
STRATEGICALLY SIGNIFICANT MINERAL DEPOSITS OF MONGOLIA



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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



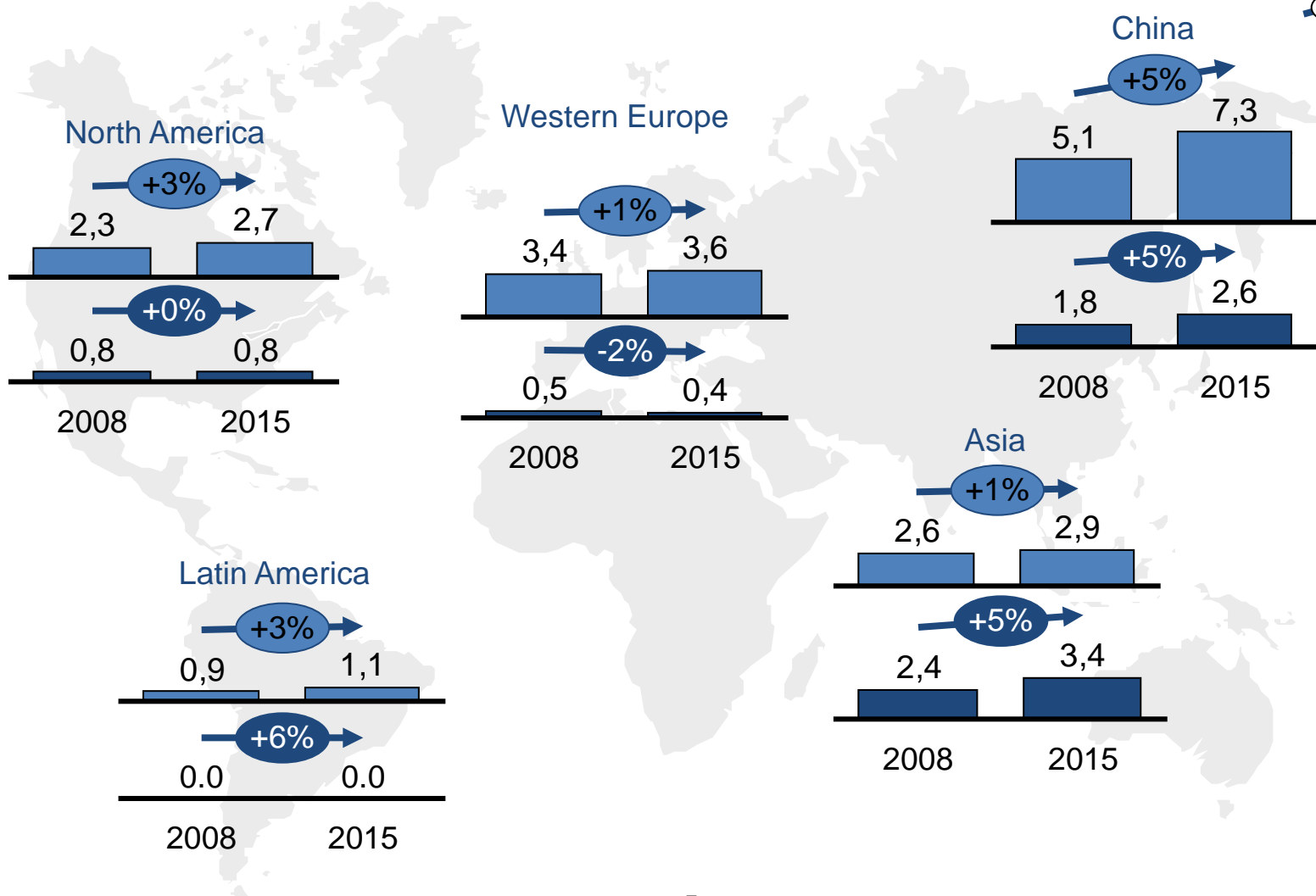
LIST OF STRATEGIC DEPOSITS

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 Ovoo	Brown coal	Gobisumber, ShiveeGobi	646.2 million tonnes coal
5	Mardai	Uranium	Dornod, Dashbalbar	1,104 tonnes at 0.119% U ₃ O ₈
6	Dornod	Uranium	Dornod, Dashbalbar	28,868 tonnes at 0.175% U ₃ O ₈
7	Gurvan bulag	Uranium	Dornod, Dashbalbar	16,073 tonnes at 0.152% U ₃ O ₈
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 ₂ O ₅
13	Boroo	Gold	Selenge, Bayangol	24.5 thousand tonnes at 1.6g/tonn Au
14	Tomortein ovoo *	Zinc	Sukhbaatar, Sukhbaatar	7.7 million tonnes at 11.5% Zn
15	Asgat *	Silver	Bayan-Ulgii, Nogoonuur	6.4 million tonnes at 351.08g/tonn Ag

Demand for coal and copper is increasing strongly in Asia

World coal and copper demand
Million tons

■ Copper
■ Coal
○ → CAGR



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.

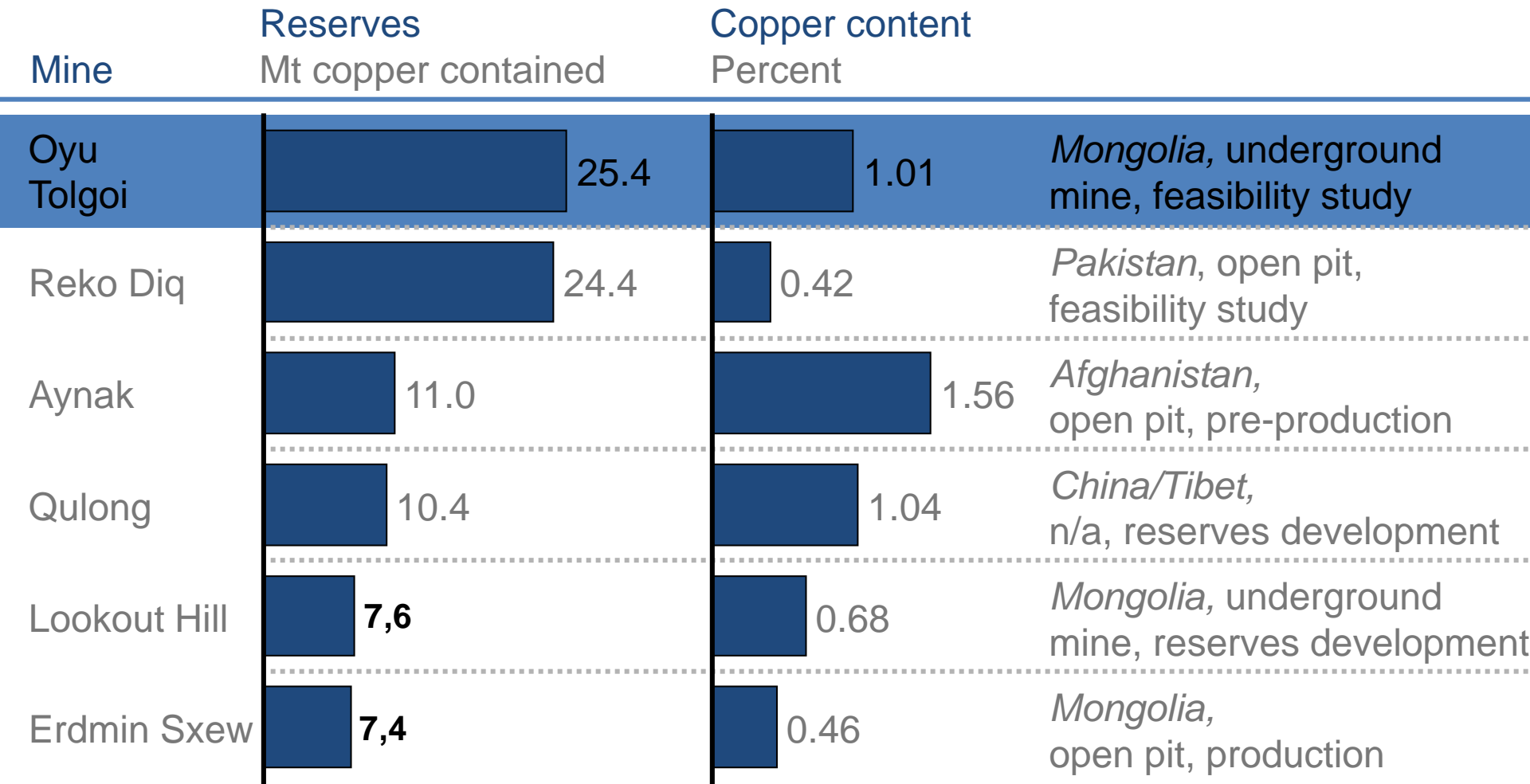
Infrastructure

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

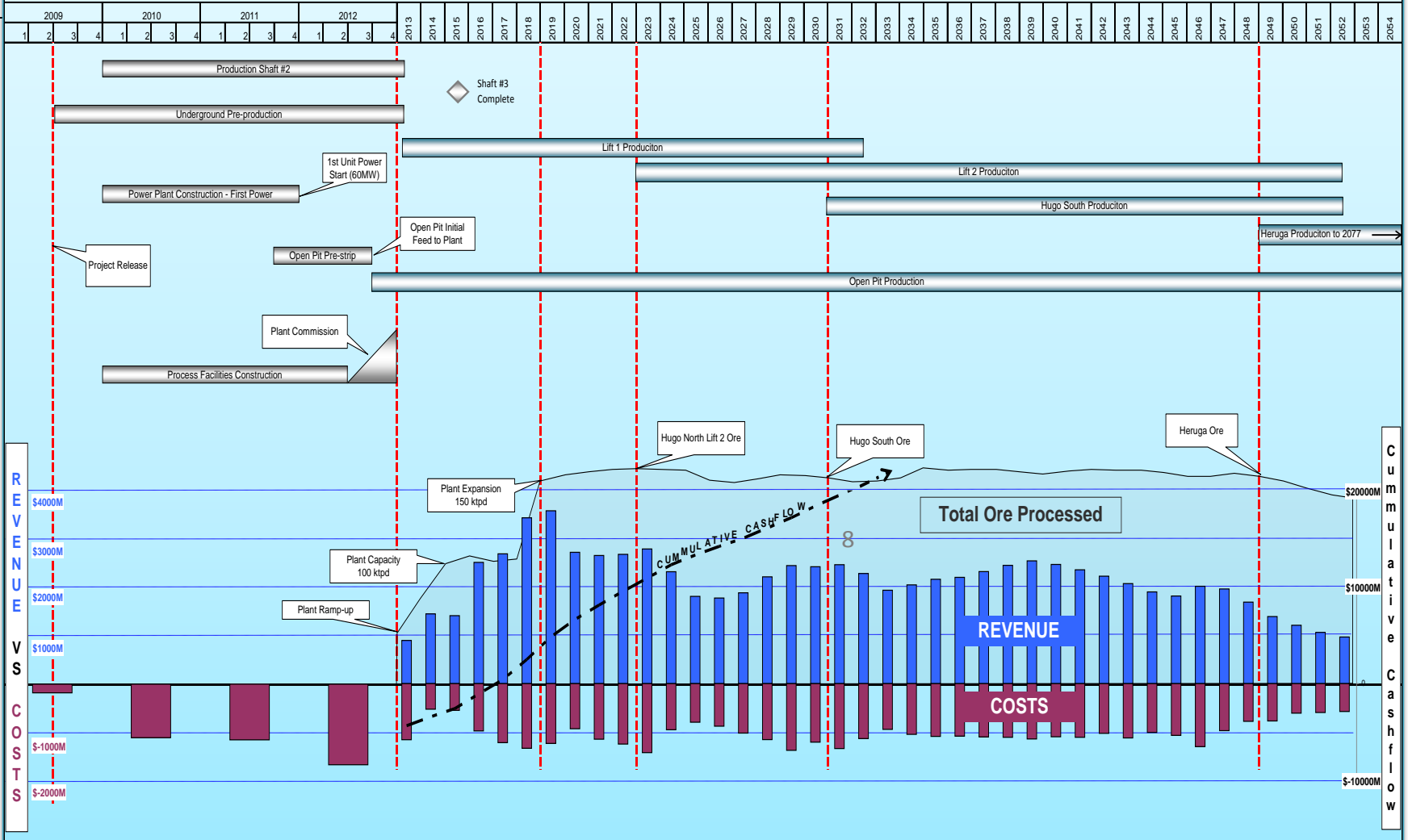
Mine Details

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

Oyu Tolgoi – The largest copper deposit in Asia



OYU TOLGOI PROJECT SCHEDULE



OYU TOLGOI INVESTMENT AGREEMENT

- Investment Agreement concluded in October 6th, 2009.
- In full effect since March 31st2010.
- Largest copper deposit in Asia

Benefits:

- Biggest mining project in Mongolia will be implemented
- Economic growth from the substantial revenue sources
- Regional infrastructures will be developed in Gobi region



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

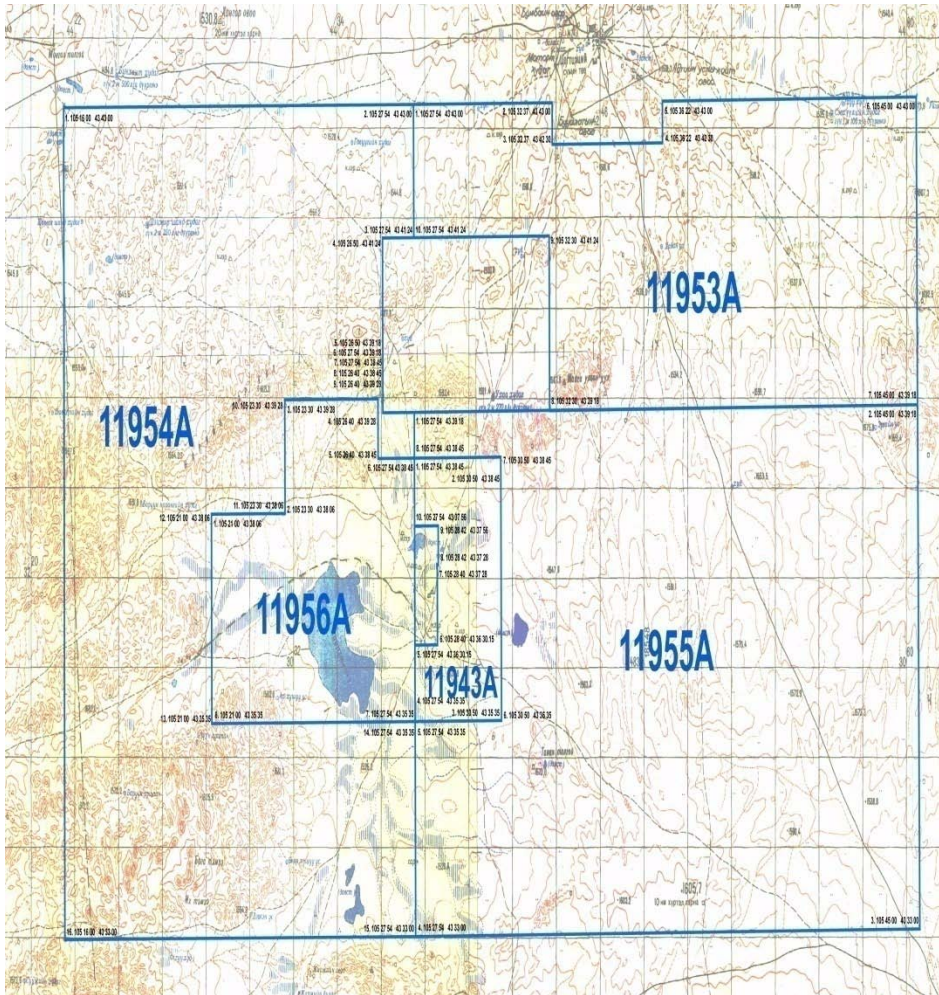
Location

- 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



Mining licenses:

- 11943A, 11953A, 11954A, 11955A, 11956A
- 68522 hectare field owned by Erdenes MGL LLC

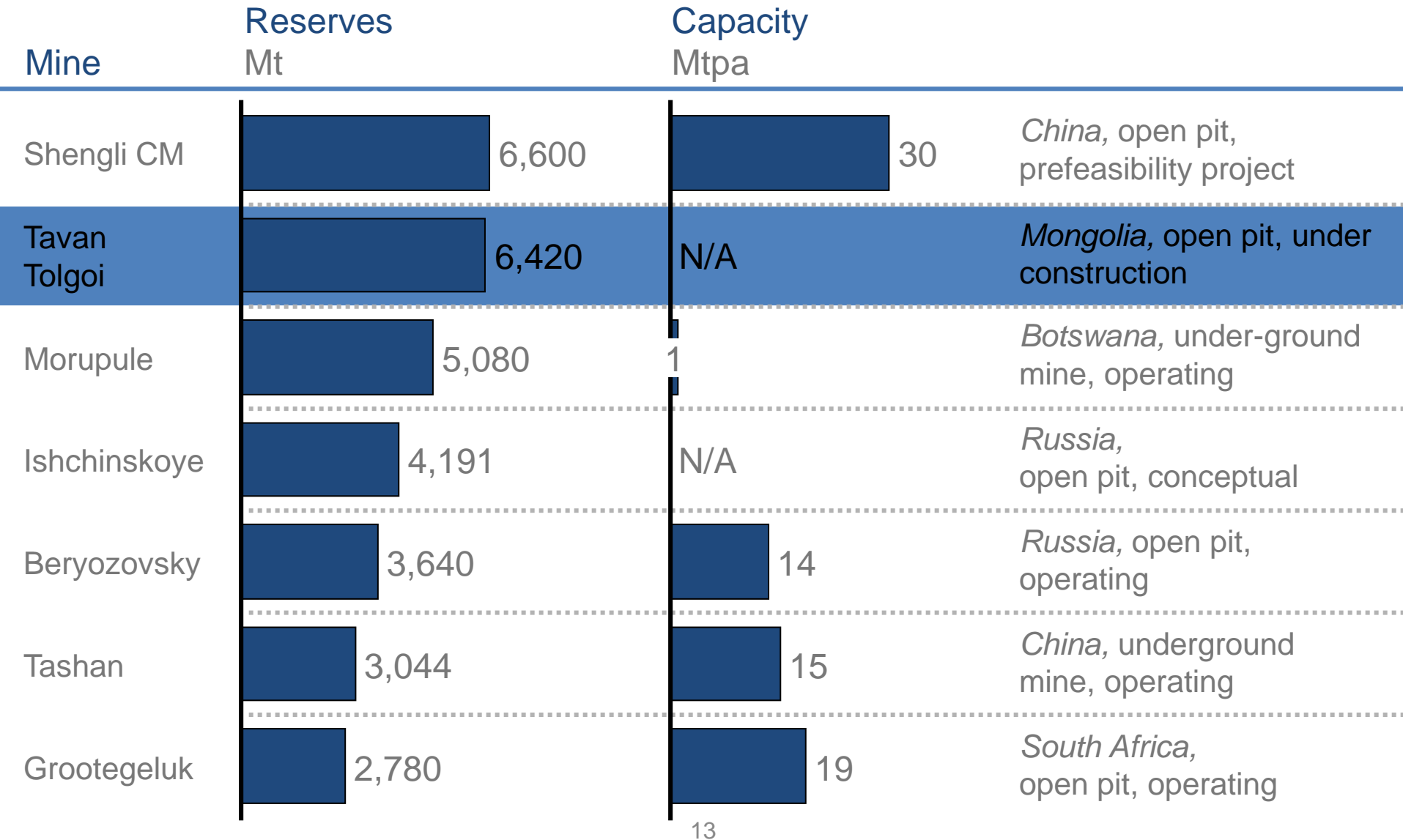
Coking coal quality:

- Calorific: 6500-7500 Kcal/kg
- Sulphur: 0.6%
- Ash: 10%
- Moisture: 8.5%

Thermal coal quality:

- Calorific: 4900 Kcal/kg
- Sulphur: 0.8%
- Ash: 20.1%-33.3%
- Moisture: 8.5%

Tavan Tolgoi – The second largest coal deposit in the world



TAVAN TOLGOI DEPOSIT OVERVIEW

■ Mine capacity:

- Second largest undeveloped coal deposit in the world.
- 15-30 million tonnes of coal per year.

Infrastructure required:

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

SHIVEE OVOO DEPOSIT OVERVIEW

Reserves

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

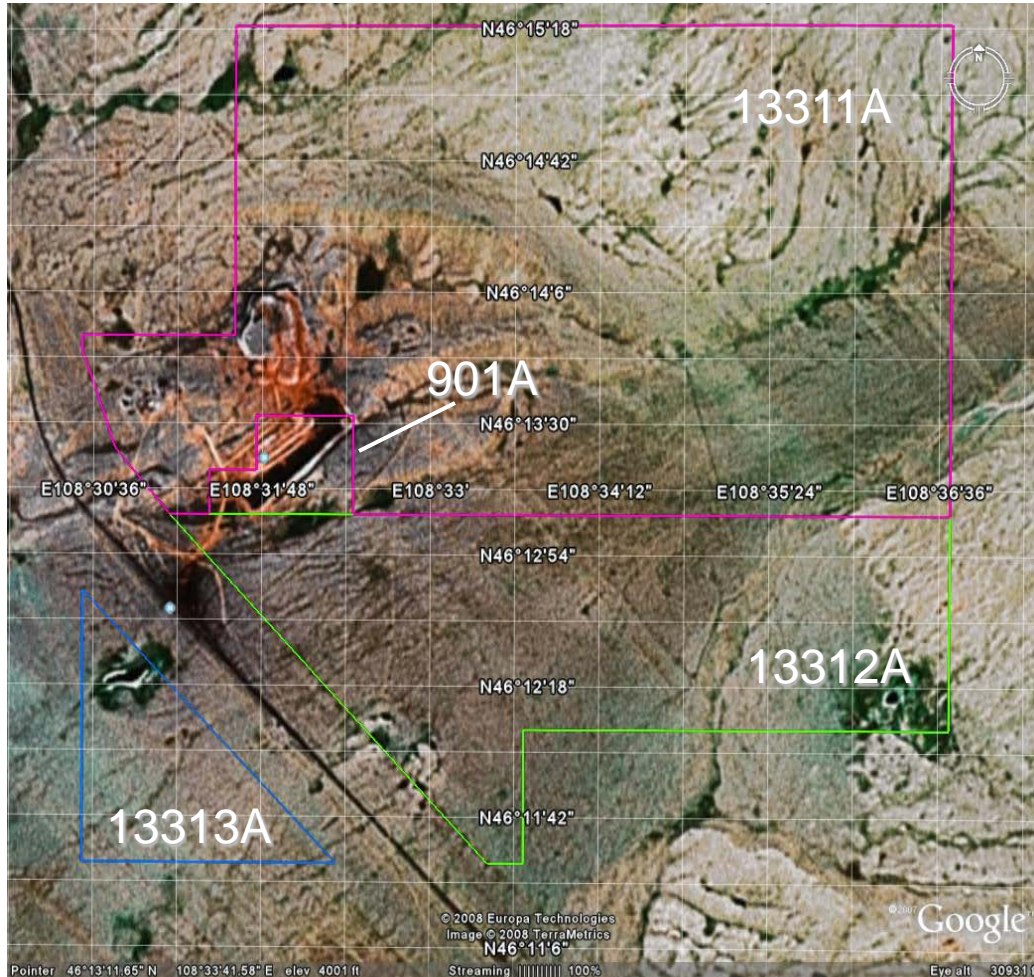
Location

- 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 DEPOSIT



Mining licenses:

- 13311A, 13312A, 13313A

- 4293 hectare field owned by Erdenes MGL LLC

Coal quality:

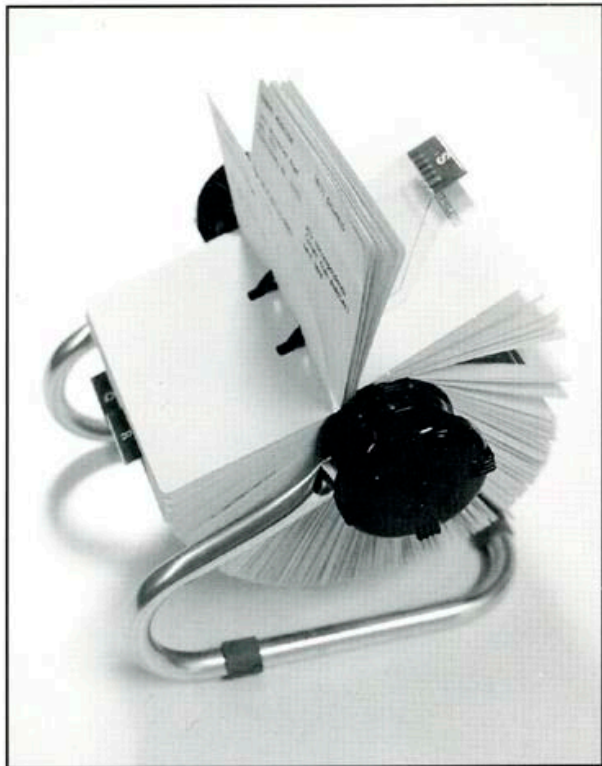
- Calorific: 2700-3100 Kcal/kg
- Sulphur: 0.64%-0.92%
- Ash: 14.2%-26.1%
- Moisture: 33.16%

SHIVEE-OVOO PROJECT OVERVIEW

- **The current project “Shivee-ovoo” was established in 1990.**
 - - 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 plants 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!!!



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