Roadmap for Sustainable Growth

Corporate Social Responsibility Report 2018
Welcome to the corporate social responsibility (CSR) report for KATCO, a Kazakh uranium miner and the largest in situ recovery uranium operator in the world. KATCO is a highly successful joint venture between two of the world’s leading nuclear operators, France’s Orano (formerly AREVA) and Kazakhstan’s Kazatomprom, employing nearly 1,200 people at the end of 2018.

Over more than two decades, KATCO has built a business based on international best practices in health, safety and environment (HSE) stewardship. The Company adheres to the transparency reporting principles of the global Extractive Industries Transparency Initiative (EITI), of which Kazakhstan is a member, and practices of the International Council on Mining and Metals (ICMM).

In 2018, KATCO continued to deliver on its key performance indicators (KPIs) measuring CSR commitments to its stakeholders, not least ensuring stable production for its customers and providing tax and budget revenues to the local and national governments. The Company provided over 37,000 hours of HSE training and continued to reduce lost-time incidents while fostering a safety-first culture.

KATCO has also invested consistently in local communities, including KZT1.3 billion (US$3.8 million) in community-based social development projects since 2010, of which KZT125 million (US$362,623) was spent in 2018.* KATCO is also a model for sustainable business and co-hosted a pavilion on World Nuclear Energy at Kazakhstan’s International Expo-2017, a major global showcase for sustainable energy.

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* Key performance indicators are a vital tool used to set targets for, and evaluate the ongoing success of, an organisation in the activity in which it engages.

* Converted with 2018 average exchange rate of 344.71 KZT / US$, source: https://nationalbank.kz/?docid=364&switch=english
KATCO’S CSR KEY PERFORMANCE INDICATORS, 2018 RESULTS

- Total Social Payments to Employees (2018): 29 mln kzt
- Number of Employees at Year-End (2018): 1,191
- Total Social Spending on Communities since 2010: 1.3 bln kzt
- Social Stability Rating (2018): 75%
- Near Misses Registered (HSE 2018): 106
- Total Production of Uranium (2018): 3,212 tons

CONTENTS

- About KATCO: 2
- France and Kazakhstan in Partnership: 6
- General Director’s Statement: 8
- Stakeholder Accountability: 10
- CSR System: 14
- CSR pillar 1: Health and Radiation Protection: 18
- CSR pillar 2: Occupational Safety: 22
- CSR pillar 3: Environment: 26
- CSR pillar 4: Social Involvement: 30
- CSR pillar 5: Commitment to Employees: 34
- CSR pillar 6: Innovation: 40
- Reporting and Methodology: 44
Established in 1996 to mine the Muyunkum and Tortkuduk deposits in Kazakhstan’s Turkistan region, KATCO Kazakh-French Joint Venture LLP (KATCO) draws on the international experience and expertise of the joint venture participants, Orano and Kazatomprom, to develop its uranium production activities. Orano owns 51% of the joint venture and Kazatomprom 49%. KATCO is headquartered in Nur-Sultan.

Kazakhstan accounts for approximately 40% of total worldwide uranium production. In 2009, KATCO became the world’s largest in situ recovery (ISR) miner. The Company produced its 40,000th ton of uranium in 2019 and accounts for around 7% of annual global output.

In 2017, Orano and Kazatomprom strengthened their historic cooperation by signing a strategic agreement to develop the South Tortkuduk project, which is located near KATCO’s existing operations, thereby securing the Company’s production for the next two decades.

In January 2018, KATCO was granted a mining licence for a new plot of the Muyunkum uranium field. The Company’s geologists discovered this plot with high resource potential a few years ago, close to the two mining sites that it already operates. These new reserves recorded in 2017 will cover more than 10 years of production for KATCO. The South Tortkuduk project team is continuing development work on the deposit to begin commissioning and production at the site by 2020.

KATCO’s annual output grew from 3,000 tons in 2009 to the level of 4,000 tons during the period of 2013-16, then subsided to roughly 3,500 tons in 2017 due to pre-licensing work at the South Tortkuduk project. Going forward, the Company projects output levels of around 3,200 tons a year until South Tortkuduk comes online, after which it expects to return to annual production levels of 4,000 tons throughout the project’s useful life.

In the beginning of 2019, Expert Online2 ranked KATCO 34th among the 100 largest companies in Kazakhstan.

In December 2018, KATCO was recognised as number two in terms of Corporate Social Responsibility in Kazakhstan in the Paryz-2018 competition held by the Kazakhstan Ministry of Labour and Social Protection.

Of the workforce of 1,191 employees at the end of 2018, more than 53% come from Sozak district, where KATCO’s mining sites are located, and KATCO recruits from the communities where it operates. Some 20% are from the wider Turkistan region, 9% are from Almaty, 7% are from the capital city of Nur-Sultan (formerly Astana, where KATCO’s headquarters are located) and around 9% are from other regions of the country. Just under 2% are expatriates.

KATCO is committed to providing unlimited growth potential for talented employees and manages its human resources pipeline by developing partnerships between Kazakhstan’s technical schools and universities and higher education institutions in France, as well as internally through Orano’s corporate university programme.

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<tbody>
<tr>
<td>Creation of KATCO joint venture</td>
<td>Launch of industrial production</td>
<td>Muyunkum South processing plant goes into operation</td>
<td>Orano and Kazatomprom sign agreement to increase KATCO production</td>
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**OUR MISSION**
To be a uranium mining benchmark, in a safe and sustainable manner, for customers worldwide, relying on our people and expertise.

**OUR VISION**
To ensure our future with successful innovation and new production projects.

**OUR VALUES**
- Sense of duty
- Taking care of each other
- Openness to change
- Enjoy and have fun
- Reliability and integrity
URANIUM INDUSTRY

Uranium is a commodity and therefore subject to a cyclical demand cycle. Today, the market is recovering from a period of pricing volatility while the demand drivers for the next decade are becoming clear. In recent years, this has led some uranium producers to reduce supply in expectation of future improvements in the marketplace. Key consumers of nuclear material include electric utilities, military submarine fleets and medical users of uranium.

According to the World Nuclear Association’s World Nuclear Performance Report 2018, there are currently around 450 nuclear power reactors operating worldwide, with a combined capacity of roughly 400 GWe, which provided more than 10% of the world’s electric power in 2017. Another 50 power reactors are currently under construction, most notably in China, India, Russia and the United Arab Emirates.

Overall, there are around 150 new reactors currently on order or planned, with another 300 proposed. Today, an important demand driver is the international fight against climate change, where nuclear power is viewed as one means of reducing carbon emissions as a replacement for coal and natural-gas burning plants, especially in the rapidly growing markets of China and India.

Kazakhstan remains the largest uranium producer in the world, accounting for two-fifths of global production in 2018 despite committing to a 20% reduction in output to help harmonise the supply-demand balance in response to falling prices on international markets. In terms of uranium reserves, Kazakhstan has an estimated 2 million tons, ranking it second after Australia. According to official statistics, Kazakhstan produced 21,699 tons of uranium in 2018, compared with 23,390 tons in 2017.

About ISR

The in situ recovery (ISR) method was created in the early 1960s and became widespread in uranium mining in the 1990s. In recent years, the process has accounted for almost half of uranium extraction worldwide.

The ISR principle consists of injecting a leaching solution through shafts into the uranium deposit. The solution (dilute acid and water) dissolves the uranium as it passes through the deposit and is pumped to the surface. The solution loaded with uranium is then transported by pipeline to the plant where the uranium is extracted and fixed on ion exchange resins. The solutions are enriched with acid and re-injected into the wells, continuing the closed-circuit process.

ISR technology has evolved with tight operational and regulatory controls. It causes little surface disturbance, does not generate tailings or waste rock, and requires less investment than conventional mining. However, this technique is put into use only when the ore is located between impervious soil layers such as in Kazakhstan and Mongolia.
BUSINESS MODEL

KATCO’s business model is designed to leverage the Company’s unique value propositions of implementing innovative technologies and efficient cost structure to deliver on behalf of customers, while taking advantage of a skilled and competitive human resource base, delivering a globally competitive cost of production. The Company is able to work with its key partners and customers, Orano and Kazatomprom, as well as its suppliers, to apply both technology and working practices to achieve excellence across all four areas of activity: exploration, mining, production, and research and development. In addition, KATCO’s focus on environmental stewardship, supported by its strong innovation function, is critical for sustaining production in a delicate local ecosystem.

Our operations

KATCO’s uranium exploration and production is focused on Turkistan region, with a population of around 2.7 million, and Sozak district, with a population of around 62,000 people. The Company is headquartered in the capital, Nur-Sultan.

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Value Propositions</th>
<th>Customer Relationships</th>
<th>Customer Segments</th>
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<tbody>
<tr>
<td>KAZATOMPROM</td>
<td>Exploration</td>
<td>Innovative</td>
<td>Power producers</td>
<td></td>
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<tr>
<td>ORANO</td>
<td>Mining</td>
<td>technologies</td>
<td></td>
<td></td>
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<tr>
<td>Suppliers</td>
<td>Production</td>
<td>Cost efficiency</td>
<td></td>
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<td></td>
<td>R &amp; D</td>
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</tbody>
</table>

Key Resources
- Personnel
- Assets

Value Propositions
- Innovative technologies
- Cost efficiency

Customer Relationships
- Power producers

Channels
- Final product

Cost Structure
- Capex
- Opex
- R & D

Revenue Streams
- Final product

Contribution to the state budget, 2017-18, KZT bln*

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>2017</th>
<th>2018</th>
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<tbody>
<tr>
<td>2017</td>
<td>26.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>19.5</td>
<td></td>
<td></td>
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</tbody>
</table>

* From EITI reports

Total uranium production, 2017-18, tons

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>3,519</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>3,212</td>
<td></td>
<td></td>
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</tbody>
</table>

* From EITI reports
Supply chain

KATCO’s supply chain is the link of entities that move its product from the mines to the customer. For the Company, the security of the supply chain is essential, as its uranium products must be properly stored and handled. KATCO manages each link of the supply chain from the mine to the railway and Kazatomprom provides essential support in this process.

- **Mining**: Muyunkum, Tortkuduk, South Tortkuduk (under development)
- **Processing**: Muyunkum, Tortkuduk
- **Logistics**: Rail to export destination
- **Sales**: Final product ready for delivery
- **Environmental protection, remediation**

**Nur-Sultan**

**TURKISTAN REGION**

- Muyunkum
- Tortkuduk
- Sozak district

**TOTAL PRODUCTION OF URANIUM IN TONS (2018)**

- 3,212

**NUMBER OF EMPLOYEES AT YEAR-END (2018)**

- 1,191

**SOCIAL STABILITY RATING (2018)**

- 75%
FRANCE AND KAZAKHSTAN IN PARTNERSHIP

A long-lasting partnership

KATCO represents one of the longest and most mutually beneficial partnerships between France and Kazakhstan with a stable and promising outlook, as additional production capacity will come online in the next few years. As a uranium mining joint venture, KATCO showcases the successful industrial partnership between two of the world’s top uranium producers: France’s Orano, an expert in every stage of the nuclear energy cycle, and Kazakhstan’s Kazatomprom, the national nuclear operator.

The joint venture provides the opportunity for both participants to combine their competitive advantages in uranium mining, contributing to Kazakhstan’s economic development and helping to ensure long-term uranium supply for a global client base, including France’s world-class nuclear industry.

Orano offers high value-added products and services for the entire nuclear fuel cycle. Its activities, which range from mining to decommissioning and include conversion, enrichment, recycling, logistics and engineering, contribute to the production of low-carbon electricity. In 2018, it had a 15% worldwide market share. It sets the standard in uranium production thanks to state-of-the-art mining techniques and proven know-how in the rehabilitation of former mines.

Mining activities are one of Orano’s core businesses. With uranium mines in operation in Canada, Kazakhstan and Niger, Orano is one of the world’s leading producers of uranium, with competitive production costs and extraction techniques at the cutting edge of innovation. Beyond mining, Orano conducts exploration and development projects in uranium-bearing zones, while also undertaking remediation and value development of former mines.

After the natural uranium ore extraction process, conversion and enrichment are key steps in providing nuclear power plants with fuel adapted to the needs of nuclear reactors. With its recently upgraded, unique integrated industrial platform, Orano group is one of the global leaders in uranium conversion and enrichment activities. As the world’s leader in reprocessing and recycling, Orano’s expertise provides its customers with efficient, safe and responsible management of used nuclear fuels. By recovering the 96% of re-useable materials (95% uranium and 1% plutonium) in used fuel, Orano can recycle the material and manufacture new fuel, such as mixed oxide fuel (MOX), for nuclear reactors.

Kazatomprom accounts for 40% of global uranium extraction. It is Kazakhstan’s national nuclear operator and is 85.08% owned by the Samruk-Kazyna sovereign wealth fund, with the remaining 14.92% of shares trading in free float on the Astana International Exchange and London Stock Exchange since its initial public offering (IPO) in November 2018.

Kazatomprom’s strategy envisages refocusing on its core business; optimising mining, processing and sales volumes based on market conditions; creating value through enhanced sales and marketing; implementing best-practice business processes; and developing a corporate culture as an industry leader. The world’s largest producer of natural uranium, Kazatomprom has priority access to one of the world’s largest resource bases.

The French and Kazakh participants exercise their control via the General Meeting of Participants and the Supervisory Board, the latter of which has seven members: four representing Orano and three representing Kazatomprom. KATCO is managed by its General Director, who is appointed by the shareholders and assisted by a Committee of Directors (CODIR) with a total of 10 members. As indicated in this report, KATCO has developed a world-class corporate governance system over the past 20 years, bringing best practices from each country.

Note: Key statistics derived from public domain reporting

<table>
<thead>
<tr>
<th>Year</th>
<th>Stake in KATCO</th>
<th>Revenues (EUR Million)</th>
<th>Total Employees</th>
<th>Uranium Output, Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>51%</td>
<td>3,848</td>
<td>19,145</td>
<td>10,531</td>
</tr>
<tr>
<td>2018</td>
<td>49%</td>
<td>3,623</td>
<td>16,000</td>
<td>7,970</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues (KZT Billion)</th>
<th>Total Employees</th>
<th>Uranium Output, Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>277.0</td>
<td>25,020</td>
<td>23,321</td>
</tr>
<tr>
<td>2018</td>
<td>436.6</td>
<td>20,507</td>
<td>21,705</td>
</tr>
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</table>
Chamber of Commerce and Industry France Kazakhstan

Since Kazakhstan’s independence in the early 1990s, one of its great successes has been developing peaceful and fruitful relationships with the world’s economic powers, communicating directly with business and industry. France is no exception.

As a French-Kazakh joint venture, KATCO is proud to be a part of the Chamber of Commerce and Industry France Kazakhstan (CCIFK), where General Director Gerard Fries is the current president. This role provides him with a unique ability to engage regularly with both Kazakhstan’s and France’s political and business leadership.

The CCIFK is a community of mutual interests of various French economic missions in Kazakhstan. Serving as a platform for negotiations and information exchange, it helps to develop and maintain business relations between France, French-speaking partners and Kazakhstan.

The CCIFK unites more than 40 members representing French companies active in Kazakhstan, as well as Kazakh companies with strong connections to France. Over the past decade of strategic cooperation between France and Kazakhstan, the volume of trade between the two countries has amounted to more than US$43 billion. Since 1 January 2017, there has been a visa-free regime for short trips of French citizens to Kazakhstan, which has largely contributed to facilitate both business and tourism.

The foreign trade turnover between Kazakhstan and France in 2017 was US$3.3 billion, an increase of 38.5% year-on-year from US$2.5 billion in 2016. Exports from Kazakhstan over the past year totalled US$2.8 billion, up 59.7% year-on-year from US$1.8 billion in 2016.

Kazakhstan has around 40 companies registered with French shareholders, including representatives of such large companies as Airbus, Alstom, Danone, Lactalis, Orano, Sanofi, Total, Vicat and many others.

The mission and values of the CCIFK include:

- Presenting Kazakhstan’s investment and export advantages to the French community
- Clarifying existing and new Kazakh legislation in the field of attracting foreign labour, fiscal policy, social regulation, etc.
- Forming among the chamber’s member companies an objective perception of the policy pursued by Kazakhstan’s government in order to further maximise their profits
- Employing citizens of Kazakhstan (qualified specialists) at French enterprises in Kazakhstan
- Holding an annual job fair with the participation of chamber member companies for Kazakh graduate students in France

Source: UN Comtrade
Dear Stakeholders,

Welcome to KATCO’s corporate social responsibility report, covering the period of 2017 and 2018. In this report, we are committed to maximum disclosure of every aspect of our work with our stakeholders, including such key issues as corporate governance, worker safety, human resources, social investment in our local communities and the environment.

It is our intention that this report serves as a roadmap: telling our stakeholders how we reached this point in our development of CSR processes, where we are now and the route we choose to move forward. We are currently engaged in a major stakeholder mapping exercise. This work serves several critical functions: it allows us to get vital feedback from stakeholders, some of whom we may not have heard clearly before. It also creates a foundation for future dialogue and signals that we value the views of each and every person with a vested interest in KATCO’s activities.

Setting targets

It is our clear view, one shared by our two participant companies, that KATCO’s stakeholder commitments must be concrete and binding on our leadership team. In this report, we outline ten CSR-related KPIs for management in 2018, ranging from near misses3 at our production facilities to social spending. Most of these numbers demonstrate progress on the roadmap, but they also indicate the need for continued work and resources to meet the expectations of our stakeholders. For instance, we have a KPI aimed at increasing our number of reported near misses, because every time we learn about one, we have the opportunity to take action to prevent a future accident.

In Kazakhstan today, we see great demand for CSR reporting striving to meet leading global standards. Natural resource companies in Kazakhstan are active in global capital markets. Our local shareholder Kazatomprom carried out a historic initial public offering in 2018 on the London Stock Exchange (LSE), the first such IPO since 2006, as part of an ambitious programme to sell stakes in national companies. This has brought about a renewed drive to establish the long-term institutions of good governance and proactive external communications among leading Kazakh companies.

The LSE listing and demands of international institutional shareholders translate into an ever-increasing focus on greater CSR disclosure by all Kazatomprom uranium producers, including KATCO as a joint venture. These dovetail with Orano’s adherence to best practices in CSR disclosure as a public company and specific demands in French legislation. For a company that is still maturing, the input of two global uranium giants has been invaluable in designing our CSR roadmap and encouraging us to engage with stakeholders. In essence, we remain a private company but one with many of the attributes and obligations of a listed company.

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3 In the context of health, safety and environment (HSE) standards, the term “near miss” refers to a potential incident that is narrowly avoided.
Focus on safety and environment

KATCO continues to make relentless progress in safety, as measured by the lost-time injury frequency rate (LTIFR), which has declined steadily. But if we are to continue to make progress on the roadmap, we cannot rely on personal safety equipment and technological fixes to prevent injuries and exposure. We must build a long-term and sustainable safety culture among all our employees and contractors. This requires training, but also a change in culture. People must learn to look out first for their fellow employees, because this is the key to protecting themselves and others. We continue to draw on insights from Orano and other international leaders in this area.

“Engaging with local stakeholders is crucial at every stage of the mining process, from exploration and production to mitigation of local environmental impacts. We need to work in close partnership at each level of government.”

Engagement to succeed

For a responsible mining company, engaging with local stakeholders is crucial at every stage of the mining process, from exploration and production to mitigation of local environmental impacts. We need to work in close partnership at each level of government – from national to regional, district and municipal – to develop plans, address concerns and obtain licences at every step of the process. It is important we engage locally both through social spending on local quality of life as well as regular sponsorship of local events.

Of course, uranium mining and taxes we pay on this activity, including payments as part of our subsoil use licence, represent our greatest single contribution to the Kazakh economy. This work generates a mix of reliable and competitively paid jobs for local communities in Sozak district and the wider Turkistan region. It also generates business for an exponentially larger network of local support companies.

But beyond this direct economic effect, our local communities expect KATCO to also make direct investments in their wellbeing. We have long chosen to do so by primarily supporting sporting and educational facilities for children in the areas around our operations and by providing much-needed community resources. Our first requirement for this investment is transparency and efficiency of spending, and today we channel key investments through a special, standalone fund run in cooperation with Orano.

Alongside local administrators and community members, we have a vetted project pipeline including contributing to the construction of a summer camp. In 2017-18, we completed major projects such as five sports fields.

At KATCO, we have made CSR considerations central to our entire business. It is impossible to separate our strategy and goals from the interests of our many stakeholders. On the walls of my office are whiteboards with daily indicators for each part of our business. Health, safety and the environment are my daily concerns and priorities.

I would like to thank all of our stakeholders for their support in 2018.

Yours sincerely,
Gerard Fries

Preparing for the future

Today, the environment is a greater priority than ever as we prepare to develop mining resources at the new South Tortkuduk site. We know local communities are vulnerable and carefully monitor everything we do, including analysing drinking water, wastewater, atmospheric emissions, soils and plants around our mines. I see the local saxaul, a tenacious but slow-growing tree that can take 100 years or more to mature, as both an indicator and symbol of the local environment: it is resilient but requires extreme care to avoid ruining decades of natural development.

Today, we are preparing for our future with the South Tortkuduk project, a new mining development that will guarantee KATCO’s long-term operations going forward. At time of writing, the project is being developed both from the administrative and the technical aspects. In the meantime, we have been able to develop improved mining techniques to ensure future mining at the site will be cleaner and more efficient than ever before.

This project will lay a new groundwork for the Company to build on its proud history of success in production. KATCO remains a market leader in terms of ISR mining, continuously improving our ability to extract value from the resources that we have been entrusted with by our stakeholders. Having recently surpassed a significant production milestone with our 40,000th ton of uranium, we look forward to even greater achievements as we prepare to launch production at South Tortkuduk.

1.3 bln kzt
Total social spending on communities since 2010
Building corporate governance institutions

While KATCO has been established as a private entity, it is owned by two public companies with institutional shareholders. Since the Company’s founding in 1996, it has developed its corporate governance system in line with local company legislation, as well as the practices of its two participants. In practice, this means that KATCO’s managers and employees have signed onto anti-corruption, conflict of interest, ethical and other guidelines, making them a core part of its day-to-day work.

The Company’s corporate governance reporting structure is set out in its Charter.

**KATCO management structure**

- **General Director**
  - The ultimate responsibility for day-to-day activities lies with the General Director, who provides leadership on KATCO’s policies and culture of responsibility.
- **Committee of Directors**
  - Assisting the General Director is the Committee of Directors (CODIR). KATCO’s executive body. Its members include the General Director, Deputy General Director and Deputy General Director for human resources, as well as the directors of finance, geosciences, HSE, legal, operations, purchasing and projects. The CODIR meets on a weekly basis.
- **Environmental and Safety Committee**
  - The Environmental and Safety Committee is responsible for changes to and the implementation of HSE policies. In line with ISO 14001 and OHSAS 18001 requirements, the CODIR reviews HSE performance and the Committee’s recommendations.
- **Employees’ representative body**
  - KATCO’s human resources (HR) policy is based on the principles of legality and reasonableness. The Company has an employees’ representative body to which nine employee representatives (ERs) are elected for four years. The ERs and KATCO’s top managers meet at least twice a year to discuss safety, HR issues and any important matters, at the request of both the employer and the ERs.

**General Meeting of Participants**

The General Meeting of Participants (GMP) is the highest executive body of the Company, Kazakh company law and the KATCO Charter determine the GMP’s full range of responsibilities. It elects and delegates management authority to the Supervisory Board.

**Supervisory Board**

The Supervisory Board, which is responsible for overall oversight of KATCO, consists of four members appointed by Orano and three by Kazatomprom.

**Technical Committee**

This consultative body of KATCO is assigned to prepare technical and economic recommendations for the GMP and the Supervisory Board. It is composed of four members (one appointed by Orano and one by Kazatomprom, as well as KATCO’s General Director and Deputy General Director).

**Financial Committee**

This consultative body of KATCO is assigned to review the Company’s budget and to present its recommendation to the Supervisory Board, which ultimately will approve KATCO’s budget. It is composed of four members, two appointed by Orano and two appointed by Kazatomprom. The Financial Committee was created along with the Budget Policy by the strategic agreement signed by Orano and Kazatomprom in April 2017.
KATCO’s collective agreement is discussed with and approved by the ERs with the Company’s management every three years.

Risk management function

KATCO’s risk management function is designed to meet the Company’s objectives, as well as to identify and mitigate risks that the Company, its employees and local communities may face. The assessment is aimed at preventing risks and identifying opportunities in all fields of operations: production, financial, safety, environmental and legal.

List of key corporate codes

To ensure managers and employees understand what is expected from them and provide clear advice for taking actions in the event of an incident, KATCO has put in place the company’s Compliance Policy.

Technical Inspector for Labour Protection

The Technical Inspector for Labour Protection, an employee representative, conducts technical evaluations as an additional internal control check on health and safety standards.

Ethical code

KATCO’s Compliance Policy is based on Orano’s Code of Ethics and the Code of Ethics and Compliance of NAC Kazatomprom JSC. It is founded on the principles of ethical integrity, professionalism, confidentiality, honesty, respect and responsibility. As part of the Orano group, the Company conducts its activities in strict compliance with the Universal Declaration of Human Rights approved by the United Nations.

The Compliance Policy seeks to: outline employees’ responsibilities in terms of compliance, with a particular focus on the practical aspects of anti-corruption measures; provide guidelines for employees on how to act when faced with non-compliance with corporate ethical standards, Kazakh legislation and/or HSE rules; determine the management’s course of action in regards to such non-compliance; and minimise the risks associated with non-compliance.

The Compliance Policy applies to any actual or suspected non-compliance with the ethics standards and rules or laws that involve the Company’s employees, including in their relations with contractors, consultants, agents and/or any other natural and legal persons relating to the Company’s business. It was drafted in 2010 and most recently amended in 2019.
Responsible mining worldwide

In addition to the executive oversight provided by internal governance bodies, KATCO is party to numerous international initiatives.

Extractive Industries Transparency Initiative (EITI)

As Kazakhstan is a member of the EITI, KATCO participates in local multilateral processes and declares its payment of taxes, mining rights and profits in accordance with EITI requirements.

www.eiti.org

International Council on Mining and Metals (ICMM)

The ICMM is an international organisation committed to a safe, fair and sustainable mining industry. KATCO strives to incorporate the ICMM's 10 principles of sustainable development and position statements. In 2017, the Company was audited by Ernst & Young to verify Orano's alignment with the ICMM principles.

www.icmm.com

Materiality and key priority issues

KATCO seeks to prioritise reporting topics according to stakeholder expectations. Criteria for evaluation are based on the ICMM's 10 principles of sustainable development, as well as GRI reporting standards.

Ethical reporting

KATCO provides an annual ethics report for Orano. It includes a signed statement from the Committee of Directors attesting to a dedicated review of the previous year’s activities.

Compliance

As part of its commitment to compliance with Kazakh, French and other international anti-corruption acts, KATCO’s Compliance Policy requires strict adherence to the following, among others:

- The United Nations Convention against Corruption adopted in New York on 31 October 2003 and ratified by Kazakhstan’s Law No. 31-IV dated 4 May 2008, with statements and reservations
- Orano’s Code of Ethics
- Kazatomprom’s Code of Ethics and Compliance
- Kazatomprom’s Corporate Social Responsibility Policy
- Orano’s Procedure on Conflicts of Interest
- Orano’s Procedure on Whistleblowing System
Stakeholder mapping

At the end of 2018, KATCO launched a major initiative to identify and communicate with its full range of stakeholders in Kazakhstan and internationally using a multi-stage methodology developed by Orano. Scheduled for completion in mid-2019, this work is expected to provide unique insights on attitudes toward the Company from stakeholders in the community, customers, employees and many others.

The process of identifying stakeholders is the first stage of the stakeholder mapping process. This ensures that KATCO hears from stakeholders it may not have heard from before or even know about. In addition, international experience demonstrates that the very action of carrying out stakeholder mapping benefits a company as it demonstrates to the target stakeholder that the company is proactive and takes their views seriously.

The final report should provide a clear and updated map of KATCO’s stakeholders and describe sentiments towards the Company. The report is expected to offer a clear set of recommendations for further action to deliver more accurately on the Company’s CSR agenda. As a result of this work, KATCO will have a more complete understanding of its stakeholders and new lines of dialogue. In turn, it can refine its policies in the CSR sphere to address key concerns.

KATCO stakeholders

- Personnel
- State and local authorities
- Social and environmental non-profit organisations
- International organisations
- Partners (commercial enterprises)
- Media
- Communities
- Participants (shareholders)
CSR SYSTEM

Guiding principles

KATCO promotes sustainable development by making firm commitments regarding social, environmental and economic responsibility based on guiding principles regarding what should be priorities. To this end, the Company has developed a CSR approach based on six pillars and guided by the Company’s CSR Policy, updated in January 2018. Each pillar represents not only a priority area of CSR, but also a key area of interaction with one or more groups of the Company’s stakeholders, whose lives are affected by the Company’s actions and strategies in these areas.

CSR pillars

KATCO has developed six core pillars of CSR over more than 20 years. These are key, if not exclusive, areas of focus for the Company and each area represents a plan of continuous action, with results measured by KPIs. Action in each area is guided by international best practices, as well as legislation and the policies of KATCO’s shareholders. Progress and priorities for each of the six pillars are covered later in this report.
In 2018, KATCO set an ambitious list of KPIs in the areas of health, safety, environment and radiation protection (HSERP) for itself and contractors.

### Safety indicators:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target</th>
<th>End 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTIFR: Lost Time Injury Frequency Rate (KATCO + Contractors)</td>
<td>≤ 0.25</td>
<td>0.45</td>
</tr>
<tr>
<td>TRIFR: Total Recordable Injury Frequency Rate (KATCO + Contractors)</td>
<td>≤ 1</td>
<td>0.67</td>
</tr>
</tbody>
</table>

#### Level IV:
- 34 29

#### Level III:
- 208 231

#### Level II:
- 2,548 2,980

### Environmental protection:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target</th>
<th>End 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Consumption Reduction</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Incidents (spills) leading to environmental contamination above established norms</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

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**Note:** The table above summarizes the safety indicators and environmental protection targets set by KATCO in 2018.
### Radiation safety:

<table>
<thead>
<tr>
<th>Target</th>
<th>End 2018</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>3.05</td>
<td></td>
</tr>
<tr>
<td>MAXIMUM RADIATION DOSE OF KATCO AND CONTRACTORS PERSONNEL (mSv/year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.47</td>
<td></td>
</tr>
<tr>
<td>AVERAGE RADIATION DOSE OF KATCO PERSONNEL (mSv/year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.98</td>
<td></td>
</tr>
<tr>
<td>AVERAGE RADIATION DOSE OF CONTRACTOR PERSONNEL (mSv/year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2.84</td>
<td></td>
</tr>
<tr>
<td>AVERAGE RADIATION DOSE OF 10 MOST EXPOSED KATCO AND CONTRACTOR PERSONNEL (mSv/year)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### HSE training:

- **30%**
  - FIRST-AID TRAINING OF SITE PERSONNEL (PERMANENTLY)

- **30%**
  - FIREFIGHTING EQUIPMENT TRAINING OF SITE PERSONNEL

### Occupational safety:

- **0**
  - CASES OF OCCUPATIONAL DISEASES
HEALTH AND RADIATION PROTECTION

Prevention is priority number one
PROTECTING OUR PEOPLE AND COMMUNITIES

Working with a radioactive substance such as uranium presents unique challenges and risks for a mining company, including the ever-present risk of exposure beyond accepted limits. To mitigate these risks, KATCO has rigorous standards in place at each point in the chain, from geological works and production to processing and delivery to the customer.

Policy

KATCO’s overriding priority has always been the health and wellbeing of its employees, contractors and local communities, seeking to create an even safer working environment and limit radiation exposure as much as possible.

The Company adheres to three primary radiation protection principles: justification, optimisation and limitation of exposure. As such, it assesses the risk of exposure to ionising radiation before beginning an activity with an aim to maintain exposure ‘As Low As Reasonably Achievable’, known by the acronym ‘ALARA’.

Objective

As part of its sustainability drive, KATCO strives to build a positive and safe work environment into all of its planning and adheres to the principle of ‘safety first’ whenever designing, constructing, commissioning, operating and decommissioning facilities.

Risk assessment

Assessing exposure risks is a core aspect of KATCO’s operations. The Company measures and regularly monitors gamma and alpha radiation exposure levels for specific areas using established technology and following international standards.

Risk mitigation

KATCO undertakes a ‘compartmentalisation’ mentality to approaching, minimising and mitigating radiation exposure risk, classifying its employees according to categories of exposure. Group A personnel (‘exposed employees’) are directly exposed to ionising radiation and work in such places as plant facilities. Group B personnel work in areas where there is potential for exposure.

KATCO maintains a strict zoning and monitoring regime for all work functions. Employees who work across zones follow sanitary rules for personal protective equipment (PPE) and approved cleaning protocols required in the respective areas.

What is radioactivity

Examples of natural radioactivity

Sources of exposure*

- Rainwater
  0.3 to 1 Bq per litre
- Mineral water
  Up to 400 Bq per litre
- Seawater
  10 to 13 Bq per litre
- Milk
  0.3 to 1 Bq per litre
- Human body
  About 130 Bq per kilogram
- Radium (1 gram)
  37 billion Bq

* A becquerel, abbreviated Bq, is defined as the activity of a quantity of radioactive material in which one nucleus decays per second.
Monitoring employees

As a matter of overriding importance, the Company pays specific attention to the radiation exposure levels of Group A personnel to ensure compliance with the regulatory limits. Employees in Group A wear individual dosimeters that certified laboratories check quarterly. If the regulatory levels are exceeded, a staff member’s activities are reviewed and measures are taken to reduce exposure. Also each quarter, Group A personnel are provided with instructions concerning safe working methods and the use of PPE to limit exposure.

In December 2018, KATCO launched attestation by an independently accredited entity to identify employees working in harmful conditions. As a result of such attestation, the Company will implement actions to further invest in improving the working conditions of its employees.

Monitoring communities

The possible risk of radiation exposure beyond background levels is the natural concern of local communities. Each year, in accordance with Kazakh regulations, international best practices and long-standing Company policy, KATCO conducts systematic environmental monitoring of the areas around its facilities, with certified laboratories testing all samples. In addition, public sanitary and epidemiological teams carry out water and soil sample tests, providing independent verification. In line with Kazakh legislation, the results of these tests are presented to Kazakhstan’s Committee of Atomic and Energy Supervision and Control each year.

Investing in protection

The Company has consistently reduced the exposure of personnel through investment in training, PPE and facilities. In 2018, KATCO spent nearly KZT100 million on PPE for its employees. The average annual level of exposure for Group A personnel was 3.05 mSv, far below the maximum of 20 mSv set by international standards.

In 2018, testing by KATCO and local authorities indicated that the radiation levels in the communities around the Company’s facilities ranged from 0.12 to 0.15 mSv/h, in line with expected natural background radiation levels. In the interests of public safety, transparency and to provide reassurance, the Company maintains digital information displays outside of its Torkuduk and Muyunkum sites to indicate current radiation levels.

Raising health awareness

KATCO has a made a priority to promote the health of its employees and foster healthy lifestyles both in its workforce and local communities. Proactive healthcare is critical for maintaining a safe workplace, as an ill employee may trigger an incident exposing themselves and others to harm. Part of this approach is the provision of regular medical checks for all categories of personnel, as well as access to medical care. Last year, KATCO’s medical personnel conducted a total of 3,669 consultations, of which 857 were performed at Muyunkum and 2,812 at Torkuduk.

In 2017-18, the Company sponsored several events aimed at raising health awareness. This included KATCO’s annual marathon in the stunning local countryside of Turkistan region, running more than 40 kilometres between Torkuduk’s base camp and Muyunkum. Employees and contractors run this and other races to raise money for charity, chasing an annual target of 18,000 kilometres. In addition, KATCO sponsors high-visibility awareness campaigns about infectious diseases that can pose a threat to both people and livestock in the region, including tuberculosis.
Permissible maximum radiation for Kazakhstan:

- Maximum level set by international standards – 20 mSv

Average annual level of exposure for Group A Personnel:

3.05 mSv*

*Average annual level of exposure for Group A Personnel

Radiation safety statistics, 2014-18, mSv

Medical consultations, 2018

*Medical consultations for KATCO and Contractors

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*Maximum level set by international standards – 20 mSv
OCCUPATIONAL SAFETY

Building a safety-based culture
SAFETY IS OUR NUMBER ONE CONCERN

KATCO’s most important safety KPI is to ensure that there are zero fatal accidents at its operations. A key aspect of achieving this goal is learning from near misses and identifying and implementing corrective actions to mitigate risks.

Policy

KATCO is committed to promoting and protecting the safety and health of its employees and contractors, eliminating accidents in the workplace and creating a positive working environment. As part of this, the Company believes in the importance of strong labour relations. A constant emphasis on risk management and best-practice procedures throughout operations ensures that KATCO remains focused on its ‘safety first’ approach.

Objective

The Company strives to implement rigorous labour and safety standards in all facilities for all employees and contractors, with a view to meeting its foremost safety objective: zero fatal accidents.

Leading a safety-based culture

While the management team bears ultimate accountability for safety in the workplace, KATCO regards it as being the responsibility of everyone involved, including employees, partners, contractors and site visitors. All workplaces are engaged in a process of “bottom-up, top-down” exchange, including safety visits, meetings, training and standards to ensure that procedures are relevant, understood and followed by everyone involved in mining and production processes.

In 2017, to further diversify the Company’s occupational health and safety training methodology, the “KATCO Test” application for its maintenance personnel was launched. The computer-based tests are taken each week and comprise a series of questions aimed at improving the safety culture. The management follows up on the tests with one-on-one coaching and group discussions of health and safety topics. The application can be run on any computer at KATCO’s facilities and has had a secondary benefit of reducing paper consumption by eliminating the previous system of printed tests.

On-site medical assistance

To ensure that the health needs of its employees are met at all times, KATCO employs specialised medical units that are on call 24 hours a day, seven days a week. Three medical units, equipped to provide emergency services in accordance with international standards, are co-located at the Company’s sites to allow for complete coverage and prompt incident response.

To supplement these formal medical units, KATCO also trains its staff in first-aid techniques. In 2018, 792 employees (50% of total personnel) received such training (KPI target was to provide first-aid training to ≥ 30% of site personnel).

5 Anchors and 7 Standards

With an aim of improving its safety culture, Orano brought together people from throughout the organisation in 2018 to assess accidents and incidents, determine the root cause of repeat incidents and review the previous 12 safety standards. The resulting initiative, called “5 Anchors and 7 Standards”, was introduced in February 2019, after the reporting period.

The anchors are explicit and form an integral part of the daily work of each employee and contractor. KATCO requires their application at all levels, with strong involvement from the management. The anchors are aimed at preventing employees from being exposed to severe and fatal hazards. The standards complement the anchors, corresponding to a rule or best practice whose application contributes to the management of risk and the prevention of accidents.

5 Anchors

- Safety equipment worn
- Protected mechanical handlings
- Secured working at height
- Pedestrian and vehicle traffic secured
- Safe LOTO (Lock out – tag out)

7 Standards

- Pictogram strict compliance
- Floor free of loose cables
- Smoking only in dedicated areas
- Alcohol and drug prohibition
- Safety induction and training
- Hold on to handrails
- Five minutes dedicated to safety
ACHIEVEMENTS IN 2018

Safety performance

KATCO aims to foster a safety culture by continuously improving on its HSE initiatives and implementing measurable KPIs wherever possible. It tracks the 12-month rolling lost-time injury frequency rate (LTIFR), one of the most widely used workplace safety benchmarks worldwide, as well as the 12-month rolling total recordable injury frequency rate (TRIFR), for its employees and contractors alike. The Company has established KPIs targeting a LTIFR of ≤ 0.25 (LTIFR was 0.21 in 2017 and 0.45 in 2018) and a TRIFR of ≤ 1.0 (TRIFR was 0.64 in 2017 and 0.67 in 2018). Underlying KATCO’s commitment is an unswerving focus on reducing these rates to zero.

As another indication of safety performance, in 2018, KATCO re-certified its health and safety management system in compliance with the OHSAS 18001 international occupational safety standards.

Safety training

A core aspect of KATCO’s commitment to occupational health and safety is providing comprehensive training courses to staff throughout its operations. In 2018, 3,509 of its employees and contractors underwent 26,503 hours of internal and external training on topics related to health, safety, environment and radiation protection (HSERP). To measure how this training is translating into safety performance, the Company conducted two second-level crisis drills at the Tortkuduk and Muyunkum sites in 2016, in addition to three second- and third-level drills in 2017 (KPI target was to conduct two second- and third-level crisis drills a year). In September 2017, KATCO also held a seminar on near misses at its Tortkuduk operations.

Joint commitment to safety

To reinforce the safety culture throughout its operations, Orano has dedicated the month of June as Safety Month since 2012. As part of this initiative, KATCO holds Safety Day events for all employees and contractors that are aimed at providing a forum for sharing information, discussing best practice, evaluating operational successes and shortcomings, and identifying areas for improvement. During the Safety Day events, employees and contractors recreate significant accidents to teach lessons learned and the management presents employees with safety awards. In addition, the Company recognises employees who have worked at KATCO for 10 years without a lost-time injury (LTI), including 230 employees in 2017 and 135 in 2018.

Safety initiatives

KATCO’s most important safety KPI is to ensure that there are zero fatal accidents at its operations. A key aspect of achieving this goal is identifying and implementing corrective actions to prevent near misses. To maintain a constant focus on this priority, the Company has established a KPI that targets the number of near misses it believes should be reported each year to ensure zero fatalities: 64 were reported in 2017 (KPI target was 60) and 106 in 2018 (KPI target was 80).

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*A lost-time injury is defined as a non-fatal injury that results in the loss of work time. The lost-time injury frequency rate (LTIFR) and total recordable injury frequency rate (TRIFR) are measured in the number of incidents per million man-hours worked. The TRIFR is calculated by adding the lost time injury (LTI) rate to the medical treatment injury (MTI) rate.*
INTERVIEW:

AINAGUL ISMAGULOVA,
HSE DIRECTOR

What is your background and how has it benefited you as HSE Director?

While I only recently became HSE Director, I have been with KATCO for several years and have an extensive background in audit, risks and control. Having performed HSE audits, I already had some pieces of the HSE picture. In my opinion, such skills as collection and analysis of high volumes of information, identification of non-conformities and propositions to solve them that were required in my previous position will help me in my current role.

What main events would you highlight for 2017 and 2018?

In 2018, KATCO received an innovation award from Orano for a project to decontaminate low-radioactive waste. The project is an innovation for the in situ leaching uranium industry. The test results have been positive and now we are researching how to scale it to production volume. Also, as part of a national competition, KATCO was awarded second place in CSR for implementing change in the Company and projects in local communities.

In terms of waste management, KATCO sends its waste for recycling and re-use. The HSE team audited this work to prove that it is being done, including visiting the end refiner and recycler. HSE also continuously takes samples of water and closely monitors emissions to ensure that they remain within the regulatory limits.

In addition, the Company is implementing new safety standards and identification processes, with an increased focus on near-miss reporting, as well as the identification of dangerous conditions and actions. To reinforce this, safety performance is monitored, and continuous training of staff and contractors takes place.

As for crisis management, KATCO conducts regular crisis drills, the most recent of which was in late December 2018.

How have KATCO’s 12 core safety standards evolved?

In the beginning of 2019, Orano had a group of people working in the safety sphere recreate the main concept of safety. They condensed the safe work rule for production into a poster with five anchors and seven standards. This is a synthesis of old standards plus worldwide near-miss and incident analysis for Orano. KATCO’s HSE standards have been updated and are being implemented, and the HSE team will be tracking statistics.

What are your top goals for 2019?

KATCO is seeking to implement a new wave in HSE, to change the attitude toward safety to be more client-oriented. We believe the HSE staff should talk more freely with employees, promoting the safety culture, environmental awareness and best practices. We are already changing and hope to do so rapidly going forward.

In 2019, the HSE team will continue to conduct safety visits and safety audits. Another priority is the Manager In the Field (MIF) initiative implemented by Orano, which seeks to get managers out of their offices to observe people working and implement actions. We have included good initiatives in our Master Plan, including improving our Emergency Plan, implementing lockout-tagout (LOTO) standards and further improving the working conditions of our employees.

See above
Environmental stewardship is central to our business model.
For KATCO and its shareholders, the metrics of its environmental impact are a vital concern. While the Company’s ISR mining technique is less invasive than most mining techniques, it must still invest considerable time and resources to prevent or reduce the impact on the surrounding environment.

Policy

Environmental protection is an integral part of KATCO’s business strategy. The Company fosters a culture of environmental risk prevention throughout its activities. Employees are required to act responsibly, carry out control measures and seek to improve KATCO’s environmental track record wherever and whenever possible. The Company has developed eight environmental standards (see below).

Objective

The Company’s objective is to monitor, manage and mitigate the effect of its operations on the surrounding environment to the greatest extent possible, including expanding the share of renewable power resources and recycling materials wherever possible. As a mining company engaged in ISR extraction, KATCO’s long-term goal is to remediate exhausted mining sites insofar as possible, including cleaning sites and replanting trees.

Environmental management process

Throughout its operations, KATCO follows both its internal guidelines and regulatory requirements, seeking to protect the surrounding environment at each step of the chain of ore body geological development, mining and processing of uranium.

Initial survey

At this first stage, KATCO’s teams study the initial state of the site. This step consists of taking a detailed inventory of its various environmental components – physical, radiological, biological and socioeconomic – before the project is launched.

Project development

During this phase, the environmental footprint of the future mine (including water, air, soil, flora and fauna) is assessed through an ecological and social impact study. Guidelines for the reclamation stage for the site are drawn up. Specialised environmental teams are involved in preliminary studies concerning the technical infrastructure in accordance with KATCO’s standards and international best practices.

Mining

Environmental monitoring is maintained and reinforced as uranium-mining operations proceed. KATCO has received and renewed several international HSE certifications for its facilities, including the re-certification of the Company under ISO 14001 certification standards in 2018.

Remediation through innovation

KATCO’s research and development function studies sites ahead of their reintegration into the natural environment after mining operations are completed. Technologies and techniques for remediation have been included in the Company’s Master Plan of key projects in recent years.

Monitoring the environment

Water, air, soil and vegetation are regularly monitored in accordance with KATCO’s internal policies and Kazakh legislation. The Company runs several dedicated programmes, including recycling and water conservation schemes. In the semi-arid environment of many parts of Turkistan region, water is a particularly critical resource and therefore water management is a top priority. Among other measures, the Company promotes the recycling of wastewater for watering trees and plants.

The saxaul tree plays a critical role in the environment of Turkistan region. The tree is resilient but grows slowly. Its extensive root system is critical for preventing soil erosion in a dry environment and is an anchor for the local ecosystem. As the trees can take a century to grow, and they are a vital resource for local communities as construction and fire materials, KATCO has been at the forefront of planting and replanting saxaul trees around its sites.

3,648/year

NUMBER OF CHEMICAL ANALYSES (WATER, SOIL AND AIR SAMPLINGS) CONDUCTED IN 2018
ACHIEVEMENTS IN 2018

Environmental performance

Each year, KATCO has strengthened its environmental programmes, while making environmental considerations central to all plans for future development, such as the mine in South Tortkuduk. Last year, the company developed eight environmental standards, establishing a framework for addressing the key ecological challenges and opportunities facing the business (see below).

In 2018, KATCO began to implement an important initiative for recycling and treating contaminated soil. This is a major project for the Company, as new technology, partly developed in house, allows for the more complete restoration of former mining sites. As part of this project, in previous years, we have taken care of this soil by sending it to special storage units to preserve it for future treatment. At the same time, the Company continued its tree planting and transplanting programme, having exceeded 100,000 trees since it began mining operations.

On 5 June 2018, a report about KATCO’s environmental protection efforts aired on the Qazaqstan national TV channel for Ecology Day.

In 2018, KATCO successfully completed the remediation of its exploration licence. The remediation project was fully validated internally and externally for its environmental issues.

8 environmental standards

In 2018, KATCO adopted eight standards for the environment focused on addressing key areas of concern for the Company and taking into account the nature of the ecosystem around its mining and production facilities in Turkistan region, as well as the environmental footprint of its headquarters.

On-site solid waste reduction
Smart paper use
Emission reduction
Biological conservation
On-site solid waste reduction
Energy management
Ecological incident management
Waste management
Water management

Orano awards

Each year, Orano recognises innovation by its member companies at an award ceremony in Paris. In 2018, KATCO submitted ten innovative projects for consideration, a reflection of the Company’s role in driving innovation. In November 2018, Orano Chief Executive Officer Philippe Knoche recognised KATCO’s low-radioactive waste (LRW) project and the Company’s collaborative design for the South Tortkuduk mining complex as winners out of 127 projects nominated from across Orano’s global business.

The LRW project is a major breakthrough for KATCO, as it provides an engineering solution for cleaning up soil with low radioactivity, which can pose long-term environmental concerns and costs. The redesign of the South Tortkuduk mining complex optimised the plant layout to decrease the cost by more than US$1 million and improve safety by moving hazardous operations further from the production building.

The process has now entered the administrative phase for cadastral registration.

To raise awareness of environmental issues within the Company, KATCO celebrates Earth Day and dedicates a day to environmental protection, including opportunities for employees to learn about recycling of resources within the company.

The Company continues to reach out to local schools to raise environmental awareness, as well as hold internal competitions highlighting resource conservation and providing employees with opportunities to volunteer in their local communities.
SOCIAL INVOLVEMENT

KATCO is invested in its local communities
CONTRIBUTING TO THE COMMUNITY

KATCO always seeks to be a trusted member of the community engaging in a transparent manner with its stakeholders. The Company’s employees live in Kazakhstan and the vast majority, around 53%, hail from the communities where KATCO operates, while 98% are Kazakh nationals.

Policy

The Company is one of the largest employers in Turkistan region’s Sozak district, where its facilities are located. It has agreements in place with the local mayors and administrations and each year the parties convene a working group to propose new projects to meet community needs over the following 12 months and beyond. KATCO approves a plan in line with its own internal obligations and begins implementation in close consultation with local leaders. The Company maintains direct contact with the closest communities in Sozak district, including Shu, Tasty, Sholakkorgan (the district centre) and Taukent. In 2018, KATCO senior management met a dozen times with regional and local leaders to discuss upcoming projects and events.

Objective

KATCO’s objective is to make strategic, long-term investments in the social and economic development of individuals and communities, based on needs identified in consultation with community representatives. These investments should meet the needs of the entire community and represent the most efficient use of resources available to achieve the most good. The Company is committed to social involvement in a way that is transparent and efficient for all stakeholders.

Project portfolio

In order to best meet the needs of local stakeholders and in line with its own values, the Company has traditionally invested in building education, sporting and health-related facilities. Separate from social investment are charitable and sponsorship activities. These have focused on providing children with basic needs (such as clothing or medicine) and sponsoring their admission to educational or recreational facilities (such as sports and summer camps).

Buying local

A practical and important contribution to the local economy is buying locally sourced goods and services wherever possible. In line with KATCO’s existing requirements to source Kazakh-made products under its subsoil use contract, the Company previously persuaded a foreign supplier to localise production of pipes used extensively in mining activities. KATCO remains committed to working with its suppliers to encourage localisation of products and taking advantage of Kazakhstan’s relatively low-cost, highly skilled labour market and geographic position at the heart of Eurasia.

Social investments should meet the needs of the entire community and represent the most efficient use of resources available.
ACHIEVEMENTS IN 2018

More than 30 projects in Sozak district

In 2018, the company completed 31 social investment and charitable projects in Sozak district, representing total spending of around KZT125 million, a significant increase compared with 2017 levels (KZT72 million). The largest project was the construction of sports facilities and playgrounds for the local communities. Others provided access to energy and water for local families, as well as charitable and sponsorship support of education, the underprivileged and local events. Also in 2018, the Company made progress on its plans to contribute to the construction of a state-of-the art summer camp in the district.

Construction of sports facilities

In 2018, KATCO completed the construction of five separate sports facilities for the communities of Sozak district. The Company views this project as a contribution that should enhance the social wellbeing of the local communities. The project was part of a programme for social infrastructure development in Sozak district’s rural areas. It involved building outdoor soccer fields with children’s playgrounds in the communities of Tasty, Shu, Kumkent, Sholakkorgan and Zhartytobe. The initiative aimed to improve the social infrastructure for children and youth in the countryside. Thanks to this project, the populations of five large communities now have access to modern sports facilities, which include fields where people can play mini-football, as well as playgrounds for preschool and primary school age children.

All told, after being approved in late 2017, the project was implemented in roughly one year. In December 2017, the first of the sports facilities was already completed and opened for the community of Tasty. On 15 October 2018, the day of the 90th anniversary celebration of the Sozak district akimat, a ceremony was held in Zhartytobe to celebrate the opening of the fifth and final sports facility.

In terms of quality and composition, these new facilities are the same as those that can be found in Shymkent, the largest city in the region. With these new sports facilities, people in these communities can now spend their leisure time outdoors in good health, playing mini-football, and children can spend time with their friends and parents at the playground.
INTERVIEW:

SALYKHAN POLATOV, AKIM OF SOZAK DISTRICT

What influence has KATCO had on your region and what have been the benefits?

First, KATCO is the largest uranium production enterprise in our district. Second, it is a major employer. Third, it pays taxes to the national, regional and district budgets. In addition, alongside taxes, KATCO provides important social assistance to the local population. They come through on all of their commitments.

In your view, what issues are the most important for local residents and government?

The most important thing is to pay salaries in accordance with the market and social demands of our time, and to pay taxes. Equally, it is important to deliver on the social commitments that one has taken on. I believe that KATCO has delivered on these commitments.

What do you know about the Company’s future plans in your district?

We maintain a regular dialogue about the development of KATCO’s business. The company has a good outlook both in terms of the overall industry and for their future in our district. KATCO plans not just for one year, but for the future. In turn, we meet with them regularly so that we are always up to date on their plans and can make the right decisions for our constituents, in line with the broader economic development of the region.

How do you coordinate KATCO’s social investments in your district?

Each year we plan and sign off on a list of social projects with the Company. It is developed on the basis of open discussions about our needs and in line with KATCO’s long-term commitment to projects promoting education, health and economic development in the district. Every project is developed with a clear understanding of cost and benefits. So, for example, after a successful project to build playgrounds and sports fields, we are in advanced discussions about contributing to the construction of a summer camp. The fact that we meet regularly with KATCO’s senior management allows both sides to follow up on progress on these joint projects.

I would underline that when KATCO takes on a commitment, whether in terms of its employees, social investment or the environment, it carries it out.
COMMITMENT TO EMPLOYEES

People bring KATCO its core assets and values
CULTIVATING PROFESSIONALS

Kazakhstan is a highly competitive market for skilled professionals and requires a deep commitment of resources to retain staff recruited from local communities. Therefore, KATCO has committed to providing employees at all levels with the opportunity to develop their professional skills and grow within the Company.

Policy

KATCO believes that its employees make a crucial difference to its competitiveness. The Company is committed to offering them professional development and career opportunities and to respecting their rights. It follows an HR policy based on equal opportunity in terms of ethnicity and gender that complies with local labour laws and international best practices.

Objective

KATCO’s objective is to be people-oriented and make employees proud to be a part of the Company. In order to recruit the best talent, the Company seeks to be perceived as an employer of choice in Kazakhstan.

Employee representation

KATCO’s HR policy is based on the principles of discussion and consultation, as it is vital in running a successful organisation. The Company has in place a collective agreement with its employees, last signed for three years (2018-21), which outlines all of the benefits. Approximately 100% of employees are covered by a collective agreement. Employee representatives are selected to act regarding benefits, working conditions, questions of compensation and occupational health and safety issues.

A shared commitment to success

The Company’s HR policy is based on the expectation that all employees share KATCO’s clearly articulated Mission, Vision and Values. In turn, the Company is dedicated to creating an open, creative and stimulating workplace with open communications. As part of this drive, the HR function has developed the Manager In the Field programme (see below) to reach out to employees where they work and collaboratively solve problems and achieve results.

Recruiting in local communities

KATCO’s employees are committed to the communities around the Company’s facilities. For the most part, that is where they grew up and their families still live. With nearly 1,200 employees, more than 50% are recruited in Sozak district and another nearly 20% are from other districts in Turkistan region. Approximately 55% of managers are recruited from local communities.

Promoting diversity

KATCO has always been an international company. Today it employs people with nearly 20 nationalities. The Company develops young leaders by providing them with the chance to learn from a diverse leadership team and take advantage of unique learning opportunities in France and Kazakhstan. This approach fosters a truly international outlook.

The Company recruits people of all ages and at every stage of their careers. It values the outlook and experience of older employees and their ability to mentor young professionals. A workplace diverse in gender, age, ethnicity and nationality is one of KATCO’s true competitive advantages. Among employees recruited in 2018, 107 were men and 34 were women. In terms of age, 94 were under 35, another 46 were between 36 and 55, and 1 was over 55.

Training and professional development

A dedication to providing every employee with the opportunity to maximise their potential is the reason KATCO dedicates so many resources to both training and professional development opportunities in Kazakhstan and France. In 2018, executives had the opportunity to train in five different programmes run by Orano (see below) to teach the fundamentals of leadership as well as the technical aspects of mining.

Number of employees hired from the local community, 2014-18

<table>
<thead>
<tr>
<th>Year</th>
<th>Sozak district</th>
<th>Other districts of Turkistan region</th>
<th>Almaty region</th>
<th>Nur-Sultan</th>
<th>Other regions of Kazakhstan</th>
<th>Other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>11.0%</td>
<td>18.4%</td>
<td>52.0%</td>
<td>17.0%</td>
<td>19.8%</td>
<td>53.4%</td>
</tr>
<tr>
<td>2015</td>
<td>9.9%</td>
<td>18.5%</td>
<td>51.0%</td>
<td>17.9%</td>
<td>19.8%</td>
<td>53.4%</td>
</tr>
<tr>
<td>2016</td>
<td>11.0%</td>
<td>17.0%</td>
<td>52.0%</td>
<td>16.5%</td>
<td>18.5%</td>
<td>53.4%</td>
</tr>
<tr>
<td>2017</td>
<td>10.8%</td>
<td>16.5%</td>
<td>52.8%</td>
<td>17.9%</td>
<td>18.9%</td>
<td>53.4%</td>
</tr>
<tr>
<td>2018</td>
<td>9.2%</td>
<td>17.1%</td>
<td>53.4%</td>
<td>19.8%</td>
<td>18.9%</td>
<td>53.4%</td>
</tr>
</tbody>
</table>
Manager In the Field

The Manager In the Field (MIF) methodology teaches managers to make observations in real time, over the short term using daily operational management, and on a medium-term horizon to manage the progress of their teams. This allows managers to observe the reality in the field, detect and prevent gaps versus the expected standards, coach their teams and encourage positive behaviours, and show recognition. The programme involves observing the team’s behaviours and current activities, as well as the environment in which they are working and how they are implementing the process.

To obtain efficient and sustainable results, the manager’s mission is to:

1. Provide vision, meaning and coherence to their team
2. Build a working environment that increases efficiency
3. Manage their team’s activity, including on a daily basis and overall progress
4. Develop the skills and autonomy of their employees
5. Foster a sense of teamwork
6. Focus on being in the field with their teams

Breakdown of types of social assistance, 2017-18, KZT mln

Breakdown of types of social assistance, 2017-18, number of personnel

- Birth of child
- Wedding
- Financial aid
- Funeral of a close relative

NUMBER OF MIF VISITS CONDUCTED ON SITE IN 2018

134
ACHIEVEMENTS IN 2018

Headquarters move
A key achievement for the HR function in 2018 was the successful move of the headquarters of KATCO from Almaty to the capital, Astana (now Nur-Sultan), involving the transfer of more than 100 staff, including all members of the executive team. The move allows KATCO’s senior managers to interact more regularly with both Kazatomprom’s management and government stakeholders.

Delivering on diversity
KATCO continues to make progress in creating a diverse and welcoming workplace, while acknowledging the challenges facing a mining company, perceived by many as a predominantly male workplace, in achieving greater gender equality. At present, women make up around 15% but accounted for 24% of total recruitment in 2018 as KATCO pursues greater recruitment of women in a mining industry that has until recently been overwhelmingly male dominated in terms of employee numbers.

Developing a well-trained workforce
In 2018, KATCO provided 39,004 hours of mandatory, hard-skills, soft-skills and foreign-language training to employees overall, compared with 38,336 hours in 2017. This included 348 mandatory training sessions, 357 professional training sessions, 159 training sessions for ‘soft skills’ and 120 language training sessions.

Social assistance
KATCO is proud to provide benefits and assistance to all of its employees, above and beyond statutory employer requirements. In 2018, KATCO spent KZT29 million on social benefits for employees. The purpose of social spending on employees is to help them cover large, one-off costs that may not be covered by statutory benefits, otherwise leaving them facing hardship. A committee reviews employee requests for funding. The majority of grants are provided to employees who have a new baby or to help pay for the funeral of a close relative.

Talent pipeline
In order to identify young leaders, each year KATCO takes on around 30 interns from top technical institutes and universities and provides them with invaluable work experience, recruiting the best students for full-time work after graduation. Within the Company, HR maintains a talent pool of managers who undergo training in house and within Orano to prepare them to take over future leadership positions.

Breakdown of employees by nationality, 2018

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Kazakhs</td>
<td>77.6%</td>
</tr>
<tr>
<td>Russians</td>
<td>11.9%</td>
</tr>
<tr>
<td>Other</td>
<td>10.5%</td>
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</tbody>
</table>

Breakdown of training sessions held, 2018

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>357</td>
</tr>
<tr>
<td>Mandatory</td>
<td>159</td>
</tr>
<tr>
<td>Soft</td>
<td>348</td>
</tr>
<tr>
<td>Language</td>
<td>120</td>
</tr>
</tbody>
</table>

Number of employees on baby care leave, 2018

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>19</td>
</tr>
<tr>
<td>Men</td>
<td>2</td>
</tr>
</tbody>
</table>
Training programmes for young leaders

In 2018, KATCO was able to offer its talented, rising managers courses through Orano’s highly regarded mining and management colleges. Some 37 managers participated in these courses during the year.

Learning Programme

The Learning Programme was designed by Orano Mining College to reinforce knowledge about Orano, the Mining Business Unit and sites, and develop networking within the Mining BU group of companies.

Change Maker

The Change Maker programme was developed by Orano School of Management to introduce the elements of Change Management, in order to prepare and adapt managers to new changes and thinking differently.

Sedimentology Aquitaine

The Sedimentology Aquitaine course was designed by Orano Mining College for professionals in mineral exploration and development, from the geologist to the production engineer. This course offers a rare opportunity to correlate the hydrodynamic processes and the resultant architecture of the sedimentary deposits.

Mining Basics

The Mining Basics course was developed by Orano Mining College to understand the mining methods used to exploit a deposit. Based on this observation, after a quick reminder concerning the deposit geology, the course covers the technical and economic optimisation of the deposit, its planning and its technical aspects relative to mining methods.

Becoming a Leader

The Becoming a Leader course was designed by Orano School of Management to train managers and heads of directions. It is a managerial excellence programme, which accelerates managerial development and fosters a leadership attitude, while increasing cooperation between managers.
INTERVIEW:

SAULE DAVLETOVA, DEPUTY GENERAL DIRECTOR FOR HUMAN RESOURCES

What was KATCO’s Human Resources function focused on in 2017-18?

Our HR team has faced certain challenges over the past couple years, including optimising headcount and facilitating the relocation of the Company’s office. While we have accomplished these tasks, there may still be areas where we can better align our operations with our stakeholders’ needs.

In addition, despite our successful achievements, there are areas where we might benefit from a more proactive approach, including our grading system and internal mobility, and we will study these matters further.

We need to ensure that we provide the proper mix of motivation and incentives to attract and retain a world-class workforce.

What are your recruiting priorities?

In general, we have two recruiting tools: internal and external. Increasing internal mobility allows us to move people from one department to another, providing relevant training to make up for any lack of experience. I also hope to develop the institution of mentorship in KATCO to improve our internal recruitment pipeline. Along these lines, succession planning is also a key HR issue today.

What employee training programmes does KATCO offer?

We provide international assignments for most of our key people.

In addition, KATCO has become a pilot project for Orano’s international leadership programme called “Becoming a Leader”. Thanks to the good results we achieved, it has now been expanded to Orano companies in the US.

What are your top goals going forward?

Launching the South Tortkuduk project will be a great achievement and will demonstrate KATCO’s long-term commitment to Kazakhstan. To conduct this project, KATCO will need to hire staff. The project will provide jobs far into the future. On a broader note, I want to help KATCO to remain an international company.

“I want to help KATCO to remain an international company.”
INNOVATION

Innovation will drive our long-term competitiveness
LEADERSHIP THROUGH INNOVATION

KATCO is a leader in Kazakhstan and globally in the uranium industry in terms of innovation. The Company has the unique ability to draw upon the vast local knowledge of its Kazakh shareholder and the scale and global leadership of its French parent company. At the same time, it has built its own, highly productive research and development centre, which has become a source of innovation for its shareholders.

Policy

The Company’s management believes that its future depends on successful innovation, whether to develop new mining capacities or mitigate the side effects of current operations. Building on different engineering teams, KATCO has recently centralised its innovative function and appointed a head of R&D to drive this process. Over the last few years, using this approach, the Company has succeeded in developing new ways to clean contaminated soil as well as to implement a new membrane technology aimed at optimising the consumption of chemical reagents during the processing of the uranium-bearing solutions.

Objective

KATCO’s objective is to become more efficient and sustainable by developing innovative projects focusing on health, safety and the environment throughout its activities.

Centres of excellence

Orano has provided KATCO with invaluable technical assistance in the R&D process, primarily through access to its global technical centres of excellence in France and the US. They generate leading research on industrial applications in the fields of materials, corrosion and welding; chemistry and radiochemistry; component qualification; and thermal hydraulic testing.

Site remediation

KATCO’s mining sites are covered by specific remediation plans that are updated extensively as the Company devises innovations in processes to restore the ground to its natural state. Accordingly, KATCO specifically seeks to develop innovations across its mine remediation approach, which limits a former mining site’s impact on the environment and population to a level that is as low as reasonably achievable. For that purpose, KATCO has developed a specific research project on natural attenuation that involves the skills of both Orano and Kazatomprom.
KATCO’s Master Plan

Tool for innovation

KATCO benefits from innovative management approaches that Orano has tested in other contexts and brought to their partnership, including the “Master Plan” approach. It is a “bottom-up” tool that empowers employees to identify specific areas for improvement and devise innovative solutions, which are then reviewed by the management.

Process

The process is updated every six months. In December 2018, KATCO reviewed its fifth Master Plan. Overall, the Company met its target of 80% project achievement. To improve focus, KATCO has reduced the number of projects from around 100 in 2016 to roughly 30 at present.

The highest priority is given to projects related to safety and the environment. For example, one such project was expanding the implementation of lockout-tagout (LOTO) standards to improve maintenance safety.

Current projects

KATCO currently has a total of 36 projects under way as part of its updated Master Plan for the first six months of 2019. Of these, 13 are related to cost and/or schedule, nine to quality, five to HR, four to customers, three to safety and two to corporate social responsibility.

- Cost/schedule. The projects related to cost and/or schedule fell under three broader categories: delivering production cost to budget; optimising net cash flow; and delivering projects on time and on budget.
- Quality. The projects related to quality were aimed at improving the key processes of a business unit in one way or another. The most important initiatives in this category included simplifying and standardising processes, developing the digital mine project, automating the update of acquired drill hole data and optimising the supply chain process.
- HR. The HR projects were focused on developing operational performance and retaining key personnel and talents of a business unit while adapting the organisation’s headcount to market constraints.
- Initiatives. Two key initiatives included implementing a new membrane process in the plant to improve the flow rate and optimising the network and well-field hydraulic simulation.
- Safety. The safety projects were part of KATCO’s efforts to continue developing a safety culture throughout its operations, including by reducing harmful conditions, improving emergency response plans and implementing the lockout-tagout (LOTO) standard in its acid network.
- CSR. The corporate social responsibility projects included recycling and treating contaminated soils, which also reduces the cost of contaminated soil treatment, as well as ensuring that its social projects meet local needs by contributing to the construction of a summer camp in Sozak district.

ACHIEVEMENTS IN 2018

Increased uranium throughput

One of the most important initiatives in 2018 was the development of a new technique to improve the processing throughput capacity of uranium-containing concentrate. This technology not only allows the Company to increase output from existing production volumes, but also process lower-concentration uranium. The ability to increase the recovery of uranium translates into longer life of up to ten years for existing deposits and the maximum productivity of mines over their lifetime.

Digital Mine

The Digital Mine project is another important technological breakthrough with long-term benefits for both efficiency and safety. The project, which is currently under development, uses electronic sensors throughout the mine and sophisticated software solutions to provide real-time data about conditions in the mine, ranging from temperature to water levels to air quality, as well as radioactive measurements. The data can be visualised to provide managers on site with a comprehensive picture of conditions at the facility, as well as flag potential anomalies.

100 mln kzt

KATCO’S INVESTMENT IN R&D IN 2018
INTERVIEW:

Nicolas Dubecq, Chief Engineer, and Olzhas Kairbayev, Project and Research and Development Director

How does KATCO approach innovation?

Olzhas: Our mission is to act as a link between Kazatomprom and Orano for innovation. Kazatomprom has significant experience in ISR technology and Orano is the world leader in the nuclear industry. Our R&D and engineering teams work hand in hand to deliver innovative new solutions to the business.

Nicolas: We are particularly proud of the award that KATCO received from Orano for organisational and managerial innovation in recognition of our innovative design work on the South Tortkuduk project. We also put tremendous effort into reducing our environmental impact and creating new technology for the future of our industry.

What recent projects have had the greatest impact on KATCO’s performance?

Olzhas: Our main initiative was to improve the processing throughput capacity by reducing the size of the treatment medium we use, which resulted in an increase in plant capacity by around 30%. While this had a clear financial impact, it also allows us to treat more flow at the same volume of production. This makes it possible to process lower-concentration uranium and to get closer to recovering the last percent of uranium. By exceeding the 90% recovery factor required by law, we strive to give value to all the uranium in the deposit.

Nicolas: We launched another important innovation project two years ago that is now reaching the industrial level to assess the long-term impact of our activity while we inject a solution and pump it to the surface.

How else have KATCO’s innovation efforts helped to reduce its environmental impact?

Nicolas: For example, we have found a new technology to recycle drilling mud that used to be a waste. Two years ago, we recycled only 30% of the drilling mud. Last year, we recycled 45% and this year we hope to reach up to 60%. This approach creates less waste and saves financial resources.

What are KATCO’s innovation priorities in 2019?

Nicolas: One promising innovation that we are introducing is a Digital Mine project to make our tools communicate with one another. While we currently manually record and enter flow data into a database, we are working to automate this, which is difficult due to the large size of the territory. We are looking into wireless solutions and hopefully, by the end of 2019, we will be able to get all the information from our tools automatically.
REPORTING AND METHODOLOGY
ABOUT THIS CSR REPORT

This Corporate Social Responsibility (CSR) Report for KATCO Kazakh-French Joint Venture LLP (KATCO) has been prepared to provide information about the Company’s activities to meet the expectations of all stakeholders.

This CSR Report reflects the Company’s operational results from 1 January 2017 to 31 December 2018. The previous CSR Report was published in June 2017.

KATCO is committed to disclosing information as effectively as possible. To this end, this CSR Report has been structured based on a judgement of the materiality of the disclosed topics. Materiality implies topics that are important for creating value for the Company, as well as for helping key stakeholders to make decisions. The judgement of materiality helps KATCO to consider the impact of various aspects of the sustainable development of the Company’s business processes and value creation when organising its work.

The judgement of materiality included the following main steps:

Step 1. A wide range of potentially significant topics relevant to the Company’s activities was identified.

Step 2. The topics were discussed with managers and employees of structural divisions to assess the Company’s economic, environmental and social impact.

Step 3. Stakeholders were surveyed to identify their expectations and assess the impact on them of certain aspects of the Company’s activities. The survey included stakeholders who are directly involved in the Company’s activities, such as employees and shareholders, as well as a wider range of stakeholders, including suppliers, partners, government agencies, local and international NGOs, and representatives of the local communities in the towns of Sholakkorgan, Taukent and Tasby.

Step 4. In accordance with the opinions of stakeholders and the Company’s assessment, the topics were placed on the Materiality Matrix presented below. The highest priority was given to those located above and to the right of the blue line on the Matrix. Their disclosure has been given the primary importance in the preparation of this CSR Report.

Materiality Matrix*

1. Occupational health and safety
2. Community involvement
3. Environmental impact
4. Risk management
5. Transparency
6. Employee development
7. Labour relations
8. Procurement
9. Business ethics
10. Research, development and innovation
11. Production efficiency
12. Effluents and waste
13. Managing long-term impacts
14. Biodiversity
15. Uranium transportation

*Topics determined to be material are highlighted yellow
This CSR Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards. In doing so, the most relevant indicators from the Standards have been used to best disclose information about material topics regarding sustainability. While this CSR Report does not fully comply with the GRI Standards, the main approaches and principles for disclosure outlined in the Standards have been used to ensure qualitative disclosure in this CSR Report.

The table below provides the locations in this CSR Report of information about various aspects of sustainability based on disclosure under the GRI Standards.

<table>
<thead>
<tr>
<th>GRI Standard</th>
<th>Indicator</th>
<th>Disclosure</th>
<th>Page in CSR Report</th>
</tr>
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<tbody>
<tr>
<td><strong>GRI 101 (2016): Foundation</strong></td>
<td></td>
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<td><strong>GRI 102 (2016): General disclosures</strong></td>
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<td>102-1 Name of the organisation</td>
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<tr>
<td></td>
<td>102-2 Activities, brands, products and services</td>
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</tr>
<tr>
<td></td>
<td>102-3 Location of headquarters</td>
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</tr>
<tr>
<td></td>
<td>102-4 Location of operations</td>
<td>5</td>
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<td></td>
<td>102-5 Ownership and legal form</td>
<td>6</td>
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<td>102-6 Markets served</td>
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<td></td>
<td>102-7 Scale of the organisation</td>
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</tr>
<tr>
<td></td>
<td>102-8 Information on employees and other workers</td>
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<td>102-9 Supply chain</td>
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<td>102-10 Significant changes to the organisation and its supply chain</td>
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<td>102-11 Precautionary Principle or approach</td>
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<td>102-12 External initiatives</td>
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<td>102-13 Membership of associations</td>
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<td>102-14 Statement from senior decision-maker</td>
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<td>Strategy</td>
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<td>Ethics and integrity</td>
<td>102-16 Values, principles, standards and norms of behaviour</td>
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<td>Governance</td>
<td>102-18 Governance structure</td>
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<td>102-22 Composition of the highest governance body and its committees</td>
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<td>Stakeholder engagement</td>
<td>102-41 Collective bargaining agreements</td>
<td>36</td>
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<td></td>
<td>102-42 Identifying and selecting stakeholders</td>
<td>13</td>
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<td>102-43 Approach to stakeholder engagement</td>
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<td>102-44 Key topics and concerns raised</td>
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<td>Reporting practice</td>
<td>102-46 Defining report content and topic Boundaries</td>
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<td>102-47 List of material topics</td>
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## GRI Standard Indicator Disclosure Page in CSR Report

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<td>GRI content index</td>
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<td>GRI 103 (2016): Management approach</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
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<td>The management approach and its components</td>
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<td>Economic</td>
<td>GRI 201 (2016): Economic performance</td>
<td>201-1</td>
<td>Direct economic value generated and distributed</td>
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<td>GRI 202 (2016): Market presence</td>
<td>202-2</td>
<td>Proportion of senior management hired from the local community</td>
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<td>GRI 203 (2016): Indirect economic impacts</td>
<td>203-1</td>
<td>Infrastructure investments and services supported</td>
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<tr>
<td></td>
<td>GRI 204 (2016): Procurement practices</td>
<td>204-1</td>
<td>Proportion of spending on local suppliers</td>
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<td>Environmental</td>
<td>GRI 302 (2016): Energy</td>
<td>302-1</td>
<td>Energy consumption within the organisation</td>
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<td>GRI 303 (2018): Water and effluents</td>
<td>303-5</td>
<td>Water consumption</td>
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<td>GRI 305 (2016): Emissions</td>
<td>305-1</td>
<td>Direct (Scope 1) GHG emissions</td>
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<td>GRI 306 (2016): Effluents and waste</td>
<td>306-2</td>
<td>Total weight of hazardous waste, with a breakdown by disposal method</td>
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<td>Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations</td>
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<td>GRI 402 (2016): Labour/management relations</td>
<td>402-1</td>
<td>Minimum notice periods regarding operational changes</td>
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<td>GRI 403 (2018): Occupational health and safety</td>
<td>403-1</td>
<td>Occupational health and safety management system</td>
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<td></td>
<td></td>
<td>Prevention and mitigation of occupational health and safety impacts directly linked by business relationships</td>
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<td>Work-related injuries</td>
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<td>GRI 404 (2016): Training and education</td>
<td>404-1</td>
<td>Average hours of training per year per employee</td>
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<td>Programmes for upgrading employee skills and transition assistance programmes</td>
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<td></td>
<td>GRI 405 (2016): Diversity and equal opportunity</td>
<td>405-1</td>
<td>Diversity of governance bodies</td>
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