



Guidebook on Technologies of Environment-Related Corporations in Fukuoka Prefecture

FY2026 Updated Edition



Introduction

Sharing Environmental Technologies from Fukuoka to the World

–Aiming to solve environmental problems throughout the Asian region

Fukuoka Prefecture is home to many years of accumulated achievements and know-how in overcoming environmental problems, and is now drawing on this strength to promote exchanges in the environmental field with various regions across Asia. In particular, we have provided technical cooperation, industrial cooperation and personnel exchanges towards the solving of environmental problems with regions in Asia with which we have friendship relationships (Jiangsu Province, China; Hanoi, Vietnam; Bangkok, Thailand; Delhi Territory, India).

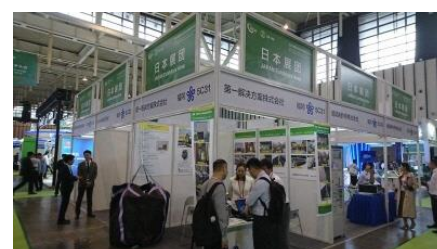
Due to the high level of interest from various regions in the environmental technologies cultivated in our prefecture through such exchanges, this “Guidebook on Technologies of Environment-Related Corporations in Fukuoka Prefecture (2020 edition)” has been published as a public relation material for investigating and organizing the environmental technologies of companies in our prefecture, introducing these things to everyone in Japan and overseas to further promote exchanges on environmental technologies and industries based on the network of our prefecture and partner-local governments. Now, as the circumstances surrounding these companies have been changing, the Prefecture updated this Guidebook in FY2026.

This guidebook not only presents the latest technologies for solving environmental problems in the areas of waste, water and atmospheric environments, but also technologies on energy saving and renewable energy based on the global trend of decarbonization.

It is our hope that this guidebook will be used widely both in Japan and overseas cities, leading to the introduction of the environmental technologies of companies based in our prefecture and helping to improve local environmental problems.



Fukuoka mascot character “Ecoton”



Contents

About Fukuoka Prefecture	1
Initiatives in the Environmental Field in Fukuoka Prefecture	2 ~ 6

Introduction to the Technologies and Products of Environment-related Companies in Fukuoka



Waste

■ ECOWOOD Co., Ltd.	7
"Eco-M Wood" wood building material	
■ MIS LTD.	8
"Joule-R" biomass burner	
■ Kakuno Manufacturing Co., Ltd.	9
Next generation pyrolyzer	
■ Kurinka Co., Ltd.	10
Highly permeable, water retaining pavement "KURINKA Road"	
■ Kenki Corporation	11
Continuous low temperature dryer	
■ Sakai Kogyo Co., Ltd.	12
"Roof chips" roof tile recycling product	
■ Genuine R&D Co., Ltd.	13
"Natural human ceramide" collection and material development	
■ Shin Kitakyushu Kogyo Co., Ltd.	14
Recycled PET non-woven fabric filters	
■ Shinryo Corporation	15
Processing solutions connected to cost reduction and effective use of resources	
■ Total Care System Co.	16
Recycling system of disposable diaper	
■ Naritabiso Co., Ltd.	17
Upcycle agricultural plastic	
■ Nippon Magnetic Dressing Co., Ltd.	18
Technological cooperation on E-waste recycling	
■ Beetle Engineering Co., Ltd.	19
Push-type multi-stage incinerators	
■ Fukuoka Metal Enterprise Co., Ltd.	20
High-quality iron scrap (steelmaking raw materials)	
■ Fukuoka Bioindustry Development Research Institute	21
Recycling of organic waste using selected highly functional actinomycetes	
■ FROM Industry Co., Ltd.	22
High performance, safe disposer	



Water

■ E.I.M. Control Systems Co., Ltd.	23
Contributing to the development, monitoring, and management of water infrastructure from a systems control perspective	
■ ISHIGAKI COMPANY, LTD.	24
Highly efficient filter press and pumping gate system	
■ SKE Co., Ltd.	25
Optimal water processing planning to meet needs	
■ Kamata Bio-Engineering Co., Ltd.	26
Proprietary adsorption and filtration technologies	
■ Kankyo Electronics Co., Ltd.	27
"Medaka Bioassay" continuous automatic water quality monitoring	
■ Kyowakiden Industry Co., Ltd.	28
Wide range of water treatments from drinking water to wastewater treatment	
■ KES Co., Ltd.	29
Support from plant construction to after-sales follow-up	
■ KOYOH Co., Ltd.	30
"Ryugu no Tsukai" water purification material	
■ Sanki Engineering Co., Ltd.	31
"Aero Wing II" air diffuser	
■ JFILS Co., Ltd.	32
High-efficiently water treatment using the enzyme activation method	
■ Nikka Environment Engineering Japan Co., Ltd.	33
"Costalyst BP" reducing processing costs for persistent COD decomposition	
■ FIRST SOLUTION Co., Ltd.	34
"MC Method" sludge dehydration technology	
■ FujiClean Co., Ltd.	35
High quality septic tanks	
■ METAWATER Co., Ltd.	36
"Pre-treated Trickling Filter System" sewage processing	

Contents



Atmosphere

■ Chugai Technos Corporation	37
Comprehensive environmental inspection and analysis	
■ BEC Kyushu Co., Ltd.	38
Dust prevention system	



Energy

■ Agritree Co., Ltd.	39
“Solar sharing” joint agriculture and solar power generation	
■ Kraftia Corporation	40
Contributing to the stabilization of renewable energy with the “Kraftia EMS”	
■ West Japan Engineering Consultants, Inc.	41
Renewable energy power generation consulting	
■ ProX Material Corporation	42
Energy saving and work environment improvement with “ProX Heat Shield Sheet ®”	
■ Hokutaku Co., Ltd.	43
Multi-vendor wind power maintenance service	
■ Riamwind Co. Ltd.	44
High efficiency, low noise and large capacity “multi-lens wind turbines”	



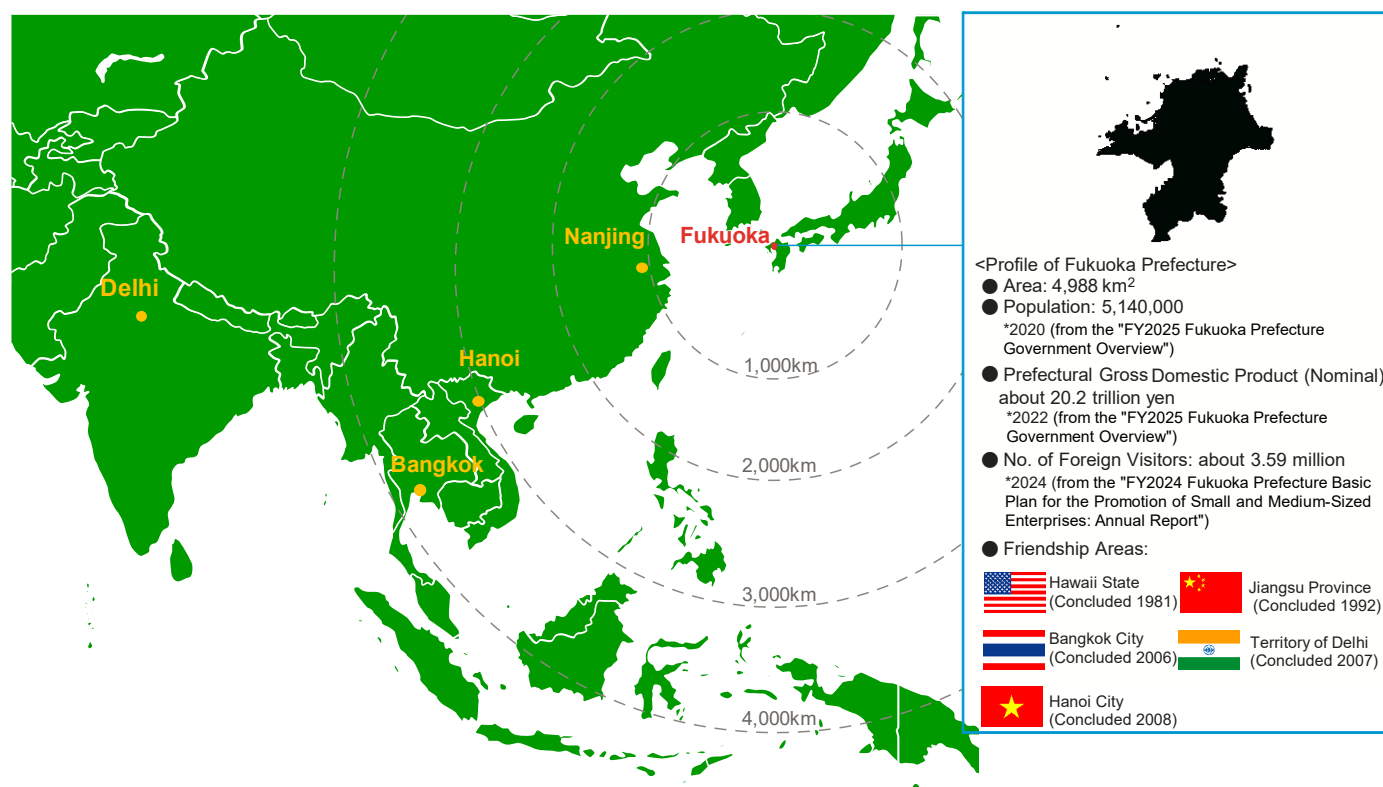
Other

■ ATGREEN Co., Ltd.	45
Provision of decarbonization and resource recycling systems	
■ Environmental Technology Service Co., Ltd.	46
Environmental survey, measurement and analysis	
■ K.K. Investment Limited	47
Insolubilization processing of heavy metals in the soil	
■ Shabondama Soap Co., Ltd.	48
“Soap-based fire extinguishing agent” that is safe for people and the environment	
■ Hasegawa Environment Development Co., Ltd.	49
Coatings to ease photosensitivity symptoms	

About Fukuoka Prefecture

Overview of Fukuoka Prefecture

Fukuoka prefecture is located in the northern part of Kyushu, which is in the southwest of Japan. It is geographically close to the rest of Asia and has developed as an open gateway to Asia since ancient times. The area of the prefecture is about 5,000 km², and the population is about 5.1 million. The prefecture has two government ordinance designated cities, Kitakyushu, which is also a model SDGs city where industrial and environmental industries are concentrated, and Fukuoka City where commercial facilities are concentrated and wholesale and retail, and service industries flourish.



Experience Overcoming Pollution

During the period of high economic growth, Fukuoka prefecture faced a serious pollution problem due to the development of industry, and has experiences overcoming such problems. In response to the calls from residents to prevent pollution, residents, companies and government worked together to restore the comfortable environment of today. In the process of overcoming pollution, we have accumulated expertise and know-how regarding environmental technologies and the construction of infrastructure.



Omuta City in the 1950s (smoke flowing into the sky)



Omuta City today (the beautiful blue skies have returned)

Initiatives in the Environmental Field in Fukuoka Prefecture

Promotion of international environmental cooperation

We are promoting environmental cooperation with various Asian countries utilizing the environmental technologies and know-how accumulated in the prefecture through the process of overcoming past pollution issues, to contribute to the solution of environmental problems in the Asian region.

Under the **"Fukuoka International Environmental Management Program (FINE)"** has been implemented since 2006, we have invited government officials that are at the core of environmental measures from various Asian countries to our prefecture to carry out training on efforts to overcome pollution, environmental technologies, policy lectures and site visits etc. We have accepted 254 trainees as of 2025.

Also, under the **"International Environmental Cooperation Project"** we are implementing various environmental cooperation projects utilizing the human network that we have built through international environmental human resource development projects etc.

In Hanoi, Vietnam, working together with the city and prefecture-based companies, we have utilized the Ministry of the Environment's "City-to-City Collaboration for Zero Carbon Society" program to introduce the outstanding environmental and decarbonization technologies of prefecture-based companies to the city, and have carried out efforts aimed at improving its environment.

In Bangkok, Thailand, we have been supporting the city's efforts to reduce waste, one of its key challenges, by providing on-site technical guidance to help establish local recycling systems.

Fukuoka International Environmental Management Program (FINE)

Invited countries (past)

China, Thailand, Vietnam, India

Content

Lectures and site visits etc.

- General environmental management (waste treatment, air conservation etc.)
- Environmental education



Solving environmental problems in the Asian region



Building a human network in the environmental field

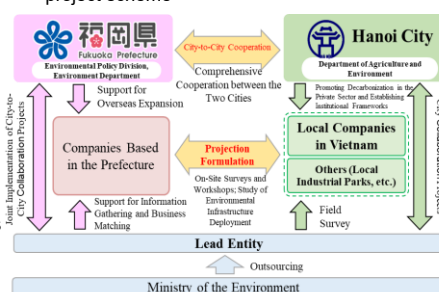
International Environmental Cooperation Projects

Hanoi, Vietnam

Support provided through the Ministry of the Environment's "City-to-City Collaboration for Zero Carbon Society" program

- Co-hosting workshops between the city and the prefecture
- Exhibiting at a booth at an international exhibition on environmental and energy technologies organized by the city
- Provision of information on environmental technologies such as renewable energy, the prefecture's environmental policies, and waste management

Diagram of the City-to-City Collaboration project scheme



On-site tour of the demonstration facility



Bangkok, Thailand

Supporting Bangkok, which has set waste reduction as a key challenge

- Producing an "awareness-raising video for city residents" featuring 3R initiatives by prefecture-based companies and organizations
- Creating a "waste-sorting awareness leaflet for city residents"
- Providing technical guidance for establishing the city's recycling systems

Awareness-raising Video for Bangkok Residents



Technical guidance session (workshop)



Inquiries regarding international environmental cooperation:

International Environmental Cooperation Section, Environmental Policies Division,
Department of the Environmental Affairs, Fukuoka Prefecture

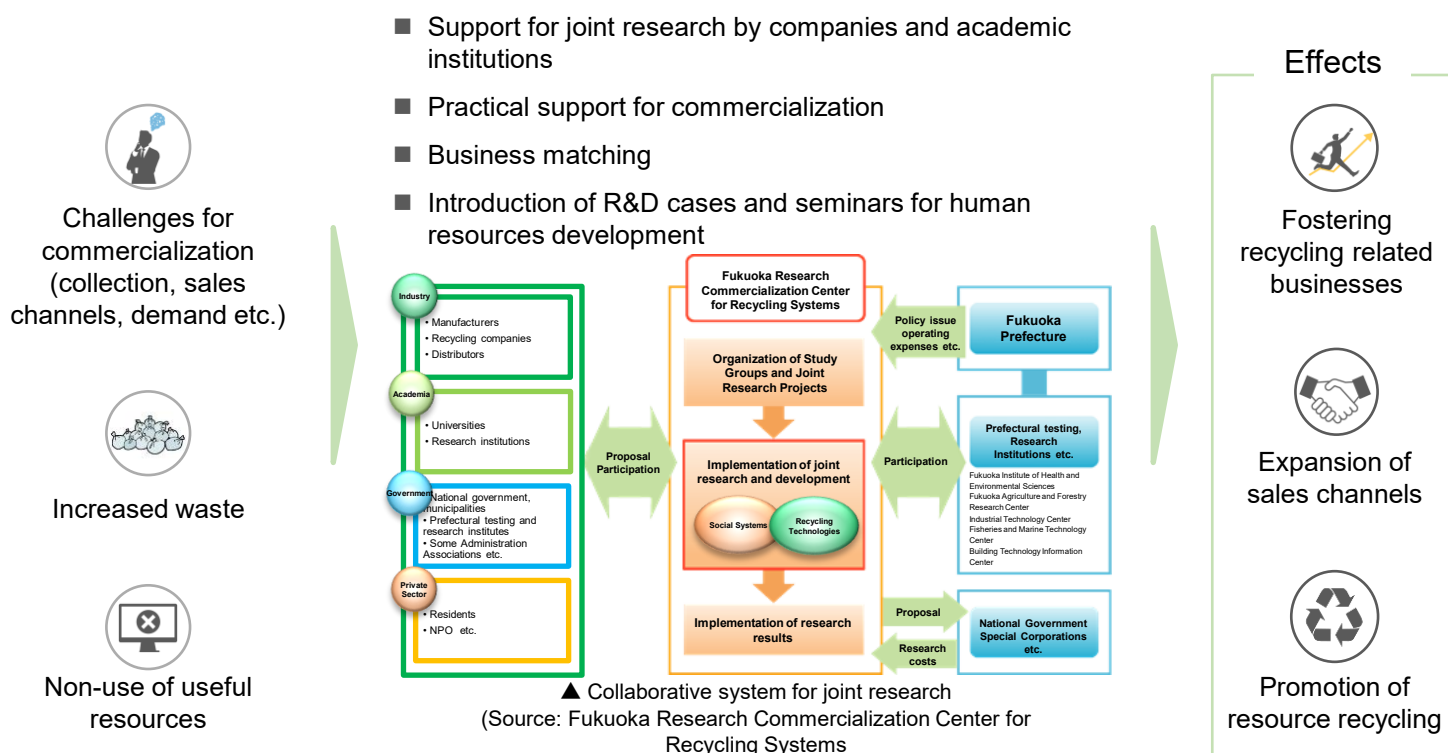
TEL: +81-92-643-3352/FAX: +81-92-643-3357 E-mail: kansei@pref.fukuoka.lg.jp

■ Promotion of a recycling-oriented society and circular economy – Construction of a recycling system integrating industry, government and academia

With the aim of promoting the recycling of resources and the reduction of waste, beyond simply the development of recycling technologies, we are promoting the development of a resource recovery system at the “**Fukuoka Research Commercialization Center for Recycling Systems**”, supporting sales channel expansion, and **supporting the spread and expansion of the prefecture's certified recycled products**.



Fukuoka Research Commercialization Center for Recycling Systems



Recycled Product Certification System



■ Forming living environments for a healthy and comfortable life – Conservation of water and atmospheric environments

We have formulated “sewage treatment principles” for the conservation of the water environment in the prefecture and advance effort to promote the dissemination of processing equipment and to pursue sustainable and efficient operations management. Regarding the conservation of the atmospheric environment, we use simulation models to forecast air pollution concentrations and manage the atmospheric environment through monitoring. Through such measures, we aim to create a healthy and comfortable living environment.



Maintenance of Sewage and Septic Tanks according to Fukuoka Sewage Treatment Principles



Regional differences in spread of sewage treatments

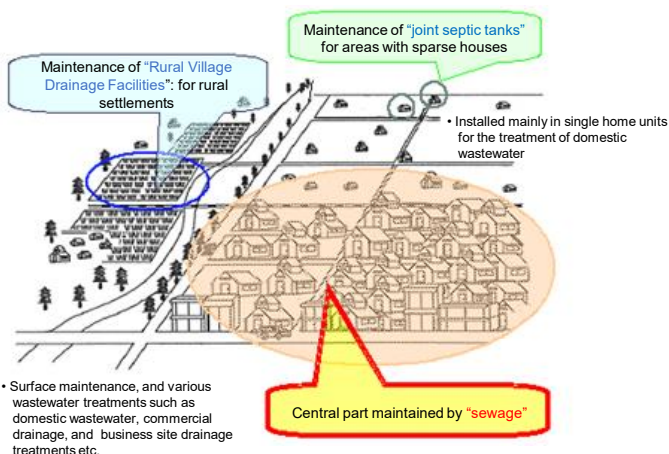


BOD/COD measures for river and sea areas



Aging and declining operating rates of sewage treatment facilities

- Formulate “sewage treatment principles” and disseminating these to sewage treatment facilities to promote efficient management
- Promoting the introduction of low-cost maintenance methods, the introduction of septic tanks, the optimization of sewage treatment facility sites, activities to raise awareness of residents and the introduction of public-private partnership initiatives etc.



Effects



Increased sewage treatment population penetration rate



Improved water quality in public water areas



Renewal of sewage treatment facilities



Air Pollution Monitoring and Survey/Research

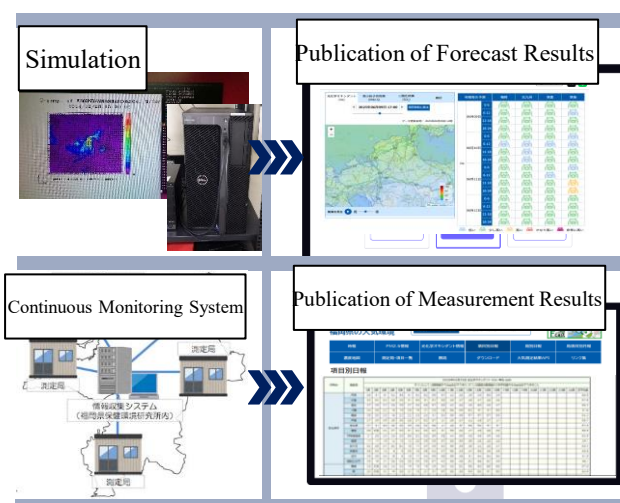


Health damage caused by photochemical oxidants and PM_{2.5}



Air pollutants crossing international borders

- Forecasting air pollution concentrations within the prefecture through simulation
- Continuously monitoring air pollution conditions within the prefecture at monitoring stations



Effects



Promotion of countermeasures based on factors that occur



Improvement of living environment

■ Transitioning to a carbon-free society – Promotion of energy saving

We are supporting the eco activities of households working on energy and resource conservation with the **"Eco-Family Support Program"** in the household sector for the transition to a carbon-free society. In addition, in the business sector, support for the adoption of decarbonized management is provided through the "Energy Conservation Consultation Service", which dispatches experts to offer energy-saving advice; the "First Step Support Program," which assists with greenhouse gas emissions calculations; the "Special Energy Measures Financing Program," which provides low-interest loans for the introduction of energy-efficient equipment; and the "Eco Business Establishment Support Program," which supports businesses engaged in energy and resource conservation initiatives.



Household Sector – Eco Family Support Program



Increased emissions in the household sector

Fukuoka Household Sector CO₂ Emissions

2013: 8.16 million tons

2023: 3.44 million tons

- Registration of homes engaged in energy saving and resource saving as "Eco Families"
- Supporting an eco-friendly life with the smartphone app, granting benefits and awards for efforts



▲ Eco Family Support App

Effects



Fostering a consciousness of preventing global warming



Promotion of action at home



Reduction of CO₂ emissions



Business Sector – Support for Energy Conservation Initiatives



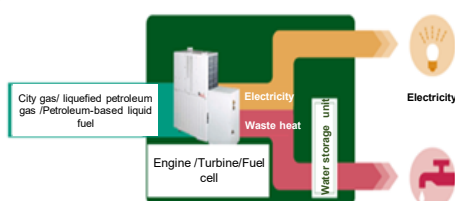
Increased emissions in the business sector

Fukuoka Business Sector CO₂ Emissions

2013: 8.63 million tons

2023: 3.86 million tons

- Dispatches specialists to provide advice on improving equipment operation and the benefits of upgrading to energy-efficient equipment
- Supports the calculation of greenhouse gas emissions, the establishment of emissions reduction targets, and the development of decarbonization management plans
- Implements low-interest loans to promote the introduction of energy-efficient equipment, cogeneration systems, and renewable energy facilities
- Gives preferential treatment in procurement bids and recognition to Eco Business Establishments that are committed to reducing electricity and gasoline consumption.



▲ Mechanism of cogeneration



▲ Eco-companies sticker

Effects



Promotion of investment in energy saving



Promotion of action by businesses



Reduction of CO₂ emissions

■ Transitioning to a carbon-free society – Promotion of renewable energy

We are developing an enabling environment to promote the adoption of renewable energy, support is provided by dispatching "Fukuoka Prefecture Renewable Energy Introduction Support Advisors" to businesses and other organizations considering the installation of renewable energy systems, as well as through initiatives such as the "Solar Power Generation Equipment Joint Purchase Promotion Program" and the "Emergency Decarbonization Support Program for Small and Medium-sized Enterprises." Also, efforts are being made to advance the deployment of offshore wind power generation, a "key technology" for establishing renewable energy as a primary power source, while promoting the diversification and decentralization of energy sources.



Support for the Introduction of Renewable Energy



Increased thermal power generation output



Barriers to introduction and lack of information

- Dispatching experts to companies considering the introduction of renewable energy and implementing the "Fukuoka Prefecture Renewable Energy Introduction Support Advisor Dispatch Program"
- Supporting the installation of solar power generation systems and related equipment by utilizing a joint purchasing scheme that reduces costs through economies of scale.
- Providing partial subsidies for the installation costs of on-site solar power generation systems and other equipment by small and medium-sized enterprises in the prefecture.
- Proactively installing solar power generation systems at prefectural facilities.



▲ Introduction of solar power generation at Fukuoka Prefecture Dazaifu schools for special needs education

Effects



Increased introduction rate of renewable energy



Promotion of introduction consideration by private operators



Reduction of CO₂ emissions



Introduction of Offshore Wind Power Generation



Increased thermal power generation output



Need for self-sustaining and distributed energy

- An offshore wind farm with a maximum total generating capacity of 220 MW began operations in March 2026 within the port area of Kitakyushu City
- Initiatives are underway to designate a "Promotion Zone" under the Act on Development of Marine Renewable Energy Power Generation Facilities (off the coast of Hibikinada, Fukuoka Prefecture)



▲ Kitakyushu Hibikinada Offshore Wind Farm

Effects



Diversification and decentralization of energy sources



Increased introduction rate of renewable energy



Reduction of CO₂ emissions



Waste

ECOWOOD Co. Ltd



Company website

The only production plant in the western Japan carrying out the “Regeneration of limited resources”

Contact Address

1-12-1 Hibikimachi, Wakamatsu-ku, Kitakyushu

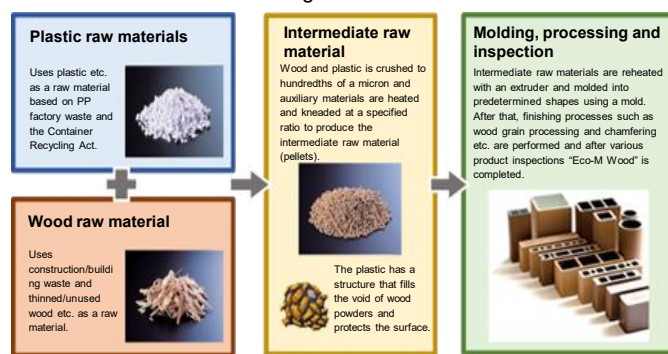
Telephone/Email

+81-93-751-2424/info@eco-wood.jp

There is a connection between the SDGs that the world is aiming to achieve and our own Corporate Philosophy. ECOWOOD continues to manufacture products with a focus on the environment, quality and technology to realize our Corporate Philosophy.

“**Eco-M Wood**,” a wood building material that uses unused wood and waste plastics as raw materials to continue to evolve coexistence with wood

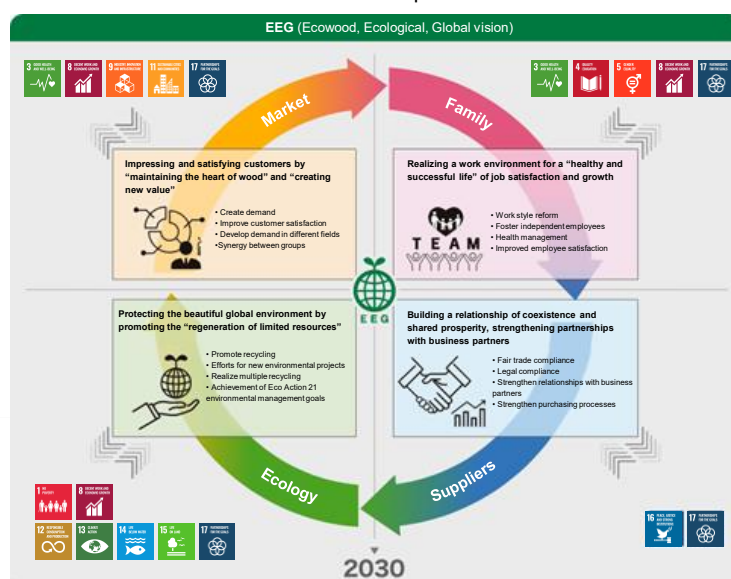
▼ Eco-M Wood manufacturing method



▼ Examples of product use (decking, benches etc.)



▼ Achievement of Sustainable Development Goals



Effectiveness

“Eco-M Wood” is a building material that utilizes used plastic and unused wood and by **promoting the effective use** of resources. This product contributes to the reduction of the amount of timber harvested and **the conservation of forests**.

Also, by using used plastic, **the emission of CO₂** from the production of raw materials derived from natural resources **can be reduced by 92%** and using this product on a wooden deck **can reduce CO₂ emissions by about 41% over the total lifecycle**.

In addition to being environmentally friendly, it also has high performance equivalent to or better than natural wood in terms of strength retention, antiseptic properties, water absorption and termite repellency, so that customers can **use it long-term with confidence**.

Applications

This product can be used as construction material for decks, louvers, fences and benches in various facilities such as parks, schools and government offices. Our commitment to the environment, quality and technology is highly valued by many customers.

Strengths

● Using this product to improve environmental issues

Eco-M wood utilizes wood and plastic that is not being effectively used and has a recycled material content of over 90%. The local production and local consumption of resources can also be achieved by regenerating aged decks and existing wood.

● Quality backed by a wide range of certifications

We continue to work and make improvements to produce homogeneous and high-quality products that customers can use with confidence. We also carry out thorough quality control and have obtained official certifications and authorizations such as ISO9001, JIS Mark Display Product, Fukuoka Prefecture Certified Recycled Product, and “SuMPO EPD” (in 2024).

● High planning and technical capabilities to meet customer needs

For over 20 years, we have been adding new functions depending on the application, while maintaining a commitment to the texture of wood. We have demonstrated high planning and technical capabilities providing products that meet the needs of our customers, with the realization of weight reduction by foaming the core layer and an ultra water resistance specification, the pursuit of realistic wood grain, the realization of high weather resistance, combining with aluminum to make it lightweight and high strength, and improving heat shielding and charge suppression.



Waste

MIS Co., Ltd.



Utilizing waste as a resources for environmental improvement and regional revitalization!

Contact Address

5413-10 Imazu, Nishi-ku, Fukuoka

Telephone/Email

+81-92-834-5131/m.i.s@mis-r.co.jp

Major Overseas Bases

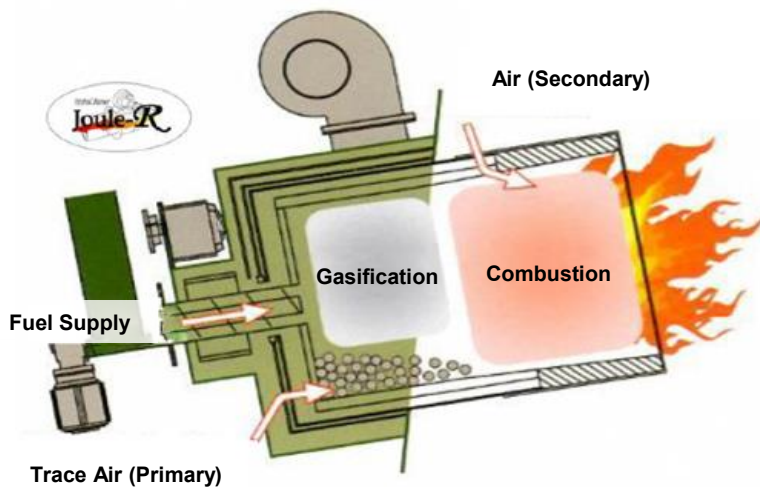
Active in Vietnam

Fossil fuels such as oil and coal, which are the primary sources of energy, are finite resources and emit carbon dioxide, a cause for global warming.

We will harness biomass to create environmentally friendly energy, in the belief that this will contribute to the prevention of global warming and help protect the global environment. We also aim to be a company that contributes to society by promoting the development of a recycling-oriented society.

“Joule-R” biomass burner that effectively utilizes various waste as fuel

▼ 2-stage combustion with the gasification and combustion method



▼ Joule-R installation example (Rice husk-fired hot water boiler)



Effectiveness

The “Joule-R” biomass gasification and combustion burner converts a wide variety of waste into fuel and offers three benefits.

- **Promotion of decarbonization**

Significantly cuts CO₂ emissions by reducing the use of fossil fuels.

- **Contribution to a recycling-oriented society**

Turns waste into valuable resources and eliminates resource wastage.

- **Revitalization of the local economy**

Circulates local waste as energy, thereby contributing to the region.

Applications

Biomass waste discharge and processing companies and businesses can utilize the biomass-based fuel—which was previously disposed of—as various forms of thermal energy.

Strengths

- **Gasification and combustion method**

Rather than combusting the fuel directly, it is pyrolyzed with a small amount of air to generate highly combustible dry distillation gas, which is then burned. This process also thermally decomposes tar components, which are of concern.

- **Swirl-type combustion method**

This is a swirl combustion type gasification burner. Unlike conventional combustion systems, it is a combustor in which the combustion cylinder rotates continuously. Agricultural residue such as rice husks, which are otherwise difficult to burn, can also be utilized as fuel.

- **Suppression of dioxin generation**

Because biomass-based waste is gasified at high temperatures without combustion, the generation of dioxins is suppressed.



Waste

Kakuno Manufacturing Co., Ltd.

Solving both global warming and organic waste treatment with virtual zero CO₂ emissions!

Contact Address

378-3 Ichimaru, Buzen, Fukuoka

Telephone/Email

+81-979-82-3888/

ceobrain1618@kakuno.page

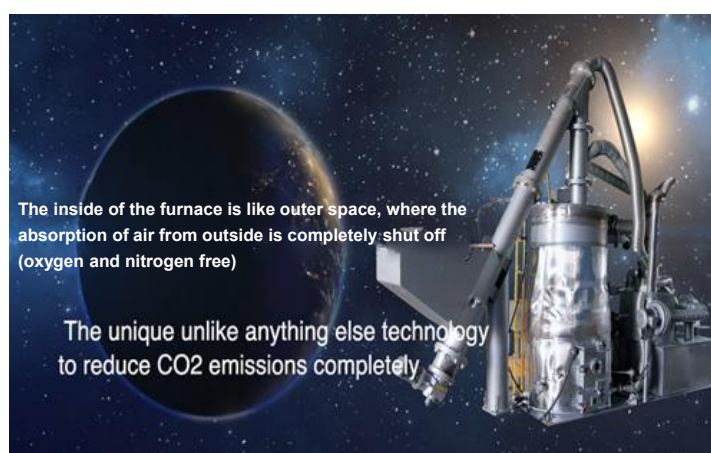
Major Overseas Bases

Active in Thailand, Taiwan, Myanmar, Philippines, Qatar etc.

Pyrolysis in furnaces without taking in air from outside and without oxygen or nitrogen is a breakthrough effect and solution for global warming and garbage disposal. The volume of garbage can be significantly reduced without releasing CO₂ or harmful gases into the atmosphere, and it can be recycled and reused.

Next generation pyrolyzer realizing the overwhelming reduction and recycling of organic waste

▼ Appearance of next generation pyrolyzer



▼ Comparison of pyrolyzer and incinerator/carbonizing furnace

Type	Pyrolyzer	Carbonization Furnace	Incinerator
Garbage disposal level	Level 5	Level 4	Level 3
Processing temperature	300-500°C	800°C	800°C
By-product	Para-metals	Charcoal	Ash
Volume reduction	1/200	1/10-1/40	1/10
CO ₂ emissions	N	Y	Y

*Garbage disposal level (Organic waste garbage)

Level 1: Garbage is not collected but is abandoned in the city.

Level 2: There is no garbage incineration facility and garbage is left as is to pile up at designated places.

Level 3: Garbage is incinerated to reduce the volume of garbage to ash and is buried in landfill.

Level 4: Garbage is recycled and used effectively but unused items are buried in landfill.

Level 5: CO₂ emissions are eliminated as a measure against global warming, and everything is used as a resource, with nothing going to landfill.

Note: These garbage disposal levels are determined by the company through exchanging opinions with experts. The figures and by-products in the table are according to the company's research. CO₂ emissions refer to the burning of waste and fossil fuels during operation (energy for start-up not included).

Effectiveness

Conventional incinerators burn fossil fuels and organic waste, emitting a large amount of CO₂ and generating a huge amount of incineration ash. There is a high cost involved in procuring these fossil fuels and disposing of the incineration ash on an ongoing basis.

On the other hand, next generation pyrolyzers **do not emit CO₂ from combustion** and can **reduce the volume of organic waste to 1/200**. Collected items can be expected to be used as new "para-metal" materials, so there is **no need for landfill disposal**. We believe that **pyrolyzers can be a trump card in realizing a carbon neutral and carbon-free society**.

Applications

With the introduction of this equipment, it will be possible to properly process waste plastics which have become a social problem to recycle, further ensuring profitability. This also leads to the suppression of waste plastic that has been abandoned in cities, mountain villages and oceans due to a lack of equipment or improper processing, contributing to solving the microplastic problem.

Strengths

● Recycling as new materials without emitting CO₂

Conventional incinerators emit a large amount of CO₂ from their combustion and the disposal of incineration ash is also costly. Pyrolyzers process under anoxic conditions, so there are none of the CO₂ emissions from conventional combustion. At the same time, with the sale of collected items continuous profits can be expected.

● Achieve efficient power generation with little waste heat loss

Because the pyrolyzer doesn't have a chimney, neither exhaust gas nor exhaust heat is discharged into the outside air and there is very little waste heat loss. Because the heat is retained, hot water and steam can be fully recovered and used to provide highly efficient power generation. In addition, because the gases are circulated internally and treated by a smoke deodorizer, making operation smokeless and odorless. Please be sure to install the unit indoors.

● Improved profitability from new materials with high added value

We are promoting the development of new applications (fertilizer, paint, electrical materials etc.) for collected new materials, "para-metals," with different players such as universities. Selling the collected items is expected to generate greater continuous revenue than the process of waste disposal. This can also contribute to the effective use of rare metals in waste, which have not been effectively collected in the past.



Waste

KURINKA Co., Ltd.



Contributing to sustainable development with natural and breathable pavement!

Contact Address

2-6-7 Togo, Munakata, Fukuoka

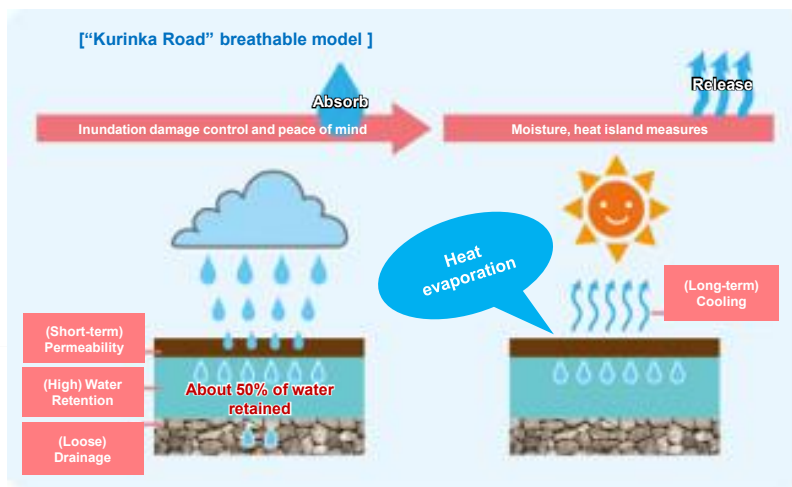
Telephone/Email

+81-940-36-9763/info@kurinka.com

Our company promotes “local production, local consumption model” for coal ash. We are currently promoting this together with local partner companies in the Kanto, Chugoku and Okinawa areas. This model can also be expanded overseas, and we are actively moving into countries centered in East Asia.

“KURINKA Road,” a highly permeable water-retaining pavement created from coal ash

▼ “Kurinka Road” water permeability and water retention mechanism



▼ Examples of construction for sidewalks and slopes etc.



Effectiveness

Our paving material is manufactured from coal ash generated from a coal-fired power plant, contributing to **the effective use of resources and the reduction of waste landfill disposal**. Also, by combining a permeable layer and water retention layer, it is effective for **landscaping and drainage measures** by preventing puddling and as **a measure against the heat island phenomenon and topsoil outflow**.

Also, like regular pavement, it is effective for weed control, allowing you to maintain a beautiful landscape.

Applications

The main raw material of this product is coal ash, so please contact us if you are looking for an effective use for coal ash, including coal-fired power plants. Also, “Kurinka Road” can be adopted in areas where there are squalls and heavy rainfall in a short period of time as landscape conservation and disaster measures for sidewalks and slopes from the high drainage and water retention functions.

Strengths

● **Effective use of coal ash generated from a thermal power plant**

Using coal ash (clinker ash) generated from a coal-fired power plant as the main raw material, we produce good quality road paving materials from waste. We have achieved highly functional and stable quality with the optimal formulation of solidifying agents and enhancers for environmentally-friendly pavement which doesn't adversely impact surrounding plants and animals.

● **Realization of comfortable road surfaces due to high permeability**

The permeable payer is constructed with coal ash and epoxy resin, giving it very high water permeability. This feature maintains a comfortable road surface that is easy to walk on by allowing rainwater to quickly seep down without creating puddles.

● **Water retention to prevent the heat island phenomenon and disasters**

The high water retention effect of the water retention layer, which consists of coal ash and a solidifying agent is also a useful measure against the heat island phenomenon, lowering road surface temperatures by about 7-10 degrees. Also, because it allows the water to penetrate gently after it has been retained, as well as being used as a drainage measure to deal with the risk of topsoil outflow due to rainwater erosion it can also be used in places where it is difficult to lay drainage ditches.



Waste

KENKI Corporation



Achieve easy, safe, reliable and inexpensive drying with high technical capabilities!

Contact Address

3-9-7 Kamimuta, Hakata-ku, Fukuoka

Telephone/Email

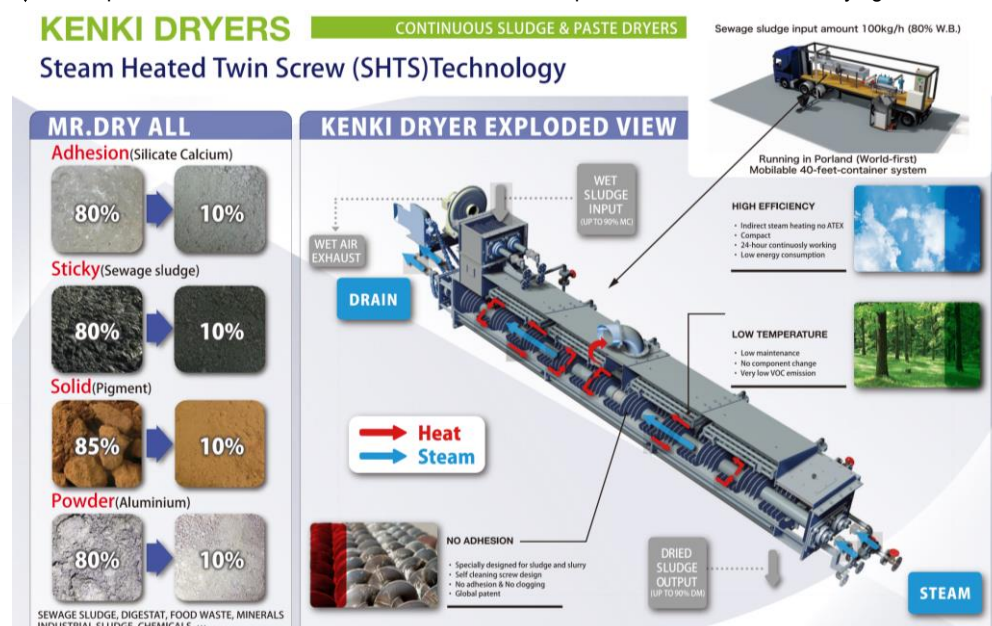
+81-92-411-1203/info@kenmori.com

The continuous low temperature Kenki Dryer, with 11 patents in 8 countries*, is capable of drying adhesives and sticky materials that can't be dried by other companies. We currently have distributors in France, Taiwan and Russia, but are also looking for partners in other areas.

*Patented Countries and Regions: Japan, USA, Canada, UK, France, Germany, Switzerland, Taiwan

Continuous low temperature dryer utilizing internationally patented technology

▼ Example and internal structure of a continuous low temperature "KENKI DRYER" drying device



Effectiveness

The amount of waste generated can be reduced by drying dehydrated sludge and organic waste discharged from water treatment facilities, and livestock manure etc.

Recycled raw materials (fuel, feed, fertilizer etc.) can be recovered after drying, which not only contributes to **the effective use of resources** but by combining with a pyrolyzer gas and oil can be collected and this can also be expected to **reduce greenhouse gas emissions**. It can also be used for adhesive and sticky materials, and it is also possible to dry raw materials with a moisture content of 90% or more to 2% or less (depending on the application and the properties of the raw material).

Applications

This technology can be used for drying for sewage treated sludge and production processes/wastewater treatment processes for various industries (automobiles, chemicals, semiconductors, food etc.). This can have a significant effect on waste reduction and the reduction of running costs by efficient drying, so please contact us if you have any problems with sludge treatment etc.

Strengths

● Adopts an original adhesion/agglomeration prevention mechanism

Adhesive raw materials are dried while separating and stirring them with a blade, and through repeated crushing the agglomeration of the coagulant in sludge can be prevented. This allows for the stable processing of adhesive and sticky raw materials (sludge, organic waste, slurry etc.) without problems.

● Realizes highly efficient drying with low pressure steam

The latent heat when low pressure steam turns into liquid is 2-5 times the sensible heat, and by drying with latent heat improved efficiency and miniaturization of dryers can be achieved. The drying temperature can be adjusted with steam pressure allowing for drying at even low temperatures (100 degrees or below), reducing water content without changing the composition of organic waste.

● Improved production efficiency by operating continuously 24 hours a day

It can be operated continuously for 24 hours, and by combining with a continuous pyrolysis device, solid fuel and soil conditioners can be collected using 100% of sludge energy etc.



Waste

Sakai Kogyo Co., Ltd.



Expanding business from multiple angles along with life cycle of buildings

Contact Address

378-1 Mizumamachi Kiyomatsu, Kurume, Fukuoka

Telephone/Email

+81-942-64-3881/

sakaikougyou@wing.ocn.ne.jp

My grandfather made Jojima roof tiles. He would ride a bulldozer to collect good quality soil in it to use as the raw materials, and then knead it, shape it, and bake it in a kiln. I would go with him in the middle of the night to check on the temperature of the kiln... The times have now turned to recycling rather than manufacturing. We want to focus on what we can now do with valuable limited resources.

Improving road surface environments with recycled waste tile “roof chips”

▼ Example of using “roof chips”



▼ Online sales of “roof chips”



▼ Before and after application of “roof chips”



Effectiveness

“Roof chips” are a recycled product (particle size adjusted crushed stones) which reuses waste roof tiles (good quality clay baked pottery tiles and smoked tiles) and can be spread on the surface of roads or sidewalks instead of crushed stone or gravel. The roof chips produced from the porous materials of roof tiles are characterized by high water retention and permeability.

Due to its low thermal conductivity, **the road surface is about 5 degrees lower than that of asphalt roads**, and aside from its effectiveness at suppressing the heat island phenomenon it also improves drainage with its excellent water permeability. It also has **the effects of weed control and preventing mud**.

Applications

It can be used in various situations in addition to roads and sidewalks, including parks and gardens. Because its effects of improving drainage and preventing muddiness it is also suitable for use in places susceptible to rainwater. It can also be used in homes for security measures and weed control.

Strengths

● Use by spreading on road surfaces instead of gravel

In addition to demonstrating the effects of water retention and water permeability which are characteristic of roof tiles, they are also lighter and easier to handle than stone or gravel, and because of their natural reddish brown or smoked coloring they fit well on road surfaces and in the garden. They have been introduced in parks, schoolyards, parking lots, flowerbeds and service areas etc.

● Can buy small bags in retail for spreading

We can sell roof chips in small bags (e.g. 12 kg bag), and also support large quantity sales. The company has also applied our experience and know-how in construction and civil engineering in the development of “roof chips”.

● Contributing to the solving of environmental issues by effectively using waste roof tiles

“Roof chips” are recycled waste roof tiles that would previously have become landfill, recycled into an added value resource. As the original roof tile manufacturer, we have utilized our expertise to develop this new application of “roof chips” to more effectively utilize waste roof tiles.



Waste

Genuine R&D Co., Ltd.



Discovering and developing functional ingredients and providing genuinely reliable products!

Contact Address

416, Tokan Fukuoka No. 2 Castel, 1-18 Hiemachi, Hakata-ku, Fukuoka, Fukuoka

Kyoto Research Institute : 3-2-16 Hikaridai, Seikacho, Soraku-gun, Kyoto

Telephone/Email

+81-774-94-5121/info2@genuinerd.co.jp

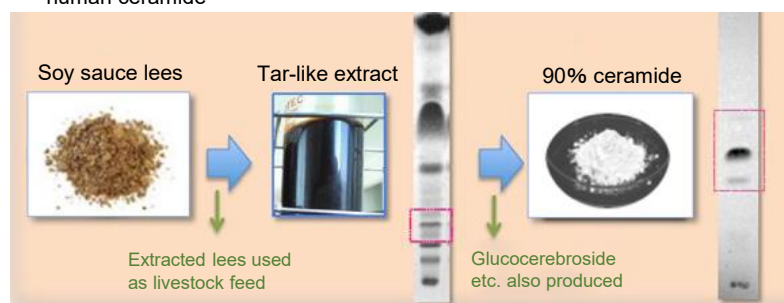
Major Overseas Bases

Active in USA (Los Angeles)

We have been researching naturally derived functional ingredients from non-standard crops and processed food waste, based on the concept of “things that can’t be found anywhere else!” We have been successful in developing natural human ceramide, a rare material in the world, and manufacture final products at our in-house GMP certified factory* based on evidence of safety and functionality. *GMP (Good Manufacturing Practice): Third-party certification for health food manufacturing and quality control

Collection and development of materials from food processing residue using “natural human ceramide”

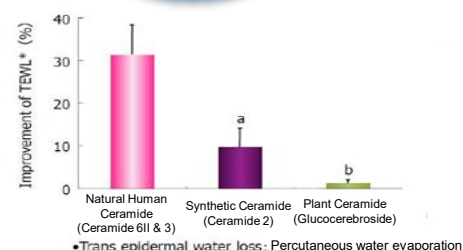
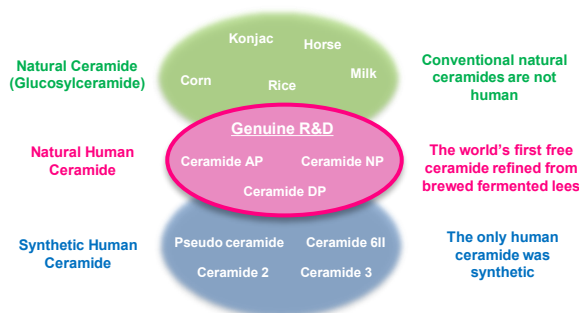
- ▼ Advanced utilization technology focused on the production of natural human ceramide



- ▼ Manufacture of functional cosmetics and supplements utilizing food waste



- ▼ Types of ceramides and water retention/barrier function effect of natural human ceramide



Effectiveness

The recovery of high value-added substances which were previously discarded from food processing residue and the provision of this as materials can be useful in the **reduction of waste disposal** and the **effective use of resources**.

In the case of soy sauce lees, the collection of “natural human ceramide” which is a functional substance with high cosmetic effect, and the use of by-products for feed achieves **advanced circulation for food processing residue**. And by utilizing these materials, we can deliver **environmentally friendly products** (health foods, pharmaceuticals, cosmetics, etc.).

Applications

New functional substances may be found even in the residue from food processing factories that is usually discarded. We want to realize the development of materials for cosmetics and pharmaceuticals that are friendly to the earth and people, through the process of collaborative research and development.

Strengths

- **World's first Purification of natural human ceramide**

Human ceramide is one of the lipids contained in the stratum corneum of the skin and is an indispensable ingredient for skin moisturizing and barrier functions. We have been the first in the world to succeed in the extraction and purification of human ceramide from abandoned brewed fermented lees.

- **Higher barrier functions from “natural” and “human type”**

Non-natural synthetic ceramides only contain limited types of short ceramides out of the approximately 350 types of human ceramides. Non-human natural ceramides have a structure different from ceramides present in the human stratum corneum, and have difficulty penetrating and moisturizing. Because these are human and natural ceramides, they feature high moisturizing power and barrier functions.

- **Technology to extract/purify various functional substances**

We are conducting research and development into technologies to extract and purify functional substances other than natural human ceramide from various food processing residue etc. These extracted functional substances can provide needed raw materials for the manufacture of health foods and medicines, cosmetics, and fertilizers and also provides support for commercialization.



Waste

Shin Kitakyushu Kogyo Co., Ltd.



Towards the creation of sustainable industry that is friendly to people and the environment

Contact Address

1-9-6 Shinmoji, Moji-ku, Kitakyushu City

Telephone/Email

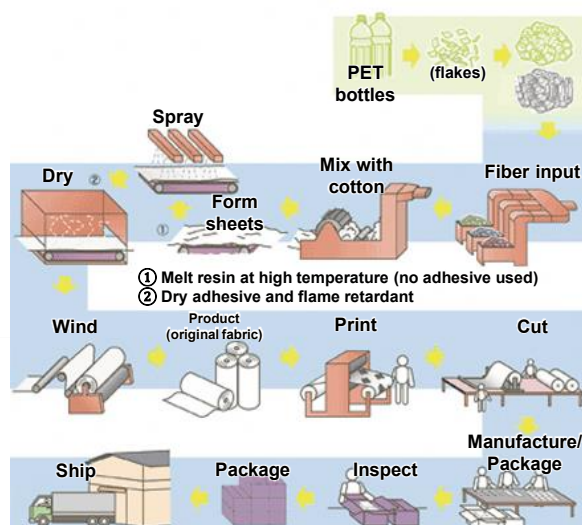
+81-93-481-2893/

<http://shinkitakyug.co.jp/contact.html>

Our company manufactures non-woven fabric and injection molds using plastic as raw materials. For this purpose, we actively work on recycling and work towards the advanced manufacture of plastic products in harmony with the environment.

Development and manufacture of recycled, non-woven fabric filters achieving a high compound ratio

▼ Non-woven fabric product manufacturing processes using recycled PET fiber



▼ Filter performance test equipment



▼ Examples of recycled PET non-woven fabric and biodegradable plastic products



Effectiveness

We develop and manufacture products using recycled PET (polyethylene terephthalate) fibers and choosing our products can contribute to **reduced waste emissions and the effective utilization of resources**. Also, by reducing dependence on petrochemical resources this leads to a **reduction of greenhouse gas emissions**.

In terms of product functions our range hood (ventilation fan) filters reduce labor for the cleaning of range hoods by preventing the adherence of oil, and our air conditioner filters can be expected to purify the air by collecting mites and house dust etc.

Applications

By installing our filters in household range hoods and ventilation fans, and office, store and factory air conditioners, it is possible to save labor in cleaning work and maintain a comfortable air environment.

Strengths

● Technical capability to realize high rate of PET recycling

We have cultivated technological capabilities for a high compound ratio with 30 years of development of products using recycled PET. Currently, we manufacture non-woven fabric products using PET fiber as a raw material such as our marque product range hood filters, which achieve a 90% compound ratio of recycled PET.

● Pursuit of safe and functional products

We have in-house quality inspection equipment and carry out thorough quality control, conducting regular combustion and tensile tests and measuring pressure loss (air resistance). There is a good balance of filtration performance and aeration performance, with air passing through well and sound removal of oil and fine dust.

● Certified recycled products that meet prefectural standards

Our range hood and ventilation fan filters have been certified "Fukuoka Prefecture Certified Recycled Products" due to their high content of recycled resources. (as of March 2021)



Waste

Shinryo Corporation



Official website

Circular Economy
Solutions Business

Utilizing chemical technologies to take limited resources to the next generation!

Contact Address

RISO Kurosaki-ekimae Bldg. 3-9-22 Kurosaki, Yahatanishi-ku,
Kitakyushu

Telephone/Email

+81-93-643-2969/
tanaka.shingo@me.shinryo-gr.com

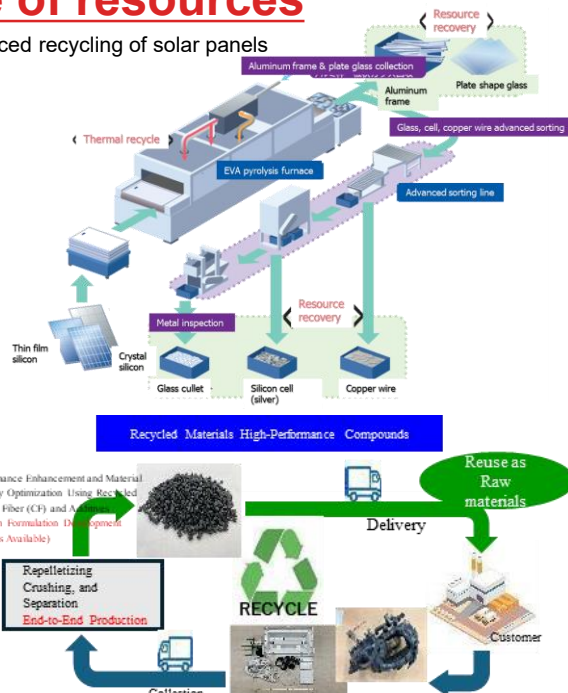
Major Overseas Bases

Active in China (Suzhou), Taiwan

We are a company that looks to show good faith to our work, people and the earth. We make full use of chemical technologies through “reduce, reuse and recycle” and with the “reliance (trust)” of the community we contribute to the creation of a resource-recycling society.

Processing solutions connected to cost reduction and the effective use of resources

▼ Advanced recycling of solar panels



Also supports PEEK, LCP, COP, PPS, PBT, PA, PC, etc.
Plastic products made from process scraps and defective items can be cleaned, sorted, and repelletized for reuse as raw materials.

Effectiveness

By applying Shinryo's proprietary technology to the advanced recycling of discarded solar panels, we are solving the problem of solar panel waste. Our high-performance compounds made from recycled materials make it possible to roll out horizontal recycling of factory offcuts and used plastics.

Also, since the precision cleaning of semiconductor manufacturing equipment contributes to reduced production loss due to dirt, this can contribute to **improved yield** and **reduced waste generation**. Surface polishing allows used semiconductor silicon wafers to be reused many times. This **lowers the procurement cost** of new wafers and **cuts greenhouse gas emissions associated with the manufacture of new wafers**.

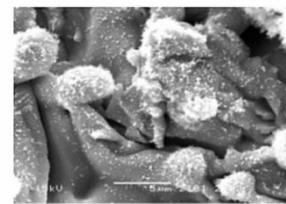
Applications

In addition to carrying out solar panel recycling ourselves, we **provide the associated technology and equipment** in Japan and overseas.

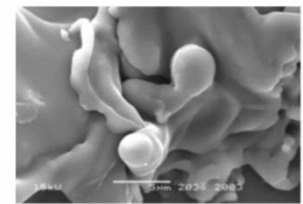
We provide the recycling of used wafers and precision cleaning of semiconductor manufacturing equipment for semiconductor manufacturers.

▼ Removal of fine particles from semiconductor manufacturing equipment by precision cleaning

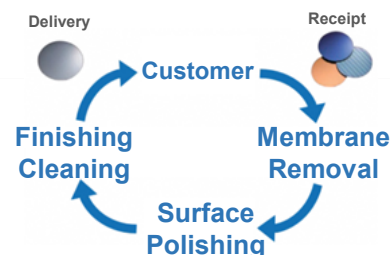
Before



After



▼ Recycling of used monitor and dummy wafers



Strengths

● Promotion of a resource-recycling society with advanced processing technologies

Our recycled wafer business and precision cleaning technologies for semiconductor manufacturing equipment are backed by technologies and know-how in physical and chemical processing technologies cultivated through many years of recycling and waste treatment. We possess advanced technical capabilities that allow us to supply recycled products, including used plastics, suitable for horizontal recycling and we make proposals which lead customers to the effective use of resources and reduce costs in their production activities.

● Precision cleaning technologies for semiconductor manufacturing equipment

Using our precision cleaning technology, we can remove μm to nm units of dirt from semiconductor manufacturing equipment. We can remove fine particles that are the source of dust and residual abrasions and alterations to the layers of ceramic/metal surfaces.

● Provision of recycled wafers with excellent cost and environmental functions

We recycle monitors and dummy wafers used in the semiconductor manufacturing process utilizing our proprietary technologies for film removal, surface polishing and finishing cleaning. We conduct inspections with high-precision equipment and provide recycled wafers of reliable quality.



Waste

Total Care System Co.



Aiming to contribute to the SDGs through the recycling of disposable diapers!

Contact Address

1-10-40 Isoda, Hakata-ku, Fukuoka

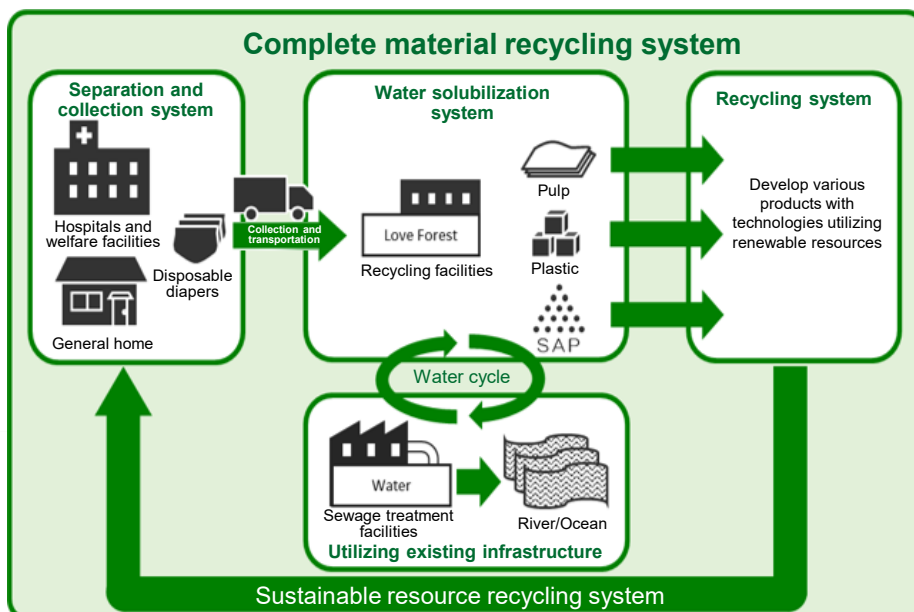
Telephone/Email

+81-92-588-3365/info@totalcare-system.co.jp

We have positioned used disposable diapers as a resource. We aim to create a society where recycling is the norm, instead of incineration. We are working towards the realization of cities that are friendly to the global environment through collaborations with nation and local governments, local residents and various businesses.

Eco-friendly recycling system of disposable diaper

▼ Complete material recycling system



▼ Factory exterior (LOVE FOREST Omuta)



▼ Goods collected in the recycling system



Recycled pulp



Building materials / toilet paper



Plastic raw materials (pellets)



Soil conditioner

Effectiveness

By recycling used disposable diapers issued from medical, welfare and nursing care sites instead of incinerating them, we can **promote the effective use of resources**.

Our company is building a functioning system which unifies “separation and collection,” “water solubilization treatment,” and “recycling” **to reduce greenhouse gas emissions** from fossil fuels and greatly contribute to **the reduction of environmental load**. Disposable diapers have a high water content and low combustion efficiency, so there are also merits in reducing the load on incinerators.

A separation and collection is essential for building a recycling system, and we hope to work in cooperation with local governments **to contribute to the sustainable development of the region**.

Applications

We offer a consulting business for each stage of construction of a recycling system, from manufacturing to sales, emissions, and recycling. We are also looking to expand our business overseas, and have a business alliance with a major Taiwanese sanitary material manufacturer.

Strengths

● Separation and collection in cooperation with medical welfare facilities and local governments

We have built a cooperative system with medical and welfare facilities to reduce the amount of mixed foreign matter which is a barrier to recycling, and we are also working on the separation and collection of used disposable diapers in cooperation with local governments in Fukuoka Prefecture (Oki, Miyama, Chikuzen).

● Technology to replace incineration with “water solubilization treatment”

Currently, most disposable diapers are incinerated, but our company became the first to commercialize water solubilization in Japan in 2005. Using water and a separating agent, used disposable diapers are separated into pulp, plastic, sludge and other materials reducing CO₂ emissions by about 40% compared to incineration. We have realized a cost-effective methods of recycling in utilizing existing infrastructure (cooperation on sewage treatment plant water resources etc.)

● Recovery of useful resources utilizing a recycling system

The recycled pulp recovered by solubilization is used as a raw material for building materials and toilet paper, the sludge is used as soil conditioner and the plastic is recycled as solid fuel (RPF), but we are currently moving ahead with research and development with the goal of returning useful products to the emitting companies (upcycling).



Waste

NARITABISO Co., Ltd.



A first in Japan! Demonstrating an eco-friendly method of using agricultural plastics as asphalt paving material

Contact Address

1-8-17 Seiho, Kurume, Fukuoka

Telephone/Email

+81-942-44-1030/

<http://www.naritabisou.com/contact/form.php>

Our company is engaged in recycling-focused waste management for a future aligned with the SDGs. This initiative will help improve the recycling rate of agricultural plastics and reduce CO₂ emissions. Using this material in asphalt paving will reduce CO₂ emissions during asphalt production and decrease the amount of asphalt used. Furthermore, improving the performance of asphalt pavements will help reduce life-cycle costs and address future labor shortages.

Patent granted for new technology to upcycle agricultural plastic

▼ Recycling of agricultural plastics (Circular Economy)



▼ Upcycling of agricultural plastics

- No washing process required
- Used as an asphalt mixture
- Improved pavement performance
- Reduced CO₂ emissions
- Reduced asphalt consumption
- Reduced life-cycle costs
- Helps address future labor shortages

Construction and manufacturing method...Patented

Effectiveness

Agricultural plastics often have significant amounts of mud, etc., adhering to them, making the washing and drying processes labor-intensive and costly; consequently, landfilling or thermal recycling (energy recovery) have historically been the primary disposal methods. At our company, we crush the material without washing and turn it into a commercial product. When incorporated into asphalt mixtures, this material helps improve properties such as adhesion, durability, and water resistance.

Through this, we aim to:

- Contribute to the 2050 carbon neutrality goal
- Improve performance compared to conventional pavement
- Contribute to the material recycling of plastics

Applications

We collect, treat, and process agricultural plastic waste, and supply asphalt paving materials for parking lots, roads, and other applications.

Strengths

● Wide variety of waste treatment and recycling results

We handle a wide variety of waste and based on factors such as their composition, shape, and condition, establish appropriate recycling routes and process the waste at our facility. We then manufacture, process, and supply the "necessary materials" to businesses that use recycled products.

Thermal recycling has specific delivery requirements, such as chlorine concentration and size, and the same applies to material and chemical recycling. It involves time and cost. We do more than simple waste disposal: we handle treatment and processing of waste on behalf of companies committed to advancing the circular economy, and we match recycled materials with appropriate reuse destinations.

● Use of agricultural plastics in asphalt mixtures

Performance tests have confirmed that this material delivers twice the performance of conventional asphalt pavement. When applied to an area the size of a 10-car parking lot, this material reduces CO₂ emissions by approximately 100 kg!



Waste

Nippon Magnetic Dressing Co., Ltd.



Practicing a sustainable growth in the “recycling industry”

Contact Address

3-6-42 Bashaku, Kokurakita-ku, Kitakyushu

Telephone/Email

+81-93-521-4400/ nmd_info@nmd.co.jp

Major Overseas Bases

Hankook Matics Co., Ltd. (Korea)

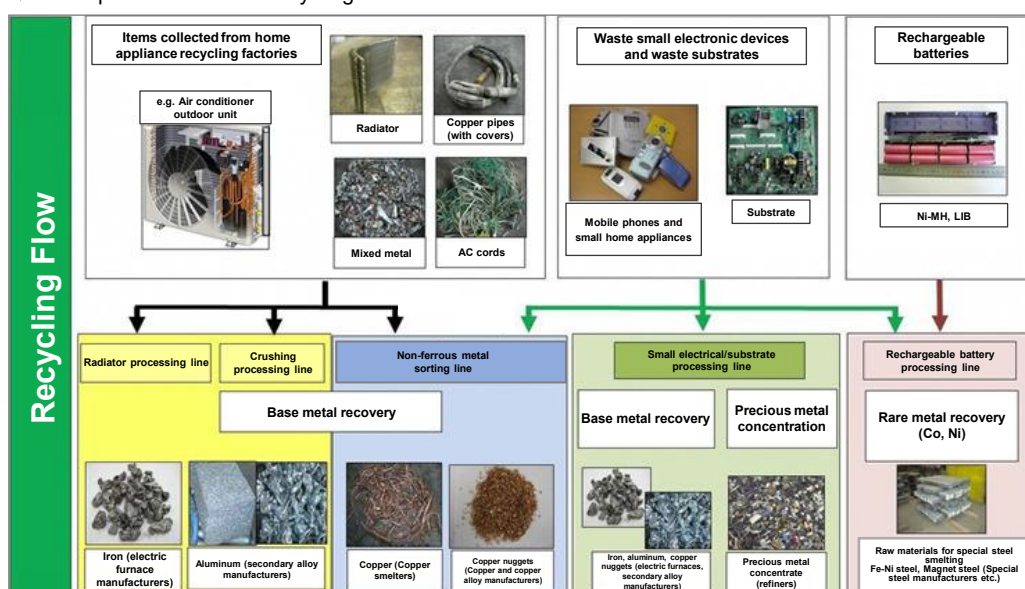
Since our founding in 1949, Nippon Magnetic Dressing Co., Ltd. has developed business activities mainly in the recycling of steel by-products (slag) generated from steelworks. Recent business developments have included the development of rechargeable battery recycling technology in the field of environmental and non-ferrous recycling, and we have worked on the recycling of rechargeable batteries equivalent to industrial waste and general waste, with a focus on small home appliances, contributing to domestic resource circulation and the reduction of final disposal volumes.



Completed in December 2025

Technological cooperation on E-waste including for rechargeable batteries

▼ Example of an E-waste recycling flow



▼ Small electronic equipment processing facility



▼ Rechargeable battery processing facility



Effectiveness

Utilizing our technology and know-how for the dismantling, crushing and sorting of resources collected from waste electrical and electronic equipment, we promote the proper treatment of waste and the recovery of various valuable metals such as iron and non-ferrous metals, contributing to the **control of environmental pollution in waste treatment, reduction of disposal landfill and improvement of resource efficiency.**

We also have the technology and know-how to recycle rechargeable batteries with the expected increase of emissions due to the spread of smartphones etc. This can contribute to **the recovery of resources such as rare metals which have previously been difficult to collect, preventing the outflow of harmful substances and ignition etc.**

Applications

We provide technical cooperation on the processing and recycling of waste electrical and electronic equipment. We also consult with government officials who are considering building various recycling systems.

Strengths

● **Metal recovery using various crushing and sorting technologies**

We have our own recycling factory for waste electrical and electronic equipment in Fukuoka and have a track record for proper processing and recycling. We build unique processing processes utilizing various sorters such as magnetic sorters, eddy current sorters, dry specific gravity sorters and heavy liquid sorters. The processes makes it possible to collect various valuable metals.

● **Proper processing/recycling technology for rechargeable batteries**

Our company is registered as a certified business operator under Act on Promotion of Recycling of Small Waste Electrical and Electronic Equipment and have developed a recycling technology for rechargeable batteries. Using a superheated steam pyrolysis furnace, it is possible to properly dispose of rechargeable batteries, collecting various valuable metals such as rare metals and special steel.

● **Achievements in overseas technical cooperation**

We provide technical cooperation for overseas businesses utilizing our track record of the proper processing and recycling of waste electrical and electronic equipment in Japan. We have provided cooperation in the form of guidance for the dismantling of waste electrical and electronic equipment for dismantlers in Cebu, Philippines.



Waste

Beetle Engineering Co., Ltd.

Affiliate (Nishihara Shoji)
website

Making proposals overseas for the optimization of infectious waste treatment!

Contact Address

2-8-2 Jinnoharu Yahatanishi-ku, Kitakyushu

Telephone/Email

+81-93-644-0158/s-narita@beetle-ems.com

Major Overseas Bases

Active in Indonesia

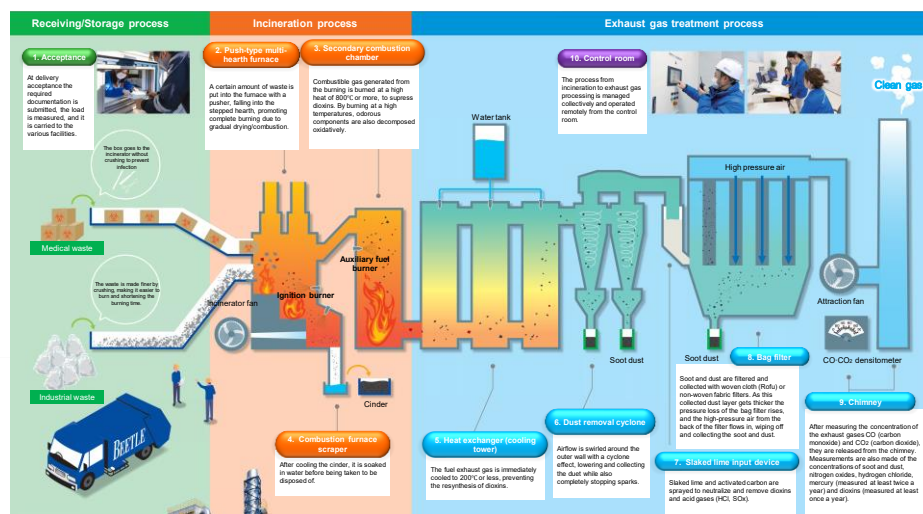
We have optimized price, environmental considerations, human resource development and operations management support to eliminate the anxiety concerned with the introduction of incinerators. We also propose sustainable systems for domestic and overseas users that don't require large equipment.

Small incinerators providing the improvements of softwares and hardwares

▼ Push-type multi-stage incinerator



▼ Processing Flow



Effectiveness

Our “BE series” push-type multi-stage incinerator is a small incinerator for the stable combustion of various waste including medical, municipal and industrial waste. Through the thorough review of device specifications in joint research with engineers, we have realized **high efficiency, small-scale processing at a price range that is easy to implement**. We have a fully environmentally friendly structure from combustion to exhaust gas treatment processes, meeting domestic and international standards. We also promote the **proper treatment of medical waste** and contribute to **resolving the issue of insufficient landfill sites by reducing the volume and weight of waste**.

Applications

This facility can be introduced at processing companies, government agencies (local governments etc.) and medical institutions aiming to dispose of 15 to 50 tons of waste per day.

Strengths

● Environmentally friendly and low cost

Thorough environmental consideration is given to not only suppress the generation of harmful substances such as dioxins with stable combustion at about 900 degrees, but also the emission of exhaust gas contact water using indirect cooling methods, etc. At the same time, our pursuit of practicality with designs that do not require large-scale wastewater treatment equipment allows introduction at a low price and in a small area because of the simplicity of the equipment.

● Human resource training center

A major concern when introducing equipment is the reduction of anxiety in human resource development, and at our company's factory in Fukuoka prefecture we accept operational training from Japan and overseas using actual machinery. We support smooth introduction through such opportunities to handle the equipment in advance.

● Cooperation with a traceability system

By using it with our company's “bee-net system” centralized waste management system, we can build a more reliable and appropriate processing flow. We also support soft management measures in waste treatment, including medical waste with dangerous and harmful properties.



Waste

Fukuoka Metal Enterprise Co., Ltd.



Stable supply of high-quality iron scraps from a raw material manufacturer of steel to Japan and Asia

Contact Address

885-19 Nakaizumi, Nogata, Fukuoka

Telephone/Email

+81-949-25-1800/fukkin@fukkin.co.jp

For more than 75 years since our founding, we have worked for the stable management of metal scrap/waste collection and processing. We are expanding our business in every aspect based around our weapons of "quality" and "speed." In recent years we have also developed Kyushu's first unmanned resource recovery system "eco Pit 24" (<https://www.fkeco.jp/>).

Production and sales of high-quality iron scraps (raw material for steelmaking) through the establishment of quality control systems (collection, processing and sorting)

- ▼ Left: ISO14001 (Environmental Management) certification
Right: ISO45001 (Occupational Safety and Health Management System) certification



- ▼ 400-horsepower vertical shredder



Effectiveness

Our company has abundant technology and know-how in the management and treatment of high-quality iron scrap (raw material for steelmaking). By performing the appropriate processing for each type of input, the impurities mixed in the scrap can be managed. In addition to contributing to the improvement of the environment, we aim to **improve resource efficiency by recycling as higher value-added raw materials.**

We also use our own quay for the export of iron scrap, realizing the **supply of high-quality recycled raw materials to Asian countries and the expansion of international resource circulation.** Furthermore, since the recycling of iron scrap directly contributes to reducing CO₂ emissions in electric arc furnace used to manufacture steel, contributing to the realization of a decarbonized society is also one of our company's key missions.

Applications

Proper treatment of metal scrap and waste resulting from production at manufacturing plants. We also sell steelmaking raw materials to businesses looking to purchase raw materials.

Strengths

● Optimal processing utilizing processing technologies and know-how

We have a 1,250 t scrap shear (2 units), 400-horsepower vertical shredder, and a press machine, and have the technology and know-how for the compression cutting, crushing and compression processing of metal scrap etc. Utilizing these technologies and know-how, it is possible to perform optimal processing depending on the type of metal scrap and to produce higher quality iron (raw material for steelmaking).

● Proper management of procured metal scrap

By managing procured metal scrap depending on types and suppliers, it is possible to perform optimal processing for each. We are also working hard on human resource education to improve awareness of safety and quality.

● Abundant track record of overseas transactions

We have an abundant record of transactions (export of iron scrap etc.) with Asian countries (Korea, Thailand, Philippines, Vietnam, Malaysia etc.) from Kyushu's first proprietary import/export quay in Hibikinada district of Kitakyushu.



Waste

Fukuoka Bioindustry Development Research Institute



Protecting food-safety and the environment with the power of microorganisms!

Contact Address

275-8 Kitanomachinaka, Kurume, Fukuoka

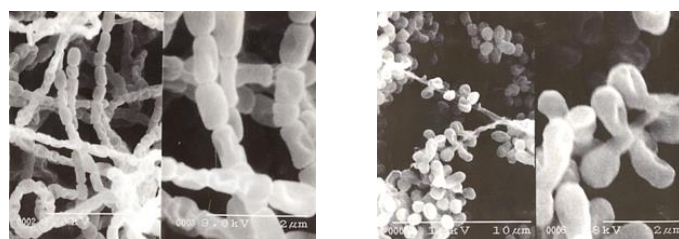
Telephone/Email

+81-942-78-6135/houzou@fukuseiken.co.jp

We effectively return to the soil organic matter nutrients that have been robbed from soil, reducing the use of pesticides and fertilizers as much as possible, and regaining the original nutrition and strength of crops, thinking first about "protecting food, human health and the environment for the future."

Recycling of organic waste using selected highly functional actinomycetes

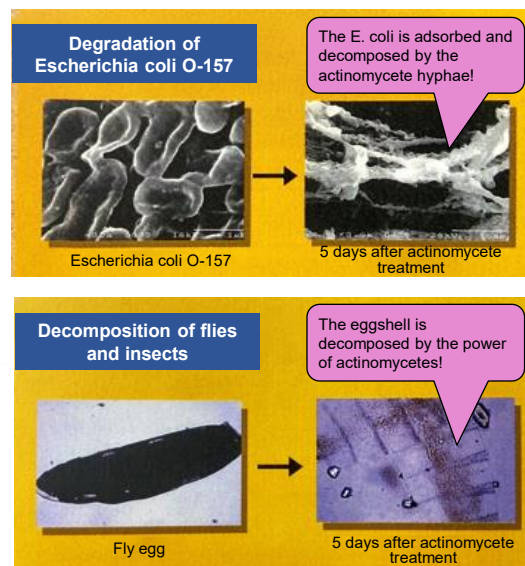
▼ Functional actinomycetes (patent-published strain)



▼ Actinomycete Functional Manufacturing System (AFMS)



▼ Effect of actinomycetes (prevention of flies and death of pathogens)



Effectiveness

The action of selected highly functional actinomycetes allows raw waste and livestock excrement to be used effectively as compost, **reducing waste generation** and contributing to **promoting the effective use of resources**. By taking advantage of its high decomposition ability, it suppresses the generation of foul odors and flies and also leads to **the improvement of hygienic environments and measures against odors around composting facilities and barns**.

It also has the effect of killing pathogens, and can decompose persistent organic substances (chitin, keratin, collagen etc.) and substances that prevent germination and growth such as phenols which are not easy to decompose, thereby **providing high quality compost with fewer harmful substances**.

Applications

This technology can be introduced in livestock barns as well as composting facilities treating organic waste discharged from ordinary households and food factories. We not only sell microbial materials, but also develop composting equipment.

Strengths

● Selected actinomycetes with high decomposition ability

We recycle waste and purify the environment using actinomycetes with high decomposition ability against organic matter which are repeatedly cultured and selected inhouse. The optimal actinomycetes can be provided, combining features depending on the application. Substances that can be difficult to decompose by other microorganisms (such as chitin, phenols etc.) can be decomposed.

● High value-added compost production using raw waste as a resource

Through the action of actinomycetes, we have achieved the high-quality production of compost by decomposing phenols that adversely affect germination and growth while suppressing the generation of foul odors and flies, and simultaneously killing pathogens. Quality analysis has confirmed the quality of this compost.

● Improves the sanitary environment of barns and contributes to odor control

By suppressing the generation of foul odors and flies and killing pathogens, not to mention the composting of livestock waste, this contributes to a hygienic environment inside and outside barns and measures against odors. The high deodorant effect and efficient composting and economy of our in-house developed compost manufacturing equipment are attractive.



Waste

FROM Industry Co., Ltd.



Using expertise and technologies to develop products to meet the needs of society

Contact Address

422-5 Kamisokoino, Nakama, Fukuoka

Telephone/Email

+81-93-244-2061/frominfo@joy.ocn.ne.jp

It has been about 50 years since the manufacture of disposers began in Japan. By repeatedly improving this product in-house and inheriting its technical history, we propose new kitchen life and contribute to environmental protection and energy saving/creation.

A high performance and safe disposer utilizing a large number of patented technologies

▼ Disposer (large capacity type)



▼ Hammer and fixed blade structure



The FROM disposer can handle it!

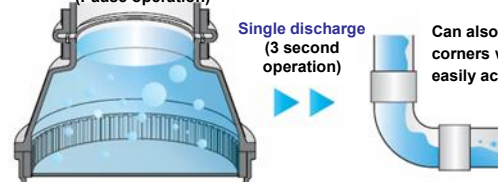


▼ Illustration of jet cleaning

Non-clogging due to jet cleaning

The crushing chamber is filled with water after crushing and is discharged at once (once every 5 times)

Pour water for 12 seconds
(Pause operation)



Effectiveness

Food waste can be crushed into small pieces with our disposer, and the solid and liquid can be easily separated with a dehydrator. As a result, the weight and volume of garbage can be reduced. This efficient transport of kitchen waste can contribute to energy saving and cost reduction, the reduction of incineration volume, and the improvement of combustion efficiency by reducing the water content of kitchen waste.

In addition, used together with biogas power generation equipment waste can be used to generate power, contributing to the emission control of CO₂ from fossil fuels and the sustainable use of resources.

Applications

It can be used in homes and apartments, and commercial disposers can be used in school lunch centers, hospitals, schools and restaurants etc.

Strengths

● High crushing power and safety

By utilizing saw-shaped fixed blades and a hammer that increases centrifugal force, the unit has a high crushing power and can crush kitchen waste that is difficult to dispose of such as edamame pods and onion skins etc. In addition, given that our company's product is a batch type operation (lid switch operation) there is no risk of accidentally touching it and it is very safe.

● Excellent drainage with jet cleaning

It has a function which jet cleans on a regular basis by filling the crushing chamber with water and discharging it in one go after the crushing of kitchen waste. This makes maintenance easy and prevents the clogging of pipes with garbage after crushing.

● Efficient operation based on the amount of kitchen waste

The unit has a program that processes kitchen waste depending on the amount of kitchen waste thrown in. It enables efficient operation depending on the amount of kitchen waste and contributing to energy saving and cost reduction.



E.I.M. Control Systems Co., Ltd.



Providing comprehensively customized services

Contact Address

3-5 Kurosakishioishi, Yahatanishi-ku, Kitakyushu

Telephone/Email

+81-93-622-4131/eimssqa@eimss.co.jp

Our company has been working on water treatment technologies since its founding. We are also working on environmental conservation and energy saving technologies with our involvement in plant equipment such as for steelworks and harbor crane control etc. In process control we support a wide range of electrical controls incorporating remote technologies such as communications and remote monitoring etc. We are researching every day based on the concept of "delivering highly reliable control systems that satisfy customer needs."

Contributing to the development, monitoring, and management of water infrastructure from a systems control perspective



▲ Introduction of control system at a water treatment facility



▲ Many achievements in harbor crane equipment

Effectiveness

Our company specializes in system control devices and has **contributed to the management of river and ocean river quality** by working with water treatment equipment manufacturers to introduce management systems for water and sewage facilities, rainwater treatment facilities and dams and rivers.

Aside from water treatment equipment, we can also achieve **energy savings** with highly efficient controls of systems that use motors.

Applications

We provide control systems for the construction of **water and sewage facilities and various hydraulic facilities (river gate equipment, manhole pumps)** by municipalities. The control of **water treatment facilities for electric power plants and steel works** is also possible.

We have many achievements in the control of cranes in harbor areas.

Strengths

● **Custom made to meet your needs**

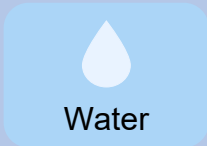
Because our products and systems are custom made, we are able to introduce control systems that are suitable for the actual usage environment. Some electrical manufacturers offer general-purpose control systems, but at EIM Control Systems we consider control systems unique to each setting. We also provide a comprehensive service, from design to after-sales support.

We can respond strongly to the need to "improve energy saving effectiveness." Our strength is the ability to introduce control systems that respond to local needs and legal requirements.

● **Compatible with various electrical systems**

In addition to water treatment equipment, we also manufacture control systems for harbor cranes, steelworks work machinery and operating systems, and power plant coal transport equipment, as well as facility management systems such as communication monitoring systems.

We provide highly efficient control systems with advanced technology while collecting information on the latest equipment and products.



ISHIGAKI COMPANY, LTD.



Maintaining water infrastructures with “trusted technology”!

Contact Address

Head office : 1-6-5 Marunouchi, Chiyoda-ku, Tokyo
Kyushu Branch : 1-9-3 Hakataekimae, Hakata-ku, Fukuoka

Telephone/Email

+81-3-6848-7900/<https://www.ishigaki.co.jp/contact/>

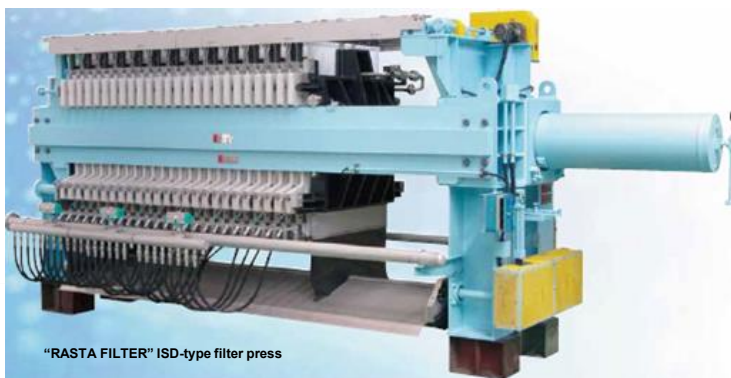
Major Overseas Bases

Ishigaki Environmental Machine (Suzhou) Co., Ltd. (China)
+86-512-6283-2377

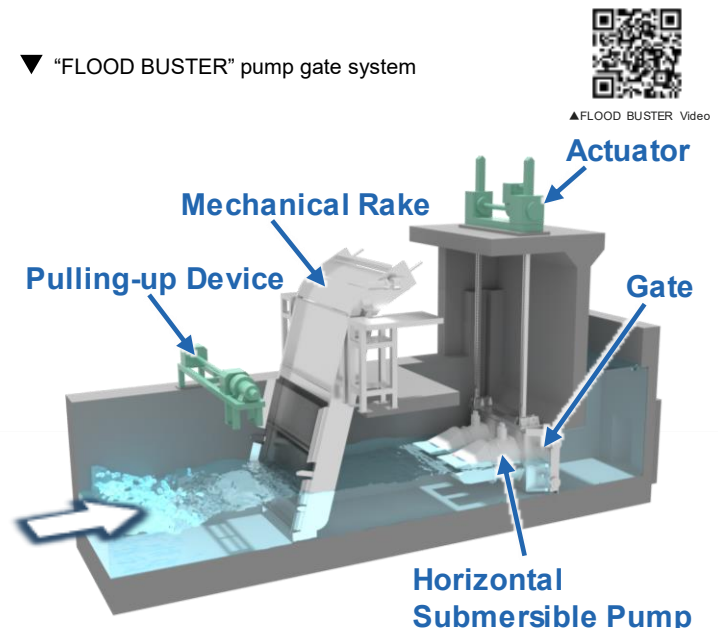
Ishigaki develops, designs and manufactures unique dehydrators and pumps etc. These products are used in many fields in Japan and overseas such as in water and sewage facilities and production processes and we demonstrate technologies from the maintenance of familiar household water to the conservation of water environments.

Highly efficient solid-liquid separation by filter cloth-type “LASTA PRESS” and flood control system “FLOOD BUSTER” with minimal footprint

▼ Appearance of “LASTA PRESS”



▼ “FLOOD BUSTER” pump gate system



Effectiveness

The filter cloth-type “LASTA PRESS” is used in various fields, such as for separating the solids and liquids from sludge in water and sewage treatment plants and private factories. Its excellent dehydration performance and high processing capacity lead to **reduced processing costs** and **energy savings**. Also, by collecting the matter suspended in wastewater, it contributes to the **conservation of water environments** when discharged into lakes and rivers.

The “FLOOD BUSTER” pump gate system allows for the construction of compact and effective pumping stations in a short period of time. This is useful for city **flood control** and to **protect people’s lives**.

Applications

The filter cloth-type “LASTA PRESS” is used to separate solids and liquids in the wastewater and manufacturing processes at water and sewage treatment plants and various private factories (food, chemicals, steel, papermaking/pulp, etc.). “FLOOD BUSTER” forcibly drains rainwater from areas to protect them from flooding.

Strengths

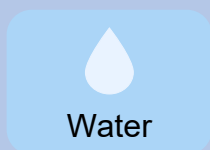
- **Self-driving filter cloth-type “LASTA PRESS” with high dehydration performance and high processing efficiency**

A filter press that operates fully automatically, equipped with a number of original mechanisms such as a top feed liquid supply, an original filter cloth independent running mechanism, and the simultaneous opening and closing of filter plates etc. The simple structure makes maintenance easy.

The ability to peel the cake (dehydrated solid) and wash the filter cloth at the same time in all rooms eliminates time and effort and also produces very high processing efficiency, which make this attractive in comparison with conventional machines that open the plate sequentially.

- **“FLOOD BUSTER” pump gate system achieving effective pumping stations**

Because it is installed directly in existing waterways, it can be constructed with a minimal amount of land. This also realizes low-cost pumping stations quicker in comparison with regular pumping stations. “FLOOD BUSTER” can pump at full speed in full water levels, and its simple configuration reduces the risk of failure due to repeated stopping and starting.



SKE Co., Ltd.



Dedicated to water all the time, and providing services our valuable customers

Contact Address

5000-1 Yamae, Chikushino, Fukuoka

Telephone/Email

+81-92-710-1780/ske@skengineer.co.jp

From the establishment of our company until today we have worked on the area of consistent fluid transfer and processing. We will continue to provide water environments that satisfy our customers, as we work to improve water related environments through the advanced treatment of wastewater and the recycling of treated water etc. as increasingly sought around the world in the future.

Proposing plans according to your needs from water intake to supply and drainage



Apartment water purification system



Detached home water purification system

▲ A water purifier installed in general households. Supplies safe water through membrane filtration.



▲ Planning optimal water treatment tailored to the customer's needs, utilizing a variety of equipment owned by the company

Effectiveness

We provide services including the installation of water purifiers in general households, water conveyancing from water intake to final discharge for construction work, and wastewater treatment at construction sites and factories **providing planning and equipment** according to requests from our customers.

In areas where tap water quality is insufficient, we can supply **safe and high-quality water** using advanced processing such as membrane filtration and activated carbon etc.

Also, utilizing our abundant knowledge of heavy metal pollution cultivated through business with the public sector and at construction sites, we are able to **properly treat wastewater** from industrial activities and construction.

Applications

We have a strong track record in wastewater treatment at factories and construction sites. We also provide services for water distribution for companies and private homes, for the safe supply of domestic water.

Strengths

● **Provision of rental equipment**

We conduct planning from design to maintenance to meet the needs of the site through efficient water supply and drainage, wastewater treatment and water purification.

We also provide services to lend equipment owned by our company. Since there is no big initial investment, this can be effective for low-cost short-term use as temporary equipment for construction or when processing for a limited time for disaster recovery work etc. Also, since it uses ready-made equipment rather than made to order, it is possible to respond quickly to urgent water pollution.

● **Compatible with various levels of water quality**

We have many achievements and technologies that can deal with diverse living environments as well as more severe environmental problems. Our strength is our ability to propose optimal plans for safe and secure life and environmental maintenance associated with construction infrastructure.



Kamata Bio-Engineering Co., Ltd.



Providing economical systems conserving the environment and ecosystems

Contact Address

3-25-1 Hakataekiminami, Hakata-ku, Fukuoka

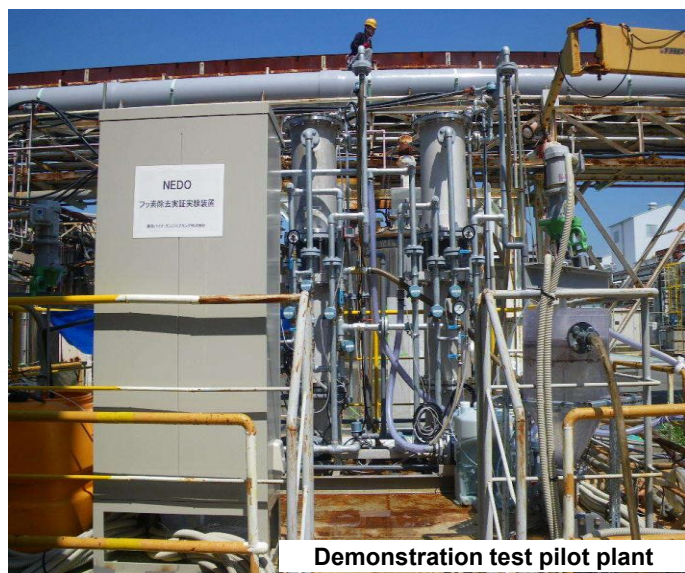
Telephone/Email

+81-92-471-1600/info@kamata-bio.co.jp

Magnetic agglutination biofiltration systems are gaining attention as devices that can purify contaminated water in a variety of fields. We have a track record of delivering systems in the private and public sectors as devices for the reuse of large amusement park lake water, car wash drainage and sewage.

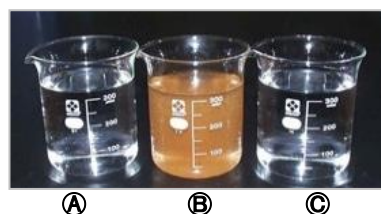
Achieving advanced water purification with proprietary adsorption and filtration technologies!

▼ Appearance of KBE Fluorine Removal System



Demonstration test pilot plant

▼ Effect of KBE iron/manganese/arsenic removal system



(a) Tap water

(b) Raw water

(c) Treated well water

▼ Appearance of KBE oil decontamination system



Effectiveness

Our fluorine removal system not only removes fluorine with high efficiency but can also reduce the amount of sludge generated due to its high adsorption efficiency. In addition, the high filtration line speed contributes to the compactness of the device, reduced initial and running costs, and reduced energy consumption.

Because our iron, manganese and arsenic removal system can remove iron, manganese and arsenic ions by air oxidation only, without the use of oxidants, safe drinking water can be obtained from well water without the production of by-products. This can also contribute to the reduction of chemical purchase costs.

Our oil decontamination system can process emulsified oil which is difficult to process. We can also miniaturize equipment due to its high adsorption and aggregation performance.

Applications

We can handle the removal of fluorine from semiconductor/glass factory wastewater, the removal of iron, manganese and arsenic from well water, and measures against oil pollution for factories and refineries, depots and ships.

Strengths

● High-Speed PFAS Adsorption-Reaction Filtration System

By injecting the PFAS adsorption-reaction agent developed by the NEDO project* with a magnetic flocculant and combining a special fiber adsorption filtration tower, PFAS, one of the environmental pollutants, can be removed at high efficiency in a short time.

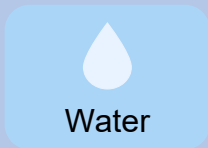
*New Energy and Industrial Technology Development Organization

● Iron, manganese and arsenic oxidation catalyst filtration

Using our special filter medium, we have achieved the reliable removal of iron, manganese and arsenic ions by air oxidation alone, without the use of oxidizers such as sodium hypochlorite or ozone etc. Our special filter medium meets US environmental standards and has a track record of about 60 years of use, so it can be used with confidence.

● Economical and ecological oil pollution removal

Our company's oil and fat water treatment agent shows good adsorption and aggregation performance for both floating oil and emulsified oil. In addition, we can detoxify the adsorbed and aggregated oil and fat components by microorganism decomposition. Also, by combining with a filtration system that allows backwash, a highly economic system can be built in comparison with other membrane treatments.



Kankyo Electronics Co., Ltd.



Creating a safe and secure society with reliable products

Contact Address

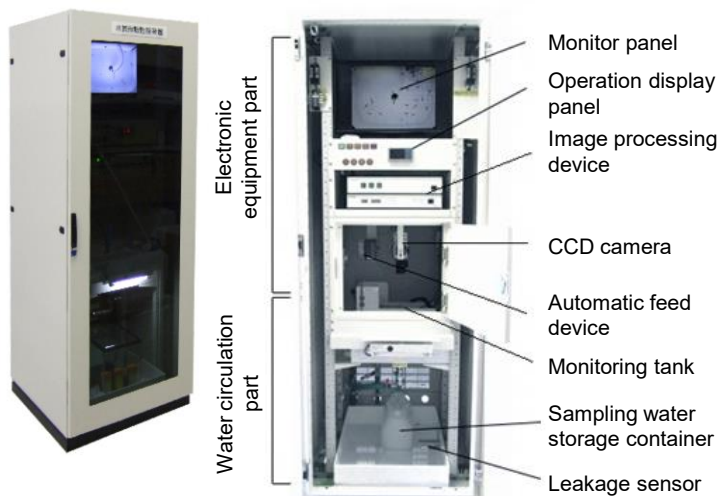
2-17-1 Taguma, Sawara-ku, Fukuoka

Telephone/Email

+81-92-872-5152//info@kankyo-densi.com

We provide solutions with our equipment to waterworks bureaus around Japan to ensure safe “water” important for daily life. We have a record of being No. 1 in Japan for delivering water safety monitoring equipment. Our technology helps you to be able to drink “water” with peace of mind!

Continuous automatic water quality monitoring system “Medaka Bioassay” with a killifish “Himedaka” and automatic image analysis technology



▲ Necessary functions are condensed into a simple form with excellent seismic and lightning resistance. Daily maintenance is easy at low cost and high performance.

Normal Times



Emergency Time



▲ If cyan flows in, the himedaka freeze due to their predatory defense instinct, and the abnormal behaviour of their stopping is detected and an alert is issued.

Effectiveness

The “Medaka Bioassay” water quality automatic monitoring device is a device that uses himedaka to **automatically and continuously monitor water quality, 24 hours a day**. With an inflow of about 1.5 liters of raw water per minute, the behaviour of about 20 himedaka can be analysed in images to monitor the water quality.

In the event of a slowdown in the movement of the himedaka, or abnormalities such as death an alarm can be issued, allowing for the **early detection of raw water contaminated by poisonous substances etc.**

Applications

Many have been introduced at waterworks and sewage facilities to ensure the safe supply of water, and it is also used for monitoring water intake from rivers for food and beverage factories and for wastewater discharged into rivers from factories.

We have installed about 250 units at purification plants in Japan alone. This contributes to the early detection of abnormalities, with a track record of having detected the influx of pesticides in the past.

Strengths

● Himedaka Bioassay

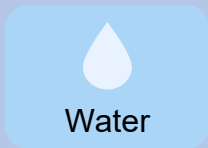
Bioassay is a method of detecting harmful substances using living things, and its utilization has been promoted in Japan since its use in measures against terrorism about 20 years ago.

Himedaka are used in Kankyo Electronics water quality monitoring devices. Himedaka have high sensitivity to toxicity and little individual difference in response, an ecological fact that has been elucidated academically, and they have been designated by the OECD as an inspection fish. With a wealth of data, results are reliable.

● Unique image analysis technology

Himedaka in a water tank are observed with a CCD camera, and images are captured and analysed by an image processing device. Alarms are then issued in stages according to the amount of activity of the analysed himedaka. If there is an abnormality in water quality, a sample of the water is collected as this alert is issued.

This is proprietary image analysis technology, which features very few false alarms. Because of its continuous automatic operation, a remote monitoring system can be constructed, and unmanned management and labour saving can be achieved.



Kyowakiden Industry Co., Ltd.



Providing “One-stop” problem solving!

Contact Address

Overseas Division : 10-2 Kawaguchimachi, Nagasaki, Nagasaki
Fukuoka Branch : 7F Nishitetsu Hakata Ekimae Bldg. 1-6-16 Hakataekimae, Hakata-ku, Fukuoka

Telephone/Email

+81-95-848-9106/info_overseabiz@kyowa-kk.co.jp

Major Overseas Bases

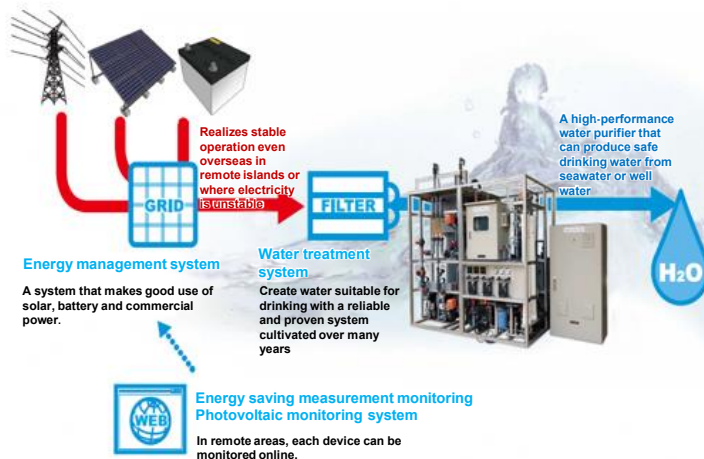
KYOWAKIDEN VIETNAM CO., LTD. (Vietnam)

Our company has accumulated technologies in the fields of water and electrical energy as an “environmental development company” and continue contributing to the achievement of the SDGs by providing services focused on the development of water and social infrastructure. We meet a wide range of needs for industrial water and wastewater treatment, primarily in southern Vietnam.

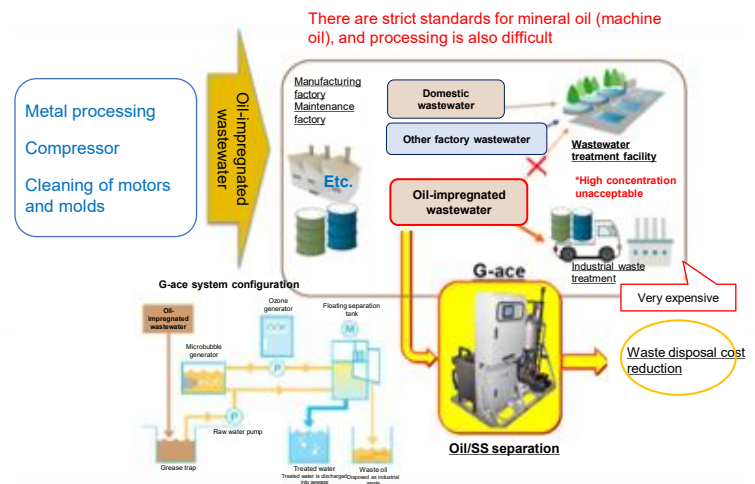
Meeting a wide range of water treatment needs, from drinking water to wastewater treatment!

▼ Hybrid water purifier

An advanced **water purification** system meeting water needs in regions with unstable power supply



▼ Oil-impregnated wastewater treatment device “G-ace”



Effectiveness

The introduction of a “hybrid water purifier” enables **stable supply of safe drinking water** even in areas where power supply is unstable. It **saves energy** because of its efficient energy management.

The oil-impregnated wastewater treatment device “G-ace” **prevents water pollution** by separating and collecting the oil from wastewater that contains oil, and also contributes to the **conservation of the water environment**. The waste such as waste oil which needed to be processed can be separated into concentrated waste oil and treated water that can be discharged directly into the sewer etc.

Applications

“Hybrid water purifiers” are being used to secure drinking and domestic water in areas away from cities, where electricity and drinking water infrastructure are inadequate. It is anticipated that they will be used at island hotel and resort locations etc. “G-ace” is suitable for treating oily wastewater at factories that perform machining and the inhouse treatment of oil-impregnated wastewater has been very well received by customers looking to reduce costs.

Strengths

● **Obtaining stable drinking water and domestic water**

The “hybrid water purifier” makes use of water purification technology developed by our company, including for seawater desalination, and can even purify river water containing salt and a lot of turbidity, and well water. Stable operation is enabled by supplying stable power by a combination of commercial power, storage batteries and renewable energy, and by optimizing operation and maintenance by remote monitoring.

● **Oil removal using ozone microbubbles**

The oil-impregnated wastewater treatment device “G-ace” floats and separates the oil in wastewater using ozone microbubbles. It can also efficiently process the mineral oils, animal and vegetable oils and emulsified oils contained in oil-impregnated wastewater. It has already been introduced in Japan and China, and we are working to spread it throughout Southeast Asia in the future, with a focus on Vietnam.

● **Handling all your needs from proposal to maintenance**

We are skilled at proposing the optimal water treatment solutions in line with customer needs, and providing for all of your needs, including after-sales maintenance.



KES Co., Ltd.



The company growing with a society and customers

Contact Address

3-31 Higashikanbaramachi, Yahatanishi-ku, Kitakyushu

Telephone/Email

+81-93-644-0220/

<https://www.kes-21.co.jp/contact/>

Major Overseas Bases

Active in Vietnam

Approaching the water environment with the “comprehensive capabilities” of our plant business, maintenance business and services and support business



▲ Abundant experience from the design of water treatment facilities to after-sales follow-up



▲ Providing advanced technology with a commitment to safety, technology and quality

Effectiveness

Our company is developing our business around the three pillars of our plant business for the design and construction of water and sewage facilities, O&M (maintenance) business operating and maintaining machinery and equipment, and service and support business performing equipment repair, facility repair and patrols, maintenance and inspections.

We provide professional services from design to after-sales follow-up for water purification plants, sewage treatment facilities and urine treatment facilities, and contribute to the stable supply of safe water and the prevention of water pollution from wastewater.

Applications

We are developing an operations management support business not only for the maintenance of water and sewage networks in urban areas, but also for industrial parks with water treatment facilities.

We have a track record of implementing feasibility studies on remote support for water and sewage facility operations in Vietnam.

Strengths

● Strengths of “Comprehensive Capabilities”

Our strength is our “comprehensive capabilities” in the three water and environment related businesses of plant construction, maintenance and management (operations management, inspection and maintenance, circulation inspection), and after-sales follow-up (equipment repair, reform, disassembly and maintenance, plumbing work and equipment manufacturing). We provide optimal solutions for the conditions at each site, by coordinating these three businesses

● Many years of experience and external collaboration

We have worked as a regional partner in water related businesses for more than 50 years since our founding and have many years experience in collaboration with local stakeholders. We are also expanding into Vietnam as a partner agency to a major Japanese plant maker.

● Providing technology overseas

To provide professional services beyond geographical constraints, we are working on the provision of remote support using IT for the operation of overseas water and sewage/industrial wastewater treatment facilities.



KOYOH Co., LTD.



Verifying effectiveness and achieving reliable results

Contact Address

169 Setakamachi Sakata, Miyama, Fukuoka

Telephone/Email

+81-944-63-3133/info@koyoh.jp

It has already been 10 years since we began research and development into the purification of tidal flat sludge by fermentation and humus of sewage sludge and thinning that had been incinerated. The practical operation finally commenced last summer. Because this involves nature there are still some points to be improved, but it has been possible to increase marine resource root species such as Japanese littleneck clams and hard clams etc. In the future, we want to work with a university team, government and fishery cooperatives to make improvements and to find the best installation methods for different conditions in various sites.

“Ryugu no Tsukai”, a water purification product that converts sludge into seafood bait



Water purification product
(Ryugu no Tsukai)



▲ Main component – Fulvic acid iron silica



▲ Effective for sludge purification and clam recovery



Before installation



1 month after installation

▲ Easy to construct to purify water environments on tidal flats or fish cages etc.

Effectiveness

“Ryugu no Tsukai” is a water purification product that can convert sludge into seafood bait.

The main component is Fe-Fulvic acid silica, which, when placed in water, breaks sludge down with the oxidizing power of ferrous iron. Also, the supply of silica at the same time promotes the growth of diatoms which are preferred by shellfish, small fish, and crustaceans. The presence of shellfish has a particularly synergistic effect on tidal flat purification and the maintenance of marine ecosystems.

“Ryugu no Tsukai” is capable of **converting about 10 cm of sludge per year into seafood bait.**

Applications

This can be used to break down sludge in closed waters such as bays and lakes where eutrophication is proceeding. In addition, by oxidizing ammonia and nitrite nitrogen into nitrate nitrogen in seafood farms, it is possible to reduce the seafood mortality rate.

Strengths

● Supplying seafood while improving the environment

A major feature is that it can break down sludge to supply food needed by living organisms, while suppressing the occurrence of nitrite, which is harmful to living organisms. Not only does this improve water environments, it also contributes to increased catches for fisheries and aquaculture.

● Inexpensive and easy to purify

This product can be used by just placing biodegradable bags containing the product on tidal flats or in fish cages. The conventional sludge treatment method of collecting sludge by ship and transporting it offshore is costly, but with “Ryugu no Tsukai” it is possible to process about 2,000 m² of sludge for about 500,000 yen.

● Utilizing plants as raw materials

The main component of fulvic acid is produced from plants such as trees, bamboo and grass etc. Also, by reusing sewage sludge we can effectively use minerals such as iron, silica and magnesium contained in the sludge.



Sanki Engineering Co., Ltd.



Contributing to the promotion of the SDGs over the world with our reliable technology!

Contact Address

1-14-18 Tenjin, Chuo-ku, Fukuoka

Telephone/Email

+81-92-517-8852/

mitsuru_hasegawa@eng.sanki.co.jp

Major Overseas Bases

Active in Austria

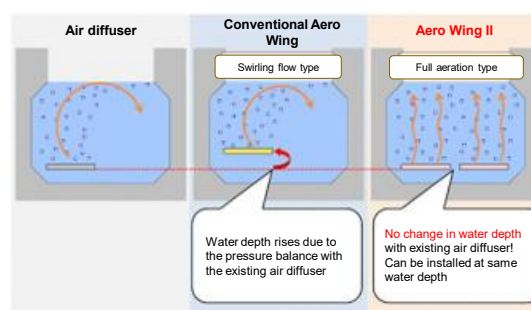
We have placed the management of environmental problems as an important issue and actively work to conserve the global environment. This proposed air diffuser has half the energy consumption of a conventional type, greatly contributing to the construction of a decarbonized, recycling-oriented society.

The “Aero Wing II” air diffuser realizes energy saving, low-cost sewage treatment with its high oxygen transfer efficiency

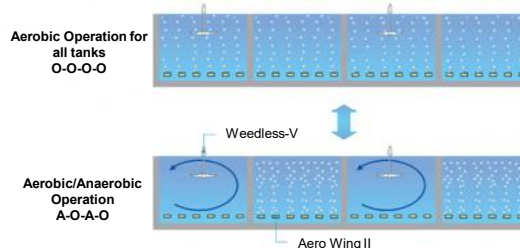
▼ “Aero Wing II”



▼ Adopted full aeration type



▼ Example of using the advanced processing method



Effectiveness

The Aero Wing II is a device that has a special synthetic resin diffuser membrane attached to a stainless steel plate achieving low pressure loss with high oxygen transfer efficiency. The amount of air blown and air blowing power can be reduced in comparison with conventional air diffusers, contributing to energy saving in sewage treatment.

In addition to the reduction of operating costs by saving energy, it is also possible to reduce initial investment costs because a pressure loss prevention device is not required.

It can also contribute to the improvement of the water environment by removing phosphorus and nitrogen because it can support advanced processing methods using an anaerobic/aerobic tank.

Applications

By introducing it to sewage treatment plants, appropriate sewage treatment can be performed while keeping energy consumption and costs down. We have a track record of having introduced more than 200 in Japan.

Strengths

● High oxygen transfer efficiency with ultrafine bubbles

With the foaming of ultrafine bubbles of around 1 mm diameter, the gas-liquid contact area of the bubbles is enlarged, making it possible to reduce the amount of air blown and air blowing power with oxygen transfer efficiency more than twice that of existing air diffusers (conventional air diffusers).

● Full aeration type dispersion method

Because of the low ventilation resistance of the Aero Wing II during operation, the diffused water depth can be lowered allowing the operation of the fully aerated diffuser method. Adopting the full aeration type with higher oxygen transfer efficiency than the swirl flow type, a further reduction of air blown and air blowing power is possible.

● Compatible with advanced processing methods

The pores are closed when the air diffusion is stopped so as not to cause clogging. Therefore, intermittent operation is possible as a measure against bulking. Also, given the ability to disperse air during aerobic operation and stop dispersing air during anaerobic operation, advanced processing methods using anaerobic/aerobic tanks are possible.

Water

JFILS Co., Ltd.



Working on the world's water pollution problems with new technological concepts!

Contact Address

391-3 Ozaki, Onga, Onga District, Fukuoka, Japan

Telephone/Email

+81-93-293-6921/ jf-contact@jfils.jp

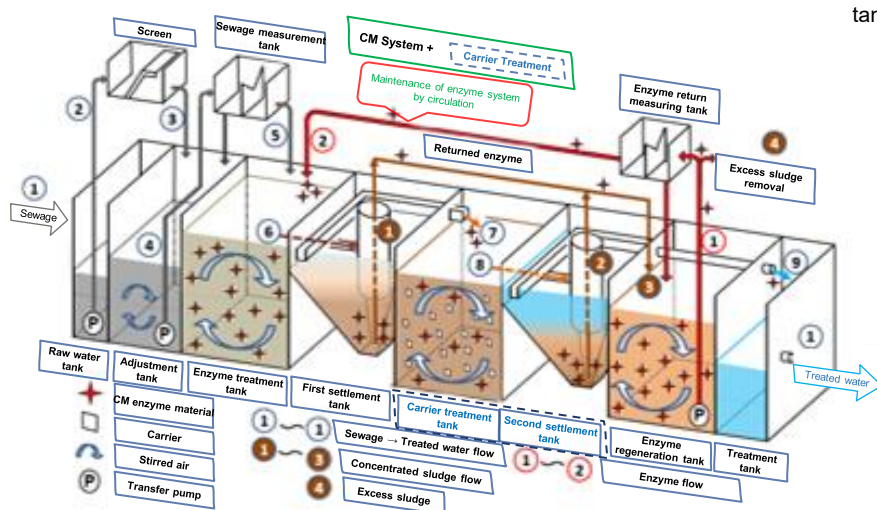
Major Overseas Bases

Active in Vietnam (Hanoi)

As economic development progresses, river and ocean pollution is becoming more serious, and there is also an urgent need to reduce CO₂. We hope to conduct joint research and development into enzyme circulation CM system facilities suitable to your country and to contribute to solving various problems.

Utilizing the catalytic action of enzymes! High-efficiently water treatment using the enzyme activation method

▼ Overview of water treatment using the enzyme activation method



▼ Results of high-concentration waste liquid treatment from a food factory (Top: immediately after collection, Bottom: 2 hours after collection) From left: Raw water tank, aeration tank, carrier tank, discharge tank



Effectiveness

The enzyme circulation CM system developed by our company promotes the decomposition of organic matter in raw water by the action of enzymes, making it is possible to treat wastewater with high organic concentration, which is difficult to treat with the standard activated sludge method. Also, since it is resistant to changes in the environment it can be treated stably regardless of changes in raw water concentration. Furthermore, the ability of the enzymes to decompose is a major advantage to deodorize sludge odor.

The amount of sludge generated with the enzyme activation method can be reduced to about 10-30% of that from the standard activated method, contributing to the reduction of sludge landfill disposal and the reduction of CO₂ emissions from sludge incineration.

Applications

BOD can treat 1,000-10,000 mg/L of raw water. It can also be used in a wide range of pH and water temperatures, making it effective for treating various organic wastewater including food factory drainage. Please contact us if you have any issues with odor control and processing costs.

Strengths

● Wide range and easy management of raw water

Organic matter can be efficiently decomposed by adding enzyme materials, making it possible to treat raw water containing high concentrations of organic matter. By adding the action of enzymes in addition to the function of microorganisms there is no need for advanced microbial control because it becomes resistant to changes in the environment and can respond to such changes.

● Deodorization with the action of biocatalysts (enzymes)

The standard activated sludge method can cause issues for the neighborhood such as sludge odor but the enzyme activation method can contribute to odor control by decomposing the substances that cause odors with the action of enzymes.

● Realization of reduced CO₂ emissions by reducing the volume of excess sludge

With the standard activated sludge method, about 80% of the generated sludge is occupied by dead microorganisms, requiring a lot of energy for disposal. On the other hand, since the action of enzymes breaks down dead microorganisms with the enzyme activation method the amount of sludge generated can be reduced to about 10-30%. Also, since much of this is made up of inorganic matter, another feature is that it can be dried in the sun, further reducing CO₂ emissions.



Nikka Environment Engineering Japan Co., Ltd.



Providing customer satisfactions with trust and reliability

Contact Address

3-16-22-4, Ibori, Kokurakita-ku, Kitakyushu-shi, Fukuoka, Japan

Telephone/Email

+81-93-777-0741/jpoffice@nikkaee.com

Major Overseas Bases

Nikka Environment Engineering Limited (Hong Kong)

Shenzhen Nikka Water Engineering Ltd. (Shenzhen, China)

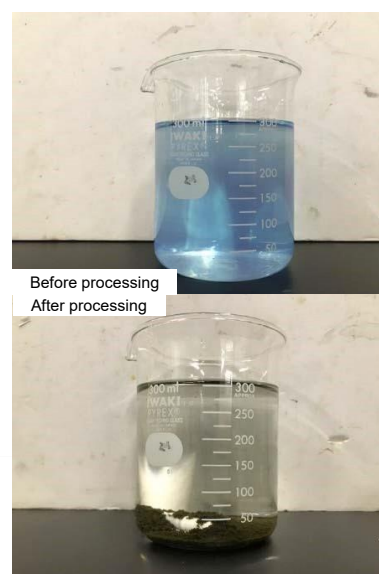
Shenzhen Nikka Environment Engineering Ltd. (Shenzhen, China)

We are a company that operates mainly in Japan and Asia, engaged in the manufacture, sale, and foreign trade of environmental equipment, including the construction, maintenance and management of environmentally friendly plants. The product here is used as an additive developed for the processing of persistent COD in factory waste liquids which greatly reduces the cost of waste liquid processing.

“Cotalyst BP” reducing process costs for persistent COD decomposition



▲ Appearance of Catalyst BP. A moist black powder that disperses well in water



▲ Decomposes not only COD and TOC, but also metal complex. The supernatant water is colorless and transparent after the copper ions are processed

Effectiveness

Fenton processing is a method for processing industrial wastewater by decomposing organic matter with the strong oxidizing power of the reaction of hydrogen peroxide and iron.

Cotalyst BP is a catalyst that greatly improves the efficiency of this Fenton processing. Even organic compounds that can be difficult to decompose with conventional Fenton processing can be decomposed, improving processing efficiency and contributing to water quality conservation in rivers and seas. It is also possible to reduce the volume of waste liquid, and to reduce the cost of processing and amount of sludge generated.

Applications

Effective against various industrial waste liquids such as plating waste liquid, developer from the semiconductor manufacturing process and dimethyl sulfoxide waste liquid etc. COD standards are becoming stricter in Asian countries such as China, and this can be used to keep drainage below standard levels.

Strengths

● COD processing cost reduction

By adding Cotalyst BP to processing it is possible to reduce the volume of waste liquid, and because the reaction is streamlined it also reduced the amount of iron salt required in the wastewater for Fenton processing. There is also a cost of processing associated with a lot of persistent COD, and this can also be reduced. Even considering introduction costs, you can recover your investment in about a year.

● Decomposes various substances

In addition to being able to decompose organic compounds that are difficult to process with the conventional Fenton processing method, metal complex can be decomposed and precipitated and separated as metal hydroxide. It also has the effect of decomposing the hydrogen peroxide that remains from Fenton processing.

● Easy to install

Can be used with only slight modifications to existing equipment. Our company provides the catalyst on its own and also supports the installation and remodeling of processing equipment.



FIRST SOLUTION Co., LTD.



Proposing the best answer for our customers on wastewater and sludge treatment!

Contact Address

2-5-13 Matsuyama, Jonan-ku, Fukuoka

Telephone/Email

+81-92-981-2631/toiawase@1st-solution.jp

On site, you will only need an “SR series” sludge reactor to react the sludge and coagulant, and “Eco Pouch” self-weight dehydration bags. This is low power and can be transported by a 2-ton truck. Sludge disposal costs can also be reduced since volume is reduced on site.

“MC Method” sludge dehydration technology that is easy to move and operate, with low initial running costs

- ▼ Toyota Lexus brand resin parts manufacturer
Hoyo Seiko Co., Ltd.
- Uses
Wastewater treatment, sludge dehydration, wastewater recycling (treated wastewater is reused on production lines)



Our original “Eco Pouch” achieves significant cost reductions compared to mechanical dehydrators

- ▼ Shiga Zeze water purification plant
Seibu Landscape Co., Ltd.
- Uses
Recycling of sludge generated when using water from Lake Biwa to make drinking water. The dehydrated sludge is reused as soil in parks etc.



Effectiveness

The mesh cut (MC) method is a dehydration system for the high-speed sedimentation and separation of wastewater and sludge using an “SR series” sludge reactor and “Flocman” powder flocculant, and dehydration using self-weighted “Eco Pouch” dehydration bags.

In addition to its high dehydration function and volume reduction performance, it is small and lightweight, and has excellent portability, making it possible to be used for muddy water at construction sites which could not be processed well in the past.

In addition, “Flocman” can not only be used for the MC method but can also be used as a soil conditioner or a fermentation accelerator during organic fertilizer production.

Applications

This technology can be used in a wide range of applications from factory wastewater to groundwater treatment, dehydration of construction sludge, purification of ponds and lakes, dehydration of sludge from water purification plants, solidification treatment of dredged sludge, and promoting the fermentation of organic fertilizer.

Strengths

● Compact “SR series” sludge reactors

The “SR series” sludge reactor is lightweight, compact and easy to operate, with few failures, realizing wastewater and sludge treatment which can be loaded onto a 2-ton truck and moved. It has a high processing capacity in spite of it being compact and consists of rapid and slow stirring layers and settling tanks.

● Highly efficient powder flocculant “Flocman”

A high-performance flocculant capable of the flocculation of wastewater and sludge. This is a flocculant optimized for the MC method, which has a very fast reaction speed and can adsorb and separate dirt particles from supernatant water in a short amount of time. It is also an environmentally friendly flocculant since it is made from natural ingredients.

● “Eco Pouch” self-weight dehydration bags with dehydration function

Japan’s only self-weighted dehydration bag manufactured under the flexible container bag standards (JIS/JFC). The dehydration performance of the central part is improved due to its special donut-shaped structure. Dehydration happens just by hanging, and it can be transferred as is to a vehicle and transported. They are also high strength, safe and durable, and are reusable.



Fujiclean Co., Ltd.



Utilizing our experiences to “protecting beautiful water” in your country

Contact Address

Fukuoka Branch : 2F Minami Kindai Bldg., 4-2-10 Hakataekiminami,
Hakata-ku, Fukuoka

Telephone/Email

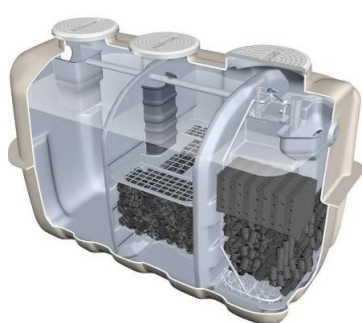
+81-52-733-0863/koji_seki@fujiclean.co.jp

Major Overseas Bases

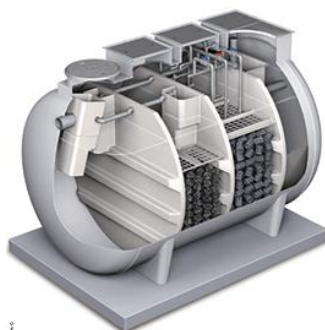
FujiClean USA, LLC (U.S.A.)
+1-207-406-2927

As a leader in septic tanks, our company has contributed to the improvement of sewers and water environments in Japan. With this experience and advanced technologies, we will continue to contribute to society in order to protect the beautiful waters of the world.

Reliably removing the odors and dirt from domestic wastewater with high quality septic tanks



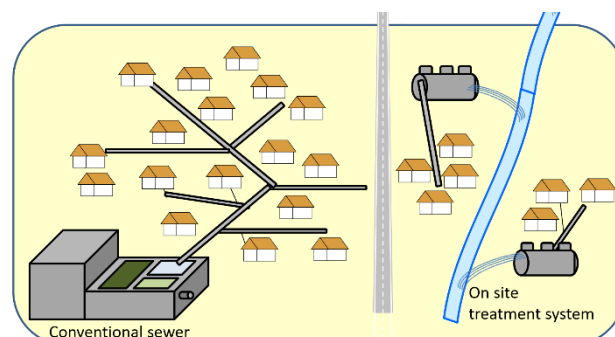
▲ “CE Model” small septic tank



▲ “PV Model” large septic tank

	Before Processing	After Processing
BOD	200 mg/L	20 mg/L
Suspended solids (SS)	160 mg/L	20 mg/L
Total Nitrogen(T-N)	50 mg/L	20 mg/L

▲ Processing Performance



▲ Proposed septic tank implementation plan in combination with existing sewage treatment facilities

Effectiveness

Our company manufactures the **“CE Model” (compact septic tank)**, **“CV Model” (medium-capacity septic tank)**, and **“PV Model” (large-capacity septic tank)** for overseas markets. In the treatment of domestic wastewater in Southeast Asian countries, often only solids are separated, and wastewater is often discharged as is in kitchens and showers and the odor of water and dirt at the point of discharge are a problem.

Our company's septic tanks **remove odors and dirt** from such domestic wastewater, **improving water environments** and **preventing the eutrophication** of aquatic environments by further removing **nitrogen and phosphorous** with advanced processing.

Applications

Our products are effective for domestic wastewater treatment and can be installed in each home or incorporated into the sewage improvement plans of local governments. As a result, our products contribute to streamlining regional wastewater treatment.

We have a track record of installations all over the world (North and Central America, Europe, Asia, Oceania, Middle East, Africa).

Strengths

● Designed for local conditions

We have a long track record of installation of the CE and PV models in Japan and have established models that are easy to maintain and use. We also propose wastewater treatment infrastructure depending on local conditions, to implement septic tanks that align with existing sewer networks.

● High-performance, durable structure

With high performance in the removal of BOD, suspended solids and total nitrogen, wastewater can be processed to a level that can be drained directly into rivers. This is a factory production type with stable quality. Also, through analysis and testing it is designed to be durable and strong against natural disasters.

● Full maintenance support

Septic tanks may not be able to fulfill all of their functions if not properly used or managed after installation. Our company visits sites regularly and provides construction guidance, maintenance of manuals, the holding of workshops and lectures to support maintenance.



METAWATER Co., Ltd.



Continue, to make it sustainable.

Contact Address

Kyushu Office : Hakata NS Bldg., 5-18 Tenyamachi, Hakata-ku, Fukuoka
International Sales & Marketing Department: JR-Kanda-Manseibashi-Bldg. 1-25,
Kanda-Sudacho, Chiyoda-ku, Tokyo

Telephone/Email

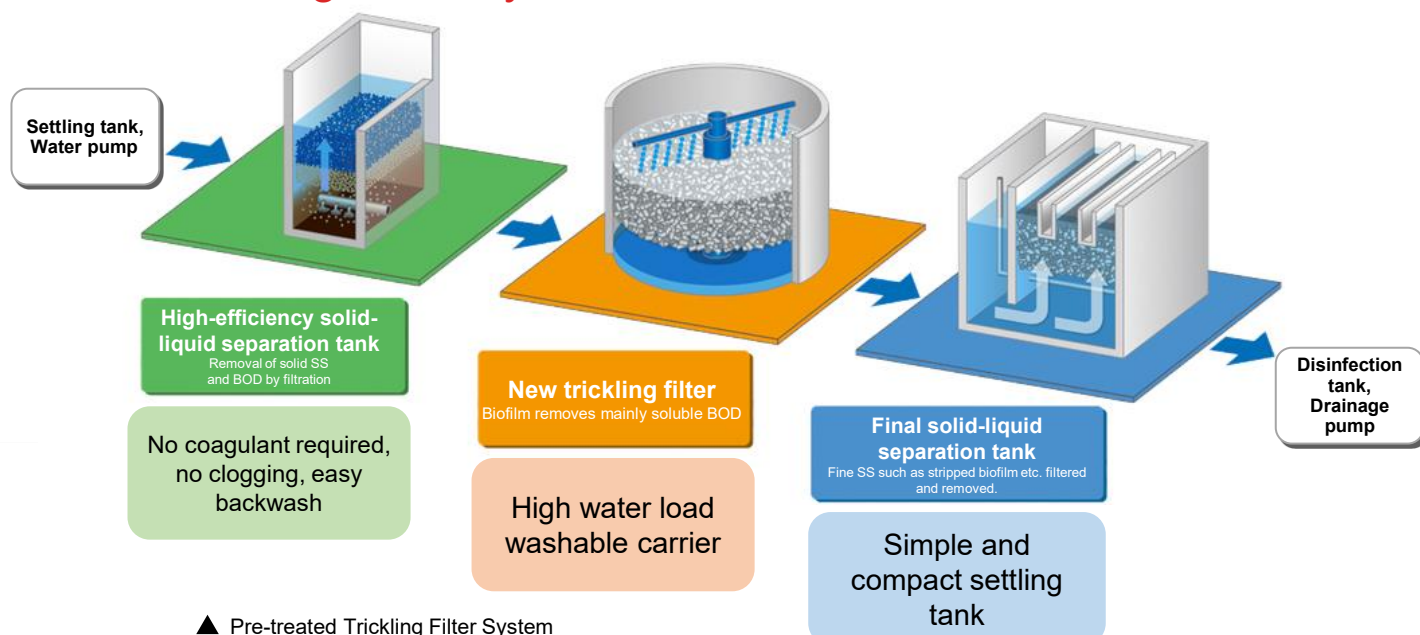
info-kaigai@metawater.co.jp

Major Overseas Bases

Vietnam, Cambodia, Singapore, USA, Netherlands

Overseas, the quality and costs required for water infrastructure differ for each country. There is a need to localize and customize our products and technologies according to the circumstances of each country. It is our goal to be a reliable presence for local construction, with a relationship of trust built on localism.

Energy saving and stable water quality treatment with our “Pre-treated Tricking Filter System”



Effectiveness

“Pre-treated Tricking Filter (PTF) System” is a sewage treatment system that combines a high-efficiency solid-liquid separation tank, new trickling filter and final solid-liquid separation tank.

With solid-liquid separation and biofilm processing, BOD (biochemical oxygen demand) and SS (suspended solids) can be removed to levels that meet overseas water quality standards, contributing to **improved environment in public water areas** by the **proper treatment of sewage**. It also has **energy saving effect** compared with the conventional standard activated sludge method, and also contributes to the **reduction of greenhouse gases**.

Applications

Developed for emerging countries, this technology has received “technical confirmation for overseas use” from the Japan Sewage Works Agency and can be used to improve water quality and environmental hygiene in Asian countries.

We built a sewage treatment facility adopting the PTF system in a cooperation project with the Japan International Cooperation Agency (JICA) in Hoi An City (Vietnam).

Strengths

● Fast and stable sewage treatment

In the high-efficiency solid-liquid separation tank, a dedicated special windmill type filter medium with light specific gravity is used, with a performance of being able to process 50-80% of BOD and 60-80% of SS, with a large filtration rate of 1,000 m/day. Also, since no flocculant is required, there is no screen clogging, making it easy to maintain with simple backwash cleaning.

● Energy saving

Under the new water trickling filtration system, air is supplied to the processing tank by blowing water down from above. By this mechanism, the supply of air to aerate from the bottom layer in the opposite direction to gravity achieves a power consumption reduction of about 75% in comparison with the conventional standard activated sludge method.

● Simple and compact

The final solid-liquid separation tank has a structure with just a filter, making installation simple and compact. Combined with the effect of high-speed filtration in a high-efficiency solid-liquid separation tank, overall space savings can be achieved, and maintenance is easy and inexpensive.



Chugai Technos Corporation



We carry out reliable inspections and analysis which you can trust and have confidence in!

Contact Address

Kyushu Branch : 2-20-35 Higashinaka, Hakata-ku, Fukuoka

Telephone/Email

+81-92-778-1122/<https://www.chugai-tec.coz.jp/en/contact/>

Major Overseas Bases

Chugai Technos Vietnam Co.,Ltd. (Ho Chi Minh City, Vietnam)

+84-28-3620-9222

Chugai Technos India Private Limited (Bangalore, India)

+91-(0)80-4148-8221

Employees at our Vietnam subsidiary, established in April 2014, and our India subsidiary, established in December 2020, undergo training in Japan on inspection and analysis technologies, and provide reliable technical services in ASEAN countries and beyond.

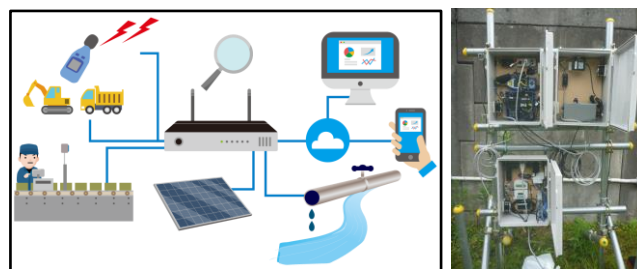
We will continue to meet our customers' needs by leveraging our network of partner companies to address local environmental challenges, verify plant performance, and more

A comprehensive analysis company which **provides inspection, analysis, and monitoring services**

▼ NOx removal system performance test



▼ Environmental monitoring



▼ Piping blockage inspection



- Speedy
Measurement
time is just
2 min
- On stream
Measurement during
operation
- Simple
&
Compact

▼ Chugai Technos overseas subsidiaries



Effectiveness

We perform performance tests of environmental system such as dust collectors, desulfurization/denitration system, power generation boilers, and water treatment facilities and can **realize the optimal operation of system** by evaluating the results. We can support ISO and EPA (US Environmental Protection Agency) methods in addition to JIS (Japanese Industrial Standards).

The optimal operation of environmental system not only leads to **improved productivity and the appropriate maintenance and management of environmental system** but can also reduce costs by reducing reagents used in environmental system and save energy. The performance of environmental measurement, analysis, and monitoring can contribute to the **conservation of air, water, and the living environment**.

Applications

We provide performance tests of various environmental system such as desulfurization and denitration system and flue gas/wastewater analysis services in thermal power plants, cement factories, waste incineration facilities and petrochemical plants etc. We also focus on related pipe blockage inspection and environmental monitoring.

Strengths

● **Responding to a wide variety of environmental measurement and analysis needs**

With a wealth of achievements over more than 40 years and advanced expertise, we deliver highly reliable data for all environmental measurement and analysis needs from the analysis of air and water quality, flue gas, wastewater and waste, to environmental monitoring, CO₂ capture and storage systems, NH₃ co-firing, H₂ utilization, and other CCUS-related measurements and analyses. We have particular strengths in plant performance tests and flue gas measurement for thermal power plants, and the use of non-destructive inspection technologies for various piping inspections.

● **Cross-sectional business development from manufacturing to commissioning/operation**

In addition to the performance inspection and analysis of various devices, we can fully respond to your needs at every stage, from plant commissioning and operation/monitoring, as well as equipment design and manufacturing/sales.

● **Full local/foreign language support system**

We have established local companies in Vietnam and India and can handle inspections and analysis in the local languages. We also have a dedicated department capable of support in English even in Japan and can communicate smoothly and create accurate and rapid English reports.



BEC Kyushu Co., Ltd.



Proposing solutions that accurately grasp the problems that are closest to our customers!

Contact Address

408-1-101 Naka, Iizuka, Fukuoka

Telephone/Email

+81-948-30-2600/info@bec-kyusyu.co.jp

Since our establishment, our company has been manufacturing and selling dust prevention devices at the core of our environmental business. We have a track record of dust countermeasures in a wide variety of industries, and we look to work with our customers to design products suited to them to solve problems that our customers have in their work environments.

A dust prevention system which is friendly to the atmosphere and working environments

▼ Foam spraying and dust prevention effect



▼ Special mist spraying and dust prevention effect



Before foam spraying

During foam spraying



Before mist spraying

During mist spraying

Effectiveness

High dust generation prevention effect can be obtained by introducing the "foam spraying method" or "special mist spraying method," depending on the requirements and process features of the customer. In addition to the **conservation of the atmospheric environment**, the on-site **working environment and health of workers** can be protected. This is effective not only on visible dust, but also on **suspended particulate matter with a diameter of 10 μ m or less**.

Also, with the combination of dust inhibitor and foam or mist, this can lead to an increased dust capture rate and **reduced water consumption** compared to using water alone. Reducing the amount of water used not only minimizes the water that adheres to objects and equipment but is also expected to have a **cost reduction effect**.

Applications

We have abundant experience in the crushing processes mainly in recycling plants, quarries, foundries and steelworks etc. We optimize our proposals by adjusting the amount of mist based on dust generated in each process.

Strengths

● **Dust source countermeasures using "foam spraying method"**

The generation of dust from crushers which are sources of dust can be suppressed by directly spraying foam on them. Since measures are taken at the source of the dust, the feature is that the effect lasts until subsequent processes. Foam is used because it has a larger surface area than water and can efficiently capture dust.

● **"Special mist spraying method" for floating dust**

Mixing in a dust inhibitor reduces the surface tension of the water, and because of the increased wettability of the dust the efficiency of the dust removal is improved, making it possible to clean the air in a short time. By using a mist (mist with diameter of 10-100 μ m), the probability of the dust and water colliding is increased, achieving a high dust measure effect with reduced water usage.

● **Provision of safe and eco-friendly dust inhibitors**

The main features of the surfactant that is a dust inhibitor is that it has excellent detergency, foaming power and emulsifying power and biodegradability. Only substances that have been verified to be safe are used and because they are only used in very small amounts it doesn't adversely affect the surrounding environment.



Energy

Agritree Co., Ltd.



Continuing to create sustainable foods and energy

Contact Address

1-115, Imamitsu, Nakagawa-shi, Fukuoka

Telephone/Email

+81-92-953-2725/marketing@agritree.jp

Major Overseas Bases

Agritree Co., Ltd Vietnam (Vietnam)

Solar sharing was created in Japan to help solve the world's food and energy problems and to create a world without hunger, poverty or plunder. By moving ahead with installations in rural areas and non-electrified areas around the world we hope that this will contribute to a more peaceful world.

Joint business of an agriculture and solar power generation “Solar Sharing”



▲ Example of introduction of Solar Sharing



▲ On-site installation in Vietnam



▲ Solar panels installed on farmland



▲ Farming below solar panels

Effectiveness

Solar sharing (agrivoltaics) is an innovative approach in which simple support poles are erected over farmland, with solar panels installed in the space above, allowing **agricultural production and power generation to take place simultaneously**. Its benefits include allowing the effective use of the space above farmland to **generate income from electricity**, while continuing to farm, and this income can help **support farm management**.

In addition, the introduction of solar power generation can contribute to **the reduction of CO₂ emissions**, helping to realize a **decarbonized society**.

Applications

Since this approach makes use of existing farmland, there is no need to develop new land, and unlike mega-solar projects, large-scale land development is rarely required. While minimizing the impact on the surrounding environment, the approach helps secure new sources of income for farmers and reduces costs through self-generated power. In addition, the shade created by solar sharing is also expected to protect crops from strong sunlight and high temperatures.

This can be used as a power source in rural areas lacking power generation facilities and is also expected to serve as a new form of power generation infrastructure.

Strengths

● Agriculture-first design

We collaborate with farmers from the design stage to propose a layout (such as panel angle and spacing) that secures suitable sunlight levels for crop growth, thereby minimizing any impact on crop yields. We also have a system in place that provides end-to-end support—from the introduction of solar sharing to ongoing maintenance and management.

● System that can be introduced on various farmland

We have a track record of introduction in Japan and have introduced systems in farmland for tea, strawberries, soybeans, blueberries, and other crops. The system can also be introduced into a variety of other types of farmlands including rice fields etc.

● Track record of overseas implementation and progress toward social implementation

To date, we have installed a total of seven demonstration facilities in Vietnam, drawing on academic expertise through collaboration with Kyushu University, the Vietnam National University of Agriculture, and Can Tho University. We are also working with Vietnam's Ministry of Agriculture and Environment and others to jointly develop guidelines for the introduction of solar sharing and to establish local standards.

We will continue to take on this challenge, working together with various relevant organizations, in order to introduce solar sharing to even more countries.



Energy

Kraftia Corporation (formerly Kyudenko Corporation)



Reaching for the next frontier through the power of technology. Contributing to society through the creation of a comfortable environment

Contact Address

14F, ONE FUKUOKA BLDG., 1-11-1 Tenjin, Chuo-ku, Fukuoka-shi, Japan

Telephone/Email

International Business Division, Technology Headquarters
050-6883-0300/Shinomiya.kengo.wg@kraftia.com

Major Overseas Bases

Singapore, Malaysia, Vietnam, Taiwan, Indonesia

Kyudenko has changed its company name to Kraftia. The new name was conceived based on the English word "craft", which means "technology and skills", and embodies the company's intention to further advance its technology and expand its business.

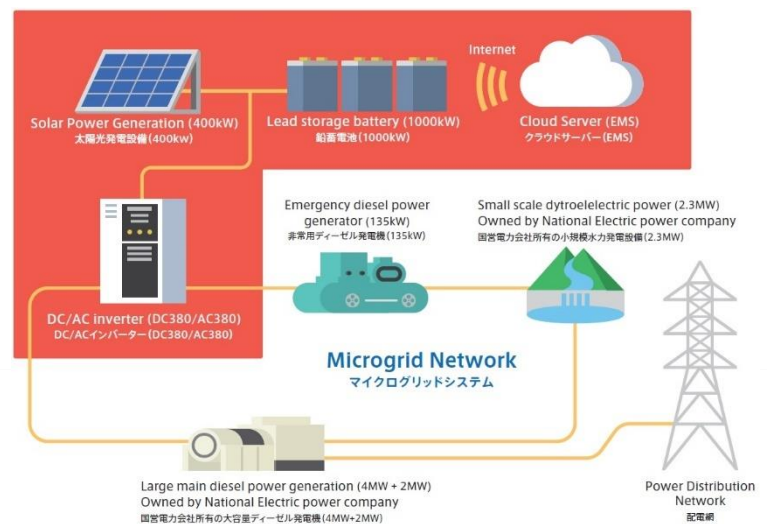
The name embodies our aspiration to carry forward our Kyushu origins and the spirit of Kyudenko while pioneering new frontiers through a trust-inspiring ability to implement new technologies and a willingness to continually embrace the challenge of realizing new technological innovation.

Contributing to the stabilization of renewable energy with the "Kraftia EMS"

▼ EMS demonstration facility in Sumba, Indonesia



▼ Illustration of introduction of EMS (Energy Management System)



Effectiveness

By substituting renewable energy such as solar power, wind power, biomass power and small hydropower for fossil fuel derived power generation, our services contribute to **suppressing CO₂ emissions from fossil fuels**.

We can also propose and construct energy saving equipment together with the construction of roof-mounted solar panels, realizing **energy saving for the entire facility** with the introduction of renewable energy. This also makes it possible to **reduce power costs** for the facility.

Applications

Our service can be provided to government agencies, power generation companies and developers considering the introduction of renewable energy power generation. We can also support the construction or maintenance of roof-mounted solar panels and energy saving equipment for factory personnel.

Strengths

● Achievements in the introduction of Kraftia EMS

"Kraftia EMS" is a technology that "combines" weather-dependent power sources such as solar and wind power with sources like biomass power generation, to deliver a stable supply of electricity to the power grid. For example, on remote islands where power generation facilities and power grids are limited, it is difficult to maintain stable power with unstable solar power generation, and this system uses a storage battery and dedicated systems to supply electricity 24 hours a day using renewable energy. We are currently working to spread this technology, mainly in Indonesia.

● Abundant achievements in renewable energy power generation equipment business

We have extensive experience in the construction and maintenance of renewable energy equipment within Japan. Drawing on this accumulated experience, we also support the construction and maintenance of renewable energy equipment overseas.

● Proposing energy saving for factories

We have abundant achievements in the design and execution of electrical equipment, distribution lines, air conditioning, water supply and drainage equipment and sanitary equipment as a comprehensive equipment company.



Energy

West Japan Engineering Consultants, Inc.



Harmonizing people and the environment, and contributing to the creation of a prosperous society

Contact Address

4F, 5F, 8F, 9F, 10F Denki Bldg. Sunselco Annex, 1-1-1 Watanabe-dori, Chuo-ku, Fukuoka

Telephone/Email

(Japanese) +81-92-781-2831/eigyoku-kanri@wjec.co.jp
(English) +81-92-781-6277/wjec_obd@wjec.co.jp

Major Overseas Bases

Jakarta Office (Indonesia)

Guided by the philosophy of "Harmony Between People and the Environment", West Japan Engineering Consultants, Inc. is a company that leverages its technical capabilities in the energy and environmental sectors to address the challenges of the times, such as decarbonization.

We will stay ahead of change and, as a company trusted by local communities, contribute to a sustainable future.

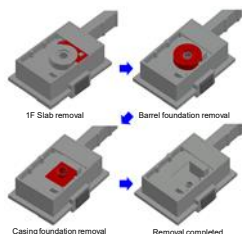
Provision of various consulting services necessary for the introduction of renewable energy power generation

▼ Example of hydropower design work

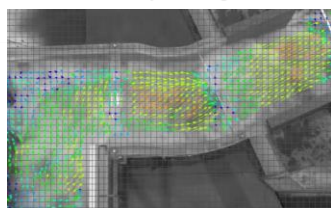
<investigation in a narrow waterway using a robot>



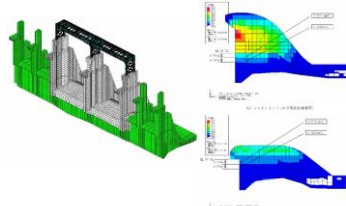
<construction plan using 3D-CAD>



<construction plan using 3D-CAD>

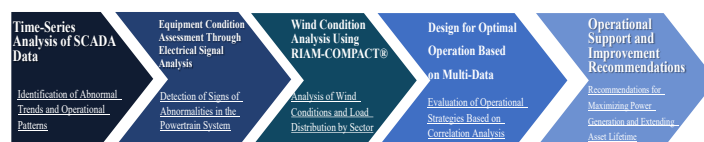


<checking stress and displacement by the FEM analysis>

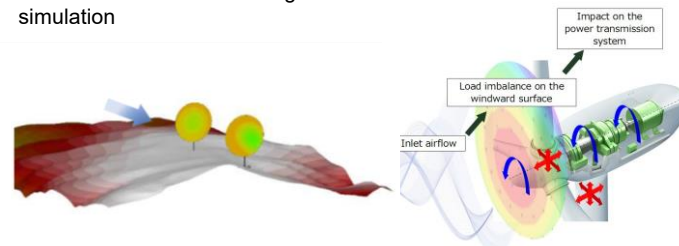


▼ Case study: optimizing wind turbine operation efficiency and extending service life

SCADA × Electrical signal analysis × Numerical wind condition analysis workflow



Visualization of the distribution and imbalance of wind loads between turbines using numerical wind condition simulation



Effectiveness

Our company has know-how on a wide range of renewable energies, including geothermal, wind, solar and biomass. We provide detailed consulting service both in Japan and overseas, according to the characteristics of each region. The spread of power generation using renewable energy aims to **control CO₂ emissions derived from fossil fuels and solve the problem of climate change**.

We also provide consulting services on the efficient operation of power plants, and can meet various needs, including the realization of **reductions in power plant operating costs** etc.

Applications

We provide consulting to government agencies and power generation companies considering the development of renewable energy such as geothermal power, wind power, solar power, biomass power and hydroelectric power etc.

Strengths

● **Providing a wide range of services, from upstream to downstream**

We can support preliminary surveys, power generation system planning and design, procurement, contracting, construction planning and management, site inspection, vocational training, financing, partner selection and power plant operation for the development of renewable energy. We provide a wide range of consulting services from upstream to downstream based on our experience cultivated in Japan and overseas.

● **Consulting according to regional characteristics**

For wind power generation, we carry out wind observation at planned construction sites for wind turbines and landscape simulations for after the introduction of wind turbines, for biomass power generation we survey the properties and emissions of biomass resources, and for geothermal power generation we carry out geological surveys, geophysical exploration and geochemical surveys. We can investigate the characteristics of target areas and design and introduce optimal systems using the resources of the target area.

● **Abundant achievements in Asian countries**

We have a wealth of experience operating overseas in consulting such as on the formulation of geothermal power plant development plans in Indonesia, survey well excavation work supervision and production capacity evaluation in the Philippines, and hydroelectric power plant efficiency in Vietnam etc.



Energy

ProX Material Corporation



Creating a comfortable environment against global warming progresses

Contact Address

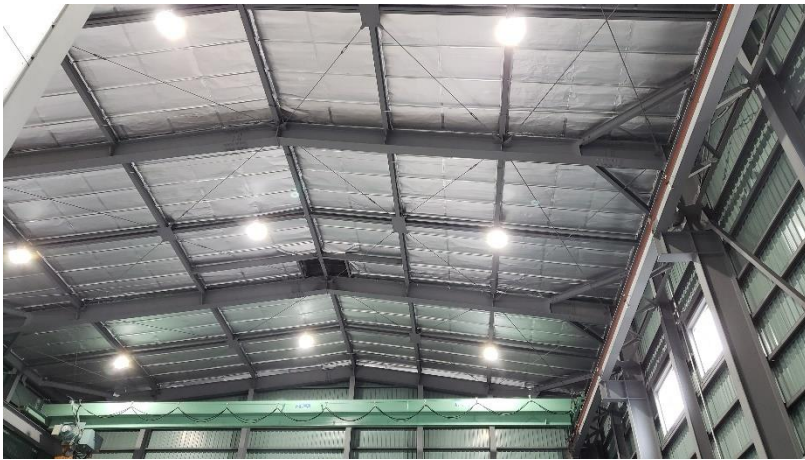
3-26-11 Odo, Nishi-ku, Fukuoka

Telephone/Email

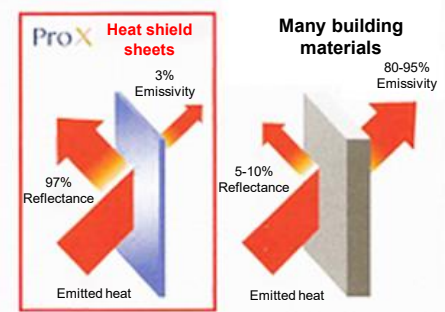
+81-92-885-3722/prox-m@syonetu.biz

Our company develops, sells and manufactures "Professional grade" heat shield sheets. Also, our patented construction method can build most steel structure buildings quickly, cheaply and neatly, with beautiful finishes and no damage. We can also show you model homes. Please feel free to contact us!

Energy saving and work environment improvement with "ProX Heat Shield Sheet®"



- ▲ Can be installed cheaply, quickly and neatly in most steel structures with our patented construction method.



- ▲ Reflects 97% of radiant heat



- ▲ We also have sheets to improve the thermal efficiency of machinery and equipment and to prevent dew condensation in refrigerator/freezer equipment.

Effectiveness

ProX Heat Shield Sheet® are heat shield sheets made of double-sided aluminum reflecting 97% of radiant heat. By installing in the underside of the ceiling and in walls, it shuts out the heat from outside air during summer and prevents heat in the room from escaping outside in winter. It also contributes to **energy saving and reduced greenhouse gases** because of improved operating efficiency of air conditioning.

Also, by installing in machinery and pipes, it is possible to **improve the thermal efficiency of industrial processes**. Further, by suppressing the rise in room temperature due to mechanical exhaust heat, this leads to **improved work environments for workers**.

Applications

This product has a significant effect on energy saving and the improvement of working environments in factories and warehouses with large spaces using little insulation. It can also be used at any building such as offices, stores, facilities and homes, etc. It is also possible to construct in existing buildings and is not limited to new construction.

Strengths

● **Semi-permanent effect by constructing in walls of rooms and roofs**

Has high durability with sandwiched aluminum with 99% purity or higher which is hard to tear and the application of anti-corrosion coating. Since the main component is aluminum, it can be recycled after use.

Since heat is shielded without using energy such as electric power, the effect is semi-permanent immediately after construction. We have a track record of obtaining energy efficiency improvement effects of 15% or more for drying furnace construction and cooling effects of about 7 degrees in house construction.

● **Advanced construction technology**

Our patented construction technology can be installed in a short amount of time with low noise. It can also be installed neatly, due its being lightweight and having the right thickness.

We have developed breathable and waterproof heat shield sheets that can also be implemented on wooden buildings.

It can also be implemented on rental properties since it is easy to recover to its original state if necessary. We also offer full after-sales service.



Energy

Hokutaku Co., Ltd.



Improving profitability and the future for our children

Contact Address

Kitakyushu Branch : 1-122-13 Hibikimachi, Wakamatsu-ku, Kitakyushu

Telephone/Email

+81-93-701-5820/ hs000@hokutaku-co.jp (Rep.), hs167@hokutaku-co.jp (Person in Charge)

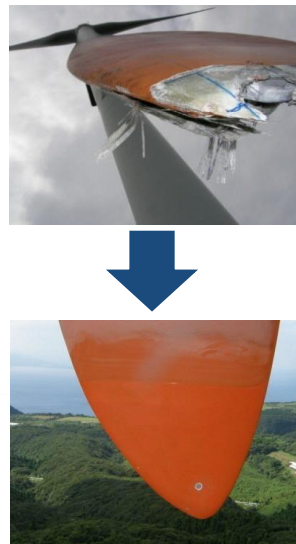
As the only multi-vendor large-scale wind power generation facility in Japan, we perform operation and maintenance (O&M) on domestic and overseas wind power generators. We will continue to support the industry with our proven technology and experience so that we can contribute to the acceleration of decarbonization and further adoption of wind power generation. We will also strive to help local communities feel more connected to wind power generation, while actively working to create employment and revitalize the region, with the aim of becoming a company that grows alongside the local community.

Multi-vendor wind power maintenance service

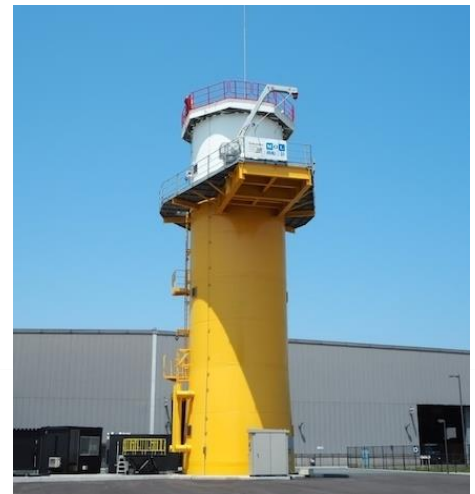
- ▼ Wind power generator for maintenance technology research and experiments



- ▼ Example of repair to a damaged blade



- ▼ Offshore wind training facility at the Kitakyushu Training Center



Effectiveness

The operation and maintenance of wind turbines are critical functions that support their stable operation, and by helping to prevent accidents such as blade throw, they can contribute to the safe adoption of wind power generation. The widespread introduction of wind power generation, as a renewable energy source, is also expected to help curb CO₂ emissions from fossil fuels.

Furthermore, since wind power can be utilized as a domestically produced energy source, it also holds significance in that the profits generated from power generation can be reinvested within Japan.

Applications

Our service can be provided to power generation companies and local governments considering the introduction of wind power generation. We can also work with companies that manufacture and sell wind turbines and turbine components.

Strengths

● Proven track record of wind turbine maintenance

Our company's main business is the maintenance of wind power generators and we can support the maintenance of a wide range of wind power generators in Japan and overseas. We can respond to wind turbine blade repair, preventive maintenance technology, wind power generator tuning and customization and careful periodic inspections.

● We own a wind turbine for technical research and experimentation

We own a wind turbine for maintenance technology research, and use it to conduct various training programs and experiments on new technologies and products. We aim to improve maintenance skills through hands-on training and demonstration testing of new technologies.

● Launch of offshore wind power training courses

This is Japan's first-of-its-kind training facility, enabling safe, onshore transfer training. The facility uses an equipment that replicates wave motion to prevent accidents such as falling into the water or becoming trapped when accessing offshore wind turbines using a specialized vessel known as a CTV (Crew Transfer Vessel).

A variety of training programs are available, and we are happy to discuss customized training courses to meet your specific needs.



Energy

Riamwind Co. Ltd.



Development of renewable energy equipment that is easy to be accepted for people and the environment

Contact Address

Room 504, Open Innovation Building, Kyushu University, 6-1 Kasuga-Koen, Kasuga, Fukuoka

Telephone/Email

+81-92-501-8578/inquiry@riamwind.co.jp

The concept of our company is the development and provision of renewable energy equipment with high social acceptance. We already have a track record overseas through JICA projects etc. We hope to contribute to the development of areas in emerging countries and remote islands with poor power conditions where harmony with nature is valued, towards the realization of a carbon-free society.

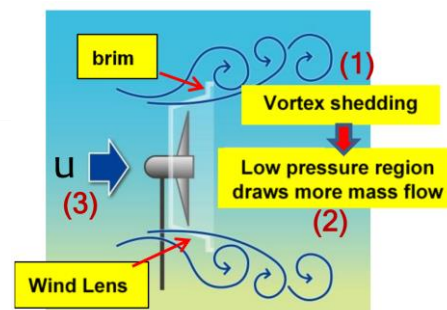
Multi-lens wind turbines realizing high efficiency, low noise and large capacity

▼ Lens wind turbine



◀ Example of the introduction of a multi-lens wind turbine

Wind lens technology ▶



Effectiveness

"Lens wind turbines" are wind turbines with diffusers (wind collection lenses), which **allow highly efficient power generation in comparison with conventional wind turbines** and has the characteristics of being **super quiet**. Using a "multi-lens wind turbine" consisting of multiple lens wind turbines **makes it possible to increase power generation output** while maintaining quietness. With wind turbines that feature high efficiency, low noise and large capacity, this can also lead to the popularization of wind power generation and **contribute to the reduction of CO₂ emissions** derived from fossil fuels.

In addition, the lens wind turbines have design quality which helps maintaining the living environment and landscape of installation areas to popularize wind power generation.

Applications

This product can be used by government agencies or power generation companies that are considering the introduction of wind power generation. In addition to introduction in areas without power grid development or remote islands, these can be used as a power source for emergency generators when combined with batteries etc.

Strengths

● "Lens wind turbines" utilizing wind collection lens technology

"Lens wind turbines" are wind turbines with diffusers, developed together with Kyushu University. A large speed-up effect can be obtained near the entrance of the diffuser by creating a low-pressure region behind the diffuser from the Karman vortex that occurs due to the "collar" of the diffuser. Since wind energy is proportional to the cube of the wind speed, this makes power generation more efficient than conventional wind turbines. Also, aerodynamic noise is greatly reduced by cancelling the wing tip vortex that causes noise from the flow along the inner wall of the diffuser.

● Increased output with multi-lens

Overall output can be increased with the arrangement of multiple lens wind turbines (multi-layering). Output can be increased while maintaining the characteristics of the lens wind turbines, increasing output by 10% with three lenses and 20% with 5 lenses. The development of multi-lens wind turbines with even more lenses is being considered for the future.

● Design that blends with nature

We are proposing a "tree that collects the wind" design of wind turbine that blends into the landscape, with the aim of popularizing products that harmonize with nature.



Other

ATGREEN Co., Ltd.



We co-create measures with our partners to resolve local challenges

Contact Address

Head Office: MIKAGE 1881 5F ACT Matsunaga Bldg., 2-1-7 Uomachi Kokurakita-ku, Kitakyushu, Fukuoka
(Fukuoka Sales Office) 2F "HAKATA LAB", 5-3 Hakataeki Chuogai, Hakata-ku, Fukuoka-shi, Fukuoka, Japan

Telephone/Email

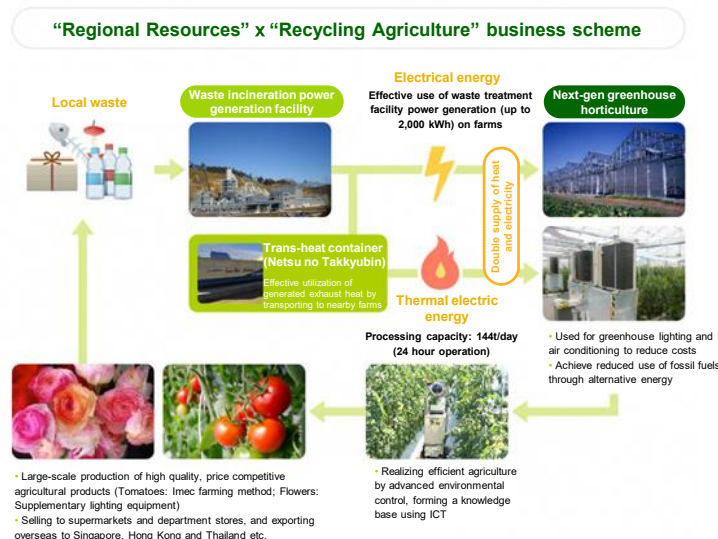
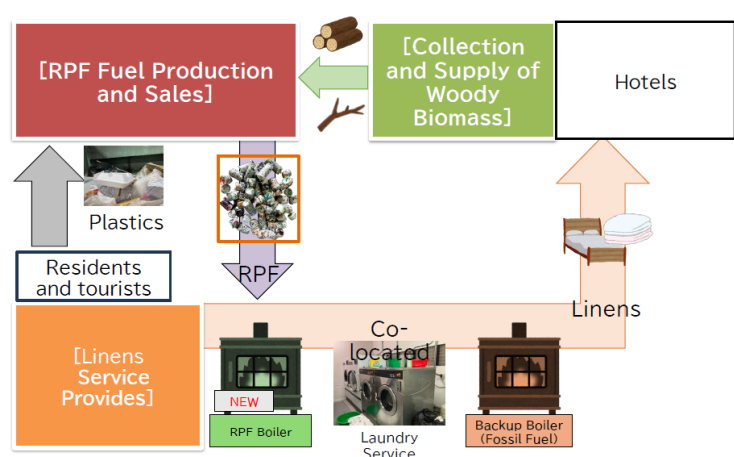
0120-26-0589/info@

Local challenges span a wide range of areas, but we focus primarily on the environment and energy sectors. In collaboration with our partners, we are working to explore measures to resolve these challenges and implement initiatives that will contribute to the business development of both parties. Please feel free to contact us.

We propose systems aimed at decarbonization and resource recycling tailored to local challenges.

- ▼ Exploring cleaning services using locally-sourced waste-derived fuel

- ▼ Example of a recycling-oriented agricultural system utilizing local resources (achievements in Japan)



Effectiveness

We propose systems aimed at decarbonization and resource recycling that address local challenges and contribute to sustainable development. For example, in countries where woody biomass waste is a problem, we have proposed introducing cleaning services in conjunction with boilers. These efforts lead to the reduction of fossil fuel consumption, the promotion of decarbonization, improved resource efficiency and the creation of local industry and employment.

Applications

We consult on methods that are most suitable to local circumstances after listening about the positions and aims of various parties such as private businesses, public institutions and agricultural cooperatives etc. We can also consult on the capacity building of government officials.

Strengths

● Proposing systems that meet local needs

We propose appropriate systems after conducting an examination of local market needs and environmental issues, the amount and abundance of waste generated, and waste and energy related legal systems etc. In addition to the use of technologies that can be introduced locally, we can propose systems that generate profits locally and incorporate the generation of employment etc.

● Collaboration with partner companies

We have rich networks with private companies throughout Japan (waste disposal companies, manufacturers, agricultural companies etc.) including waste treatment group companies. By collaborating with companies with various technologies and know-how, we can propose initiatives that contribute to decarbonization measures that are suited to the region and resource recycling systems. We can also handle cooperation between local governments and companies.

● Abundant achievements overseas

We have a track record of JICA private sector cooperation projects in Southeast Asian countries and island countries and intercity collaboration and demonstration projects with the Ministry of the Environment. We also have a track record in the field of agriculture and of efforts contributing to the achievement of SDGs.



Other

Environmental Technology Service Co., Ltd.



Utilizing our experience and networks “for the world and humanity”

Contact Address

2-4 Nakabarushinmachi, Tobata-ku, Kitakyushu

Telephone/Email

+81-93-883-0150/kankyo@kan-tec.co.jp

Major Overseas Bases

Dailen-Kyushu Environmental Science & Technology Co., Ltd. (China)

Responding to environmental problems is a global issue for both developed and developing countries. To solve these problems, it is first important to collect accurate information. Our company uses our many years of experience and our network to help solving these problems.

Environmental survey, measurement and analysis based on many years of achievements and advanced technologies



Water quality survey



GC-MS



Exhaust gas measurement



Automatic air quality measurement device



Soil gas survey



Ecosystem survey

- ▲ We have various analytical equipment for water quality, air and soil etc., and staff with high technical abilities, and provide environmental surveys, measurement and analysis, standard sample preparation, and consulting services.

Effectiveness

We perform **environmental measurement and analysis** related to water quality, air and soil; surveys of the living and natural environments; environmental assessments; and **consulting services** related to the reduction of greenhouse gases and environmental risks.

We have researchers with high technical abilities who can propose analysis and survey methods tailored to our customer's needs. As a third-party inspection agency, we make full use of our advanced technologies and precision analysis equipment to **perform measurement and analysis with a high degree of independence, fairness and accuracy** and to **contribute to compliance with environmental regulations**.

Applications

We receive many requests, from private companies in need of environmental monitoring, to universities and research institutions that are difficult to carry out sufficient analysis or R&D with their own measurement and analysis equipment alone. We have commenced developing our business around local governments and Japanese companies moving into local communities.

Strengths

● Researchers with high technical abilities

From our background of a founder who devoted himself to ingenuity for measurement and analysis when Japan was at the height of its pollution problem, our researchers have worked hard to understand the principles of measurement and analysis methods, not just following manuals. This high level of technical ability has allowed us to provide highly trusted measurement and analysis.

Even for issues for which there are no environmental regulations, we work to provide technologies to solve problems, including consulting services such as developing survey and measurement methods and establishing reference standards.

● Abundant achievements and trusted externally

In regions where it is difficult to collect reliable information about measurement and analysis companies, operators may make measurements themselves, but our company has established trust and abundant achievements in emerging countries in Asia, performing measurement and analysis with high reproducibility and objectivity.

● Breadth of knowledge and network

From our experience engaging in overseas business, we have contacts in emerging Asian countries, including China and Southeast Asia, and are also familiar with the trends of local environmental laws and regulations.



Other

K.K. Investment Limited



Providing the cost-effective technologies created in Japan

Contact Address

1-3-1-203 Dojimar, Wakamatsu-ku, Kitakyushu

Telephone/Email

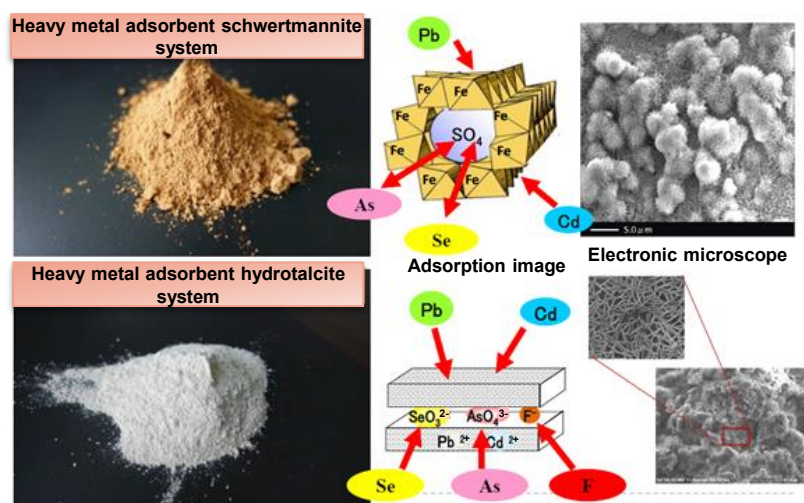
+81-50-3696-4565/yoshida@aquars.com

Major Overseas Bases

Shanghai Soil Environmental Technology Inc. (China)

There is a tendency to believe that "Japanese technology has good performance, but costs too much," but cost awareness is very important to environmental restoration. We will continue to provide materials with high-cost performance, contributing to the solution of problems.

Processing for the insolubilization of heavy metals in soil by chemisorption



▲ The schwertmannite system insolubilizer with iron as the main material, and the hydrotalcite insolubilizer with aluminum and magnesium as the main materials. Anions are drawn inside, and cations are adsorbed on the surface.

▲ Construction example

Effectiveness

By applying adsorbent to soil contaminated with heavy metals, it is possible to **chemically stabilize and insolubilize the heavy metals**.

The adsorbent uses the schwertmannite system for which iron is the main raw material, and the hydrotalcite system for which aluminum and magnesium are the main raw materials. In both cases, selenium and arsenic are drawn inside the adsorbent as anions SeO_3^{2-} or AsO_4^{3-} , and cations such as Pb^{2+} and Cd^{2+} are adsorbed on the surface of the adsorbent, **preventing heavy metals in the soil from elution**.

Applications

This product can be used in places where measures are required for soil pollution due to heavy metals, where it occurs, such as at factory sites, around mines, and on agricultural land. We have a track record of conducting feasibility studies for JICA and JETRO in Thailand.

Strengths

● Adjustment of chemicals according to pollutants

Because it is insolubilized by chemisorption, it is also possible to deal with pollution from multiple heavy metals. The types and content of the heavy metals in contaminated soil are analyzed and the adsorbent is then adjusted and provided so that it is suitable to the construction site. This means that the adsorbent can be used without waste, and costs can be kept down.

● Construction methods according to the application

Because contaminated soil can be processed on site, there is no need to remove it for processing.

The adsorbent can come in various forms such as powder, granules and fibers, so the construction method can be determined based on the application. Granules and fibrous adsorbents can be used for passive purification (a processing method that uses environmental power such as water flow etc.), and the effect of insolubilization can be obtained simply by installing adsorbent in a net in the path of contaminated water.

The treatment of soil in multi-function embankments is also possible with the underdrain method and containments of contaminated soil from above and below with adsorbent.



Other

Shabondama Soap Co., Ltd.



“Protecting our health and clean water” with additive-free soap technology.

Contact Address

2-23-1 Minamifutashima, Wakamatsu-ku, Kitakyushu

Telephone/Email

+81-93-701-3181/ asami-katsuki@shabon.com

The CO₂ emissions from peat fires in Indonesia have been reported to exceed 1 billion tons in high-emission years, a scale that surpasses Japan's total annual emissions. In addition, health damage caused by severe smoke pollution and disruptions to aircraft operations are having a major impact on neighboring countries as well.

Our company will contribute to resolving such social challenges through the promotion of a “soap-based fire extinguishing agent”, which is safe for people and the environment and can effectively extinguish fires using minimal water.

“Soap-based fire extinguishing agent” that is safe for people and the environment



▲ Fire extinguishing demonstration and experiment



▲ Uses an additive-free, soap-based surfactant that is highly biodegradable and safe for people and the environment



▲ Ten months after the fire was extinguished with the agent, vegetation had recovered to a level equivalent to that seen with water alone

Effectiveness

While many fire extinguishing agents use synthetic surfactants, the fire extinguishing agent developed by our company through industry-academia-government collaboration uses a soap-based surfactant (hereinafter referred to as “soap-based fire extinguishing agent”), **successfully achieving both reduced environmental impact and improved fire-extinguishing efficiency.**

Using this “soap-based fire extinguishing agent” to combat forest and peatland fires contributes to **ecosystem conservation, reduction of greenhouse gas emissions, and mitigation of smoke pollution.**

Applications

The category is a “Class A” fire extinguishing agent, used for general fires such as building fires; however, due to its excellent environmental performance, it is **ideal for extinguishing fires through direct application to natural environments**, such as forest fires and peatland fires.

Strengths

● Control of the impact on the ecosystem

A fire extinguishing agent that uses soap instead of a synthetic surfactant. It binds with minerals found in nature and is **biodegrades 100%** within 3 to 4 days after use, minimizing impact on the ecosystem. In addition, research on peatland and forest fires in Indonesia has also demonstrated that it **promotes plant growth.**

● Excellent defoaming properties

Foam does not remain for long after the fire suppression, enhancing safety during investigation activities and the removal of equipment and materials.

● Enhances the penetration of water used to extinguish fires

Adding this agent to the water at a ratio of 1% reduces its surface tension, thereby **enhancing the water's penetration into burning materials and its cooling effect.**



Other

Hasegawa Environment & Development Co., Ltd.



Developing technologies to solve your problems!

Contact Address

Head Office: 1-9-24-1001 Otemon, Chuo-ku, Fukuoka

Telephone/Email

+81-92-753-8620/oshima@smartcoat.jp

Since our founding, we have exclusively handled heat-blocking measure for window glass, but we now offer a wide variety of products and are constantly evolving to meet your needs. We are pleased to announce that we have developed and obtained a patent for the world's first window glass coating designed to address photosensitivity (commonly known as Irlen Syndrome).

Coatings to ease photosensitivity symptoms (World's first, patented)

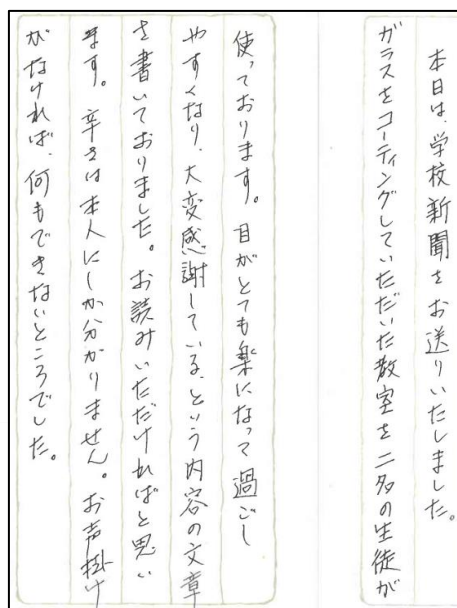
▼ Patent certificate



▼ Installation scene at a school for the blind



▼ Letter of thanks from the Principal (Excerpt)



Effectiveness

Recent surveys suggest that as many as 20% of Japanese people have photosensitivity (Irlen Syndrome).

Although photosensitivity (commonly known as Irlen Syndrome) itself is still a relatively little-known condition, it has been gaining renewed attention in recent years.

This coating reduces eye strain by evenly blocking light in the blue light spectrum.

It also offers **health benefits, as well as power-saving and energy-saving effects**, by blocking ultraviolet rays, blue light, and near-infrared rays.

Applications

Because photosensitivity (commonly known as Irlen Syndrome) is still not widely recognized, we hope to see the coating adopted first in public facilities. We are especially keen to see it adopted in educational settings such as kindergartens, elementary schools, and junior high schools.

Strengths

● Blocks UV rays

Applying this coating to existing window glass blocks approximately 99% of ultraviolet rays.

● Blocks blue light

By evenly blocking wavelengths in the blue light spectrum, which places a heavy burden on the eyes, sunlight is transformed into light that is gentler on the eyes. Blocking approximately 50% to 80% of blue light allows people who are sensitive to glare to coexist with those who are not.

● Uses SOLAMENT®

As a heat-blocking measure, this coating uses SOLAMENT®, a world-class heat-blocking material developed by Sumitomo Metal Mining. This also blocks near-infrared rays, effectively reduces strain on the skin, prevents heat stroke, and saves power and energy.

In Conclusion – For those interested in the listed environmental technologies

■ Inquiries regarding the listed environmental technologies

- If you are interested in the posted environmental technologies, please contact each company directly with their noted contact details.
- For inquiries from persons outside of Japan, please contact the prefecture's Environmental Policies Division, and we will try our best to connect you with each listed company.

Contact – Fukuoka Prefecture Department of Environmental Affairs, Environmental Policy Division

Email : kansei@pref.fukuoka.lg.jp

- Fukuoka prefecture also has overseas offices in Shanghai, Hong Kong and Bangkok. Feel free to contact these offices and we will try our best to connect you with each company.

< Shanghai Office >

Address: Room 2636 26F New Town Center Bldg., 83 Loushanguan Road, Shanghai, China

TEL : +86-21-3105-6376 Mail : shanghai@fukuokash.com.cn URL : <http://www.fukuokash.com.cn/>

< Hong Kong Office >

Address: Unit 702B, 7/F, New East Ocean Centre, 9 Science Museum Road, Tsim Sha Tsui East, Kowloon, Hong Kong

TEL : +852-2869-9809 Mail : hongkong@fukuoka.com.hk URL : <http://www.fukuoka.com.hk/>

< Bangkok Office >

Address: 9/F Sindhorn Bldg. Tower 2, 130-132 Witthayu Rd., Lumpini, Pathum Wan, Bangkok 10330, THAILAND

TEL : +66-2-689-6200 Mail : fukuokabkkoffice@gmail.com

■ Notes about this Guidebook

- The companies listed in this guidebook were selected based on the results of a research on environment-related companies with bases in Fukuoka prefecture.
- The content of this guidebook is current as of April 2026.
- The content of this guidebook is created based on interviews with each company and materials provided by each company, and Fukuoka Prefecture makes no guarantee regarding the results or effects contained herein. Please make any decisions on entering into transactions at your own risk.

Guidebook on Technologies of Environment-Related Corporations in Fukuoka Prefecture

- First edition: Published March 2021

Published by: Environmental Policy Division, Department of Environmental Affairs, Fukuoka Prefecture

Commissioned to: Mitsubishi UFJ Research and Consulting Co., Ltd.

- Revised edition: Published September 2026

Published by: Environmental Policy Division, Department of Environmental Affairs, Fukuoka Prefecture

Contact

7-7 Higashikoen, Hakata-ku, Fukuoka City, Fukuoka, 812-8577

TEL : +81-92-643-3352 FAX : +81-92-643-3357

e-mail : kansei@pref.fukuoka.lg.jp

URL : <https://www.pref.fukuoka.lg.jp/>



Environmental Policy Division,
Department of Environmental Affairs,
Fukuoka Prefecture

7-7 Higashikoen, Hakata-ku, Fukuoka City, Fukuoka
TEL +81-92-643-3352
FAX +81-92-643-3357
E-mail kansei@pref.fukuoka.lg.jp