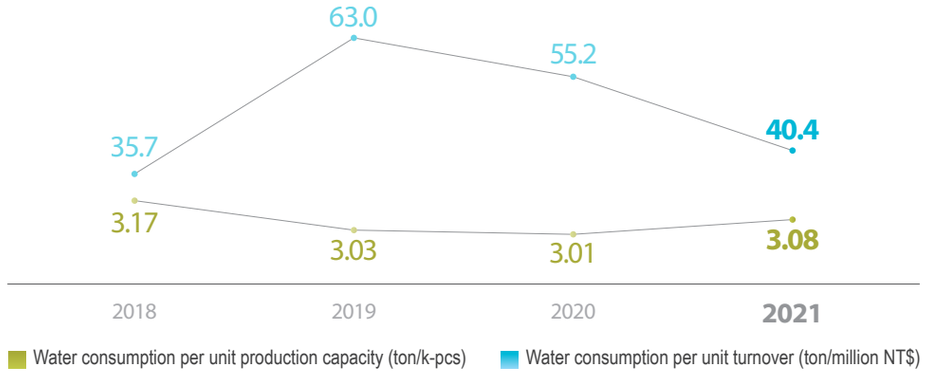
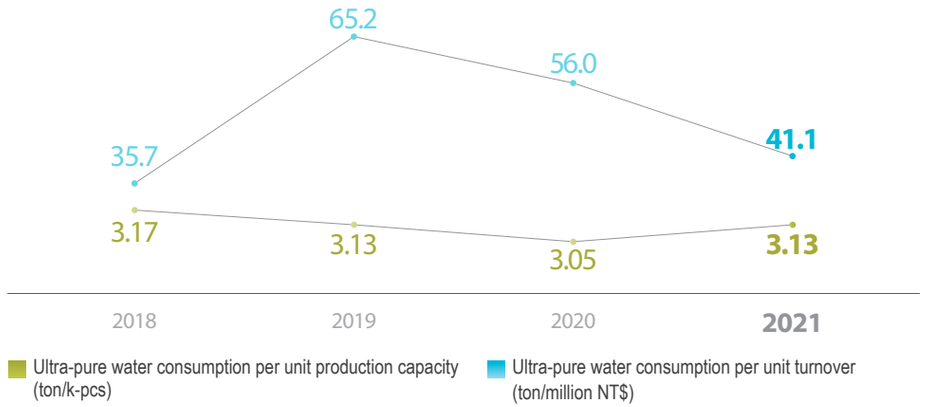
Run chart of 2018-2021 water consumption



Run chart of 2018-2021 ultra-pure water consumption



Water Resource Risk Management

Our main water source comes from the Shihmen Reservoir, and is channeled and processed through the Taoyuan Canal before being supplied as production water. The gravity flow is used to independently channel water without affecting the ecology of water resources and any other purposes of usage. In addition, rainwater harvesting can supply production water and tap water for household use. Currently, Nanya has only one production plant located in New Taipei City, Taiwan. Taiwan's rainfall is unevenly distributed between regions and seasons, which often results in regional and seasonal droughts. Nanya has used the WRI Aqueduct, tools for simulating water resource scenarios, to analyze the geographical location of the plant. The water source is the Taoyuan Canal of Shihmen Reservoir, which supplies 96.5% of water. The water stress assessment result was "low", meaning that it is a non-water stress area. Furthermore, Nanya's water source Shihmen Reservoir supplies approximately 800 million litters/day. The Company's daily water consumption is approximately 9.5 million litters. Hence, the effect of Nanya's operations on regional water use is 1.2%.

To reduce the risk of short-term water shortages inherent in the geographical location, we have continuously promoted water-saving measures, and committed ourselves to water recycling to strengthen our adaptability. The amount of water needed by production is huge so water shortage will cause production interruptions, affecting the output and delivery. To mitigate immediate impacts caused by short-term water shortages, a cistern with a capacity of 43 million litters and two detention basins each with a capacity of 4.06 million litters have been built in the plant to effectively harvest rainwater during the rainy season. Moreover, Nanya and the adjacent factories of the Formosa Plastics Group have cooperated to set up an emergency response organization for water shortages. When water shortages occur, the members of the emergency response organization can urgently deploy water resources to support each other. Therefore, no production losses have occurred owing to water shortages.

Nanya drought response mechanism

Water situation light Blue (Normal) — **Government response measures**: Stable water supply

- Nanya response measures: Water is normally drawn from Taoyuan Canal for production.

Water situation light Green (Slight water shortage) — **Government response measures**: Strengthen water allocation and recommend fallowing

- Nanya response measures: Draw water from Taoyuan Canal, storage pond, and 7 wells in the factory site in response.

Water situation light Yellow (Phase 1) — **Government response measures**: Lower the pressure of water supply during off peak and specific time periods

- Nanya response measures: Draw water from Taoyuan Canal, storage pond, and 7 wells in the factory site in response.

Water situation light Orange (Phase 2) — **Government response measures**: Reduce water supply to industrial users by 5-20%

- Nanya response measures: Draw water from Taoyuan Canal, storage pond, and 7 wells in the factory site in response.

Water situation light Red (Phase 3) — **Government response measures**: Rotational water suspension or during specific time periods

- Nanya response measures: Draw water from Taoyuan Canal, storage pond, and 7 wells in the factory site in response. If water is still insufficient, use the wells in Chang Gung Golf Course or coordinate water supply through the emergency response organization.

Water Conservation

In addition to the design of water-saving processes, the Nanya's water management chiefly emphasizes water reduction and recycling. Currently, the main directions promoted are as follows:

- Implement water-saving results through work guidelines.
- Reach the reduction effects through methods of conservation such as reduction and recycling.
- Promote water conservation through daily management practices.
- Build waste water classification treatment and adopt multiple recycling to maximize the use of water resources.

Nanya actively implements water conservation measures and plants currently have acid-alkaline waste water, hydrofluoric waste water, and organic waste water recovery systems. Along with the implementation of various water saving measures, the process water recycling rate reached 90.8% in 2021 . In 2021, the water consumption from waste water and rainfall harvesting methods totaled 5,450 million liters, accounting for 159% of the company's water consumption. In the future, to coordinate with the expansion plan of plant area, an estimate of NT$430 million has been invested in building new hydrofluoric waste water COD and total nitrogen treatment systems, which not only will solve the problem of excessively high hydrofluoric waste water COD and total nitrogen, but also recover the hydrofluoric waste water at the same time. It is estimated that additional 1 million liters hydrofluoric waste water will be recovered daily. The systems are expected to be completed in 2022.

Nanya water resource video

Note: Nanya's process water recovery rate was calculated using the formula approved by "Nanlin Technology Park Environmental Quality Supervision and Management Committee," which was required in the environmental impact assessment. We began using the formula of Hsinchu Science Park Bureau for calculation in 2021, so that calculation standards are consistent with peers in the industry, and also updated process water recycling rate in 2018-2020.

Cooperation and Communication

Besides implementing internal water resource management and evaluation, Nanya is also actively implementing water conservation measures and water recovery and reuse, and participates in the industry association for water conservation related guidance and experience sharing.

Government

- Participate in the semiconductor industry association, periodically attend "water resource diversification management and cooperation platform" meetings of the Water Resources Agency, and engage in exchanges, communication, and cooperation in water resource related policies.
- Attend meetings and coordinate and communicate with the Irrigation Agency and North Region Water Resources Office, and cooperate with the government's emergency response plan when there is a water shortage, in order to most effectively utilize water resources, mitigate the impact of water shortages in water supply areas, and achieve stable and balanced water supply.

Local residents

- Nanya formed an Environmental Quality Supervision Committee with the local community when it was first established, and commissions a third party to conduct surveys of surrounding ecology, hydrology, and air quality. Survey results are reported to the Environmental Quality Supervision Committee.
- Nanya learns about issues that community residents are concerned about through the Environmental Quality Supervision Committee, and includes the issues in its periodic evaluation of ISO 14001 Management Systems.
- To ensure that the water quality of effluent is normal and eliminate concerns residents may have about effluents from Nanya, we have established an effluent water quality real-time monitoring system that is linked to the Environmental Protection Bureau, jointly monitoring the water quality of effluents in real time.

Suppliers

- We share, exchange, and provide guidance to suppliers for water management and conservation measures through supplier meetings, in order to improve their water management measures.

Companies and the general public

- Nanya shares its water management experience through participation in various events, such as the green factory visit co-organized with the Industrial Development Bureau in 2021, during which we shared our water management and water conservation results with visiting government officials and companies.