



Mongolian Mineral Processing Association

COAL PREPARATION STATUS OF MONGOLIA

*M. Bazarragchaa
(Board member)*

“MONGOLIAN MINERAL PROCESSING ASSOCIATION”

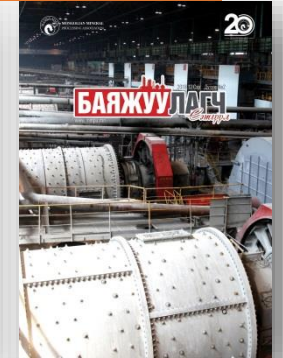
Concept



The association was found in 1998 in Erdenet. In 2017, the association was moved to Ulaanbaatar, currently around 100 organizations, 850 members are enrolled at the association and has been continuously operating over 20 years.

Main activity:

- ❑ Provide support to members and member organizations
- ❑ Consulting and third-party control service for mine exploitation, processing plant technological operation
- ❑ Providing support for introduction of advancement of mineral processing technology and science.



COAL PREPARATION PLANT – WET 1

№	Company, Coal type	Province, sum	Capacity, MTPA	Flowsheet	Water	Power	Notes
1	Energy Resource LLC, Tavan Tolgoi coking	Umnugobi, Tsogt tsetsii	3 lines x 5 = 15	2 product HMC (1.2-60 mm) + Spirals (0.25-1.2 mm) + Column flotation (0- 0.25 mm)	Underground 1 tn = 150 liter	Own power plant 18 MW	Normal operation 1-2 lines. Upgrade the dewatering medium size flowsheet
2	El Power LLC, Tavan Tolgoi coking	Umnugobi, Tsogt tsetsii	1.2	Jig + Spiral + Flotation	By truck, underground	Diesel generator	Temporary stop
3	Tumen Zag LLC, Tavan Tolgoi coking	Umnugobi, Tsogt tsetsii	1	Spiral + Flotation	Underground	Central Transmission Line	Re wash tailing pond. Yield 40%, Ash 10-12%.
4	Mongolian Coal Cleaning LLC, Re wash the Energy Resources tailing pond, coking	Umnugobi, Tsogt tsetsii	0.3	Spiral + Flotation	Underground, 200 liter	Central Transmission Line	Re wash tailing pond. Yield 40%, Ash 10-12%.
5	Oyut Bolor Erdene LLC, Tavan Tolgoi coking	Umnugobi, Bayan Owoo	0.2	Jig + Flotation	Underground, 140 liter	Diesel generator	TT JSC coking coal
6	Ih Gobiin Ich LLC, Tavan Tolgoi coking	Umnugobi, Tsogt tsetsii	0.2	Jig	Ground	Diesel generator	From ETT coking coal
7	ENK LLC, Tavan Tolgoi coking	Umnugobi, Tsogt tsetsii	1	Jig	Underground	Diesel generator	Under construction. Coking coal
8	Strato LLC, Tavan Tolgoi coking coal	Gobisumber, Shivee gobi	1.5	Jig + Spirals	Underground	Central Transmission Line	No flotation. Additional install the spirals. Stop operation.
9	Mongolyn Alt (MAK) LLC, Nariin Sukhait 1/3 soft coking	Umnugobi, Gurvantes	1	3 product HMC (0-50 mm) + Flotation (0-0.2 mm)	Mine water and ground 1 tn = 80-100 liter	China, Ceke	Planning to build additional wet plant # MTPA and dry plant 2 MPTA
10	SGS LLC, Nariin Sukhait 1/3 soft coking	Umnugobi, Gurvantes	2 lines = 1.2	Jig + Spirals	Mine water and ground	Diesel generator	Used plant, Additional install the spirals and no flotation.

COAL PREPARATION PLANT – WET 2

№	Company, Coal type	Province, sum	Capacity, MTPA	Flowsheet	Water	Power	Notes
11	Usukh Zoos LLC, Nariin Sukhait 1/3 soft coking	Umnugobi, Gurvantes	1.5	3 product HMC + Spirals + Flotation	Mine water and ground	Diesel generator	Start operation
12	Achir LLC, Alagtolgoi thermal	Dornogobi, Dalanjargalan	1.2	Jig	Underground	Central Transmission Line	No coal mine, buy and wash. Additional to build spirals
13	RenZen Hou LLC, Alagtolgoi thermal	Dornogobi, Dalanjargalan	0.9	Jig	Underground	Central Transmission Line	Stop operation. Used plant and tailing pond.
14	Davkhar Amjilt LLC, Alagtolgoi thermal	Dornogobi, Dalanjargalan	0.35	Jig	Underground	Choir 220/110/35/6 kV	No mine. Buy and wash steam coal.
15	Gobiin Shilmel Zam LLC, Alagtolgoi thermal	Dornogobi, Dalanjargalan	1.5	Jig	Underground	Choir 220/110/35/6 kV	Start operation.
16	Fengshu Zun LLC, Alagtolgoi thermal	Dornogobi, Dalanjargalan	0.5	Jig	Underground	Choir 220/110/35/6 kV	Stop
17	“Dungli” LLC, Khuut thermal	Dornogobi, Bayanjargalan	0.3	Jig + Spirals	Mine water	Choir 220/110/35/6кВ	Coal, oil shale, Coal type D,
18	Coal LLC, Ail bayan, Coking	Dornogobi, Mandakh	1.5	Jig + Spirals + Flotation	Underground	Central Transmission Line	Operate.
19	Dragon International LLC, Semi anthracite	Dornogobi, Saikhan dulaan	0.5	Jig	Underground	Diesel generator	No building and flotation.
20	Shariin Gol JSC, Thermal	Darkhan Uul, Shariin Gol	0.6	HMC	Underground	Central Transmission Line	Stop operation.
21	Big Mogul Coal & Energy Company, Thermal	Dundgobi, Bayanjargalan	1	Jig	Underground	Central Transmission Line	From 2019 operate.
	TOTAL		32.45				

WET PLANTS - 2



Energy Resource LLC



Mongolyn Alt (MAK) LLC



SGS



Usukh Zoos LLC

WET PLANTS - 2



COAL PREPARATION PLANT - DRY

No	Company, Coal type	Province, sum	Capacity, MTPA	Technology	Notes
1	Mongolyn Alt (MAK) LLC, Nariin Sukhait 1/3 soft coking	Umnugobi, Gurvantes	1.5	3 lines - FGX-12 stationary and mobile screen	Increase the capacity
2	Usukh Zoos LLC	Umnugobi, Gurvantes	0.5	2021.01	XFD-10 dry jig
3	South Gobi Sands LLC, Nariin Sukhait 1/3 soft coking	Umnugobi, Gurvantes	9	3 lines x FGX-48A not install	Not install and no operation
4	Golden Traingle LLC, Tavan Tolgoi coking	Umnugobi, tsogt Tsetsii	0.5	FGX-6	Stop operation
5	Umnii Gobiin Diamond LLC, Tavan Tolgoi coking	Umnugobi, Tsogt Tsetsii	0.3	FGX-9	
6	Rongyuan Trade Co.,Ltd, Tavan Tolgoi coking	Umnugobi, tsogt Tsetsii	0.5	FGX-12	
7	Tavan Tolgoi JSC, Tavan Tolgoi coking	Umnugobi, tsogt Tsetsii	1	FGX-12	Temporary work
8	ENC LLC, Tavan Tolgoi coking	Umnugobi, Tsogt Tsetsii	0.5	FGX-12	No operation, new
9	Mon En Co LLC, Khushuut coking	Khovd, Darbi	3	4 lines x FGX-12 (FGX-24A)	Operation
10	TeFis Mining ”LLC, Khushuut east side coking	Khovd, Darbi	0.25	FGX-6	Used plant, temporary operation
11	Dragon International LLC, Alag Undur Semi anthracite	Dornogobi, Saikhandulaan	0.2	FGX-3	
	TOTAL		17.25		

DRY PLANTS



Erdenes Tavan Tolgoi JSC – World biggest coking coal CHPP



CONCLUSION

- 1. As of 2021, there are 21 wet (32.45 million tons per year) and 11 dry (17.25 million tons per year) plants in Mongolia. The total installed capacity reached 49.7 million tons per year. However, 35% of total coal exports, or 12 million tons of coal per year, are processed, indicating that existing plants are undercapacity and unreliable.**
- 2. In the future, along with increasing coal mining, processing and export, it is necessary to pay attention to upgrading the technology and improving the reliability of the existing coal concentrator, and to pay attention to the design and technology selection of new CHPP, and to prepare Mongolian workers for operation and maintenance.**
- 3. In addition, soum and local relations need to be resolved openly and transparently in order to fully resolve the issue of land, water and electricity supply for the new CHPP.**
- 4. Most of the CHPP is located in the Gobi region and uses surface and surface water. Most of the CHPP's are privately built with a capacity of 1 million tonnes or less, and the existing jig plants produce medium and fine coal that cannot be fully washed. In the future, comprehensively address the use and storage of CHPP and madlings.**
- 5. Present limitation to utilize water in Gobi, desert region and well-water are leading to need of dry coal washing technology.**
- 6. Implement Dry+Wet coal washing technology integrated. (Tavan Tolgoi, Nariin Sukhait mine area)**

THANK YOU FOR YOUR ATTENTION

Mongolian Mineral Processing Association

Mongolia, Ulaanbaatar, Sukhbaatar district, Baga-Toiruu-49, MTU Park-423

Phone: +976-90770210, 86862558

E-mail: mmpa@mmpa.mn

Web-site: www.mmpa.mn

