Strategy and Markets

2.1. Strategic Vision and Targets

RESULTS FOR TEN YEARS: NEW SUSTAINABLE DEVELOPMENT PROSPECTS

The first decade of the Mining Division's newest history saw material achievements of its team including, without limitation:

- socially responsible restructuring of PJSC PIMCU (achieving breakeven of uranium production and preserving resources for further development of the enterprise and diversification of its business);
- active development of drill hole insitu leaching assets (JSC Khiagda and JSC Dalur);
- increasing depth of processing of the proprietary mineral resource

base (producing sized coal, scandium products, etc.);

 launching new business lines in the mining and adjacent industries raising investments and engaging external partners' competencies.

In this connection, value of these results is determined not only with their contribution to general performance of ROSATOM or responses to challenges associated with unfavorable conditions. The platform has formed for long-term balanced development of the company in its capacity of the center responsible for supply of Russian

nuclear industry with strategic feedstock. In relation to its new business lines, ARMZ's initiatives synchronize with projects of other divisions aimed at development of rapidly growing markets and retaining global process leadership of



In the reporting year, the Mining Division made its significant contribution to strengthening market positions of the Russian nuclear industry and reliable satisfaction of its feedstock needs growing with the increasing long-term order portfolio. Performance improvement operations continued in 2017 with the total production cost of uranium at the division's enterprises decreasing by 10% versus the planned level

Development of uranium assets was accompanied with the growing mineral resource base (at JSC Dalur) and further operations to develop new uranium deposits (at JSC Khiagda and JSC Dalur's sites). The Division's largest production



site, PJSC PIMCU, continued its break-even operations in 2017 and completed implementation of its Mine No. 6 project implementation program in full.

Active development of new business lines allowed the Mining Division not only to comply with planned targets set by ROSATOM but also to initiate its new mining projects. Fruitful and concentrated work of the team on these and other priorities allowed creating conditions for further sustainable development of the company's business.

For details, see the Business Diversification section.

STRATEGIC OBJECTIVES OF THE COMPANY

In pursuing its long-term strategy, ARMZ focuses on complying with ROSATOM's strategic objectives. Reflection thereof in the Company's business determines its strategic goals.



2.2. Contribution to Pursuit of ROSATOM's Strategy

In developing its uranium mining, ARMZ relies on ROSATOM's needs and market conditions. Russian enterprises have no objective to produce uranium whatever the cost with ensuring safety and competitive production cost being the priorities. This approach is supplemented with identifying and implementing design and technical solutions, and cost cutting to preserve business stability regardless of external conditions.





MINING DIVISION STRATEGIC OBJECTIVES



MAINTAINING COMPETITIVE PRODUCTION COST OF



STABLE DEVELOPMENT OF THE DIVISION, INCLUDING BY BUSINESS DIVERSIFICATION

INTERNATIONAL MARKETS

KEY PRIORITIES OF URANIUM MINING DEVELOPMENT IN THE RUSSIAN FEDERATION:

KEY PRIORITIES OF URANIUM MINING DEVELOPMENT IN THE RUSSIAN FEDERATION ARE AS FOLLOWS:

- starting construction of PJSC PIMCU's mine No. 6 (launching it in 2023 would allow maintaining uranium mining volumes after retirement of operational mines);
- maintaining economic efficiency of uranium mining at JSC Dalur and increasing uranium mining at JSC Khiagda within the framework of achieving full capacity.

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Significant foundations were laid for the above priorities:

- in 2017, PJSC PIMCU fully completed its work program for Mine No. 6 project to start its construction in 2018 when the enterprise will be celebrating its 50th anniversary;
- JSC Khiagda's site saw pilot operations at Istochnoye Deposit. Additionally, physical launch was performed of the mining complex and auxiliary facilities at Vershinnoye Deposit. These operations were performed to bring the enterprise to its rated capacity (1,000 tpa of uranium);
- In 2017, JSC Dalur received the license for Dobrovolnoye Uranium Deposit.

Other promising uranium projects including the Elkon Project are in the strategic reserve until external conditions improve sustainably. They are scheduled for commissioning by 2030.

In the specified period, JSC Atomredmetzoloto's core business is uranium production. Work to develop operational enterprises will be supplemented with implementation of projects in mining and adjacent industries to ensure growth of the division's business scales and improvement of its social and financial stability.

2.3. Strategic Objectives Achieved in 2017



- Program for the implementation of Mine No. 6 Project completed in full
- O2 Ash dump at Krasnokamensk TPP launched
- Physical launch of the mining and processing complex ensured at JSC Khiagda's Vershinnoye Deposit
- JSC Khiagda permitted to perform commissioning of its Istochnoye Deposit (Placer No.1)



- A number of actions was implemented to obtain the status of the RPS enterprise by JSC Khiagda
- The technical design for the development of Dalmatovskoye Deposit was approved
- The subsoil use license was received for and design work started at Dobrovolnoye Deposit
- The positive conclusion was received for the Pilot Production Site for Uranium ISL at Khokhlovskoye Deposit



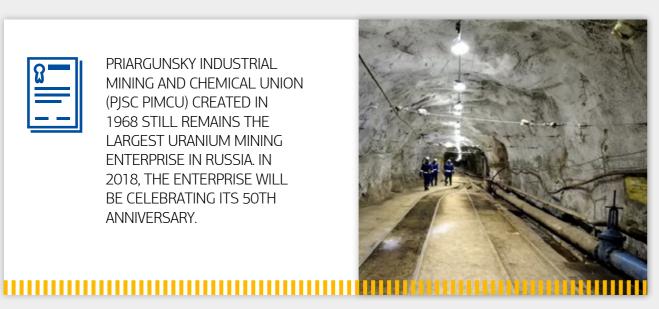


- Development of the aluminum-scandium master alloys production process was completed at JSC Dalur
- Survey was completed for construction of the mining and concentration works at JSC The First Ore Mining Company
- Semi-commercial process testing of ores at Pavlovskoye Field was completed

2.4. Strategic Targets for 2018



PRIARGUNSKY INDUSTRIAL MINING AND CHEMICAL UNION (PJSC PIMCU) CREATED IN 1968 STILL REMAINS THE LARGEST URANIUM MINING ENTERPRISE IN RUSSIA. IN 2018, THE ENTERPRISE WILL BE CELEBRATING ITS 50TH ANNIVERSARY.



JSC ATOMREDMETZOLOTO

 maintaining the production cost and achieving the break-even point for the Division

PJSC PIMCU

- commencing construction of Mine
- commissioning the second milestone of the Sredneye tailings' pond;
- commissioning the plant for production proprietary granulated explosives;
- developing new businesses including sized coal, pyrite cinders, lithium and mining machinery;
- commissioning the water drainage duct at the Urtuysky strip mine.

JSC KHIAGDA

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- commencing commissioning of Istochnoye Deposit;
- commencing development of design documents for Kolichikanskoye Deposit;
- developing competencies and implementing new methodologies of repair and restoration operations
- commissioning the Dzhilinda 110/10 kV reducing substation (RSS).

JSC DALUR

- performing engineering surveys and developing design documents for LSU-2 and the near-rail base at Khokhlovskoye Deposit;
- performing engineering surveys and developing design documents for the pilot plant (PP) at Dobrovolnoye Deposit;
- commencing construction of the pilot production facility for aluminum and scandium master alloys;
- extending the subsoil use license for Dalmatovskoye Deposit.

JSC RUSBURMASH

- implementing the Ready Polygon Project at JSC Khiagda and JSC Dalur;
- switching to the new well design using non-plasticized PVC (NPPVC) to replace high density polyethylene (HDPE) at JSC Dalur (100% of wells) and JSC Khiagda (25% of wells).

JSC VNIPIPROMTECHNOLOGII

completing the internal order of the Holding Company's production enterprises in due time and in due quality, and reducing the share of subcontracting;

- taking actions to increase the performance efficiency and increase the labor productivity, reduce the project implementation costs and terms by at least 5%;
- within the further development framework of JSC VNIPIpromtechnologii as an engineering company:
- implementing PMS;
- creating the chemical analytical
- creating the resin quality assessment laboratory.

JSC THE FIRST ORE MINING **COMPANY**

- develop project documentation for the construction of the mining and thickening plant at the Pavlovskoye deposit (Novaya Zemlya archipelago);
- complete the engineering survey for the construction of the sea port complex.

PLANS FOR 2018, LONG-TERM AND MID-TERM PLANS

In 2017, ARMZ's enterprises completed their production program in full. In the future, natural uranium mining is planned to be supported at around three ktpa (subject to demand trends on part of industrial consumers).

Basic priorities of the Company remain ensuring the uranium mining efficiency, including through the development of new deposits, and active development of new business lines. PJSC PIMCU will construct its new mine based on Argunskoye and Zherlovoye fields accounting for more than 40% of the enterprise's mineral resource base. Commissioning of Mine No. 6 in 2023 will not only keep the infrastructure and potential of

the enterprise, but also ensure its cost-effective operation over a long period of time.

Moreover, in-situ leaching enterprises, JSC Dalur and JSC Khiagda, will continue their balanced production growth. JSC Khiagda, given its significant potential for development of competitive uranium mining, will continue developing the new deposits of the Khiagda ore field — Istochnoye, Vershinnoye and others. The objective of the enterprise is to reach the capacity of about 1,000 tpa of uranium in 2019 with the possibility of increasing it on a long-term horizon. JSC Dalur's priorities are maintaining the current production level and developing Dobrovolnoye Uranium Deposit.

Within the framework of developing new business lines, further increase of the Company's product portfolio is provided for. The Division's service enterprises will continue promoting their services based on their existing competencies at new markets. Implementation of mining projects on partnership principles and organization of strategic feedstock processing engaging adjacent divisions and external partners will allow ARMZ to make a material contribution to increase of new business revenues within ROSATOM.

2.5. Sustainable Development Agenda

ARMZ considers contributing to sustainable development of the public as one of its constant strategic priorities. ARMZ strives to pay material attention to developing communications with regional administrations, public and environmental organizations, and education authorities in its operating regions. ARMZ as a socially responsible company admits that its sustainable development contributes to welfare of its operating regions and areas.

The Holding Company has a significant influence on the formation of the revenue part of the budgets of the areas of operation. Tax deductions, creation of new jobs with decent salaries, charitable programs, etc. determine the importance of the Holding Company for the regions of operation.

ARMZ conducts a responsible environmental policy based on:

- the principles of priority conservation of natural ecological systems;
- obligatory use of advanced scientific achievements and ensuring environmental safety;
- transparency and accessibility of information on the environmental aspects of the Company's activities to the general public.



SUSTAINABLE DEVELOPMENT CONCEPT IS

the model of civilization development based on the need to establish the global balance of solving social and environmental problems and environmental protection. For the first time, the term 'sustainable development' was used in the Our Common Future report presented in 1987 by the UN Global Environmental and Development Commission under Gro Harlem Brundtland. It denoted such society development model under which satisfying life necessities of the current generation of people does not endanger future generations' ability to satisfy their needs.

KEY APPROACHES TO SUSTAINABLE DEVELOPMENT



Sustainable development is inseparably linked with the implementation of corporate social responsibility measures aimed at improving the quality of life of employees and their families, promoting stable development of regions and increasing the welfare of the population in the areas of the Company's operation.

TRINITY OF SUSTAINABLE DEVELOPMENT OBJECTIVES IS INTEGRATED INTO THE COMPANY BUSINESS AND IMPLIES



Participation in maintenance of the global uranium market stability, national and regional economy, balance of reasonable expectations and stakeholders' interests



Minimizing environmental impact, reasonable subsoil use, resourcesavings, compliance with international environmental standards



Social responsibility for safety, health and professional development of staff, social and economic welfare of operation regions, support to local communities, charity









WITHIN THE FRAMEWORK OF THE APPROACH, THE HOLDING COMPANY



Maintains continuous dialog with stakeholder to improve transparency and reportability of the Company's business



Improves the corporate governance system based on Russian and international standards



Develops and implements innovative processes



Complies with business ethics rules

CONTRIBUTION TO ACHIEVING THE UN SUSTAINABLE DEVELOPMENT OBJECTIVES

ARMZ supports all UN Sustainable Development Objectives and strives to make a material contribution to the objectives that comply with the Company's business specifics as much as possible.



AT THE UN SUMMIT ON SUSTAINABLE DEVELOPMENT IN SEPTEMBER 2015, HEADS OF STATES AND GOVERNMENTS ADOPTED AN AGENDA FOR THE PERIOD UP TO 2030, WHICH INCLUDES 17 SUSTAINABLE DEVELOPMENT GOALS (SDGS).

THE COMPANY'S CONTRIBUTION TO ACHIEVING THE OBJECTIVES



ARMZ is in the very first process NFC stage and its natural feedstock production is used for conversion into products of higher processing stages and NPP nuclear fuel. The share of nuclear power in the country's total power balance is on the growing trend. Production cost of nuclear power is its material competitive edge versus other types of electric power plants. Its moderate level depends on the cost of natural feedstock among other things.



ARMZ's key strategic environmental objectives are environmental protection and sustainable use of natural resources at its subsoil use locations. The principles of ARMZ's Environmental Policy include reducing its environmental impact.

ARMZ also pays much attention to development of advanced processes. During the newest history of the feedstock industry, the nuclear industry has been able to increase the share of environmentally friendly and economically efficient in-situ leaching (ISL).



Social capital management and establishing partnerships in operating regions are parts of ARMZ's sustainable development policy. ARMZ strives towards recognition and fair appraisal of its employees' achievements. The Company is sure that additional social protection initiatives for its employees allow them to feel comforTable Therefore, the Company provides its employees with the full set of statutory social guarantees and allows them to use additional social programs.

Infrastructure investments are another important of the Holding Company's social responsibility. As the Holding Company's enterprises are located in different regions of the Russian Federation (Kurgan Region, Republic of Buryatia and Trans-Baikal Territory), ARMZ considers possible social and economic consequences of its decisions and interacts closely with all stakeholders.



One of ARMZ's business priorities is ensuring satisfaction of final consumers of uranium feedstock. The Company promotes integrating the most sustainable solutions into its supply chain. ARMZ is continuously monitoring satisfaction of its customers' needs in natural uranium for the short and long term, as well as promptly responds to any their requests and expectations. Streamlining of finished goods warehousing and shipping systems is used to improve product quality.

ARMZ is also supporting the need for reducing consumption and processing of natural resources.









THE MINING DIVISION IS DIRECTLY INFLUENCING ACHIEVEMENT OF OTHER SDGS.



Ensure access to and Build resilient sustainable use of water resources and sanitation for all



infrastructure. promote sustainable industrialization and foster innovation



safe, resilient and sustainable



Make cities inclusive. Conserve and sustainably use the oceans, seas and marine resources



Promote peaceful and inclusive societies for sustainable development purposes, ensuring access to justice for all and creating efficient and transparent institutions based on wide participation at all levels.

Other UN objectives are not immediately associated with the Mining Division's business. The Company adheres to them and contributes to achieving them according to its abilities.

For details of the contribution to achievement of UN Sustainable Development Goals, see Annual Report 2016.

For information on key sustainable development 2017 Results, see primary sections hereof.

SUSTAINABLE DEVELOPMENT FUNCTIONAL RESPONSIBILITIES

Different business lines existing, sustainable development matters are resolved individually for each line and are allocated among profile units as follows:



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social responsibility: Deputy Director General for Strategy and Business Development, and Chief HR Officer;



environmental impact: Chief Safety Inspector;



environmental responsibility: Deputy Director General for Economics and Finance.

2.6. Natural Uranium Market Overview and Outlook

NATURAL URANIUM MARKET IN 2017

Global Demand for and Supply of Uranium

As of 2017, the global uranium market is estimated at 73 to 74 kt subject to NPP reactor needs, and formation of commercial and strategic reserves. In this connection, the global natural uranium production exceeded 58 kt last year. The balance of the supply was ensured with supplies of uranium extracted and processed earlier (secondary sources).

For most of the year, the uranium market was unstable on excessive supply not supported with short-term demand. Declarations of restricted production by some uranium producers contributed to improvement of market conditions but failed to overcome depressive trends.

Mean spot price in 2017 was USD 57 per kilogram of uranium (Ux Consulting*).



Sources: input data from Ux Consulting*; mean value calculated by JSC Atomredmetzoloto.

* Ux Consulting (UxC) is an independent international company specializing in the research of market environment and predicting nuclear fuel cycle markets. Founded in 1994. Website:

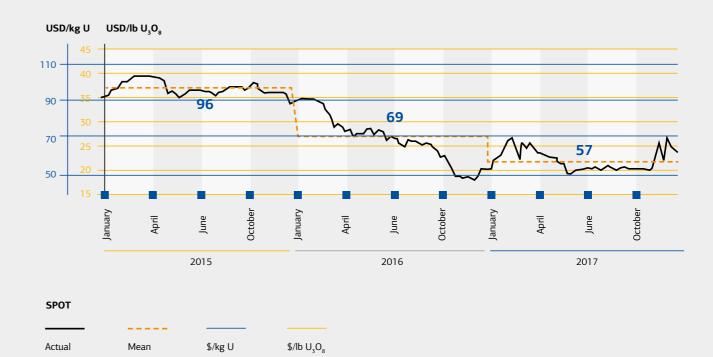


Figure 15. Uranium Spot Price Trends

Global Uranium Production in 2017

At year-end 2017, global uranium production exceeded 58 kt and was 6% lower YoY (over 62 kt). Decreasing production under restricted excessive mining was observed in Kazakhstan, Canada, Niger and some other

countries. Significant growth was recorded only in Namibia (due to start of pilot operation of the Husab mine).

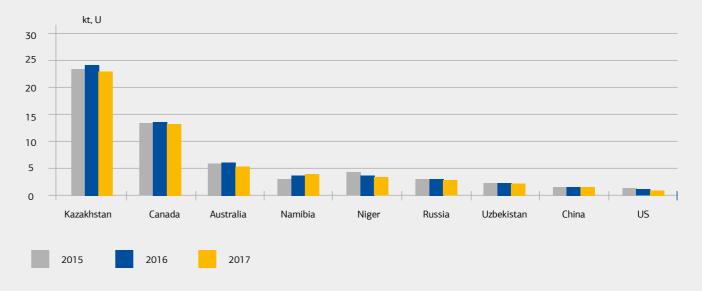


Figure 16. Uranium Production Countries, 2015-2017, thousand tonnes

Sources: estimate of ISC Atomredmetzoloto based on press-release and company report data. US Energy Information Administration (U.S. EIA).

Nine key producing countries accounted for circa 97% of global uranium production. Kazakhstan, Canada and Australia retained their leading positions. Russia ranks 6th among the leading countries (5% of global production).

JSC NAK Kazatomprom has been the largest uranium mining company globally since 2010. ROSATOM including ARMZ and Uranium One (shown separately) produced more than 8.0 thousand tonnes of uranium in 2017, which makes up circa 14% of the global production (global rank 4).

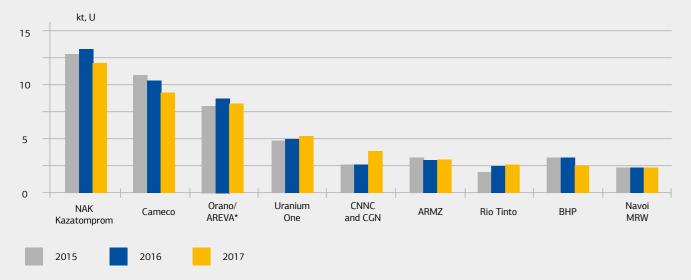


Figure 17. Uranium Production by Major Companies in 2015-2017, thousand tonnes

Sources: company press release and report data (Orano / AREVA, CNNC and CGN, Navoi MRW – JSC Atomredmetzoloto's estimate. Production volume is recorded proportionally to ownership interests.

MERGERS AND ACQUISITION IN URANIUM INDUSTRY

2017 saw further decrease in mergers and acquisitions (M&A). Volatile uranium market contributed to decreasing asset values and insufficient financing for organizing major deals. Key market players showed no activity in M&A but used their efforts to develop their asset portfolios formed earlier.

DEVELOPMENT OF EXISTING AND PROMISING PROJECTS IN 2017

In the reporting year, major uranium producers responding to continuing adverse trends supplemented cost cutting and investments with production restrictions. Relevant plans aimed at rebalancing the market were announced by JSC NAK Kazatomprom, Cameco, AREVA* and other companies. The total reduction of uranium mining, provided such plans are implemented, may be 7 to 8 kt in annualized terms.

In particular, JSC NAK Kazatomprom plans additional uranium mining reduction in Kazakhstan in 2018 to 2020. Cameco announced suspending operations at McArthur River in Canada for 10 months in 2018. AREVA* announced further production reduction at its Niger enterprises (planned as of 2018).

In view of the above, development rates of most existing projects were low. An exception to this was Namibian Husab (owned by Chinese CGN). In 2017, the enterprise running in the pilot operation mode produced circa 0.9 kt of uranium.

Junior companies continued streamlining key projects (in Canada, Australia, the US and some other countries) to commission them at the uranium market growth stage. Nonetheless, the work rates for most of such projects were also low due to the difficulties in raising financing and ensuring product sales.

ROSATOM INCLUDING ARMZ AND URANIUM ONE (SHOWN SEPARATELY) PRODUCED MORE

8,000

TONNES OF URANIUM IN 2017, WHICH MAKES UP CIRCA

14%

OF THE GLOBAL PRODUCTION

FORECAST FOR YEAR 2018

Moderately optimistic assessments are predominant in relation to the uranium market situation in 2018. At the same time, whether the will be implemented depends on the scale and excessive production reduction rates of key producers (their relevant plans were announced last year and earlier). Efforts of certain players may be significantly balanced with increasing production of enterprises reaching full capacity.

In this connection, highly volatile prices may continue in 2018. The situation, like in the previous years, may be influenced materially by situational factors such as significant events of key market players and problems solved by them to ensure business stability.

URANIUM MARKET PROSPECTS Global Nuclear Power Development Outlook

As of 2017, nuclear generation remains one of the basic components of global energy balance satisfying all consumers' needs in relation to safety, reliability, environmental and economic efficiency, etc.

The most active growth of nuclear power in the future is expected in China, India, Middle East (UAE, Iran, Turkey and Egypt) and other world regions. Some developed countries, primarily in Western Europe, are expected to gradually reduce their nuclear generation due to their focus on large-scale development of renewable energy.



nuclea power



GLOBAL

ENERGY

BALANCE

hydro power





23% coal generation



generation

39 %

Figure 18. Global energy balance

Global Natural Uranium Market Outlook

The situation in the global market will remain unstable in the short term. Its stable improvement and uranium price recovery are predicted in the medium term (from early 2020s) driven by the following:

- increasing demand as NPPs are restarted in Japan, and newly constructed units are commissioned in China, India, the UAE and other countries, most of which do not have ready uranium resources;
- decreasing supply due to intense depletion of existing uranium deposits, long time (up to 10 years) and resource cost of new deposit development;
- decreasing deliveries from secondary sources as their liquid portion is used;
- increasing long-term contracting (in relation to deliveries until 2025).

In the long run, the demand for uranium is expected to increase on intense construction of new NPPs. To cover the demand and replace disappearing production volume, existing deposits will need to launch new more expensive projects. Growth of such trends from the mid-2020s will be contributing to further market price growth. According to the forecast of the World Nuclear Association (WNA), global demand for uranium may reach 84 kt by 2030.

Natural uranium production will grow in line with the demand Trends. The full potential for increasing production by 2030 will be at least 87.000 tonnes of uranium. Therefore, no deficit is expected, even with decreasing secondary deliveries.



THE FULL POTENTIAL FOR INCREASING PRODUCTION BY 2030

87,000 TONNES OF URANIUM



^{*}In January 2018, AREVA announced change of its name to Orano within the restructuring framework.