Russian uranium mining industry diversification strategy

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Uranium demand and atomic energy growth

The main factors of demand/supply relationship

- Uranium mining
- Secondary sources
- Reactor related uranium demand
- Additional demand

- Favorable uranium prices
- Sufficient and qualitative uranium resources
- Sufficient uranium production capacities
- Staffing

- HEU-LEU Program
- US policy in the uranium inventory reduction and stock balance selling
- Policy in spent fuel and HEU recycling

- Countries’ policy in atomic energy
- Trends in new NPPs construction
- NPP’s operation time extension
- NPPs decommissioning

Uranium as a trading commodity (stocks trading)
- Energy companies stockpiles

Key issue of the atomic energy development – sustainable and long-term uranium supply
The last 20 years – uranium production covered about 40% of uranium demand. The difference was covered by inventories and secondary sources. Low uranium prices did not stimulate uranium production.
WNA 2009 Nuclear Fuel Market Report:
Reactors requirements growth from 68,000 to 104,000 tU to 2030 (53%)
Uranium production needs to increase from 54,000 to 99,000 tU
Stages of the uranium industry development

- **2010-2020** - reactor demand covered by uranium production
- **after 2020** - uranium production shortage
- **after 2025** - decrease of uranium production and production capacity shortage (decommissioning of some mines due to U resources depletion)
U resources is a key factor for sustainable development of uranium production.

- Leading companies will produce about 1.8 million tons of uranium in 2009-2030 (U resource consumption - 37%).
- 62% of the total U resources by 2030 will be in the Olympic Dam (copper-main commodity).
- U resources of primary uranium mines will be reduced by 2030 more than two fold.
ARMZ uranium output 2007-2010

World uranium production in 2004-2010, tU

ARMZ – U1 alliance holds third place in 2010 global uranium production after Kazatomprom and Cameco.

As for U production growth rating, ARMZ – U1 alliance holds second place among largest uranium producers.

The main uranium output growth was due to development of JVs in Kazakhstan

Russia ranked sixth among countries by uranium production
ARMZ Highlights 2006-2010

- Acid plant at Priargunsky commissioned, Priargunsky’s mine #8 construction is underway

- Exploration and designing activities for new uranium deposits in Russia (Elkon, Olovskoe, Gornoe) are underway

- Special service companies (Rusburmash, ESK) established

Individual mines in Russia

- Priargunsky
- Dalur
- Khiagda

ARMZ Uranium holding development started

- Elkon
- Olovskoe
- Gornoe
- Akbastau
- Zarechnoe
- Rusburmash
- Lunnoe

- Armenia
- Namibia

Mining and processing complexes commissioned at Dalur and Khiagda

- Elkon
- Dalur
- Khiagda

- Priargunsky
- Gornoe
- Akbastau
- Zarechnoe
- Rusburmash
- Lunnoe

All-season bridge constructed through Vitim River

- Elkon
- Olovskoe
- Gornoe
- Akbastau
- Zarechnoe
- Rusburmash
- Lunnoe

Production assets development

- Armenia
- Namibia

International holding development

U1 assets:
- Karatau
- Inkai
- Akdala
- Kharasan
- USA
- Australia

- UGRK
- ESK
- Armenia
- Namibia

Acid plant at Priargunsky commissioned, Priargunsky’s mine #8 construction is underway
ARMZ geographical diversification

- **Existing and under construction mines**
- **ARMZ-U1 alliance**
- **Planned mines**
- **Exploration and new projects**
ARMZ projects pipeline

Exploration / Perspective
- Mongolia
- Armenia
- Namibia

Designing / Exploration
- Elkon
- Gornoe
- Olovskaya
- Lunnoe

Construction
- Khiagda
- Honeymoon
- US ISL
- N.Kharasan

Production
- Akbastau
- Zarechnoe
- Priargunsky
- Dalur
- Karatau
- Akdala
- S.Inkai

ARMZ strategy — through diversification to world’s leadership
Why Uranium One?

Best in class assets with lowest cash cost (Kazakhstan)

Significant growth prospects

Widest diversification of assets (projects on 3 continents: America, Asia and Australia)

Best in class management (bringing mines into operation, significant experience in M&A)

Highest standards of corporate governance

Track record and high profile among the sector’s public companies
ARMZ New M&A Target - Mantra Resources

**Assets Overview**

- Sandstone-hosted deposit located within the Karoo sediments
- Multiple stacked mineralized horizons of variable thickness at shallow depths (i.e. less than 100 m)
- Relatively low technical risk based on preliminary scoping study and metallurgical work
- No drilling and blasting required
- Government has been very supportive of the mining industry

- Significant resource increase potential within existing licenses
- Nyota Prospect only covers 100 km² of 3,250 km² land package
- 100 km² of airborne radiometric anomalies detected
- Higher grade mineralization has been observed at surface in outcrops and trenches

**Project Geography**

**Exploration Upside**

- Significant resource increase potential within existing licenses
- Nyota Prospect only covers 100 km² of 3,250 km² land package
- 100 km² of airborne radiometric anomalies detected
- Higher grade mineralization has been observed at surface in outcrops and trenches

**PFS results overview**

<table>
<thead>
<tr>
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<th>PFS</th>
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<tbody>
<tr>
<td>LOM Production</td>
<td>~3.7 mm lbs U₃O₈ per annum</td>
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<tr>
<td>Mine Life</td>
<td>12 years, with potential to increase</td>
</tr>
<tr>
<td>Mining Grade</td>
<td>308 to 586 ppm U₃O₈</td>
</tr>
<tr>
<td>Recovery</td>
<td>85% recovery and low acid consumption</td>
</tr>
<tr>
<td>LOM Avg Cash Cost</td>
<td>US$28.06 / lb U₃O₈</td>
</tr>
<tr>
<td>Development Capex</td>
<td>US$298.1 million</td>
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The flagship Mantra’s Mkuju River project (Tanzania) is low cost, near term production, significant potential to increase resources and life of mine.
ARMZ – U1 alliance potential

- ARMZ – Uranium One will be one of the leading global uranium producer. It preliminary ranks second in production volume by 2015.

- Further U resources strengthening, especially in the lowest cash cost category.

- The increase in market capitalization and the ability to attract investment, using all the market mechanisms.

- Excellent potential for further ARMZ – Uranium One growth.

Deal with the Uranium One is the first and most important step in ARMZ strategy

Source: UxC data, ARMZ evaluation
ARMZ strategy – sustainable leadership

Diversified producer with world-class assets

- Russian uranium deposits
- Effective low-cost uranium production assets abroad

Sustainable uranium supplies

Exploration activities over the world

Diversification in prospective non-uranium metals (REE, gold, zirconium, etc.)