

ORGANIZATION / INITIATIVE LEAD

Municipality of Kamikatsu (Tokushima Prefecture, Japan) & BIG EYE COMPANY Inc., operator of the Kamikatsu Zero Waste Center.

Kamikatsu pioneered Japan's municipal zero-waste movement with the country's first Zero Waste Declaration in 2003. Its model combines source separation, household composting, reuse, financial transparency and civic design to achieve high resource recovery without relying on complex technological infrastructure.

TECHNICAL SOLUTION NAME

Kamikatsu Zero Waste Model — Citizen-Led Source Separation, Circular Spatial Design & Community Governance

HIGHLIGHT TITLE

Maintaining a ~80% recycling rate for more than two decades through citizen participation, source separation and civic design rather than high-tech waste infrastructure.

SHORT DESCRIPTION

The Kamikatsu Zero Waste Model is a low-tech municipal waste system built around citizen participation. Residents separate waste into 14 categories and 44 subcategories at a central facility, while organic waste is mainly composted at household level. Costs and revenues associated with different materials are made visible to residents, turning waste management into a transparent civic process. Since 2020, the Zero Waste Center WHY has combined waste sorting, reuse, education, research and hospitality within a single circular-economy hub.

EXTENDED DESCRIPTION

Kamikatsu adopted Japan's first Zero Waste Declaration in 2003, creating a low-tech system based on source separation, transparency and citizen participation. Residents separate waste into 14 categories and 44 subcategories at a central facility, while organic waste is mainly composted at home.

A key feature is making waste and its impacts visible. Residents can see how materials are processed and the costs or revenues associated with them, linking individual behaviour to the environmental and economic performance of the system. Reuse is integrated through the Kurukuru Shop, where unwanted objects can circulate within the community.

In 2020, these principles took physical form with the Zero Waste Center WHY, designed by Hiroshi Nakamura and built largely from reclaimed local materials. The facility combines waste sorting, reuse, education, research and hospitality, turning waste management into a visible civic infrastructure that encourages participation, behavioural change and ultimately waste prevention.



DEMONSTRATED METRICS

- ~80% recycling rate, excluding bio-waste, maintained over more than two decades.
- Waste separated into 14 categories and 44 subcategories.
- More than 7 tonnes of goods recirculated annually through the Kurukuru Shop.
- Approximately JPY 1.8 million generated annually through the sale of recovered resources and returned to the community through the Zero Waste Promotion Fund.
- FY2024 processing costs: approximately JPY 8 million compared with an estimated JPY 14.24 million.
- Approximately 700 reclaimed windows incorporated into the Zero Waste Center WHY façade.
- Population served: fewer than 1,300 residents.

REAL IMPACT

Kamikatsu demonstrates that high resource-recovery rates can be sustained through governance, citizen participation and spatial design rather than relying exclusively on capital-intensive waste technologies.

Key impacts include:

- More than two decades of high recycling performance.
- Household-level participation embedded in the municipal waste system.
- Reduced dependence on incineration and disposal.
- Organic waste diverted through household composting.
- Reuse embedded in everyday community life through the Kurukuru Shop.
- Waste-management costs and material value made visible to citizens.
- Creation of a global education and knowledge-transfer platform through the Zero Waste Center WHY.
- Development of local circular businesses and research collaborations.

The model has transformed waste management from a municipal service into a shared civic practice.

IMPLEMENTATION LOCATION & DATE

Kamikatsu, Tokushima Prefecture, Japan.

Zero Waste Declaration adopted in 2003.

Zero Waste Center WHY opened in 2020.

The model continues to operate and evolve more than two decades after its introduction.

SIMILAR CASES IMPLEMENTED ELSEWHERE

The Kamikatsu experience has influenced other zero-waste initiatives in Japan and abroad. Japanese municipalities including Minamata, Miyama, Ooki and Ikaruga have subsequently adopted zero-waste commitments.

The Kurukuru Shop concept has been replicated in communities in China and Indonesia.

Elements of the Kamikatsu methodology are also being applied by Mitsubishi Estate in Tokyo's Marunouchi business district, where resource-recovery strategies are being tested at a much larger urban scale.

TECH LEVEL

Low Tech



CO-BENEFITS

Environmental

- Reduced waste sent to incineration or disposal.
- Household composting of organic waste.
- Increased material recovery and reuse.
- Extended product lifecycles.
- Reduced demand for virgin resources.
- Reclaimed materials incorporated into the Zero Waste Center itself.

Economic

- Reduced waste-processing costs.
- Revenue generated through recovered materials.
- Economic value returned to residents.
- Support for local circular businesses.
- Low dependence on capital-intensive technological infrastructure.

Social

- High levels of citizen participation.
- Increased awareness of material consumption and waste.
- Community ownership of the waste system.
- Intergenerational transfer of zero-waste practices.
- Attraction of national and international visitors.

Governance

- Transparent communication of waste-management costs and revenues.
- Replicable municipal framework based on participation.
- International knowledge transfer and policy learning.
- Collaboration between local government, businesses and citizens.

Spatial / Design

- Waste infrastructure transformed into an accessible civic space.
- Architecture used to encourage behavioural change.
- Reclaimed local materials incorporated into the building.
- Integration of waste management, reuse, education and hospitality in one facility.

COST OF THE SOLUTION

LOW. The model does not depend on specialized high-tech sorting infrastructure. Its main requirements are citizen participation, education, source-separation systems, operational coordination and appropriately designed collection and reuse spaces.

The Zero Waste Center WHY also demonstrates how reclaimed local materials can be incorporated into the physical infrastructure itself.

MITIGATION / ADAPTATION

Mitigation

MAIN CATEGORY

Primary: Governance & Economy

Secondary: Energy & Environment

BASE INFORMATION SOURCES

- Documentation provided by the Municipality of Kamikatsu / Zero Waste Center WHY
- Kamikatsu Zero Waste Center WHY project information
- Tomorrow.City — previous coverage of the Kamikatsu zero-waste model
- Municipal and project documentation on Kamikatsu's Zero Waste Declaration and resource-recovery system

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