

ERDENES MONGOL ASPIRES TO WORLD STAGE





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It is time to accelerate



EDITOR-IN-CHIEF
Bekhbayar.D

The October issue is brought to our readers by Erdenes Mongol LLC and Mongolian Economy Magazine.

This special issue covers various topics such as how Erdenes Mongol LLC, a company with around 10 years of history, achieved their ambitious goals, the current stage of the business cycle, legal framework and human resources management. In other words, this issue attempts to shed light on their vision and goal in order to show where Erdenes Mongol LLC is heading.

Its executives consider Erdenes Mongol as a company of all Mongolians. Hence, the public needs to know about policies, operations and ongoing projects of the company. Likewise, as it is a state-owned company, our policymakers need to have sufficient information and knowledge to be able to provide their support to the company.

As of today, Erdenes Mongol has 13 subsidiaries and affiliated companies with over 2,000 employees. Erdenes Mongol is a holding company that brings a major mining project in Mongolia together and closely collaborates with the world's leading mining companies. Over the course of 10 years, the lessons from past mistakes and vast professional experience allowed them to set the foundation for creating an internationally competitive organization and competent workforce.

It is time to accelerate. In other words,

it is the time to commence the large-scale projects, accumulate earnings and expand funding sources for the sovereign wealth fund. Thereby, the government has to ensure a sound legal environment and regulatory framework necessary for achieving these goals.

Erdenes Mongol, a holding company aiming for global expansion, has proposed to enact a law solely directed to their operations. It is not an ordinary state-owned company but a holding company joining major projects that are directed to the global market, managing assets of various stakeholders and fostering the development of Mongolia.

Policymakers have to shift their perception of Erdenes Mongol as a mere state-owned company so they could provide sufficient support through policy. They must know that Erdenes Mongol is a company that keeps up with global standards and pace and represents Mongolia in the global market.

Recently, the representatives of the Standing Committee on State Budget of the Parliament, made a visit to Erdenes Mongol to learn about their policy, operations and projects. The visit carried significant importance to both parties. Members of the Parliament can provide adequate support only if they have accurate information about the company. Furthermore, the media bears the responsibility of providing the public with accurate and reliable information. ■

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Deposits under the ownership of Erdenes Mongol LLC

STRATEGIC DEPOSITS

ASGAT	TAVAN TOLGOI
6.4	7.4
million tons	billion tons coking coal
BAGANUUR	OYU TOLGOI
812	44.4
million tons of coal	million tons of copper
SHIVEE-OVOO	1903
617	tons of gold
million tons of coal	

Deposits transferred to Erdenes Mongol LLC's ownership

Dundgovi: Salkhit

Expected to be transferred

BAYANKHONGOR:	UMNUGOVI:
Dorjoot Khyar	Ovoot Khyar
Khalzan	Ulziit-Ovoo
Khuren Tsav	
Mukhar Kher Tolgoi	



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/Хүүхдийн 100/
- Наран Плаза 2-р давхарт
/Энхтайваны гүүрний
баруун талд/

TRAVEL WORLD SHOP NARAN

- Наран Плэйс 2-р давхарт
/13-р хорооллын дунд зам/
- Наран Пойнт 1-р давхарт
/Засгийн газрын ордны
баруун хойно/

SAMSONITE BOUTIQUE

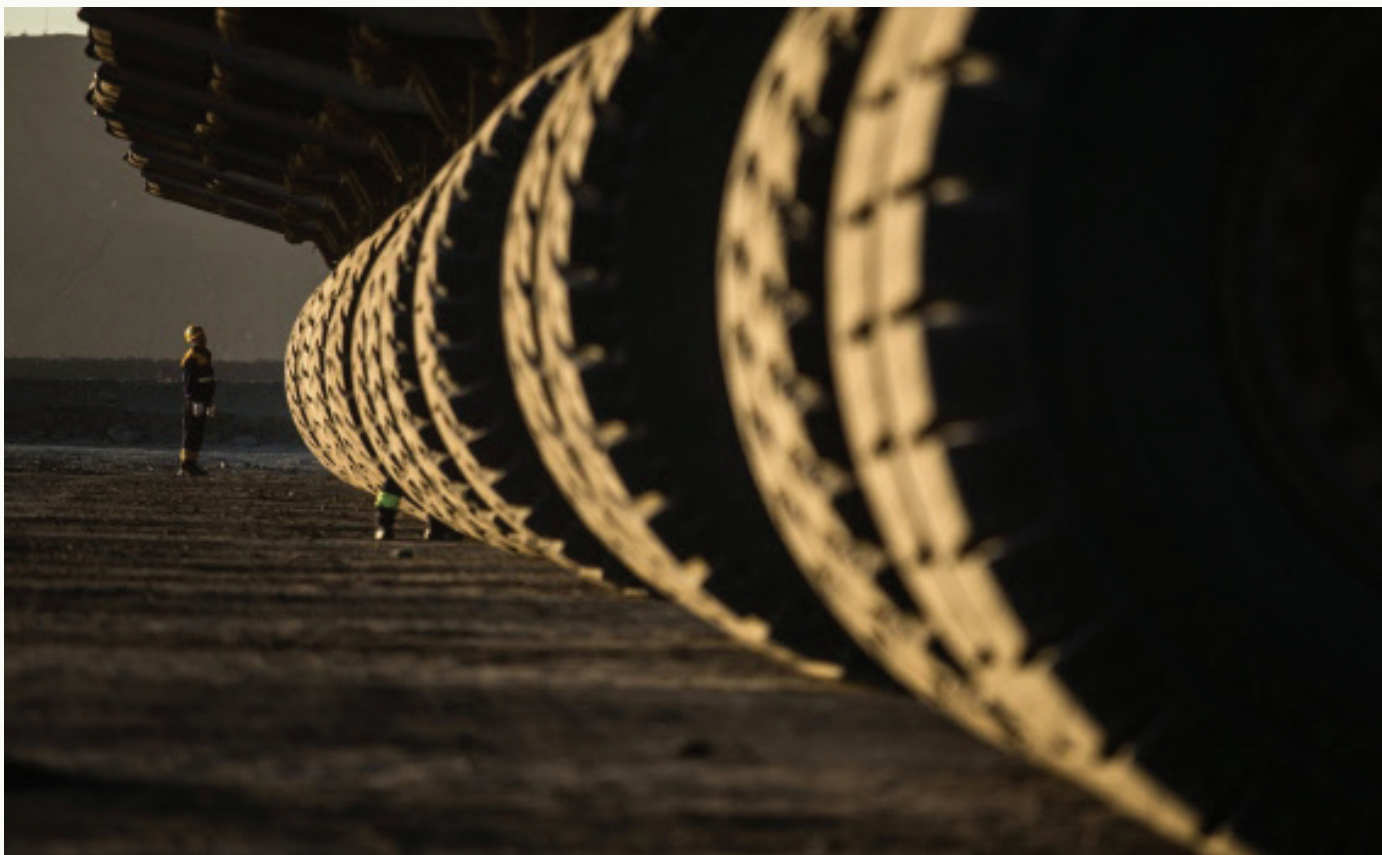
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Outlook

Erdenes Mongol aspires to world stage



According to Mongolia's long-term policy document "Vision 2050", the mining sector is envisioned to play a major role in doubling the GDP per capita to 8,299 USD over the next 10 years. In order to achieve the long-term goals set out in the Vision 2050, the plans to commence several large-scale projects were included in the Government's Action Program for 2020-2024.

Economic outlook for next four years will be determined whether Mongolia could continue copper and coal projects, capitalize on the Asgat Silver Deposit, expand the Baganuur and Shivee-Ovoo coal mines to increase its operational efficiency, exploit the full potential of Salkhit Silver Deposit, attract further investments for rare-earth element exploration

and construct copper smelting and precious metal refining plant.

We cannot start addressing long-term development policies or economic diversification before implementing the high-yield projects in the short run. Fortunately, after the parliamentary election of 2020, the governance stability and legacy of policies were ensured which presents an excellent opportunity for debt-ridden Mongolia.

The Vision 2050 aims to make Mongolia a country with accumulated wealth and to solve social issues such as unemployment and poverty. In the Vision 2050, the GDP growth, average salary and employment rates were projected in two different ways, with and without reflecting the upcoming projects. With the current pace, GDP is expected to reach 22.6 billion USD by 2030. If the ►

- major mining and infrastructure projects are successfully implemented then the GDP could reach 24.6 billion USD by 2030 and economic growth would be considerably higher.

In terms of scale, all projects at their the extraction phase, cannot come close to Oyu Tolgoi and Tavan Tolgoi mine projects. Owing to Oyu Tolgoi's copper and Tavan Tolgoi's coal which are main sources of government revenue, we have been able maintain foreign currency flow. At the moment, Erdenes Mongol has a number of projects that have a potential to become the next revenue source requires investments.

As of today, Erdenes Mongol has 13 subsidiaries and affiliated companies and four project units. The company has been mainly focused on copper, coal, uranium, natural gas, oil, rare earth elements, precious metals exploration and in exporting value-added products.

Since it was established in 2007, the company has gone through a long difficult journey. In the past, the company made few missteps in capitalizing on natural resources, controlling and managing the state shares, leading mega-projects and balancing the interests of the various stakeholders. But the lesson learned from past failures made the company more immune and became a motivation to step into the global market.

The company has made significant progress in recent years. Erdenes Mongol LLC is working to reduce their debt burden, improve their performance indicators, make their operations more transparent and pursue a strategy that is in line with the country's medium and long-term development policies. B.Batmagnai, Director of Asset Management at Erdenes Mongol LLC, said, "In terms of financial performance, total assets and profitability have increased dramatically at the group level in recent years. According to the financial statement of 2019, the total assets reached USD 5.78 billion." In order to attract investments for large projects and improve its operations, financial statements have been audited by an international auditing firm since 2014. Furthermore, two years ago, BDO, a multinational audit and advisory firm, value Erdenes Mongol LLC's assets at 15.7 trillion MNT and gave a credit rating of B3.

Currently, Oyu Tolgoi, Tavan Tolgoi, Baganuur and Shivee-Ovoo are the only mines that are steadily operating. In terms of production capacity, these

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[Mukhar Kher Tolgoi](#)

UMNUGOVI:

[Ovoot Khyar](#)

[Ulziit-Ovoo](#)

mines produce and export 700,000 to 800,000 tons of copper concentrate and 15 to 20 million tons of coking coal per year, while supplying six million tons of lignite for domestic consumption. They are the mines that are yielding benefits for the country. However, with regard to the Baganuur and Shivee-Ovoo mines, the mines need to put the winter preparation in place, renew equipment and technology to increase production capacity and reduce costs. Therefore, we are working with the Ministry of Finance to use the ►

- ▶ loan provided by the Japan Bank for International Cooperation (JBIC) in addressing the aforementioned needs.

The rest of the projects are in their early stage, conducting feasibility studies and looking for investors. The uranium exploration, the Salkhit Silver

Deposit, the Tavan Tolgoi coal-bed methane, the Gashuun Sukhait Road and Minerals Exchange projects are successfully moving forward.

In the past, the company was mainly focused on copper and coal, but since recently they began putting our attention on diversifying our mineral portfolio. The equitable distribution of mineral resources to the people has always been the main goal of the mining sector. Bearing this in mind, the dividends on 1,072 shares of Erdenes Tavan Tolgoi was paid to

citizens this year. Moreover, the production at the Salkhit Silver Deposit fostered the development of the country which can be seen as an indirect distribution of wealth to citizens.

The feasibility study for the Gold Refinery Plant, which aims to increase the country's foreign exchange reserves and foster the gold industry, has been completed

exported to China and to countries in Asia.

Another project that aims to add value is the production of coke and steel project implemented under a general cooperation agreement with Sinosteel Corporation. The plant will be located in Dornogovi Aimag.

The feasibility study for the Gold Refinery Plant which aims to increase the country's foreign exchange reserves and foster the gold industry has been completed. At the moment, the company is negotiating an investment deal for the gold refinery plant with a capacity of producing 50 tons of gold per year. In terms of state shares, the investments will be discussed at the government level.

Mongolia's copper production is expected to increase in the next few years. Currently, 1.4 million tons of copper is produced and exported annually from Erdenet and Oyu Tolgoi mines. By exploiting Oyu Tolgoi underground mine and Tsagaan Suvarga copper deposit, copper production is estimated to increase to four million tons per year. Thus, the Ministry of Mining and Heavy Industry of Mongolia approved the feasibility study, solved infrastructure challenges and accelerated the construction of the copper smelting plant with a capacity of processing one million tons of concentrate and producing 257,000 tons of cathode copper, 5.8 tons of gold per year. The projects at the subsidiaries and affiliated companies of Erdenes Mongol LLC require investments of at least 300 to 400 million USD.

In addition to the government support and guarantee, political stability and corporate governance are critical for launching socially and economically significant mining and infrastructure projects and attracting foreign investments. In fact, international investors demand to keep politics out of business. Due to high political risks, Mongolia is lagging behind other countries in terms of competitiveness and business environment.

It is impossible to achieve the country's medium and long-term development goals without separating our politics from business. A long-term stable investment is vital for any large-scale projects that could benefit Mongolia. Hence, investor's rights, interests and safety of their assets must be ensured at all levels. That is the only pathway to strengthen the "immunity" of Mongolian companies stepping into the global market. ■



One of the largest value-added export projects is the Shivee Energy Complex Project, a power plant with an annual capacity of 5,280 MW based on the Shivee-Ovoo Coal Deposit. This project which will require total investments of 7.1 billion USD is being implemented in partnership with State Grid Corporation of China. This project will allow us to convert our lignite into electricity which can be

In numbers

ERDENES MONGOL LLC

(Second quarter of 2020)



**Subsidiaries
and affiliated
companies**

13

**Project
units**

4



Responsible mining index

Decision-making



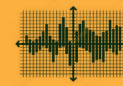
92%

Implementation



92%

Monitoring



80%

Social responsibility

▼ Suppliers

1122
enterprises

50
citizens

▼ Local procurement

(2017-2019)

57.4
billion MNT

▼ Investments to local development projects

(2017-2019)

974.3
billion MNT

Expected investments (USD)

Shivee-Ovoo power plant with an
installed capacity of 5280 MW

7.1 billion

Tavan Tolgoi Power Plant

1 billion

Coke and steel plant

320 million

Renewal and extension of Baganuur
coal mine

178.5 million

Asgat Silver Deposit

127 million

Renewal of Shivee-Ovoo coal mining
equipment

120 million

Mineral commodity exchange

10 million

Production volume (tons)

Copper
concentrate

700-800
thousand

Silver
concentrate

600
thousand

Coking
coal

15-20
million

Energy
coal

6.0
million

Transported
coal

18
million

Source: Erdenes Mongol LLC

Sovereign Wealth Fund

Development selection



In Mongolia, part of government revenue is being transferred to the Future Heritage Fund, a savings fund, and Fiscal Stability Fund, a stabilization fund

In physics, if you pour six litres of water into a five litre container, you will spill the excess. On the contrary, in economics, an excess can be contained. There are many countries that utilize their surplus revenue to foster their development. Hence, a country with abundant natural resources like Mongolia needs to manage their surplus revenue wisely and to avoid Dutch disease or resource curse. One way to do this is by creating a sovereign wealth fund.

Since the 1950s, Norway has been capitalizing on its abundant oil reserves. On the other hand, the economy was becoming more and more dependent on natural resources and vulnerable to commodity prices in the global market. In order to save surplus revenue, the Parliament of Norway established a pension fund in 1967. Despite that, Norway was still experiencing symptoms of

Dutch disease. To ease the symptoms, the Norwegian Parliament took a different approach by establishing another pension fund, the Norway Pension Fund Global, to invest mainly in foreign markets. The fund was designed to invest in high-yield real estates and securities issued by foreign governments, banks and companies. As of today, the Norway Pension Fund Global has over 1.1 trillion USD in assets making it the largest sovereign wealth fund in the world. This is how Norway found the right solution to manage natural resources after going through tough challenges over the course of 40 years. The Governance model of the Norway Pension Fund Global, ensures the equitable distribution of wealth and is considered to be the most advanced model in the world.

To overcome challenges presented during the transition to a market economy, Mongolia had to rely heavily on the mining sector. Later on, to reduce the dependency on the mining sector, the Government made several attempts to create sovereign wealth funds. In that respect, our authorities have been

► visiting Norway to learn more about their successful sovereign wealth fund. Unfortunately, we have failed to establish a fund that could come close to the Norway Pension Fund Global. Even to this day, the economy of Mongolia is depending on the price cycles of raw materials. Moreover, government spending increases when revenues increase following higher commodity prices in the global market.

In short, Mongolia is still struggling to turn the surplus revenue derived from the mining sector into advantage. In the past, the Government has only been transferring cash as means of allocating wealth derived from natural resources. This measure has been elevating the consumer prices instead of improving the living standards. The central bank misses its inflation target due to Government decisions to inject the economy with cash. No wonder why people are furious and economists are critical of the soaring debt of Mongolia regardless of abundant natural resources.

Selection result

Currently, there are 122 sovereign wealth funds around the world. The total assets of these funds amount to 27 trillion USD which is 1.2 times larger than the US economy or 1.9 times than China's economy. The majority is funded by revenue from natural resources and the rest by foreign reserves which are used for long term high-yield investments. Countries with limited natural resources like Singapore invest their foreign reserves to achieve high long-term returns.

Depending on the nature and purpose, a sovereign wealth fund is classified into a stabilization fund, savings fund, reserve investment fund and development fund. Stabilization funds are set up to prevent the budget from commodity price volatility. When the commodity prices are high, excess revenues are saved which is later transferred back if prices fall. Reserve investment funds are established to increase the return on reserves by investing in securities and other assets. Savings funds are designed to save wealth for the future generation. Development funds are created to allocate funds to socio-economic projects such as poverty reduction, infrastructure and economic diversification.

In Mongolia, part of government revenue is being transferred to the Future Heritage Fund, a savings fund, and Fiscal Stability Fund, a stabilization fund. The Law on Future Heritage Fund was adopted in 2016 to save a portion of our resource wealth for the

Top 10 largest sovereign wealth funds in the world

Norway Government Pension Fund Global	\$1.1 trillion
China Investment Corporation	\$1.04 trillion
Abu Dhabi Investment Authority	\$579.6 billion
Kuwait Investment Authority	\$533.6 billion
Hong Kong Monetary Authority Investment Portfolio	\$528 billion
GIC Private Limited	\$453.2 billion
Temasek Holdings	\$417.3 billion
Public Investment Fund	\$390 billion
National Council for Social Security Fund	\$324.9 billion
Investment Corporation of Dubai	\$305.2 billion

Source: www.swfinstitute.org

future. With regard to the Fiscal Stability Fund, it allows the Government to set aside surplus revenue derived from exporting mining products for times of revenue shortfall. As of 2020, the assets of two funds amount to 1.1 trillion MNT. Under the law, the state central administrative body has the right to manage these funds.

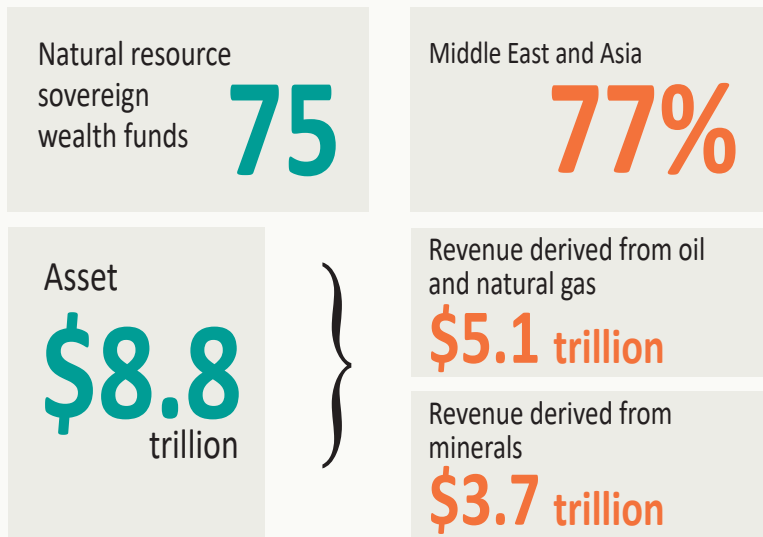
In theory, Mongolia can create a sovereign wealth fund as many as they want. However, the two previously mentioned funds are not established to ensure equal distribution of resource wealth to every citizen. This can be ensured by development funds.

Turning point

This year, Mongolia made progress in managing the natural resource and its revenues by including a provision on the wealth fund in the Constitution of Mongolia and long term development policy "Vision 2050". The next sovereign wealth fund will be a development fund which is mainly sourced by royalties on mineral deposits. Furthermore, under Vision 2050, the Government has drawn a development plan for the upcoming 30 years which is going to be reflected in the fund management. According to the Government Action Program for 2020-2024, a fair and equal allocation of resource wealth will be ensured through a sovereign wealth fund.

The Government of Mongolia is encountering numerous challenges in achieving the aforementioned ►

Mongolia is still struggling to turn the surplus revenue derived from the mining sector into advantage



- development goals. Under this condition, both private and public bodies are struggling to create jobs and support income of citizens. Mongolia, a country with vast land, has poor infrastructure that worsens the gap between urban and rural areas.

If Mongolia could get the full benefit of ambitious projects in the mining sector, it could enhance regional development and job creation. The development of the Gobi region where Oyu Tolgoi and Tavan Tolgoi mines are located can be given as an example. The Government can boost the development and economic

recovery of regions but should not repeat the same mistakes made in 2012 and 2016. It must be borne in mind that citizens demand new jobs or opportunities to start their businesses rather than cash transfers.

The fact that newly appointed Parliament and Government are willing to maintain the legacy of previous authorities gives us a stronger hope that this time we might actually succeed in establishing an effective

sovereign wealth fund. The only concern is whether the sovereign wealth fund will be managed by a politically independent corporation.

In the Parliamentary Resolution No.2 on measures following the new amendments to the Constitution

of Mongolia, it is stipulated that a sovereign wealth fund shall be managed independently and is subject to public monitoring. Adoption of law on sovereign wealth funds which reflects international best practices could lay the foundation for effective management of the wealth fund.

In other words, under the Vision 2050, Mongolia will become a shareholder of globally leading companies and banks in the next 10 years. Then between 2030 to 2040, the Government will ensure a safe and healthy living environment by investing in domestic projects on energy, infrastructure, transportation, water management and communication. If the wealth fund can become a globally recognized sovereign wealth as described in the Vision 2050 within 30 years, then Mongolian citizens will be able to receive dividends on their preferred shares.

Under the law, Erdenes Mongol LLC bears the obligation to generate revenues that will be accumulated in a sovereign wealth fund. The company holds special licenses on deposits that are classified as strategic in the Parliamentary Resolution of 2006. According to the Prime Minister's order dated November 2019, the operations of Erdenes Mongol LLC must be directed to generating revenue for sovereign wealth funds and in relation to it, necessary rules and regulations must be formulated. In short, Erdenes Mongol LLC will be held responsible for revenue accumulation to the sovereign wealth fund whereas the Government will take over fund management.

Meanwhile, for citizens, sovereign wealth funds have become a topic that falls on deaf ears. However, there is still hope that Mongolia might succeed this time if we could reflect international principles in the law on a sovereign wealth fund. The Santiago Principles is the formulation of principles and practices on sovereign wealth funds around the world. In 2007, the International Monetary Fund coordinated an in-depth research on the effects of sovereign wealth funds on the economy and formulated 24 generally accepted principles. The International Working Group of Sovereign Wealth Funds that consisted of 26 member countries with largest sovereign wealth funds agreed on the Santiago Principles in 2008. They defined a sovereign wealth fund as a special purpose investment fund that is owned by the general government. ►

If we incorporate the Santiago Principles in the law, then we will have a transparent, independent and sound governance structure for management of the wealth fund in place

► The Law on sovereign wealth funds was set as the 16th agenda for the first parliamentary session in Mongolia. If the Parliament decides to become a full member and to incorporate the Santiago Principles in the law, then we will have a transparent, independent and sound governance structure for management of the wealth fund in place. Mongolia has set out an

objective to increase the middle class population to 80 percent of total population. A sovereign wealth fund will play a key role in achieving this objective.

Hope that the underground wealth will drive the development of Mongolia rather than dragging Mongolia into an unfortunate fate depicted in the movie “Blood Diamond” starring Leonardo Dicaprio. ■

LEGAL FRAMEWORK FOR SOVEREIGN WEALTH FUND

1. ARTICLE 6.2 OF CONSTITUTION OF MONGOLIA

The government policy on the use of natural resources shall be based on long-term considerations while ensuring the right to live in a healthy and safe environment for present and future generations. To ensure equal and fair distribution of wealth, the revenue derived from natural resources shall be accumulated in the Sovereign wealth fund.

2. THE PARLIAMENTARY RESOLUTION NO.2 ON MEASURES FOLLOWING THE NEW AMENDMENTS TO THE CONSTITUTION OF MONGOLIA

1.1.2 Sovereign wealth funds will be savings and development funds. The income to the funds will consist of the revenue from mining activities including royalties deriving from the use of in strategic deposits, sale of shares held by the state, production sharing contracts on natural gas and oil, dividends from shares held by the state and net profits derived from its investments.

1.1.3 An investment management corporation must manage the fund independently, establish

good corporate and fund governance and ensure appropriate conditions for public monitoring. The corporation must follow principles of equality and fairness in distributing wealth for current and future generations and dividends on preferred shares.

3. LONG TERM DEVELOPMENT POLICY “VISION 2050”

Creating an internationally recognized wealth fund capable of supporting economic diversification, innovation, new technology, human and green development goals.

- *1st stage (2020-2030): Investing in projects with high returns*
- *2nd stage (2031-2040): Financing socio-economic goals*
- *3rd stage (2041-2050): Becoming internationally recognized sovereign wealth fund*

4. THE GOVERNMENT PROGRAM FOR 2020-2024

3.2.9 Enforcing amendments to the Constitution of Mongolia and ensuring equal and fair distribution of natural wealth to citizens through a sovereign wealth fund.

Development

P.Gankhuu: We are developing Erdenes Mongol in cooperation with various stakeholders



Mongolian Economy Magazine spoke with P.Gankhuu, CEO of Erdenes Mongol LLC.

-Erdenes Mongol LLC is a holding company that brings the largest mining projects altogether. How should we view Erdenes Mongol LLC?

-Erdenes Mongol LLC was established in 2007 to represent the Government of Mongolia in developing the strategically important mineral deposits and making state investment more efficient. It is a Mongolian people's company. In fact, the government's decision to issue a preferential share to each citizen was made already. As it is the People's company to serve the public, our company bears a unique responsibility to work as a fair and transparent economic mechanism in ensuring equal and inclusive distribution of natural wealth. As you said, Erdenes Mongol LLC also can be viewed as a holding company combining major mining projects under its management to develop them efficiently and beneficially.

-I believe that Erdenes Mongol LLC has become the face of Mongolia. How is Erdenes Mongol connecting to the world? How does your operation affect regional development, especially in Northeast Asia?

-In the past, we focused on moving certain large projects in the mining sector forward. The years passed were marked by success, challenge, and struggle to initiate and implement the Oyu Tolgoi and Tavan Tolgoi projects, resolve problems associated with them, and remove the deadlocks and eventually "raise" those two. The company has also been putting extra weight on attracting foreign investments to ensure those projects' continuity.

Without a doubt, Erdenes Mongol LLC must actively engage in regional cooperation. Indeed, we have several projects in different areas that involve major regional players. For instance, our Shivee Energy Complex Project, whose goal is to build a large scale power plant that supplies energy to domestic and foreign markets such as the Northeast Chinese market, is ready to kickstart as its feasibility study is completed. We are cooperating with the State ►

- Grid Corporation of China on the implementation of the abovementioned project.

Mongolia is rich in renewable energy resources. Thus, Erdenes Mongol LLC is participating in regional cooperation on renewable power generation and net exports of green energy. In 2019, we signed a memorandum of cooperation with Rosneft Oil Company of the Russian Federation in this area.

Mongolia must strive to become part of the international production network by supplying value-added products. This means we aim to produce final or intermediate or semi-finished products to the international production network or global supply chain, revitalizing our manufacturing sector.

-Is there any potential with this regard for Mongolia?

-If we process our minerals and supply to the international production network, there are many opportunities. For instance, there is an avenue to the Northeast Asian supply chain by producing value-added export components. Getting involved in one or some parts of the production network's value-adding process could generate 'wealth making' businesses. When a final product has 100 components or parts, we may need to produce at least 1 or 2 components. We must aim for this.

Activated charcoal is required for car air filters of many types. Let us process our coal and take part in the production network. The processing of coal is finished with coking coal in Mongolia. Yes, we produce a bit of steel from our iron ore, but at a nominal volume. It is time to process our minerals to the next level and produce intermediate or final goods.

We need to produce value-added to effectively take advantage of the global network and utilize our mineral and agricultural resources. In other words, Mongolia has tremendous potential for exporting value-added products such as refined minerals to facilitate regional development and cooperation.

-Erdenes Mongol LLC is an asset management company. Do you think the capability of human resources and the organizational structure are up to the level that you expected?

-In Mongolia, quite a few professionals are working in private asset management companies, raising funds in domestic and international markets, and generating high returns. I could say we are moving in that direction. Our focus is to create a structure and environment that improves accountability and

productivity. You know only people with professional experience and skills can responsibly manage assets when the stakes are high. The precondition to manage assets is to have assets. To manage assets, Erdenes Mongol LLC needs to have assets. When it was founded, the company set objectives such as securing assets, acquiring talents, and becoming a holding enterprise. But the most important objective of securing assets was stalled. Without assets, there is no point to have an ambitious goal. A mining company can compete in the domestic and international markets only when it has licenses and fields.

In the past two years, the Prime Minister of Mongolia has given massive support to Erdenes Mongol LLC by granting special licenses on deposits and transferring several other companies' shares. This enabled us to implement the next level policy. Hence, we could talk about how to manage our assets. The next question, who should manage the assets, arose subsequently. The capacity of our human resources has reached a certain level. One in every four employees is equipped with skills and education that no other state-owned companies have ever had. We have professionals who graduated from foreign and national universities, specializing in asset management, international finance, human resources management, and those gained valuable experience by taking part in the implementation of major projects. However, we still have limited resources, I would say. The main challenge now is to build capacity. We need headhunting and recruit talents and train our staff to strengthen our capacity. The talent pool was limited before. But now, many young professionals are working at the international level, and there are opportunities for them to work at our company to challenge themselves and devote their knowledge and skills to serving their home country.

Erdenes Mongol LLC is collaborating with Rio Tinto, one of the leading mining companies globally, Orano, one of the world's largest uranium producers, and the State Grid Corporation of China, which operates roughly 90 percent of China's electricity grids. We also work with Oyu Tolgoi LLC with the latest technologies for an underground mine. Recently, we extended our global cooperation to Gazprom, the ►

Erdenes Mongol LLC is collaborating with the world's leading mining companies such as Rio Tinto, Orano, and the State Grid Corporation of China

► largest natural gas producer in the world. Thus, to work with these giants, we need to address issues concerning our human resources. Both domestic and international cooperation will play a critical role in capitalizing on our mineral resources.

We have subsidiaries implementing diverse projects such as gold, silver, copper, iron ore, rare earth elements, natural gas, and methane projects. The participants in those projects are international companies too. Therefore, Erdenes Mongol LLC must manage and balance its various stakeholders' interests, including multinational companies, domestic and foreign investors, and regional partners. Taking up a leadership role and working at Erdenes Mongol LLC means great responsibility and, at the same time, tremendous opportunity.

-How is Erdenes Mongol LLC recognized globally? Everyone knows Singapore's Temasek, Kazakhstan's Samruk Kazyna, Russian Gazprom, and French Areva.

-The first messages reached the global audience for sure. Our company's name is circulated among and known to government officials, investors, and executives, at a higher level, in the world mining sector as Erdenes Mongol representing Mongolia on Ouy Tolgoi project with Rio Tinto, on the joint project with French counterpart Orana, and the pipeline

project with Gazprom.

It is a privilege to be selected in global level projects. The gas pipeline project is a regional project, as you know. The directors of Gazprom told us 'Erdenes Mongol is the largest holding company in Mongolia. We are happy that your company is selected. You are also lucky because we are number one in the world. We are pleased to work with you'. These words define us and, at the same time, accentuate our responsibility. It is worth noting that we are cooperating with large Japanese, Korean, and Chinese corporations in energy and renewable energy projects.

-What projects are being prioritized at the moment?

-The top priority is given to the projects that could deliver high yields in the short run. The projects were prioritized upon evidence based financial and economic analysis and grouped into short and long term projects.

However, the global economy is facing unprecedented uncertainty due to the COVID-19 pandemic. As a result, investors are taking extra caution when investing.

The risk-averse projects with high yields are gold and silver projects. For the last seven years, the price of gold has been steadily increasing. The initial ►



The board of Erdenes Mongol LLC is visiting Baganuur mine. 2020.10 cap

► required investment as not as high as other mineral projects, and the payback period is shorter. Hence, we are working on starting with gold and silver projects to increase our financial capacity and invest in other projects. As of today, Erdenes Mongol LLC possesses six gold and four silver deposit licenses. In today's environment, it isn't easy to start projects which require huge investment and takes time to generate a revenue stream.

-Around 70 percent of your operations are directed to future projects. How are you preparing for the implementation of upcoming projects?

-At this stage, our main goal is crystal clear, to raise funding for our projects. Due to our domestic financial market limitation, Erdenes Mongol LLC has no choice but to seek and raise fundings from international markets. We are working on the preparation. First, we need to meet the requirements set by foreign stock exchanges. For instance, the company must provide a transparent financial statement that is audited by international auditing firms and to ensure good governance.

The consolidated financial statement of Erdenes Mongol LLC has been audited by globally renowned financial services firms in the last three to four years. In terms of good corporate governance, we are implementing the ADB's project on strengthening institutional framework and management capacity. These are for strengthening Erdenes Mongol's market credibility to raise external funds for our projects.

-Russia and Mongolia signed an agreement on building a gas pipeline that will run through Mongolia. The gas pipeline will open up new opportunities and bring advantages for Mongolia and the region. What is your take on the gas pipeline project?

-In the last 100 years of history, Mongolia signed two agreements on the largest infrastructure development projects. Marshal Kh.Choibalsan, the former Prime minister of the Mongolian People's Republic, signed the first agreement on Ulaanbaatar Railway in 1946. The Ulaanbaatar Railway that crosses through three countries was designed to facilitate regional integration.

Prime Minister U.Khurelsukh signed the second agreement on Mongolia's participation in the Power of Siberia 2 pipeline mega-project in 2019. As a result, the gas trunklines will run through Mongolia's



Within the framework of the gas pipeline project, Russia and Mongolia have signed a memorandum of intent to set up a special-purpose company in Mongolia for conducting a feasibility study (August 25, 2020).



Erdenes Mongol LLC signed a memorandum of strategic partnership and cooperation with UK UZTM-KARTEX LLC, a company based in Russia.

territory. It was, indeed, a historical event.

In the early 1990s, it was a dream to build a Trans-Mongolian pipeline. In the 2000s, we expressed our interest and pleaded multiple times to the Russian government in getting a gas pipeline across Mongolia, stating its cost-effectiveness and the shortest distance of exporting gas to China. This dream is about to come true soon, finally.

Certainly, the gas pipeline project will take a long time to be completed. Hence, we must commence the project as early as possible to turn our dream into reality. ■

Rare earth metals

Does Mongolia need rare earth elements?

Even though rare earth elements are called “rare”, they are more abundant than gold or silver in the earth’s crust. Countries around the world are crossing swords over one of a set of seventeen chemical elements in the periodic table.

Rare earth elements which are the main components of cutting-edge technologies of the 21st century are named rare as the elements are often found together and require intricate separation processes.

The processing technology for rare earth elements (REE) varies depending on the mineral content such as bastnaesite, monazite, apatite, xenotime. REE contains radioactive elements, uranium and thorium but has a wide range of applications including defense, health and even space exploration. Moreover, REEs are necessary components for our inseparable companion - phones, portable devices and electric cars.

Soaring consumption of REE is driven by industrial progress and demand for environmentally

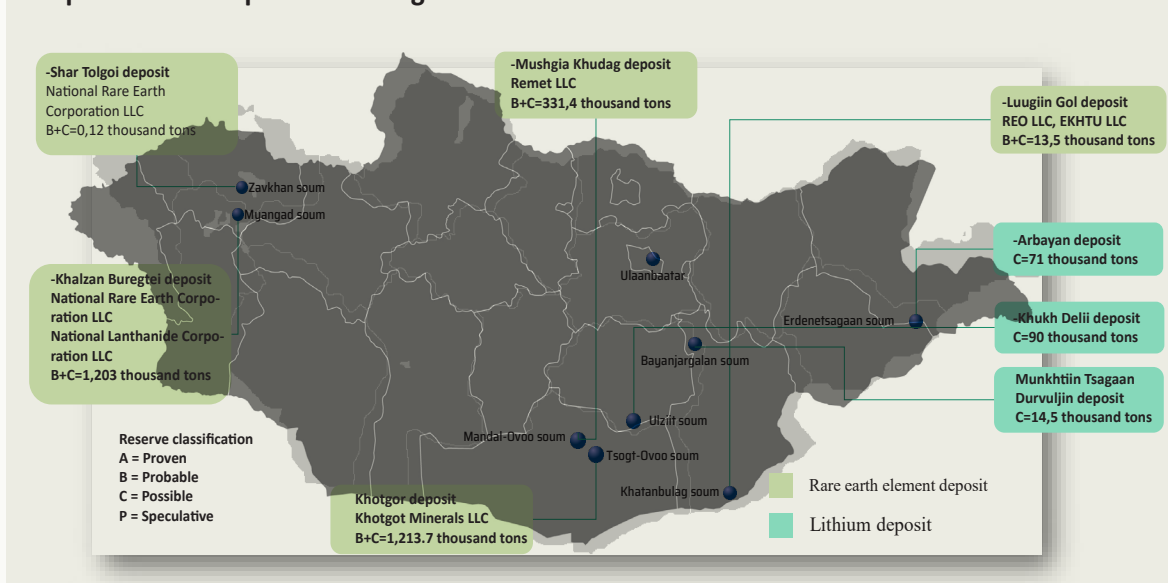
friendly technologies. Since the 1990s, China has been a dominant player in the rare earth industry producing 97 percent of the global demand but gradually losing its competitive advantage.

In 2019, China produced 130,000 tons of the total global production of REE which in total amounted to 210,000 tons. The largest manufacturing countries such as member states of the European Union, the United States and Japan have been making considerable efforts in reducing dependency on China.

In Mongolia, there are four REE deposits: Mushgai Khudag Deposit in Umnugovi Aimag, Lugiin Gol Deposit in Dornogovi Aimag, Khotgor Deposit in Umnugovi Aimag and Khalzan Buregtei Deposit in Khovd Aimag.

For instance, Lugiin Gol, Mushgai Khudag and Khotgor deposits mainly have light REEs. Demand for elements used in renewable energy, electric car and magnet manufacturing such as neodymium and ►

Graphic on REE deposits in Mongolia



► praseodymium is growing. The REE deposits in Mongolia have high contents of such elements.

Yttrium is the main element found in the Khalzan Buregtei Deposit which has the largest REE reserves. A.Temuujin, the head of the Rare Earth Element Research Project Unit of Erdenes Mongol LLC, pointed out that the demand for yttrium which requires complicated processing has recently dropped.

China extracts rare earth elements during iron ore production which makes it less costly to produce. Hence, exploit niobium, tantalum and zircon from the Khalzan Buregtei Deposit and then extract REE from the waste products.

The Lugiin Gol Deposit is the most intensely studied deposit in Mongolia and has REEs with the highest content. Unfortunately, scientists claim that the deposit does not have enough reserve for production.

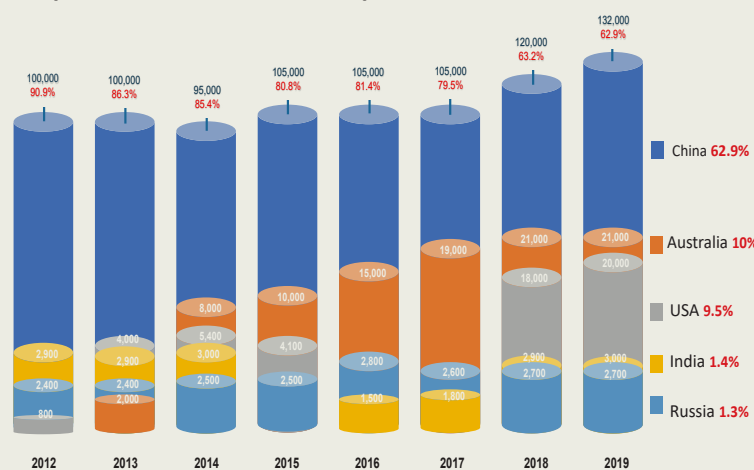
Mongolia is estimated to have three million tons of REE reserves. A.Khaumdas, a professor and a project consultant for the REE project at Erdenes Mongol LLC, emphasized the need for further studies on REE deposits, exploration and production experiments. To set this into motion, the Government has to closely cooperate with the private sector. However, the special licenses on those REE deposits are held by private companies who refuse to collaborate with the Government or use the license as collateral for loans. At the moment, three out of eight licenses are held by banks as collateral.

To acquire an exploration and exploitation license on REE, the project must be introduced to the National Security Council of Mongolia and approved at the Cabinet session. The reason for strict requirements is that REEs are classified as radioactive elements in the Nuclear Energy Law. Therefore, experts suggest revising the classification and related laws on REEs.

Deposits of REEs are found in only a few locations. Furthermore, REEs are exploited and processed in a few technologically advanced countries. Thus, many countries include REEs in the list of strategically important minerals.

The Rare Earth Element Research Project Unit of Erdenes Mongol LLC has submitted a proposal addressing the necessity of formulating a national policy on REEs to the Ministry of Mining and Heavy Industry. Currently, the Rare Earth Element Research Project Unit is burning the midnight oil to acquire an exploration license before 2021. This will allow

Graphic on Rare earth metal producers (tn oxide)



Graphic on REE usage by type

A rare-earth element is one of a set of seventeen chemical elements specifically the fifteen lanthanides, as well as scandium and yttrium.[2]



MAGNETS

Motor, generator, microphone, speaker, MRI, space communication, sonar systems, lasers, jet plane



METALLURGY

NIMH battery, oxide, steel, special oxide



PHOSPHORS

Lasers, fluorescent lamps, LED, display, X-ray



CATALYSTS

catalyst for oil refineries, car catalyst, diesel additives, water treatment



GLASS AND CERAMICS

Paint, fuel cells, capacitor, semi-conductor, detectors
Glass and ceramics
Paint, fuel cells, capacitor, semi-conductor, detectors



OTHER

health sector, fertilizers, paint

REE is a "vitamin" for hi-tech.

them to conduct a thorough study and exploration of REEs and will open an opportunity to cooperate with foreign and domestic investors.

The demand for REEs which are globally considered as strategically important minerals keeps growing robustly. It raises a question, whether REEs are absolutely necessary for the development of Mongolia. Present and future development are inseparable from high technology. Therefore, it is time to step into the REE market so that we can ensure that Mongolia is not left behind. ■

Human Resource

Leaders of “Erdenes” Resource

Erdenes Mongol LLC has 13 subsidiaries, two independent project units and 5,319 employees (including Oyu Tolgoi LLC whose shares are owned by Erdenes Oyu Tolgoi LLC). One of the largest employers of Mongolia Erdenes Mongol LLC and its subsidiaries operate in the mining sector.

Erdenes Mongol LLC brings diverse companies with 30 to 40 years of history and even recently established new companies together. Erdenes Mongol LLC has a mission to provide opportunities for growth in the workplace. Their human resource policy is primarily designed for preparing innovative, creative, highly skilled and ethical professionals. In that respect, Erdenes Mongol LLC has formulated the human resources management strategy for 2018-2023 with a technical assistance loan provided by the Asian Development Bank.

The external auditing of the procedures, rules and documents on human resource management, revealed that Erdenes Mongol LLC meets its standards on the employment contract and personal data collection. Following the adoption of the mining gender policy by the Ministry of Mining and Heavy Industry, the company took measures to further strengthen human rights protection and began issuing employment statistics by gender.

Oyu Tolgoi LLC which is partly owned by Erdenes Oyu Tolgoi LLC can be given as an example of excellent human resource management in Mongolia. For instance, Oyu Tolgoi LLC had to put together a team for their underground project within three months. Thus, the company took prompt action by organizing an open house hiring event. The screening team of Oyu Tolgoi LLC selected 400 people from 15,000 visitors. At Oyu Tolgoi LLC, 90 percent of employees are Mongolian nationals.

Among Erdenes Mongol LLC subsidiaries and affiliated companies, the companies with the longest history set an example in human resources management, company culture and employee retention.

Advisor to CEO of Erdenes Mongol LLC O. Tuya emphasized that in terms of newly established subsidiaries and affiliated companies, they take the human resource policy of Erdenes Mongol LLC into account in employee selection, employee retention and providing opportunities for growth at work. When she was asked what is the best way to find highly educated, skilled and experienced professionals, she said “In Mongolia, there are very few highly educated and skilled professionals who have sufficient experience in ►



► the area. The motto of Erdenes Mongol LLC is “Natural wealth for every citizen”. Erdenes Mongol LLC is the largest strategic company in Mongolia, this makes it an attractive, motivating and fulfilling place to work.”

P. Gankhuu, CEO of Erdenes Mongol LLC, said “A quarter of our employees are professionals who graduated from global universities which makes our company unique from other state-owned companies. This is the result of the human resource management legacy left by our previous CEOs.”

In response to criticism, he said that Erdenes Mongol LLC has many levels in organizational structure. “There are 2,022 people working at Erdenes Mongol LLC. Each subsidiary of Erdenes Mongol LLC is in charge of their large projects in terms of scale, investments and profits. Our employees can be transferred from one project to another and even to another subsidiary. Since I was appointed as the CEO of Erdenes Mongol LLC in June 2018, we have established six new subsidiaries to ensure the independent implementation of recent projects. As a matter of fact, these companies are making tremendous progress in their projects. Generally, big-scale projects tend to require a complex organizational structure.”

As the majority of subsidiaries and affiliated companies operate in the mining sector, the human resources policy is distinct from other sectors. The mining production starting from exploration to the closure takes considerable time and requires a lengthy process. Hence, employees must be able to handle a heavy workload, conduct seasonal work in rural areas and adapt to new environments. In short, even if you pass the selection process, you will have to constantly renovate, prepare and grow at Erdenes Mongol LLC.

Erdenes Mongol LLC as a group company faces one major obstacle in effectively implementing human resource management strategy and retaining workers in order to increase productivity and efficiency - political instability.

Given the fact that Erdenes Mongol LLC is a state-owned company, the decisions made by both the Parliament and Government directly affect the operations, especially the human resources policy. Erdenes Mongol LLC does not deny the reality that sometimes they have no choice but to appoint people lacking necessary education, knowledge and skill to executive positions due to political pressure from high-level officials. ■

Number of employees by companies

88	Erdenes Mongol LLC
1124	Baganuur JSC
160	Gashuun Sukhait Road LLC
13	Mon Atom LLC
10	Erdenes Alt Resourc LLC
557	Shivee Ovoo JSC
28	Erdenes Silver Resource LLC
6	Erdenes Methane LLC
16	Erdenes Oyu Tolgoi LLC
7	Erdenes Steel LLC
6	Erdenes Asset Management LLC
3	Rare Earth Element Research Unit
4	Shivee Energy Complex Project Unit
70	Number of executives

Employee Age

18-25	149	7%
26-35	694	34%
36-45	592	29%
46-55	483	24%
Above 55	104	5%
Above 10 years	389	19%

Period of Employment

Period	Number of employee	Percentage
Below one year	278	13%
2-4 years	542	27%
5-7 years	467	23%
8-9 years	346	17%
Above 10 years	389	19%

Oyu Tolgoi

Ts. Tumentsogt: There is a necessity for copper concentrate and power plants

Ts. Tumentsogt, tCEO of Erdenes Oyu Tolgoi LLC, spoke with Mongolian Economy Magazine about the Oyu Tolgoi Project.

-Due to the COVID-19 outbreak, the global economy is facing tough challenges. Has the pandemic affected the implementation of the Oyu Tolgoi Project? Also, could you tell us about the recent progress made on the project?

-All businesses around the world have been affected by the COVID-19 pandemic, as has Erdenes Oyu Tolgoi LLC. Even though the copper exports dropped in the first quarter of 2020, the prices of copper and gold began to gradually rise from the second quarter. Thus, in the third quarter, Erdenes Oyu Tolgoi LLC exceeded its copper sales target. To maintain and accelerate the export levels further, the company has been taking measures to mitigate potential sales risks and strengthen the monitoring process.

-In the first half of 2020, how much investment have you received for the Oyu Tolgoi Project? Currently, the company is discussing additional investments needed to ensure operational continuity amid the pandemic. What measures have been taken to attract further investments?

-Since 2010, the Oyu Tolgoi Project received 11 billion USD total in investments. On September 10, 2020, Rio Tinto and Turquoise Hill Resources (TRQ) signed a memorandum of understanding concerning the funding of the Oyu Tolgoi Project. The parties agreed on the following: pursue a re-profiling of existing project debt in line with the revised mine plan, project timing and cash flows; and seek to raise up to 500 million USD in additional lending under the existing project financing arrangements from international financial institutions. Thereafter, Rio Tinto gave their suggestion on the funding pathway for the Oyu Tolgoi Project.

The chief executive of Copper and Diamonds at Rio Tinto Arnaud Soirat, said “The MOU agreed today that TRQ provides a clear funding pathway for the completion of the Oyu Tolgoi Underground Project. We will continue



working with TRQ and the Government of Mongolia to progress the underground project, which has the potential to unlock the most valuable part of the mine for the benefit of all stakeholders.”

-What plans does Erdenes Oyu Tolgoi LLC have on extending the benefits of the Oyu Tolgoi Project to Mongolia?

-Every year since 2010, Oyu Tolgoi LLC has generated 1.7 billion USD in government and local revenue. The total VATs and social insurance premium payments amount to around one billion USD each year. In addition, Oyu Tolgoi LLC entered into supply agreements with roughly 400 businesses which helped to create nearly 3,000 new jobs. Within the scope of a cooperation agreement made between Umnugovi Aimag, Khanbogd, Manlai, Bayan-Ovoo, Dalanzadgad soums and Oyu Tolgoi LLC, we have been funding various projects around infrastructure and sustainability as well as assisting local businesses since 2016. Oyu Tolgoi LLC makes an annual investment of five million USD to local projects through the Gobi Oyu Development Support Fund. ▶

► A few projects which we have completed are the Khanbogd Secondary School No.2 for 640 secondary children and 200 kindergarten children, hospitals and animal health care centres all of which have been endorsed by local residents. To extend the contribution, Erdenes Oyu Tolgoi LLC made significant efforts on tightening our budget monitoring, cutting costs and exploring possibilities of an interest rate reduction with the Government of Mongolia.

-What policy and support are needed to boost local procurement? How can we increase the competitiveness of our national suppliers?

-Local procurement which amounted to 114 million USD in 2010 reached 3.4 billion USD by the second half of 2020. In relation to the Oyu Tolgoi Project, we have closely cooperated with around 400 national companies and purchased goods and services amounting to 608 million USD from companies incorporated in Umnugovi Aimag.

To further facilitate local procurement, Oyu Tolgoi LLC has adopted a “Made in Mongolia” initiative. We hope it will improve the competitiveness of local suppliers and help to create a diversified economy in Mongolia. Owing to the Made in Mongolia initiative, local companies began manufacturing not only bulk bags, protective clothing and safety equipment but also grinding steel ball and power distribution systems. It is a significant achievement for local businesses.

- Only a tiny part of the energy consumption of the Oyu Tolgoi Project is supplied domestically. What steps can be taken to increase domestic energy supply?

- Mongolia does not store energy, at the moment. Thus, for the Oyu Tolgoi Project, we spend nearly 650 million USD on energy imported from electric utility companies in Inner Mongolia each year.

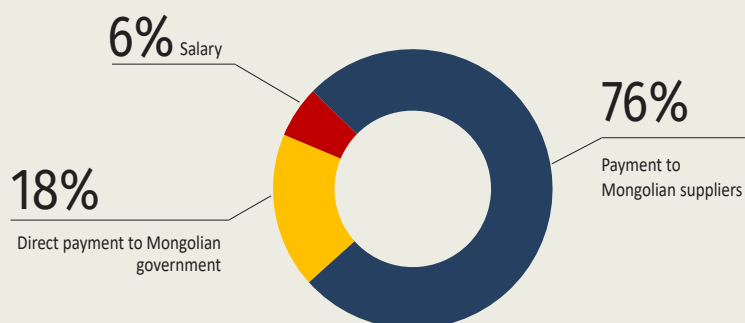
Promisingly, issues concerning the government investment to Tavan Tolgoi Power Plant Project and domestic energy supply were addressed and resolved by Government Resolution No.124 of 2020. According to the Power Source Framework Agreement which has been amended recently, Oyu Tolgoi LLC must prioritise the development of the state owned power plants and has the right to extend the contract on the power purchase with electric utilities companies in Inner Mongolia or enter into contact with state owned power plants.

The construction of Tavan Tolgoi Power Plant is scheduled in July 2021. Within the next four years, we plan to supply secure, safe and stable energy which is generated at Tavan Tolgoi Power Plant to the Oyu Tolgoi Project.

The Tavan Tolgoi Power Plant, a state owned limited liability company, has been established following the Government Resolution No.124 of 2020. Erdenes Tavan Tolgoi LLC might undertake thirty percent of investments

Total in-country spend 2010-2019

(10 billion USD)



Financial performance

Million USD	2019	2018	2017	2016	2015
Sales Revenue	1,166	1,180	940	1,203	1,635
Underlying Earnings Before Interest, Taxes, Depreciation and Amortisation	350	346	230	390	553
Underlying Earnings Before Interest, Taxes, Depreciation and Amortisation (%)	30%	29%	24%	32%	34%
Sustaining capital expenditure	134	91	82	101	125
Development capital expenditure	1,185	1,242	852	230	-
Taxes, fees, and other payments to government	209**	200	180	189	256

to Tavan Tolgoi Power Plant Project and the rest by Development Bank which is subject to further discussion.

-How do you see the short and long term development of the Oyu Tolgoi Project?

-The mining companies around the world attach special importance on corporate social responsibility so should our company. The following can be given as examples of such measures: establishing and maintaining a good relationship with the locals; promoting economic and social development; creating new jobs; increasing local procurement; and investing in local businesses.

In the long run, it is critical that we put efforts on attracting investors to make the copper concentrate and power plant projects into reality. These projects will create more jobs and help local businesses.

-Do you think that the economy of Mongolia will rely on the Oyu Tolgoi Project after the pandemic?

-After the COVID-19 pandemic, the economic recovery will be mainly driven by the mining sector. In the global market, the prices of copper, gold and coking coal are most likely to remain stable in the upcoming two to three years. If the Oyu Tolgoi underground mine starts exports in 2022, it will certainly accelerate the economic recovery of Mongolia. ►

Road

L.Nyambayar: We strive to look at the bigger picture when solving problems



L. Nyambayar, Director of Infrastructure and Logistics Department at Erdenes Mongol LLC

-What infrastructure projects are being implemented by Erdenes Mongol LLC?

-Erdenes Mongol LLC is in charge of infrastructure projects around the Asgat silver deposit, such as the construction of the natural gas pipeline. Our subsidiaries and related companies are carrying out several other projects as well. From 2014, Erdenes Mongol LLC took over the maintenance and repair of 239 km of road which run en route from deposits in Tavan Tolgoi to Gashuun Sukhait-Gants Mod border crossing.

-Could you tell us about the repair and use of the Gashuun Sukhait Road?

-Mongolia's coking coal is exported through the Gashuun Sukhait border crossing. For instance, 20.6 million tonnes of coal was exported via the Gashuun Sukhait Road in 2019. The coal export volume which was 6.5 million in 2014 reached 20 million in this last year.

However, the revenue derived from road usage fell due to lower coal exports between 2015 and 2016. Consequently, during that period the repair work was ceased. The studies showed that around 10 percent of the road was in poor condition in 2017. Therefore, Erdenes Mongol LLC has been putting efforts into repairing the roads in the past few years. Owing to this, the road condition has significantly improved.

Public bodies, NGOs and drivers have been

providing positive feedback with regard to the repair and maintenance of the Gashuun Sukhait Road. To illustrate, the Gashuun Sukhait Road was selected as one of the outstanding development projects implemented in Tavan Tolgoi by the Bayan Zam Transporters Association in 2019. So far, Erdenes Mongol LLC has invested more than 25 billion MNT in the repair and maintenance of the road. Furthermore, they contribute around 8 to 9 billion MNT each year to Gashuun Sukhait Road LLC for road management, police services, health check-ups and other necessary activities. Within this framework, around 5 km of road was paved in 2017, another 5 km in 2018 and 48.5 km in 2019. To strengthen the quality of the Gashuun Sukhait Road, we built additional layers extending the road thickness to 11-12 cm.

Due to the COVID-19 outbreak and border restrictions, the exports fell this year. As a result, we had to postpone planned repair works. In 2020, we coated a 9.2 km road and began utilizing cutting edge technologies to restore the road condition. One example is the Gashuun Sukhait Road which is mainly used by heavy trucks. This becomes the reason for frequent road cracking all year around. In the last two years, we used a cold mix asphalt which can be applied in all seasons to restore potholes and wide cracks on the road.

-What Erdenes Mongol LLC is doing to improve the working conditions of coal transporters?

-Not only road repair and maintenance is of significant importance to us, the related infrastructure projects and health and safety of drivers matters as well. Every day, some of our drivers experience mechanical failures or even breakdowns. In that case, a driver must pull off the road so other trucks could pass safely. Even one truck can halt coal exports for that day. That is why we have increased the number of parking lots, garbage cans and restrooms along the road. Furthermore, last year, with Unitel, an information technology company, we installed four telecommunication antennas on the way from the mines to the border crossing. This enables drivers to make emergency calls during their duty on the road. For drivers who spend 24 hours in their truck cabin, radio boxes were installed with the support of NGOs operating in Mongolia.

In the past two years, we have added around 800 road signs to improve road safety. It might seem that we are ►

► merely concerned with the road but it is more than that. The road is part of the transport system that includes more than 10,000 drivers and there are many people who are providing various services to them. It indeed creates greater concentration than soums. The National Police Agency has been providing its services on a contractual basis for the last three years. Following the campaign called “We only live once” which was launched jointly with the National Police Agency, the rates of violation and crimes dropped considerably in the region.

Also, the drivers who work in dusty environments received health checkups in 2018. This year, the Ministry of Health is collaborating with us to conduct health checkups. Moreover, with the help of media companies, we published a magazine for drivers. Erdenes Mongol LLC worked together with the General Authority for Social Insurance to carry activities promoting the importance of social insurance.

I would like to emphasize the fact that we strive to look at the bigger picture when solving problems. Erdenes Mongol LLC should not leave the well being of drivers out of the picture by saying it is the sole responsibility of their employers or the Ministry of Health.

-The coal is the main source of revenue for Mongolia. How would you evaluate the Gashuun Sukhait Road’s impact on government revenue?

-In 2019, 56 percent of total coking coal was exported via Gashuun Sukhait Road. Owing to this, 10,000 drivers have jobs and can support their families. Moreover, along the road, auto repair shops and small businesses are being created. Over the past years, domestic companies began taking over auto repair services. Currently, we are building a service center that has 2,500 parking spaces, a food court, a laundry room, rehabilitation, break rooms, auto repair shops and which will offer other necessary services.

-Has soil erosion reduced since the road has been built?

Previously, there were trucks that illegally transported coals eroding the soil. To solve this issue, we strengthened

control over illegal transportation. In regard to coal transportation for long distances, the trucks use the paved road from the mines to Tsagaan Khad but for the shorter distances, the trucks drive over earth roads. Hence, I would conclude that soil erosion has been reduced to a certain extent.

However, during the loading and unloading process, coal dust, a major air pollutant, is emitted. In order to reduce the coal dust emission, the unloading area needed to be paved. For example, in China, the coal is loaded and unloaded in a closed coal yard. Also, we need to put certain restrictions on the transportation of uncovered coal. Today, over 2,000 vehicles are transporting coal via Gashuun Sukhait Road.

-There is a growing fear that coal transportation via road may decline due to the railway en route from Tavan Tolgoi to Gashuun Sukhait. How do you see road transportation in the future?

In the past, we experienced an upward trend in exports of coal. Regardless of the demand, the supply largely depends on the capacity of our border crossings. On a given day, only between 1,500 to 1,600 trucks can pass through the Gashuun Sukhait border crossing. Thus, in 2019, the Government of Mongolia took an initiative to expand the capacity of the border crossings. We hope it will boost coal exports in the near future. There are a number of ongoing infrastructure projects, but the capacity of border crossings must be at the center of our focus. Only in this way, will we be able to maintain coal transportation via road.

Under the framework of enhancing exports from Tavan Tolgoi, the road constructions namely a 270 km road en route to Tsagaan Del Uul Port, 435 km road to Khangai Mandal Port and 250 km road to Gashuun Sukhait Port will be carried out jointly by the Government and private sector. This could lead to an increase in coal exports to Bayan-Nuur, Alxa League and Baotou which are the prefectures of the Inner Mongolia Autonomous Region. Due to these reasons, I would say that road transportation is likely to be accelerated. ■



Methane

D.Amar: 21st century is the age of methane



Mongolian Economy Magazine spoke with D.Amar, CEO of Erdenes Methane LLC, about the coal-bed methane (CBM) project in the Tavan Tolgoi coalfields.

-What is the significance of the coalbed methane project?

-Methane is a clean source of energy. Hence, this project is a long-term solution to reduce air pollution and smoke in Ulaanbaatar. Moreover, the coalbed methane project will play an important role in bringing best practices and technologies to Mongolia, especially for the gas industry, in developing infrastructure, in preparing future professionals and in creating more jobs. In other words, the gas industry will become one of the economic drivers.

Currently, there are five companies in Mongolia that have signed Production Sharing Agreements (PSA) for coalbed methane exploration and production. Unfortunately, Erdenes Methan LLC is the only company that is actively operating and the first state owned company entering into PSA.

-When did the project start?

-In 2014-2016, few works related to the extraction of methane from the Tavan Tolgoi coal deposit were carried out. In February 2017, Erdenes Methane LLC entered into a coal bed methane exploration agreement with the Mineral Resources and Petroleum Authority of Mongolia

(MRPAM). Only the Tavan Tolgoi coal reserves lying within a depth of 300 meters below the surface of the earth were studied and the further studies were delayed due to high risks involved. This was the reason for the long delay in our project.

I was appointed as CEO of Erdenes Methane LLC in 2018. At that time, it was unclear how the state-owned company would ensure fulfillment of its obligations under the agreement on high-risk methane exploration as the government will not be able to invest in the project. Thus, we took several actions to attract investments. But, we could not attract investors interest due to the geological and financial risks of the coalbed methane project. In the past, several local and foreign investors have agreed to finance our project, but to no avail. The exploration phase of any mining projects is extremely risky. No one can say for sure that the deposit has reserves or not. Therefore, in times of economic hardship, the Government does not invest in projects without a feasibility study.

Attempts to work with the Development Bank of Mongolia and other commercial banks and domestic investors have been unsuccessful. It should be noted that as the methane industry is a relatively new industry in our country, it is difficult to find people with expertise in the field. Therefore, in order to attract non governmental investments, we announced an open tender to find an investor for the coalbed methane project with an aim to ensure the continuity of the project. Australia's Jade Methane LLC was chosen as the foreign investor to cooperate on the project

-How much was spent on exploration under the contract with Jade Methane LLC?

-According to the plan given to MRPAM, we would have spent 800 thousand USD for the exploration work, but we spent USD 1.1 million or MNT 3.1 billion at the current exchange rate to fulfill our obligations under the contract on exploration.

-Would you mind sharing the results of the exploration?

-The exploration phase is intended for determining the quality of methane and coal beds. To conduct exploration in the Tavan Tolgoi deposits, we drilled 500-900 meters deep holes in eight sites. A methane test on 618 samples ►

► and a coal quality test on 853 samples were done to estimate the amount of reserves. In terms of quality, the methane content was 97-98 percent.

-What is the current stage of the methane project?

-Exploration and extraction of coalbed methane is regulated by the Petroleum Law of Mongolia. The Petroleum Law and the Minerals Law are based on two different principles, tax and finance. Coalbed methane exploration is regulated by the Exploration Agreement, while exploration and production are regulated by the Production Sharing Agreement.

We have successfully completed tasks specified in the Methane Exploration Agreement. The results were reported to the MRPAM during the Petroleum and Non-Traditional Petroleum Exploration and Exploration Technical Council's meeting held in October 2019. Thereby, Erdenes Methane LLC fully fulfilled its obligations under the Exploration Agreement so investors could enter into a PSA.

In May 2020, we signed a PSA with MRPAM, as authorized by Government Resolution No. 143. In accordance with the PSA, an exploration, estimation of reserves and feasibility study will be carried out. If methane is released during the methane exploration phase, we will have to extract it immediately. Therefore, for methane, the feasibility study is prerequisite for the exploration process.

We are prepared to move on to the next phase of the project, exploration. However, at the moment, we are waiting for the Government to make the decision on a transfer of rights and responsibilities under the PSA to the joint venture company which is specified in our investment agreement.

-Could you give us information about Jade Methane LLC? Does the company have a financial capacity to ensure successful implementation of the project?

-Jade Methane LLC is highly experienced in raising funds not only for methane, but also for other mining projects. Mineral exploration is the riskiest endeavor in the mining sector. Big investors are reluctant to invest in mineral exploration. Therefore, it has become a common practice to raise funding through the stock exchange. Our investor Jade Methane LLC has many years of experience in this area. Moreover, the MRPAM's working group had reviewed, examined and evaluated the professional and financial capacities of Jade Methane LLC beforehand.

-The government is actively supporting the projects implemented by Erdenes Mongol LLC.

Hence, the projects are expected to succeed. How long will it take to complete the coalbed methane project?

-From 2017 to 2019 was a risky period for the project from a geological and financial standpoint. In the past two years, we had our hands full as we have had to find an investor for the coalbed methane project, negotiate the terms and conclude an investment agreement.

In 2021 and 2023, we will carry out a well drilling, methane emission measurement, testing a production technology, methane reserve estimation and feasibility study. I hope that the project will begin in the second half of 2023 and start generating revenue from 2025, as planned.

-What are the potential risks involved in the project?

-A precise estimation of coalbed methane has not been done yet. According to preliminary estimation, methane reserves are estimated at 2.3 billion cubic meters at the exploration site or 8-10 billion cubic meters at the Tavan Tolgoi deposit. This is 5-6 times lower than the forecasts.

Also, the technical solution and economic efficiency are not clear yet as the project feasibility study has not been completed. Only after estimating the exact amount of reserves by the feasibility study, many subsequent issues will be addressed such as whether to first solve electricity and heating issues in Ulaanbaatar or to supply for local consumption. We hope that the deposit has enough reserves to meet the energy demand of Ulaanbaatar for the next 50 years.

-There are many coal deposits in Mongolia. How many of them have exploitable methane?

-It depends on the age of deposits. The best quality methane is methane from coal beds formed during the Permian period. Most of the lignite deposits in our country are geologically young which means that the methane content may not be as high as 98% like Tavan Tolgoi's methane.

There are many Permian coal deposits including the Tavan Tolgoi deposit in the world. Recently, a large deposit of high-quality coal was discovered in the neighboring Xinjiang Uyghur Autonomous Region. They began exploiting methane before coal. Countries with the largest methane reserves are China, Australia, Canada and the United States.

The twentieth century was the age of oil and gas. Now, the age of methane has come. Hence, having enough reserves to meet domestic consumption would be beneficial for Mongolia. It is time for Mongolia to start exploiting methane to seize the opportunity presented in the methane age. ■

Nuclear energy

D.Dalaijargal: It is possible to attract investments and cooperation for mineral exploration



Mongolian Economy Magazine spoke with D. Dalaijargal, CEO of Mon-Atom LLC, about the company's operations and joint projects.

-Could you briefly introduce your company?

-Mon-Atom LLC was established under Resolution No. 45 of the Government of Mongolia issued in 2009. The company does exploration and exploitation of uranium and other radioactive minerals unilaterally as well as cooperating with other legal entities representing the Mongolian Government in accordance with national laws.

-Due to the lack of knowledge on topics such as nuclear energy and yellowcake, citizens tend to oppose our projects. Could help our readers to clear up this misunderstanding?

-I agree with the fact that the public has a negative misconception about radioactive minerals. This is largely caused by a lack of accurate and reliable information on this topic. Uranium which is found in the oceans, soil, groundwater and coal is 400 times more abundant than gold and 20 times more abundant than silver. Yellowcake is a uranium concentrate powder separated from other natural impurities. It has low radioactivity and considered to be the most stable and safest form of uranium.

In 2019, our company organized training for professional inspectors of aimags with licenses for exploration and mining of radioactive minerals. Henceforth, we will keep providing appropriate information and promotion activities on a regular basis.

- There was news that uranium the environment, soil and drinking water were polluted and people, livestock and animals were poisoned due to the exploration in Ulaanbadrakh Soum of Dornogovi Aimag. Do you have any comments on that news?

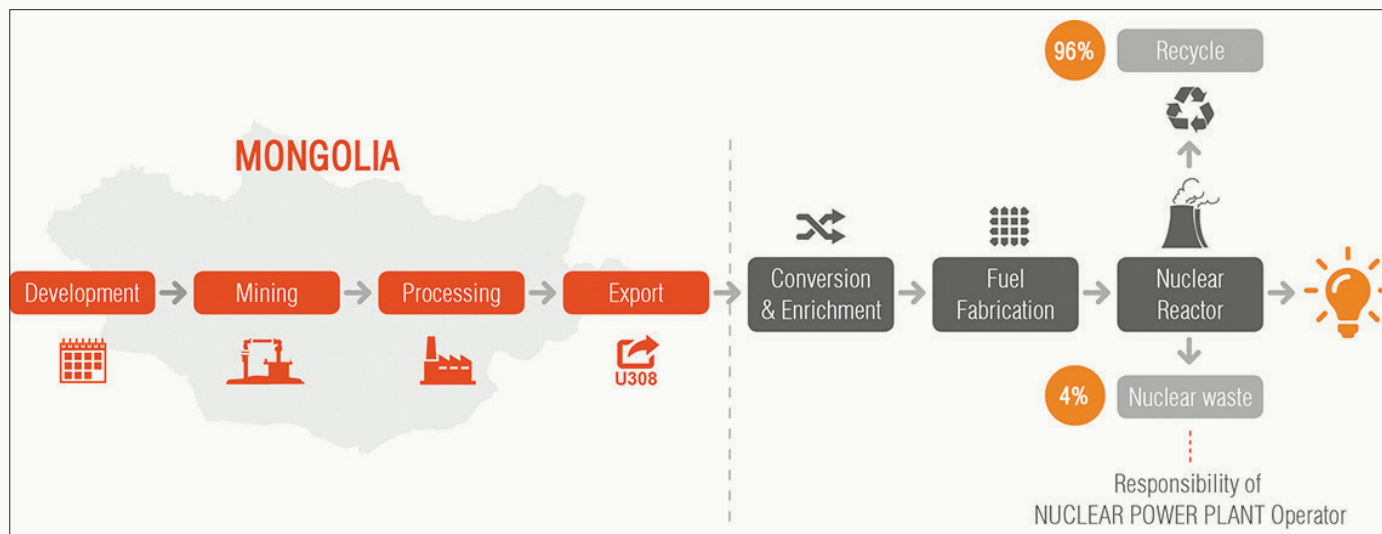
- In addition to the working group of the Mongolian General Authority for Veterinarian Services (GAVS), the two working groups established by the order of Prime Minister N.Altankhuyag in 2013 and formed by the order of the Chief of the Cabinet Secretariat of the Government L.Oyun-Erdene were sent to Ulaanbadrakh Soum to assess, evaluate and determine the reality of this situation in May 2020.

The above-mentioned three working groups did not discover human or animal diseases related to uranium exploration and semi-industrial pilot mining in the Zuuvch Ovoo and Dulaan Uul areas in Ulaanbadrakh Soum, Dornogovi Aimag.

The working group found that herder Enkhbat's eight-legged goat was found to be 50 km away from the project site and could not have been affected by the exploration. Furthermore, they found that a cow and a sheep owned by D.Norsuren, a herder from Sainshand Soum, was not poisoned by uranium rather the animals had died of anthrax and blood-borne diseases and had been vaccinated against foot-and-mouth disease when their animals were infected with anthrax. It turned out that some NGOs had given false information to the public.

-How many licenses do you have? How many projects are you working on?

-Mon-Atom LLC does not hold any licenses for exploration and mining of uranium and other radioactive minerals. However, we are conducting a study on geological prospects for uranium deposits. In the future, we could obtain a special license ►



► and collaborate with investors on uranium exploration.

Mon-Atom LLC cooperates with a French company Orano Group, China National Nuclear Corporation, Russia's State Atomic Energy Corporation Rosatom and the Czech Republic-based company Uranium Industry JSC. The Mongolian-French joint venture company Badrakh Energy LLC holds three mining licenses in Dornogovi Aimag and the Mongolian-Czech joint venture Gurvansaikhan LLC holds four mining licenses in Dundgovi and Sukhbaatar aimags.

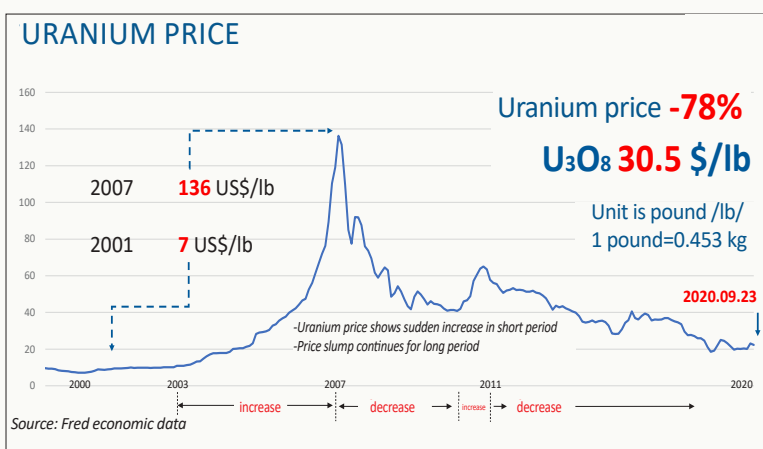
-How is the operation of Badrakh Energy LLC going?

-As of today, the company is preparing to conduct a technical test at the site. The reserves of the Zuuvch Ovoo deposit were discussed at a meeting of the Minerals Professional Council of the Ministry of Mining and Heavy Industry in January 2020, and the deposit's reserves were approved at 93.0 thousand tons.

The Zuuvch Ovoo project was initially scheduled to start in March this year after obtaining all permits in order to put the project into economic operation as soon as possible, determine the key parameters and make realistic technical and economic calculations. However, the plan was delayed due to the pandemic.

-Could you tell us how many exploitable deposits in Mongolia? How do you see the future of the nuclear energy sector?

-As of today, there are 13 uranium deposits registered in the Mineral Resources Fund of Mongolia. Only the Mardai deposit in Dornod Aimag was mined between 1989-95.



The price for uranium which reached 137 USD in 2007 is now 30.5 USD per pound. Owing to the introduction of an underground leaching method that has the lowest environmental impact new opportunities for uranium production have opened up.

Before starting a discussion on a nuclear power plant, we need to assess our financial and economic capabilities and conduct an environmental impact study. Furthermore, if the results of a detailed feasibility study confirm that nuclear power would be beneficial for Mongolia, we could cooperate with the International Atomic Energy Agency (IAEA). Hence, to make it happen, we must complete the preparations set out in the Guidebook on the Introduction of Nuclear Power formulated by IAEA. Before collaborating with international organizations and foreign investors, we must be prepared as much as possible. ■

Erdenes Steel

Ts. Batbold: Building a new production plant that will substitute imports



Mongolian Economy Magazine spoke with Ts. Batbold, CEO of Erdenes Steel LLC, about the coke and steel plant project.

-Could you tell our readers about the coke and steel plant project?

-Erdenes Steel LLC is working on the implementation of the coke and steel plant project that will produce 500,000 tons of metallurgical coke and 300,000 tons of steel in a year. After conducting a study on the possible locations, we narrowed it down to Govisumber Aimag. The plant will not only create 1,500 jobs but it will also foster the creation and development of small and medium-sized manufacturers in the region.

-Would you mind introducing the latest progress to the project implementation?

-The studies on the coke and steel plant began in 2015. Subsequently, we completed the economic and technical feasibility study which was later approved by the authorities in 2019. I am honored to say that Erdenes Steel LLC has moved to the construction stage.

One of the top ten Asian companies SinoSteel Corporation which is a state-owned enterprise was selected as a general contractor for the coke and steel

plant construction. Thereby, SinoSteel Corporation signed a memorandum of understanding with Erdenes Steel LLC. Within this framework, we held several business meetings to report the progress of the coke and steel plant project.

-One of the important factors for the successful implementation of any large-scale projects is an investment. How the company intends to secure the necessary investments.

-The project requires total investments of around 320 million USD. To explore investment opportunities, we have met with representatives of the French multinational financial services firm Natisix and the Swiss investment firm Credit Suisse. These firms have expressed their interest in investing in the coke and steel plant project.

-When will the project be completed? What are the potential risks you may incur along the way?

-Erdenes Steel LLC is working intensively to complete the project by 2025. In terms of risks, I would say there is a wide range of risks related to investment, funding, energy supply and construction.

-How will the project contribute to the Mongolian society and economy?

-The coke and steel plant carries significant importance for Mongolia as it could replace the imports, create 1,500 jobs, boost the household income, become one of the largest taxpayers and accelerate the development of rural regions. What is more, the plant could bring small and medium-sized producers into life.

- How are you planning to ensure the supply of raw materials?

-The raw materials involved in steel production are iron ore, iron concentrate, coke agglomerate, metallurgical coke, limestone and fluorite. The coking coal can be supplied from the Tavan Tolgoi Deposit and iron ore from ore deposits in Khentii, Dornogovi and Selenge aimags. These deposits are located near the railway and roads which will allow us to save costs. I would confidently say that turning the raw materials into final coke and steel products will play a critical role in the development of Mongolia. ■

Energy

Sh. Dorjgarchaa: Diversifying exports by turning brown coal into the final product



Mongolian Economy Magazine spoke with Sh. Dorjragchaa, Head of the Shivee Energy Complex Project of Energy Export.

-The Shivee Energy Complex Project is a megaproject that will require as much investment as the Oyu Tolgoi mine. Would you mind telling our readers about the project?

-Upon the invitation of the President of China Xi Jinping, the President of Mongolia Ts. Elbegdorj made an official visit to the People's Republic of China in 2015. During the visit, the two Presidents signed a Memorandum of Understanding to execute the feasibility study for the Shivee Energy Complex Project of Energy Export at the Shivee-Ovoo coal deposit. Subsequently, the feasibility study was conducted jointly by the Ministry of Energy and the State Grid Corporation of China.

As stipulated in the preliminary study, we plan to build a coal-fired power plant with an installed capacity of 5,280 MW located at the Shivee-Ovoo strategic coal deposit, a transmission line with the capacity to transmit 4,600 MW ± 660 kV UHV and a coal mine with the capacity to extract 20 million tons of coal per year. The energy produced at Shivee Ovoo Power Plant will be supplied for domestic consumption and exported to the People's Republic of China. The project will receive total investments of approximately 7.1 billion USD.

In terms of capacity, the new power plant will be close to the Taichung Power Plant, one of the largest coal-fired power station in the world. Its distance for power transmission is expected to be over 1,200 kilometers. In short, the Shivee Energy Complex

Project will play a vital role in transforming Mongolia into an energy-exporting country.

-What has the project unit accomplished in the last year? What are you planning to achieve in near future?

-Under the Decree of the Minister of Energy, a working group comprised of 22 representatives of all existing stakeholders was established. The working group is responsible for assessing the feasibility study of the Shivee Energy Complex Project located in the Shivee-Ovoo coal deposit. Earlier we planned to invite top experts from the State Grid Corporation of China. But our plan was postponed due to the pandemic.

-The success of megaprojects primarily depends on the investment flow. How are you planning to secure sufficient funding for the Shivee Energy Complex Project?

-The project will require 7.1 billion USD in total. Twenty percent will be financed by the State Grid Corporation of China and eighty percent by investment banks in China.

-As a result of the Shivee Energy Complex Project, Govisumber Aimag is expected to become twice as big as Nalaikh District. What other positive impacts could the project bring to the society and economy of Mongolia?

-Following the Shivee Energy Complex Project of Energy Export, the flow of foreign investments to Mongolia will substantially increase. It is estimated that in the first five years of operations, the GDP of Mongolia could grow by four percent per year. In addition, it will create over 5,000 new jobs since the production begins.

For the construction of the power plant, we will hire around 20,000 workers who will be taking professional training in Mongolia or be enrolled in universities in China. Moreover, the new power plant will become a major source of government revenue through mining royalties, corporate income tax, local tax, air pollution tax, VAT, customs duties and others. The plant will generate around two billion MNT as profits which will further increase the government revenue.

The project will certainly lead to export diversification by turning brown coal with the lowest heat content and quality to value-added export products.

Choir City where the Shivee Energy Power Plant will be located will become a modern advanced city without any doubt. In the future, we plan to develop infrastructure, healthcare, education sectors of the Choir City. ■

Precious metals

T.Munkhbayar: We will become a key benefactor to the sovereign wealth fund



Mongolian Economy Magazine spoke with T.Munkhbayar, the CEO of Erdenes Silver Resource LLC

- Could you tell us what main projects are being implemented by Erdenes Silver Resource LLC?

-Erdenes Silver Resource LLC was established as a state-owned subsidiary of Erdenes Mongol LLC in June 2019. To capitalize on the Salkhit silver and gold deposit the Government of Mongolia granted the license for exploration on the Salkhit deposit which covers 2,887 hectares of land to Erdenes Silver Resource LLC in October 2019. It is important to note that the company is self-financed not funded by the Government.

At the beginning of 2020, our company took over the implementation of “the Law on One Time Forgiveness of Pension Debt” which covered debt amounting to 1.2 trillion MNT of 233,000 pensioners. This was a great example of an equal distribution of wealth

derived from natural resources. Another example is dividends disbursed by Erdenes Tavan Tolgoi JSC. The Government will certainly keep allocating natural resource revenues to each citizen equally, investing in projects critical to the development of Mongolia.

As part of the Salkhit Deposit Project, Erdenes Silver Resource LLC aims to move toward sustainable production and improve the infrastructure around the deposit. In fact, we have started everything from scratch. For instance, at the time we took over, the equipment was broken and the infrastructure was out of order. Thus, we repaired and renewed 80 to 90 percent of the refinery.

The first state-owned silver refinery with a capacity of producing 25 to 30 tons of refined silver in a day was opened. The refinery created 150 new jobs and housing and offices were built to ensure better working conditions. It is a perfect example of how the government took over management of the refinery, improved the operations, increased productivity and distributed the revenue to citizens. ►

It is important to note that the company is self-financed not funded by the Government

► Even if we produce at our fullest capacity, we cannot cover the one-time forgiveness of pension debt. Therefore, we are building the second refinery based on a project plan drawn by professional firms. This second refinery will have twice as much capacity as the first one. This means we can produce 600,000 tons of ore in a year.

-Erdenes Silver Resource LLC is tasked to repay the pension debt amounting to 1.2 trillion MNT within five years. How is the company planning to repay the pension debt?

-We issued bonds so commercial banks could write off all the pension loans. The payment period of bonds is four to five years. In terms of pensioners who did not have pension debt at that time of writing off, we plan to give vouchers worth one million MNT to each pensioner (in total will amount around to 210 billion MNT) in May 2021.

When the Government announced that they will write-off pension debts by capitalizing on the Salkhit silver and gold deposit, it sparked debates and misinformation over the reserve amount. The underlying reason was that the estimate on reserves was lower than it was previously calculated.

The follow-up exploration conducted in the summer of 2020 showed that reserves can be raised by 50 percent. Therefore, Erdenes Silver Resource LLC is preparing to introduce the preliminary results, get approval from the Mineral Resources and Petroleum Authority and update the corresponding reports on reserves and feasibility study. Exploration was only conducted in one part of a licensed area that covers 2887 hectares of land. This means the more exploration we do the more reserves will be discovered.

- What progress are you making in terms of raising around 210 billion MNT for vouchers? Do you think it is highly feasible to raise that amount by May 2021?

-It has been 1.5 years since Erdenes Silver Resource LLC was established. During this time, we have not gotten any financial support from the Government in relation to the repair and renewal of the plant. Hence, it is quite a challenge to raise around 210 billion MNT within a short time.

To improve our chances, Erdenes Silver Resource LLC is exploring opportunities to collaborate with companies from China and Europe who have sent their proposals. Currently, the executive team and the Board

Production plan

INDICATOR	PERFOR- MANCE	TARGET				
	May to July 2020	2020	2021	2022	2023	2024
Ore refining /tons/	32,000	98,000	450,000	600,000	600,000	273,600
Concentrate /tons/	532	5479	25,095	33,541	33,542	15,299
Pure silver /tons/	11	100.3	257	193	164.4	70.9
Pure silver and gold /kilograms/	10	123.6	267	182	218.5	83

are reviewing the proposals and putting their heads together to reach an agreement beneficial to each party.

So far, we have raised 20 percent of the fund for vouchers to pensioners. I would confidently say that at the current pace, Erdenes Silver Resource LLC will be able to raise around 210 billion MNT by May 2021.

-Which projects are you currently working on?

-Our company has recently acquired a special license on Ovoot Khyar gold deposit at Tsogtsetsii Soum in Umnugovi Aimag and exploration has already begun. We plan to get approval on exploration results including the reserve amount by the end of this year or the first quarter of 2021 so we can start production.

-How do you see the future of Erdenes Silver Resource LLC? How do you plan to work?

-I wish that the state owned companies would put talented teams together, contribute to government revenue and ensure equal distribution of wealth derived from natural resources to the citizens. Companies need to strive to become a final producer not a mere supplier of raw materials. Having said that, Erdenes Silver Resource LLC will exert itself in setting an example, by leading and cooperating with other businesses so that we can make progress together.

I believe that everything boils down to people. Hence, Erdenes Silver Resource LLC has gathered highly educated and experienced professionals together to run the company. That is the reason why we were able to fulfill our responsibilities within a short time frame.

The operations of Erdenes Silver Resource LLC will certainly keep expanding. There is no doubt that Erdenes Silver LLC will become a major contributor to the sovereign wealth fund of Mongolia in near future. ■

Asset Management

B.Ugankhuu: Aiming to set up an investment fund in Mongolia



Mongolian Economy Magazine spoke with B.Ugankhuu, CEO of Erdenes Asset Management LLC, about their operations and investment management.

-Could you tell our readers about your company and its operations?

Erdenes Asset Management LLC is aiming to establish a closed-end investment fund based on the aforementioned projects

-The vision of Erdenes Mongol LLC is "Managing assets, leading growth" which suggests that Erdenes Mongol LLC can be broadly viewed as an asset management company. In 2016, Erdenes Mongol LLC established Erdenes Asset Management LLC to carry investment management activities. In the beginning, Erdenes Asset Management LLC was rarely active. We began actively operating in

2018. Subsequently, after fulfilling the necessary requirements, we were granted a license to carry out investment activities from the Financial Regulatory Commission in November 2019. This means that we have been actively providing our services for only a

short period of time.

-In the past 10 months, since Erdenes Asset Management LLC started actively operating, what projects have you focused on?

-Erdenes Asset Management LLC provides services to clients on investments to high-yield low-risk projects of various sectors and financial tools on the stock market. Also, we focus on projects of Erdenes Mongol LLC subsidiaries that have a high rate of return in the short-run and could be started as soon as investments are made after feasibility studies. Investors tend to be interested in projects that could yield a high return on investment within two to three years. Due to these reasons, the "Gold Refinery Project" of Erdenes Alt Resource LLC and the "Shivee Energy Complex Project" based at the coal mine of Shivee-Ovoo are currently at the center of our work.

Prime Minister Ch. Khurelsukh visited the gold refinery plant in Kazakhstan and in 2019, he signed a Memorandum of Understanding on Cooperation on the construction of a gold refinery plant in Mongolia. Under the agreement, the Government of Mongolia and Erdenes Alt Resource LLC had to exercise an obligation to secure investments amounting to 81.9 million USD. The refinery plant will allow us to produce pure gold and other precious metals at a low cost.

Furthermore, in order to export electric power to China, Shivee Energy LLC is planning to build a power plant with the capacity of producing 5280 MWh. Extensive efforts are being made to attract investments to build a power plant with 200 MWh capacity based on brown coal from the Shivee Ovoo mines. Currently, we are in talks with two companies from China, one from South Korea and one from the United States with regard to these investments.

- What challenges are you facing in attracting both domestic and foreign investments?

-The commercial banks account for more than ►

- 90 percent of the financial market and the rest by securities firms. The public knows very little about the stock market. For comparison, 70 percent of households in the United States hold assets on the stock market whereas in Mongolia, it is less than 10 percent.

The reasons are the size and maturity of the stock market in Mongolia. Also, there are very few professionals who have experience in investment management. The projects we are working on require investments worth billions or trillions MNT, however, we have a small chance of raising such investments in the domestic market.

-How is the establishment of an investment fund going?

-In Mongolia, there are 27 investment management companies but only around 10 of these companies have prior experience in establishing investment funds. According to statistics, the companies have only created private investment funds and invested mainly in real estate. It can be said that there are currently no examples of conventional investment funds in Mongolia.

Erdenes Asset Management LLC is aiming to establish a closed-end investment fund based on the aforementioned projects. Under the law, an investment fund is registered by the Financial time, we are discussing the terms of the contract.

-The purpose of Erdenes Asset Management LLC is to become one of the competitive investment management companies in the region. What policies and principles do you follow to achieve that goal and how are you preparing your people?

-In order to become a competitive investment company in the region, there are many things that need to be done in Mongolia first. As I mentioned before, the stock market is still immature in Mongolia. Therefore, there is a growing need to prepare future professionals in this area and to collaborate with experienced international advisors and institutions in taking the sector to the next level. After that, promotional activities such as providing information and educating the public will follow. Only when this has happened, can we start talking about entering the regional market.

The investment company carries a great responsibility of managing their stakeholder's assets.

Projects

PROJECT	INVEST- MENT	NOTES
Ovoot Khyar Khuren Tsav	80 mln USD	
Coke and steel plan	320 mln USD	Feasibility study approved, EPC contract was signed with SinoSteel Corp.
Tavan Tolgoi power plant	1 bln USD	Feasibility study approved, 300MW power plant
Baganuur mine equipment	178.5 mln USD	Feasibility study approved
Erdenes Commodity Exchange	10 mln USD	Feasibility study approved
Shivee-Ovoo mine equipment renewal	70 mln USD	Feasibility study approved
Asgat silver deposit	127 mln USD	Feasibility study shall be renewed
Gold refinery plant	81.9 mln USD	Feasibility study approved
Coal bed methan prospecting work	Needs additional prospecting work	Feasibility study is underway

Hence, the investment company must be open, transparent and clear. Erdenes Asset Management LLC attaches great importance to following these principles. Leading global investment companies such as Vanguard, Blackrock, Goldman Sachs follow the same principles. For them, it is not important where they work but how. In other words, the business is based on knowledge, relationship and trust which does not distinguish it from traditional businesses.

In terms of HR, it is critical to have a professional team with wide experience as investors place great trust in us. Therefore, we bear a tremendous responsibility to train the next professionals and hone their skills.