

CIP Excellent Contribution Award

In response to climate change, USI has incorporated energy saving and carbon reduction into the key award categories of the CIP Excellence Contribution Awards. In line with AI-driven trends, digital transformation has also been recognized since 2024 as a key driver of sustainable operations and included as a priority category. The organizing unit (COD) has established corresponding evaluation criteria and increased the quota for key project awards to encourage green and digital innovation proposals.

In 2025, a total of 9 award-winning projects, among which there were 3 digitalization innovation projects and 2 energy-saving and carbon reduction projects receiving awards, the total carbon reduction amount 1,736 metric tonnes. For the annual award-winning projects, please refer to the following table for details:

Facility	Rank	Project Name	Project Benefit
Key Projects			
Zhangjiang	Gold	Independent R&D and Implementation of the SECS/GEM ⁽¹⁾ EAP ⁽²⁾ Platform (digitalization innovation)	An in-house SECS/GEM driver and EAP platform enables precise equipment data integration with MES and RMS systems, supporting automated process control, full traceability, improved product quality, and AMHS ⁽³⁾ integration for end-to-end automated manufacturing, with cumulative savings of CNY 1.21 million.
Nantou	Silver	COD Digital Optimization - WW Mfg. KPI Dashboard (digitalization innovation)	An interactive digital dashboard covering all USI manufacturing sites integrates equipment-related metrics with automatic updates. Leveraging in-house IT capabilities and AI tools (e.g., Copilot), it consolidates multi-system data into a unified cloud-based platform, enhancing data accessibility, flexibility, and scalability, with cumulative savings of CNY 0.35 million.
Huizhou	Silver	Warehouse 3-in-1 Creative Material Reception Process (digitalization innovation)	Through the integration and automation of SAP, WMS, and MES systems, operational workflows and workstations are streamlined. Barcode-based processes enable automated material receiving, palletizing, and SAP posting, reducing labor requirements and space utilization, with cumulative savings of CNY 0.46 million.
Kunshan	Bronze	Energy Saving and Optimization of Compressed Air Systems (energy-saving and carbon reduction)	Implement online monitoring of compressed air systems to enable visualized and digitalized operations, thereby reducing energy consumption, saving 2.84 GWh of electricity annually and reducing carbon emissions by 1,715 metric tonnes, with cumulative savings of CNY 1.33 million.
Zhangjiang	Bronze	Handler UPS ⁽⁴⁾ System Optimization (energy-saving and carbon reduction)	Through load analysis and risk validation, the removal of one UPS was confirmed to have no impact on testing quality, while optimizing power protection, reducing costs, lowering carbon emissions, and decreasing annual battery waste by 34 units, saving 35.7 MWh of electricity annually and reducing carbon emissions by 21 metric tonnes, with cumulative savings of CNY 0.17 million.
Other Projects			
Jinqiao	Gold	Laser Head (SP Talon 532-40) Lifetime Extension	A laser head power and lifetime monitoring system was developed, along with standardized replacement and health assessment procedures, to reduce procurement and production costs, with cumulative savings of CNY 1.43 million.
Zhangjiang	Silver	Laser Drill UPH ⁽⁵⁾ Improvement	Audio products adopt a laser drilling process with new desmear materials to ensure via filling and printing continuity. Silver paste is used to replace antenna modules, reducing downstream packaging steps and overall costs, with cumulative savings of CNY 0.75 million.
Kunshan	Bronze	Develop PC M/B Streamline Automation Line with Test, Assembly and AVI ⁽⁶⁾	Collaborative robots and autonomous mobile robots were implemented to enable automation across testing, assembly, and AVI stations, establishing USI's first flexible automated PC M/B production line, reducing labor effort, minimizing handling risks, and increasing automation levels, with cumulative savings of CNY 0.75 million.
Zhangjiang	Bronze	Auto Reel Loading and Unloading for SMT Production Lines Project	An integrated system with material shortage management, feeder handling, and AGV ⁽⁷⁾ automation streamlines material flow, reduces manual errors, and enhances traceability, with cumulative savings of CNY 0.55 million.

Note:
1. SECS/GEM, SEMI Equipment Communications Standard/Generic Equipment Model
2. EAP, Enterprise AI Platform

3. AMHS, Automated Material Handling System
4. UPS, Uninterruptible Power Supply
5. UPH, Unit Per Hour

6. AVI, Automatic Visual Inspection
7. AGV, Automated Guided Vehicle