

Energy Management

We continue to find new and innovative ways to increase the efficiency of our energy management systems. Based on comprehensive calculations of energy consumption, such as electricity and oil, we carry out a comparative analysis of our energy efficiency, which influences our energy management targets and improvement plans. We aim to implement innovative energy-saving technologies to drive continuous improvement in our energy performance.

Electricity analysis

We carry out a monthly analysis, calculating monthly electricity consumption and evaluating the implementation of a smoothed electricity use approach, and report problems to the plants and mines for timely rectification.

Direct electricity purchases

We participate in direct electricity transactions and achieve the optimal allocation of power resources by signing long-term cooperation agreements. In Fiscal 2021, the Ying Mining District purchased in 94.6 million kWh directly, saving US \$444,018 in electricity charges; for the GC Mine, those figures were 30.1 million kWh and US \$168,166 respectively.



Electricity consumption analysis meeting

Electricity Consumption	Fiscal 2021	
	Ying	GC
Year-on-year change in peak electricity consumption (%)	-0.03	+0.28
Year-on-year change in electricity consumption during flat period (%)	-0.34	-0.10
Year-on-year change in electricity consumption during valley period (%)	+0.47	-0.18
Direct electricity supply transactions (10,000 kWh)	9,456.98	3,006.49
Electric charge savings from direct supply (\$)	444,018	168,166

Energy Consumption	Fiscal 2021	Fiscal 2020	Fiscal 2019
Diesel (m ³)	592	507	693
Gasoline (m ³)	107	88	91
Coal (tonnes)	0	0	0
Liquefied Petroleum Gas (LPG) (m ³)	0	0	0
Electricity (MWh)	119,988	110,185	106,913
Total energy consumption (tonnes of standard coal equivalent)	15,603	14,271	14,103
Total energy consumption (GJ)	457,119	418,011	413,074

We continue to optimize our energy structure in step with the global energy transition trend. We no longer use any coal, have been exploring the use of new energy sources, and have been gradually introducing new energy equipment in lighting, transportation, heating, cooling, and other areas. We have phased out outdated processes and equipment over time based on energy efficiency monitoring and assessment to improve our energy efficiency. A few of the ways we have done this include eliminating the use mining vehicles below the National IV Standard and switching to LED lights for underground lighting.

Case Replacing High Energy-consuming Equipment and "Going Green"

In Fiscal 2021, Ying Mining District phased out nine second-level energy-consuming air compressors and replaced them with new first-level energy-consuming frequency conversion screw air compressors. Given the same air supply and pressure, the power is reduced from 132KW to 95KW, saving over 28% of energy. GC Mine replaced one air compressor, effectively reducing the use of power and improving efficiency.