

SMALL TOWN **BIG STEPS**

The Story of Kamikatsu, Japan



ZERO WASTE CITIES ASIA SERIES
Kamikatsu, Japan

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Addressing the global plastic crisis is not a walk in the park. But a quaint town in Japan — Kamikatsu — proved to the world that it could be done by emphasizing the concepts of reduction and reuse and making recycling creative and fun. This town's emphasis on reducing what to throw is manifested in their city-wide waste management strategy and demonstrates how a single step like this could make a significant contribution to solving the global waste crisis.

Located on Shikoku island in Southeastern Japan, the small, picturesque town of Kamikatsu, home to a tightly knit community of fewer than 2,000 residents, is the first municipality in Japan to implement Zero Waste. In 2003, Kamikatsu declared their Zero Waste goal of eliminating waste by 2020, without resorting to incinerators or landfills.¹

Kamikatsu has an extensive waste sorting system, where people separate wastes into 45 specific categories such as aluminum cans, steel cans, newspapers, paper cartons, and paper flyers.² They also wash and transport their waste to the waste collection center — a practice that the residents initially found tedious, but which eventually became second nature to them. They also manage all of their organic waste within each household.

Kamikatsu's definition of Zero Waste is that nothing goes into incineration or landfill and everything gets reused or recycled. Deliberate efforts were undertaken by the community to excise plastic waste from their lives. This approach has led the town to where it is today — 81% of its garbage recycled. That is on top of what is reused and composted.³

THE BEGINNING OF ZERO WASTE

Until the late 1990s, there was no such thing as recycling, nor was waste collection or plastic pollution an issue for the town. The town's traditional waste management consisted of either incineration or dumping their mixed waste in landfills. Residents used to burn their household garbage

at home or dump it in an open space in the middle of the town, where dumped waste are incinerated in the open air.

In 1995, the town started to provide subsidy for electric composters for its organic waste, making it possible for home-generated organic waste to be composted and returned to the ground in each household. Soon there was pressure coming from the national government to stop the open burning of waste, prompting the town to resort to using incinerators to manage their waste.

At a great expense, Kamikatsu installed two incinerators in 1998. After just three years, both incinerators were banned following a national regulation due to health concerns about the amount of



KAMIKATSU (located in Katsuur district)
TOKUSHIMA PREFECTURE
Population: 1,528 (2019)
Land area: 110 km²

Population Density: 12.80/ km² [2018]
Waste Generation: 286 tons/year
Waste diversion rate: 81%
Reference: <http://www.kamikatsu.jp/>





On-site waste staff members ensure proper waste disposal. © MASATAKA NAMAZU

dioxins produced from small-scale incinerators nationwide.

Since the amount of waste had been increasing exponentially, the option of investing in waste-to-energy incinerators was brought to the table, but was not acknowledged as appropriate solution due to its financial costs. This left the municipal government officials to find a new approach to dealing with their residential waste.

At first, the most feasible solution was for the town to transport their waste to other municipalities, but it was not cost-efficient and was an unsustainable move for a small economy. So the municipal officials came up with a better plan — to reduce as much waste going to incinerators or landfill as possible. This was the threshold of Kamikatsu's Zero Waste scheme and a step towards the Zero Waste ambition.

In 2003, Kamikatsu declared its Zero Waste goal of eliminating waste by 2020, without resorting to incinerators or landfills.⁴ The initial stage of

its implementation was met with resistance from the community. For most residents of the town, it was a struggle to wash and dry their trash before sorting them into their appropriate bins. For most people, this kind of waste management was too labor-intensive and confusing as residents are required to strictly separate things that are made from different materials.⁵

In 2005, the Zero Waste Academy, a local non-profit organization, currently led by Akira Sakano, was born. The Zero Waste Academy provides services to turn waste into something useful and helps Kamikatsu work towards its sustainability goals.⁶

The Zero Waste Academy, together with the municipal office, facilitated gatherings for open discussions about the Zero Waste goal, organized presentations and workshops, and ran city-wide information campaigns about Zero Waste. These communication efforts were a salient factor in engaging the community for them understand what Zero Waste is, why they are doing it, and how it will

benefit them.⁷ Once the villagers got into the swing of things, there was no looking back.

MORE THAN JUST 'RECYCLING'

Interestingly, there are no trash collectors in this town. Instead, it is the residents themselves who transport their own garbage — washed and dried — to the town's waste collection facility known as "Gomi station," where the final waste segregation is done.

At the waste collection center,⁸ there are on-site staff members who are responsible for supporting residents and ensuring that the proper waste segregation is done. As for older residents who are unable to personally deliver their waste to this facility, the Zero Waste Academy provides a fee-based garbage truck service to transport their trash to the waste collection center. These households are provided with subsidies to help cover the collection fee of 10 Yen (\$0.093) per 45 liter of waste and 270 Yen (\$2.51) for bulk waste.

45 DEGREES OF SEPARATION

As mentioned, there are 45 waste classifications in the waste collection center, far from the average number of expected waste categories when recycling. There is likewise an impressive number of subcategories for each type of waste. There are separate bins for different types of paper products such as newspapers, magazines, cartons. There are even more trash bins for plastic bottles, caps, and cans, and even metals are further classified into aluminum and steel.

Kamikatsu originally began with nine categories, but to accommodate more types of waste to facilitate a more effective recycling process, the number later expanded to 34 in 2002, and to 45 types of waste with 13 categories since 2016.⁹ Each bin also has a sign illustrating what the trash will be recycled into and how much that recycled material will cost or earn the community. Given this aggressive sorting system, each resident receives a recycling guide booklet.¹⁰

KURU-KURU: REUSE AND RECREATE

From becoming a hub for social interaction among residents, the waste collection center later expanded to include a circular shop or *kuru-kuru* shop (*kuru-kuru* meaning circular in Japanese), where locals can drop off items they no longer need and take away any of the items that were also dropped off there for free. Additionally, in an effort to eliminate the use of disposable plastic cups and plates for special occasions, residents can also borrow 8,000 tableware items from the Zero Waste Academy for free.¹¹

Next to the waste collection center is a *kuru-kuru* craft center where local women, particularly grannies, make products out of discarded materials such as teddy bears from old kimonos, a traditional Japanese garment. Products sold in these local businesses need to be designed to adhere to the circular economy, where everything made is either reused or recycled. Both the center and the shops are managed and operated by the Zero Waste Academy.

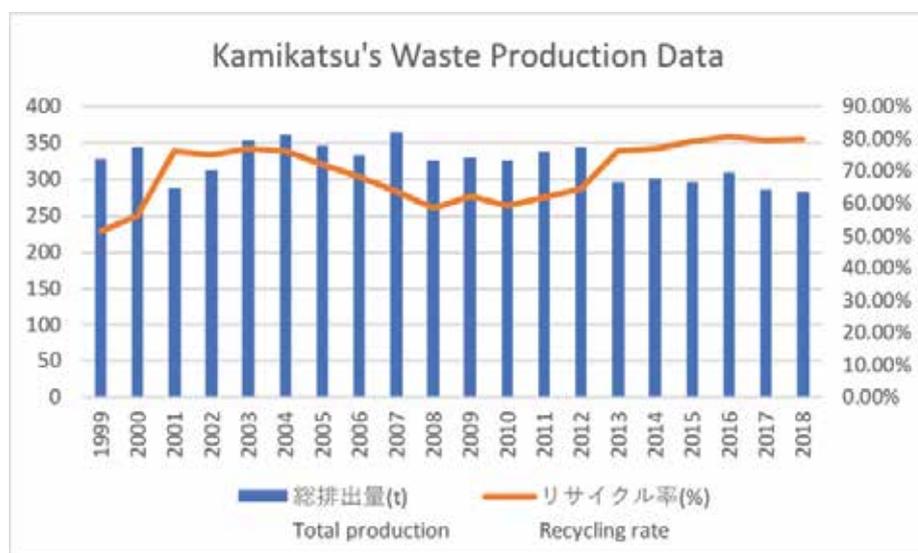
ZERO WASTE ACCREDITATION FOR BUSINESSES

The Zero Waste Academy trains local shops on how to recycle waste products and partners with them in conducting waste audit reports to identify the different categories of waste. On top of that, the organization manages a Zero Waste accreditation scheme, where local businesses are given certification according to their efforts to reduce waste and control its use of single-use products. Proposals for using environmentally-friendly materials and Zero Waste methods are made to local businesses to encourage Zero Waste efforts with the hope of increasing the number of businesses, on a global

scale, to participate in taking continuous efforts in promoting Zero Waste.

BEHAVIORAL AND LIFESTYLE SHIFT

Following the implementation of the Zero Waste program, Kamikatsu has saved a third of the town's former costs from waste incineration.¹² Aside from the town's annual waste management cost, which is about 6 million Japanese Yen (\$55,764.00), Sakano highlighted the economic benefits of recycling in their community. Recycling earns them 3 million Japanese Yen (\$27,882.00), which technically is more cost-efficient than incinerating, and selling waste like paper or metals and helps offset Kamikatsu's waste disposal costs.¹³



Somewhere near the *kuru-kuru* shop is a *Kuru-Kuru* Craft Center, where local women make products out of discarded materials such as old kimonos or teddy bears. ©MASATAKA NAMAZU



Kuru-kuru Craft Center sells old products such as old fabrics, clothing, and recycled cotton. © MASATAKA NAMAZU

While recycling rate dropped, waste generation and the volume of waste going to incineration and landfill decreased as well.

Social attitudes were reshaped and consumption habits likewise changed. People became more aware of the packaging involved in consumer goods. They now prefer less complicated packaged goods or goods that are package free. As a result, local businesses are more encouraged to provide waste-free products and services.

WHAT COMES NEXT?

Looking back, it's been almost 16 years since the town embarked on its Zero Waste scheme. At this point, the waste reduction process that was once a burden, has become a way of life for the town of Kamikatsu.

Last 2003, after Kamikatsu promulgated its Zero Waste scheme, the town aimed to:¹⁴

1. Raise the ecological consciousness of individuals
2. Ensure that no waste goes to an

incinerator or landfill by 2020, and consequently amplify the reuse-recycle scheme

3. Develop networks with like-minded individuals

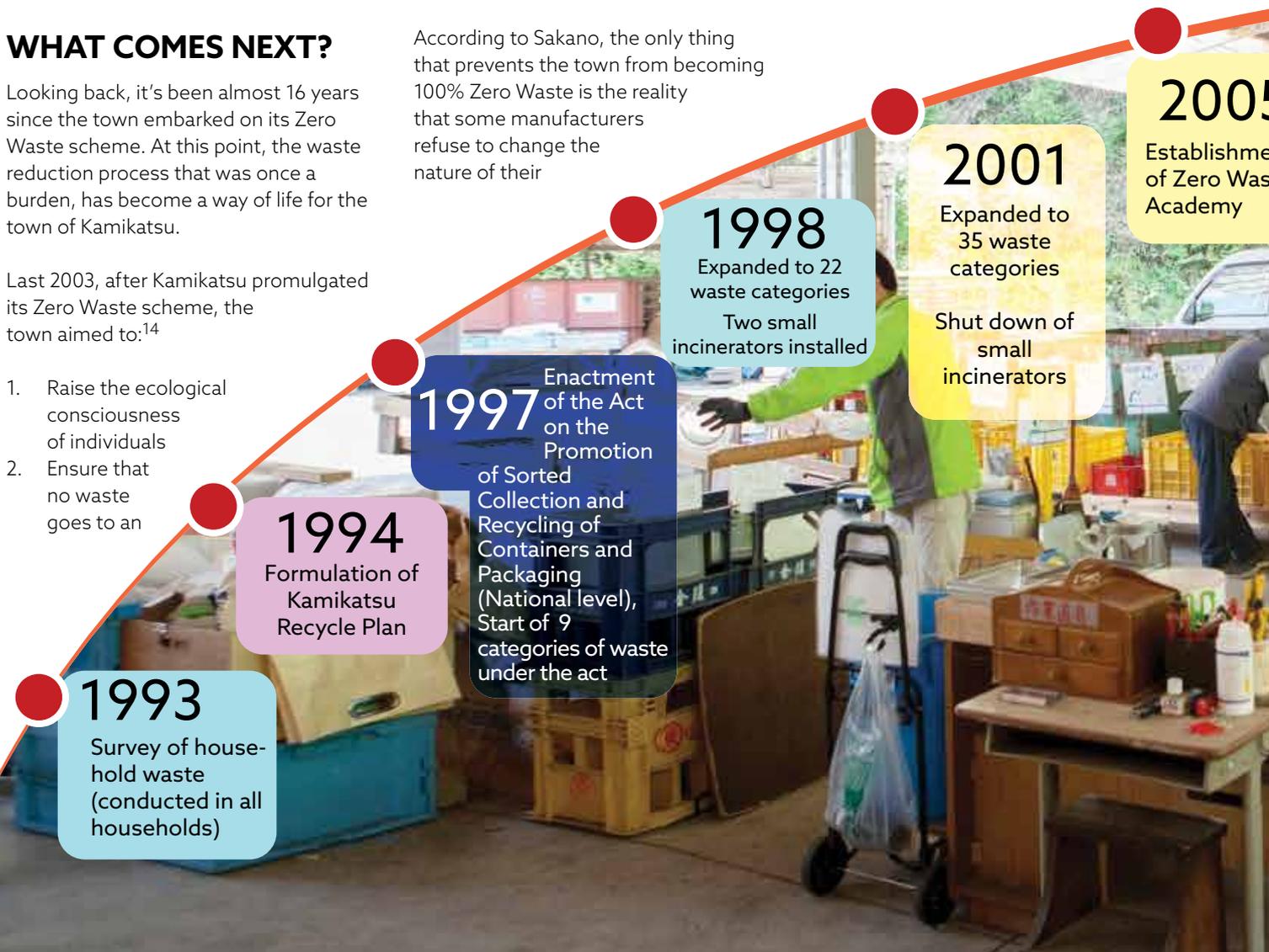
As for the next steps, the town aims to prevent waste production altogether. Back in 2015, the town developed a further roadmap of achieving Zero Waste by 2020. This ambition of becoming the first Zero Waste town in Japan by 2020, without resorting to incinerators or landfills, is within the bounds of possibility.

According to Sakano, the only thing that prevents the town from becoming 100% Zero Waste is the reality that some manufacturers refuse to change the nature of their

production process— they still use non-recyclable packaging and materials in their products.¹⁵ Aside from involving the residents and local businesses, the community's next step is to pressure outsiders to get involved in incorporating the idea of a circular economy in the production and supply of single-use products.

The quaint town of Kamikatsu developed innovative ways to prevent the disposal of a staggering amount of waste. Not only is this strategy open to its local community, but anyone involved in the production and consumption of products.

Without a doubt, Japan's greatest asset lies in its people — innovative, purposeful, and well-disciplined. Like them, we too can do something to alleviate waste pollution that has grown immensely in proportion throughout the world. May the townfolk's ingenious way of implementing Zero Waste serve as an example for world leaders and a source of inspiration for people.



NOTES

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