

Dynamic Group's Waste Management Plan

1. Waste audit to identify opportunities to improve waste performance

Through full process inventory and data analysis, we can fully understand the waste output and flow blind spots of the printed circuit board (PCB) process.

- Comprehensive inventory of the manufacturing process: Tracking the flow of waste for processes such as pre-processing, inner layer exposure, etching, electroplating, outer layer processing and molding.
- Classification and quantitative analysis: Finely classify waste into hazardous industrial waste (such as copper-containing waste liquid, waste dry film) and general industrial waste (such as waste packaging materials, sludge), and establish quarterly baseline data.
- Identify high-reduction value points: Analyze the replacement frequency of scrap boards, scrap materials, and chemical baths to identify key opportunities that can extend the life cycle or improve recycling purity.
- Improving ESG performance: Selected as a typical case of provincial/national "waste-free enterprise" .

2. Action plan to reduce waste generation

Starting from source design and process optimization, we will promote comprehensive waste reduction and resource reuse.

Reduce packaging materials at source: Work with suppliers to promote the "de-plasticization" of raw material packaging, and fully switch to recyclable anti-static turnover boxes and environmentally friendly pallets.

Extending the life of the chemical bath: introducing an online automated monitoring and precise supply system to cooperate with regular laboratory analysis to reduce the frequency of the entire tank being scrapped due to aging of the bath.

Recycling and utilization of heavy metal waste water resources: Resin adsorption and electrolytic recycling of high-value metals such as palladium and copper reduce the generation of heavy metal sludge.

Continue to carry out potion reuse: Comprehensive utilization of tin stripping waste liquid production capacity to improve raw material utilization

Continuously carry out waste reduction in the factory: nickel-containing waste liquid is concentrated in the factory to reduce the amount of waste transported outside.

3. Achieve quantitative goals of minimizing waste

Set clear and trackable phased KPIs to ensure that waste reduction results meet green factory standards.

Taking 2025 as the baseline, it is planned that the total waste output intensity (tons/millions of revenue) will decrease by 5.4% in 2027 and 7.3% in 2030.

Long-term goal for 2030: The overall waste recycling rate of the entire plant must

continue to maintain or exceed 90%.

Hazardous waste indicators: The proper disposal rate and declaration compliance rate of hazardous industrial waste must be maintained at 100%.

4. Invest in innovation or R&D to minimize waste

Invest a dedicated budget to convert process waste into high-value renewable resources.

Raw material precious metals and copper recycling technology: Set up a copper recovery system for copper-containing waste liquids (such as acidic/alkaline etching waste liquids), and recover gold and palladium precious metals to directly extract high-purity recycled metals to promote circular economy.

Raw material potion recycling technology: Set up a copper-containing nitric acid recovery system and a tin stripping waste liquid recovery system. After extracting metallic copper and tin, the potion is prepared and returned to the production line for reuse, promoting a circular economy.

Waste sludge reduction and resource utilization: Use high-efficiency wastewater sludge drying technology to reduce the moisture content of sludge to reduce the amount of external transportation.

AI smart manufacturing sorting: The visual AI judgment system evaluates the process and optimizes layout in real time during the cutting and punching stages, minimizing the generation of PCB scraps.

Waste discharge and raw material optimization: Work with upstream and downstream partners to develop low-pollution, low-carbon-emission raw materials, and reduce the output of highly polluting waste chemicals from the front-end design.

5. Waste reduction training provided to employees

Establish a green corporate culture that involves all employees and integrate waste reduction awareness into daily operations.

Training for new and existing employees: ISO 14001 environmental management system and waste classification practical courses are held regularly every year.

Training for process personnel: Technical training on "accurate material control and chemical spill prevention" is provided for production line operators to reduce waste generated by operational errors.

Waste reduction competition and proposal awards: Through "proposal awards", employees are encouraged to propose frontline waste reduction and recycling ideas.

6. Integrate recycling programs to reduce waste sent to landfill from own operations

Implement the full cycle of resources within the factory and implement the concept of circular economy.

Multi-channel classification and strict control: comprehensively promote plastic reduction and implement precise resource recycling in office and living areas; implement comprehensive diversion of waste glass, waste plastics, scrap metal and

paper at the production line.

Promoting independent circular economy: Huangshi Factory established a dynamic circular economy industry research center in 2023 to actively connect waste materials that cannot be processed in the factory to qualified third-party recycling systems and convert them into secondary raw materials.

7. Waste certified by independent certification agencies avoids landfills

Introducing international authoritative third-party verification to declare Dynamic Electronics' determination to zero waste to landfill.

Introduction of UL 2799 verification: Continue to promote the effectiveness of UL 2799 (zero waste to landfill) certification in major factory sites.

Pursuing the highest certification level: By reducing process volume, in-plant recycling, off-plant physical/chemical conversion and heat recovery, we aim to reduce the amount of waste that will eventually be sent to landfills to <1%, and strive to achieve the Platinum certification level.