NON-FERROUS METALLURGY:
PLATINUM-GROUP METALS
FACTS AND FIGURES
ABOUT THE RUSSIAN DIRECT INVESTMENT FUND

The Russian Direct Investment Fund is a $10 billion fund established to make equity investments primarily in the Russian economy.

RDIF was created in 2011 under the leadership of the President and Prime Minister of Russia to co-invest alongside top global investors, acting as a catalyst for direct investment in Russia. RDIF together with its co-investors invested and committed over $7 billion for this purpose, of which RDIF alone invested $1.3 billion and over $6 billion came from the leading international co-investment partners.

RDIF also attracted over $15 billion of foreign capital into the Russian economy through long-term strategic partnerships.
RUSSIA IN THE GLOBAL PLATINUM-GROUP METALS INDUSTRY
1.1 PLATINUM AND PALLADIUM RESERVES BY COUNTRY
2013, thousand tonnes*

1. South Africa 63.0
2. Russia 1.2
3. USA 0.9
4. Canada 0.3
Other countries 0.8

* Source: USGS data
### PLATINUM-GROUP METALS MINING

#### GLOBALLY

Leading countries*, 2013, tonnes

<table>
<thead>
<tr>
<th>Country</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>140</td>
</tr>
<tr>
<td>Russia</td>
<td>25</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>12</td>
</tr>
<tr>
<td>Canada</td>
<td>7</td>
</tr>
<tr>
<td>USA</td>
<td>3.7</td>
</tr>
</tbody>
</table>

#### Global platinum mining

1. South Africa
2. Russia
3. Zimbabwe
4. Canada
5. USA

### Global palladium mining

<table>
<thead>
<tr>
<th>Country</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>82</td>
</tr>
<tr>
<td>South Africa</td>
<td>82</td>
</tr>
<tr>
<td>Canada</td>
<td>13</td>
</tr>
<tr>
<td>USA</td>
<td>12.5</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>9</td>
</tr>
</tbody>
</table>

1. Russia
2. South Africa
3. Canada
4. USA
5. Zimbabwe

* Source: USGS data
1.3 PLATINUM INDUSTRY: KEY GLOBAL PLAYERS

2013

Ranking of companies based on platinum production
2013, % of global production

1. Anglo Platinum
   South Africa

2. Impala Platinum
   South Africa

3. Lonmin
   UK

4. Norilsk Nickel
   Russia

5. Northam
   South Africa

6. Vale
   Brazil

Source: Annual Report of Norilsk Nickel, 2013, Company data
PALLADIUM INDUSTRY: KEY GLOBAL PLAYERS

2013

Ranking of companies based on palladium production
2013, % of global production

1. Norilsk Nickel
   Russia

2. Anglo Platinum
   South Africa

3. Impala Platinum
   South Africa

4. Stillwater
   USA

5. Lonmin
   UK

6. Vale
   Brazil

Source: Annual Report of Norilsk Nickel, 2013, Company data
RUSSIAN PLATINUM-GROUP METALS INDUSTRY: CURRENT ISSUES AND TRENDS
2.1  PLATINUM MINING

Platinum mining in Russia and globally
2009-2013, tonnes*

<table>
<thead>
<tr>
<th>Year</th>
<th>Platinum in Russia</th>
<th>Russia's share of global mining, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>181 (11.6)</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>192 (13.1)</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>195 (12.8)</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>183 (13.4)</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>192 (13.0)</td>
<td></td>
</tr>
</tbody>
</table>

* Source: USGS data
### 2.2 PALLADIUM MINING

Palladium mining in Russia and globally

2009-2013, tonnes*

<table>
<thead>
<tr>
<th>Year</th>
<th>In Russia</th>
<th>Globally</th>
<th>Russia’s share of global mining, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>192</td>
<td>83.2</td>
<td>43.3</td>
</tr>
<tr>
<td>2010</td>
<td>202</td>
<td>83.7</td>
<td>41.9</td>
</tr>
<tr>
<td>2011</td>
<td>215</td>
<td>86</td>
<td>40.0</td>
</tr>
<tr>
<td>2012</td>
<td>201</td>
<td>82.1</td>
<td>40.8</td>
</tr>
<tr>
<td>2013</td>
<td>211</td>
<td>82</td>
<td>38.8</td>
</tr>
</tbody>
</table>

* Source: USGS data
2.3 PLATINUM AND PALLADIUM PRODUCTION IN RUSSIA

Platinum production in Russia
2010-2013, tonnes

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>100.0</td>
</tr>
<tr>
<td>2011</td>
<td>106.6</td>
</tr>
<tr>
<td>2012</td>
<td>95.6</td>
</tr>
<tr>
<td>2013</td>
<td>101.3</td>
</tr>
</tbody>
</table>

Palladium production in Russia
2010-2013, tonnes

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>100.0</td>
</tr>
<tr>
<td>2011</td>
<td>97.8</td>
</tr>
<tr>
<td>2012</td>
<td>100.0</td>
</tr>
<tr>
<td>2013</td>
<td>94.3</td>
</tr>
</tbody>
</table>
2.4 RUSSIAN EXPORT OF PALLADIUM AND PLATINUM
2013, tonnes, by top importing countries

Exports of palladium, tonnes
Exports of platinum, tonnes

USA
UK
Germany
Belarus
Hong Kong
Japan

10
0.3
3.7
0.6
7.7
29
0.4
0.16
16
III GEOGRAPHY AND CORPORATE STRUCTURE
3.1 KEY DEPOSITS OF PLATINUM AND PALLADIUM IN RUSSIA

Reserves, tonnes:  
- <10
- 10-100
- >100
### 3.2 RUSSIAN PLATINUM-GROUP METALS INDUSTRY: CORPORATE STRUCTURE

#### Norilsk Nickel

**Companies of the Holding company**
- Polar Division (Norilsky Kombinat OJSC)
- Kolskaya GMK OJSC
- Kombinat Severonikel OJSC
- Mining and Metallurgical Kombinat Pechenganikel OJSC

**Mines of the Holding company**
- Oktyabrske (Krasnoyarsk Krai)
- Talnakhskoe (Krasnoyarsk Krai)
- Norilsk-1 (Krasnoyarsk Krai)
- Zhdanovskoe (Krasnoyarsk Krai)
- Zapolyarnoe (Krasnoyarsk Krai)
- Kotselvaara, Semiletka (Krasnoyarsk Krai)

**Concentrating plants**
- Talnakhskaya
- Norilskaya

**Metallurgical processing enterprises**
- Copper Metallurgical Plant
- Nickel Metallurgical Plant
- Nadezhdinsky Metallurgical Plant
- Severonikel Kombinat

#### Russian Platinum GC

**Companies of the Holding company**
- Artel Starateley Amur UK OJSC
- Russian Platinum LLC

**Mines of the Holding company**
- Chernogorske Deposit (Krasnoyarsk Krai)
- Konder (Khabarovsk Krai)
- Norilsk-1 (Southern section) (Krasnoyarsk Krai)
### NORILSK NICKEL: NO. 1 IN GLOBAL INDUSTRY TOP – 10

2013, by sales volume and market capitalization

<table>
<thead>
<tr>
<th>Country</th>
<th>Company</th>
<th>Sales, USD mln</th>
<th>Market capitalization, USD mln</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Russia</td>
<td>Norilsk Nickel</td>
<td>11 121.42</td>
<td>28 642.18</td>
</tr>
<tr>
<td>2 USA</td>
<td>Southern Copper Corp.</td>
<td>6 669.27</td>
<td>23 369.05</td>
</tr>
<tr>
<td>3 UK</td>
<td>Antofagasta Plc</td>
<td>6 325.39</td>
<td>10 988.26</td>
</tr>
<tr>
<td>4 Canada</td>
<td>First Quantum Minerals Ltd.</td>
<td>3 446.50</td>
<td>9 126.63</td>
</tr>
<tr>
<td>5 Peru</td>
<td>Sociedad Minera Cerro Verde SAA</td>
<td>1 804.65</td>
<td>8 523.86</td>
</tr>
<tr>
<td>6 South Africa</td>
<td>Impala Platinum Holdings Ltd</td>
<td>2 728.63</td>
<td>4 582.44</td>
</tr>
<tr>
<td>7 China</td>
<td>Jilin Jien Nickel Industry Co., Ltd.</td>
<td>391.16</td>
<td>3 721.92</td>
</tr>
<tr>
<td>8 Philippines</td>
<td>Nickel Asia Corp.</td>
<td>245.54</td>
<td>2 472.43</td>
</tr>
<tr>
<td>9 China</td>
<td>Chongyi Zhangyuan Tungsten Co., Ltd</td>
<td>322.42</td>
<td>1 362.36</td>
</tr>
<tr>
<td>10 Australia</td>
<td>Western Areas Ltd</td>
<td>301.93</td>
<td>849.16</td>
</tr>
</tbody>
</table>

Sources: Bloomberg, Reuters
NORILSK NICKEL: GLOBAL MARKET LEADER
2013, share in global metal production

1. Global nickel producer
   14% of global nickel production

1. Global palladium producer
   41% of global palladium production

4. Global platinum producer
   11% of global platinum production

11. Global copper producer
    2% of global copper production
GEOGRAPHY AND CORPORATE STRUCTURE

NORILSK NICKEL MARKET CAPITALIZATION

Capitalization growth
Nov 2013 - Nov 2014, %

Norilsk Nickel  +20%
Rio Tinto  -9.3%
BHP Billiton  -19.3%
VALE  -41%

Sources: Bloomberg, Reuters, Company data

Capitalization
USD bln

23.8
Nov. 13

28.6
+20%
Nov. 14
NORILSK NICKEL: SUSTAINABLE HIGH MARGIN

EBITDA
USD bln

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>5.8</td>
<td>4.2</td>
<td>7.2</td>
<td>7.2</td>
<td>4.9</td>
<td>4.2</td>
</tr>
</tbody>
</table>

EBITDA margin, %

Earnings per share
USD

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>23.2</td>
<td>19.2</td>
<td>16.3</td>
</tr>
</tbody>
</table>

Revenues
USD mln

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>14.5</td>
<td>12.4</td>
<td>11.5</td>
</tr>
</tbody>
</table>
NORILSK NICKEL: KEY FINANCIAL INDICATORS
2011-2013

Free Cash Flow
2013, as % of Revenue

| Company      | Free Cash Flow
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Norilsk Nickel</td>
<td>21</td>
</tr>
<tr>
<td>BHP Billiton</td>
<td>11</td>
</tr>
<tr>
<td>VALE</td>
<td>9</td>
</tr>
<tr>
<td>Rio Tinto</td>
<td>8</td>
</tr>
<tr>
<td>Anglo American</td>
<td>4</td>
</tr>
</tbody>
</table>

Net Debt to EBITDA
2013

| Company      | Net Debt to EBITDA
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BHP Billiton</td>
<td>0.8x</td>
</tr>
<tr>
<td>Rio Tinto</td>
<td>0.9x</td>
</tr>
<tr>
<td>Norilsk Nickel</td>
<td>1.1x</td>
</tr>
<tr>
<td>VALE</td>
<td>1.1x</td>
</tr>
<tr>
<td>Anglo American</td>
<td>1.2x</td>
</tr>
</tbody>
</table>
NORILSK NICKEL: DIVERSIFIED GLOBAL PLAYER WITH A FOCUS ON CHINA

Norilsk Nickel Sales structure 2013, %

- Europe: 52%
- North America: 9%
- Russia: 10%
- Asia: 29%

Norilsk Nickel exports to China 2005-2013, nickel, thousand tonnes

- 2005: 8.75 thousand tonnes
- 2013: 70 thousand tonnes

CAGR 30%
NORILSK NICKEL PRODUCTION INDICATORS: PLATINUM AND PALLADIUM  
2011-2013, thousand troy ounces

<table>
<thead>
<tr>
<th>Year</th>
<th>Platinum Production</th>
<th>Palladium Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>695</td>
<td>2,806</td>
</tr>
<tr>
<td>2012</td>
<td>683</td>
<td>2,731</td>
</tr>
<tr>
<td>2013</td>
<td>651</td>
<td>2,661</td>
</tr>
</tbody>
</table>
INVEST IN RUSSIA PLATFORM

WHY RUSSIA?
“Russia is one of the largest countries in Zone Europe, Middle East, North Africa and a big contributor to its results. We believe in Russia’s long-term potential and will continue to develop business here; the country, where we first came more than 140 years ago.”

Luca Centenelli
Executive Vice President Nestlé S.A.
Head of Zone Europe, Middle East, North Africa

DID YOU KNOW?
Russia is the 8th largest economy in the world.
GDP purchasing power parity, $ trillion

SAY YES TO KALUGA REGION
Kaluga Region General Information
Total area: 22,000 km²
Population: 1,220,000
Major cities:
Kaluga (population: 347,144)
Ostashkov (population: 100,023)

THEY CHOOSE RUSSIA
Track inward strategic investment across Russia
View map

PROJECT DATABASE
Smart City Kazan
New urban space project in Kazan
All projects

SITE SELECTION TOOLS
THE BEST WAY TO FIND
Search Available Properties
Start search

INVESTMENT ANNOUNCEMENT
Find information about publicly announced investment in Russia regions
View all
Key facts about the Russian economy. Russia's global ranking in different areas.

COMPARE REGIONS
Every region talks about their pro-business investment climate. We gather evidence on the actual state of affairs.

SECTORS
Gain access to the partners’ reports, guides and other materials about key industries.

REGION PROFILES
Say YES to your success in Russia. Our team of regional professionals provide you with the expertise and up to date information you need in order to make an informed investment decision with regards to any specific region.

Say YES to your success in Russia. Our team of regional professionals provide you with the expertise and up to date information you need in order to make an informed investment decision with regards to any specific region.

Get a historical perspective on top international companies which have made specific regions in Russia their home and see their profiles.

WHY RUSSIA

WHERE TO INVEST

INVESTMENT TOOLS

They choose Russia
Success stories of foreign investors from multiple Russian regions. Track inward strategic investment across Russia.

PROJECT DATABASE
The Project Database is the central storehouse of information on regional projects, verified by the Russian Direct Investment Fund professionals.

SITE SELECTION TOOLS
The best way to find the best properties (greenfield and brownfield).

The easy-to-use property search tool allows you to find a specific site by entering Size, Other Features and Location Filters. Compare selected properties side-by-side, download individual property sheets and see your results in a basic or detailed list view, or on a map.

INVESTMENT ANNOUNCEMENT

Find information about publicly announced investments within Russian regions.
RUSSIAN DIRECT INVESTMENT FUND

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