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August 26, 2025
Gunze Limited

In May 2025, Gunze announced its mid-term management plan, "VISION 2030 Stage 2," which declares the company's commitment to achieving sustainable business operations that balance "social value" and "economic value." This commitment will build a sustainable business foundation and establish Gunze as a company that will continue to be chosen globally. Recently, as resources have become more limited, and environmental problems have popped up from higher demands for resources, we've realized that making the most of waste as part of a cycle of creating more value is crucial for new growth. So, the move from the old economic system to a circular one is really important. In this 14th edition, we'll talk about how we're working to make the circular economy a reality in our apparel business.

Join the Japan Sustainable Fashion Alliance (JSFA)

The Japan Sustainable Fashion Alliance (JSFA) is a corporate platform aimed at promoting a sustainable fashion industry through joint solutions to shared challenges in fashion and textiles. While many companies pursue their own sustainability efforts, the JSFA enables collective action on issues too complex for individual resolution.

Its goals include: (1) Understanding the industry's environmental and social impact. (2) Developing shared solutions. (3) Promoting the shift to sustainable fashion.

Gunze joined the alliance as a supporting member in 2022, aligning with the following commitments:

- 1. Support the Paris Agreement and adopt a decarbonized business model.
- 2. Participate in initiatives like the 2050 Net Zero Declaration, RE100, EP100, and EV100.
- 3. Ensure transparency across the value chain with suppliers and customers.
- 4. Promote lean production, purchasing, and recycling.
- 5. Engage in policy and sustainability initiatives.

Gunze remains committed to advancing these goals.

JSFA Member Companies' 2030 Goals (Vision 2030)

1. Fashion loss zero by 2030

- Make things clear by knowing how much inventory you have and how you dispose of waste.

- Creating a system that uses things in a cycle.

2. Carbon neutrality with milestones toward 2050

- Tracking and reducing greenhouse gas emissions (CO2 equivalent) throughout the supply chain.

3. Achieve goals by leveraging innovation and shared tools

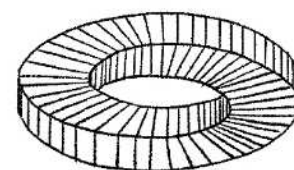
- Use of new materials and technologies.

- Adoption of eco-friendly design.

- Talking with consumers about how to make fashion more sustainable.

4. Respect the human rights approach

- JSFA and its member companies support the United Nations Guiding Principles on Business and Human Rights. They will promote initiatives to respect human rights based on these principles.



**JAPAN
SUSTAINABLE
FASHION
ALLIANCE**

Gunze Logistics achieves zero industrial waste at Nishinomiya and Okayama Logistics Centers

Gunze Logistics handles all the logistics for Gunze-branded innerwear, legwear, and lifestyle apparel. This includes receiving, storing, picking, packing, and shipping all over the country. At the Nishinomiya Logistics Center in Hyogo, they're working hard to cut industrial waste by focusing on two main types of plastic. We've got polypropylene packaging bags and polypropylene/polystyrene hangers. One of the main challenges was that plastic was classified into five types instead of three, and it had to be recycled appropriately. The team made visual guides and explanatory videos so that about 40 employees could sort plastic the right way. So, we didn't generate any industrial waste in November 2024.

This success was later expanded to the Okayama Logistics Center, where both facilities now turn collected bags into hangers for Gunze's men's underwear brand "ASEDORON". The recycling process includes transporting used film, converting it into raw materials, and manufacturing new hangers—now totaling 350K units per year. We're working to expand the initiative, and we're planning to install a plastic film compressor at the Utsunomiya Logistics Center by July 2025. This will increase our recycling capacity.



Gunze Nishinomiya Logistics Center

Team members and plastic film compressor

Aiming for Zero Plastic Waste - The Challenge at the Nishinomiya Logistics Center -

The project was started because of a change in the city's rules. Starting in the 2024 fiscal year, waste plastic will be considered industrial waste. The Nishinomiya Logistics Center disposed of around 7 tons of waste plastic in 2023, and this change was expected to increase costs by about 2.3 million yen annually. On top of that, Gunze Group has made waste reduction and recycling part of their company rules, so we teamed up with the headquarters to start projects aimed at getting to "Zero waste plastic." But, adding more waste categories to sort can be a big job for staff. So, we tried to improve sorting efficiency without messing with how things were done, and we also focused on getting the staff to sort waste the right way. One of these is "visual management." Making the process easy to see makes sorting a lot easier. We also share the results of our efforts every month on bulletin boards and other platforms to keep our staff motivated.

We can't expect to achieve a circular economy with just the efforts of individual companies. I'm going to introduce this initiative through the "Osaka Apparel Logistics Association", of which we are a member, and promote waste reduction across the entire industry.

Mr. Ogawa is currently the organization's vice chairman.



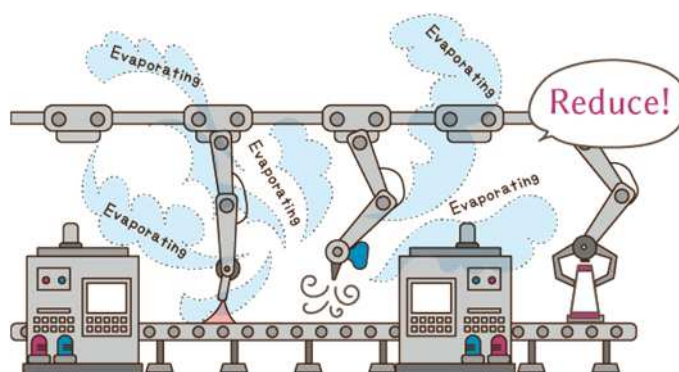
Mr. Ogawa
President, Gunze Logistics

Efforts to reduce the use of organic solvents at the Tsuyama Plant in Threads and Accessories Business

The three main parts of a circular economy are reduce, reuse, and recycle, in that order. First, we should all try to reduce our waste. Then, we can reuse items, and finally, we can recycle them. This approach helps us use our resources more efficiently and reduce our environmental impact.

At Gunze's threads and accessories department Tsuyama Plant in Okayama, Japan, they're working on ways to use fewer organic solvents. The department makes sewing threads for clothes and car safety parts, like airbags and seatbelts, and these products have to meet very strict safety standards. Airbag sewing thread is especially important, and it's sewn into vital components. Their production bases are located in Japan, China, Vietnam, Bangladesh, and Indonesia.

The Tsuyama Plant has recently cut back on solvent use in the airbag sewing thread process. These threads are bonded with resin, dissolved in organic solvents. Before, big equipment areas were exposed to air, causing solvent evaporation equal to a 60-car parking lot. By using technology to cut down on contact with air, they were able to reduce evaporation and use less solvent.



Further efforts to reduce organic solvent usage

We've been working hard to cut down on the use of organic solvents. As the next effective reduction measure, we've started a new test focusing on "suppressing the volatilization and leakage of organic solvents in the preparation process before processing. This initiative is expected to be a highly effective reduction approach following the measures we've implemented so far, and it aims to physically suppress the volatilization and leakage of organic solvents in the process. During this process, it's important to keep the organic solvents at a steady temperature, which makes it hard to change up the process. Also, the tanks we use to store solvents aren't fully sealed, so there's leakage of volatile components outside the tanks because of temperature fluctuations. We're testing a new technology that recirculates volatile organic solvents back into the tanks before they escape, so there's no leakage. This initiative is going to integrate volatile and leakage suppression measures across our entire resin processing process. This will improve air quality in the plant and reduce CO2 emissions, as well as make the workplace more comfortable.

Moving forward, we'll keep making sustainability a top priority in our business activities and do even more to help create a sustainable society.



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