



Presentation Materials by Japanese Companies

17 October 2025 Nagoya, Japan

The 16th UN-Habitat Environmental Technology Expert Group Meeting (EGM)

UN-Habitat Regional Office for Asia and the Pacific (UN-Habitat ROAP)

1. Honda Motor Co., Ltd.,

Honda ICT Solutions for Social Issues

-More Honda's Mobilities Create Better World-

Honda Motor Co, Ltd.

October, 2025

In 2008, Honda partnered with local governments to use hard braking data to pick up areas of danger; tree trimming and road signage improvements at 16 locations resulted in a 66% reduction in the number of hard braking incidents. Since then, Honda has been developing data analysis technology using connected car data with a focus on accident reduction.

GPS, G-sensor,
Operation,
Weather,

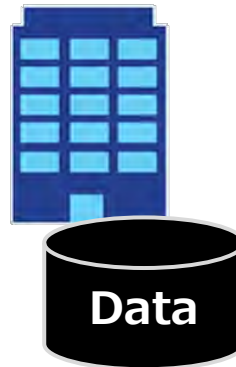
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Honda Motor Co., Ltd. Confidential

- Driving Information
 - Moving Information
 - Vehicle Condition
- Location info
 - Speed
 - G sensor
 - Steering
 - Binker...

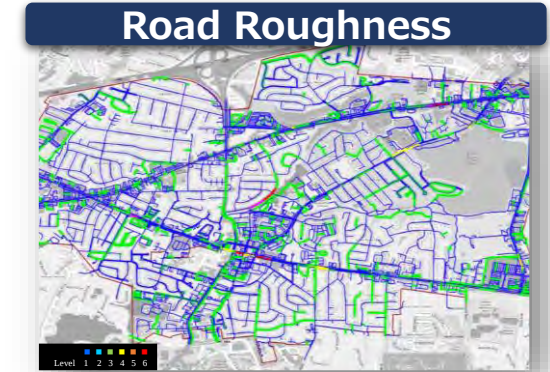
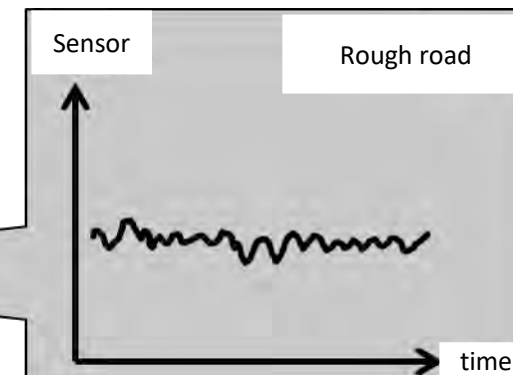
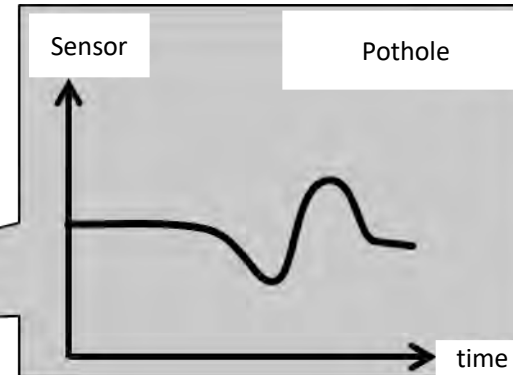


Connected



※This technology is established with test vehicle data acquired at 10 Hz.
Proven in US with connected vehicle data (1Hz).

Estimates road surface conditions by utilizing G sensors, etc.



The goal is to efficiently provide road management information to road management organizations in each country by using data from Honda Connected Vehicles.



This service uses sensor data from connected cars to detect structures and hazardous objects on the road and provides this information to organizations and drivers who need it.

Road Structures



Road Hazards



It is possible to contribute to maintaining the health of roads and traffic safety for all traffic participants.

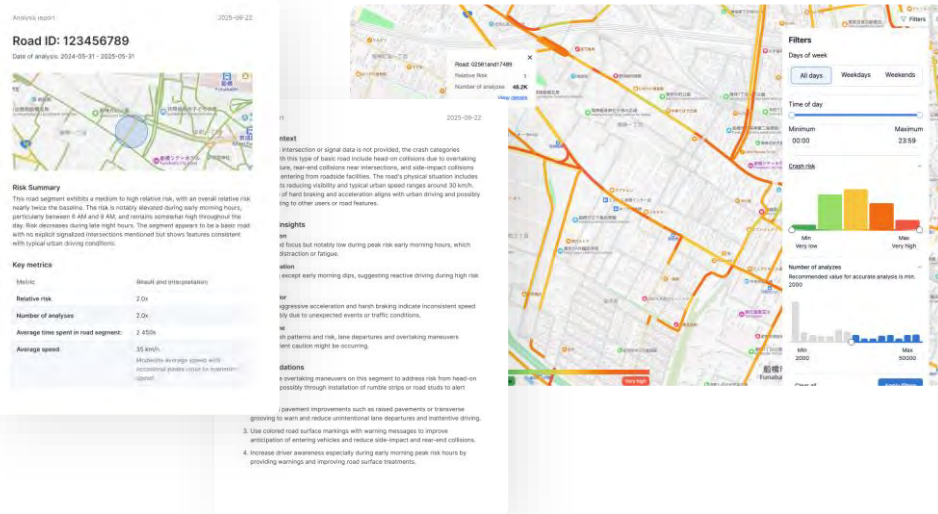
Honda has been working with iProbe Inc., a startup funded by the JPN large companies since 2020 to develop potholes & roughness detecting services in the US. iProbe has been demonstrating the service especially in California, Ohio, and Hawaii



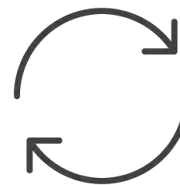
Accumulate know-how on accident reduction through continuous activities, since traffic accidents will not be reduced to zero immediately.

Accident data and vehicle data are analyzed to identify high accident locations. Then, the causes of the accidents are considered, and various countermeasures are implemented, such as cutting down trees and installing speed bumps. The effectiveness of the countermeasures is then verified by conducting the same analysis again. By implementing these measures at many locations, a pattern will be established that these measures are effective for these causes. Once this has been achieved, the entire area will be expanded to accelerate the reduction of traffic accidents.

Current Situation Analysis Effect Verification



Crash Risk Map Platform



Countermeasure Implementation



Honda Connected Car acquires a variety of weather-related data.

○ Data being acquired

Collecting of data through on-board sensors and communication modules

*We do not collect data without the user's consent.

*Data is processed statistically, and no personal information is provided.

Time, location and direction information

Event time, latitude and longitude, direction, etc.

Vehicle Driving Information

Igon/off, acceleration, torque, fuel consumption, etc.

Safety Function Information

ABS, airbags, child locks, etc.

Vehicle Maintenance Information

Accident history, abnormal alarms, tire pressure, etc.

Vehicle Personal Information

Seat/handle position, operating history, etc.

Weather Condition Information

Temperature, humidity, atmospheric pressure, rainfall, etc.

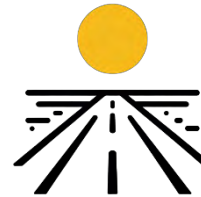


Detail

- External environmental data for automobiles include outside air temperature, atmospheric pressure, solar radiation, raindrop detection, etc.
- Vehicle internal environmental data such as internal temperature, internal humidity, etc.
- Other data such as wiper operation, air conditioning, etc., which drivers use with their own will.

○ Assumed Use Cases

In addition to addressing infrastructure issues, consider providing weather data itself



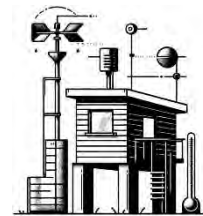
• Estimation of road radiant heat

Estimates road radiant heat from air temperature etc. Verify the effectiveness of thermal barrier pavement.



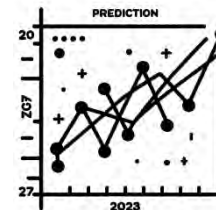
• Optimization of anti-freeze application area

Estimates road surface temperature based on outside air temperature and solar radiation. Used to select areas to apply anti-freeze.



• Replaces or complements ground-based meteorological observation networks

In areas where ground meteorological observation networks do not exist or are scarce, external environmental data is provided as a substitute or complement to these networks.



• Substitute or supplement agro-meteorological data

Providing external environmental data for agriculture, which is vulnerable to the weather environment, for use in production volume forecasting

2. INSPIRATION PLUS Inc.



INSPIRATION+

1% Inspiration and 99% Perspiration

The 16th UN-Habitat Environmental Technology Expert Group Meeting

Digital Transformation of Disaster Prevention using EDiSON

INSPIRATION PLUS Inc.

Challenges and Solutions in tackled by INSPIRATION PLUS

Challenge 1: Information **Aggregation** is Difficult

There are many disaster management stakeholders, making information aggregation difficult.

Information used for disaster management is scattered, and the format, granularity, ID, name, etc., differ for each data set.

Printing maps on paper and giving handwritten instructions, or communicating via whiteboards, limits the scope of sharing.

Solution 1:

Real-time aggregation and accumulation of data held by many stakeholders

Challenge 2: Information **Analysis** is Not Being Done

Judgment of future risks is reliant on human know-how (e.g., "A typhoon on this path means that river is dangerous")

Judgments are made based on experience from a lot of information.

There is much scattered information, and it cannot be analyzed manually.

Solution 2:

Analysis and Visualization of Future Disaster Risks

Challenge 3: Information **Utilization** is Difficult

Past disaster experiences cannot be digitized and cannot be reused.

Experience and know-how are lost due to personnel transfers.

There are few staff members dedicated to disaster management, making information organization impossible.

Solution 3:

Decision Support for Disaster Countermeasure Policy Decisions, etc.



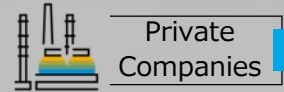
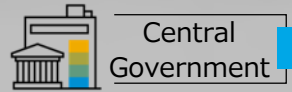
The Necessity of Applying DX to the Disaster Management Field to Advance Disaster Countermeasures

EDiSON: Centralized Collection, Analysis, and Use of Disaster Prevention Information

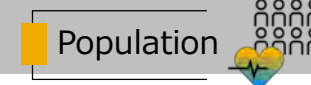
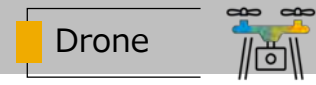
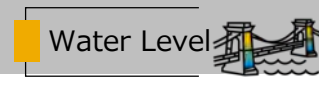
Solution

Integrating essential disaster countermeasures data and performing AI/spatial analysis to enable advanced early warning and enhanced the use of information

Various Organizations



Variety of Data



Collects

Aggregates diverse static and real-time data

Analysis

Data Analysis with AI and Spatial Analysis

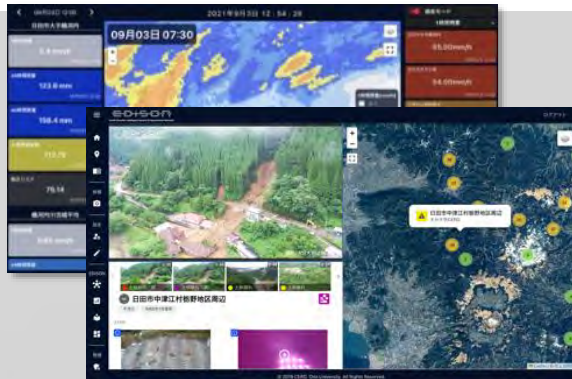


Analysis

Data Accumulation Simulation

Application

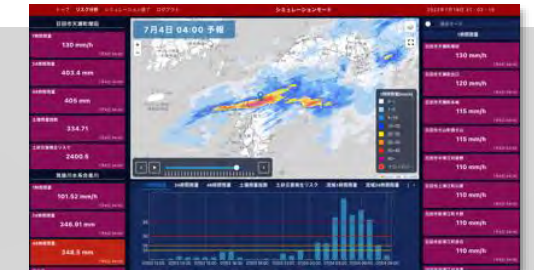
Disaster Risk Visualization use in decision making, BCP, and training



Disaster Risk Assessment
Drone Information Sharing / 3D Analysis



Real-time Alert



Disaster Information Archive
Disaster Risk Simulation



Intelligent Dashboard

AI-generated Assistance

Disaster Preparedness and Prevention Education

Analysis materials

Disaster response support

API Integrated System

Response · Recovery · Reconstruction support

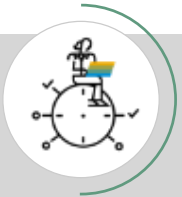
Main Feature of 『EDiSON』

Disaster Prevention Integrated Platform with Various Functions Implemented for Advanced Disaster Prevention



Platform Integrating Diverse Data Essential for Disaster Response

- Integrates a wide variety of data dispersed across various organizations
- Integrates a wide variety of FMT including static information on land and facilities, real-time weather data, human flow data with demographic attributes, images, videos, and 3D models



High Speed and Real-time Data Utilization and Visualization

- Subdivide data into 500m mesh and assess risk up to 15 hours ahead
- Automatically create structured data through categorization and aggregation using AI
- Automatically performs spatial analysis of various polygon data and integrates location information



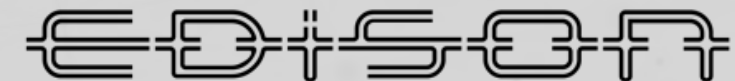
Multi-faceted Data Analysis, Risk Assessment, and Simulation

- Multi-faceted analysis through optimal use of AI and spatial analysis
- Rapid initial response and advance preparation through business-specific analysis
- Provides dashboards that users can customize on their own



Integration with Core Systems as an Information Platform

- Complementary functions such as risk assessment through integration with disaster response systems
- Achieves advanced disaster prevention while utilizing existing systems
- Supports diverse input/output formats, including dynamic and file-based integration



Earth Disaster Intelligent System & Operational Network

Benefits of Using 『EDiSON』 (ex: Kyushu Region)

▲15_H

[Local Government] – Regional Disaster Prevention Collaboration Model

Establishing rapid initial response systems to cope with increasingly frequent heavy rainfall disasters is a key challenge

- Utilization:
- By using EDiSON, real-time information sharing between municipal governments and the prefectural office was achieved.
 - Weather, geographic, and population data from each municipality were integrated, enabling the system to automatically suggest the optimal timing for issuing wide-area evacuation orders.

Effect: Preparation for evacuation orders could begin before 3:00 p.m., promoting earlier evacuation behavior among residents.

▲25%

[Industry] – Strengthening BCP (Business Continuity Plan) Measures

Companies with multiple production sites in Kyushu faced challenges in making operational decisions during rainfall disaster

- Utilization:
- Introduced EDiSON's 500-meter mesh risk prediction function to assess disaster risks by region.
 - Used the results to support decision-making on plant operations and reconstruction of logistics routes.

Effect: Reduced disaster-related losses by 25% and improved the rate of avoiding supply chain disruptions.

+40%

[Educational Institution] – Implementation in Regional Disaster Education Programs

To strengthen disaster education aimed at raising community disaster awareness and developing students' crisis response skills.

- Utilization:
- Conducted biannual disaster drills at local junior high schools using virtual rainfall and simulation functions.
 - Enhanced realism through drone footage and scenario-based training exercises.

Effect: Improved participants' disaster knowledge retention rate by 40%, and expanded participation in community-based disaster preparedness activities.

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3. NTT Data Institute of Management Consulting, Inc.



データ活用を通じて どうレジリエンスを強化するか？

How can we strengthen resilience through data utilization?

ハイレジリエント社会の共創プラットフォーム

「D-Resillio連携基盤®」

Co-creation Platform for a Highly Resilient Society
D-Resillio Integration Framework

NTTデータ経営研究所 地域未来デザインユニット
NTT DATA INSTITUTE OF MANAGEMENT CONSULTING, Inc

江井仙佳
Noriyoshi Enei

Shifting Social Trends and Persistent Challenges 社会トレンドの変化と根強く残る課題

The challenges and needs that must be addressed during disasters are becoming more severe, complex, and diverse due to environmental changes surrounding disasters and the persistence of longstanding issues such as on-site response.

災害を取り巻く環境変化と、現場対応等の従来からの課題の継続により
災害時に対応しなければならない課題・ニーズは深刻化・複雑化・多様化しています

災害の激甚化・頻発化

一層強まる災害の脅威に対する対策の強化
Strengthening countermeasures against the intensifying threat of disasters



激甚化・頻発化
(画像：消防庁HPより)

Increasing severity and frequency of disasters

繰り返し被災

(画像：国土交通省HPより)



複合型災害

(画像：消防庁HPより)

Composite disaster

公助の限界

Composite disaster

現場の災害対応の課題

多岐にわたるミッションとひっ迫した状況のせめぎあい
The tug-of-war between diverse missions and pressing circumstances



組織が個別に対応
アクションの遅れ

Delays in action due to organizations responding individually

リソース不足
情報収集の手間

Shortage of human resources and the hassle of gathering information

新たなプレイヤーや価値観

要配慮者への対応や男女共同参画などの意識の変化
Changes in awareness regarding support for vulnerable individuals and gender equality



要配慮者対応
(画像：東京都HPより)



女性の視点

Support for vulnerable individuals and gender equality



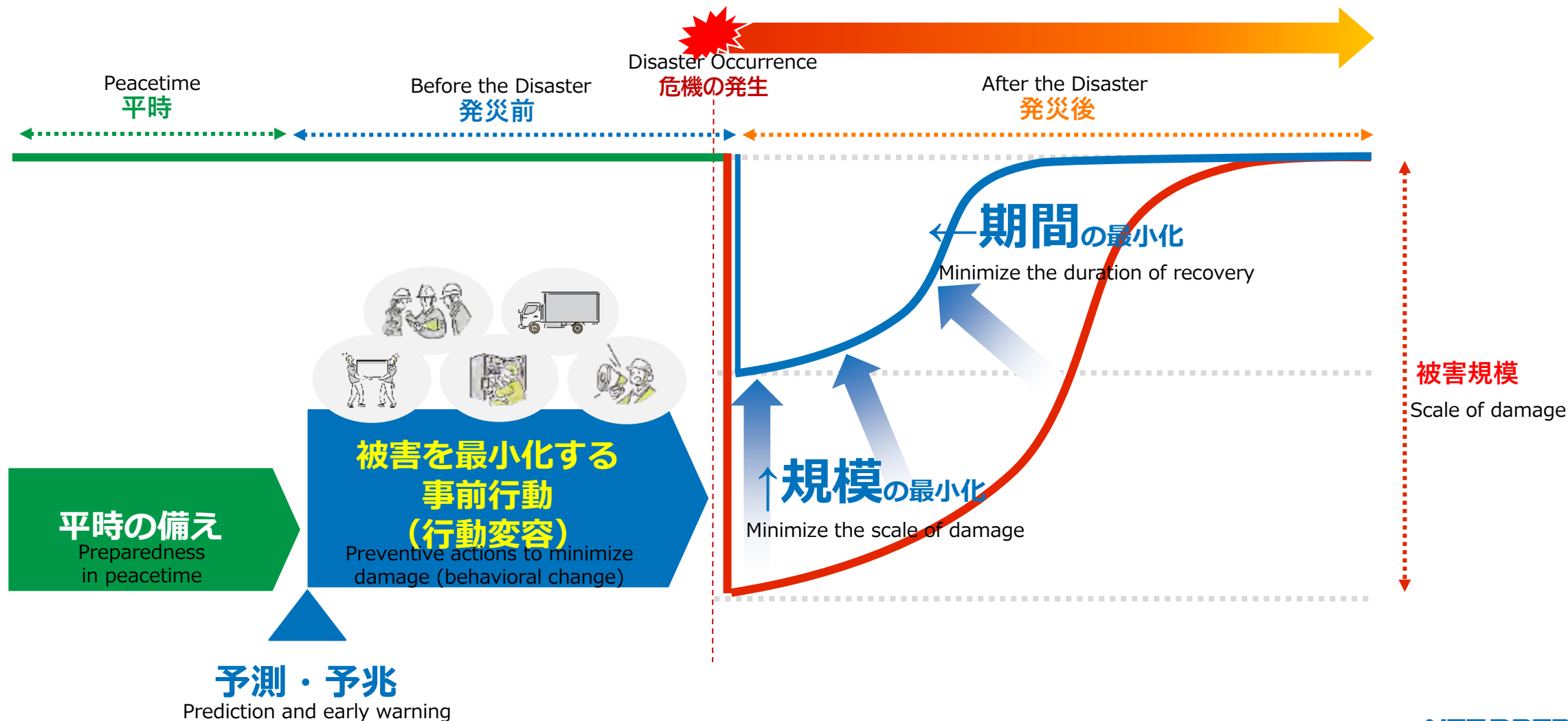
ヒト・モノ・情報 未活用のポテンシャル

Potential for Utilizing Information Technology

Approach to the Solution | Proactive Disaster Prevention to Minimize Damage

解決の方向性 | 被害を最小化するプロアクティブ防災（事前防災）

被害の規模や復旧の期間を最小化していくためには、**予測・予兆に基づいた事前行動（プロアクティブ防災）への行動変容が重要**となる。
To minimize the scale of damage and the duration of recovery, it is essential to promote behavioral change toward proactive disaster prevention — taking preemptive actions based on prediction and early warning.



POINT01|Information Gathering for Action Decisions: Digital Capture of the 2024 Noto Peninsula Earthquake Situation

POINT01 | 行動判断のための情報の収集 デジタルで捉えた令和6年能登半島地震の状況

各機関から様々な災害リスク情報が提供されており、それらを活用可能な状態で集約しておくことが重要。

Various disaster risk information is provided by different agencies, and it is important to consolidate this information in a usable format.

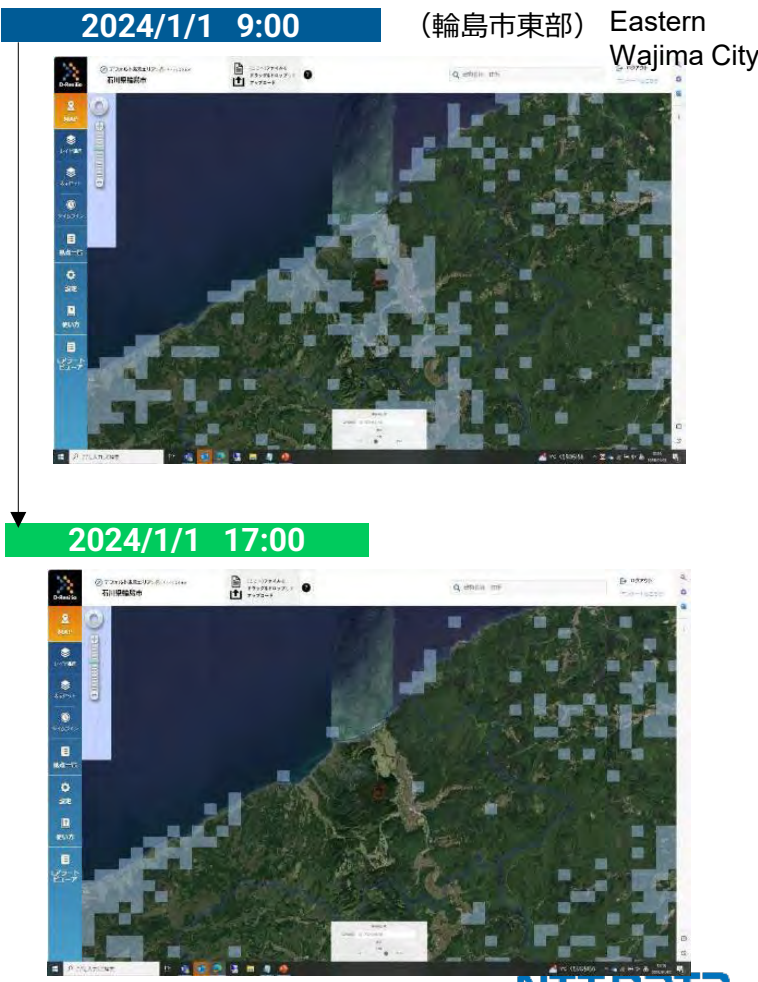
Changes in Mobile Communication Network Status Before and After the Earthquake(Population Statistics Map)

■ 地震発生直後からのSNSによる現場状況 (被害状況、生活基盤への影響など)

Real-time social media updates from the scene immediately after the earthquake (Damage situation, impact on daily life infrastructure, etc.)



■ 地震発生前後の携帯通信ネットワーク (人口統計マップ) の状態変化



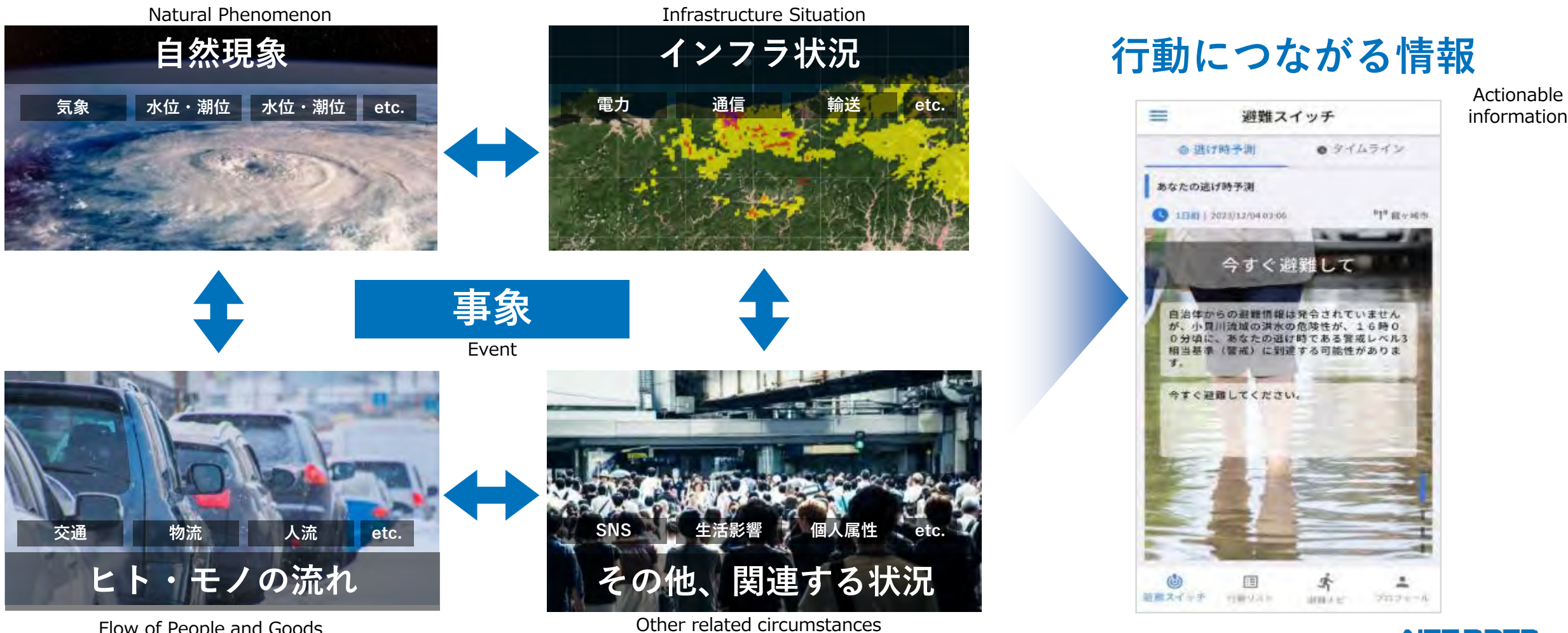
POINT02 | 事象情報から“行動に繋がる情報”への変換

災害時は、気象変化等の自然現象のみならず、インフラや人流、物流などが相互に依存する形で災害リスクが発生する。

During disasters, risks arise not only from natural phenomena such as weather changes, but also from the interdependent nature of infrastructure, human flow, and logistics.

ただし、それぞれはあくまで“事象”であり、それらを元に“行動に繋がる情報”に変えて活用することが重要。

However, each is merely an “event,” and it is crucial to transform them into “actionable information” for utilization.



The Ideal Form of Disaster Prevention Information Apps 防災情報提供アプリのあるべき姿

Various institutions provide apps designed to deliver disaster prevention information. However, to truly encourage behavioral change that leads to reduced damage, it is essential to provide information that not only reaches people and is understandable, but also enables them to take action.

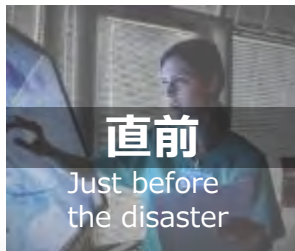
各機関から防災情報提供を目的としたアプリが様々提供されているが、被害軽減に繋がる行動変容を促すためには、“届く”、“わかる”に加え**“動ける”情報の提供が重要**である。



NTTデータのハイレジリエント社会の共創プラットフォーム「D-Resilio連携基盤®」

あらゆる災害フェーズ・シーンに対応可能なサービス創出のため、
組織の垣根を超えて共創に取り組むプラットフォームを提供します

We provide a platform for cross-organizational co-creation to develop services capable of addressing all disaster phases and scenarios.



あらゆる災害フェーズに対応できるサービスの創出

Creating services capable of responding to all disaster phases

D-Resilio® 連携基盤
- Collaboration platform -

Data Utilization and Collaboration Beyond Organizational and Industry Boundaries

組織・業界の枠を超えたデータ活用とコラボレーション

多様な業界とのコラボレーション
Collaboration across diverse industries



インフラ
Infrastructure



保険
Insurance



消防
Firefighting



物流
Logistics



自治体
Local Governments



中小企業...etc
SMEs



4. PoliPoli, Inc.

Co-Creating Resilient Cities with Citizens

Collaborative Policy Platform



16th UN-Habitat International Expert Group Meeting on Environmental Technology: Platform for Sustainable Urban Development in the Asia-Pacific Region – Special Meeting

PoliPoli inc,

Director, Department of Public-Private Partnerships

Junya Uchida

Challenges in building resilient cities faced by Asian urban areas and citizens as key partners in city development

Challenges related to city development

Disaster risk

Infrastructure
development

Key stakeholders essential for solving Challenges

Experts

Government officials

Citizens

etc.

Particularly important are...

Citizens

The majority of residents—citizens—can contribute to building resilient cities by being aware of disaster risks, preparing in advance, and maintaining a regular interest in infrastructure development. Resilient cities are built on the knowledge and preparedness of their residents!

→ **Citizens are key partners in city development**

Expression of opinions as a way for citizens to participate

Policy co-creation online platform

PoliPoli Gov

Here is the PoliPoli Gov site

<https://polipoli-gov.com/>



We operate a platform where citizens can voice their opinions to the government on a variety of themes. To date, we have conducted over 100 public consultation projects.

Citizens post their opinions

They feel that their opinions are reflected and develop a desire to be involved in policy

Increase in engaged population for resilient city development

Toward resilient city development co-created with citizens

Our past efforts

In Japan, a disaster-prone country, we conduct public consultations with citizens on disaster drills related to resilient city development, as well as on city development in general.

Disaster drill

[Tell us your ideas for disaster drills you'd want to participate in!]

We conducted interviews with citizens about public consultations that encourage participation.

Based on citizens' feedback, we are considering disaster drills that citizens actually want to join.

Implemented in a city with a population of 430,000



Implemented in a city with a population of 140,000



Resilient city development

[What kind of city development do you expect?]

We conducted public consultations aligned with Japan's Ministry of Land, Infrastructure, Transport and Tourism's theme of resilient city development, gathering citizens' perspectives on what a resilient city means to them.

Implemented in a city with a population of 1,880,000



Some of the opinions local government received



【What kind of safety drill would you want to join?】 117 comments

- You can receive emergency food
- **A camp where you learn how to spend time during emergencies**
- Celebrities are participating
- You receive cash
- You get a free food like hot dog



【What are some ideas for disaster drills people would actually want to join?】 62 comments

- **Friday Night Disaster Drill! Hold a drill on Friday and have a party with emergency food**
- An event where you can get disaster tips and emergency supplies
- Taste testing of emergency food
- Experience real disasters, like a magnitude 7 earthquake or typhoon-level winds



【What kind of city development do you expect?】 197 comments

- Since national and prefectural roads in the city center have heavy traffic congestion and many accidents, we want the prefecture to build a ring road around the city outskirts
- **Existing roads are deteriorating, causing severe vibrations while driving. They are also dangerous during disasters, so we want better quality management**
- We want thorough implementation of barrier-free (accessible) infrastructure

Bringing Citizen Voices to Governance: A Solid Step Toward Resilient City Development

1. Concrete Policy Outcomes Driven by Citizen Participation

- a. Three Projects Implemented: Local governments reporting that some citizen ideas were successfully incorporated into disaster drill programs and city planning initiatives.
- b. Creating New Value: This was not mere opinion gathering. **It led to the creation of new value**—namely, **disaster drills and city planning initiatives that people actually want to participate in, which were unattainable under traditional administration-led approaches.**

1. Co-creating a Resilient Future Through Local Government Utilization

- a. This initiative has a proven track record in three cities with varying population sizes, demonstrating high reproducibility and versatility.
- b. It can be introduced in your municipality as a cost-effective citizen collaboration model.

We welcome the opportunity to discuss how this model can support your efforts in building a truly resilient city, and we look forward to the possibility of a partnership!

5. SHO-SEKKEI CO., LTD.

ARCHITECTURE: Tokyo Headquarters Building: Aiming for Coexistence with Disaster-Resilient Communities



1. Information Regional Community



The entrance features digital signage that provides information to the community about the town, its history, evacuation sites, and more. In the event of a disaster or emergency, it can be used to broadcast urgent disaster information.

2. Business Continuity Plan (BCP)



To prepare for power loss, we have introduced a “Business Continuity System” utilizing solar panels, storage batteries, and EV vehicle connections. During disasters, this system continuously supplies power to common areas, maintaining lighting and ensuring terminal power to support business resumption.



The on-site well is equipped with electric and manual pumps integrated with the business continuity system to handle long-term water outages. The secured power and water sources can supply not only building occupants but also the surrounding community.

3. Emergency Shelter Functionality



The 7th-floor multipurpose room serves as an added-value feature for tenants, freely available for daily use, and functions as an evacuation shelter during disasters or other emergencies. It enables simple cooking via the kitchen facilities and provides hygiene assistance through shower facilities.

COM
MUNI
TY

BCP

EMERG
ENCY
SHELTE
R

Disaster Prevention Initiative: Establishment and Activities of “BOCO”

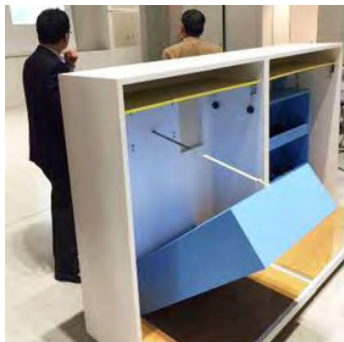


一般社団法人
防災事業経済協議会



【 Shifting Disaster Prevention from Cost to Value 】

BOCO (General Incorporated Association for Disaster Prevention Business Economics/ Industry-Government-Academia Collaboration) integrates the outstanding technologies, services, and networks of diverse companies. We aim to establish a sustainable “new form of disaster prevention business” that functions as a viable economic activity. By strengthening “self-help” and “mutual aid” independent of reliance on the state, we contribute to the development of our members and the enhancement of Japan's overall disaster prevention capabilities.



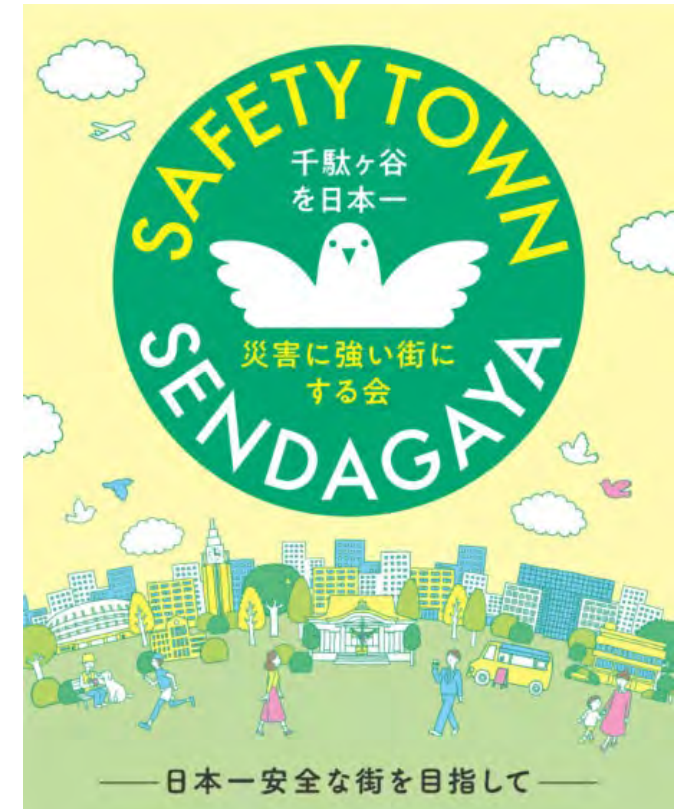
Furniture Tip-Over
Prevention Device



Manual for
Evacuation Life at
Home



The “Always On Lamp tsuita”
bulb that stays lit even during
power outages



SAFTY TOWN SENDAGAYA

This project was launched as the “Association Aiming to Make Sendagaya Japan's Safest Neighborhood.” Sendagaya, where BOCO is based, is now a neighborhood attracting global attention. Setting the goal of making this Sendagaya area “Japan's most disaster-resilient neighborhood,” BOCO will collaborate with local residents, merchant associations, businesses, and organizations to carry out various activities. This initiative unites the entire community to enhance the value of Sendagaya from a disaster prevention perspective.

CITY : SENDAGAYA SAFTY TOWN

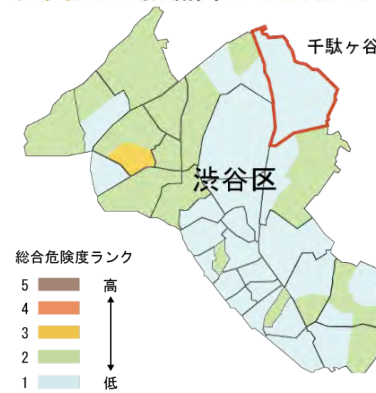


STS Well Installation Activities



To make the Sendagaya area a disaster-resilient community through our own efforts, we launched a crowdfunding campaign to raise funds for a project to prepare local wells for use during disasters. In the Tokyo metropolitan area, the probability of a magnitude 7 earthquake occurring within the next 30 years is estimated to be around 70%. While we cannot prevent earthquakes from happening, we can take steps to protect our lives and livelihoods after a disaster strikes. Rather than relying solely on the government for local disaster preparedness, the people who live and work here are building a “mutual aid infrastructure.” This initiative enhances the value and appeal of the Sendagaya community.

Location Environment of Sendagaya



Shibuya Ward's Sendagaya, where the building stands, is a location with a high safety rating even within Tokyo. Choosing a highly safe location like this project is fundamentally important, as there is no risk of earthquakes or flooding.

Other Initiatives



Representing the Sendagaya district, we participated in the “Shibuya Disaster Prevention Caravan (Sendagaya)” disaster preparedness drill, primarily operated by Shibuya Ward. We introduced our activities centered on “disseminating disaster prevention information using digital signage” and “improving local wells for effective use during disasters (crowdfunding).”



The entries themed around disaster preparedness and awareness showcased uniquely creative ideas, prompting us to reflect on many things. We held the award ceremony for the “Disaster Prevention Poster Contest” at the Sendagaya Bon Dance Festival.

Disaster Prevention Business: Evacuation Business / Startup Convention



- Proposing a new form of “evacuation” with a regional living base as a disaster shelter.
- Leveraging Sho-Sekkei's vacant house renovation technology to integrate regional revitalization with secure housing creation.
- Utilizing Sho-Sekkei's renovation expertise to holistically advance “vacant house utilization × regional revitalization × disaster prevention infrastructure development.”
- Establishes an evacuation base in Tomioka City, Gunma Prefecture, developing it as an “Evacuation Village” concept that combines Sho-Sekkei North Kanto Branch with a retreat facility function.



BOCO Disaster Prevention Business Contest Held

【Announcement of the 2025 BOCO Disaster Prevention Business Contest】

■ Purpose

This contest aims to serve as a catalyst for creating and realizing disaster prevention businesses. For outstanding ideas, we will provide funding and business development support in collaboration with participating companies, investors, and researchers within the council.

■ Event Overview

- Name: BOCO Disaster Prevention Business Contest
- Organizer: BOCO / Disaster Prevention Business Startup Forum
- Eligibility: Companies, startups, researchers, individual entrepreneurs, and all individuals interested in disaster prevention businesses

■ Candidates for supplementary prizes

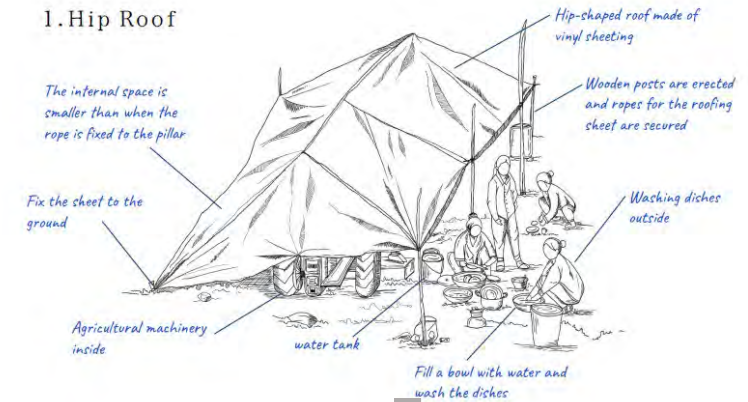
Funding and financial support, prize money, investors, loans and fundraising assistance from financial institutions

■ Schedule

- Sunday, December 21, 2025: BOCO Disaster Prevention Startup Premium Kickoff
- January–March 2026 : Entry Acceptance • Document Screening • First Round Selection
- May 2026: Final Presentation • Judging • Awards Ceremony

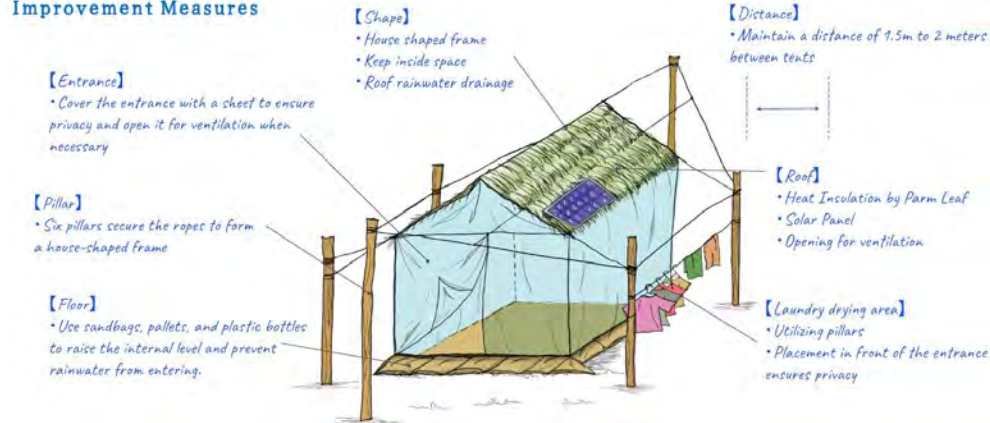
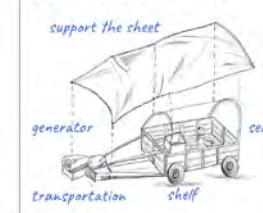
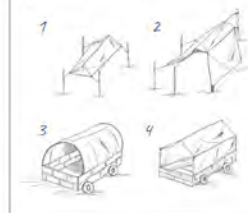
SHO-SEKKEI CO., LTD.
PHNOM PENH BRANCH

Phase1-2. Survey



Phase1-3.Analys

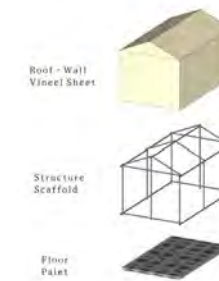
3. Distributed and Shared Living Activities



Phase2

Proposal for the construction of evacuation shelters submitted to IOM upon securing the budget

Realistic Proposal • Estimate Cost



① Unit : 2.4m x 4m									
No	Item	Item Image	Size	Quantity	Unit	Unit Price	Total	Remark	
1	PVC Pallets		W1, 90xD1, 28 x H120mm	8	Pcs	18.0	144.0		
2	Steel Tube		50x3 x 4.8mm x L1.5mm	9	Pcs	17.0	153.0		
3	PVC Vinyl Tarp		W3.0m x H3.5m	4	Sheet	136.5	546.0	PVC Vinyl tarp 3.5x3.5mm	
4	PVC Vinyl Tarp		W3.0m x H2.5m	2	Sheet	121.0	242.0	PVC Vinyl tarp 3.5x3mm	
5	Clamp Connection			32	Pcs	10.7	342.4		
Total							1269.4		

6. Fujita Corporation



エコ・ファースト企業
環境大臣認定



Daiwa House Group®

Construction techniques useful for disaster countermeasure

17 Oct 2025

Fujita Corporation
Technology Planning Office
Civil Engineering Technology Department
Executive Expert : Hiromichi Ota



Robo QS : Tele-operated system for heavy machinery



Asami River Emergency Disaster Recovery (2000)



Takachiho No. 3 Emergency Rock Removal (2010)



National Route 186 Disaster Recovery (2017)



Nakagusuku Village Disaster Recovery (2006)



Funaishi River Debris Flow Disaster Recovery (2010)



National Route 220 Emergency Recovery (2017)

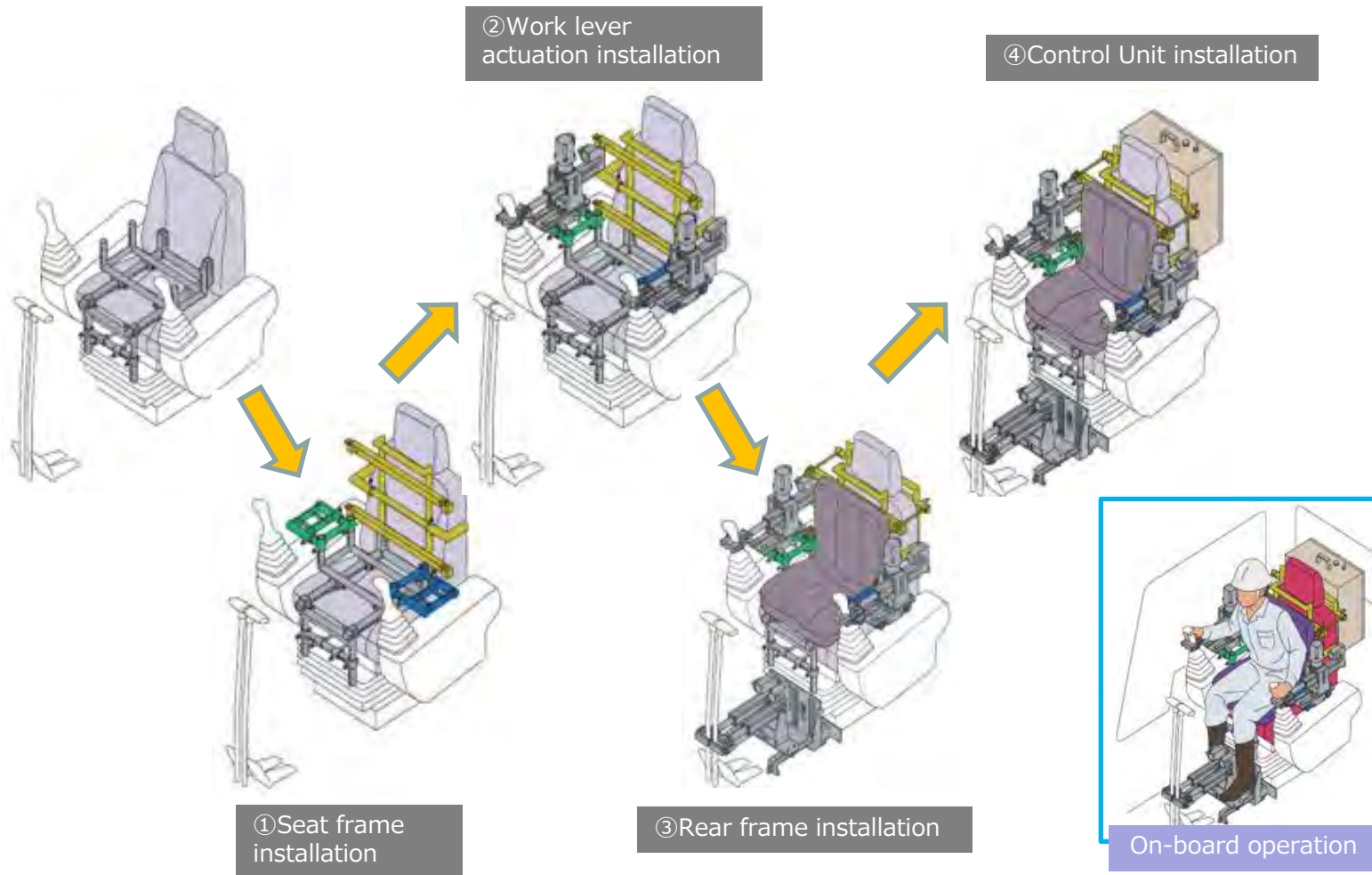
FT Madokira : Instant soil improvement material



Noto peninsula earthquake and heavy rain recovery work (2024)

Robo QS : Tele-operated system for heavy machinery Fujita Corporation

It works simply by attaching a unit to a general hydraulic excavator



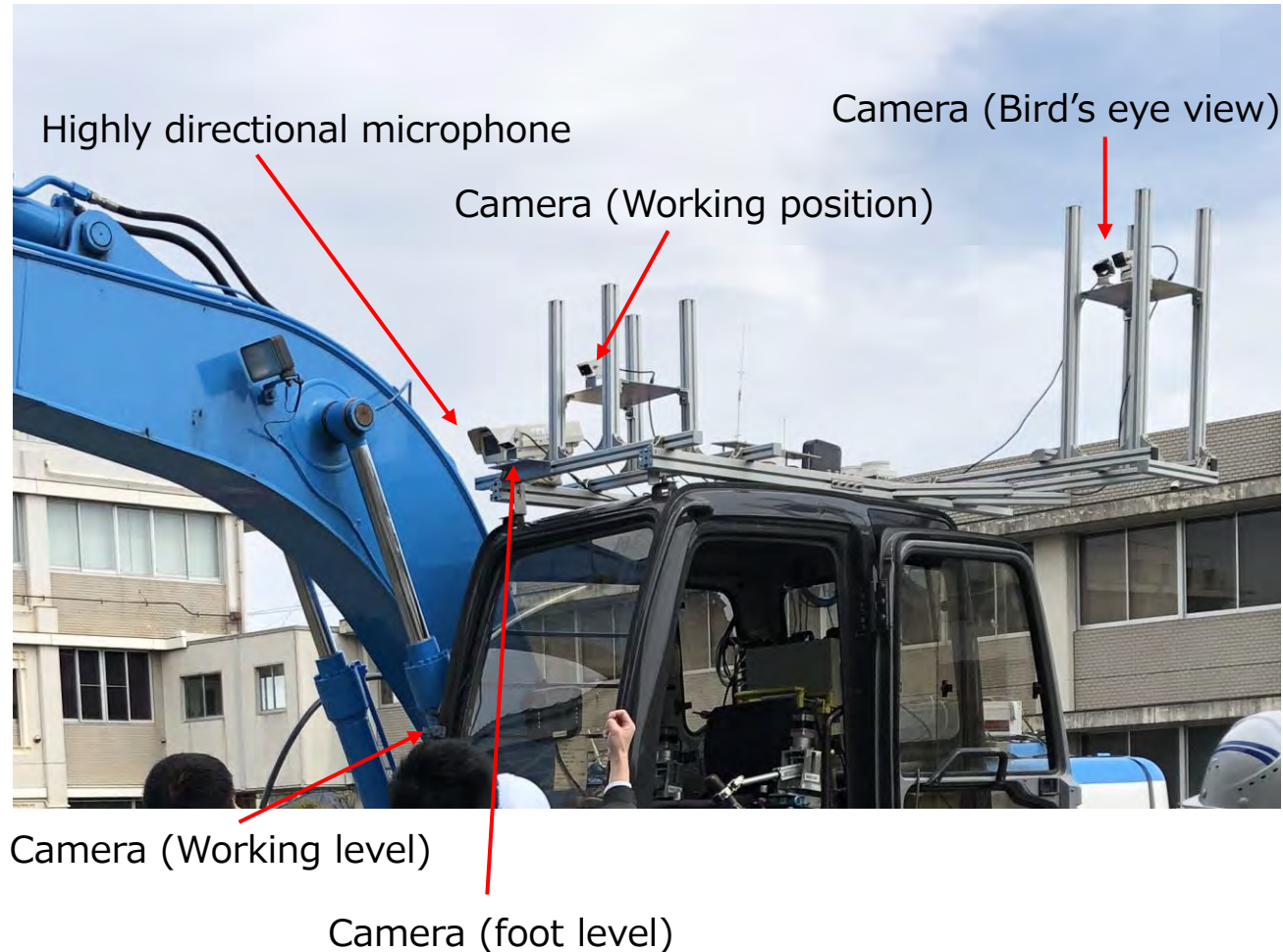
Demonstration work



Easy to send in small packages

Out of sight operation of Robo QS

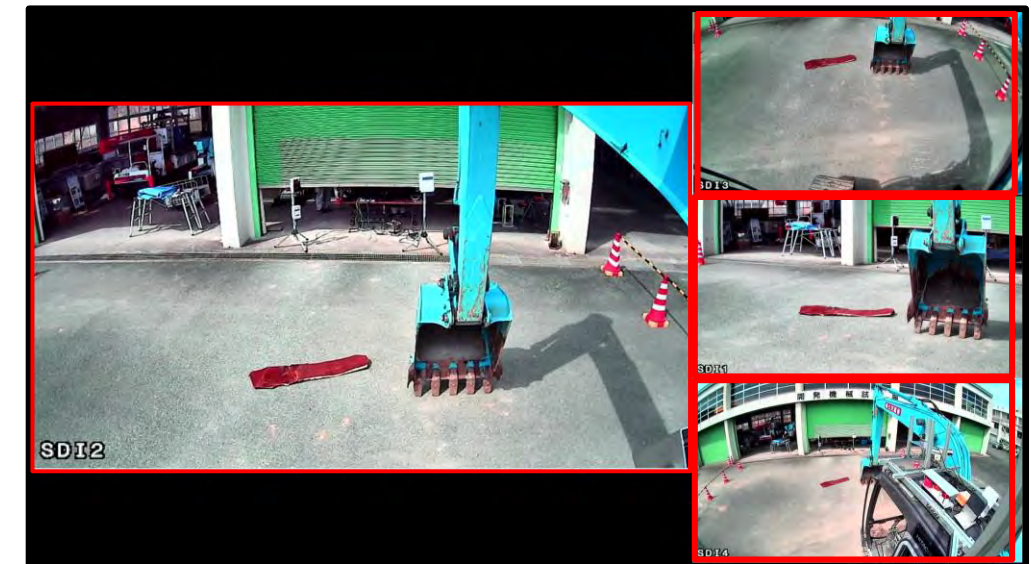
- Cameras (4-viewpoints), Microphone
(Freely adjustable field of view and sound quality)



- Operation room



- 4-viewpoints monitor
(Main viewpoint can be selected)



Muddy soil + FT Madokira ⇒ Easy to compact soil



FT Madokira
Inorganic
Porous
Excellent water absorption
Low carbon emissions

SEM image

Pilot road building in muddy sites using FT Madokira

Fujita Corporation

2024 Noto peninsula earthquake, and heavy rain
Emergency restoration work

By simply mixing the FT Madokira into the mud, the soil can be improved to be easily compacted immediately.





Thank you.

www.fujita.co.jp

7. HRD Co., Ltd.

~Using Water to Create
a Comfortable Environment~

How Magnetic Water Activators Work



HRD

HUMAN R&D CO., LTD.

17. Oktober 2025

The function of magnetic water activators

【Dipole Big Pole Forschungs-, Entwicklungs- und Fertigungsunternehmen】

HUMAN R&D Co.,Ltd. Capital:100,000,000 yen Establishment:11/12/1991

Founded as a research and development company. My research themes are “water,” “air,” “light,” and “magnetism.”

【Dipole: Household Use / Big Pole Industrial Use】

• Patented product



Patent Nr. 6830737

„Leistungssteigerungsvorrichtung und Wasseraktivierungssystem“

Patent No. 7140357 “Water Activation Device and Method for Manufacturing the Same”

With two patents, we hold exclusive rights in the field of magnetic activated water devices, including manufacturing methods.

Company Case Studies

(Titles omitted; examples)

Kyoto City Elementary School Lunch Center (153 schools) • Fujifilm Ministry of Defense Facilities • Koyasan Renge-in Roadside Station Fujikawa • Kofu City Environmental Center Seven-Eleven Affiliates (Rice, Oden Ingredients, Chinese Food Ingredients, etc.) • Chatan Town Public Bathhouse, Okinawa Prefecture NTT East Japan • Odakyu Electric Railway • Sanko Co., Ltd. Tagonoura Fisheries Cooperative • Dormy Inn Hotels • Oyado Nono • Ravista • JR East Hotel Group Ozasa Clinic • Kamiya Clinic • Oji Dental Clinic Ginza Yanagidori Dental Clinic • Kanda Matsuya (soba restaurant) Tonkatsu Ginza Bairin • Kennedy House Ginza Tofuro Group • Toraya (Yokan) • Rokkatei • Kinseiken • Zaoen

Sales performance: 200,000 units over 25 years Adopted across a wide range of fields, from households to major corporations

• Public Interest Incorporated Association Japan Water Works Association Factory Certified Product



In the water conditioner industry, HRD is the only certified company.



Certified as a Yokohama Intellectual Property Future Enterprise by Yokohama City

The most significant feature of the Dipole Big Pole

- ① Ionized water with enhanced functionality can be obtained from every faucet in the home.



Dipole technology instantly creates natural ionized water that takes years to form naturally



The Principle of Dipole Ion Water Generation

Improved ionized water is available from every faucet in your home. Water that passes through benefits from ionized water effects for various uses including drinking water, baths, showers, laundry water, toilets, car washing water, pet drinking water, water for flower offerings at household shrines, and watering plants.

- ② The chlorine odor in tap water is reduced, making the water easier to drink and more delicious.

Sensory testing for chlorine odor at a Ministry of Health, Labour and Welfare-registered testing agency



Over 80% of users of Dipole Ionized Water report a reduction in chlorine odor, improved drinkability, and enhanced taste. Equivalent results have been confirmed by public testing institutions registered with the Ministry of Health, Labour and Welfare. (Can be used with water purifiers)

- ③ Water cannot enter the body unless it is ionized.

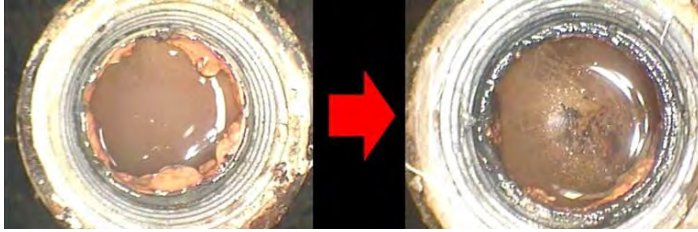


Ionized water increases permeability.

Bathing in ionized water or showering provides the effects of warm and cold compresses.

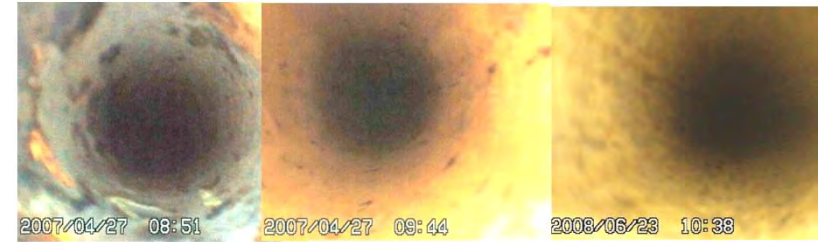
The most significant feature of the Dipole Big Pole

- ④ Master Scale Remover Removes scale from water supply and drainage pipes, extending pipe life and preventing aging.



Inside the piping
before installation
Rusty lumps have
formed inside the pipe.

Inside the piping 6 months after
installation The rust lumps observed
inside the pipes prior to
installation have mostly been
removed, and the red rust has
changed to black rust.



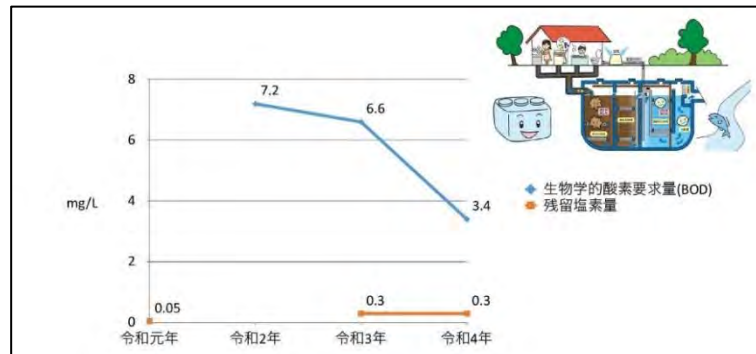
Fujifilm Hiratsuka Plant (Scale Removal and Adhesion Prevention)

Scale removal is expected. The aging of buildings,
facilities, and the human body begins with water supply
and drainage pipes. Removing scale extends their
lifespan.

- ⑤ Memory effect is achieved.



Suppression of algae
through drainage



Changes After Installing a Combined Sewage
Treatment Tank

The enhanced functionality persists
longer due to one of this water's
characteristics, the "memory effect." Its
effects extend from the water supply to
the sewage system, enabling purification
of wastewater and contributing to
environmental improvement.

- ⑥ No ongoing costs after installation.

Zero breakdowns, zero electricity usage, zero maintenance.

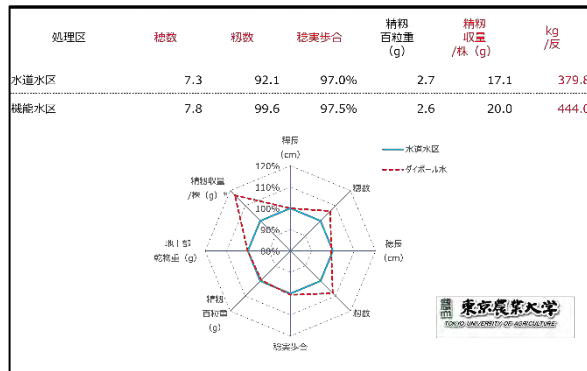
- ⑦ The device's effects last semi-permanently.

The energy source is a magnet.

The degradation rate of the magnet in use is 2% over 60 years.

The most significant feature of the Dipole Big Pole

⑧ Other Effects



Tokyo University of Agriculture



- 1) It also leads to a 15-20% increase in agricultural production. Results from the “Tokyo University of Agriculture Rice Cultivation Experiment” and the “Akita Prefecture Ogata Village Rice Field Experiment”
- 2) Swine Farming: Promoting Livestock Production and Reducing Odor
Patent No. 7064734: Method for Raising Livestock and Livestock Raising Unit
- 3) We have successfully developed a method for early wine maturation and the production of wines without added antioxidants.
Experiments have already been conducted at several locations at the Katsunuma Winery in Koshu City, Yamanashi Prefecture.
- 4) Animals, plants, and humans within the household can create a comfortable living space.
Reduces animal odor, improves coat luster, and extends the life of sakaki branch cut flowers on household shrines.
Houseplants and trees thrive and live long, purifying the air.
- 5) Application Examples of Air Activation
Organic Waste Dipole Pyrolysis Device for Air Activation



Dipole Pyrolysis Device

⑨ Summary

The perfect solution for the SDG era Zero ongoing costs after installation Zero secondary pollution Zero breakdowns Zero electricity or other running costs Zero maintenance The device delivers lasting results indefinitely. We wish to expand sales to ASEAN countries.

8. Taihoukinzoku Co., Ltd.



Taihoukinzoku
co., ltd.

Urban Infrastructure in the Age of Climate Change: Practical Solutions with Flood Barriers and Watertight Doors

Takashi Miyachika

President



<https://taihoukinzoku.jp/>



Taihoukinzoku
co., Ltd.

Introduction

- Current situation of heavy rainfall and flood damage in Japan and around the world
- Urban flood risks: disruption of transportation, inundation of public facilities, and economic losses



Munir Uz zaman/AFP



PHOTO: REUTERS



2003年福岡県の地下鉄「博多駅」／共同通信社

Global insured flood losses (last decade vs previous)_

+30 % increase > **USD 88 billion** in cumulative insured flood losses (through 2022)

Global economic losses from floods (1985–2019)_

Very large cumulative exposure > **USD 1 trillion+** total (infrastructure, property, business interruption)

Asia

In 2022, Asia recorded a flood affecting **33 million people** just in Pakistan floods (June-Sept).

Japan

Massive cost & human impact 2020 Kyushu floods : damage **USD 5.6 billion**, **77 lives lost**, ~15,000 buildings damaged/flooded



Product Types / Variants

FLOOD LOCK series					Water Penetration Resistance Grade (JIS A 4716 Grade based on water leakage amount)				
					Water Penetration Resistance Grade (JIS A 4716 Grade based on water leakage amount)				
Product Name	Detachable Flood Barrier (JIS Simple Type)	Detachable Flood Barrier (Standard Type)	Detachable Flood Barrier (High Water Pressure Type)	Example of Flood Barrier Storage	Waterproof Door (Double Type)	Waterproof Door (Magnetic Seal)	Steel Door Waterproof Frame	Sheet-type Flood Barrier	Barrier & Sheet (3-Sides Waterproof)
Type	P5	P6	P7	P8	P9	P10	P11	P12	P13
Sample Photo									
Features	No construction required (low cost). Simply place the panel against the existing opening and raise the handle for easy water stoppage.	Installation is possible almost anywhere, with minimal site condition constraints. The panel is lightweight, using extruded aluminum material. Simply turning the Camlock handle allows for horizontal and downward compression (Patented).		• Wall-Mounted Type • Storage Box Type • Drawer Type • Flat Storage • Vertical Storage • Roll Cage Pallet Type	Available in single and double swing types. Complete with specified low-noise door seals and emergency specifications. Can be opened a standard door during normal times.	No special operation is required in an emergency; water sealing is active at all times through normal opening and closing.	Converts existing doors into watertight doors at a low cost. No special operation is required in an emergency; water sealing is active at all times.	Since the sheet is pulled up and deployed from beneath the floor, special installation is possible. No storage space is required.	No floor demolition (backing) is required. The upper sheet can be rolled up and used during evacuation.
Manufacturable Range (Width) (m)	W400mm and over	W400mm and over	W400mm and over		W410~W4000mm and over	W500~W2200mm and over	W300~W2000mm and over	W400mm and over	W450mm and over
Manufacturable Range (Height) (m)	H1500mm and under	H1500mm and under	H2000mm and under		W450~W4000mm and under	W400~W4000mm and under	W400~W4000mm and under	W400~W4000mm and under	W400~W4000mm and under
Water Limit	1.0m and under	1.0m and under	2.0m and under	Custom options are also available.	1.5m and under	3.0m and under	1.0m and under	1.0m and under	1.2m and under
Water Penetration Resistance (JIS A 4716: K2)	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6		Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6
Extended Installation Time (s)	1 minute	3 minute	5 minute		1 minute	No Operation Required	No Operation Required	3 minute	3 minute
Main Installation Location	Apartment Buildings and Commercial Facilities	Basement Entrances, Factories, Warehouses, Apartment Buildings (or Condominiums), Parking Lots, Commercial Facilities, and Public Facilities	Basement Entrances, Factories, Warehouses, Apartment Buildings (or Condominiums), Parking Lots, Commercial Facilities, and Public Facilities		Factories, Warehouses, Apartment Buildings (or Condominiums), Commercial Facilities, Public Facilities, Electric Rooms, Machine Rooms	Factories, Warehouses, Apartment Buildings (or Condominiums), Commercial Facilities, Public Facilities, Electric Rooms, Machine Rooms	Existing Steel Doors	Basement Entrances, Factories, Warehouses, Apartment Buildings (or Condominiums), Parking Lots, Commercial Facilities, and Public Facilities	Basement Entrances, Factories, Warehouses, Apartment Buildings (or Condominiums), Parking Lots, Commercial Facilities, and Public Facilities
Product Name	Barrier & Sheet (3-Sides Waterproof)	Sliding-Type Flood Gate	Sliding Flood Gate	Folding Flood Gate (3-Sides Waterproof)	Folding Flood Gate (4-Sides Waterproof)	Large Underground Flood Gate	Expansion Rubber Flood Gate (Patented)	Rampway Up-and-Down Type Flood Barrier	Other Waterproof Products
Type	P14	P15	P16	P17	P18	P19	P20	P21	P22
Sample Photo									
Features	The upper sheet can be rolled up and used during evacuation. Suitable for locations where aesthetics are prioritized.	Quick installation is possible by simply closing the door and raising the Camlock handle.	Quick installation is achieved with smoothly lateral movement.	Ideal for large openings where wide floor travel space is unavailable.	Ideal for large openings where wide floor travel space is unavailable.	The floor remains flat for normal operation. Suitable for large openings.	Ultimate water stoppage capability. Water is sealed by expanding the rubber seal with a single push of a button.	No special operation is required in an emergency; water is sealed constantly.	
Manufacturable Range (Width) (m)	W100~W400mm and under	W450~W2000mm and under	W400mm and over	As this is a custom-made product, please contact us for consultation.	As this is a custom-made product, please contact us for consultation.	W400~W4000mm and under	W400~W4000mm and under	W400mm~W2000mm and under	
Manufacturable Range (Height) (m)	H1000~H2100mm and under	H400~W2000mm and under	H400~W2000mm and under			H400~W2000mm and under	H400~W2000mm and under	H400~W2000mm and under	
Water Limit	1.0m and under	2.0m and under	2.0m and under	1.0m and under	1.5m and under	1.5m and under	1.5m and under	2.0m and under	
Water Penetration Resistance (JIS A 4716: K2)	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6	Equivalent to WS-6	
Extended Installation Time (s)	3 minute	1 minute	1 minute	3 minute	3 minute	15 minute	1 minute	No Operation Required	
Main Installation Location	Director (EV) Openings/Frames, Commercial Facilities, Public Facilities	Basement Entrances, Factories, Warehouses, Apartment Buildings (or Condominiums), Parking Lots, Commercial Facilities, and Public Facilities	Basement Entrances, Factories, Warehouses, Apartment Buildings (or Condominiums), Parking Lots, Commercial Facilities, and Public Facilities	Basement Entrances, Apartment Buildings (or Condominiums), Commercial Facilities, Public Facilities	Basement Entrances, Apartment Buildings (or Condominiums), Commercial Facilities, Public Facilities	Underground Passages / Underground Walkways	Basement Entrances, Factories, Warehouses, Apartment Buildings (or Condominiums), Parking Lots, Commercial Facilities, and Public Facilities	Basement Entrances, Factories, Warehouses, Apartment Buildings (or Condominiums), Parking Lots, Commercial Facilities, and Public Facilities	
Notes / Remarks					Notes / Remarks				
① Please contact your sales representative regarding sizes outside the manufacturable range.					② Values stated are based on tests conducted by the Japan Testing Center for Construction Materials, and internal testing, or design standards, and are not guaranteed values.				
③ Installation time varies depending on the storage location, product size, etc.									



<https://taihoukinzoku.jp/>



Taihoukinzoku
co., ltd.

REI

No construction required (low-cost).

Product Types / Variants

Flood Protection Panels / Removable Barrier Panels

- Detachable / removable types
- Swing-type, sliding type, folding door type



Swing Type (2-tier)



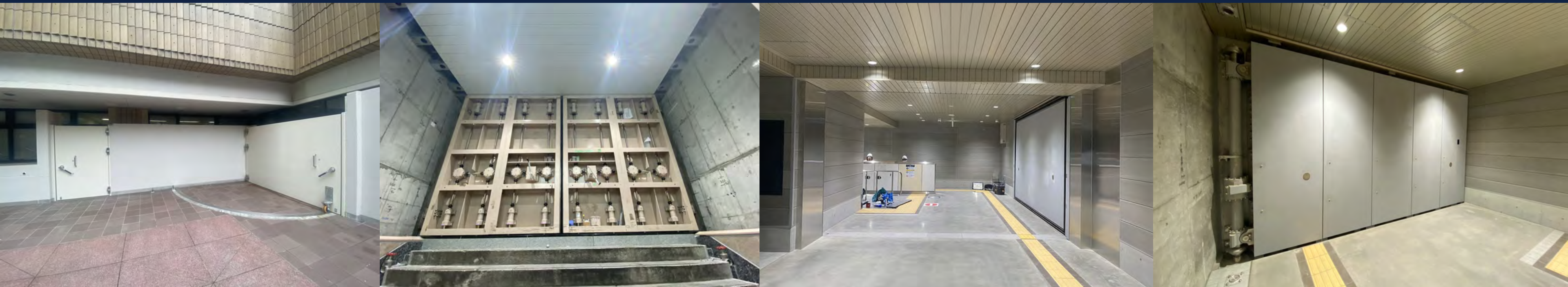


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co., ltd.

Product Types / Variants



Watertight Doors

- Single door, double door
- Reverse water pressure type (single-open)
- Large watertight doors (single door, folding door)



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co., ltd.

Product Types / Variants



CSM-Sheet Type

- No need to secure a separate storage space for components.
- The sheet and components are stored within the side and bottom frames.
- Uses a highly durable, flame-retardant sheet (CSM material) also utilized in professional inflatable boats.
- Unaffected by temperature; remains flexible even in winter.
 - Highly tear-resistant, even if punctured

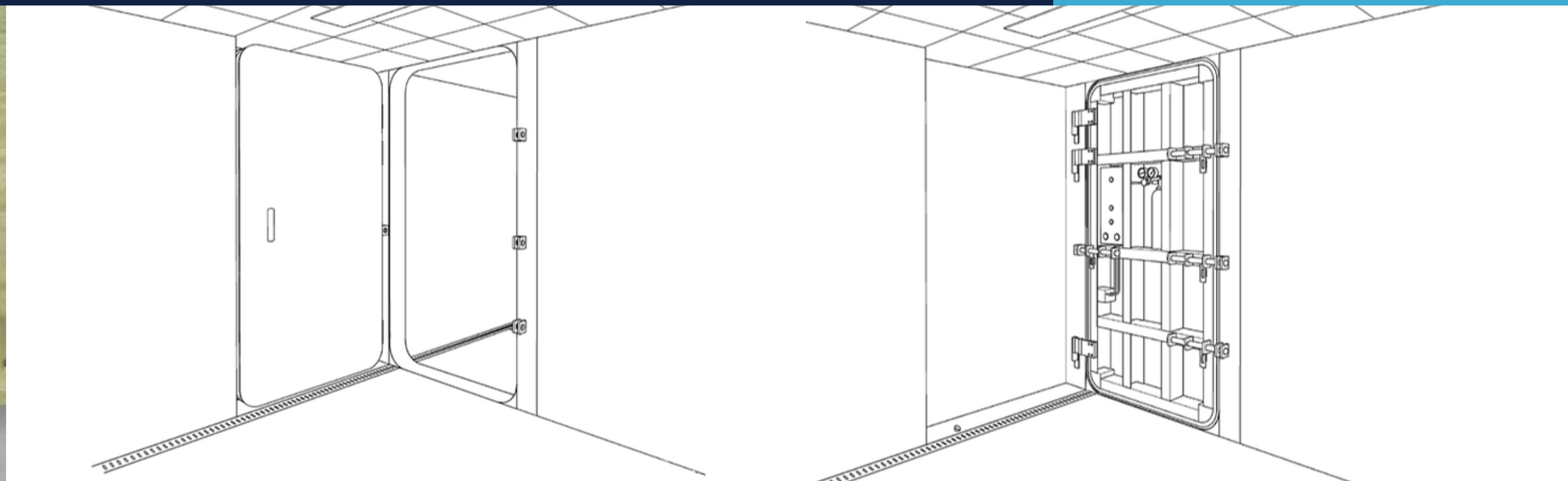


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co., ltd.

Product Types / Variants



Inflatable Type (TaihouD)

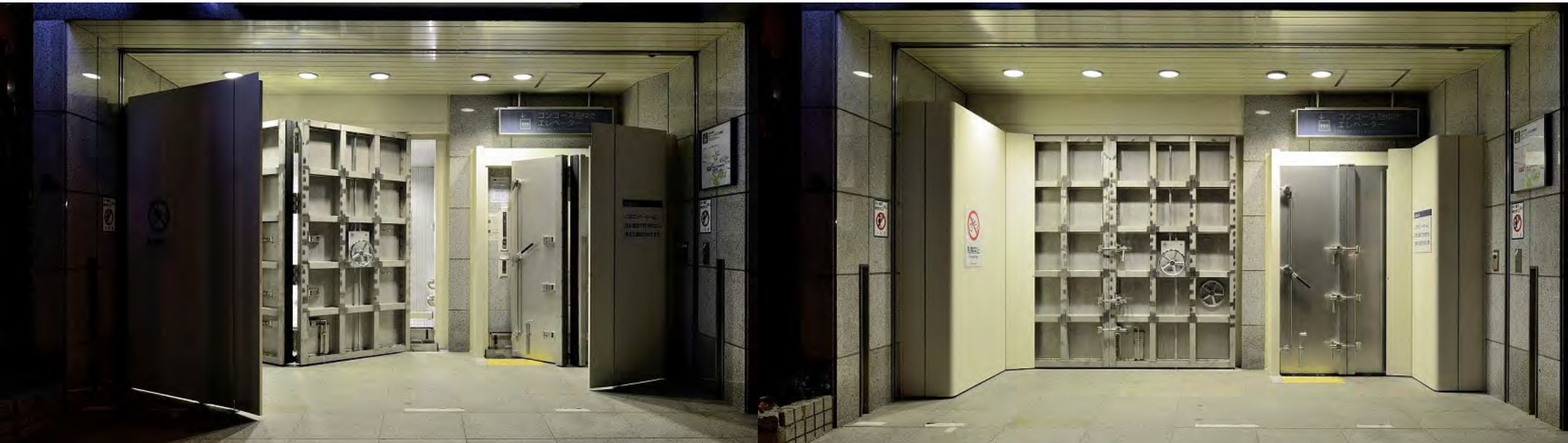
- Ultimate water-stoppage
- capability. Water is sealed by expanding the rubber seal with a single push of a button



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co., ltd.



Case Study

Tokyo Metro Station

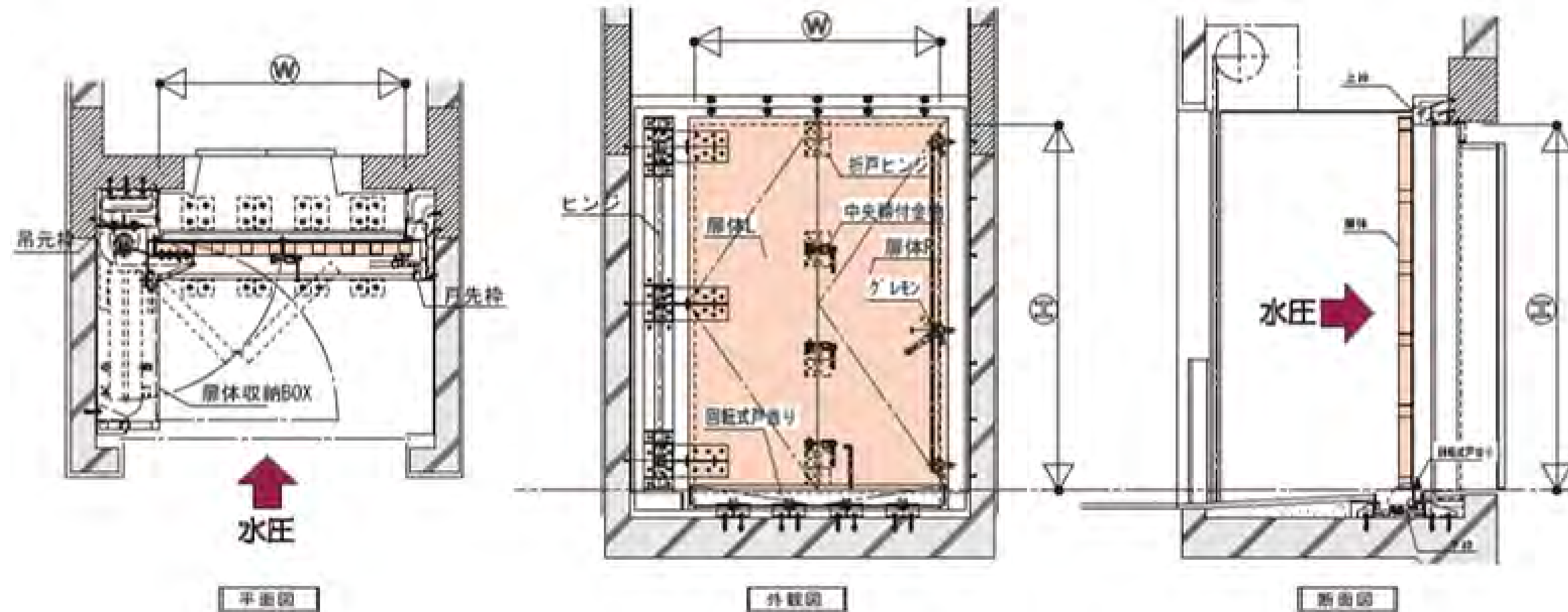
- **Bespoke Design for Each Opening** → Every system is custom-made to fit the exact dimensions, fittings, and conditions of the construction site. This ensures perfect sealing and maximum protection.
- **Rapid deployment / removable** → minimal tools, quick assembly
- **Robust sealing / watertight performance** → designed to resist hydrostatic pressure
- **Durable construction** → engineered for repeated use over long lifespans
- **Scalable** → small panels to large doors to inflatable systems
- **Low maintenance** → corrosion resistance, simple mechanisms



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Taihoukinzoku
co., ltd.



Case Study

Tokyo Metro Station

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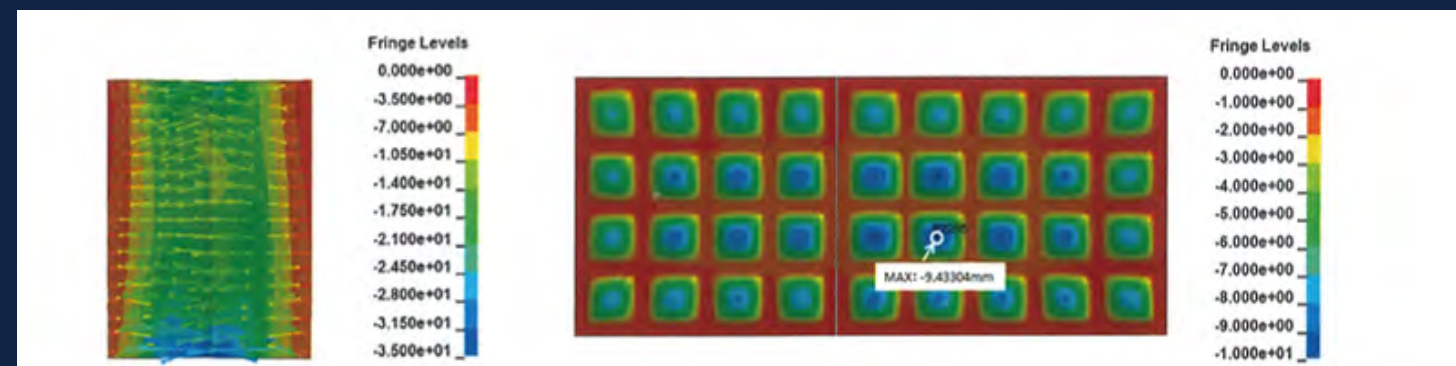
<https://taihoukinzoku.jp/>



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co., ltd.

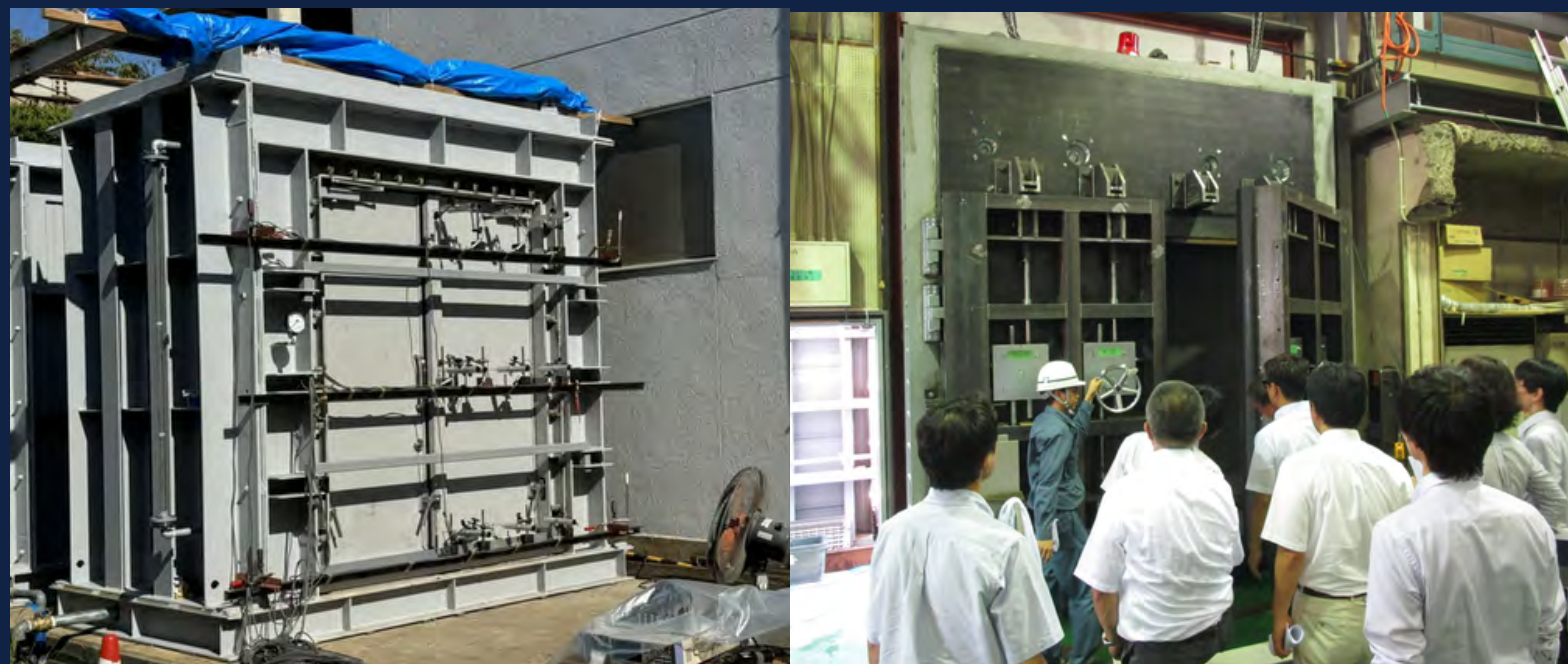
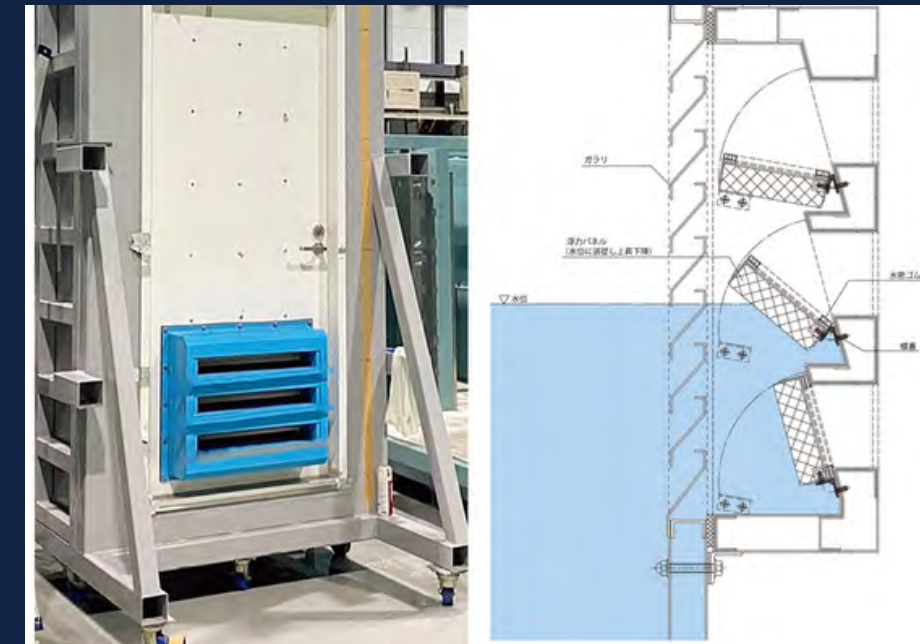
Research & Development

Structural Analysis



New Product

Buoyancy Louver-Type Flood Barrier



Safety Verification with Prototype

On-site Experiment





<https://taihoukinzoku.jp/>



Taihoukinzoku
co., ltd.

■ Water Penetration Resistance Grade (JIS A 4716 Grade based on water leakage amount)

※The grade in brackets indicates the Technical Evaluation Grade of the Japan Testing Center for Construction Materials (JIC).

- | | | | |
|---|-----------|--|-----------|
| • WS-6 : 1 L/(h·m ²) or less | (Grade 5) | • WS-3 : Over 10 L/(h·m ²) to 20 L/(h·m ²) | (Grade 2) |
| • WS-5 : Over 1 L/(h·m ²) to 4 L/(h·m ²) | (Grade 4) | • WS-2 : Over 20 L/(h·m ²) to 50 L/(h·m ²) | (Grade 1) |
| • WS-4 : Over 4 L/(h·m ²) to 10 L/(h·m ²) | (Grade 3) | • WS-1 : Over 50 L/(h·m ²) to 50 L/(h·m ²) | |



“WS-6 Certified by National Authorities: Proven Flood Protection for BCP”

“Allow water penetration of $\leq 1 \text{ L/h/m}^2$

— effectively maintaining a dry and secure environment even under severe flood conditions.

Such certified performance ensures that critical facilities — government offices, hospitals, transport hubs, and data centers



<https://taihoukinzoku.jp/>



Taihoukinzoku
co., ltd.

Our Team



Consulting

There are many conditions and site regulation and restriction. We find the solutions.

Designing

We design robust with high-standard flood barriers with the most reasonable cost

Fabrication

Includes the best configurations, we test the sealing and standing of the product

Installment

Even if there will be a irregularity at the site, our professional will find the best solution



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Taihoukinzoku
co., ltd.

“In 2025, our company was awarded a government subsidy of 500 million Japanese yen under the program 『成長加速課補助金』 by the Ministry of Economy, Trade and Industry (METI).

This subsidy was granted because our flood barriers and watertight doors directly strengthen infrastructure resilience and contribute to flood-ready Business Continuity Plans (BCPs).

The government’s support demonstrates a clear expectation: that we continue to expand this business, protect more cities, and accelerate our role in building disaster-resilient urban infrastructure.”



<https://taihoukinzoku.jp/>



Taihoukinzoku
co., ltd.

Photographer: Jiao Xiaoxiang/VCG via Getty Images

Conclusion

Asia cannot afford disruption from floods.
Resilient infrastructure is the foundation of
economic and social stability.
Flood barriers and watertight doors provide a
proven path toward sustainable, flood-ready cities.



<https://taihoukinzoku.jp/>



Taihoukinzoku
co., ltd.

**“From Japan to the world:
practical solutions for a
flood-resilient tomorrow.”**

Questions & Discussion

Thank You

9. Yachiyo Engineering Co., Ltd.

Yachiyo Engineering Co., Ltd.

Consultant for Infrastructure Development

17 October 2025

Get in touch with us by e-mail at intl@yachiyo-eng.co.jp
and visit our website: www.yachiyo-eng.co.jp/e

Takatoshi ARAI



Feasibility Study of Solid Waste Management Facilities

WTE in Davao, Philippines and Integrated Waste Treatment in Chattogram, Bangladesh



Feasibility Study Report

The Project for the Construction of Waste-to-Energy Facilities in Davao City

prepared for

by

KPMG AZSA LLC
Yachiyo Engineering Co., Ltd.
EX Research Institute, Inc.

From the People of Japan

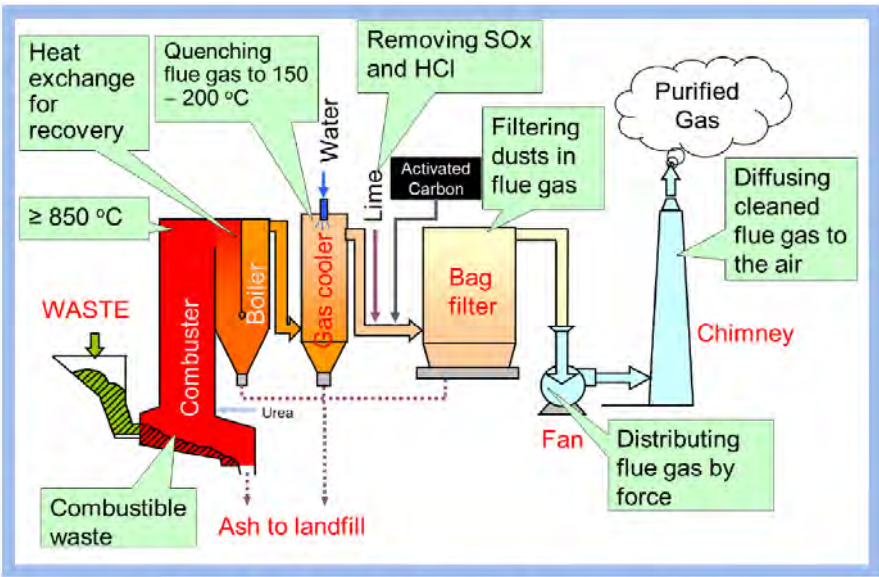
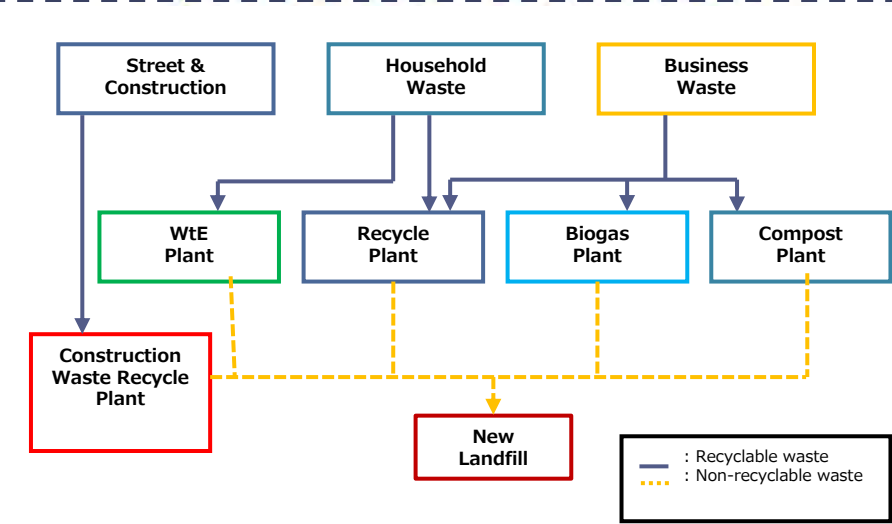


Figure 3-1 Outline of Treatment Process in a WtE Plant



[Project Purpose and Objectives]

- ✓ To establish the integrated waste treatment facility for municipal solid waste in Chattogram City
- ✓ To implement the facility centering on WtE and optimally combining other treatment technologies according to the quantity and quality of waste
- ✓ To collaborate Chattogram City Cooperation and/or local companies for appropriate operation of the facility
- ✓ To evaluate the feasibility of the project by financial and environmental viewpoints.

Site	Outline of Proposed Facilities
New Candidate Site	Integrated waste treatment facility ● New Landfill site ● WtE ● Compost plant ● Recycle plant
Existing LFS A	● Safety closure
Existing LFS B	● Safety closure ● Transfer station ● Compost plant ● Recycle plant

Feasibility Study, Detailed Design, Tender Assistance, Construction Supervision and Technical Cooperation

Kolkata Solid Waste Management Improvement Project, India

3

[INTRODUCTION]

The Department of Urban Development, Government of West Bengal has received an Japanese ODA Loan from Govt. of Japan through JAPAN INTERNATIONAL COOPERATION AGENCY (hereinafter referred to as JICA) of amount 3.584 billion yen toward the cost of the “Kolkata Solid Waste Management Improvement Project.”

Loan Agreement Date: March 31, 2006

Loan Agreement Closure Date: July 24, 2017

Population covered: 0.77 million (2011 Population census)

Municipalities involved: Uttarpara-Kotrung, Konnagar, Rishra, Serampore, Champdani and Baidyabati

- Project has introduced the concept of shared SWM facility called Regional Waste Management Center (RWMC) for the first time in India.
- In the project, segregation of waste at source has been introduced, which is the first sanitary solid waste management system in the West Bengal State.



Target Area and Facility Location

[PROJECT OBJECTIVES]

- Creation of scientifically designed and environmentally sound waste management infrastructure.
- Raising public awareness and undertaking education in urban communities on better ways to handle waste to promote re-use, reduce and recycling of waste.
- Participation of the citizens and the Urban Local Bodies (ULBs) as stakeholders through public awareness and behavior change education.

[PROJECT OUTPUTS]

- Segregated organic waste is collected and processed into compost in Compost Plant, and the products are utilized as fertilizer.
- At Transfer Stations, valuables are separated manually, and sold for recycling traders. Those works contribute to reduction of disposal waste.
- Remaining waste is disposed at the environmental-friendly final disposal site, which is the sanitary landfill site at RWMC.



Environmental Education



Source Separation



Compost Plant



Sanitary Landfill Site



Septic Tank Sludge Treatment

Basic Design, Detailed Design, Procurement Supervision and Technical Cooperation

Healthcare Waste Management in Cambodia, Sri Lanka and Nigeria

4

[Procurement of HCW Incinerators]

Project type: Japan's Grant Aid Project
Country: Cambodia
Client: Ministry of Health
Period: May 2023 - ongoing
Components: 29 incinerators, training
Consulting Services are Planning, Detailed design, Tender assistance and Procurement/Construction supervision.

Project type: Japan's Grant Aid Project
Country: Sri Lanka
Client: Ministry of Health
Period: May 2023 - ongoing
Components: 15 incinerators, training
Consulting Services are Planning, Detailed design, Tender assistance and Procurement/Construction supervision.



[Capacity Development]

Project type: JICA's Technical Cooperation Project
Country: Nigeria
Counterpart: Abuja Environmental Protection Board and Health Services and Environment Secretariat of Federal Capital Territory Administration
Period: September 2022 – October 2024

[Project Objectives]

- ✓ To develop a Plan on healthcare waste management
- ✓ To enhance the capacity for healthcare waste management

Output 1: To assess the solid waste management capacity of the CP agency and current issues

Output 2: To draft healthcare waste management basic plan

Output 3: To develop the training tools for HCWM and implement the training

Output 4: To share the experience and knowledge to adjacent cities



RIAD : River Image Analysis for Debris transport

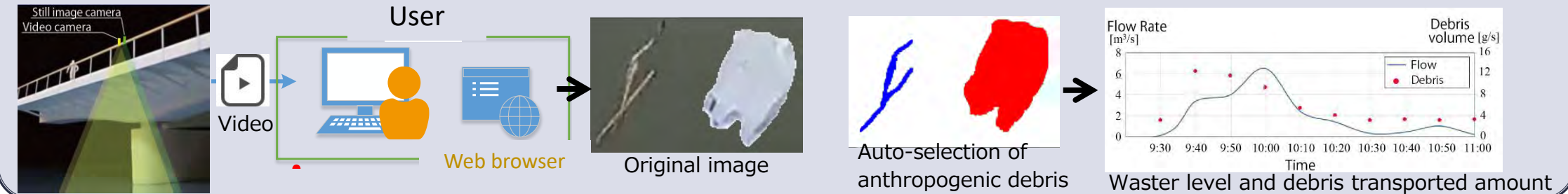
PRIMOS : Plastic Runoff Identification, Monitoring & Observation System

[OVERVIEW]

Overview: A system that calculates the transport amount of debris on river surface using videos by distinguishing the color difference between the river surface and debris

Developer: Tokyo Univ. of Science Prof. Nihei, Ehime Univ. Assoc. prof. Kataoka

Systematization : Yachiyo Engineering Co., Ltd. Environmental Planning Dep. Consulting Headquarters



[Brunei Darussalam]

Smart JAMP 2021 Pre-feasibility Study on the Introduction of Clean River Management System for the Realization of Smart City In Bandar Seri Begawan, Brunei Darussalam

- Video recordings were made at 3 locations for 5 minutes every hour, totaling 6 times.

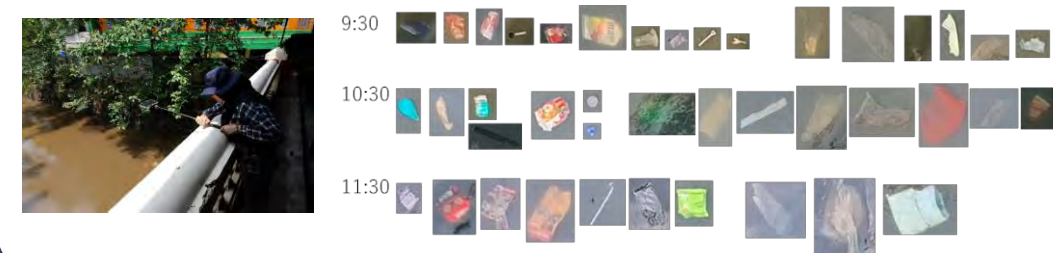


Captured Plastics (during 30 minutes)

[Indonesia]

The Preparatory Survey for Integrated Urban Flood Management Project in JABODETABEK

- A survey was conducted to determine the amount of waste flowing into the planned underground diversion channel.
- Video recordings were made at 2 locations for 5 minutes every hour, totaling 6 times.



Captured Plastics (Each 5 minutes)