

Radium (2547 TW)

Radium (2547 TW) Subsidiary Bao-Ding Reclaimed Water Wins the 2026 Japan IDPA “Pioneer Award”

Taiwan's Smart Water Innovation Takes Center Stage in the Global Reclaimed Water Era

Setting a New Global Benchmark for Sustainable, AI-Driven and Aesthetically Integrated Urban Infrastructure

As the global transition toward water resilience accelerates, reclaimed water has evolved from an environmental initiative into critical infrastructure supporting industrial competitiveness and sustainable urban development.

The Taoyuan Northern Reclaimed Water Center, developed by Bao-Ding Reclaimed Water, a subsidiary of Radium (TWSE: 2547), has been honored with the **2026 Japan International Pioneer Design Award (IDPA) – Pioneer Award**. Distinguished among entries from nearly one hundred countries and regions, the project was recognized for its innovative integration of environmental sustainability, public art, intelligent management, and urban aesthetics.

The award not only demonstrates Taiwan's world-class engineering capabilities in reclaimed water infrastructure but also marks the nation's emergence as a global leader in circular water resource development.

A New Global Water Strategy: Reclaimed Water Enters a Golden Era of Growth

The increasing frequency of extreme climate events, together with the rapid expansion of AI data centers and advanced semiconductor manufacturing, has dramatically increased demand for reliable, high-quality industrial water. Around the world, reclaimed water is no longer viewed merely as an environmental solution. It has become strategic infrastructure essential to economic resilience and national competitiveness.

Taiwan has become one of Asia's pioneers in reclaimed water development. According to the water resource strategy announced by Executive Yuan, R.O.C. (Taiwan), sixteen reclaimed water plants have been approved. By 2026, seven facilities located in Taoyuan, Taichung, Tainan, and Kaohsiung have commenced operation, supplying more than 190,000 metric tons of industrial-grade reclaimed water per day. Upon completion of all planned facilities, Taiwan's daily reclaimed water production is expected to exceed 500,000 metric tons.

Policy support has further accelerated market demand. Under the “Regulations Governing the Use of Reclaimed Water by Development Projects,” implemented in 2024, development projects requiring more than 20,000 metric tons of water per day must source at least 50% of their industrial water from reclaimed water systems. Complementing this policy, Taiwan's Ministry of Economic Affairs has announced the “Water and Watershed Sustainability Development Action Plan,” committing approximately NT\$158.6 billion between 2026 and 2031 to strengthen national water infrastructure.

For AI computing, semiconductor fabrication, and advanced electronics manufacturing, water security has become as critical as energy security. Corporate decision-making has shifted from focusing primarily on water costs to managing the operational risks associated with water shortages. Consequently, reclaimed water has evolved from a public utility into a strategic resource underpinning high-tech manufacturing, smart cities, and national resilience.

International Design Recognition Redefines the Role of Reclaimed Water Facilities

The 2026 Japan International Pioneer Design Award (IDPA) is one of Asia's most prestigious international design competitions, attracting architects, designers, engineering firms, and global brands from nearly one hundred countries and regions across categories including public architecture, smart cities, ESG and sustainable development.

For Bao-Ding Reclaimed Water, this recognition extends well beyond architectural excellence. It signifies Taiwan's successful transformation of traditional public infrastructure into next-generation urban assets that seamlessly integrate technology, ecology, aesthetics, culture, and intelligent governance.

Guided by the design philosophy of "Harmony Between Wind and Water," the Taoyuan Northern Reclaimed Water Center incorporates large-scale circular public art installations, water-inspired sculptures, landscaped green corridors, intelligent lighting systems, and visual elements reflecting the Taoyuan Aerotropolis master plan.

Rather than functioning solely as a water treatment facility, the center has become an open civic space combining environmental education, ecological landscapes, public art, and community engagement, which redefining the relationship between essential infrastructure and urban life.

AI-Powered Smart Water Management Builds Future Urban Resilience

As the reclaimed water industry advances, AI-enabled monitoring, AIoT-based real-time water quality management, low-carbon treatment technologies, and energy optimization are becoming industry standards.

Bao-Ding Reclaimed Water has incorporated AI-powered operational monitoring, automated water treatment technologies, and digital operation management systems to enhance supply reliability while supporting global net-zero ambitions and ESG supply chain requirements. These technologies provide semiconductor manufacturers and high-tech industries with safer, more stable, and more intelligent sources of premium reclaimed water.

Today, Radium Group's water resource business has established a comprehensive circular water ecosystem. Subsidiaries Rih-Ding Water operates wastewater treatment facilities with a combined daily treatment capacity of 100,000 metric tons, while Bao-Ding Reclaimed Water supplies 40,000 metric tons of reclaimed water

each day, serving major industrial customers including Nan Ya Plastics Corporation's Jinxing Plant, CPC Corporation Taiwan's Taoyuan Refinery, and Far Eastern Petrochemical, significantly strengthening industrial water resilience across northern Taiwan.

During the first quarter of 2026, the Group's water resource business generated over NT\$670 million in revenue, accounting for 42% of Radium's consolidated revenue, underscoring its transformation into one of Radium's primary growth engines and validating the company's long-term investment in sustainable infrastructure.

From Infrastructure Development to Urban Governance: Building a World-Class Sustainable Brand

Radium Chairman Lin Rong-shian stated that, "sustainability is not simply about constructing buildings. It is about creating safer, healthier, and more livable environments for future generations."

He noted that global urban competitiveness is rapidly evolving beyond traditional real estate development toward integrated resilience built upon water resources, energy systems, transportation networks, and intelligent governance.

Over the years, Radium has continuously invested in urban regeneration, Transit-Oriented Development (TOD), circular economy initiatives, smart buildings, reclaimed water infrastructure, and healthy aging communities. Through cross-disciplinary integration and technological innovation, the Group aims to establish a new model of urban development that simultaneously delivers environmental stewardship, economic prosperity, and social value.

Receiving the 2026 Japan IDPA Pioneer Award not only affirms Bao-Ding Reclaimed Water's excellence in design and engineering, but also demonstrates that Taiwan's circular water resource industry has achieved world-class competitiveness.

Looking ahead, Radium will continue expanding investments in AI-driven smart water technologies, energy efficiency optimization, low-carbon treatment processes, and circular water resource innovation. By integrating smart technologies, sustainable urban development, and environmental stewardship, the Group is committed to building resilient, low-carbon, aesthetically inspiring water infrastructure for cities worldwide.

2026 Japan International Pioneer Design Award (IDPA),
Bao Ding Reclaimed Water/ Taoyuan North District Water Reclamation Center
Award website: <https://idpa-japan.com/taoyuan-north-district-water-reclamation-center/>



Bao-Ding Reclaimed Water- Taoyuan North District Water Reclamation Center



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