

# Overseas Business History

2013	JICA	Selected for "Feasibility Study on Introduction of Solid Fuel Production Equipment Using Rice Husk as Raw Material " (SME Support Type) (Tanzania)
2014	JICA	Selected for "Dissemination and Demonstration Project of Solid Fuel Production Equipment Using Rice Husk as a Raw Material"(SME Support Type) (Tanzania)
2019	MOE TICAD7	Adopted as "Commissioned City-to-City Collaboration Project for the Realization of a Carbon-Society in FY1, 2019"(Can Tho City, Vietnam) Exhibited at "Business Expo & Conference" (Yokohama)
2020	MOFA UNIDO MOE METI	Non-Project Grant Aid (ODA) exported 7 grind mills to Nigeria Selected for "Project to Support Overseas Japan Companies by Demonstration and Transfer of STePP Technology for Preventing Infectious Diseases in Developing Countries" (Vietnam) Engaged in " Commissioned City-to-City Collaboration Project for the Realization of a Carbon-Society in FY2, 2020 "(Soc Trang Province, Vietnam) "The 6th Jump Out Japan! Subsidy for Expansion to Global Growth Markets (Madagascar)
2021	JICA MOE MOFA MOE	Selected for the "2nd SME and SDGs Business Support Project Feasibility Survey in 2020 " (SME Support Type) (Madagascar) Engaged in "Commissioned City-to-City Collaboration Project for the Realization of a Carbon Society in FY3 2021"(Soc Trang Province, Vietnam) Selected for the "Overseas Development Initiative for Decarbonization Technology" and listed in the list of decarbonized products and packages. Virtually exhibited at COP26 JAPAN Pavilion in Glasgow, UK
2022	TICAD8 MOE Forestry Agency MOE	Exhibited at the "Special Exhibition Introducing the Products, Technologies, Initiatives, etc. of Japan Companies Contributing to the Development of Africa"(Tunisia) Engaged in "Commissioned City-to-City Collaboration Project for the Realization of a Carbon Society in FY4, 2022"(Soc Trang Province, Vietnam) Adopted for the "Forest Knowledge Utilization Promotion Project for Developing Countries in FY4, 2022" (Cambodia) Virtual Exhibition at COP27 JAPAN Pavilion (Cairo, Egypt)
2023	MOFA	Japan NGO Collaboration Grant Aid in FY4, 2023 "Through the revitalization of the Nigerian National Rice Production and Processing Cooperative Engaged in the "Decarbonized Rice Production and Processing Promotion Project" (Nigeria)
2024	UNIDO	Adopted as an "Industrial Vocational Training Program through Technology Transfer from Japan" (Madagascar)
2025	METI	Global South Future-Oriented Co-Creation Project(Large-scale Demonstration ASEAN Member Countries) (2nd Application) Engaged in the "Demonstration Project for Improving Agricultural Productivity and Reducing Carbon Emissions through the Use of Biochar in Vietnam"(Vietnam)



Nurturing Greenery  
Protecting the Future

Nurturing Greenery, Protecting the Future

Tromso  
Company Profile

Company Information



**Tromso Co., Ltd.**  
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Issued in August 2025



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Tromso Co., Ltd.

# Nurturing Greenery Protecting the Future

By recycling unused biomass  
We contribute to the realization of sustainable agriculture and  
the preservation of the global environment

## Tromso's 3 Core Businesses



### Agritech Business

Manufacturing and sales of biochar production machines, along with the provision of biochar-related services



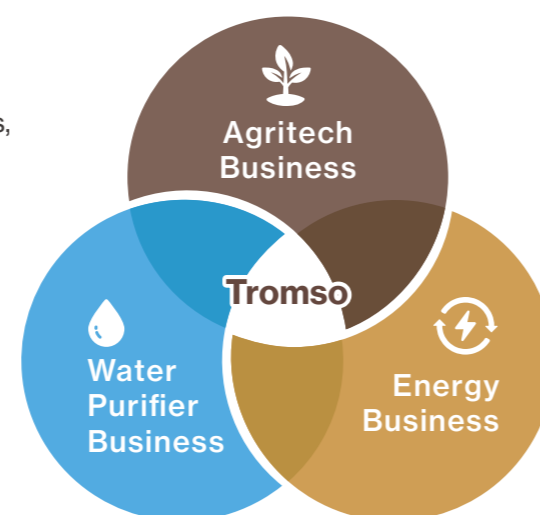
### Energy Business

Manufacturing and sales of Grind Mill rice husk briquetting equipment.



### Water Purifier Business

Development and sales of water purifiers utilizing rice husk-derived activated carbon.



## Corporate Profile

**Company :** Tromso Co., Ltd.

**Address :** 1182-6 Innoshima Shigeicho, Onomichi-city, Hiroshima, 722-2102, Japan

**Business Details :**

Manufacture and sales of rice husk solid fuel production equipment, development and sales of carbonization equipment, analysis and application development of biochar

**Founded :** October19, 1994

**Capital :** 29,990,000 yen

**President and CEO :** Masaaki Uesugi



## History of the Founding

Tromso is a company based in Innoshima (Onomichi City, Hiroshima Prefecture), an area known for its thriving shipbuilding industry. It was founded as a spin-out from a manufacturer specializing in heat exchangers and related products. The company was established by four baby boomer engineers who had retired from major shipbuilding firms. With a wealth of experience and expertise, they came together to apply the shipbuilding technologies they had cultivated over the years to land-based manufacturing.

I was struggling to deal with the large amount of rice husks produced during rice polishing," recalls one of the founders. This challenge led Tromso to focus on finding a sustainable use for rice husks.

In Japan, approximately 2.1 million tons of rice husks are generated annually, with around 750,000 tons discarded without being utilized. To address this issue and promote effective use of this agricultural byproduct, Tromsø developed and commercialized the "Grind Mill" – a machine that converts rice husks into solid fuel.

In recent years, as a new business pillar, we have also turned our focus to the agriculture, forestry, and food sectors, specifically on the effective utilization of various organic residues generated during product processing.

We are actively expanding our business by developing and utilizing biochar made from unused biomass resources. This includes the development, manufacturing, and sales of biochar production equipment, allowing us to contribute to sustainable resource use and environmental conservation.

## Management Philosophy and Goals

Building on the technology of solidifying rice husks inherited from our founder, our management philosophy centers on developing "rice husk solutions" and pursuing an "environmental and social issue-solving business." We aim to add value to rice husks and other agricultural residues, promoting the effective use of resources and enhancing agricultural productivity.

Tromso's goal is to embrace the challenge of innovative manufacturing that addresses various issues faced by Japan and the world. We strive to contribute to the creation of a sustainable society where future generations can live in a green and comfortable environment.



## Contribution to the SDGs

Tromso sells rice husk solid fuel production equipment and water purifiers, and through its biochar-related initiatives, contributes to the achievement of the following six goals.





## Leveraging biochar technology to address social and environmental challenges

Tromso's new Agritech division is building a comprehensive business model that spans from the development of biochar production equipment to support for biochar application, chemical analysis, and carbon credit certification. Through demonstration projects in Japan and abroad, we aim to enhance agricultural productivity, reduce fertilizer use, and drive the decarbonization of agriculture. Furthermore, by expanding internationally – including into the Global South – we strive to become a green technology company that contributes to local communities through a business model that integrates circular agriculture with greenhouse gas emission reduction.

## What is Biochar?

**Biochar is defined as “a solid material obtained from the thermal decomposition of biomass at temperatures above 350°C under limited oxygen conditions that prevent combustion.”**

— Based on the 2019 Revised IPCC Guidelines

Biochar is produced from a wide range of organic materials, such as wood, bamboo, rice husks, and livestock manure, collectively referred to as biomass residues.

In recent years, biochar has gained attention not only for its ability to improve soil quality in agricultural applications but also as an effective tool for climate change mitigation through carbon sequestration. As a sustainable agricultural material, biochar contributes to addressing multiple environmental challenges, including the treatment of organic waste generated from farming and the reduction of greenhouse gas emissions.



### Features of biochar



#### Improving soil physics

- Improved water retention and permeability
- Improvement of soil biologies and soil fertility
- Reducing Soil Contamination
- Increase in soil organic carbon, etc.



#### Improvement of fertilizer use effect

- N<sub>2</sub>O reduction
- Reduction of nitrogen leaching, etc.



#### Carbon sequestration

- Long-term carbon storage in the soil
- CO<sub>2</sub> emission reduction, etc.

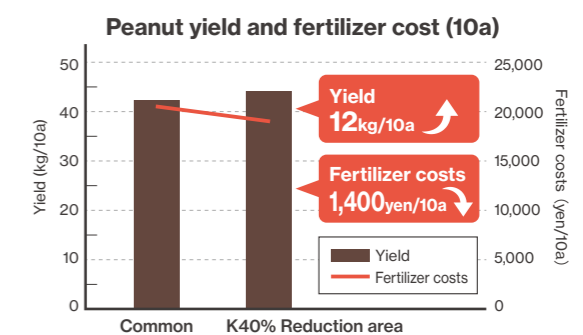
## Effects of biochar application

### 1. Reduction of chemical fertilizers

The application of biochar to farmland enhances soil water retention and fertility, improving the ability of the soil to retain essential nutrients such as nitrogen and potassium. This helps suppress nutrient runoff after fertilization and ensures a stable nutrient supply in the root zone of crops. Additionally, biochar increases the soil's cation exchange capacity (CEC), promoting the adsorption and retention of cationic fertilizer components such as ammonium ions (NH<sub>4</sub><sup>+</sup>) and potassium ions (K<sup>+</sup>).

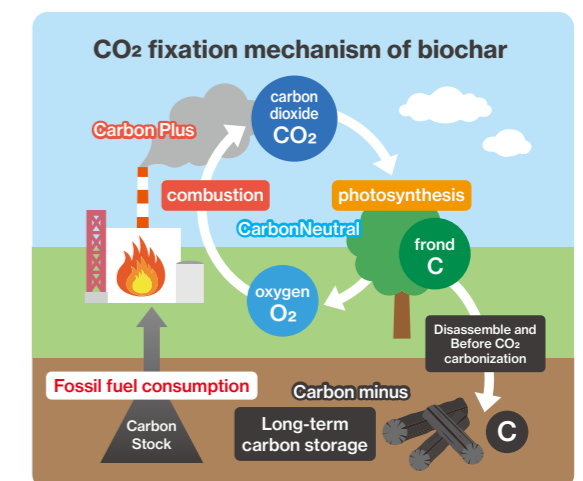
A field test conducted in a peanut field in Yachimata City, Chiba Prefecture, demonstrated that biochar application improved crop yield while reducing the need for fertilizer (Figure 1).

**Figure 1: Potassium reduction field test in Yachimata City, Chiba Prefecture**



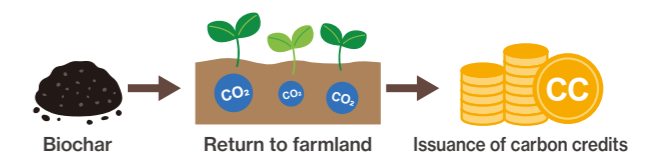
### 2. Reducing CO<sub>2</sub> emissions through carbon fixation

Carbon contained in biomass such as wood and agricultural residues is typically decomposed by microbial activity in the soil and released into the atmosphere as CO<sub>2</sub>. However, when this biomass is converted into biochar and applied to the soil, the decomposition of its carbon content is significantly slowed, allowing the carbon to be stably sequestered in the soil. This process helps reduce CO<sub>2</sub> emissions to the atmosphere. For example, applying one ton of rice husk-derived biochar to farmland can result in a CO<sub>2</sub> reduction effect of up to approximately 1.16 t-CO<sub>2</sub>.



### 3. Creation of carbon credits

The carbon credit system is a mechanism that allows companies to buy and sell greenhouse gas (GHG) emission reductions, including CO<sub>2</sub>. By applying biochar to farmland, it contributes to CO<sub>2</sub> reduction and can be certified and traded as carbon credits.



## Biochar Demonstration Experiment in Vietnam

**Implementation details:**  
**Biochar agricultural application experiment**  
**Country: Can Tho City, Vietnam**

Biochar is applied to rice fields in the same area. Investigation of growth when chemical fertilizers are reduced and cost-effectiveness of chemical fertilizer reduction.

**Chemical fertilizer reduction effect on the practice area.** **Biochar application area** **ABT 28% reduction**



Before heading



After heading

## Utilizing the know-how of biochar technology Tromso's one-stop service

Comprehensive support for utilization in agriculture through four key pillars

Leveraging technology and expertise gained from demonstration experiments in Japan and abroad, Tromso integrates services that were previously handled by multiple companies. We offer comprehensive support for all services related to biochar.



1

### 1. Production of biochar production equipment

The quality of biochar varies depending on factors such as carbonization temperature, duration, production method, and its characteristics during agricultural use and carbon credit generation. At Tromso, we leverage knowledge gained from three years of cultivation trials and demonstration experiments conducted both in Japan and abroad. Based on this expertise, we manufacture and sell biochar production equipment specifically designed for agricultural applications.



2

### 2. Farming support using biochar

We provide agricultural support to farmers in Japan and overseas, including fertilizer design proposals that reduce the use of chemical fertilizers through the application of biochar. By minimizing chemical fertilizer usage, we aim to increase farmers' income while promoting environmentally friendly and sustainable agricultural practices.



3

### 3. Support for the creation of carbon credits

Based on biochar demonstration experiments, we calculate the amount of greenhouse gas (GHG) emission reductions, including CO<sub>2</sub>, and generate carbon credits. We also offer support for carbon credit applications and the procedures required for certification.



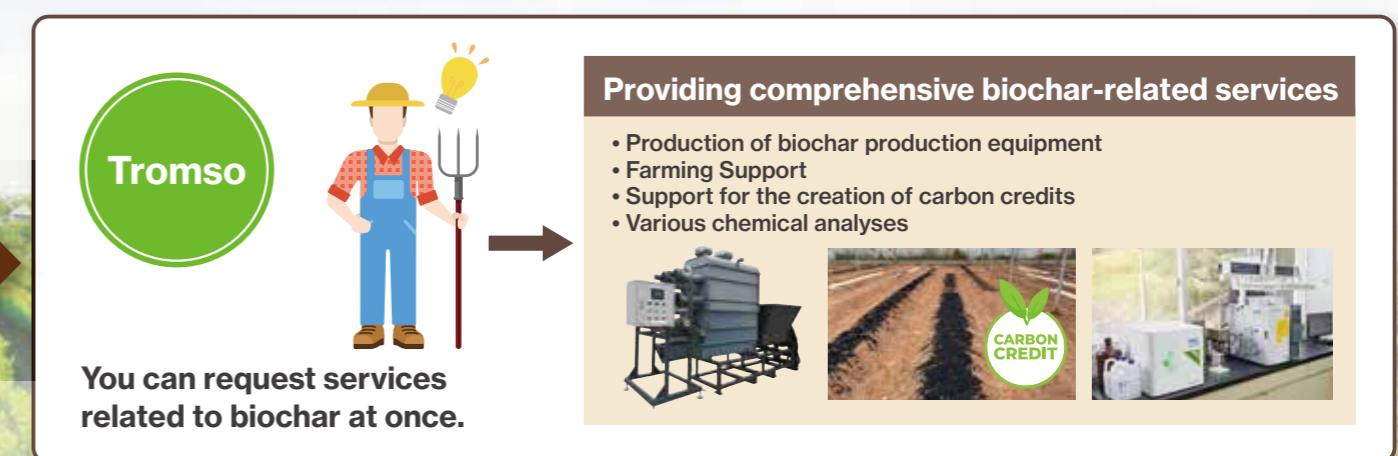
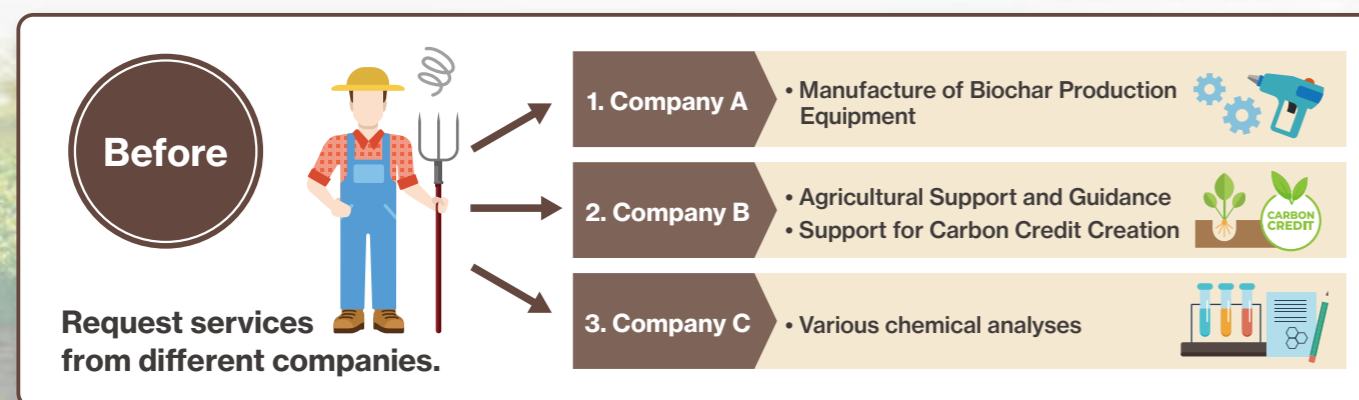
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### 4. Chemical analysis

Samples collected from demonstration experiments conducted in Japan and abroad are quantitatively analyzed at the Biochar R&D Center using advanced analytical equipment. We also outsource GHG emission measurements and CHNS elemental analysis to ensure accurate and reliable data.



## One-Stop Biochar Service - Visual Concept



## Product

### Continuous biochar production equipment

#### TCE-C001

\*The image is for illustrative purposes only.



By adjusting the carbonization time, temperature, etc.  
We produce biochar with specifications suitable for agricultural application.

**Selling price/** Contact us

#### Specification

Model: TCE-C001  
Capacity: Approx. 0.4 m<sup>3</sup>/h+0.2 m<sup>3</sup>/h  
Size: Approx. 4,500×1,400×h2,500mm(Chimney not included)  
Weight: Approx. 1,800kg  
Power supply: AC200V 3φ 50Hz/60Hz

#### Features

- Continuous carbonization equipment utilizing a screw conveyor.
- Capable of carbonizing various types of biomass, including rice husks, rice straw, and peanut shells.
- Allows adjustment of biochar quality by controlling carbonization time and temperature.

### Brick type biochar production equipment

#### TCE-B001

\*The image is for illustrative purposes only.



A batch carbonization furnace that can directly input raw materials with high moisture content and large size raw materials.

**Selling price/** Contact us

#### Specification

Model: TCE-B001  
Capacity: Approx. 20 m<sup>3</sup>/9day  
Size: Approx. Φ3,000×h4,500mm(Chimney not included)  
Weight: Approx. 20,000kg

#### Features

- Batch carbonization equipment that produces biochar without requiring electricity.
- No need to size-match raw materials; large materials such as bark and palm shells can be carbonized.
- Raw materials with high moisture content can be processed directly without pre-drying.

New Office

### Innoshima, Hiroshima Prefecture Biochar R&D Center

We will utilize part of the idle facilities at the Innoshima Flower Center, located in Shigei-cho, Innoshima, Onomichi City, as a "Biochar R&D Center." The facility includes a laboratory equipped with analytical instruments capable of quantitative analysis of greenhouse gases (GHGs) and biochar composition. A test field will be established on-site to conduct cultivation experiments for various crops. We also plan to welcome trainees from Japan and abroad. As a cutting-edge hub in the fields of environment and energy, we aim to become a leading facility that contributes to the development of the Innoshima region.



## Effective use of unused rice husks for new energy

Approximately 2 million tons of rice husks are generated annually in Japan alone, and about 150 million tons worldwide. Many of these rice husks are currently incinerated and discarded without being utilized. We are focusing on rice husks as an underused resource and are working to transform them into a new regional energy fuel by utilizing the "grind mill," a rice husk solid fuel production device.

## Using Grind Mill Solutions for the circulation of local resources

The grind mill efficiently utilizes unused rice husks, which are generated in large quantities at agricultural sites, recycling them into solid fuels such as "Momigalite" and ground rice husk. By making use of this underutilized regional biomass, we promote effective local resource use, strive toward a sustainable energy recycling society, and contribute to reducing agricultural waste and CO<sub>2</sub> emissions.



## Introduction of grind mills overseas

Grind mills are increasingly being adopted and expanded overseas, especially in African countries. In addition to introducing them to private companies through B2B channels, we have also implemented them in collaboration with international organizations, governments, ministries, and agencies.

### Grind mill introduction in Africa



	Nigeria	10units
	Tanzania	9units
	Senegal	6units
	Madagascar	6units
	Ghana	2units

We are also in contact with Egypt, Uganda, etc.



## New energy derived from rice husks Momigalite

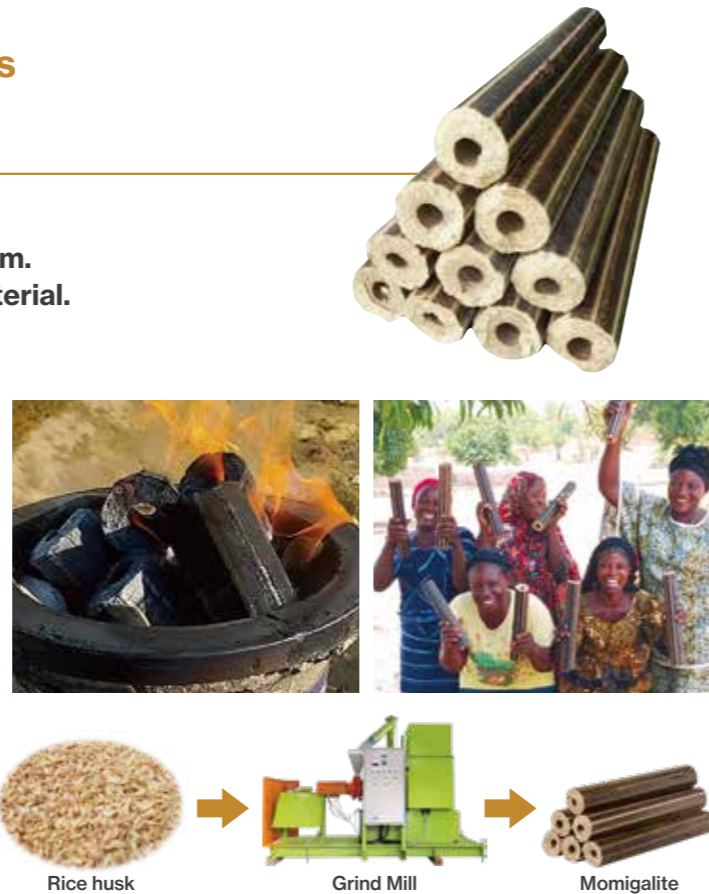
**Momigalite is an alternative to fossil fuels, produced by grinding rice husks into a solid form. It is made from 100% rice husks as the raw material.**

### Features

- Easy to ignite using a fire starter
- Calorific value of approximately 4,000 kcal/kg
- Consistent moisture content and shape ensure stable combustion
- Even as the flame diminishes, it remains in a state suitable for cooking
- As long as rice is cultivated, the annually generated rice husks serve as a sustainable raw material
- Maintains quality during long-term storage, making it ideal for fuel stockpiling

Shape: Solid fuel compressed by breaking the hard structure of rice husks.  
Size: Diameter approx. 5.4 cm× length 35 cm (Center hole 1.7 cm)  
Specific gravity: about 1.3  
Moisture content: about 5.5%

**No binders are used in solid form**



## Momigalite Q & A

### Q Are there any harmful gases in the exhaust composition of Momigalite?

Momigalite is made from 100% rice husks, with no binders or adhesives used during solidification, ensuring that no harmful gases such as NO<sub>x</sub> or SO<sub>x</sub> are produced during combustion.



### Q Is momigalite an environmentally friendly fuel?

When Momigalite is burned, CO<sub>2</sub> is released; however, since CO<sub>2</sub> is absorbed and O<sub>2</sub> is emitted during the growth of the rice plants, the CO<sub>2</sub> generated from burning Momigalite is considered carbon-neutral and is therefore not counted in emissions.



### Q What is Momigalite used for?

Momigalite is used as an alternative fuel to firewood and fossil fuels. It can be utilized in agricultural house stoves, boilers, and as fuel for biomass power generation. Additionally, it serves as an outdoor fuel for barbecues and is suitable for disaster preparedness stockpiles.



### Q Where can I buy Momigalite?

Tromso Co., Ltd. serves as the secretariat for the Momigalite Promotion Council. Momigalite can be purchased through the official website of the National Fir Galite Promotion Council.

 **Momigalite Promotion Council Homepage**  
<https://momigalite.com>



## Eco-friendly new resource Ground rice husks

**Grinding rice husks in a mill generates high frictional heat, which kills bacteria, enhances water absorption and retention, and produces an alternative medium that maintains excellent air permeability.**



### Features

- Excellent water absorption and water retention.
- Ideal for livestock bedding, seedling soil for paddy rice, horticultural soil, etc.

Shape: Powder with coarsely ground  
Size: Diameter 1-3 mm

### Excellent water absorption performance

By grinding rice husks, which are originally hydrophobic, they can be used as a bedding with excellent absorbency.



Rice husks (unprocessed)



Ground rice husk (processed)



Nursery using 100% ground rice husks

\*If you use ground rice husks in a nursery, please do so at your own risk.

### use 1 For making a nursery

Using ground rice husks reduces the weight of traditional seedbeds, significantly lowering the cost of nursery establishment.



### use 2 For alternative media

Ground rice husks contain silicic acid derived from rice, which, when used as an alternative growing medium, is expected to promote healthy crop growth.



### use 3 For bedding material

It decomposes more quickly than traditional rice husks, making it an excellent alternative to increasingly expensive wood chips.

## Spiral rice husk solid fuel with excellent ignition Curl Chips

**With a special curl chip machine, It is a fuel made by compressing and molding rice husks into a spiral shape without heating.**



### Features

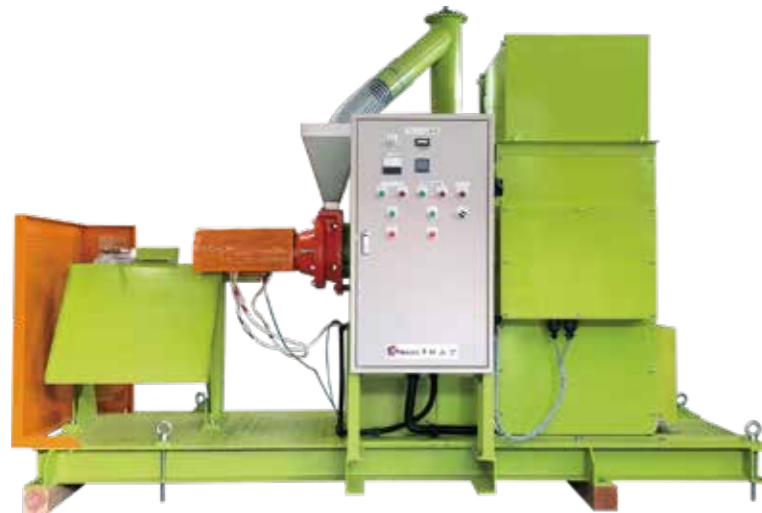
- Offers better ignition performance than Momigalite.
- Expected to reduce CO<sub>2</sub> emissions when co-fired with coal in power plants and industrial coal boilers; feasibility studies are currently underway in India and Vietnam.

Shape: Solidified rice husks in a spiral form



## Product

### Rice husk solid fuel production equipment Grind Mill TRM-120F



#### Features

- One machine can produce both Momigalite and ground rice husks
- Equipped with a rice husk conveyor and rice husk feeding device, it enables fully automated operation from rice husk loading to Momigalite molding
- A single operator can manage 2 to 3 grind mills simultaneously

### From Rice Husk Input to Momigalite Molding A standard model with fully automated operation.

#### Specification

Model: TRM-120F  
Capacity: Approx.120 kg /h (During the production of Momigalite)  
Size: 2,780(W)× 1,503(D)× 2,130(H) (mm)  
Weight: Approx. 1,300 kg  
Power supply: AC200V 3Φ50Hz/60Hz・AC400V3Φ50Hz  
Motor: 15kW 4P (Reduction ratio:1/15)  
0.4kW 4P (Reduction ratio: 1/10)  
0.25kW 4P (Reduction ratio: 1/6)  
Heater: 1.5kW×3 pieces

Manufacturing volume  
 120kg/h

Manufacturing volume  
 120kg/h

### Rice husk solid fuel production equipment Grind Mill TRM-120DD




#### Features

- One machine can produce both Momigalite and ground rice husks
- An economical model that eliminates the dosing machine, allowing manual rice husk insertion to reduce initial costs and equipment weight
- Simplified equipment design lowers maintenance needs and reduces the number of replacement parts
- Highly demanded overseas, especially in regions with abundant labor and a need to minimize initial investment

### Rice husk feeder is omitted. Economy model for overseas use.

#### Specification

Model: TRM-120DD  
Capacity: Approx. 120 kg /h (During the production of Momigalite)  
Size: 2,700(H)× 992(D)× 1,343(H) (mm)  
Weight : Approx. 900 kg  
Power supply: AC200V 3Φ50Hz/60Hz・AC400V 3Φ50Hz  
Motor: 18.5kW 4P (Reduction ratio: 1/15)  
Heater: 1.5kW×3 pieces

Manufacturing volume  
 120kg/h

Manufacturing volume  
 120kg/h

## Feature

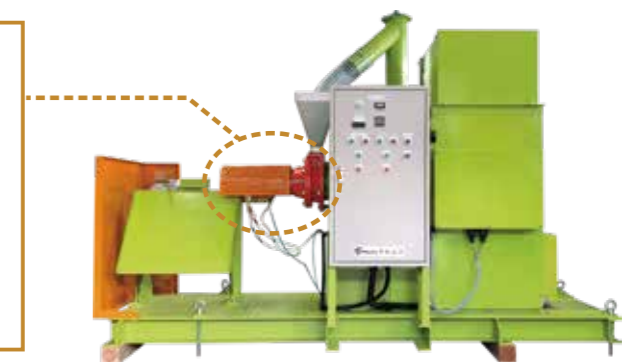
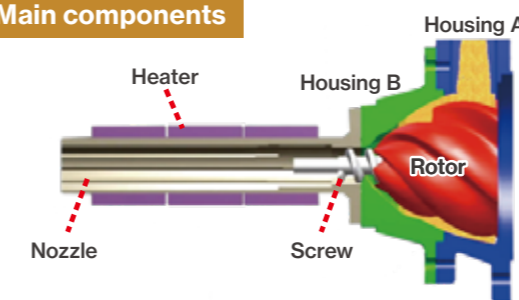
1. The grind mill is a device that produces the solid fuel “Momigalite” primarily made from rice husks, as well as ground rice husks that can be used as natural organic materials.
2. Provides one-stop support from raw material input to molding; the machinery is installed directly in the rice husk storage area and can be operated immediately.
3. Simple operation with no special skills or qualifications required.

Details about Momigalite can be found on page 9, and information on ground rice husks is on page 10.

## Active in a wide range of roles

By attaching or removing key components, the machine can switch between producing Momigalite and ground rice husks.

#### Main components



When attached... Momigalite



When removed... ground rice husks

## Movable

The grind mill is truck-mobile, allowing it to be transported directly to rice husk locations for on-site Momigalite production.



Momigalite Demo Car



Mobile grind mill

## Simple operation

The operation of a grind mill does not require any special skills or qualifications.



## Product

### Grinding machine TRM-400S



#### Features


- This machine is dedicated exclusively to producing ground rice husks and delivers approximately three times the output of the TRM-120F model.
- The main motor speed is fully adjustable, allowing easy control over the particle size of the ground rice husks.
- Ideal for those seeking to mass-produce crushed rice husks efficiently in a short period.

**Grinding rice husk production machine:**  
This model is recommended for those who want to manufacture only ground rice husks.

#### Specification

Model: TRM-400S  
Capacity: Approx. 400 kg /h ( During the production of Ground rice husks)  
Size: 1,985(W)× 1,055(D)× 1,343(H) (mm)  
Weight: Approx. 850 kg  
Power supply: AC200V 3Φ50Hz/60Hz • AC400V3Φ50Hz  
Motor: 18.5kW 4P (Reduction ratio: 1/5)

#### Manufacturing volume

 **400kg/h**



Production of Ground rice husks



Ground rice husks

### Curl Chip machine TRM-200CR



#### Features

- This model was developed in response to the large volumes of rice husks generated in developing countries, with enhanced production capacity to meet local demand.
- By eliminating the need for heaters and other previously required components, and shortening the molding nozzle design, it achieves longer part lifespan and lower production costs.

**A specialized machine that solidifies rice husks into a spiral shape: Introducing a new grind mill designed for overseas users, featuring high production capacity.**

#### Specification

Model: TRM-200CR  
Capacity: Approx. 200 kg /h (Curl Chip Production Volume)  
Size: 2,197(W)× 1,095(D)× 1,480(H) (mm)  
Weight: Approx. 985 kg  
Power supply: AC-200V 3Φ50/60Hz • AC400V 3Φ50Hz  
Motor: 30kW 4P (Reduction ratio: 1/7.12)

#### Manufacturing volume

 **200kg/h**



Solidifying into a spiral



Curl Chips

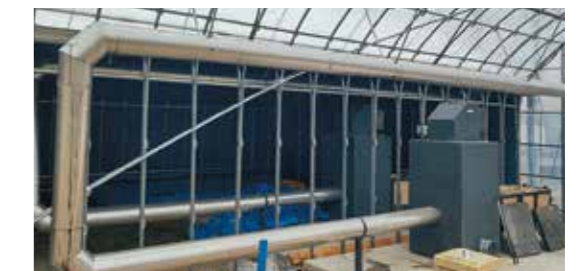
### Rocket stove TRM-2020-1

**A simple rocket stove featuring a combustion chamber made of refractory bricks. Designed as auxiliary heating equipment for greenhouses, it can use Momigalite as fuel.**



#### Specification

Model: TRM-2020-1  
Size: 2,136(W)× 760(D)× 1,771(H) (mm)  
(Excluding the chimney part)  
Weight: Approx. 520 kg  
Power supply: AC100V 50Hz/60Hz • AC200V 3Φ50Hz/60Hz  
Fuel: Momigalite (or firewood)  
Injection: fuel input/100 ~ 110 kg  
(Fuel input for the above equipment dimensions)  
Chimney: Ducts sold separately  
Remarks: Combustion furnace size can be changed to suit the size of the customer's house



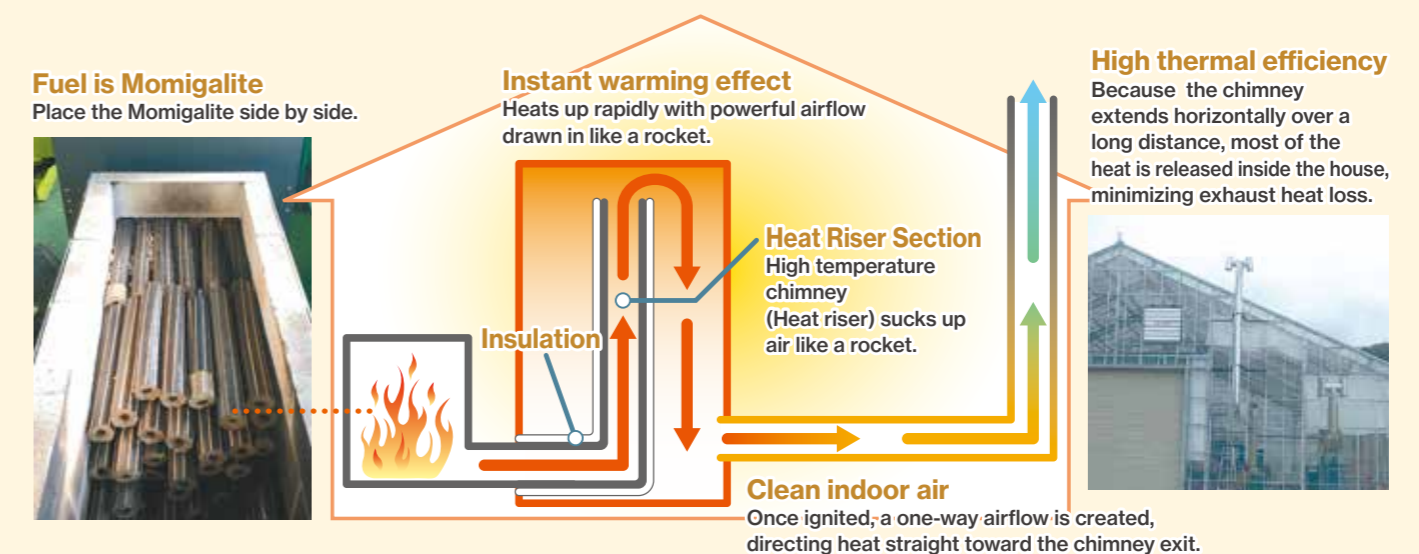
#### Lateral chimney (up to 10 m)

The horizontally extended chimney design efficiently distributes heat throughout the interior of the greenhouse.

#### Features

- Utilizing the rocket stove mechanism, the chimney can be extended horizontally over a long distance.
- This long horizontal exhaust duct allows heat to be efficiently absorbed into the greenhouse interior.
- When Momigalites are lined up-side by side, they burn slowly, eliminating the need for refueling until the following morning.

### Rocket stove structure diagram



# Water Purifier Business



## Born from rice husk innovation: Rice husk activated carbon filter water purifier

Water is deeply connected to our daily lives. Whether it's drinking water or water we use for bathing and washing our face, water that comes into direct contact with our skin, or water that enters our body indirectly through washing ingredients and dishes used in cooking, water reaches us in many ways. That's why we want it to be of the highest possible quality. At Tromso, we harnessed the exceptional adsorption properties of rice husk activated carbon created from rice husks and used it as the core material in our water purifiers.



### Features

#### 1 "Rice husk activated carbon filter" made from 100% domestic rice husks

Palm husk activated carbon is often used in general water purifier filters, but Tromso's water purifier uses "rice husk activated carbon" made from domestic rice husks.

#### 2 Responding to PFAS (PFOS, PFOA) removal

Due to its porous structure, rice husk activated carbon has an excellent effect on the adsorption of harmful substances of various sizes in water. The removal rate of PFAS (PFOS, PFOA) is more than 89%, which proves to have a higher removal ability compared to general activated carbon.

\*PFOS and PFOA are a type of organofluorine compound whose use is regulated in many countries due to problems such as harmfulness and accumulation.



#### 3 Elutes silica to support beauty and health

Rice husks contain a lot of silica (silicon), and silica is eluted in water filtered by a Wellbina water purifier. Silica is an essential mineral for the human body that supports the formation of skin, hair, and bones, and rice-derived vegetable silica has been found to have a high absorption rate by the body.



#### 4 Environmentally friendly

By using rice husks, which are unused biomass, as raw materials, we contribute to reducing waste. In addition, the spread of water purifiers will lead to a reduction in plastic bottles, realizing a sustainable life with less environmental impact.



## Welvina Series Product Lineup

### Pitcher Type

With its compact, low-profile design, it fits neatly into your refrigerator door pocket. A stopper between the lid and inner container prevents raw and purified water from mixing. The recessed grip at the bottom of the main body makes it easy to hold with one hand. Designed for convenient refrigerator storage, it's especially useful during warmer seasons when drinking water is consumed more frequently.

\*Can be stored upright on shelves 25 cm or taller.



### Outdoor installation type (PoE type)



This is an outdoor water purifier that can filter all tap water in your home. You can use Welvina's safe and delicious water for drinking water, baths, showers, and laundry. In addition, since it does not use a power supply, it can be used even in the event of a power outage in the event of a disaster.

\*The outdoor installation Welvina is a product jointly developed by "DAX Co., Ltd." and "Tromso Co., Ltd."

### Water server type (with hot and cold-water function)



High-performance water filter TRM-03B

In conventional water server type water purifiers, dedicated filters are installed according to their roles for each function, and they are often composed of multiple filters. The high-performance water filter (TRM-03B) of "Welvina" aggregates each filter that has been divided by role into a small number of filters.

You can enjoy delicious silica water smartly and casually.



## Water Purifier Business in Vietnam

Tromso's water purifier project using rice husk activated carbon was selected under a UNIDO initiative that supports Japanese companies overseas through the demonstration and transfer of STePP technologies for infectious disease prevention in developing countries. As part of the project, Tromsø installed 200 built-in water purifiers at hospitals and schools in Soc Trang Province, Vietnam, providing clean and safe water to medical staff and residents.





## With Tromso technology Solving the world's problems

In recent years, global challenges such as climate change, resource depletion, food insecurity, and environmental pollution have become increasingly serious. In response, Tromso Co., Ltd. is committed to building a sustainable future by harnessing local resources and advancing technological innovation.

For example, we simultaneously create environmental, social, and economic value through initiatives such as developing technologies to recycle unused biomass like rice husks, an agricultural byproduct, and advancing biochar technologies that help reduce greenhouse gas emissions.

Our mission is to contribute to a sustainable society by linking community-based manufacturing with solutions to pressing global issues.

## Local subsidiary Tromso Vietnam

In 2021, we established a local subsidiary, Tromso Vietnam, to develop our business centered on the agricultural field and the effective use of environmental resources in Vietnam. The company is conducting cultivation experiments on the application of biochar to farmland. In addition, in the water purifier business, we are developing water purifiers using rice husk activated carbon filters in Vietnam and promoting a business aimed at supplying hygienic drinking water locally.



Biochar Demonstration Experiment



Biochar Demonstration Test



Highlights from the Water Purifier Event

### Tromso Vietnam Co., Ltd

**Establishment :** June 1, 2021

**Residence :** 360C Ben Van Don street, Ward 1, District 4, Ho Chi Minh City Vietnam

**Representative :** Masaaki Uesugi

**Number of Employees:** 5 full-time employees (3 Japanese speaking), 2 part-time

**Capital :** 663,695,445 VND (~29,400USD) 100% owned subsidiary from Japan subsidiary"

#### Business description:

Conducting work and research related to biochar demonstration under the consignment of a Japan subsidiary,  
Sales of grind mills and biochar production equipment,  
consulting services related to biochar application,  
carbon credit application services, and sales of water purifiers

## Overseas Expansion Consulting

We offer comprehensive one-stop support from the business planning stage through to full operation. Our services include assistance with establishing a local subsidiary in Vietnam, registering representative offices, branches, business sites, and store locations, as well as handling licensing and market research. In addition, we provide a wide range of tailored services to meet our clients' needs, including partner matching, appointment scheduling, on-site inspection support, and interpretation services.



### Establishment and registration of local subsidiary

Essential for overseas expansion, we handle all procedures on your behalf.



### Market Research & Marketing

We will conduct marketing including the selection of target areas.



### Business Matching

We will introduce you to the best business partners who are familiar with the local area.



### Exhibition Participation Support

We provide comprehensive support from store opening plan formulation to promotion.



## Global Human Resource Development

As the market for the agritech business expands, we are also actively working to recruit and train foreign human resources. We are focusing on recruiting human resources from African countries, where the use of biochar is expected to expand in the future, and aim to grow as a global company.



Large photo from left:  
AKARI KURODA (Japan) YIKII WALTER (Uganda)  
UGWU CHIGOZIE (Nigeria)  
SHEMA JEAN DE DIEU (Rwanda)  
Bottom right: NGUYEN THI MINH THUY (Vietnam)

