

Status of Water Usage and Wastewater Recycling

Given its essential role in our manufacturing process, TSRC recognizes the paramount importance of water quality and quantity. We are committed to continually optimizing our use of this precious resource. TSRC incorporated water-related risks into our overall risk management system, with particular attention to the risk resulting from and resulting in climate change. We conduct annual assessments of water-related risk at each site and review our response measures accordingly. TSRC has set up three major focuses for water resource management: efficient water use, circulation and recycling, and clean emissions.

TSRC continues to increase the recycling rate of process wastewater, increase the proportion of recycled water used, reduce water withdrawal from surrounding areas of locations. We also try to reduce the amount of process wastewater that enters wastewater treatment plants of industrial parks as much as possible. TSRC has set a wastewater recycling target of 36% of the Group's total wastewater recycled by 2025, and a recycling rate of 40% by 2030. In 2024, the recycling rate was 27%, achieving the target of 26%. In addition to condensed water and processing wastewater recycling, TSRC has planned to build reclaimed water facilities or increase the purchase of reclaimed water at a number of production locations to enhance water resource stability. We expect Group-wide recycled water use to reach 34% of its total water consumption in 2025 and 40% in 2030. In 2024, the reclaimed water utilization rate was 23%, achieving the target. TSRC publicly discloses its water resources management data and strategies every year and conducts a stakeholder survey to understand the views and feedback on TSRC's actions.

Goals and Achievement	Achievements in 2024	2024 Goals	2025 Goals	2030 Goals
	<ul style="list-style-type: none"> Increased wastewater recycling to 27% of total volume of wastewater Increased reclaimed water utilization to 23% of total water consumption 	<ul style="list-style-type: none"> Increase wastewater recycling to 26% of total volume of wastewater Increase reclaimed water utilization to 23% of total water consumption 	<ul style="list-style-type: none"> Increase wastewater recycling to 36% of total volume of wastewater Increase reclaimed water utilization to 34% of total water consumption 	<ul style="list-style-type: none"> Increase wastewater recycling to 40% of total volume of wastewater Reclaimed water accounts for 40% of total water use

1. Water Resource Risks and Management

Based on the Aqueduct Water Risk Atlas published by the World Resources Institute, the US TSRC Specialty Materials LLC factory in Louisiana and our trading-based subsidiary Polybus, based in Singapore, face low water stress risk (<10%). TSRC (Vietnam) Company Limited, which is based in Vietnam, and our Global Business Headquarters face low to medium water stress risk (10-20%). China-based Shen Hua Chemical, Nantong Industries and TSRC-UBE based in Jiangsu Province, our trading-based subsidiary TSRC (Lux.) based in Luxembourg, and the TSRC Specialty Materials LLC offices in Texas face a medium to high water stress risk (20%-40%). Shanghai Industries, located in the Shanghai region of China, faces an extremely high water stress risk (>80%). If considered based on city, the TSRC Kaohsiung Factory is located in a region at high risk of drought both in the past and for the future (2015 to 2039), regardless of whether it is the dry or rainy season.

Drought is identified as TSRC climate-related risk. Accordingly, TSRC has set four major response actions, including the implementation of water conservation measures, the enhancement of process wastewater recycling and water resource efficiency, the increased use of reclaimed water, and the increase of water supply sources. The ESG Task Force reports quarterly to the management team on the implementation of water resource management and the achievement of water management goals to ELT, and discusses from time to time the improvement of water resources management, the increase of wastewater recycling, and other programs and implementation status.

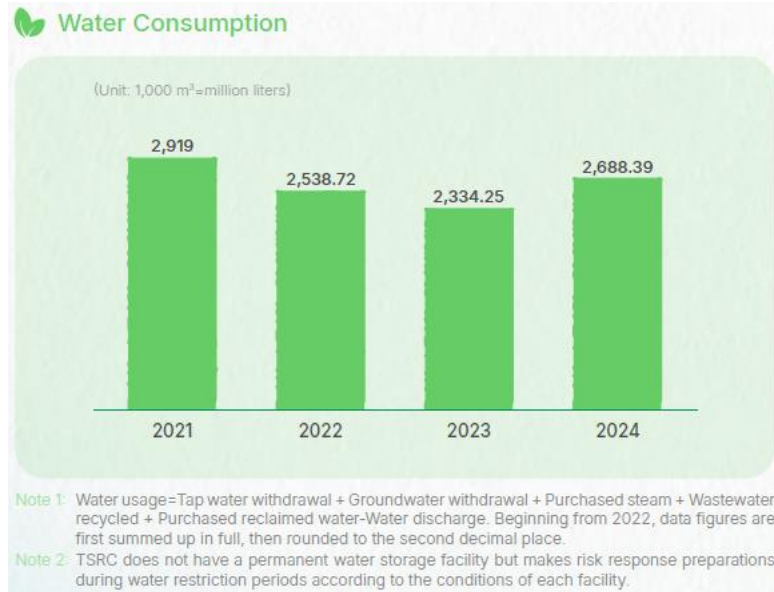
2. Water Resource Usage (Water Withdrawal, Discharge and Usage Volume)

TSRC's production volume increased by 4.00% compared to 2023, leading to an increase in water consumption. In 2024, we withdrew a total of 3,329.67 thousand cubic meters of water (groundwater and tap water), an increase of 5.04% compared to 2023. TSRC Group's total water consumption in 2024 was 2,688.34 cubic meters, an increase of 15.17% compared to 2023. TSRC's total water usage in 2024 was 5,441.59 thousand cubic meters, an increase of 6.12% compared to 2023. Water consumption per unit product was 9.85 metric tons per metric ton of production, an increase of 2.04% compared to 2023.

TSRC's water consumption data reporting boundary covers all factories and subsidiaries identical to the reporting scope in the financial statements and has obtained ISO 14001 Environmental Policy Certification and Accountant's Limited Assurance of SASB Indicators (ISAE 3000).

In 2024, the Kaohsiung Factory, Nantong Industries, and TSRC-UBE each optimized their factory facilities to reduce reliance on fresh water. In particular, the Kaohsiung Factory recycled and reused process wastewater, while Nantong Industries and TSRC-UBE reduced reliance on fresh water by increasing their wastewater recycling rate.





2024 Water Withdrawal, Discharge, and Consumption (by Water-stressed Areas)

(Unit: 1,000 m³=million liters)

Categorized at the province, county/city level	Regions with Extremely High Water Stress	Regions with High Water Stress		Regions with Moderate to High Water Stress					Regions With Low to Moderate Water Stress		Regions with Low Water Stress		TSRC Group
	Shanghai Industries	TSRC Corporation		Shen Hua Chemical	Nantong Industries	TSRC-UBE	TSRC Specialty Materials LLC (office)	TSRC (Lux.)	TSRC (Vietnam) Company Limited	TSRC Corporation	TSRC Specialty Materials LLC (factory)	Polybus	Total
		Kaohsiung Factory	Gangshan Factory							Global business headquarters			
Tap water withdrawal	9.70	1,569.69	3.11	924.73	325.03	258.06	1.67	0.07	5.47	2.35	229.73	0.01	3,329.63
Groundwater withdrawal	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Purchased steam	0.00	10.41	0.00	182.75	292.17	218.92	0.00	0.00	0.00	0.00	169.23	0.00	873.48
Wastewater recycled	0.00	549.62	0.00	91.98	258.30	140.28	0.00	0.00	0.00	0.00	0.00	0.00	1,040.18
Purchased reclaimed water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	198.26	0.00	198.26
Total water withdrawal	9.70	1,569.74	3.11	924.73	325.03	258.06	1.67	0.07	5.47	2.35	229.73	0.01	3,329.67
Water usage	9.70	2,129.76	3.11	1,199.46	875.50	617.27	1.67	0.07	5.47	2.35	597.22	0.01	5,441.59
Water discharged	9.70	1,011.89	2.34	788.56	234.95	253.09	1.67	0.07	1.57	2.35	447.00	0.01	2,753.20
Water Consumption	0.00	1,117.88	0.77	410.90	640.54	364.18	0.00	0.00	3.90	0.00	150.22	0.00	2,688.39

Note 1: Tap water withdrawal refers to freshwater supplied by the local water company ($\leq 1,000$ mg/L TDS). TSRC Kaohsiung Factory also draws groundwater.

Note 2: Total water withdrawal = Tap water withdrawal + Groundwater withdrawal.

Note 3: Water usage = Fresh water withdrawal + Groundwater withdrawal + Purchased steam + Wastewater recycled + Purchased reclaimed water.

Note 4: Water consumption=Water usage-Water discharge.

Note 5: Purchased steam is also used as a process water source after the heat exchange purpose is achieved in the relevant process, and the evaporation amount is not considered in the data.

Note 6: Data figures are first summed up in full, then rounded to the second decimal place.

Note 7: Regarding water resource risks:

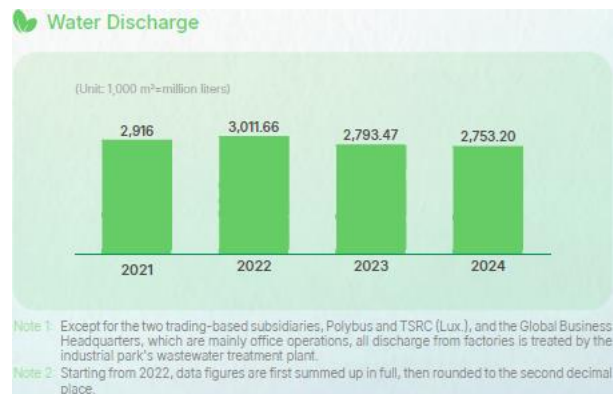
The TSRC Specialty Materials LLC factory in Louisiana, USA, and the trading-based subsidiary Polybus in Singapore face low water risks (<10%). TSRC (Vietnam) Company Limited, which is based in Vietnam, and our global business headquarters face low to medium water stress risk (10-20%). China-based Shen Hua Chemical, Nantong Industries and TSRC-UBE based in Jiangsu Province, our trading-based subsidiary TSRC (Lux.) based in Luxembourg, and the TSRC Specialty Materials LLC offices in Texas face a medium to high water stress risk (20%-40%). Shanghai Industries, located in the Shanghai region of China, faces an extremely high water stress risk (>80%).

Regardless of whether it is the dry or rainy season, TSRC's Kaohsiung Factory and Gangshan Factory are at high risk for drought in the past and the future (2015-2039), according to the report published by the National Science and Technology Center for Disaster Reduction.

Note 8: In 2024, fresh water and groundwater withdrawal in areas with high water stress and extremely high risk (according to regional analysis) accounted for 47.53% of the group's total water withdrawal, and water consumption in areas with high water stress and extremely high risk accounted for 41.61% of the group's total water consumption.

3. Treatment of Wastewater and Discharge

TSRC's main production sites are all located in local industrial parks and are subject to management and supervision by the competent authority of the industrial parks. For wastewater from manufacturing processes and operations, TSRC takes recycling within the plant as the main consideration to reduce wastewater discharge. Wastewater that cannot be recycled and reused is pre-treated by factories until it meets local effluent monitoring standards and priority-controlled substance emission limits, and is then discharged into the industrial park's wastewater treatment system. TSRC's wastewater discharge has not caused any direct ecological impacts to the surrounding areas. In 2023, TSRC did not violate any wastewater regulations or exceed priority-controlled substance emission limits. TSRC factories have installed online COD analyzers, ammonia nitrogen analyzers, pH meters, and flow meters. In addition, interception facilities for torrential rain and online COD monitors have been implemented to timely monitor the quality of discharged water.



4. Water Reuse and Recycling

To reduce the water resource risk associated with climate change and increase operational stability, TSRC is increasing capital expenditures to strengthen the Group's wastewater recycling rate. In 2023, wastewater recycling equipment was installed in Nantong Industries and TSRC-UBE to increase the wastewater recycling rate to 38% and 39%, respectively. In 2023, the Kaohsiung Factory increased its daily recycling capacity by 51 metric tons through the optimization of the wastewater recycling system. In response to the water restrictions in Kaohsiung, measures are taken in advance, such as installing additional water pipelines and inquiring about the availability of recycled water.

Wastewater Recycling

TSRC promotes the recycling and reuse of water resources within its factories to enhance the utilization rate of every drop of water and reduce our water footprint.

TSRC-UBE

- Installed new wastewater recycling equipment in 2024, will enter use in 2025

Nantong Industries

- Installed new wastewater recycling equipment in 2024, will enter use in 2025
- Optimized existing wastewater recycling equipment operations, increasing the wastewater recycling rate from 38% to 52%

Kaohsiung Factory

- Increased amount of wastewater recycled from production processes by 43,730 tons



Nantong Industries Wastewater Recycling Equipment

Reclaimed Water Usage

TSRC strives to increase the proportion of reclaimed water use and reduce the amount of water withdrawn from tap water by recycling discharge water.

TSRC-UBE

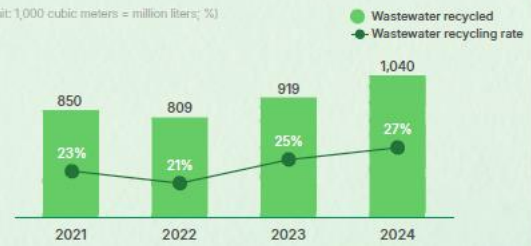
- Reduced amount of tap water withdrawn by 6,670 tons by using recycled wastewater for cooling tower water circulation

Kaohsiung Factory

- Continued inquiries into purchasing reclaimed water

Wastewater Recycling and Recycling Rate

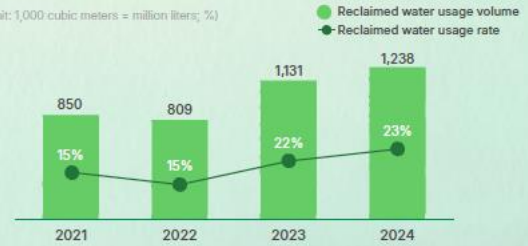
(Unit: 1,000 cubic meters = million liters; %)



Note 1: Wastewater recycling rate=Wastewater recycled volume/total wastewater volume.
Note 2: Data figures are first summed up in full, then rounded to the nearest whole number.

Reclaimed Water Usage Volume and Rate

(Unit: 1,000 cubic meters = million liters; %)



Note 1: Reclaimed water usage rate=Reclaimed water usage volume/total water usage volume.
Note 2: Data figures are first summed up in full, then rounded to the nearest whole number.

5. Water Resource Sharing

In response to water risks at the Kaohsiung Factory and in consideration of the common interests of other local industrial water users, TSRC's Kaohsiung Factory is actively engaged in water resource sharing initiatives with neighboring Dashe industrial park. TSRC also cooperates with major suppliers (such as CPC), which, in addition to maintaining its own water demand in times of poor water conditions, has set up water pipelines with TSRC and provided part of the TSRC's water resources to combat droughts and tide over water restrictions together.