

2023 | SPECIAL EDITION

Underground mine Underground operations to bring opportunities for promoting Mongolia globally and to boost investment

Editorial meeting Khanbogd will become the new economic hub

### WORLD CLASS MINE-OYU TOLGOI MINING CITY-KHANBOGD

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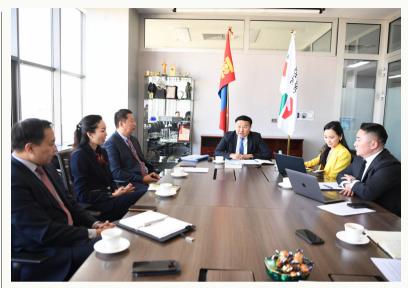
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## **GREEN DEVELOPMENT**

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### **Editor-in-Chief's message**

### Oyu tolgoi Project will become a world-class mine, Khanbogd will become a new economic hub



Editor-in-Chief D.Bekhbayar at underground mine

This March, two significant events took place in the southern gobi. One is the commencement of underground mine production at Oyu tolgoi and the other one is a forum entitled "Khanbogd - Construction, Workplace".

During the opening ceremony of the underground production commencement, the Prime Minister of Mongolia, Oyun-Erdene Luvsannamsrai, and Rio Tinto chief executive Jakob Stausholm delivered their speeches from 1.3 kilometers below the surface and proclaimed to the world the commencement of the underground operation. Furthermore, Mr. Bold Baatar, Chief Executive of Rio Tinto Copper, hosted an online presentation on the project and reported to investors and investment experts in London, directly from the underground mine. That is the philosophy of the underground mine.

We have prepared news reports of these two events and included them in our special edition. Who did attend the underground production commencement and what did they say? What was the hot topic of the first forum on developing Khanbogd soum into a city? With this special edition, we deliver viewpoints and interviews with investors, public and private representatives, and underground mine workers.

This edition specifically offers comprehensive information and accounts about the Oyu tolgoi project. I believe this special edition dedicated to these historic events will go into history even if it gets old over time. I also think the value of these yellow pages of the magazine will increase when Oyu tolgoi success will be praised worldwide and when people from every corner of the world will come to worldfamous city called Khanbogd. There were many misunderstandings and disputes between the parties in the past. Despite all of those, the underground production started by overcoming hardships, thanks to the determination of shareholders to move the Oyu tolgoi project forward. The government of Mongolia and Rio Tinto have managed to settle all issues except the one still outstanding related to a tax dispute. They plan to discuss the issue this August to find a compromise.

As all conditions for continuous underground production have been put into place, talks about the development of Khanbogd Soum into a city have started. The Government has approved a general plan for the development of Khanbogd soum into a city while Oyu tolgoi decided to fund this development to the tune of 50 million US dollars. Having completed infrastructure and construction projects, the development of a new settlement area for 25,000 residents in Khanbogd soum will gain strong impetus.

We also dedicate the cover page to those who were responsible for the commencement of the underground mine operation. We had an editorial meeting with the management of Erdenes Oyu tolgoi LLC on developing Khanbogd soum into a city. During that meeting, we held a detailed discussion about how the soum should be developed as a city, what construction projects are planned, as well as on issues like social services, infrastructure, involvement of local residents, private sectors, and business environment.

I should note that I was even more encouraged that Khanbogd will become a new economic hub. I am also confident that the Oyu tolgoi Project will become a world-class mine promoting Mongolia to the world.

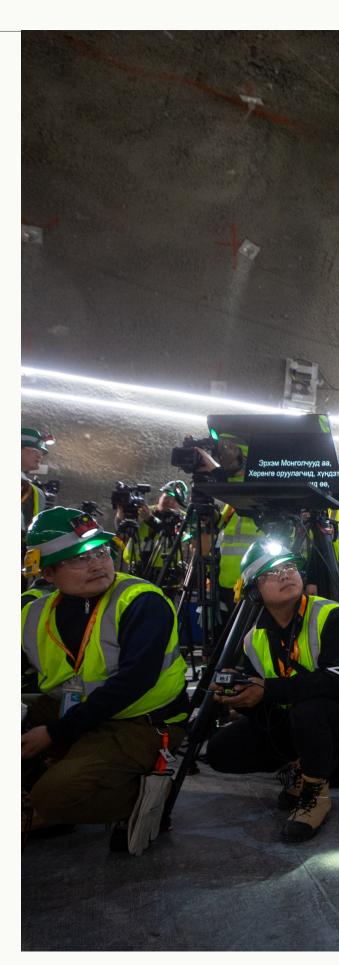
# UNDERGROUND MINE COMMENCEMENT

### L.Oyun-Erdene, Prime Minister of Mongolia:

As Prime Minister of Mongolia, I am announcing today to the world from the 18th mineshaft located 1,265 thousand meters deep underground that Mongolia is launching the world's fourth-largest high-tech copper mine and right now is extracting its first product.

### Jakob Stausholm, CEO of the Rio Tinto Group:

The copper produced in this truly world class, high technology mine will help deliver the electrification needed for a net zero future, grow Rio Tinto's copper business and generate significant benefits for Mongolia.





### **Underground mine**

## The powerful engine of Oyu tolgoi has commenced



he most valuable part of Oyu tolgoi is the underground mine. So today (March 13, 2023) mining of this valuable part has begun.

Last year, the Oyu tolgoi project's debt of \$2.3 billion was completely paid off, and preparations for the long-awaited underground mining began. As a result, the people of Mongolia now have a mine with cutting-edge technology that ranks fourth in the world, and we have begun sustainable mining from a depth of 1.3 kilometers using the block mining method. As a result, we are beginning to be recognized as one of the major players in the international copper market.

The opening ceremony of underground mining was attended by Prime Minister L.Oyun-Erdene, who was representing the Government of Mongolia, which owns 34% of the Oyu tolgoi project, and Jakob Stausholm, CEO of the Rio Tinto Group, which owns 66%, and representatives of other departments and miners.

The underground mine's operation was commenced by the Mongolian Prime Minister and the Rio Tinto Group CEO, who gave a speech at the opening. Mongolia now has the world's fourth-largest copper mine, with its first product being extracted from borehole No. 18, which is located at a depth of 1300 meters.

The Prime Minister emphasized that "The Oyu tolgoi project is not only the massive foreign investment Mongolia received since its transition to democracy but also a historic project first implemented with our 3rd neighbor country to play an important role in ensuring the economic sovereignty and independence of Mongolia.

It is worth noting that sales of USD 1.4 billion products and investment of USD 200 million in 2022 by the Oyu tolgoi played an important role in overcoming the economic difficulties caused by the pandemic in Mongolia. The Oyu tolgoi project is an

OT is expected to produce 500,000 tons of copper annually from 2028 to 2036 example of what Mongolians can achieve and create when we are united and coherent in carrying out the development policy."

The CEO of the Rio Tinto Group said "Today, we will see the underground mine take its first steps in becoming one of the most important producers of copper in the world. At full production, Oyu tolgoi's underground and open cut mines will produce enough copper annually for more than 6 million electric vehicles.

The copper produced in this truly world class, high technology mine will help deliver the electrification needed for a net zero future, grow Rio Tinto's copper business and generate significant benefits for Mongolia".

Developing the underground mine requires an investment of over \$7 billion. It is estimated that once the underground mine is fully operational, the benefits to the Mongolian economy and the state budget will increase at least threefold. Oyu tolgoi is expected to produce around 500,000 tons of copper annually on average over the period from 2028 to 2036 from both the open pit and underground mine.

T. Namjilmaa, one of the key figures in this historic development who joined Oyu tolgoi in 2009, shared her thoughts during the opening ceremony. When she first started work, only about 500 meters of the underground mine penetration had been done, and only shaft 1 had been completed. Today, the cross-penetration continues for over 120 km, and the construction of the underground mine is in its final stage. She said, "I am very proud of my team, thousands of employees, and miners of Oyu tolgoi. Today is a day of celebration for everyone in Oyu tolgoi. I am confident that the Oyu tolgoi project will bring great positive changes to Mongolia's economy in the years ahead" she said.

On this day, our government also intensified the implementation of the Oyu tolgoi project and signed a memorandum of understanding with investors on copper processing and final copper product production.

The memorandum was signed by Ch. Khurelbaatar, Deputy Prime Minister and Minister of Economic Development of Mongolia, and B.



Bold, director of Rio Tinto's Copper Group. Having a copper concentration plant will allow us to earn about \$2 billion in cathode copper export income annually. Therefore, today's memorandum is the historic starting point for the real revival of industrialization.

Also, the Director of Rio Tinto's Copper Group, B. Bold, and the Minister of Road and Transport Development, S.Byambatsogt, signed a memorandum of cooperation within the framework of supporting research management related to possible traffic infrastructure projects in Ulaanbaatar. On this occasion, the Minister of Road and Transport Development S.Byambatsogt emphasized the following: "We deeply believe that we can show what the government can do for public welfare in cooperation with a large socially responsible company."

Since 2010, Oyu tolgoi has spent 34 trillion MNT on purchases made from national companies, taxes and fees paid to the state budget, as well as salaries for employees. By 2028, Oyu tolgoi's annual sales revenue is expected to reach \$8 billion. Thus, a powerful economic engine of Mongolia has started to go into operation. By 2028, OT's annual sales revenue is expected to reach \$8 billion

### Reporting



When we landed at Khanbumbat airport to report on the commencement of the Oyu tolgoi mine, where the first exploration and excavation operations began in 1997, we were greeted by Oyu tolgoi officials. A team of journalists visited Khanbogd a day before the start of underground mining comencement to become familiar with the Oyu tolgoi operation.

The underground mine currently produces about 10,000 tons of ore daily

The majority of the overall deposits at the Oyu tolgoi mine contain ore of the highest mineral quality which is buried deep below the Hugo Dummet deposit. Before entering the underground mine, specialists provided extensive safety training as well as clothes and protective equipment to us. We are also completely equipped with GPS Safety helmets, maps, a light, a methane detector, gloves, safety goggles, and a self-rescuer. The guide specialist stated that everyone should constantly carry a self-rescuer in order to avoid unanticipated risks, as the underground air is unfit for breathing at a temperature of +20F. We were provided with all information during the journey, as there was

concern about our safety, and the guide specialist was working hard to enforce all underground mining standards.

Then we boarded a massive elevator which is capable of carrying 300 passengers and has a capacity of transporting up to 60 tons to the mine's depths. The depth of the deepest shaft is equivalent to 12 times the size of the Blue Sky Towers. However, the elevator ride down to a depth of 1,300 meters took barely three minutes. I had the impression that I was walking inside a house or structure rather than in an underground mine. My fantasy of meeting some dark and dimly lit place quickly faded. The mine's walls and roof were all plastered with cement, and the rock was secured by drilling 8-meter-long threaded bolts on the ceiling and 6-meter-long threaded bolts on the walls to avoid collapse. We sat separately on a minibus that would take me to the depths, and after passing through a long tunnel with many intersections and crossroads, I arrived at the draw bell. The ore body will fall through the draw bell > that is being cut into blocks.

T.Namjilmaa, our miner guide and Lateral development supervisor, said that at the start of the underground mining operation, 30 field draw bells of Panel 0 will be operational, while a total of 220 draw bells are planned to be operational. The ore that had fallen from the draw bell was moved into the first draw points by the loaders. The first draw point smashes the ore body and delivers it using the 1.6 km long conveyor belt, to the surface in the shaft, and to the concentrator using the conveyor belt.

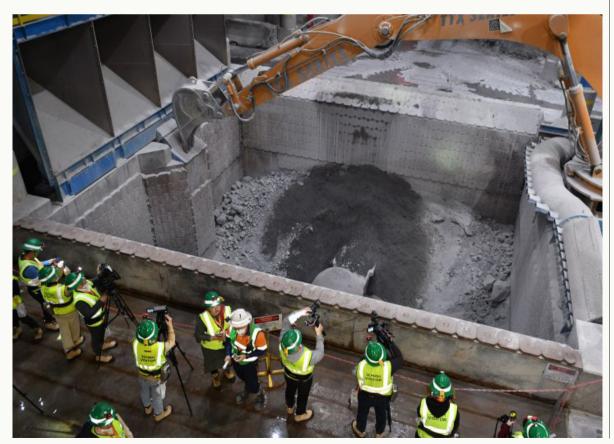
The Ore deposits at Oyu tolgoi, hundreds of meters below the surface, have the highest copper and gold content in the world. Average copper grades of 1.66 percent are expected over the life of the mine. The depth and fragmented nature of the ore bodies make them suitable for using a block caving method, which involves digging just below the ore body and then collecting the falling ore.

T.Namjilmaa explained to us that the underground mine currently has a capacity of 10,000 tons of ore

production daily, and this capacity will increase as the number of draw bells grows. She said that there is still a lot of work to be done, such as the Lateral Development and Ramps of Panel 1 and Panel 2, the Ventilation Shaft, the Infrastructure of Crushing and Hauling, and the Construction of new mine Tunnels.

The Oyu tolgoi underground mine will be fully operational somewhere between 2028 and 2036. It is then expected that about 500,000 tons of copper concentrate will be mined annually. At the underground mine today, there are approximately 400 pieces of equipment and 700-800 employees who are working in four shifts.

As a journalist, my wish came true to visit the Oyu tolgoi underground mine. The mine will continue to operate continuously starting from today. This is how the mega project is beginning to benefit all parties involved, delivering positive improvements and growth to the Mongolian economy and society, and helping to establish the country's reputation on the world market.



Mine currently has a capacity of 10,000 tons of ore production daily

### **Prime Minister**

# Mongolia is announcing that it has a world-class copper mine



The investor has fulfilled its promise to start full underground production within the first quarter of 2023 Fellow Mongolians, Investors and distinguished guests,

On this historic day of the commencement of the underground production I would like to extend my greetings to you - all the miners, engineers, and technicians, who have personally taken part in the Oyu tolgoi construction, building a world-class mine at the empty site of the Southern Gobi.

A year ago from today – on 25 January 2022 as a result of writing off \$2.3 billion incurred debt and \$22 billion of predicted debt applicable for Mongolia's 34 percent share in the Oyu tolgoi, the long-disputed and stalled Underground mine operations began with the first blast.

The investor has fulfilled its promise to start full underground production within the first quarter of 2023. I am confident that it will become our core principle of mutual trust and responsible attitude on the part of both sides in our future cooperation.

Ladies and Gentlemen,

As Prime Minister of Mongolia, I am announcing today to the world from the 18th mineshaft located 1,265 thousand meters deep underground that Mongolia is launching the world's fourth-largest hightech copper mine and right now is extracting its first product.

I wish to underscore that copper concentrate from this Underground mine represents Mongolia's contribution to humanity's endeavor to prolong the life of the planet Earth by increased manufacturing of electric cars, by entering a new era of advanced technology and the green global development.

The Oyu tolgoi project is not only the massive foreign investment Mongolia received since its >

UNDERGROUND MINE

transition to democracy but also a historic project first implemented with our 3rd neighbor country to play an important role in ensuring the economic sovereignty and independence of Mongolia.

It is worth noting that sales of USD 1.4 billion products and investment of USD 200 million in 2022 by the Oyu tolgoi played an important role in overcoming the economic difficulties caused by the pandemic in Mongolia.

The Oyu tolgoi project is an example of what Mongolians can achieve and create when we are united and coherent in carrying out the development policy.

The path to today's progress of the Oyu tolgoi project has not been smooth. On behalf of the Government I would like to express my deep gratitude to Khurelsukh Ukhnaa, President of Mongolia, Zandanshatar Gombojav, Speaker of the Parliament, members of the Parliament, members of the Ad Hoc Committee of the Parliament for their political support rendered to the Government in implementing the resolutions 92 and 103 of the State Great Hural and in defending the interests of all Mongolians and their aspirations to own the wealth of the country over the long-years of complex negotiations. I would also like to thank all politicians, who took part in the Oyu tolgoi project from the very beginning, those who took risks, albeit their wrongs and rights, to advance this project, and all those people who fought to improve the agreement, and, last but not least, the investors. I would like to emphasize that this project has been the collective work of ours.

The Oyu tolgoi underground mine is a crucial project in implementing Mongolia's long-term development policy, Vision - 2050.

If the OT underground production is implemented in tandem with projects of Ports' Revival and Industrial Revival under the New Revival Policy, and if the Government wins the battle of uncovering the shadow economy of mining with the help of the people, I am confident that we can produce 500,000 tons of copper concentrate annually and bring the GDP per capita up to USD 10,000, thus bringing closer the long-awaited dream of all Mongolians.

On behalf of all Mongolians, I would like to extend our gratitude to you, Mr.Jacob Stausholm, CEO of Rio Tinto Group, and your team, and through you The Oyu tolgoi agreement serves as a clear testimony to Mongolia's commitment to being a sustainable and reliable partner that cooperates in an open, transparent, and mutually beneficial manner with its investors to all the investors, for accepting and respecting the principle of ensuring Mongolia's interests in the Oyu tolgoi agreement and favoring long-term partnership and mutual trust.

The Oyu tolgoi agreement serves as a clear testimony to Mongolia's commitment to being a sustainable and reliable partner that cooperates in an open, transparent, and mutually beneficial manner with its investors.

Today, we will sign a memorandum of understanding with the investors on copper beneficiation and production of final copper products to intensify the implementation of the Oyu tolgoi project. I am sure that it will signify the onset of exporting not just raw materials but rather value-added products and materialization of the Industrial Revival.

In my capacity as Prime Minister of Mongolia, I would like to responsibly reaffirm before the entire community of investors that Mongolia will prioritize long-term, mutually beneficial, and stable partnership on a number of mega economic projects based on the core value passed down from our ancestors to the effect that "Mongolian Yes is tantamount to Oath".

With a view to enhancing our active partnership in the mining sector, including on copper and rare earth elements, and in non-mining sectors, including tourism, agriculture, industry, energy, and transport logistics, we have declared the years of 2023-2025 as "Welcome to Mongolia" years and committed ourselves to support investment at all levels. Tangible progress is being observed and mega projects are being intensified.

Mongolians say that positive words lead to a brighter future. I see OT underground production commencement at the beginning of the year of Rabbit and Mongolia's 10.6 percent economic growth in January 2023 as a sign towards a prosperous future.

As the year of Rabbit is defined as a beautifying year, let's make Mongolia more attractive to the world, and let every citizen and every business entity spare no effort to promote tourism and attract investment to our country.

Dear investors, I wish to see you all back at the Mongolian Economic Forum to be held under the motto "Welcome to Mongolia".

May Mongolia prosper under the power of the Eternal Blue Sky!

### CEO

## We believe that the true potential of our partnership is only just beginning



Mr Prime Minister – thank you for your words of encouragement for our team. I would like to thank your leadership and your Cabinet for everything that you have done to make today possible and forge a strong partnership for the road ahead.

Ladies and Gentlemen – since I became Rio Tinto Chief Executive two years ago, I have spent a great amount of time focused on Oyu tolgoi. And it has been the key focus for our Copper Chief Executive Bold Baatar.

At full production, Oyu tolgoi's underground and open cut mines will produce enough copper annually for more than 6 million electric vehicles

Delivering a project of this scale and complexity is not easy. Mining an ore body of this size, located 1.3km beneath the Gobi Desert requires investment, it requires technical expertise, but most of all it requires trust. The trust to stand together, and to rely on one another in the pursuit of an audacious goal.

Prime Minister, since we met here a little over a year ago, Rio Tinto has worked hard to build trust, and this has been critical in helping us to reach the truly special milestone which we are marking today.

The commencement of underground production means we can now focus firmly on the future and

our collective journey as we ramp up over the months and years ahead.

We are in no doubt about the hard work that is left to do, and we are not complacent about the likely challenges ahead, but as we gather today, we draw confidence from the fact that we are now walking forward in lockstep, and with our eyes fixed firmly on the same horizon.

As we move forward, it is also important to reflect on what has already been achieved together.

Oyu tolgoi has one of the best safety performances of any mine anywhere in the world. Nothing is more important – and this should be our proudest achievement.

The open pit has now been mining for more than a decade, already producing enough copper each year to build 27,000 wind turbines.

At every stage, our OT workforce has embraced technology and productivity to create one of the most technologically advanced mines in the world, finding better ways to provide the materials that the world needs.

I would like to pay tribute to our teams who have made today possible. For the last six years, thousands of young Mongolians and their international colleagues have been working tirelessly beneath our feet to build this mine.

They have been supported by thousands more on the surface, in the Gobi, in Ulaanbaatar and in Brisbane and beyond. From the cooks in the kitchen who feed them three good meals a day to the engineers, mine planners and projects teams who have planned the installation of every piece of equipment and every meter of excavation – I thank you all.

To the hundreds of Mongolian companies who have supported Oyu tolgoi over the last decade, I thank you as well.

And to the people of Khanbogd and the South Gobi – thank you for embracing this project, for working with us, and for allowing us to be part of your community.

Today, we will see the underground mine take its first steps in becoming one of the most important producers of copper in the world. At full production, Oyu tolgoi's underground and open cut mines will produce enough copper annually for more than 6 million electric vehicles.

The copper produced in this truly world class, high technology mine will help deliver the electrification needed for a net zero future, grow Rio Tinto's copper business and generate significant benefits for Mongolia.

For Rio Tinto, this is a key step in delivering on our strategy and growing in materials the world needs for the energy transition.

While it will take time for the mine to ramp up production, this moment symbolizes what is possible through true partnership. We believe that the true potential of our partnership is only just beginning. By continuing to work together, The copper produced in this truly world class, high technology mine will help deliver the electrification needed for a net zero future, grow Rio Tinto's copper business and generate significant benefits for Mongolia

we can do much more.

Rio Tinto is now a direct shareholder in Oyu tolgoi. As a result, we can work more closely with Erdenes Oyu tolgoi to realize the true value of Oyu tolgoi so that we can keep contributing to Mongolia's prosperity.

I believe that Mongolia has boundless potential for sustainable and equitable development. With OT up and running, we can leverage the mine to bring more investment, more projects and more jobs to the region.

We look forward to working with the Prime Minister and government in the months ahead to identify the part Rio Tinto can play in this. We are ready for the next stage of our relationship.

In the years and decades to come, as Mongolia continues to grow and progress, each and every day, this mine will continue to deliver copper to the world, value to stakeholders and revenue to the Government, underpinning our shared future.

Ladies and gentlemen, thank you all for being a part of this journey, and part of our shared history.



# UNDERGROUNDMINE



OVER 80 PERCENT OF OYU TOLGOI'S TOTAL VALUE LIES DEEP UNDERGROUND.



OYU TOLGOI IS EXPECTED TO PRODUCE 2% OF THE WORLD'S COPPER DEMAND.

# 500.000

THE OPEN PIT AND THE UNDER-GROUND MINE OF OYU TOLGOI WILL BE FULLY OPERATIONAL BY 2028-2036; IT IS EXPECTED THAT ABOUT 500,000 TONS OF COPPER CONCENTRATE WILL BE MINED EACH YEAR.

# IN BRIEF

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AT PEAK PRODUCTION, OYU TOL-GOI WILL PRODUCE 500,000 MET-RIC TONS OF COPPER ANNUALLY, ENOUGH COPPER TO BUILD 1,580 WIND TURBINES AND ELECTRIC VEHICLES EVERY DAY.

THE DEEPEST SHAFT IS 1.3 KILOMETERS DEEP, WHICH IS EQUIVALENT TO 12 TIMES THE HEIGHT OF THE BLUE SKY TOWERS.

THE AVERAGE HEIGHT OF A MINE TUNNEL IS 5.5 M WITH A WIDTH OF 5 M.

### Viewpoint

## The first step in building a copper plant has been made



**B.BOLD** Chief Executive of Rio Tinto Copper R io Tinto estimated that demand for copper to increase by 25-50 million tons or twofold annually by 2035. Such a forecast is driven by the global growing demand for electric vehicles. Diesel vehicles we drive today use 26 kgs of copper on average, while electric vehicles use 86 kgs of copper on average, 3-4 times more than diesel vehicles. Besides, all cables and electrical wiring are made of copper too.

Furthermore, there is an urgent need to update and change energy sources because of climate change and global warming. Copper is also used in renewable energy sector.

All these figures suggest that we should have a celebration today. By the time when global copper demand is on the rise, Mongolia has made the first step towards the construction of a copper plant capable of making huge profits.

As of today, Oyu tolgoi funds its investment from income from copper sales. In particular, the open-pit mine produces 170,000 tons of ore annually, which makes an income of 1.4 billion USD per year through the sale to the Bank of Mongolia. With this income, we can pay subcontractors and main employees and cover the cost of our investments, meaning we are now less dependent on external funding.

The subcontracting works are 83 percent complete and is expected to be finished in a year and a half. My expectation is that the project will be financed by its own resources in the future. As for a power plant, Oyu tolgoi signed an electricity purchase agreement with the Government of Mongolia and this agreement has become a benchmark agreement that meets internationally recognized standards. We are 100 percent ready to sign a contract if the activities of the Tavantolgoi plant achieve their results.

The Southern Gobi has other sources of renewable energy too and we have the opportunity to conduct research on how to use solar and wind power to produce energy. The copper plant is something we have talked about and dreamed about for many years. In the Investment Agreement, it was agreed that a copper plant must be built as part of Oyu tolgoi project, and a relevant study was conducted in 2016. We are also working with the Ministry of Economy and Development in the construction of a copper processing plant.

Concerning the dispute related to taxation, a final decision is yet to be made and negotiations are underway at the moment. However, both parties don't see it as a dispute and stick to the position of listening to each other to find a solution to this issue.



**CH.KHURELBAATAR,** *Minister of Economy and Development* 

## Copper dominates in the amount of taxes paid to the budget

-The underground mine, which contains the main reserve of Oyu tolgoi copper, has started its operation.

Working on the 2023 budget, the projected profit from underground production has been reflected in the budget. 660,000 dry metric tons of concentrate will be produced. That number will increase to 780,000 tons in 2024. With this increase, 1.3 million tons of copper concentrate will be produced. Consequently, it will yield more revenue and contribution to our economy.

Most importantly, we forecast that 500,000 tons of pure copper will be produced between 2028 and 2036. Mongolia has Oyu tolgoi as well as the Erdenet plants. These two plants alone pay taxation amounting to 2.3 trillion MNT to the budget. Meanwhile, a coal-mining company, Erdenes Tavan Tolgoi has paid a taxation of over one trillion MNT. In view of this, copper dominates in the amount of taxation paid to the budget.

Besides, there is a high possibility that

there are more deposits of this scale yet undiscovered out there in our country. The volume of copper consumption on the global market is increasing significantly. In view of this, Mongolia should make itself a big player on the global copper market. We, Mongolians, should look forward with anticipation and need to pursue an ambitious policy.

Today, a memorandum on the construction of a copper smelting plant to produce pure copper was signed for the first time. I personally concluded an agreement on investment back in 2007, in which the issue of the copper smelting plant was first mentioned. And most importantly is that today we got even closer to building that type of plant.

By becoming capable of producing not just copper concentrate but also pure copper and even products made of copper, Mongolia's economy will expand creating more jobs and improving livelihood.



**KH.NYAMBAATAR** *Minister of Justice and Internal Affairs* 

## All issues have been settled except the tax dispute

-Now, we have only one issue left to settle – the tax dispute. This is very problematic. The parties managed to compromise and find solutions on all issues except tax disputes. Negotiations are taking a long time in order to avoid further disputes and misunderstandings between the tax service and the company.

The Mongolian tax authority created

a tax penalty report with twelve clauses and the tax paying company rejected the report, which caused the tax dispute. We are confident the dispute will be settled through mutual consent no later than August 12 of this year. Once this final dispute is finalized, the implementation of the parliament's resolution No.103 will be deemed fully satisfactory.

# The Oyu tolgoi Project has entered the third phase of its development



**N.TSERENBAT** *CEO of Erdenes Oyu tolgoi LLC* 

> -Today's commencement of the underground mine means the start of the project's continuous mining work in the future.

Secondly, the ore content of the underground mine is three times higher than that of the openpit mine, which creates the opportunity to earn more revenue. If we manage to immediately start the construction of the Tavan Tolgoi power plant in order to increase the project return, we will be able to keep the money spent for buying electricity from our southern neighbor and use it domestically.

Besides, a memorandum signed by Minister of the Economy and Development and Chief Executive of Rio Tinto Copper Group has significant importance. I see this memorandum as expressing of mutual cooperation in the production of valueadded copper products by processing Oyu tolgoi copper ore and the start of the third phase of Oyu tolgoi project.

Erdenes Oyu Tolgoi LLC and the Ministry of Mining and Heavy Industry jointly carried out fundamental research on how to turn Oyu tolgoi copper into a final product. A subsequent important point is that Rio Tinto now holds a 66% direct interest in the Oyu tolgoi project, thanks to which we now have an opportunity of boosting cooperation, raising funds, and introducing cutting-edge technology with a single partner.

With the commencement of the underground mining operations, Mongolia has proclaimed itself a big player on the copper market to the world. Consequently, it serves as a good example that raises the reputation of Oyu tolgoi subcontractors, human resources and Mongolian geologists who will be working on other similar projects. On the other hand, we, when entering the underground mine, have seen with our own eyes what massive work has been done.

We have a bright future. Thanks to the cooperation between Erdenes Oyu Tolgoi and the Oyu Tolgoi company, the future of this mega project is in the hands of the Mongolian people. It is a joyful event that Mongolia proclaims to the world that it has well-skilled, new human resources for the mining industry.



**B.JAVKHLAN** *Minister of Finance* 

## Oyu tolgoi provides many Mongolians with jobs and income

-First, we need to sort out and sum up a few basic concepts. Over the last ten years, all projects only affected about 20 percent of the total resources of Oyu tolgoi. But thanks to the launch of the underground mine operations, it becomes possible to work on the remaining 80 percent of the resource. The production volume will continue to keep growing. In 2022, the Oyu tolgoi project paid a total of 622 billion MNT to the state budget.

In terms of economic benefit, the peak period will start from 2028. However, the volume of economic benefit will depend on the global copper price at that time. We are standing at a historic moment with regards to the scale of construction works to be done and the mining technology introduced.

In view of the current copper price, Oyu tolgoi mine will be a principal source to increase GDP two or three-fold between 2028 and 2036. We cannot limit the project's economic benefits as a monetary contribution to the budget only. The project has a number of economic and social significance.

Oyu tolgoi, for instance, makes purchases from domestic suppliers worth around 200 million dollars yearly. It has also created 10-15 thousand jobs and has been preparing worldstandard mining sub-contractors.

The Oyu tolgoi mine is a place with excellent conditions and environment for occupational safety. Compared to other similar mines across the world, Oyu tolgoi ranks among the top three on the safety index. This should be considered as one of the many benefits given to us. For Mongolia, the project's benefits will surely increase further.

622 billion MNT is only the amount Oyu tolgoi paid to Mongolia's budget in the forms of taxation, fees, and other payments. Another gain is that Oyu tolgoi provides many Mongolians with jobs and income. I should emphasize that Oyu tolgoi collaborated with some 10,000 national businesses in a decade as its supplier, indirectly benefiting to Mongolian economy.



**G.YONDON** General Director of State-Owned Enterprise Erdenet Mining Corporation

### We are grateful to Oyu tolgoi for preparing Mongolian mining specialists

-The launch of underground production is very significant for Mongolia. Firstly, Mongolia is in the limelight of the world's mining industry. The start of a highproductive underground mine has become an important event, especially today, when there is a debate on how the increasing demand for copper can be satisfied.

The benefit to the Mongolian economy will grow three-fold.

There is an existing memorandum between Erdenet Mining Corporation and

Oyu tolgoi.

There are ongoing talks between the two parties to renew and modify the memorandum in the near future.

Oyu tolgoi is a mine with state-ofthe-art, cutting-edge technology. It is not just an ore mine only but also a training ground for mining specialists, for which I am very grateful to Oyu tolgoi. I am happy for many young people who are prepared by Oyu tolgoi paving their path to working overseas.

### **Rio Tinto Mongolia**



### Kh.Amarjargal: Underground operations to bring opportunities for promoting Mongolia globally and to boost investment

Interview with Kh.Amarjargal, CEO of Rio Tinto Mongolia, on the benefits of the Oyu Tolgoi (OT) project and its underground mine operations.

-OT operationalized its underground mine prior to the deadline agreed upon with the Government of Mongolia. To achieve this, what efforts did the investors make?

-In January last year, OT investors concluded an important negotiation with the Government of Mongolia and reached agreement on a number of important issues. This allowed underground operations or 'undercutting' to commence at Oyu Tolgoi. This was an important milestone not only in Mongolian history, but also in the global copper sector. Prime Minister L.Oyun-Erdene and Rio Tinto CEO Jakob Stausholm participated in this event. At that time, we pledged to Rio Tinto Mongolia provides 17 types of business services globally commence Oyu Tolgoi underground production in the first half of 2023", - a milestone we reached in March three months earlier than planned. For the Oyu Tolgoi project, this was a historic achievement.

2023 is an important year for Rio Tinto – our 150th year as a company - and we have utilized this knowledge, experience and technology, developed over many years, in 35 countries to successfully support the development of Oyu Tolgoi

Technologically, underground mining production is complex and it requires time to developWe have set a goal to gradually increase the production and reach the highest production level in 2028- 2036. Oyu Tolgoi uses a block caving method in its underground mine, which requires thorough operations, high-level knowledge and advanced technology. Just a few countries are able to apply this technology. It is also an indication that the technology serves as grounds for building investors' trust, engagement and cooperation for successfully commencing Oyu Tolgoi project and further this success in the future.

-It is understood that the use of technology, knowledge and experiences of a group with 150 years of history advanced Mongolian mining sector to a new level. Needless to say that Mongolian miners and suppliers also gained considerable experience.

-The impact of mining investment should not be measured only in terms of cash generated. We see it as a big investment for all Mongolians and Mongolian people. As of present, Oyu Tolgoi employs more than 20,000 people, of which 97% are Mongolian nationals. This is something we are very proud of. Many experts with years of experience in the mining sector get surprised, "How can you manage achieving such a high level of national employees within such a short time?". The fact that Mongolians can now become internationally recognized mining specialists and experts capable of working in other countries is truly commendable.

I want to highlight one example here. As said earlier, Rio Tinto Group operates in 35 countries. More than 100 Mongolian young professionals work in Rio Tinto's subsidiaries abroad in various positions, from engineers to group CEO.

-Rio Tinto has built a world-class mining complex in the southern Gobi region, ensuring stable operation. This has brought a wide variety of development for Mongolia. Can you give details on the Oyu Tolgoi project benefits for Mongolian society and its mining sector?

-The OT Investment Agreement which underpins the project, was signed in 2009. Since then, more than \$15 billion has been invested in Mongolia. In 2022 alone, Oyu Tolgoi supplied \$1.6 billion to the domestic market, of which \$1.4 billion was from sales revenues. In other words, \$200 million was brought into Mongolia in addition to full sales revenues. Out of the \$1.6 billion, \$1.3 billion was spent for procuring goods and services from national suppliers. Currently, over 800 companies partner with Oyu Tolgoi, again, of which more than 500 are national suppliers, and of which 100 operate in Umnugobi. Every cent of Oyu Tolgoi investment is transacted through the Bank of Mongolia, supplying foreign currency into the domestic market and contributing to Mongolia's Sources from the Ministry of Economy and Development cites that OT project accounts for \$7 of every \$10 foreign investment injected into Mongolia foreign currency source.

Sources from the Ministry of Economy and Development cites that OT project accounts for \$7 of every \$10 foreign investment injected into Mongolia. Looking at this, Oyu Tolgoi spend 100% of its sales revenues in Mongolia and commit 75% of all investment for procuring goods and service from national suppliers.

-Underground production is about to commence over a decade after the OT Investment Agreement was signed. What were the challenges to achieve such success? How did you overcome these challenges?

-It is a long story. Oyu Tolgoi is the largest project and the biggest development implemented in Mongolia. During last year's Mongolian Economic Forum, Minister of Finance B. Javkhlan highlighted that, "Rio Tinto has firmly invested into Mongolia since 2009 and been committed to cooperation with strong belief through ups and downs". This is exactly right. We have faced many challenges and the path for such large-scale construction and investment project is never straightforward. A number of challenges and difficulties are to be expected. Importantly, however, we have overcome these challenges by working closely with our partners, reaching mutual understandings, and building trust. This principle will be followed in the future. We are pursuing a policy to constantly increase the benefits of Oyu Tolgoi project stakeholders in the long run.

-Since the commencement of mining operations at Oyu Tolgoi, the company has devoted considerable attention to safety, environment, communities, and stakeholders, injecting a significant amount of investment. It is observed that Oyu Tolgoi implemented measures that are in line with global benchmark operation and introduced international standards. Tell us more details about it.

-The 150 years of knowledge and experience that Rio Tinto has accumulated from operating in 35 countries, is definitely our greatest asset. Therefore, the work we have delivered at Oyu Tolgoi has informed an exemplary best practice sector of Mongolia. We developed all safety procedures in compliance with Mongolian legislation and international standards. We complied with these standards by firmly establishing them in everyone's minds working at Oyu Tolgoi. Safety is the top priority for the mining and heavy industry. We feel especially proud of this record on safety ►

Moreover, we pay special attention to issues that are critical for the environment. We do our evaluations and regularly release environmental reports. Using internationally recognised and worldleading technology, we rehabilitate the environment we operate in. We also recycle about 90% of the water we use. We never discharge water after using it only once. Oyu Tolgoi uses groundwater that contains a high amount of minerals. It is not drinking water. It seems that people always misunderstand this. Three years ago, Oyu Tolgoi was recognized for its advanced water use solutions and technology and was awarded for global standards excellence. Also, we carry out many activities for supporting local development and responding to immediate needs, which can be benchmark activities not only in Mongolia but also for the world. In 2015, Oyu Tolgoi signed a Cooperation Agreement with the local government. Under this Agreement, Oyu Tolgoi invests \$5 million in local development every year.

-Engagement of all stakeholders, including the Government, investors, public and the community, seems important for further success of the project. What is your opinion on this?

-In addition to investors, suppliers also play very important roles for the successful implementation of the Oyu Tolgoi project. As mentioned earlier, more than 500 national companies supply their goods and services to Oyu Tolgoi. As part of corporate strategy and policy, we focused on supporting domestic investment and national companies. As opposed to the past, Mongolians now have much better knowledge of the benefits of the Oyu Tolgoi project and investment in general. Investment is not just cash. It includes the knowledge and education provided to Mongolians, know-how, and technology brought into Mongolia. Investment also provides positive social and economic impacts. That is why the public supported this project and the Government signed the agreement. It is called an Investment Agreement, but in actuality, it is a Stability Agreement. A stable business environment is necessary for a large-scale investment and mega project, so making such an agreement is a standard everywhere. There is a lot to work with the Government on how to cooperate with the investors within the framework of this agreement, how to successfully complete the project, and how to diversify the economy.

Rio Tinto realizes the Mongolian dream of exporting the knowledge of Mongolian young professionals and planning to expand this even more -As the largest investors, how do you support in terms of advertising/promoting Mongolia internationally and increasing the investment inflow? For example, information on the Oyu Tolgoi project is disseminated during large mining forums and events.

-Without a doubt, Oyu Tolgoi is Mongolia's forefront project on the global stage and for foreign investors. Furthermore, we are planning to undertake many social activities in addition to the project. We already started some. For instance, Rio Tinto Mongolia provides 17 types of business services globally. Rio Tinto realizes the Mongolian dream of exporting the knowledge of Mongolian young professionals and planning to expand this even more. We have the opportunities and potential. We are, in a way, advertising Mongolia internationally and attracting investment. In addition, we are developing an SME program, which aims at supporting other companies. Ethics is essential in business, as ethics would be the prerequisite to investment. Grounded on this belief, we established the Business Integrity Center, in cooperation with Mongolian National Chamber of Commerce and Industry and Transparency International. Also, we are planning to do more on green development in the future.

19 international banks worked with us on financing the Oyu Tolgoi project. Through this partnership, they all gained a significant understanding of both Mongolia and the Oyu Tolgoi project. During any forums and large-scale events, we deliver messages and information about the project, "this is how we operate at Oyu Tolgoi project". If you heard about it, B.Bold, CEO of Rio Tinto's Copper Group, connected to London live from 1300 meters of depth in an OT underground mine and introduced the project progress report to investors and investment analysts. It is one way of promoting and advertising Mongolia to the global community and investors. Think about it for a moment. It is amazing. Connecting between continents from 1.3 km depth in the mine and presenting the report. The commencement of underground mine production means it starts the milestone that Oyu Tolgoi would become an important player in the copper sector and Mongolia to become a large producer. This is largely seen as a door to promoting Mongolia globally and increasing the investment from around the world.

### World in 2023

# It is about making the biggest positive difference



We are bringing you an essay by Deirdré Lingenfelder, Chief Executive Officer of Oyu Tolgoi specially written for World In 2023 magazine.

What a year 2022 has been! Firstly and most importantly we achieved another year of solid safety performance and made good progress on our Environmental, Social & Governance (ESG) commitments with the launch of the Oyu Tolgoi Catalyst Fund for Khanbogd Development. We started the year strongly with the commencement of the underground mine in January. This is an amazing testament of our shareholder partnership as well as the hard work and resilience of our employees and contract partners. We continued making substantial progresses throughout the year and delivered on our operations plan despite cost and supply chain headwinds. This is only possible with a dedicated, passionate and aligned team. I want to take this time to thank each and every one of you for your dedication and hard work.

#### The year ahead

Building on these achievements, this year is shaping up to be another exciting year. I look forward to celebrating the commencement of Underground Production next month and will communicate more on this historic milestone soon.

There has been significant work across our business to plan for 2023 and it will be important that we have a shared understanding of our priorities to ensure we continue our journey to be a safe, world-leading, and sustainable copper business. Importantly, we need to ensure we deliver on our promises which will also mean that we will continue our contribution to Mongolia's long-term prosperity. In 2023, we will focus on:

#### **Our People**

Safety, wellbeing and caring for each other remain the highest priority for us. This year we will continue on our Safety Maturity Journey. We are also investing significant time and effort in the capability development of our people with initiatives such as leadership programs and technical skill development.

#### **Operational Excellence and Development**

We will continue to focus on the safe ramp up our underground production, including reaching near completion of Shafts 3 & 4 and the Conveyor to Surface projects. As we ramp up, our mining profile will change, and we need to stay focused on continually improving. As a growing business, it will be important to demonstrate financial discipline and to deliver a profitable business to our shareholders.

### Our Partnerships with Environmental, Social & Governance at the core

Our ESG portfolio is critical to maintaining our license to operate and we need to deliver mutually beneficial outcomes for our business and stakeholders.

We will focus on ensuring the effective delivery of the Oyu Tolgoi Catalyst Fund for Khanbogd Development and our water strategy. We will demonstrate care for our planet through our support of the billion-tree programme and finding a pathway to decarbonise our business.

### **Staying 5 Steps Ahead**

Our business is fast paced and constantly evolving. We need to plan for the full integration of the underground project into operations and we will also be refreshing our long-term strategy in consultation with the Oyu Tolgoi Board.

I'm excited about working with you all to deliver on our promises in 2023 as we strive to reach the next chapter of Oyu Tolgoi's history together. It is a significant year for all of us, announcing our first underground production commencement and becoming the fourth largest gold and copper operation in the world.

But it is not about being the biggest. It is about making the biggest positive difference. We are stronger, together.



# Oyu tolgoi will significantly contribute towards global green development

Which is the commencement of underground mining operations, Oyu tolgoi has become not just a big project for Mongolia but also a world-scale project. For Mongolia, it is the biggest mega project. However, for the Rio Tinto group, Oyu tolgoi is a new project with the most advanced, cutting-edge technology among other projects operated in thirty-five countries of the world by Rio Tinto. Now let's talk about how Oyu tolgoi could contribute towards global green development.

The world community has brought together a common objective to promote green development and protect life on our blue earth. Each nation has been doing its best to combat climate change. Every country belonging to this blue earth

Some experts even predict that the price of copper might reach 15,000 US dollars per metric ton made promises and was given concrete tasks, which include the implementation of the UN 17 Sustainable Development Goals, reduction of green gas emissions, and fighting climate change. All countries under the SDGs have determined and are implementing their green development policies.

Mineral resources under the southern gobi's soil in Mongolia are about to play an important role in global green development. Copper is one of the most useful products for green development. In other words, the more the world strives towards green development, the more the copper demand will grow. Let's cite Mr. N. Tserenbat, CEO of Erdenes Oyu tolgoi.

"Humankind collectively has produced a total of 🖕

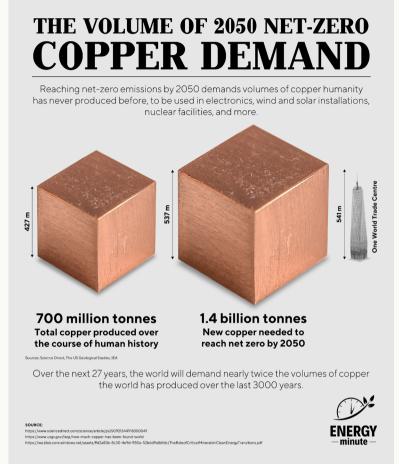
700 million tons of copper to date. It is estimated that 1,4 billion tons of copper is required in order to fulfill the goal of reaching net-zero carbon dioxide or CO2 emissions globally by 2050. It is believed that the first-ever formal production dates back to about 5000 B.C. when a copper smelting plant was established in Chile. However, now the world collectively needs to produce 1,4 billion tons of copper in the upcoming 17 years, which means the copper price will definitely be going up".

Oyu tolgoi is a mine with advanced, cuttingedge technology. According to experts, Oyu tolgoi's lifespan is anticipated to be 50 or 60 years reaching around 2100, which clearly demonstrates that this mine with environment-friendly technology will be greatly contributing towards global green development.

During the commencement of the underground production, the Government of Mongolia signed a memorandum with the investor for copper concentration plant and production of finished copper, to move the Oyu tolgoi underground project forward. The paper was signed by Mr. Ch. Khurelbaatar, the Minister of Economy and Development, and Mr. Bold Baatar, Chief Executive of Rio Tinto Copper. With the start of the copper concentration plant, it will be possible to yield an income amounting to 2 billion US dollars annually, from cathode copper export.

Mr. Bold, Chief Executive of Rio Tinto Copper





said "Rio Tinto estimated that demand for copper to increase by 25-50 million tons or twofold annually by 2035. Such a forecast is driven by the global growing demand for electric vehicles. Diesel vehicles we drive today use 26 kgs of copper on average, while electric vehicles use 86 kgs of copper on average, 3-4 times more than diesel vehicles. Besides, all cables and electrical wiring are made of copper too.

Furthermore, there is an urgent need to update and change energy sources because of climate change and global warming. Copper is also used in renewable energy sector".

As of today, the copper price has reached about 8,900 US dollars per metric ton. Experts say that the copper price will continue to increase in the world commodity market. Some experts even predict that the price of copper might reach 15,000 US dollars per metric ton. It is obvious that the more copper demand goes up and the price increases, the more the value of the project will grow.

### **Underground worker**

## E. Ankhbayar: Young people that work at the Oyu tolgoi mine have to consider themselves very fortunate

Here is an interview with Mr. E. Ankhbayar, Manager of the Underground Hoist & Fixed Plant Maintenance, Oyu tolgoi Mine.

### - Please share with us about where and when did you start your employment at Oyu tolgoi?

- I have been participating in the construction of the Oyu tolgoi mine since 2012. First, I started to work in the asset management department and later moved to the open pit maintenance department. Afterward, I worked as a manager and superintendent for the Concentrator Plant Maintenance for five years, before shifting to my current position of Manager of Hoist and Fixed Plant Maintenance of Underground Operations.

Before starting my employment at Oyu tolgoi, I was involved in a Rio Tinto Program for new graduates and worked at the Kennecott Copper Mine in Salt Lake City, the United States of America between 2009 and 2012. The program aims to give new graduates the working experience and to develop them through hands-on practice.

After graduating from the Michigan Technological University majoring in



mechanical engineering, I was admitted to this program and started to work at the Kennecott Mine. Many years have passed since then and looking back I have learned and mastered a lot of things. By the time when Rio Tinto started to introduce its new management system at Oyu tolgoi, I already had awareness and knowledge about this system. Because I had an opportunity to gain adequate experience while working at Rio Tinto's Kennecott Mine. Besides, this experience was helpful in adapting to the new working conditions over a short period of time when I got my job at Oyu tolgoi.

- As a person who has experience of working at a mine overseas, how would you evaluate the skills of Mongolian youth?

- If I consider all mines owned by Rio Tinto overseas, Mongolian youth

have many advantages and skills. In my opinion, Mongolians are better than their foreign peers in terms of professional qualifications and skills, as well as the ability to learn things quickly. Mongolians also have an excellent ability in adapting to any new conditions. As far as I am aware, there are now 50-100 Mongolian miners who are working overseas after working at Oyu tolgoi. Just at the Kennecott mine, some thirty Mongolians work there today. We all know that the current Chief Executive of Rio Tinto Copper is a Mongolian national. It is my belief that those working in the Mongolian mining industry, especially at the Oyu tolgoi mine, will never be rejected wherever they go to work, in terms of qualifications and skills.

Most of the Mongolian young miners have higher education. In the West, skilled engineers with higher education prefer working in information technology rather than working in mining, according to my observation.

Young people that work at Oyu tolgoi have to consider themselves very fortunate. They earn a good salary and work at a mine that uses the latest technology and the Oyu tolgoi mine is the one that leads many other mines of Rio Tinto with its high safety standard. I guess that is the reason why thousands of Mongolian skilled youths are eager and keen to work at Oyu tolgoi.

-Now that underground mine operations have started, please share with us your impressions.

- I count myself a very lucky and fortunate one. I had an opportunity to work for different departments and units at Oyu tolgoi, thanks to which I have learned a lot. I want to say to all Oyu tolgoi employees that we really did it all together. It is thanks to everyone who did the first explorations, built camps, builders and engineers who built plants, subcontractors, and others. My sincere congratulations to all of them on this historical event - the commencement of underground mine operations. This is a truly big construction and today is a day we must celebrate and be proud of what we have achieved.

### **Miners' impressions**



**D.DAVAADASH** Senior specialist of the underground mine shaft operation and transportation department

-I have been working at Oyu tolgoi for seven years, since 2016. I am very happy and impressed with the start of underground mining today.

Our department is responsible for shaft operations and transportation in the mine. It transports underground mining personnel as well as materials and concrete needed for underground mining operations.

Our work slogan is to ensure safe working conditions. Safety always comes first, and production comes second. Safety is not just a rule for mining, infrastructure, and construction, it is a standard that everyone should follow in their lives and every step of the way. Therefore, the safety training of each Oyu tolgoi employee is very thorough. For that reason, we have been able to start our underground mining operations securely in the knowledge that safety is our top priority.



**B.MUNKHDUL** Senior Electrical Specialist of the Quarry **Repair Department** 

-Our repair department maintains about 150 heavyduty machines with a team of 640 employees, including full-time and contract employees. I have been working at Oyu tolgoi for more than 10 years, since 2012. Now I am working as a senior electrician in the mine repair department. Long-term and short-term

plans are in place for daily routine maintenance.

The open-pit mine was put into operation in 2012, and I am happy that the underground mining operation started after 10 years of underground construction. This is a historical event not only for the Oyu tolgoi workers and the people of Mongolia.



#### **CH.ALTANPUREV**

An infrastructure assistant and a senior specialist in the mobile equipment repair department



A.MUNKHTSETSEG **Underground Mine Operations Trainer** 

-I have been working in Oyu tolgoi since 2018 and in the Underground Mine sector for exactly two years. I participate in the process of preparing the wells, blasting, and charging during crosspenetration. Our training slogan is "Training saves lives". A very appropriate slogan. No job can be done without proper training first.

Today is a historic day for

Mongolia. In terms of mining operations, it can be said that the process of extracting underground resources using block mining technology is the first in Mongolia. More than 14,000 people are employed at Oyu tolgoi. Today, with the beginning of this underground phase, which was created by the efforts of many people, I certainly feel a sense of pride and achievement.

-I am in my 11th year working at Oyu tolgoi. Now I am working as an infrastructure assistant and a senior specialist in the mobile equipment repair department.

Our mine uses more than 900 medium-sized pieces of equipment and over 300 passenger vehicles. Our department provides reliable maintenance services for all this equipment and vehicles. Our infrastructure department has a staff of 450 people. At the Oyu tolgoi camp, we provide a safe and efficient working environment for the workers. The team also provides reliable

transportation, including flight arrangements, on-site bus services, and accommodation as well as the proper work environment for each employee.

Back in 2010 and 2011, we started our operations with the stripping of the soil. Since then, a lot of money has been spent to create today's development and prosperity. Congratulations on this anniversary to the more than 14,000 workers who took part in it all and are now working as "Oyu tolgoi employees," as well as the miners who will work at Oyu tolgoi in the future.

### Khanbogd-Construction and Employment 2023 forum

Investment, required for Khanbogd soum general development plan implementation /2021-2040, billion MNT/

- Real estate
  450.0
- Engineering infrastructure **295.9**
- Road and transportation
  58.5
- Green area

21.5





### **Khanbogd Forum**

## Smart and eco city in the Galba Gobi

t is already apparent that a city will be established in the Galba Gobi. Khanbogd is the name of that city.

There was a period when no one expected that the name of the soum would become so popular in our country, which is located on a house in the land of the rising sun. Khanbogd Soum was soon to become associated with the name Oyu tolgoi.

As a result, Khanbogd's position in the national weather forecast became stable. It is the warmest spot in Mongolia. Summer temperatures reach + 40 degrees. During the winter months, temperatures range from -15 to -28 degrees. According to some of the locals, the soil temperature can reach as high as +50 degrees in the summer.

Khanbogd residents are very familiar with heat and bitter cold, as well as spring storms and gale-force winds. However, on the

### Khanbogd soum general development plan

72.5 HA Ger district with complete engineering infrastructure

138,5 HA Ger district with partial engineering infrastructure

- Apartment district with partial engineering infrastructure
- 139,2 HA Public area to be connected to the utulity networks
- 26,6 HA Educational area

4,9<sub>HA</sub> Hospital area

- P 185,5 HA Renewable energy area
- 61,7 HA Industrial area
- 70 HA Farm area
- 346 HA Reserve area
- 298,4 HA Green area

threshold of this century, their fate took a totally unforeseen path.

It was founded in Khadan Khoshu in 1924 as Galba Soum. So, they migrated and settled in modern Ikhbulag in 1941.

Khanbogd will see years of radical reforms, construction, and progress over the years to come. This city in the sand will be a showpiece of the country's progress and become a brilliant and shining developed city. Khanbogd will become a world-renowned city. It will be a melting pot of many different nations, and many tourists will wish to visit. Oyu tolgoi will grow into the world's fourth-largest copper mine in five years and Khanbogd will never be the same.

People know about cities such as Las Vegas in the United States and Dubai in the United Arab Emirates, which were built with unparalleled development in the middle of sand dunes and transformed the desert. Then, in the Mongolian Gobi, an exquisite city called Khanbogd will be built, attracting international attention. The name "elegant city" was chosen because I wanted to convince Mongolians that an eco-city can be developed in the Gobi. I aspire to create a green city with well-organized, wellplanned, and easily available social services, as well as a high quality of life for its residents. I wish it to become a joyful city with clean air, a safe environment, and a healthy way of life.

### The Khanbogd people's wish has come true

Since the Oyu tolgoi mine began its operations, the Khanbogd people's lives have changed dramatically. This soum of the Gobi, like the other 330 Mongolian soums, has had same economic indicators since 2010. However, over the last ten years, this soum has achieved a high rate of development. Khanbogd now has a settlement population of roughly 8,000 people, with a mobile population of about 30,000. The people of Khanbogd are proud to own the most camels in the country. The total number of camels is 34.4 thousand. Khanbogd now determines Ömnögovi's strategic development even down to geographic location.

It is 295 kilometers from the center of Ömnögovi province and 779 kilometers from Ulaanbaatar city. The Oyu tolgoi mine, the Tsagaan Suvarga gold and copper mine to the northeast, the Harmagtai mine to the east, and the Tavantolgoi mine to the north are all located inear the soum. In terms of economic parameters, Khanbogd lags substantially behind other soums. As a result, the state grants the city its status and serves as the primary foundation for its development. The people of Khanbogd, on the other hand, have been carrying the hope of turning their soum into a city for more than ten years, and they are now overjoyed that their wish is coming true.

### Forum on "Khanbogd-Construction and Employment"

On March 13, the underground mine area of Oyu tolgoi began operation. On March 31, the "Erdenes Oyu tolgoi" firm, in **>** 

collaboration with the Cabinet Secretariat of the Government. hosted the forum "Khanbogd-Construction and Employment" in Khanbogd Soum.

The start of underground mining created the conditions for the mine to function nonstop. And N. Tserenbat, the CEO of the "Erdenes Oyu tolgoi" corporation, stated that Khanbogd Soum is becoming a model city that has developed buildings and produced sustainable growth, setting the groundwork for what it is now. He handed the Chairman of the Citizen's Representatives Council the entire blueprint for the development of Khanbogd City till 2040.

The forum approved the general strategy for the development of Khanbogd until 2040. They discussed and exchanged ideas on how to successfully expand the economy and business, how to promote healthy and safe living areas for the people, and the policies and tasks that the Soum community and citizens should execute in order for the city to grow. The primary keynote lecture "Khanbogd-2040 Development Key" was given by N. Tserenbat, the CEO of "Erdenes Oyu tolgoi". In this regard, he stated that various economic circumstances have been created for Khanbogd Soum to work as a city, as cities emerge wherever there are markets and economic opportunities, like the creation of jobs, a growing population, and the right environmental conditions.

The Erdenes Oyu tolgoi company aims to create SME's involved in the food and agriculture sectors over the first three years. However, they will support value-added services, like wool cashmere, leather, and other processing industries in the medium term. Long term, it is expected to promote the growth of tourism, infrastructure, IT parks, and other new economies after 2030.

This is how the development of Khanbogd will proceed. If the government has established a legal framework for development with a status of a city and approved the general plan, it will be supported by the Oyu tolgoi company, which has decided to invest \$50 million US dollars.

The Govi Oyu Development Support Fund NGO has been working in the Soum with an annual capital injection of five million US dollars together with Oyu tolgoi project partners such as Hanbogd, Manlay, Bayan-Ovoo, and Dalanzadgad. Over the next five years, this NGO will invest \$50 million in the development of Khanbogd city.

The Khanbogd economy will thrive by 2040 if these policies and objectives are implemented.

Khanbogd's GDP per capita is 15.9 million MNT, and the GDP is 137 billion MNT currently. By 2040, the population will have grown to about 25.8 thousand, the GDP per capita will be 85.2 million MNT, and Khanbogd's GDP will be 2.2 trillion MNT. The Erdenes Oyu tolgoi company has forecasted a threefold growth in population, a 5.4-fold increase in GDP per capita, and a 16-fold increase in Khanbogd's GDP.

#### **Opportunities for business**

Currently, more than 200 small and medium businesses are operating in this Soum. According to research done by Erdenes Oyu tolgoi research, more than 80% of this is in the service sector, with more than 10% in manufacturing. The majority are restaurants, grocery businesses, and general merchandise stores. Over 50 companies in the mining, construction, and transportation sectors are involved in the storage industry.

The Erdenes Oyu tolgoi company also announced that it has developed and prepared five projects with the main goal of supporting the citizens and economic entity of Khanbogd soum providing healthy and safe food to the workers at the mine of the Ovu tolgoi project.

These include egg-laying chicken farms, beef cattle farms, dairy farms, as well as a four-season greenhouse and a 300-ton warehouse project. This project requires a 6.4 billion MNT investment, and it highlights the possibility of attracting and implementing investment from various sources, such as commercial bank investment loans, loans to support small and medium businesses, loan guarantee funds, and guaranteed loans from the ADB.

Along with the massive mine, Khanbogd offers a variety of business opportunities. Given that the Oyu tolgoi mine currently employs over 10,000 people, there are many opportunities to supply the workers at the mine. Khanbogd is the closest point to the mine, and the mine is accessible via a 35.1-kilometer paved road. Khanbumbat Airport is already in operation. The local business representatives said that there are possibilities to manufacture and supply some of the food and products in Khanbogd that are currently carried by plane from Ulaanbaatar to the mine. For them, the most significant aspect to consider is that Oyu tolgoi requires strict health and safety standards.

It is also a location with significant tourism development potential. Galba Gobi features magnificent nature, uncommon animal life, many types of winged birds, and many monuments such as the three famous Galba monasteries, Demchog Monastery, the world's energy center founded by Noyon Khutagt Danzanravjaa.D /known as the Saint Lord of the Gobi/.

It is critical that the government develops and implements a tourist policy that promotes tourism not only at border ports but also in border areas. Such a business climate and opportunities can be found in Khanbogd.

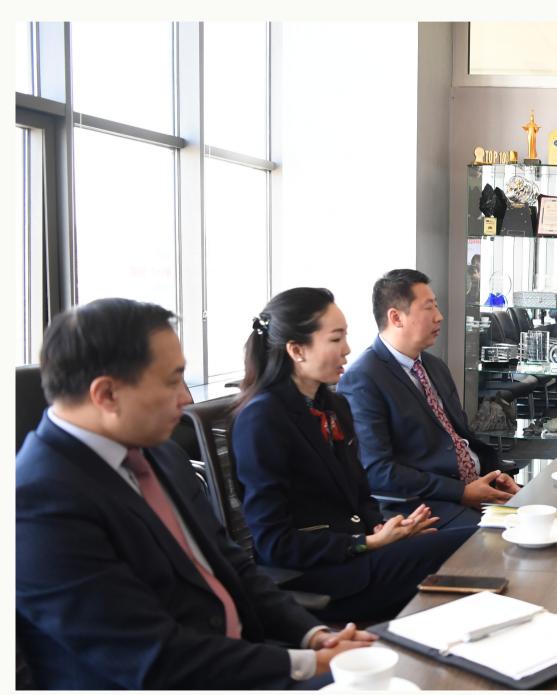
The People of the Soum were grateful when the Khanbogd Development Accelerator Oyu tolgoi Foundation announced plans to create Galba Park, a sports and recreation facility, in the first phase. People will flock to places that are smart, green, elegant, clean, happy, and secure. People make the decision to reside there. Imagine a city like this flourishing in the Galba Gobi, in the south of Mongolia.

### **Editorial meeting**

# How to transform Khanbogd soum into a city

### Khanbogd will become the new economic hub

An editorial meeting was held with the management team of Erdenes Oyu Tolgoi LLC within the framework of the development of the Oyu Tolgoi project's underground mining and the development of Khanboad soum in Umnuaobi province, where the Oyu Tolgoi project's operational area is located. It provided detailed information regarding underground mining activities, the results, the benefits to Mongolia, how to transform Khanbogd soum into a city, what kind of engineering network would need to be built, and how many people would be settled. N.Tserenbat, Executive Director of EOT LLC, L.Unurbaatar, General Manager of the Geology and Mining Department, B.Bayar-Ulzii, General Manager of the Financial Analysis Department, J.Naranpurev, General manager of the Legal department and B.Chuluunbaatar, General Manager of the Khanbogd Project and Cooperation Department attended this editorial meeting.



-In connection with the commencement of underground mining at the Oyu Tolgoi project, EOT LLC hosted the first-ever Khanbogd-Construction and Employment forum in Umnugobi province's Khanbogd soum. What was the primary objective for convening this forum? -N.Tserenbat: Based on the events over the last 70 years, the phenomena of a new residential areas-urbanization can be attributed to major mine development. Such as Erdenet, Darkhan-Uul, Bor-Undur, Baganuur, and Shivee-Ovoo. Khanbogd is expected to develop into a new economic hub.





**N.TSERENBAT** Executive Director of EOT LLC

> If all food products, including meat and vegetables, can be delivered to Oyu Tolgoi workers entirely from Khanbogd soum, it will be the region's greatest achievement.

And the Oyu Tolgoi mine will be the driving force behind this initiative.

The Erdenes Oyu Tolgoi LLC must fulfill its commitment to increase profits for the Mongolian side in the Oyu Tolgoi project. Local jobs will be made based on the costs without increasing project expenditures. Since 2015, Oyu Tolgoi LLC has invested USD 5 million per year in the development of the Gobi region. The project's production and services, which are being developed at a cost of hundreds of millions of dollars, are expected to create jobs in Khanbogd. The Khanbogd-Construction and Employment forum was arranged with that in mind.

An external team conducted a poll following the forum's organization. More than 80% of those who responded to this survey wanted to know if the flats and apartments in Khanbogd were ready, how much space was available, and how much would they cost.

There are a lot of people who want to live in Khanbogd. As a result, we want to complete the construction work as soon as possible. Treatment facilities, heating networks, drinking water sources, and clean and wastewater pipes have all been constructed. Based on this infrastructure, the construction of housing, buildings, and roads will be done by the private sector. The private sector will construct houses, buildings, and roadways based on the needed infrastructure. We plan to work with the Mongolian Mortgage Corporation and the Credit Guarantee Fund. It is planned for the private sector to construct 800-1000 homes that will be eligible for mortgage loans. As a result of that, subcontracting companies of the Oyu Tolgoi project will be able to relocate their offices and workers to Khanbogd. These tasks will be completed as soon as possible and with excellent quality.

-What will be the positive impact of Khanbogd becoming a city in Umnugobi province and the economy of our country?

-N.Ts: There are two important things. Native people's interests are jeopardized in places where mining operations take place. The subject of why Khanbogd was chosen frequently comes up. First, the local people will become part of the new economic cycle. They will be provided with employment and business options. Opportunities will be given, but they'll also come with the training needed to take advantage of them. Training for agricultural and greenhouse-based growers was held in the fall of last year. Farmers complained about a lack of storage and containers. As a result, **>** 

▶ it was decided to construct a warehouse with a capacity of 400-500 tons at Khanbogd soum using funds from the Gobi Oyu Development Support Fund.

Also, the construction of a contemporary butcher shop has been discussed for many years. It will be resolved as soon as possible. If all food products, including meat and vegetables, can be delivered to Oyu Tolgoi workers entirely from Khanbogd soum, it will be the region's greatest achievement.

Our company is often told that Oyu Tolgoi should be entirely supplied by Mongolian enterprises and the private sector. There is only one requirement for us to deliver this request to Oyu Tolgoi. Oyu Tolgoi is willing to purchase products that adhere to both international and Mongolian standards.

The Small and Medium Enterprise Development Fund, Credit Guarantee Fund, Cooperative Development Fund, and commercial banks in Khanbogd soum stated that they would provide a limited number of additional loan packages to residents, businesses, and producers. This will be a huge opportunity.

We intend to organize the Khanbogd Business Forum jointly with the local administration. This forum is likely to see plenty of business proposals. Khanbogd residents should first discuss what they can do and produce, as well as how to do it.

-It is estimated that Khanbogd's population will grow to 25,000. Can you please explain how this number was derived?

-N.Ts: The economic and social indicators included in the plan to develop Khanbogd soum into a city were not overestimated. For example, as of today, the registered population in Khanbogd soum is 8,660, and the mobile population will increase to about 40,000. Based on the actual situation, we estimate that the registered population of Khanbogd will reach 25,000 soon.

However, when the construction of the underground mine of the Oyu Tolgoi project is completed in 2025, the work of the subcontractors will be finished, and there will be about 4,800 permanent employees. So, if 3,000 of those 4,800 people and their families relocate to Khanbogd soum, the population will rise to 12,000. It was

N.TSERENBAT: Based on the trend and concept of sustainable development, we will aim to make the city's solution as eco-friendly as possible estimated that adding the 8,000 Khanbogd natives would bring the total to about 20,000. Also, I believe there will be benefits if businesses relocate to local areas as part of the government's larger policy of urban and rural revitalization.

In addition, during the opening of underground mining operations, a memorandum of cooperation was signed between the Ministry of Economy and Development and the Rio Tinto Group for the production of final products. The Government of Mongolia plans to build a copper concentrate processing plant in Khanbogd Soum, and a residential area will also be created along with it. In this way, it is expected that Khanbogd Soum will become a city with a population of at least 25,000. Within the framework of this plan, the Ministry of Construction and Urban Development was asked to pay special attention to and support the development of Khanbogd Soum. The resident representative of the European Bank for Reconstruction and Development /EBRD/ has visited Khanbogd soum three times in a year and familiarized with the situation. The first meeting was the Oyu Tolgoi project, and the second meeting was the development program of Khanbogd. Most recently, a meeting was held to personally familiarize the representative with the projects and programs to be implemented in Khanbogd. I met with Daniel Kochinsky, a member of the British Parliament and Trade Envoy for Mongolia, and specifically introduced the Oyu Tolgoi project, the copper concentrate processing plant, and the plan to turn Khanbogd soum into a city. We are focusing on attracting investments by promoting our projects to foreign investors.

-How will the new residential area be provided with electricity?

-N.Ts: There is a three-stage solution to the infrastructure problem, including electricity, is planned. In the first phase, 5 billion MNT will be allocated from the local budget for the construction of a 15 MW thermal power plant. This is because Oyu Tolgoi and other external financing organizations will not invest in a coal-fired power station, so we will construct a thermal power plant with our own budget. It is estimated that 40 MW of energy and heat will be produced by 2040. ►



B.CHULUUNBAATAR General Manager of Khanbogd Project and Cooperation Department

> It is planned to start the work of providing renewable energy sources in 2032

Domestic and foreign enterprises are submitting proposals for joint implementation of renewable energy projects related to the development of Oyu Tolgoi.

L. Unurbaatar: (General Manager of Geology and Mining Department) Oyu Tolgoi LLC is planning to conduct research related to renewable energy around the project site this year, and is working to study solar and wind resources that can generate energy. After that, the possibility of cooperation will be opened.

**B.Chuluunbaatar:** (General Manager of Khanbogd Project and Cooperation Department) Renewable Energy is included in the general plan for the development of Khanbogd. The location of the land was determined and it was taken under special need. It is planned to start the work of providing RES in 2032.

-What cities and towns will be built based upon the general plan for the development of Khanbogd soum? Apart from energy, what other infrastructure programs are planned?

-L.Unurbaatar: (General manager of geology and mining department) In 2017, with the investment of OT LLC, a water purification facility, which can purify 2,600 cubic meters of water daily and has the capacity to provide clean water to 13,000 people was built in Khanbogd soum. Further expansion would increase its capacity which should provide 35,000 people with purified water.

B.Ch: Over the past decade, Oyu Tolgoi has

built about 30 infrastructure buildings with an investment of 56 million USD in Khanbogd soum. Now, within the framework of Khanbogd's development strategy, the construction of roads, and hard and soft infrastructure with an investment of 85 million US dollars will be carried out as a priority. A total of about 500 million US dollars is needed to solve several infrastructure issues.

The general development planning of Khanbogd covers 1610 hectares of land. It is planned to build apartments, private residences, and commercial service complexes in the new residential area. In the first phase, 160 apartments will be built, and the opportunity to rent and purchase them will be provided to the first-time workers of the Oyu Tolgoi company to move there at a discounted rate. If you settle with your family, other types of support are planned. To attract step-by-step investments for the implementation of the general development plan, Khanbogd Development Accelerator Oyu Tolgoi is applying to foreign investors and international funds.

-They say Khanbogd will be a smart and ecofriendly city. What kind of policy and planning is being done toward that goal?

-N.Ts: Based on the trend and concept of sustainable development, we will aim to make the city's solution as eco-friendly as possible. All buildings and structures that are planned to be built will be required to have no heat loss, use renewable energy, preserve and protect the original nature of Gobi, and properly recycle natural resources. We aim to make the entire city eco-friendly by planting plants that are compatible with the soil of the region and creating green structures. From the point of view of social development, all parties should strive to create a stress-free, improved quality of life, comfortable environment, access to government services, and create attraction. Also, innovative solutions to reduce greenhouse gas emissions will be introduced. Besides, it is expected to be a smart city with everything the younger generation looks for.

-The most important factor is the provision of high-quality social services. People will want to settle in Khanbogd if the social services that the **>** 

#### citizens require are available. What is the policy toward creating social services?

-B.Ch: To increase education quality, the Khanbogd Development Accelerator Fund of Oyu Tolgoi will meet with representatives and administrators from the capital's schools and invite them to open a branch school in Khanbogd by introducing their educational activities. The Oyu Tolgoi employees are asking us to pay particular attention to enhancing the accessibility to improving access to schools, kindergartens, and hospitals in Khanbogd.

# -What construction works are planned to be completed by 2024?

-B.Ch: Initially, 13 priority projects will be implemented in three areas: hard infrastructure, social infrastructure, and business development. For example, the work of paving the national and auxiliary roads in the Soum will be started this year. It is planned to start the renovation of Galba Park, build a recreation and sports complex, and finish it by 2024. Also, the street project will be started as part of the beautification of the neighborhood. Within the framework of this project, works such as the connection of utility lines, the construction of public and playgrounds, and the construction of pedestrian paths will be carried out.

-How do you plan to create a business policy and environment in the new residential area?

-N.Ts: We will fully participate in the first three years to assist food, agriculture, and small and medium-sized industries, and in the medium term, we will grow value-added products, services, and wool, cashmere, and leather processing industries. In 2030-2034, it is planned to support and expand tourism, infrastructure, IT parks, and other new economic sectors as part of the long-term goals. We intend to implement it in stages and effectively because there is a lot of money to be spent and a lot of work to be done.

# -What is the construction industry's human resources potential and capacity? Has this been a topic of research?

**-N.Ts:** We see it as the families of the employees of Oyu Tolgoi. Once they settle down, human resources will be created. Retraining should be organized according to the branch and profession.

B.CHULUUN-BAATAR: Over the past decade, Oyu Tolgoi has built about 30 infrastructure buildings with an investment of 56 million USD in Khanbogd soum We are also looking into the possibility of creating new jobs for seniors in Khanbogd soum.

-B.Ch: The Ministry of Construction and Urban Development, the Administrations of Umnogobi Province and Khanbogd soum, and the Oyu Tolgoi Accelerator Fund for the development of Khanbogd, jointly signed a 10-year four-way agreement for the development of Khanbogd soum. Within the framework of that agreement, a partnership committee consisting of representatives of the parties will be established and the administration of Khanbogd soum will work with that committee. The main purpose of the agreement is to focus on the implementation of projects and programs for the development of Khanbogd with the support of all four parties without hindrance or delay.

-Many capital companies want to participate in the construction of Khanbogd. What chances do they have?

**-N.Ts:** First of all, a policy is being made to provide opportunities to local enterprises of Khanbogd. At the Khanbogd business forum, we will clarify what Khanbogd can do, how to participate in the development, and what their opportunities are. After that, it is possible to involve other enterprises in projects and works that the people of Khanbogd cannot do.

-Tell us about the advantages of turning Khanbogd Soum into a new residential area.

-N.Ts: Oyu tolgoi's shift workers incur very high flight costs for coming and going. If Oyu Tolgoi mine workers start settling in Khanbogd soum, this cost will be saved. Oyu Tolgoi spends about USD 25 million (according to budget 2023) annually just on flights. With the creation of a new settlement zone, this cost will be reduced by around 63 percent, meaning USD 15 million will be saved annually. On top of that, what changes in the overall economy is that most of the cost of flying goes towards jet fuel. We are a country that does not produce our jet fuel. So, it can be understood that the money sent out will decrease to a certain extent.

People often ask why we do not receive money from Oyu Tolgoi project. Due to the implementation of the Oyu Tolgoi project, some of the expenses that must be incurred from Mongolia have been reduced. Also, the Oyu Tolgoi project has been our **>** 



J.NARANPUREV General manager of Lthe egal department

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The main purpose of the agreement is to focus on the implementation of projects and programs for the development of Khanbogd with the support of all four parties without hindrance or delay.

lifeline in any period of economic crisis or growth, providing stable income to the budget of Mongolia. It is correct to look at it from the point of view that Oyu Tolgoi cooperates with many Mongolian enterprises and subcontractors by buying products and services. Some people compare us with the Erdenet Mining Corporation, which has been operating since 1978. However, how many years has the Erdenet Mining Corporation been operating? Since 2019, the profit from Erdenet to Mongolia has increased. It is estimated that the highest dividend will be received from the Oyu Tolgoi project around 2038. However, the news that the price of copper is expected to reach 15,000 US dollars per metric ton by 2025 has started to spread internationally. The higher the price of copper, the more profitable we will be.

# -The Mongolian stake in the Oyu Tolgoi project can be increased to 34 percent

-We talked a lot about the issues surrounding the topic of Khanbogd Soum becoming a city. Now let's talk a bit more about Oyu Tolgoi operations and underground mining. Mining has begun. What are the policies and responsibilities of Erdenes Oyu Tolgoi on this project after the start of mining?

-N.Ts: We will work on two main areas: ensuring the stable operation of Oyu Tolgoi and increasing profit for the Mongolian side. As part of the preparation of qualified personnel for sustainable production, the Geology and Mining Department of Erdenes Oyu Tolgoi Company is preparing human resources for open and underground mines and concentrators. On how to work better, we are studying the best practices of other companies and are working on introducing those at Oyu Tolgoi.

In terms of financial and economic efficiency, we are analyzing how to reduce the cost of loan interest, which has the greatest impact on the costs of Oyu Tolgoi LLC, and how to find financing from cheaper sources. Consulting services are available for some activities.

**L.U:** The first stage of the Oyu Tolgoi project was the open pit mining operation in the South Oyu group deposit, which began in July 2011. Ore extraction began in April 2012, and in January 2013, the concentration plant with a capacity of 100,000 tons of ore per day commenced operations.

As such, the open pit and concentrator operations were streamlined, and concentrate exports began on July 9, 2013. By official document, the Investor informed the Government of Mongolia that the "Production Start Date" stipulated in the Investment Agreement was September 1, 2013.

However, the copper, gold, and molybdenum reserves in the Hugo Dummett group deposits (Hugo South and Hugo North) and Heruga deposits in the Oyu Tolgoi group of deposits will be mined by block caving method of underground mining.

The Hugo North deposit will be split 2 layers, and the ore reserves on the 1st layer will be divided into 3 panels. In preparation for the production, crushers, the conveyor systems to the surface, shafts and tunnels for production and ventilation purposes were started in 2016.

As of April 2023, the project construction is 85% complete. The construction of the following facilities is ongoing.

• The ventilation shafts, shaft number 3 is sinking at the level of 539m from the 1130m, and shaft 4 is at 660m from the 1147m respectively.

• The construction progress of the conveyor system up to the surface (C2S) is 45.6% complete.

• The engineering work of the concentrator conversion project has been completed, and the construction work is 15.4% complete.

• The excavation work for Primary Crusher No. 2 (PC2) will be completed this year, and construction will continue. Overall project is scheduled to be completed in December 2025 at a same of the **>**  ▶ commissioning of PC2.

As a result of the work of the various developments, undercut began on January 25. 2022, within panel 0, the first drawbell was blasted on June 17, 2022, and the underground mining commencement is held on March 13, 2023,. Production capacity is expected to expand to 30,000 tonnes per day in the first guarter of 2025, 45,000 tonnes per day in 2027, and 95,000 tonnes per day in 2030. Because of the commencement of underground mine operation, there is a need to empower and prepare professionals in the fields of block caving technology and geotechnics, and the Department of Geology and Mining works at OT site every month. We are also participating in capacitybuilding courses and studying the experiences of other mines in the world.

**B.Bayar-Ulzii**: (General Manager of the Financial *Analysis Department)* Due to the commencement of underground mining, the grade of ore entering the concentrator has increased, affecting the grade and volume of the concentrate to be produced, increasing sales income and profitability. In the long-term financial model of the Oyu Tolgoi LLC, the price of copper was calculated at 7,700 US dollars per metric ton and 1,486 US dollars per ounce for gold. Other international banks and brokers expect copper and gold prices to be higher than our estimates in the long term. As of today, April 21, 2023, the price of gold on the London Metal Exchange has reached 2,005 US dollars/ ounce, and copper has reached 8,865 US dollars/ metric ton. All this will have a positive impact on us. According to the long-term financial model of Oyu Tolgoi LLC, the positive cash flow of the Oyu Tolgoi project will increase sharply from 2025, and the Government of Mongolia will start receiving dividends from 2037. Between 2037 and 2039, dividends of Mongolia will be the highest. If the price of copper is higher than forecast, the time when the Government of Mongolia starts receiving dividends will come nearer, also the amount is expected to increase. Oyu Tolgoi LLC is working to release its revised feasibility study by the first half of 2023. At that time, these figures will most likely change.

-N.Ts: In the future, the cost will not increase,



L.UNURBAATAR (General manager of geology and mining department)

Furthermore, it is expected that the infrastructure and the structures developed with current expenditures will be used for the extraction and processing of the ore from the second floor of the Hugo North, Hugo South, and Heruga deposits.

but our income will automatically increase with the increase in the price of the metal on the world market. With this, it can be understood that the dividend we will receive will increase and the term will be extended.

-As Oyu Tolgoi's reserves run out, The Rio Tinto Group will leave Mongolia before Mongolia receives any dividends. At that time, the Mongolians will only be left with a lot of dug holes, some say. Could you please give a professional explanation for this?

-B.B: It is important to understand that the Oyu Tolgoi project has a huge positive impact on the Mongolian economy, both directly and indirectly, in addition to dividends. For example, Oyu Tolgoi accounts for a significant share of export revenue. This amount will double by 2025 and 3.2 times by 2030. Currently, 20,000 employees are working on the Oyu Tolgoi project together with suppliers, subcontractors, and companies. All of them benefit from the Oyu Tolgoi project. The benefits of the Oyu Tolgoi project cannot be limited to just dividends.

**L.U:** The extraction and processing of Oyu Tolgoi deposits L.U: The extraction and processing of Oyu Tolgoi deposits will be coordinated with the concentrator's capability, and because the concentrator can only process 100,000 tonnes of ore per day, huge quantities cannot be extracted in a short period of time. Furthermore, it is expected that the infrastructure and the structures

J.NARANPUREV: It was agreed that the deal would initially endure for 30 years and that if the agreement was extended, the Monaolian side's 34 percent stake would be expanded to 50 percent under specific conditions



**B.BAYAR-ULZII** 

General Manager of the Financial Analysis Department

> According to the long-term financial model of Oyu Tolgoi LLC, the positive cash flow of the Oyu Tolgoi project will increase sharply from 2025, and the Government of Mongolia will start receiving dividends from 2037.

developed with current expenditures will be used for the extraction and processing of the ore from the second layer of the Hugo North, Hugo South, and Heruga deposits. As a result, the parties will collaborate to extract and process these deposits according to the plans included in the Feasibility Study and financial models, and it appears unlikely that they will be mined and exported out of Mongolia's border in a short period.

-It was said that the efficiency of the project would be improved if the interest rate on the loans taken for the financing of the Oyu Tolgoi project could be reduced to a certain extent. What is the status of this issue? How favorable is the work of increasing efficiency and delaying the start of receiving dividends as much as possible?

-N.Ts: Rio Tinto provides system and management services to Oyu Tolgoi. We are working with the Rio Tinto's investment and financial advisory team. The results of this cooperation cannot be made public right now. But now, rather than domestic disputes, we have come to the strategy of how the Mongolian side will benefit more and how to reduce the high cost.

-Our government owns 34 percent of the Oyu Tolgoi project. Was it possible to add this percentage to the initial contract? Citizens also talk a lot about this issue. Do we have a chance to increase our stake in the future?

The parties will collaborate to extract and process these deposits according to the plans included in the technical and economic basis and financial calculations. and it appears unlikely that they will be mined and exported to Mongolia's border in a short period

L.UNURBAATAR:

-J.N: Simply said, if the exploration and determination of reserves of important mineral deposits are carried out at the expense of a foreign investor, the state must possess 34%, and 50% or more if the cost is borne by the state budget.

When the parties first signed the Investment deal for the Oyu Tolgoi project, it was agreed that the deal would initially endure for 30 years and that if the agreement was extended, the Mongolian side's 34 percent stake would be expanded to 50 percent under specific conditions. As a result, when the Investment Agreement will be extended, the Mongolian side can increase its share.

Secondly, options for boosting Mongolia's benefits are being investigated. An IPO, for example, can be used to raise funds. As a result, the potential of financing the Oyu Tolgoi project will be conducted in relative terms, and it cannot be ruled out that it will have a significant impact on the dividends and return period that Mongolia would receive. To summarise, aside from the increase in global metal prices, there is a chance that the dividend and payback period for the Mongolian side of the project will be more beneficial in the event of an IPO.

-Please provide information on the near future of copper on the world market, price growth, and consumption.

-N.Ts: It has been estimated that the world needs 1.4 billion tons of copper to meet net zero emissions by 2050. The earliest formal copper plant is believed to have been established in Chile around 5000 BC when a copper smelter was established. From that time to today, mankind has produced 700 million tons of copper. But now the world needs to produce 1.4 billion tons of copper in the next 27 years. Therefore, the price of copper is bound to rise. We are trying to calculate Mongolia's benefits from using the Oyu Tolgoi group of deposits. It is tentatively estimated that the Oyu Tolgoi mine will operate until 2100. Don't let this project be slowed down or stopped by unnecessary misunderstandings when we have so much potential. However, if you look at the national level, you should think that many more copper mines will be put into operation.

### Viewpoint



Deputy Chief of the Cabinet Secretariat

## U. Byambasuren : The development of other non-mining economic branches should be a priority too

Before the Oyu tolgoi project, Khanbogd soum had a population of about 2,000 and was just an ordinary soum being no different from others. With the start of the big mining project, its population is constantly increasing. Development of the soum into a city based on the right policy and plan was natural as it already undergoes a population concentration and that will create increasing economic opportunities. Last year, a general plan to develop Khanbogd Soum into a city was approved. An important component of the government's 'New Revival' policy is the revival of urban and rural areas. The principal issue of the urban and rural revival concept is about creating human-friendly conditions both in urban and rural areas. The government policy aims more for the development of soums and villages furnished with conditions favorable for the habitation of people and employment opportunities, in view of the fact that Ulaanbaatar City alone accounts for about half the population of Mongolia - one of the most sparsely populated countries in the world.

The mining operation is limited in terms of time. For us, therefore, the development of other non-mining economic branches should be a priority too. I think another favorable condition for developing Khanbogd Soum into a city is its warm weather. Even in the coldest part of the winter, the soum is warmer than Ulaanbaatar City. And I believe that this would attract more people to the soum.



Governor of Umnugobi Province

# R.Seddorj: We invite real estate developers

Khanbogd has a strategic significance and is one of the biggest soums of Umnugobi Province. The province administration wants every soum to have an equal development level. Umnugobi people are happy with the combined efforts of the government, private sector, and investors towards the building of a modern, eco-friendly, and comfortable city in order to settle Oyu tolgoi workers in Khanbogd soum and reduce the overpopulation of the capital city.

There are two important border checkpoints in the territory of our province. Gashuunsukhait Port accounts for 48 percent of total exports, while Shiveekhuren port accounts for 28 percent. As part of the rural revival task included in the government's New Revival Policy, preparations for the reception of new residents to be transferred from Ulaanbaatar City have been launched. With all necessary facilities like schools, kindergartens, hospitals, sports & gym complex, museums, and others already built, workers of companies working with Oyu tolgoi or working at Ganshuunsukhait port, and residents from all 21 provinces are now able to come to Khanbogd Soum and settle here. The Digital Development & Communications Ministry has opened a point of digital public service in the Tsagaan Khad settlement area of Gashuunsukhait port. With this, 23 thousand residents living and working in the area are now able to get public services close by in a fast way.

There are a lot of requests coming from residents of our province about supporting small and medium enterprises. Meanwhile, Oyu tolgoi mine workers want to settle in Khanbogd Soum and live comfortably. It is believed that the existing 14 days on /14 days off the roster is the main cause leading to divorce among mine workers.

Therefore, we invite the companies to build private apartments in Khanbogd, Gurvantes, and Tsogtstsetsii soums. We will be putting in all our efforts to solve land and infrastructure matters related to this issue.



Vice-Minister of Digital Development and Communications

# J. Erkhembaatar: Digital infrastructure works are completely finished in Khanbogd Soum

Infrastructure and planning are vital for the development of Khanbogd soum into a city. Our ministry has almost finished the installation of the communications infrastructure required for building the digital infrastructure for Khanbogd soum, exchange of information, and digital access to public services. The soum is fully connected to a 4G communication system. It can be said that digital infrastructure works are completely finished in Khanbogd.

We have a plan in place to connect four soums

with a fiber optic cable network. By doing this, all soums of Mongolia will be finally connected via a fiber optic cable.

Also, an Hurdan point for digital public services was opened in the Tsagaan Khad of Gashuunsukhait port. Similar service points are also available at fourteen different locations in Ulaanbaatar City. Residents are now able to get public services digitally at the nearest point of their residency in an easy, convenient, and fast way.



Director of Small & Medium Enterprise Development Office

# Ch.Erdenesaikhan: Khanbogd has all the right conditions for the development of cooperatives

Umnugobi Province does not pay a small amount of money to the budget. For example, in the 2021-2022 financial year, the province paid 11 billion MNT to the budget. In return, the Government grants soft loans to small and medium entrepreneurs of Umnugobi Province through the government's Small & Medium Enterprise Development Fund. Last year, loans totaling 1 billion MNT were granted to five enterprises of Khanbogd soum. Also, there is a Cooperative Development Fund. A distinguishing feature of the soum is that it gets good financial support and it has a competitive market for selling products. For this reason, it is good for big national companies to establish their branches in Khanbogd soum.

As I mentioned earlier, a distinguishing feature of Khanbogd is that there will be no hardship for companies to sell their products. Most importantly, big mining companies can buy their products only if their products meet buyers' quality standards. Another important issue to pay attention to is production capacity and human resources. Another advantage is the soum is furnished with all the right conditions for the development of cooperatives. Oyu tolgoi gives excellent support to cooperatives.

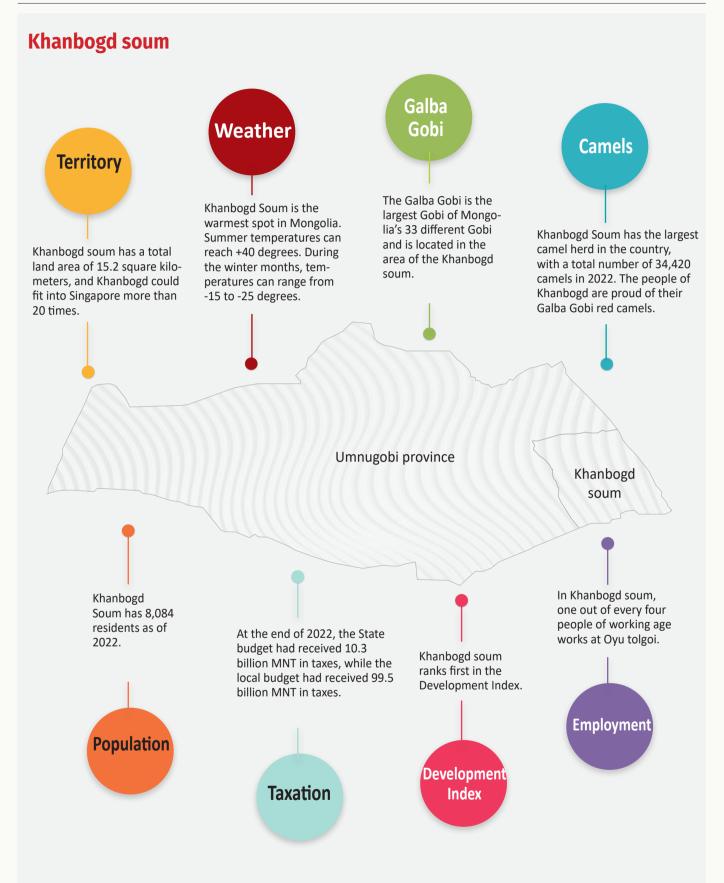


Director of Business Project Development Department of the Credit Guarantee Fund

### E.Tamir: We introduced a product aimed at supporting the development of Khanbogd soum into Khanbogd city

Our Fund issues guarantees up to sixty percent of loans to small and medium business entrepreneurs. During a forum entitled 'Khanbogd - Development & Workplace', a memorandum on further cooperation with the soum administration was signed. Under that memorandum, the Fund will provide small and medium enterprises operating in Khanbogd Soum with a credit guarantee in getting the required financing. Any licensed enterprise that is running a small to medium business can get a credit guarantee. It means we issue a credit guarantee to the necessary amount after a bank approves the credit application.

Apart from supporting small and medium enterprises, we have introduced a product aimed at supporting the development of Khanbogd Soum into a city. In particular, we now issue guarantees to mortgage advance payments. 60% of the 30% advance payment or 18% of the total mortgage amount is covered by the fund's credit guarantee, thanks to which anyone moving to Khanbogd Soum can buy an apartment on favorable conditions without taking on a financial burden.



# Citizen's representatives meeting T. Buyan-Ulzii: We will try to develop a marvelous city



Rather than just having mining companies at Khanbogd, non-mining sectors should be developed in tandem with mining industry

We spoke with T. Buyan-Olzii, the Head of the citizen's representatives meeting of Khanbogd Soum, Umnugobi Province.

-To develop Khanbogd into a city, a Khanbogd development and employment forum was held in Khanbogd soum. What do you think is the importance of this forum?

-l am pleased to have organized a discussion about the future of Khanbogd soum in collaboration with Erdenes Oyu tolgoi Co Ltd. Opinions were exchanged on topics such as Khanbogd's development plan, employment guidelines, and the future plans as far as 2040.

The development plan for providing a city-like living environment to the 25,000 people who will settle in Khanbogd soum was officially launched today. Khanbogd will collaborate with all parties to transform Galba Gobi into a magnificent city by addressing the area's many infrastructure issues.

-What is the most common feedback you received from citizens?

-There is the Oyu tolgoi mine next to our Soum. Therefore, everyone wants to work at the mine. They are interested in making one member of the family work at the mine, while others develop their own small and medium-sized businesses based on the mine. The labor force will probably increase to a certain extent due to the start of Oyu-Tolgoi's underground mine operation. Not all Oyu tolgoi employees will be able to live on the mine campus. In line with this, if Khanbogd soum is able to solve its infrastructure problems first and then build an eco-city for the younger generation, the employees of the mine can live comfortably in our soum with their families.

-How many economic benefits do you see if Khanbogd soum is developed into a city?

-I don't think that only miners and their families will live in Khanbogd in the future. Other mining companies, not just companies that supply products to Oyu tolgoi, aim to create a free economic zone for their export products. There are a lot of opportunities to expand the economy by having food and agriculturalrelated industries, including wool and cashmere semiprocessing industries. Therefore, rather than just having mining companies at Khanbogd, non-mining sectors should be developed in tandem with mining industry.

-You signed several MOUs with the parties during the forum. What work will be done in Khanbogd soum as part of these memorandums?

-I think that these memorandums are the beginning of the actual implementation of the development plan. Within the framework of the memorandum, we will cooperate with the Loan/Credit Guarantee Fund. This has created an opportunity to provide financial support to local people to start small or medium size businesses. Also, at the time when the housing project gets underway, employees of the mine and people moving from the city to our area can apply for a subsidized mortgage with a down payment of 30%. Bluefin LLC, a catering service provider, has offered to buy the food and supplies that meet the standards from the small and medium businesses of Khanbogd. Therefore, we grow vegetables together and supply them to companies according to their requirements. Also, Khanbogd people were given the opportunity to supply Khanbogd small and medium industries that have been operating here for many years, such as bread and bakery products manufacturers, with updated technological procedures and standards. This is a very important job in the countryside.

-It is crucial to discuss environmental concerns as Khanbogd soum develops as a city. What initiatives

### are being undertaken to protect and improve the environment?

-Khanbogd has sensitive soil and a dry, harsh climate. As a result, over the last ten years, we have implemented numerous projects and programs in collaboration with the Oyu tolgoi in the fields of planting gobi-adapted grasses and nature restoration. We joined the President's Billion Trees national movement and began planting trees. Green facilities are also a prime consideration in the planning of the city of Khanbogd to be environmentally friendly and eco-friendly. We want to show that an eco-city can be built in the Gobi region.

#### **Khanbogd Accelerator Fund**

# An engine to accelerate the development

The Oyu tolgoi Foundation for the Development of Khanbogd was founded in September of last year to assure the implementation of a long-term development plan for the development of Khanbogd soum in Umnugobi Province till 2040.

The future development of Khanbogd Soum as a smart, sustainable, and green city is envisioned in this policy paper. The Oyu tolgoi Company has pledged to invest 50 million US dollars directly over the next five years through the Oyu tolgoi Foundation, which is the driving force behind the development

of Khanbogd. It specifically indicates that 10 million USD annually, or 35 billion MNT, will be invested.

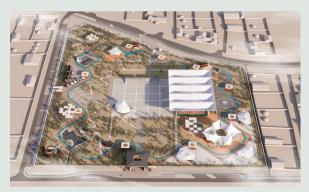
The architectural design for implementing three projects in Khanbogd Soum has been completed to achieve the long-term strategic goal of improving the quality and accessibility of social infrastructure services.

Within this year, five hectares of Galba Park's first phase of re-

development is expected to be completed. By combining elements from the Gobi region, we hope to make the park more attractive and comfortable for visitors to spend their leisure time.

A 5,000-square-meter recreation and sports facility with cutting-edge technology is also part of the development.

A space of around one hectare will be developed outside the recreation and sports facility for basketball, football, and children's playgrounds. A fitness center, yoga room, family restaurant, and coffee shop will also be available.



Galba park plan

There will also be a judo and freestyle wrestling arena. The design work for all these facilities has been considered concluded. The building process will begin later this year, and Khanbogd residents will be able to use the newly constructed recreation and sports facility starting in 2024.

The construction of a paved road through the soum's center will be the next initiative of the Khanbogd Development Accelerator Fund. The design work is still undergoing. The senior manager of the fund, T.Aldarsaikhan, noted that work is being done to upgrade side-

> walks and public areas within the scope of the Street Project as well as to link homes to the main water supply pipe.

The previously mentioned fund will decide the strategic objectives for enhancing social services in the future and will create short-term, medium-term, and long-term strategies to achieve these objectives by June.

### **Gobi Oyu Development Support Fund**

# Gobi resources for Gobi People



he Gobi Oyu Development Support Fund (Gobi Oyu DSF) was established by Oyu tolgoi LLC as a stand-alone legal entity in order to provide the implementation of the Cooperation Agreement signed with Umnugobi Province and Khanbogd soum on April 22, 2015

The Gobi Oyu DSF aims to contribute to the sustainable development of Umnugobi and Partner Communities by supporting and delivering efficient Projects and Programs that target health, education, training, employment, local business expansion support, environment and preservation of cultural heritage.

Oyu tolgoi LLC has provided a total of 101.3 billion MNT as at 2022 through the Gobi Oyu DSF since its establishment and funded 353 sustainable development projects and programs. In particular, Gobi Oyu DSF' received USD 5 million per annum from Oyu tolgoi LLC to contribute to the socioeconomic development of Umnugobi Province for the funding of projects and programs, local donations, DSF operations, student scholarships, and savings for future generations.

In the last seven years, out of the total 101.3 billion MNT received from Oyu tolgoi" LLC, 89.45%, equal to over 90 billion MNT, were spent on 353 projects and programs, particularly 118 large-scale projects, and 235 quota funding projects.

It was a high priority to solve energy and water supply issues in order to develop Khanbogd soum into a city. For this purpose, a clean water supply An investment totaling 101,3 billion MNT is made into Umnugobi Province complex was built in 2017 thanks to funding provided by Oyu tolgoi LLC through Gobi Oyu DSF, which amounted to USD 6,9 million. This complex has comprehensive automated technology such as two groundwater wells, a reservoir, a water purifying facility, an open station, and a water quality inspection laboratory and has the capacity to serve 13,000 people and can be expanded to serve up to 35,000 users. Thanks to this complex, Khanbogd soum center residents now have access to purified water, which is just one of many positive advantages created for the health and living standards of local residents.

Also, Gobi Oyu DSF funded the construction of a fully equipped school for 640 children, and a kindergarten for 200 children in Khanbogd soum, thereby creating 70-80 new jobs.

Another 10,9 billion MNT was provided last year for the construction of the Gobi Museum of History and Nature in Dalanzadgad soum, Umnugobi Province. The museum has a collection of more than 4,000 exhibits and artifacts in its halls with world-class designs and equipment. There are also ancient and paleontological findings, like fossils, from Tsakhiurt Valley, Otson Maanit, Bayanzag, Chono Shurguul, and Tugrugiin Shiree that proved human civilization was present in Umnugobi aimag 4,500-5,000 years ago as well as samples of the renowned blacksmiths and artisans.

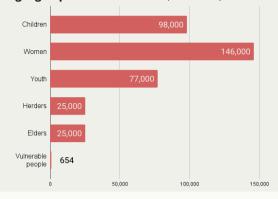
Apart from that, Oyu tolgoi LLC supports the **>** 



education of children and youth, which are the future of Umnugobi province, through scholarships and savings programs. Each year, Gobi Oyu DSF allocates and transfers 2% of its annual funding to a 10-year savings account for Umnugobi Province children and youth. The savings account was opened on January 1, 2016, and its balance is now 2.3 billion MNT.

The Gobi Oyu DSF has effectively implemented financial contributions provided by Oyu tolgoi LLC not only for the development of Umnugobi but also for Mongolia and will be continuing to initiate and implement more projects and programs for the community's welfare and well-being.

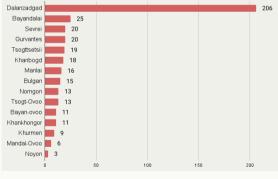
Target groups and beneficiaries (2015-2022)



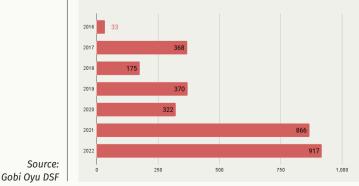




### **Recipients of the student scholarship by soums** (2016-2022)



Total amount of donation (2016-2022)



### Khanbogd and companies

# B.Erdene-Ochir: The people of Khanbogd are learning a lot from the Oyu tolgoi culture



On the topic of Khanbogd becoming a city, I spoke with B. Erdene-Ochir, a member of the Citizens' Representative Khural of Umnugobi Province, a businessman from Khanbogd Soum, and the CEO of Uujim Mod company.

-Khanbogd soum is your birthplace. I heard you are a businessman who has been working since the start of the Oyu tolgoi project to upgrade the soum into a city, with the goal of keeping the benefits of the project in the local area. As someone who has known the history of relations and cooperation between Oyu tolgoi LLC and Khanbogd soum from the start, please tell us about the relationship of that time.

-I was born and raised in Khanbogd soum and completed my basic education in this soum. I decided to live and work in my native land after graduating from university and founded my own company in 2002. In 2012, I was elected to the Civil Representatives' Khural to represent the soum in the Umnugobi Province for the first time. I thought about what a representative should do, what I can do for the residents, how to keep the benefits of Oyu tolgoi towards the soum's prosperity and economy, and how we can all contribute together. At that time, no tangible benefit was felt for our soum and its residents from this big project.

Then I met with Oyu tolgoi officials to discuss allowing the soum residents to engage and involve the local legal entities in the project operations. The management of Oyu tolgoi welcomed us and discussed our options on how to allow us in the project operations. This was how our collaboration started.

Oyu tolgoi company said that the "local legal entity lacks the financial ability and good management. We cannot elect local companies to undertake the tasks because they will hinder our project, which is why we can't support them". But if we say we can't do it then we'll end up like this forever. In the end, it was agreed to look at it from both sides; which meant they would support us and issue a closed tender only for the Khanbogd-based companies.

When the selected companies began their operations, they quickly ran into problems such as a  $\triangleright$ 

lack of funds and employees. It happened just as OT predicted. I once again requested that the management of Oyu tolgoi support them. They understood us and began collaborating by sending a senior marketing and management team member and providing guidance and assistance to the local companies. As a result, the policies and operations of the companies evolved and improved. In Khanbogd soum, there are about 80 companies operating. There are other companies from other soums of Umnugobi province, and the total number of companies will be around 130. More than 200 million US dollars have been invested in local development through these 130 legal entities. This is a significant investment by Oyu tolgoi through these local entities.

#### -I am aware that Khanbogd soum has a lot of business potential. The Oyu tolgoi mine employs nearly 10,000 employees, isn't it?

-Khanbogd residents have a great opportunity to prosper. Many of its people work at the Oyu tolgoi mine. The Gashuunsukhait port which borders China, is only about 100 kilometers away. The soum has both natural resources and animal husbandry. By developing industrialization that integrates mining, agriculture, and animal husbandry, a variety of economic prospects could be pursued.

I am grateful to Erdenes-Oyutolgoi LLC for hosting the Khanbogd-development and employment forum. Because the expectations of the local people were considered and discussed at that forum. The Khanbogd residents have understood the future of the soum and the mine.

They are talking about it and debating how they can be a part of this huge mine construction and development. Elders used to tell us that Khanbogd people are descendants of really intelligent and hardworking people. The Khanbogd people are proud of their ownership of the Galba Gobi. We are really lucky to have world-class mining operations in our country. However, we must consider how we might use our ancestors' treasures and vast resources to improve the lives of the local people.

# -Please tell us about your company and your business activities.

-I've been working hard to attract foreign investments. In this country, as a businessman, I am the leader and take certain risks. I also understood that no foreigner would come and just give us the money. Therefore, I began constructing a building to demonstrate the benefits of this big project to the local area. I built a townhouse in the soum with my friend, having no idea who might purchase it, when, or at what price. In Khanbogd, a new residential complex of about 160 households was built using cast-in-place concrete. This project will be extended. It was intended to demonstrate that the people of Khanbogd can build model complex houses with cutting-edge technology.

#### -How capable are Khanbogd's companies now?

-I am not suggesting that they have 100% completely skilled employees. However, the skills and talents of the employees of the companies continue to improve.

Because of Oyu tolgoi standards, we have changed how we look at things, especially business. The Oyu tolgoi culture, which highly values health and safety, has taught us a lot. This is their first and foremost principle. They have taught our people how to implement various standards in their everyday situations.

Oyu tolgoi observes quality standards that make individuals, locals, and legal entities think about how to implement those standards. We understand that the task must be completed at the highest level, with the best quality and standard. We are learning a lot from the Oyu tolgoi culture. This culture, I believe, will substantially contribute to the growth of Khanbogd as a city.

## -What is your vision for a sensible and ecological city?

-We want our residents to live comfortably, and we want high-quality social services. Rather than some high-rise structures, we want to establish a comfortable, quality, healthy, and safe environment. The city will be built in the warmest location in Mongolia. It is critical to establish a research-based ecocity here, such as planting trees and plants that are suitable for the Gobi's special environment.

Our soum is expected to have a population of 25,000-30,000 people. In the past, Oyu tolgoi's investment and budget have allowed us to build a number of infrastructure solutions. Significant funds were invested in wastewater treatment, sewer systems, and underground service engineering. An underground utility network has already been constructed, capable of catering to a population of 35,000.