



2023

ENVIRONMENTAL
REPORT

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Message from President

Dynic Corporation promotes corporate activities covering the stages from development through to disposal of products, considering the environmental preservation at all times.

Our corporate objective is to color the day-to-day life abundant and comfortable.

Dynic Group always takes care to follow Environmental Basic Policy, which was established for the purpose of directing us to a habitable earth. We regard addressing the risks associated with biodiversity and climate change as an important issue and we are working hard every day on environmentally-friendly corporate activities in consideration of harmony between technology and environment.

Our 5 plants in Japan have already engaged in activities toward carbon neutrality such as the installation of energy-saving equipment and the promotion of the use of renewable energy. We will continue to strengthen these activities and promote product design and conservation activities considering biodiversity.

DYNIC ASTRONOMICAL OBSERVATORY, opened in 1987, continues activities to raise environmental awareness through astronomical observation events and planetarium screenings in cooperation with Taga-cho, the local administration.

Our Group companies both in Japan and abroad are also continuously introducing energy-saving equipment and promoting biodiversity conservation initiatives.

In 2022 for the first time, we newly challenged to joining to CDP (Carbon Disclosure Project) activities, which is a non-governmental organization and analyzes and evaluates companies' initiatives to the climate change. And we received a certain degree of evaluation.

To ensure that we continue to be a trusted company in the future, all of our employees will work together as one team to strengthen our efforts regarding environmental measures and undertake the development of environment-related products that take into consideration the global environment and living environments, promoting business activities that contribute to the realization of global environment preservation with our eyes towards the next generation.



A handwritten signature in black ink, appearing to read 'H. Yamada', written in a cursive style.

Hidenobu Yamada
President
Dynic Corporation

August 2023

Company Profile

Corporate Name	Dynic Corporation
Establishment	August 18, 1919
Capital	JPY5,795.65 million
Stock Listing	Standard Market of the Tokyo Stock Exchange
Amount of Sales	JPY29.6 billion (Consolidated sales JPY41.5 billion) (As of June 27, 2023)
Employees	620 (1,219 including Group companies) (As of June 27, 2023)
Head Office	Tokyo Head Office: Shin Onarimon Bldg., 6-17-19, Shimbashi, Minato-ku, Tokyo 105-0004 Tel: +81-3-5402-1811(main) Fax: +81-3-5402-3146
	Kyoto Head Office: 26 Daimon-cho, Nishikyogoku, Ukyo-ku, Kyoto 615-0812
Branch	Sapporo, Tokyo, Nagoya, Osaka, Fukuoka, Hong Kong, Singapore, U.S.A., Thailand, U.K., China , Indonesia, Czech (including Group companies)
Factory	Shiga, Saitama, Oji, Fuji, Moka, U.S.A., Thailand, U.K., China, Indonesia, Czech (including Group companies)
Affiliated Company	7 companies in Japan; 11 companies in other countries
Business Line	Book covering material, Cloth for printing and business purpose, Decorative covering material for packages, Covering material for magnetic passbooks, Film-coated products, Material for labels, Composite film, Printer ribbon, Business card printers, Stationary paper goods, Magnet-related products, Moisture getter for organic EL, Carpet, Wallcoverings, Ceiling material, Blinds, Non-woven cloth/ carpets for automotive interiors, Filters, Industrial tarpaulins, Canvases, Rainwear, Industrial non-woven cloth, Aluminum foil/lid material for container sealing, Paper core/paper packaging, Film processing for cataplasm, Freshness-keeping agents for food, Adhesive interlining, Fancy products, Transportation/storage of products, etc. (including products of Group companies).

Basic Environmental Policy

As global warming and other global environmental issues become increasingly severe, continued efforts are required to achieve carbon neutrality and create a recycling-oriented society. Dynic Corporation has established Basic Environmental Policy as described below and is committed to addressing environmental issues.

【Basic Environmental Policy】

Dynic Corporation recognizes that efforts to ensure environmental preservation are an important business challenge and believes that it is our responsibility as a manufacturer to observe all applicable environmental laws and regulations at home and abroad and offer products with a lower environmental burden. To implement this concept in a specific manner, we are committed to thoroughly promoting the following principles in each stage including development, material procurement, manufacturing, sales, distribution and disposal;

- (1) We are committed to reducing environmental load, biodiversity conservation and climate change initiatives in all stages of our business activities throughout the life cycle of our products.
- (2) We are committed to making proactive initiatives to save energy and reduce waste, thereby preventing environmental pollution.
- (3) We are committed to preventing the risk of harmful chemical substances damaging the environment.
- (4) We are committed to disclosing information regarding our business activities related to the environmental and proactively promoting environmental conservation activities with local communities; and
- (5) We are committed to implementing education and training related to environmental conservation to improve awareness of the environment.

Hide Nobu Yamada, President
Dynic Corporation

Initiatives to Reduce Environmental Load

We are introducing the manufacturing method that features less of an energy load and implementing product design where resource saving and longer service life are taken into consideration; in addition, we consider materials that feature less of an environmental load and materials that are easy to be recycled from the design phase of the product.

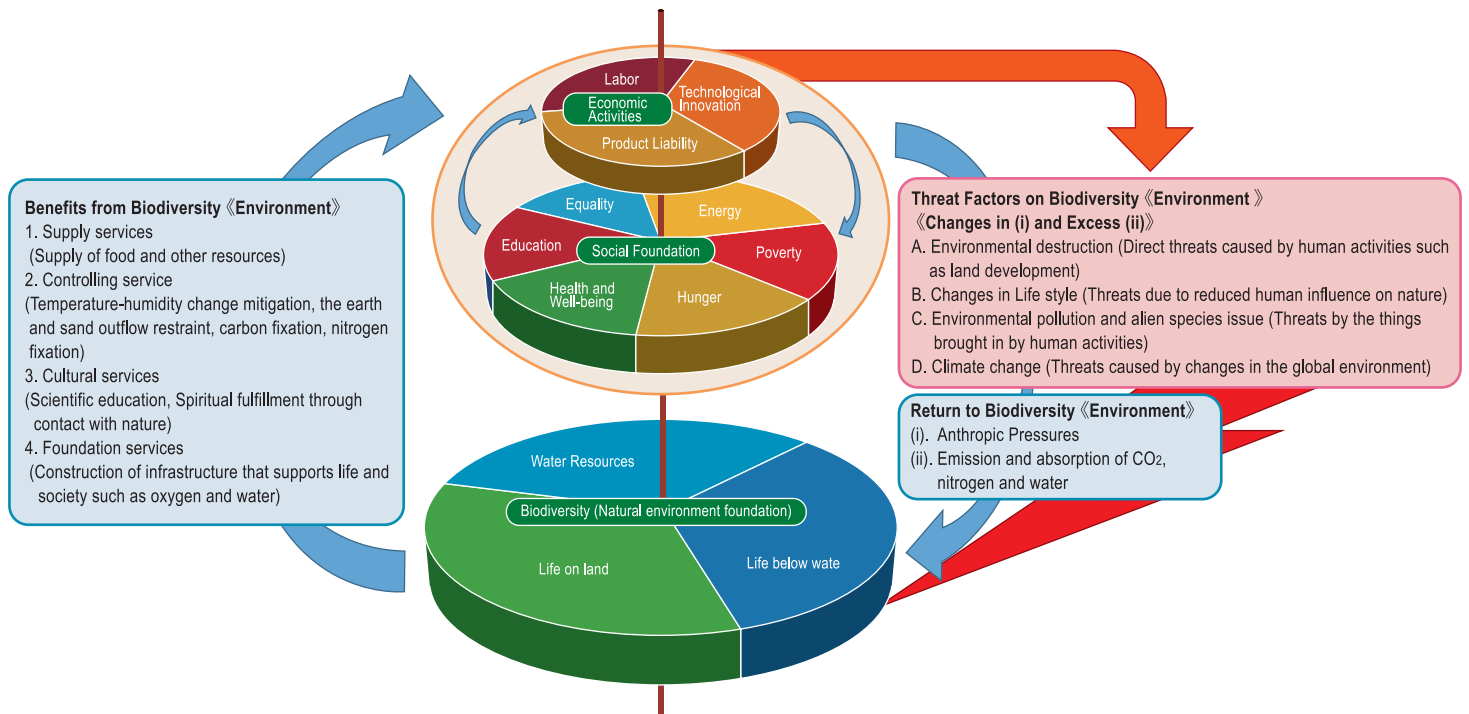
In the manufacturing phase, we make efforts to save energy and reduce waste in the manufacturing scene every day, thereby contributing to the reduction in the environmental load. In the marketing phase, we propose environmentally-friendly products that reduce the environmental load at the customer by using the products, thereby making efforts to contribute to the environmental preservation of the earth.

Initiatives to Climate Change and Biodiversity Conservation

We promote countermeasures against climate change through our initiatives for energy-saving and reducing emissions of carbon dioxide throughout entire company. And we make efforts for the contribution to construction of sustainable society and coexistence with the global environment regarding biodiversity.

Initiatives to the Environmental Issues

Dynic Corporation is aware of the balance between "benefits from biodiversity to society" and "return from society and economy to environment" and considers the following environmental issues for realizing a sustainable society.



Environmental Issues	Action To Be Taken
A. Environmental destruction (Direct threats caused by human activities such as land development)	<ul style="list-style-type: none"> • Reduction of final disposal volume (Refer to P8) • Assessment for environmental impact in case of utilization of unused land
B. Changes in Life style (Threats due to reduced human influence on nature)	<ul style="list-style-type: none"> • Proper use of biomass materials
C. Environmental pollution and alien species issue (Threats by the things brought in by human activities)	<ul style="list-style-type: none"> • Reduction of waste (Refer to P8) • Proper management of waste water and exhaust gas (Refer to P7) • Reduction of PRTR substances use • Resource circulation • Management of chemical substances contained in products
D. Climate change (Threats caused by changes in the global environment)	<ul style="list-style-type: none"> • Energy saving (Refer to P6) • Introduction of renewable energy

In 2022 for the first time, we challenged to register our activities related to above D, climate change, to CDP (Carbon Disclosure Project), which is a non-governmental organization engages in analysis and evaluation companies' initiatives to the climate change.

Evaluation to us was "C" among 8 steps, A, A-, B, B-, C, C-, D and D-. We will analyze the evaluation results and aim to enhance our activities and improve the evaluation. We will also strengthen our initiatives on issues other than climate change.

Environmental Target and Results

We set the midterm targets for environmental performance (FY2021 to FY2023) and are committed to promoting them.

The results in FY2022 are as follows:

FY2022 Environmental Target and result List

Areas		Unit	FY2022				Final target for FY2023
			Target	Result	Self-evaluation	Related page	
Climate change initiatives Energy saving	CO2 emissions reduction	t-CO2	Versus FY2013 9% reduction	-11.8%	○	P6	Versus FY2013 10% reduction
	Reduction in Energy intensity	L/km of oil equivalent	Versus FY2017 5% improvement	+1.2%	×	P6	Versus FY2017 6% improvement
Resource saving	Reduction in water consumption	1000 tons	Versus FY2017 5% reduction	+4.5%	△	P7	Versus FY2017 6% reduction
Reducing, reusing, and recycling of waste	Waste volume reduction	t	Versus FY2017 5% reduction	+1.1%	×	P8	Versus FY2017 6% reduction
	Volume reduction of wastes subject to final disposal	t	Versus FY2017 5% reduction	+35.7%	△	P8	Versus FY2017 6% reduction
Prevention of environmental pollution	Reduction in emissions of PRTR substances	t	Versus FY2016 30% reduction	+5.1%	△	P10	Versus FY2016 35% reduction
Environment-related products	Increase in % sales	%	Versus FY2020 1.0% improvement	-1.8%	△	P12	Versus FY2020 1.5% improvement

<Self-evaluation legend>

◎ : More than twice the target

○ : Achieved the target

△ : The target was not achieved but better figure than last year.

× : Improvement toward the target was not made.

FY2022 Initiatives to Reduce the Environmental Load

Initiatives related to climate change/saving energy

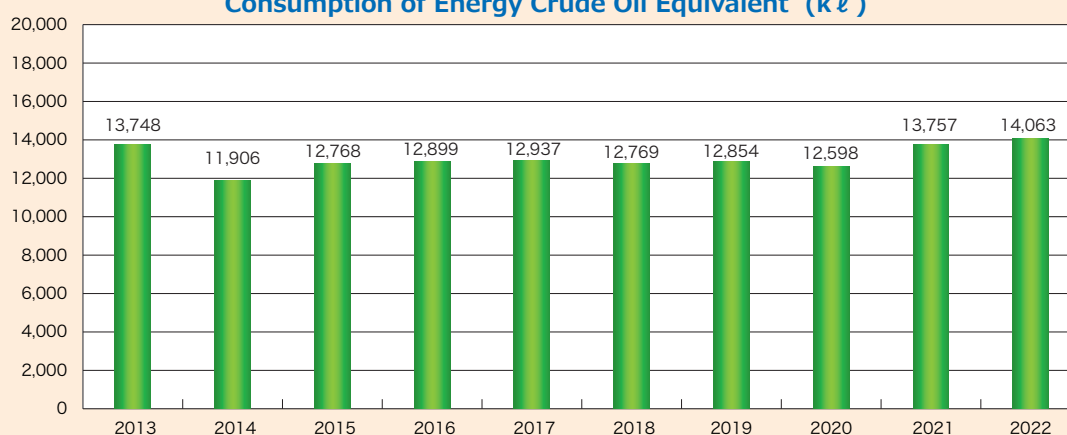
We consume energy to manufacture in our production activities. Our process emits CO₂ as greenhouse gas. To reduce CO₂ emissions, we are implementing initiatives to reduce energy use in production processes.

We make investments in various types of energy-saving equipment systematically such as switching plant ceiling lighting to LEDs, conversion of air-conditioners and chillers to higher-efficiency models, installing inverter-controlled compressors, modifying steam piping and introducing self-consumption type solar power generation facilities. Furthermore, we have implemented productivity improvements to increase energy efficiency, including installation of new equipment and improving in existing equipment.

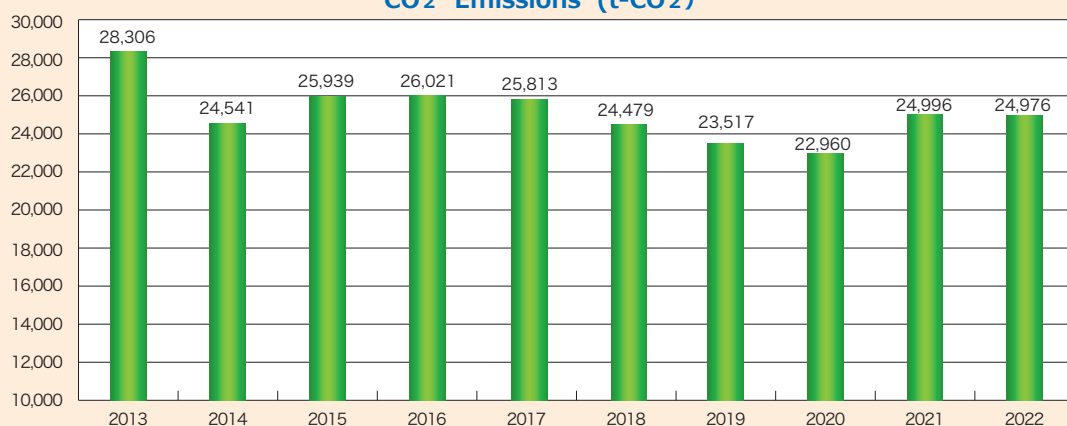
While our production volume decreased by 1.3% YoY in FY2021, our energy use increased by 2.2% YoY and our energy intensity worsened by 3.6% YoY at the result. However CO₂ emission decreased by 0.1% YoY.

In FY2023, we will continue to increase productivity aggressively and install more energy-saving equipment to achieve our goals.

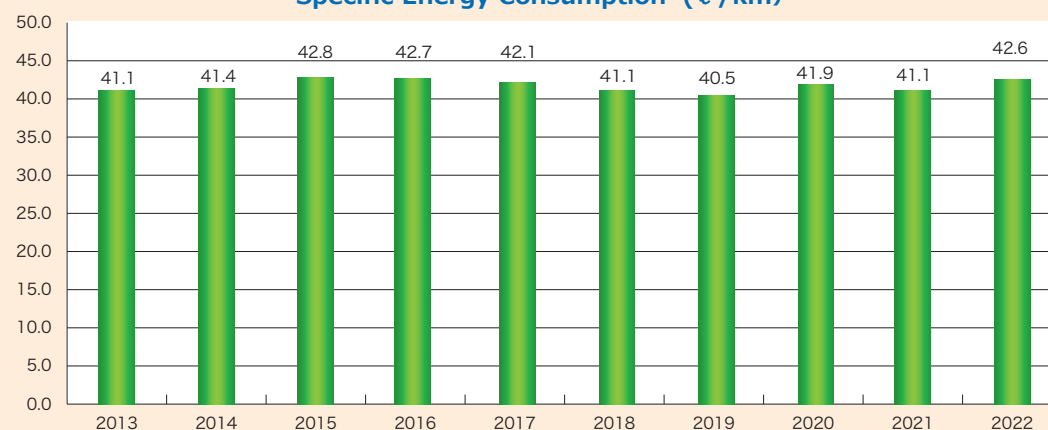
Consumption of Energy Crude Oil Equivalent (kℓ)



CO₂ Emissions (t-CO₂)



Specific Energy Consumption (ℓ/km)



FY2022 Initiatives to Reduce the Environmental Load

Initiatives related to saving resources/reducing waste

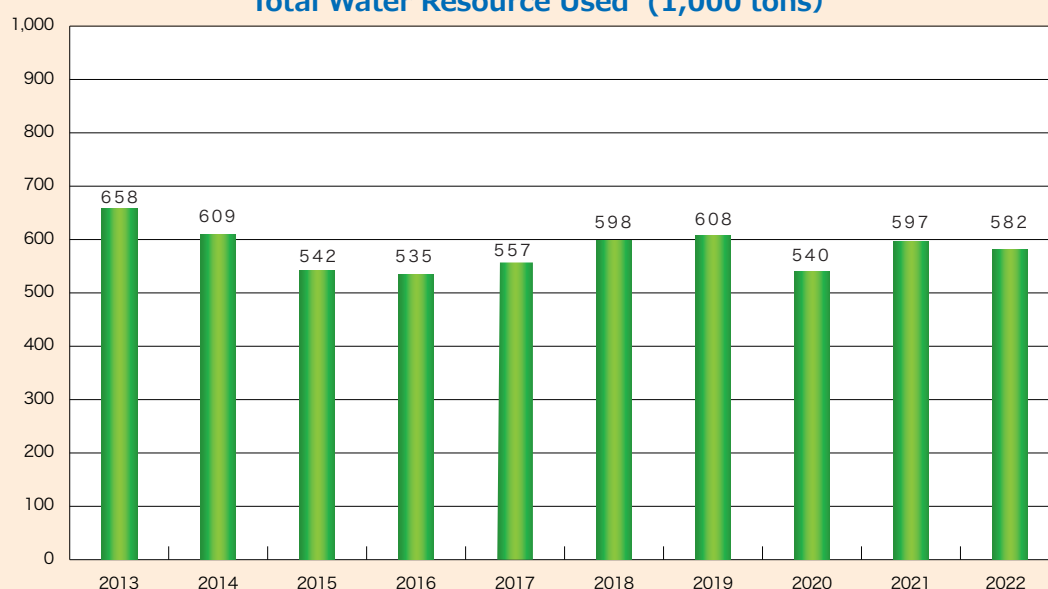
● Efficient use of water resources

We have recycled more waste water from the washing and cooling systems in our production processes in order to effectively conserve water resources.

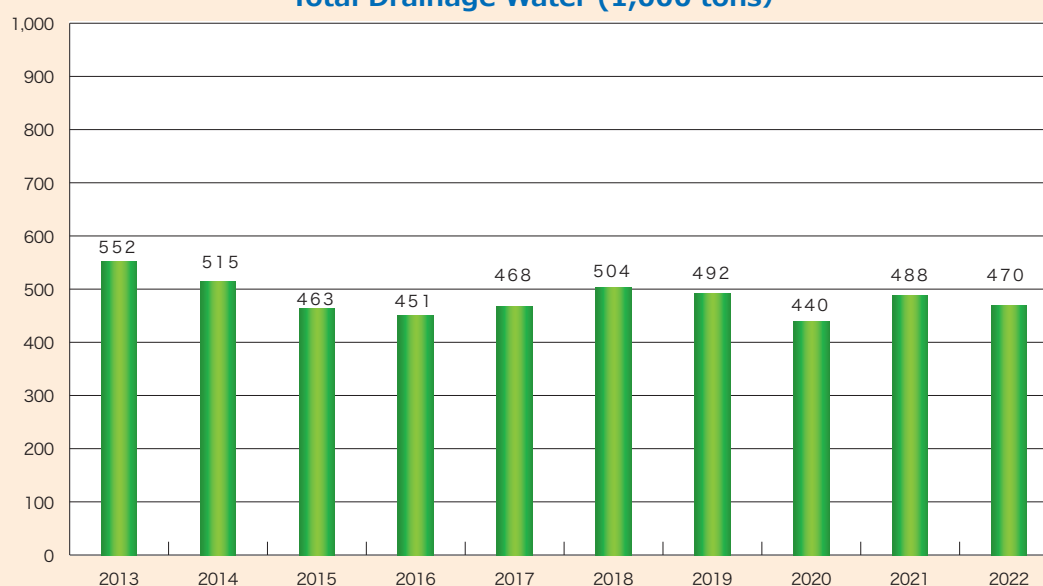
In 2022, total intake amount of water resources was 97.4% of previous year figure and total amount of wastewater was 96.4% of previous year figure. Both decreased compared to the previous year.

In FY2023 as well, we will review the use of wasteful water resources and work to reduce the total amount of water resource input.

Total Water Resource Used (1,000 tons)



Total Drainage Water (1,000 tons)



FY2022 Initiatives to Reduce the Environmental Load

Initiatives related to saving resources/reducing waste

● Initiatives to reduce waste

We are committed to waste reduction in order to protect the global environment. In order to not only reduce waste generation but also effectively use resources, we push forward reuse and recycling approaches.

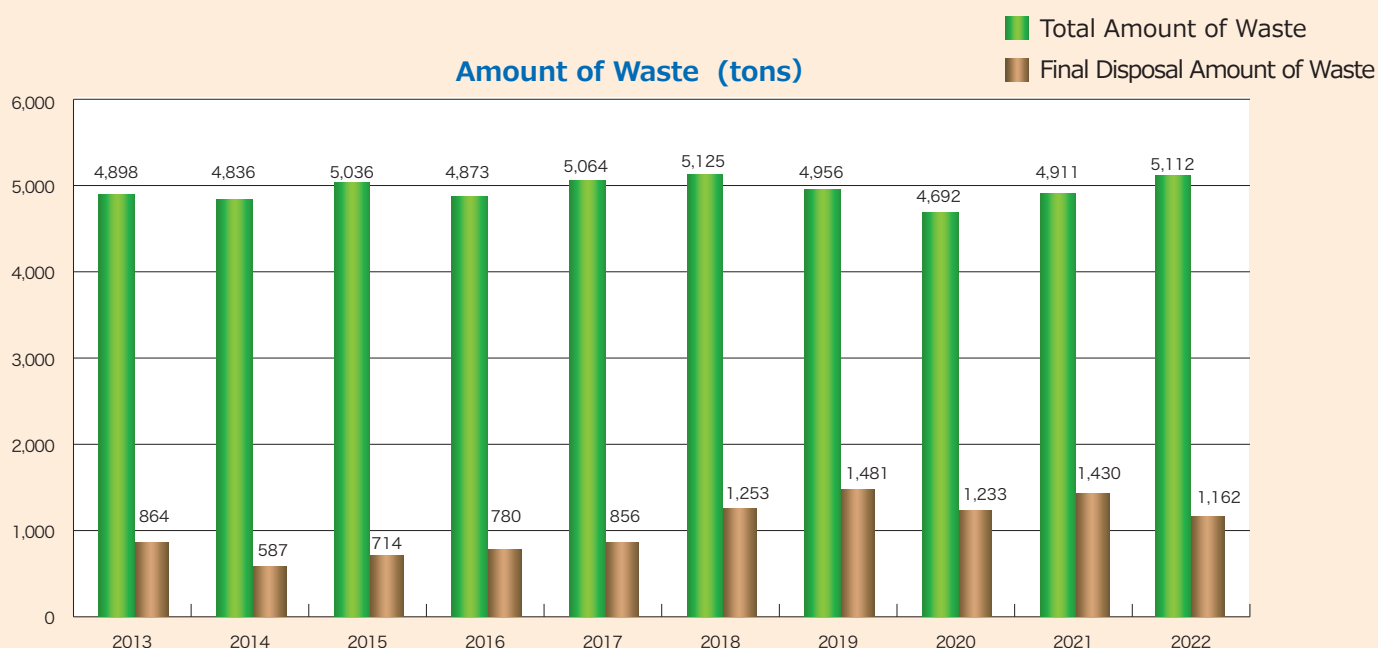
Total intake amount of materials in FY2022 was 35,064 tons, which is same level as the previous year. The total amount of waste was 5,122 tons, which is 4.3% more than the previous year, but the total amount of final disposal of waste decreased by 18.8% YoY, which is significant reduction.

In FY2023, we will strive to promote the emission reduction and resource recovery in order to continue the reduction of the total amount of final disposal of waste.

Total Amount of Materials Used (tons)



Amount of Waste (tons)



FY2022 Initiatives to Reduce the Environmental Load

Initiatives related to saving resources/reducing waste

● Initiatives to Reduce Plastic Waste

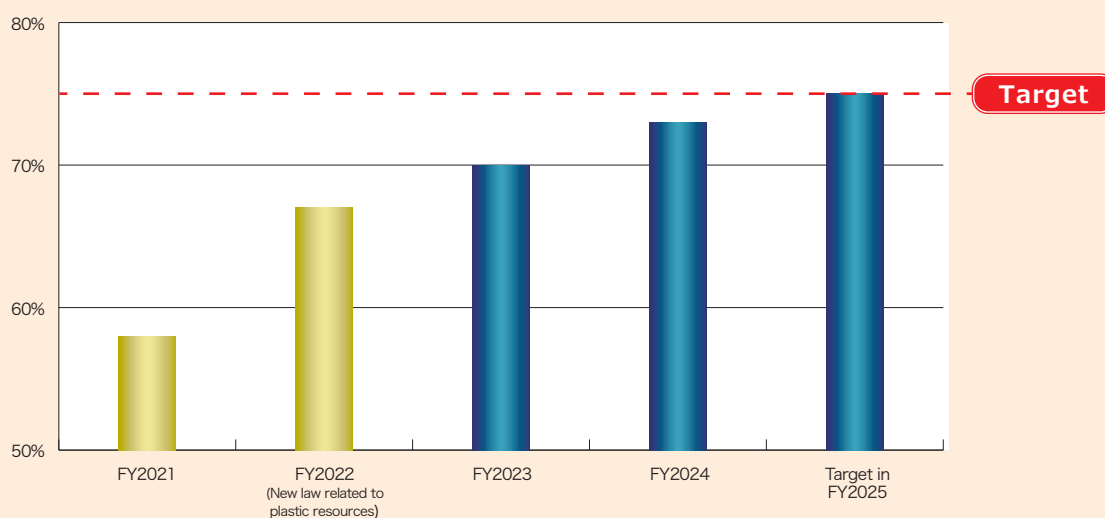
The Plastic Resource Circulation Act was enforced on April 1, 2022 in response to the marine plastic pollution, climate change and the strengthening of foreign waste import regulations. In accordance with the basic principle and policy of the law and also in line with the final target on the total amount of final disposal of waste in our medium-term business plan "SOLID FOUNDATION 2026", we promote the emission reduction and resource recovery of plastic waste by setting a target for the effective utilization rate. The effective utilization rate in FY2022 improved by 9.0% compared to the previous year due to the shifting from incineration and landfill process to the better methods such as thermal recovery system.

In FY2023, we will strive to promote the emission reduction and resource recovery in order to continue the reduction of the total amount of final disposal of waste. We believe that these initiatives will help to slow climate change and reduce biodiversity loss.

Status of Waste Plastics Processing in 5 Domestic Factories

	FY2021	FY2022 (New law related to plastic resources)	FY2023	FY2024	Target in FY2025
Amount of final disposal (t)	1134	948			625
Amount of resource recovery (t)	1544	1895			1875
Total amount of waste plastic emission (t)	2678	2843			2500
Effective utilization rate	58%	67%	70%	73%	75%

Effective utilization rate



It takes a certain time to reduce the emission amount as we need to create new formulation using lighter and different raw materials. However we definitely progress systematically and slowly but firmly. We will launch and introduce them as environment-related products.

FY2022 Initiatives to Reduce the Environmental Load

Initiatives to reduce the release of chemical substances

In accordance with the Law concerning Pollutant Release and Transfer Register (PRTR Law), we notify the regulatory authority of the amounts of chemical substances that are released into the environment after our use in the manufacturing process and make efforts to reduce them.

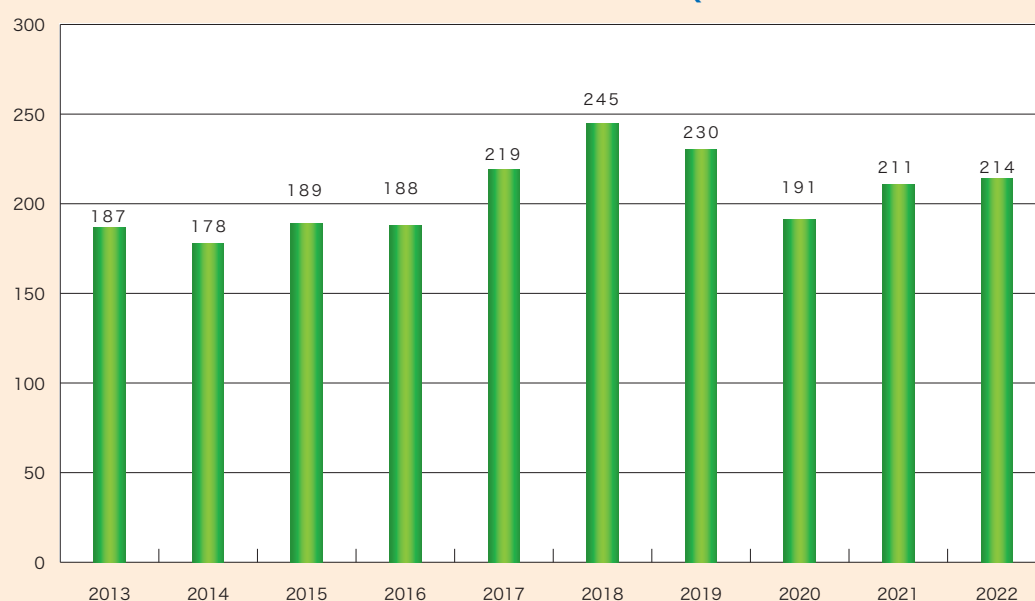
The released amount decreased by 5.4% YoY and the transferred amount increased by 1.4% YoY in FY2022 by installation RTO processing equipment in Shiga Factory.

In FY2023, we will carry out initiatives aiming to achieve the release reduction of 35% compared to FY2016, which is the target on our medium- and long-term plan.

Total Released Amount (tons)



Total Transferred Amount (tons)



Overall environmental load from business activities in FY2022(Material Flow)

We assess the environmental load from various emissions (OUTPUT) generated as a result of our business and production activities involving raw materials, energy and water resources (INPUT) in order to more effectively conserve those resources through more efficient use.

We could achieve the target for CO₂ emission reduction in FY2022.

In FY2023, we will carry out further initiatives to put resources to effective use.

INPUT	
Energy consumption : 14,063,000 L (of oil equivalent)	
Electric Power (Purchased) :	29,569 MWh
LNG :	1,567 tons
City Gas :	3,465,000 m ³
Bunker A :	528,000 L
LPG :	26 tons
Gasoline :	7,000 L
Water consumption : 528,000 tons	
Groundwater :	382,000 tons
Industrial water :	153,000 tons
City water :	47,000 tons
Total raw material input : 35,064tons	

Businesses



【 Dynic product groups 】

Publishing and Stationery Products/Print Media Supplies/Nonwoven Fabric Products/Apparel/
Household Products/Industrial Products/Special Embossed Products/Foil, Films, and Paper Products

OUTPUT	
Greenhouse gas (CO₂ emissions)	
Emissions from production process :	24,976 t-CO ₂
Emissions from product logistics :	1,193 t-CO ₂
※ Logistics are outsourced to group company.	
Emission into the atmosphere	
PRTR substances :	390 tons
NO _x :	18.1 tons
SO _x :	0.4 tons
Dust :	0.3 tons
Emission into water system	
Emission :	470,000tons
BOD :	0.5tons
COD :	1.4 tons
Emission into soil : N/A	
Chemical substances (PRTR substances)	
Emissions into the environment :	390 tons
Transferred as waste :	214 tons
Total waste amount : 5,122 tons	
Incineration/landfill disposal amount :	1,162 tons
Recycled amount :	2,269 tons
Valuables amount :	1,691 tons
Recycling rate :	77%

Environment-Related Products

Dynic Corporation is working hard on the development of various products that contribute to the development of society and creation of more affluent life. We believe the distribution of such new products to society will lead to our contributing to society through our business activities.

Dynic Corporation defines "products that take the global and living environments into consideration" as "environment-related products".

Products that take the global environment into consideration

[Products that reduce the load on the environment]

■ PVC-free products, Plastic-free products, Solvent-free products

Non-vinyl-chloride covering materials (for eco-files), Olefin based covering materials, *Magnetic cards based on paper, EVA base container material, Water-paint based covering materials for file binders and notebooks

■ Products using recycled paper, recycled fiber, recycled resin

Covering materials based on recycled paper for books, textbooks and back tapes of notebooks, *Carpet based on recycled polyester, *Label materials based on recycled polyester

■ Products using sustainable natural resources

*Biomass mark certified Thermal Transfer Ribbon (BMC1), *FSC certified covering material (EPALON), Colored nonwoven fabrics based on 100% rayon (PANELON COLOR SHEET)

[Products that take treatment and disposal into consideration]

■ Products that take ease of disposal into consideration

Cutting blades based on paper for polyethylene food wrap and aluminum foil, Paper lid materials for drinks

■ Products that contribute to resource-saving / 3R (Reuse, Recycle, Reduce)

Stretchable wallcoverings, Reused toner cartridges, Sub-cassettes for refill, Automotive light weighting headliner material, Desiccant for organic EL devices

Products that take the living environment into consideration

■ Products that provide comfortable spaces

Deodorant PANELON filters, Antimicrobial and deodorant wallcoverings, Negative-ion-radiating wallcoverings, Filter materials for air purifiers, Antivirus wallcoverings, Sound-absorbing nonwoven floor fabrics

■ Products useful for maintaining the freshness of health products/food

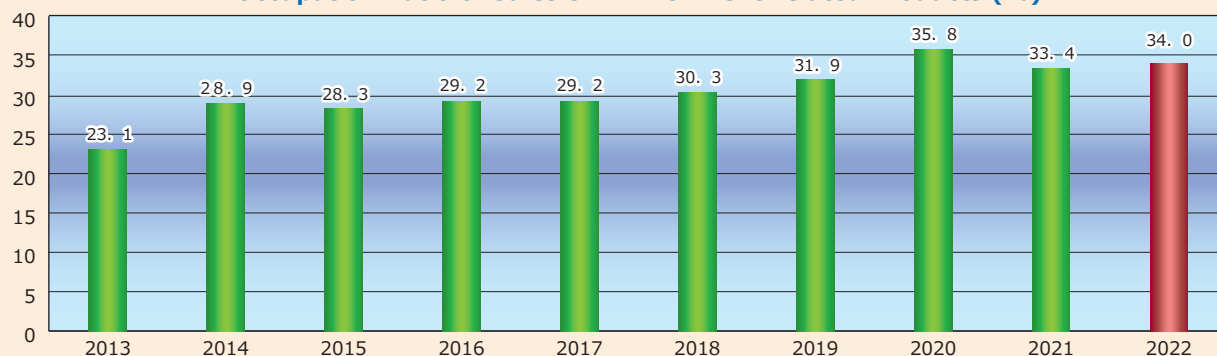
Water-resistant food packaging materials, Food freshness preservatives, *OEKO-TEX certified Thermal Transfer Ribbons, *OEKO-TEX certified nylon-coated label materials, Embossed film for poultice

■ Products with antibacterial and deodorant properties

Antibacterial book covering materials

Products marked with an asterisk [*] are certified by third-party.

Occupation Ratio of Sales of Environment-related Products (%)



©You can find the details for these environment-related products on our website.

We have actively promoted product development with "Contribute to society through environment-related products" as a key phrase. In FY2022, environment-related products occupied 34.0% of our total sales, which failed to achieve our target.

We would like to continue the contribution to society by increasing the proportion of environment-related products that consider human health and the environment.

Introduction Dynic environment-related products

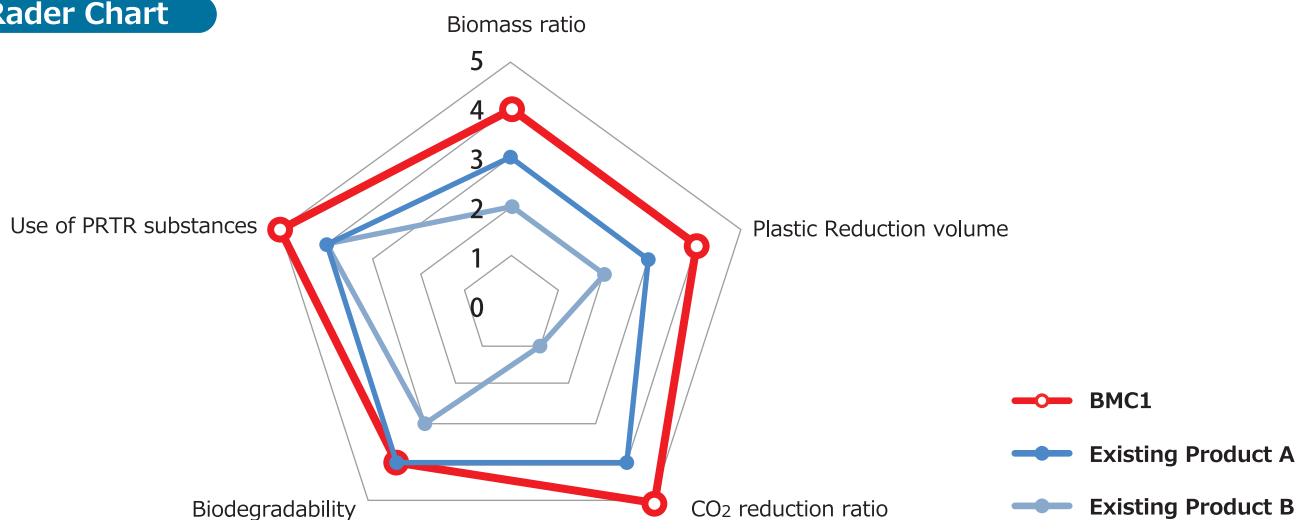
Thermal Transfer Ribbon BMC1

Point of Environmentally-friendly

Plastic amount as substrate are reduced by 20%.
Main components are substituted to plant origin raw materials.
Products certified as Biomass mark



Rader Chart



Criteria Showing evaluation on a scale 1 to 5

Biomass ratio	Ratio of biomass materials contained in ink layer. Scale 1 Less - Scale 5 Rich
Plastic Reduction	Thickness of polyester substrate holding ink, Scale 1 Thick – Scale 5 Thin
CO2 reduction ratio	CO2 emission in products manufacturing and disposal. Scale 1 More – Scale 5 Less
Biodegradability	Usage ratio for biodegradable materials. Scale 1 Less – Scale 5 Rich
PRTR substances	Usage amount of PRTR substances in production processes. Scale 1 More – Scale 5 Less

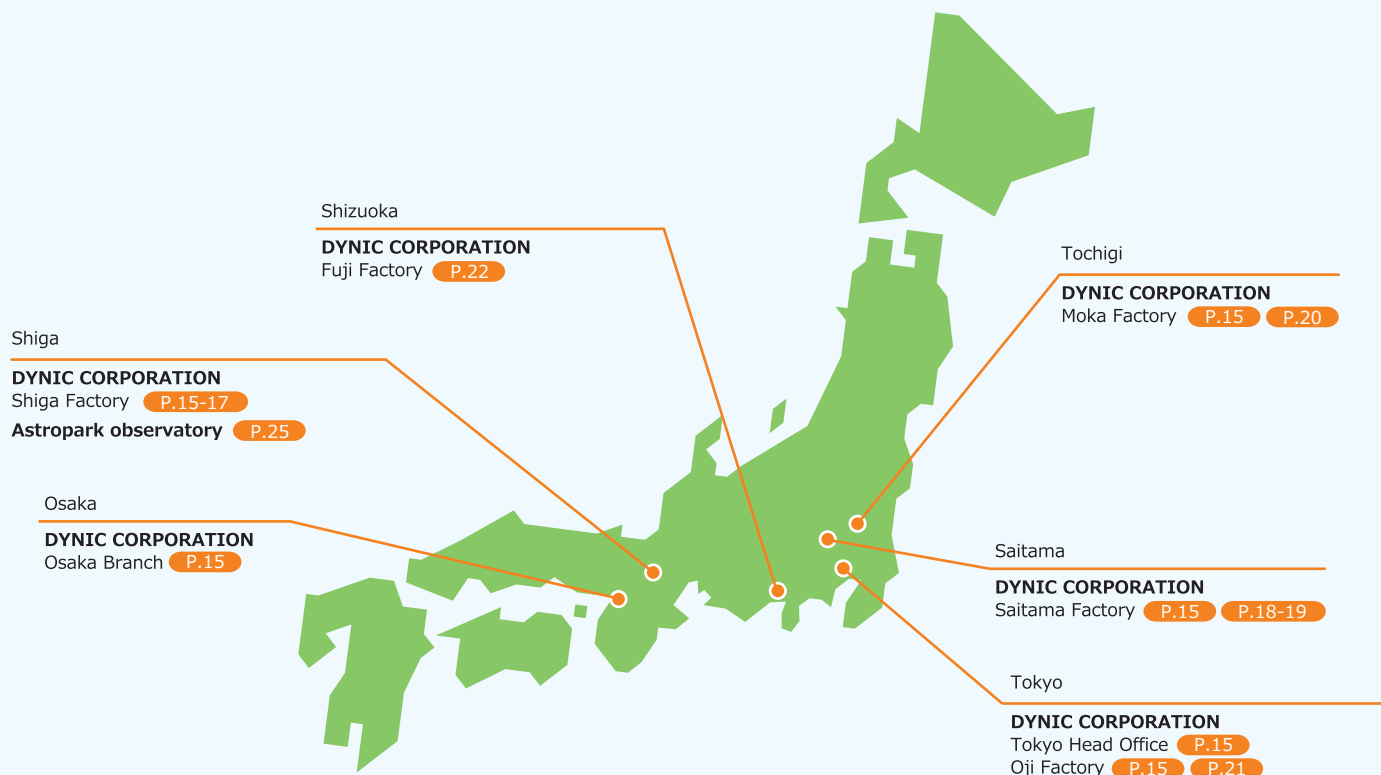
Evaluation

Criteria	Scale	Result
Biomass Ratio	4	More than 50%
Plastic Reduction	4	20% less than existing products
CO2 reduction rate	5	More than 10% reduction
Biodegradability	4	25% to 50%
PRTR substances	5	50% reduction

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FY2022 Activity Status at Each Base

Introducing the activity status At Domestic Bases



Introducing the activity status At Overseas Bases



Initiatives for sustainability

Workshop for CDP and TCFD in FY2022

We devised a new medium-term business plan "SOLID FOUNDATION 2026" in March 2023. In this plan, we set up "Climate change response" and "Initiatives for biodiversity conservation" as important items in environment-related fields.

We believe that disclosing information to the financial market about how risks and opportunities affect our business activities related to these 2 items will lead to solution by ensuring transparency regarding environmental issues.

In FY2022, we worked to carry out the workshop among entire company (major offices and all factories) and create the opportunity to share the information for the purpose of establishing the foundation as a company bringing affluent life and aggressively collecting the risk and opportunity of climate change causing a big impact on our business activities.

In FY2023, in order to establish a foundation as a company bringing affluent life to the people, we will further deepen what we have learned from the workplace and try the concreated actions and information disclosure under our policy "For The Customer" .

● Workshop for "risks and opportunities"



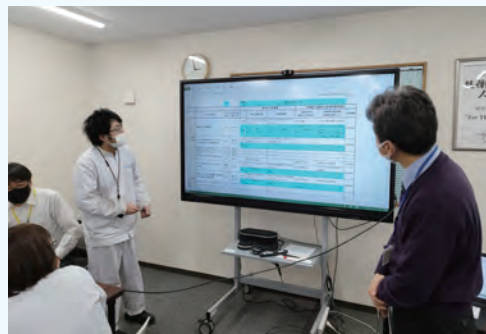
◀ Tokyo Head Office



◀ Osaka Branch



◀ Saitama Factory



◀ Moka Factory



◀ Shiga Factory



◀ Oji Factory

It is the first time to discuss the risks and opportunities related to climate change. Various opinions were exchanged more actively than expected and it is possible to share our tasks in each site. We believe that it is precious time to consider the sustainable corporate activities.

FY2022 Activity Status at Each Base

Shiga Factory - A model factory aiming at harmony between high technology and nature -

Shiga Factory is our largest factory with a vast site of approx. 350,000 m², surrounded by mountains and greenery nurtured by the clean water of Lake Biwa water system and fresh air. With the backbone of Dynic's unique advanced technology, they produce many of our key products such as covering materials for books and magnetic passbooks, wallcoverings, woven interlining, moisture removal sheet for OLED and sound absorption flooring materials.

Benefiting from the rich natural environment, Shiga Factory has also emphasized harmony with the natural environment and conservation. They, fully equipped with wastewater treatment facilities, are committed to recycling resources and have earned a high reputation as a model factory themed on energy saving and no pollution.



Environmental index results

Item	Energy intensity (k ℓ /km)	CO ₂ emissions (t)	Intake of water resources(k ℓ)	Total waste (t)	Final disposal waste (t)	PRTR substance emissions (t)
Results	0.069634	9515	156	1985	413	5
YoY	+13.4%	-2.2%	-17.0%	+21.6%	-22.8%	-85.3%

Reducing the environmental load -Installation of energy-saving equipment - Initiatives toward carbon neutrality

● Installation Solar Panel

Using our idle land, which is former golf course site, adjacent to the buildings of Shiga factory, we installed and operated solar power generation panels with a capacity of 2,547KW. We are promoting the spread of renewable energy toward carbon neutrality.

The construction was carried out in consideration of biodiversity by suppressing embankment and gravel removal and preventing the introduction of alien species.



Start operation in October 2022

● Rotary type Regenerative Thermal Oxidizer

We installed a "Rotary type Regenerative Thermal Oxidizer" in Shiga Factory as the initiative to reduce the environmental load.

This is the superior system for both the environment and energy efficiency that can keep fuel consumption low by adopting a heat exchanger that utilizes exhaust heat and high exhaust gas treatment performance. And it contributes to the improvement of the work environment by reducing the leakage of exhaust gas from the equipment side.



Start operation in May 2022

FY2022 Activity Status at Each Base

Initiatives for biodiversity conservation: Working together with the community

● Zero trash cleanup activities

Every year, Taga-cho, where Shiga Factory is located, holds cleanup activities on the day around May 30 ("Gomi zero" or "Zero trash" day), designated by Shiga Prefecture as a day for environmental beautification activities.

We support these activities and on Sunday, May 29, 2022, our 14 members took part in the zero trash cleanup activities along Route 306 in the town.



● Forest conservation activities

On Saturday, October 22, 2022, "Volunteer activities for forest improvement" were hosted by the Environmental Conservation Association of Shiga Prefecture at Takatoriyama Fureai Park in Taga-cho. Dynic Corporation is a member of the association and our 9 employees joined in the activities.

They pruned branches, cut and sorted out small trees and cut down the weeds under the trees for forest improvement. While having a refreshing sweat, they could come into contact with nature. It was a good experience for them.



FY2022 Activity Status at Each Base

Saitama Factory - Future-oriented, advanced, composite technology and the most modern FA line -

Saitama Factory, production site in the east, is in operation as a future-oriented factory focusing on technology development. The factory generates products covering wide range of business fields from value-added hi-tech products to mass produced products which make up the backbone of the industry, utilizing exceedingly high level composite technology and the most modern FA (Factory Automation) line. The production system consists of 6 production centers, each of which is responsible for covering paper material, covering vinyl material, tarpaulin, inked ribbons, FFC (Fine Film Coating), carpet and nonwoven fabric, independently. The Factory diligently implements regional and environmental measures and its greening promotion initiative and industrial waste recycling system have earned a high level of trust from public institutions.



Environmental index results

Item	Energy intensity (k ℓ /km)	CO ₂ emissions (t)	Intake of water resources(k ℓ)	Total waste (t)	Final disposal waste (t)	PRTR substance emissions (t)
Results	0.422533	11264	266	1976	498	361
YoY	-2.0%	+1.6%	+1.2%	-3.1%	-17.4%	+12.4%

Reducing the environmental load - Installation of energy-saving equipment - Low carbon initiatives

● Installation of the High-Efficiency Air Conditioner

We installed the high-efficiency air conditioners in the meeting rooms. Energy-saving effects are expected by upgrading.



For reduction environmental load – Reduction energy loss -

● Improvement thermal efficiency/Reduction heat loss

We carried out maintenance work on the thermal oil piping system insulation material (glass wool). We expect an energy-saving effect by reducing heat loss from the heat transfer oil piping.



FY2022 Activity Status at Each Base

Initiatives for biodiversity conservation

● With community

Once a month, Saitama Factory conducts cleanup activities on the roads around the factory. During FY2022, we implemented these activities 12 times and collected cigarette butts, beverage bottles and other trash.



● Dealing with designated invasive alien species

Saitama Prefecture held a major survey to find red-necked longhorn beetles (*Aromia bungii*) by inviting participation from citizens. We cooperated with this survey and examined the trees on our site. We confirmed the damage to cherry blossoms and plums on the premises and reported to the relevant local governments.

Red-necked longhorn beetles (*Aromia bungii*) are highly prolific, and their distribution is expanding in the northern Kanto area. In addition to cherry trees, the beetles also attack fruit trees such as Japanese apricots and peaches and could cause damaged trees to wither and die.



(Left : Male, Right : Female)

The larvae of this longhorn beetle feed on the wood of the invaded trees and excrete brown excrement (a mixture of droppings and wood waste). The outbreak of excrement was also confirmed in the cherry blossoms on the premises.

Adults are 25 to 40mm in size and black color but have a red neck.

It is designated as a specific alien species and it is necessary to contact the facility manager and local government. In addition, it is recommended to exterminate mobile adults as soon as they are found.



FY2022 Activity Status at Each Base

Moka Factory - Delivering safety quality from our well-controlled work environment -

Responding to rapidly diversifying needs for aluminum-foil and other lid materials, Moka Factory is quick to create composite lid materials by taking advantage of its technological strength in the field of aluminum-foil processing.

This has resulted in our soft-packaging materials for processed food and industrial uses winning the unflagging trust of our customers.

We are determined to continually meet the challenge of the “next” by making the most of our wealth of proprietary technologies.



Environmental index results

Item	Energy intensity (k ℓ /km)	CO ₂ emissions (t)	Intake of water resources(k ℓ)	Total waste (t)	Final disposal waste (t)	PRTR substance emissions (t)
Results	0.008260	2115	140	611	111	22
YoY	-6.8%	+1.3%	+11.0%	-7.0%	-20.3%	+15.8%

For reduction environmental load – Reduction energy loss -

● Replace Steam Piping System

We replace 9 traps for the steam drain lines on Moka Factor’s gravure printing machine. By replacing the traps, troubles such as water hammer can be prevented and effects such as energy saving by reducing steam leakage have been achieved.



FY2022 Activity Status at Each Base

Oji Factory - With reliable quality control we have earned the trust of our customers -

Oji Factory is responsible for the production of aluminum-foil material for lid and coating paper. Since introducing the “Lectraseal (registered trademark)” (container sealing material using processed aluminum foil) from the U.K., we have obtained a substantial share in this field. Designed for high-frequency induction heating to bond materials onto containers, the “Lectraseal” is an innovative process for sealing material for lid onto processed food containers that contributes greatly to maintaining product quality for customers. In the field of coating paper and films, we are meeting ever-diverse customer needs by making the most of our wealth of know-how and state-of-the-art large-size coating machines. Our diverse range of the most advanced processing technologies allows us to constantly meet the challenge of the “next.”



Environmental index results

Item	Energy intensity (k ℓ /km)	CO ₂ emissions (t)	Intake of water resources(k ℓ)	Total waste (t)	Final disposal waste (t)	PRTR substance emissions (t)
Results	0.040996	1660	19	466	131	1.8
YoY	-5.0%	-4.4%	-1.5%	-5.0%	-11.5%	-95.3%

Reducing the environmental load - Installation of energy saving facilities

● Replaced to LED lighting

We switched the ceiling light in the clean room to LED lighting. Annual CO₂ emission reduction of 13 ton can be expected.



FY2022 Activity Status at Each Base

Fuji Factory - Producing environment-friendly renewable products -

Operating under a clean environment and the strictest quality control, Fuji Factory is engaged in the production of paper-tube containers for food and fire-pot.

Our ongoing pursuit of environment-friendly materials encourages us to take up the challenge of the “next.”



Environmental index results

Item	Energy intensity (k ℓ /km)	CO ₂ emissions (t)	Intake of water resources(k ℓ)	Total waste (t)	Final disposal waste (t)	PRTR substance emissions (t)
Results	0.000531	295	1	84	9	0
YoY	-2.6%	+27.3%	-19.7%	-10.0%	+57.3%	—

◆Fuji Factory does not handle the substances subject to the PRTR Law beyond legal standards.

Reducing the environmental load - Introduction the renewable energy

●Under Consideration Installation of Solar Panel

We examined whether it is possible to install solar panels on the roof of the factory building. And we will evaluate the profitability and other factors as the next step.



FY2022 Activity Status at Each Base

DYNIC USA CORPORATION

Dynic USA Corporation was established in Hillsboro, Oregon, USA in 1988. We produce thermal transfer ribbons and the printable fabric "CETUS" for tags/labeling and exports these products to North, Central and South America.

Office & Factory

4750 N.E.Dawson Creek Drive, Hillsboro,
Oregon 97124, U.S.A

TEL: 1-503-693-1070 FAX: 1-503-648-1185

<https://www.dynic.com/>



Reducing the environmental load - Installation of energy-saving equipment



● Replace Boiler

Dynic USA replaced the original boiler with two smaller, more efficient models in February 2023.

An estimated 35% reduction of LNG usage can be expected by the new operation.

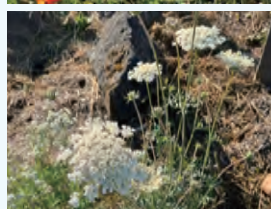
We expect a reduction of 210 KL per year in crude oil equivalent and 410 tons of CO2 emissions.

Initiatives for Biodiversity Conservation

● Activities for wetland conservation

Dynic USA has resumed habitat restoration and cleanup activities at Jackson Bottom Wetlands Preserve in October of 2022. This volunteer activity was suspended during the Covid-19 pandemic. Located in Hillsboro, Oregon Jackson Bottom is a 257 ha (635 acre) wetland reserve with a diverse variety of native plants and animals.

Dynic USA Corporation has been taking part in this activity since 1997.



FY2022 Activity Status at Each Base

DYNIC (UK) LTD.

Dynic (UK) Ltd. was established in Wales, UK in 1989, to convert and supply thermal transfer ribbons and care labels. Our products are exported to Europe and Africa.

Office & Factory

UNIT7 Trident Business Park, Ocean Way, Cardiff, CF24 5EP, Wales, UK.

TEL:44-29-2048-3973 FAX:44-29-2048-6706

<https://www.dynic.co.uk/>



Reducing the environmental load – shift to Electric Car and Hybrid Car



● Introduction Electric Car and Hybrid Car

The company vehicles Dynic (UK) Ltd. owned (4 gasoline vehicles) were successfully replaced with new electric and hybrid vehicles (1 vehicle) and hybrid vehicles (3 vehicles) from January 2022.

The main greenhouse gases emitted from cars that burn gasoline and run are NOx (nitrogen oxides) and CO₂. We support the reduction of greenhouse gas emissions as a measure to reduce the environmental impact and mitigate climate change.

Reducing the environmental load – Model Factory for recycling waste-



▲Incineration Waste

▲Paper

▲Wood Waste

● Promote Recycling Waste

Dynic (UK) Ltd. separately disposes the waste generated through the business into 3 types: Paper, Wood waste, Incineration waste.

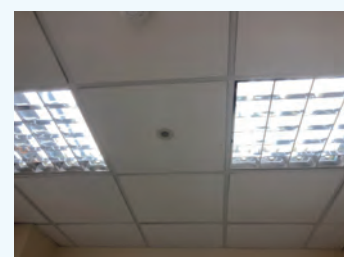
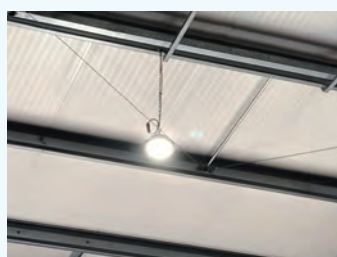
Paper is recycled into recycled paper, wood waste is recycled into biomass-derived fuel and incineration waste is thermally recovered by heat recovery generated during incineration.

Aiming to be a Zero-waste factory, we recycle and reuse as much as possible.

Reducing the environmental load – Installation Energy-Saving Facility-

● Updated to LED type lightings

We updated the ceiling lightings in the factory to LED type and the lights in the office to motion sensor LED type.

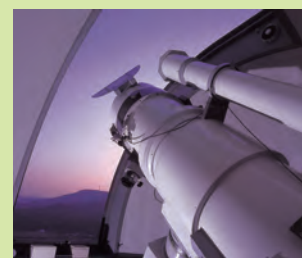


FY2022 Activity Status at Each Base

DYNIC ASTRONOMICAL OBSERVATORY

DYNIC ASTRONOMICAL OBSERVATORY, equipped with a 60cm diameter Reflector telescope and a variety of observation equipment, is the first public observatory operated by a private company.

Since the company foundation, we have been deeply involved in the fields of culture and education through book covering materials and we opened this observatory in 1987 as an ideal form of social contribution and cultural activities.



Introduction our activities through TV and newspapers

● DYNIC ASTRONOMICAL OBSERVATORY was featured on TV and newspaper.

The ceremony to commemorate the naming of the asteroid "Akebonozou" was held at the Taga-Cho Museum on July 7, 2022 and Shiga Factory Manager submit the naming report to the Mayor of Taga- Cho.

It was the Star Festival. Kindergarten children and town officials from Taga-Cho celebrated "Akebonozou", which became a star, and our activities were introduced by local TV stations and newspapers.



● Naming of Asteroid "Akebonozou"

In March 1993, a whole body skeletal fossil of "Akebono elephant (*Stegodon aurorae*)" that lived between 1 million and 2.5 million years ago was discovered in a redeveloped industrial park 700 meters east of DYNIC ASTRONOMICAL OBSERVATORY.

Whole body fossils of this elephant is very rare and it is currently on display at the Taga-Cho Museum. Our observatory discovered an asteroid in April 1993 and its naming right had been reserved. With this fossil designated as a natural monument in 2021, DYNIC ASTRONOMICAL OBSERVATORY named this asteroid "Akebonozou".

Astronomical Observation Event

● Digital planetarium

The full-fledged digital planetarium, which was installed to mark the centennial of the company's foundation, continuously is high popularity.



◀ Simulated picture of Perseids in Summer 2022

In addition to the regular astronomical observation event held every Saturday, the observatory also hosts the observation event occasionally in accordance with celestial phenomena such as total lunar eclipse and meteor shower.

On November 8, 2022, Uranus was hidden behind the moon during the total lunar eclipse, which is a very rare phenomenon. The event was also broadcast live via internet by utilizing the remote observatory observation system built so far.

During the period when there are no restrictions against the COVID-19 pandemic, we hold regular astronomical observation event guided by professional staff using the telescopes of astronomical observatories and the planetarium.

Regular Astronomical
Observation Event

Every Saturday 19:30 to 21:30

Observation Fee

Junior High school students and youngers JPY100
Adult JPY200



Environmental Report 2023

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