

E-world  
energy & water 2025

# TOKYO

*Pavilion*

Feb. 11-13 (Tue-Thu)  
9:00 am to 6:00 pm\*

\*Closes 5:00 pm on final day

Messe Essen HALLO 0H00

各情報のご手配をお願いいたします。



TOKYO  
METROPOLITAN  
GOVERNMENT

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# TOKYO Pavilion

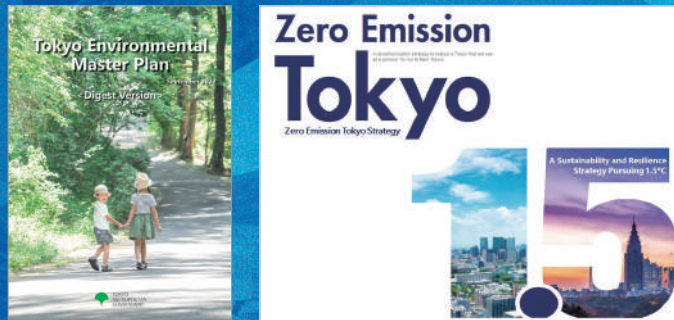
Messe Essen HALL5 **0H00**

ホールの番号をご教示いただけますと幸いです。

Tokyo, the capital of Japan, sets a goal to become a green and resilient global city creating a sustainable future that is safe, secure, and welcoming.

As such, Tokyo is host to many outstanding products and advanced technologies in the environment and energy sectors. This exhibit is presented by 10 Tokyo-based SMEs who are industry leaders in these sectors in Japan.

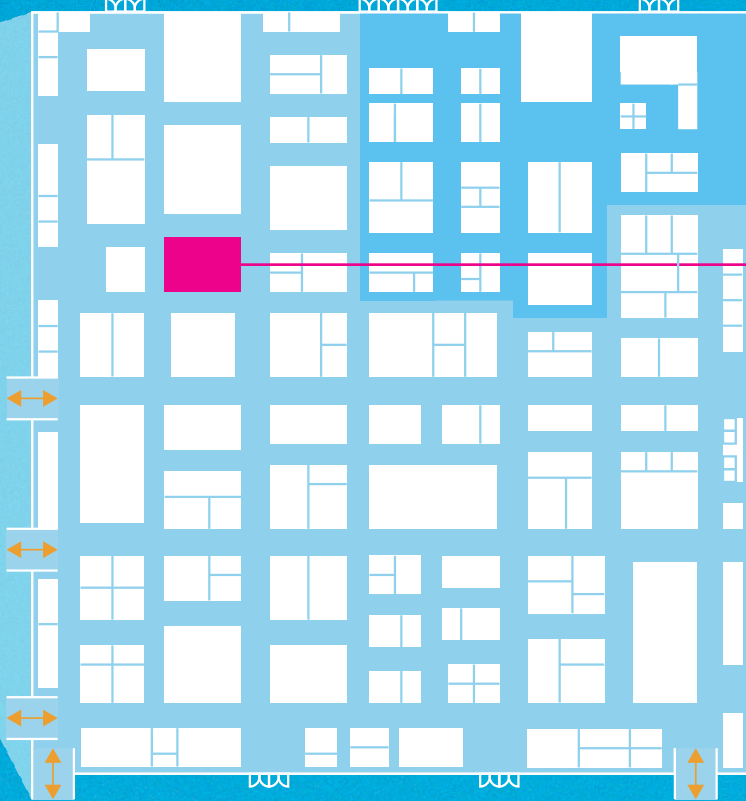
Check out the technologies and products displayed in the Tokyo Pavilion to find out their true ability and take this opportunity to consider collaborating with the Tokyo SMEs.



E-world 2025 Floor Map



HALL 5



**0H00**  
Tokyo Pavilion

↔ CROSSOVER \*Maps shown are intended as a rough guide only.



at E-world 2025



# TOKYO Pavilion EXHIBITORS CONTENTS

本文の小見出しなどと照らし合わせ、ご確認くださいませと幸いです。



01

## Fuji Graphite Works Co., Ltd.

### Products on show

- Snow Melting Pavement Material Made of High Quality Synthetic Graphite

### Specialist sectors

- Sale/ Research and Development of Carbon and Graphite Products



02

## Helvetia INC.

### Products on show

- Nessum Adaptor VPLC-4000
- Nessum Control Module VPLC-CORE400

### Specialist sectors

- Nessum is capable of long-distance wired and short-distance wireless communications over a variety of wired and wireless communication media.



03

## Japan System Planning Co., Ltd.

### Products on show

- The Kumano Ocean Current Power Generation System

### Specialist sectors

- The next-generation natural energy system, driving a carbon-neutral society
- Easy installation even at an ocean depth of 4,000 meters



04

## ORLIB Co.,Ltd.

### Products on show

- High-performance battery technology that does not use rare metals

### Specialist sectors

- secondary battery



05

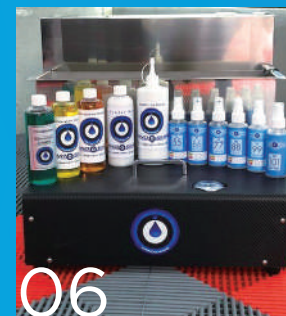
## PoC TECH Inc.

### Products on show

- Generates independent renewable energy even in harsh environments
- Hybrid use with grid electricity possible
- Automatic switching function with priority to renewables

### Specialist sectors

- Development of self-sustaining renewable energy units.



06

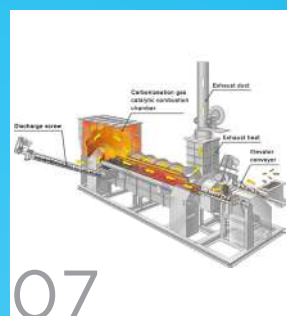
## SYSTEM BRAIN CORPORATION

### Products on show

- NANO-MAINTENANCE

### Specialist sectors

- Glass coating for buildings, PV arrays



07

## ZE ENERGY INC.

### Products on show

- Carbonizer converts waste into resources. Equipment that converts organic waste into charcoal by steaming (indirect heating). Almost no dioxins are generated and carbon dioxide emissions are reduced. The charcoal produced is used as an alternative fuel to coal, soil improvement, water quality improvement, deodorant, etc.

### Specialist sectors

- Carbonization technology, medium-scale biomass gasification and power generation technology



# Fuji Graphite Works Co., Ltd.



01

印象がよくなるように、メインとサブに分けて記載させていただきました。認識に誤りがございましたらご教示いただけますと幸いです。

## Yukikeshi Kun

### Synthetic Graphite Snow Melting Pavement Material

This is snow-melting pavement material, made of high thermal conductive concrete containing synthetic graphite, which is artificially graphite-crystallized material by firing coke at around 3,000 degrees Celsius, has few impurities, high electrical conductivity, excellent lubricity and heat resistance. Synthetic graphite is generally used in sliding parts such as carbon brushes, electrodes for electric furnaces for steel, conductive materials for batteries, and friction materials such as brake pads.

We, Fuji Graphite Works' synthetic graphite product has been selected as a snow-melting agent in one of the heaviest snowfall areas in Japan due to its safety, profitability, workability and availability in this product.

Additionally it is economical friendly as recycled material by lot-out products of electrode, processed powder and used electrodes.



## COMPANY PROFILE



We are only one graphite manufacturer in East Japan with over 70 years. We always welcome to help you anything related to carbon / graphite materials.

### Target companies

- Construction company
- House/ Construction material manufacturer
- Electronic material manufacturer
- Road reforming company

### Target end users

- Construction company
- House/ Construction material manufacturer
- Electronic material manufacturer
- Road reforming company

Representative  
IZUMI ARUGA (MS.)

HP

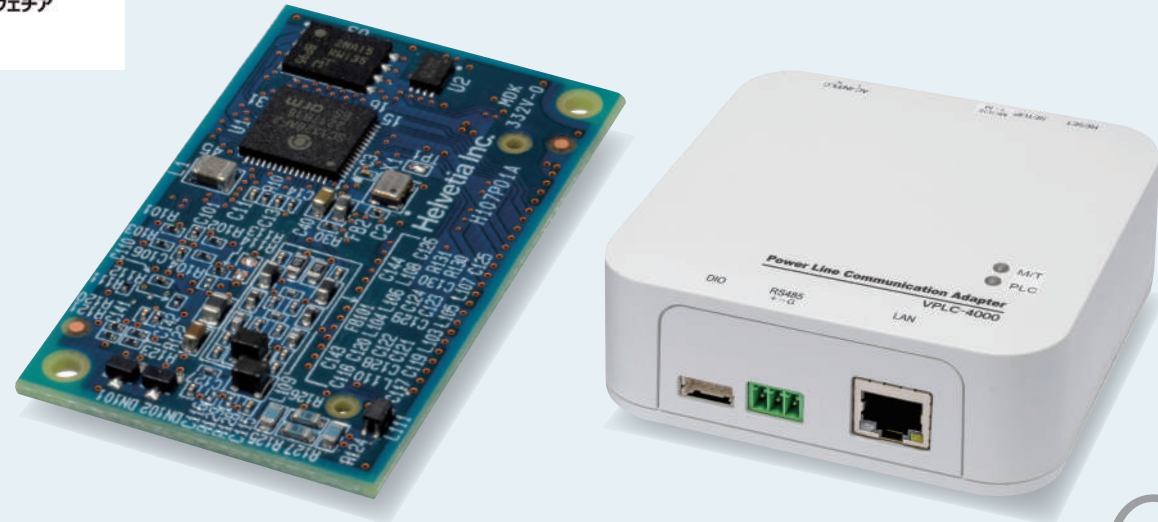
<https://www.fujikokuen.co.jp/en>







# Helvetia INC.



02

印象がよくなるように、メインとサブに分けて記載させていただきました。認識に誤りがございましたらご教示いただけますと幸いです。

## Nessum The Future of Communications Infrastructure

Nessum enables long-distance wired communications and short-distance high-speed wireless communications over a variety of communication media, including wired, wireless, and underwater. It solves various network construction issues and realizes an IoT society where everything is connected.

### Nessum WIRE

Updating Existing Wiring into Communication Lines Nessum WIRE can utilize existing wiring for communication. This eliminates the need for new wiring for communication cables, enabling network construction in a short period of time and at low cost.

### Nessum AIR

Improves communication speed by controlling communication range Short-range, high-speed wireless communication up to 100 cm is possible by applying the Nessum standard.

High-speed communication is possible while precisely limiting the communication range by adjusting the transmission power, antenna shape, and size.

In addition, since the communication range can be defined, false positives and security issues due to radio interference will not occur."



## COMPANY PROFILE



**Representative**  
KENICHI GONDO

**HP**  
<https://helvetia.co.jp/en/>



We are an OEM/ODM developer of IoT systems. We also develop, sell, consult, and customize power line carrier communication devices (Nessum).

### Target companies

- Network Sier
- Network equipment distributor
- Photovoltaic power generation control system development company
- IoT system development company
- real estate business
- Wired drone developer

### Target end users

- network designer
- IoT system development designer
- Solar power generation control solution development engineer
- Smart home product developer
- Wired drone developer



# Japan System Planning Co., Ltd.



03

印象がよくなるように調整させていただきました。認識に誤りがございましたらご教示いただけますと幸いです。

## The Kumano Ocean Current Power Generation System

### 1. Ocean current energy: 10 times greater than wind or solar power

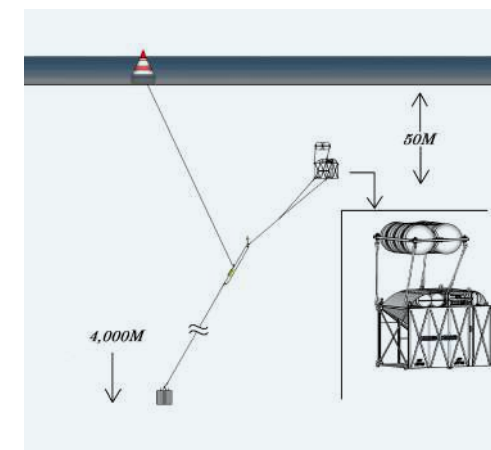
Ocean currents offer a power generation capacity 10 times greater than wind or solar energy. To put this into perspective, if the output of a nuclear power plant is 1 million kWh, the combined capacity of global wind and solar power equals 338 nuclear power plants. In contrast, ocean current power generation can produce the equivalent of 4,590 nuclear plants, just from the Gulf Stream alone—there are 3-4 other comparable ocean regions worldwide.

### 2. Enabling a carbon-neutral society

Fossil fuels like coal, petroleum, and natural gas currently generate the equivalent of 2,003 nuclear power plants but also emit large amounts of CO2. Ocean current power generation, if implemented in the Gulf Stream, can eliminate CO2 emissions, paving the way for a truly carbon-neutral society.

### 3. Producing "green" hydrogen

Our technology uses the electricity generated from ocean currents to electrolyze water, producing green hydrogen. The hydrogen is then stored and transported as hydrogen gas, offering a sustainable and environmentally friendly energy solution.



## COMPANY PROFILE



**Representative**  
KUMANO KATSUYUKI

**HP**  
<https://k-greenenergy.com/en/>



We produce hydrogen by electrolyzing water, utilizing energy generated from ocean currents. This innovative approach creates clean hydrogen, driving sustainable solutions for the future.

### Target companies

- Environment consultants
- Companies developing plastic materials
- Hydrogen electrolyzer manufacturers
- Manufacturers of hydrogen storage tanks

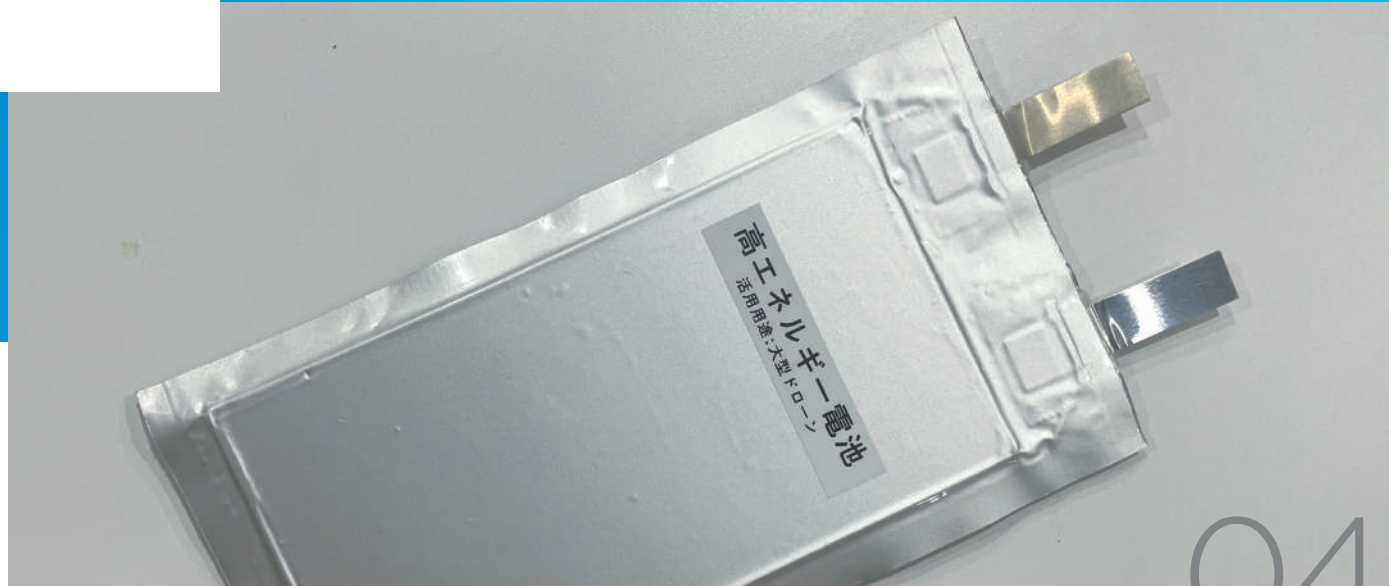
### Target end users

- Plastic wire manufacturers
- Manufacturers of low-torque generators
- Environmental investors
- Hydrogen-related businesses



ORLIB

ORLIB Co., Ltd.



04

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メイン画像と似ているため、もし、あれば他の画像のご手配は可能でしょうか？

### High-performance battery technology that does not use rare metals

A new type of battery that is high-energy, low-cost, has a short charging time and a long cycle life without resource constraints

By applying high-capacity silicon anode technology to iron-based active materials, which are not subject to resource constraints, we have developed a low-cost battery with high energy density equal to or greater than that of rare metals. This battery is also resistant to capacity loss even with repeated charging and discharging, and operates stably even at extremely low temperatures, making it suitable for use as an EV or power storage battery. With these high-energy battery technologies, we will improve energy efficiency, decarbonize, and mitigate global warming.

Battery with 1.5 times the energy, 8 minutes charging, and over 1000 charge/discharge cycle life (under ongoing testing)

### COMPANY PROFILE



Representative  
SATOH MASA HARU

HP  
<https://www.orlib.jp/>



Founded in 2020 as a university-based venture. Winning multiple national projects with its unique high-energy technology. Expanding business with prototype cells and high-energy process equipment.

#### Target companies

- Volkswagen
- TerraE
- BMW
- RWE
- Fraunhofer-Gesellschaft

#### Target end users

- Battery manufacturers
- Automobile manufacturers
- Renewable energy power generation company
- Cargo and passenger transport companies
- Research institute



PoC TECH  
Concept Tech Firm

PoC TECH Inc.



画像の横幅が足りなかったため、AI生成により両端を追加しております。一度ご検討いただけますと幸いです。

05

印象がよくなるように、メインとサブに分けて記載させていただきました。認識に誤りがございましたらご教示いただけますと幸いです。

### SAI-KORO standalone renewable energy storage and power generation unit that utilizes

Our mission is to provide localized energy units that can be used anytime, anywhere, and by anyone. We are committed to enriching people's lives and the environment through "natural energy design." The exhibit features SAI-KORO, a standalone renewable energy storage and power generation unit that utilizes solar power generation in the Shimokita Peninsula of Aomori Prefecture, a coastal area with deep snow and salt damage. By supporting energy independence in regions like this, where there are many places without power grids, or in mountainous areas, or in areas that are not electrified or have unstable power, we aim to contribute to global warming mitigation, disaster resilience, and quality of life enhancement.

This technology can create a number of self-sustaining, renewable energy utilisation areas as smart cities.



### COMPANY PROFILE



Representative  
SAORI AOSAWA

HP  
<https://pocotech.co.jp/>



We are a technology development company creating new concepts for renewables.

- Renewable energy technology R&D/commercialization support company
- Tokyo Metropolis Tokyo Bay eSG Project Partner companies

#### Target companies

- Power generation developer of wind, tidal, hydro, etc.
- Companies and academia involved in smart city development

#### Target end users

- municipality
- Inverter Manufacturer
- renewable energy provider
- Leisure Facilities
- general consumer

いただいた小見出しテキストですが、プロフィールの方が適しているかと思い、調整させていただきました。もし、戻した方がいい場合には再度調整いたしますのでご教示いただけますと幸いです。





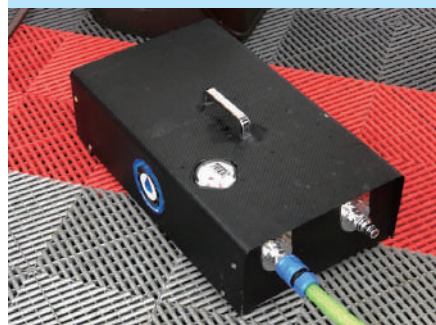
# SYSTEM BRAIN CORPORATION



## NANO-MAINTENANCE

In the glass coating generator, the new-generation ceramics come into contact with water, and molecules of a substance called SiO<sub>2</sub> (silicon dioxide) begin to dissolve into the water through an electrochemical reaction from the surface. The dissolved SiO<sub>2</sub> adheres to the construction object and forms three layers (nanoglass layers). Unlike conventional glass coatings that use chemicals, our glass coating uses only water and inorganic natural minerals, so the wastewater can be washed away after application. (Nano Maintenance) We have developed a cleaning solution that mainly contains mold, such as buildings, buildings, solar panels, etc., and has the characteristic of eradicating the cause of mold by killing the sclerotia of mold. In March 2016, we received an order from the Ministry of the Environment for this method of glass coating and protection after cleaning as the nano-maintenance SB method. <Nanoshine> Our technology for coating moving objects such as cars, trains, buses, and taxis enables quick and easy construction that is unparalleled in the construction methods of other companies.

## COMPANY PROFILE



**Representative**  
TOMOKAZU KANDA

**HP**  
<https://systembrain.cc/english/>



A unique coating technology that does not use any chemicals and simply uses only water and composite ceramics to form a vitreous shielding film on the object!

### Target companies

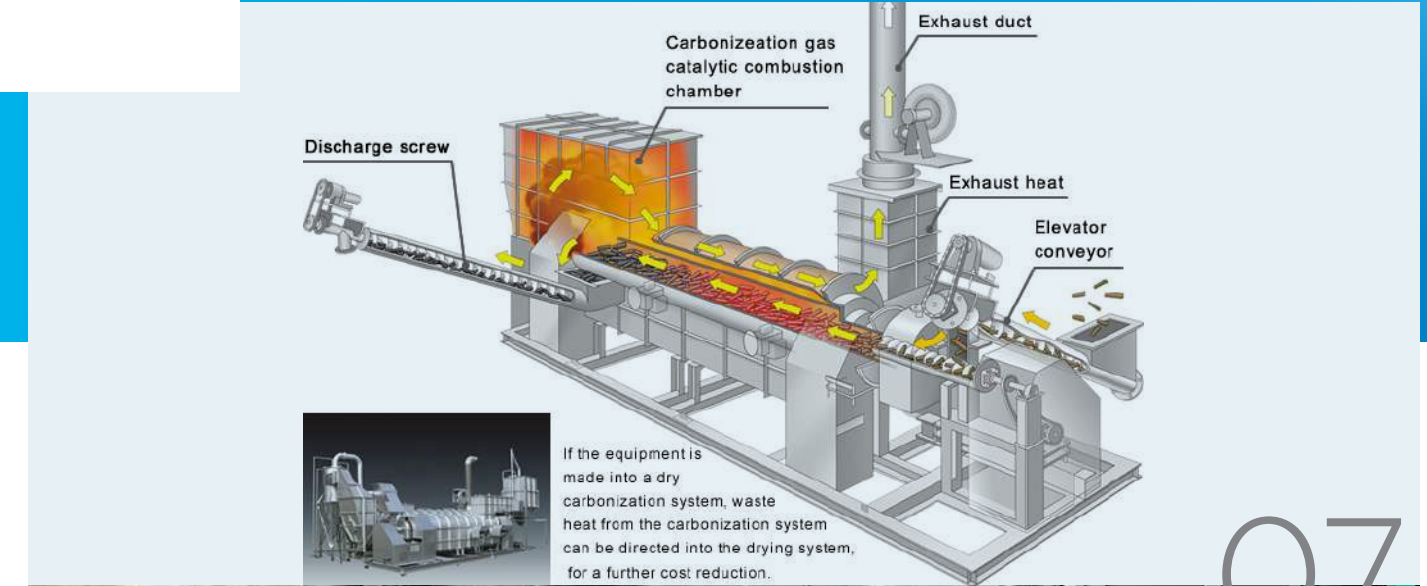
- Vonovia SE
- Deutsche Bahn AG
- Siemens AG
- Robert Bosch GmbH
- Hanwha Q CELLS Co., Ltd
- Mercedes-Benz AG / Bayerische Motoren Werke AG / Volkswagen / Audi AG / Dr. Ing. h.c. F. Porsche AG

### Target end users

- real estate related
- Building management company
- Transportation infrastructure related
- Internal/external contractor
- car dealer relationship



# ZE ENERGY INC.



## Carbonizer converts waste into resources. Effective in sludge treatment phosphorus extraction

ZE Energy is a pioneer of carbonization equipment in Japan and has evolved the traditional Japanese charcoal-making technology into a technology that converts waste into a resource with minimal environmental impact. Charcoal can be used for a variety of purposes, including soil and water quality improvement, deodorization, and fuel. Carbonization technology can also be effectively used in phosphorus extraction in sewage sludge treatment.

From 2026, we will begin full-scale sales of carbonizing and briquetting thinned and unused timber as an alternative fuel to coal. Starting with use as a mixed fuel with coal in blast furnaces, in the future it will be used as a coke substitute in blast furnaces and cupolas, and as a fuel in electric arc furnaces.

In biomass gasification power generation, we specialize in power generation size of 500kw, which is ideal for energy development for local production for local consumption in mountainous areas, and we can be said to be the only gasification power generation equipment manufacturer of 180 to 2,000kw. We generate power using woody biomass such as construction waste and thinned wood, and waste such as food scraps and food processing residues as fuel.

We also offer optimal installation proposals tailored to the industries and facility environments of product companies and various organizations. We are the only Japanese manufacturer of carbonization equipment that has obtained the CE mark.

## COMPANY PROFILE



**Representative**  
KOHEI MATSUSHITA

**HP**  
<https://ze-energy.net/en/>



Manufacturing and sales of system carbonization and semi-carbonization equipment that pyrolyzes biomass waste to produce charcoal while simultaneously reducing carbon dioxide emissions, as well as biomass power generation equipment. CE

### Target companies

- Businesses that process biomass waste by methods other than carbonization
- Businesses planning to construct biomass power generation
- Coal fuel distributors considering alternative fuels
- Food manufacturers and other companies working on turning their own waste disposal into resources such as biochar.
- Companies working on carbon credits

### Target end users

- Waste disposal and treatment company
- Re-energy generators that generate biomass power
- Fuel distributors selling alternative fuels to coal
- Businesses seeking alternative fuels to coal
- Companies reviewing their own waste management to reduce CO<sub>2</sub> emissions