



Yingxin energy from waste heat, China

In an effort to lower the carbon footprint of its energy-intensive glass production, the Yingxin company has implemented a modern waste heat recovery system to reduce its fossil-fueled power consumption. In addition, the company is supporting local sustainable development.

Location



The project is located at a glassworks plant near the city of Xingtai in Southern Hebei province, home to mining and steel production, and an important supplier of agricultural products for Northern China. Xingtai is one of the oldest cities in Northern China, with its history reaching back 3500 years.

Project



At a time when China is sensing the pressure to balance economy and environment, a huge number of emission reduction measures are being implemented with the help of carbon finance. One of them is this Gold Standard waste-heat capture project at the Yingxi glassworks plant. Through this project, the company has reduced its fossil-fuelled power consumption by an impressive 76,000MWh annually.

In addition to the benefits to the climate and environment, the project owner is also involved in sustainable development of the region. Amongst other activities, the company is supporting schools, elderly people and the village's infrastructure with financial aid and the provision of machinery to villagers at no cost.



The project generates electricity by recovering and utilising waste heat from the glass smelting furnaces. Converted into electricity, it meets part of the internal demand, thereby displacing the electricity that was previously generated by a captive coal gangue power plant. Four recovery boilers, with two sets of condensing turbine generator units have been built and now provide an installed capacity of 12 MW, consisting of two 6MW units. Before the installation of the emission reduction project, the waste heat generated by four glass production line furnaces was not utilised but simply vented into the atmosphere.

Project achievements



Socio-economic impact:

- The project has generated about 24 permanent new green jobs for locals.
- The project owner is supporting elderly people by voluntarily granting pensions to villagers of 65 years and over.
- To celebrate traditional Chinese festivals, the glass company is distributing gifts (such as rice, moon cake and financial aids) to the local population.
- To enable independent and sustainable development in the neighbouring villages, the company is lending out tools and machinery (such as trucks or shovel cars) to villagers at no cost. Through this, local development and autonomous structures are strengthened.
- Workers at the plant receive an above-average salary.
- By providing scholarships to local children and supporting community schools, the company supports sustainable development and a better future for the younger generation.
- The local Christian minority have received funding from the project owner, enabling them to build a church.

Environmental impact:

- A significant reduction in air pollutants such as sulphur dioxide, grime, and suspended particulate matter results from the reduced demand for fossil-fuelled power thanks to the waste-heat recovery system.

Checklist Project 300 502



The Gold Standard®
Premium quality carbon credits

✓ Additionality and permanence:	according to the rules of the Gold Standard
✓ 3 rd party verified::	by Japan Consulting Institute
✓ Transparency:	provided by Gold Standard Registry
✓ Annual CO ₂ -reduction:	67,000 tCO ₂ e
✓ Social and environmental benefits:	as documented in our database
✓ Marketing material:	high resolution pictures and HD video footage available