GREENTECH

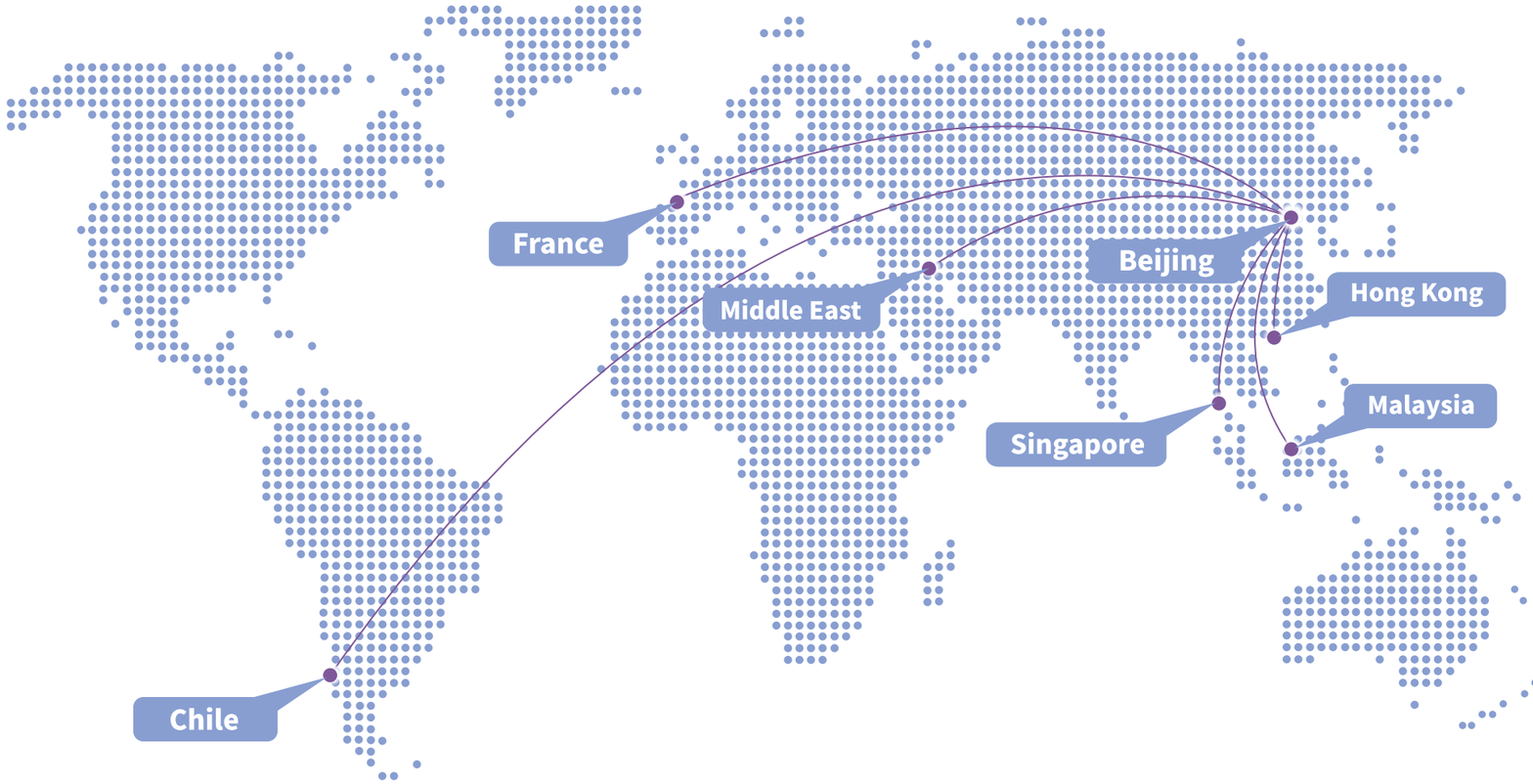
A DEVELOPER AND OPERATOR OF LARGE-SCALE ROBOTIC WATER TREATMENT SYSTEMS

GreenTech Environmental Co., Ltd.

ABOUT US

For over 20 years, Greentech has focused on high-quality water solutions. Powered by the AI-driven water production robot, Newater House®, the company has redefined traditional water plant construction by enabling standardized, scalable replication. Compared with conventional engineering-based plants, Newater House® reduces land footprint by 90%, delivery time by 90%, and operating personnel by 90%, while lowering lifecycle costs by 50%. This disruptive transformation enables distributed deployment of water plants across workshops, industrial parks, and cities, promoting efficient water recycling and bringing humanity closer to true water freedom.

- National High Tech Enterprise
- National Specialized and Innovative "Little Giant" Enterprise
- First Class Honor for the Environmental Protection Science and Technology Award offered by the Chinese Society for Environmental Sciences
- First Class Honor for the Science and Technology Award offered by the Membrane Industry Association of China
- First Class Honor of the "China Environmental Protection Federation Science and Technology Award"
- Establishment of a Postdoctoral Research Workstation



IDENTITY
A developer and operator of large-scale robotic water treatment systems

MISSION
AI for Water Freedom

VISION
To become a global innovator and leader in realizing water freedom for humanity through AI-powered technologies

Evoloution of Company

2004
Establishment of GreenTech Environmental in Beijing

2006
Contract signed for the Tangshan Industrial Wastewater Resource Recovery Project

2007
Strategic cooperation with Dutch investors, establishment of the Sino-Dutch Water Investment Group

2008
Contract signed for the first municipal sewage resource utilization PIPP project in Yuanping, Shanxi Province

2014
Strategic investment by Abengoa

2015
Contract signed with Middle East Steel Group Industrial Wastewater Resource Utilization Project

Pioneered the development and application of the 'Digital Water Plant Twin' intelligent operation and management platform

2016
Strategic investment by the Beijing Enterprises Water Group

2017
Contract signed for the first 'Blue Ecological Park' Industrial Wastewater Resource Recovery Project in Tangshan

GTMOST Membrane Universal Platform obtained international invention patent

2019
Contract signed for the first large-scale project in China for the application of nanofiltration technology to treat micro-pollutants in surface water in Zhangjiagang City

2020
Listed on the Shanghai Stock Exchange Science and Technology Innovation Board

2021
GreenTech's first 'Engineering Productized' water plant - Wuxi Reclaimed Water Plant officially started commercial operation

2022
Establishment of the Pipeline Technology Company

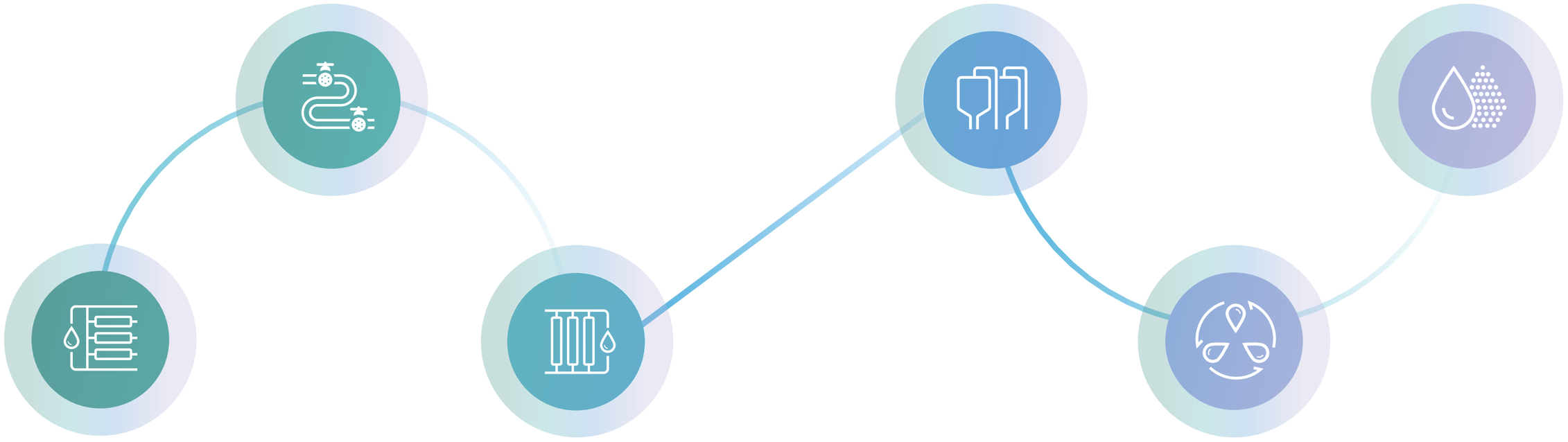
2023
Establishment of BlueNexus Technologies Pte Ltd in Singapore

2024
Released Newater House 2.0® – robust and efficient robotic water plant

2025
Released WateRobot®1.0 AI agent for WTP management

BUSINESS SCOPE

GreenTech Environmental focuses on the fields of advanced water treatment and resource recovery from wastewater.



TECHNOLOGY PRODUCT

1 Drinking Water Advanced Treatment Technology Package

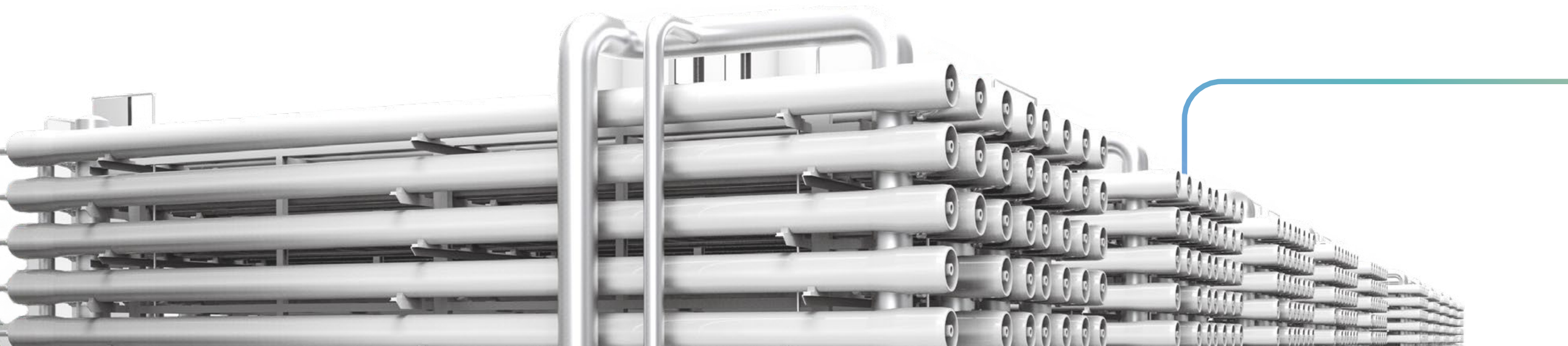
By combining GreenTech's proprietary membrane technologies—including a universal membrane platform, membrane fouling control, IMS direct coupling, precise chemical dosing, and targeted scaling inhibition—the system ensures high-quality water supply while effectively reducing membrane fouling, extending membrane service life, and ultimately lowering overall system operating costs.

- **BioSecure** Biosecurity Technology Package
- **SlightPol** High-Quality Water Supply Technology Package for Slightly-Polluted Water Sources
- **BWD** Brackish Water Desalination Technology Package

2 Citywide High-Quality Uniform Water Supply Network Technology Package

By applying GreenTech's independently developed water quality protection technologies for municipal water transmission and distribution networks, secondary contamination in existing pipelines is effectively eliminated, ensuring the delivery of high-quality drinking water from source to tap.

- **Vortex** Pipeline Air-Water Vortex Cleaning Technology
- **Folmar** Water Quality Protection Technology for Pipeline Networks
- Pipeline Leakage Control Technology
- Pipeline Water Quality Intelligent Control Txechnology Intelligent Water Quality Monitoring and Control Technology for Distribution Networks



3 Wastewater Resource Utilization (Recovery) Technology Package

GreenTech wastewater enables wastewater reclamation and reuse while converting other pollutants in water into products with commercial value—maximizing resource recovery and fully unlocking the value of wastewater.

- This combined package applies GreenTech's independently developed technologies, including Membrane Universal Platform, membrane fouling prevention, IMS direct coupling, precise dosing, and precise prevention of scale formation.

- **HEZLD ™** High-Efficiency Zero Liquid Discharge (ZLD) Process Technology Package

  By integrating Newater House membrane concentration, Crysacter™ crystallization softening, and evaporation–crystallization technologies, the HEZLD™ package enables high-efficiency, low-cost zero liquid discharge while producing widely usable product-grade salt.

- **COBF** Concentrated Brine Discharge Treatment Technology Package

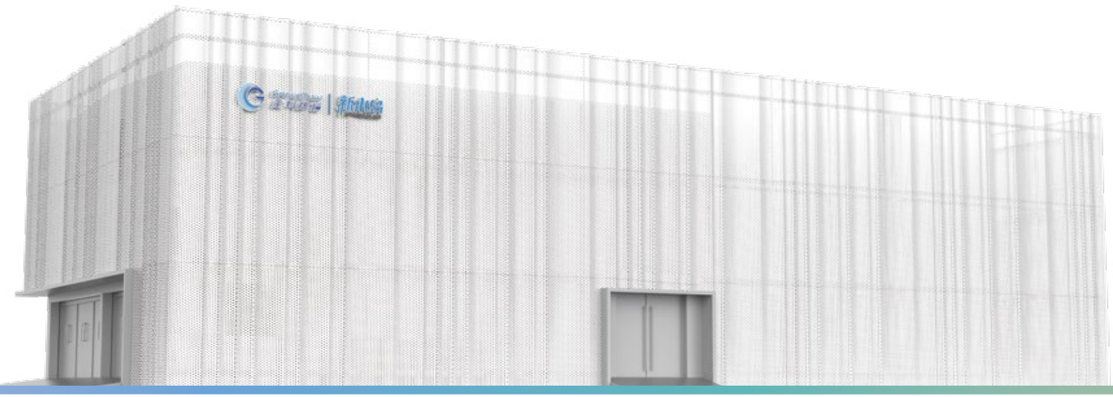
  Integrating Crysacter™ crystallization softening, HEOCCT™ Q3/H_2O_2 catalytic oxidation, biological filtration, and ultrafiltration to achieve Class 1A or Surface Water Class IV compliant discharge of RO/NF concentrate.

4 Newater House®

Water Treatment Robot—Newater House® redefines the traditional water plant construction model from the ground up by applying an industrial product development mindset. Powered by WateRobot®, the AI-driven intelligent operations platform independently developed by GreenTech, Newater House® features a highly integrated design that brings together all plant equipment and facilities as well as buildings and structures into a single, cohesive system. Manufacturing, commissioning, and trial operation are completed in the Newater House Super Factory, after which the water treatment robot is rapidly assembled and delivered on site—enabling fast deployment, standardized quality, and intelligent operation.

- Leveraging insights and operational data from over 100 projects spanning 20 years, GreenTech has transformed its deep expertise in water plant design, equipment manufacturing, engineering construction, and operations management into Newater House—a fully productized intelligent water plant solution.
- Newater House offers automated, safe and efficient management to deliver high-quality water for industrial enterprises, industrial parks and municipal applications. It effectively addresses challenges such as water scarcity, limited environmental carrying capacity, water safety risks, and high operating costs.
- Compared with conventional engineered water plants, the solution reduces land footprint by 90%, shortens delivery time by 90%, cuts operational staffing by 90%, and lowers total life-cycle costs by 50%.

Modular Design — **Industrialized Manufacturing** — **Rapid Installation and Delivery** — **AI Agent-Driven Operation** — **4S Professional Service**



* Newater House® was awarded the certification of "AI Industry Innovation Scenario Application Case" by the Digital Technology Center of the Industrial Culture Development Center, Ministry of Industry and Information Technology (MIIT).
* Newater House® was selected into the "Catalog of Industrial Water-Saving Processes, Technologies, and Equipment Encouraged by the State(2025)" compiled by the Ministry of Industry and Information Technology and the Ministry of Water Resources.
* Newater House® has been awarded "China Environmental Protection Product Certification" and "Beijing Certificate of New Technologies, New Products and New Services".

5 WateRobot® AI Agent

AI-powered water plant operations system

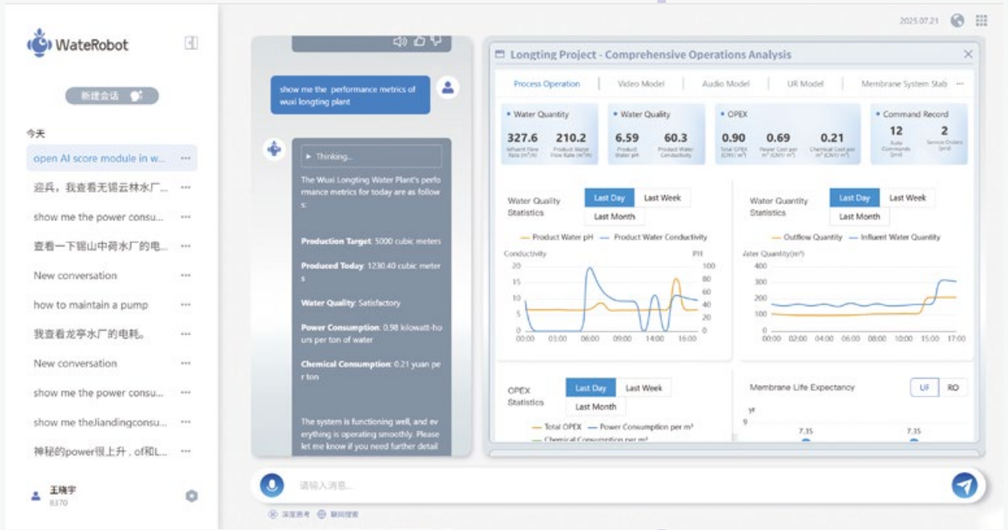
WateRobot® AI Agent is an unmanned, AI-driven system that autonomously manages water plant operations by replacing human tasks. It incorporates GreenTech's self-developed process optimization models, alongside AI models for computer vision, auditory sensing, and infrared, to ensure real-time environmental awareness. By leveraging large language reasoning models, it enables predictive maintenance of equipment and processes. The system operates within a closed-loop Online to Offline framework, ensuring the safe, efficient, and cost-effective operation of water plants with optimal performance and minimal human intervention.

Improving Efficiency & Reducing Costs

In the Wuxi area, 5 water plants and 1 operation service center were managed by just 10 staff, resulting in a 90% reduction in labor, a 50% drop in equipment failure rates, 15% savings in chemical costs, and 30% savings in electricity. Overall operational costs were reduced by 35%, and the region pioneered a distributed, unmanned operation management model.

Enabling Unmanned, Safe, and Efficient Water Plant Operations

- **Unmanned Operation:** A multi-modal integrated architecture optimizes processes, enables autonomous monitoring, predicts failures, and supports maintenance decisions—with over 90% recognition accuracy, replacing manual inspections and operational adjustments.
- **Autonomous Agent Operation:** Generates 12 types of standard reports (e.g., cost analysis, equipment maintenance, operational performance) on demand, providing data-driven decision support for stable and efficient operations.
- **Intelligent Interactive Consultation:** As an AI agent, WateRobot® enables human-machine interaction, autonomously accessing SCADA systems, digital twin platforms, and other operational systems to deliver real-time visualized data and feedback.
- **Zero-Barrier Operation:** Plug-and-play functionality with natural language interaction, while retaining traditional configuration interfaces to meet ISO 9001 safety and compliance requirements.



FEATURED PROJECTS

Advanced Water Treatment

The company has delivered a portfolio of nationally significant landmark projects, pioneered multiple industry-first innovations, and earned numerous prestigious awards across domestic and international markets.

Xiong'an New Area No.1 Tap Water Plant

Water Production: 150,000 m³/d

Core Technology:
BioSecure Biological Safety Technology Package

Drinking water plants for the Beijing 2022 Winter Olympics main venues in Chongli and Yanqing

Water Production: 25,000 m³/d

Core Technology:
BioSecure Biological Safety Technology Package

- National High-Quality Engineering Award for 2022-2023

Advanced Water Treatment

Advanced Water Treatment by Nanofiltration in Zhangjiagang No.3 and No.4 Water Treatment Plants

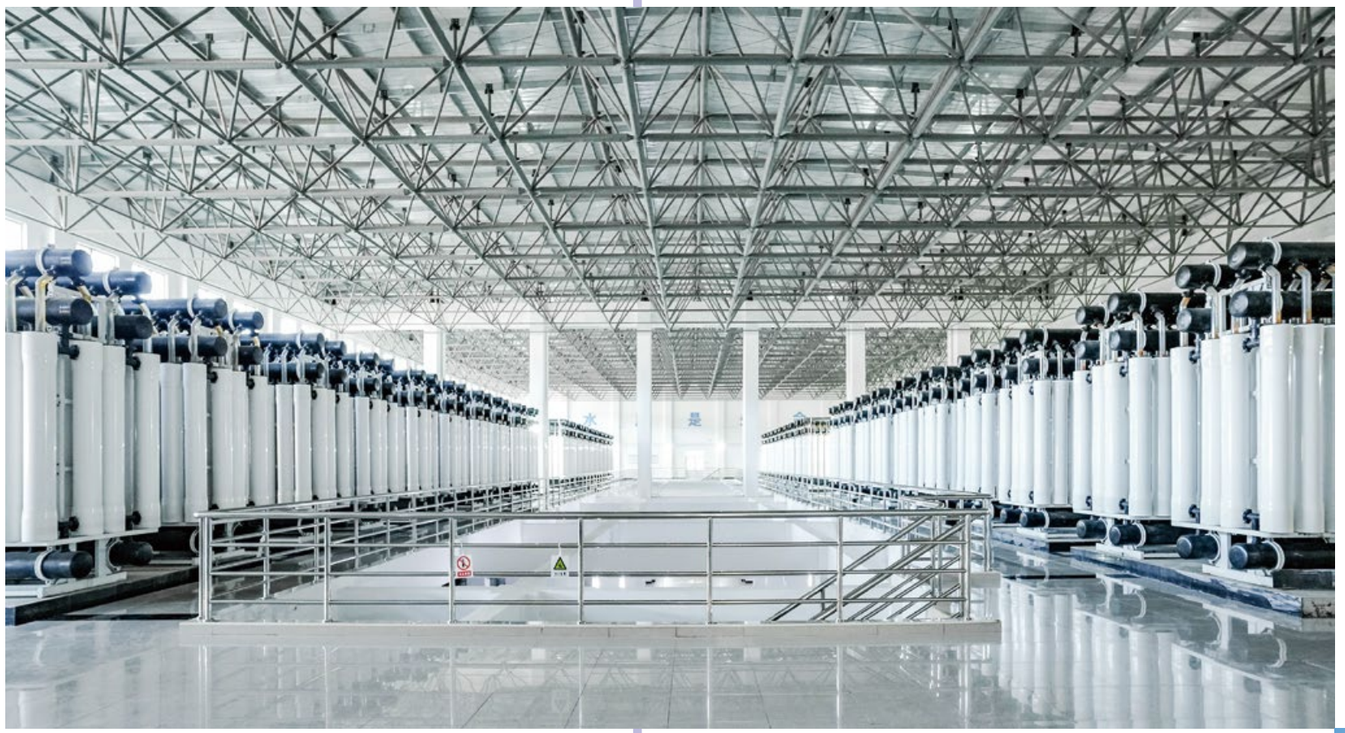
Water Production: 400,000 m³/d

Core Technology:
SlightPol High-Quality Water Supply Technology Package for Slightly Polluted Water Source

- 2022 GWI Water Project of the Year
- Selected as a demonstrating engineering project by the China Urban Water Association in 2022
- Pioneered a new technology pathway for producing high-quality drinking water from slightly polluted water sources through an innovative nanofiltration membrane hybrid process

FEATURED PROJECTS

Advanced Water Treatment



Beijing South-to-North Water Diversion Shijingshan Water Plant

Water Production: 200,000 m³/d

Core Technology:
BioSecure Biological Safety Technology Package

Multiple brackish water desalination projects in northwest China

Water Production: 200,000 m³/d

Core Technology:
BWD Brackish Water Desalination Technology Package

Wastewater Resource Recovery

We provides high-quality reclaimed water solutions for industrial users across diverse sectors—including new energy industry, electronics manufacturing industry, thermal power, chemical fiber, textile dyeing, and steel—serving facilities of various scales and enabling the commercialization of premium water resources.

Wuxi Longting Newater House

Providing 5,000 m³/d of high-quality reclaimed water for thermal power enterprises

Henan Lankao Newater House

Providing 5,000 m³/d of high-quality reclaimed water for electronics manufacturing enterprises

Newater House of Shijiazhuang Yuhua Thermal Power Plant, CHD

Providing 10,000 m³/d of high-quality reclaimed water for thermal power enterprises

Newater House project in Yangqu Industrial park, Shanxi Province

Providing 2,000 m³/d of high-quality reclaimed water for new materials enterprises

Jiangsu Yancheng Newater House

Providing 5,000 m³/d of high-quality reclaimed water for electronics manufacturing enterprises

Zhejiang Zhoushan Newater House

Providing 5,000 m³/d of high-quality reclaimed water for new energy enterprises

Wastewater Resource Recovery

Tangshan Nanpu Reclaimed Water Project

Providing 87,000 m³/d of high-quality reclaimed water for chlor-alkali chemical and chemical fiber enterprises

Tangshan Nanpu Wastewater Economic Development Zone Reclaimed and Reuse Phase II Project Phase was successfully approved for RMB 50 million in central government infrastructure budget funding

Wuxi Anzhen Newater House

Providing 5,000 m³/d of high-quality reclaimed water for new energy enterprises

Wuxi Jianding Newater House

Providing 2,500 m³/d of high-quality reclaimed water for electronics manufacturing enterprises

Hebei Gaoyang Reclaimed Water Project

Providing 13,500 m³/d of high-quality reclaimed water for textile dyeing enterprises

FEATURED PROJECTS

Wastewater Resource Recovery

Middle East Steel Industry Reclaimed Water Project

Providing 15,000 m³/d of high-quality reclaimed water for steel enterprises

The Middle East Steel Industry Reclaimed Water Project was recognized as a flagship case for coordinated pollution reduction and carbon reduction under the Belt and Road Initiative

Ningxia Zhongwei High-Efficiency Zero Liquid Discharge Project

Reclamation of 25,000 m³/d of wastewater with zero pollution discharge

Tangshan Nanpu Brine Discharge Treatment Project

40,000 m³/day brine treatment achieving Class IV surface water discharge standards in China

688466.SH

Address: 16th Floor of Motorola Building Tower A,
No.1 Wangjing East Road, Chaoyang District, Beijing, China
Postal Code: 100102
Phone: +86 10-6439-9965
Fax: +86 10-6439-2202
Email: info@greentech.com.cn
Website: https://www.greentech.com.cn/en/
Linkedin: https://www.linkedin.com/company/gt-environmental