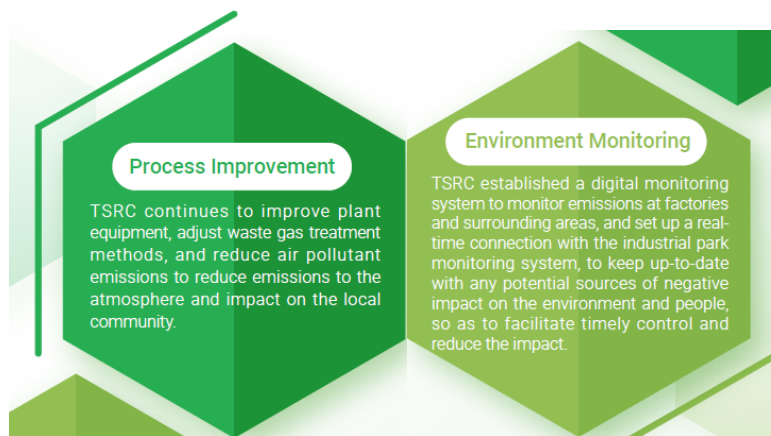









# Status of Environmental Management

TSRC takes its social responsibility for environmental protection seriously, and has adopted high standards of environmental management at all of its operating locations, including: air pollution, waste/scraps, soil and groundwater contamination, and other substances that may have an impact on the environment. TSRC continues to promote energy conservation and waste reduction, air pollution prevention, and wastewater reduction and recycling through ISO 14001 Environmental Management Systems. We periodically conduct comprehensive reviews, and use technology to monitor factories and surrounding areas, so as to comply with regulations. TSRC's environmental management strategy focuses on "process improvement" and "environment monitoring", in which the global business headquarters is responsible for environment management and supervision and for formulating related plans while factories are responsible for implementation.



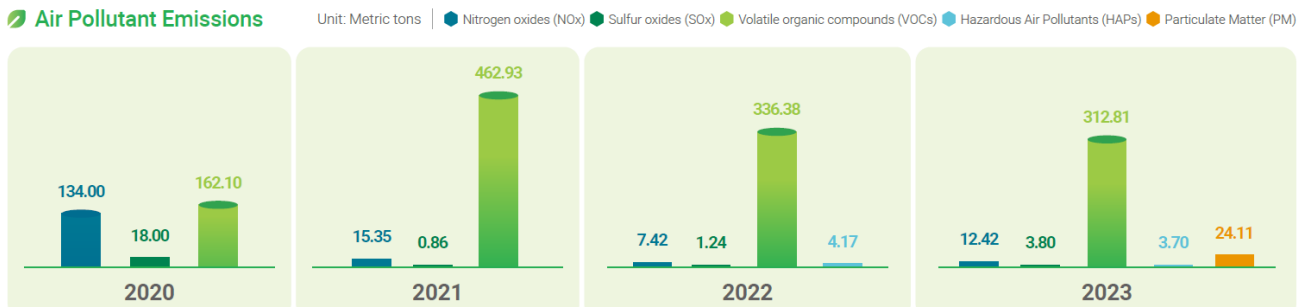
## 1. Air Pollution Prevention and Management

TSRC will strengthen the management of volatile organic compounds (VOCs) at each site to prevent and manage air pollution, and promoted the following measures at each plant in 2023:

TSRC Factories		Measures for 2023	
Kaohsiung Factory		Equipment Upgrade	<ul style="list-style-type: none"> <li>Replacement of cock valves with low leakage type.</li> <li>Use of new gaskets for piping flanges.</li> <li>Replacement of closed sampling system.</li> <li>Tanker unloading adopted dry connectors.</li> <li>Introduced an exhaust gas recycling system which diverts part of the exhaust gas to the boiler to recover heat energy and reduce emissions.</li> </ul>
		Equipment Upgrade	<ul style="list-style-type: none"> <li>Replacement of exhaust gas extraction equipment in the R&amp;D lab.</li> <li>Replaced the size of the extruder exhaust hood at the manufacturing site to effectively collect the VOCs generated from the cleaning of the pelletizer and extrusion dies.</li> </ul>
Gangshan Factory		Regular Inspection	<ul style="list-style-type: none"> <li>Annual maintenance, filter replacement and inspection of scrubbers to ensure the removal efficiency of scrubbers.</li> <li>Total suspended particulates (TSP) generated during the operation of dosing and suction areas at the manufacturing site are collected through closed or air hoods and processed in bagged dust collectors, which are regularly cleaned weekly to ensure proper functioning of the dust collectors and are superior to the law that the collectors are to be replaced every three years.</li> </ul>
		Equipment Upgrade	<ul style="list-style-type: none"> <li>Replacement of old gaskets and other measures to reduce non-point source emissions.</li> </ul>
Shen Hua Chemical		Purchase of New Equipment	<ul style="list-style-type: none"> <li>Added new activated carbon adsorption device to treat the unorganized waste gas escaping from the dry bed.</li> <li>Installation of mobile suction device to collect the waste gas generated from the inspection and maintenance process to the regenerative thermal oxidizer (RTO) for treatment, so as to reduce the emission of non-point source.</li> </ul>
		Process Improvement	<ul style="list-style-type: none"> <li>Collect laboratory oven emissions and non-point source emissions from doping tanks to a RTO for treatment to reduce non-point source emissions.</li> </ul>
		Regular Inspection	<ul style="list-style-type: none"> <li>Regularly carry out Leak Detection and Repair (LDAR) inspections and take timely closure of leakage points.</li> </ul>

TSRC Factories		Measures for 2023	
Nantong Industries		Process Improvement	<ul style="list-style-type: none"> <li>Using closed samplers, dry connectors, and hoods to connect the test emissions to a RTO for treatment.</li> </ul>
		Regular Inspection	<ul style="list-style-type: none"> <li>Regularly carry out Leak Detection and Repair (LDAR) inspections to eliminate VOCs from escaping.</li> </ul>
TSRC-UBE		Purchase of New Equipment	<ul style="list-style-type: none"> <li>Built a new 70,000 m<sup>3</sup>/h regenerative thermal oxidizer to increase the collection capacity of process waste gas.</li> </ul>
		Process Improvement	<ul style="list-style-type: none"> <li>Improvement of VOCs collection process through M-2, AO, and DEAC feedstock allocation tanks, and continuous optimization of equipment containment.</li> </ul>
		Regular Inspection	<ul style="list-style-type: none"> <li>Regularly carry out Leak Detection and Repair (LDAR) inspections to eliminate VOCs from escaping.</li> </ul>
TSRC (Vietnam) Co., Ltd.		Regular Inspection	<ul style="list-style-type: none"> <li>Introduced scrubbers in 2019 to reduce VOCs fugitive emissions. TSRC also regularly monitors VOCs values every quarter to monitor the scrubbers' removal efficiency.</li> </ul>
Shanghai Industries		Purchase of New Equipment	<ul style="list-style-type: none"> <li>Installation of air collection hoods above the vibrating screens in the extrusion line to eliminate the escape of VOCs.</li> </ul>
TSRC Specialty Materials LLC		Process Improvement	<ul style="list-style-type: none"> <li>Planning to introduce a co-generation system to reduce emissions by channeling waste gas into the co-generation system to generate electricity and steam.</li> </ul>

TSRC continues to upgrade equipment and optimize processes, reduces air pollutants released in the production process, such as VOCs, which have been declining over the past three years, and reduces hazards to the environment and health.



In 2023, two incidents of violation of the Air Pollution Prevention Act occurred at TSRC's Kaohsiung Factory, and TSRC immediately initiated remedial measures. These include the establishment of a plant equipment component tracking record, replacement of sealing strips, and education and training of operators, to immediately minimize the impacts on the environment and residents in nearby communities.

**TSRC Air Pollution Violations and Improvement Plan**

Factory Found in Violation	Regulation Violated	Reason for Fine	Penalty Amount (NT\$)	Solution or Improvement Plan
TSRC Kaohsiung Factory	Article 23 of the Air Pollution Control Act, Taiwan	The synthetic rubber manufacturing process (M03) at the Kaohsiung Factory did not effectively collect air pollutants, which was not in compliance with Article 13 of the Air Pollution Control and Emission Standards for Volatile Organic Compounds, which stipulates that emission pipes should have a closed air collection system. This is in violation of Article 23 of the Air Pollution Control Act.	450,000	<ul style="list-style-type: none"> <li>TSRC has paid the full amount of the fine.</li> <li>Establishment of BR plant equipment component tracking logs and inspections.</li> <li>MS-6401 had poorly designed exhaust duct, replaced the cover sealing strip and improved the exhaust duct.</li> <li>Conducted On the Job Training (OJT) program for personnel.</li> </ul>
	Subparagraph 4, Paragraph 1, Article 32 of the Air Pollution Control Act, Taiwan	Leakage of flanges from the transportation pipeline in the unloading area of the Kaohsiung Factory's thermoplastic rubber manufacturing process (M04), resulting in the leakage of isoprene residue in the transportation pipeline (there was no transportation operation at that time, so the leakage was the residue in the pipeline), resulting in air pollution, which was in violation of Subparagraph 4, Paragraph 1, Article 32 of the Air Pollution Control Act, Taiwan.	195,000	<ul style="list-style-type: none"> <li>Revised the manual to avoid liquid sealing of the unloading pipe or residual isoprene in the pipe.</li> <li>Conducted personnel training to require that the isoprene unloading pipe be connected to the recirculation pipe, and that the hand valve switch be controlled by the unloading personnel, so as to prevent personnel from mis-operation.</li> <li>Installation of pressure relief facilities in isoprene unloading line to avoid liquid damage to the line due to operator error.</li> <li>Purchased a set of multi-functional leakage stopping tools (e.g., flange clamps for lines under 6 inches).</li> </ul>

## 2. Ecosystem Preservation and Other Pollution Prevention

TSRC’s production sites and offices are not located in protected and restored habitats, nor in any of the 6 protected areas, biologically diverse areas, or genetically diverse areas specified by the International Union for Conservation of Nature (IUCN). None of the species in the industrial park are listed on the “Red List” of IUCN or “National List of Protected Species in Taiwan”. TSRC Group has set up maintenance and management policies for a certain percentage of green space and vegetation at each of its plants, provided that factory safety and normal production processes are not jeopardized.

### Implementation Status of Natural Environment Protection at Each Plant Site

TSRC Factories	2023 Accomplishments
<b>Kaohsiung Factory</b>	<ul style="list-style-type: none"> <li>In addition to the daily maintenance of vegetation in the plant, we continue to take care of the vegetation on site through an external professional team. Tree species in the onsite include yellow palm, longan trees, mango trees, and Autumn Maple Tree.</li> <li>The fruits of these tree species are an important food source for birds. Through appropriate pruning, the ripe fruits are retained as a food source for birds and other animals.</li> <li>Emphasizing the role of plants in carbon sequestration and air purification to provide a habitat for birds and other species.</li> </ul>
<b>Shen Hua Chemical</b>	<ul style="list-style-type: none"> <li>When Shen Hua built its factory in 1998, it planted a variety of plants during the same period and maintains the vegetation’s normal growth every year. However, Shen Hua plans to relocate its factory in the next two years in line with the national policy and will continue to evaluate the possible ways of relocating the plants with an external professional company, so as to ensure that the species of the trees can be retained. A professional company will be commissioned to move the tree species that are suitable for relocation to the new factory site. For tree species that are not suitable for relocation, the trees will be retained on the original site and handed over to the relevant government units for follow-up maintenance and care.</li> <li>Online monitoring of rainwater and industrial wastewater in the factory area to ensure that the discharge standards are met and to minimize the impact on plants onsite.</li> </ul>
<b>Nantong Industries</b>	<ul style="list-style-type: none"> <li>In addition to daily maintenance, we maintain the green plants and lawns in the factory through external professional green plant maintenance companies to ensure the healthy growth of green plants.</li> </ul>
<b>TSRC-UBE</b>	<ul style="list-style-type: none"> <li>Online monitoring of rainwater and industrial wastewater in the plant area to ensure that the discharge standards are met and that the existing plants and lawns are not affected.</li> </ul>
<b>TSRC (Vietnam) Co., Ltd</b>	<ul style="list-style-type: none"> <li>In addition to the factory’s own general maintenance of the plants, the factory’s greenery and lawns are taken care of by a professional greening maintenance unit to protect the natural growth of green areas and plant species, as well as the habitat of birds.</li> </ul>
<b>Shanghai Industries</b>	<ul style="list-style-type: none"> <li>In addition to carrying out its own daily maintenance, the factory actively participates in ecological restoration by repairing and caring for plants that have been damaged, in order to restore the balance and stability of the ecosystem.</li> <li>Implementing green production methods, adopting environmentally friendly production technologies and equipment, improving production efficiency and resource utilization, and reducing negative impacts on the environment.</li> <li>To fulfill social responsibility, the company is concerned about environmental protection issues, and encourages employees to actively participate in public welfare and environmental protection activities to promote the harmonious development of enterprises and society.</li> <li>Evaluate the engineering operations in the factory area, and if the survival of plants is affected, transplant the plants to suitable locations according to the characteristics of plants and transplantation requirements.</li> <li>Reduce noise and avoid disturbing the habitat of birds in the factory area.</li> </ul>

Regarding the prevention of land and groundwater pollution, the three subsidiaries of Shen Hua Chemical, TSRC-UBE, and Nantong Industries conduct regular soil and groundwater monitoring inventories in accordance with the “HJ 1209-2021 Technical Guidelines of Soil and Groundwater Self-Monitoring for Industrial Enterprises” of China every year. The results of the inspections in 2023 showed no abnormalities, and there were no leaks or contamination incidents. In accordance with the Soil and Groundwater Pollution Remediation Act, the Kaohsiung Factory conducts groundwater monitoring once a year, and in 2023, the test results showed no anomalies and no contamination occurred. In addition, in accordance with the “Regulations for the Prevention of Pollution of Groundwater by Storage Systems and the Installation of Monitoring Equipment”, soil gas monitoring wells are installed in the diesel fuel storage tanks in the plant area, and monitoring and testing are conducted on a regular basis. The TSRC Specialty Materials LLC plant is located in the Dow Industrial Park and the groundwater is monitored by Dow.