

Incorporated in Bermuda with limited liability Stock Code: 276

# Environmental, Social and Governance Report 2018



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#### ABOUT THE REPORT

This Environmental, Social and Governance Report ("**Report**") provides information about the principles and actions of sustainable development of Mongolia Energy Corporation Limited ("**MEC**" or the "**Company**", and together with its subsidiaries, the "**Group**") as a corporate citizen and its relationships with major stakeholders. The contents of this Report have been prepared after taking into account the materiality of sustainability issues arising from the Group's operations.

#### OUR VALUES

MEC's Sustainability Values are driven by integrity and responsibility:



All information included in this Report is based on the data submitted to the relevant Mongolian governmental agencies and results of regularly monitored reports of performance from the Khushuut mine site and Xinjiang washing plant and as well as from data of other governmental authorities and the information and sources which we believe to be true and correct.

#### CORPORATE GOVERNANCE

We believe good corporate governance principles and practices are the foundation of a company's long term success. MEC maintains the highest ethical standards when making decisions to protect the interests of the Company and its shareholders. Our governance policies and practices are well-established and apply to every business activity at all levels.

Our Board of Directors is the highest governance body within the Group having the responsibility to review and maintain the corporate governance to ensure that the Group is consistently conducting the business in a socially responsible and ethical manner, as well as handling alleged unethical conducts and violation of rules promptly and discreetly. Members of the Board of Directors of the Company have a diverse range of business and professional expertise and possess appropriate experience and competencies to discharge their duties effectively.

We are committed to follow the best practices in managing the environmental aspects of our operations. We pay utmost attention to minimize the impact and invest considerable amount of our resources in environmental management and community relations. MoEnCo LLC ("**MoEnCo**"), our principal operating subsidiary in Mongolia, applies advanced rehabilitation technology to improve, if not restore, the environment to its pre-mining condition in the mining areas.

#### BOUNDARY AND SCOPE OF THIS REPORT

The Report presents the work that we had done on environmental and social aspects for the financial period, from 1 April 2017 to 31 March 2018 ("**Financial Year**") and includes the environmental and social responsibility programs taken place at Khushuut mine site and the entire far-western province of Khovd, Mongolia and at our washing plant in Xinjiang, the People's Republic of China ("**PRC**" or "**China**"). However, some of the information is presented on calendar-year basis in order to ensure that it is consistent with the information submitted to the various Mongolian and PRC governmental agencies.

#### **REPORTING GUIDE**

Our Report is prepared in accordance with the Environmental, Social and Governance Reporting Guide of Hong Kong Exchanges and Clearing Limited. The Environmental, Social and Governance Reporting Guide encourages companies to report on practices and performance that relate to sustainability in a manner that is transparent and uses a globally shared framework of indicators.

#### THE COMPANY

Every business has its milestones along the road to success. In September 2017, we celebrated our 10<sup>th</sup> anniversary of operations in Mongolia.



### **10 YEARS OF OPERATIONS IN MONGOLIA**

Ten years ago, MEC made a commitment to develop a large coal mine in a remote region of far western part of Mongolia, among gorges of Altai Mountains range. Though we had encountered setbacks in our early stage of development, we remained adamant.

## **10 YEARS OF COMMITMENT**

Today, we have transformed this remote place from a modest exploration operation to a large-scale mining and infrastructure project. We have become the most important private contributor to the regional development in Western Mongolia.

MEC is an investment holding company. The Group's principal business is coal mining and exploration which is operated by our indirect wholly-owned subsidiary in Mongolia, MoEnCo. Our principal project is the Khushuut Coking Coal Project in Khovd province, Western Mongolia. We sell coking coal and thermal coal to our customers in China and Mongolia respectively.

As of early 2018, the Khushuut project consists of (i) 75.08 hectares open pit coal mine, (ii) a dry coal processing plant ("**DPP**") with an annual 2 million tonnes capacity, (iii) an on-site chemical laboratory, (iv) a 311 km heavy duty paved road from the mine to the nearest border of China at Yarant, (v) a customs processing point near the border between Mongolia and China covering 10 hectares, (vi) Uyench Customs Bonded Yard ("**Uyench CBY**") and processing center with 60 residents capacity camp commissioned in January 2017, covering 50 hectares and (vii) a 360 people capacity mine camp at the mine site.

The Khushuut village with approximately 410 residents is in the vicinity.

The mine is located at the height of 2,000 meters in average above sea level in Altai Mountains, exposing to extreme weather conditions throughout the year. Temperatures fluctuate between 28°C in summer and -40°C in winter. Winter is long with heavy snowfall and gale force wind between October and April. The wind is always strong and gusty on-site with wind speed of up to 20 meters per second.

Extreme weather conditions and remote mountainous terrain not only make the mining operations challenging, but also call for the specific environmental conservation policies and measures. Significant resources are required to conserve the environment and minimize the impact of our operations on the local community.

#### ENVIRONMENTAL



#### ENVIRONMENTAL POLICY

We aim to minimize environmental harm at every stage of our mining operations. The Group has adopted an environmental policy focusing primarily on, among others, complying with the host-country legislations and regulations; establishing management systems and programs relevant to our environmental risks to prevent, reduce or mitigate impacts at all stages of our operations and regularly assessing our performance through evaluation of our business processes and practices and monitoring the surrounding environment in which we operate.

The Group's environmental responsibility principles and actions consist of:

- compliance with the laws and regulatory frameworks;
- environmental impact assessment;
- environmental management systems and programmes;
- environmental monitoring; and
- environmental auditing, including (i) internal, (ii) hiring independent third parties and (iii) through government agencies.

MEC sees the importance of promoting green culture at our workplace and encouraging our employees to sustain the green efforts in their daily lives. Our Hong Kong head office has participated in the World Green Organization ("**WGO**") Green Office Awards Labelling Scheme since 2015, which is a programme that strives to ensure environment sustainability as set out in the United Nations Sustainable Development Goals (UNSDG) and there has been eco-healthy workplace practice enriched the scheme in recent years. In recognition of our efforts and commitment to reduce energy consumption, waste and move further towards a low carbon office operation, MEC has been awarded the WGO's "Green Office" Label for four consecutive years. MEC has also been awarded the "Eco-Healthy Workplace" Label since July 2017. The two awards demonstrate that we have done our utmost from the top level in Hong Kong in promoting green and healthy workplace practice.

On local level, we encourage open dialogue with the communities surrounding our operations in Khovd in order to maintain the platform for long-term collaboration, trust and sustainable community development that have been achieved over the past 10 years of MoEnCo's operations.

#### ENVIRONMENTAL MANAGEMENT

As a country with scarce water resources, harsh climate and lands prone to desertification and erosion, Mongolia imposes rigorous regulations, permit application requirements and procedures on environmental conservation and management.

In Mongolia, MoEnCo has formed an environmental management team to oversee the environmental protection performance of its operation under the supervision of the mine director and the deputy Health, Safety, Environmental and Quality manager. The team is responsible for the implementation and monitoring of MoEnCo's environmental management plans and programs. The team identifies and addresses possible measures to reduce the adverse impacts of our operations on the environment. MoEnCo's legal department works closely with the team to ensure that we have complied with the relevant environmental legislations, including but not limited to, the Minerals Law of Mongolia, the Law of Mongolia on Environmental Protection and the Law of Mongolia on Environmental Impact Assessments. The legal department is also responsible for ensuring timely execution and submission of environmental plans and reports to related authorities, and obtaining the requisite licenses and permissions.

MoEnCo is required to submit an annual environmental management plan for the upcoming year to the three Mongolian governmental agencies for approval and also an environmental report setting out the performance of the previous year under the regulatory regime. Our environmental team holds meetings regularly with the specialists of the General Agency for Specialized Inspection, environmental inspectors of Khovd province government and other related government officers in relation to our environmental management strategy and efforts.

In 2017, environmental inspectors of the General Agency for Specialized Inspection (www.inspection.gov.mn) visited the Khushuut mine site three times under the regular government assurance scheme. Moreover, in December, our mine hosted a team of 14 provincial administration executives to assess the performance of MoEnCo's 2017 Environmental Management Plan ("**EMP**"), in which it was as 84.14% completed while some of the planned works are still in progress.

Under our 2017 EMP, we had disbursed approximately 466.3 million togrogs (approximately HK\$1.53 million) on environmental works.

According to the General Environmental Protection Law and Minerals Law of Mongolia, a minerals license holder must deposit a certain amount of funds as assurance of its environmental reclamation. In 2017, MoEnCo accrued approximately 229 million togrogs (approximately HK\$734,791) in a special warranty account of Ministry of Environment and Tourism.



#### AIR QUALITY MONITORING

With regard to the air emissions and monitoring procedures, all MoEnCo's operations were in compliance with:

- Air Law of Mongolia, Air Pollution Fee Law, and related regulations;
- permit requirements prescribed by various laws of Mongolia;
- mandatory reporting to the government; and
- national air quality standard MNS 4585:2007 approved by National Standardization and Measurements Committee of Mongolia in 2007.

MoEnCo carries out the air quality monitoring and testing against the requirements under the standard below.

Air quality: General technical requirements MNS 4585:2007							
Name of the contaminant	Measured in average of	Measurement unit	Permissible amount				
Chemical impact							
	Average of 10 mins		500				
Sulfur dioxide (SO <sub>2</sub> )	Average of 20 mins	µg/m³	450				
	Average of 24 hours	μg/m	20				
	Annual average		10				
	Average of 30 mins		60000				
Carbon monoxide (CO)	Average of 1 hour	µg/m³	30000				
	Average of 8 hours		10000				
	Average of 20 mins		85				
Nitrogen dioxide (NO <sub>2</sub> )	Average of 24 hours	µg/m³	40				
	Annual average		30				
Ozone (O <sub>3</sub> )	Average of 8 hours	µg/m³	100				
	Average of 30 mins		500				
Dust (Total measurable particles)	Average of 24 hours	µg/m³	150				
	Annual average		100				
Coorce porticles (DNA )	Average of 24 hours		100				
Coarse particles (PM <sub>10</sub> )	Annual average	µg/m³	50				
Small particles dust (PM <sub>2.5</sub> )	Average of 24 hours	µg/m³	50				
	Annual average	μα/π	25				
C <sub>20</sub> H <sub>12</sub>	Average of 24 hours	µg/m³	0.001				
Physical impact							
Level of noise							
- from 07:00 to 23:00	Average of 16 hours	decibels	60				
— from 23:00 to 07:00	Average of 8 hours		45				

MoEnCo has engaged a government agency, Information and Research Institute of Meteorology, Hydrology and Environment (www.icc.mn) bi-annually for conducting the mine air sampling and testing in five locations under the approved procedures. The last survey was conducted in December 2017, when the team sampled and measured SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, heavy metals and radiation in five locations with every 20 minutes in frequency or continuous 24 hours over three regular working days of the mine. The Institute's measurements and report, as of an independent government assessment, indicated that MoEnCo's mining operations were in compliance with the Mongolian air quality standard. The major measurements and findings of the Institute's report follows.



Average NO<sub>2</sub> measured every 20 minutes over 72 hours



\* MoEnCo's 2017 air quality study and report was prepared by Information and Research Institute of Meteorology, Hydrology and Environment (government agency, www.icc.mn) under the National Agency Meteorology and the Environmental Monitoring (https://namem.gov.mn/eng/). The expert who prepared the charts simply compared to the NO<sub>2</sub> value of MNS 4585:2016 (http://www.air.ub.gov.mn/about/air-quality-standard. html, Ulaanbaatar city Government Air Office website), which is 200. MoEnCo did not opt to change this because this is the government assessment number.



<sup>a</sup> The expert compared PM<sub>10</sub> to the "total measurable particles" for 20 minutes value of MNS 4585:2016 which is 500 (http://www.air.ub.gov. mn/about/air-quality-standard.html, Ulaanbaatar city Government Air Office website).



The Information and Research Institute of Meteorology, Hydrology and Environment (www.icc.mn) concluded in its assessment report:

- All measured emission levels were within the allowable level of the Mongolian national standard except for the PM<sub>10</sub>. Its high level over the afternoon of one day which could partly be attributed to whirlwinds over the Khushuut valley at the time of measuring.
- No heavy metal contents in the soil were measured above the permissible level.
- Radiation level was corresponding to the usual value for Mongolian coal mining sites but above the actual country average value.





In addition, MoEnCo's environmental team had conducted measure of some emissions at the mine site, two of which have not been covered by the Institute's survey are shown.

The noise measurements were carried at 5 different locations, each of which also had 6–44 measurement points at each location. The test results showed that the overall noise level stayed within the permissible level most of the time throughout the year. The noise level recorded above the permissible levels several months in pit office, the place we do mining operation nearby and during the second half of the year in the DPP that we operate heavy machinery.



#### MEASURES AGAINST DUST GENERATION

Mining operations and related activities such as coal hauling, top soil stripping, coal loading and unloading, etc. will invariably generate dust. Due to terrestrial specifics of our Khushuut Coal Mine located among hills, the distances between coal piles are relatively short; therefore, this creates significantly less road dust in comparison with other coal mines of the country.

MoEnCo takes various types of preventive measures at its several production phases to reduce dust by:

- constructing and maintaining the environmental protection facilities;
- using "Water Wall" technology;
- watering the roads and pathways within the mine;
- enforcing speed limits when driving on the mine roads;
- covering the dirt road surfaces with gravel; and
- making purposed strips of vegetation along the roads close to the village and between the village and the mine pit, and planting trees and bushes on these strips.

Special fence for protecting against dust pollution around our DPP and the adjacent customs control area was built and commissioned by MoEnCo in 2014. It is 2,292 meters long and 12–15 meters high.

In early 2017, MoEnCo piloted a water wall sprinkler system, one of the best technologies available today to control dust in the air, at our DPP, the most intensive coal handling area. As of early 2018, there are three sprinkler machines (orchard mist blower and blast sprayer with a tank) with 16 tonnes water spaying capacity working at the site to reduce dust concentration in the air to about 40 percent throughout a day. As the dust reduction and prevention measure have proven effective, we plan to purchase and install additional water spraying systems within 2018. MoEnCo had spent around 394 million togrogs (approximately HK\$1.29 million) for the purchase and installation of the existing spraying facilities in 2017.

MoEnCo now has 5 trucks with total capacity of 30 tonnes which uses the mine's waste water for spraying the mine pit inner roads and the coal loading and unloading areas for dust reduction.

#### VEHICLE EMISSIONS

As of the end of March, 2018, there were 410 heavy duty trucks and other machinery belonging to 28 transportation and haulage companies engaged in hauling, loading, unloading and carrying our coal to domestic and international buyers.

With regard to the vehicle emissions, MoEnCo and its transporting contractors are required to operate in accordance with the requirements and adhere to the procedures as follows:

- Transportation Law of Mongolia of 1999, Regulation of 2010 on Technical Inspection of Vehicles, and other relevant regulations
- National standard MNS 4598:2011 "General requirements and technical conditions for road vehicles", national standard MNS 5013:2009 "Petroleum powered vehicles maximum permissible levels of toxins in emissions, their composition, measurement methods and procedures", national standard MNS 5014:2009 "Diesel engine vehicles maximum permissible levels for toxins emissions and measuring method", approved by the Standardization and Measurement Agency (www.estandard.gov.mn)

All trucks for coal transportation have to undergo mandatory inspection imposed by the government, purchase the road use permit and pay annual emissions taxes at the Khovd province Auto Vehicles and Transportation Center. Only vehicles that met the emissions standards are allowed to obtain a one-year permit for driving. MoEnCo also ensures that all the trucks engaging in its coal transportation have been duly inspected, meeting the emissions requirements and having obtained the necessary road permits. All MoEnCo's coal transport agreements include provisions ensuring the carrier's obligation to comply with the emission standards.

MoEnCo operates 3 check points for the trucks engaging in the Khushuut transportation: (i) at the exit of the Khushuut mine; (ii) MoEnCo's new Uyench CBY and processing center which is about 224 km from the Khushuut coal mine, and (iii) entrance of the Bulgan border crossing point. In addition, MoEnCo manages to have the presence of government inspectors at our new Uyench site, various government agencies including (i) National Auto Vehicles and Transportation Center, (ii) Mongolian Customs General Administration (www.customs.gov.mn), and (iii) General Agency for Specialized Inspection. These inspectors not only ensure all trucks meeting the general requirements and technical conditions specified in the standards but also conducting selective daily testing of emissions. These three agencies also perform their thorough inspection duties at Bulgan border crossing point (before heading to PRC) for trucks loaded with coal and returning trucks after their unloading at the Groups' another coal processing facility.

Upon satisfying all requirements imposed on heavy duty trucks, including emissions limits, all trucks for coal export obtain 2 types of certificates under the internationally procedures agreed between China and Mongolia:

- from National Auto Vehicles and Transportation Center in the capital city and subsequently verified by the provincial Center confirming the truck's compliance with the standards; and
- from Mongolian Customs General Administration in the capital city and subsequently verified at Bulgan border crossing point allowing expedited and regular border crossing.

#### SOIL QUALITY MONITORING

In 2017, the Khushuut mine had 15 soil quality sampling points at the mine site and its vicinity of 5 km. Soil samples were collected quarterly and sent to the Laboratory of Soil Science of Institute of Geography of Mongolian Academy of Science (www.ac.mn/?id=25152).

In additional to regular sampling and testing soil in the mine's vicinity, in 2017, MoEnCo contracted an independent evaluator, the Soil Science Department of Institute of Geography and Geoecology under Mongolian Academy of Science (https://igg.ac.mn), for a comprehensive study and evaluation of the soil quality and changes around the mine. The Institute's team of experts studied throughout the year and presented its assessment report in December 2017. The research determined the soil's chemical composition change, physical characteristics change, erosion, heavy metal contents and pollution and bacterial pollution. Some parameters were sampled and tested at 5 locations while most parameters were taken at 31 locations throughout the mine and its vicinity of up to 10 km along the wind and nearby river flow directions.

The Institute assessed the Khushuut soil quality as follows:

- Erosion: topsoil around the Khushuut mine was not notably degraded. Land within the workers' camp and around the office showed certain "wear and tear". Land within the Khushuut village incurred some salination due to the mining operations.
- Heavy metals: tests were for content and amount of 33 different metals, other toxic minerals and their compounds sampled at 31 locations. Only chromium (Cr) and vanadium (V) were elevated above the standard range in two and three locations respectively, and this was attributed to the natural occurrence of these minerals in soil. All other tests for metals and other minerals were either significantly below the Mongolian MNS 5850:2008 standard requirement or, in case of absence of an established standard indicator, within the naturally occurring range.
- Arsenic: the average of tests for arsenic (As) at 31 sampling points was 7.6 mg/kg which is higher than the MNS 5850:2008 standard indicator. This was attributed to the natural occurrence and geomorphology of the area and not to the mining operations. For comparison, the average of As content in the soil of Eastern and Central Mongolia was 11.7–19.5 mg/kg.
- Bacteriological: tests were for 5 different bacteria in 10 sampled locations. Of these, 2 bacteria were found in 4 locations with "insignificant" amount that could be related to presence of livestock grazing around the mine year-round, and no further action was required or recommended.
- There was no overall measurable chemical composition or physical characteristics change of soil in the vicinity of Khushuut mine which could be attributed to the mine operations.



In 2017, there was no area reclaimed in geological or biological terms within the Khushuut mine's operation fields because of the early stage of MoEnCo's operations and on-going mining activities.

For preservation of the stripped topsoil and to prevent losing its fertility, some 50,000 m<sup>3</sup> of topsoil, now covering 0.3 hectares, had underwent biological restoration where seeds of perennial plants and grass were sprinkled over to protect against erosion.

	2014–2017	2016	2017
Location	(hectares)	(hectares)	(hectares)
Rehabilitated land for topsoil piles protection	12.9	0.5	0.3
In 3 district centers under Corresponding Protection Program	40	20	20
Total	52.9	20.5	20.3

On two occasions, the Khovd environmental inspector inspected MoEnCo's fertile topsoil removal, preservation and storing procedures to ensure topsoil stripping had complied with the national standard MNS 5916:2008 and MoEnCo's 2017 mining works plan approved by Government.

We extend our environmental safeguarding beyond our mining lands. For example, in 2017, we placed new warning boards, safety, road and location signs throughout Khushuut valley and along Khushuut river.

Apart from the above, MoEnCo also carries out protection of 2 ancient burials lying not far from our land holdings voluntarily, although such efforts are not MoEnCo's legal obligation. In the past, we organized archaeological digging and extended survey for antiquities around the mine. Now we monitor to ensure if the stones and hieroglyphs of these burials are intact in their remote and unoccupied locations.

#### **VEGETATION MONITORING**

In December 2017, the Soil Science Department of Geography and Geoecology Institute carried out a comprehensive study and evaluation of land degradation and vegetation and its changes in Khushuut mine vicinity. Their report included land assessment under the national standard MNS 5546:2005 on methodology of determining soil and vegetation degradation as well as recommendations on native plants that could be used for biological rehabilitation of mine disturbed areas.

	2017
Of total 20,153 hectares of land assessed:	
seriously impacted and degraded	1%
with certain degradation	4%
slightly degraded	17%
healthy with no degradation	78%

The report described that our Khushuut mine area is rich in medicinal (36.6%) and rare, endangered plants (16.5%).

#### CORRESPONDING PROTECTION PROGRAM

MoEnCo initiated the "Corresponding Protection" program in 2016 at the recommendation of the Sustainable Mining Land Management Project of United Nations ("**UN**") Development Programme office in Mongolia, the purpose of which is to offer land reclamation in different areas in a volume corresponding to the size of land used for mining at Khushuut.

Moreover, we take up the obligation of such corresponding restoration in the 2017–2020 Cooperation Agreement signed with the Khovd province Government in August 2017.

In addition to the 20 hectares of land with 7,000 newly planted trees and shrubs in the previous year, in 2017 MoEnCo commissioned:

- 10 hectares of land with 4,000 newly planted trees to Jargalant district authorities;
- 5 hectares with 2,000 young trees to Darvi district; and
- 5 hectares with 2,000 young trees to Tsetseg district.

	2016	2017
Hectares of land rehabilitated and commissioned under the Corresponding Protection Program	20	20
No. of districts involved	3	3
No. of trees planted and nurtured	7,000	8,000

In addition, land plots around the mine office, processing plant and inside the customs inspection yard were greened with grass and now approximately 5,000 trees have been grown there, of which 2,000 were planted in 2017.

We hired only the local residents of the 3 nearby districts to perform all our revegetation and maintenance works.

Jointly with the Sustainable Mining Land Management Project which has been implemented by the UN office in Ulaanbaatar, MoEnCo organized 2 training sessions for local residents involved in our green efforts during which various soil works techniques, watering and tree planning procedures as well as general environmental protection awareness were taught.



Scarcity of water in Mongolia necessitates stringent laws and regulations, especially those regulating the water management during mining operations. MoEnCo's Khushuut mine project has its water use regulated by the following permits obtained in accordance with the Water Law, Water Fees Law, Minerals Law and other relevant statutes:

- the water use permit issued by Huisiin Gobi Tsetseg Lake Watershed Area Administration (local water authority);
- the water use agreement entered between Huisiin Gobi Tsetseg Lake Watershed Area Administration, government-owned Mongol Us company and MoEnCo;
- MoEnCo's Comprehensive Water Use Report submitted on 30 November 2017; and
- MoEnCo's 2017 EMP approved by the relevant Government agencies.

In 2017, MoEnCo paid approximately 18.45 million togrogs (HK\$60,500) to the Khovd province budget for water used.

MoEnCo prepares annual Comprehensive Water Use Report and submits to its water provider, the governmentowned Mongol Us company. This company and the local water authority jointly evaluate and approve the report. Only upon satisfactory acceptance of MoEnCo's reporting of its water conservation and quality monitoring efforts, they will issue a water permit for the subsequent year. MoEnCo's 2017 report was accepted with satisfaction in December 2017 by the government.

The Huisiin Gobi — Tsetseg Lake Watershed Area Administration, which is the Khovd water authority, names its best private water user in every 4 years. In November 2017, this Administration nominated MoEnCo for the "Best Water User" crediting and praising our "outstanding contribution to nature protection, conservation and rehabilitation, successful performance of contractual duties and obligations under the water use permit issued by Government annually and introducing a based model for water use and not exceeding the available water amount". MoEnCo also implements a comprehensive natural water monitoring process to allow us to operate without damaging the associated ecosystems and affecting the use of local water, and a set of medium and long-term water management actions at our Khushuut operations in order to maximize water recycling and reusing inside the mine boundaries and minimize fresh water intake:

- Surface water flow, level and volume monitoring: rivers measurements are taken every 3 days in the locations;
- Measurements of water flow and volume of natural springs are made at 12 natural springs in radius of 4 km around the mine site, measurements taken every 3 days; and
- Underground water level and flow monitoring at 3 special water monitoring boreholes, measurements taken every week.

#### ENVIRONMENTAL (CONTINUED)

In 2017, we continued to closely monitor the fresh water intake and usage at two existing wells through established meters and 24-hour surveillance through several external and internal cameras. The meter readings and camera recordings were submitted quarterly to the environmental inspector of Darvi district and Huisiin Gobi — Tsetseg Lake Watershed Administration.

MoEnCo's water quality monitoring data and government assessments have demonstrated that no water sources have been significantly affected by water extraction for our current mining operation and there are no significant cases of water depletion.

MoEnCo gets a permit from the provincial administration and hires a local contractor to remove and dispose the camp sewage waste and treated by Khovd center's facility.

In 2017, the Mongolian government carried out the Khushuut water quality assessment in accordance with the requirements and procedures of the relevant laws and standards:

- MoEnCo sent its water samples to the Institute of Geography and Geoecology of Mongolian Academy of Sciences (https://igg.ac.mn/) for chemical analysis on a monthly basis. This laboratory reported that the Khushuut water continuously satisfied the Mongolian national water quality standard MNS 900:2005; and
- MoEnCo also sent drinking water samples bi-annually to the laboratory of National Center for Public Health under the Ministry of Health (www.ncph.gov.mn) for bacteriological analysis.

	2016	2017	
Amount of fresh water used for residential purpose (m <sup>3</sup> )	13,846	13,980	
Amount of water used for industrial purpose:			
underground water (m <sup>3</sup> )	28,878	45,162	
intensity	—	0.032 m³/t	
drainage water (m <sup>3</sup> )	15,976	7,920	
intensity	—	0.0056 m³/t	
Fresh water use fee	Exempt	under the law	
Underground water fee paid	— MNT 14 million		
Technical water use fee paid	_	MNT 4.47 million	

In both cases the Center evaluated Khushuut water as "meeting requirements of the residential drinking water standards of Mongolia".

In warmer seasons of the year, the pit of Khushuut Coal Mine occasionally produces some underground water drainage. We put this water into use for sprinkling roads for dust suppression, mine and village greenery and irrigation, training against potential fire hazard and for drilling works. MoEnCo has duly paid for the use of this water.

#### USE OF ENERGY RESOURCES

As our mine site is located among remote hills of far western Khovd province of Mongolia and some 26 km from the nearest settlement of Tsetseg, our mine is not connected to the central electricity grid. In respect of its operations, Khushuut mine site uses 15 diesel generators while the new Uyench CBY, commissioned in January 2017, uses 3 generators with capacity ranging from 30 kW to 3,000 kW. The total capacity is 4,180 kW.

	2017
Diesel used for electricity production	1.53 million liters
Diesel costs	2.76 billion togrogs (HK\$4.88 million)
Total electricity consumption	3,042 kW
Intensity	0.0022 kW/t

The electricity produced by these generators serve not only Khushuut operations (large equipment repair workshop, workers camp, offices, services, underground water pumping, etc.) but also the nearby Khushuut village for free. 174 households of Khushuut village are provided by our free electricity 24 hours year-round.

#### WASTE MANAGEMENT

MoEnCo's vigorous waste management program had complied with the Mongolian laws pertaining to waste management, occupational safety and hygiene, various regulations and national standards, and is realized through:

- collecting, storing, sorting and separating the waste for recycling or reusing; solid waste including coal ash, hazardous waste, medical waste, etc.;
- burning in the special oven, burying or disposing the various types of waste at different designated sites or transporting and delivering to the specialized provincial treatment and disposal centers;
- obtaining due permits, having dumpsite locations specifically selected, approved and regularly inspected by the provincial and district Environmental Office; and
- paying for waste disposal to the local budgets, contracting a specialized and licensed company for transporting and waste disposal.

We aim at producing less waste as much as we could, reducing the negative impacts of the waste through reuse and recycling, and following the principles of waste elimination under the environmentally safe technologies.

The Group believes a proper waste management is essential for long term environmental sustainability. Therefore, MoEnCo conducts the internal audit with garbage and industrial waste management with aims to ensure that we have improved and developed the auditable management system continually.

#### ENVIRONMENTAL (CONTINUED)

In 2017, MoEnCo hired a local company to transport and dispose the specific types of mine's production and camp waste. Also, we purchased and installed 44 separation waste bins of 120 kg volume. Over 73% of hard residential waste was sorted, packaged and handed over to local entrepreneurs and small businesses for recycling.

Waste produced	Total amount	Intensity
Hazardous waste including medical waste	34 kg	0.000024 kg/t
Non-hazardous waste		
Including hard, ash, residential, sewage	1,913.7 t	0.0014 t/t

In 2017, MoEnCo's entire waste management system and dumpsites were inspected 3 times by the provincial environmental inspector and the hygienist working at our Khushuut mine site as part of the mandatory government inspection.

## ENVIRONMENTAL MANAGEMENT AND PERFORMANCE AT XINJIANG WASHING PLANT

Coal quality control is an indispensable segment in the production process. Due to water source issues of our coal mine, we are unable to erect the usual coal processing and handling facilities in Khushuut. Hence, we built the DPP at the Khushuut mine site for initial processing of coal before export. This could not only eliminate the unwanted rubbles and other materials to enhance our raw coal quality, but also reduce our export transportation costs. The processed coking coal is then washed by our Xinjiang Washing Plant in China and sold as clean coking coal to our customers.

Coal washing is a process that is undertaken in a coal washery or coal washing plant where coal is refined or cleaned of impurities. Coal washing involves using water, mechanical techniques and relies on gravity and the difference of density between coal and its impurities which are usually more densely packed due to the fact that they are inorganic.

#### MAIN FEATURES OF THE XINJIANG WASHING PLANT

Our coal washing plant is located in Qinghe County, Xinjiang, some 30 kilometers from the Xinjiang Takeshiken border. It has a gross area of 200,000 square meters, and comprises the main plant and production area, the raw coal yard, and the office and living quarters. The main plant and production areas include clean coal bunker, waste rock bunker, preparation workshop, filtration workshop and sedimentation facilities etc. It was commissioned by end of 2014 and the annual washing capacity is 1.5 million tonnes.

#### COAL STORAGE AND DISPOSAL

After the washing plant received the raw coal from Mongolia, the coal is stored in a raw coal yard of 63,300 square meter surrounded by the dust suppression wall pending for processing. During the clean coal production process, a certain amount of coal gangue is screened out, and the majority of which is used as raw materials for construction while a small amount of it not in use is piled up temporarily in an interim yard. Clean coal is produced after the raw coal has gone through various mechanical screening, filtering and washing processes. Clean coal is then temporarily stored in the clean coal yard for delivery to our customers.

## ENERGY CONSUMPTION AND WASTES PRODUCED IN THE PRODUCTION PROCESS

Under the clean coal production process, it involves energy and water consumption and generates solid waste including sludge and garbage. Some of the wastes are hazardous such as coal gangue, coal slime and ash. The table below shows the washing capacity, total amount of major energy and water consumed and hazardous wastes produced during the Financial Year:

	2016	2017
Raw coal for washing (tonnes)	425,097.08	646,546.18
Clean coal production (tonnes)	380,932.68	547,383.84
Electricity consumption (kWh)	4,279,430	4,765,320
Intensity	10.07kWh/t	7.37kWh/t
Water consumption (m <sup>3</sup> )	41,408	47,208
Intensity	0.10 m³/t	0.07 m³/t
Total hazardous wastes (tonnes)*	88,460	99,380
Intensity	0.21t/t	0.15 t/t

\* Non-hazardous substances produced under the process are negligible.

#### ENVIRONMENTAL PROTECTION

In the Financial Year, the washing plant's infrastructure management, construction process and operation passed the Environmental Protection Inspection on the Washing Plant Construction Project which was carried out by Altay Environment Monitoring Center of Xinjiang, China. The washing plant project had implemented environmental control and ecological conservation measures regulated by the Chinese government and had complied with the "Three Simultaneities" of the Environmental Protection Law of PRC which requires us to design, construct and put to use simultaneously with the washing plant project. The inspection included various aspects such as water management, air pollution, noise management, waste management and testing.

#### WATER MANAGEMENT

During the production process, it consumes huge volume of water and sewage is produced. Sewage is mainly produced from flowing water, spraying, flushing and cleaning machines and facilities in the production process. With the sewage treatment system, it forms a closed-circuit circulation for re-use in the washing plant with no discharge to the outside. Therefore, it ensures no harm to the surrounding environment. For domestic sewage, the sewage undergoes waste water treatment before storing in a tank for winter which is used for irrigation in summer. If sewage is produced due to equipment failure or other incidents, it is stored in the standby thickening tanks to ensure no discharge to the outside to affect the environment.

The test results showed that after sewage treatment, the pollutant concentration under the Determination of Biochemical Oxygen Demand for Five Days exceeded Level 2 of China's Integrated Wastewater Discharge Standard (GB8978–1996)<sup>1</sup>, while others all achieved Level 2 and met the standard.

Information is available at http://english.mee.gov.cn/Resources/standards/water\_environment/Discharge\_standard/200710/W020061027521858212955.pdf

#### NOISE MANAGEMENT

Noise mainly generates from pumps, vehicles and operating machines during the production process. All machines are placed indoor. The washing plant also adopts vibration isolation and noise reduction measures to minimize environmental noise. Noise outside the washing plant had been tested and achieved Category 2 and met China's Emission Standard for Industrial Enterprises Noise at Boundary (GB12348–2008)<sup>2</sup>.

#### AIR POLLUTION

Flue gas from boilers and dust from coal yards are two main sources of air pollution in a washing plant. The flue gas produced by the boiler is treated by the dust removal and desulphurization facilities before dispersing into the air through the chimneys. For controlling dust emission, the coal yards are surrounded by dust suppression walls of 12 meters in height. In addition, all vehicles are tightly covered by tarpaulin during coal transportation. The coal washing process is operated under an enclosed environment and sealed coal conveyor belts are adopted.

There is currently no  $CO_2$  emission conversion formula for electricity consumed by washing plant; therefore, no  $CO_2$  measurement was made on electricity consumption. Under a spontaneous survey, the results showed that all factors under surveillance achieved level 2 requirements under the Emission Standard for Pollutants from Coal Industry (GB20426–2006)<sup>3</sup> and Integrated Emission Standard of Air Pollutants (GB16297–1996)<sup>4</sup>. Under the organized survey, the results showed that the coal boiler factors under surveillance achieved table 1 requirements and table 4 relating to the lowest height requirements for chimneys under the Emission Standard of Air Pollutants for Boiler (GB13271–2014)<sup>5</sup>.

#### WASTE MANAGEMENT

Liquid waste includes sewage while solid waste includes coal slime, coal gangue, dust from boilers, sludge and garbage produced in operation of washing plant. Most of the by-products under the production process are hazardous which will be treated and recycled for re-use as mentioned.

#### USE OF ADVANCED TECHNOLOGY

For the aim of increasing production capacity and reducing energy consumption, we applied advanced technology in the production process. We installed high technological machines in the washing plant for production. In 2016, we installed a filter press. The washing capacity increased from 180 tonnes of coal to 280 tonnes of coal per hour. The electricity consumption was reduced from 10kW to 7.5 kW per tonne of coal. In 2017, a horizontal rapid-decantation centrifuge was installed. It increased the washing capacity from 280 tonnes of coal to 330 tonnes of coal per hour. The electricity consumption was reduced from 7.5 kW to 6.8 kW per tonne of coal.

#### WASTE DISPOSAL POLICY

We have established a dust management system. Workers of the washing plant have strictly followed precautions for the unloading process of raw coal vehicles, the "10 Prohibition Rules in Washing Plant" and standard code of operating procedures and accountability systems for equipment (including boilers, dust remover, and other safety and environmental protection equipment). Daily check and rectification on equipment and process are carried out by respective departments.

We have also submitted a proposal to the Municipal People's Government of Qinghe about rehabilitation of the open-pit in Akeharen village by utilizing our solid waste, coal gangue and sludge.

- <sup>2</sup> Information is available at http://english.mee.gov.cn/Resources/standards/Noise/Emission\_Standard2/200907/W020081017398126509058.pdf
- <sup>3</sup> Information is available at http://english.mee.gov.cn/Resources/standards/water\_environment/Discharge\_standard/200710/W020070207562285376298.pdf
- <sup>4</sup> Information is available at http://www.mee.gov.cn/image20010518/5302.pdf
- <sup>5</sup> Information is available at http://english.mee.gov.cn/Resources/standards/Air\_Environment/Emission\_standard1/201605/W020160511527396226970.pdf



#### LABOUR SAFETY

The health and safety policies of the Group are principally required to, among others, comply with applicable Mongolian legislation and regulations, and exceed those requirements where necessary, in order to maintain a healthy and safe working environment; and to identify, assess, and manage the health and safety risks of our activities in all planning and operational decisions based on appropriate and systematic risk assessment processes.

In 2017, MoEnCo's safety team consisted of 15 experienced full-time specialists working at the mine site. In addition to their regular work ensuring the mine's safe operations, this team conducted bi-monthly or monthly work place safety inspections at 8 important locations throughout 2017. Total number of workplace inspections by the safety team was 105.

Lagging and leading indicators are adopted to measure the health and safety performance on a monthly basis. Daily and weekly workplace inspections are conducted by supervisory staff and safety officers to identify potential workplace hazards, assess safety risks, and immediate actions are taken to correct any activity deviated from the policies and procedures.

In 2017, our safety team renewed or formulated a total of 52 safety instructions and held on-job demonstration training sessions.

In 2017, the government assessment team from Khovd provincial branch of General Agency for Specialized Inspection (www.inspection.gov.mn/), including its occupational safety inspector, worked once at our Khushuut mine site as a part of their regular scheduled mine safety inspection.

In 2017, MoEnCo recorded zero (0) fatality, zero (0) occupational diseases and zero (0) lost time.

Khushuut Coal Mine	2017
Total MoEnCo's man-hours worked	952,348
No. of fatalities	0
No. of lost time (hour)	0
Injury frequency rate	0
Total recordable injury frequency rate	0

Adhering to its obligations under the law, MoEnCo presented its safety and health data to the Mineral Resources and Petroleum Authority of Mongolia (https://mrpam.gov.mn) in March, 2018, as part of the MoEnCo's mining works, environmental and management report.

In addition to covering all MoEnCo's workers and staff with mandatory Mongolian government social insurance (which includes health insurance, unemployment, old age pension, welfare, and industrial accidents insurance), we additionally subscribe all our workers to the voluntary "employer's liability" insurance under the private insurance schemes which provide a good level of extra coverage for potential medical expenses and lost wages experienced by our employees, or their beneficiaries, if the employee is injured, sickened or killed by job-related causes. Additional voluntary insurance premiums paid were approximately 37,616,150 togrogs (approximately HK\$119,777) in 2016 and approximately 46,487,915 togrogs (approximately HK\$148,060) in 2017.

#### EMERGENCY RESPONSE CAPACITY

Since the launch of operations at the Khushuut mine site, MoEnCo has devoted considerable attention and resources to mine safety and enhanced MoEnCo's capacity for emergency response and rescue. Our emergency response team ("**ERT**") not only responds to incidents at the mine site but also ensures the community safety by responding to calls from local residents.

MoEnCo emergency response team consists of 2 full-time professionals and 18 volunteers who are employees of MoEnCo and its contractors. Team members receive:

- bi-annual comprehensive one-day simulation training on equipment and emergency response techniques. This training is held in a form of a show attended by local residents. They are invited for learning, training and participating in the simulation practice.
- by-monthly one-day training where practice exercises, simulated emergency scenarios and external training are provided to ensure that their skills are maintained.

Adhering to the Disaster Preparedness Law and other relevant laws and regulations, MoEnCo prepares the Emergency Response Plan annually for approval by the Mine Rescue Office of General Authority for Emergency of Mongolia (http://nema.gov.mn). The ERT is equipped with the latest communications and tracking systems and fire extinguishing equipment and machines. The team regularly participates in events and training of the Emergency Office and Fire Department of Khovd province and of the relevant agencies.

Mandatory training on emergency response techniques and procedures are held for all new employees of MoEnCo and its contractors before commencement of work and quarterly for revision.

Due to the remoteness and very low and sparse population of Khushuut area, dictate that our ERT is sometimes called to incidents on the Khushuut road or in the vicinity of the mine. MoEnCo provides free emergency response to local incidents.

	2017
Total hours of training for disaster readiness offered in 2017	195
No. of calls to incidents at the mine	5
No. of calls to incidents on the road or in the local community	9

In May 2017, our ERT participated in the regional mine rescue competition in Zavhan province and received one gold, one silver and three bronze medals for their outstanding skills performance.



#### **HEALTH SERVICES**

Our Khushuut coal mine site has one of the best equipped and modern health centers in the area which is operated by our subcontractor and provides free services to:

- MoEnCo employees;
- all contractors' employees at the mine site;
- local residents of adjacent 3 districts; and
- export coal truck drivers on the MoEnCo's Khushuut road.

Our Khushuut mine site is located in a remote part of Mongolia among Altai Mountains with very low population density, few settlements and even fewer medical facilities. MoEnCo gives support to local communities by offering free health care services, transporting the sick and pregnant to the provincial hospital and providing aids for accidents, if any, on our Khushuut road.

Number of visits to Khushuut medical center	2016	2017
Visits/calls by the MoEnCo's employees	2,238	2,921
Visits/calls by local residents	245	193
of which adults	134	106
children	111	87
Calls to accidents on Khushuut road	4	5

Our medical team, consisting of 6 doctors and 2 nurses as of the first quarter of 2018, provides free primary health care, medical emergency aid, stabilization, treatment, follow-up observation and first aid training.

In 2017, our medical team organized 15 training sessions on first aid and occupational injuries prevention attended by 196 MoEnCo's and contractors' workers and 15 sessions on wellness and decease prevention attended by 295 workers and local residents.

An important achievement of 2017 for MoEnCo was opening of a medical center at our new Uyench CBY and processing center. This center, now serving over 460 people (including contractors' workers) and some local residents of Uyench, is equipped with modern equipment and well supplied with daily treatment needs.

#### MANDATORY HEALTH SCREENING

In compliance with the legal requirements, all of our site employees undertake pre-employment medical examination to ensure that they are fit to perform their jobs safely without placing co-workers at risks. Subsequent extensive medical checkup is conducted bi-annually or annually subject to a job position to ensure that no health issues and occupational diseases were contracted as a result of operational activities.

For regular medical examination of our workers, MoEnCo engaged the services from 2 hospitals in 2017, one in capital Ulaanbaatar and one in Khovd province center.

The number of MoEnCo's workers who underwent annual medical checkups in 2017 was 307, in which 124 were for pre-employment medical checkups.

#### ENSURING HYGIENIC STANDARDS

At our Khushuut camp and mine site, occupational hygiene is ensured through our team efforts aimed at recognition, evaluation, control and prevention of hazards from work and living arrangements that may result in illness, injury or affect the well-being of our workers, and safeguarding the community at large.

Ensuring hygienic standards at the camp for more than 1,000 people at times (including our subcontractors' workers) in a remote mountain location scarce of water is a challenge for MoEnCo in terms of resources and logistics. However, continuous meeting of the occupational hygiene requirements is an important part of the MoEnCo's safety programs and planning.

MoEnCo hired a Khovd company for regular disinfection of various places at the camp under specific schedules. Also, workplace assessment, inspection, sampling, testing, and regular training of all workers and specific staff, for example, camp canteen cooks, are carried out under the regular schedules for maintaining the due hygiene at the site.

In 2017, the mine site organized "All Staff Cleaning Weekend" twice which included cleaning, disinfecting, trash collection and removal not only at the camp but also the nearby Khushuut village and the vicinity of the mine. About 200 people, including the local village residents, participated in each of these community outreach events.

#### EMPLOYMENT PRACTICE

MEC has extensive operations in Hong Kong, China and Mongolia; thus, we adhere to labour laws, employment practices and business ethics of these different locations.

We believe a diverse workforce and inclusive workplace can support better work performance which ultimately benefits our work.

As at 31 March 2018, the Group employed a total of 740 employees.	As at	t 31	March	2018,	the	Group	employed	а	total	of	740	employees.	
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	Hong Kong	China	Mongolia
Total*	34	243	463
By employment type			
Full-time	100%	95%	99%
Part-time	0%	5%	1%
By gender			
Female	62%	21%	29%
Male	38%	79%	71%
By nationality			
Chinese (HKSAR)	100%	0.4%	0%
Chinese (PRC)	0%	99.6%	5.2%
Mongolian	0%	0%	94.6%
Other	0%	0%	0.2%

\* Excluding contractors' employees

In line with MoEnCo's community development strategy by providing job opportunities to the areas which we operate in, we support employment of local citizens. We also made a pledge to prioritize local hiring in the Cooperation Agreements reached with Khovd province Government.

		2017	2018
	April	November	March
No. of people working for Khushuut project*	977	1,310	1,574
of which, percentage of local hiring	74%	73%	77%
percentage of people working at the mine site		—	91%

\* Including contractors' employees

In 2017, the provincial labour inspector worked once at our Khushuut coal mine site as a part of their regular scheduled assessment sessions. The labour inspector not only scrutinized whether MoEnCo's operations had complied with the labour regulations but also held discussions with our mine and camp workers.

One of the important decisions, the increase in wages, which is believed to foster greater employee motivation, was made by the end of 2017:

- salaries and wages for all workers were increased 10% to match the inflation; and
- a new compensation for hazardous conditions was established.

Mongolia enforces stringent labour legislation and standards in line with the best international practices. MoEnCo has been strictly complying with all requirements of Mongolian labour regulations. All terms and conditions under labour contracts are consistent with the Labour Law, Occupational Health and Safety Law, Social Insurance Law and other relevant laws.

In January, 2018, our administration and Workers Union entered into a Joint Agreement pursuant to the relevant laws of Mongolia.

Women have a notable role at the management level as well as the rest of the employees within the Group. Women make up 29% of all people working at MoEnCo. This participation share is above the average women's involvement rate (24–27%) in the extractive industry of Mongolia reported by Women in Mining Mongolia (www.wimmongolia.org) with which MoEnCo has been maintaining close collaboration since its establishment.

	Men/women ratio
Top management at Group level	50/50
Top management at MoEnCo	50/50
Hong Kong office staff	38/62
All MoEnCo employees	71/29

During the reporting period, no complaints related to harassment, discrimination or human rights were recorded at our offices and sites. We received a number of complaints from the Khushuut mine site workers related to the working conditions and wages.

The Group management took seriously each of such complaint. Each case was referred to the human resources management or legal department, or our Workers Union, for careful review. All of them were resolved timely through joint efforts in compliance with the relevant laws of Mongolia.

#### TRAINING AND DEVELOPMENT

Mongolian laws impose strict obligations on a mining license holder to provide safety and health training.

MEC believes a comprehensive training program can enhance individual and organizational capability, as well as reducing the number of injury, illness, property damage and missed time from work. MoEnCo offers:

- requisite occupational safety training that are prescribed by the occupational safety laws and regulations;
- a wide range of specified training on proper use of occupational disease protective equipment, mine safety training and first aid course, fire prevention, safety regulations, hygienic requirements, workplace risks assessment and so on;
- training pertaining to the environmental protection including geographical information system (GIS) programs, simple land rehabilitation techniques suitable for the Khushuut area, environmental works planning and execution, etc.; and
- specific operational instructions, for example, on safe operations of various equipment, chemicals handling, fuel charging and discharging, traffic within the mine site, safe parking of heavy-duty trucks, coal sampling techniques, restrictions on access to some designated parts of the mine site and so on.

In 2017, MoEnCo sent its representatives to 11 industry conferences, workshops and seminars on labour safety and environmental conservation and management.

Since 2016, MoEnCo has been partnering with the Sustainable Mining Land Management Project of UN Development Programme offering a training module on environmental conservation works, pastureland management and herders engagements for MoEnCo's staff and local citizens.

We offer training sessions free of charge to our staff and the contractors' staff. When organizing training and development activities, MoEnCo collaborates with various professional organizations and training institutions. Joint training sessions were held in collaboration with the Technology University of Orkhon province which runs a renowned occupational skills training center in Mongolia (www.erdenetis.edu.mn), Khovd province Emergency and Fire Department, Khovd province Environmental Office, Huisiin Gobi — Tsetseg Lake Watershed Area administration, Mongolian Red Cross Society (www.redcross.mn), Dale Carnegie Training Mongolia (www.dalecarnegie.com/mn), Mongolian Disaster and Fire Protection Association (www.niigemleg.mn) and Altan Bolomj training center (www.jobagency.mn). The total number of training sessions (including this collaborative training sessions) organized and participated was 18, the number of MoEnCo staff participation in the trainings was 49.

	2017
Number of safety training topics covered	31
number of attendees	4,893
Number of topics on procedural and operational instructions	26
number of attendees	1,036

Average hours of training completed for each Khushuut mine site employee was 14.8 which is above the mandatory 14 hours of training for a mine site worker required annually under the Labour Minister' s decree of 2016.

	2017
Total hours of training offered	5,197
Average training hours completed per Khushuut mine site employee	14.8
Average training hours (including MoEnCo headquarter office staff)	11.2

#### ANTI-CORRUPTION MEASURES

The Group upholds high standards on promoting anti-corruption, with all its employees and directors required to maintain a high level of business ethics. The Group is committed to preventing, detecting and reporting all types of fraud including bribery and corruption. The Group's Audit Committee has responsibility to review and raise concerns about possible improprieties in financial reporting, internal controls and other matters. No incidents regarding bribery, corruption or unethical behaviour were recorded or identified in 2017.

MEC has a whistleblowing policy which is written in its Internal Regulations. This policy aims to provide a formal channel for our employees and stakeholders to report concerns about any suspected misconduct, malpractice or irregularity. This policy is intended to protect the whistleblower to report its concerns without fear of victimization, subsequent discrimination or disadvantage.

MoEnCo's approach to anti-corruption and ethical business conduct is outlined in its Internal Regulations which, among other matters, identifies our obligations, as a company, to comply with all applicable laws and to avoid and report bribery and corruption cases. MoEnCo ensures anti-corruption approach and prevention of nepotism through:

- due diligence of potential employees, contractors and suppliers;
- frequent communications from company management to all staff including those working at Khushuut camp;
- dedicated assessment of bidders and their tender proposals offering their services to MoEnCo; and
- inclusion of anti-bribery provisions in the employment contracts with all MoEnCo workers and managers.

The Group ensures that all of its operations and interactions are conducted in an ethical, honest, and accountable manner and in accordance with all applicable laws and regulations. With thousands of workers, suppliers and contractors, the Group strives to ensure that not only is corruption contrary to our values and responsibility, it may also erode our ties with the communities where we operate.

We expect all employees to identify and raise concerns about unethical business conduct, including potential bribery or corruption issues. The Group maintain strong anti-retaliation policy for those would raise concerns timely and in good faith.

In December 2017, MoEnCo organized a one day training for our procurement staff. One of the goals was to provide a clear understanding of how to recognise, reduce and detect corrupt behaviour and conflicts of interest in procurement and supply chain, and to increase awareness of importance of ethical conduct throughout the whole procurement process.

The Group believes that transparency and reporting is a proper tool to ethical business conduct pursuant to the relevant laws and regulations as well as its own policies.

The Group regularly reports its operations, revenues, taxes, environmental performance and social issues through several channels:

- the website of the Group and, ultimately, the HKEx
- Mineral Resources and Petroleum Authority of Mongolia, Ministry of Environment and Tourism of Mongolia
- Khovd province Government
- MoEnCo's social media sites
- Extractive Industries Transparency Initiative (www.eitimongolia.mn)

#### SUPPLY CHAIN MANAGEMENT

The Group's approach to working with contractors and suppliers is based on the principles of fair-minded competition, total cost of ownership, continuous improvement, and a mutual focus on ethical conduct. We strive to do business only with those companies who share our respect for the environment, law and ethical behaviour.

All contracts and agreements with contractors and suppliers include MoEnCo's compliance provisions. These requirements cover important issues such as anti-bribery, labour standards strictly enforced by the Mongolian government, workers' health and safety, environmental preservation and rehabilitation schemes, workers' fair pay and hours of work and rest, and mandatory insurance provisions. These government scheme insurance provisions that we require our contractors and suppliers to subscribe their workers include the health insurance, unemployment, old age pension, welfare, and industrial accidents insurance.

When selecting our suppliers and contractors, MoEnCo adheres to two main selection criteria:

- priority is given to local, Khovd, companies and individuals interested in working with us; and
- products and services offered by suppliers and contractors should, first of all, satisfy needs and demands of our mine workers and the specifics of MoEnCo's operations in the remote region of Mongolia with harsh climatic and terrestrial conditions.

It is our intent to deal with contractors and suppliers who have accepted and self-certified against our requirements. All contractors and suppliers, new or current, are assessed in accordance with the requirements regarding ethics, corruption, and labour standards risks prior to working with them.

In December 2017, our procurement staff received one-day training and the topics covered logistics, operations, planning, and sourcing in the supply chain management strategy. It also included topics on transportation, warehousing and inventory, logistics network designs, optimization of supply flow and different techniques that would help MoEnCo to maintain our existing long-term productive supplier relationships.

#### COMMUNITY



As a responsible corporate citizen, MoEnCo continues to put emphasize on community developments and partnerships by giving back to local citizens. We share the benefits with rural communities and generate economic values by creating jobs, procuring local services and goods, supporting social developments, paying taxes and charges locally and helping people in need.

The 2014–2016 Cooperation Agreement between MoEnCo and Khovd province Government was concluded and evaluated in early 2017. In its assessment report, the Khovd Government expressed its "great satisfaction" of MoEnCo's works toward fulfilling its social responsibility to support local communities. Encouraged by such mutually benefiting cooperation with the local government and the great appreciation of our efforts received from the local communities, MoEnCo entered into the next phase Cooperation Agreement for the years of 2017–2020 with Khovd Government in August, 2017.

The assessment report which was approved by the Khovd province Government in August 2017, concluded the successful completion of the 2014–2016 Cooperation Agreement and showed that during the term of the Agreement, MoEnCo paid over 2.28 billion togrogs (approximately HK\$7.54 million) to Khovd province Government budget as local taxes, fees and charges.

In 2017, Khovd province budget received approximately 1.16 billion togrogs (HK\$3.93 million) and 255.9 million togrogs (HK\$839,250) in the first 2 months of 2018 from MoEnCo, in the form of taxes, fees, charges, tolls and premiums payable.

	2015-2016	2017
No. of contractors and suppliers	352	284
of which No. of local suppliers and contractors		
(individuals and businesses)	139	132

A much larger support to the local economy comes from MoEnCo's procurement of goods and services. In order to support and strengthen local small and medium sized businesses, local companies in Khovd which meet our procurement requirements are given preference to be our suppliers of petroleum products, water, foodstuff, work uniforms, various services including export coal transportation, and so on.

	2016	2017
Amount of locally purchased goods and services (including	16.07 billion togrogs	35.7 billion togrogs
coal transportation)	(HK\$51.6 million)	(HK\$117.3 million)
Percent to the total procurement	45%	49%

To ensure its full cooperation with the province, MoEnCo presents monthly reports of its operations and local engagements to Khovd province Governor, representatives of the provincial Assembly and 12 other local institutions.

MoEnCo's 311 km long Khushuut road is a locomotive of the regional development. It is the only hard-covered road within 3 neighboring rural districts stretching westward from our Khushuut coal mine to Bulgan border point on the Mongolian side, and Takeshiken border on the PRC side.

With our road in service since 2011, local residents in Khovd province are given the opportunity to use, without any fees or tolls, the asphalt road for their transportation of food, materials and necessities. In the vast remote lands, travelling, carrying medical supplies, petrol and equipment are very important in sustaining lives of the local communities.

Ever since commissioning of the road, regional border activities have become more active and prosperous as local people are now carrying on their businesses along the Khushuut road. Before the construction of our road, local people from western provinces of Mongolia were required to drive on a rocky and muddy road for more than twelve hours in order to reach the Bulgan border crossing point. After commissioning of this asphalted road, the border is now within reach in four hours.

As of end of 2017, about 11% of the Khushuut road traffic belonged to residents of Khovd and neighboring provinces.

Another milestone of MoEnCo's operations achieved was the opening of the Uyench CBY in January 2017. Located in about 224 km from Khushuut mine site and about 85 km to the Mongolia-China border, our Uyench site consists of 38 buildings and facilities (workshop, trucks parking area, storage area, engineering facilities and production units, living quarters, roads, hospital, and etc.) over 50 hectares.

As of the first quarter of 2018, MoEnCo employed 79 people at our Uyench CBY site, of which 92% were local people. The site now provides jobs for a total of over 450 people including MoEnCo's contractors' staff and coal truck drivers.

#### PRIORITY TO LOCAL HIRING

By entering into the Cooperation Agreement with Khovd government, we pledged to increase job opportunities for local citizens and support businesses in Khovd.

In 2017, MoEnCo recruited 70% of the total workforce from Khovd province (average of the 12 month of 2017) and, as of the first quarter of 2018, around 66% of all people employed for Khushuut project were local citizens. As a member of MoEnCo family, residents of Tsetseg, Darvi, Uyench and other districts of Khovd province are similar to all our employees, they undergo regular full medical checkups and have their social security and health insurance premiums paid by MoEnCo. Moreover, they get on-job training and enjoy the active social life at the camp.

In 2017, MoEnCo paid to the Khovd province Tax Office and Social Insurance Office over 280.65 million togrogs (approximately HK\$920,258) for taxes on behalf of the MoEnCo's employees, and 741.06 million togrogs (approximately HK\$2.43 million) as social insurance premiums of our workers.

As of March 2018, MoEnCo contracted 27 local transportation companies to carry our products to the buyers, of which 13 companies were engaged for export transportation. Of all these carriers, 89% of their heavy-duty truck drivers were hired locally (Khovd province citizens), while the remaining drivers were hired from the neighboring provinces. Similarly, 75% of haulage, road maintenance workers contracted by MoEnCo were locals with remaining people being the engineering personnel hired from elsewhere. These people were engaged in snow and ice removal, clearing, small repairs and upgrades on the road and other scheduled maintenance works.

MoEnCo mandatorily includes in its subcontracting agreements with its contractors and suppliers, for example, transportation companies or construction contractors, provision that they hire the majority of their personnel locally under legitimate labour contracts that meet all legal requirements and with the provisions of compulsory government social and health insurances.



#### DONATION

The assessment report concluding the 2014–2016 Cooperation Agreement execution and approved by the Khovd province Government in August 2017, shows that during the term of that Agreement MoEnCo paid to Khovd province Government budget over 2.28 billion togrogs (HK\$7.54 million) as local taxes, fees and charges.

As mentioned, we made a contribution to the Khovd province government budget under the Cooperation Agreement. Moreover, in 2017, our donations (excluding the funds paid to the Development Fund) was used for purchase of animal feed during the harsh winter, community emergency preparedness, hospitals in Tsetseg and Uyench soum, repair of water wells, purchase and installation of essential machinery and equipment, and so on.

MoEnCo also spent a total of 456.63 million togrogs (approximately HK\$1.5 million) in 2017 for providing Khushuut county households with free water and electricity.

As it was mentioned above, MoEnCo started working in Uyench soum; therefore, MoEnCo now has additional responsibility to support and contribute to the development of this soum. Thus, in 2017, we donated to organizing events and for needs of the Uyench residents who can now receive treatment and emergency first aid at the medical facility of our Uyench site.

MoEnCo distributes coal for the Khovd governor's office and local communities for sustaining their livelihood in harsh winters of Mongolia. Sales of significantly discounted coal were also provided to two districts of Khovd.

	2016	2017
Tonnes of coal distributed free of charge	363	2,938
No. of local households, social organizations or companies which		
received discounted coal	_	2,750
No. of free coal recipients	_	127

MoEnCo's medical center at the mine site provides free outpatient medical care and emergency services for the local people in 3 soums. In 2017, our medical team had treated 193 patients from the local community without charge.

In 2017, we also built fences around 200 hectares of agricultural land in Darvi soum against the domestic livestock grazing nearby. 38 local families are now using this large plot of land for their vegetable gardening.

#### KHUSHUUT DEVELOPMENT FUND

Khushuut Development Fund was established in May 2014 under the Cooperation Agreement between MoEnCo and Khovd Government.

In 2017, MoEnCo transferred 665.62 million togrogs (HK\$2.18 million) to Khovd Khushuut Development Fund under the new Cooperation Agreement 2017–2020 with Khovd province entered in August 2017.

	2016	2017
MoEnCo's contribution to Khushuut Development	329.25 million togrogs	665.62 million togrogs
Fund	(HK\$1.08 million)	(HK\$2.18 million)

For example, a part of MoEnCo's 2017 contribution to this Fund was used for establishment of the first in Khovd Center for Protection of Battered People. It offered temporary protection for people from domestic violence and help them gain tangible resources for supporting themselves and their families and to create new life.

In the past, MoEnCo's donations and subsidies to the local Development Fund were spent for:

- building, repairing and maintaining social facilities at nearby villages and settlements (kindergartens, general family hospitals, Khovd infection decease hospital, regional diagnostics center, youth and family development center, technical training center, etc.)
- repairing and improving civil infrastructure (local heating station, water wells, roadways, planting trees and greening efforts, etc.)
- supporting local agriculture and livestock (purchase and distribution of seeds, distribution of animal fodder over harsh winters, improving cultivated lands, etc.)
- organizing various cultural events, sports and artistic competitions and celebrations for Khovd communities, seniors, youth, etc.
- paying tuition fees for college students, and many other courses.

#### CELEBRATION OF MOENCO'S 10TH ANNIVERSARY



In relation to celebrating MoEnCo's 10th anniversary of successful business in Mongolia in fall 2017, our staff received a remarkable number of awards, medals, nominations, prizes and recognitions from the Ministry of Mining and Heavy Industry of Mongolia (www.mmhi.gov.mn), relevant mining industry associations, Ministry of Finance of Mongolia (www.mof.gov.mn), as well as Khovd province Government.

	Number of staff
Awarding agency/body	awarded
Ministry of Mining and Heavy Industry of Mongolia, Ministry of Finance of Mongolia	32
Khovd province Governor and/or Peoples Representatives Assembly	4
Industry Chambers, Associations and other professional organizations	13
MoEnCo LLC	15



#### SUCCESS IN 2017 MAKES MOENCO SETS SIGHTS HIGHER

Last year's recovery of the coal market meant increased exports for Mongolia Energy Corp., commonly called MoEnCo, which operates the Khushuut mine. The company ended 2017 exporting more than 600,000 tonnes of washed coal, 80% more than in the previous year. Since prices also were high, the rise in exports gave a very healthy look to the company's balance sheet.

> MoEnCo acquired the licence over Khushuut in 2007, but could not begin work in earnest as the then government proposed to Parliament that it should be



MoEnCo was the first coal extractor in Mongolia to refine its product before export. Its dry refining plant's production capacity is approximately 1.5 million

As the main event of celebrating MoEnCo's 10th anniversary, we organized a traditional Naadam festival at the mine site. The festival included national wresting competition, horse riding, cultural performance and other exciting events which was attended by hundreds of local people, athletes, young riders, artists as well as our employees and their families.

In August 2017, the Khovd Government and MoEnCo organized a joint discussion and assessment of execution of the 2014–2016 Cooperation Agreement. The province Governor and his Administration not only gave high evaluation of our operations at Khushuut and execution of the Cooperation Agreement, but also prepared a short documentary showing various social facilities and provincial events sponsored and funded by MoEnCo in the past 4 years. The documentary was broadcasted by the Khovd TV channel in December, 2017<sup>6</sup>.

In 2017 and early 2018, MoEnCo's operations and contribution to the regional development received positive and encouraging coverage in Mongolian printed media and TV.

Positive assessment of MoEnCo's business in the far western Khovd province was also given by the Minister of Mining and Heavy Industry of Mongolia in the media after his visit to Khushuut mine site in November, 2017. He was accompanied by a member of Mongolian Parliament, they toured the mine site and met with our site managers and workers.

<sup>&</sup>lt;sup>6</sup> https://www.facebook.com/212725282262177/videos/869376309930401/?q=%D0%9E%D0%BB%D0%BE%D0%BD%20 %D0%AF%D1%81%D1%82%D0%BD%D1%8B%20%D0%A2%D0%B5%D0%BB%D0%B5%D0%B2%D0%B8%D0 %B7%20%D1%85%D3%A9%D1%88%D3%A9%D1%82

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