COMPANY BACKGROUND

Polyus PJSC is the largest gold producer in Russia and a top 10 gold producer globally with one of the lowest cost profiles. The company also holds the world's fourth largest gold reserves with 64.3 million ounces of proven and probable gold reserves underpinning its strong growth profile. Principal operations are located in Krasnoyarsk, Irkutsk and Magadan regions and the Sakha Republic (Yakutia) and include five operating mines, the alluvial operations and several advanced development projects. In the 2015 financial year Polyus achieved turnover of US$2,189 million and posted an operating profit of US$1,141 million. Capital expenditure totalled US$268 million. Polyus employs 11,700 across all operations.

Website:  www.polyus.com

MAJOR OPERATING DIVISIONS

Polyus has a three-tier structure: head office (Moscow), business units and mine sites. Principal business unit operations are located in the Krasnoyarsk, Irkutsk and Magadan regions and Sakha Republic (Yakutia). This includes five operating mines, alluvial operations and several advanced development projects. The largest deposits are Olimpiada, Natalka and Sukhoi Log. Olimpiada, the flagship mine, operates with a recovery rate of 73.7 per cent and represents 39 per cent of the company's total gold output.
ACTIVE PROJECTS

<table>
<thead>
<tr>
<th>Olimpiada Mine</th>
<th>Blagodatnoye Mine</th>
<th>Titimukhta Mine</th>
<th>Verninskoye Mine</th>
<th>Alluvial Mine</th>
<th>Kuranakh Mine</th>
<th>Nataльka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Krasnoyarsk Business Unit</td>
<td>Irkutsk BU</td>
<td>Yakutia BU</td>
<td>Magadan BU</td>
<td></td>
<td></td>
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<tr>
<td>Mature, began production in 1996. over 10 Moz. Gold resource</td>
<td>Mature - commissioned in July 2010 8.2 Moz Proven and Probable reserves</td>
<td>Mature - commissioned in July 2009 currently idle 1.3 Moz Proven and Probable reserves</td>
<td>Mature - commissioned in July 2011 3.8 Moz Proven and Probable reserves</td>
<td>Mature - 0.9 Moz proven and probable reserves</td>
<td>Mature - operational for over 40 years 2.4 Moz Proven and probable reserves</td>
<td>Development Stage, 16.2 Moz Proven and Probable reserves</td>
</tr>
</tbody>
</table>

Processing Capacity

| Processing Capacity | 8 mtpa over two plants | 6.0 mtpa largest single processing plant in Russia | 2.4 mtpa - Mine idle since 2016** | 2.2 mtpa | 10 m3 | 3.8 mtpa |

2015 Production

| 760 koz | 424.6 koz | 102.3 koz | 161.1 koz | 188.2 koz | Currently operates at 3.6 mtpa |

- Open pit gold mine
- Conventional shovel-and-truck open-pit operation.

Olimpiada Mine - The ore is stock-piled at the surface. Blasting is conducted using high-energy fuel emulsion explosives. The rock is excavated using electric and diesel hydraulic excavators.

- Dredging and quarrying.
- Gravity separation.

Open pit gold mine. Conventional shovel and truck operation.

* Current exploration indicates the potential for a significant extension of life of mine

** Titimukhta Mine Mill was reconfigured in 2016. Since then, mining and processing activities at Titimukhta have been idle in favour of treating Olimpiada ores.

PROCUREMENT PRIORITIES

In the context of maintaining Polyus Gold’s overarching objectives of maximising production while maintaining its position as a low-cost producer, key operational drivers focus on safety, increased productivity of loading, drilling and transportation and increased efficiency of blasting.
PROCUREMENT OPPORTUNITIES

Australian METS suppliers have an opportunity to meet Polyus Gold’s operational challenges in areas of higher technology including automation, where Polyus are looking offshore for operational solutions.

Areas of interest to Polyus include:

**Priority One (quick implementation category)**

**Automation and management systems**
- Remote control of drilling rigs and excavators
- Automation of all production processes in gold processing (including mining, gold processing, maintenance)

**Equipment**
- Equipment for autonomous mine survey

**Gold Recovery Plant**
- Compact systems of desorption
- Technology, equipment to control ball mills loading
- Technology, equipment for chemical dosing
- Paste thickening, press-filters and process controls
- Equipment for effective return water filtering and purification from slurry

**Priority Two**

**Automation and management systems**
- Fleet management systems
- Software for mining planning, processing, blasting (blast modelling)
- Complex mining/geology information systems

**Equipment**
- Equipment for fault diagnosis of mining machinery including tools for framework fault diagnosis
- Maintenance equipment for heavy machinery

**Blasting**
- Remote control and radio blasting
- New bulk explosion technology

**Mine drainage**
- Automatic-control system of mine drainage
- Pit-dewatering equipment
- Pumping and re-pumping stations
- Mobile pumping stations

**Gold Recovery Plant**
- Equipment for removing sludge sediments from tailing dump bottom
  - Coal pumps
  - Wear-resistant pulp lines
  - High productivity screens
  - Oxygen supply dispensers
  - Technology, equipment for effective thickening
  - Paste thickening, press-filters and process controls
  - Equipment for effective return water filtering and purification from slurry
  - Concentrating tables and remote control systems for them

**Priority Three**

**Drilling Rigs (air-percussion and rotation drilling)**
- Sloping environments - expertise and equipment

**Geology**
- Automated lines of sample preparation
- New technology for precious metals rapid determination in the field environment

**Energy Efficiency**
- Mobile lighting systems for dumps and faces
- Energy saving systems for coal powered boiler
- Automotive coal feeding systems for boilers
- Efficient and economical waste oil powered boilers

**Equipment**
- Fast erecting installations - wind and snow load capacity
- Wind power stations
- Automotive coal feeding systems for boilers
- Efficient and economical waste oil powered boilers

**Critical Success Factors**

**Regulatory compliance**

In recent years, there has been substantial progress in the adoption of common international rules on product standards and certification procedures in Russia. However, Russia still has a complicated system of certification and all products imported to the country must conform to Russian standards.
All mining projects executed in Russia by foreign companies must be harmonised to meet both Russian and international standards. As of July 2010, the procedure for conformity assessment was established in the Customs Union created by Russia, Kazakhstan, Belarus, Armenia and Kyrgyzstan. An exporter can now obtain unified certificates/declarations of conformity for all CU members.

**Industry standards**

Mining products are subject to the following CU technical regulations:

- CU TR 010/2011 “Safety of machinery”
- CU TR 012/2011 “Safety of equipment in explosion hazardous environments”
- CU TR 019/2011 “Safety of personal protective equipment (PPE)”

**Local Presence**

Establishing a local presence through partnering with established Russian companies or engaging dedicated representation directly has been highly regarded in the procurement decision process. A local presence delivers the ability for regular engagement and ongoing follow-up at a minimum. Where service and/or training are critical aspects of the supply, local presence would be considered essential. Service, repair and maintenance capability is mandatory for non-standard and sophisticated plant and equipment.

**CURRENT AUSTRALIAN SUPPLIER ENGAGEMENT**

Australian METS suppliers have successfully engaged with Polyus to provide products and services across a broad area of supply including mine consulting, mine planning including software, machinery and blast optimisation.

**AUSTRADE**

The Australian Trade and Investment Commission – Austrade – contributes to Australia’s economic prosperity by helping Australian businesses, education institutions, tourism operators, governments and citizens as they:

- develop international markets
- win productive foreign direct investment
- promote international education
- strengthen Australia’s tourism industry
- seek consular and passport services.

Austrade provides information and advice that can help Australian companies reduce the time, cost and risk of exporting. We also provide a range of services to Australian exporters looking to expand their business in growth and emerging markets, including:

- information and advice on doing business in international markets
- help with overseas market selection
- identification of relevant overseas contacts
  - assistance with market entry and expansion
- identification and follow-up of specific international business opportunities.

We also administer the Export Market Development Grants scheme – the Australian Government’s financial assistance program for aspiring and current exporters.

[austrade.gov.au](http://austrade.gov.au)

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