



Intelligent solutions, smarter environment

ecoAI is a pioneering environmental technology development company dedicated to creating intelligent solutions for environmental challenges and regulation, through the specialization of AI-powered tools, products, and technologies. We are on a mission to harness the power of artificial intelligence to develop innovative, efficient, and sustainable technologies that address pressing environmental challenges globally, bothering around reclamation, restoration, remediation and monitoring.



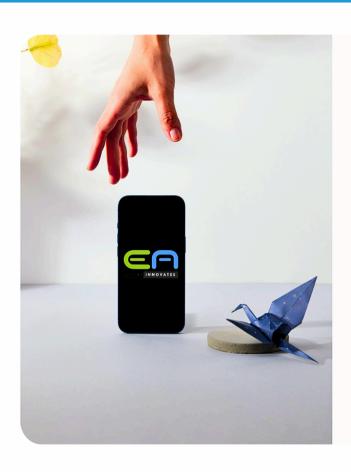
Innovative Technology: At the forefront of Al applications in environmental services, providing state-of-the-art solutions.



Sustainable Practices: Committed to sustainable methodologies that minimize environmental impact while maximizing efficiency ecoAl INNOVATES is poised to revolutionize the industry.



Expert Team: A dedicated team of environmental scientists, engineers, Al developers, and regulatory specialists committed to excellence.



With over a decade of expertise, ecoAl INNOVATES is dedicated to developing Alassisted automatic environmental control systems, enhancing precision, efficiency, and sustainability in environmental practices.

OUR PROJECTIONS

- **Environmental:** Promote sustainable practices through precise environmental monitoring and control.
- Economic: Reduce operational costs and enhances productivity through automation and efficient resource management.
- Social: Contribute to community wellbeing by ensuring healthier environments and promoting sustainable practices.



OUR INNOVATIVE TECHNOLOGIES



POWERED BY ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) comprises various technologies such as machine learning, neural networks, and natural language processing. These technologies empower machines to learn from data and execute tasks that traditionally demand human intelligence. The significance of AI in environmental management lies in its ability to enhance efficiency through automation, bolster predictive capabilities, and elevate decision-making processes. The future of environmental management lies in the intelligent use of AI and big data. These technologies offer the tools we need to monitor our environment comprehensively, predict future trends accurately, and make informed decisions that promote sustainability and resilience.

Automation represents a paradigm shift in the environmental industry, offering transformative benefits that enhance efficiency, accuracy, and scalability. By embracing automation, we can address environmental challenges more effectively, ensuring a more sustainable and resilient future for our planet. As technology continues to advance, the integration of automated systems in will undoubtedly play a crucial role in safeguarding our natural resources and ecosystems for generations to come.

The transition towards autonomation is motivated by the imperative need for enhanced efficiency, precision, scalability, and proactive oversight. This enables ongoing monitoring of environmental parameters, efficient resource allocation, anticipatory trend analysis, fostering improved and sustainable environmental management protocols. Embracing autonomy equips us to tackle the intricate environmental issues, fostering a more sustainable robust and planet for future generations.



For the love of water.

As South Korea's official water management company for municipalities, BIZDATA, EcoAl's AI partner, plays a crucial role in implementing advanced technologies for efficient water resource management. The company's smart water management systems are designed to reduce operational costs, improve water quality, and enhance public safety. These systems utilize AI to detect and respond to malfunctions in real time, ensuring reliable and efficient water services for municipalities across the country

BIZDATA has also been recognized for its innovative contributions to the industry. The company received the grand prize in the environmental service category from the National Assembly, Trade, Energy, Small and Medium Venture Business Committee in 2023. Additionally, it has been re-certified as a technologically innovative small and medium-sized business (INNO-BIZ), highlighting its commitment to continuous innovation and excellence in the environmental sector

Water is a vital resource for all forms of life on Earth, playing a crucial role in health, agriculture, industry, and environmental sustainability. Access to clean water is essential for drinking, sanitation, and food production, impacting overall public health and well-being. Furthermore, water is integral to maintaining healthy ecosystems and supporting biodiversity.

Our efforts in water management are aligned with global initiatives such as the United Nations' Sustainable Development Goals (SDGs), particularly Goal 6, which aims to ensure availability and sustainable management of water and sanitation for all. By leveraging Al and big data ecoAl contributes to the global effort to improve water quality, increase water-use efficiency, and enhance water management practices, ultimately supporting the health and well-being of communities worldwide



SMART WATER

NAIAD Hexa Series

NAIAD is a sustainable and efficient water treatment and management platform consisting of 6 adjustable modules and autonomous operating system built on big data and powered by artificial intelligence.



Revolutionary Sustainable & Effective Water Treatment Solution

NAIAD is an efficient and sustainable waste water platform that effectively removes pollutants and harmful substances, offering sustainable water services for better water management. NAIAD regularly improves its algorithms through reinforcement learning to continuously increase efficiency. This design allows it collect and process all data needed for water treatment then purify water by connecting individual modules, each with it's own water treatment process in stages.

Advanced smart water and waste water treatment system integrating AI big data technology with modular hardware solutions. It aims to revolutionize existing water treatment methods by providing a more efficient, scalable, and cost-effective approach., utilizing machine learning algorithms for AI modeling, autonomous model adjustments, and predictive decision-making, possessing a comprehensive monitoring and analysis tools for real-time water treatment status and insights.

"A one of a kind technology developed and built to effectively manage one of life's most important resource."



Data Computing



Standardized System



Automatic Advancement

NAIAD is derived from the Greek mythology of the water nymph NAIAD, who guards the sources of water for life. We do our best to embody and carry on the responsibility of NAIAD, through our respect for our environment and duty to protect and provide clean water for generations to come.

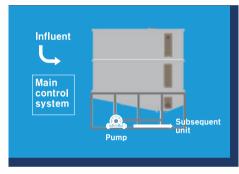
CONFIGURATION AND SPECS



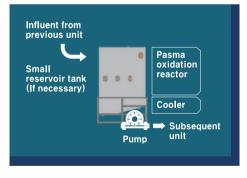
Module Types

No.	Water Treatment Functions (ID Name)	Released
Α	Main Control Unit and Reservoir Tank (MCU-RT)	0
В	Plasma Oxidation Unit (POU)	0
С	Electro-Coagulation Unit (ECU)	0
D	Ceramic Membrane Filtration Unit (CMFU)	0
E	Sedimentation and Dewatering Unit (SDWU)	0
F	Activated Carbon Unit (ACU)	0
G	Coagulation-Flocculation Unit (CFU) (Drinking Water Unit 1)	
Н	Sedimentation-Disinfection Unit (SDU) (Drinking Water Unit 2)	
1	Reverse Osmosis Unit (ROU) (Deionized- drinking Water Unit)	
J	Filtration Unit (FU)	
K	Anaerobic Bioreactor Unit (ABU)	
L	Advanced Oxidation Process Unit (AOPU)	

[Module A] Main Control Unit and Reservoir Tank



[Module B] Plasma Oxidation Unit















MANUFACTURED IN FACTORY AND ON SITE INSTALLATION



UNMANNED AUTONOMOUS OPERATION



MODULE TYPED DESIGN

OPERATIONAL STEPS

The NAIAD Hexa Series goes through a carefully designed process from installation to use. Wastewater is analyzed in the laboratory to determine the treatment process. At the factory, the modules are assembled according to the analysis. The combined NAIAD is transported to the site and installed. After more than a year of operational data has been collected, management is only a matter of desk monitoring from the convenience of your office.

SITE STEP

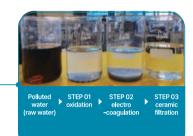
In Laboratory

01. Inspect Site

- Site visit and inspection
- Establish water treatment goals

02. Analyze and Test in Lab

- Analyze wastewater and research on appropriate treatment methods
- Test based on treatment method combinations



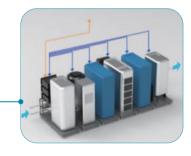


03. Design Modules

- Select and combine modules according to treatment method
- If predeveloped modules are available, collaborate with HW companies to develop new modules



- Initial assembly of modules in factory
- verufy functionality through testing





05. Transport to the Site

- Load modules into containers
- Transport them vis truck or ship

06. Install the Set and Test On-Site

- Set is installed within 3 days
- Connect wastewater and test out





07. Carry out Operation and Monitor

- Operate and analyze treatment process for one year (covering all seasons)
- Coalate relevant data, monitoring formonice

08. Adjust Algorithm and Test Operation

- Fine-tuning algorithms based on the collected data
- Update subsequently with improved algorithms through machine learning, at specified intervals





Based on AI · Bigdata

Unmanned Autonomous Operation

Feature

01

Integrated structure for autonomy



Remote Monitoring & Operation



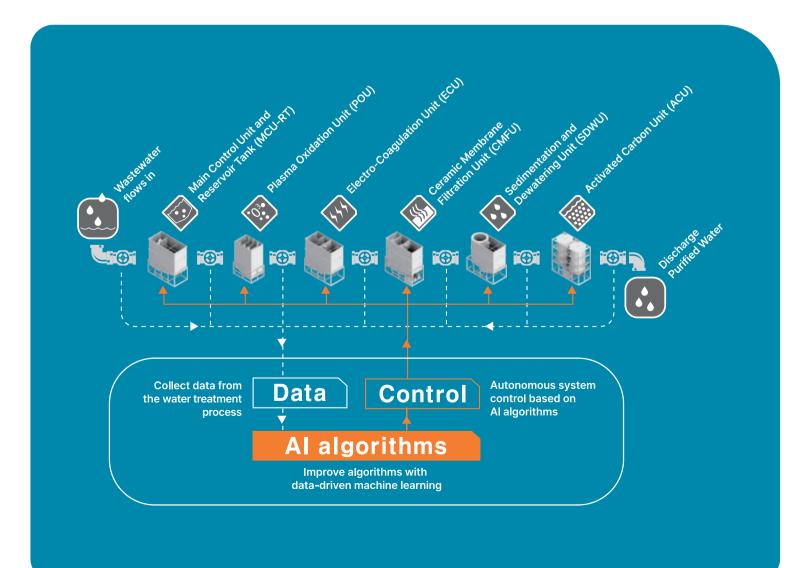
Optimized Power Control



Integrated the devices, controls, sensors, networks, and data processing required for water treatment into a single system.

Monitoring changes in quantity and quality remotely for operations.

Efficiently manage the power required for wastewater treatment and optimizing power usage to contribute to carbon neutrality.



Standard Size and Stainless Steel

Manufactured in Factory and On-site Installation

Feature

02

Factory-tested and transported for installation



Since NAIAD is manufactured at the factory and then transported to the sites, it takes only about 3 days for installation

Overcoming space constraints



Using standardized modules, it occupies minimal space and allows for on-site customization during installation

Appliance-like Design



Modules are designed for easy use, similar to typical household appliances, and are made of highly durable stainless steel.



Manufactured in Factory

The complete set of equipment is manufactured in the factory following standard module specifications



Transported in Containers

The equipment sets are then loaded and transported to site for installation



Installed On-Site

Equipment is then installed on-site within a short period of 3 days or less

Global Availability

NAIAD is now available on a global scale. We have expanded our reach to ensure that no matter where you are, you can access the innovative solutions offered by NAIAD

- North America
- South America
- Antartica
- Asia

- Europe
- Africa
- Austrailia





Global Accessibility

NAIAD leverages the power of cloud computing to ensure that our system is not only globally accessible but also continuously updated and improved. Being cloud-based allows NAIAD to operate seamlessly worldwide, providing real-time data and insights to users no matter where they are located. This global connectivity ensures that our clients can monitor and manage their environmental systems effectively from any location.

The cloud infrastructure also facilitates efficient communication between our team and users, ensuring prompt support and updates. Moreover, NAIAD's algorithms are continuously updated through the cloud, allowing for the integration of the latest advancements in AI and environmental science. This ensures that our system remains at the forefront of innovation, providing the most accurate and effective solutions for environmental management.

With NAIAD, you can be confident that you are using a system that is not only globally accessible but also continually evolving to meet the highest standards of performance and reliability.