

Waste Disposal and Recycling

TSRC optimizes the process conditions within the plants to precisely control material input and reduce waste production. TSRC also actively promotes the recycling of by-products within the factories and exploring the utilization of waste outside the factories by collaborating with upstream and downstream value chain partners and other industries. All measures aim to transform waste into valuable resources, expand the secondary raw materials market, and implement the concept of circular economy. TSRC has set waste management targets aiming for a group-wide waste recycling rate of 54% by 2025 and 56% by 2030. The 2025 target was achieved.

Goals and Achievement	Achievements in 2025	2025 Goals	2026 Goals	2030 Goals
	- Achieved waste recycling rate of 55.8% 10 improvement proposals of ECR (Error Cause Removal) improvement proposals	- Achieved waste recycling rate $\geq$ 54% - Number of ECR improvement proposals addressing waste management issues $\geq$ 10	- Achieved waste recycling rate $>$ 54% - Number of ECR improvement proposals addressing waste management issues $\geq$ 10	- Achieved waste recycling rate $\geq$ 56% - Number of ECR improvement proposals addressing waste management issues $\geq$ 60 since 2025

1. Waste Management Policy

TSRC refers to the basic principles and structure of the ISO 14001: 2015 environmental management system when formulating waste management plans and management goals, and periodically supervises and analyzes waste management results. In addition to the disclosure and reporting of waste data in each plant in accordance with local regulations, the Group holds at least one ESG production and waste management meeting per quarter, where the head of TSRC Global HSE, on behalf of each plant, reports to the head of the Group's Operational Division on the status of implementation and plans for future improvement. The Kaohsiung and Gangshan factories conduct quarterly reviews of the effectiveness of waste reduction, while Nantong Industries, Shen Hua Chemical, and TSRC-UBE track the amount of waste produced and the reduction targets on a monthly basis. Starting in 2025, each plant will set goals and submit them to TSRC Global HSE at the headquarters for review and tracking of management performance.

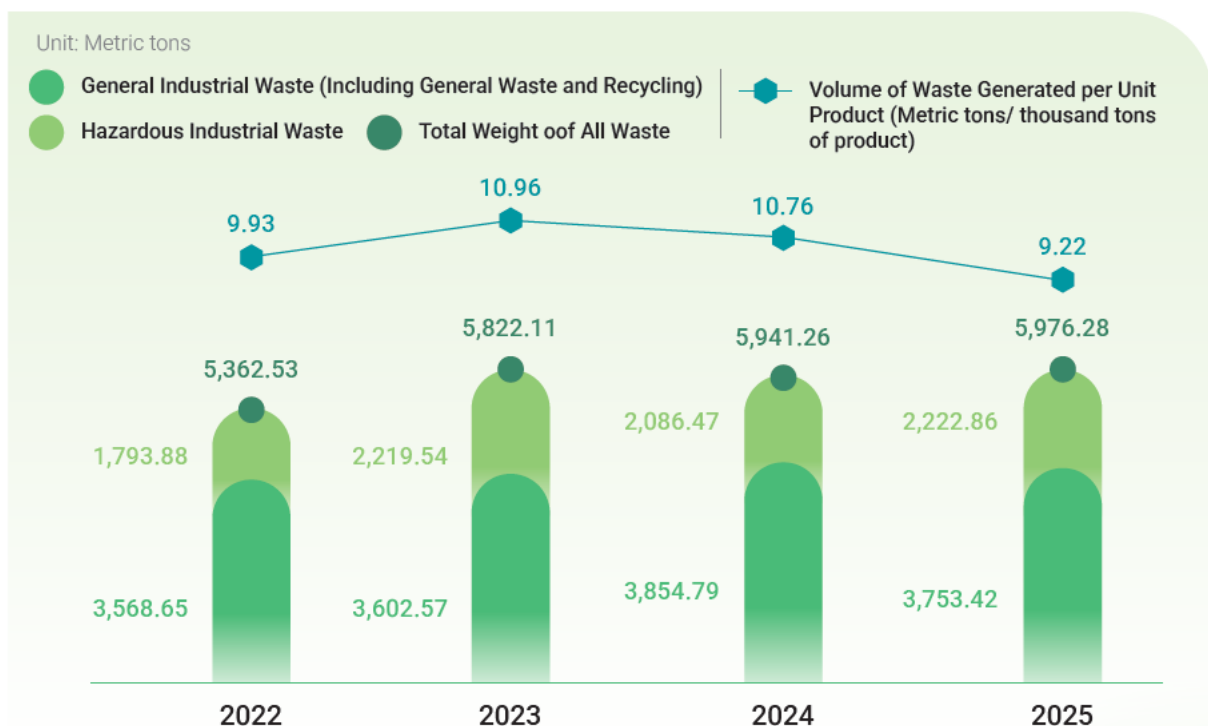
If TSRC Group's waste can be reused in the plants, it will be used as input materials in the manufacturing process. If in-site reuse is not possible, the waste will be commissioned to qualified waste disposal companies for final disposal or out-of-plant reuse. For wastes that cannot be avoided due to technical bottlenecks, the final disposal is mainly by incineration, during which the emission of air pollutants may cause air pollution and environmental impact. TSRC carefully manages each factory's waste based on our responsibility to the environment. We clear, dispose, or reuse waste with high standards in comply with environmental protection regulations of the country or region where each factory is located, and carries out audits, vehicle tracking, and other supervisory measures for waste removal and disposal companies.

2. Waste Generation and Recycling

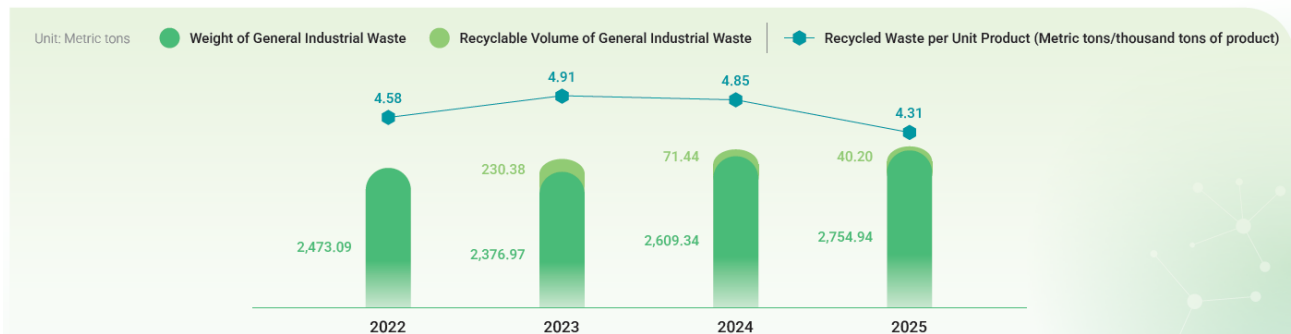
In 2025, TSRC generated total general industrial waste (including non-recyclable, reusable, and recyclable) weighing 3,753.42 metric tons, a 2.63% decrease compared to 2024. Total hazardous industrial waste (including non-recyclable, reusable, and recyclable) weighing 2,222.86 metric tons was generated, a 6.54% increase compared to 2024. The total weight of all generated waste was 5,976.28 metric tons, an increase of 0.59% compared to 2024. Overall, TSRC's waste per unit product in 2025 was 9.22 metric tons/thousand metric tons of product, a decrease of 14.27% compared to 2024.

The overall production volume increased by 17.34% in 2025, resulting in a slight increase in the total weight of TSRC's waste compared to 2024. TSRC continues to strengthen waste management by optimizing the packaging of raw materials, adjusting process control parameters, and implementing other measures to reduce waste generation at the source. We have also adopted resources and recycling measures, and recycled 74.47% of general industrial waste generated in 2025 along with 24.30% of hazardous industrial waste. In the future, we shall continue to improve our recycling rate, reducing our impact on the environment.

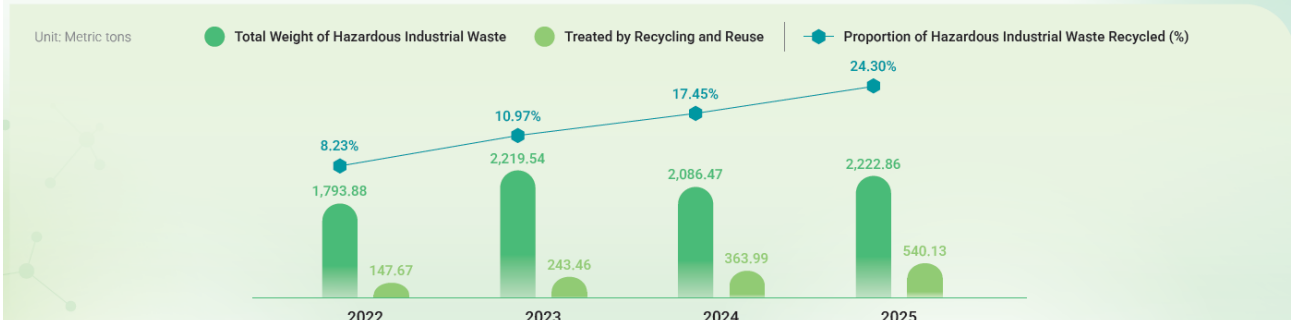
Waste Generation



Weight of General Industrial Waste



Weight and Proportion of Hazardous Waste Recycled and Disposed



TSRC Group Total Weight, Recycling Weight, and Percentage of General Industrial Waste and Hazardous Industrial Waste (by Subsidiary)

Unit: Metric tons

		TSRC Corporation		Shen Hua Chemical	Nantong Industries	TSRC-UBE	Shanghai Industries	TSRC (Vietnam)	TSRC Specialty Materials	TSRC Group Total
		Kaohsiung Factory	Gangshan Factory							
2022	Total Weight of General Industrial Waste	1,230.62	86.01	283.49	1,296.55	203.86	3.80	29.79	434.52	3,568.65
	General Industrial Waste Recycled	770.64	21.68	225.34	1,222.97	170.32	3.80	28.33	0.00	2,473.09
	Recycling Rate of General Industrial Waste (%)	62.62%	25.21%	90.07%	94.33%	83.55%	100.00%	95.10%	0.00%	69.30%
	Total Weight of Hazardous Industrial Waste	136.46	0.00	845.36	475.26	287.08	23.00	1.32	25.4	1,793.88
	Hazardous Industrial Waste Recycled	0.00	0.00	94.29	23.96	6.50	22.93	0.00	0.00	147.67
	Recycling Rate of Hazardous Industrial Waste (%)	0.00%	0.00%	11.15%	5.04%	2.26%	99.70%	0.00%	0.00%	8.23%
2023	Total Weight of General Industrial Waste	1,134.51	73.62	299.36	1,480.98	134.02	89.11	25.13	365.84	3,602.57
	Non-recyclable General Industrial Waste	411.30	50.95	7.48	74.00	31.72	52.83	1.10	365.84	995.21
	General Industrial Waste Recycled	492.83	22.67	291.88	1,406.98	102.30	36.28	24.03	0.00	2,376.97
	General Industrial Waste Reused	230.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	230.38
	Recycling and Reuse Rate of General Industrial Waste (%)	63.75%	30.79%	97.50%	95.00%	76.33%	40.71%	95.62%	0.00%	72.37%
	Total Weight of Hazardous Industrial Waste	125.67	0.00	1,343.25	432.38	244.30	37.35	2.63	33.96	2,219.54
	Non-recyclable Hazardous Industrial Waste	125.67	0.00	1,173.05	406.24	234.38	0.14	2.63	33.96	1,976.08
	Hazardous Industrial Waste Recycled	0.00	0.00	170.20	26.14	9.92	37.21	0.00	0.00	243.46
	Recycling Rate of Hazardous Industrial Waste (%)	0.00%	0.00%	12.67%	6.05%	4.06%	99.63%	0.00%	0.00%	10.97%

		TSRC Corporation		Shen Hua Chemical	Nantong Industries	TSRC-UBE	Shanghai Industries	TSRC (Vietnam)	TSRC Specialty Materials	TSRC Group Total
		Kaohsiung Factory	Gangshan Factory							
2024	Total Weight of General Industrial Waste	1,262.53	63.14	291.42	1,353.95	161.84	62.01	55.26	604.64	3,854.79
	Non-recyclable General Industrial Waste	401.34	27.97	23.72	74.54	31.94	8.16	2.60	603.74	1,174.01
	General Industrial Waste Recycled	861.19	0.00	267.70	1,279.41	129.90	53.86	16.39	0.90	2,609.34
	General Industrial Waste Reused	0.00	35.17	0.00	0.00	0.00	0.00	36.27	0.00	71.44
	Recycling and Reuse Rate of General Industrial Waste (%)	68.21%	55.70%	91.86%	94.49%	80.26%	86.85%	95.30%	0.15%	69.54%
	Total Weight of Hazardous Industrial Waste	135.76	0.00	1,080.44	420.52	298.39	37.41	4.47	109.49	2,086.47
	Non-recyclable Hazardous Industrial Waste	135.76	0.00	797.82	391.37	283.33	0.24	4.47	109.49	1,722.48
	Hazardous Industrial Waste Recycled	0.00	0.00	112.90	11.28	10.22	37.17	0.00	0.00	171.57
	Hazardous Industrial Waste Reused	0.00	0.00	169.72	17.86	4.84	0.00	0.00	0.00	192.42
	Recycling and Reuse Rate of Hazardous Industrial Waste (%)	0.00%	0.00%	26.16%	6.93%	5.05%	99.36%	0.00%	0.00%	17.45%
2025	Total Weight of General Industrial Waste	1,245.30	81.06	346.85	1,480.88	170.53	48.18	N/A	380.62	3,753.42
	Non-recyclable General Industrial Waste	412.70	40.86	9.02	75.36	32.30	7.42	N/A	380.62	958.28
	General Industrial Waste Recycled	832.60	0.00	337.83	1,405.52	138.23	40.77	N/A	0.00	2,754.94
	General Industrial Waste Reused	0.00	40.20	0.00	0.00	0.00	0.00	N/A	0.00	40.20
	Recycling and Reuse Rate of General Industrial Waste (%)	66.86%	49.59%	97.40%	94.91%	81.06%	84.60%	N/A	0.00%	74.47%
	Total Weight of Hazardous Industrial Waste	149.35	0.26	1,321.28	407.64	283.76	24.27	N/A	36.30	2,222.86
	Non-recyclable Hazardous Industrial Waste	149.35	0.26	871.02	351.69	273.45	0.66	N/A	36.30	1,682.73
	Hazardous Industrial Waste Recycled	0.00	0.00	163.73	55.95	10.31	23.61	N/A	0.00	253.60
	Hazardous Industrial Waste Reused	0.00	0.00	286.53	0.00	0.00	0.00	N/A	0.00	286.53
	Recycling and Reuse Rate of Hazardous Industrial Waste (%)	0.00%	0.00%	34.08%	13.73%	3.63%	97.28%	N/A	0.00%	24.30%

Note 1: This table only includes manufacturing factories and subsidiaries that engage in manufacturing activities within the reporting boundary. This excludes the two trading-based subsidiaries, Polybus and TSRC (Lux.), whose primary business is trading, and the Global Business Headquarters, and the TSRC Specialty Materials office, which are mainly office operations, generating only general domestic waste, not industrial waste.

Note 2: Data is derived from the waste removal and disposal (transfer) records provided by waste treatment vendors. Data figures are summed up in full, before being rounded to the second decimal place.

Note 3: Kaohsiung Factory, Gangshan Factory, Nantong Industries, TSRC-UBE, Shen Hua Chemical submit reports to the government waste platform every month. Shanghai Industries and TSRC (Vietnam) report to the government every year. TSRC Specialty Materials reports to the government every two years.

Note 4: Non-hazardous general industrial waste includes: (1) Non-recyclable general industrial waste disposed of via incineration, landfill, and thermal treatment, including non-recyclable waste plastic mixtures, inorganic sludge, waste rubber, and waste packaging materials. (2) Recyclable general industrial waste, including waste iron, waste paper, scrap rubber, waste bulk bags, and waste metal boxes. (3) Reusable general industrial waste, including waste rubber, waste wood, and waste lubricant.

Note 5: Hazardous industrial waste includes: (1) Non-recyclable waste oils, waste liquids, organic waste, sludge, waste chemicals, and containers for hazardous substances; (2) Recyclable waste oil, waste packaging materials, and waste containers. These waste materials are defined based on the regulations announced by the competent authorities:
Taiwan Kaohsiung Factory and Gangshan Factory: Based on the definitions provided in the "Hazardous Industrial Waste Recognition Standard" published by the Taiwan Environmental Protection Agency.
China Shen Hua Chemical, Nantong Industries, TSRC-UBE, and Shanghai Industries: Based on the definitions provided in China's "Directory of National Hazardous Wastes".
Vietnam TSRC (Vietnam): 08/2022/NĐ-CP, 02/2022/TT-BTNMT.
USA TSRC Specialty Materials: 40 CFR (Code of Federal Regulations) parts 260 through 273. Louisiana Administrative Code, Title 33, Part V.

Note 6: TSRC (Vietnam) suspended operations and ceased production since the end of December 2024. Therefore, there are no data for 2025.

3. Waste Reduction and Reuse

TSRC actively reduces waste at the source by developing renewable materials to reduce the use of fossil fuels and waste. In addition, TSRC optimizes process control to stabilize reaction temperature and increase conversion rates, while increasing sampling analysis to make process conditions more precise and reduce waste and by-product production. TSRC's global factory sites and subsidiaries promote the reuse of by-products and resources within the plant to reduce waste production.

	Waste Reduction at Source	Waste Reuse (On-site)	Waste Recycling (Off-site)
Measures	TSRC optimizes process controls to stabilize reaction temperature and increase conversion rates, while increasing sample analysis to make process conditions more precise and reduce the waste and by-products generated.	Promote resource recycling in the plant to reduce waste generation.	TSRC actively works together with waste treatment vendors to convert waste into resources.
Results	Kaohsiung Factory - Revamped the drainage pipe design to eliminate defective drainage and clogging problems, thereby reducing waste rubber production by 0.35 metric tons. Shen Hua Chemical - Follow the latest regulatory requirements and use actual production monitoring data to reevaluate the optimal replacement cycle for activated carbon adsorption devices, reduced the frequency of unnecessary activated carbon replacement, and effectively reduced 36.35 metric tons of waste. Nantong Industrial TSRC-UBE - Added stainless steel sinks in the production process to prevent contamination of rubber granules by concrete from the process trenches, reducing waste rubber by 3.4 tons. Shanghai Industrial - Added temporary storage barrels for finished products to reduce the use of PE bags, reducing about 0.32 tons of waste bags from packaging.	Kaohsiung Factory - Recycled and reused waste rubber for sampling and analysis, reducing waste by 0.16 tons. - The analyzed products are sorted into categories such as dark-colored rubber and light-colored rubber and sent to the secondary rubber area. Through process improvement and classification management, the generation of waste rubber has been reduced by approximately 0.7 tons. Shen Hua Chemical - Soft water from the manufacturing process is recycled into the soap solution allocation process to reduce soft water consumption and wastewater volume, resulting in a reduction of 4,950 metric tons of wastewater. Nantong Industrial TSRC-UBE - Reused high-moisture rubber in the manufacturing process, reducing the generation of 35.64 metric tons of scrap rubber. - Recovered the styrene remaining after sampling and analysis from the tank truck, reducing the generation of 17.7 liters of waste liquid.	Shen Hua Chemical Recycled and reused empty waste liquid drums to solve the problem of unused empty drums, while reducing the procurement demand for storage drums and reducing 1.31 metric tons of waste. 