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### CORPORATE COMMUNICATION TOOLS



Social and Environmental Report 2023  
(Japanese Edition)



Sustainability Report 2022-2023



Corporate website



LinkedIn Takasago site

### Cover Picture



Poster, 'Géllé Frères'  
1910s

The poster, one of Takasago Collection, is regarded not only as works of art but also a material to hand down the fragrance culture as which was made in 1910s



# Corporate Vision

## > Create New Value Through Innovation Rooted in *Kaori*

In 2020, the Takasago Group celebrated its 100th anniversary. With the corporate philosophy “Contributing to Society through Technology” in mind, we have added the corporate mission, “Create new value through innovation rooted in *kaori* (aroma in Japanese).” The corporate mission is incorporated in the essence of Takasago, which our predecessors have cultivated over the past 100 years. Currently, we maintain offices, production sites and R&D centers in 28 countries and regions. Through our network of global research, production, creativity and marketing, we develop products tailored to the needs of individual markets. By utilizing our

technologies and our global network, we will continue to develop high-quality and innovative products that contribute to cultural and social progress.

We have established Vision 2040 as a vision of ourselves in 2040. With Vision 2040's slogan, “Care for People, Respect the Environment,” we have been pursuing advanced technologies to enrich and bring well-being to daily life. We will work in harmony with nature and apply its blessings to contribute to the sustainability of the natural environment. Through those activities, we aim to remain an indispensable company.

### Corporate Philosophy

**Contributing to Society  
through Technology**

### Corporate Mission

**Our mission is to create new value  
through innovation rooted in *kaori***  
(*kaori*: aroma in Japanese)

### Vision 2040

**Care for People,  
Respect the Environment**

#### Our vision is to be:

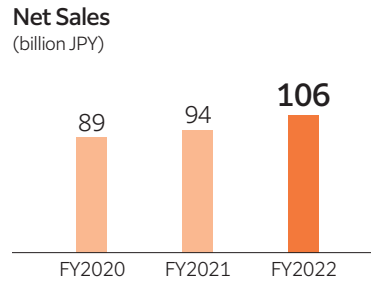
- 1 Proud of our culture of respect, diversity and inclusion
- 2 In harmony with nature, enriching and bringing well-being to daily life
- 3 Full of hope and ambition, confidently taking on new challenges
- 4 Eager to continue to innovate and remain an indispensable company

# Our Businesses

## > Flavors Overview



We design taste that has value, from a belief that delicious taste brings well-being. The flavors of foods are created by intricate mixtures of aroma components. When these complex aromas join in harmony with tastes and textures, truly delicious taste is born. Across wide-ranging categories of beverages and foods, flavors add zest to everyday dining.



### Initiatives

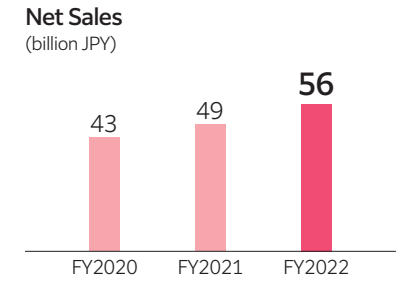
We are advancing the development of flavors with added value utilizing core technologies created in Japan, our central base of R&D. One of our strengths is our ability to extend these technologies globally through collaborating with our Flavor R&D departments in nine countries around the world. We go beyond creation technologies and constantly seek solutions to customers' challenges. Such solutions include screening of effective masking agents with receptor assays, formulation of flavors to fit food and beverage applications, and sensory and psychophysiological effects of flavor when eating.

Vivid Flavors®/VIVID® [Vivid Flavors® / VIVID® | Takasago International Corporation](#)  
 INTENSATES® [INTENSATES® | Takasago International Corporation](#)

## > Fragrances Overview



Creating the fragrances of tomorrow — We provide fragrances used in products such as perfumes, cosmetics, shampoos, detergents, air fresheners and bath salts with excellent residual fragrance, diffusion and stability.



### Initiatives

- Strengthening competitiveness by developing technologies related to well-being and hygiene and high added value fragrances, keeping sustainability and the SDGs in mind.
- Our fragrances are created with the aim of caring about people, the global environment and society to support our future.



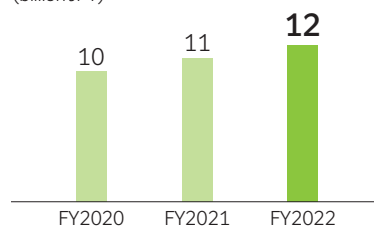
# Our Businesses

## > Aroma Ingredients

### Overview

We develop innovative and unique materials using our chiral technology which plays an important role in the creation of flavors and fragrances.

Net Sales  
(billion JPY)



### Initiatives

- Developing materials under the More with Less concept
- Developing BIOSWITCH® materials from existing Aroma Ingredients (AI) items derived from fossil raw materials
- Developing renewable AI products that are biodegradable
- Expanding our Sustainable Scent collection

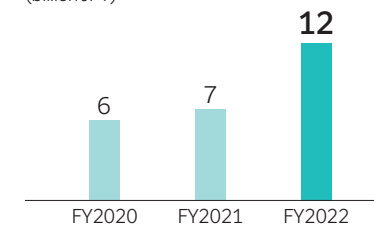
## > Fine Chemicals

### Overview

The Fine Chemicals Division was born from the technological application of asymmetric catalysts invented for the industrial production of *l*-menthol.

Our main product line consists of pharmaceutical intermediates and electronic materials. We also provide ligands and catalysts on an industrial scale.

Net Sales  
(billion JPY)



### Initiatives

Ligands and catalysts:

The catalyst technology contributes to the minimization of waste from chemical plants. To support green and sustainable manufacturing, we provide Takasago catalysts to a wide variety of markets such as the pharmaceuticals, agrochemicals, functional materials and aroma ingredients markets. We are strengthening our supply capacity to meet the increasing demand in recent years.

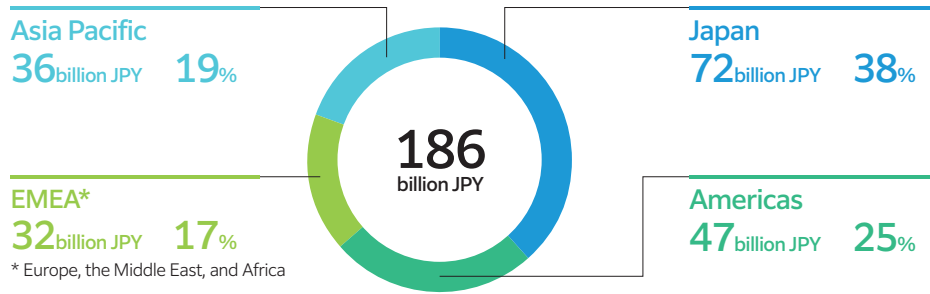
Continuous flow:

Our pursuit of green chemistry has led us to adopt continuous flow technology for pharmaceutical intermediates production.

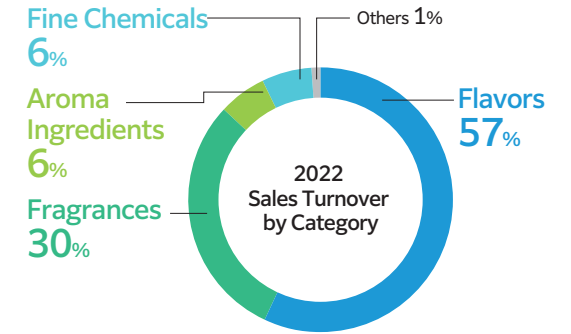
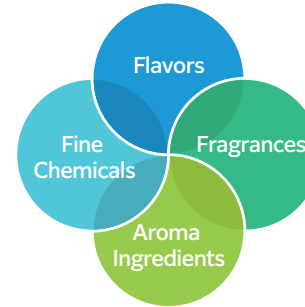
Since 2012, we have succeeded in the creation of four commercial production lines using several types of continuous reactors.

# Financial Highlights

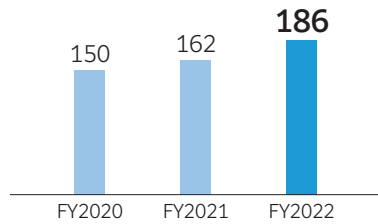
## 2022 Sales Turnover by Region



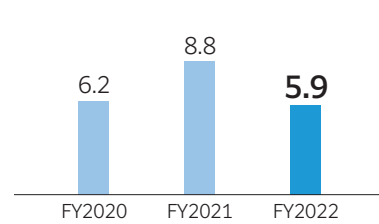
## Core Businesses



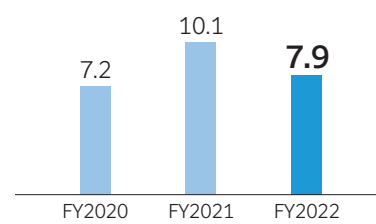
Sales Turnover (billion JPY)



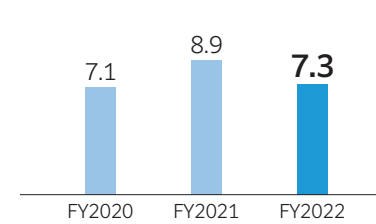
Operating Income (billion JPY)



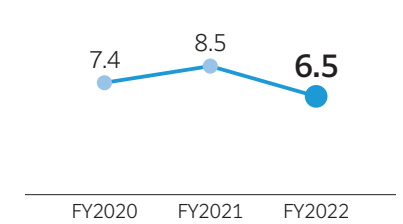
Ordinary Income (billion JPY)



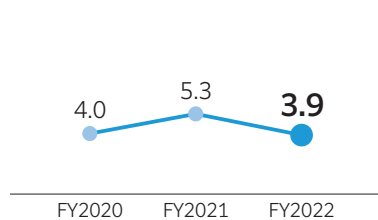
Net Income (billion JPY)



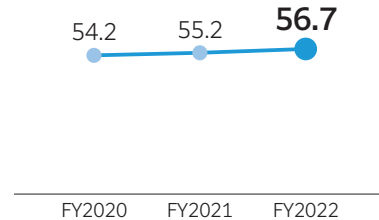
ROE (%)



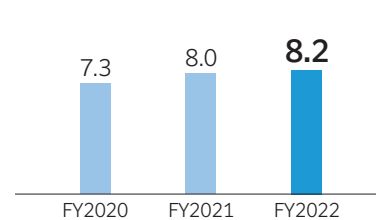
ROA (%)



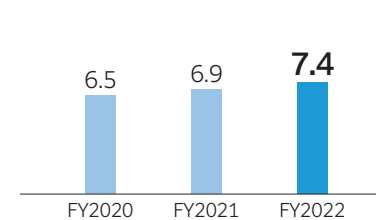
Equity Ratio (%)



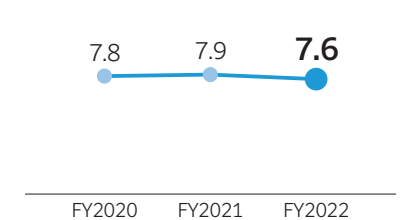
Capital Investment (billion JPY)



Depreciation Expense (billion JPY)




















































R&D Expense to Sales Turnover (%)

























# Global Network

## Asia/Pacific





















Japan	Takasago International Corporation	        
Singapore	Takasago International (Singapore) Pte. Ltd.	     
Philippines	Takasago International (Philippines), Inc.	
Thailand	Takasago Import and Export (Thailand) Ltd.	
Indonesia	PT. Takasago International Indonesia	    
	PT. Takasago Indonesia	
India	Takasago International (India) Pvt. Ltd.	     
Pakistan	Takasago International (Pakistan) Pvt. Ltd.	
China	Takasago International (Shanghai) Co., Ltd.	  
	Shanghai Takasago-Union Fragrances & Flavors Co., Ltd.	     
	Xiamen Hua Ri Foods Industrial Co., Ltd.	
	Takasago International (Guangzhou) Co., Ltd.	      
Korea	Takasago International Corporation (Korea)	
Malaysia	Takasago International (Malaysia) Sdn.Bhd.	















## Europe/Middle East/Africa

France	Takasago Europe Perfumery Laboratory S.A.R.L.	    
Germany	Takasago Europe G.m.b.H.	    
	Takasago International (Deutschland) G.m.b.H.	
Italy	Takasago International (Italia) S.R.L.	
Spain	Takasago International Chemicals (Europe), S.A.	   
	Takasago International (España) S.L.U.	
United Kingdom	Takasago (U.K.) Ltd.	
Turkey	Takasago International Turkey Esans Ve Aroma San. TIC. A.S.	
South Africa	Takasago International Corporation South Africa (Pty) Ltd.	
Madagascar	Takasago Madagascar S.A.	
Morocco	STE Cananga S.A.R.L.	

## The Americas

U.S.A.	Takasago International Corporation (U.S.A.)	       
	Centre Ingredient Technology, Inc.	 
Mexico	Takasago De Mexico S.A. De C.V.	    
Brazil	Takasago Fragrâncias E Aromas Ltda.	      

Office	Laboratory	Factory	
 Headquarters	 Flavors	 Flavors	 Fine Chemicals
 Sales Office	 Fragrances	 Fragrances	 Food
 Representative Office	 R&D	 Aroma Ingredients	 Natural Resources



# Takasago's value chain

We handle various raw materials and produce flavors for food and beverages, fragrances for perfumes, cosmetics and household products, aroma ingredients for these fragrances, and fine chemicals supporting the development of new medicines.

The strengths of Takasago's value chain include:

## Stable, sustainable procurement capabilities with a robust global network

- Build strong relationships of trust with fair and reliable suppliers, and achieve responsible sourcing through continuous risk improvement throughout the supply chain.

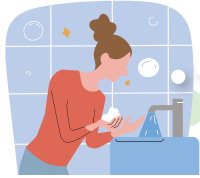
## Competitive technologies through advanced science

- Flexibly responding to customers' needs with a variety of processes.
- Developing innovative aroma ingredients based on unique asymmetric synthesis, a key technology.
- The technologies are being applied not only in the field of flavors and fragrances but also for a wide range of fine chemicals, including highly technical Active Pharmaceutical Ingredient (API) Intermediates and new functional materials that support the electronics industry.



# Where our products are used

Morning



Facial soap, toothpaste, mouthwash

Skincare products, cologne, cosmetics



Yogurt, pastries, dressing, instant noodles



Laundry detergent, Fabric softener



Functional foods/ drinks



Dashi (traditional Japanese source of umami)



Fine chemicals

Supporting the development of new medicines by supplying pharmaceutical intermediates

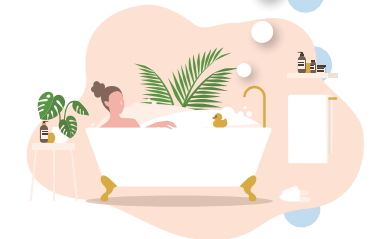


Afternoon

Ice cream, potato chips, chocolate, canned coffee beverages



Hair care products, body wash



Room fragrances



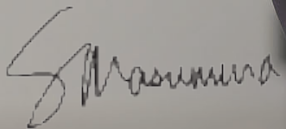
Evening

# Takasago's Value Creation Story

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**Satoshi Masumura**President and  
Chief Executive Officer

## Message from President and CEO

**Q Please tell us about the status of your business for the fiscal year ending March 31, 2023 and your forecast for the fiscal year ending March 31, 2024.**

In the fiscal year ending March 31, 2023, while the economy continued to be affected by the covid-19 infection, it gradually became compatible with socioeconomic activities and showed signs of a gradual recovery. As for the global economy, there were many causes for concern, including Russia's military invasion of Ukraine, the energy market turmoil triggered by the invasion, the impact of trade friction between the U.S. and China on the economy, global inflation, and exchange rate fluctuations.

Against this backdrop, the Takasago Group's net sales increased 15.0% from the previous fiscal year, reaching a record high.

By segment, in Japan, the Flavor Department focused on developing growth categories and new customers, and achieved steady sales growth. In the fine chemicals segment, we increased the supply capacity of existing pharmaceutical intermediates by improving production efficiency, and also acquired new commercial products.

In the Americas, the Flavor and Fragrance divisions maintained the growth by expanding sales to domestic and regional customers in addition to multi-national customers. In the fine chemicals division, sales remained strong due to aggressive marketing efforts, including sales expansion of new products.

In Europe, the fragrance division performed well by focusing on sales expansion of cosmetics and other products, and the flavor division achieved business expansion with a client in Africa.



In Asia, sales of beverage and savory flavorings, a focused category in the Flavor division, were strong, and sales in emerging markets were also favorable. In the Fragrance division, sales were strong because of the concentration of management resources on multi-national and major local customers, targeting the air care, personal care, and fabric care categories.

In terms of profit, we focused on expanding sales of mainstay products and new products both in Japan and overseas, and also made efforts to pass on the higher prices of raw materials and other items to customers.

In the fiscal year ending March 31, 2024, although the impact of the covid-19 infection on economic activities will ease, the situation is expected to remain extremely uncertain due to the future situation in Ukraine, resource price trends, and concerns of a downturn in the economies of various countries against a backdrop of global monetary tightening and other factors.

In the flavor and fragrance industry, the competitive environment remains severe, but the market is expected to continue to grow in China and Southeast Asia, while solid growth is also expected in the mature markets of Europe and the United States. However, we anticipate a difficult environment in terms of profits, affected by soaring raw material and energy prices, supply chain disruptions, and other factors.



## Please explain your medium-term management plan, which is entering its final year.

The fiscal year ending March 31, 2024 is the final year of our medium-term management plan, New Global Plan-1 [NGP-1], which is based on three basic directions, "Growth expansion overseas," "Profit improvement in Japan," and "Sustainability promotion," and has five pillars and priority issues.

With regard to the first of these basic directions, "promoting overseas growth," we are enhancing and revitalizing the organization at each of our bases in order to further expand our overseas business, which in recent years has grown steadily in terms of both sales and operating income and has come to support the overall performance of the group. In addition, we have been promoting the establishment of a global core system, which was introduced to our Singapore base last fiscal year, and a global template has been established. In the fiscal year ending March 31, 2024, we will complete the introduction of the system in the U.S., and after that, we will proceed with the introduction to other bases to unify management resources on a global scale.

On the other hand, in Japan, with the market not expected to expand, the company has been facing a difficult situation in terms of profits in recent years. Despite remarkable growth overseas, domestic sales still account for about 40% of total sales, and we are working to improve profits in order to serve as a foundation for generating stable earnings. One of our measures is to reduce manufacturing costs by reviewing our production system, and we will continue to focus on automation and labor saving. In addition, for flavor and fragrance products, we will continue to examine this issue with a focus on business, research, and production divisions.

The third of our basic directions is "Sustainability promotion" from the perspective of realizing Vision 2040, which has the slogan "Care for People, Respect the Environment," and aiming for long-term business growth. One of these efforts is the development of products with an awareness of their contribution to the SDGs. In terms of development, we need to consider raw materials, manufacturing methods, manufacturing processes, and other aspects from multiple perspectives. Among other things, we are promoting

the introduction of the latest biotechnologies and the strengthening of our manufacturing infrastructure using these technologies.

Based on these three basic directions, we will make a concerted effort to achieve our numerical target of 200 billion yen in net sales and accumulate as much operating income as possible in the final year of NGP-1, the fiscal year ending March 31, 2024, by promoting organizational and cross-functional efforts.



### **Sustainability promotion is one of the basic directions of NGP-1. Can you tell us about the purpose of promoting sustainability and the progress of your activities?**

Sustainability is now not only a governance code required of companies, but it is also becoming an essential part of our response to the various demands of our customers. In 2002, the Takasago Group published its Environmental Declaration, which was the starting point for our EHS activities. Currently, the entire Group is strategically promoting sustainability activities to further enhance social and governance aspects. In addition, under the slogan of Vision 2040, "Care for People, Respect the Environment," we aim to respect diverse values and coexist in harmony with nature. Through sustainability activities aimed at realizing this goal, we intend to enhance our corporate value as well as contribute to a sustainable society.

Our group is promoting sustainability activities based on "Sustainability 2030," which outlines our plan for the next nine years toward the year 2030.

In April 2020, we established and announced the Group's policies (Governance, Strategy, Risk Management, and Metrics and Targets) in line with TCFD recommendations, and in May 2021, we received the Greenhouse Gas Protocol (GHG) certification from the international initiative "Science Based Targets", an international initiative, and clarified the numerical targets to be achieved by 2030. Last year, we were selected for a program supported by the Ministry of the Environment, which provided us with an opportunity to systematically learn the approach to GHG reduction in Scope 3. The Group is actively exchanging opinions

on how to reduce the emission of GHGs.

In addition to our efforts to reduce GHG emissions, we also focus on manufacturing processes and products that are environmentally friendly. In our manufacturing processes, we use a continuous flow system for the production of pharmaceutical intermediates in line with the U.S. FDA's recommendation for green chemistry, and we use catalysts based on our proprietary technology to improve energy efficiency. At the same time, we are also focusing on the development of environmentally friendly flavor and fragrance materials by utilizing biochemistry. In addition to our traditional domestic production, we are expanding our range of high-yield bio-derived natural flavor ingredients by utilizing the proprietary production technology of Centre Ingredient Technology, which joined the group in 2016.

Maintaining biodiversity is a very important topic. The Group uses many natural raw materials such as citrus, mint, vanilla, coffee and myrcene, the starting material for synthetic menthol. To preserve the natural environment, the Group is strengthening its partnership with local communities under the "TaSuKI Originals, Care and Comply" initiative. One of these activities is the planting of grapefruit trees in Florida, USA, which began in 2019. Florida is one of the world's leading citrus growing regions, and the Group has been purchasing grapefruit and orange essential oils there for many years. In recent years, Florida has been hit hard by hurricanes and disease, which has had a significant impact on the crop. Therefore, with a view to securing a stable supply of raw materials, a grapefruit tree-planting project was realized in cooperation with a local essential oil processor and a neighboring citrus farm. This year, about 90% of the trees have been planted, and the grapefruit planted in the early stages of the project will begin to be pressed for essential oil.

In the production of vanilla in Madagascar and lavandin in France, we are also working to reduce the concerns and burdens of production for farmers by strengthening cooperation with local communities.

On the other hand, we are also focusing on the development of biodegradable aroma ingredients. Aroma-ingredients, which are mainly used as fragrance materials in fragrance products, are easily biodegradable and are required by the



market to be friendly to the global environment and ecosystems, and we see this as a major theme.

Other activities to reduce environmental impact include reducing water consumption, reducing waste, and promoting the 3Rs (Reduce, Reuse, Recycle). Reducing plastic containers is another major issue. Plastic containers used for flavored products are made of multiple layers of plastic because of the importance of barrier properties. This makes recycling more difficult, but since reducing the number of plastic containers is an important issue, we will continue to study with container manufacturers to switch to containers with a lower environmental impact.

The Group's sustainability activities consist of ESG activities in various areas, but I have focused on the environment in describing our progress here. There are many issues in ESG field, and we will continue to carefully address them one by one to resolve them.

**Q NGP-1 is developing the Global SAP Project (core system integration project) overseas as part of its efforts to strengthen its global management foundation. Can you tell us more about the progress of the project and your future plans?**

The Global SAP Project is a mid- to long-term company-wide project that began in 2020. We have started to create a template to be used globally from 2020. It took almost two years to complete the project due to the Corona disaster, but at the end of last year, the system went live in Singapore, our first implementation site. This year, we are working on the implementation in the U.S., and next year we plan to introduce the system in Europe, and a few years later in Japan. While integrating the core system in this way, we would like to promote global integration of peripheral systems as well.

**Q Lastly, what are your ambitions for the final year of NGP-1?**

For the current fiscal year (ending March 31, 2024), we are targeting a 7% year-on-year increase in sales to 200 billion yen. Operating income is budgeted at 4 billion yen, down about 30% from the previous year, due to soaring raw material and energy prices, supply chain disruptions, and other factors. The entire company is working together to implement various measures to increase operating income as much as possible.

We have also begun to consider the next medium-term management plan (NGP-2). In terms of future capital investment, we have many projects in the pipeline, including the construction of new laboratories, expansion of production capacity at domestic and overseas plants, and measures to deal with aging facilities. Although times are tough in terms of profits, even excluding the effect of the weak yen, sales have been growing very steadily over the past few years, and we intend to further solidify our internal foundation so that we can continue to meet strong demand.

I would like to ask all of our shareholders for their continued support for the long-term as we look forward to the further development of our group.



## Message from Senior Vice President, General Manager of GIHQ (Sustainability, Global)

# Sustainability Promotion

The Takasago Group has set Sustainability Promotion as the Basic Policy of its medium-term management plan NGP-1. As a member of society, the Group is sincerely addressing the challenges faced by society and actively engaging in activities aimed at solving these challenges. The group also aims to enhance non-financial corporate value through sustainable management. In the below, I would like to share the progress of our sustainability activities in the second year of NGP-1.

Climate change caused by global warming has various impacts, such as an increase in the frequency and intensity of extreme weather (hurricanes, floods, droughts, etc.), coastal flooding due to sea level rise, impacts on ecosystems, and negative effects on agriculture. Takasago is addressing adaptation to and mitigation of climate change through an international framework. In April 2020, we disclosed information in line with the TCFD recommendations, publicly announcing the Group's policy and strategy. In May 2021, we made the Group's GHG emissions reduction targets official, certified by the SBTi.

Last year, we were selected to participate in a support program hosted by the Ministry of Environment of Japan to reduce Scope 3 GHG emissions and given an opportunity to work closely with BCG for about five months on how to reduce Scope 3 GHG emissions." Through the collaboration, we looked into a more systematic approach toward reducing the GHG emissions of procurement activities, which account for 90% of Scope 3 emissions, such as replacing synthetic raw materials with sustainable raw materials, and began requesting LCA disclosure and collaborating with major suppliers on emissions targets.

As for our efforts to reduce Scope 1 and 2 emissions, as Takasago Japan has a big Energy-saving Management Committee in Japan, we conducted sessions to share its activities with affiliates outside of Japan, exchanged thoughts and opinions on reduction measures, and sought improvement plans for the energy-efficient




**Tatsuya Yamagata**

Senior Vice President  
General Manager of GIHQ  
(Sustainability, Global)

manufacturing of powdered flavors, operation of wastewater treatment plants and other endeavors. We are also planning to globally install monitoring meters in appropriate places to understand actual energy usage. Additionally, we are looking at its systems to calculate the LCA of our products and have it ready when required by our customers. The group will continue to focus on developing environmental products and processes, using continuous flow production processes centered on the fine chemicals business and CIT, which joined the group in 2016 to strengthen manufacturing in the biotechnology field, and collaborating with R&D to develop bio-based flavors and fragrances ingredients.

Human rights are guaranteed by international laws, but in reality, there are problems around the world where people's basic rights and dignity are violated. The Takasago Group conducts corporate activities with respect for human rights, and in 2019 we formulated the Takasago Group Human Rights Policy and established a system for human rights due diligence\* with reference to a guidebook published by the Japan Federation of Bar Associations. Subsequently, we organized a wide range of human rights issues and summarized them as Key Human Rights Issues

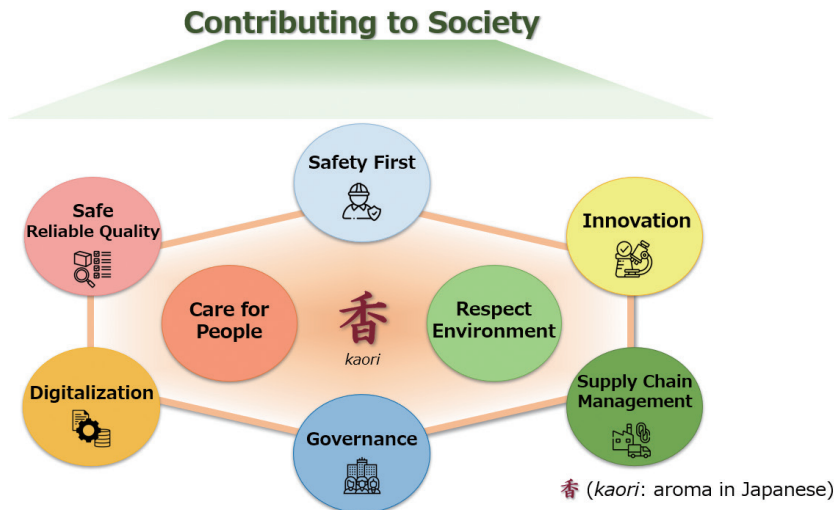
which were appended to the Policy. At the same time, we have incorporated these Key Human Rights Issues into the Takasago Group Supplier Code of Conduct and share it with our suppliers, requesting their compliance with the code of conduct. In terms of raw material procurement, we do business with more than 1,000 different suppliers. Since these suppliers are spread all over the world, it is difficult to conduct on-site audits for all of them. Therefore, we effectively utilize SEDEX, an ethical audit platform, to conduct ethical audits. In this way, the Takasago Group ensures responsible sourcing.

In addition to our regular practice of annual human rights due diligence, last year, referring to the List of Goods Produced by Child Labor or Forced Labor made by the U.S. Department of Labor, Takasago conducted human rights due diligence regarding its suppliers of the specified materials and in the specified areas.

Lastly, I would like to touch upon the revision of our materiality. Our board of directors conducts an annual review of our materiality, but this time, we have revised the materiality of our group in response to the revision of the GRI guidelines. We have reevaluated our value and simplified our materiality to ensure that our focus is easily understood by all stakeholders.

While this time I have mainly discussed global social issues, our sustainability action plan, Sustainability 2030, includes other important issues that we need to address. You can find more information about this on P.22 and our website. Takasago will continue to make every effort to build a sustainable global environment and society.

\* Human rights due diligence: a process starting with identifying human rights risks, responding to issues, and disclosing information.





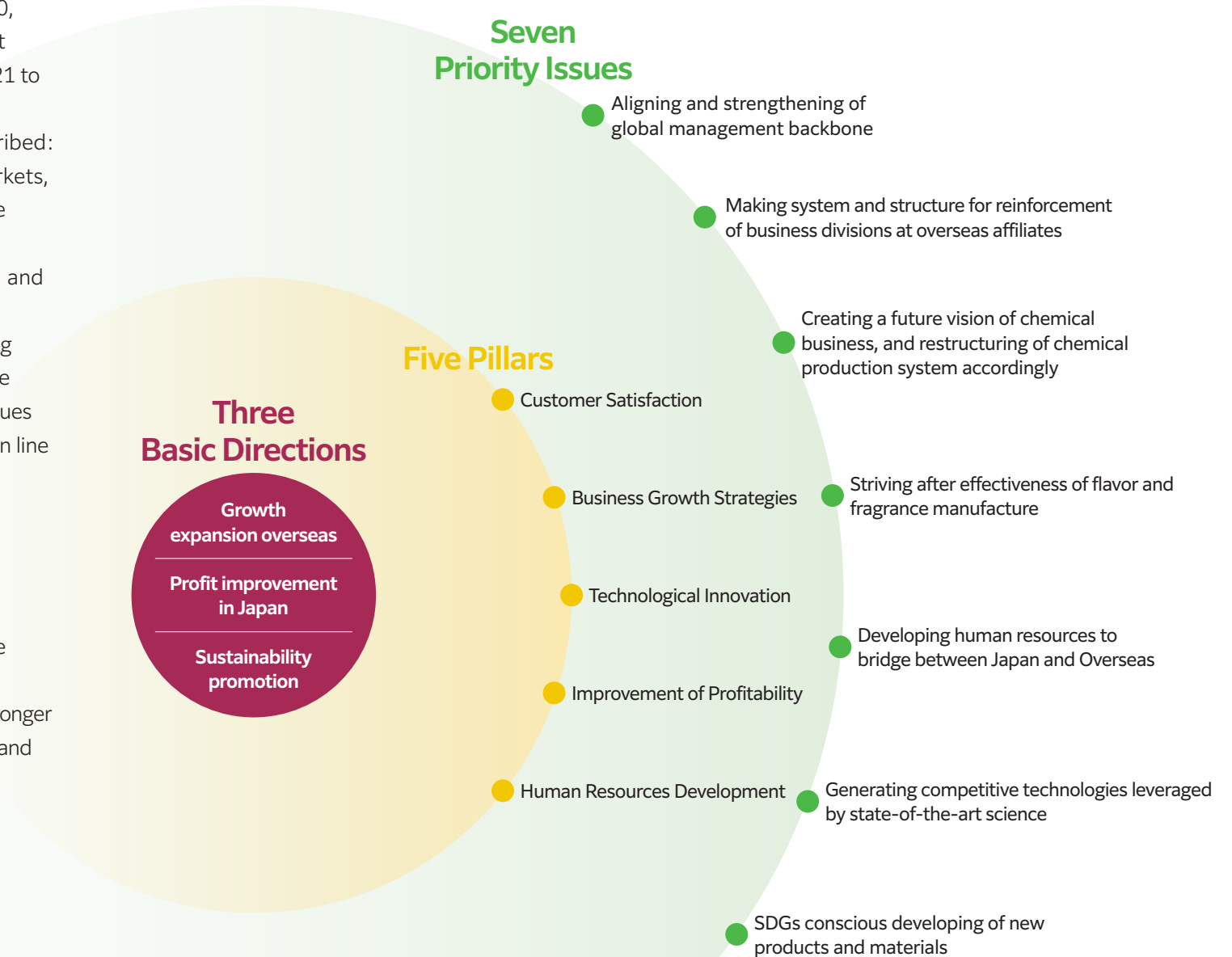
# Business Strategy—New Global Plan-1

To get closer to our vision stated in Vision 2040, we will implement our Mid-Term Management Plan, New Global Plan-1 (NGP-1), from FY2021 to FY2023.

In NGP-1, three basic directions are described:  
 (1) Achieving higher growth in overseas markets, particularly emerging markets, which are growing remarkably,  
 (2) seeking to improve profitability in Japan, and  
 (3) developing sustainability globally.

We position the five policies of the preceding Mid-Term Management Plan, One-T, as the five pillars in NGP-1 and have set seven priority issues that the entire Group should strive to achieve in line with the basic directions and pillars.

To achieve the seven priority issues, we will strengthen cooperation among overseas bases, increase production capacity, accelerate rationalization, and enhance the research and development function primarily in Japan. For the entire Group to share goals and pursue them as "One Takasago," we will have leaders provide stronger leadership and enhance global communication and will thereby boost employees' motivation.





# Policy and Plans for Sustainability

The Takasago Group believes that sustainability is a vital element for our growth. Sustainability Promotion is defined as one of the three basic directions in the current mid-term management plan, NGP-1. Following the Sustainability Basic Policy developed in 2021, we will strive to accelerate related activities.



**Sustainability Basic Policy**

The policy has been developed as basic principles of our actions of sustainability. Based on the "Care for People, Respect the Environment" statement in our Vision 2040, The Takasago Group respects all kinds of values and aims to live in coexistence with nature. Through fair and transparent corporate activities, we will continue to address social issues and contribute to sustainability in all forms.

**Materiality**

Materiality is designed to describe relevant issues we need to tackle with priority. This is reviewed and discussed every year.

**Sustainability 2030**

Sustainability2030 includes concrete plans to achieve each objective of Materiality.

From the beginning, our business activities have been aligned with the United Nations Sustainable Development Goals (SDGs) in many aspects, such as the reduction of CO<sub>2</sub> emissions for Goal 13 and process-innovation for Goal 9. We will continue to enhance our business operations to help achieve the SDGs with strong commitment to addressing global challenges.



# Sustainability Governance

## Board of Directors

The Board of Directors is the highest governance body of The Takasago Group. It is chaired by our president and CEO. At its meetings, the Board of Directors discuss and make decisions on key management issues and strategies, but sustainability matters are also included on its agenda. As part of our Group's approach to sustainability, we identify material issues every year, which are discussed and approved by the Board of Directors. In addition, the Sustainability 2030 medium-to-long-term sustainability action plan and information about individual sustainability issues (climate change, human rights, etc.) are reported to the Board of Directors for discussion and decision-making.

## Executive Management Committee

The corporate officers (senior vice presidents and vice presidents) are assigned by the board of directors to lead the divisions. Most of them are the general manager of a division reporting directly to the CEO and president. Following internal regulations, the corporate officers discuss and approve issues brought to them. Sustainability related matters are also discussed by the corporate officers and discussed at meetings of the Board of Directors if necessary.

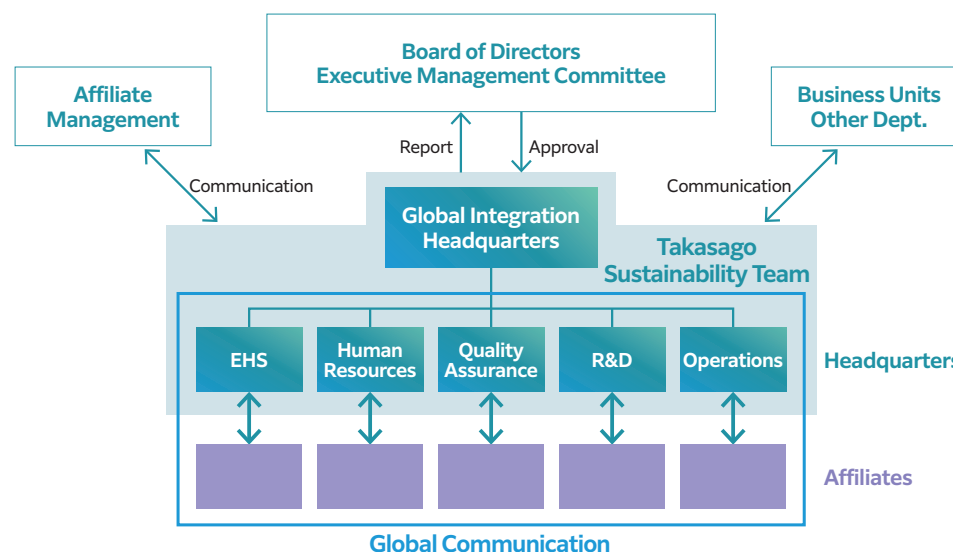
## Global Integration Headquarters

The Global Integration Headquarters is the division responsible for sustainability (strategy and planning) and is leading the Sustainability Promoting Committee. The general manager of the division is responsible for taking up sustainability related matters at the meetings of both the Board of Directors and the Executive Management Committee.

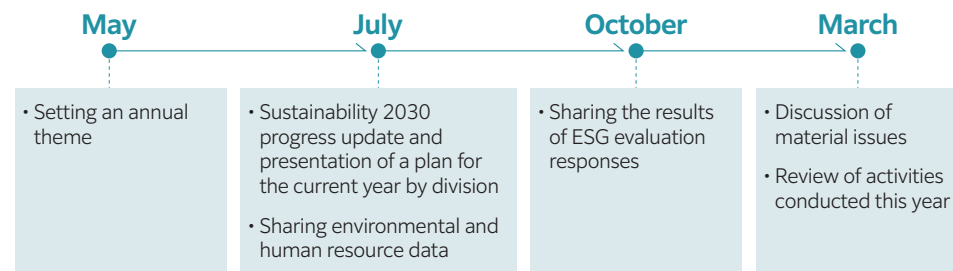
## Takasago Sustainability Team and Sustainability Promoting Committee

The Takasago Sustainability Team was formed in 2017 to ensure that all our activities are globally aligned with the vision and strategy and action plans are executed in a

timely and appropriate manner. The team performs five key corporate functions: EHS, Human Resources, Quality Assurance, Operations and R&D. The general manager of the Global Integration Headquarters leads the team and communicates information about key sustainability matters to the Board of Directors. Corporate officers and representatives involved in each function participate in the activities of the Sustainability Promoting Committee, which meets once every 3-4 months at Headquarters to exchange information and concerns and monitor the progress of our activities. Individual teams are responsible for communicating information about their functional areas across the globe and developing their own action plans following the corporate strategy.



### The Main agenda of the Sustainability Promoting Committee



## Materiality

The Takasago Group conducted the assessment of its material issues taking external opinions into consideration. The material issues, which are reviewed every year, are identified based on global trends, sustainability indexes and standards such as the Global Reporting Initiative (GRI), the Dow Jones Sustainability Index (DJSI) and Sustainability Accounting Standards Board (SASB) Standards and trends in our industry. Identified issues are discussed by the sustainability team and thoughts and opinions are exchanged with stakeholders. For the current materiality, we exchanged thoughts and opinions with women and labor unions. The draft of material issues is then brought to the corporate officers and the Board of Directors for further discussion and decision-making.

Through these actions, we address global issues and fulfill our corporate responsibilities as a member of society. This also helps enhance the corporate value of the Group over the long term.

### > Changes in this reporting period

We have refreshed our Materiality to meet the renewed GRI guidelines. We have re-evaluated our value and simplified our outlook on the materiality to ensure that the message is easily conveyed to all stakeholders. For example, we put “*kaori*,” “care for people” and “respect the environment” in the center of the Materiality to emphasize Takasago’s uniqueness.

### > Process for Defining Materiality

Identify material issues by examining global trends and industry trends in addition to the current materiality

Discuss within the Sustainability Promoting Committee

Exchange thoughts and opinions with Stakeholders

Discussion and approval by the Board of Directors



Meeting with stakeholders (women)

### > Materiality 2022-2023

Please see page 15

# Stakeholder Engagement

Takasago identified shareholders, society, suppliers, customers and employees as our key stakeholders.

We believe that seeking mutually beneficial solutions and continuous engagement will enable us to develop good relationships with stakeholders.

	Employees	Suppliers	Customers	Society	Shareholders and Investors
Why we engage	Recognizing that a diverse workforce supports us in our continuing to create new value. We are actively working to develop and promote human resources to create an attractive workplace. We also focus on creating a comfortable and safe workplace so that employees can work with peace of mind.	To maintain the high level of trust we receive from society while taking the environment into consideration, we recognize the importance of good relationships of trust with our suppliers, not just in the procurement of raw materials, but also in the procurement of all goods and services.	We continuously deliver safe, reliable, high-quality products and we shall fulfil our responsibilities to supply product to customers. Furthermore, we aim to provide comprehensive solutions to our customers' product manufacturing issues. We provide products with greater value by understanding the needs of our customers, identifying global trends, and integrating product concepts and technologies based on an understanding of consumers.	We actively participate in social contribution activities while maintaining good communication with local communities. As a flavor and fragrance company, we also engage in activities to familiarize people with fragrance through the introduction of fragrance culture.	We shall meet the expectations of shareholders and investors through sustainable growth achieved by sound and transparent corporate activities.
How we engage	<ul style="list-style-type: none"> <li>Employee awareness survey</li> <li>Self-assessment system</li> <li>E-learning programs</li> <li>Fair personnel system</li> <li>Information sharing with labor unions (labor-management councils, etc.)</li> <li>Welfare and benefit programs</li> <li>Compliance hotline</li> <li>Internal magazine</li> <li>Company recreation activities</li> <li>Health and productivity management</li> </ul>	<ul style="list-style-type: none"> <li>Mutual understanding through dialogue in person or via web meetings</li> <li>Development of a range of policies (e.g., the Supplier Code of Conduct)</li> <li>Distribution of the Takasago Responsible Sourcing policy (TRSP) and the obtaining of consent forms</li> <li>Ensuring the sustainability of procurement through regular supplier questionnaires, the Sedex SAQ, and responsible sourcing questionnaires.</li> <li>Compliance hotline</li> </ul>	<ul style="list-style-type: none"> <li>Responding to sustainability-related requests from customers</li> <li>Undergoing audits regularly</li> <li>Publication of the Sustainability Report (information disclosure)</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of annual social contribution activity plan</li> <li>Public relations magazine (The Takasago Times)</li> <li>Establishment of the Takasago Collection Gallery</li> <li>Support of educational institutions</li> </ul>	<ul style="list-style-type: none"> <li>General meeting of shareholders</li> <li>Financial results briefings (twice a year)</li> <li>Timely and appropriate disclosure of information, such as the publication of shareholder newsletters</li> <li>Enhancement of the website's IR section</li> <li>Meetings with institutional investors</li> </ul>
Key topics and concerns discussed	<ul style="list-style-type: none"> <li>Human resource development</li> <li>Diversity and inclusion</li> <li>Well-being</li> <li>Occupational health and safety</li> <li>Human rights</li> </ul>	<ul style="list-style-type: none"> <li>Responsible sourcing</li> <li>Traceability</li> <li>Climate change</li> <li>Human rights</li> <li>Risk management</li> </ul>	<ul style="list-style-type: none"> <li>Well-being</li> <li>Customer health and safety</li> <li>Responsible sourcing</li> <li>Innovation</li> <li>Digitalization</li> <li>Quality assurance</li> <li>Sustainable product development</li> </ul>	<ul style="list-style-type: none"> <li>Environmental conservation</li> <li>Climate change</li> <li>Biodiversity</li> <li>Human rights</li> <li>Social contribution activities</li> </ul>	<ul style="list-style-type: none"> <li>Governance</li> <li>Transparency</li> <li>Stable profitability</li> <li>Investment in the future</li> <li>Climate change</li> <li>Human rights</li> <li>Biodiversity</li> </ul>



# Initiatives Related to the SDGs

The SDGs provide an opportunity for companies to create value for both their business and society. We have considered how our key initiatives contribute to achieving the 17 goals of the SDGs. By steadily proceeding each initiative, we strive to contribute a sustainable society.

## Initiatives Related to the SDGs Highlights

 <b>3 GOOD HEALTH AND WELL-BEING</b>	Contribution of well-being through <i>Kaori</i> , Occupational health and safety	 <b>7 AFFORDABLE AND CLEAN ENERGY</b>	Energy reduction program
 <b>9 INDUSTRY INNOVATION AND INFRASTRUCTURE</b>	Developing of new products and materials with SDGs in mind	 <b>10 REDUCED INEQUALITIES</b>	Human rights, Diversity and Inclusion
 <b>13 CLIMATE ACTION</b>	Disclosure TCFD recommendations, SBTi certification	 <b>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</b>	Responsible sourcing












## Relation to the SDGs Overview

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
EHS	Climate Change					●	●						●				●
	Reduction of Environmental Impact					●	●		●		●	●		●			
	Occupational Health and Safety			●		●		●		●	●						
Social Aspects	Raw Material											●					●
	Responsible Procurement											●					●
	Customer Health and Safety			●								●				●	
	Innovation		●	●					●					●		●	
	Green Chemistry					●	●					●	●				
	Local Communities							●								●	
	Human Resources Development					●		●									
	Diversity and Inclusion					●				●							●
Contribution of Well-being through <i>Kaori</i>			●									●					
Digitalization								●									
Governance	Human Rights				●			●		●						●	●
	Economic Performance							●									
	Risk management							●									
Disclosure	Transparency										●						●

# 2022 Progress Highlights of Sustainability 2030

To achieve our Materiality, we have formulated a mid-to-long-term sustainability action plan, Sustainability 2030, which was launched in April 2021. The status of activities under this action plan is regularly reported at Board of Directors meetings.

The following is a summary of the progress of major activities in 2022. Please refer to the related pages the detailed activities and future initiatives. The full version of Sustainability 2030 is available here

	Item	Phase 1 (2021-2023) Targets	Actions taken in 2022	Progress in Phase 1	Related pages	
1	Climate Change	Obtain SBTi certification and establish an approach for the reduction of GHG emissions	Promote reduction with concrete plans Scope 1+2 Discussed on energy saving activities and introducing renewable energy across the globe. Scope 3 Selected for a support program hosted by the Ministry of Environment of Japan to reduce Scope 3 GHG emissions and established a concrete reduction plan. Started supplier engagement based on the plan.		P23, 31, 32, 33	
2	Reduction of Environmental Impact	Reduction of GHG emissions	27.5% reduction of GHG emissions by 2030 vs 2019	Compared with the previous year, 0.6% increase		P23, 31, 32, 33
		Reduction of water usage	1% reduction of water usage by 2022 (10% reduction by 2030 vs 2020)	Compared with the previous year, 0.9% increase		P34
		Reduction of waste generation	0.5% reduction of waste generation by 2022 (5% reduction by 2030 vs 2020)	The amount of generated waste has increased 29.4%. 0.98% of the waste generated by the entire group was disposed in landfills. (0.76% in the previous year.)		P34
3	Occupational Health and Safety	Compliance	<ul style="list-style-type: none"> <li>Develop EHS compliance management</li> <li>Implement an EHS compliance check</li> </ul>	<ul style="list-style-type: none"> <li>Renewing management tools</li> <li>Developed a portal site at global level</li> </ul>		P35
		Chemical handling	Examine the situation of chemical management at each site.	<ul style="list-style-type: none"> <li>Considering standardized management methods in Japan and overseas</li> </ul>		P35
		Improve work-life balance	Provide training	<ul style="list-style-type: none"> <li>Selected as a Health and Productivity Management Organization 2022.</li> <li>Provided seminars and training.</li> </ul>		P41
4	Local Communities	Develop an annual plan for social contribution activities per site	Developed an annual plan per site.		P63	
5	Green Chemistry	Development of eco-friendly technologies and products	Promoted projects such as projects to improve products' biodegradability	N/A	P58	
6	Responsible Sourcing	Raw Material Procurement	Implementation of Responsible Sourcing Policy	Obtained confirmation letter for the policy from approx. 750 of 1,100 companies (about 60%).		P43
7	Human Rights	Establish improvement scheme on human rights and working environment, utilizing the knowledge of third-party organizations	Most sites have received SEDEX audits every three years. Propagated improvements to the Group as needed.		P24	
		Conduct Human Rights Due Diligence regularly	Conducted Human Rights Due Diligence in 2022 over the group. No human rights violations were reported at Group companies.		P24	
8	Transparency	Disclosures of non-financial information	Enhance information	Besides the publication of Sustainability Report and Social and Environmental Report, we have disclosed our activities through Website and LinkedIn.		P.1
		Disclosures of information such as environmental impacts by products	Implement LCA and Sustainability ID Score	<ul style="list-style-type: none"> <li>LCA: Besides ℓ -menthol, completed the LCA calculation for 13 items</li> </ul>		P32

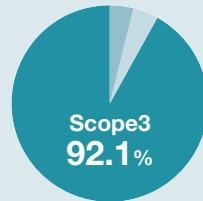
Material Issue 1

# Climate Change

## Basic Approach

The Takasago Group understands that climate change is an important issue that must be addressed from a long-term global perspective and has identified it as an item of very high importance among its material issues. We will continue to work on climate-related issues in order to minimize their impact in the future.

[tCO <sub>2</sub> ]	2019	2030 (Target)	Ratio
Scope 1+2	67,089	48,639	27.5%
Scope 3	781,321	675,842	13.5%

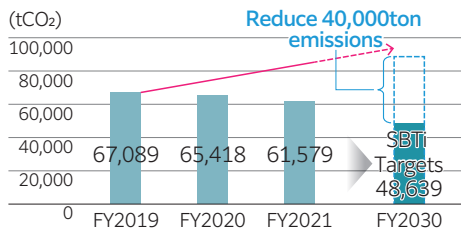


## Scope 1+2 (Our Operations)

We focus on renewable energy sources and energy efficiency and conservation as ways to reduce scope 1 and 2 GHG emissions.

Regarding renewable energy sources, some sites have already achieved 100% renewable energy-derived electricity. Looking at progress in 2022, we began utilizing electricity derived from renewable energy sources at the Iwata factory. The Iwata factory is the largest synthesis manufacturing site in our group and it consumes the largest amount of energy.

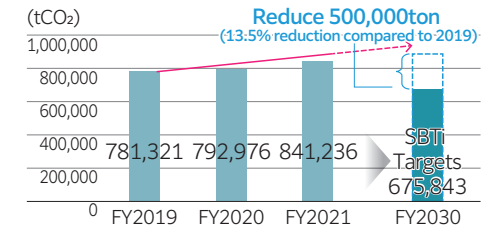
When it comes to energy efficiency and conservation, our EHS managers are leading energy saving activities at each site. For example, renovating equipment to improve energy efficiency, installing LEDs, mapping where we use energy, etc. Furthermore, best practices are shared globally.



Solar panels at Takasago Singapore / Renovation of equipment to improve energy efficiency at Takasago Coffee

## Scope 3 (Supply Chain)

Considering that 92% of our GHG emissions are scope 3 emissions, we need to put more effort into this area to reach the target. The Ministry of Environment of Japan selected Takasago International Corporation to participate in a support program to reduce scope 3 GHG emissions. Starting on Sep. 30, 2022, we received four months of consulting services and established a concrete reduction plan that includes for example, how to engage with our suppliers. Based on the plan, we will implement the reduction measures.



## CDP

Takasago group has responded to the CDP through its supply chain program since 2010. The group's score in the CDP's Climate Change program in 2022 was a B. In addition, the Takasago group was selected by the CDP as a Supplier Engagement Leader in its Supplier Engagement Rating in recognition of our climate change measures throughout the supply chain. The group's score in other CDP programs was B in Water Security and B in Forests (commodity: palm oil). We believe that these results were because we were highly evaluated for our environmental stewardship and supplier engagement activities. Our group will continue to strive for sustainability by reducing GHG emissions and mitigating climate-related risks.

## Future Efforts

Takasago group is accelerating its efforts to address climate change and it is taking concrete steps to implement various actions. Regarding our GHG emission reduction activities, our group will promote energy-saving activities and the implementation of renewable energy to achieve our SBT reduction targets for 2030. We also plan to strengthen engagement with our customers through the promotion of LCA calculations for our products. In addition, to address climate-related opportunities and risks, we will further promote green chemistry and enhance supply chain resilience. The Takasago group will continue to consider and implement a range of measures to contribute to a carbon neutral society.

# Human Rights

## Basic Approach

The Takasago Group is committed to respecting human rights in its business activities. To further clarify our stance in this area, we developed The Takasago Group Human Rights Policy in 2019. In addition, we established a procedure for human rights due diligence\* referring to guidance published by the Japan Business Federation. In 2021, we summarized a wide range of human rights issues as Priority Human Rights Issues and added them to the Policy. We also incorporated them into The Takasago Group Supplier Code of Conduct in order to strengthen human rights initiatives throughout our supply chain. We explain the Code of Conduct to our suppliers from whom we procure not only raw materials but also all goods and services and ask them to comply with the Code of Conduct in order to promote human rights protection throughout the entire supply chain.

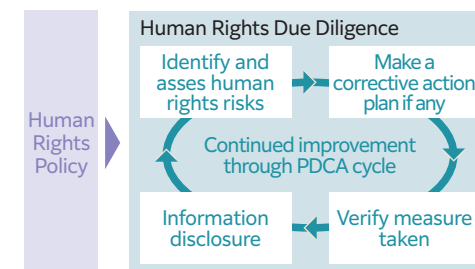
\*Human rights due diligence: a process starting with identifying human rights risks and including responding to issues and disclosing information.

## Strategy Regularly Conducting Human Rights Due Diligence

In 2019, we established a procedure for conducting human rights due diligence referring to a guideline published by the Japan Business Federation. We made a checklist following the guideline, and it is updated annually taking our business activities and global trends into account. In 2022, we focused on procurement, EHS and Human Resources & General Affairs. Regarding procurement, we checked our raw materials using the List of Goods Produced by Child Labor or Forced Labor made by the US Department of Labor.

Looking again at the procedure for the due diligence, the next step is to conduct interviews with the relevant divisions at all sites (per company unit) using the checklist every year. After the interviews are conducted, the results are summarized

and verified at Headquarters. The results are then reported to the Board of Directors and are disclosed on the website and in the Sustainability Reports. In fiscal year 2022, no human rights violations were reported at Group companies.



## Development of a Scheme to Review Human Rights and Labor Standards in our Business Flows

The Takasago Group uses Sedex, an online platform that enables companies to manage and improve working conditions in their supply chains. Companies are audited and respond to the questionnaires, and the results can be viewed by their own company and their customers. To review our own work environment regularly, our manufacturing sites are audited once every three years, and we proactively make improvements based on the results of the audits in cooperation with the relevant departments. As a buyer company, we also check the results of the audits of and questionnaires filled out by our suppliers who are linked to Sedex. This enables us to use Sedex for the management of human rights and labor environments within our supply chain and communicate with suppliers when necessary. Through this scheme, we regularly monitor and evaluate the human rights and labor environments in the supply chain.

## Establishment of a Reporting and Consulting Hotline

We established a compliance hotline at each site which also handles human rights matters as well and we have regularly reviewed the hotline system since 2020 to standardize and improve the hotline system. We will continue to monitor and verify the system to ensure improvements are implemented.



## Responsible Sourcing

### Basic Approach

As you are aware, the diverse challenges that we face globally, which include environmental concerns such as the exhaustion of resources and global warming and social issues including the prevention of workplace accidents and human-rights issues, are increasing and becoming more serious. This requires that companies act with agility in their responsible sourcing activities to ensure the sustainability of their procurement is based on strong and reciprocal relationships with partners and on transparent transactions. It is only when we cooperate with our business partners throughout the supply chain that we can implement the necessary action plans to optimize sustainable supply chains via the assessment of risks and implement kaizen or continuous improvement.

### Strategy

### Implementation of the Takasago Responsible Sourcing Policy

We have established the Takasago Responsible Sourcing Policy and are requesting that our business partners and their sub-contractors share and understand this policy and the underlying concept by distributing and submitting agreement forms.

In addition, in order to confirm compliance, we ask our suppliers to respond to the Takasago Responsible Sourcing Policy self-assessment questionnaire or the Sedex questionnaire, in order to confirm compliance and investigate the risks and the potential impact of procurement activities in the fields of human rights, labor, the environment and anti-corruption. If the possibility of an adverse effect on the supply chain is confirmed, we will immediately make an improvement plan and take corrective measures in cooperation with our stakeholders such as suppliers.

### > 2022 Progress & Results

After distribution of the Takasago Responsible Sourcing Policy to all the Takasago Group raw materials suppliers in 2021, we obtained agreement forms from approximately 750 (68%) of the about 1,100 suppliers in 2022. We also asked the suppliers who have submitted the agreement form to join Sedex or respond to the self-assessment questionnaire established by our policy to check their compliance. Approximately 260 suppliers have linked with the Takasago Group on the Sedex platform. Now we are starting a project with 3rd party organization to develop procedures for identifying risk on supply chain and CSR audit tools.

### > Future Efforts

In 2023, we will continue to obtain the Takasago Responsible Sourcing Policy agreement forms from our suppliers. We request that the suppliers who have submitted the agreement form join Sedex or respond to the self-assessment questionnaire established by our policy. We will continue to provide feedback to the suppliers who respond, and if there is a need for improvement, we will work together with the supplier to improve. Through the CSR audit project, we will establish guidance to identify risk on supply chain and plans for the implementation of CSR audits.



Material Issue

4

# Digitalization

## Basic Approach

The Takasago Group is focusing on the continued development and utilization of IT as corporate infrastructure for sustainable growth.

In addition to the global integration of ERP and satellite systems, the automation of manufacturing, and the use of artificial intelligence (AI), we are also promoting a paperless work environment that can flexibly accommodate remote work.

We consider digitalization to be an indispensable strategy for realizing the standardization of our operational flows as well as to improve the productivity of the Takasago Group under the One Takasago concept. Furthermore, the continuous enhancement of IT security is an urgent issue to respond to increasingly diverse and sophisticated cyber-attacks. We continue to implement measures to prevent attackers from entering our network by using vulnerability assessment tools for example.

We have compiled these issues into Takasago GIT Strategy — 4 Platforms,\* a blueprint for the period up to 2030. In line with this blueprint, we will steadily improve and utilize IT, which supports the foundation of our group's corporate activities, and strengthen security in a step-by-step manner.

\*4 Platforms: IT Security Enhancement, GSAP/Integration of Satellite Systems, Digitalization of Corporate Divisions, and Other Management

## > 1 IT Security Enhancement

The improvement of digital security measures is positioned as one of the most important initiatives. Technical measures that we are planning include the global implementation of multi-factor authentication and vulnerability assessment tools, and the establishment of a dedicated global security team. On the software side, The Takasago Group is strengthening its awareness-raising activities by regularly reviewing internal rules and making ongoing e-learning programs available to employees.

## > 2 GSAP/Integration of Satellite Systems

Prior to the deployment of the Global SAP system at each site, we began the development of the Global Template in 2020. Although the project's schedule was affected by the pandemic, we completed the project about two years after it began. Last year, SAP S4/Hana went live at Takasago Singapore, the first site where it was implemented.

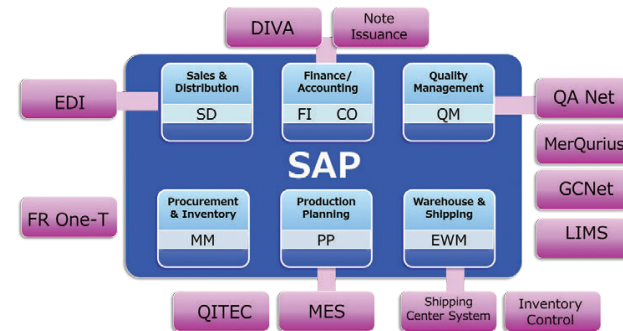
### Scope for the Modules



In addition to integrating our ERP systems with SAP globally, the main focus of this project is to align business processes with the Takasago Best Practices, starting with overseas sites and working toward implementation at the headquarters in Japan. After 2025, the scope of implementation will be expanded to include R&D and Safety & Regulatory Affairs

### Satellite Systems

This will also be a long-term project, but creating a global design now is quite important for the future and will enable us to design all of the global Takasago systems according to its architecture.



### > 3 Digitalization of Corporate Divisions

Global IT supports digital transformation designed by each corporate function. Recognizing that digitalization as an indispensable strategy to improve the productivity of the entire group, we are looking into many ways to utilize AI in the development of flavors and fragrances, as well as in production planning, on top of the current automation systems implemented at manufacturing sites. We also believe that the combination of AI-based automatic recognition technology, industrial robots and conveyors has the potential to transform the traditional human-dependent production process of compounding flavors and fragrances. Furthermore, by linking these automated facilities with a globally integrated ERP system, we aim to achieve a high level of safety, productivity and product quality.

### > 4 Other Managements

Global IT is trying to build an efficiently managed (virtual) global organization. The functions of Global IT are to control the global budget (based on local IT budgets), carefully observe local projects and avoid any duplication of work or inefficiency.

#### Human Resources Development

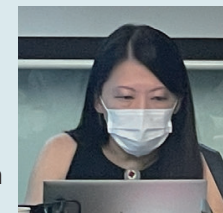
In response to the shortage of human resources due to the enhancement of digitalization globally, we have been working hard to recruit fresh graduates and mid-career workers who are interested in ICT, and also to best utilize and train the human resources we already have internally.

For example, we try to optimize local talent globally for global projects, and this has become an opportunity for the human resource development of the entire group. The GSAP project consists of teams with diverse members, ranging from employees in senior positions to employees engaged in day-to-day business operations. We also actively support the participation of younger people, including for training purposes, and are systematically developing human resources with an eye toward the future.

#### Voice

**12<sup>th</sup> October 2021 was the kick-off day for our GSAP TIS SAP project.**

**Site Coordinator, Valerie Kam**



It was an exciting journey for the TIS team and exciting to be the first Takasago site to implement the best Takasago practices using the SAP H/4HANA system. The local team had been looking forward to this big change. At the same time, it was also frightening due to the many unknown challenges ahead, but we all knew that it would not be an easy journey.

After TIS toiled for about 12.5 months to prepare to transition our operations from an outdated two-decades-old legacy system to SAP S4/HANA, finally, the day arrived.

1<sup>st</sup> November 2022 was the TIS SAP Go-live day, and we survived!

I must say that our LFLs and extended project members were really great team players.

Without their “never give up” spirit and together or our supportive global Project Owner, local management and GSAP team, we would not be able to reach this major milestone together. To date, however, we are still stabilizing and there are issues here and there, but we believe that things will get better and we will grow stronger in 2023.

Looking back, some of our biggest challenges were

- The big gap in the master data between our legacy system and SAP, necessitating an unexpected increase in resources
- Changing people’s mindsets was difficult, but “It’s always impossible until it’s done.”
- As TIS were first time SAP users, we may not be experienced enough to troubleshoot as quickly as our other sites who were already experienced SAP users, but we were so lucky to have our very supportive and encouraging management and GSAP team.

# Green Chemistry

## Basic Approach

Based on our corporate mission, "Create new value through innovation rooted in kaori (kaori: aroma in Japanese)," our R&D has set "Generating competitive technologies leveraged by state-of-the-art science" and "SDGs conscious developing new products and materials" as priority issues in the NGP-1 period, and green chemistry plays a vital role in solving these issues.

We are working to design new processes that take environmental load reduction and energy efficiency into consideration and working to develop unique materials and products utilizing renewable raw materials or unused resources in line with the SDGs. Through these eco-friendly R&D activities, we are advancing green chemistry aiming to achieve Vision 2040, "Care for People, Respect the Environment."

## Strategy

### Promote eco-friendly R&D guided by the twelve principles of green chemistry

We facilitate the efficient use of water and the reduction of greenhouse gas emission to reduce environmental load by utilizing our unique catalytic technology, introducing white biotechnology and designing eco-friendly processes. At the same time, to efficiently use limited natural resources, we are also actively working to explore and utilize renewable raw materials, reduce the use of natural raw materials by developing and switching to alternative materials, and utilize unused resources. We contribute to the realization of a sustainable society through these eco-friendly R&D activities.

## > 2022 Progress & Results

In the development of aroma ingredients, we have been promoting BIOSWITCH® by converting from petroleum-derived raw materials to renewable feedstocks. We focus on bio-based and biodegradable aroma ingredients developed from renewable feedstocks, and we also believe the introduction and utilization of biotechnology is one of the key approaches for practicing green chemistry. We are pushing forward with the introduction of leading-edge technology through open innovation. As a part of these efforts, we are working on "Development of Bio Production Technology to Accelerate the Realization of Carbon Recycling" project in collaboration with a national research and development agency, the New Energy and Industrial Technology Development Organization (NEDO).

In the field of organic synthesis, process research laboratory in Iwata factory has been collecting the reaction data for safety assessment and energy control, and by utilizing those data for a distillation simulator and a plant information management system, we succeeded in optimizing the distillation conditions for aroma ingredients, which resulted in improving the productivity by 12%. In addition, by improving the reaction conditions in manufacturing process of pharmaceutical intermediates, we succeeded in reducing the usage of organic solvent by 48% compared to the conventional process. For sustainable use of natural resources, we have strengthened our efforts to optimize the manufacturing process of catalysts and recover precious metals from spent catalysts. We will continue to promote initiatives to reduce our environmental load.

## > Future Efforts

Along with our strategy based on Vision 2040, "Care for People, Respect the Environment," we will continue to push forward with eco-friendly R&D activities with a focus on green chemistry to solve priority issues during the NGP-1 period.



# Environment, Occupational Health & Safety

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Takasago Safety Day 2022



# Global EHS Management

EHS headquarters (“EHS HQ”) defines the Takasago Group (“Takasago”) EHS Mission as follows:

“EHS Mission”

To build a sustainable EHS culture, Takasago will:

- Fulfill the legal, stakeholders, and other requirements applicable to our operations.
- Identify and control the risks inherent to our activities, to avoid incidents, illnesses and negative environment.
- Imagine and realize initiatives for the conservation of natural resources, prevention of pollution and reduction of our carbon footprint.
- Incorporate environmental protection, safety and occupational health in our business plan and decision-making.

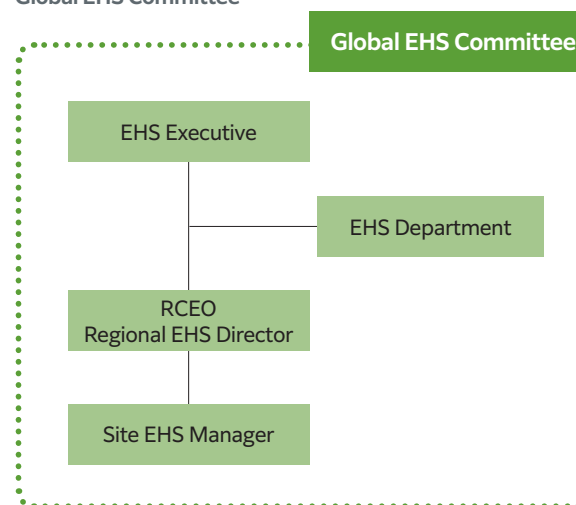
Sustainability 2030, a 10-year plan for sustainability promotion activities from FY2021 to FY2030, has also been launched alongside the EHS Mission.

In Sustainability 2030, EHS HQ set goals related to its EHS activities, including, but not limited to, climate change (reduction of greenhouse gas (“GHG”) emissions), reduction of environmental impact (sustainable use of resources and prevention of pollution) and occupational health and safety (promotion of occupational safety and health).

At the end of the first 10-year plan, the goals of the EHS activities had been successfully achieved.

To promote the standardization of EHS activities and implement the plan globally through the operation of the above management system, Takasago has organized the Global EHS Committee (“GEC”). The GEC, chaired by the EHS Executive, Tatsuya Yamagata, is composed of officers in charge of EHS at our production sites.

## Global EHS Committee



## > EHS Statement

Takasago has established the EHS Statement as one part of the foundation of the management of the entire group.

This EHS Statement is written in 11 languages to share the Takasago Group’s vision and values for its EHS activities with all of Takasago’s employees in the 28 countries it operates in.

The EHS Statement states that in all its business activities, EHS has the highest priority.



# | Approach to Climate Change

## > Formulation of climate change strategy and disclosure in line with TCFD recommendations

Takasago International Corporation expressed our support for the TCFD recommendations in November 2019, and we disclose our principles and strategy for addressing climate change based on the recommendation. The TCFD recommendations set four pillars (governance, strategy, risk management, metrics and targets) for disclosure, and require companies to disclose policies and measures for each pillar, especially climate-related risks and opportunities. We will continue to contribute to the realization of a more sustainable society by expanding information disclosure in line with the TCFD recommendations.

## > Governance

To establish management that earns high appraisals from and the trust of all our stakeholders, the Takasago group strives to reinforce its corporate governance. We recognize that climate change is the most important issue in our materiality assessment and discusses policies and measures regularly at board of directors meetings. Regarding the specific issues of energy consumption and GHG emissions, the Global EHS Committee discusses detailed countermeasures.

## > Strategy

The Takasago Group recognizes the important strategic business perspectives on the various climate-related risks and opportunities. Our sustainability team conducted scenario analyses and identified the risks and opportunities beyond 2030.

### - Climate-related risks

We recognize the impact of disasters such as heavy rain and floods can have on direct operations and the supply chain. As our operations have previously been affected by these disasters, we are working hard to reduce their impact by formulating Business Continuity Plans (BCPs) and strengthening business continuity management.

### - Climate-related opportunities

In FY2022, energy security became an important issue worldwide due to rising energy costs triggered by the Ukraine crisis. To deal with this situation, our group promotes measures to improve energy efficiency and profits by reducing the cost of energy, and it strengthens the resilience of our energy supply. Regarding our energy saving activities in particular, we have been implementing various measures for a long time.

- Promoting the switch to more efficient fuels (e.g., from heavy oil to LNG)
- Upgrading to energy- and resource-saving production equipment
- Installing cogeneration equipment
- Reducing energy consumption and GHG emissions by automating facility operations, reviewing operation methods and changing production processes
- Appropriately maintaining and inspecting facilities
- Installing LED lights
- Providing environmental education, including training programs specific to energy and climate change



In addition, we recognize the development of low-carbon products and technologies through process innovation as a major climate-related opportunity and are working diligently to develop them.

## ➤ Risk Management

The Takasago Group regularly assesses important business risks and strives to avoid or mitigate their impact to conduct stable business activities. The impact of climate-related risks on business are discussed, analyzed and evaluated by the Risk Management Committee so that the board of directors can evaluate and decide countermeasures together for them. In 2021, we experienced supply chain disruptions due to the flooding of the Rhine River caused by torrential rains at Takasago Europe G.m.b.H. (TEG), which is our flavor manufacturing site in Zülpich, Westfalen, Germany. We found that it is important to regularly review the scheme for emergencies and we will continue to enhance risk management.

In addition, our integrated global ISO 14001 certification helps us monitor and manage environmental risks across all of our sites, including the R&D centers and manufacturing sites. Internal ISO audits are also regularly conducted.

## ➤ Metrics and Targets

Takasago International Corporation monitors and discloses GHG emissions and reduction rates as KPIs to address climate change issues. We also conduct the third-party verification of GHG emissions as a key metric. For details, please refer to the environmental data section of this sustainability report.

# | Environment

## Energy and Emissions

At Takasago, most of the energy used is electricity purchased for use in production sites and offices.

Takasago has been working through various methods to reduce its use of energy related to CO<sub>2</sub> emissions. To further reduce CO<sub>2</sub> emissions, Takasago is proactively considering switching to energy sources with lower CO<sub>2</sub> emissions such as renewable energy through an analysis of the conditions and situation of each site as well as business and stakeholder needs.

## ➤ Our Target

We set targets in accordance with the guidance of the Science Based Targets Initiative (SBTi) to reduce direct scope 1 and scope 2 emissions to 27.5% of the 2019 level by 2030, and to reduce scope 3 supply chain emissions to 13.5% of the 2019 level by 2030.

## ➤ 2022 Result Scope 1 and 2 emissions

In 2022, as a result of our Energy use reduction activities, Takasago's total energy consumption decreased 1.8% compared to the previous year. Despite this, CO<sub>2</sub> emissions in 2022 increased 0.6% compared to 2021 due to increase in the emission factors.

## ➤ Scope 3 emissions

GHG emissions are verified by a third party. We are aware that the characteristics of our business cause the highest emissions in Category 1 (procurement activities). After considering reduction measures with the support of the Japan Ministry of the Environment, we decided to further promote supplier engagement



**Energy consumption within the organization**

	2021 (restated)	2022	Changes in %
Total fuel consumption within the organization from non-renewable sources (GJ)			
Town Gas	407,388	384,675	-5.6%
LP Gas	7,145	8,706	21.8%
LNG	70,713	54,519	-22.9%
Natural gas	5,651	35,517	528.5%
Residual Fuel Oil	33,768	31,847	-5.7%
Gas/Diesel Oil	6,687	6,536	-2.3%
Kerosene	263	193	-26.7%
Gasoline	7,801	7,892	1.2%
Waste Oil	46,364	50,518	9.0%
<b>Total Direct Energy</b>	<b>585,781</b>	<b>580,403</b>	<b>-0.9%</b>
Electricity, heating, cooling, and steam purchased for consumption (GJ)			
Electricity purchased	677,365	646,724	-4.5%
Steam purchased	50,031	50,498	0.9%
<b>Total Indirect Energy</b>	<b>727,396</b>	<b>697,222</b>	<b>-4.1%</b>
Renewable energy consumed (GJ)			
Biomass incinerated	43,338	30,361	-29.9%
Electricity purchased	112,541	134,691	19.7%
Electricity generated	0	272	
<b>Total Renewable Energy</b>	<b>155,879</b>	<b>165,324</b>	<b>6.1%</b>
<b>Total Energy</b>	<b>1,469,057</b>	<b>1,442,949</b>	<b>-1.8%</b>

**Energy intensity**

	2021 (Restated)	2022
Energy intensity (GJ per tonne products)	19.03	18.81

**Greenhouse gas (GHG) Emissions (scope 1 + 2)**

	2021 (Restated)	2022	Changes in %
GHG emissions (MT)			
Scope 1*	30,076	29,676	-1.3%
Scope 2	31,503	32,269	2.4%
<b>Total (Scope 1 + 2)</b>	<b>61,579</b>	<b>61,945</b>	<b>0.6%</b>

\* Gases included in the calculation of Scope 1 ; CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, and SF<sub>6</sub> NF<sub>3</sub>, or all.

**GHG Emissions Intensity (scope 1 + 2)**

	2021 (Restated)	2022	Changes in %
<b>Total (Scope 1 + 2)</b>	<b>0.80</b>	<b>0.81</b>	<b>1.2%</b>

**Other Indirect Greenhouse Gas (GHG) Emissions (scope 3)**

	CO <sub>2</sub> emission (MT)	Ratio to GHG total Ratio to the gross volumes
cat 1 Purchased goods and services	864,513	86.40%
cat 2 Capital goods	23,369	2.34%
cat 3 Fuel- and-energy-related activities	12,312	1.23%
cat 4 Upstream transportation and distribution	26,549	2.65%
cat 5 Waste generated in operations	5,140	0.51%
cat 6 Business travel	509	0.05%
cat 7 Employee commuting	5,480	0.55%
cat 8 Upstream leased assets	N/A	N/A
cat 9 Downstream transportation and distribution	N/A	N/A
cat 10 Processing of sold products	N/A	N/A
cat 11 Use of sold products	N/A	N/A
cat 12 End-of-life treatment of sold products	726	0.07%
cat 13 Downstream leased assets	61	0.01%
cat 14 Franchises	N/A	N/A
cat 15 Investments	N/A	N/A
<b>Scope 3</b>	<b>938,659</b>	<b>93.81%</b>
<b>Scope 1</b>	<b>29,676</b>	<b>2.97%</b>
<b>Scope 2</b>	<b>32,269</b>	<b>3.22%</b>
<b>GHG total amount</b>	<b>1,000,604</b>	

\* Concerns period is for 01 April 2021 to 31 March 2022

[See the Statement](#)

## Water and Effluents

As a chemical products manufacturer, Takasago requires a sufficient quantity and quality of water. Therefore, we recognize the importance of securing a sufficient quantity and quality of water for the group's operations.

Though currently Takasago production sites have secured a sufficient quantity and quality of water, Takasago must anticipate a decrease in the available quantity and quality of water due to changes in situations such as the climate. Takasago manages water resources appropriately and is promoting the reduction of water usage throughout the entire group.

EHS HQ continuously collects and monitors data regarding the total water withdrawal of the entire group using T-ReCS®, a data management system.

### Total Water Withdrawal by Source

water withdrawal (ML)	2021		2022	
	All areas	Areas with water stress	All areas	Areas with water stress
Third Party				
Municipal Water	680	109	695	82
Industrial Water	438	0	422	0
Surface Water	0	0	0	0
Ground Water	2,056	0	2,086	0
<b>Total Water Withdrawal</b>	<b>3,174</b>	<b>109</b>	<b>3,203</b>	<b>83</b>

We are reducing water withdrawal by implementing more efficient equipment or technology and by redesigning production processes.

Some production sites in areas with abundant resources withdraw a licensed amount of groundwater for production purposes and EHS HQ monitors the impact on the environment.

### Water Discharge by Destination

water discharge (ML)	2021 (Restated)		2022	
	All areas	Areas with water stress	All areas	Areas with water stress
Surface Water	2,518		2,495	
Ground Water	0		0	
Third Party	451		517	
<b>Total Water Discharge</b>	<b>2,969</b>	<b>44</b>	<b>3,012</b>	<b>73</b>

Regarding wastewater generated in production activities, we discharge wastewater while complying with local laws and regulations. At sites where wastewater has a high pollution load, biological treatment is performed and wastewater is discharged after meeting effluent standards, or treatment is outsourced to a specialized third party.

Some sites discharge wastewater into rivers but only after biological treatment.

### Water discharge by level of treatment

water discharge (ML)	2021 (Restated)		2022	
	All areas	Areas with water stress	All areas	Areas with water stress
No treatment	542		660	
Primary treatment	29		31	
Secondary treatment	2,348		2,321	
<b>Total Water Discharge</b>	<b>2,969</b>		<b>3,012</b>	

### Water Consumption

Water Consumption (ML)	2021 (Restated)		2022	
	All areas	Areas with water stress	All areas	Areas with water stress
<b>Total Water Consumption</b>	<b>205</b>	<b>10</b>	<b>191</b>	<b>10</b>

## Waste

Takasago continually challenges itself to reduce the total amount of waste it generates by promoting the entire group's proper sorting of waste to recover valuable resources, recycling some waste to avoid disposal in landfills, and improving product designs and production processes. In addition, Takasago properly manages contracted waste disposal companies to prevent the inappropriate disposal of waste, such as illegal dumping.

### Waste by Type and Disposal Method

Hazardous waste (tonnes)	Onsite	Offsite	Total
Recycling	0	1,887	1,887
Incineration	0	195	195
Landfill	0	28	28
<b>Total hazardous waste</b>	<b>0</b>	<b>2,110</b>	<b>2,110</b>
Non-hazardous waste (tonnes)	Onsite	Offsite	Total
Recycling	2,172	17,991	20,163
Dehydration	10,914	0	10,914
Incineration	0	2,638	2,638
Landfilling	0	197	197
<b>Total non-hazardous waste</b>	<b>13,086</b>	<b>20,826</b>	<b>33,912</b>

In 2022, 0.8% of the waste generated by the entire group was disposed in landfills.

## Environmental Compliance

Compliance is one of the most important management issues.

Environmental compliance is managed based on the processes of the ISO 14001 environmental management system ("EMS"), which clearly defines applicable items, applicable standards, measurement standards, and application requirements.

Takasago has established a process for obtaining the latest information about EHS, safety, disaster response, legal and regulatory requirements, the needs of society and other trends.

# Occupational Health & Safety (OHS)

Takasago is globally advancing its acquisition of the ISO 45001 certification of its occupational health and safety management system (“OHSMS”), in addition to the ISO 14001 certification. In 2020, Takasago production sites in Japan acquired ISO 45001 certification and the Corporate Research & Development Division in Japan and 8 overseas production sites acquired the certification in 2021. In addition, in 2022, 3 overseas production sites acquired the certification. To date, a total of 21 sites globally have acquired the certification.

Takasago will continue to expand its overseas production bases' acquisition of this certification and promote occupational safety and health initiatives through a globally unified management system.

## › Incident Reporting Rule and Incident Investigation

EHS HQ established the reporting rule for incidents (including occupational accidents) in 2020. This has enabled the entire group to receive and share incident information in a timely manner in accordance with this rule.

Investigating the cause of incidents is very important from the perspective of preventing incidents that are the same or similar. Once EHS HQ receives an incident report from the site where an incident occurred, EHS HQ reviews the incident's description, causes and corrective actions to ensure the accuracy of the investigation conducted at the site.

## › Hazard Identification, Risk Assessment

Takasago's Occupational Health and Safety Risk Assessment (“OHS RA”) Rules apply at all of its production sites unless there are relevant local legal requirements that are more stringent. Takasago evaluates the occupational health and safety risks impacting all employees, including workplace hazards, based on this rule. The EHS HQ is currently working on building supplementary procedures for OHS Rules to globally enhance the OHS RA.

## › OHS Communication & Inspection

Global EHS Meetings are held at least four times a year to share information related to EHS.

EHS HQ conducts EHS inspections at several production sites every year. To date, EHS HQ has inspected sites in the US, India and Singapore. During these inspections, EHS HQ introduced information about the EHS requirements, checked progress, discussed EHS issues and shared best practices. Due to COVID-19, these site inspections have been suspended since early 2020, but in their place EHS HQ has developed a remote EHS inspection method and inspected production sites in Mexico successfully. EHS HQ will continue to perform EHS inspections remotely until this situation is resolved and ensure that EHS activities are being conducted at sites globally. Fortunately, as the COVID-19 situation eased, EHS HQ visited the Mexico site which was remotely inspected in 2020 and conducted an on-site inspection.

## › Employee Occupational Health and Safety Training

To promote OHS improvement activities, it is necessary for all workers to correctly understand and be aware of their roles and responsibilities.

To this end, we are working to improve our capabilities through a variety of education and training programs, including the training of officially certified OHS personnel and education for workers who require specialized knowledge and skills for hazardous work.

EHS HQ held an OHS RA workshop to learn the information and practical awareness that is needed to promote OHS RA.

## › Occupational Injuries (Work-related Injuries)

EHS HQ is preparing to aggregate its OHS data, including information about occupational injuries and illnesses using T-ReCS®. Moreover, EHS HQ plans to build a more efficient system to aggregate data globally.

In 2022, there were 12 work-related injuries in Japan, 14 in EMEA, 3 in Asia-Pacific, and 5 in the Americas. The “Occupational Injury Frequency Rate” was 3.36, and “Severity Rate” was 0.33. The main type of work-related injury was being caught in or between machines or objects. There were no fatal work-related injuries in the same period.

### Column

#### Takasago USA Flavor factory (Teterboro) celebrating 500 days without a lost time accident

On May 7th 2023, we went 500 days without a lost time accident. We celebrated on May 24th, with an ice cream truck for all the employees to celebrate and enjoy.

Everyone really appreciated having a celebration for this great achievement.

We are looking forward to many more milestones and celebrations in the future.



## › Takasago Safety Day 2022

On April 10, 2022, the 9th Takasago Safety Day was held with the pledge to “Never again allow an incident like the one that occurred in 2013.” Since April 10 fell on a Sunday in 2022, the Takasago Safety Day event that all of the Takasago Group participates in was held on Friday, April 8.

In 2022, under the theme of “Driving better communication to achieve Zero Accidents,” education and training were conducted to reconfirm awareness and improve knowledge of safety while taking sufficient infection prevention measures.

At each site, individual employees, small groups and departments watched the video of the CEO message and the video about the core time program, followed by education and training sessions that were each designed to better communication in line with the theme.

For example, in some sites, when conducting firefighting drills, participants were not informed in advance of the location of the fire and whether there were any injuries. In other sites, they divided into an inspection team and an inspected team in some department, and the inspection team explained to the inspected team the areas of risks, incidents that had occurred in the past in that section, and countermeasures against those incidents, then inspection team received such explanation, asked several questions, and exchanged opinions on whether the inspected team had a correct understanding of the situation. Each site dedicated very useful time to this type of training.

Some participants thought that work-related injuries and communication might not have much to do with each other, but as a result of the training program, many of them said that they were reminded of the importance of communication. The day was a reminder that we should promote EHS activities with an awareness of the importance of communication on a daily basis.



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# | Our People



## Message from General Manager, Human Resources and General Affairs Div.

### Hirokazu Isono

The management of the Takasago Group aims to create a company where each employee can experience a sense of fulfillment and happiness at a high level.

Specifically, we strive to establish an environment where people from diverse backgrounds can work with joy and a sense of purpose, create a system that supports individual growth, and above all, implement management practices that enable employees to achieve a healthy work-life balance.

The management of the Group will continue to work to make this a company with high employee satisfaction and to contribute to society by achieving sustainable business activities.

## > Basic Approach

— Reform of Work Practices and Enhancement of Workplace Environments —  
Realize work practices that improve the capabilities of employees and that respect their diversity, character and background. Also, provide safe and healthy working environments.

- Establish a human resources development program in which individuals can fully exercise their capabilities.
- Promote equal employment opportunities within the workplace and prohibit any discrimination due to nationality, religion, sex, age, race, creed or other related social status as it relates to employment decisions.
- Promote the reform of work practices including breaks and leave, ensuring a healthy work-life balance.

- Respect each employee's individuality and support their efforts to develop their skills and career.
- Develop and maintain an appropriate working environment to ensure employee safety and enable them to maintain and improve their health

\*Extracted from The Takasago Group Charter of Corporate Behavior and Code of Conduct

## > Human Resources Development Statement

Takasago recognizes that our employees are a critical component for success. The organization supports an environment that empowers employees and challenges them to reach their full potential. We focus on the combination of employees' aspirations for the growth of their careers and opportunities to enhance skills by offering on-the-job and external training opportunities. We earn the trust of our customers by providing pioneering technology and exceptional service resulting from the solid teamwork of The Takasago Group's employees. To maintain this trust, we continually invest in educational development and enrichment opportunities, resulting in confident employees that embrace challenges, learn from failures as an avenue for growth and successful and innovative improvement. Lastly, the organization inspires teamwork by engaging in a diverse array of professional skills, fully equipped to meet a range of challenges. Roles and responsibilities are aligned across affiliates, ensuring skills sets and requirements are comprehensive, utilizing local talent in a global manner.

\*Quoted from The Takasago Group Human Resources Development Statement

## › Employment Status

Takasago's workforce is in 28 countries and regions around the world is engaged in a variety of contracts and types of work.

### Employees including temporary staff

Region	Employees	Male	Female	%Male	%Female
Japan	1,852	1,455	397	79%	21%
Asia Pacific	902	466	436	52%	48%
Europe	764	442	322	58%	42%
Americas	784	435	349	55%	45%
<b>Total</b>	<b>4,302</b>	<b>2,798</b>	<b>1,504</b>	<b>65%</b>	<b>35%</b>

### Permanent employees by age group

Region	<30		30-50		>50		Total
	Male	Female	Male	Female	Male	Female	
Japan	230	65	771	190	427	133	1,816
Asia Pacific	98	75	266	280	77	53	849
Europe	42	67	268	181	114	64	736
Americas	43	62	217	182	175	104	783
<b>Total</b>	<b>413</b>	<b>269</b>	<b>1,522</b>	<b>833</b>	<b>793</b>	<b>354</b>	<b>4,184</b>

## › Training and Education

The global business environment has been changing over the years. The landscape surrounding businesses now is increasingly competitive and complex. The digital revolution is reshaping the employee mix. The changes have unavoidably contributed to persistent uncertainty, the establishment of a multigenerational workforce, and the shortening of the shelf life of knowledge, and they have placed a premium on reskilling and upskilling.

The Takasago Group are companies that are built upon capable people whose learning is fueled by their foresight and innovation. We have developed the Educational Programs concept to contribute to the upskilling of our employees, increase our employees' creativity and elevate our employees to new heights.

### Educational Programs



Takasago Educational Program consists of above 5 pillars

### Number of training programs employees participated in

Category	Employees applies to the trainings (approx.)	Employees participated in	Ratio
Compliance (anti-corruption, anti-bribery, etc.)	4,000	1,346	33.7%
Preventions of against discrimination and the violation of human rights		2,286	57.2%
Professional Development		3,066	76.7%
IT Security		3,995	99.9%

One of the site-specific programs that has been established is Takasago International Corporation (TIC)'s Takasago College, an in-house institution that has been operating since 2009 to provide our employees with an environment that enables them to acquire experience and increase their skills in a broad range of areas.

**Basic Course**

Participants are junior employees. To deeply understand each other's business operations, they make a presentation about the flow of their own operations. This activity is expected to strengthen their performance and communication capabilities.

**Advanced Course**

Takasago provides a program to enhance participants' knowledge and skills. To increase their flexibility to enable them to take on new challenges, participants learn about communication skills, logical thinking and other skills. The program is not just about learning skills. It is also focused on ways to utilize these skills on the job.

**Current learning & development programs at Singapore**

<p>eLearning Platform</p>		<p>Takasago International Singapore (TIS) has made available a platform with more than 15,000 online learning programs developed by industry experts. These courses are made available in many languages including English, Spanish, German, French and Japanese. We leverage the eLearning platform to enable self-directed online learning and development. It has been especially critical for thriving through knowledge during the pandemic.</p> <p>HR constantly creates new learning paths on the eLearning platform, uploading company specific training content (i.e., safety videos) and recommends courses via email to all employees and to specific departments to encourage a culture of self-directed learning within the company.</p>
<p>Present with Impact</p>		<p>TIS has created an extra ordinary presentation skill training program designed to enable:</p> <ul style="list-style-type: none"> <li>- Meetings with managers for pre-training analysis</li> <li>- 1-on-1 coaching for each trainee</li> <li>- Employees taking the course to meet with trainers regarding presentation preparation for one year following the end of the training program</li> </ul>
<p>Critical Thinking</p>		<p>Creative problem solving and decision making is important for people in all divisions, from managers to executives. Takasago has designed a training program that focuses on enabling employees to think critically in every situation and on methodologies for identifying creative solutions to every problem.</p>
<p>Key Account Management</p>		<p>Understanding effective ways of managing key accounts is a fundamental part of enabling businesses to grow stronger. TIS has created a key account management training program with the intent of improving our teams' skills in these areas:</p> <ul style="list-style-type: none"> <li>- Effective account business planning</li> <li>- General business and the development of businesses</li> <li>- Measuring the effectiveness of your relationships with customers</li> <li>- Fine tuning strategy</li> </ul>



## ➤ Diversity Equity and Inclusion

Diversity is a core value of The Takasago Group. We are committed to cultivating a globally diverse, equitable and inclusive culture. We value the contributions of all its employees and believe that the broad perspective provided by a diverse workforce adds value to all our products and operations on a global scale.

With the great contributions of the Global HR team, we established Takasago Group Diversity Equity & Inclusion Policy in 2022.

To embody the Policy, we identified 6 pillars for our targets: Diverse working styles, Women, Disabilities, Senior Employees, People from other countries, and LGBT issues. Recognizing that situations are different in each country, we are developing targets per site per pillar.

[Full version of Takasago Group Diversity Equity & Inclusion Policy](#)

### Current programs with these goals in the USA include:

- Diverse recruiting initiatives and partnerships with local high schools, universities and community outreach programs to enhance talent acquisition efforts.
- Cross-cultural awareness training for employees and managers to understand and embrace differences and increase awareness of unconscious biases.
- Observation of holidays that recognize and celebrate diversity and inclusion
- Flexible employee policies and programs.
- Performance-based recognition across all levels, regardless of background.

## Round-down salary scheme at Takasago Europe Perfumery Laboratory S.A.R.L. (TEPL)

The idea is to collect monthly donations from employees and contributions from the company to support associations with sustainable, social and inclusive activities. Around 25% of employees donate each month (the program began in February). The concept is to propose that the employees who want to join the program round down their monthly salary to the euro and give the rounded-down cents plus an extra donation (up to €15/month) to support two associations selected by TEPL (HR/Sustainability steering committee). TEPL contributes by doubling the cents donated by employees. 100% of the funds are given to non-profit associations and, as per French law, donations are tax-deductible.

## ➤ Work-life Balance

Takasago strives to create a good working environment as we believe it helps improve our productivity and make our employees' lives more fulfilling. One of the targets in our new medium- to long-term sustainability plan, Sustainability 2030, is the improvement of our employees' work-life balance. Enormous efforts have been made at each site and we will continue to care for employees working in many different situations. Local efforts also provide customized initiatives. In Brazil, for example, they have the following programs:

- Training for managers to support employees using specific tools and to look for problems such as burnout or overwork. Additionally, training to improve their coaching skills and to enable managers to offer specific benefits to employees who are struggling, such as therapy or coaching from external professionals.
- The creation of a family-friendly work environment, where children and family can visit the company during special events like Mother's Day and also participate in specific races. This is incentivized and sponsored by Takasago Fragancias E Aromas Ltda. (TBR)
- The encouragement of employees to join our sponsorship of a local organizations that supports children in vulnerable situations, especially during holidays like Easter, Christmas, Children's Day, etc. Participating in these events provide employees time away from the office and an ability to volunteer which provides a sense of purpose and gives back to the community.

## ➤ Good Health and Well-being

We believe that supporting the mental and physical health of employees is an important part of reinforcing our human resources and achieving sustainable corporate growth.

Well-being is a state of calm, stability, connection and satisfaction achieved by a worker who is part of a company. It is reflected in the physical, social and economic well-being of employees.

### Case Study from Mexico

Takasago De Mexico S.A. De C.V. (TDM) has adopted measures focused on taking care of small details that contribute to the improvement of the motivation and productivity of our collaborators.

#### Current programs at TDM are as follows:

- We have flexible permits and schedules, and there is a Youth in Action program in which the high school and university students who are the children of our employees collaborate with TDM part-time during the summer.
- All our collaborators always present on special days during the year, we organize sports tournaments, we promote traditions uniting our people and relieving stress.
- We provide a 50% subsidized dining room service and seek to provide competitive salaries and benefits.

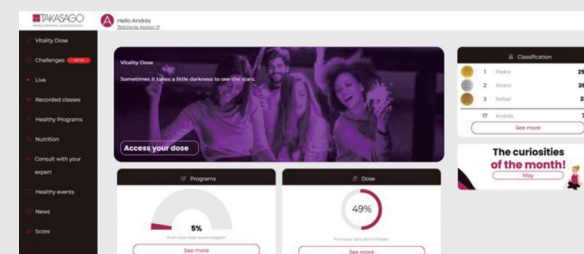
### Case Study from Spain

Takasago International Chemicals (Europe), S.A. (TICSA) prioritizes health and safety at work. It could be no other way, but the company wants to go farther and ensure the well-being of all staff by developing healthy programs that enable staff to be healthier and happier. At the same time, TICSA aims to include the most up-to-date well-being practices in its activities. For that purpose and in addition to the activities that we have been doing for several years such as vaccination programs, specific training for our people about safety, etc., we have wanted to implement a new wellness and health platform.

This platform will make challenges and video tips about memory, visual acuity, good posture, nutrition, financial health and many more topics available. Also, live exercise classes and a channel with all the recorded classes, including classes about mindfulness, yoga, toning, fitness, etc., are available on the platform so that employees can access them where and when they want.

Health programs can be accessed reflecting the objectives of the users, including programs focused on physical health, stretching, gymnastics for pregnant women, back care and many other subjects. Employees can follow diets that best suit their personal objectives. And there is also the ability to contact a health professional through a chat application to answer all the questions our employees have.

In summary, we believe that the company has to be the leader of this transformation with the goal of increasing the well-being of all our employees using the practices we have mentioned to improve the company and the lives of our staff.



## ➤ Labor-management Relations

The Takasago Group respects the freedom of association and the right to collective bargaining. Businesses face many uncertainties in this rapidly changing global market. Establishing a genuine dialogue with the representatives that the workers have freely chosen enables both workers and employers to understand each other's problems better and find ways to resolve them. The freedom of association and collective bargaining provide opportunities for constructive rather than confrontational dialogue. There are many examples of activities in this area, but here is a small selection from Japan and Germany.

In Japan, TIC works with a workers' union council under a union shop agreement. TIC has endeavored to build upon the amiable labor-management relations, in which employees and management proactively conduct activities such as the reporting of business conditions and the exchange of opinions about working environments at labor-management meetings. Generally, TIC is involved in labor management meetings twice a year. TIC's health and safety committee meets once a year, and its welfare committee meets once a year.

Furthermore, to listen its employees' voices, TIC has implemented the Window for Tomorrow reporting system which all employees can use. By improving systems and benefits through discussions between labor and management, we continue to reform of work practices and improve workplace environments.

The election meeting of the works council of Takasago Europe GmbH (TEG) took place on August 12, 2021. Nine colleagues were elected to the works council by the employees. One member of the works council is released from their work while the other eight perform their works council duties on a voluntary basis in addition to their work at TEG. The term of office is 4 years, after which new elections take place. In addition to many duties, the works council has a variety of rights, ranging from the right to be provided information by the employer to genuine co-determination. For example, issues relating to working hours can only be implemented by the employer if the works council has agreed to these measures. Furthermore, the works council has an important say in matters such as the equality of men and women in the company, the promotion of the integration of people with severe disabilities and the integration of foreign employees.

## Procurement



### Message from General Manager, Procurement Div., Supply Chain Div. and Supervisor for Production Div. Naoki Mizuno

In today's era of Supply Chain 5.0, the necessary management approach calls for the establishment of resilience considering potential risks and the achievement of sustainability from the perspective of ESG management. To accomplish this, it is essential that we possess new capabilities and a new

foundation through activities such as the visualization, reassessment and redesign of the supply chain network, to establish a system capable of responding swiftly and flexibly. We will strengthen the global network structure supporting the engineering chain and the supply chain, including sales, research, procurement, purchasing, production and logistics. On the top of that, we enhance the establishment of new relationships and mutually beneficial collaborations with our customers and business partners. Through these efforts, we implement a dynamic and sustainable supply chain management that is befitting of the new unique era of the Takasago Group.

## ➤ Responsible Sourcing

Takasago values sustainability in its business activities. It is essential that we source the raw materials used by our business units in a responsible way and in alignment with the need and aspirations of customers and society. We use approximately 12,000 different raw materials sourced from more than 1,000 suppliers all over the world. Of these, about 4,000 raw materials are natural ingredients derived from natural sources such as fruits, vegetables, plant roots, leaves and flowers. The other 8,000 raw materials are aroma ingredients produced using sophisticated chemical technologies. Some of them are derived from natural gas or naphtha while others are derived from natural sources such as pine trees. They can provide a unique sensory profile that does not exist in nature, and can be alternatives to precious

ingredients derived from animals such as musk, ambergris, etc. To punctually supply appropriately priced high-quality raw materials to our facilities around the world, our global procurement team communicates through our global network to enhance our procurement activities.

In June 2017, Takasago signed the UN Global Compact (UNGC) and we continue our efforts to align with the UN Global Compact's Ten Principles in the areas of human rights, labor, the environment and anti-corruption. We are also striving to achieve procurement that is as sustainable as possible while also focusing on compliance with the laws in each country, respect for human rights, environmental conservation, fair business practices and involvement and development in local communities.

In order to build fair and trusting relationships with worldwide business partners to enable responsible sourcing, we have established the Corporate Procurement Policy, the Corporate Procurement Guidelines, the Takasago Group Supplier Code of Conduct, and the Takasago Responsible Sourcing Policy.

### ➤ Corporate Procurement Policy

In terms of the procurement of raw materials as well as all goods and services necessary for our business, Takasago is working towards improving its responsible sourcing for sustainable economic growth and the mitigation of social issues. Our corporate procurement policy details the basis of our responsible sourcing. The full statement is available at

<https://www.takasago.com/en/sustainability/visitor/procurement.html>

### ➤ The Corporate Procurement Guidelines

The Corporate Procurement Guidelines embodies the Corporate Procurement Policy. The Guidelines, which procurement staff comply with, cover fundamental subjects, such as compliance, fair trade, anti-corruption, human rights and environmental protection that must be aligned with the concept of responsible sourcing. We periodically review and update the Guidelines to align them with changing global trends, including the increased importance of sustainability. To ensure its implementation, Global Procurement Training includes sessions on the Corporate Procurement Guidelines as well as other basic corporate policies.

### ➤ The Takasago Group Supplier Code of Conduct/ The Takasago Responsible Sourcing Policy

To ensure that we maintain the high level of trust that society has in us, we respect and value our business partners who are focused on environmental and social responsibility. To share our activities for the realization of responsible sourcing based on our Corporate Procurement Policy and our values together with our business partners, we have shared the Takasago Group Supplier Code of Conduct (revised in 2021) with them and ensured their understanding. Its scope is all raw materials as well as all goods and services necessary. The concept is also reflected in our Responsible Sourcing Policy, which states our ambitions, objectives and commitment to responsible sourcing focused on raw materials. The Takasago Responsible Sourcing Policy has been verified and recognized by Ecocert Expert Consulting (the Ecocert Group) as being in line with the global standards such as ISO 26000 practices and the Sedex Members Ethical Trade Audit (SMETA) principles.\* To encourage our business partners to understand and cooperate with its concept and thinking, we have shared it with them since 2021 and promoted responsible sourcing.

\*An auditing methodology providing a compilation of best practices for ethical auditing techniques



## ➤ Global Procurement Team

We have established our Corporate Procurement Policy, which clearly states our basic understanding and requirements for procurement activities in accordance with our corporate vision and mission. Also, to ensure the appropriateness of business procedures in accordance with the Corporate Procurement Policy, we have established the Corporate Procurement Guidelines. In addition to this policy and these guidelines, to promote sustainable procurement activities that take into consideration human rights, labor, health and safety and the environment, we have established the Takasago Responsible Sourcing Policy, which is aligned with the ISO 26000 standard as well as the SMETA principles and which supports the UN's 17 Sustainable Development Goals. Our Sustainability Promotion Division, business divisions, other related divisions and overseas affiliates communicate to ensure that all employees are aware of and thoroughly adhere to these policies.

Teamwork is one of the things most valued by Takasago, alongside technology and trust. This is particularly the case in procurement. We established the Global Procurement Team, which includes delegates from 12 global production sites, to align with the concept described in the Corporate Procurement Policy and to optimize operational processes. We schedule an annual meeting at the headquarters, various workshops, regional meetings, on-site visits and training via a matrix-like structure by region, global ingredient category management and other global strategic corporate initiatives.

## The Organization of Takasago Global Procurement



## ➤ The Role of Procurement in the Future

Takasago Global Procurement ensures the timely supply of quality raw materials while ensuring security, safety and economic appropriateness to effectively operate our global production sites around the world. To achieve this mission, it is crucial for us to fairly and reliably develop and maintain business partnerships for the long term for the procurement of raw materials and also other services. We believe we should share values such as respect for the global environment with our partners, including every upstream stakeholder in our supply chains, to ensure that we are a well-regarded and trustworthy company.

As we all are aware, our global challenges, which vary from environmental concerns such as the exhaustion of resources and global warming to social issues including workplace accidents and human-rights issues, are increasing and becoming more serious. We promote responsible sourcing and pursue the resilience of our raw materials procurement so that our sustainable procurement is based on strong reciprocal relationships with partners featuring transparent transactions. Toward a brighter future for society, we will design an innovative supply chain model in which every stakeholder shares values such as coexistence, co-prosperity and *kyousei* (共存、共栄、共生) to realize an environment of empathy, sympathy and collaboration (共感、共鳴、共働).

## ➤ Global Procurement Training

In 2022 the COVID-19 pandemic continues to influence society and we continue to provide training for procurement staff through the Procurement Academy e-training program. From 2020, the Procurement Academy was held twice a year not only for new employees being on-boarded but also for mid-level to expert staff. The programs cover fundamental and advanced topics such as policies, guidelines, IT literacy, sustainability, knowledge of ingredients and packages, sourcing techniques, and other areas. The aim is to share valuable knowledge regarding procurement, intergroup networking and teambuilding, as well as to increase the capabilities of the global procurement staff.

## Voices



**Fumie Ito,**  
**Takasago International Corporation (Japan)**

Despite various restrictions imposed by COVID-19, I am very pleased to have been able to participate in this kind of training session. Through the Procurement Academy, I was able to learn about Takasago's various procurement initiatives beyond the scope of my usual responsibilities, including supplier assessment processes, sustainability efforts and renewable raw materials. The global training program has enabled me to acquire a broader range of knowledge. As a procurement team member, I want to continue learning every day and apply what I learn in my work to have a broader perspective.



**Stanley Chong,**  
**Takasago International (Singapore) Pte. Ltd.**

In today's unpredictable global market, it is expected that buyers will face challenges due to supply disruptions, which in turn have a great impact on cost. Global trends have evolved, with factors such as US-China political issues, the pandemic, high logistics costs, interest rate increases, fires at suppliers' factories and the increased use of AI technologies showing us that markets are changing.

To stay competitive and relevant in the market, we should continue to learn new skills and agilely adapt to the market's transformation. Our Procurement Academy program helps equip the team with new skills, generate ideas and at times adapt to changes to improve the organization.

## ➤ Collaboration with a Third Party

To further respond regarding its responsible sourcing aspirations, the Takasago Group has joined social organizations promoting sustainable and ethical sourcing.

In early 2016, we joined the Supplier Ethical Data Exchange (Sedex)<sup>1</sup> (AB membership), facilitating the assessment of suppliers in the areas of work environment, health and safety, environmental management and ethical business practices. Using the world's largest collaborative platform for sharing supply chain data globally along with a separate supplier questionnaire, we ensure an ethical supply chain. We have asked suppliers to become Sedex members or respond to our self-assessment questionnaire so that we can monitor their compliance with the Takasago Responsible Sourcing Policy. As a result, around 260 supplier members of Sedex had established links with the Takasago Group as of fiscal 2023.

The Ministry of Economy, Trade and Industry in Japan released its Guidelines for Respecting Human Rights in Responsible Supply Chains, etc. in September 2022. This was followed by the *Practical reference materials for respecting human rights in responsible supply chains, etc.* guidelines, published in April 2023. As an urgent issue, we are starting a project with a third-party organization to conduct human rights due diligence in the supply chain to proactively manage any potential or actual adverse human rights impact that our supply chains may have.

Soon after signing the Global Compact in 2017, Takasago Japan attended Global Compact Network Japan (GCNJ)<sup>2</sup> to study ESG trends and contribute to the promotion of sustainable supply chains in Japan. Discussion with the staff in charge of CSR procurement on the supply chain teams of GCNJ companies deeply increased our understanding of Human Rights Due Diligence etc.

The Takasago Group is also a member of the Roundtable on Sustainable Palm Oil (RSPO)<sup>3</sup> and the Japan Sustainable Palm Oil Network (JaSPON)<sup>4</sup> for the promotion of a sustainable palm supply chain. We have acquired RSPO certifications as shown in the table below to supply RSPO certified products according to our customers' needs. We also would like to respond with the shared responsibility defined by the RSPO to increase the consumption of certified palm products.

Affiliate	Scope	Year
Takasago International Corp. (U.S.A.)	Fragrances	2021
Takasago Europe Perfumery Laboratory S.A.R.L.	Fragrances	2019
Takasago International (Singapore) Pte. Ltd.	Fragrances	2022
	Flavors	2022
Takasago International (Shanghai) Co., Ltd.	Fragrances	2022

1 An online platform for sharing information on ethical and responsible practices.

2 An organization who supports the voluntary strategic actions of Japanese member companies and organizations toward the achievement of the ten principles of the Global Compact and the SDGs.

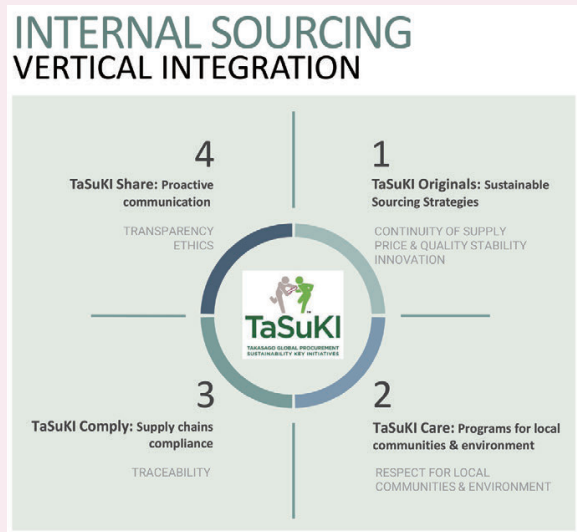
3 A social organization trying to transform the palm oil industry to ensure its sustainability and reduce its impact on the environment.

4 A platform for the sustainable procurement and consumption of palm oil in Japan.

# TaSuKI update

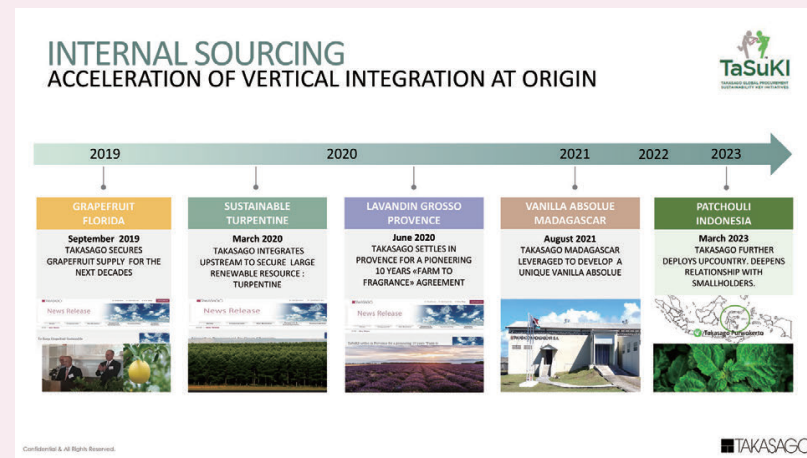
## 1. Overview

TaSuKI was officially launched four years ago. This year's report is a good opportunity to remind readers about the overall objectives and strategic steps accomplished to date.



- **What it is:** TaSuKI is a dedicated organization within procurement established to restore full sourcing control on selected key ingredients while addressing core CSR expectations.
- **Strategy:** TaSuKI designs, implements and develops sustainable sourcing strategies and support programs at the material's origin to secure the most strategic raw materials needed by Takasago.
- **Scope:** TaSuKI settles at the source wherever direct sourcing presence for iconic ingredients is required.

We have successfully weathered the storms of the past four years. Despite unprecedented constraints due to covid, supply chain disruptions and geopolitical crises, we accelerated the implementation of strategic TaSuKI initiatives such as initiatives for grapefruit, turpentine, lavandin, vanilla and patchouli.



Going forward we will maintain the good momentum. We intend to continue to roll-out additional TaSuKI initiatives all along the Kyoto to Grasse journey which was accomplished by Takasago's founder one hundred years ago.



## 2. Ongoing Projects

### France Lavandin Grosso

Pioneering 10 Years «Farm to Fragrance» Lavandin Agreement - TaSuKI Originals, Care and Comply



The situation we anticipated last year for the 2022/2023 crop unfortunately happened

- Due to record inflation and geopolitical tensions, most economies experienced the global slowdown. This had a direct negative impact on demand for lavandin grosso, which is widely used in fine fragrances as well as in home and personal care consumer goods.
- Accordingly, lavandin grosso inventories piled up throughout the entire supply chain, from farmers and cooperatives to resellers and fragrance houses. From a bullish perspective, the summer 2022 crop was mediocre due to droughts, but that was not enough to rebalance supply and demand.

As a result, market prices further collapsed for the second consecutive year and reached record lows far below cost and farmers' living income expectations.

Takasago did not join in this blood bath. Instead, we walked the sustainability talk, and

scrupulously executed the 10-year cost + fixed & fair price and volume commitment agreed with the SCA3P farmers' cooperative back in 2020, which enables us to:

- Financially support the SCA3P Cooperative and its 206 farmer members when they need it most with pre-agreed fair purchase prices and quantities.
- Mitigate price and supply volatility. Keep farmers interested in growing lavandin with long term fair prices, thus avoiding future production drops and likely price increases/speculation.

### Florida Grapefruit

Sustainable Grapefruit: Planting of New Groves – TaSuKI Originals, Care and Comply

The long-term Sustainable Grapefruit project is well on track. The agreement signed back in 2019 continues at a good pace with the new groves planted in Florida ready to go into production. The new groves commitment is resulting in a strong and unique partnership with the citrus industry.





The entire value chain has been integrated and is aligned in the same direction. In 2023, we expect to reach 85% of the total grapefruit trees to be planted. At the moment, the trees planted during the first phase will be producing fruit, resulting in the first grapefruit oil available from our sustainable orchards. We anticipated the sustainable grapefruit oil supply and have already developed unique grapefruit oil grades for both our Flavors and Fragrances Creation Teams.

### Madagascar Vanilla

News from Takasago Madagascar – TaSuKI Originals, Care and Comply

For three years, the Madagascar vanilla market has been experiencing upheaval, despite implementing a minimum export price. While COVID and the Ukraine crisis made buyers initially seek out more raw materials, inflation caused the opposite. Consequently they explored cheaper alternatives and demand fell. Excess supply has therefore left thousands of tons of vanilla beans unsold, negatively impacting Madagascar's economy and leading to bankruptcies in the supply chain.

Despite the hardships faced by Madagascar vanilla farmers, Takasago remained committed to promoting sustainability by working closely with local communities.

#### • Takasago sustainable activities in 2022 with Madagascar vanilla farmers:

The achievement of sustainable programs and a sustainability vision is based on three main pillars: society, the environment and fair business. Accordingly, in 2022, the activities have led to the further strengthening of the local organization for Vanilla sourcing.

Sustainability activities were marked during the year by the initiation of programs identified by vanilla grower cooperatives and communities in line with local needs.

Three programs were initiated with medium- to long-term objectives:

**1- Improving infrastructure of vanilla planters' villages:** these aim to stimulate rural development, including improving roads and improving critical safety for the planters transporting the precious vanilla. Restoration of bridges and public lighting were identified by the villagers.

**2- Reforestation of an endangered forest are in the Makadabo region.** The plan is not only to reforest the area and introduce good nature conservation practices, but also to provide vanilla growers with an alternative source of income. The activity has found official support via the vanilla cooperatives and their local communities, as well as the Regional Forestry Office: guidance on the selection of 2,000 forest trees and 3,000 clove plants to the area led to successful transfer to Makadabo area. This activity is bringing our teams in medium- to long-term monitoring of the project's success, including measurement for the forest development and clove production.

**3- Finally, a project focusing on improving the school enrolment rate** of the vanilla growers' children is one of the local communities demands. This is included in our project to improve rural development and living standards of the local communities, and even if usually not found in vanilla, to help combat child labor overall. Three primary schools have been identified as being of strategic importance. They have been rehabilitated and provided with supplies (tables and benches). This action is essential to improve the attractiveness of the school environment. These activities are of course complemented by workshops each year between our teams and the local communities, including training and awareness-raising activities on the same topics. Naturally, this activity will be monitored over the medium to long term to identify its effectiveness, in particular by measuring school attendance rates.

#### • The results and contributions of sustainable activities in 2022:

In collaboration with vanilla farmers from six large villages, social and environmental programs implemented in 2022 achieved positive results and improvements to local infrastructure, benefiting 2,966 people.



Vanilla producing village in Madagascar with ongoing sustainable activities



Small bridges linking villages are crucial for communities. There are frequently in need of restoration

All of these initiatives align with Takasago's sustainable vision to improve the local vanilla industry. From early long-term projection those projects are expected to impact 16,446 people in the future. Investments in education programs could benefit 584 students, while environmental initiatives such as reforestation and supporting farmers improved the quality of life for local communities and positively impacted 242 hectares of agricultural land.

Additionally, activities to add Ecocert FFL, organic and UEBT/RA producers to Takasago Madagascar's sourcing capabilities could be achieved in this region.



Infrastructure in villages where vanilla producers live aimed at enhancing accessibility and security



Development of tree farming for reforestation and alternative agriculture opportunities to improve producers' quality of life



Improving schools' attractiveness and promoting education

### Closing and Future Outlook:

Vanilla farmers in Madagascar are facing a decrease in revenue due to the economic downturn caused by large carryovers, putting their activities at risk. Efforts to maintain their interest in vanilla farming will be critical going forward, but the crisis is likely to persist for the next two to three years. In 2023, the plan is to work closely with vanilla producers to promote a sustainable vision, further expanding reforestation, improving healthcare, enhancing infrastructure, and promoting best practices in vanilla agriculture.

### Sustainable Turpentine

#### Strengthen Procurement for Green Chemistry – TaSuKI Originals, Comply and Share

In March 2020, Takasago International Corporation announced the acquisition of a stake in LAWTER B.V. and accordingly signed an agreement between shareholders with Harima Chemicals Group, the parent company of LAWTER B.V. The agreement will strengthen Takasago's procurement, specifically for the production of *l*-menthol which uses Takasago's green chemistry core technology. Pine chemicals, chemicals derived from pine trees, are utilized for various products including resin, electronic components and other chemicals. For aroma chemicals, crude sulfate turpentine and gum turpentine are important raw materials. However, demand for gum rosin, a co-product of gum turpentine, has been decreasing in recent years, causing the availability of gum turpentine to be unstable and prices to fluctuate. On the other hand, with consumers today paying more attention to responsible sourcing and transparency throughout the supply chain, backward integration is becoming increasingly important.

LAWTER B.V. provides Takasago with crude sulfate turpentine (CST), the primary raw material for many strategic aroma chemicals, from paper mill companies, which is considered to be a source with less fluctuation in supply and price as well as better traceability. Takasago aims to secure a more stable supply of the key raw material by strengthening the upstream partnership.

In March 2023, Harima Chemicals Group announced their plan to open a facility for the production of myrcene on the premises of its manufacturing hub in Japan, the Kakogawa Plant. Scheduled for completion in April 2023, this is their first myrcene plant in Japan. The energy required in the operation of the plant will be primarily self-generated from renewable energy sources and carbon-neutral fuels, making it a truly sustainable facility. Through such partnership, we ensure sustainable procurement as well as enhanced traceability and the protection of human rights throughout the supply chain.

# Production

## Our Production Model at a Glance

The main objectives of production are: (1) to manufacture products with consistently excellent Takasago Quality at all affiliates around the world with zero incompatibilities, (2) to align CSR activities globally to contribute to the creation of a sustainable society actively, and (3) to cooperate with QA/QC and EHS to establish Takasago's best practices.

## Development of Standardization Based on the Corporate Production Policy

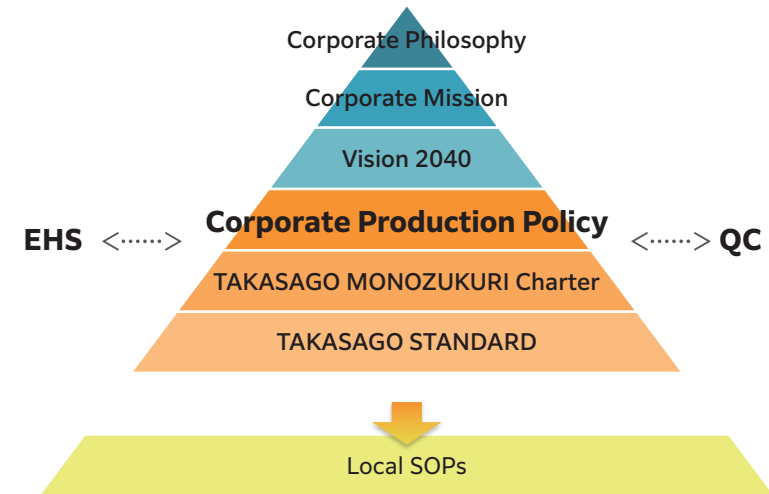
The Takasago Group developed its Corporate Production Policy (below) to implement activities for production and sustainability with a clearly defined purpose in the global functional area. By utilizing the characteristics of each affiliate and promoting a sense of unity in global production practices, Takasago aims to create a product supply system that is trusted by customers around the globe.

### Corporate Production Policy

We practice the following in our production activities:

- Continuously striving to provide the highest level of customer service while maintaining safety in the workplace, the stability of supply and quality assurance in all of our production activities.
- Constantly pursuing excellence in our production practices and manufacturing systems.
- Vigilantly observing all relevant laws and regulations, respecting human rights, being fair, and preserving the environment.

Furthermore, with the aim of creating an effective document system, we developed the TAKASAGO MONOZUKURI Charter in January 2022 and are working to establish the TAKASAGO STANDARD standardizing operating procedures (SOPs) to link the Corporate Production Policy to local SOPs



## Global Meetings

Takasago holds a variety of international meetings such as Global Operations Directors meetings, Global Supply Chain Management Committee meetings, and Global Plant Managers meetings on a regular basis.

Through these meetings, we promote effective global collaboration, ensuring that our goals are aligned and so that we can move forward as The Takasago Group.



Global Supply Chain Management Committee meeting

## › Environmental Risk Initiatives

Takasago understands the potential impact of risks such as climate change and natural disasters on production activities and believes that an approach that considers environmental risks is an essential part of sustainable growth. As a result, Takasago has promoted water risk initiatives in parallel with its reduction of environmental impact. The Takasago Group evaluated the water risks faced by each of our affiliates using the WWF-DEG's Water Risk Filter.

## › Zero-Accident Activities

Zero-Accident Activities are programs where all employees practice precautionary measures relating to industrial safety and health with a "safety first" philosophy. They are implemented at all factories in Japan. On top of the activities prescribed by EHS, Takasago aims to promote activities that encourage employees to take ownership of workplace safety, ideas for handling situations that are not clearly covered by rules, and the continuous improvement of safer production practices. Specifically, Japanese affiliates have held hazard prediction workshops where employees examine potential real-life scenarios for ways to improve safety. Also, they have established the practice of "pointing and calling" to build a culture of safe habits. These practices promote the development of leaders who support future health and safety initiatives and embody the "safety first" spirit while considering the safety of their colleagues.



Left: Hazard prediction workshops / Right: Pointing and calling

# Logistics

## › Corporate Logistics Policy

The Takasago Group has established the Corporate Logistics Policy as its principles for logistics in accordance with the Charter of Corporate Behavior which includes consideration of the environment and local communities.

We practice the following in our logistics activities:

- Continuously striving to provide the highest level of customer service while providing a safe and stable source of supply.
- Constantly pursuing excellence in our logistics operations, systems and processes.
- Persisting in the observance of all relevant laws and regulations, respect for human rights, being fair and considering environmental preservation.

## › Establish a Quick and Efficient Logistics Network

Although the logistics disruption caused by the COVID-19 pandemic is slowly coming to an end, logistics costs are currently rising worldwide due to factors such as labor shortages, inflation, rising oil prices and the Ukraine crisis. In addition, environmental concerns are becoming more important, and logistics costs are expected to continue to rise in the future. These challenges cannot be addressed by one company, and cooperation throughout the supply chain is essential.

The Takasago Group is working to improve inbound and outbound logistics efficiency where we can control it. This minimizes the time and costs involved in transporting production materials and products and establishes a quick and efficient logistics process. Specific initiatives include the following\*:

1. Data analysis and forecasting: Some sites use data analysis and demand forecasting to accurately predict logistics needs and allocate appropriate resources to optimize inventory and ensure smooth logistics operations.
2. Technology: We use the latest technology to automate and streamline its logistics processes. For example, we utilize automated warehouse systems and track shipping processes in real time.



3. Strengthening partnerships: Strengthening its close collaboration with its logistics partners. Through information sharing and cooperation at each stage of the supply chain, we are able to keep up our resilient logistics.
4. Promote sustainable logistics: By aiming to achieve environmentally friendly logistics, we are working to reduce environmental impact by selecting energy-efficient transportation methods and using reusable packaging materials.

(\*Including plans)

### ➤ Digitalization

We are transitioning to the paperless processing of business transactions utilizing digital technologies and tools.

The warehouse management system at the Hiratsuka Distribution Center in Japan has been renovated. This renovated system can liaise with transport companies to share shipment data to reduce the amount of paper used and facilitate the tracking of shipments.

### ➤ Strengthen Partnerships

In the transportation sector, the shortage of drivers and workers is a social issue, and a transition to a new standard for working conditions and working hours is now underway.

To ensure resilient and stable logistics, it is urgently necessary to improve the operational efficiency of all supply chain processes, including the processes of shippers.

To achieve this we held seminars with logistics companies to exchange information and opinions and learn about their situation and what can be improved.

To address the concerns we identified, we changed a workflow to palletize shipments before picking to reduce wait time and the time necessary for loading cargo.

## ➤ Promote Sustainable Logistics

### Reducing Environmental Impact

We are improving operations to reduce CO<sub>2</sub> emissions during upstream transportation and distribution activities. In some cooperative transportation processes transporting goods from factories to product warehouses, our logistics team are working to reduce the number of trucks by adjusting collection dates and improving load efficiency.

In the optimization of our logistics network, the adjustment of distribution bases to shorten transportation and distribution distances is also a part of our commitment to sustainability.

### Traceability of Waste Operations

We use the e-manifest system of a public interest incorporated foundation that enables us to track and document the movement and disposal of waste to ensure waste management traceability.

When consigning waste transportation and disposal, we prioritize contracts with companies that are certified as excellent by local governments and visit their disposal facilities and confirm their operations are appropriate to reduce the risk of compliance violations.



## Recycled/Renewable Materials and Packages

In 2022, 50.0% percent of the raw materials used by the Takasago Group were renewable (45.4% in 2021).<sup>1</sup>

We do not use recycled materials for the containers that contact our products due to safety regulations. Due to this, recycled pallets are only used in some storage areas. We use recycled materials (wastepaper and steel materials) for cardboard packaging and steel drums. We are also reusing intermediate bulk containers (IBC), steel drums and pallets as long as there are no potential safety risks. For example, Takasago International (India) Pvt. Ltd. sent 2,300 empty raw materials barrels to an authorized dealer for recycling. Takasago International Corp. (U.S.A.), used 193 cases of paper using recycled materials, recycled 232 ink cartridges and purchased 14,700 business cards utilizing recycled stock. Through activities like these, we promote the utilization of materials and packages that can be recycled in reasonable ways while we ensure the safety of packages and materials. This enables us to reduce environmental impact.

1. Renewable raw material: A renewable resource is a natural resource which can replenish itself by an amount exceeding human consumption through biological reproduction, naturally recurring processes, or other positive actions. We calculated the percentage of raw materials used that are renewable based on the guidelines in the GRI Standards.

## Research & Development



### Message from General Manager, Corporate Research and Development Div.

#### Fumihiko Yanaka

Based on our corporate philosophy, "Contributing to Society through Technology," derived from our corporate mission, our new corporate mission, "Create new value through innovation rooted in kaori (kaori: aroma in Japanese)," and Vision 2040, "Care for People, Respect the Environment" which is a vision

for a period that includes the milestone of our 100th anniversary, R&D plays an important role in the improvement of quality of life (QoL) by developing unique and superior technologies and products through the organic and functional integration of three types of innovation (concept innovation, product innovation and process innovation) and open innovation through active collaboration with external partners.

To solve issues globally recognized by the SDGs, we promote eco-friendly R&D with green chemistry always in mind, and to reduce environmental load, we utilize our unique catalytic technology, introduce white biotechnology and design eco-friendly processes so that we can facilitate the efficient use of water and the reduction of energy usage and greenhouse gas emissions. In addition, to efficiently use limited natural resources, we are also actively working to explore and utilize renewable raw materials and reduce the use of natural raw materials by developing and switching to alternative materials and utilizing unused resources.

### ➤ R&D Framework

Our basic R&D division is working closely with overseas flavor and fragrance R&D centers and actively advancing R&D activities to meet global needs. We continue to work together with overseas R&D centers and steadily proceed with the overseas expansion of our technologies and products to, for example, modify the flavor profile of low salt/sugar/fat consumer products and plant-based food and to respond to demand for natural and environmentally friendly flavor and fragrance materials.

## Innovation

### ➤ Taking on the Challenge of a More Authentic Flavor

#### - Vivid Flavors® Retroma™

Various efforts are underway, but humankind has not yet solved the problem of climate change, and further actions are required. There are concerns about the influence of abnormal weather on the harvesting of crops including the source of flavor ingredient. Russia's invasion of Ukraine also affected global grain demand. The food crisis is a real issue.

We are not only replacing flavor ingredients derived from natural agricultural products, but also developing flavors for alternative foods such as plant-based meat that are currently being actively developed by a lot of food companies. In the development of flavors for those purposes, how we develop flavors that are as close to the target food aroma as possible is important.

We at Takasago are developing Vivid Flavors® which are created using analytical information from GCO, which can detect aroma using the human nose, and by using chiral aroma ingredient molecules to target the aromas of real food. Vivid Flavors® are now widely used in food development around the world.

In our recent efforts, we are trying to express the aroma of foods/beverages when we are actually eating/drinking them. In other words, by analyzing and understanding the retronasal aroma, we have succeeded in creating flavors that make you feel like you are eating the food. We have also tried to improve analytical methods to analyze the aroma of target foods more accurately. Because the aroma of the fresh food, a fruit, for example, is constantly changing even while analyzing it. Applying this new method, unfavorable changes of aroma can be greatly reduced, and we can obtain the information to create flavors that are much closer to the real food.

We have already started to promote these flavors as our new Vivid Flavors® Retroma™ brand.

Through the promotion of those flavors, which can express aromas closer to the target foods, we make up for the lack of specific agricultural crops with aromas, and we contribute to people's lives by improving the aroma of sustainable food alternatives.

### ➤ New and Unique Japanese Herb Fragrances

Takasago has been working on capturing and analyzing the scents of unique Japanese plants using our AROMASCOPE™ technology and reconstituting them without losing their natural qualities. Through this work, we aim to explore natural materials and obtain inspiration for new fragrance creation.

Although the concept of nature is a major global trend in the fragrance product market, during the COVID-19 pandemic the demand for "natural" is getting higher and higher, and Japanese plants have attracted more attention as the next new targets. A few years ago, we focused on Japanese wood species and developed fantastic fragrances with expected psychological functions. Following this challenge, we have started the Japanese Herb Project.

Japanese cuisine was registered on the UNESCO Intangible Cultural Heritage List in 2013, and Olympic were held in 2021, both accelerating the Japanese food boom globally. However, with the exception of well-known ingredients such as yuzu and green tea, Japanese herbs are not well recognized, and the use of their scents in fragrance products is still limited.

Since ancient times, Japan has cultivated a culinary culture that explores the best use of the scents of fresh ingredients. The heart of this project is the creation of the fresh scent of the finest herbs that appeal to you. As a first step, we carefully selected eight herbs based on the production area, growing environment, best harvest season, fragrance character, etc. Sansho (Japanese pepper / *Zanthoxylum piperitum*) in the Wakayama area, Red Perilla (*Perilla frutescens*) in the Kyoto area, and Seri (*Oenanthe javanica*) in the Akita are examples. Then, just like in Japanese cuisine, we used different preparation methods such as cutting, shredding, and rubbing to bring out the fragrance of each material. Using AROMASCOPE™ technology, it was possible to capture the "sparkling aroma," the very subtle scent of herbs, which is present only at the very moment of these treatments. Using these analytical results, we successfully reconstituted the very fresh scents of the herbs.

We are globally showcasing our new collections, expressing the special moment's aroma of Japanese herbs and beautiful creation fragrances using these scents. Through this, we hope to share wonderful experiences with you and show you the new values and charm of unique Japanese herbs.

## ➤ BIOSWITCH® Aroma Ingredients

### - Development of bio-based and biodegradable aroma ingredients.

Takasago's history with aroma ingredients began in 1920 and "Symbiosis with nature" is a part of Takasago's heritage. In 1983, we established the asymmetric synthetic method and applied it in the industrial production of *l*-menthol.

From the 1990's, our main focus was expanding this asymmetric technology to manufacture optically active aroma ingredients using CHIRAL SWITCH to give Takasago's CHIRAROMA® products. Now we have a diverse CHIRAROMA® ingredients palette.

Recently, we have been investigating R&D utilizing renewable/bio-based materials to displace the need for non-renewable petroleum-based chemicals under the BIOSWITCH® branding.

In 2014, Takasago became the first in the industry to disclose the bio-based percentage of its aroma ingredients, and now it discloses the status of CHIRAROMA®, such as biodegradability, ISO 16128 and nature identical. In 2021, several ingredients were additionally certified under the United States Department of Agriculture's BioPreferred® Program.

We are currently developing environmentally benign biodegradable aroma ingredients and energy-efficient manufacturing processes involving catalysis.

## ➤ Development of a Lexicon and a Map of Emotions Elicited by Coffee

Recently, there has been much interest in developing products that appeal to consumers' emotions, but there has not been enough research on how to express the emotions elicited by coffee flavor in Japanese. In response to this gap, we developed an emotion lexicon for coffee flavor based on the sentiments of general panelists and the flavorists. Utilizing this lexicon, we conducted a sensory evaluation and constructed a map linking coffee bean characteristics (roast degree, origin) to emotions. This allowed us to find similarities and differences in the general panelists and flavorists' emotional perceptions of coffee flavor. By using the lists and the maps obtained through this research in different ways depending on the evaluator and purpose of evaluation, it will be possible to conduct sensory evaluation and market research using familiar emotional expressions, which will lead to data-driven value propositions.

This project was presented at the 2022 Annual Conference of the Japanese Society for Sensory Evaluation and received the best presentation award. We will continue to develop our research on flavor and emotion to contribute to the improvement of people's QoL and the achievement of well-being.

## Green Chemistry

### ➤ Process Innovation

#### - Approach promoting energy saving and waste reduction

Our R&D activities and manufacturing are oriented toward Green Chemistry, based on the well-known 12 principles. We are working to reduce environmental impact in all processes, from the selection of raw materials to their manufacture and use and to their disposal. We are focused on using more sustainable or renewable feedstocks, waste reduction and energy conservation. In the process research laboratory, reaction data is collected using special instruments recording thermodynamic data for both safety assessment and energy control. Using a distillation simulator and a plant information management system, we were able to optimize the distillation conditions of aroma ingredient and improve productivity by 12%. In addition, by improving the reaction conditions in a pharmaceutical intermediate manufacturing process, we were able to reduce the amount of organic solvent used by 48% compared to the conventional process. The catalysts used in our key technologies for asymmetric hydrogenation and coupling reactions use precious metals such as rhodium, ruthenium and palladium. For the sustainable use of natural resources, we have strengthened our efforts to optimize the catalyst manufacturing process and recover precious metals after using those catalysts. We will continue to promote initiatives to reduce our environmental impact.

### ➤ Development of Special Catalysts

#### - Efforts to reduce environmental impact

Catalysis, which is one of the embodiments of the 12 principles of Green Chemistry, enables the reduction of the raw materials used, the waste generated and the energy consumed and enables the use of safer and even harmless reagents. Since the establishment of the *l*-menthol process in 1983, we have worked to develop catalysts for various transformations and leveraged them in commercial manufacturing.

One of our recent developments is a method for the synthesis of optically active  $\beta$ -amino alcohols. Chiral  $\beta$ -amino alcohols are frequently used in the synthesis of a

wide variety of bioactive compounds. The reduction of chiral  $\alpha$ -amino esters into chiral  $\beta$ -amino alcohols is one of the most straightforward approaches.

Stoichiometric metal hydride reduction has been frequently used for the conversion, but it requires that the optically active  $\alpha$ -amino esters be prepared in advance. We identified that the use of the RUCY<sup>®</sup> catalyst gives enantioenriched  $\beta$ -amino alcohols through asymmetric hydrogenation even with racemic  $\alpha$ -amino esters via dynamic kinetic resolution (DKR) (*Org. Lett.* **2023**, *25*, 2355–2360). This protocol could be applied to substrates with various functional groups with low catalyst loading.

### ➤ Aroma Ingredients R&D by White Biotechnology

Takasago has been studying the production of aroma through biotransformation for over 50 years, and we have built a Takasago microbial library consisting of about 2,000 useful microorganisms. This library is greatly utilized by Takasago's White Biotechnology. Centre Ingredient Technology Inc., which joined the Takasago Group in 2016, manufactures natural aroma ingredients using a highly efficient fermentation and downstream process, such as aroma recovery technology, and is a major Takasago manufacturing base that uses biotechnology.

In addition, Takasago is enhancing its technology by participating in Japanese government projects, collaborating with universities and utilizing the latest biotechnology. In 2022, we will join new bio-production project under New Energy and Industrial Technology Development Organization.

Our R&D is devoted to environmentally friendly activities based on SDGs and Green Chemistry, which are included in our current medium-term management plan, NGP-1. We will accelerate R&D to innovate for the realization of a decarbonized society and to contribute to a circular economy and a sustainable bio-economy by introducing the slogan, "Symbiosis with Nature."

# Quality Assurance

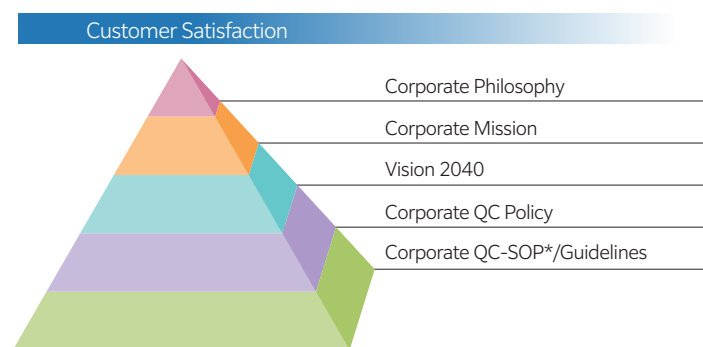
Takasago is a committed valuable partner of our customers, meeting all their product quality, regulatory and safety requirements. The mission of the Corporate Quality Assurance Headquarters (QAHQ) is to ensure that Takasago supplies safe, wholesome and reliable fragrances, flavors, aroma ingredients and fine chemicals that comply with the safety and regulatory requirements of local governments, customers and trade associations. To achieve this mission, we promise to pursue “no complaints, no non-conformities” and “no defects, no errors.”

## Quality Assurance Organization

Takasago QAHQ strives to ensure that Takasago consistently delivers high-quality products and ensures that our customers’ needs are met. QAHQ is an independent organization within Takasago composed of quality assurance departments around the world that operate under the One Takasago Quality Assurance Concept. QAHQ includes four centers: the Global Flavor QC Center (FLQC), the Global Fragrance QC Center (GFQC), the Global Flavor Regulatory Center (GFRC) and the Global Fragrance Safety and Regulatory Affairs (GFSARA) Center which operate globally and closely with local affiliates. These four centers are responsible for the development and implementation of global policies and guidelines under a globally standardized operation process. Both Flavor and Fragrance QC Centers strive to standardize, maintain and enhance the QC testing skills of the local QC team by conducting sensory evaluation, physicochemical testing and microbiological testing proficiency tests. Both QC Centers supports the quality standardization of raw materials which are used globally to provide the same quality products in collaboration with the procurement department. We believe these activities will contribute to not only the quality aspect of all products that we manufacture, but also to ensure that a continuous supply of products can be provided to our customers in the event when the business continuity plan (BCP) must be implemented. Aside from the globally recognized regulations, both GFRC and

GFSARA communicate with specific national trade associations and working groups to stay up to date on the latest regulatory information and changes globally. This information is shared and updated with the team members of all affiliates. The latest information alerts enable all team members at all affiliates to use the latest regulatory information for product labeling, customer support and informative purposes. This has allowed the local affiliates to consistently provide the support that our customers need.

The global regulatory teams have been also very effective in developing new functionality to prepare for new regulatory requirements. This includes the development of new auto-generated forms to address new regulatory requirements and supports new customer requirements. In addition, the global regulatory teams have implemented global tracking systems for CAPA plans to better recognize commonly arising issues. This allows the global teams to be more effective in developing proactive policies and procedures to reduce non-conformity across the globe. Thus, we are able to provide the highest quality products to meet or exceed all of our customers’ expectations worldwide.



\* SOP: Standard Operating Procedure



## › QC Policy, SOP and Guidelines

Takasago's Corporate QC Policy was developed based on our Corporate Philosophy, Corporate Mission and Charter of Corporate Behavior. The policies promotes a globally consistent quality mindset and systems that not only meet our customer's expectations, but also ensure appropriate and timely improvement to our day-to-day activities in line with the Corporate QC Policy, global QC Standard Operating Procedures (SOPs) and guidelines were established to standardize detailed QC procedures across all business units and affiliates. These guidelines are also incorporated in the local quality management procedures and practices to ensure the global alignment of QC management.

## › Training Programs

To enhance and maintain the highest level of quality and service, all Takasago Flavor and Fragrance QC teams participate annually in global training sessions provided by the Global QC Centers. The Global QC Centers are technical support groups within Takasago QAHQ that build globally aligned QC systems and train the local QC teams of all Takasago affiliates. The technical supervisors of the Global QC Centers coordinate regular training programs to ensure up to date competencies and skillsets. This globally coordinated and operated system is the key to ensuring that the same high-quality service is being offered and that our products consistently meet or exceed all of our customer's requirements. Recent flavor QC training conducted by flavor technical supervisors has included training on organoleptic evaluation, gas chromatography methods, maintenance procedures, technical laboratory best practices and quality systems designed to provide the same high-quality services to all customers around the world. These training programs are also designed to respond to local needs to improve and enhance specific analytical areas.

Our proactive activities will help align and streamline QC best practices, and in turn encourage the identification of issues and improvement of the efficiency of procedures, resulting in less waste and greater consistency across all our affiliates. Additionally, we conduct proficiency testing globally based on Takasago's ISO/IEC 17025 accreditation certification. This helps to confirm and standardize QC testing

skills and maintain the highest level of proficiency as well as motivating the QC staff members. As for Takasago fragrance affiliates, representatives of the QC teams attended olfactive intensive training at the Fragrance QC Center. The training consists of smelling natural raw ingredients and finished products to understand their complex nature and characteristics. The training also includes discussions sharing the expected raw material and finished product quality. After the training, attendees who were technical representatives support certified leads with daily olfactive training at their site and serve as sensory contact for the key site Global Fragrance QC center. All training results are shared with global and local management to ensure that the lessons and skills learned are effectively reflected and utilized as part of all local QC teams' daily activities as well as continuous improvement plans. This is a crucial part of Takasago's efforts to continuously supply the highest quality products to our customers anywhere in the world. These global training programs contribute to the standardization of the quality of Takasago products and improve the teamwork of all the QC teams as One TAKASAGO.

## › Compliance with Laws and Regulations Related to Chemical Substances

It is Takasago's global policy to comply with the latest laws and regulations. Takasago fully supports the objective of the chemical legislation around the world to improve the safe and sustainable use of chemicals and improve the quality of life of all citizens of the world and the environment. To conduct our business globally, The Takasago Group complies with laws, regulations, and relevant standards on product quality and safety, the environment and chemical substances as well as on accounting, taxes, labor and transactions in each country and region. This includes compliance with laws and regulation related to chemical substances, and The Takasago Group considers this to be a top priority. We continuously monitor and complete regulatory activities to ensure that we meet local regulatory requirements around the globe. This applies to the four business pillars of The Takasago Group, the Fragrance, Flavor, Aroma Ingredients and Fine Chemicals divisions. To comply with the regulations of various regulatory bodies, The Takasago Group works as a global

team to ensure that registration activities around the globe are conducted efficiently, minimizing redundancy in testing and expediting registration. As we look towards 2023 and beyond, there are number of new chemical laws that are currently being written and may require The Takasago Group to conduct additional registration activities. These laws include UK REACH, potential updates to the EU REACH requirements, Turkey-REACH and other chemical legislation. As new chemical legislation are enacted, The Takasago Group will be ready to work proactively to meet new compliance requirements. The GFSARA Center continuously monitors ever-changing global regulations, customer requirements, standards and guidelines by communicating with trade organizations such as IFRA,<sup>1</sup> ACI,<sup>2</sup> PCPC,<sup>3</sup> FCA<sup>4</sup> and many other trade associations. Information is shared promptly with each affiliate around the world, guaranteeing that Takasago can provide safe and reliable products all over the world in a consistent manner.

1 IFRA: International Fragrance Association

2 ACI: American Cleaning Institute

3 PCPC: Personal Care Products Council

4 FCA: Fragrance Creators Association

## › Certifications

Takasago promotes the acquisition of quality management system certifications such as ISO 9001, FSSC 22000/ISO 22000, the GFSI and other internationally recognized quality and safety standards that are appropriate for the products we manufacture. A new flavor and fragrance facility was built in Indonesia and obtained ISO 9001 and FSSC 22000 food safety certifications specifically for flavor facilities in March of 2020. Introduction of these international standard systems are a key element for globalization rather than a part of local activities across all of Takasago. We are confident that these internal standards drive us to promote better quality services and increase customer satisfaction. To continue moving forward, Takasago is in the process of implementing a program designed to integrate systems from the FSSC 22000 viewpoint of hazard analysis.

## › On-Site Audits

To further strengthen the group's quality management, global QC centers routinely conduct on-site audits of all manufacturing sites to ensure their systems are consistently improving as well as meeting or exceeding all established requirements and standards, and that they are aligned with Takasago's business plan, objectives and quality control policy. Customer Health and Safety Takasago develops and manufactures a wide range of products across four of its business pillars: Fragrances, Flavors, Aroma Ingredients and Fine Chemicals. As an integral part of the creation and production processes, Takasago continually evaluates all products for their health and safety compliance. This approach is applied from the research and development stages up to the manufacturing and delivery stages of our products. During the reporting period, Takasago has not identified any instances of non-compliance with regulations or voluntarily adopted rules.

## › Marketing and Labeling

All of Takasago's sales are through business-to-business channels. None of its products are sold directly to end-consumers. Our fragrances and flavors are sold to companies manufacturing consumer goods, who incorporate them into their products that are sold to the general public. Our aroma ingredients are sold to other flavor and fragrance companies for use in the creation and manufacture of their own compounds. Takasago fine chemicals are generally used as intermediates for the manufacturing of pharmaceuticals and chemicals. When supplying our products to our customers, Takasago provides the product information of all of the products we manufacture as required by regulations and/or the customer. This typically includes one or more of the following:

- Sourcing of the raw materials used in the manufacturing of our products
- Composition of our products (dependent on disclosures)
- Safety data sheets (which highlight components that may have a health or environmental impact)
- Information on the safe use of our products

During the reporting period, Takasago has not identified any incidences of noncompliance regarding product information or labeling.

## ➤ Response to Kosher and Halal Needs

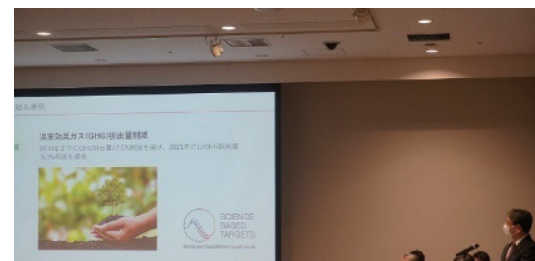
Takasago respects local cultures and customs, and actively creates products that reflect our values. Some local cultures and customs requires strict adherence to religious precepts, and we have worked to expand our products that comply with these precepts, so they can be consumed with peace of mind. Well-known religious precepts include the Jewish kosher dietary regulations and the Islamic halal regulations. Both have the meaning of “forgiveness” and are strictly adhered to as a fundamental part of each religious person’s life based on their religious beliefs. Takasago’s kosher products are primarily supplied from factories in the United States. Our halal products are primarily supplied from our factories in Singapore and Malaysia. Our factories in Japan supply products and manufacture intermediate products for customers in the United States and Southeast Asia and have traditionally supplied synthetic flavors and food flavors that meet kosher requirements. In addition, our flagship product, *ℓ*-Menthol, is also halal certified. Moving forward, Takasago will continue to increase the number of products that are kosher and halal certified and will further enhance the manufacturing and supply of products that are friendly to the global environment and compatible with local cultures and customs.

## Stakeholders and Investors

We strive to appropriately return profits to shareholders by realizing sustainable growth through sound and transparent corporate management. At the same time, we work hard to further strengthen communication with shareholders and investors both in and outside Japan. Takasago discloses corporate information to shareholders and investors in a timely and adequate manner.

As part of our efforts to improve our IR activities, we publish the Newsletter to Shareholders twice a year while also disclosing related documents and press releases on the IR section of our website to expand the investor community and enable shareholders and investors to deepen their understanding of our business activities. In addition, we hold financial result briefings twice a year (May and November), and our president and officers directly communicate with investors and analysts. The details of the briefings are also disclosed on our IR site. Furthermore, the Investor Relations/Public Relations Department handles reporting related to IR and visits investors.

When it comes to shareholder returns, Takasago embraces shareholder-favoring business operations and aims to establish a corporate foundation which enables profit to increase and continuous, stable dividends while considering the performance of the business.



# Local Communities

## Basic Approach

As stated in The Takasago Group Charter of Corporate Behavior and Code of Conduct, The Takasago Group respects the global environment and local communities and believes its relationships with local communities are a fundamental part of its business. For a long time, we have been engaged in a variety of activities, such as the holding of cultural events, the provision of educational programs, donations and other support for community activities. We will continue these activities and strive to be a partner that is trusted by local communities.

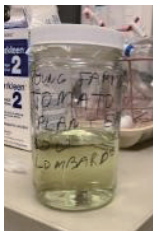


### U.S.A.

The National Young Farmers Coalition is a national advocacy network of young farmers fighting for the future of agriculture. Partner with R&D to identify new natural flavor & fragrance materials. Leading to greater use of naturals.



Tomato plant



extract



### Germany

Even a year after the devastating flood disaster — which also affected our employees — help is still needed. Our soccer team supports this and therefore took part in HelferCup #1 in Erfstadt. The collected funds will be used to buy materials for the building materials donation store in Erfstadt. Our team trained for the tournament and had a lot of fun and sporting ambition. Cheered on by colleagues, our team won two of four games.

Many thanks to the Rhein-Erft helper group for their organization of the event and of course to our team!



### France

In 2022, Takasago Europe Perfumery Laboratory S.A.R.L. donated €2500 to Les Cantines Du Sourire to provide 3,345 breakfasts and 20 tables and benches. The association's goal is to finance breakfasts for three classes of children aged 3 to 6 from a school in Saint Louis, Senegal. Providing breakfasts to schoolchildren helps to fight malnutrition and absenteeism.



### Spain

Takasago International Chemicals (Europe), S.A. promotes relationships with vocational schools and local universities and enables them to visit our factory to learn about our facilities and listen to explanations about the different job positions we have with the objective of orienting students about the labor world.



## Singapore

At Takasago International (Singapore) Pte. Ltd. (TIS), soap trial samples are usually thrown away at the end of each project. To reduce waste, we started donating soap trial samples every one to two months.

TIS Fragrance donates about 10 to 15 kg of soap bars each month. The soap bars are then delivered to communities in need with the help of an NGO. Local charities and community groups that distribute the bars to rental flats and low-income groups said the soap comes in useful as it is a basic necessity.



## Japan

The Hiratsuka Factory organized a local environment event cleaning the Sagami River and donating tulip bulbs. Also, at the Kashima Factory, we donated calendars, towels and notebooks to local schools.



## India

TII celebrated World Environment Day on the 9th of June, 2022. As a part of its environment day initiative, Capital Land organized Green Drive 2022 for the tenants in One Hub Chennai.





# Governance

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## 69 Risk Management

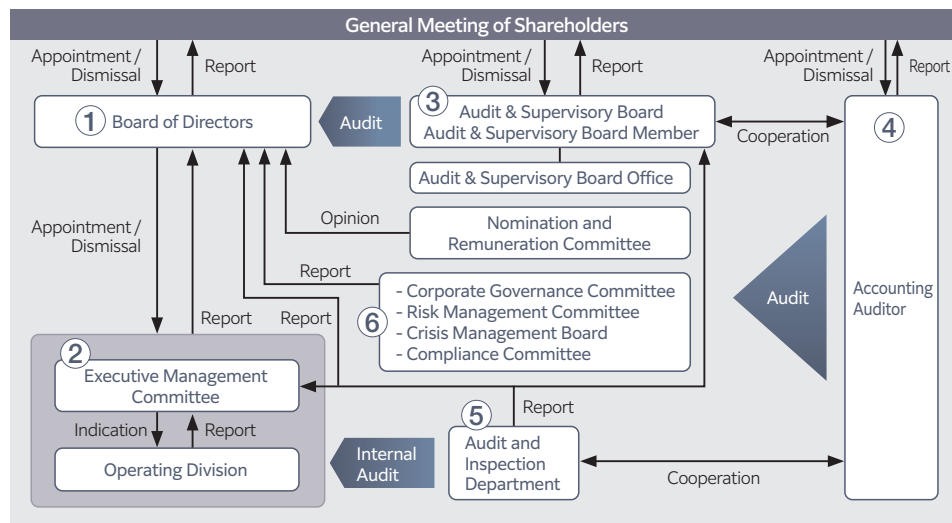
## 71 Compliance



# Corporate Governance

## Our Approach to Corporate Governance

The Takasago Group strives to enhance the appropriateness of its management decisions, its checks on the management process and the transparency of its management through the disclosure of information to ensure the appropriateness of corporate governance. Aiming to achieve sustainable growth and enhance corporate value over the medium and long term, we have established the Basic Corporate Governance Policy by resolution of the Board of Directors. It is available on the Group's website.



## 1 2 Board of Directors and Executive Officers System

In principle, the Board of Directors meets once a month, and extraordinary meetings are held as necessary. Directors ensure the fairness and transparency of management by supervising management and make the best possible decisions through the development of management strategies and plans and decisions regarding important investment projects and other business operations. At the same time, by setting the term of office of directors to be one year, we ensure sufficient opportunities for earning the confidence of the general meeting of shareholders, clarifying management responsibilities and strengthening functions for sustainable management. We have introduced an executive officer system to ensure the efficiency of management decision-making by the directors and the speedy execution of business operations and are working to differentiate the corporate governance function of the Board of Directors from the executive officers' execution of business operations. In general, the Executive Management Committee meets once a month to discuss important management issues. Executive officers from the overseas offices attend once a quarter. The Group positions the committee as a place for sharing information and discussing global matters.

## 3 4 5 Board of Auditors, Corporate Auditors, Internal Audit

In principle, the Board of Corporate Auditors meets once a month, and extraordinary meetings are held as necessary. The corporate auditors cooperate closely with the accounting auditor and exchange opinions and information. The Internal Audit Department reports the results of internal audits to the Corporate Auditors, and the Corporate Auditors may utilize the Internal Audit Department as necessary. In addition, the Corporate Auditors' Office has been established to assist the Corporate Auditors in their duties. The Board of Corporate Auditors functions more effectively by ensuring that the Corporate Auditors utilize their experience to audit management from a fair and neutral standpoint, working closely with the Internal Auditing Department and the Accounting Auditors.

## ⑥ Authorized Committee

<b>Corporate Governance Committee</b>	The committee is chaired by the President and is composed of seven directors, executive officers and other members. The committee deliberates important matters related to corporate governance with the aim of continuously enhancing corporate value.
<b>Risk Management Committee</b>	The committee is chaired by the President and is composed of the general managers of each division. To enable the Board of Directors to comprehensively identify and assess risks that could impact the Group we have strengthened our management system and are continuously deliberating and formulating measures to prevent these risks from impacting the group or mitigate their impact.
<b>Crisis Management Board</b>	We have established a system that enables headquarters and affiliates to respond promptly to emergencies, should one occur. We regularly review the reporting and instruction routes linking the Crisis Management Board (located at headquarters) and affiliates to ensure the smooth transmission of important orders and guidance. In addition, to prepare for large-scale disasters and emergencies, The Takasago Group has developed and formulated standardized BCP (Business Continuity Plan) procedures.
<b>Compliance Committee</b>	The committee is chaired by the President and composed of nine directors and full-time corporate auditors. The committee deliberates and promotes important matters for the establishment and thorough implementation of a compliance system.

### ➤ Evaluations of Board of Director Effectiveness

The Takasago Group conducts periodic evaluations of the effectiveness of its Board of Directors with the aim of enhancing its effectiveness and enhancing corporate value.

A summary of the results of these evaluations is disclosed on our website.

### Evaluation Method

A questionnaire is distributed to all directors and corporate auditors regarding the effectiveness of the Board of Directors, in which they are asked to rate the effectiveness of the Board of Directors on a step-by-step basis and to provide comments. The Board of Directors deliberated on the results of the questionnaire, which are analyzed and discussed at the Board of Directors meeting. The major items in the questionnaire are as follows.

- Composition of the Board of Directors
- Operation of the Board of Directors
- Roles and Responsibilities of the Board of Directors
- Performance of the Directors and Corporate Auditors as Individuals
- Structure supporting the Board of Directors
- Relationships with Stakeholders

### Summary of FY2022 Evaluation Results

As a whole, the Board of Directors is effective and functioning properly. Regarding the effective exercise of its supervisory functions, important issues which were discussed by the Nomination and Compensation Committee in which external directors are a majority, were brought to the Board of Directors. In addition, the external directors effectively supervised management and directors from an independent and objective standpoint by providing comments and opinions, and each director appropriately evaluated business performance and made decisions.

Furthermore, they appropriately responded to issues that should be addressed by the Board of Directors, such as promptly addressing the impact of heightened geopolitical risks.

## Efforts to Improve Effectiveness

We confirmed that we will continue to work on corporate strategy and other aspects of the corporate direction, one of the issues that has been raised since last year, and that the need to further enhance our efforts to address these issues is a task for the Board of Directors. In addition, as it is the final year of the medium-term management plan, we confirmed that the Board of Directors will fully analyze the current situation and consider countermeasures, enable this consideration to be reflected in the next three-year plan and address other necessary issues. Based on the results of this evaluation, the Board of Directors will engage in discussions and resolve issues to enhance the effectiveness of the Board of Directors and further improve corporate value.

## ➤ Remuneration System

### Basic Policy

- (i) Remuneration, etc. for executive directors shall be appropriate, fair and balanced to motivate the executive directors to contribute to the Takasago Group's sustainable growth and the enhancement of corporate value over the medium to long term.
- (ii) Remuneration, etc. for executive directors shall be determined by the Board of Directors in accordance with the policy described in the preceding paragraph, within the amount resolved at the General Meeting of Shareholders, reflecting some performance-linked elements and linked to medium- to long-term business performance, respecting the report from the Nomination and Remuneration Committee.
- (iii) Remuneration, etc. for Outside Directors shall be fixed remuneration only, reflecting their responsibilities as Outside Directors, and shall not include stock-related remuneration or variable bonus.

## Fixed Salary

Fixed remuneration is remuneration paid monthly to each director in accordance with their position and responsibilities, and the level of individual remuneration shall be determined in consideration of business performance, past results, the level of employee salaries and the level of remuneration paid by other companies.

## Variable Bonus

The amount of variable bonuses shall be determined based on performance indicators such as consolidated net sales, consolidated operating income and net income attributable to shareholders of the headquarters for each fiscal year, as well as by taking everything including the degree of achievement of the priority measures set by each director into consideration.

## Remuneration Structure for Executive Directors

Remuneration for executive directors consists of fixed salary, variable bonuses that mainly reflect short-term performance, and stock-based remuneration that contributes to the medium- to long-term improvement of corporate value through the continued promotion of sharing value with shareholders.

In principle, the composition ratio of each type of remuneration (in the case that the bonus is paid in full) shall be set so that, in general, fixed salary is approximately 60%, variable bonuses are approximately 20%, and stock-based remuneration is approximately 20%.

## Determination of Details of Individual Remuneration of Directors

The Board of Directors shall pass a resolution to mandate the President determine the amounts of the fixed salaries and variable bonuses to be paid to each individual director and shall mandate specific details for the President.

In determining the amount of compensation, the President shall respect the reports of the Nomination and Compensation Committee.

# Risk Management

## ➤ Approach to Risk Management

The Takasago Group values the environment, society and the sustainability of its business. To fulfill our responsibilities to every stakeholder, we regularly monitor and identify risks that could potentially affect the stability of our business while striving to maximize stakeholder value. Our Risk Management Committee, consisting of general managers, identifies potential risks that may hinder business continuity and formulates and reviews preventive measures to address these risks. The identified risks are reported at Board of Directors Meetings for further review. We will continually develop and implement measures to mitigate each of the risks listed below in the best possible way.

## ➤ Promoting Risk Assessment and Management

We identify and evaluate the risks that could affect our financial position and operations after the Risk Management Committee weighs their impact. Since our products are used in many final products as raw materials and our production stopping would impact the supply of many final products, we consider the issues that may affect the continuity of production to be major risks. Therefore, we consider countermeasures for each identified risk and review them periodically. For example, we have been managing our inventories for several months to maintain a safe zone where supply will not be stopped, using production management items such as inventory volume and delivery lead-time as indicators.

## Risk Management Structure



## ➤ Identified Risks

### Climate Change

The Takasago Group's financial performance could be significantly impacted by climate change caused by greenhouse gas emissions, such as unexpected fluctuations in the weather, extreme weather events or irregular, unseasonable weather. For example, as the group sources and uses a variety of natural raw materials, shortages and price increases of these natural raw materials caused by climate change could restrict our operations.

### Procurement

The Takasago Group sources raw materials and supplies its products around the world. Natural disasters, changes in consumer preferences, changes in international and local regulations and other significant changes are factors that influence our procurement and sales activities. Supply chain disruptions due to geopolitical risks, accidents at suppliers, etc. may affect our business performance if we are unable to fulfill our responsibility to continually supply products. These factors can significantly affect our business performance and financial condition.



## Globalization

The Takasago Group conducts business globally. The disruption of politics, the economy, society or many other factors caused by emergent situations such as terrorism, war, pandemic, etc. could significantly affect the group's business performance and financial condition.

## Economic Conditions and Exchange Rates

A future recession or economic downturn of our main market, both in and outside Japan, could affect our sales performance. It could also lead to a change in consumer demand, causing consumers to hold off on purchases of household products, foods and other products in a stagnant economic situation.

The fluctuation of exchange rates, when converted to the Japanese yen, could potentially affect the financial condition of the consolidated financial statements. In foreign currency transactions, significant exchange rate fluctuations could impact the group's business results and financial condition.

## New Product Research and Development

The Takasago Group continues to research and develop new products well ahead of the potential needs of the market. However, the delay of development or unforeseen changes in consumer's preferences could negatively affect the results of investments in research and development.

## Sales

Industry reorganization due to acquisitions of competitors or other factors may reduce our relative advantage. In addition, the entry of competitors into the market may reduce the market share of existing products, which may affect our business performance.

## Product Quality

The Takasago Group is expanding its business around the world. As we manufacture and sell a variety of products, there is a risk of financial loss due to customer complaints, recalls or the loss of the trust of our stakeholders due to the willful contamination of products, products being damaged during transportation, etc. We established countermeasures for a range of issues and are strengthening the management system.

## Accidents and Disasters

Natural disasters or accidents that occur in areas where our production sites are located could damage production facilities and disrupt procurement, distribution and sales. Consequently, accidents and disasters can negatively affect Takasago's business performance and financial condition.

## Information Security

The Takasago Group handles confidential information related to research and development, production, marketing and sales, as well as the personal information of many customers. The Takasago Group's business performance and financial condition could be affected by a leak of confidential or personal information held by the group caused by an attack on its servers, the illegal access of its systems, a computer virus, or other factors that are out of our control.

## Compliance

To conduct our business globally, the group complies with laws, regulations and relevant standards on product quality and safety, the environment, chemical substances, accounting, tax, labor and transactions in each country and region. When new laws, regulations or relevant standards come into effect, it is possible that they will significantly impact our business performance, hindering the group's business activities and forcing additional investment to address the situation.

## Human Resources

The Takasago Group is expanding its business all over the world. There is the risk that the group could fail to sufficiently secure and develop human resources, which could affect our business performance and financial condition.

### › Crisis Management

Takasago has established its crisis management system, including a business continuity plan (BCP) which enables the group to take necessary precautions to address possible disasters and emergency situations.

All of the procedures are to help effectively minimize the impact of a crisis when it occurs and immediately restore normal operations. The Crisis Management Board has been established within the Corporate Headquarters in Tokyo. In the event of a crisis, no matter where it arises, the Crisis Management Board organizes meetings to manage the situation and provide instructions.

### › Information Security

Amid frequently occurring cyber-attacks, our group is strengthening its IT security across the globe. In terms of physical measures, we have introduced tools and device authentication with the goal of preventing the intrusions of attackers. On the non-physical side, we are continually increasing employee awareness through training and notifications. 3,884 employees (97% of all employees) received IT e-training in 2021.

Additionally, the following necessary digital tools and systems for connecting to the company's systems are in place for our employees working from home:

- Secure connection through a cloud system when accessing the company systems from home via the Internet.
- Security patches and automatic updates to an anti-virus system that protects employees working from home.
- Updated detailed rules for the use of applications and digital tools that consider the work-from-home environment.

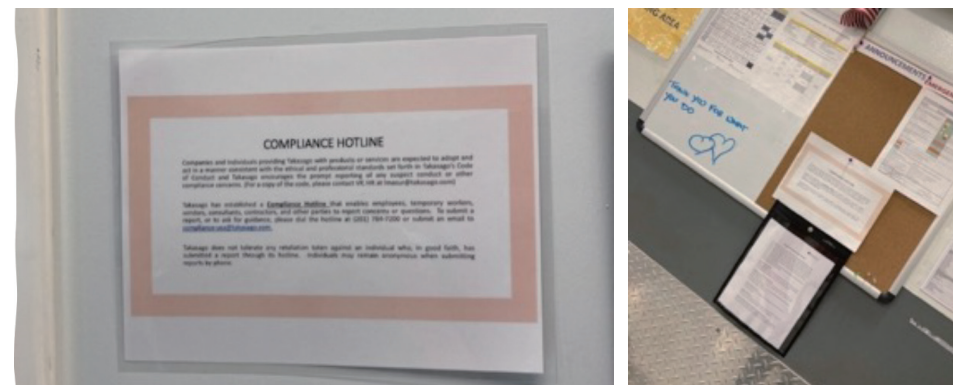
# Compliance

## › Compliance Structure

The Takasago Group believes that compliance is one of its top priority management issues and strives to continuously improve its compliance system while ensuring fair and proper business activities and effective corporate governance.

## › Compliance Hotline

The Takasago Group has a compliance hotline that enables all employees and other stakeholders such as suppliers and customers to report any compliance issues through the hotline and all of the information submitted to the hotline will be treated in the strictest confidence. Posters advertising the hotline have been displayed at offices and factories to ensure that our stakeholders know how to report any issues they discover. In 2022, the number of consultations was 16 for the entire Group.



## › Approach to Anti-Bribery

The Takasago Group understands that corporate bribery is an impediment to fair competition and a serious threat to corporate credibility. Based on this, we have established the Takasago Group Anti-Bribery Policy to ensure fair and ethical business activities by preventing bribery involving the employees or officers of the Takasago Group companies, ensuring compliance with the bribery laws and regulations of the countries and regions where we do business prohibiting bribery without exception.

The Takasago Group Anti-Bribery Policy stipulates the implementation of education and training and the establishment of a consultation and reporting system.

## › Approach to Eliminating Organized Crime

Our position against organized crime is clearly stated in our Charter of Corporate Behavior and Code of Conduct as well as The Takasago Group Supplier Code of Conduct. We work to eliminate organized crime by encouraging the entire group and also our supply chain. Furthermore, in response to the Tokyo Metropolitan Government's policy of eliminating organized crime groups, we have included a clause regarding the elimination of organized crime into our basic transaction contracts.

## › Ethical Audits

To operate our business sustainably, we need to understand our own business practices, enhance our business ethics and ensure that we comply with the principles of social responsibility. Our group utilizes SMETA\* to conduct ethical audits by third party organizations at our own manufacture sites. Through SMETA, we properly confirm compliance of our sites and strive to improve in accordance with audit results and findings.

In FY2022, Takasago Group conducted SMETA at 10 main manufacture sites. We conduct a plan to receive SMETA regularly across the globe and have conducted at main our manufacture sites (100%) over the five-year period from FY 2018 to FY 2022. The SMETA checks the following items according to the ETI Base Code established by the International Labour Organization.

### Major SMETA issues

- Appropriate working and employment conditions
- No discrimination and harassment
- Freedom of association and the right to collective bargaining are respected
- Safe and hygienic working environment
- Environmental standards meet local and national laws and requirements
- Compliance (bribery, corruption, and any improper business practices) meet local and national laws and requirements.

All issues found in these audits have been corrected and addressed. We will continue to implement SMETA to build an ethical corporate culture.

\* SMETA (Sedex Members Ethical Trade Audit) is Sedex's social auditing methodology, and the most widely used social audit in the world. SMETA assesses a site based on 4 pillars: labour, health and safety, environment and business ethics.

In addition to the ethical audits, we review our compliance through Ecovadis questionnaires. For example, as one of questions, we confirmed that employees receive 24 hours rest within a time frame of 7 consecutive days throughout the entire scope of operations.

## ➤ Tax Compliance Initiatives

The Takasago Group recognizes that the payment of taxes is one of the most basic and important social responsibilities that companies must fulfill, and we believe that proper tax payment plays an important role in the development of the countries and regions where we do business.

- We do not engage in tax planning or use tax havens to avoid taxes, and we comply with the laws and regulations of each country and region and the guidelines set forth by the Organization for Economic Cooperation and Development (OECD).
- We have established a scheme to enhance tax compliance and reduce tax risks by securing and training appropriate human resources while strengthening cooperation with external experts and other departments. In addition, we comply with laws and regulations and strengthen risk management by sharing the information about legal judgements and lawsuits that the tax authorities of various countries and regions provide
- We build and maintain good relationships with tax authorities in each country and region and respond to their requests in good faith. In addition, we strive to ensure transparency and trust in the tax authorities of each country and region by appropriately disclosing the information required by applicable laws and regulations.

## External Evaluation & Socially Responsible Investment Index



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

### Asia-Pacific Climate Leaders 2023

<https://www.ft.com/climate-leaders-asia-pacific-2023>



### FTSE Blossom Japan Sector Relative Index

## External Partnerships and Initiatives

Takasago engages with several organizations, supports initiatives and interacts with sustainability-related organizations including those listed below.

- American Chemical Society
- CDP
- EcoVadis
- European Flavour Association (Executive Board)
- Flavor and Extract Manufacturers Association (Board of Governors)
- International Fragrance Association (Board of Directors)
- International Organization of the Flavor Industry (Board of Directors)
- Japan Business Federation
- Japan Chemical Industry Association
- Japan Climate Initiative
- Japan Flavor & Fragrance Materials Association
- Japan Food Additives Association
- Japan Sustainable Palm Oil Network (JaSPON)
- Mint Industry Research Council
- Monell Chemical Senses Center
- Natural Renewable Stewardship Circle
- Rainforest Alliance
- Research Institute for Fragrance Materials (Board of Directors)
- Roundtable on Sustainable Palm Oil
- Science Based Targets Initiative (SBTi)
- Sedex
- Syndicat National des Fabricants de Produits Aromatiques
- The Global Alliance for Sustainable Supply Chain
- The Sustainable Vanilla Initiative
- UN Global Compact



## | Corporate Profile

<b>Company Name:</b>	TAKASAGO INTERNATIONAL CORPORATION
<b>Headquarters:</b>	Nissay Aroma Square 17F5-37-1, Kamata, Ota-ku, Tokyo 144-8721, Japan Tel:81-3-5744-0511 Fax:81-3-5744-0512
<b>Founded:</b>	February 9, 1920
<b>Representative Corporate Executive Officer:</b>	Satoshi Masumura
<b>Description of Business:</b>	Manufacturing and sales of flavors, fragrances, aroma ingredients, and fine chemicals.
<b>Capital:</b>	9,248 million yen
<b>Consolidated Sales:</b>	186,792 million yen (Fiscal year ended March, 2023)
<b>Numbers of Employees:</b>	3,756
<b>Numbers of Countries with Subsidiaries:</b>	28
<b>Numbers of Global Creation Centers:</b>	13
<b>Numbers of Production Sites:</b>	25
<b>Stock Listing:</b>	Tokyo

## | About This Report

### Issue date

09, 2023

### Scope and Boundaries

The scope of this report is the Takasago group.

This includes consolidated subsidiaries as well as non-consolidated subsidiaries defined by the equity-method.

### Period Covered

Fiscal 2022: In this report, the term of "Fiscal" is as follows;  
From April 1, 2022 to March 31, 2023 for Japan/  
From January 1, 2022 to December 31, 2022 for the others  
-If any data covers different period, the period is described.  
-Some latest information included.

### External Assurance

GHG emissions were verified by a third party based on the result of activities. See the Statement

### Guideline referenced

GRI Standards [See the GRI Index](#)