

Zijin Copper, to be a leading role in Green Mining Transformation

Integrated Carbon Management, New Energy Technology and GHG Emission Controlling



What is our focus and strategy ?



New Energy Technology

- Conduct the research and plan on solar and wind power generation projects
- Introduce the kinetic energy power and waste heat power generation technology



Integrated Carbon Management

- Develop a carbon management policy and target
- Conduct carbon management throughout the entire management and production process
- Technology Transformation to low-carbon and intelligent



GHG Emission Controlling

- Use natural gas instead of coal in smelting
- Large-scale investment in ecological greening projects
- Establish a monitoring record of GHG emissions for all equipment

1. Carbon capturing (Implemented)

As of the end of Sep. 2023, the green area reaches 3.102 million square meters, which would *reduce carbon emission of 500 tons/year*.



2. Solar energy (Planned)



Distributed photovoltaic

Total construction area:

150,000m² (Dumps and tailings ponds)

Installed capacity:

10~12 MW

investment:

8,900,000€

Construction period:

2024-2025.

Carbon Reduced:

13,000 tons/year

3. Use of excess heat (Waste heat power generation)



We use a low-temperature waste heat utilization system in the smelter to **use waste heat to generate electricity**.

Waste heat from the smelting plant is used to drive a **steam generator**, which will increase the power generation **by 10 million kWh/year**. It greatly improves our energy efficiency and reduces the carbon emission.

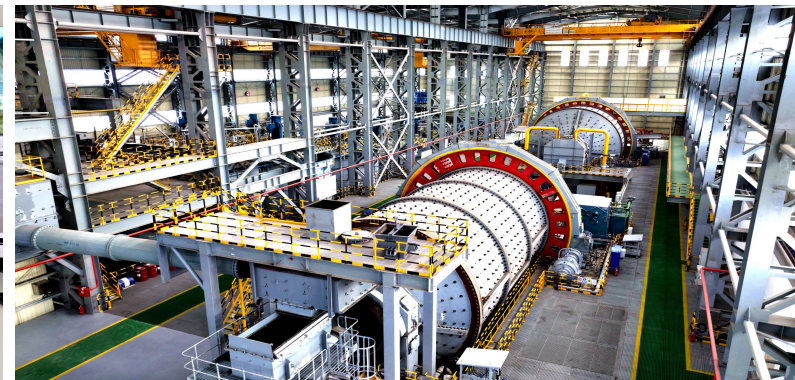
10 Million Kwh/Year — Waste heat power generation

4. Change to Clean Fuel



*Solve the environmental problems and control GHG emissions from the essence of technology.
We use the natural gas to replace the coal which reducing the carbon emission more than 9000 tons/year.*

5. More intelligent equipment



The equipment unit becomes more intelligent, and the production energy consumption of ton copper is reduced a lot. The automation level and energy-saving efficiency of the production equipment have been greatly improved.

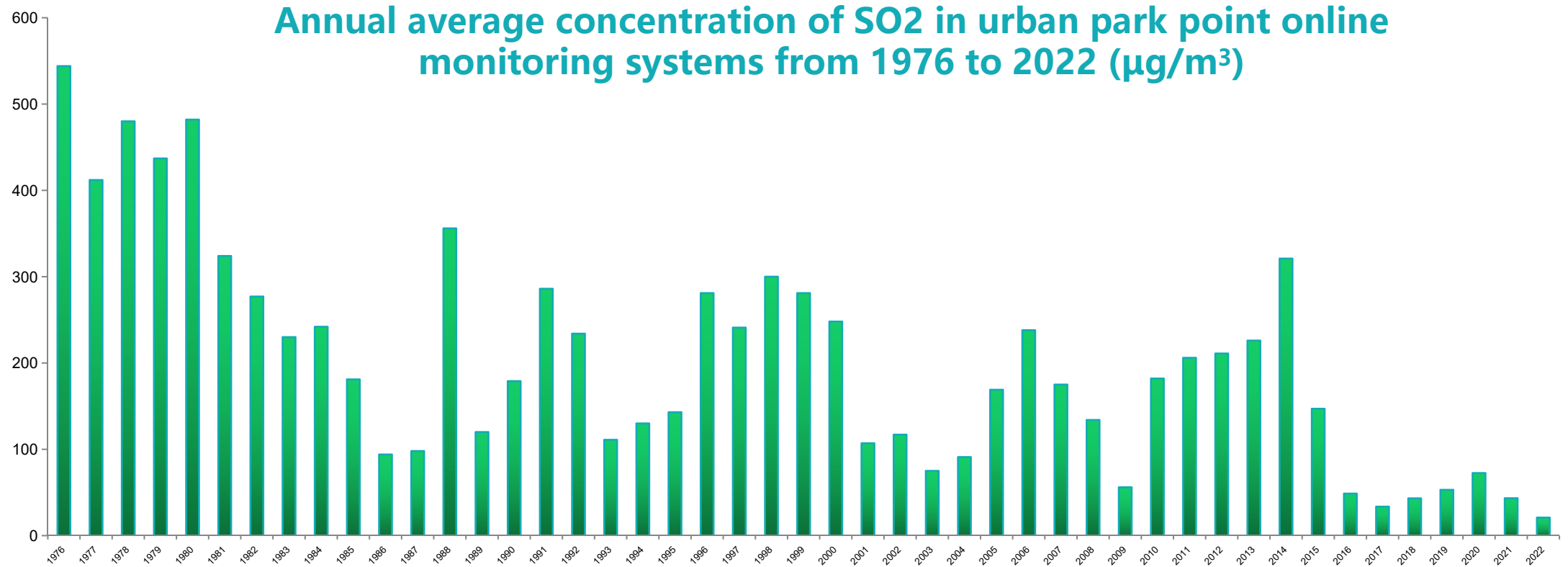
Through the GPS system and monitoring sonde, the dispatch center can figure out the data of the real time status of each mining truck, drilling rig, and shovel to ensure that they work with the lowest energy consumption.

6. Integrated wastewater treatment



The integrated wastewater treatment systems ensure that all industrial wastewater is treated and recycled to use again. Mine pit wastewater is injected into the tailings pond, neutralized and precipitated, and then reused.

7. Air quality - treatment effect (SO₂)





COMMUNICATIVE, we embrace mutual trust.

SELF-DISCIPLINED, we pursue a win-win strategy.

RESPONSIBLE, we create sustainable value.

Thank You