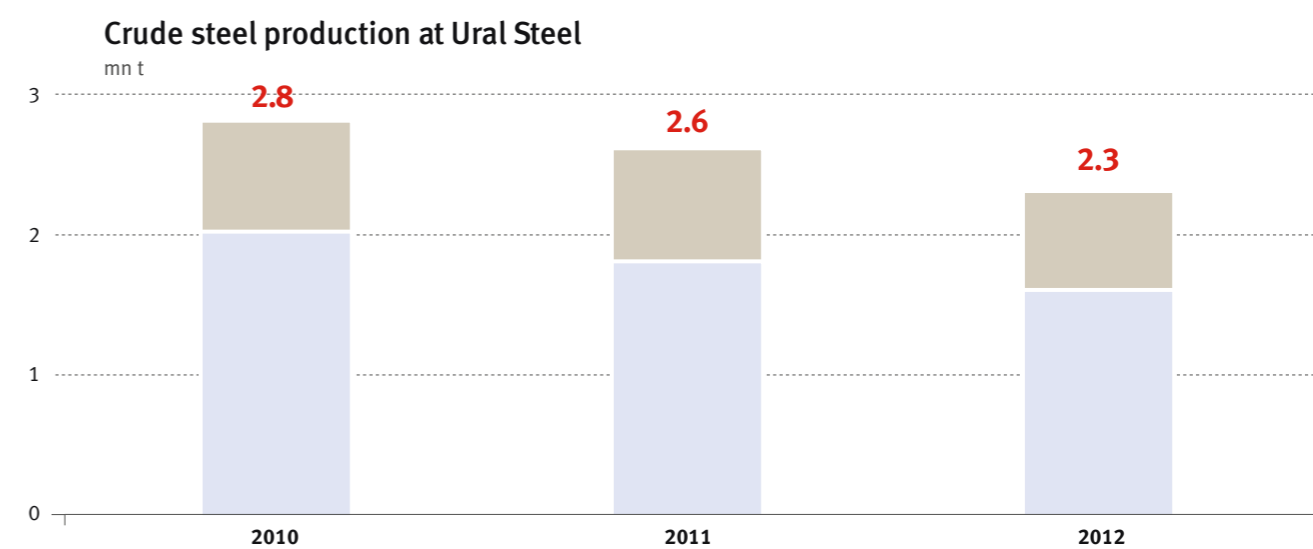
The main consumers of steel products in Russia are ChelPipe, Revyakinskiy MZ, KAMAZ, Vyksa MZ, TMK and Severstal-Metiz.

In June 2012, Metalloinvest and ChelPipe signed an agreement to expand cooperation and increase supplies over the next three years. The parties agreed to increase deliveries of Ural Steel’s flat products to ChelPipe. Metalloinvest will become one of the main suppliers of rolled products for the production of pipes that are intended for the construction of the product pipeline under a project being implemented by SIBUR.

Metalloinvest is also a major steel supplier for bridge construction in Russia and abroad. Metalloinvest’s steel products were used to build an 895-metre bridge over Oka River in Nizhny Novgorod and a 3,100-metre bridge to Russky Island in Vladivostok.



Source: Company data



Source: Company data

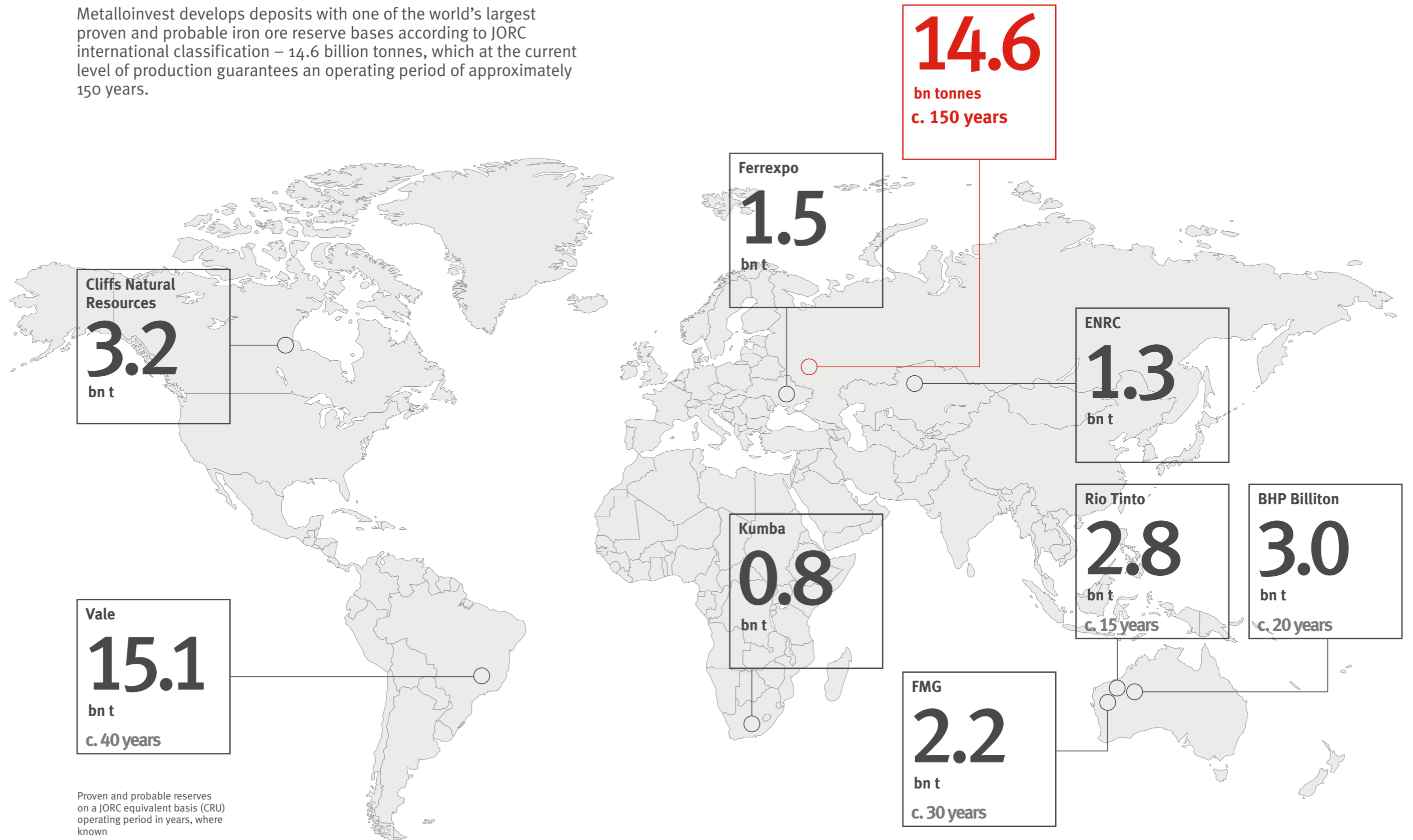
## 4 Strategy



**First HBI  
supplier  
in the world**

## 4.1 Strategy

Metalloinvest develops deposits with one of the world's largest proven and probable iron ore reserve bases according to JORC international classification – 14.6 billion tonnes, which at the current level of production guarantees an operating period of approximately 150 years.



Metalloinvest's long-term strategy involves consolidating its market positions and efficient use of its resource base through producing high value-added products: pellets and HBI/DRI.

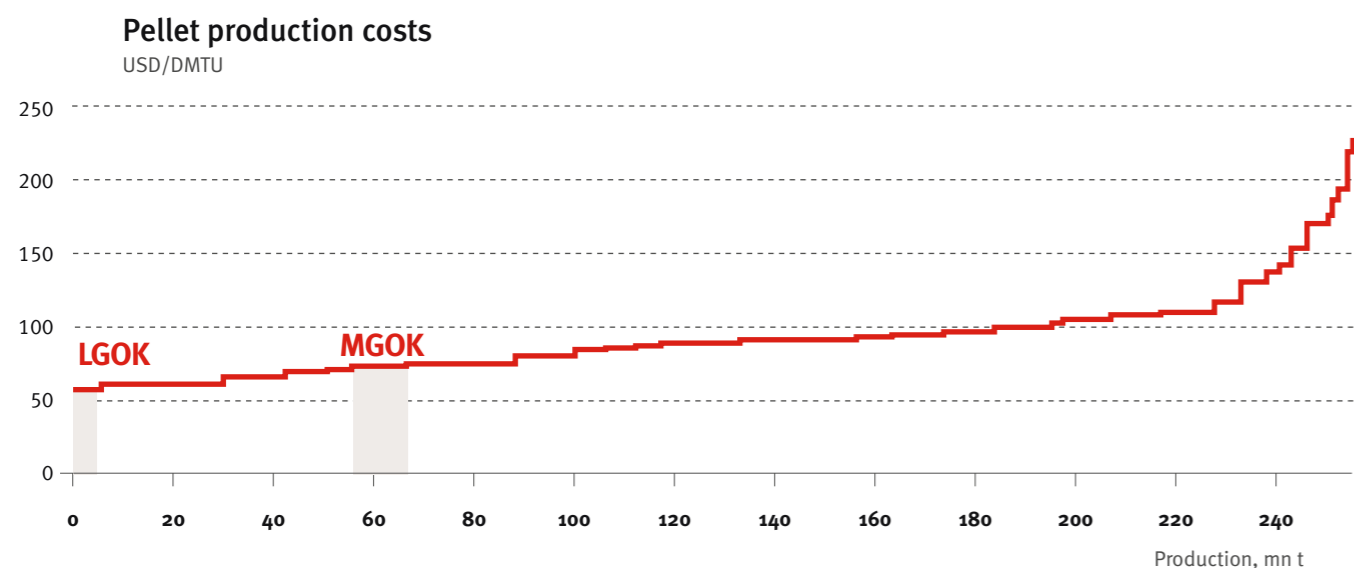
The production costs of pellets and HBI/DRI at Metalloinvest's plants are considerably lower than the production costs for similar products among global competitors.

The cost curve\* for global pellet production in 2012 is shown below. Metalloinvest's plants are in the first quartile among the world producers based on this indicator.

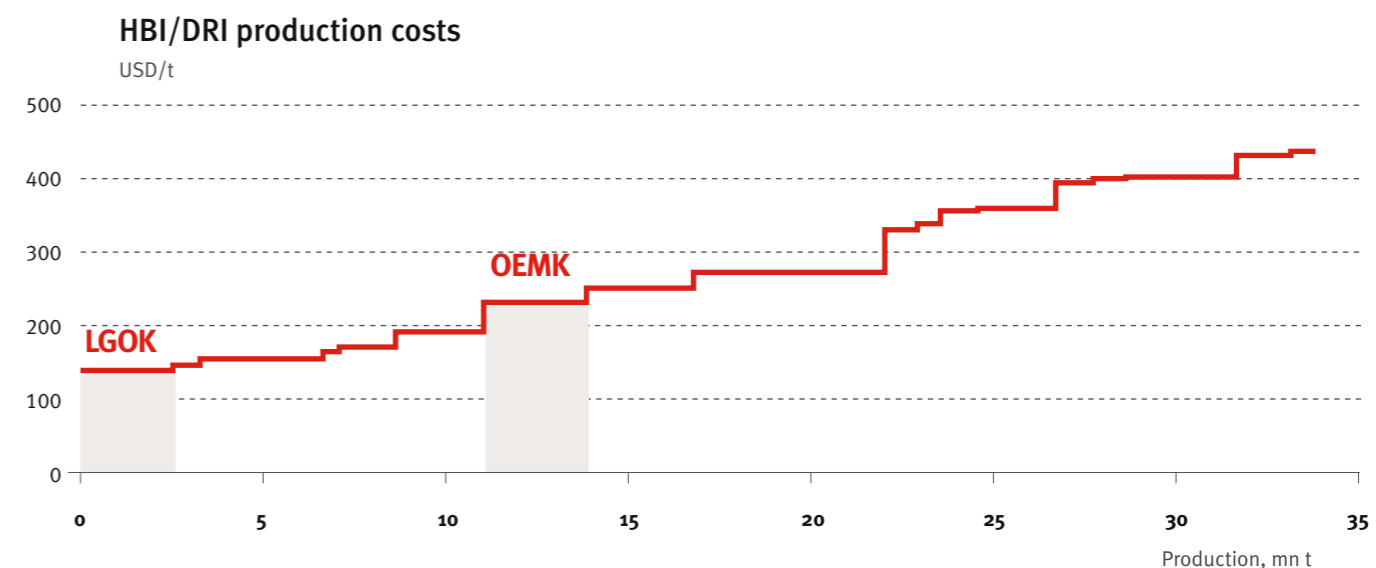
According to the cost curve\* for HBI/DRI production in 2012, HBI production costs at LGOK are the lowest in the world.

The main reasons for the low production costs of pellets and HBI/DRI at Metalloinvest's plants are:

- availability of own extensive resource base
- absence of third party involvement in pit development
- use of railway to transport iron ore from the pit
- use of low-cost magnetic separation as the primary method of iron ore beneficiation
- "zero" transportation costs for shipping iron ore concentrate from LGOK to OEMK through the 26-km slurry pipeline
- energy-efficient production technology
- access to substantial quantities of relatively inexpensive natural gas and electricity



Source: CRU, LGOK and MGOK costs are provided by the Company



Source: CRU, LGOK and OEMK costs are provided by the Company

\* The costs provided by the Company for the production of HBI/DRI and pellets have been placed on CRU's global cost curves for HBI/DRI and pellets. It should be noted that the production costs for LGOK and MGOK have not been calculated using the CRU model and are thus not truly comparable to the operating costs of other mills that have been calculated the CRU model.

## PELLETS: HIGH VALUE-ADDED PRODUCT

### Main advantages of using pellets versus sinter:

- **Environmentally friendly production technology.** Use of pellets eliminates the sintering process thereby reducing emissions of a steel plant, specifically greenhouse gas emissions.
- **Energy-efficient production technology.** Use of pellets for hot metal production reduces coke consumption and increases the blast furnace's production capacity due to the higher iron content in the pellets which has a positive impact on the economics of a steel plant.

### Main advantages of producing pellets:

- relatively low production costs
- energy-efficient production due to the processing of magnetite ore
- easy transportation, storage and use
- higher price of pellets compared with iron ore

### Pellet production at Metalloinvest's plants

Metalloinvest is the largest pellet producer in Russia and the CIS and the third largest pellet manufacturer in the world.

A distinctive feature of Metalloinvest pellets is their high iron content, ranging from 62% to 66.5%.

At present, Metalloinvest has total pellet production capacity of 22.6 million tonnes per year, with LGOK accounting for 8.8 million tonnes, MGOK for 10.2 million tonnes and OEMK for 3.7 million tonnes.

In order to increase pellet production, the Company launched construction of Pellet Plant #3 at MGOK in 2010. After the completion of the project, Metalloinvest will have total production capacity of 27.6 million tonnes of pellets per year (for details, see page 67).

## HBI/DRI: HIGH VALUE-ADDED PRODUCT

### Main advantages of using HBI/DRI versus pig iron and ferrous scrap:

- **Quality.** The low content of impurities (sulphur, phosphorus) and non-ferrous metals (copper, nickel) in HBI/DRI makes it possible to produce high-quality steel.
- **Universality.** HBI/DRI can be used both at mini-mills in electric furnaces and at integrated metallurgical plants in blast furnaces or basic oxygen furnaces.
- **Efficiency.** HBI/DRI can be continuously fed into a furnace without additional processing, which maximises the utilisation capacity of steelmaking equipment and improves the cost structure.
- **Stable supply.** HBI/DRI production takes place throughout the entire year, while the collection of scrap metal is seasonal.



**35%**  
energy saving  
in HBI/DRI production  
compared with hot  
metal smelting

#### Additional advantages of HBI versus DRI:

- **Easy to transport and use.** The high density of HBI (approximately 5 grammes/cm<sup>3</sup>) allows for easy storage and transportation as well as a reduction in the space occupied in the furnace and a weaker reaction with atmospheric oxygen.
- **High thermal and electrical conductivity.** Higher thermal and electrical conductivity ensure rapid melting both in blast furnaces and electric arc furnaces.

#### Factors supporting global demand for HBI/DRI:

- **Stricter requirements for eco-friendly production.** Stricter atmospheric emissions standards are reducing crude steel production with the use of coke. Steel production in electric arc furnaces eliminates the use of coke.
- **Increase share of steelmaking in electric arc furnaces.** The proportion of steelmaking in electric arc furnaces increased from 27% in the 1980s to 75% in 2010 in the United States and from 28% in the 1980s to 42% in 2010 in Europe.
- **Degradation of scrap quality.** During the steelmaking process in electric arc furnaces, the residuals contained in scrap metal (lead, copper, tin, zinc) partially infiltrate the finished product. Following their service life, these steel products and metalware are used in the form of scrap to make steel, which leads to the accumulation of residuals in the finished product. In order to control the chemical composition, manufacturers have begun adding HBI/DRI to scrap as furnace charge thereby reducing the content of residuals.
- **Expanded requirements for steel products.** For quality assurance and reliability as well as to increase the service life of metal products (bridge structures, vehicles, pipelines), metalware manufacturers are imposing stricter requirements on steel products, which in turn results in the need to use high-quality raw materials in steelmaking processes.

#### Factors supporting demand for HBI/DRI in the CIS:

- **Reduced availability of home scrap.** In CIS countries, the decline of open-hearth production and transition to the use of electric arc furnaces, as well as the introduction of continuous steel casting technologies, resulted in reduced scrap availability. A shortage of scrap supports high demand for HBI/DRI, which is a substitute for scrap.
- **Increased use of electric arc furnaces for steelmaking.** The proportion of steel produced in electric arc furnaces in CIS countries increased from 12% in 2000 to 23% in 2012. In particular, 15 mini-mill projects, comprising electric arc furnace and rolling equipment with production capacity of 16 million tonnes of steel per year were commissioned between 2006 and 2013 or are currently at the start-up stage in Russia.

#### Main advantages of HBI/DRI production versus pig iron:

- **Compact facilities.** HBI/DRI production does not require sinter plants, coke oven batteries and blast furnaces.
- **Environmentally friendly process.** The use of natural gas as a reducing agent in the HBI/DRI production process is more environmentally friendly compared with the use of coke. The reduction in carbon dioxide emissions is 50%–60% compared with hot metal production in blast furnaces.
- **Energy efficiency.** Direct iron reduction process occurs in the solid phase at a temperature of 900°C, which is considerably lower than the hot metal smelting temperature of 1,250°C. The energy savings from using HBI/DRI in production compared with hot metal smelting are approximately 35%.

## HBI/DRI PRODUCTION AT METALLOINVEST'S PLANTS

Metalloinvest's plants possess the necessary resources to produce HBI/DRI:

- high-quality iron ore products with iron content of more than 66.5%
- access to substantial quantities of relatively inexpensive natural gas and electricity
- technical expertise and practical experience

In 2012, the Company's share of the global HBI market was 40%.

At present, Metalloinvest produces HBI/DRI at 100% capacity utilisation. Production volumes amount to 5.2 million tonnes per year.

In order to increase HBI/DRI production, the Company has begun modernising of HBI-2 Plant and also signed a contract for the construction of HBI-3 Plant at LGOK. Following the completion of these projects, the Company will have total production capacity of 7.2 million tonnes of HBI/DRI per year (for details, see page 67–68).

## 4.2 Investment Programme

**463**  
mn USD  
capital expenditure  
in 2012

The Company has been implementing an investment programme designed to achieve a balance between profitability in the current business cycle, a long-term market positions consolidation and effective monetisation of the resource base. The investment programme aims to grow output of high value-added products: pellets and HBI/DRI, as well as optimise production in the Steel Segment.

The investment programme is flexible and is dependent on a number of factors, including the current market situation, the cost of raising funds, and so on things. When selecting investment alternatives, a limited number of projects with significant potential to increase the Company's internal value is implemented.

Metalloinvest follows a policy of capping the maximum amount of capital expenditure (including maintenance) to a level of USD 700–800 million per year.

Capital expenditure totalled USD 463 million in 2012 versus USD 512 million in 2011 and USD 392 million in 2010.

### INVESTMENT PROJECTS

#### PELLET PLANT #3 CONSTRUCTION AT MGOK

Design capacity  
**5**  
mn tonnes of pellets  
per year

Capital expenditure  
**450**  
mn USD

The project provides for the construction of a conveyor-based pellet plant, with green pellets manufacturing facilities, a finished products warehouse, a railway station for the shipment of pellets as well as external networks and communications. As of the end of 2012, 50% of the total capital expenditure for the project had been completed. Current stage involves construction of pelletising and roasting shops, pellets warehouse, transfer points, limestone and bentonite warehouse, concentrate receiving and thickening units. Railways for pellets shipment are also under construction. Environmental challenges are being resolved: work has begun on a settling pond to collect rain and meltwater with subsequent purification and entry into the plant's general recirculation system. The project includes construction of closed-space pellets storage and installation of gas burning units which will decrease dusting and nitrogen oxides emissions into atmosphere. Systems for slurry and water recycling will be installed in order to prevent water pollution. In November 2012, work began on the installation of the key pellets roasting equipment. Pellet Plant #3 is to be put into operation in 2014.

The successful implementation of the project will enable Metalloinvest to increase the share of high value-added products in the shipment structure.

#### HBI-3 PLANT CONSTRUCTION AT LGOK

Design capacity  
**1.8**  
mn tonnes  
of HBI per year

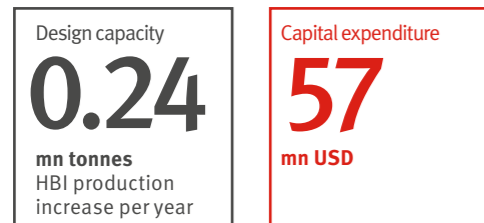
Capital expenditure  
**850**  
mn USD

In August 2012, Metalloinvest signed a contract with Siemens VAI (Austria) and Midrex Technologies (USA) for the construction of HBI-3 Plant at LGOK. The consortium of Siemens and Midrex will handle the development, manufacturing and delivery of the equipment and the automation of the first and second levels. Russian engineering company City Institution for Designing Metallurgical Plants LLC (hereinafter – Gipromez), a subsidiary of Metalloinvest, is also involved. The project provides for the construction of HBI plant, including auxiliary facilities, as well as the reconstruction of a pellet plant and beneficiation plant to provide HBI-3 Plant with raw materials. The plant includes a shaft furnace and lines for the flow of input materials, process gasses and finished products. As part of the reconstruction of the pellet plant, the gas purification system will be rebuilt, the existing cyclones and wet gas purification facilities will be replaced with electric filters, a new purification system for furnace gas emissions will be built. As part of the reconstruction of the beneficiation plant, two sections will be built for the production of high-grade iron ore concentrate. The project will be finished in 2016.

Following its commissioning, HBI-3 Plant will become the world's largest HBI production module.

The implementation of the project will enable Metalloinvest to meet the growing demand from steelmaking plants for high-quality raw materials and maintain its leading global position in the production of merchant HBI.

## HBI-2 PLANT MODERNISATION AT LGOK



In November 2012, LGOK successfully completed the first stage of HBI-2 Plant modernisation involving the reconstruction of cooling conveyors. Under the first phase of the project, three cooling conveyors were replaced and reconstruction work was performed on the steam removal and water treatment systems as well as electrical equipment. These measures increased production capacity of HBI-2 Plant by approximately 58,000 tonnes per year. In addition, the use of technologies for the slow cooling of HBI helped to improve its fractional composition and increase strength.

As a result of the first stage of the project, the production capacity of HBI-2 Plant grew by 58,000 tonnes per year and the overall capacity of the two plants now total 2.46 million tonnes per year. After the second stage of the project is completed, the overall capacity of the two plants will rise up to 2.64 million tonnes.

## CRUDE STEEL PRODUCTION INCREASE TO 3.85 MILLION TONNES PER YEAR AT OEMK



The project involves equipment in the electric arc furnace plant and the constructing casting crane, the completion of the water supply circuit construction and the installation of an additional transformer with capacity of 320 MVA, which will ensure stability and reliability of the electric arc furnace's operations in order to improve the balance of the plant's energy system. Work on the project began in 2008. In late 2012, the arc power optimisation system on the electric arc furnaces was modernised, furnace transformers with 90 MVA capacity were replaced by 105 MVA ones, the gas purification system was renovated, and the cooling water circulation system was modernised to support simultaneous work of five continuous casting machines.

The implementation of the project will not only increase crude steel production at OEMK to 3.85 million tonnes per year, but will also reduce environmental impact and stabilise the production process.

## OXYGEN STATION CONSTRUCTION AT OEMK



In June 2012, Metalloinvest signed an agreement with Linde (Germany) for construction of a new oxygen station at OEMK with a cryogenic air separation unit and production capacity of 20,000 m<sup>3</sup> of oxygen per hour. The main purpose of the project is to support the needs of OEMK production divisions for air separation products. Construction of the oxygen station began in June 2012. The project also involves Russian engineering company Giprometz, a subsidiary of Metalloinvest. Giprometz will provide the full range of design and supervision work for the implementation of the project.

The new unit will meet OEMK's needs for air separation products while increasing crude steel production capacity to 3.85 million tonnes per year and reducing the environmental impact.

## COKE OVEN BATTERY #6 CONSTRUCTION AT URAL STEEL



In 2011, the Company began working on a project to construct the new coke oven battery #6 and rebuild the coke plant at Ural Steel. The high aims of the project are to increase coke production and to stabilise coke quality. The project involves construction of the new coke oven battery #6, construction of a dust-free coke pushing system with the separation and purification of gas emissions from residual dust, organisation of wastewater treatment, and construction of additional power supply facilities for the coke plant. The project is expected to be completed in 2013.

The commissioning of new coke oven battery #6 will reduce environmental impact and lower Ural Steel's dependence on external coke supplies, which will optimise its production cost structure.

## VACUUM DEGASSER CONSTRUCTION AT URAL STEEL



In 2012, the vacuum degasser in the electric arc furnace plant at Ural Steel was put into operation. The vacuum degasser is to process up to 1.2 million tonnes of crude steel per year. The main purpose of the project is to improve quality of cast pipe billet and heavy plate. Degassing is the most efficient crude steel treatment, as it reduces the content of hydrogen, nitrogen and oxygen dissolved in the steel as well as proportion of non-metallic residuals. The project was implemented over two years. The contract for the supply of equipment was signed with Siemens VAI in 2010. In March 2012, hot tests of the vacuum degasser were conducted.

The use of the vacuum degasser in the technological process of steel production enabled the plant to expand its product range as well as improve its quality and competitiveness.

## MODERNISATION OF SINTERING MACHINE #4 AT URAL STEEL



In October 2011, modernisation of Sintering Machine #4 started. The purpose of the project is to satisfy sinter demand of blast furnace shop and to reduce the costs of hot metal smelted in the blast furnaces. The project will result in sinter production increasing by 83,300 tonnes, up to 0,85 million tonnes per year. The project is expected to be completed in 2013.

**The upgrades will not only increase sinter production, but will also reduce coke consumption in blast furnaces.**

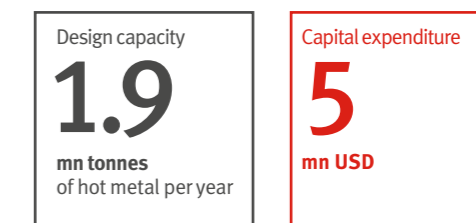
## HYDRO-MECHANICAL DESCALING SYSTEM FOR PLATE MILL AT URAL STEEL



In January 2011, technical modernisation of the hydro-mechanical descaling system at Plate Mill has been started. The project will ensure 100% descaling from the surface of rolled products, and thus, remove the risk of a disruption in the production process at Plate Mill due to the need for additional cleaning of the finished products in order to eliminate “rolled-in scale” defects. The project will also ensure compliance with the requirements of Russian standard STO 13657842-1-2009 “Rolled low-alloy structural steel products for bridge construction”. The project is expected to be completed in 2013.

**The project will enable Ural Steel to maintain its positions on the market for bridge steel.**

## MODERNISATION OF THE CASTING FACILITIES AT THE BLAST FURNACE SHOP AT URAL STEEL



In October 2011, modernisation of the pouring bay of the blast furnace plant has been started. The goal of the project is to increase pig iron production volume at Ural Steel by 0.8 million tonnes to 1.9 million tonnes per year through increasing the operational time of the existing pig iron casting machines ##1–4 at the plant’s blast furnace shop. In addition, upgrade of sinter express laboratory will allow to certify all merchant pig iron produced and eliminate the risk of manufacturing products that do not meet customers’ quality requirements. Work on the project is expected to be completed in 2013.

**The increase in merchant pig iron production will improve Ural Steel’s performance.**

# 5 Corporate Governance, Capital Markets and Information Disclosure



**Farhad Moshiri**  
Chairman of the Board  
of Directors

**Ivan Streshinsky**  
Non-Executive  
Director

**Irina Lupicheva**  
Non-Executive  
Director

**Andrey Varichev**  
Executive  
Director

**Vadim Levin**  
Independent  
Director

**Eduard Potapov**  
Executive  
Director

**Nikolay Krylov**  
Independent  
Director

## 5.1 Corporate Governance System

**7**  
people  
new composition  
of the Board of  
Directors

### BOARD OF DIRECTORS

The Board of Directors of Metalloinvest Management Company oversees the company's operations, determines its long-term strategy and assesses the performance of senior management.

In February 2013, Metalloinvest announced the election of a new Board of Directors chaired by Farhad Moshiri. The Board of Directors comprises two independent directors, three non-executive directors and two executive directors. As a result of the changes, a female director joined the Board for the first time in the Company's history. In March 2013, the Board of Directors approved the members of the Audit Committee and the Finance, Budgeting and Strategy Committee.

### COMMITTEES OF THE BOARD OF DIRECTORS

Two committees have been set up under the Board of Directors: the Audit Committee and the Finance, Budgeting and Strategy Committee. The Committees are responsible for the preliminary review of the most important matters falling within the remit of the Board of Directors as well as for preparing recommendations and making decisions.

### AUDIT COMMITTEE

Independent Director Vadim Levin is the Committee Chairman. The Committee also includes Nikolay Krylov (Independent Director) and Irina Lupicheva (Non-Executive Director).

The primary functions of the Audit Committee are:

- assessing the effectiveness of the internal audit procedures and preparing proposals for their improvement
- selecting external auditors and making recommendations on their remuneration
- assessing external auditor's reports

The Company's internal audit system consists of the Audit Committee, Internal Audit Department and Internal Audit Services of the subsidiary companies. The Internal Audit Services of the subsidiary companies is functionally subordinate to the director of the Internal Audit Department, which in turn reports to the Audit Committee.

The primary functions of the internal audit system are:

- identifying and assessing risks at the Company, business units levels, as well as of the activities and processes
- introducing and improving internal audit procedures
- assessing the effectiveness of the internal audit procedures and preparing improvement recommendations for the internal control system

### FINANCE, BUDGETING AND STRATEGY COMMITTEE

Non-Executive Director Ivan Streshinsky is the Committee Chairman. The Committee also includes two Executive Directors: Eduard Potapov and Andrey Varichev.

The primary functions of the Finance, Budgeting and Strategy Committee are to consider and approve proposals on the following:

- priority areas of the Company's activities
- investment expenditures exceeding RUB 750 million
- sales and purchases of shares (interests) in other companies (including derivative instruments)

- supply contracts for steel, iron ore and other products, if the amount of the transaction or several related transactions exceeds RUB 1.5 billion, except for intragroup transactions
- conclusion of credit and loan agreements, bank deposit agreements, agreements on the issue of promissory notes and other instruments to raise funds if the amount of the transaction or several related transactions exceeds RUB 1 billion, except for intragroup transactions
- the Company's dividend policy

### DIVIDEND POLICY

The Company traditionally uses part of its net income to pay dividends to shareholders. When considering dividend payments and recommendations concerning the amount of dividends, the Board of Directors takes into account the current level of debt as well as the requirements of the investment programme.

In particular, amid the global financial crisis in 2009, the Company decided not to pay dividends. In 2010, dividend payments totalled USD 211 million. The Company paid out USD 267 million in dividends in 2011 and USD 290 million in 2012. Thus, Metalloinvest paid out a total of USD 768 million in dividends in the period from 2009 to 2012 with the average dividend pay-out ratio of 25% of net income.

**290**  
mn USD  
dividend payout  
in 2012

## SENIOR MANAGEMENT

The Company's senior management structure is formed in accordance with the functional principle.



**Eduard Potapov**  
Chief Executive

Mr Potapov has served as CEO of Metalloinvest Management Company since March 2010. Prior to that, he held a variety of roles at Metalloinvest since 2005, including CFO in 2008–2010. Mr Potapov graduated from Moscow University of Consumer Cooperation with a major in Financial Management. He is a member of the Association of Chartered Certified Accountants (ACCA).



**Nazim Efendiev**  
First Deputy CEO - Sales Director

Mr Efendiev graduated from the Military Institute of Foreign Languages and the Academy of National Economy with an MBA, and also completed the International Management programme at Kingston University. Prior to assuming his current position in 2012, Mr Efendiev served as deputy CEO of Metalloinvest Management Company for interaction with the public authorities. He also previously worked as the managing director of Ural Steel and chairman of the Uralmash board of directors.



**Pavel Mitrofanov**  
Deputy CEO - Chief Financial Officer

Mr Mitrofanov studied economics at Moscow State University, completed a master's programme with a degree in Financial Accounting, Analysis and Audit, and earned an MBA from the Imperial College Business School in London. Mr Mitrofanov has worked at Metalloinvest since 2004. He served as deputy CEO for strategic development at Metalloinvest Holding Company in 2008–2009 and Investment and Development Director in 2009–2010. He has held his current position since April 2010.



**Sergey Shuvalov**  
Deputy CEO - Legal and Corporate Affairs Director

Mr Shuvalov graduated from Novosibirsk Military and Political College and the International Legal faculty of Moscow State Institute of International Relations under the Ministry of Foreign Affairs of the Russian Federation. Mr Shuvalov has held senior positions at the Company since 2006. Before coming to Metalloinvest, he served as head of the Gazmetallproject legal office.



**Yuriy Nadeyev**  
Deputy CEO - Chief Security Officer

Mr Nadeyev graduated from Moscow Institute of Law and holds a PhD in Legal Sciences. Mr Nadeyev has worked at the Company since 2009. Prior to this he worked at the Ministry of Internal Affairs of the Russian Federation.



**Dmitry Babkin**  
Chief Investment and Strategy Officer

Mr Babkin graduated from Moscow Institute of Steel and Alloys with a degree in ferrous metallurgy and holds a PhD in Legal Sciences. He graduated with honours from the Finance Academy under the Government of the Russian Federation with a degree in finance and credit. Mr Babkin has worked at the Company since 2005. He serves as Chairman of the Giprommez Board of Directors since 2011.



**Julia Mazanova**  
Social Policy and Corporate Communications Director

Ms Mazanova graduated from the faculty of technical cybernetics and automation at the Moscow Institute of Chemical Engineering and earned an MBA in Political and Business Communications at the Institute of Communication Management under the Higher School of Economics. Ms Mazanova has held senior positions at the Company since 2005.

## 5.2 Capital Markets

Since 2011, Metalloinvest has been actively raising financing on the capital markets in accordance with its strategy to increase the share of long-term and public debt in its portfolio as well as to diversify sources of funding.

- In July 2011, Metalloinvest entered international capital markets for the first time, issuing USD 750 million of Eurobonds maturing in 5 years. During the book-building investors submitted more than 260 orders and demand totalled USD 3.2 billion, with the order book 4 times oversubscribed. The annual coupon rate was set at 6.50%. International ratings agencies Moody's and Fitch assigned the issue ratings of Ba3 and BB- respectively.
- In March 2012, the Company attracted RUB 25 billion with a debut issue of RUB-denominated bonds maturing in 10 years with an early redemption option in 3 years. The annual coupon rate was set at 9.00%. During book-building, 98 orders were submitted for more than RUB 48 billion, which exceeded the expected placement volume of RUB 15 billion by 3.2 times.

Given the high demand from investors, the Company decided to place additional RUB 10 billion of bonds the next day. During the book-building, investors submitted 52 orders for a total of RUB 27 billion, with the order book 2.7 times oversubscribed.

- In February 2013, Metalloinvest raised RUB 10 billion issuing RUB-denominated bonds maturing in 10 years with an early redemption option in 5 years. The annual coupon rate was set at 8.90%. During the book-building, investors submitted 44 orders for a total of more than RUB 20 billion, or double the expected placement volume. The Company used the proceeds for the early repayment of RUB-denominated bank loans due to be repaid in 2014.
- In April 2013, Metalloinvest raised USD 1 billion issuing Eurobonds maturing in 7 years. The annual coupon rate was set at 5.625%. International ratings agencies Moody's, Fitch and Standard&Poor's assigned the issue ratings of Ba2, BB- and BB- respectively. During the book-building, investors submitted more than 260 orders for a total of USD 3.7 billion, with the order book oversubscribed by 3.7 times. The proceeds from the Eurobond placement were spent on the partial early repayment of the syndicated loan (PXF).

Metalloinvest debt securities outstanding						
Instrument	Currency	Nominal value of issue	Coupon rate	Issue date	Early redemption option	Maturity date
Eurobonds	USD	USD 750 mn	6.50%	July 2011		July 2016
RUB-denominated bonds (Series 01)	RUB	RUB 5 bn	9.00%	March 2012	March 2015	March 2022
RUB-denominated bonds (Series 05)	RUB	RUB 10 bn	9.00%	March 2012	March 2015	March 2022
RUB-denominated bonds (Series 06)	RUB	RUB 10 bn	9.00%	March 2012	March 2015	March 2022
RUB-denominated bonds (Series 02)	RUB	RUB 5 bn	8.90%	February 2013	February 2018	February 2023
RUB-denominated bonds (Series 03)	RUB	RUB 5 bn	8.90%	February 2013	February 2018	February 2023
Eurobonds	USD	USD 1,000 mn	5.625%	April 2013		April 2020

## 5.3 Changes to the Corporate Governance and Information Disclosure System

Entering the capital markets helped the Company to improve its transparency and corporate governance system. As part of Metalloinvest's enhanced transparency, it obtained credit ratings

### CREDIT RATINGS

In June 2011 as part of the debut Eurobond issue, the Company was assigned credit rating by international ratings agencies Moody's and Fitch for the first time. Moody's assigned Metalloinvest a corporate family rating Ba3 with a Positive outlook, and a national scale rating of Aa3.ru. Fitch assigned the Company long-term issuer default ratings in foreign and national currency of BB- with a Stable outlook, and a national scale rating of A+(rus).

from the three leading international ratings agencies, changes to the Board of Directors structure and composition and improved the level of information disclosure.

In July 2012, international ratings agency Standard&Poor's assigned Metalloinvest long-term corporate credit ratings in foreign and national currency of BB- with a positive outlook.

In April 2013, Moody's raised Metalloinvest rating to Ba2 with a stable outlook, and Fitch revised its outlook on the BB- rating from stable to positive. Standard&Poor's affirmed the Company's rating at BB- with a positive outlook.

#### MOODY'S ANALYSTS

noted in the press release on the rating action in April 2013 that the rating upgrade reflected the Company's good profitability despite challenging market conditions, increased share of domestic sales under long-term contracts, and focus on high value-added products: pellets and HBI/DRI.

#### FITCH ANALYSTS

noted in the press release on the outlook change in April 2013 that the change was driven by robust liquidity position as well as historically strong operational profile translating into positive free cash flow.

#### STANDARD & POOR'S ANALYSTS

noted in the press release on the outlook affirmation in April 2013 that the action reflected the fact that Metalloinvest's leverage is in line with the current rating. The ongoing Positive outlook is based on the expectation that Metalloinvest will continue to generate substantial free cash flow as well as its commitment to further improve corporate governance.

### CHANGES TO THE CORPORATE GOVERNANCE SYSTEM

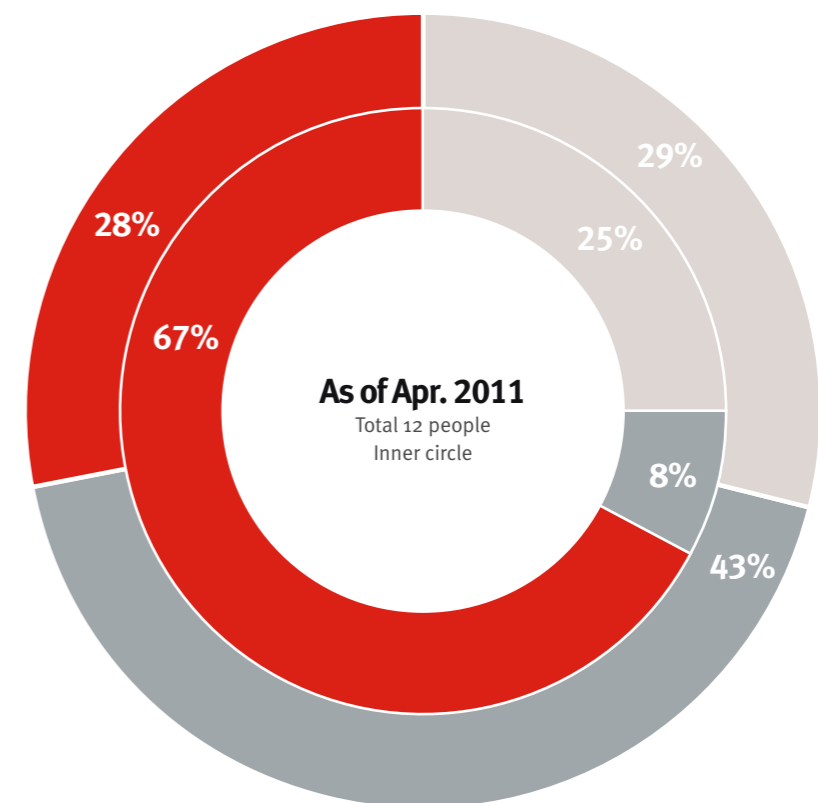
Objectivity and independence of opinion are among the basic guiding principles of the Metalloinvest Board of Directors. These principles are ensured through the inclusion of independent and non-executive directors on the Board. The independence of the Board members is necessary to monitor the activities of the Company's senior management and prevent conflicts of interests between management and shareholders. Presence of non-executive directors on the Board is of critical importance for such matters as determining the amount of remuneration to be paid to the senior management, acquisition or sale of assets, and conducting internal audits.

Over the last two years, Metalloinvest has made significant progress in terms of compliance of its corporate governance system with best practices. The changes in the composition of the Board of Directors have ensured the progress. In its current form, the Board is separated from the management and constitutes an independent structure that plays a central role in the corporate governance system.

#### Changes to the corporate governance system

- Independent Directors
- Executive Directors
- Non-Executive Directors

**As of Feb. 2013**  
Total 7 people  
Outer circle



- The total number of directors decreased from 12 to 7 people. The decrease in the number of Board members was due to the withdrawal of some executive directors from the Board in 2011-2012. A reduction in the number of directors simplifies the decision-making process on matters that fall within the remit of the Board.
- The proportion of independent and non-executive directors increased. In its current form, Executive Directors make up 28% of the Board of Directors, Non-Executive Directors – 43%, and Independent Directors – 29%.
- The Finance, Budgeting and Strategy Committee is chaired by a Non-Executive Director. The appointment of a Non-Executive Director as Chairman of the Finance, Budgeting and Strategy Committee is designed to eliminate any potential conflict of interests between shareholders and senior management.

- A separate Audit Committee is chaired by an Independent Director. The Audit Committee, which directly manages the Internal Audit Service, was spun off from the Finance, Budgeting and Audit Committee in March 2013.

## INFORMATION DISCLOSURE

Along with entering international capital markets, Metalloinvest started to improve its information disclosure. The ultimate goal of enhancing Metalloinvest's transparency is to boost the investment community's confidence in the Company. Achieving this goal involves timely disclosure of significant information concerning:

- operational and financial performance
- the Company's strategic goals
- significant corporate events
- appointments to the Board of Directors; member's qualifications, as well as the Board's opinion with respect to their independence
- the management of the Company and other related parties
- the Company's policy with respect to environmental protection, human resources and social activities

In 2012, the Company also launched a new corporate website, which is one of the primary means of information disclosure for the stakeholders, including investors and analysts. The website contains materials on operational and financial results, annual reports, presentations for investors, information on securities and ratings, and a calendar of key events.

Starting from 2011, Metalloinvest began publishing a Report on Corporate Social Responsibility.

In September 2011, Metalloinvest established the Investor Relations Department and entrusted it with the main functions with regards to investor interaction.

Starting from 2011, Metalloinvest has begun disclosing its financial and operating results on a semi-annual and quarterly basis respectively. The publication of the financial results is accompanied by a conference call with investors and analysts. In addition to increasing the frequency of information disclosure, the Company is systematically reducing the timeframe for disclosure.

Since 2012, the Company began arranging the site visits for investors and analysts, for the investment community to get a better understanding of the production processes at Metalloinvest. In August 2012, a delegation of investors and analysts spent two days inspecting the entire production chain from the LGOK pit to the finished products warehouse of the roll finishing workshop at OEMK.

The efforts made by Metalloinvest management to establish a dialogue with investors and analysts have resulted in increased interest in the Company from the investment community. At present, the Company is covered on a regular basis by five leading investment banks: Sberbank CIB, VTB Capital, UBS, Societe Generale and Mitsubishi UFG Securities.

Starting from 2012, the Company began taking active part in conferences and forums at which meetings with investors can be held in one-on-one formats. Over the past year, the Company attended more than seven conferences and forums in Moscow and St Petersburg, during which it held over 50 meetings with more than 140 investors and analysts. In 2013, the Company plans to significantly expand the geography of its meetings with investors by participating in international conferences and forums.

In addition to taking part in conferences organised by investment banks, the Company is actively involved in arranging its own events for investors. In February 2012, Metalloinvest held an Investor Day in Moscow for the first time in its history, with more than 60 investors and analysts in attendance.

In May 2012, the Company arranged a non-deal road show in Asia with the support of banks. The Company held 9 meetings with key investment funds and management companies over several days in Singapore and Hong Kong.

In April 2013, the Company held another Investor Day devoted to the release of financial results for 2012 reported under IFRS, which was attended by more than 50 investors and analysts.

### “IN DECEMBER 2012, THE COMPANY PRESENTED ITS NEW BRAND.

It is not simply a change of the logo, slogan and corporate colours for the unification of perception of our production assets. The new visual style symbolises the changes in our business philosophy, defining the vector for creation of a global efficient mining company, competitive in a changing economic environment, and a leader in its segment”, – said Eduard Potapov, Chief Executive Officer of Management Company Metalloinvest.

# 6 People and the Environment

More than **62 thousand** employees across the Company's operations

62

## 6.1 Personnel

The main priorities of the Company's Human Resources policy are to provide quality training for the core technological staff and to continuously raise profile of the mining and metallurgical professions. Metalloinvest strives to use the latest technologies for workplace organisation, recruiting and employee adaptation as well as professional training and development. The Company creates conditions to reveal employees' potential and encourage stronger commitment.

In 2012, the average number of employees at LGOK, MGOK, OEMK and Ural Steel totalled 45,140 people, an increase of 765 people (+1.7%) compared with 2011. The growth came primarily from the Mining Segment's from repair and transport functions, specifically their inclusion within the organisational structure, as well as from hiring additional personnel for the implementation of investment projects. Excluding these factors, the average number of employees was down by 790 people in 2012 versus of 2011 (-1.8%), with 932 fewer people in December 2012 compared with December 2011 (-2.1%).

The major instrument of personnel optimisation in 2012 was staff turnover without hiring new people in place of the retired in certain divisions and professions.

In 2012, employee compensation at LGOK, MGOK, OEMK and Ural Steel totalled RUB 16,719 million,

an increase of 13.0% compared with 2011, caused by wage indexation which was partially compensated by the decrease in the average number of employees.

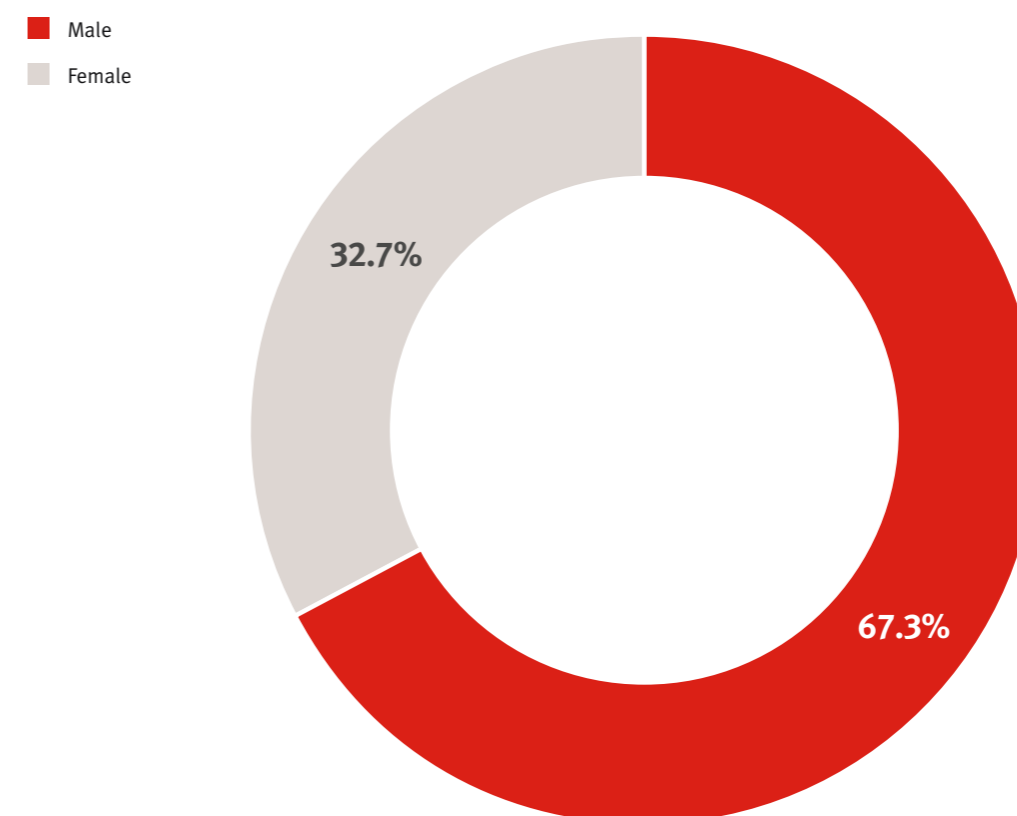
The 2012 average monthly salary at LGOK, MGOK, OEMK and Ural Steel was 11.1% higher than in 2011.

The average monthly income of the plants, employees exceeds the average monthly income in the regions where the Company operates: by 63.9% in the Belgorod Region, by 66.8% in the Kursk Region, and by 38.5% in the Orenburg Region.

In 2012, the gender makeup of LGOK, MGOK, OEMK and Ural Steel personnel remained stable. The average length of employment exceeds 10 years and demonstrates staff loyalty.

### Gender structure of LGOK, MGOK, OEMK and Ural Steel personnel

as of 31 December 2012



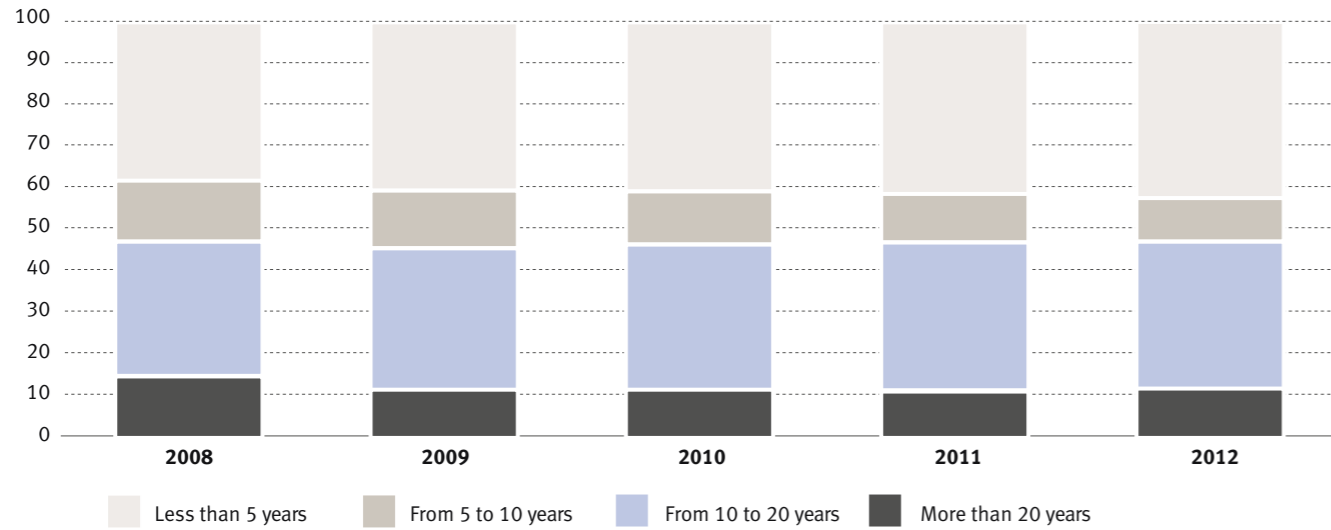
Source: Company data

Average number of LGOK, MGOK, OEMK and Ural Steel employees, people					
	2008	2009	2010	2011	2012
LGOK	9,985	9,722	9,472	9,454	9,880
MGOK	7,918	7,429	7,418	7,525	8,367
OEMK	11,723	11,063	11,313	11,577	11,440
Ural Steel	17,096	16,557	16,685	15,818	15,452

Average monthly income of LGOK, MGOK, OEMK and Ural Steel employees, RUB					
	2008	2009	2010	2011	2012
LGOK	23,078	19,398	25,713	29,331	31,968
MGOK	22,230	19,598	24,852	28,606	31,158
OEMK	25,214	24,896	28,290	31,594	34,951
Ural Steel	17,353	16,231	19,689	23,662	26,976

### Length of employment of LGOK, MGOK, OEMK and Ural Steel personnel

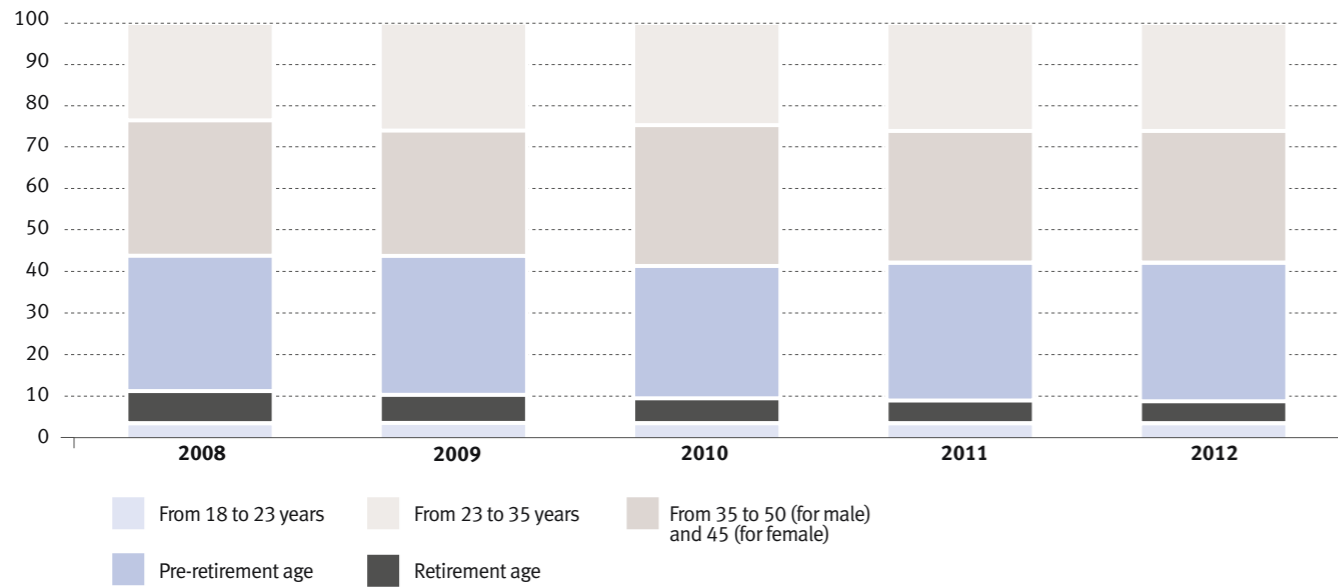
as of 31 December 2012



Source: Company data

### Age structure of LGOK, MGOK, OEMK and Ural Steel personnel

as of 31 December 2012



Source: Company data

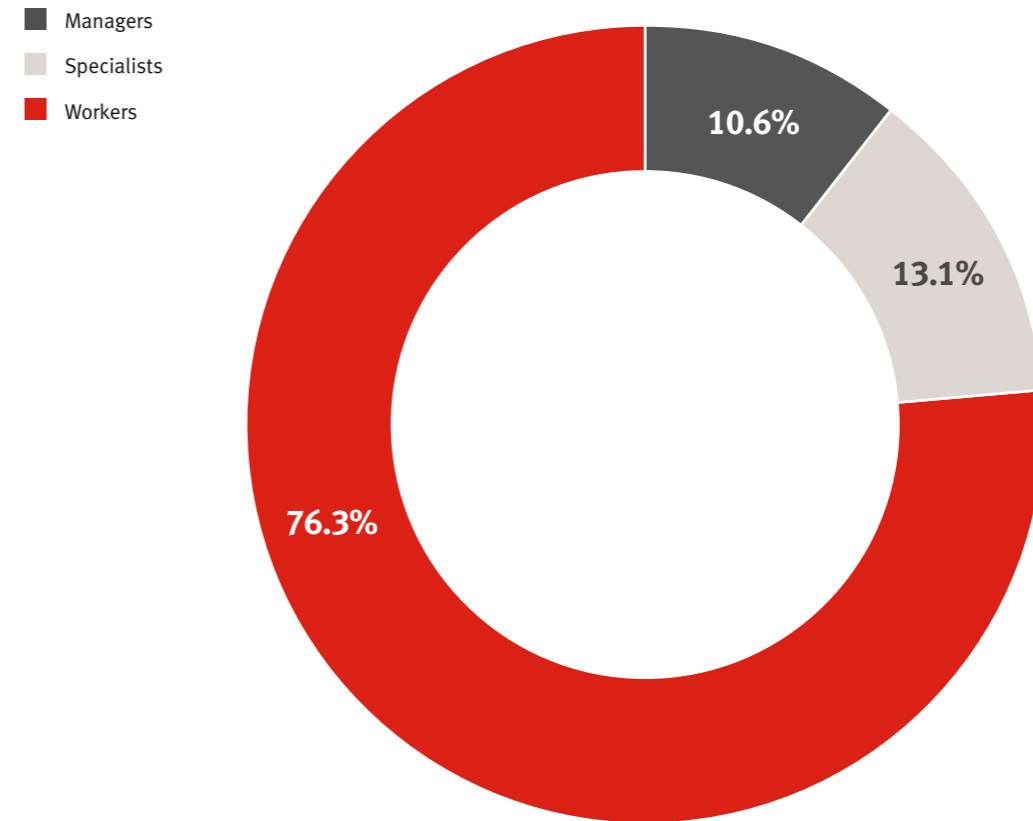
Staff turnover at all plants is at the optimal level, which allows systematic replenishment of the workforce. The lowest staff turnover is in the 30 to 50 years age group, which attests to a balanced and stable workforce.

In order to train highly skilled personnel to the level required, the Belgorod Region and LGOK concluded an agreement for the representatives of the plant to join the Supervisory Board of Gubkin Polytechnic College.

The skill level of LGOK, MGOK, OEMK and Ural Steel personnel is increasing due to continuous personnel training. The proportion of personnel with a higher and secondary vocational education exceeds 50%.

### Structure of LGOK, MGOK, OEMK and Ural Steel personnel

as of 31 December 2012



Source: Company data

## PROFESSIONAL SKILLS CONTEST

In 2012, the first corporate professional skills contest was held among all Company's subsidiaries for the core professions: heavy vehicle operator, drill rig operator, excavator operator for mining enterprises, electric furnace steelworker, hot rolling mill control station operator and crane operator for steel production. The main purpose of this event, which has become an extension of the professional contests system at the individual plants and a component of the continuous personnel training system, is to raise the profile of key production roles, support the exchange of experience in key professions, and improve skills.

## ADVANCED TRAINING OF ENGINEERING PERSONNEL

Training was conducted as part of the programme to continue systematic training on engineering technologies and improve knowledge level of key personnel. In addition to theoretical training, the programme included placements at Russian and foreign enterprises in order to study best practices in production engineering.

The programme won the competition in the Presidential Programme organised by the Ministry of Education and Science of the Russian Federation in 2012.

**IN THE BELGOROD REGION,** equipment valued at RUB 15 million was acquired as part of the 2011–2015 Federal Target Programme for Educational Development with the focus on “development and introduction of programmes to modernise vocational training systems of the Russian Federation”, which is being implemented in order to improve the education process at colleges that train personnel in the main production professions for LGOK and OEMK. Excavator, bulldozer and heavy vehicle simulators in addition to an electrical laboratory and a welding laboratory were purchased to enhance the training process and reduce on-the-job training period.

In order to train highly skilled personnel to the level required by the plant, the Belgorod Region and LGOK concluded an agreement for the representatives of the plant to join the supervisory board of Gubkin Polytechnic College.

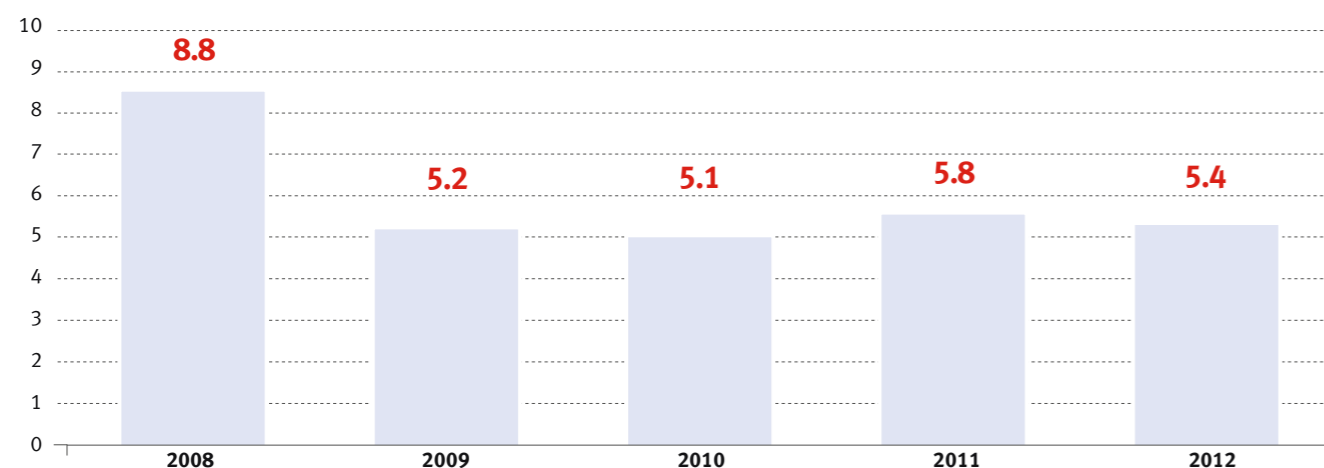
## FOREMEN SCHOOL

In 2012, MGOK launched a targeted programme to develop key management and technical skills among line personnel called “Foremen School”. The programme involves the study of a wide range of themes: from production planning to quality management system and accounting.

## DEVELOPMENT OF MANAGERIAL SKILLS

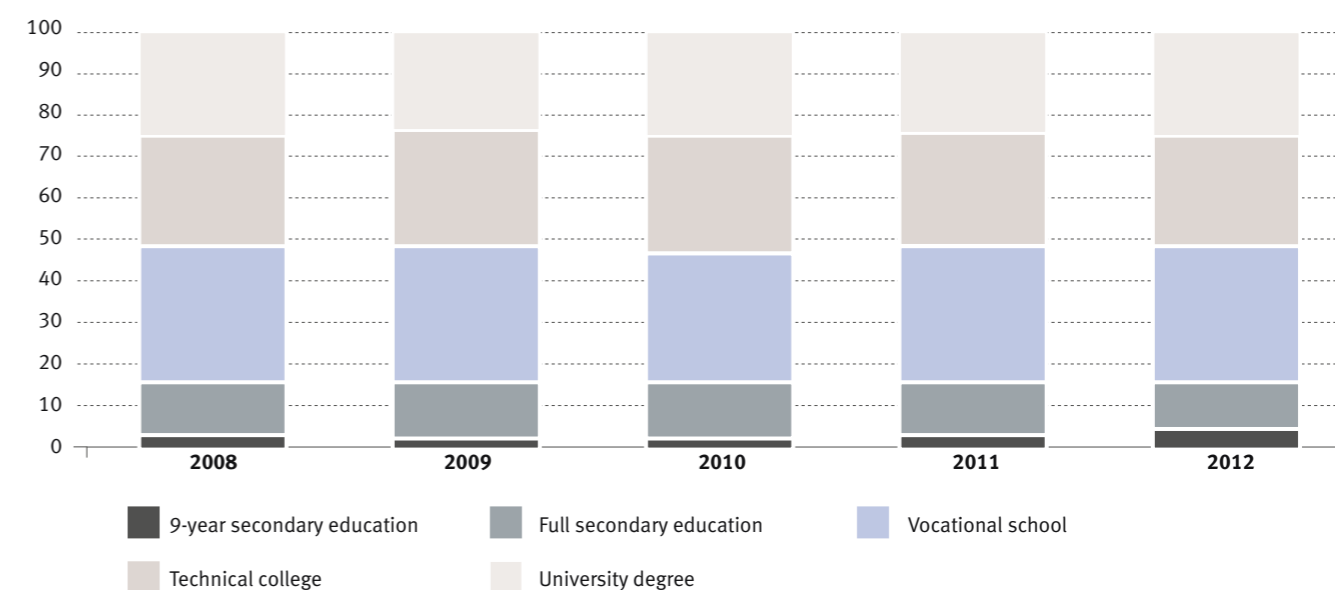
In 2012, a programme was launched to develop managerial skills among senior and middle management. The main features of the programme are a cascade training model using programmes to improve key managerial skills, situational management, time management, emotional intelligence, and project management.

Staff turnover at LGOK, MGOK, OEMK and Ural Steel in 2012, %



Source: Company data

Qualification levels of LGOK, MGOK, OEMK and Ural Steel personnel as of 31 December 2012



Source: Company data

## 6.2 Occupational Health and Safety and Environmental Protection

### OCCUPATIONAL HEALTH AND SAFETY

Metalloinvest implements comprehensive programmes to improve work conditions at its plants, in particular renovations to create comfortable and safe working environment. As a result of these programmes, the total number of accidents declined by 25% between 2009 and 2012.

In 2012, Metalloinvest spent RUB 165 million on occupational safety and industrial safety programmes.

In 2012, the Company began implementing the “Personal Protective Equipment. Corporate Requirements” project at OEMK and Ural Steel. The project aims to improve employee protection from occupational hazards through the use of advanced personal protective equipment. The second phase of the project will be carried out in 2013 for LGOK and MGOK.

In 2012, Metalloinvest spent RUB 258 million on providing employees with the necessary personal and collective protection equipment.

### ENVIRONMENTAL PROTECTION

The Company’s activities are based on the principles of responsible use of natural resources. Its plants implement a wide range of measures to reduce any negative impact on the environment:

- reduction of harmful emissions into the atmosphere
- efficient use and treatment of wastewater
- disposal and recycling of industrial waste
- introduction of energy and resource saving technologies
- land reclamation

Metalloinvest implements a set of projects that aim to resolve environmental challenges. The most significant ones in terms of reducing the environmental impact are the **construction of new Coke Oven Battery #6**, including the dust-free coke pushing system with the separation and purification of gas emissions from residual gas; the organisation of wastewater treatment; **the closure of an open-hearth plant at Ural Steel**; **the project to increase crude steel production at OEMK to 3.85 million tonnes per year**, which involves the modernisation of the gas purification unit of four electric arc furnaces; and the construction of water recycling systems and waste water treatment plants. **Construction of Pellet Plant #3 at MGOK** includes construction of closed-space storage of pellets and installation of gas burning units which will decrease dusting and nitrogen oxides emissions into atmosphere. Systems for slurry and water recycling will be installed in order to prevent water pollution (for details, see page 67).

In 2012, Metalloinvest **sold greenhouse gas emission reduction units** for the period of 2008-2009 within the framework of the Kyoto Protocol. It spent the proceeds on implementation of investment projects involving the introduction of advanced technologies at Ural Steel in order to further reduce the environmental impact.

Despite an increase in production in 2012, the implementation of environmental measures made it possible **to reduce total air pollutant emissions by approximately 2.0%** more than in 2011.



**IMPLEMENTATION OF THE “PERSONAL PROTECTIVE EQUIPMENT. CORPORATE REQUIREMENTS”**  
 project was awarded the “PEOPLE INVESTOR 2012” prize by the Association of Managers of Russia as the “Best Regional Project”.

**LGOK AND OEMK WON PRIZES**  
 in a contest for the best occupational safety work and corporate culture among mining plants in the Belgorod Region for 2012.





**OEMK RECEIVED THE HIGHEST AWARD**

of Grand Prix at the 2012 national contest “Russian Organisation with High Level of Social Effectiveness”, which was organised by the Government of the Russian Federation and Russian Association of Employers and Unions. The company was the winner in two categories: “For the Development of Human Resources” and “For a Healthy Lifestyle”.

**OEMK AND LGOK TOOK THE FIRST AND SECOND PLACES,**

respectively in both categories: “For the Development of Human Resources” and “For a Healthy Lifestyle” at the regional stage of the national contest “Russian Organisation with High Level of Social Effectiveness”. In addition, LGOK took the second place in the category “For a Reduction in Occupational Accidents and Diseases in Production Sector Organisations”.

**OEMK AND URAL STEEL WERE DECLARED WINNERS**

in the categories “Socioeconomic Effectiveness of Collective Agreement” and “Personnel Development” at the IX industry contest “Mining and Metallurgical Plant with High Level of Social Effectiveness”, which was organised by the Association of Mining and Metallurgical Sector Industrialists of Russia and the Central Council of the Miners and Metallurgical Workers Union of Russia.

**PROGRAMMES FOR EMPLOYEES**

Priority programmes for employees are: treatment and rehabilitation of the employees and their children; family and parenting support programmes; programmes for assistance to seniors.

In 2012, the budget for the three main social assistance programmes totalled RUB 1,071 million, including maintenance of treatment and rehabilitation facilities.

Collective bargaining agreements that extend to all the employees of the Company’s main plants set forth the main focus areas of social support for employees and their families.

Fulfillment of the bargaining agreements is confirmed on the yearly basis by the Social Board comprising Metalloinvest’s senior management and representatives of the main plants’ unions. According to the minutes of the Social Board meeting, held in December 2012, the Company fulfilled the bargaining agreement in full.

**Focus areas of the social assistance programmes for employees in 2012**

<b>Total, RUB mn:</b>	<b>1,071</b>
Treatment and rehabilitation of employees and their children	492
Family and parenting support programmes	63
Programmes for assistance to seniors	516

## 6.4 Social Programmes for the Benefit of Local Communities

Social programmes for the benefit of local communities are implemented according to the principles of public-private partnerships under social and economic partnership agreements with local authorities.

The Company provides assistance in implementing programmes with the following focus areas:

- development of education potential
- development of healthcare
- development of sport
- development of the potential of the regions where the Company operates
  - entrepreneurship
  - social activism
  - target regional development programmes

### PROGRAMME FOR DEVELOPMENT OF ENTREPRENEURSHIP IN NOVOTROITSK

The programme aims to develop Novotroitsk social and economic potential as well as living standards via expanding entrepreneurial activities among its citizens, especially in social services.

Under the programme, a comprehensive system of support measures will be developed, including education programmes, consulting, assistance in raising financial resources for entrepreneurial projects as well as the promotion of the goods and services produced locally. The programme is implemented in partnership with the authorities of the Orenburg region and the city of Novotroitsk.

In each region where the Company operates a coordinating board was established in order to define major social issues as well as the required contributions from each party according to the social and economic partnership Agreements.

Various non-profit organisations and funds with expertise in implementing social projects assist in realisation of the programmes for local communities.

In 2012, a total of RUB 862 million was spent on the programmes for social investments into the development of regions where the Company operates.

In 2012, a contest for business initiatives was held as part of the programme, which included a start-up school for aspiring entrepreneurs, an assessment of the contest participants projects, and identification of support measures from all partners of the programme.

In 2012, the budget of the programme totalled RUB 6.6 million, including all parties' contributions.

### METALLOINVEST SCHOOL OF COMMUNAL GOOD

The programme aims to develop the potential of municipalities as well as support and develop social initiatives in the regions where the Company operates. Students from the four cities – Stary Oskol, Gubkin, Zheleznogorsk and Novotroitsk – along with their parents, teachers, representatives of public organisations, non-profit organisations and businesses all take part in the programme.

The programme inspires the younger generation to demonstrate initiative and adopt a responsible approach, not only to their own lives, but also to the town where they were born; is also motivates the participants to live fuller lives.

The Metalloinvest School of Communal Good participants develop and implement community service projects for which funds are distributed on a competitive basis.

In 2012, the budget of the Metalloinvest School of Communal Good programme totalled more than RUB 6 million, including all parties' contributions.

### HEALTHY CHILD PROGRAMME

One of the most significant problems facing Zheleznogorsk is the increase of sickness rates among children. The Company initiated measures to enhance the healthcare systems for children of pre-school age by uniting the efforts of teachers, doctors and parents. As a result an integrated local programme was devised.

The main objective of the Company under the programme is to attract the best experts in children's health, who would be able to enhance the existing system for rehabilitating children through teaching modern approaches and technologies in this sphere to the relevant organisations and parents.

A key focus area of the programme in 2012 was the professional development of teachers and doctors. A group of specialists from a children's clinic underwent refresher courses, while art therapy training courses were held for kindergarten psychologists.

In 2012, the budget of the programme totalled RUB 4 million, including all parties' contribution.



#### METALLOINVEST SCHOOL OF COMMUNAL GOOD

programme won the "Corporate Charity Leaders 2012" contest, which was organised by the Donor Forum non-profit partnership organisation, PricewaterhouseCoopers and Vedomosti newspaper. The Company was recognised in the "Best Programme Revealing a Company's Corporate Charity Policy and Social Investment Principles" category.

## 7 Results of 2012



## 7.1 Macroeconomic Factors Affecting Metalloinvest Results

**World economy and iron ore prices.** Since the end of 2009, there was an increase in global iron ore trading, primarily due to growth in economic activity in Asian countries. In particular, economic growth in China in 2010-2011 contributed to increased activity of automotive and construction companies, which are the main consumers of steel products. This led to an increase in demand for iron ore and price growth. In 2010 and 2011, the average Platts iron ore price index (62% Fe, CFR China) was USD 150/tonne and USD 170/tonne respectively. This situation was observed until the end of 2011; however, the slowdown in economic growth in China in 2012 resulted in a decline in iron ore prices. The average Platts iron ore price index (62% Fe, CFR China) was at USD 130/tonne in 2012 (for details, see page 23).

**Russian economy.** Since a significant portion of Metalloinvest's revenue is generated by shipments to Russian customers (43% in 2012), the state of the Russian economy has a major effect on the Company's results. The key factors are economic growth, condition of certain sector, in particular the automotive, pipe and construction industries, and inflation.

In 2010, the Russian economy demonstrated moderate post-crisis recovery. Economic growth continued in 2011-2012 as well. The main drivers of growth were major infrastructure projects in preparation to the APEC Summit 2012, Universiade 2013 in Kazan and the 2014 Winter Olympics in Sochi.

	2010	2011	2012
GDP growth	4.5%	4.3%	3.4%
Consumer price index growth	8.8%	6.1%	6.6%
Steel consumption per capita, kg	261	288	311
Pipe production growth	35.3%	8.1%	-3.9%
Automobile production growth	93.6%	41.7%	12.1%

Source: Russian State Statistics Service, Chermet, Worldsteel, CRU, OICA/BMI

## 7.2 Operational Results

### IRON ORE

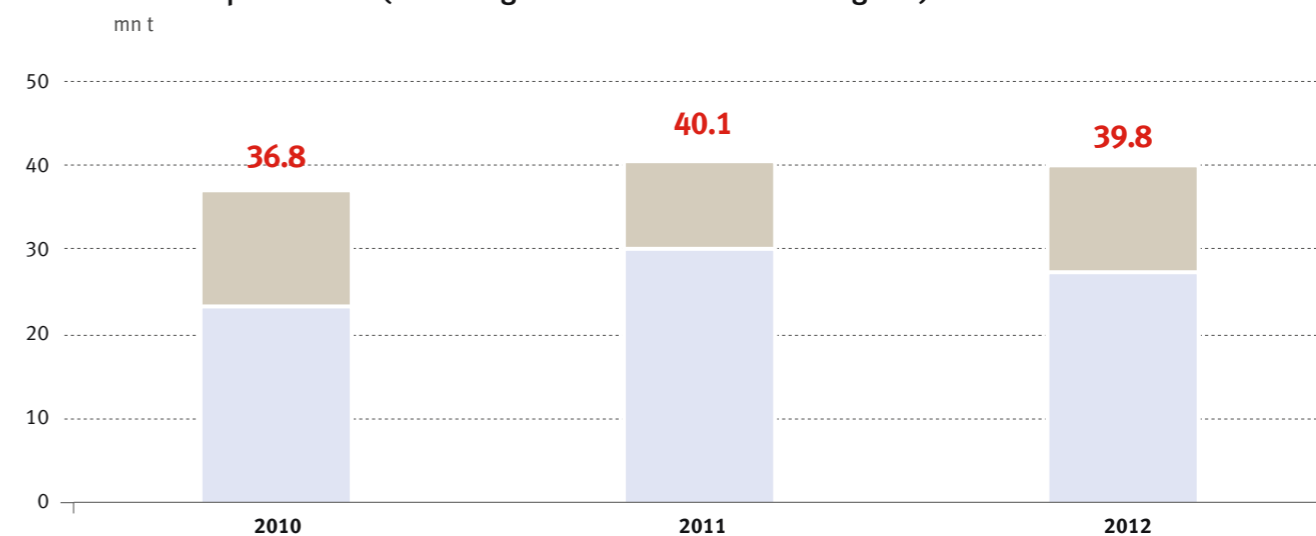
**Production and shipments in key business segments were stable.** Despite continued global economic instability, Metalloinvest was able to increase output and shipments of its key high value-added products: pellets and HBI/DRI.

At the end of 2012, Metalloinvest:

- ranked fifth in the world in terms of iron ore production
- maintained its status as the largest iron ore producer in Russia and the CIS
- kept the leadership position on global HBI market
- held third place in the world in terms of pellets production
- stood among Russia's five largest steel producers

**Stable output volumes allowed Metalloinvest to strengthen its market position.** In 2012, iron ore production totalled 39.8 million tonnes, which is consistent with the volume produced in 2011. Achieving this figure enabled Metalloinvest to become one of the world's five largest iron ore producers and maintain its undisputed leadership position among the Russian and CIS producers.

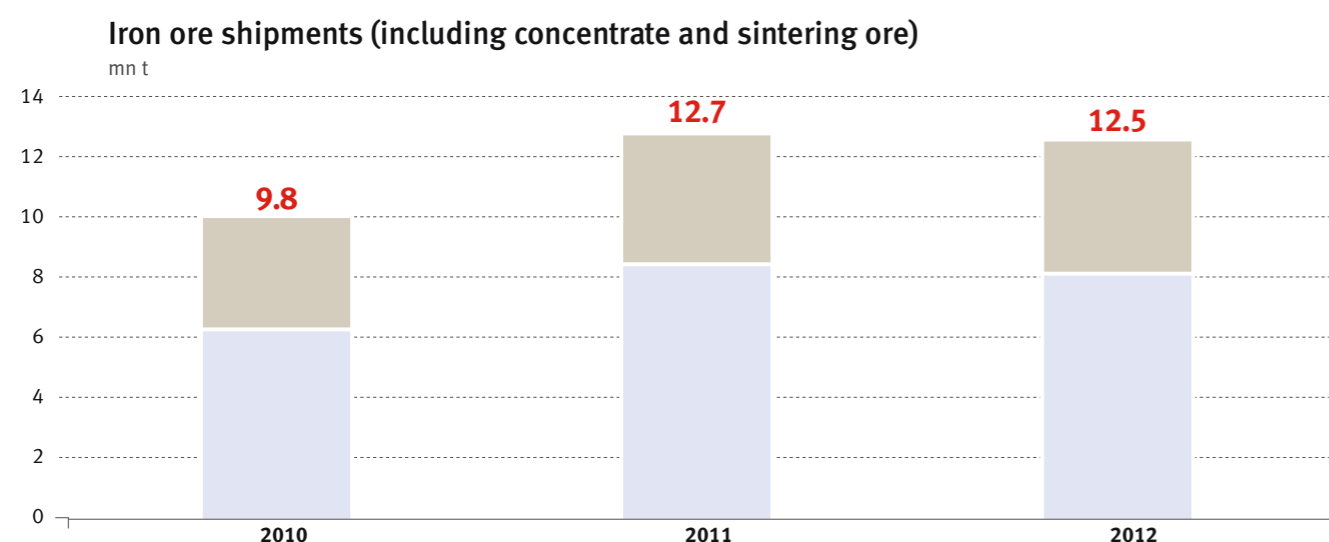
Iron ore production (including concentrate and sintering ore)



Source: Company data

Iron ore shipments declined due to increased production of pellets and HBI/DRI. Iron ore shipments to external customers decreased 1.7% year-on-year in 2012, to 12.5 million tonnes. The reason for

the reduction was increased production of pellets and HBI/DRI by Metalloinvest. Approximately 65% of iron ore was processed into high value-added products: pellets and HBI/DRI.



Source: Company data

## PELLETS

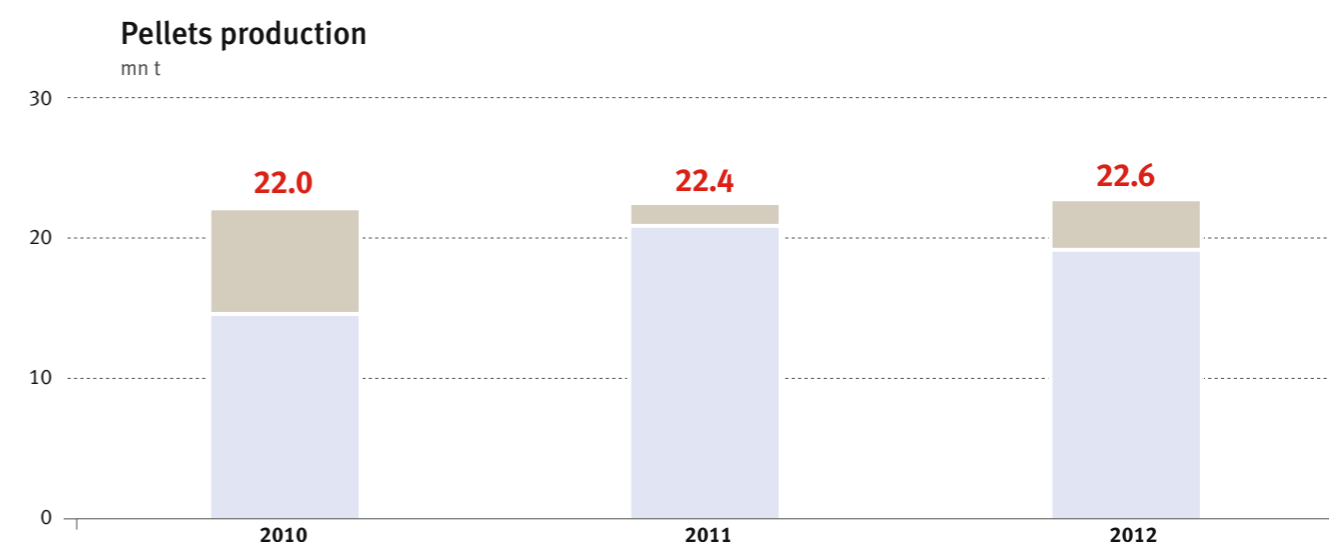
Growth in production in Metalloinvest's key business segment enabled the Company to maintain strong positions. Metalloinvest focuses on pellet production due to the high margins and steady demand for this product. In 2012, pellets production grew 1% year-on-year, to 22.6 million tonnes.

The production results achieved in 2012 enabled Metalloinvest to remain the world's third largest pellet producer and consolidate its positions in Russia and the CIS.

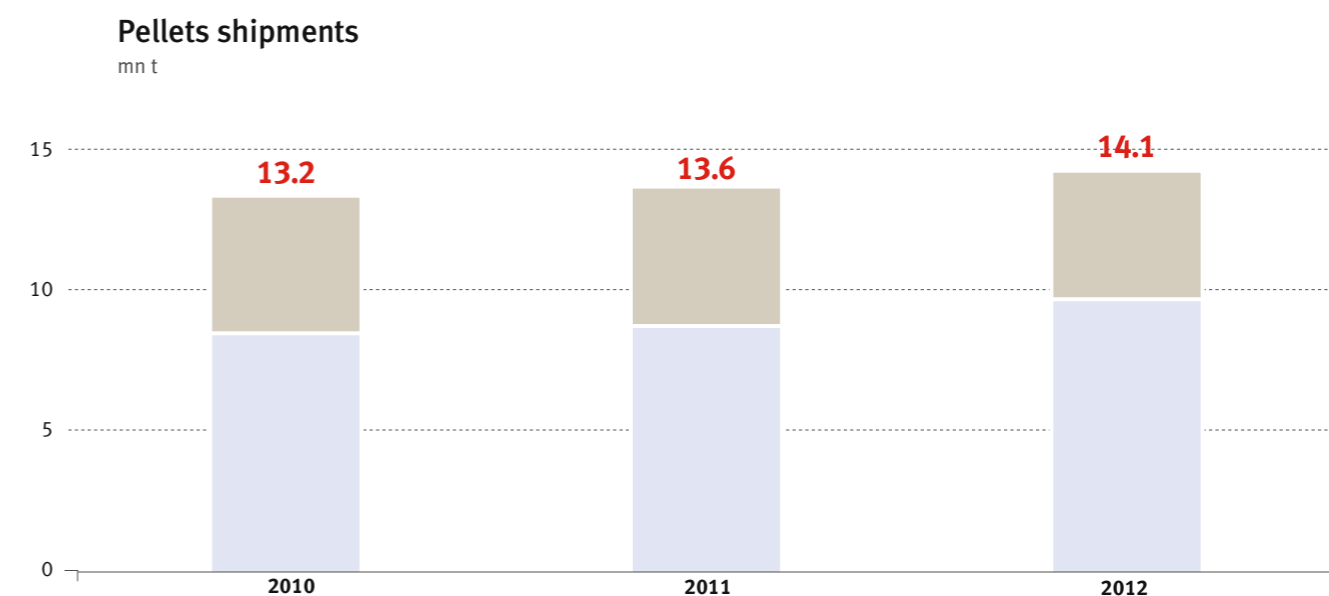
Metalloinvest is planning to increase pellet production capacity. In 2010, the Company launched construction of Pellet Plant #3 at MGOK with capacity of 5 million tonnes per year. The plant is to start operations in late 2014. Following construction, Metalloinvest will have total pellet production capacity of 27.6 million tonnes per year (for details, see page 67).

Pellet shipments grew due to steady demand. In 2012, pellet shipments to external customers increased 3.3% year-on-year to 14.1 million tonnes. Metalloinvest's

pellets contain up to 66.5% of iron. Growing demand for high-quality iron ore products contributed to the growth in Metalloinvest's pellets shipments.



Source: Company data



Source: Company data

## HBI / DRI

Growth in HBI/DRI production ensured that Metalloinvest remained the market leader.

The development of HBI production is based on growing demand, high margins and a relatively low level of competition in the HBI market.

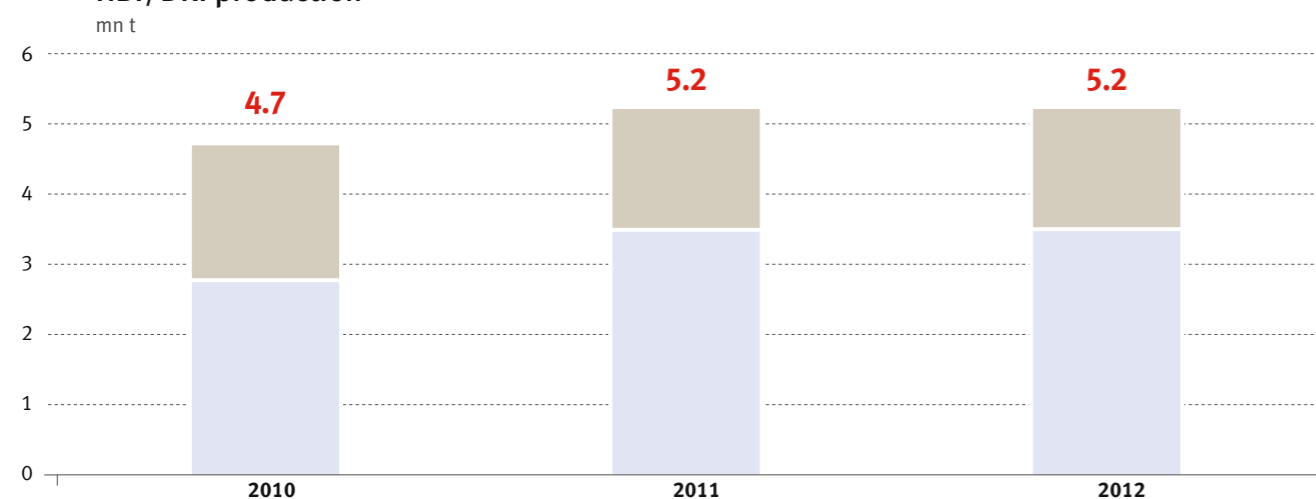
In 2012, Metalloinvest produced 5.2 million tonnes of HBI/DRI, 0.4% more than in 2011. The Company is the sole producer of HBI/DRI in Russia and the CIS.

**Metalloinvest is planning to increase HBI/DRI production capacity.** In 2012, Metalloinvest completed the first phase of the project to modernise HBI-2 Plant and increase its production capacity by 58,000 tonnes of HBI per year. The Company also began implementing an investment project to build HBI-3 Plant with capacity of 1.8 million tonnes per year. Following its completion, the plant will become the world's largest HBI production module, and Metalloinvest will have HBI/DRI production capacity equivalent to 7.2 million tonnes of HBI per year (for details, see page 67–68).

90% of the HBI produced is shipped to external customers. The higher density of HBI compared with DRI makes it easier to store and transport and also has a weaker reaction with atmospheric oxygen. Thus, almost all of the DRI produced is consumed internally by the Company for steel production, while almost all the HBI is shipped to external customers. Metalloinvest shipped a total of 2.3 million tonnes of HBI/DRI in 2012, with HBI making up 95% of this amount. In 2012, 90% of all HBI produced was shipped to external customers. Metalloinvest maintains its leading position on the global HBI market: at the end of 2012 the Company's share was 40%.

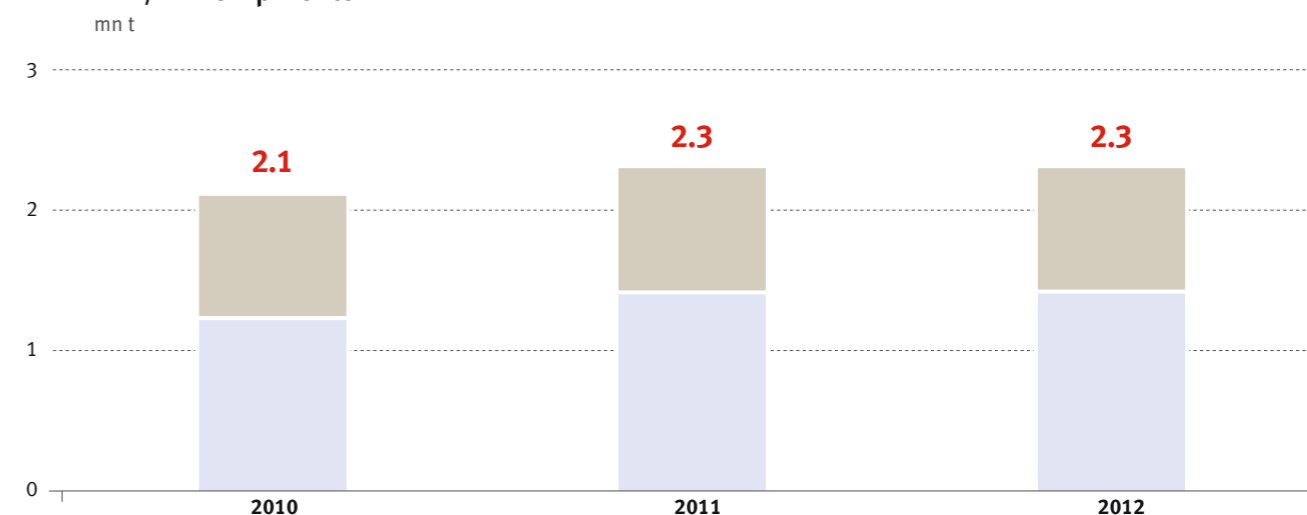


HBI/DRI production



Source: Company data

HBI/DRI shipments

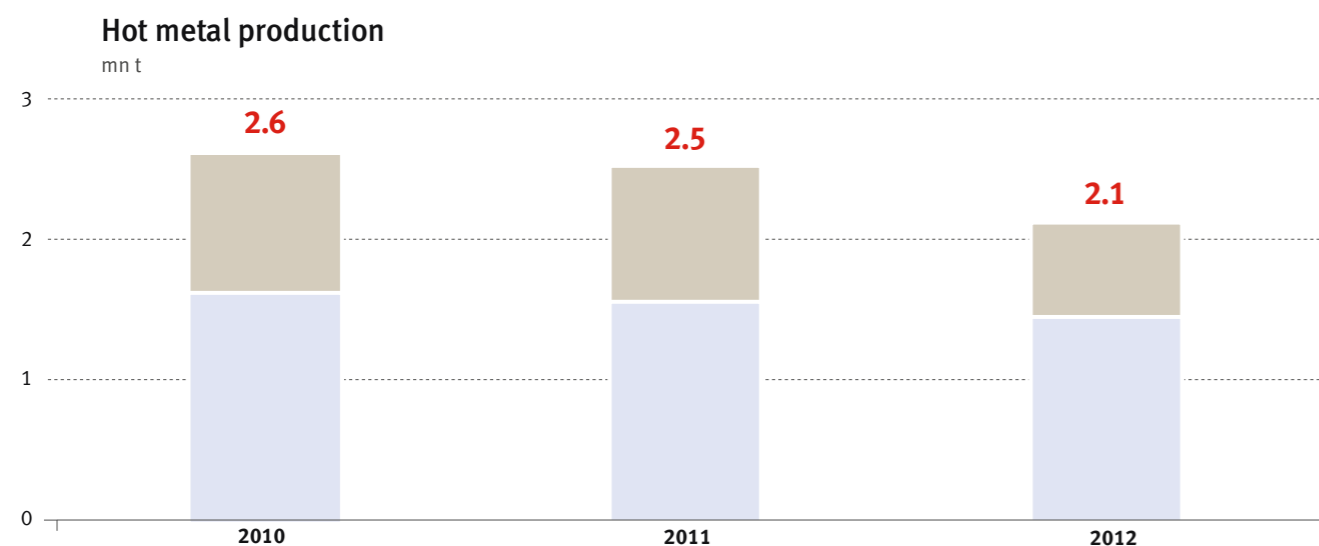


Source: Company data

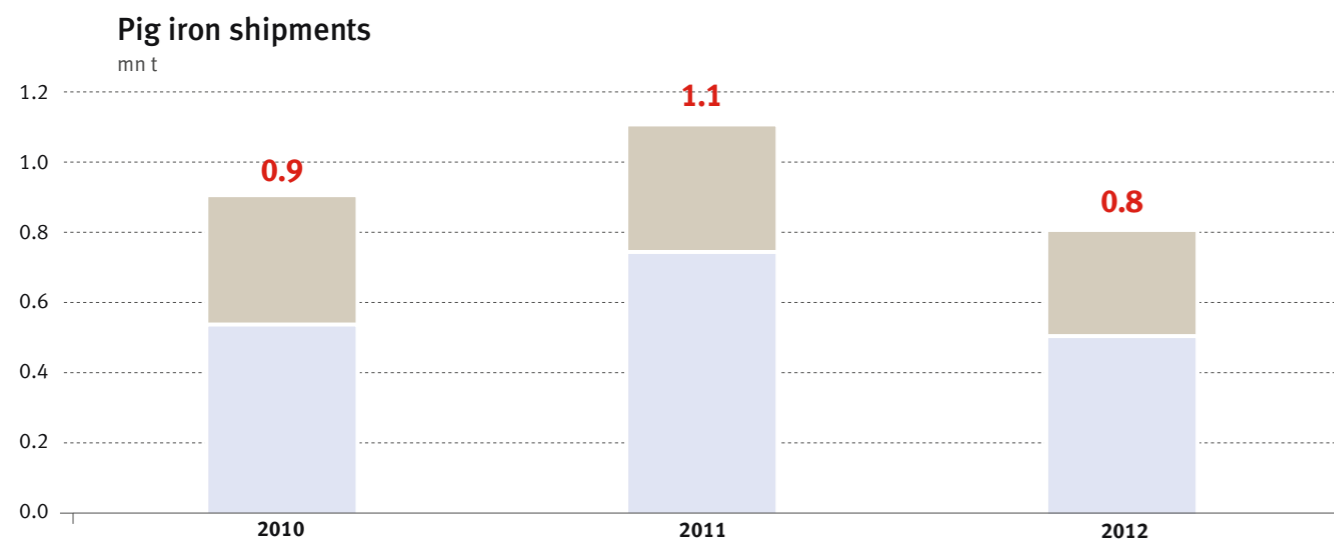
## HOT METAL AND PIG IRON

Hot metal production decreased due to planned maintenance works at Ural Steel. Blast Furnace #1 was put into operation in early 2012 following planned maintenance, while the more productive Blast Furnace #3 was suspended for planned repairs in the second half of the year, which led to a decrease in hot metal production by 15.2% year-on-year, to 2.1 million tonnes.

Pig iron shipments fell 28.0% year-on-year in 2012, to 811,000 tonnes. The main reason for this was a reduction in hot metal production volume while internal consumption for crude steel production remained stable.



Source: Company data

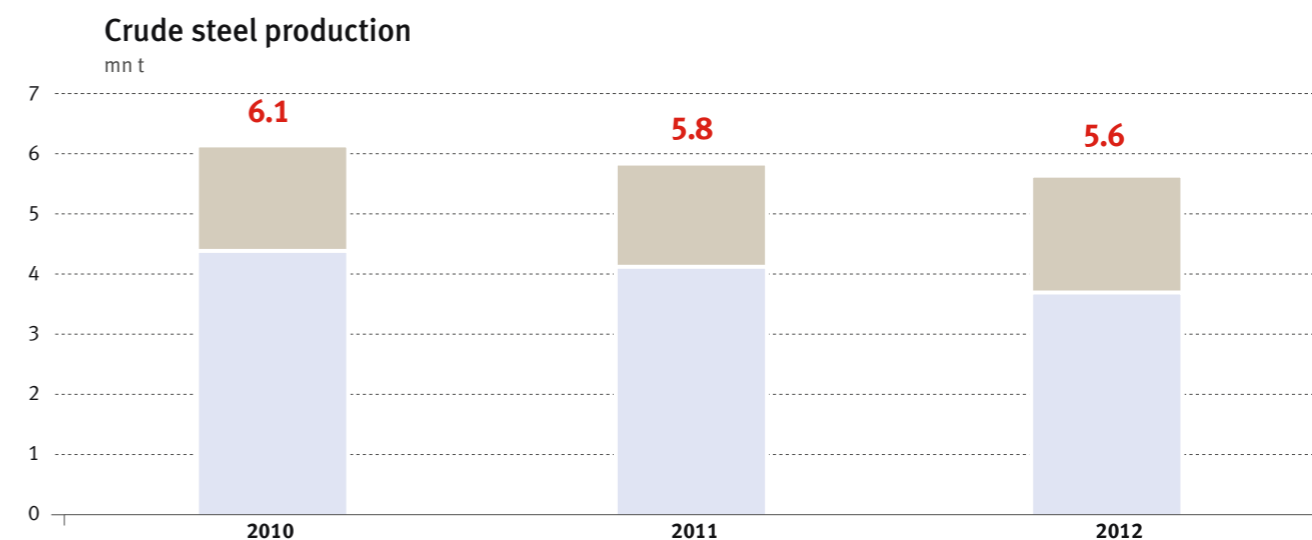


Source: Company data

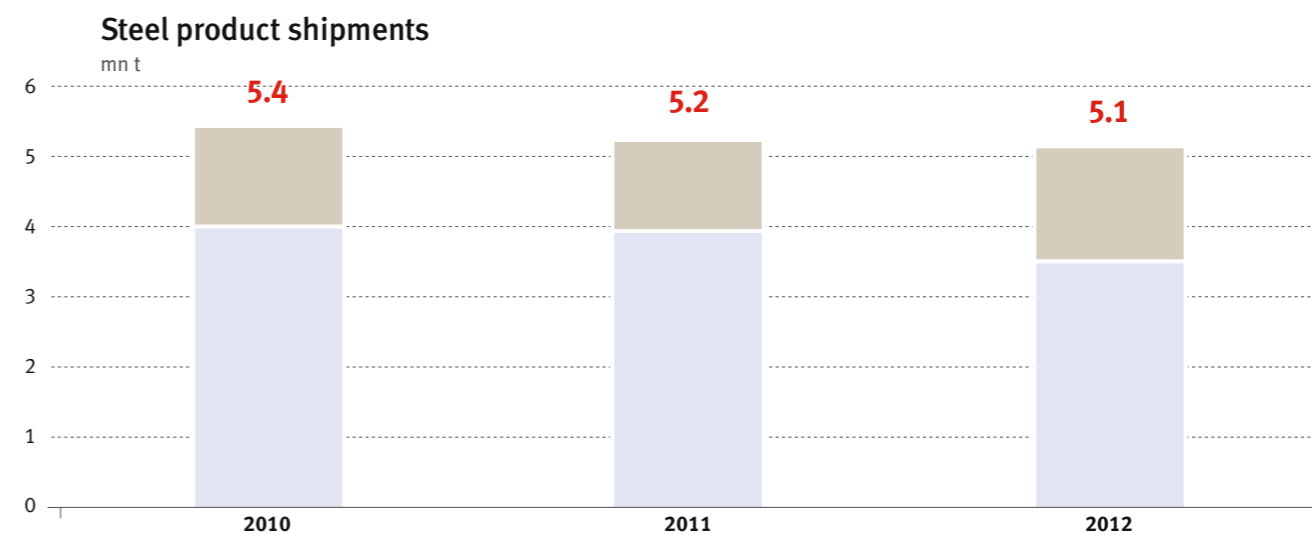
## STEEL

Metalloinvest maintained strong positions among the Russian steel producers. In 2012, the Company produced 5.6 million tonnes of crude steel, a decrease of 3.5% compared with 2011. The main reason for this was a decline in crude steel production in the

open-hearth plant due to its phased mothballing and closing down in 2013. However, the production figures still enabled the Company to rank fifth among the Russian steel producers with an 8% share of the total production.



Source: Company data



Source: Company data

In 2012, shipments of steel products to external customers declined 2.3%, to 5.1 million tonne, due to the decrease in steel production.

**Facilities modernisation: a temporary reduction in output is necessary for future growth.** Metalloinvest's steel production facilities are concentrated at OEMK

## GEOGRAPHY OF SHIPMENTS

**Shipments are diversified within Russia and abroad.** Metalloinvest is committed to the geographical diversification of shipments to external customers and focuses primarily on emerging markets with high potential for growth. Metalloinvest ships iron ore products both within Russia and the CIS and to China and the countries of Southeast Asia, Europe, the Middle East and North Africa (for details, see page 44–47).

Russia is one of the most promising markets for Metalloinvest. The conclusion of long-term contracts with leading Russian steelmaking plants led to an increase in the share of Russia and the CIS in the overall shipment structure of iron ore products from 34% in 2011 to 52% in 2012.

Since 2011, Metalloinvest has been shipping pellets to NLMK as part of a four-year contract.

Since 2011, Metalloinvest has been shipping pellets and iron ore concentrate to MMK. In December 2012, the Company signed a new three-year contract with MMK, which provides for an increase in iron ore shipments.

and Ural Steel. At present, OEMK is performing work to expand production, which will result in a capacity increase to 3.85 million tonnes of crude steel per year. It is expected that the growth in steel production at OEMK will compensate for the current decrease in production at Ural Steel caused by the closure of the open-hearth plant in 2013 (for details, see page 68).

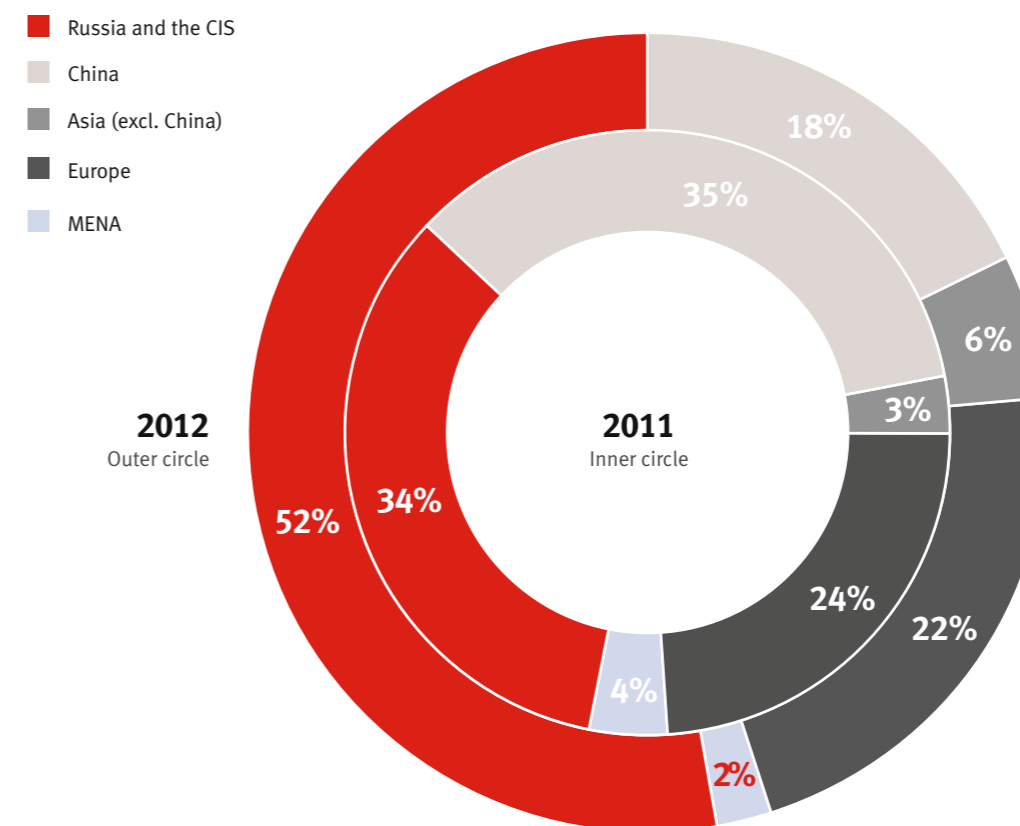
The share of Southeast Asian countries (excluding China) in the overall shipment structure of Metalloinvest doubled from 3% in 2011 to 6% in 2012. The main factors for this change were an increase in supplies to Japan and new contracts in Thailand and Indonesia.

Despite stagnant demand in the European markets, the Company was able to maintain shipment volumes at the 2011 level: Europe's share in the shipment structure declined negligibly from 24% to 22%.

China's share fell from 35% to 18% primarily due to the increase in shipments to Russian customers under long-term contracts. China remains one of the Company's main export markets.

## Shipments by market

iron ore, pellets, HBI/DRI, excluding intragroup shipments



Source: Company data

## 7.3 Financial Results

### Key financial results: EBITDA remained at the 2010 level amid significantly lower prices

(62% Fe, CFR China), USD/t



— Platts iron ore index (62% Fe, CFR China)

### Revenue

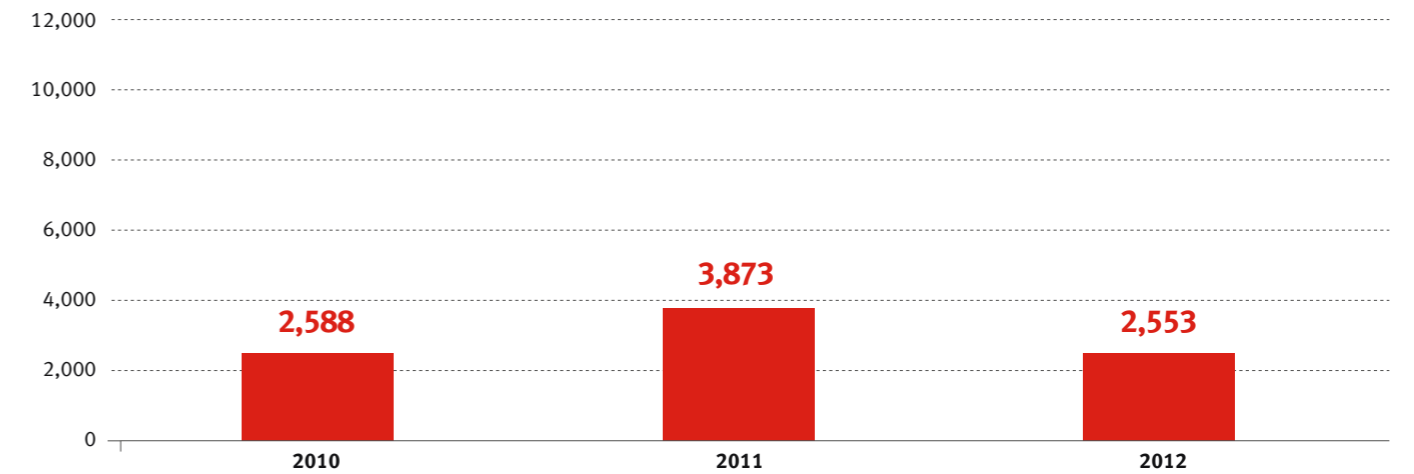
USD mn



Source: Company data

### EBITDA

USD mn



Source: Company data

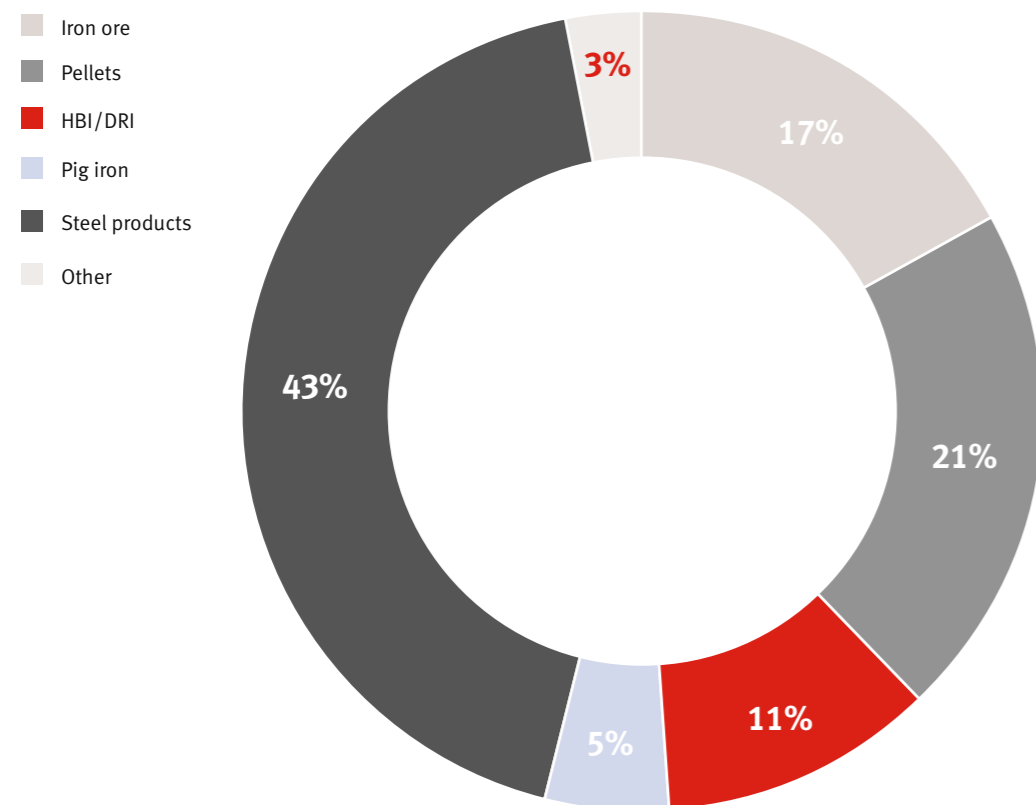
## REVENUE

Lower revenue was due to a decline in iron ore and steel prices. In 2012, Metalloinvest generated revenue of USD 8,194 million, 17.4% less than in 2011. Revenue in the Mining Segment totalled USD 4,009 million (49% of total revenue), a decrease of 17.9% year-on-year following the decline in iron ore prices. The decline in prices was partially compensated

by growth in physical shipments to the leading Russian steelmaking plants, NLMK and MMK, under long-term contracts. Revenue in the Steel Segment totalled USD 3,762 million (46% of total revenue). The decline in revenue in the Steel Segment totalled 18.1% year-on-year and was caused both by a reduction in shipments and a decline in steel prices.

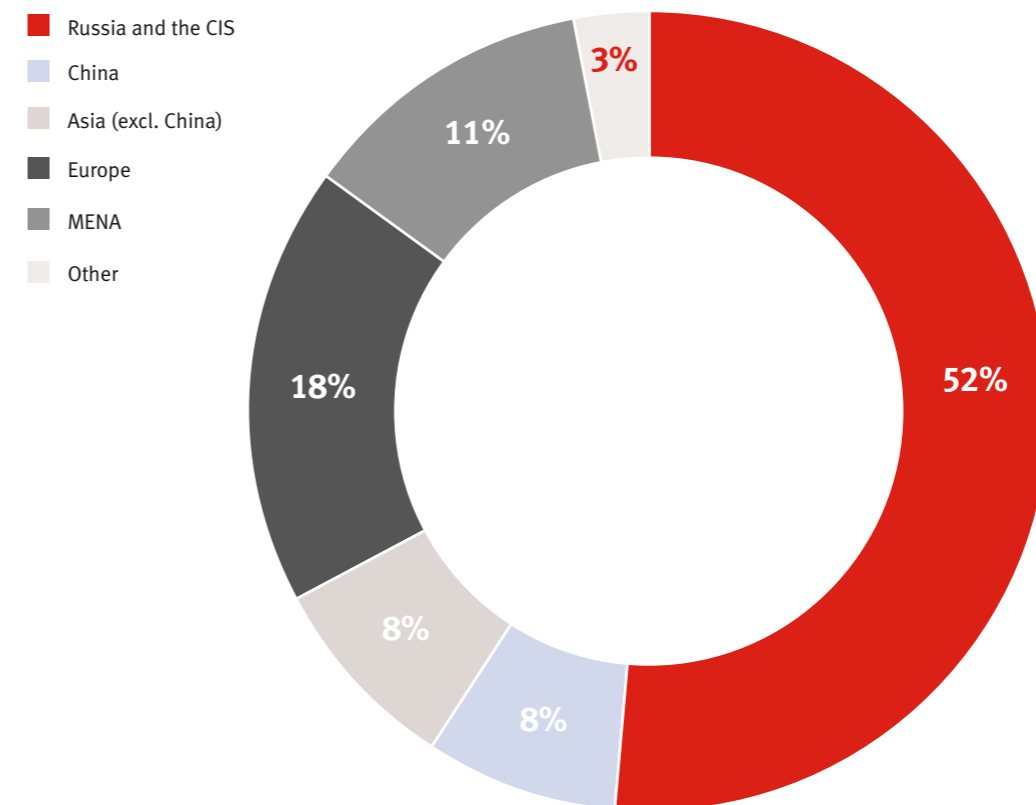
Russia's share in the revenue structure grew as a result of an increase in demand from Russian steelmaking plants. In 2011-2012, Metalloinvest concluded several long-term contracts with Russian steelmaking plants, which directly affected the revenue structure by sales market. The share of Russia and the CIS in revenue grew from 44% in 2011 to 52% in 2012.

Revenue by product type



Source: Company data

Revenue by market



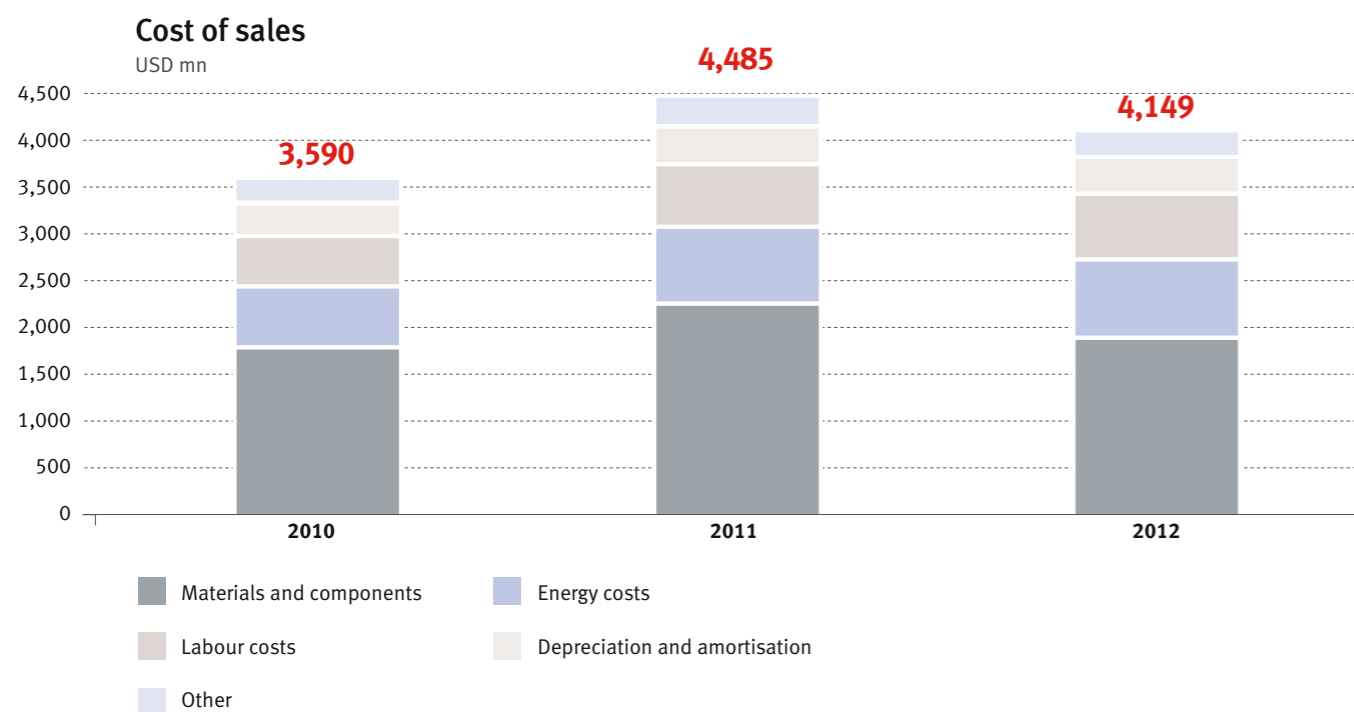
Source: Company data

## COST OF SALES AND DISTRIBUTION EXPENSES

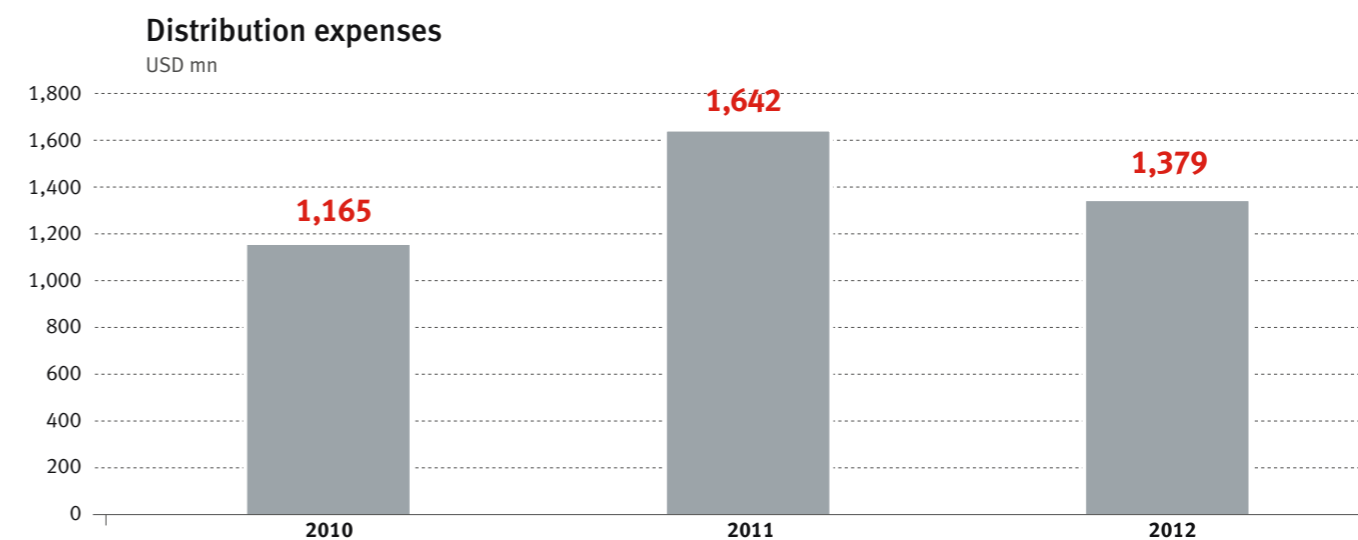
The reduction in materials and components expenses was the main reason for the decline in production costs. In 2012, production costs declined 7.5%, to USD 4,149 million, primarily due to a reduction in materials and components expenses — the largest cost item, constituting 47% of costs. In 2012, materials and components expenses declined 16.0%, to USD 1,966 million, due to reductions in the prices

of iron ore, coking coal and scrap, which the Company's steelmaking plants use as raw materials. Energy costs — the second largest production costs item (USD 861 million, or 21% of costs) — increased 1.8% due to an increase in electricity tariffs and growth in the natural gas price. Labour costs increased 5.1% year-on-year due to an increase in average wage at Metalloinvest's plants.

The change in shipments geography led to a significant reduction in transportation costs. In 2012, distribution expenses declined 17.8% year-on-year, to USD 1,379 million. The main reason for the decline was a reduction in transportation expenses, which account for more than 94% of all distribution expenses. In particular, the increase in the share of Russia and the CIS in the shipment structure to 52% led to a decline in the average shipment distance and therefore cost.



Source: Company data



Note: Distribution expenses include transportation, labour, customs duties, packaging materials, amortisation of property, plant and equipment, and other expenses.

Source: Company data

## PROFITABILITY

The Mining Segment provided 87% of EBITDA, while the Steel Segment accounted for 10%. In 2012, due to the factors affecting the dynamics of revenue, production costs and distribution expenses, EBITDA decreased 34.1% year-on-year declining to USD 2,553 million. However, despite the average iron ore price declining to USD 130/tonne (Platts iron ore price index, 62% Fe, CFR China) EBITDA

in 2012 was in line with EBITDA in 2010 when the average iron ore price was USD 150/tonne. The result was primarily due to increased production of high value-added products, as well as reduction of transportation expenses following the increase of shipments to the Russian customers. The EBITDA margin declined by 7.8 percentage points compared with 2011, to 31.2%.

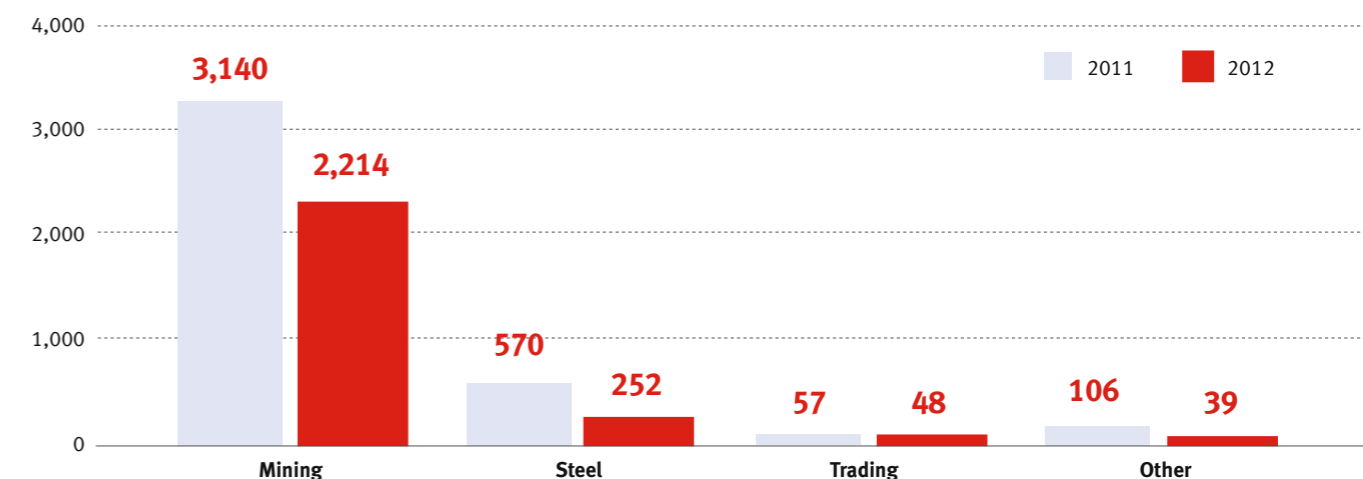
## NET INCOME

Net income grew 20.4% in 2012 compared with 2011, to USD 1,724 million. Over the course of the year, besides the operational performance, the net income was affected by several other factors including: profit from the sale of the Company's captive transport operator, Metalloinvesttrans, interest income of USD 195 million on discount promissory notes and loss of USD 189 million on foreign exchange operations associated with business activities.

In May 2012, Globaltrans acquired 100% of the shares in Metalloinvesttrans from Metalloinvest for a cash consideration of USD 569 million. Metalloinvest recognised the profit from the disposal of the subsidiary in the amount of USD 369 million as a part of the profit from discontinued operations for the period.

## EBITDA by segment

USD mn



Source: Company data

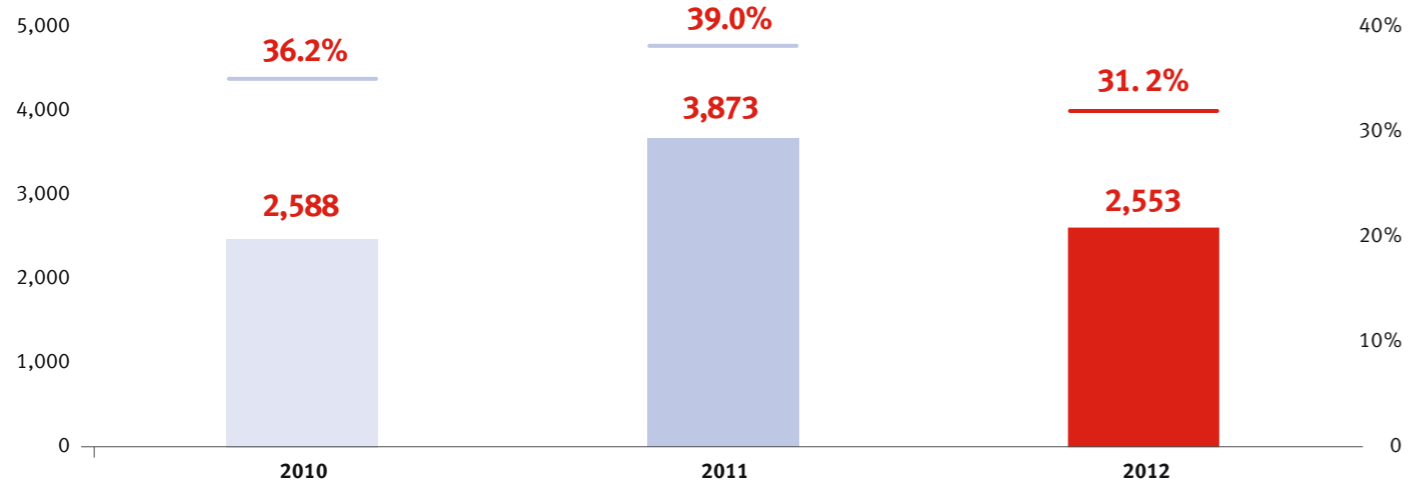
## INVESTMENT PROGRAMME

Capital expenditure totalled USD 463 million in 2012. Metalloinvest follows a policy of capping the amount of capital expenditure (including maintenance) to a level of USD 700-800 million per year.

Metalloinvest's main investment projects are: the construction of Pellet Plant #3 at MGOK and the construction of HBI-3 Plant at LGOK (for details, see pages 67-68).

## EBITDA and EBITDA margin

USD mn

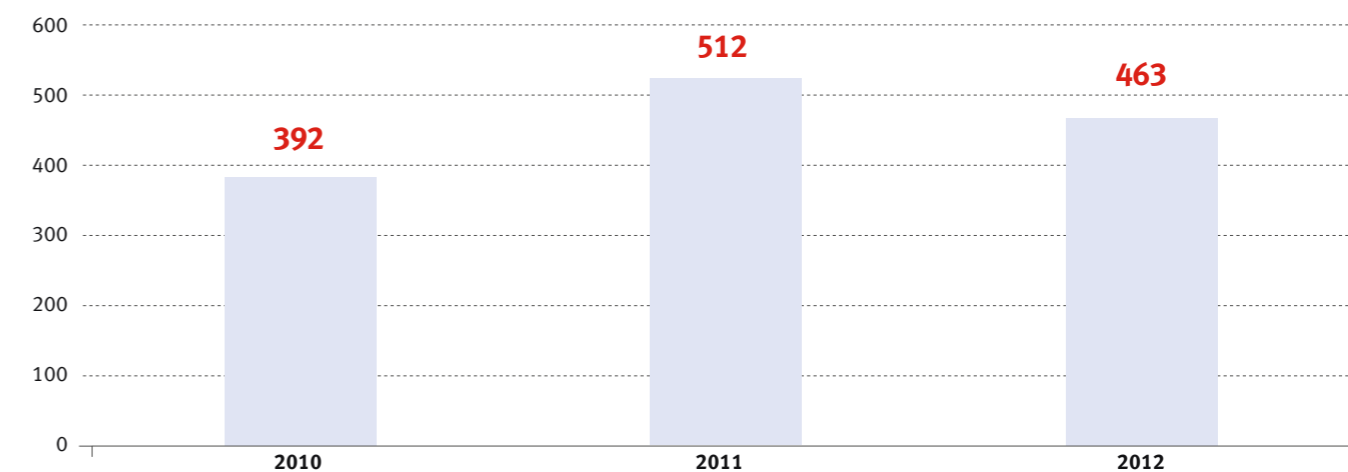


Note: EBITDA already show on p. 113

Source: Company data

## Capital expenditure

USD mn



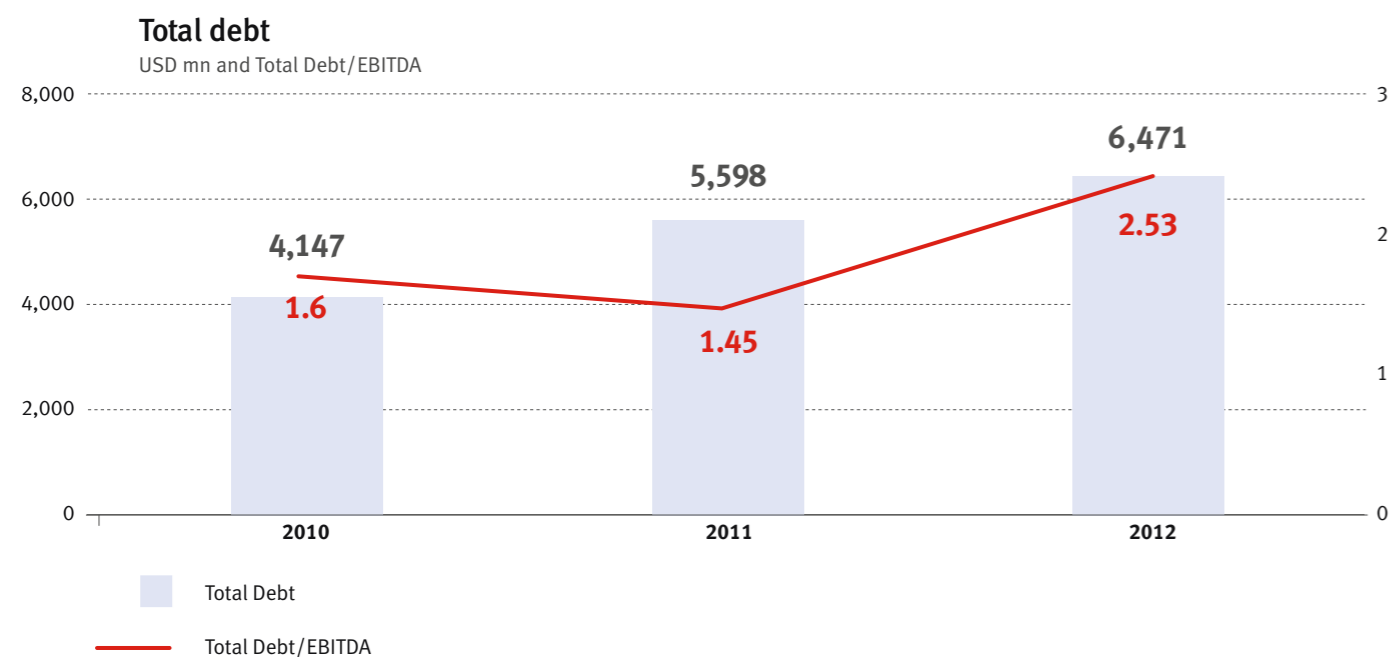
Source: Company data

## LIQUIDITY

In 2012, net cash generated from operating activities totalled USD 1,848 million, a decrease of 35.7% from USD 2,876 million in 2011.

In 2012, net cash spent on investing activities totalled USD 53 million compared to USD 3,033 million in 2011. The difference is primarily due to the acquisition of a stake in Norilsk Nickel in 2011 for USD 2,226 million and the income from the sale of Metalloinvesttrans in 2012.

In 2012, net cash spent on financing activities totalled USD 2,493 million, compared to USD 1,306 million generated from financing activities in 2011. The primary cash outflow is associated with the acquisition of a 24% stake in the Company by a Metalloinvest subsidiary for USD 3,023 million.



Source: Company data

## FINANCING

As of 31 December 2012, Metalloinvest had total debt of USD 6,471 million with a total debt/EBITDA ratio of 2.53x, compared to 1.45x on 31 December 2011.

**Debt portfolio was further optimised in terms of sources, maturities and currency structure.** As of 31 December 2012, long-term debt, accounted for 95% of the total debt versus 80% on 31 December 2011, which is consistent with the Company's strategy of increasing the share of long-term debt.

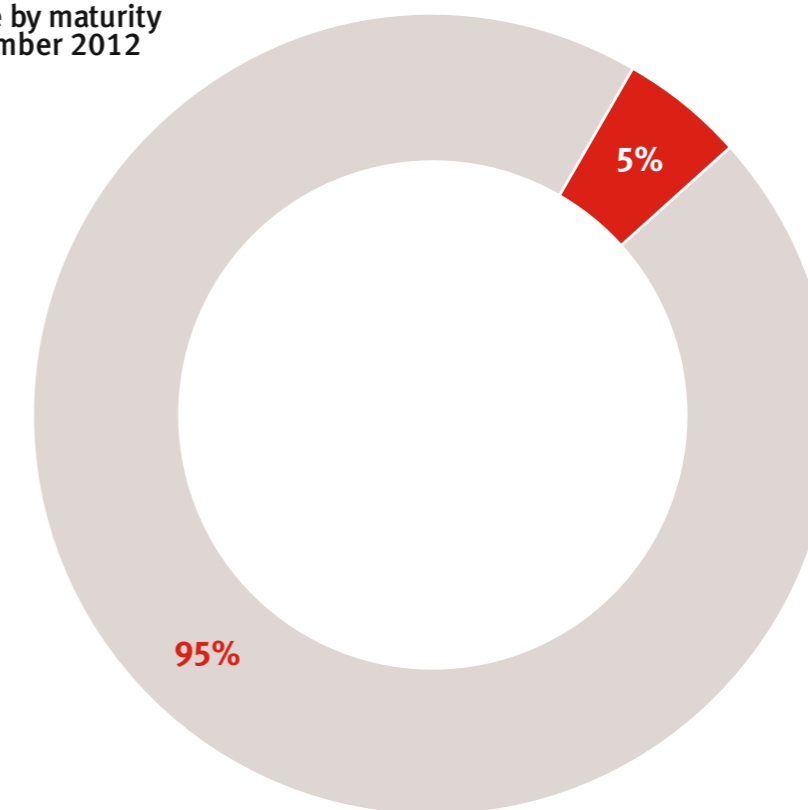
Metalloinvest also aims to diversify its sources of debt. As of 31 December 2012, a syndicated loan (PFX) accounted for 37% of debt, credit facilities from Sberbank for 34%, RUB-denominated bonds for 13%, and Eurobonds for 11%.

In 2012, Metalloinvest saw a significant improvement in its debt repayment schedule due to the raising of long-term financing.

In March 2012, the Company raised RUB 25 billion issuing RUB-denominated bonds maturing in 10 years with an early redemption option in 3 years. The annual coupon rate was set at 9.00%.

### Debt structure by maturity as of 31 December 2012

- Long-term Debt<sup>1</sup>
- Short-term Debt<sup>2</sup>



<sup>1</sup> Debt maturing more than one year after the reporting date

<sup>2</sup> Debt maturing less than one year after the reporting date

Source: Company data

In May 2012, Metalloinvest made an early repayment of USD 700 million under the syndicated loan (PXF) of USD 3.1 billion received in April 2011.

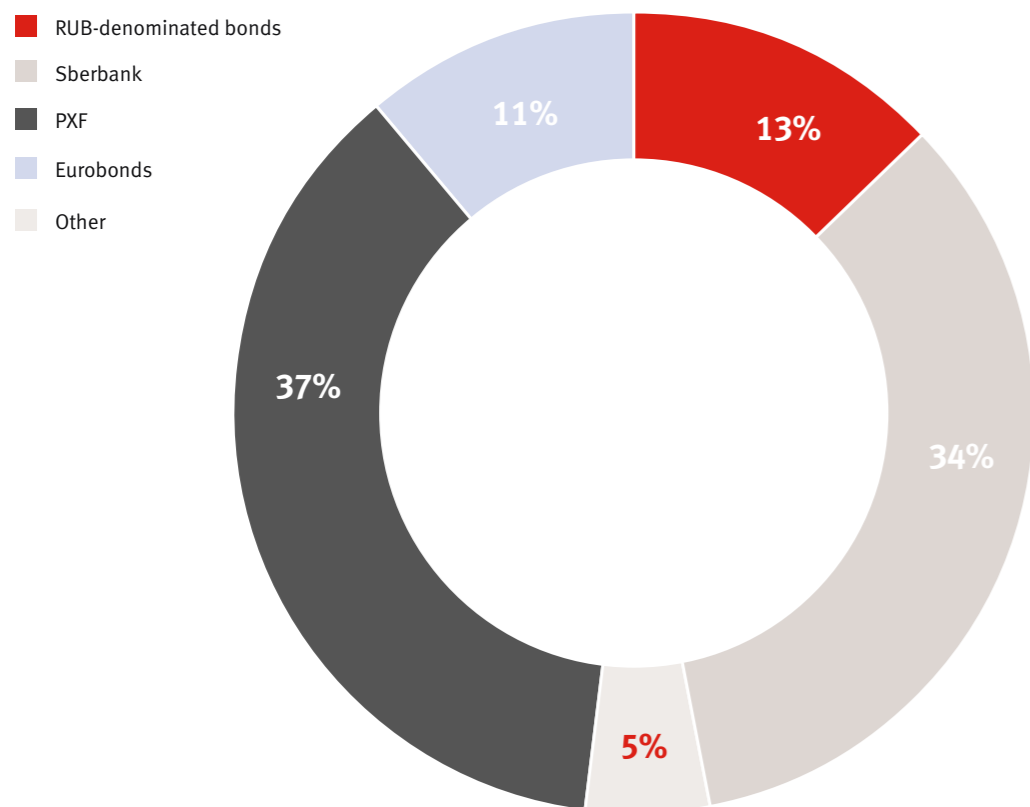
In February 2013, Metalloinvest raised RUB 10 billion issuing RUB-denominated bonds maturing in 10 years with an early redemption option in 5 years. The annual coupon rate was set at 8.90%. The proceeds were spent on the repayment of the majority of RUB-denominated loans maturing in 2013–2014.

In March 2013, the Company used its operating cash flow to repay an additional USD 250 million under the syndicated loan (PXF).

In April 2013, Metalloinvest raised USD 1 billion issuing 5.625% Eurobonds maturing in 7 years. The proceeds from the Eurobond placement were spent on the early repayment of USD 1 billion of the remaining USD 2.15 billion of the syndicated loan (PXF). Metalloinvest repaid the USD 750 million tranche maturing in 2014 and the USD 250 million tranche maturing in 2015. As a result, the Company significantly improved its debt repayment schedule and increased the average maturity of its debt portfolio.

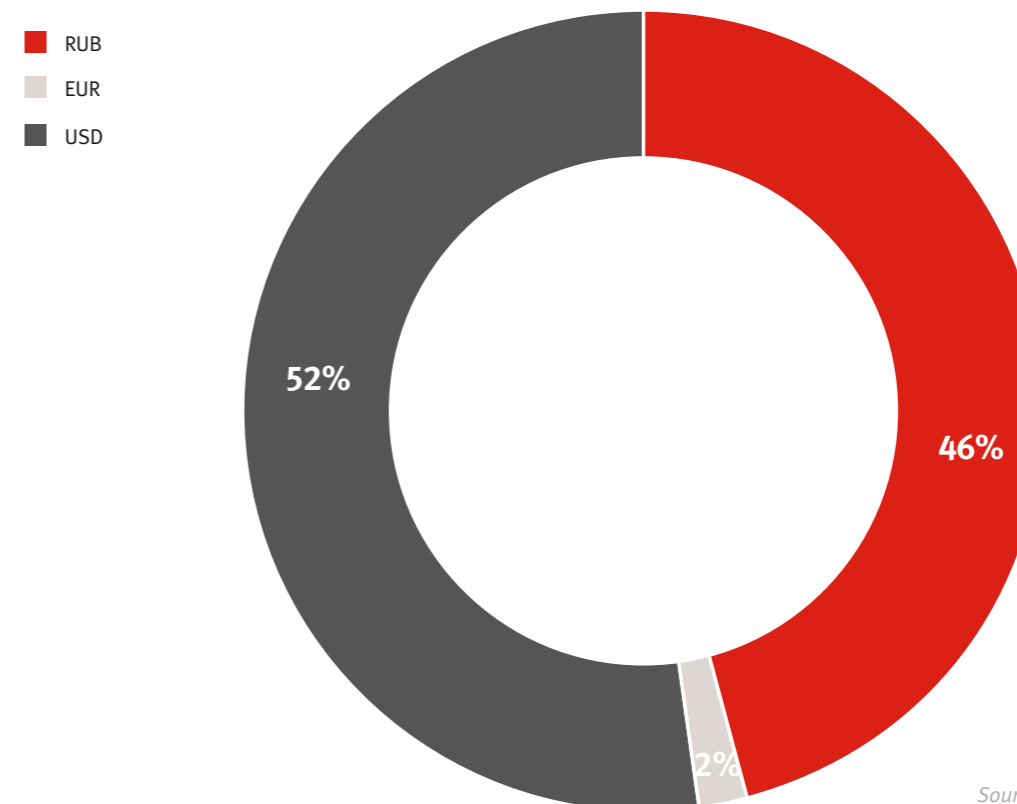
### Debt structure by sources

as of 31 December 2012



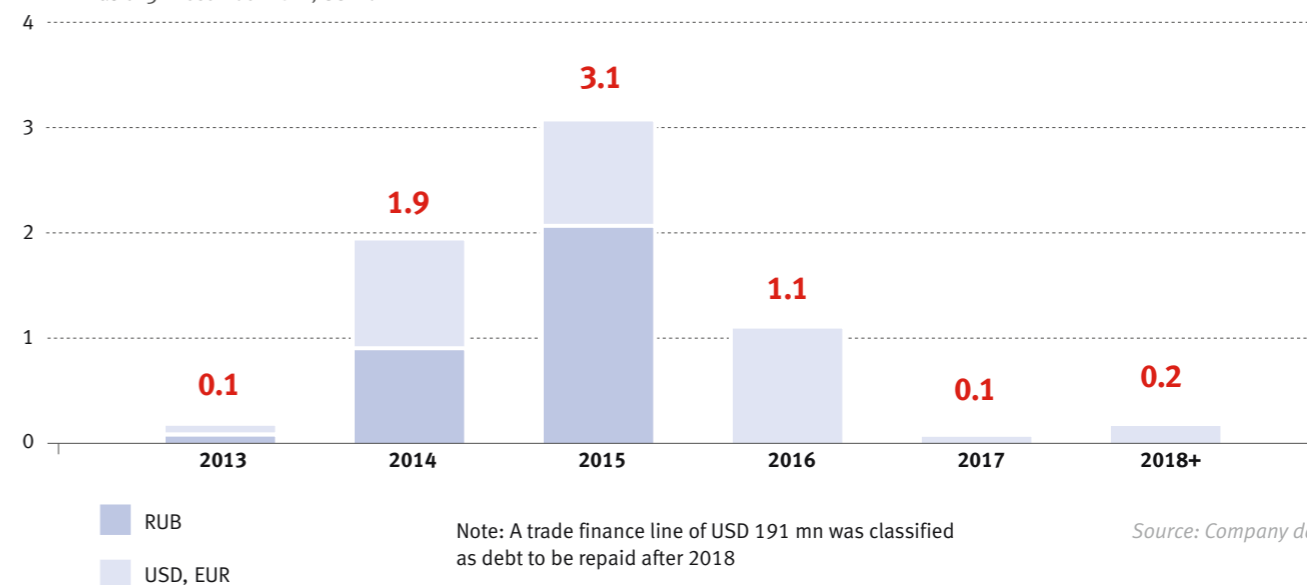
### Debt structure by currency

as of 31 December 2012



### Debt maturity schedule

as of 31 December 2012, USD bn



## DIVIDENDS

In January 2012, Metalloinvest paid dividends for the first 9 months of 2011 in the amount of USD 290 million (for details, see page 75).

## CHANGES TO THE SHAREHOLDER STRUCTURE

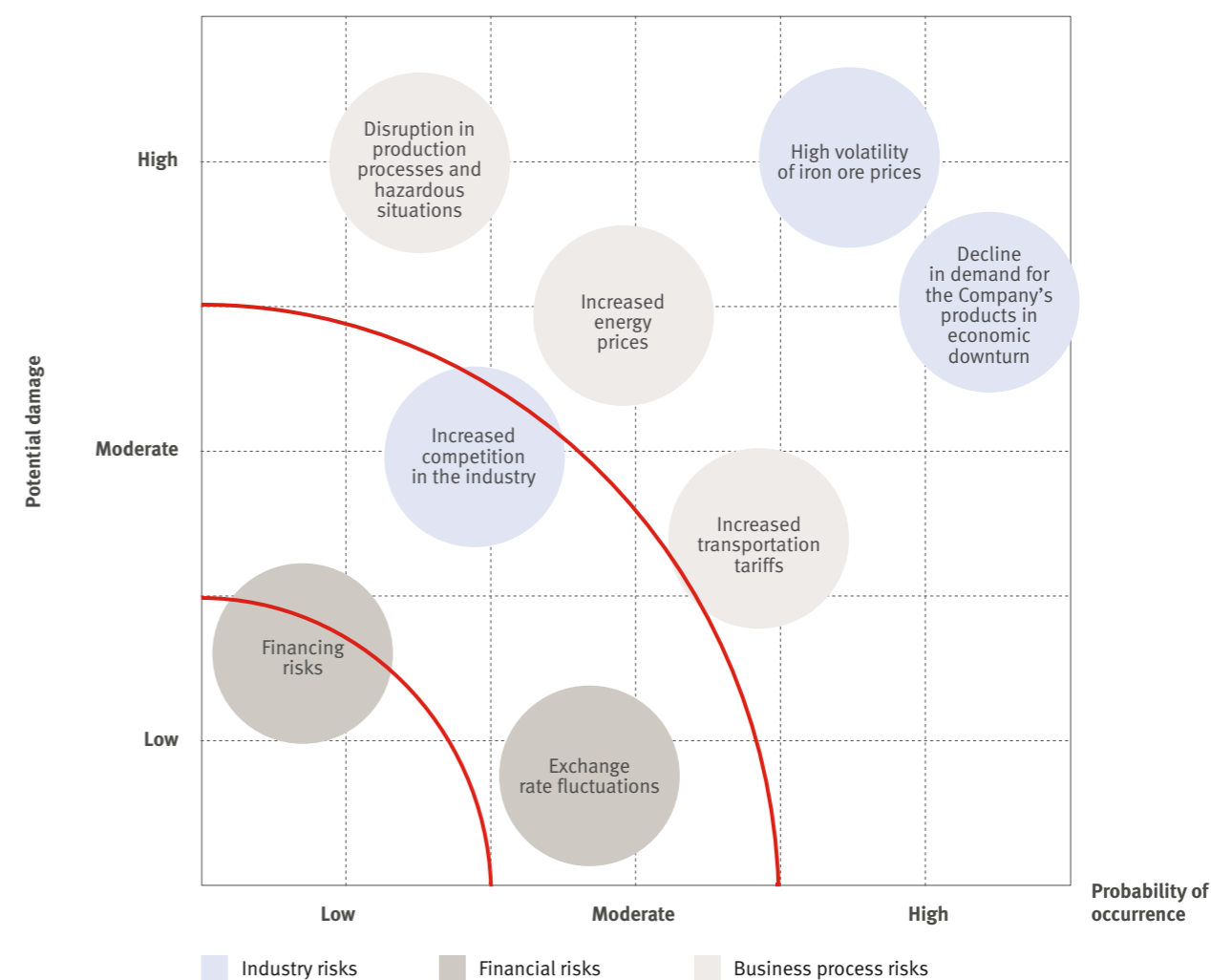
In December 2012, Metalloinvest Ltd (a subsidiary of Metalloinvest Group) acquired a 24% stake in the Company for USD 3,023 million as through of several transactions by the companies of the Metalloinvest Group and its shareholders. VTB Group withdrew as a Metalloinvest shareholder, and USM Holdings gained control over 100% of the Company's shares.

## 7.4 Risk Management System

Metalloinvest's activities are associated with various risks. In order to identify, classify and assess their potential implications and to manage them effectively, **Metalloinvest has created a multi-level risk management system.** This system provides for risk

management both at the level of the Board of Directors and at the level of functional heads at the production enterprises. The most significant risks, the probability of their occurrence and the scale of potential implications are presented in the risk map.

Risk map



## INDUSTRY RISKS

- **Iron ore prices are very volatile.** Iron ore prices are now subject to significant fluctuations due to increased volumes of spot trading.

In order to minimise this risk, **Metalloinvest concludes long-term contracts for the supply of iron ore, under which the prices are reviewed once a month or once a quarter.** Since 2011, Metalloinvest has been making pellets shipments to NLMK under a four-year contract. Since 2011, the Company has been shipping pellets and iron ore concentrate to MMK. In 2012, Metalloinvest signed a new three-year contract with MMK which provides for an increase in shipments of iron ore products. In March 2013, a three-year contract was signed with Severstal for the supply of 3 million tonnes of iron ore concentrate.

- **Demand for the Company's products can deteriorate in downturn.** The main consumers of Metalloinvest's products are steelmaking plants, automotive and engineering enterprises as well as construction companies, whose businesses are subject to cyclical changes.

## BUSINESS PROCESS RISKS

- **Energy prices can increase.** Electricity and natural gas are the main energy resources that the Company purchases from external producers. An increase in energy prices would lead to growth in production costs.

In order to reduce energy cost risks, **Metalloinvest concludes direct long-term contracts for natural gas and electricity supplies with Gazprom and Federal Grid Company.**

- **Transportation tariffs can grow.** The potential implications of an increase in transportation tariffs include growth in transportation expenses for finished products and, consequently, a decline in EBITDA margin.

In order to minimise this risk, **Metalloinvest is implementing a strategy focusing on production of high value-added products: pellets and HBI,** using approximately 65% of the iron ore it manufactures for their production. Large share of high value-added products in shipment structure enables Metalloinvest to achieve strong financial results even in periods of a price downturn associated with economic cycles.

- **Competition in the industry can intensify.** Russia's accession to the WTO in 2012 may potentially lead to increased competition in the Russian mining and steel industries.

Russia's accession to the WTO is unlikely to affect Metalloinvest's activities for the following reasons:

**Most of the imports, similar to the Company's products, were not restricted by any trade barriers** whose cancellation or relaxation would give them additional competitive advantages.

**Metalloinvest cooperates with key customers** and is also expanding and diversifying its customer base.

In 2012, Metalloinvest sold captive rail freight operator Metalloinvesttrans to Globaltrans. The transaction involved **the conclusion of a contract under which Globaltrans will transport 100% of Metalloinvest's freight by rail at agreed prices** over the first year and 60% of the freight volume during the second year using the "right of first refusal" principle. As a result of the transaction, Metalloinvest's plants managed to gain access to the comprehensive services of one of the largest and most efficient transport operators in Russia.

In 2013, Globaltrans and Metalloinvest reached a new agreement under which Globaltrans will transport 100% of Metalloinvest's freight until 31 May 2015 and the parties will review the prices for these services on a quarterly basis.

- **Production processes can be disrupted and hazardous situations can arise.** The risk of emergencies in the workplace entails downtime in production and growth of non-production expenses.

In order to prevent hazardous situations, **the Company employs comprehensive measures for industrial, production and environmental safety.**

## FINANCIAL RISKS

- **Exchange rates can fluctuate.** Foreign exchange risks are associated with the Company's export activities as: revenue from Metalloinvest's export operations is denominated in USD. Changes in exchange rates on the reporting date result in the Company recognising gains or losses associated with the foreign exchange on a consolidated basis.

The impact of foreign exchange is minimised due to the fact that **the currency structure of the Company's liabilities is similar to the currency structure of its revenue.** As of 31 December 2012, 47% of the Company's revenues and 52% of its liabilities were denominated in USD.

In an effort to reduce dependence on third parties, **repair work at production facilities is performed by the company's teams.**

In order to avoid potential losses, **Metalloinvest has business interruption insurance,** following the general practice in the industry. The insurance programme, which covers Metalloinvest's production assets, is offered by reinsurance companies with "A" ratings and a leading insurance company with a rating of "AAA-".

- **Financing markets can be unstable.** Metalloinvest actively raises funds on debt capital markets and also in the form of bank loans. The cost of financing is determined by market environment, and changes in market conditions can lead to a significant increase in the cost of servicing financial obligations.

In order to reduce credit risks, **Metalloinvest strives to maintain its total debt/EBITDA ratio at or below 2.0x.**