

# STRATEGICALLY SIGNIFICANT MINERAL DEPOSITS OF MONGOLIA



Berlin, 2011





## Agenda:

- About Erdenes MGL
- Strategic Deposits
- Oyu tolgoi copper & gold deposit
- Tavan tolgoi fossil coal deposit
- Shivee ovoo brown coal deposit

## ABOUT ERDENES MGL

- Erdenes MGL's mandate
  - Represent the Government interest in strategic deposits;
  - Hold mineral licenses of and develop deposits explored with governing funds;
  - Manage assets in deposits of strategic importance upon the approval from the Parliament and Cabinet;
  - Select strategic investors in above deposits;
  - Provide advisory services
- 100% state-owned
- Established in February 2007



## ERDENES MISSION AND VISION

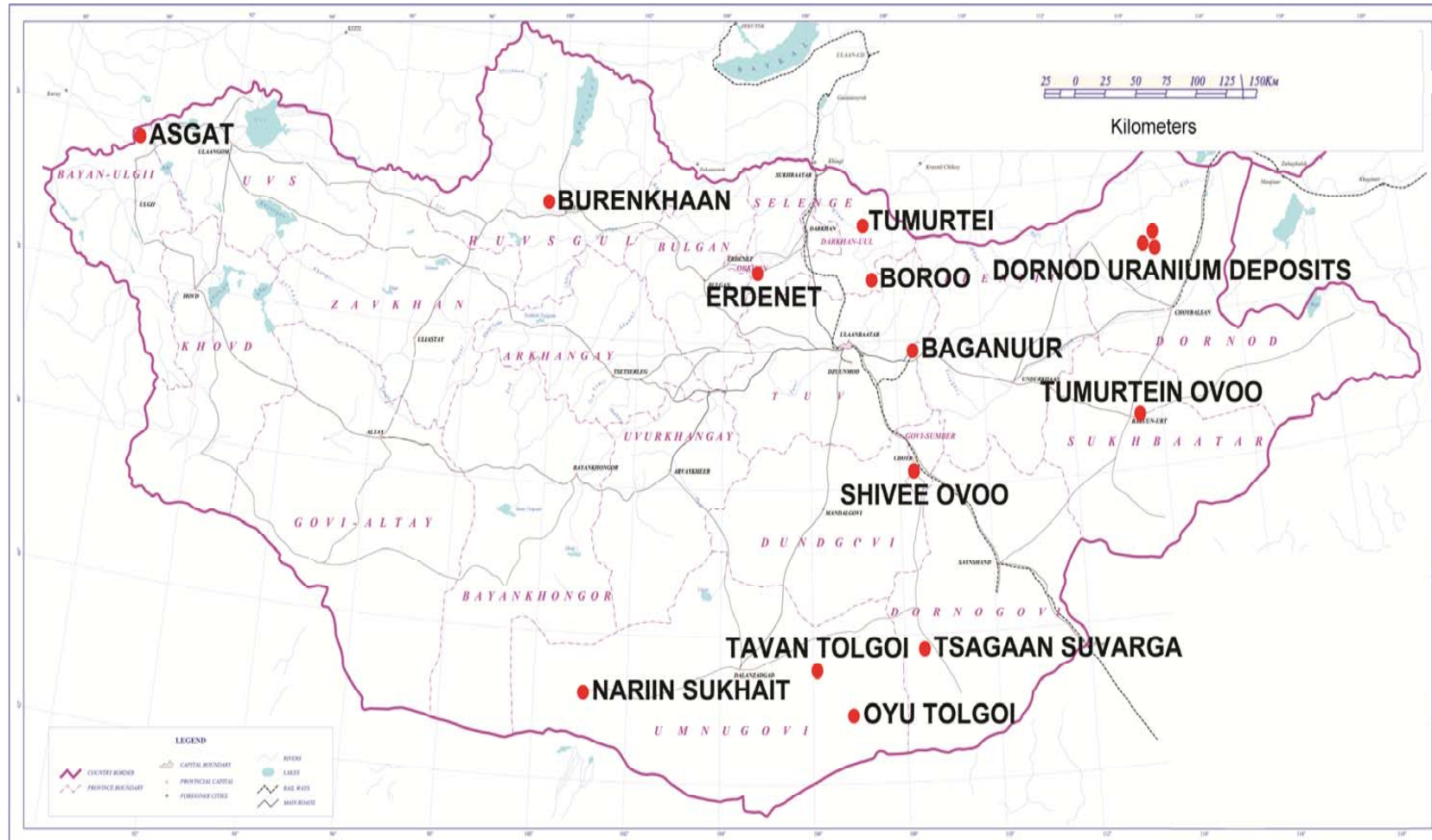
- Our mission is to maximize the benefits of the mining sector for people of Mongolia and contribute to the development of the country.
- Erdenes corporatizes the state participation in the minerals development.
- The long term vision of the company is based on a successful example of entities that progressed from state owned enterprises to become the world's top mining companies listed on the largest stock exchanges.



## LIST OF STRATEGIC DEPOSITS

No	Deposit name	Type of mineral	Location	Reserves & Resources
1	Tavan tolgoi	Fossil coal	Umnugobi, Tsogttsetsii	6,420 million tonnes coal
2	Nariin sukhait	Fossil coal	Umnugobi, Gurvantes	125.5 million tonnes coal
3	Baganuur	Brown coal	Ulaanbaatar, Baganuur	600 million tonnes coal
4	Shivee Owoo	Brown coal	Gobisumber, ShiveeGobi	646.2 million tonnes coal
5	Mardai	Uranium	Dornod, Dashbalbar	1,104 tonnes at 0.119% U <sub>3</sub> O <sub>8</sub>
6	Dornod	Uranium	Dornod, Dashbalbar	28,868 tonnes at 0.175% U <sub>3</sub> O <sub>8</sub>
7	Gurvan bulag	Uranium	Dornod, Dashbalbar	16,073 tonnes at 0.152% U <sub>3</sub> O <sub>8</sub>
8	Tomortei	Iron	Selenge, Khuder	229.3 million tonnes at 51.15% Fe
9	Oyu tolgoi	Copper, gold	Umnugobi, Khanbogd	2.7 billion tonnes of ore, 25,4 million tonnes of copper , 1028 tonnes of gold
10	Tsagaan suvarga	Copper, molybdenum	Dornogobi, Mandah	10.64 million tonnes oxides at 0.42% Cu and 0.011% Mo, 240.1 million tonnes sulphides at 0.53% Cu and 0.018% Mo
11	Erdenet	Copper, molybdenum	Orkhon, Bayan-Ondor	1.2 billion tonnes at 0.51% Cu and 0.012% Mo
12	Burenkhaan	Phosphor	Khubsugul, Alag-Erdene	192.24 million tonnes at 21.1% P <sub>2</sub> O <sub>5</sub>
13	Boroo	Gold	Selenge, Bayangol	24.5 thousand tonnes at 1.6g/tonn Au
14	Tomortein owoo	Zinc	Sukhbaatar, Sukhbaatar	7.7 million tonnes at 11.5% Zn
15	Asgat	Silver	Bayan-Ulgii, Nogoonnuur	6.4 million tonnes at 351.08g/tonn Ag

# DEPOSITS OF STRATEGIC IMPORTANCE



## OYU TOLGOI DEPOSIT OVERVIEW

### Reserves

- 2,7 billion tonnes of ore
- 25.4 million tonnes of copper
- 1028 tonnes of gold, 5144 tonnes of silver

### Location

- 600 kilometers south of capital city, Ulaanbaatar
- 80 kilometers to Chinese border

### Investor

- Erdenes MGL LLC
- Ivanhoe Mines Ltd.
- Rio Tinto International Holdings Ltd.

### Infrastructure

- All infrastructure issues (electricity, railroad, roads, water, etc.) need to be addressed

### Mine Details

- Open pit and underground mines
- Potential mine life of minimum 50 years at 55 tonnes/year of ore processing capacity



## OYU TOLGOI INVESTMENT AGREEMENT

Investment Agreement concluded in October 6<sup>th</sup>, 2009.

### Benefits:

- Biggest mining project in Mongolia will be implemented
- Economic growth from the substantial revenue sources
- Regional infrastructures will be developed in Gobi region
- Create large number of new jobs





## TAVAN TOLGOI DEPOSIT OVERVIEW

### Reserves

- 6.4 billion tonnes of coal, of which:
- 1.8 billion tonnes of coking coal
- 4.6 billion tonnes of thermal coal

### Location

- 540 kilometers south of capital city, Ulaanbaatar
- 270 kilometers to Chinese border
- 400 kilometers to the nearest railway station

### Infrastructure

- All infrastructure issues (electricity, railroad, roads, water, etc.) need to be addressed

## TAVAN TOLGOI DEPOSIT OVERVIEW

- **Mine capacity:**

- 15-30 million tonnes of coal per year.
- Over 3500 full time jobs

**Infrastructure development plan:**

- Processing plant
- Power plant: 600 MW
- Thermal power plant: 100 MW
- Water: building a pipeline from Balgasyn ulaan nuur to Tavan Tolgoi.
- 3000 project workers required



## ERDENES TAVAN TOLGOI – LISTING IPO



1<sup>st</sup> quarter of 2012 Planning list  
Erdenes Tavan Tolgoi company IPO  
international stock market

## SHIVEE OVOO DEPOSIT OVERVIEW

### Reserves

- Indicated: 564 million tonnes of brown coal
- Inferred: 82 million tonnes of brown coal

### Location

- 260 kilometers south of Ulaanbaatar
- 20 kilometers to the nearest city of Choir

### Infrastructure

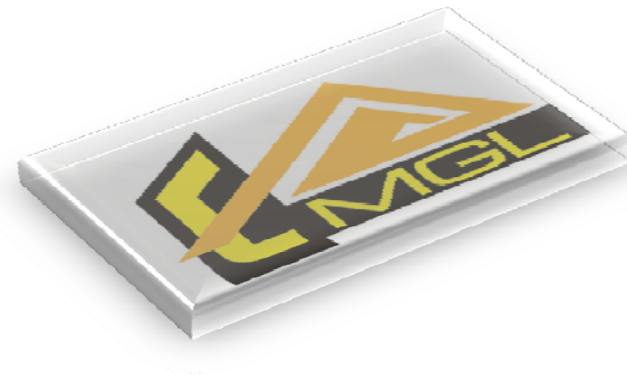
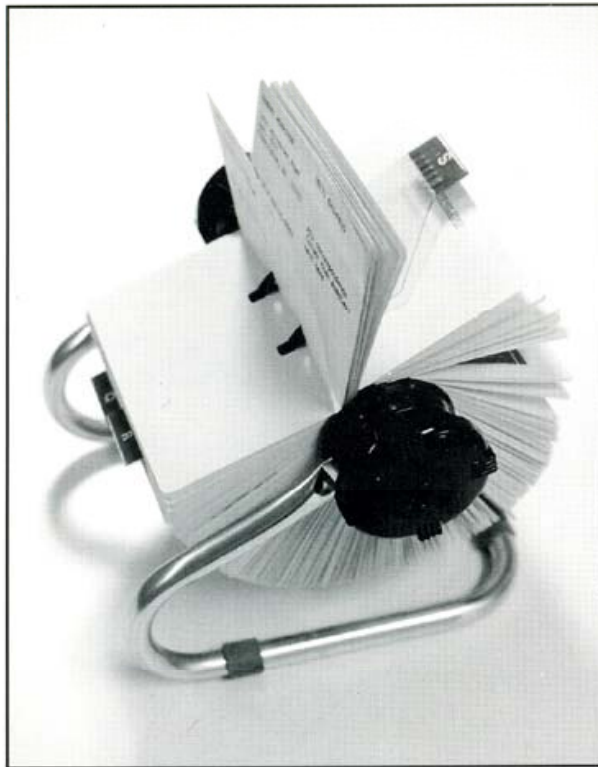
- Located right on the rail line
- Paved road access to Ulaanbaatar
- Access to electricity

## SHIVEE-OVOO PROJECT OVERVIEW

- **The current project “Shivee-ovoo” was established in 1990.**
  - - 90% state owned, 10% traded on Mongolian Stock Exchange
  - - Connected to main power grid system and railway
  - - Capacity: up to 2 million tonne per year (1.45 million mined in 2008)
  - - Currently operating on 901 A mining license, 91 hectare field
  - - Supplies coal used by power plant No 3 and 4 of Ulaanbaatar city
  
- **Ministry of Mineral Resources and Energy of Mongolia, Erdenes MGL and State Grid Corporation of China are planning an integrated project that comprises a large mine-mouth coal-power complex and an electricity transmission system to export electricity to China.**
  - - Shivee-ovoo coal mine: 20 million tonnes of coal per year
  - - Power plant: 8x600 MW
  - - Transmission line: 660 KV
  - - Project Investment required: approximately 5 billion USD



Thank you!!!



**Erdenes MGL LLC**

