Atmospheric Water Generator (POTORI) Introduction Record Project Status

FREE & CO.

POTORI

Save the world
with water
in the air

Ver.2501_02

Save the world with water from the air

INDEX

In Japan

POTORI is used in various places all over Japan, proving its usefulness not only in everyday life but also in emergencies such as disaster areas and places where water is scarce.

Support for disaster-stricken areas

Utilizing roadside stations as disaster prevention centers for the Ministry of Land, Infrastructure, Transport and Tourism

Demonstration experiment of minimal infrastructure housing in Toki City, Gifu Prefecture

Delivered for Ministry of Defense testing

10 liters/day model
(hot and cold water)

Hybrid water machine

POTORI
ぽとり

Through installation trials at clinics and construction site offices in Tokyo, the product's reliable usability and quality have been highly praised in actual work sites.

Reflecting user feedback, improvements have been made to the "water tank full notification" function and the sound of pumping water.

This is a product that responds to the needs of the field and can be used with confidence.

Tokyo Construction Site Office

Tokyo Hidamari Clinic Roppongi

Demonstration experiment in Toki City, Gifu Prefecture | Circulating minimal infrastructure housing

We are conducting a demonstration experiment in which people actually live in the world's first minimal infrastructure home with a circulation system and air-powered water maker.
The location is Toki City, Gifu Prefecture.
We are demonstrating that this is a solution for sustainable water resource utilization.

POTORI wastewater purification system

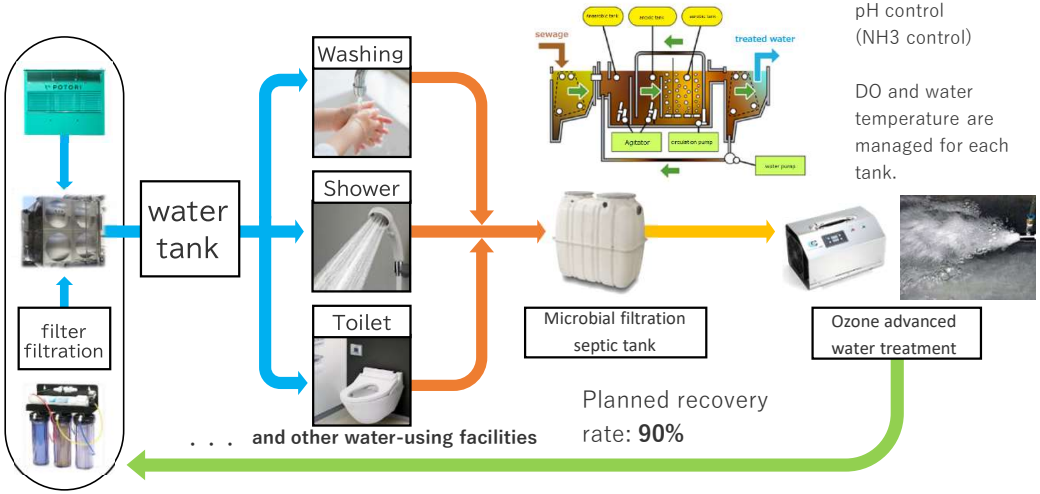
By applying a circulating (wastewater reuse) air water purifier system, it is possible to realize a home that is independent of water infrastructure and does not rely on public water and sewerage infrastructure.

Resident

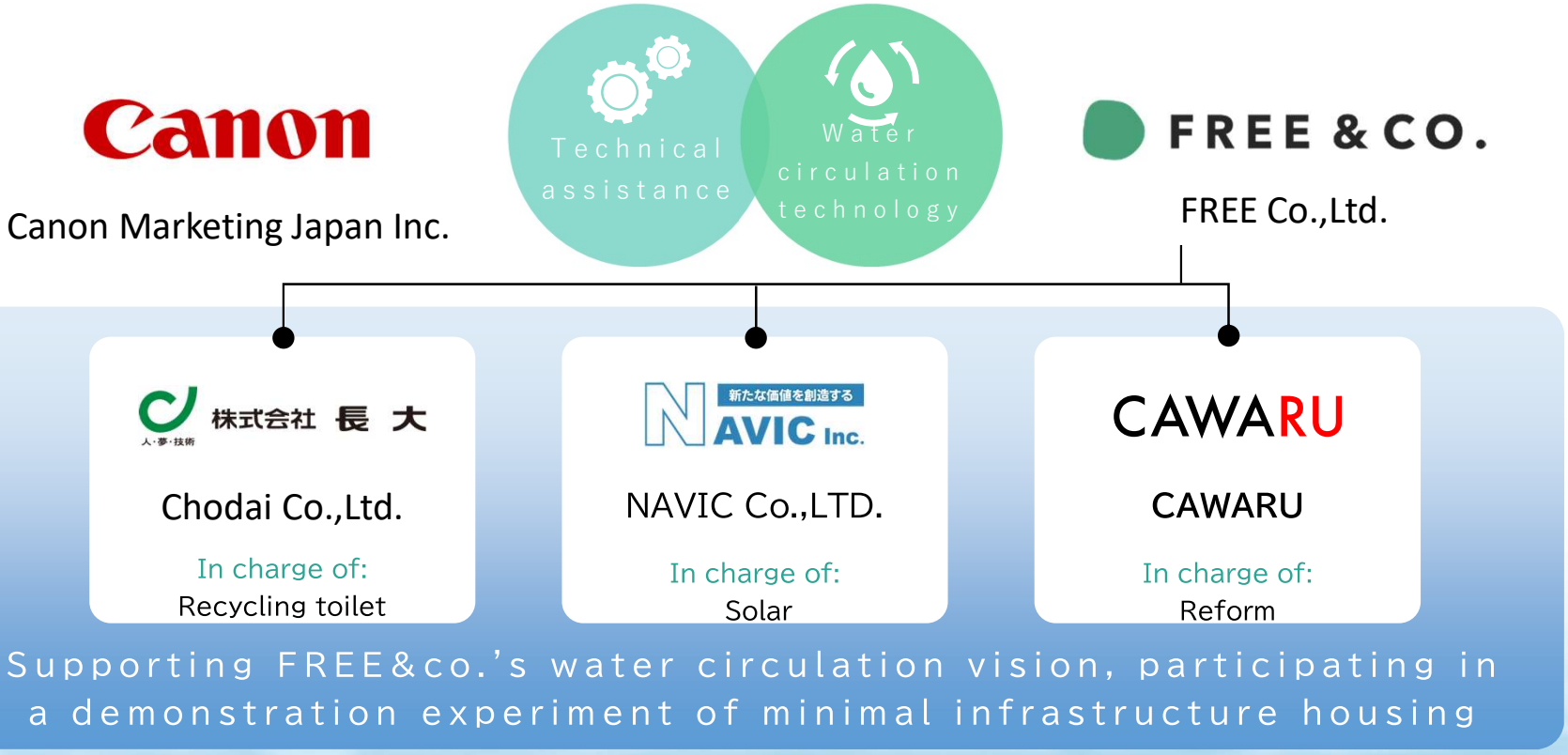
Hidenori Shiraishi

Living in Toki City, Gifu
Pianist

Circulating (wastewater reuse) Atmospheric Water Generation system



Collaborating companies support FREE's vision (a sustainable society based on water circulation)



Ministries and Agencies | Ministry of Land, Infrastructure, Transport and Tourism

We are currently conducting installation and demonstration experiments as part of a project to utilize roadside stations as disaster prevention centers.

Source: NHK Yamagata NEWS WEB (2023.09.27)
https://www3.nhk.or.jp/lnews/yamagata/20230927/6020018626.html

Roadside station

Installed at the roadside station "Iide", designated as a Yamagata Prefecture regional disaster prevention center
Installed a 1000L model (September 2023)
Featured in local media and attracting attention
→ Demonstration experiment to be conducted in 2024

Off-grid trailer house

An off-grid overnight stay will be held in a trailer equipped with an air-powered water machine (November 2023)

NEWS WEB 新着 天気 動画 ニュース ジャンル

山形 NEWS WEB ▶ 山形の深掘り記事

地域防災拠点に指定 飯豊町の道の駅で社会実験 設備を案内

09月27日 18時22分

山形県内で唯一、地域の防災拠点として指定されている飯豊町の道の駅で、今後の活用方法を検討する社会実験が今年度から始まり、２７日は地元の住民などに防災に関する設備を案内しました。

道の駅「いいで」は、国から地域の防災拠点となる「防災道の駅」に指定されていて去年８月の豪雨では、周辺の道路が冠水して通行止めになったため、避難場所として開放し、およそ１００人が避難しました。

Ministries and Agencies | Ministry of Defense

In order to utilize it for the Japan Ground Self-Defense Force's water supply activities, we carried out improvements based on on-site inspections and requests, received an order, and delivered the product for testing in December 2023.

Self-contained model equipped with a disaster prevention generator

(Ministry of Defense model reference material)

Domestic Projects | Support Activities

Support for areas affected by the Noto Peninsula earthquake

On February 5, 2024, we donated two Atmospheric Water Generator to Shika Town, Hakui County, Ishikawa Prefecture.

Domestic Projects | Support Activities

Support for areas affected by the Noto Peninsula earthquake

On February 26, 2024, we will donate one Atmospheric Water Generator to Noto Town, Housu District, Ishikawa Prefecture.

We also received feedback that laundry dries easily.

■ Crisis Management Industry Exhibition RISCON TOKYO 2024 (Tokyo) - October 2024

■ Gifu City Disaster Prevention Fair 2023 (Gifu Prefecture) - October 2023

■ Advanced Construction, Disaster Prevention, and Disaster Reduction Technology Fair 2022 (Kumamoto Prefecture) - November 2022


Reference: Disaster Prevention Fair in Kumamoto 2022
https://www.skumamoto.jp/2022result/kaijou_fuukei/index.html

■ Tohoku Six Prefectures Roadside Stations Whole Festa (Miyagi Prefecture) - October 2023


■ Roadside Station Touring Photo Exhibition (Tokyo) - April 2022

Reference:PR TIMES(2022.04.14)
https://prtimes.jp/main/html/rd/p/000000009.000043602.html

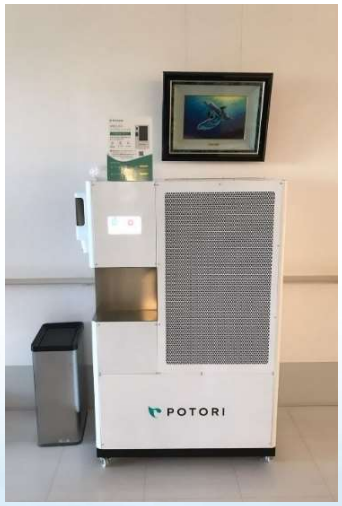
General company installation example

It has been introduced in a wide variety of private facilities and is used in a wide range of locations, including hospitals, hotels, and office buildings.

As a highly reliable water supply solution, it helps create a safe and comfortable environment every day.

June 2022	Okinawa Prefecture	Iias Okinawa Toyosaki Outside Store Okinawa
July 2022	Chiba Prefecture	Suemaru FT INNOVATORS CO.,LTD.
September 2023	Osaka Prefecture	Kishi Corporation
February 2024	Gifu Prefecture	Comfort Systems Co., Ltd.
May 2024	Aichi Prefecture	Certain medical corporation facility.
September 2024	Tokyo	Hidamari Clinic Roppongi
		And many more

Tokyo Hidamari Clinic Roppongi

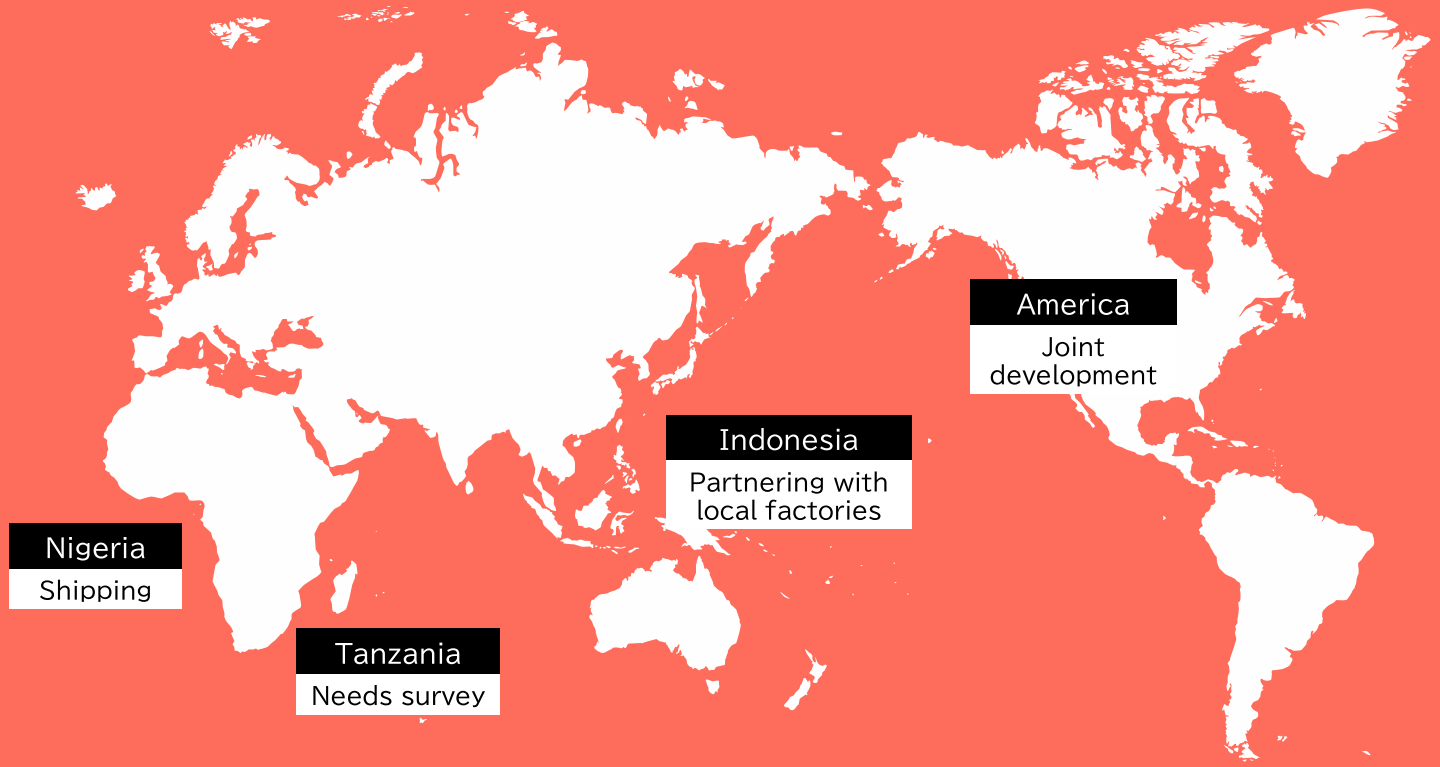


Aichi Medical Corporation Facility

Tokyo Office

Outside Japan

With the aim of disaster prevention and improving the local environment where drinking water standards are not met, we are promoting projects to introduce air water purifiers in various countries and regions. In cooperation with local partners, we are contributing to the creation of a safe and secure living infrastructure through sustainable water supply.



A project aimed at improving environments that do not meet drinking water standards.

JICA needs confirmation survey

2023	August	JICA inspection
	December	JICA adoption
2024	May to Dec.	Needs survey in Tanzania (Joint project with Watarai Electric Civil Engineering Co., Ltd.)
	July	1st Survey
	August	2nd Survey


Tanks for storing tap water


Bus lane under construction

Asia-Pacific Africa Women ‘s Economic Exchange Summit

November 2022 Water production demonstration in Saitama Prefecture

December 2022 Request for estimation

1000ℓ Room temperature type

Participating Countries

- Republic of Burundi
- Democratic Republic of the Congo
- Republic of Gabon
- Republic of the Gambia
- Republic of Malawi
- United Republic of Tanzania
- Republic of Uganda
- Republic of Zambia
- Republic of Zimbabwe

Overseas projects | Visits to various countries

A project aimed at improving environments that do not meet drinking water standards.

Asia areas

2023	October	Visit to Bangladesh
2024	February	Visit to Qatar
	April	Visit to Indonesia
	June	Indonesia(shipped in June) Installed in Malang → Moved to Jakarta (September 2024)
	July	Visit to Thailand
	September	Partnership with Turkiye local subsidiary Planned future expansion
	September	Visit to Sri Lanka
	September	Visit to Indonesia, Thailand
	November	Visit to Indonesia, Thailand, and the Philippines

Africa areas

2024	September	Nigeria shipping

Indonesia shipping model

Case mark

Compatible with overseas voltages and plug shapes

Surabaya, Indonesia

Indonesia business

With the aim of contributing to measures to combat the water shortage in the Indonesian market, establishing a new sales base, and developing the market, we have partnered with a local factory in Indonesia to supply parts and support the factory's operations.

Before renovation

POS2

180ℓ/day(50Hz)
190ℓ/day(60Hz)

Indonesia shipping model

POT1

220ℓ/day(50Hz)
230ℓ/day(60Hz)

Factory contract signed with PT. NAGA ARTHA MANDIRI

Cost reduction through local manufacturing

+

Establishing a sustainable business model

After renovation

American partner companies tackling water issues with cutting-edge technology

We have officially started a joint development project between FREE and a US company that has high expectations for the practical application and commercialization of our advanced technology.

In this project, we aim to combine the company's innovative MOF technology with FREE's know-how in developing and manufacturing air-powered water makers to develop a high-performance hybrid product that is particularly suited to low humidity environments.

Innovative MOF Technology

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Development and manufacturing know-how of Atmospheric water Generator

FREE &CO.

Prototype No. 1

- Market launch of device that aims to supply 2 liters of water per day without electrical input
- Growth expected in response to demand for sustainable water supply technology

Registration and Inspection

It has passed 51 water quality tests that comply with tap water standards. Its reliable quality has earned it the trust of many companies. It has also received various certifications from third-party organizations, and will support your business as a safe and sustainable water infrastructure.

Various certifications, registrations and inspection results

Registered with UNIDO (United Nations Industrial Development Organization)
Sustainable Technology Diffusion Platform STePP

NETIS (Ministry of Land, Infrastructure, Transport and Tourism):
Registration (TH-240022-A)

WaterProject (Ministry of the Environment):
Participation in project

Domestic patent: pending

Overseas patents: pending

Vibration Inspection : Completed

Water Quality Inspection:
Conforms to the 51 criteria of the Japanese Water Supply Act Standards.

UNIDO ITPO Tokyo's STePP Sustainable Technology Promotion Platform

Water Project