Study Visit to Everbright Environmental Energy (Nanjing) Co., Ltd.

Visit Time: April 9, 2025, 14:30–17:00
Visit Location:
No. 1 Jingmai Industrial Park, Jiangning Subdistrict, Jiangning District, Nanjing
Important Notes:

1. Gather in the lobby of the conference center at 14:30 PM. Round-trip transportation will be provided via shuttle buses arranged by the organizer.
2. Advance registration is mandatory for all participants. On-site registration is not permitted.

Company Profile

Everbright Environmental Energy (Nanjing) Co., Ltd., as a AAA-rated Waste-to-Energy Plant, was established in 2014. It hosts Nanjing's largest municipal solid waste (MSW) incineration power generation project under a Build-Operate-Transfer (BOT) model. The facility processes 4,000 tons of MSW daily (Phase I: 4×500 tons/day; Phase II: 3×670 tons/day) and generates 680 million kWh of electricity annually, sufficient to meet the electricity demand of one household for three months. The project also includes a 500-ton/day co-processing facility for food waste and a 150-ton/hour heating supply system, with cumulative steam supply reaching 166,300 tons (as of November 2024). With a total investment of RMB 2 billion, the project reduces annual CO2 emissions by 670,000 tons, saves 310,000 tons of standard coal, and decreases landfill usage by 1.81 million cubic meters, achieving full-process management of MSW in line with the principles of "reduction, resource recovery, and harmless treatment."

Technical Highlights

- **Incineration Technology:** Utilizes multi-stage reciprocating mechanical grate furnaces tailored for high-moisture, low-calorific-value waste.
- **Emission Control:** Employs a dual-stage "SNCR + Low-Temperature SCR" process to limit NOx emissions to <80 mg/m³. Combines semi-dry deacidification, activated carbon adsorption, and baghouse filtration to ensure flue gas emissions exceed EU 2010 standards. Notably, this is China's first MSW incineration project to adopt SCR denitrification.
- **Food Waste Treatment:** Implements preprocessing steps such as crushing, dewatering, and oil extraction. Residual solids are co-incinerated, while wastewater and leachate undergo anaerobic digestion to produce biogas for power generation, enabling resource recycling.
- **Monitoring & Transparency:** Equipped with real-time emission monitoring systems, with data publicly displayed on 24-hour LED screens and shared online. The facility also hosts the industry's first simulation training center and promotes environmental education through a 720° VR cloud-based virtual tour platform.