

TUMURTEIN GOL PROJECT

Investment highlights

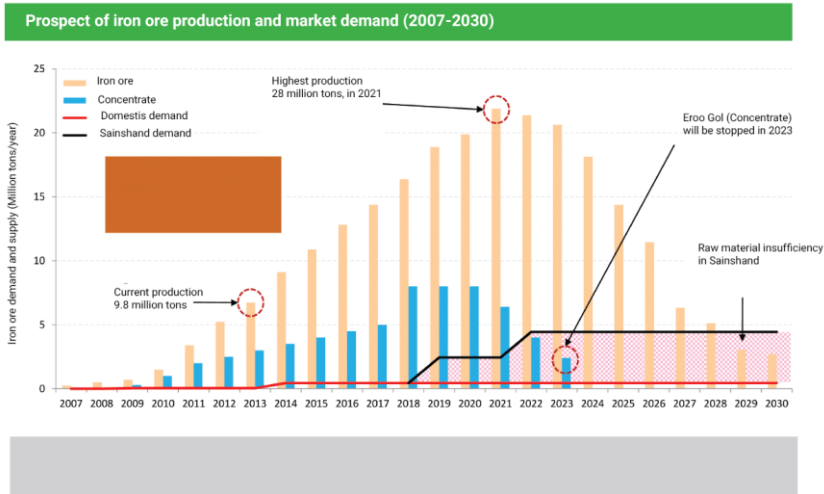
- Project area has developed infrastructure, distance from railway is 12 km. In 2016, new railway terminal (distance from railway is 2-3 km) will be started operating.
- According to reserve estimation on the deposit, within depth of 250m **13815.85** thousand tones of actual B category reserve, **2584.26** thousand tones of potential C category reserve. Total reserve **16400.1** thous.tn, **Fe- 48.37%, S-0.56%**
- At the moment 2 fractions of products are available on the market (52-56% concentrate, 0-10mm and 10-30 mm)
- The project implementing company is famous national enterprise has 20 years of experience in mining sector
- Net profit will be 78 million dollar in 18 years (calculated as today's rate). In case of product price increases in the future, a profit will be increased as well.

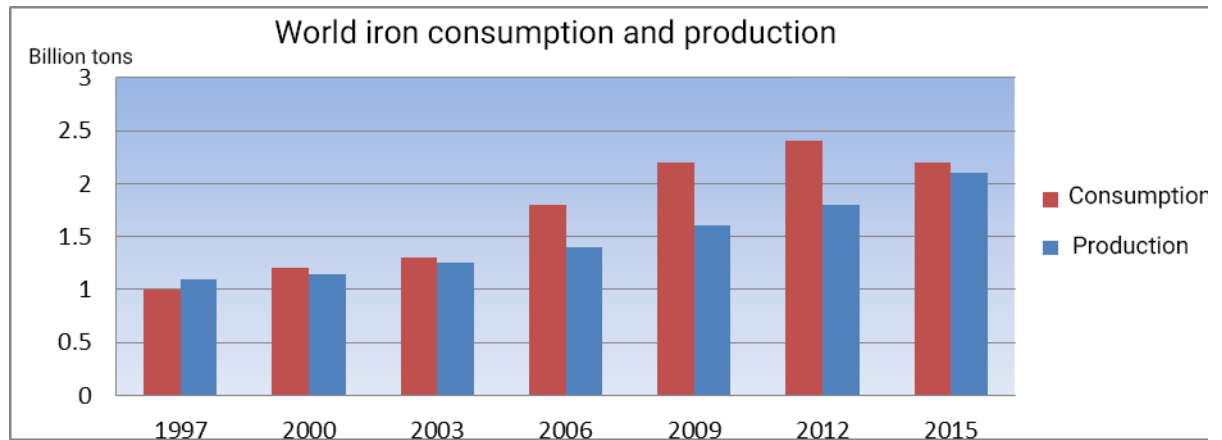
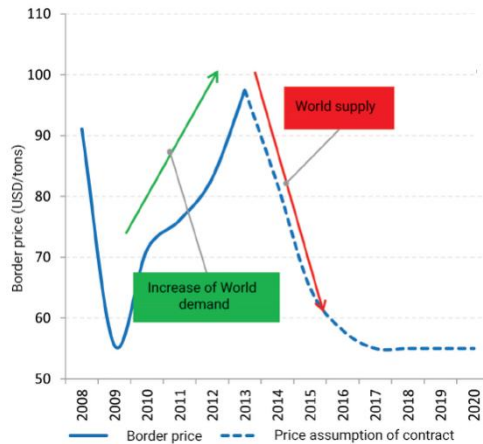
Company overview

- “ERDES GROUP” LLC Mongolian mining company established with the purpose of developing the “TumurteinGol” iron ore deposit.
- As of Dec. 2014, 3900.0 thousand cubic meter of overburden has been stripped and 900 thousand tons of iron ore has been mined by open pit method. There are 2 Processing lines to produce iron ore concentrate with Dry magnetic Separation method. 2 processing plants has a total annual capacity to extract and process 1000.0 thousand tons of iron ore and produce 700.0 thousand tones of upgraded iron ore (capacity 120-150 tones per hour).
Scope of works done during 2009-2014:
 - **890 thous.tn** of iron ore processed
 - **560 thous.tn** of products produced
- “ERDES GROUP” LLC is planning to use underground mining from 2018.

Sector and industry overview

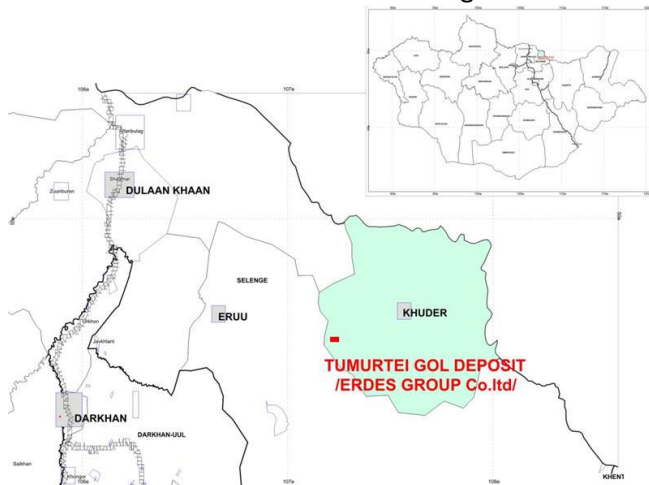
Estimated extract of iron ore and iron or concentrate by Mongolian iron ore producers between 2014-2030
227 million tons iron ore, 54 million tons ore concentrate





Project introduction

The TumurteinGol mine is located in 381 km north of Ulaanbaatar city, 144km east of Darkhan city and 30 km south west of Khudersoum (sub-province) in Selenge province. Distance from railway: 18km /in 2016 it would be 1 km/ *Nomenclature: M-48-83 Geographical coordination: Latitude 490 40I 15II - 490 40I 54II Longitude 1070 12I 30II - 1070 15I 00II*



- Exploration work was done in 2007 and estimated the deposit contains a total of 16.4 MT of B+C category resources with average Fe grade of 48-50%.
- Mining operations has started in March 2008. Current mining annual capacity is 1200.0 thousand cubic meters of overburden could be stripped and 1000,0 thousand tons of iron ore could be mined and stockpiled using professional mining machineries such as CAT, TEREX, BELAZ and HYINDAI. There are 2 processing plants working now, first plant installed in 2009 and expansion work has done in 2012, and second plant installed in 2011.
- Preliminary feasibility study on iron ore with wet processing plant for TumurteinGol mine has done in 2014.
- During 18 years of the project operation there is needed an investment of 21.22 billion MNT and therefore 8.4 million cubic meter overburden will be stripped and 17.8 million tons of iron ore will be extracted.
- There will be sold in total 9.59 million tones of upgraded iron ore be divided in two:
 - 4.28 million tones upgraded iron ore with Fe 52.46% for 50.0 USD and
 - 5.3 million tones upgraded iron ore with Fe 66.35% for 79.0 USD

Financial snapshot

Investment: Total project investment: **35.02**million USD.
 Already invested by Dec.2014: **13.8**millionUSD
 Required investment: **21.22**million USD

No	Investment by type	Amount during operation (million USD)
1	Intangible assets	0.37
2	Equipment for open pit mining	0.74
3	Investment for underground mining	10.54
4	Reconstruction for Dry magnetic processing plant	1.53
5	Wet processing plant	4.77
6	Machineries	0.29
7	Equipment for electric power supply	1.01
8	Infrastructure objects, constructions	1.97
Total investment		21.22

Payback duration – 5 years

Management team	No	Full name	Position	Experience	Qualification
	1	L.Natsagdorj	Director of Production	26	Electronical, technical engineer
	2	N.Erdenechuluun	Director of Finance	26	Engineer of Metallurgy, Business Administration

3	L.Narmandakh	Director of Manufactory	33	Mechanical engineer, Business Administration
4	R.Tuul	Chief accountant	28	Accountant
5	D.Onolbaatar	General engineer of Manufacture	14	Gelologist
6	R.Gansukh	Senior engineer	25	Engineer of Geodesy
7	Ch.Ariunbold	Senior engineer at Ore dressing manufacture	9	Technologist
8	P.Otgonbaatar	Chief Geologist	14	Geologist
9	D.Tumenbold	Project technical advisor	19	Engineer

Entry valuation

Total project cycle /18 years/

Indicators	Unit	Total amount
Net profit	million USD	85.9
Cash flow	million USD	78.9
Present value	millionUSD	20.0

Project management

The project is managed by the group's executives and the board of directors.

Risk management

Risks	Factors	Risk prevention
Risk of technology	Operating downtime due to damage of machinery and other equipment or employee irresponsibility	- Execute scheduled repairs and services on time - Improve human resource capacity - Provide necessary parts and items
Risk of market	Decreasedmarket demand, decreased price of iron ore	Produce ore powder which is less price sensitive and more competitive product
Risk of management	Related to human resource	- Improve employees' skills - Providing healthy and safe working environment

Contact Address

Invest Mongolia Agency

Name : Mrs. Onon Khanoi
Position/department : Senior Officer/ Division for Promotion and Consultancy Services
Phone : (976)-11320706; (976)-88090959
Email : onon@investmongolia.com

Invest Mongolia Agency

2 June 2015