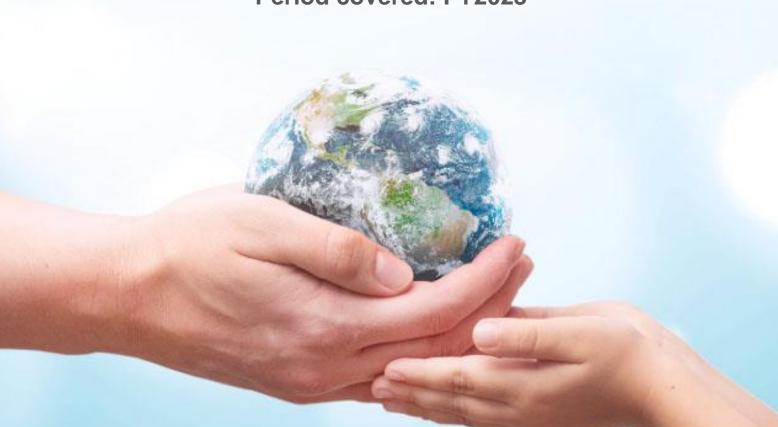


# **Environmental Report**

2024

Period covered: FY2023



**Kyowa Leather Cloth Co., Ltd.** 

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## **Editorial Policy**

The purpose of this report is to communicate widely to the public about environment-related initiatives.

\*Please be aware that the above information contains estimates based on information currently available and may differ from actual results and performance.

[Period covered]

FY2023 (April 2023 - March 2024)

\*Some contents included may be from before or after this period.

[Scope of coverage]

This report covers Kyowa Leather Cloth Co., Ltd.

\*Some content includes consolidated subsidiaries.

[Reference guidelines]

"Environmental Reporting Guidelines" released by the Ministry of the Environment

[Date of issue]
December 2024

[Contact information for inquiries] Kyowa Leather Cloth Co., Ltd.

https://www.kyowale.co.jp/

\*Please use the inquiry form.

# **Top Message**

Director, President and Chief Executive Officer, Kyowa Leather Cloth Co., Ltd.

Mikio Hanai



# Get our wisdom together (for better use) to pass on a beautiful Earth to future generations

Since its establishment in 1935, Kyowa Leather Cloth has been striving to provide "affluence" and "peace of mind" in various aspects of daily life, including automobiles, home furnishings, furniture, bags, and shoes, through "product performance" and "design" that we have cultivated as a manufacturer of leather materials.

In recent years, climate change due to global warming has become a major issue, increasing the need for "environmental value." We are working under the environmental slogan, "Get our wisdom together (for better use) to pass on a beautiful Earth to future generations." Not only do we provide "affluence" and "peace of mind" inside vehicles and rooms by providing surface upholstery materials, but we are also working toward realizing a sustainable society in the future by manufacturing products that are valuable to the "global environment" as a whole.

Among environmental issues, we are working on climate change issues, with the goal of becoming carbon neutral in 2050. In addition to decarbonization, we aim to become a resource-recycling (circular economy) company by developing environmentally friendly products and establishing manufacturing methods that do not impose a burden on the environment. We are also working on the disclosure of environment-related information, and began preparing and releasing an "Environmental Report" in the last fiscal year. We will continue to push forward with our activities and expand the contents of the report.

## **Sustainability**

We are a manufacturer of interior upholstery and covers for automobiles, housing, and housing fixtures, and of cover materials for fashion and lifestyle-related products, with the slogan "Get our wisdom together (for better use) to pass on a beautiful Earth to future generations," and we are engaged in corporate activities that work in harmony with people and our planet, such as being Industry pioneer in acquiring environmental ISO 14001 certification. We are working toward sustainable growth in the future based on the three pillars of "achieving carbon neutrality," "diverse human resources," and "social contribution activities." In addition to carbon neutrality, we aim to become a resource-recycling (circular economy) company by developing environmentally friendly products and establishing manufacturing methods that do not impose a burden on the environment.

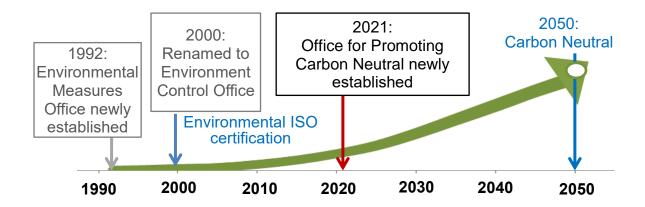


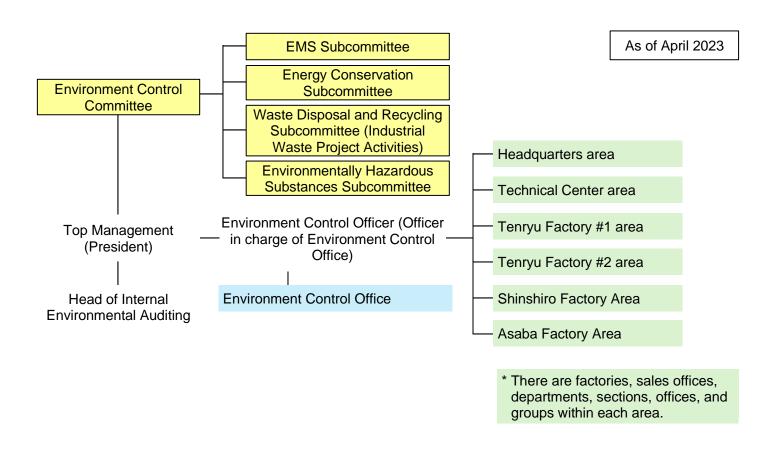
	SDGs	Initiative Pillars					
13 74854.	CLIMATE ACTION	[01] Achievement of Carbon Neutrality • Reduction of greenhouse gas (CO2)					
7 thef-same	AFFORDABLE AND CLEAN ENERGY	emissions • Product development taking reduction of CO2					
12 ocene	RESPONSIBLE CONSUMPTION AND PRODUCTION	emissions into consideration					
8 Maria	DECENT WORK AND ECONOMIC GROWTH	[02] Diverse Human Resources • Expansion of internal systems to create an					
5 ARLAS	GENDER EQUALITY	environment in which both men and women can easily balance work and childcare.					
3 HAZBER	GOOD HEALTH AND WELL-BEING	Health management initiatives, environmental improvement					
11 GARGER	SUSTAINABLE CITIES AND COMMUNITIES	[03] Social Contribution Activities					
14 ************************************	LIFE BELOW WATER	Contribution to local communities     Protection of biodiversity (ecosystems) and					
15 #55#55#55#	LIFE ON LAND	maintenance of water quality					

## **Environmental Management**

## Promotion and Management Organization

At Kyowa Leather Cloth, the Environment Control Office is responsible for overall environmental management. However, with the recognition that climate change measures are a particularly important environmental issue, in May 2021 we established the Office for Promoting Carbon Neutral to promote our activities.





# **Environmental Management**

## Acquired ISO 14001 Certification

In 2000, in recognition of its permanent environmental response system, Kyowa Leather Cloth was awarded ISO 14001 certification for the entire company, and has continued to receive certification ever since.

We have received renewal audits every three years, with the latest recertification being awarded in 2024.



#### **Environmental Policies**

As a manufacturer of interior upholstery and covers for automobiles, housing, and housing fixtures, and of cover materials for fashion and lifestyle-related products, with the slogan "Get our wisdom together (for better use) to pass on a beautiful Earth to future generations," and we are engaged in corporate activities that work in harmony with people and our planet.

#### **Environmental Policies**

- (1) To contribute to the preservation of the environment by complying with environmental laws, regulations, and various agreements to which we have agreed.
- (2) To provide the market with products that anticipate the environmental needs of the times.
- (3) To minimize the environmental impact of our corporate activities.
  - 1) Reducing the use and emissions of environmentally hazardous substances.
  - 2) Effectively using resources and reducing waste
  - 3) Reducing CO2 emissions and promoting energy conservation
- (4) To raise environmental awareness of all employees through education and other means
- (5) To work closely with local communities and cooperate in local environmental conservation activities

August 1, 2018
Director and President,
Kyowa Leather Cloth
Co., Ltd.

In accordance with the above policies, we will establish objectives and targets, strive to achieve them, and periodically review them to promote continuous improvement.

乙中幹雄 Mikio Hanai

## CO2 Emission Targets and Results

Following the government's "2050 Carbon Neutral Declaration" in 2020, in 2021 Kyowa Leather Cloth also set targets of -50% for 2030 (compared to 2013) and carbon neutrality for 2050. We aim to achieve virtually zero CO2 emissions by promoting activities to reduce CO2 emissions through (1) introduction of renewable energy, (2) application of capital investment, technological innovation, etc., and (3) promotion of day-to-day improvements.

In addition, the Kyowa Leather Group, including its consolidated subsidiaries, has set group targets for CO2 emissions. We aim to achieve a 50% reduction by 2035 (compared to 2021) and carbon neutrality by 2050. The Group will work together as one to promote activities to reduce CO2 emissions. In FY2023, CO2 emission reduction activities were carried out as planned, and CO2 emissions per product meter decreased, but the absolute value of emissions was strongly affected by the increase in production volume and the conversion factor of electric power companies.





#### Actual CO2 Emissions [thousand tons]



#### CO2 Emissions [t-CO2] (Scope1, 2)

(Fiscal year)

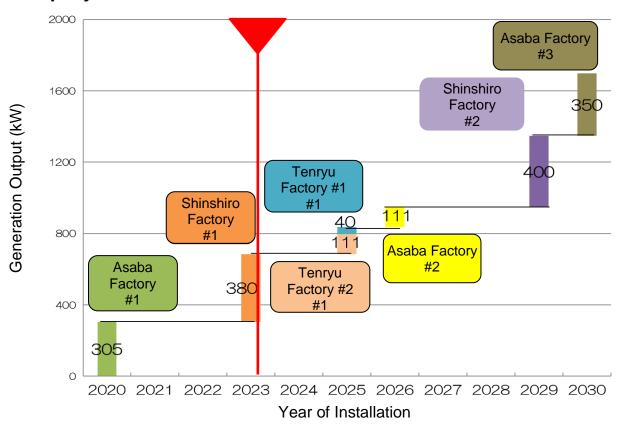
	_	- '		•							• ,
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Kyowa Leather Cloth	37,235	41,085	41,771	39,790	36,437	32,391	30,337	29,826	29,040	25,787	29,442
Group Total	-	-	-	-	-	-	-	-	59,102	54,575	55,893

## (1) Renewable Energy [Solar Power Generation]

In order to achieve the 2030 target of reducing CO2 emissions by 50% (compared to 2013), we have established a company-wide plan to introduce solar power generation. In FY2023, the system was introduced at the Shinshiro Factory, enabling an annual reduction of approximately 171 tons of CO2 emissions.

In FY2024, we plan to introduce renewable energy to Tenryu Factories #1 and #2, aiming to reduce CO2 emissions and increase the ratio of renewable energy in all factories.

#### **Company-wide Solar Power Generation Installation Plan**



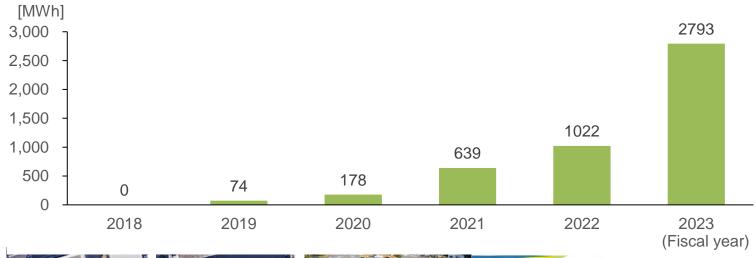


Shinshiro Factory #1 (3 locations) 380 kW total (from January 2024)

## (1) Renewable Energy [CO2-free Electricity]

In addition to the newly installed solar power generation equipment at the Shinshiro Factory, solar power generation equipment has also been installed at other factories. We also purchase CO2-free electricity.

Electricity -- Renewable Energy Consumption [Kyowa Group consolidated figures]





Tenryu Factory #1 90 kW (from 2017)



Tenryu Factory #2 40 kW (from 2018)



Asaba Factory 305 kW (from February 2021)

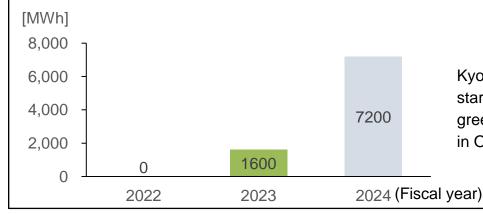


Headquarters, Technical Center "CO2-free electricity" (Chubu Electric Power Company) 480 MWh (2023)

#### ■ Initiatives at Kyowa-GSK (Factory in China)

Kyowa-GSK, a China-based group company, has also begun introducing green power. The Chinese government has made a declaration of carbon neutrality by 2060 and peak out before 2030. The national carbon emissions trading system became operational in July 2021, with the initial phase covering only the electric power sector; from 2023, the Kyowa-GSK has been promoting carbon neutral activities, aiming to achieve carbon neutrality in 2050, and a 50% reduction by 2035 (compared to 2023), which is earlier than China's declaration for 2060.

Electricity -- Renewable Energy Consumption [Kyowa-GSK]



Kyowa-GSK started using green electricity in October 2023 

# (2) Capital Investment and Technological Innovation [Fuel Conversion]

#### **■** Boiler Fuel Conversion

In 2023, we installed a new heat-transfer boiler at the Asaba Factory, with which the fuel used was converted from grade A fuel oil to liquefied natural gas (LNG).

LNG is an environmentally friendly energy source that produces lower amounts of NOx (nitrogen oxides), which cause air pollution, and no SOx (sulfur oxides) or particulates. Boiler operating efficiency has been improved by approximately 30%, and the amount of steam generated can be adjusted more finely according to operating conditions. LNG also emits less CO2 during combustion, enabling a reduction of approximately 770 tons of CO2 per year as compared to conventional grade A fuel oil boilers. Currently, we are also considering the introduction of a new steam/heat transfer boiler and fuel conversion at the Shinshiro Factory.

This is expected to reduce CO2 emissions by approximately 670 tons per year.



Conversion to LNG boiler at
Asaba Factory
Reduction of 770 tons of
CO2/year
(compared to FY2021)

# (2) Capital Investment and Technological Innovation [Visualization]

## **■** Energy Visualization

#### (1) Installation of Measurement Instruments

At the Asaba Factory, the installation of electricity meters and fuel flow meters capable of measurements for each process was completed in FY2021. By linking the measured values to the time of day in daily reports, we were able to "visualize" which work was consuming how much energy.

In FY2023, the "visualization" implemented at the Asaba Factory was horizontally extended to all factories. We are proceeding with the installation of electricity meters and steam flow meters and the construction of systems, giving priority to the processes related to representative products at each factory.

In FY2023, the installation status of measuring instruments is 50% at Tenryu Factory #1, 80% at Tenryu Factory #2, and 70% at Shinshiro Factory. We are continuing the installation of equipment with the aim of completing "energy visualization" at all factories in FY2024.

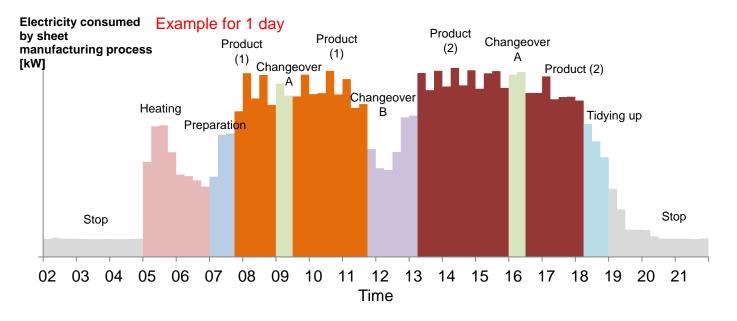
The same energy visualization activities are also being implemented in group companies. Installation of electricity meters capable of measuring each process at Kyowa-GSK has been completed. We were able to "visualize" how much energy was being consumed in each process.

Electricity meters installed for each process in Kyowa-GSK



## (2) Utilization for energy conservation

At the Asaba Factory, the measurement instruments helped us find energy waste, which enabled us to save energy by reducing the heat input time in the sheeting process.

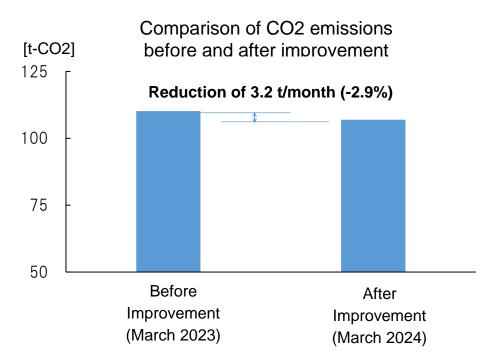


# (3) Day-to-day Improvements and Energy Savings [Use of Wasted Heat]

# ■ Hot well tanks: Utilization of flash steam waste heat (Building 2, Tenryu Factory #2: from March 2024)

- · We focused on the flash steam (steam that has partially self-evaporated from the returned condensate) that is being released into the atmosphere.
- · The boiler supply water temperature is raised by heat exchange between flash steam and water in the tank (boiler feed water), resulting in reduced boiler fuel consumption and reduced CO2 emissions.





· Currently considering horizontal expansion at the main building of the Tenryu Factory #2 and the Shinshiro Factory, with improvements scheduled for 2024.

<Estimated CO2 Emission Reductions>

Main building of Tenryu Factory #2: 51 t/year (-2.0%)

Shinshiro Factory: 78 t/year (-3.1%)

# ■ Tenryu Factory #1: Improvement of energy conservation by using exhaust heat ⇒ 10% reduction in power consumption

 Utilization of exhaust heat from the compressor to heat the Inspection Room and supply heat to the Thermal Storage.



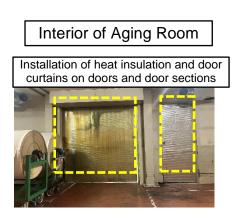


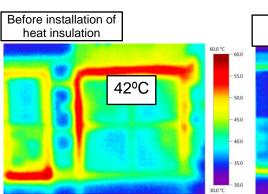
# (3) Day-to-day Improvements and Energy Savings [Heat Insulation]

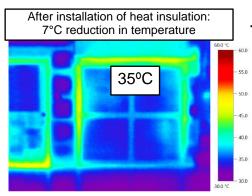
■ Tenryu Factory #2: Measures to prevent heat radiation loss in Aging Room ⇒ 10% reduction in power consumption

Installation of heat insulation and door curtains on doors and door sections

\* Products are cured in an Aging Room for 24 to 72 hours (room temperature: 60°C) to accelerate the cross-link reaction of the adhesive.



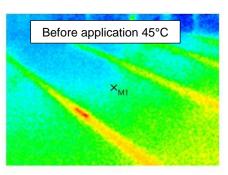


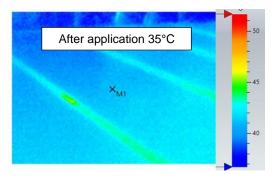


■ Shinshiro Factory: Energy saving in indoor air conditioning by application of heat insulating coating on roof of Aqueous Paint Thermal Storage

⇒ 10% reduction in electricity consumption





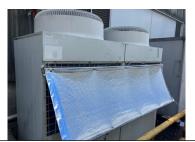


■ Shinshiro Factory: Outdoor AC unit (application of heat shield)



Heat exchanger temperature rises due to direct sunlight exposure





Heat shield sheet prevents temperature rise in heat exchangers

# (3) Day-to-day Improvements and Energy Savings [Equipment Renewal]

#### ■ Kyowa-GSK: Renewal of air compressor

Conventional model





75 kw x 2 units = 150 kw Air compressor full load operation

Power consumption -20%

Energy-saving model



120 kw x 1 unit
Renewal to energy-saving model

Power consumption -50%

- ·Renewal of various facilities, with priority given to aging and inefficient air compressors.
- · Updated with energy-saving models to achieve higher efficiency and energy savings.

### ■ Kyowa-GSK: Renewal to small-size motors to improve energy-saving pumps

Conventional model









90 kw x 2 units, 45kw x 1 unit

45 kw x 2 units, 22 kw x 1 unit

Small-size model

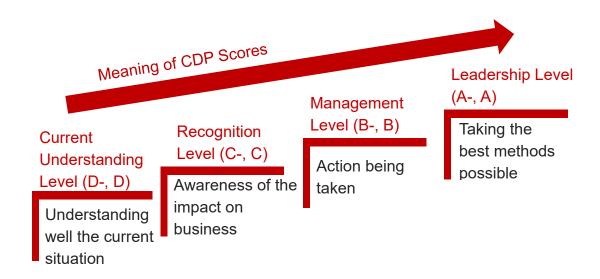
- · Priority given to renewal of pumps with low efficiency
- · Motors that had some leeway in output were replaced with smaller motors to increase efficiency.

#### CDP Evaluation

Kyowa Leather Cloth discloses information to CDP (an international organization that evaluates companies through environmental questionnaires) through Toyota Motor Corporation's supply chain program and has received rank evaluations.



In 2023, the company received a B for climate change, an A- for supplier engagement, and a B for water security, all of which are above average for the plastics manufacturing industry.





#### Disclosure of Non-financial Information

Kyowa Leather Cloth began disclosing non-financial information in accordance with TCFD standards with the "Sustainability Information Disclosure" section of its FY2022 Annual Securities Report. The following disclosures are the same as those in the 2023 Annual Securities Report.

#### (1) Governance

Policies and plans concerning important matters related to corporate management, including sustainability of the Group, are deliberated by the Executive Committee through functional meetings which are established as necessary. We established the Office for Promoting Carbon Neutral (May 2021) to formulate, promote, and propose plans toward carbon neutrality in 2050. The Environment Control Office is in charge of following up and evaluating the environmental management system and environment control based on laws and regulations, and reports and deliberates on the results at the "Environment Control Committee" (with President and Representative Director heading the committee and meetings chaired by the director in charge of the Environment Control Office) held once every six months. The President and Representative Director reports the agenda and deliberations of the "Environment Control Committee" to the Executive Committee.

## (2) Strategies

#### **Climate Change Scenario Analysis**

Classit	fication	Potential Impact	Impact Severity	Measures
	Policies & Regulations	·Increased costs due to carbon credits and carbon taxes	Medium	·Set CO2 reduction targets and promote group-wide activities
Policies & Regulations  Transition Risk (Scenario of less than 2°C)  Physical Risk (Scenario of 4°C)  Copportunity (Scenario of less than 2°C)  Physical Risk (Scenario of 4°C)  Products & Resources  Products & Markets  Products & Markets	·Increased costs due to energy conversion and converting to low-carbon materials	High	· Give priority to low-cost, low- carbon initiatives such as energy conservation and solar generation	
less than	Market	·Orders decrease if demand for low-carbon products cannot be met	High	Develop low-carbon products and products that are compatible with a circular economy
	Reputation	·Loss of investor reputation due to delay in environmental initiatives	Medium	<ul> <li>Proactively disclose information through CDP and environmental reports</li> </ul>
Risk (Scenario of	Acute	· Shutdowns and supply chain disruptions due to natural disasters	Low	<ul> <li>Strengthen the supply network by coordinating with suppliers and affiliates</li> </ul>
	Chronic	_	Low	<ul> <li>Curb operating costs through energy conservation, productivity improvements, etc.</li> </ul>
(Scenario of less than		·Cost savings through energy conservation and energy conversion	Medium	· Give priority to low-cost, low- carbon initiatives such as energy conservation and solar generation
		· Increase in value-added and sales through environmentally friendly products	Medium	· Develop low-carbon products and products that are compatible with a circular economy

#### Disclosure of Non-financial Information

The Company is in the process of conducting scenario analyses to examine the risks, opportunities, and impacts of climate change. We have established a below 2°C scenario and a 4°C scenario by referring to information from the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA). We will continue to conduct scenario analyses on a regular basis to address risks and opportunities.

#### (3) Risk Management

Based on our environmental policy, we identify environment-related risks, set goals for their reduction, and promote improvements in each department. The results are evaluated by each department using the management system (ISO14001), reported and discussed at each environment-related subcommittee, and then reported and discussed at the company-wide Environment Control Committee. Furthermore, any major risks discovered are reported to the Crisis Management Committee, which meets once every six months and is attended by the directors in charge of each Group company, for deliberation and decision on measures to be taken.

#### (4) Indicators and Targets

We have set targets for CO2 emissions (Scope 1 & 2) of a 30% reduction in FY2025 (compared to FY2013), a 50% reduction in FY2030 (compared to FY2013), and carbon neutrality in FY2050. In addition, the Group's consolidated target is a 50% reduction (compared to 2021) in FY2035 and carbon neutrality in FY2050. We are promoting activities to reduce CO2 emissions based on the following three core initiatives: (1) introduction of renewable energy and other energy sources, (2) application of capital investment, technological innovation, etc., and (3) promotion of day-to-day improvements. In FY2023, we have continued our CO2 emissions reduction activities as planned. Detailed information on our activities will be published in an "Environmental Report" on our website.

#### CO2 Emissions (Scope 1 & 2)

, ,	Actual (	(t-CO2)	T4		
	Base Year	FY2023	- Targe	)T	
Kyowa Leather Cloth only	37235 (FY2013)	29442	FY2030: -50% (compared to FY2013)	FY2050:	
Group Consolidated Figures	59102 (FY2021)	55893	FY2035: -50% (compared to FY2021)	Carbon Neutral	

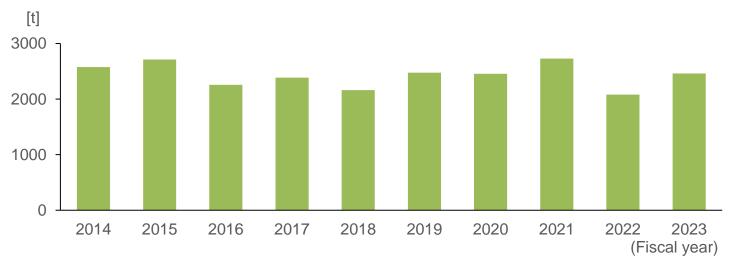
Calculation conditions: Scope 1 conversion factor is based on figures from the Ministry of the Environment; Scope 2 conversion factor is based on market standards.

# **Recycling of Resources**

#### Volume of Waste Materials

Kyowa Leather Cloth is committed to reducing industrial waste in order to make effective use of limited resources and reduce environmental impact.

Volume of Waste Materials



#### ■ Industrial Waste Project Activities

Reduction of waste generation: Identify waste generation at each factory and implement improvements to reduce waste generation

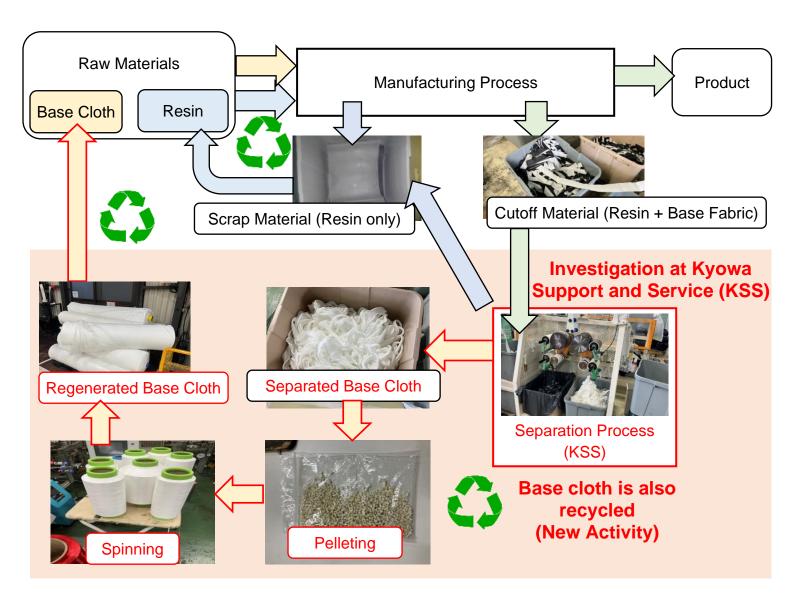
Promotion of reuse: Conversion of waste into resources both internally and externally

## **Recycling of Resources**

## Recycling of Resins and Base Fabrics

Kyowa Leather Cloth not only reuses the resin scraps generated in the manufacturing process in the same process, but also separates the scraps where the resin and base fabric are attached and recycles them into a state where they can be used as raw materials again.

Kyowa Support and Service (KSS) separates waste PVC generated from Kyowa Leather Cloth into PVC and base fabric, and PVC is reused within Kyowa Leather Cloth. KSS works with Kyowa Leather Cloth to recycle the base cloth into yarn once again and process it into recycled base cloth.

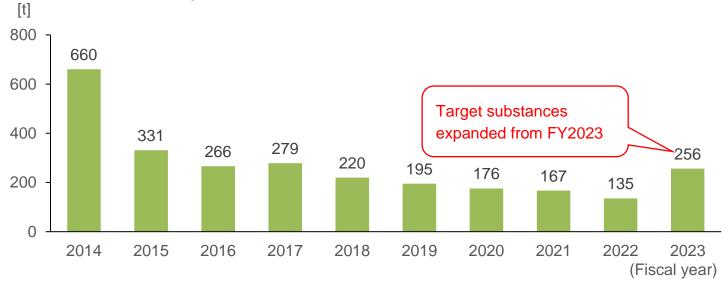


## **Chemical Substances**

#### **PRTR Substances**

Kyowa Leather Cloth is working to reduce the use of organic solvents such as toluene, which can cause problems such as sick building syndrome, by replacing them with other substances. We have also installed equipment to recycle the organic solvents in the exhaust gas as fuel, thereby reducing the amount of environmentally hazardous organic solvents released into the atmosphere.





#### **Emissions and Transport of PRTR Substances [t]**

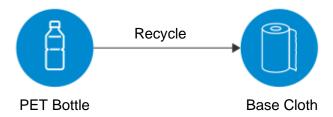
-: Less than target (Fiscal year)

		- 6-2							,
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
7.5	7.2	6.8	7.0	7.8	8.3	8.2	9.0	8.2	9.1
155.4	93.7	76.6	67.7	46.8	35.8	27.5	22.2	19.3	15.2
34.8	32.6	16.8	9.8	1.5	0.1	-	-	-	-
0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	-
1.4	-	-	-	-	-	-	-	-	-
1.6	-	-	-	-	-	-	-	-	-
453.7	192.0	162.5	189.8	160.8	147.6	136.1	131.1	103.0	136.9
2.5	2.9	2.9	2.7	2.9	3.3	3.7	4.7	4.6	5.5
2.9	2.3	-	1.3	-	-	-	-	-	-
								0.2	0.4
-	-	-	-	-	-	-	-	0.3	0.4
									4.3
									1.6
Not applicable							15.4		
1						67.7			
								0.0	
660.0	330.9	265.9	278.5	219.9	195.2	175.6	167.2	135.4	256.2
0	7	e	7	e	e	F	F	e	10
9	/	б	/	6	ъ	5	5	б	10
	7.5 155.4 34.8 0.3 1.4 1.6 453.7 2.5 2.9	7.5 7.2  155.4 93.7  34.8 32.6  0.3 0.3  1.4 -  1.6 -  453.7 192.0  2.5 2.9  2.9 2.3   660.0 330.9	2014     2015     2016       7.5     7.2     6.8       155.4     93.7     76.6       34.8     32.6     16.8       0.3     0.3     0.3       1.4     -     -       453.7     192.0     162.5       2.5     2.9     2.9       2.9     2.3     -       -     -     -       660.0     330.9     265.9	2014         2015         2016         2017           7.5         7.2         6.8         7.0           155.4         93.7         76.6         67.7           34.8         32.6         16.8         9.8           0.3         0.3         0.3         0.2           1.4         -         -         -           453.7         192.0         162.5         189.8           2.5         2.9         2.9         2.7           2.9         2.3         -         1.3           -         -         -         -           Not         Not         8         265.9         278.5	2014         2015         2016         2017         2018           7.5         7.2         6.8         7.0         7.8           155.4         93.7         76.6         67.7         46.8           34.8         32.6         16.8         9.8         1.5           0.3         0.3         0.3         0.2         0.1           1.4         -         -         -         -           453.7         192.0         162.5         189.8         160.8           2.5         2.9         2.9         2.7         2.9           2.9         2.3         -         1.3         -           -         -         -         -         -           Not application         Not application         265.9         278.5         219.9	2014       2015       2016       2017       2018       2019         7.5       7.2       6.8       7.0       7.8       8.3         155.4       93.7       76.6       67.7       46.8       35.8         34.8       32.6       16.8       9.8       1.5       0.1         0.3       0.3       0.3       0.2       0.1       0.1         1.4       -       -       -       -       -         453.7       192.0       162.5       189.8       160.8       147.6         2.5       2.9       2.9       2.7       2.9       3.3         2.9       2.3       -       1.3       -       -         -       -       -       -       -       -         Not applicable	2014         2015         2016         2017         2018         2019         2020           7.5         7.2         6.8         7.0         7.8         8.3         8.2           155.4         93.7         76.6         67.7         46.8         35.8         27.5           34.8         32.6         16.8         9.8         1.5         0.1         -           0.3         0.3         0.3         0.2         0.1         0.1         0.1           1.4         -         -         -         -         -         -         -           1.6         -         -         -         -         -         -         -           453.7         192.0         162.5         189.8         160.8         147.6         136.1           2.5         2.9         2.9         2.7         2.9         3.3         3.7           2.9         2.3         -         1.3         -         -         -           -         -         -         -         -         -         -           -         -         -         -         -         -         -           -         - <td>2014         2015         2016         2017         2018         2019         2020         2021           7.5         7.2         6.8         7.0         7.8         8.3         8.2         9.0           155.4         93.7         76.6         67.7         46.8         35.8         27.5         22.2           34.8         32.6         16.8         9.8         1.5         0.1         -         -           0.3         0.3         0.3         0.2         0.1         0.1         0.1         0.1           1.4         -         -         -         -         -         -         -         -           453.7         192.0         162.5         189.8         160.8         147.6         136.1         131.1           2.5         2.9         2.9         2.7         2.9         3.3         3.7         4.7           2.9         2.3         -         1.3         -         -         -         -           -         -         -         -         -         -         -         -         -           453.7         192.0         162.5         189.8         160.8         147.6<td>2014         2015         2016         2017         2018         2019         2020         2021         2022           7.5         7.2         6.8         7.0         7.8         8.3         8.2         9.0         8.2           155.4         93.7         76.6         67.7         46.8         35.8         27.5         22.2         19.3           34.8         32.6         16.8         9.8         1.5         0.1         -         -         -           0.3         0.3         0.3         0.2         0.1         0.1         0.1         0.1         0.1           1.4         -         -         -         -         -         -         -         -         -           1.6         -</td></td>	2014         2015         2016         2017         2018         2019         2020         2021           7.5         7.2         6.8         7.0         7.8         8.3         8.2         9.0           155.4         93.7         76.6         67.7         46.8         35.8         27.5         22.2           34.8         32.6         16.8         9.8         1.5         0.1         -         -           0.3         0.3         0.3         0.2         0.1         0.1         0.1         0.1           1.4         -         -         -         -         -         -         -         -           453.7         192.0         162.5         189.8         160.8         147.6         136.1         131.1           2.5         2.9         2.9         2.7         2.9         3.3         3.7         4.7           2.9         2.3         -         1.3         -         -         -         -           -         -         -         -         -         -         -         -         -           453.7         192.0         162.5         189.8         160.8         147.6 <td>2014         2015         2016         2017         2018         2019         2020         2021         2022           7.5         7.2         6.8         7.0         7.8         8.3         8.2         9.0         8.2           155.4         93.7         76.6         67.7         46.8         35.8         27.5         22.2         19.3           34.8         32.6         16.8         9.8         1.5         0.1         -         -         -           0.3         0.3         0.3         0.2         0.1         0.1         0.1         0.1         0.1           1.4         -         -         -         -         -         -         -         -         -           1.6         -</td>	2014         2015         2016         2017         2018         2019         2020         2021         2022           7.5         7.2         6.8         7.0         7.8         8.3         8.2         9.0         8.2           155.4         93.7         76.6         67.7         46.8         35.8         27.5         22.2         19.3           34.8         32.6         16.8         9.8         1.5         0.1         -         -         -           0.3         0.3         0.3         0.2         0.1         0.1         0.1         0.1         0.1           1.4         -         -         -         -         -         -         -         -         -           1.6         -

# **Environmentally Friendly Products**

## **Products Using Recycled PET**

Kyowa Leather Cloth is also developing synthetic leather using recycled base fabrics derived from PET bottles in order to reduce CO2 emissions not only from fuel and electricity used in manufacturing, but also from raw materials.



## **Products Containing Bio-materials**

Kyowa Life Techno is developing LeNa, a bio-vegan synthetic leather made from biomass materials. Variations include BambLena, made from bamboo cut to thin out bamboo groves, and SheLena, made from discarded shells.





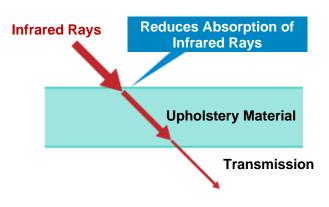
#### https://www.kyowalt.co.jp/lena/

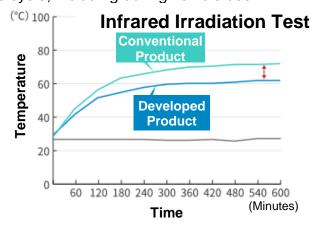
"LeNa," which has been developed and marketed so far, has a biomass degree of 20-30%, and we plan to continue development with the aim of establishing a product design with a biomass degree of 50%. In addition, we have been developing environmentally friendly products mainly for bags, and we plan to develop products for the sports sector in the future.

## **High Temperature Suppression Functions**

Kyowa Leather Cloth is not only replacing materials with those friendly to the environment, but is also developing products with new functions. Automobile surface upholstery materials with high temperature suppression functions save energy for the air conditioner inside the vehicle, thus contributing to the reduction of CO2 emissions over the entire product life cycle, including during vehicle use.

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**BambLena** 

# **Environmentally Friendly Products**

## Ethical Synthetic Leather 'Sobagni'

Kyowa Leather Cloth sells assorted goods under the Sobagni brand.



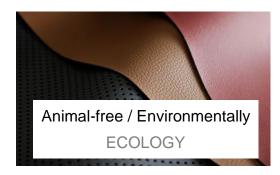
Sobagni

https://sobagni.jp/

**ETHICAL** 

Coined from the Italian word "sogni" (many dreams) and the Japanese word "beside you".

The Sobagni initiative shows our commitment to coexist with the global environment and local communities, and to continue to make synthetic leather friendly to people, animals, and the earth.



The concept of "animal-free" products, which do not use animal materials, is supported worldwide due to the belief that wearing animal leather may be cruelty to animals. Synthetic leather is an "animal-free" material. Additionally, Sobagni material does not use environmentally hazardous substances or chemicals that fall under the category of environmental hormones, making them friendly to people, animals, and the environment.



Unparalleled lightness\*1, high durability by automotive standards, and texture and quality that will remain unchanged for more than 10 years\*2. Easy-to-use, enduringly attractive design that takes advantage of the characteristics of the material. Real sustainability is durability. We believe that it is sustainable to use your favorite items for a long time, rather than disposing of them.



With Sobagni, we are actively involved in social contribution activities based on our desire to "do something useful for society through our materials and activities."

- · Tie-ups with local companies and designers.
- · Support for design universities and regional schools (industry-academia cooperative projects)
- · Collaboration with vocational facilities
- \*1 2/3 the weight of genuine leather of the same thickness
- \*2 The material is durable for 10 years, but we do not guarantee the durability of the product itself, including sewing and hardware.

# **Environmentally Friendly Products**

#### Chakara Made from Shizuoka Tea



## Concept

· Utilizing our own technologies to build a circular economy together with the local community

Catechin

- · Adding raw materials to synthetic leather that meet the following criteria
  - · "Not edible"
  - · "Require less energy to grind into powder"
  - · "Definitely domestically made"



Inedible parts of tea leaves generated during the production of matcha at a tea manufacturer in Shizuoka

Prefecture are used

# Sobagni using Chakara

- · Contributing to the circular economy
- The material is given a supple, luxurious look and a softly fragrant tea aroma
- · Antibacterial and deodorizing function due to catechin contained in tea leaves

Chakara website

https://sobagni.jp/chakara/



# **Contribution to Society**

Each year we continue our efforts to better the future of our planet by participating in local environmental conservation activities. Specifically, we contribute to the protection of the local natural environment through cleanup activities. We will continue to strive for the realization of a sustainable society in harmony with the local community.

Our company sees environmental conservation as an important mission and will promote activities to protect the future of the earth in cooperation with local communities.

#### Donation of Unwanted Household Items to Overseas

Sep.26, 2023: Through the "Mottainai Volunteer Project," we collected unwanted household items (160.5 kg) to be donated overseas.



# **Contribution to Society**

# **Community Cleanup Activities**

### ■ Lake Sanaruko Cleanup Operation

Cleanup activities at Lake Sanaruko in Hamamatsu City



#### ■ Shinshiro Clean Festa 2023

Cleanup of city streets around Kyowa Leather Cloth Shinshiro Factory in Shinshiro City

