

 TAKASAGO

# Sustainability Report 2019-2020



# The Origin of the Corporate Philosophy



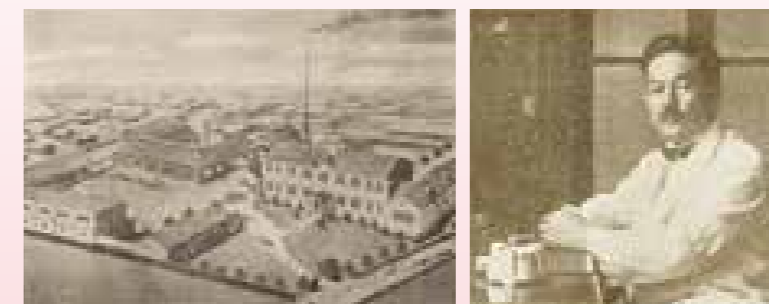
"Kainosho notebooks," where Tadaka wrote about the research in Europe (center/right) and a photo taken during the training at a natural aroma manufacturer in Grasse, South France (left)

*Takasago International Corporation marks its 100th birthday in 2020.*

These notebooks were used by Tadaka Kainosho, the founder of Takasago International Corporation, when he was studying perfumery in Europe. He put down everything he learned in France and Switzerland in these notebooks. Containing pages of writing in French and German, they give a sense of the young Tadaka's passion as well as his keen interest in the technology. The notebooks hold a great deal of meaning for Takasago International Corporation, which Tadaka later founded, as they provide the foundation of the company's corporate philosophy of technology-based development.

In 1920, Tadaka founded a company specializing in the manufacture of aroma ingredients, one of the first of its kind in Japan, based on a strong belief that fragrances and flavors enrich people's lives and can thus contribute to society.

The company has grown into a global enterprise and yet still maintains the passion of its founder to contribute to society through technology, which remains unchanged even as the world continues to evolve. In order to fulfill our mission to deliver to countless people products that can increase their enjoyment of life, we will drive our global business forward, aiming to become a world-leading flavors and fragrances supplier.



The Tokyo factory (currently the head office building in Kamata, Ota-ku) at the time of the foundation and the founder Tadaka Kainosho

# Contents



Cover Picture  
Uematsu Hobi

**Incense case with chrysanthemum branch and bird design in inlaid mother of pearl and maki-e**

Taisho- Showa period, 20th century

This box is a modern version of the lacquerware with densely sprinkled gold powder and in laid mother of pearl fashionable from the Heian to the Kamakura periods. It was inspired by the "Inkstone case with hedge and chrysanthemum design in inlaid mother of pearl and maki-e" (National Treasure) handed down by the Tsurugaoka Hachiman Shrine. The artist who created it, Uematsu Hobi (1872-1933) is known for studying classic works and working in a style that gave them interpretations.

\*Quoted from Treasures from The Takasago Collection

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## Corporate Communication Tools



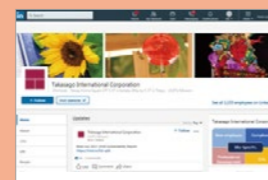
Social and Environmental Report  
(Japanese Edition)



Sustainability Report  
2019-2020



Corporate website



LinkedIn Takasago site

# Message from President and CEO



*Inheriting a 100-year history of overcoming changes, we will leap forward into the next 100 years.*

**Q. Looking back on fiscal 2019, could you provide an overview of the company's business condition?**

In fiscal 2019, our Flavor Division enjoyed strong sales of flavors for beverages at our Singapore subsidiary, and of coffee-related products in Japan. In the Fragrance Division, sales were up 1.3% from the previous year, due to factors including an increase in sales of Aroma Ingredients by our US subsidiary. In terms of profits, however, despite surpassing our forecast value at the start of the fiscal year, operating profit declined 54.4% from the previous year due to factors including a jump in raw materials prices, and both ordinary profit and net profit declined.

In fiscal 2019, an increase in earnings in the fast-growing Asia region made a significant contribution to our business, in which overseas sales account for over 50% of our total sales. While our business in Japan struggled in terms of profits amid a difficult environment for revenue, we made advancements in growth overseas as our business in the Americas attained profitability and both the Europe and Asia regions contributed to profits. In fiscal 2020, as raw

materials prices are stabilizing, we forecast little change in net sales (0.7% year-on-year growth) along with increased profits. At present, the COVID-19 pandemic is expected to significantly hinder growth in the global economy as a whole. While this may affect some categories of our business, we believe that mainstay flavors and fragrances for foods and for household goods will remain strong as products that are involved in lifestyle necessities.

**Q. Could you discuss the medium-term management plan, which has reached its final year?**

We have promoted our TAKASAGO GLOBAL PLAN long-term vision since 2009, and have worked to become a world-class flavors and fragrances company as we approach our 100th anniversary. Fiscal 2020 marks the final year of our One-T three-year medium-term management plan that brings this long-term vision to a close.

The plan sets forth the five basic policies as its basic strategies: Improvement of Customer Satisfaction, Promotion of Business Growth

Satoshi Masumura  
President and Chief Executive Officer



Strategy, Technological Innovation, Improvement of Profitability, and Human Resources Development. Placing the concept of “Corporate” at the center of these five basic policies, we will work to organize the standards and systems required of a global company, strengthen our governance, and enhance our global functions, and will undertake the creation of creative and innovative value. Over the past two years, we have steadily carried

out Business Growth Strategy by means including expanding the vanilla business, enhancing natural aroma ingredients through CIT in the US, and strengthening our expansion in Southeast Asia and South Asia by operating a new factory in Indonesia. With regard to Technological Innovation, too, we have been working on the development of new materials utilizing biotechnology, and the enhancement of continuous flow technology in the

fine chemicals business. The result of these actions has been an increase in net sales particularly in overseas markets. At the same time, with regard to initiatives for Improvement of Profitability, global tightness in raw materials and price hikes that we had not anticipated when formulating the plan occurred. Although we addressed these issues in the areas of procurement, production, and sales, we struggled with the initiatives. Under these circumstances, we anticipate difficulty in achieving net sales of 170 billion yen and a ratio of operating profit to revenue of 5.2%, our targets for the final year of the plan.

From the perspective of Corporate, we are implementing a variety of measures aimed at One-Takasago. One of these is the Global SAP Project, which we are advancing mainly overseas. Over the next several years, we will integrate the backbone IT systems of our major sites overseas. Through this project, we intend to unify workflows in line with Takasago’s best practices. In strengthening

governance, we formulated a human rights policy and conducted Human Rights Due Diligence at all of our sites in Japan and overseas. We were able to confirm the absence of any human rights violations. Through the process, we also identified vulnerabilities in our corporate activities and made improvements such as IT security.

**Q. One-T sets the promotion and strengthening of sustainability as a goal. What are your thoughts on this, from the perspective of ESG?**

The Takasago group is strengthening initiatives with E standing for EHS (Environment, Health, and Safety), S for social aspects, and G for governance, from the perspectives of fulfilling our responsibility as a member of society and increasing our corporate value in non-financial areas.

With regard to dealing with environmental issues (climate change), in April of this year we disclosed information on governance, risks and opportunities, strategy, and metrics and targets as Takasago guidelines, in line with TCFD recommendations. Giving more specific consideration to metrics and targets, we hope to move forward in parallel with

confirming to SBTi criteria. While Green Chemistry will play a central role in our strategy, we want to create new business opportunities through means including the development of new materials that leverage biotechnology, and synthesis that uses the continuous flow process. We will also make efforts to put green procurement into practice in raw material procurement. Takasago's synthetic menthol uses renewable raw materials, and has now been certified as a USDA Certified Biobased Product. Safe operation is also vital to sustainable management. Since the accident that occurred at our Hiratsuka Factory in 2013, we have worked on further building our safety management system. We are currently making preparations to acquire ISO 45001 certification. We will work to unify systems throughout the Group, with steady everyday safety activities as our base.

Looking at social aspects, it is important that we strengthen engagement with every stakeholder. With our employees, we want to continue creating proper work environments that consider life-work balance. With regard to the supply chain, we will make efforts

not only in the procurement of raw materials but also in responsible procurement that shares its values with stakeholders, including IT, logistics, and stationery.

In governance, we will continue Human Rights Due Diligence as noted above, and will work to prevent human rights violations while resolving vulnerabilities in our business processes.

We will also continue to undertake sustainable management through issues in ESG.

**Q. What thoughts do you have regarding the next 100 years?**

The times in which Tadaka Kainosho founded the company in 1920 were turbulent. Political and economic turmoil were ongoing after World War I, and depression was imminent. A century later, the severity of those days have come again, with the world hit by calamity in the form of the COVID-19 pandemic.

How people work and spend their leisure time will undergo drastic changes over the next few years, and

processes and methods for product development in the industrial world will change as well. However, no matter how society may change, flavors and fragrances will uphold their roles in adding color and joy to people's everyday lives and widely supporting the affluence of society. Takasago will continue adhering to its management philosophy of "Contributing to Society through Technology" in order to realize the social value through our core business. At the same time, we will adapt flexibly to changes in society and will maintain and hone our high technological capabilities, as we strengthen our efforts to secure the profits that support those capabilities.

The Takasago group has approximately 3,500 employees today. Of these, overseas employees have come to account for nearly 60% of the total. In order to become a company in which diverse human resources of any nationality play active roles and grow together as one, we need to share a new vision. Our plan is to formulate this vision and announce it as VISION 2040, presenting the ideal that we hold for ourselves 20 years ahead in 2040.

**Q. In closing, could you say a few words looking ahead to the time after One-T?**

In our next medium-term management plan beginning in fiscal 2021, as COVID-19 and other concerns create ongoing uncertainty, the creation of a corporate structure that can sustainably generate profit even during deterioration in consumption trends, raw materials conditions, or elsewhere in the external environment will be a continuing theme. The square T, as known as "Triple T", that forms our corporate logo incorporates our wish to gain customers' Trust through Technology and Teamwork. Etching this unwavering wish of the Takasago group in our minds and always adopting the viewpoint of our customers, we will strengthen our sales capabilities, research and development capabilities, strict quality control, and swift and flexible response, as we strive to further improve supply chains within the Group and improve customer satisfaction.

Inheriting a 100-year history of overcoming changes, we will leap forward into the next 100 years.

# Corporate Vision

## Corporate Philosophy

Contributing to Society through Technology

## Medium-term Management Plan "One-T"

It is essential to combine all management resources of the Takasago group and make group-wide efforts to produce creative and innovative value for the year, 2020. We set the new medium-term management plan "One-T" (FY2018-2020), shortened form of One-Takasago which is also a slogan for united the Takasago group. Towards the realization of one of our basic management policies "A leading flavors and fragrances company in the global market that consistently supplies dependable products," we will grow continuously by carrying out our plans with the following five pillars.



## Basic Management Policy

- A well regarded company that respects the global environment and local communities.
- A leading flavors and fragrance company in the global market that consistently supplies dependable products.

### Basic Policies in the One-T

#### 1. Customer Satisfaction

Through improved sales capability, enhanced research and development, comprehensive quality control, and swift and flexible business actions, we aim to improve customer satisfaction.

#### 2. Business Growth Strategy

While increasing our market presence and securing stable profits, we aim to strengthen our business foundation and to achieve net sales target of 170 billion yen.

#### 3. Technological Innovation

With the corporate philosophy of emphasis on technology in mind, we strive to develop new technologies and products with great originality and superiority, and to apply their achievements to our global business.

#### 4. Improvement of Profitability

Through optimizing value chain and re-engineering business processes globally, we aim to achieve an operating income ratio target of 5.2%.

#### 5. Human Resources Development

We will optimize our human resources, develop staff members who will pursue ambitious initiatives in new areas, and create an environment where our staff members can fulfill their potential globally.

◆ We put the concept of "Corporate" in the center of the basic policies above and as a global company, we will harmonize rules and guidelines as well as integrate systems to strengthen our corporate governance and accelerate the globalization. This will move us ahead to achieve One-Takasago.

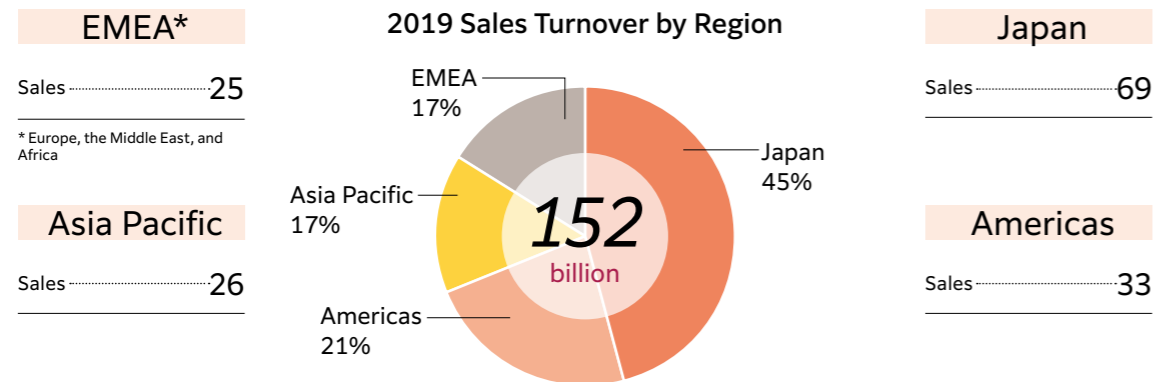
# Corporate Profile

## -100 years of Inspiration & Innovation-

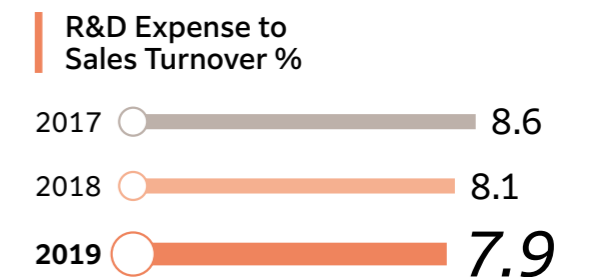
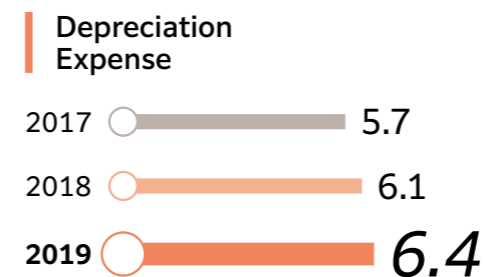
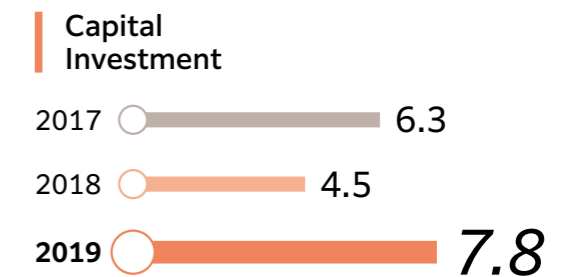
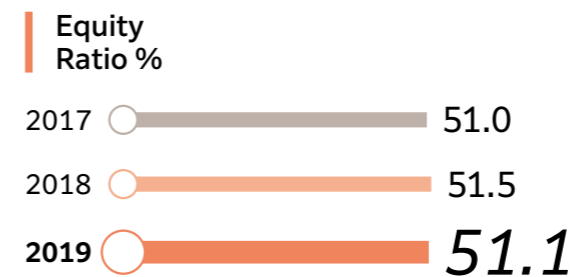
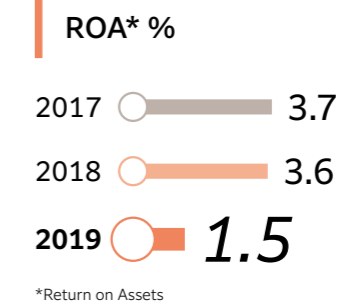
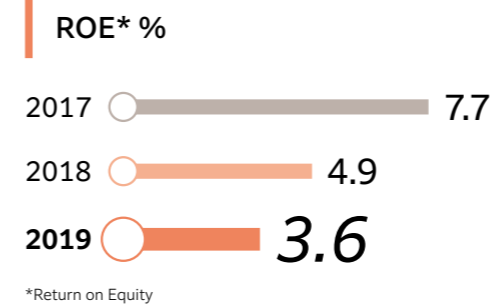
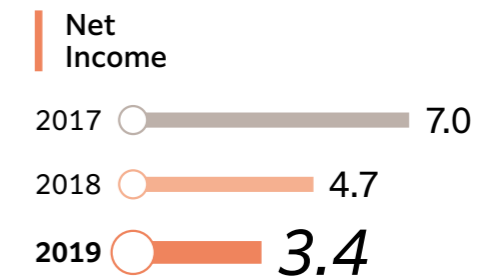
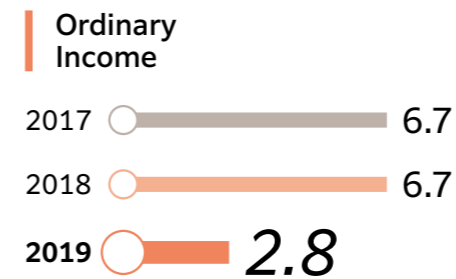
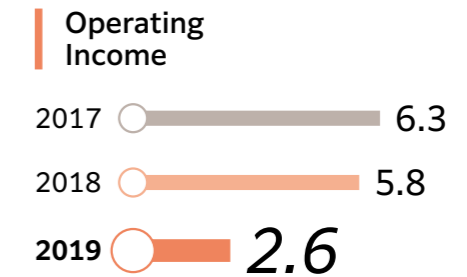
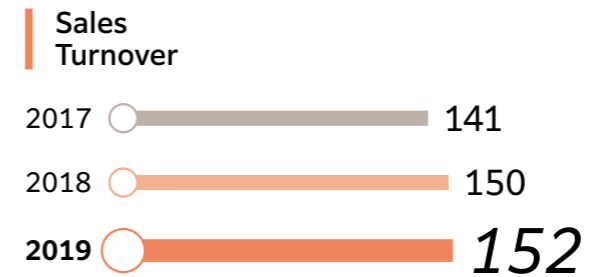
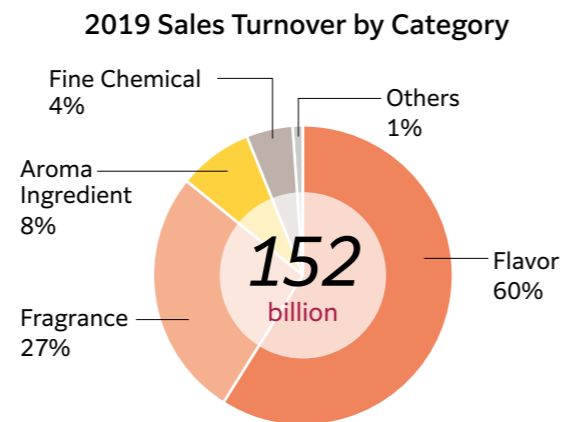
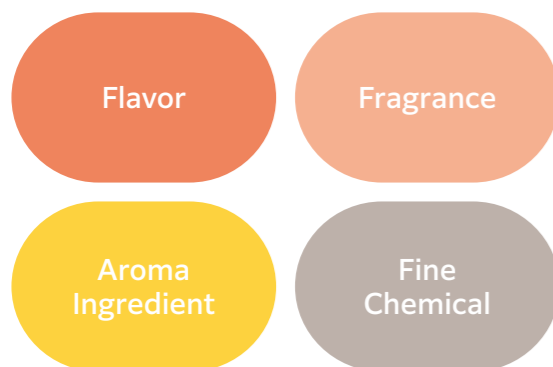
Takasago International Corporation, headquartered in Tokyo, Japan, develops, manufactures and supplies flavors, fragrances, aroma ingredients and fine chemicals. Our products are in foods, cosmetics, household products and pharmaceutical intermediates for the life science industry, and functional materials for the electronics industry.

Corporate Profile	<b>Name</b>	TAKASAGO INTERNATIONAL CORPORATION
	<b>Headquarters</b>	5-37-1, Kamata, Ota-ku, Tokyo, 144-8721, Japan
	<b>Founded</b>	February 9, 1920
	<b>Capital</b>	9.2 billion JPY
	<b>Employees worldwide</b>	3,572

### Financial Highlights (billion JPY)



### 4 Core Businesses





# Global Network

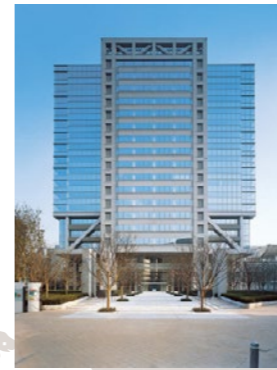
We have now business operation in 28 countries and regions around the world. In November 4th, 2019, a new production factory in Indonesia started its operation. This production facility together with our facilities in Singapore and India allows us to manufacture products at these three sites to supply for growing markets in the region. This is also enable us to shorten lead-time as well as secure flexibility in business plans.

We will continue our efforts to understand our customer's perspective, strengthening sales & marketing forces, enhance R&D capabilities, conduct thorough quality control on all our product, and provide flexible services with agility to ensure a corporate focus on delivering customer satisfaction.

**Office**    Headquarters    Sales Office    Representative Office

**Laboratory**    Flavors    Fragrances    R&D

**Factory**    Flavors    Fragrances    Aroma Ingredients    Fine Chemicals    Food    Natural Resources



# Business Outline

Takasago has been developing innovative flavors, fragrances, aroma ingredients and fine chemicals to enrich people's daily lives.

## Flavor



We design to taste...

## Fragrance



Creativity, inspired by nature and powered by science

## Aroma Ingredient



Endless Possibility

## Fine Chemical



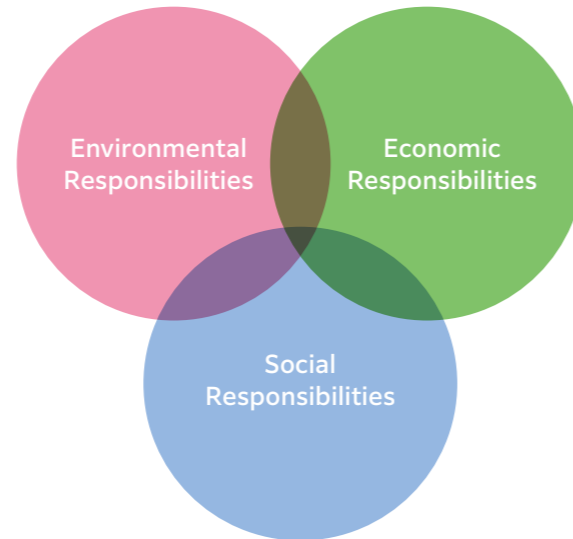
Green Chemistry

# Sustainability at Takasago

## Sustainability Vision

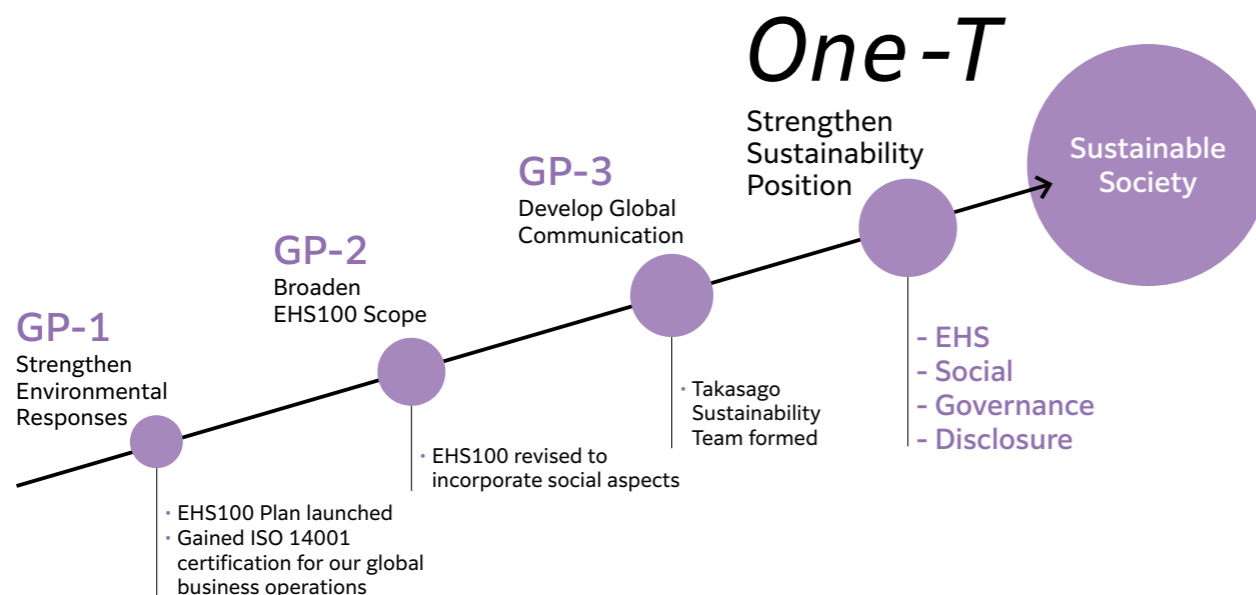
As a company that recognizes its corporate responsibility to the global environment and aspires to be a society's most trusted partner, we position sustainability as one of the key cornerstones of our business to ensure a prosperous society for future generations.

Furthermore, as a responsible corporate citizen, we fulfill our economic, environmental and social commitment in a well-balanced manner. Specifically, we make utmost efforts to reduce our environmental impact through diverse initiatives for reduced waste and improved energy efficiency, to conserve bio-derived materials, and to actively embrace diversity in our workforce through a sound diversity management.



## History

Takasago has been actively developing environmental initiatives into the business activities since the environment statement was first published in 2002. Throughout midium-term business plans, Takasago has been expanding its scope to social aspects, such as human rights and diversity and to all sustainability-related issues.

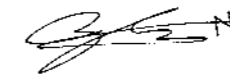


# Sustainability is a vital element for our growth

## Message from Senior Vice President



**Tatsuya Yamagata**  
Senior Vice President,  
Global Integration Headquarters,  
and EHS Executive



## Accelerate Sustainability

Takasago celebrated its 100th anniversary on February 9, 2020. In that brilliant year and the final year of One-T, the current running medium term business plan, we made an official kick-off of Global SAP Project successfully and marked the first step for New Takasago. This project will take several years to integrate the ERP system at key affiliates outside Japan. Through this project, we aim to develop Takasago Best Practices and unify the business flow globally. With the standardized business flow and the Best Practices, we will be able to have more flexibility in human resources and provide challenging opportunities for our employees as well as conduct business in the best way anywhere. This is exactly what One-T is aiming for. The project is considered as the first important step for our next 100 years.

For the final year of One-T, we are focusing on the following challenges. Firstly, we released "Takasago Plan in response to TCFD recommendations" on our webpage on April 1, this year. Having prepared for the disclosure since the previous year, extensive discussions were conducted within the concerned departments as well as in the Sustainability Promoting Committee. The draft proposal was finally brought up to the Board

of Directors for further discussion and approval. Through this process, we reconfirmed our policy of tackling climate change issues. Regarding indicators and targets, we will set them with SBTi criteria. In the latter half of the previous year, we started to look into indicators and targets through an opportunity provided by the Ministry of Environment. Having received the support, we were able to calculate CO<sub>2</sub> emissions for all categories in Scope 3 and are now developing a globally standardized formula. Additionally, in the area of logistics that is difficult to unify globally, we have set a corporate policy and furthering discussion on targets and action plans to reduce CO<sub>2</sub> emissions.

In the previous year, we formulated the Takasago Group's Human Rights Policy, which is one of the most important frameworks for governance. Human Rights Due Diligence survey was then conducted at all affiliates in and outside Japan and at the headquarters, and we confirmed there was no occurrence of human rights violations. The survey questionnaire was made based on the guideline published by the Japan Federation of Bar Associations. Conducting Human Rights Due Diligence helps identify vulnerability in our business process and system for improvement. To strengthen stakeholders' engagement, we continue to strive in developing better and firmer relationship with every stakeholder.

To make steady and sustainable growth in a long term, we will make every possible effort to promote sustainability this year too.

## Takasago Sustainability Team

Takasago Sustainability Team was formed in 2016 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.

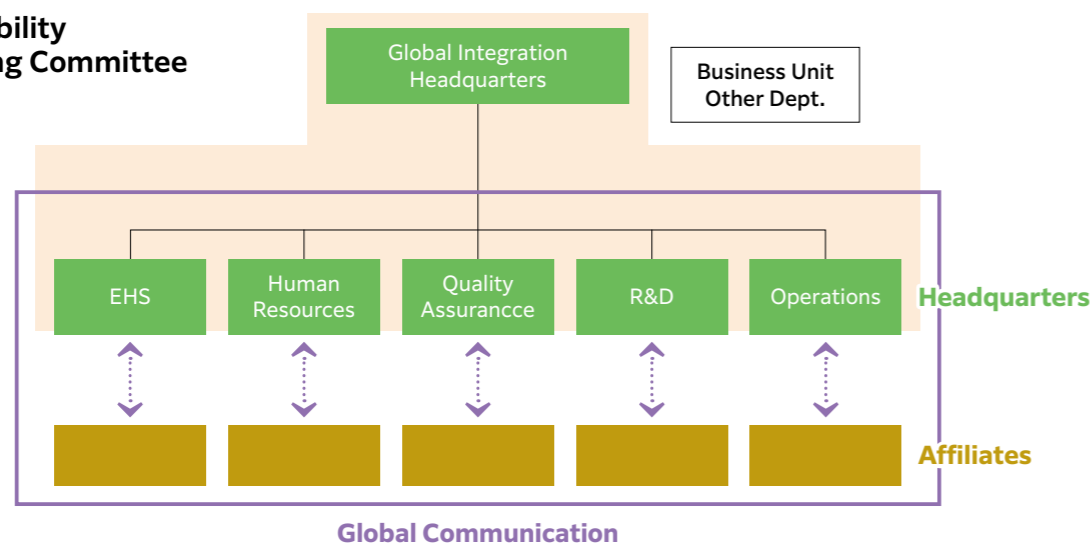
The team consists of five key corporate functions: EHS, Human Resources, Quality Assurance, Operations, and R&D.

General manager of Global Integration Headquarters is leading the team and communicates key sustainability issues at the Board of Directors. Sustainability Promoting Committee, in which representatives from

each function participate, takes place regularly at Headquarters to exchange information and concerns and monitors the progress of our activities.

Respective teams are responsible for communicating in their functional areas across the globe and developing their own action plans following the corporate strategy. A global meeting is held regularly to build mutual communication and discuss issues and concerns as well as monitor the progress. Through this global communication system, Takasago is strengthening sustainability across the globe.

### Sustainability Promoting Committee



## Materiality Assessment

Takasago conducts materiality assessment, taking external opinions into consideration, and reviews its material items every year.

In our materiality matrix, Y-axis represents "importance to stakeholders". Its items are identified based on global sustainability indexes and standards, such as Global Reporting Initiative (GRI), Dow Jones Sustainability Index (DJSI), and Sustainability Accounting Standards Board (SASB).

Identified items are discussed and fine-tuned by the Sustainability Team, taking account standpoint of diverse stakeholders.

X-axis represents "influence on group's business

success". The team also discusses this aspect for each item and plots them on the materiality matrix.

It is then brought up to the corporate officers and the Board of Directors for further discussion and decision-making.

Through taking these actions, we tackle global issues and fulfill our corporate responsibility as a member of the society. This also helps enhance the corporate value in the long term.

The content and boundaries of this report are defined based on the following process.

### Process for Defining Materiality



## Materiality 2019-2020

\*We use the term of 'Materiality' as defined by the GRI Sustainability Reporting Standards: "relevant topics that may reasonably be considered important for reflecting the organization's economic, environmental and social impacts, or influencing the decisions of stakeholders."



## Initiatives Related to the SDGs

Our business operations closely related with the SDGs.

We have plans and initiatives in place to contribute in achieving the SDGs.



	Materiality Items	SDGs	Initiatives
EHS	Reduction of Environmental Impact	3 6 7 8 9 11 14	<ul style="list-style-type: none"> <li>EHS100 Plan</li> <li>Takasago group's strategy and plan that are in line with TCFD recommendations</li> </ul>
	Climate Change	6 7 11 13 15	
	Occupational Health and Safety	3 6 8 10 11	
Society	Raw Material	12 17	<ul style="list-style-type: none"> <li>Sustainable Procurement Programs (TAKASOURCE, TaSuKI)</li> </ul>
	Customer Health and Safety	3 12 15	
	Innovation	2 3 9 13 15	<ul style="list-style-type: none"> <li>R&amp;D Strategy</li> </ul>
	Green Chemistry	6 7 9 12	
	Local Communities	8 15	
	Human Resources Development	5 8	<ul style="list-style-type: none"> <li>Training Program Guidelines</li> </ul>
	Responsible Supply Chain	12 17	<ul style="list-style-type: none"> <li>Takasago Supplier Code of Conduct</li> </ul>
Governance	Human Rights	5 8 10 16 17	<ul style="list-style-type: none"> <li>Human Rights Due Diligence</li> </ul>
	Economic Performance	8	<ul style="list-style-type: none"> <li>Medium-term Management Plan "One-T"</li> </ul>
	Risk Management	8	<ul style="list-style-type: none"> <li>Risk Management Committee</li> </ul>
Disclosure	Transparency	12 17	<ul style="list-style-type: none"> <li>Annual Sustainability Report in accordance with the GRI Guidelines</li> </ul>

*Sustainable Society*



# Our Activity

## Governance

- Risk Management
- Crisis Management
- Compliance
- Human Rights

## EHS

- Environment
- Occupational Health and Safety(OHS)
- Takasago Safety Day 2019

## Society

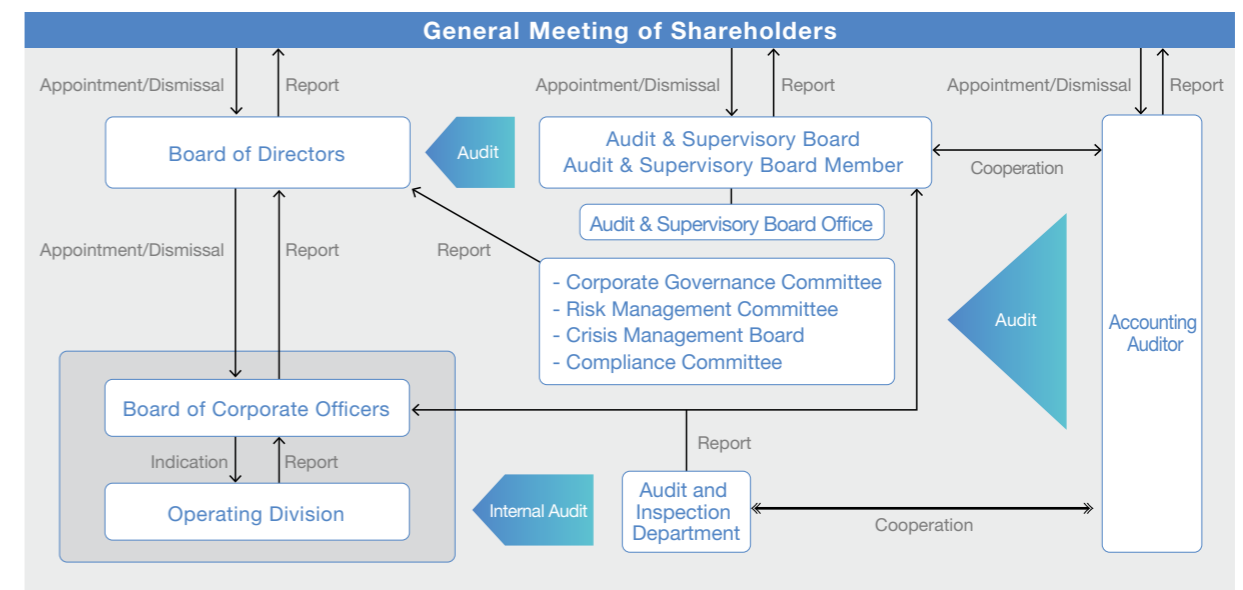
### Stakeholder Engagements

- Our People
- Our Supply Chain
  - Sourcing
  - Production
  - Logistics
- Research & Development
- Quality Assurance
- Shareholders and Investors
- Society
  - Community
  - Spreading Culture of Fragrance

## Governance

The Takasago group continues to further strengthen its corporate governance by ensuring that decisions are made according to the corporate guidelines and the process is properly monitored by the Board of Directors. Transparency in corporate activities is further enhanced through appropriate information disclosure. In addition to establishing a basic policy on internal control, a corporate officer system was introduced to clearly separate the Board of Directors' supervisory

and policy making functions from Corporate Officers' execution and implementation roles in the business operations. This is to ensure that both the Directors and Corporate Officers remain focused on their primary roles and decisions made and directions set by the Board of Directors are dutifully executed in a timely manner. Improvements of the governance structure have been made continuously.



## Risk Management

The Takasago group does not only value the environment and society, but also the sustainability of its business. In order to fulfill our responsibility to every stakeholder, we regularly monitor and identify risks that could potentially affect our business stability while striving to maximize stakeholder value. Our Risk Management Committee, consisting of general managers, identifies potential risks that may hinder business continuity as well as formulates and reviews preventive measures against those risks. The identified risks are reported at the Board of Directors Meeting for further review.



We will continually develop and implement measures to mitigate each of the risks listed below in the best possible way.

## Identified Risks

### Climate Change

The Takasago group's financial performance could be significantly impacted by climate change, such as unexpected climate variability or extreme weather events due to global warming caused by greenhouse gas emissions, or unseasonable weather that occurs irregularly. For example, as the group sources and uses a variety of natural raw materials, shortage and price hike of natural raw materials, caused by climate change, could restrict the operations. Also, unseasonable weather in summer could affect the sales of our flavor products in the beverage market, which is one of our main categories.

### Exchange Rate

The Takasago group develops, manufactures, and supplies products in a global scale, taking advantage of having 11 overseas consolidated subsidiaries. Due to fluctuation of the exchange rate, the nonconsolidated financial statements, when exchanged into Japanese yen, could potentially affect the financial condition of the consolidated financial statements. In foreign currency transactions, significant fluctuations of the exchange rate could impact the group's business results and financial condition.

### Globalization

The Takasago group conducts business globally. Confusion of politics, economy, society, and many other aspects caused by emergent situations such as terrorism, war, pandemic, and so on, could significantly affect the business performance and financial condition.

### Procurement/Sales

The Takasago group sources raw materials and supplies its products around the world. Natural disasters, changes in consumer preference, changes in international and local regulations, and other significant changes are factors that influence procurement and sales activities, and thereby significantly affect our business performance and financial condition.

### Accidents/Disaster

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

### New Products Research and Development

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

### Information Security

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

### Economic Conditions

Future recession or economic downturn in main markets, both in and outside Japan, could affect our sales performance. It could also lead to a change in consumer demand that holds off on buying household products, foods, and other products under the stagnating economic situation. Decline in consumer demand in main markets could impact Takasago group's business performance and financial condition.

### Compliance

To conduct our business globally, the group complies with laws, regulations, and relevant standards on product quality and safety, environment, and chemical substances as well as on accounting, tax, labor, and transactions in each country and region. When new laws, regulations, or relevant standards are put into effect, they could significantly impact our business

performance, hindering the group's business activities and forcing additional investments to cope with the situation.

### Human Resources

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

## Crisis Management

Takasago has established its crisis management system, including business continuity plan (BCP), which enables the group to take necessary precautions against possible disasters and emergency situations. All the procedures are to help effectively minimize the impact of a contingency, and immediately restore normal operation. The Crisis Management Board is set up at the Corporate Headquarters in Tokyo. In the event of a crisis, no matter where it arises, the Crisis Management Board organizes a meeting to manage the situation and give directions.

## Compliance

The Takasago group considers compliance to be 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. The group has a compliance hotline that enables all employees to report violations of compliance and consult their concerns on compliance related issues. All employees of any type of contract within the group are informed of the compliance hotline through KUMPU, our internal publication. During the reporting period, we did not have any issues brought up through the system. Nor was there any

incompliance with any laws or regulations in social as well as economic areas.



## Human Rights

The Takasago group fully recognizes respect for human rights as its corporate responsibility. The Charter of Corporate Behavior and Code of Conduct revised in 2018 include respect for human rights, which is to be incorporated into our corporate culture. To take actions on this commitment, "Takasago Group Human Rights Policy" was developed based on the Universal Declaration of Human Rights, International Labor Organization Declaration on Fundamental Principles and Rights at Work, Ten Principles of the United Nations Global Compact, and other concepts.

Embodying the policy, we established a system for human rights due diligence, which is to identify, prevent, and mitigate relevant risks. With consideration to diverse stakeholders, we developed a questionnaire to assess risks based on the Human Rights Due Diligence Implementation Guideline issued by Japan Federation of Bar Associations. We conducted the first assessment through the end of 2019 to the beginning of 2020 and did not identify any significant risk related to Human Rights in our business operations.

We will conduct human rights due diligence assessment on an annual basis and continue with our utmost efforts to prevent and mitigate relevant risks in our business activities.

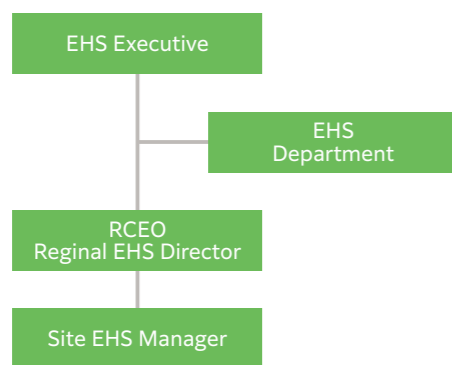
# EHS

## Global EHS Management

The Takasago group fully recognizes the importance of environmental conservation and the occupational health and safety of its employees and other stakeholders.

EHS Headquarters is responsible for making the strategy and plans on all global EHS activity. The Global EHS Committee, which is chaired by the EHS Executive, Tatsuya Yamagata, takes place every quarter to discuss the global activities on the environment and occupational health and safety.

### Global EHS Committee



environmental conservation (reduction of water use), waste management, promotion of renewable energy and management of chemical substances. EHS data associated with these objectives are entered into T-ReCS®, an EHS management system, by each site on a regular basis and collected by the EHS office for monitoring and further improvement. To enhance global EHS management, we acquired ISO14001 multisite certification in 2011 and have maintained it since then. In addition, we will globally acquire ISO45001 in the next two years and will integrate both ISO standards.

## Our EHS Statement

We have established the EHS Statement as one of the basis of Takasago group's management and revised it in April, 2020 to correspond to requirements of the ISO45001.



Acting as a global enterprise based on the philosophy of Contributing to Society through Technology, the Takasago Group ensures compliance with laws and internal guidelines and standards, responds to society's demands for preserving the global environment and protecting people's health and safety, and aims to be a company that contributes to the realization of sustainable society.

1. We hold EHS as a value in all of our business operations.
2. We work to maintain and enhance EHS activities in coordination with our employees and internal and external stakeholders.
3. We endeavor to protect the environment and create a work environment where employees can work in a safe and healthy manner through the assessment and mitigation of EHS risks from our business activities.
4. We set specific goals for EHS activities and continually improve our management system to achieve them.



Global EHS Committee Meeting was held in 30th July, 2020

EHS Department functions as communicating across affiliates and HQ. It develops guidelines to make global alignment under Takasago's own policy. The EHS Department plays key roles in supervising progress on a long-term action plan called "EHS 100 Plan" (2009-2020). This plan includes objectives such as climate change (reduction of CO<sub>2</sub> emission),

# Environment

As part of our basic management policy, we aim to be "A well regarded company that respects the global environment and local communities" and endeavor to reduce the environmental impact of our activities.

## Environmental Management System

As of December 2019, 20 production sites, Corporate Research & Development Division (Hiratsuka, Japan) and EHS Department at the Headquarters have acquired the ISO14001 certification under a single corporate certificate to enforce effective governance on environmental issues.

## Energy and Emissions

We manufacture flavors and fragrances from a variety of natural raw materials, which are sourced from all over the world. The price, quality and supply volume of our raw materials have been affected by unfavorable global weather, especially in recent years. In addition, some of our production bases have been directly affected by natural disasters such as heavy rains that placed the supply of raw materials used for our products at risk. These extreme weather events are presumably caused by climate change.

As such, taking appropriate actions on climate change are extremely important issues for us, not only for protecting the global environment, but also for assuring the supply of raw materials for our products, which is directly associated with sustainability of our business.

On top of the objectives set in EHS 100 such as reduction of energy consumption and CO<sub>2</sub> emissions as well as increasing the use of renewable energy, the Global EHS Committee formulated a plan to introduce Science Based Targets Initiatives during One-T. We have already expressed our commitment in July 2019 to manifest our promise to tackle climate change issues.

Our total energy consumption in 2019 increased by 2.4% from the previous year due to steady growth of our business but CO<sub>2</sub> emissions in 2019 decreased 0.2% compared to 2018 through our efforts to increase

the use of renewable energy.

We will continue making utmost effort on reduction of greenhouse gas emissions through strengthening overall energy management, upgrading equipment, improving production processes and introducing more environmentally friendly technologies such as continuous flow manufacturing processes to achieve the objectives set in EHS 100 Plan.

For Scope 3, our logistics team has been working on reviewing distribution points and shorten mileage of transportation with the aim of reducing the indirect CO<sub>2</sub> emissions.

## Energy Consumption within the Organization

	2018(Restated)	2019	Changes in %
<b>Direct Energy (GJ)</b>			
Town Gas	218,645.10	204,547.66	-6.4%
LP Gas	3,632.82	3,779.43	4.0%
LNG	285,579.91	264,773.41	-7.3%
Natural gas	19,800.72	27,763.62	40.2%
Residual Fuel Oil	41,792.83	43,315.75	3.6%
Gas/Diesel Oil	7,071.47	7,451.89	5.4%
Kerosene	2.57	170.76	6,544.4%
Gasoline	10,100.39	10,557.16	4.5%
Waste Oil	28,973.87	40,490.79	39.7%
<b>Total Direct Energy</b>	<b>615,599.68</b>	<b>602,850.47</b>	<b>-2.1%</b>
<b>Indirect Energy (GJ)</b>			
Electricity purchased	790,939.37	729,309.47	-7.8%
Steam purchased	28,885.32	28,631.59	-0.9%
<b>Total Indirect Energy</b>	<b>819,824.69</b>	<b>757,941.06</b>	<b>-7.5%</b>
<b>Renewable Energy (GJ)</b>			
Biomass incinerated	32,860.39	38,305.67	16.6%
Electricity purchased	112,695.17	225,335.94	100.0%
<b>Total Renewable Energy</b>	<b>145,555.56</b>	<b>263,641.61</b>	<b>81.1%</b>
<b>Total Energy</b>	<b>1,580,979.93</b>	<b>1,624,433.14</b>	<b>2.7%</b>

## Energy Intensity

	2018(Restated)	2019
Energy intensity (GJ per tonne production)	24.16	23.91

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

	2018(Restated)	2019	Changes in %
<b>GHG emissions (tonnes)</b>			
Scope 1	30,613.58	32,536.37	6.3%
Scope 2	23,622.97	22,108.29	-6.4%
<b>Total (Scope 1 + 2)</b>	<b>54,236.55</b>	<b>54,644.66</b>	<b>0.2%</b>



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

	2018(Restated)	2019	Changes in %
<b>GHG emissions (tonne)per tonne production</b>			
Scope 1	0.47	0.51	10.0%
Scope 2	0.36	0.35	-3.2%
<b>Total (Scope 1 + 2)</b>	<b>1.01</b>	<b>1.04</b>	<b>3.2%</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	717,679.28	58.34%
cat 2	Capital goods	22,378.20	1.82%
cat 3	Fuel- and-energy-related activities	12,105.75	0.98%
cat 4	Upstream transportation and distribution	379,247.17	30.83%
cat 5	Waste generated in operations	6,713.54	0.55%
cat 6	Business travel	464.36	0.04%
cat 7	Employee commuting	5,968.33	0.49%
cat 8	Upstream leased assets	NA	
cat 9	Downstream transportation and distribution	NA	
cat 10	Processing of sold products	NA	
cat 11	Use of sold products	NA	
cat 12	End-of-life treatment of sold products	13,034.28	1.06%
cat 13	Downstream leased assets	65.15	0.01%
cat 14	Franchises	NA	
cat 15	Investments	NA	
<b>Scope 3</b>	<b>1,175,513.50</b>	<b>95.56%</b>	
Scope 1	32,536.37	2.64%	
Scope 2	22,108.29	1.80%	
<b>GHG total amount</b>	<b>1,230,158.16</b>		

\*Amount of GHG emissions has verified by a third-party. There is a possibility for the figures would be restated.

### Water and Effluents

We require water in our manufacturing process such as for clearing and cooling. Sufficient amount and quality of water is very important in our operations, as water scarcity and change or deterioration of water quality directly affect our production output and quality. Currently, availability of water does not directly affect our business operations, as we have secure access to sufficient amount and quality of water. However, we have production facilities in 13 countries, and some of them are located in areas where demand of water is expected to increase in the future.

Reduction of water withdraw is one of the targets for our multi-site ISO14001 certification. The water we use is either municipal or ground water, which

are both measured and monitored, with a disclosed combined reduction target. The data are reported on monthly basis by each site. The total water withdrawal increased by 3.2% from the previous year due to the construction work conducted at several sites. We will continue making efforts to reduce water consumption. It is important to understand the specific conditions and requirements of water use at each site and proper use of water. Through a periodical survey on regulatory trends and risk analysis, we strive to identify water risks at each site and its associated management.

### Total Water Withdrawal by Source

water withdrawal (ML)	2018 (Restated)	2019
<b>Third Party</b>		
Municipal Water	624,115.08	619,494.64
Industrial Water	457,224.00	455,469.00
<b>Surface Water</b>	<b>85.00</b>	<b>46.00</b>
<b>Ground Water</b>	<b>2,065,243.14</b>	<b>2,172,153.40</b>
<b>Total Water Withdrawal</b>	<b>3,146,667.22</b>	<b>3,247,163.04</b>

### Water Discharge by Destination

water discharge (ML)	2018 (Restated)	2019
<b>Surface Water</b>	<b>2,666,400.84</b>	<b>2,728,149.48</b>
<b>Ground Water</b>	<b>863.00</b>	<b>179.00</b>
<b>Third Party</b>	<b>346,328.45</b>	<b>367,451.08</b>
<b>Total Water Discharge</b>	<b>3,013,592.29</b>	<b>3,095,779.56</b>

### Water Consumption

	2018	2019
Total Water Consumption (ML )	132,933	151,383

### Waste Management

In 2019, 2.7% of the waste generated is finally landfilled, but there are countries and areas where the manifest system is not in place, and processing information on waste at outsourced companies is not available or is unclear for some cases. In the future, we will aim for collection of more accurate data by selecting contractors that can disclose processing information. We will work to reduce the amount of generated waste through appropriate sorting and recycling practices, and related education to our employees.

### Waste by Type and Disposal Method

Hazardous waste (tonnes)	2018 (Restated)	2019
<b>Recycling</b>	<b>1,157.08</b>	<b>1,271.93</b>
<b>Incineration</b>	<b>177.92</b>	<b>180.04</b>
<b>Landfill</b>	<b>61.94</b>	<b>76.90</b>
<b>Total hazardous waste</b>	<b>1,396.94</b>	<b>1,529.24</b>
Non-hazardous waste (tonnes)	2018 (Restated)	2019
<b>Recycling</b>	<b>11,022.77</b>	<b>13,937.35</b>
<b>Incineration</b>	<b>4,063.47</b>	<b>3,875.22</b>
<b>Landfill</b>	<b>495.28</b>	<b>825.13</b>
<b>Total non-hazardous waste</b>	<b>15,416.90</b>	<b>18,635.70</b>

### Environmental Compliance

The Takasago group considers compliance as one of its top priority management issues. In 2019, discharged water quality slightly exceeded the local effluent standards at one production site. We have been working hard to improve quality of discharged water and comply with the standards.

## Climate Change

We fully recognize climate change as an urgent global issue. In October 2018, Takasago joined the Japan Climate Initiatives to support its initiatives. The Board of Directors actively discussed TCFD recommendations over past few years and approved Takasago Group's strategy and plan that are in line with the recommendations in this March, which is published on the webpage. In addition, to revise our approach in reducing CO<sub>2</sub> emissions in a more efficient and scientific way, we decided to study more about the Science Based Targets initiative (SBTi) and then set the GHG emissions targets according to its criteria. In the process, we will develop concrete plans to reduce direct and indirect CO<sub>2</sub> emissions in every aspect of our supply chain system.

In fact, reduction of CO<sub>2</sub> emissions has been a key issue that Takasago has been tackling for many years under our EHS100 Plan which started in 2009. The EHS100 Plan includes the reduction target by 2020, which is to achieve 35% reduction per tonnage compared to the result in 2009. In addition to day to day efforts, we will continue to investigate additional ways to increase renewable energy use as well as develop manufacturing processes to introduce more green chemistry and improve its production efficiency. Furthermore, acquisition of SBTi will enable us to conduct deeper observations and better insights to challenge climate change.

(\*1: TCFD (Taskforce on Climate-related Financial Disclosure) was established by Financial Stability Board and published the recommendations for voluntary climate-related financial disclosures that are consistent, comparable, reliable, clear, and efficient to help market understand their risks and opportunities. The recommendations consist of four pillars: Governance, Strategy, Risk Management, Metrics and Targets.)

### TCFD Recommendations



#### Conducted scenario analyses by Takasago Sustainability Team

<Specified the risks and opportunities in a middle-long term>  
 Physical risks: heavy rains, floods, etc., influences on supply chain including the operation at our factories  
 - Implement the business continuity plan (BCP) and ensure the ability to continue business at key manufacturing sites.

Opportunities: improvement of energy efficiency, new products and technologies through innovation, etc.  
 - Develop low carbon products and technologies diligently.  
 - Promote Green Chemistry through the development of catalysts and continuous flow processing, which contribute to reducing energy use and waste.

Full disclosure is available on our website : <https://www.takasago.com/en/sustainability/tcfd.html>

# Building a sustainable EHS culture

# Occupational Health & Safety (OHS)

## Development of OHS Management System

Takasago is currently striving to acquire ISO45001 (OHSMS; Occupational health and safety management system) certification as described in the EHS 100 Plan. We have formulated numerous rules and systems since December 2013. We will streamline these rules and systems through Takasago group's OHSMS implementation. We will establish a safety culture and more practical management system to eliminate incidents.

We plan to create EHS management system that integrates both EMS and OHSMS with the goal of achieving a multi-site certificate similar to the current EMS certificate.

We have kicked off in December 2019, beginning with the acquisition of the certificate in production sites in Japan by end of 2020 and expanding the scope to other countries by the end of 2021.

## Incident Reporting Rule

We have a global reporting rule for EHS related incidents, enabling us to share the overview, root cause and countermeasures for the incidents with our affiliates around the world through the report.

The EHS headquarters reviews the reports sent from each site and provide feedback if necessary. The EHS headquarters also shares these reports through the Global EHS Committee, Safety Committee or e-mail. Other sites use the information to prevent similar incidents from occurring on their sites.

## Hazard Identification, Risk Assessment, and Incident Investigation

In January 2019, we released our newly developed Occupational Health and Safety Risk Assessment (hereinafter called OHS RA) Rules. This rule is applied globally to all production sites unless there are more stringent relevant local legal requirements. By introducing this rule, we are evaluating occupational health and safety risks for the employees from workplace hazards. We believe that OHS RA will play a

crucial part in reducing risk of all incidents.

## Employee Training on Occupational Health and Safety

Prior to official release of the OHS RA rules, OHS RA workshop was conducted in December 2018 to familiarize the EHS managers both in Japan and abroad to the rules, hazard identification and risk evaluation. In Japan, a briefing session and workshop on OHS RA was held for all production sites in 2019 to provide detail procedure to implement OHS RA.

In addition, each site plans and provides site specific OHS training to its employees depending on the identified site specific OHS risks.



## OHS Communication & Inspection

Since the fire accident in 2013, under the commitment of "Safety First", Takasago conducts regularly a site audit at all our production sites in Japan to ensure that safety measures are taken in an appropriate manner and monitor continuous improvement for preventive measures suggested through the audits. In addition, we organized a Safety Committee that meets on a monthly basis to discuss incidents which have occurred at production sites with participants, including site representatives, members of the Production Division and the EHS Department. Through discussions, we develop Takasago Best Practices which are implemented and deployed globally. Takasago Best Practices are still under development but through integration with ISO 45001, we aim to achieve highest quality globally-standardized safety systems.

Since March 2019, we have started conducting site audits for overseas production sites to introduce details of the requirements and check their progress. In order to standardize inspection, a reporting format including a checklist and a document request list was developed. Based on this procedure, we visited sites in the US, India and Singapore to discuss EHS issues and share best practices globally.



Site Audit in the U.S.

## Work-Related Injury

Fatality as a result of work-related injury wasn't occurred in 2019. Number of recordable work-related injuries were 11 in Japan, 27 in EMEA, 1 in Asia-Pacific, and 6 in Americas for all employees.

The main type of work-related injury was "Caught in/between" machines or objects.

# Takasago Safety Day 2019

We designate April 10 as Takasago Safety Day. This day is to reflect on the fire accident in 2013, with a pledge to never let such accidents happen again.

On April 10, 2019, Takasago Safety Day was held with various safety trainings at all the group companies in and outside Japan to develop safety awareness and improve knowledge about safety. We all reaffirmed the commitment towards safety.

## Standard Program

### DVD Viewing

- Message from the CEO
- Safety Education (Theme of 2019 is "Human Error")

Our President and CEO delivered a speech at the Headquarters in Tokyo. The video message was sent to group companies outside Japan.



Satoshi Masumura, President and CEO, said in his briefing; "Having reviewed the accidents that frequently occurred at other manufacturers overseas in recent years, we must once again recognize how important it is to maintain safe and secure business operations. In approaching human error, our theme for this year, all of us must consider the measures we should take to prevent accidents based on what we are familiar with in our own working environments."

## Site Specific Programs

After conducting the Standard Program, each site conducted the following activities respectively;

### Headquarters (Tokyo, Japan)

Conducted lecture on human error by a fire officer of a local fire department.



### Hiratsuka Factory (Kanagawa, Japan)

Conducted on-the-table drill and carried out practical scenario training.



### New Jersey, USA Office

Conducted hands on fire extinguisher training.



### New Jersey, USA (Flavor Factory)

Conducted fire extinguisher simulation.



### Mexico

Conducted fire drill and emergency training.



### India

Conducted emergency training.



### Iwata Factory (Shizuoka, Japan)

Conducted tele-communication tests and took safety education about human error.



### Kashima Factory (Ibaraki, Japan)

Conducted operation skill test on forklift, fire drill, and safety education.



### R&D (Kanagawa, Japan)

Conducted joint drill with local fire department, tele-communication test, and confirmed evacuation route.



### Mihara Factory (Hiroshima, Japan)

Conducted safety lecture by a specialist, safety meeting to review safety and measures to be taken.



### Takasago Food Products (Shizuoka, Japan)

Conducted safety lecture by the facility manager, safety education, and tele-communication test.



### Takasago Spice Hadano Factory (Kanagawa, Japan)

Conducted safety education and safety patrol in the workplace.



### Takasago Chemical Kakegawa Factory (Shizuoka, Japan)

Conducted safety education on the facility and forklift, life-saving training, and safety patrol in the workplace.



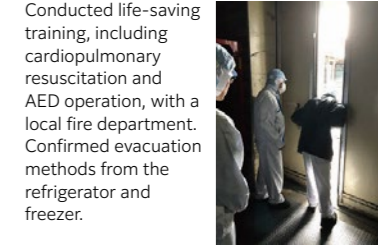
### Takasago Coffee Iwata Factory (Shizuoka, Japan)

Conducted tele-communication test and safety education.



### Nankaikako (Wakayama, Japan)

Conducted life-saving training, including cardiopulmonary resuscitation and AED operation, with a local fire department. Confirmed evacuation methods from the refrigerator and freezer.



### New York, USA (Fragrance Factory)

Conducted fire extinguisher simulation.



### Guangzhou, China

Conducted fire drill, safety education, and safety lecture by an external specialist.



### Shanghai, China

Conducted fire drill, safety education, and safety lecture by an external specialist.



### Singapore

Conducted spill control training.



### France

Conducted safety education about flammable mist and chemical risks.



### Brazil

Conducted emergency training, lecture about leadership in crisis, and shared ideas for fostering safety culture.



### Madagascar

Conducted occupational safety education.



### Germany

Conducted fire drill, lecture about removal of hazardous and harmful substances to human skin and eyes. Conducted driving simulation.



### Spain

Conducted fire drill.



# Society

## Stakeholder Engagements



Takasago regards shareholders, society, suppliers, customers and employees as our key stakeholders. It is very important to strengthen the engagement with each stakeholder and make clear action plans based on the corporate policy.

## Our People

Takasago respects individuals and emphasizes importance on Human Resources Development.



**-Reform of Work Practices and Enhancement of Workplace Environments-**  
Realize work practices that improve the capability 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 and/or other related social status as it relates to employment decisions.

Promote reform of work practices including breaks and leaves, ensuring work-life balance.

Respect each employee's individuality and support his or her effort to develop skills and a career.

Develop and maintain an appropriate working environment to realize the employees' safety and health maintenance and enhancement

\*Extracted from 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 and challenges employees to reach their full potential. We focus on combining employee aspirations for career growth, with opportunities to enhance skills, by offering on-the-job and external training opportunities. Trust from customers is earned from providing pioneering technology and exceptional service resulting from 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 innovative improvements. Lastly, the organization inspires teamwork by engaging a diversified group of professional competencies, fully equipped to meet a range of challenges. Roles and responsibilities are aligned across affiliates, ensuring skills sets and requirements are comprehensive, utilizing local talents in a global manner.

### Employment Status

Takasago has its workforce in 27 countries and regions around the world with a variety of contracts and types of work. In 2019, 42.1% of employees joins the collective bargaining agreement.

#### Employees including temporary staff

Region	Employees	Male	Female	%Male	%Female
Japan	1,790	1,419	371	79%	21%
Asia Pacific	846	449	397	53%	53%
Europe	775	416	359	54%	54%
Americas	650	346	304	53%	47%
<b>Total</b>	<b>4,061</b>	<b>2,630</b>	<b>1,431</b>	<b>60%</b>	<b>44%</b>

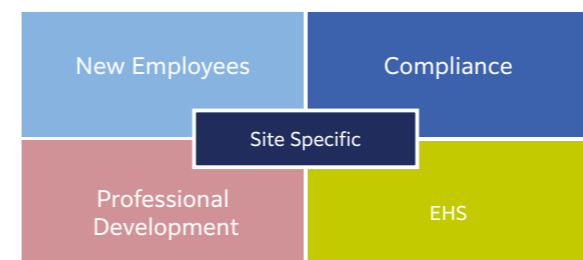
#### Permanent employees by age group

Region	<30		30-50		>50		Total
	Male	Female	Male	Female	Male	Female	
Japan	244	58	813	221	329	79	1,744
Asia Pacific	84	71	289	264	54	33	795
Europe	52	58	242	176	105	59	692
Americas	27	65	168	144	121	81	606
<b>Total</b>	<b>407</b>	<b>252</b>	<b>1,512</b>	<b>805</b>	<b>609</b>	<b>252</b>	<b>3,837</b>

### Training and Education

Takasago engages in ongoing training activities to promote continuous learning, and has been showing positive results. These include providing comprehensive education on anti-harassment and diversity to ensure employees and managers understand the importance of cultural differences and inclusion, support for human rights, and respect for different beliefs and practices. Safety procedures are prioritized to increase awareness of dangerous activities and hazardous materials with the goal of eliminating injuries and illnesses of all personnel. Anti-corruption, anti-trust, and other related trainings are also provided across all regions to educate and reinforce commitment to regulatory excellence and fair competition. The culture of Takasago supports employee growth and development from on-boarding, ongoing training, and on-the-job experiences. Building on employee expertise allows Takasago to continuously enhance the products and services provided for the consumer.

#### Educational Programs



Takasago Educational Program consists of above 5 pillars

### Career Development

Takasago is highly committed to career development and career path of its employees. We understand what knowledge, skills, personal characteristics, and experience are required for an employee to progress in their career. We identify talents, support employee development beyond borders, share best practices and knowledge, broaden perspective and network, and expand global capabilities. Takasago offers a variety of tools, trainings, and opportunities to develop laterally, through promotion, or by departmental and overseas transfer. Employees actively participate in their development plans and discuss career aspirations. Working collaboratively with managers, employees build and identify training needs and resources in order to enhance performance expectations, aligned with company objectives. To enable employees to fully understand the operations of the group, performance metrics are established, development plans are created, and opportunities to embark on new projects are provided in collaboration with the management.

### Promoting Diversity

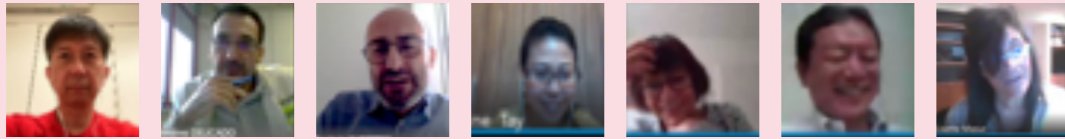
Takasago continually strives to create a work environment that welcomes and respects diversity and empowers individuals to realize their full potential. As part of this, we support efforts to increase female managers and foreign national employees while promoting the benefits of diversity and inclusion. Takasago values the contributions of all employees and believe that the broad perspective provided by a diverse workforce adds value to all our products and operations on a global scale.

### Communication

Takasago Japan has been seeking to develop its own way of team building among the affiliated companies in Japan. A sport event called "Takasago-Cup" is one of its efforts in Japan. The event is held every year, in which employees of group companies also participate. The matches of various sports such as volley ball, basketball, tennis, and baseball are organized and participants enjoy playing matches with other sites. We aim to build solid team at each business site and across the companies and develop an appropriate work environment through these opportunities.

Our people are great asset

# Fighting with COVID-19



\*Global HR team "met" online and discussed how to motivate employees during the COVID-19 crisis in 12th May, 2020.

## Appreciation of our employees who supported us during the COVID-19 pandemic

### Thank you for all our colleagues

In February 2020, the World Health Organisation (WHO) declared China's coronavirus outbreak a global public health emergency when a Coronavirus emerged in Hubei, China. Soon, the Singapore government had decided to shut its borders to any visitors from or transit via mainland China.

Our Chinese national colleagues who had gone home to Mainland China for vacation were immediately put on a 14-day paid leave on self-home quarantine upon their return to Singapore. The event quickly brought memories of the 2013 SARS outbreak. As more infection cases were reported in the nearby countries, fearing the spread of infection, several cities in the Asia started to close its borders with cities and countries.



Takasago Singapore office has a group of employees who commuted daily across the Singapore-Malaysia border to work in Singapore. This group of employees was suddenly caught in a dilemma when on 16th March the Malaysia government announced the decision to implement lockdown in a day's time. It was to prevent the rising spread of the COVID-19 in Malaysia, but it meant our employees would not be able to cross the borders for 2 weeks and the only way to continue working in Singapore was to stay here during the lockdown period. They were given only one day to decide. There should have been many things running through our employees' minds on that fateful day and eventually, each had to decide if to stay back in Malaysia or relocate to Singapore during the lockdown period.

It was a difficult decision, with little time and not mentally and physically prepared for such a lengthy step. For those who decided to remain in Malaysia, we empathized that it was a difficult decision, due to many family reasons. Those who decided to relocate to Singapore, were immediately put in a hotel since they had no accommodation in Singapore. The lockdown had since extended several times, and these dedicated employees have not physically seen their loved ones for more than 4 months as both countries continue to have travel restrictions. The least that the Human Resource personnel could do was to put in some snack packs at the hotel to cheer them up while they are missing their loved ones. The HR personnel held several Skype dialogue sessions with both groups of employees (those in Singapore and Malaysia) to gather

feedback, understand their issues, address their needs and encourage all to stay positive.



## Singapore governance implemented lockdown

Takasago International Singapore (TIS) was thrown into another challenge when the Singapore government implemented lockdown on 7th April 2020. We are deemed essential services and TIS was able to continue operations but on a reduced workforce on-site and the rest to work partially or 100% from home.

Working from home posed challenges as well. For many who had never worked from home, they had to adapt overnight, there were no trial periods. We know some ended up working too much without scheduled work hours. It was difficult to prioritise work in a home environment. Some missed the human interaction and felt isolated. There were occasional technology hiccups, bad health habits, interruptions of family, pets, doorbells and particularly young children, having school students moved to home-based learning as schools were close. During internal meetings (audio or/and video), managers and staff were accommodating and patience, when a team member was interrupted by a baby crying, a child tabbing on the keyboard, a child calling for attention, etc.

Occasional Bento meals were provided to those of our teams who continued to work 100% on-site, it was merely to cheer them on while the rest work from home. Photographs of them at work were taken and you could still see the smiles in their eyes, even with

their masks on.



We thank all our employees, especially those who had worked full-time on-site (during our lockdown period) and to our Malaysian colleagues who left home to continue working with us here in Singapore. Our sincere thanks to all for their relentless dedication, remaining safe and keeping strong in these unprecedented times. #TakasagoStrong

**Elaine Tay**  
*Takasago International (Singapore) Pte. Ltd.*  
 Human Resources Director

## Takasago Strong

The programs and policies implemented at Takasago International Corporation serve to prevent health-related issues, work injuries and promote safe operations at our sites worldwide. We are equally committed to serving the needs of our customers and supplying products and services to meet their needs and maintaining efficient business operations. The COVID-19 pandemic added an immense challenge, as we worked to mitigate the spread of the virus at our sites and within the communities we serve, while we continue to service our customers.

Takasago was deemed an "essential" business due to the types of products we manufacture, accordingly, operations were maintained throughout many of our facilities globally. We migrated to work from home arrangements, where possible, and maintained on

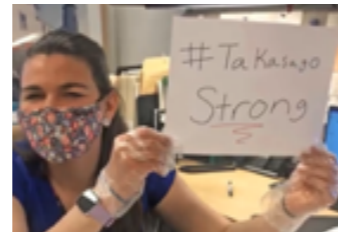
site activities in those processes that could not be performed remotely. At Takasago, we implemented numerous safeguards and precautions throughout facilities to mitigate the spread of the disease and protect those employees unable to telework. We practiced social distancing, reduced density among employees, communicated recommended hygienic practices and increased the sanitation protocols within all areas, just to name some measures.

Takasago, like other organizations, learned to operate under “new conditions” because of the COVID-19 Pandemic. The “work/life” balance became more blended as home spaces also became work areas, employees shifted to telework arrangements, and children were obliged to attend school virtually. Most challenging was the emotional toll the illness had on the health of employees and their families, as well as the need to isolate to minimize the spread of the virus. Understanding the hardship, it placed on the team, mentally, physically, and emotionally, we shared solidarity and conducted various teambuilding and morale boosting activities, while supporting sustainability efforts.

In the US, T-Shirts were designed that stated “**We Stay Here for You, Please Stay Home For Us**” – the message was straightforward. A reminder to shelter at home, and flatten the curve, while recognizing the work of our valuable team members who manufacture essential products. Funds raised from the sale of T-shirts were donated to support and provide resources to a hospital and food pantry in the local community. Additionally, we recognized our teams via



**#TAKASAGOSTRONG** outreach. Employees working diligently, at home, in the office, in our labs and at a manufacturing facility, were pictured and highlighted doing their part to meet the needs of our customers in a safe manner, while we weathered the COVID-19 Pandemic.



During this unprecedented time, we remain committed to our core values: Trust, Technology & Teamwork. We will strive to fight against the pandemic, protect our employees, partner with our customers to support our communities. Our work and actions will demonstrate our commitment to our dedicated employees, the health and safety of our team and their families, and the communities in which we operate, as well as our customers.

**Lisette Masur**

*Takasago International Corp. (U.S.A.)  
Vice President, Human Resources*

## Our Supply Chain

### Sourcing



#### Our Supply Chain and Procurement Model at a Glance

Takasago values sustainability in its business activities. It is, therefore, essential to source raw materials used by its all business units in a responsible way, in full alignment with the group values and needs of both clients and civil society's aspirations. Takasago uses approximately 13,000 different raw materials sourced from more than 1,000 suppliers all over the world. About 4,000 of those raw materials are natural ingredients derived from natural sources such as fruits, vegetables, plant roots, leaves and flowers. On the other hand, approximately 9,000 of the raw materials are synthetics, made by sophisticated chemical technologies. Their main starting materials can be of natural origin like wood or synthetic origin such as natural gas or naphtha. They can provide a unique sensory profile which does not exist in nature as well as replace natural ingredients to decrease usage of protected ingredients such as musk and ambergris. To timely supply of high-quality raw materials with appropriate prices to our facilities around the world, we are promoting procurement activities using our global network. In order to build fair and trustful relationship with worldwide business partners for sustainable procurement, we have established a Corporate Procurement Policy, Corporate Procurement Guidelines, and Takasago Supplier Code of Conduct.

#### Corporate Procurement Policy

As a guide for our procurement activities to consider the global environment and the conservation of local communities, we have established the "Corporate Procurement Policy" in accordance with the "Basic Management Policy".

We practice the following in our procurement activities:

- Pursuing the three elements of quality, cost, and stable supply
- Persisting in the observance of all relevant laws, respect for human rights, being fair, dealing impartially and considering preserving the environment
- Valuing a regional culture and building a partnership between the Takasago Group and the supplier

#### Corporate Procurement Guidelines

Corporate Procurement Guidelines embody Corporate Procurement Policy.

The Guidelines include fundamental subjects such as compliance, fair trade, anti-corruption, human rights and environmental protection, to be align with the concept of responsible sourcing.

In the Takasago group, all staff in charge of procurement activities, including day-to-day purchasing at each local site, follows the Guidelines. To ensure its implementation, Global Procurement Training includes sessions on Corporate Procurement Guidelines as well as other basic corporate policies.

#### Takasago Supplier Code of Conduct

As we emphasize global environment, we respect business partners who value environmental and social responsibility to maintain a high level of trust from society. To ensure business partners understand our policy and our expectations, we have established Takasago Supplier Code of Conduct. It is included in our questionnaire and ensure their full understanding before dealing with Takasago.

“As a company that values the global environment and aspires to gain a high level of trust from society, Takasago holds sustainability as one of the key cornerstones of our business. Takasago therefore prioritizes and values suppliers that place importance on global and social responsibilities (e.g. sustainability, compliance with laws, regulations & social norms, protection of human rights, assuring health and safety and fair trade).”

Takasago Code of Conduct is a summarized statement. As such, it is reinforced by our Responsible Sourcing Policy which indicates our ambition, objective and commitment in detail.

### Global Procurement Team

Teamwork is one of the important values in the Takasago group.

We have established a Global Procurement Team to consolidate procurement activities. Additionally, in today's VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) world, mutual-aid between affiliates is becoming more important from the point of view of BCP (Business Continuity Plan). The Team currently contains delegates from 11 global production sites. As we handle various raw materials from all over the world, mostly having different cultural background, our presence at their source is one of the major keys to ensure stable supply. As such, each affiliate is responsible for supplier relationship management as an international procurement office of the Takasago group. Based on the concept of standardization, including harmonization of raw materials, we continue to explore every possible opportunity for comprehensive optimization of raw material management. Global RFQ (Request for Quotation) is one example of such activities.

When it is necessary to manage the availability of raw materials due to global volume constraints, the

Takasago team globally shares inventory within the group.

In addition to a regular annual meeting at the headquarters, our global procurement team schedules various workshops, regional meetings, visits, and training via a matrix-like structure by region, ingredient category, or business type under the corporate initiative.

### Training Session

Global Procurement Team members have the opportunity to attend a training session at the headquarters in Japan.

These have been conducted the session twice a year, with the aim of deepening the Teams understanding of corporate medium-term management plan, corporate procurement policy and guidelines as well as intergroup networking and building teamwork through face-to-face meetings.

Even under current challenges due to COVID-19, we are trying to continue providing the opportunity for trainees via video conference etc.



### Responsible Sourcing

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

In the end of 2019, our Responsible Sourcing Policy has been verified and recognized to be in line with global standards and practices, ISO26000, and SMETA (Sedex Members Ethical Trade Audit)\*1 principles as well as supporting the UN 17 SDGs by Des Enjeux et des Hommes. Our Responsible Sourcing Policy embodies the concept of Supplier Code of Conduct. Based on the Policy, we are investigating the risks and potential impact of our procurement activities in various fields of "human rights, labor, environment, and anti-corruption". If a possibility of negative influence is confirmed, we will promptly plan for improvement and take measures in cooperation with suppliers and other stakeholders for their implementation.

\*1 An audit methodology, providing a compilation of best practice ethical audit techniques

- Thorough implementation of the "Takasago Supplier Code of Conduct" and distribution of "Responsible Sourcing Policy", which emphasizes corporate social responsibility such as sustainability and respect for basic human rights, by periodic supplier surveys utilizing questionnaires
- Ensure that no forced labor or child labor exists by periodic supplier questionnaire, Sedex SAQ, and Responsible Sourcing Questionnaire.

(According to the supplier questionnaire results in 2019, we confirmed all our business partners acknowledged as Takasago global suppliers meet the social and environmental standards.)

\*2 An online platform for sharing information on ethical and responsible practices.

### 2) Collaboration with 3rd Party Organization

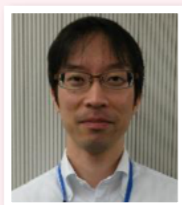
In order to pursue responsible sourcing, the Takasago group has joined social organizations promoting sustainable and ethical sourcing. We improve procurement taking into consideration environmental conservation. We have become a member of RSPO (Roundtable on Sustainable Palm Oil)\*3 and JaSPON (Japan Sustainable Palm Oil Network)\*4, and attended a sustainable palm tour in Malaysia to understand the sustainability in palm oil supply chain. In 2019, our affiliate in France received RSPO certificate for Mass Balance as the first step in producing fragrance sustainably. RSPO team including Sales, Supply Chain, Regulatory, and QA in the US as well as France RSPO team are working for the next target of receiving RSPO-MB certificate for the New York facility in 2020.



In early 2016, we joined Sedex (AB membership) enabling assessment of suppliers in the areas of work environment, health and safety, environmental management, and ethical business practice. Using the world's largest collaborative platform for sharing supply

### VOICE

*Yasutada Miyato in Takasago Europe Perfumery Laboratory S.A.R.L. (France)*



I am working in France, engaging in raw material procurement and sustainability matters in Europe. Europe is the origin of many authentic fragrance and flavor ingredients. Access to Africa where there is a large number of precious ingredients is easy. Working in such region is convenient to grasp market situations. In addition, meeting people directly locally is a wonderful opportunity to understand their cultural background. I believe this kind of cooperation will help us to make a stronger and more respectful relationship.

### VOICE

*Winnie 王倩 in Shanghai Takasago-Union Fragrances & Flavors Co., Ltd. (China)*



Training for me is a great chance to get a general overview of our global internal organization and workflow in a very short time, and understand more about the challenges and issues faced by each affiliate. It is also an excellent opportunity for me to communicate with everyone face-to-face. I believe that with more discussion and information exchange, we can help each other to improve work processes in the future.

Pursue safe, reliable & stable supply by responsible sourcing with all stakeholders

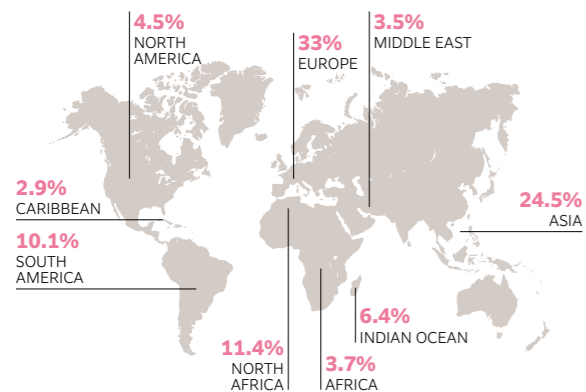
chain data globally, along with a separate Supplier Questionnaire, we will ensure an ethical supply chain. By 2019, relationships with around 180 major suppliers overseas and in Japan were established on Sedex. We confirm whether new business partners are Sedex members when starting transactions, and encourage them to become a Sedex B member if they are not. We continue to promote activities for prioritized existing suppliers to attend Sedex for sustainable relationship.

\*3 A social organization trying to transform the palm oil industry into a sustainable industry with fewer burdens on the environment.  
\*4 A platform for sustainable procurement and consumption of palm oil in Japan.

### 3) Sustainability: Evolution of Our Sourcing

To enable us to realize sustainable procurement, we developed a sourcing assessment tool; TAKASOURCE. This is a matrix for evaluating the sustainability of our sourcing, validated by Des Enjeux et des Hommes, based on the three pillars of sustainable development: environment, economy, and society. This allows us to identify a list of priority raw materials which we must reduce the related risks.

<More than **500 raw materials sources** and **60 suppliers** have been assessed around the world by TAKASOURCE>



Takasago is committed to a more sustainable sourcing approach.

We are launching a supply program which promotes sources certified as "sustainable" through the TAKASOURCE.

The idea is to support producers and advocates who share our commitments by participating financially through the purchase of their productions.

On the other hand, certifications such as RSPO, Fair for

Life, and FSC are not always financially accessible for all suppliers.

In such case, we have several factors in the program to confirm commitment to sustainability of those suppliers.

We have also followed this commitment in terms of preserving resources by working on all of our raw materials containing palm oil or those derived from palm oil.

Following the headquarters becoming a member of the RSPO in September 2017, Takasago's European fragrance production has taken the next step in receiving the RSPO-MB certification. A team representing purchasing, QA, and sustainability department was formed to highlight the key steps in identifying all raw materials derived from palm, tracing volumes of ingredients purchased as mass balance, and volumes supplied as compounded fragrances. Following accreditation in October 2019, the first CoA for customers with a RSPO-MB engagement was issued in February 2020. Based on this experience, other fragrance manufacturing facilities are due to also receive certification in 2020-21, demonstrating our sustainable commitments to protect the forests, biodiversity, and local communities.

### 4) "TaSuKI" Update

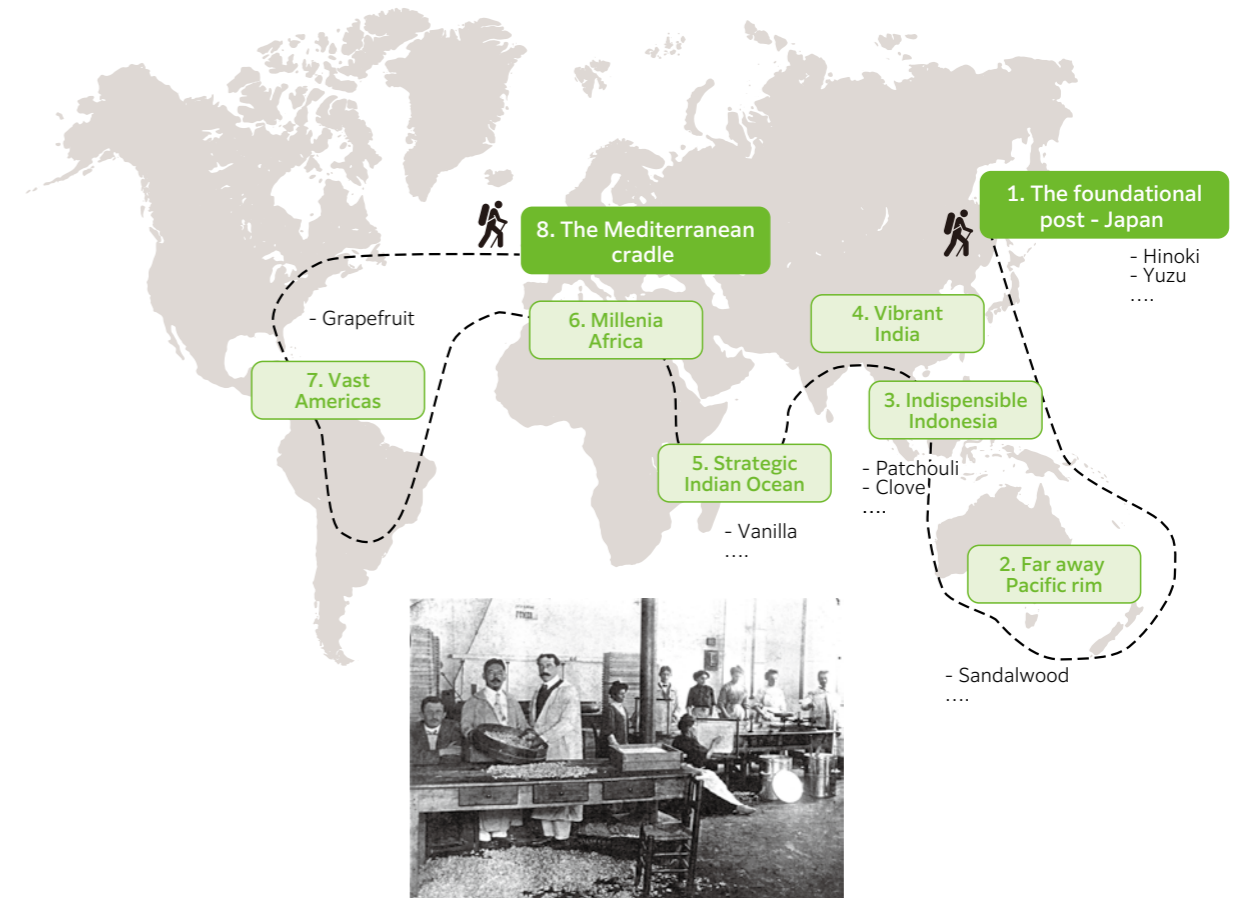
#### 1. Overall

2020 is indeed quite unique for Takasago as we are celebrating the 100th anniversary of the Company. One hundred years ago, back in 1920, our founder, Tadaka Kainosho, successfully established the Company in Japan.

An avid learner and visionary, he first spent many years abroad to better understand the emerging fragrances and flavors industry prior to returning to Japan and incorporating Takasago.

To celebrate Tadaka Kainosho's early 1900's discovery journey, we have combined our *TaSuKI* initiatives and recreated our own "From Kyoto to Grasse" itinerary. Reorganizing *TaSuKI* initiatives under one single "Kyoto to Grasse banner" will improve overall visibility, implementation as well as ensure best practices to be shared.

## TaSuKI Originals - From Kyoto to Grasse - Sourcing posts



### 2. Ongoing Projects Update

#### Strengthen Procurement for "Green Chemistry"

- Sustainable Myrcene: Agreement on Stockholding - "TaSuKI Originals, Care and Comply"

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, a parent company of LAWTER B.V. The agreement will strengthen procurement at Takasago specifically for the production of *l*-Menthol which is using "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 during recent years, causing unstable availability and fluctuating prices of gum turpentine.

On the other hand, nowadays with consumers paying more attention to responsible sourcing and transparency throughout the supply chain, Backward integration is becoming increasingly important. Regarding pine chemicals as related business of forestry industry, there are some global initiatives such as Carbon Disclosure Project (CDP Forest started in 2013) and SDG 15 ("sustainably manage forests") which encourage specific actions for sustainable operations.

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



**FLORIDA GRAPEFRUIT**

• Sustainable Grapefruit: New Groves Plantation – “TaSuKI Originals, Care and Comply”

Takasago strengthened long-term support for the grapefruit industry under the Tree Funding Agreement.

For the first time in 100 years, Takasago Corporations joined in an ambitious plan to increase grapefruit plantations in the State of Florida.

Peace River Citrus Products, Inc. (citrus processor) and The Scott Family Companies (citrus grower) have launched a project to plant a quarter million new grapefruit trees on 1,000 acres in Florida’s St. Lucie and Indian River counties.

This is the first major grapefruit planting in the State since citrus greening disease decimated Florida’s grapefruit groves.

Through this innovative grove planting commitment, Peace River and The Scott Family Companies aim to boost Florida’s grapefruit crop by 15 percent when the new groves reach maturity.



Takasago gained the rights to procure 100% of the grapefruit essentials oil produced under this agreement. Increase in volume will reduce the impact of open market fluctuation.

Despite Takasago not being a citrus grower, it is important that we engage closely with the plantation business by supporting the costs for planting each new tree.

Peace River Citrus Products, Inc. is a privately held and vertically integrated citrus grower, processor, and packager founded by Bill Becker and headquartered in Vero Beach, FL. Peace River employs 325 people in its modern and efficient citrus grove and processing sites located throughout central Florida. Peace River

is a strategic supplier and brand partner of The Coca-Cola Company, supplying orange, grapefruit and lemon juices, and citrus products to support Coca-Cola’s brands across the globe. Peace River also supplies juices and citrus by-products such as pulp, essence, and oil to private label bottlers, retailers, and flavor companies in both US and international markets.

The Scott Family Companies is a vertically integrated organization that grows, packs, and markets fresh grapefruit in the US and international markets. The companies that make up this organization include Scott Family Groves, Scott Citrus Management, Riverfront Packing Company, and Scott Marketing. The Scotts are third generation citrus growers that have a long history of farming in the famous Indian River growing district. Five family members are intimately involved in the day-to-day operations across management of the farms, fresh fruit packing plant, and marketing and distribution company of the fresh product.

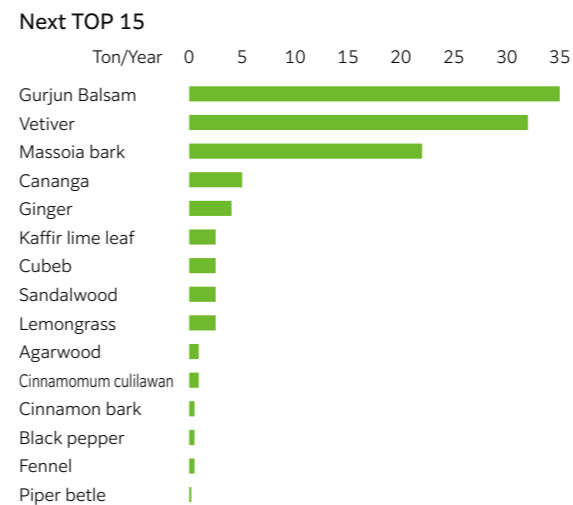
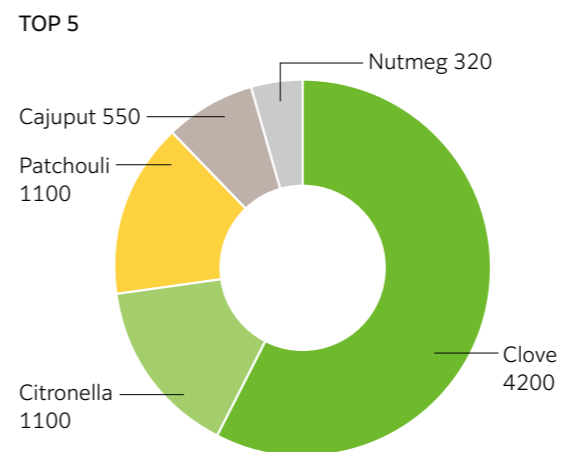


**Indonesia**

• Leverage Indonesia's rich Oils and Spices Heritage – “TaSuKI Originals”.

First, identify sourcing potential: While local patchouli sourcing and processing has been already in full swing for decades at Takasago, we embarked on a comprehensive program to leverage Indonesian oils and spices sourcing and upgrading opportunities. The first step is to confirm and prioritize the next raw materials TaSuKI will address. (as shown in the graphs below)

Indonesian essential oils production (ton/year)  
Potential sourcing opportunities for Takasago

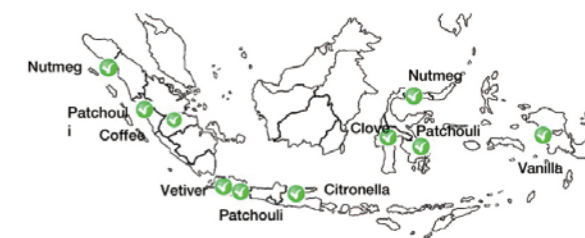


Second, deploy strategies and plans: Combine Takasago’s 40 years of local experience with a thorough due diligence of agro- and socio-economic trends (graph 1) to prioritize, design, and implement natural ingredients sourcing and manufacturing strategies and plans (graph 2).

**1. Responsible Sourcing due diligence**



**2. Takasago potential sourcing plan - Indonesia**



**Vanilla MADAGASCAR**

• News from Takasago Madagascar – “TaSuKI Originals, Care and Comply”

**1. Strategic Sourcing – TaSuKI Originals**

2019 - 2020 is finally the time for the cycle to bounce back and prices to decline. This seven-year unprecedented “storm” was rough. However, Takasago’s local infrastructure, many years of local sourcing presence, and expertise in Madagascar proved to be a great asset to support our clients to secure high-quality supply and further grow their businesses. It is also said that one should “never waste a good crisis”. Takasago used every opportunity during these past years to fully understand issues impacting the vanilla supply chain (social, cultural, economic, and scientific) and address them accordingly.

One key example is our presence upcountry. We source vanilla from 6,000 individual farmers. However, some of those farmers must transport their vanilla to far away villages for collection. In 2020, Takasago intends to open a large purchasing station close to where farmers are located. This will facilitate logistics, diminish risks, and facilitate and accelerate payments. This Takasago Upcountry Buying Station will serve 250 individual farmers. We are planning to further deploy additional Upcountry Buying Stations in other locations in need of this service.

**2. Support to Local Communities and Environment – TaSuKI Care**

Besides the above described local Upcountry Buying Stations which benefit the farmer communities, Takasago is making good progresses in its multi-year academic research program in cooperation with

universities in Europe and Madagascar. Once the program is completed, findings will be shared, and training will be organized for smallholders, with the primary objective being to improve quality and yields, thus benefit the farmers. Publications will soon be released followed by immediate local implementation of the program.

Environmental conservation is another important priority for Takasago. Without forests, vanilla would not exist. Therefore, Takasago Madagascar SA joined two reforestation programs in 2019. The first in May in the Toamasina area and the second in October (images below). Takasago Madagascar SA and its partner, Ramanandraibe Exportation SA, participated in a national reforestation project monitored by local environmental authorities "DREED", with a target to replant 10 million trees in 2020. Takasago Madagascar SA contributed in planting 2,600 new trees in two days.



### 3. CSR Compliance – TaSuKI Comply

Since Takasago established in Madagascar for vanilla sourcing and manufacturing 7 years ago, it took steps to thoroughly understand each dimension of the sourcing process and implement required best practices. As we conducted backward integration, we deepened relationship with smallholders and further identified risks in vanilla beans supply chain as well as points of improvement. With the recent deployment of Upcountry Buying Station, we felt we had sufficient insights and control and decided to begin fair trade certification process (Fair for Life).



## Production

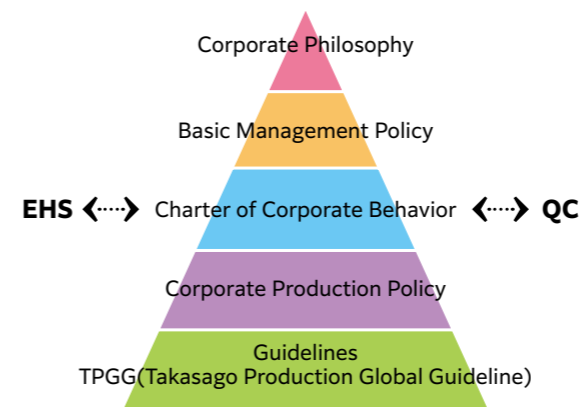
### Our Production Model at a Glance

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

### Corporate Production Policy

The Takasago group developed a Corporate Production Policy (below) to implement activities for production and sustainability with a coherent purpose in the global function 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 trusted by customers around the globe.

### Achieving Uniform Quality



### 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, stability of supply and quality assurance in all of our production activities.
- Constantly pursuing excellence in our production practices and manufacturing systems.
- Persisting in the observance of all relevant laws and regulations, respect for human rights, being fair, and considering environmental preservation.

### Global Meetings

Takasago holds regular international meetings (e.g. the Global Operations Directors Meeting shown below) as a concrete way to exchange information and to discuss issues such as crisis management, quality, and EHS in detail.

Through these meetings, we strengthen communication, which leads to promoting a sense of unity in production and CSR activities.



Global Operations Directors Meeting

### Environmental Risk Initiatives

Takasago understands how climate change and natural disasters can be a potential risk to production activities, and believes that the approach corresponding to environmental risks is integral to sustaining growth. As a result, Takasago has promoted water risk initiatives in parallel with reductions to environmental impacts. The Takasago group carried out a water risk evaluation using WWF-DEG's *Water Risk Filter* at each of our affiliates. In addition, headquarters delivered a report on the response to recent natural disasters in Japan at the Global Operations Directors Meeting.

### Zero-Accident Activities

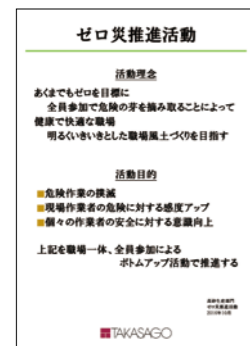
Zero-Accident Activities are programs where all employees practice precautionary measures relating to industrial safety and health with the philosophy of "Respect for Human Life". They are implemented at all of our Japanese affiliates.

On top of the activities prescribed by EHS, Takasago aims to promote activities that encourage employees to take ownership of workplace safety, as well as ideas to handle situations that are not explicitly covered by rules, in addition to 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 “pointing and calling” exercises to build a culture of safe habits. These practices promote the development of leaders who support future health and safety initiatives and embody the spirit of “Respect for Human Life” when considering the safety of their colleagues.



Left photo: Hazard prediction workshops.  
Right photo: Pointing and calling.



Zero-Accident Activity philosophy

## Logistics

### Corporate Logistics Policy

The Takasago group established the “Corporate Logistics Policy” as principles of logistics in accordance with the “Basic Management Policy” which includes consideration toward the environment and local community.

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.

### Rationalization of Logistics for GHG Emissions Reduction

Takasago is preparing to acquire certification from SBTi (Science Based Targets Initiatives) by March, 2021. This certification is to set a target for reduction of GHG emissions including the supply chain emissions. In 2019, taking the Ministry of Environment’s support program, we were able to calculate the emissions of several categories which we were not able to. We found that our emissions of Scope 3 consists a large part of our total GHG emissions. The amount of Category 4, which is transportation and delivery (upstream) emissions, consists the second largest amount of Scope 3.

Reducing the Scope 3 emissions is very challenging but we recognize this as an important issue.

We are working to review the transportation and delivery system and are considering ways to reduce the emissions, such as through rationalization of logistics.

### Recycled & Renewable Materials and Packages

For the Takasago group\*1, the ratio of renewable raw materials\*2 we used in 2019 is about 50%.

We do not use recycled containers that come in contact with our products because of safety regulations. Basically, recycled pallets are only used for some storages and one-way use for safety reason. We use recycled materials (waste paper and steel materials) for cardboard packaging and steel drums, and the ratio of waste paper used in cardboard varies according to the country. We are also reusing intermediate bulk containers (IBC), steel drums and pallets as far as there is no potential safety risk. Packaging materials unfit for reuse are collected, sorted and recycled by authorized recycle contractors.

\*1 All Japan subsidiaries and affiliates in global, except CIT.  
\*2 Renewable raw material: A renewable resource is a natural resource which can replenish itself to overcome human consumption through biological reproduction, naturally recurring processes and/or other positive actions. Based on the definition of GRI Standard Japanese version, we compiled the ratio of renewable raw material usage.

## Research & Development



Based on our corporate philosophy of “Contributing to Society through Technology”, our R&D contributes to the improvement of QOL (Quality of Life) by developing unique and superior technologies and products through organically and functionally integrating three types of innovations (“concept innovation”, “product innovation” and “processes innovation”) and open innovation in collaboration with external partners. In recent years, global warming caused by climate change is becoming more pronounced. As part of our important efforts to solve these global challenges addressed by the SDGs, we promote environmentally friendly R&D with green chemistry always in mind. To reduce environmental impact, we are focusing on green chemistry such as utilizing our original catalytic technology, white biotechnology, designing eco-friendly processes, and considering wastewater to facilitate efficient use of water and reduction of energy and greenhouse gas. In addition, we are also actively working to explore and utilize renewable raw materials, reduce the use of natural flavor ingredients by developing alternative ingredients, and utilize unused resources to use natural resources more efficiently. We will continue to contribute to the realization of a sustainable society by resolving various social issues through these innovative R&D activities that consider SDGs.

### Fumihiko Yanaka

Senior Vice President  
Corporate Research and Development Div.



## INNOVATION

### Sustainable Flavors

#### - Supporting conservation of natural resources

We always aim to design environmentally friendly products by using our technologies.

Due to the recent difficulties in sustainably acquiring

natural resources, we have promoted backward integration with natural flavor material suppliers as well as pursuit to reduce excessive dependence on natural resources. With our cutting-edge analytical technologies, we thoroughly investigate aroma components of natural products and our advanced synthesis and flavor creation technologies enable us to develop flavor extenders reconstructed based on the results to partially replace natural ingredients in our formulation.

We are also focusing on reduction of waste from flavor development perspective. One of our approaches is to reduce waste by extending the shelf life of our products and our customers products. To achieve this, we pursue every possibility of improving the stability of our products from various aspects. There are several key aroma components in natural products which contribute to the olfactory properties, however, some of them are unstable and generate undesirable off-notes under certain conditions. With our intensive investigation, we have identified more stable aroma compounds and have fully utilized them to create more stable flavors. For some important natural flavor materials which contain unstable components, we are leveraging our innovative processing technologies to remove unstable components from the natural flavor materials so our flavor will be able to remain closer to its original profile over a longer period of time. Furthermore, our patented encapsulation technologies also enable products to have longer shelf life. These approaches contribute to extending the shelf life of products and also improve inventory management, reducing unnecessary dead stock. It is also important to reduce waste generation in the production process. Although waste generation is inevitable when processing natural resources, we are committed to reducing waste in our production process with process optimization and by reusing or recycling waste for other products.

With these various approaches, Takasago always strives to contribute to the society through our flavor developing technology.

### “Attractive Japanese Natural Scents”

#### - Delving into psychological effect to relieve stressful society

The concept of “nature” is a major global trend in

the fragrance market. Takasago has been engaging in capturing and analyzing the scents of unique Japanese flora with our technology AROMASCOPE® to reconstitute them without losing their natural qualities. In 2017, we started "Japan Wood Project" which focuses on the scents of Japanese traditional trees such as Hinoki (*Chamaecyparis obtusa*) in Kiso area, Hiba (*Thujopsis dolabrata* var. *hondae*) in Aomori area and Sugi (*Cryptomeria japonica*) in Akita area which are species endemic to Japan.

In this project, our team has established an innovative method for reconstituting natural scents and we are now working on creating our collection of woody fragrances with a concept of "blooming and relaxing woods." This concept expresses a new woody note with freshness and diffusivity.

We utilized both GC/MS and GC-olfactometry (GC/O) analysis to identify key components contributing to the unique odor, which finally lead to the reconstitution of natural woody scent. The scent of each wood was compounded based on the results respectively and our Japanese wood fragrances faithfully reflect their unique fresh woody characters.

Moreover, as the scents of wood and forest have psychological effects such as mental healing, relaxation and enhancing recovery from fatigue, we are researching into these effects.

In 2019, we confirmed positive effects of our Japanese wood fragrances on humans with physiological and psychological measurements such as subjective evaluation, contingent negative variation (CNV), electrocardiogram (ECG) and saliva analysis. We successfully developed Japanese wood fragrances that give fresh scent with psychological effects.

We are now focusing on Japanese herbs such as Yomogi (*Artemisia indica* var. *maximowiczii*), Mitsuba (*Cryptotaenia canadensis* subsp. *japonica*) and Sansho (*Zanthoxylum piperitum*).

We are striving to create a new collection of traditional Japanese herbs with a concept of "botanical herbs". Japanese herbs are not well-known in the world and there are few essential oils in the fragrance market. Our challenge is to offer Japanese herb fragrances with a concept of natural and botanical healing effect through an integration of our innovative analytical and psychological technologies and creation expertise.

### Aroma Ingredients from Renewable Resources

We are honored to be the leading global Japanese aroma ingredient company marked our 100th anniversary in 2020. Sustainability is a key mindset of our vision.

ℓ-Menthol is a representative example as we manufacture it from renewable myrcene. We also use renewable resources coupled with our synthetic technology to give birth to our sustainable ingredients such as Biomuguet® and Biocyclamol®. Both are nature-identical, biodegradable and chiral molecules which are indispensable alternatives to existing market ingredients. Our newest molecule Dextramber®, launched with a woody and amber note, is one such ingredient under our CHIRAROMA® platform which utilizes our asymmetric chemistry technology and epitomizes our commitment to contribute to society through technology. In addition, we are now working on new and improved development process for replacing petroleum feedstock with renewable and bio-based feedstock under our BIOSWITCH® concept.

### Retronasal Aroma

Aroma can be perceived with two ways: orthonasal and retronasal. Aroma components that are released from what you eat or what you drink and pass through the oral cavity and enter the nasal cavity are called retronasal aroma. They play a major role in our palatability of food and beverages when eating and drinking. Therefore, understanding of the retronasal aroma is an important aspect for flavor creation. At Takasago, we are developing flavors that are closer to how people perceive when eating and drinking through retronasal aroma analysis. Takasago has developed a new technology to monitor the retronasal aroma in real-time when eating and drinking by using PTR-MS (proton-transfer-reaction mass spectrometry). This technology has enabled us to provide our customers with flavors that consider changes in flavor profile over time, including a flavor with longer-lasting effect in the mouth after drinking beverages and a flavor with higher top impact. Takasago has been creating new series of fruit flavors that bring the experience of deliciousness by analyzing retronasal aroma release when eating fresh fruits.

These flavors are expected to enhance consumer satisfaction of food products and contribute greatly to improving their QOL through eating and drinking.

### Aroma Tunes™

#### - Supporting human well-being

Scents are known to have effects on human physiology and psychology. A number of research reports have described their effects on humans. Takasago, as a pioneer in this research field, has been working on revealing how scents affect our psychological states with scientifically established physiological measurements. By investigating human responses to scents, we have proved that some of the scents can have influences on humans. With these studies, we strive to develop flavors and fragrances based on human physiological data to support the state of human emotion.

Many people expect scents to have a relaxing effect. However, the definition of "relax" is not scientifically clear. As such, we investigated the psychophysiological effects of scents under a stress condition by psychoneuroimmunology, which is the study of interaction between psychological processes and the nervous, endocrine and immune systems of the human body. This is an evaluation of aroma effects from diversified standpoints using multi-modal measurements. We named it Aroma Tunes™ and aim to support human well-being.

## GREEN CHEMISTRY

### Process Innovation

#### - Approach to realizing a greener world

Our R&D activities and manufacturing are oriented toward Green Chemistry, based on the well known 12 principles. One of the key activities is to fully utilize continuous flow processing, realizing safer operation with less energy. Takasago has successfully implemented several continuous flow processes including pipe flow reactor and CSTRs (Continuous Stirred-Tank Reactors). To realize them, the process development function in R&D has played a key role from process design to actual implementation. The importance of this function is not limited to the continuous flow implementation, but every new

material launch. In this context, Takasago strives to strengthen this function. The process development department was established in 2017 as an independent laboratory which works closely with fine chemicals and aroma ingredients research groups. A wider green chemical viewpoint can be incorporated from the very early stage of research. Some of the viewpoints from chemical engineers include safety and energy saving, which are key components of green chemistry. At the process development laboratory, reaction data are collected by using special instruments, giving thermodynamic data for both safety assessment and energy control. These data with interpretation are promptly fed back to the research team, helping them to optimize reaction conditions. Under this circumstance, the development period of the processes is reasonably shortened by considering green chemistry. While the new organization works as expected, instruments to generate kinetic data are fully engaged. To further facilitate these activities, Takasago is aware that enhancing this capability is necessary. As such, Takasago began investing new infrastructure. Installing energy saving technology in new facility design will incorporate greener processes from the start and contribute in more environmentally friendly development.

The above mentioned approach coupled with introduction of new catalyst and natural aroma will further enhance Takasago's capability to contribute to realizing a greener world.



### Utilization of Special Catalysts

#### - Toward energy and waste reduction

Our efforts for Green Chemistry include development of catalysts mediating the chemical conversions

which have been carried out in stoichiometric fashion. One of the examples is reduction of amides to give amines. Amines are among the most frequently used compounds in the pharmaceutical industry. Conventionally, stoichiometric amount of metal hydrides has been used for reduction reactions. We succeeded in replacing the protocol to catalytic use of a Ru-MACHO<sup>®</sup> derivatives. With this catalyst, cyclic amides are converted to the corresponding amines in high yield (*Org. Lett.* **2019**, 21 (24), 9954). Leveraging feedback from potential and actual users, we are currently working on expanding the substrate scope.

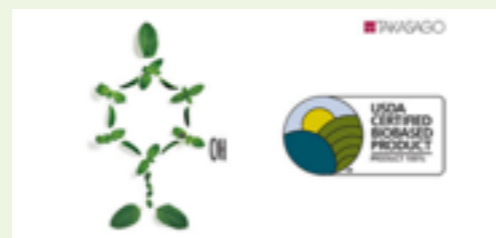
### Natural Aroma Ingredients Developed by White Biotechnology

As a company that started its business in Japan, Takasago has heritage based on Japanese culture called "Mottainai" for reducing waste and recycling. White biotechnology is another key driver in green chemistry. This takes advantage of enzyme or microorganism biocatalysts, which fulfills many key criteria of green chemistry and contributes to SDGs. Increasing demand for natural flavors also drives new R&D using biocatalyst. As for captive natural specialty R&D, the targets are requested by flavorists, the production process that complies with EU natural regulation and kosher is investigated using microorganisms and enzymes. We cooperate with Takasago Food Products Co., Ltd. and US-based Centre Ingredient Technology, Inc. (CIT), which joined our group in 2016. They will become a leading manufacturing hub for bioprocess production of our natural aroma ingredients. CIT is a high-tech production and pilot production facility which uses fed-batch cultivation with accurate cultivation control and monitoring, downstream processes with consideration of production safety and recovery by thin film distillation. Our key natural products manufactured at CIT include gamma-decalactone, gamma-octalactone, gamma-nonolactone, phenylethyl alcohol, hexanal and other specialties. In 2019, we successfully launched captive natural specialty by white biotechnology which will significantly add value to our flavor compounding.

## Column

### *l*-Menthol and Biomuguet<sup>®</sup> received USDA Certified BioPreferred Label

Takasago International Corporation announces that *l*-Menthol, Biomuguet<sup>®</sup> and Biocyclamol<sup>®</sup> are certified USDA Biobased products as 100%. USDA certified BioPreferred label offers recognition and confidence to our efforts and commitment to provide products that will contribute to a more sustainable society. Takasago's journey towards a 100% Biobased *l*-Menthol began in 1954 was ground-breaking. It also opened up the door to discover many other Biobased aroma ingredients on our portfolio. This USDA Biobased certification is a timely reminder to us that the journey towards Biobased molecule is not by chance or serendipity but through hard-work, ingenuity and resourcefulness that goes beyond Kaizen. Truly Takasago bringing together Nature and Chemistry for the benefit of society. Third-party verification for a product's biobased content is administered through the USDA BioPreferred Program. One of the goals of the BioPreferred Program is to increase the development, purchase, and use of biobased products. The USDA Certified Biobased Product label displays a product's biobased content, which is the portion of a product that comes from a renewable source, such as plant, animal, marine, or forestry feedstocks. Utilizing renewable, biobased materials displaces the need for non-renewable petroleum-based chemicals. Biobased products, through petroleum displacement, have played an increasingly important role in reducing greenhouse gas emissions that exacerbate global climate change.



## Quality Assurance

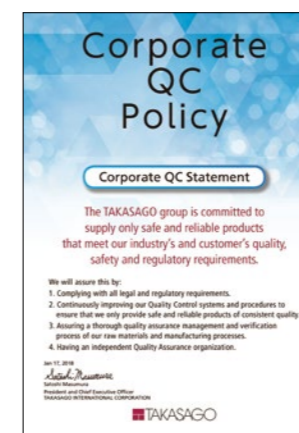
Takasago is committed on working as a valuable partner with our customers to meet all their product quality and safety requirements.

### Quality Assurance Organization

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 safety and regulatory requirements of governing bodies, customers and trade associations. In addition, Takasago QAHQ strives to ensure that Takasago consistently delivers high-quality products and services to satisfy customers' needs. QAHQ is an independent organization within Takasago and consists of quality assurance departments around the world that operate under "One Takasago Quality Assurance Concept". QAHQ also includes four centers: Global Flavor Quality Control (QC) center, Global Fragrance QC center, Global Flavor and Fragrance safety center and regulatory affairs center which operate globally and closely with local affiliates. These four centers are also responsible for the development and implementation of global policies and guidelines under a globally standardized operation process. Thus, we are able to provide the highest quality products to meet or exceed all of our customers' expectations worldwide.

### QC Policy, SOP and Guideline

Takasago's Corporate QC Policy was developed based on our Corporate Philosophy, Basic Management Policy and Charter of Corporate Behavior. This enables us to have a globally consistent quality mindset and systems that not only meet our customer's expectations, but also ensure appropriate and timely improvements. 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 global alignment of QC management.

### Global Meeting

Global meetings are held on a regular basis by each quality division. These meetings are designed to update all affiliates on the latest regulations, global policies and guidelines and to discuss any relevant issues or concerns on a timely basis. This activity ensures that Takasago provides the same level of quality and service for our customers globally. QC Centers, for instance, coordinate quarterly teleconferences and semi-annual meetings with all key QC leadership from all facilities to exchange information, leverage and share best practices, set and measure KPIs and to keep the teams aligned and informed.



### Training Programs

To enhance and maintain the highest level of quality and service, all Takasago Flavor and Fragrance QC teams participate in global training sessions provided by the Global QC Centers. The Global QC Centers under the Takasago HQ as technical supporting groups build globally aligned QC systems and train local QC teams of all Takasago affiliates. The technical supervisors of the Global QC Centers coordinate these training at predetermined intervals. This globally coordinated and operated system is a 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. Our flavor affiliates produce flavors distinct to their region. Recent flavor QC trainings conducted by

the flavor technical supervisors included training on organoleptic, gas chromatography methodologies, maintenance procedure, technical laboratory best practices and quality systems designed to provide the same high-quality services to all customers around the world. These trainings are also designed to respond to local needs to improve and enhance specific analytical areas. Our proactive activities will help to align and streamline QC best practices, and in turn encourage improve efficiency of procedures, resulting in less waste and safety risks.

Additionally, we conduct proficiency testing globally, based on Takasago's accreditation of the ISO/IEC17025 schemes. This helps to confirm and standardize QC testing skills and maintain them at the highest level as well as motivating the QC staff members.

As for Takasago fragrance affiliates, representatives of the QC teams attended olfactive intensive training in 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 included discussions on sharing the level expected for the quality of raw material and finished product. After the training, attendees who were validated as Technical Referent support and teach daily olfactive training at their site and also act 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 trainings contribute not only to standardize the quality of Takasago products, but also serve to improve teamwork between all the QC teams as "One TAKASAGO."

### Compliance

It is Takasago's global policy to comply with the latest laws and regulations. Takasago fully supports the objective of REACH in Europe to improve the safe and

sustainable use of chemicals and the quality of life of all citizens in Europe as well as the environment. Last year (2018) was a key milestone for REACH. Takasago took an active role in its implementation and registered all the relevant substances by the deadline. REACH is a continuous process and we are ready to work with ECHA and the competent authorities to provide any required additional data that are needed to assess the safe and sustainable use of the chemicals we registered. In addition, Takasago continues to monitor all the other chemical control regulations around the world with a special focus on K-REACH and Turkey REACH in 2018 and beyond.

Global Safety and Regulatory Affairs Centers continuously monitor ever changing global regulations, customer requirements, standards and guidelines from trade organizations such as FEMA, IFRA, RIFM, IOFI, ACI, PCPC and many other organizations. Information is shared promptly with each affiliate around the world, guaranteeing that Takasago provides safe and reliable products all over the world in a consistent manner.

### Certifications

Takasago promotes the acquisition of management system certifications such as ISO9001, FSSC22000/ISO22000, GFSI Scheme and other internationally recognized quality and safety standards that are appropriate for products we manufacture. A new flavor and fragrance facility was built in Indonesia and obtained ISO9001 certification and FSSC22000 food safety specifically for flavor facility in March 2020. Introducing such international standard system is one of the key elements for globalization rather than a part of localized activity in all Takasago. We are confident that these internal standards drive us to promote better quality service as well as boosting customer satisfaction. To keep moving forward, Takasago is in the process of implementing a program designed to integrate systems from the viewpoint of hazard analysis in FSSC22000.

### On-site Audit

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 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 stage up to the manufacturing and delivery stage of our products. During the reporting periods, Takasago has not identified any non-compliance with regulations or voluntary codes.

### Marketing and Labeling

All of Takasago's sales are made through business-to-business channels. None of the product is 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 product information as required by regulations and/or the customer for all the products we manufacture. This typically includes one or more of the following:

- Sourcing of the raw materials used in the manufacture 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 incident of non-compliance concerning product information or labeling.

## Shareholders and Investors



We strive to offer an appropriate return of 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 in a timely and adequate manner to shareholders and investors. As part of our efforts to improve our IR activities, we send Newsletter to Shareholders twice a year while also disclosing related documents and press releases on the IR site on our website to expand the investor community and enable shareholders and investors to deepen their understanding about our business activities.

In addition, we hold financial result briefings twice a year (May and November), and our president and officers in charge directly communicate with the investors and analysts. The details of the briefings are also disclosed on our IR site. Furthermore, Investor and Public Relations Department takes charge in handling reporting related to IR and visits to investors. When it comes to shareholder returns, Takasago embraces shareholder-favoring business operation and aims to attain corporate base which enables a higher level of profit and generates continuous and stable dividends taking into account the business performance at the same time. To improve capital efficiency and increase shareholder returns, we conducted purchase of treasury stock in 2019.



Striving to provide safe, reliable and quality products

# Society

# Community



As stated in the Basic Management Policy, Takasago group respects the global environment and local communities and considers relationship with the local communities is fundamental. We have been taking various approaches such as holding cultural events, offering educational programs, offering donations and supporting community activities for a long time. We will continue these activities and strive to be a partner trusted by the local communities.



## Germany

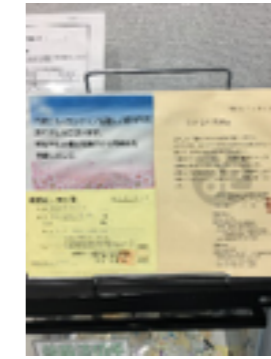
Takasago Germany attended the Business Run in Cologne, as yearly sports and charity activity.

## Japan



## Iwata Factory

Iwata factory participated in tree planting and thinning activities in forests in corporation with a local environmental conservation association to contribute to the protection of groundwater source and the environment of forests.



## Kashima Factory

Kashima factory donated used stamps and plastic bottle caps, unused notebooks, and calendars to a local welfare center. Used stamps and plastic bottle caps are sold and the profit is used for food supports in developing countries.



## Takasago West Japan

About 50 employees joined "Mihara Yassa Festival" as dancers. Through such activity, we continue to build relationship with the local community.



## USA

Takasago U.S. employees came together to participate in the 2019 Bergen County Out of the Darkness Walk. The Walk is meant to bring awareness and help raise funds for the American Foundation of Suicide Prevention. So far, the 2019 Bergen County walk has raised over \$130,000 and is taking donations throughout the end of the year.

## Europe



## France

Takasago France has committed 1,500€ to support "Les Cantines du Sourire" which aims to finance breakfasts. Our donation made it possible to offer more than 4,500 breakfasts to young school children.



## Spain

Takasago Spain renewed the University chair, a collaboration agreement with a local university. The local university is made up of technology, entrepreneurship, and socioeconomic chairs. All of them carry out training, research and development, or knowledge transfer activities in areas of common interest.

## Singapore

Guided by the knowledgeable staff at Takasago, students applied simple practical skills they learned at school (use of electronic balance, droppers, calculation of dilution) in real-world contexts by making their very own drinks using their very own unique mix of flavours.

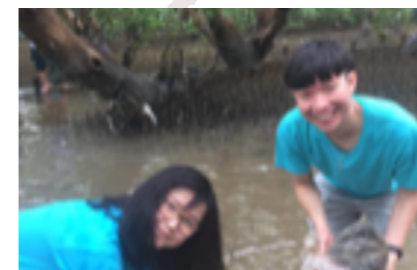


## Asia Pacific



## India

Takasago India employees visited the Panchayat School in Kunnapattu which is close to its factory site. Takasago India has donated four blackboards to the school in response on the request from the school last year.



## Thailand

Takasago Thailand participated in the Mangrove Forest Planting activity at Bang Pu Mangrove Forest.

## Americas

## Brazil

Children of ages 4 to 15 years visited Takasago Brazil. They experienced the application of products and tasted and smelled new flavors and aromas.



## Spreading Culture of Fragrance

Perfumes are believed to date back over 5,000 years, developing as distinctive form of aroma-related culture over the long history of human civilization. It is commonly believed that people in Japan started using "koh" when Buddhism was introduced to Japanese culture in the Asuka period (A.D. 538). In the Muromachi period, kohdo was established as way of appreciating aroma in accordance with a set ritual among the upper-class. Use of perfumes became popular among the common people in the Edo period for cosmetics and other means. kohdo is now integrated into traditional Japanese culture.

As a flavor and fragrance manufacturing company, Takasago believes that it is our responsibility to spread and sustain the culture of fragrance in the society. Takasago started its collection, called "The Takasago Collection" since we acquired the Mito Tokugawa family's fragrance instrument, 'incense case with young pine, plum branch and maki-e' in 1960. In 1993, we further purchased dozens of items, and those became the base of our current collection.

As one of 100th anniversary events, we planned to hold "Forms for Fragrance-Treasures of The Takasago Collection" exhibition in Akita, Mie and Tokyo starting March, this year to the beginning of the next year. There are approximately 230 items to be displayed,

which have been selected by Mr. Tomita (Head of Tokyo Station Gallery). We also reproduced the fragrance of the perfume that was offered to the Emperor Showa, which the visitors can smell and feel more familiar with fragrances. We thought this event would be a great opportunity to showcase the history and culture of fragrance to a wider audience. Unfortunately, Takasago Collection in Akita scheduled in April was cancelled due to the coronavirus outbreak. We hope the situation will get better soon, and hopefully the rest will take place as per scheduled.

We will look for every possible opportunity to organize an event associated with Kodo and continue to make efforts to spread and sustain culture of Fragrance.



100 Years Commemorative Goods  
Treasures from The Takasago  
Collection





# External Partnerships and Initiatives

Takasago engages in several organizations, supports initiatives and responds to sustainable related platforms including 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
- Sedex
- Syndicat National des Fabricants de Produits Aromatiques
- UN Global Compact

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102-27	Collective knowledge of highest governance body	P.20 Message from Senior Vice President	
102-28	Evaluating the highest governance body's performance	—	
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102-30	Effectiveness of risk management processes	P.26-28 Governance > Risk Management	
102-31	Review of economic, environmental, and social topics	P.21-22 Materiality Assessment	
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### About This Report

#### Issue date

31st August, 2020

#### 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 2019. In this report, the term of "Fiscal" is as follows;  
From April 1, 2019 to March 31, 2020 for Japan  
From January 1, 2019 to December 31, 2019 for the others

#### External Assurance

There is no external assurance for this report.

#### Guideline referenced

GRI Standard (core option)

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Contact: Global Integration Headquarters

102-35	Remuneration policies	Corporate Governance Report P.7-8 (Japanese)	
102-36	Process for determining remuneration	Corporate Governance Report P.7-8 (Japanese)	
102-37	Stakeholders' involvement in remuneration	—	
102-38	Annual total compensation ratio	—	
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102-41	Collective bargaining agreements	P.38 Employment Status	
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102-46	Defining report content and topic boundaries	P.21-22 Materiality Assessment	
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102-52	Reporting cycle	P.63 About This Report	
102-53	Contact point for questions regarding the report	P.63 About This Report	
102-54	Claims of reporting in accordance with the GRI Standards	P.63 About This Report	
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<b>103</b>	<b>Management Approach</b>		
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103-1	Explanation of the material topic and its Boundary	P.21-22 Materiality Assessment P.23-24 Initiatives Related to SDGs	
103-2	The management approach and its components	P.11-12 Medium-term Management Plan "One-T" P.12 Basic Management Policy P.21 Takasago Sustainability Team P.29 Environment, Occupational Health & Safety > Global EHS Management P.30 Environment > Environmental Management System P.33 Occupational Health & Safety (OHS) > Development of OHS Management System P.37-38 Our People P.42-51 Our Supply Chain P.52-55 Research & Development P.56-58 Quality Assurance P.59-60 Society	
103-3	Evaluation of the management approach	P.20 Message from Senior Vice President	
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<b>GRI 201:</b>	<b>Economic Performance 2016</b>		
201-1	Direct economic value generated and distributed	P.13-18 Corporate Profile Consolidated Financial Statements The Fiscal Year ended March 31st, 2020 <a href="https://www.takasago.com/env/ir/library1.html#ir202103">https://www.takasago.com/env/ir/library1.html#ir202103</a>	
201-2	Financial implications and other risks and opportunities due to climate change	P.27 Risk Management > Climate Change P.32 Climate Change	
201-3	Defined benefit plan obligations and other retirement plans	—	
201-4	Financial assistance received from government	—	
<b>GRI 202:</b>	<b>Market Presence 2016</b>		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	—	
202-2	Proportion of senior management hired from the local community	—	
<b>GRI 203:</b>	<b>Indirect Economic Impacts 2016</b>		
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203-2	Significant indirect economic impacts	—	P.44-49 Our Supply Chain > Responsible Sourcing
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204-1	Proportion of spending on local suppliers	—	
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205-1	Operations assessed for risks related to corruption	—	
205-2	Communication and training about anti-corruption policies and procedures	P.38 Training and Education	

205-3	Confirmed incidents of corruption and actions taken	—	
<b>GRI 206:</b>	<b>Anti-competitive Behavior 2016</b>		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	—	
<b>GRI 207:</b>	<b>Tax 2019</b>		
207-1	Approach to tax	—	
207-2	Tax governance, control, and risk management	—	
207-3	Stakeholder engagement and management of concerns related to tax	—	
207-4	Country-by-country reporting	—	
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301-1	Materials used by weight or volume	—	
301-2	Recycled input materials used	P.51 Recycled & Renewable Materials and Packages	
301-3	Reclaimed products and their packaging materials	P.51 Recycled & Renewable Materials and Packages	
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302-3	Energy intensity	P.30 Energy and Emissions	
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302-5	Reductions in energy requirements of products and services	—	
<b>GRI 303:</b>	<b>Water and Effluents 2018</b>		
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303-2	Management of water discharge-related impacts	—	P.31 Water and Effluents
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<b>GRI 304:</b>	<b>Biodiversity 2016</b>		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	—	
304-2	Significant impacts of activities, products, and services on biodiversity	—	
304-3	Habitats protected or restored	P.48-49 Support to Local Communities and Environment - TaSuKi Care	
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	—	
<b>GRI 305:</b>	<b>Emissions 2016</b>		
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305-5	Reduction of GHG emissions	P.30 Energy and Emissions > Greenhouse gas (GHG) Emissions (scope 1+2) P.31 Energy and Emissions > Other Indirect Greenhouse gas (GHG) Emissions (scope 3)	
305-6	Emissions of ozone-depleting substances (ODS)	—	
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<b>GRI 306:</b>	<b>Waste 2020</b>		
306-1	Waste generation and significant waste-related impacts	P.31 Waste Management	
306-2	Management of significant waste-related impacts	P.31 Waste Management	
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<b>GRI 307:</b>	<b>Environmental Compliance 2016</b>		
307-1	Non-compliance with environmental laws and regulations	P.32 Environmental Compliance	
<b>GRI 308:</b>	<b>Supplier Environmental Assessment 2016</b>		
308-1	New suppliers that were screened using environmental criteria	P.44 Supplier Relationship Management	
308-2	Negative environmental impacts in the supply chain and actions taken	P.44-49 Responsible Sourcing	
<b>400</b>	<b>Social</b>		
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401-1	New employee hires and employee turnover	—	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—	
401-3	Parental leave	—	
<b>GRI 402:</b>	<b>Labor/Management Relations 2016</b>		
402-1	Minimum notice periods regarding operational changes	—	

<b>GRI 403:</b>	<b>Occupational Health and Safety 2018</b>		
403-1	Occupational health and safety management system	P.33 Occupational Health & Safety (OHS) > Development of OHS Management System	
403-2	Hazard identification, risk assessment, and incident investigation	P.33 Incident Reporting Rule P.33 Hazard Identification, Risk Assessment, and Incident Investigation	
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403-4	Worker participation, consultation, and communication on occupational health and safety	P.34 OHS Communications & Inspection	
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<b>GRI 404:</b>	<b>Training and Education 2016</b>		
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405-1	Diversity of governance bodies and employees	P.38 Employment Status P.38 Promoting Diversity	
405-2	Ratio of basic salary and remuneration of women to men	—	
<b>GRI 406:</b>	<b>Non-discrimination 2016</b>		
406-1	Incidents of discrimination and corrective actions taken	P.28 Human Rights	
<b>GRI 407:</b>	<b>Freedom of Association and Collective Bargaining 2016</b>		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	—	
<b>GRI 408:</b>	<b>Child Labor 2016</b>		
408-1	Operations and suppliers at significant risk for incidents of child labor	—	
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409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	—	
<b>GRI 410:</b>	<b>Security Practices 2016</b>		
410-1	Security personnel trained in human rights policies or procedures	—	
<b>GRI 411:</b>	<b>Rights of Indigenous Peoples 2016</b>		
411-1	Incidents of violations involving rights of indigenous peoples	—	
<b>GRI 412:</b>	<b>Human Rights Assessment 2016</b>		
412-1	Operations that have been subject to human rights reviews or impact assessments	P.28 Human Rights P.45 Sustainability: Evolution of Our Sourcing	
412-2	Employee training on human rights policies or procedures	P.42 Corporate Procurement Guidelines P.43 Training Session	
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	—	
<b>GRI 413:</b>	<b>Local Communities 2016</b>		
413-1	Operations with local community engagement, impact assessments, and development programs	P.59-60 Society	
413-2	Operations with significant actual and potential negative impacts on local communities	—	
<b>GRI 414:</b>	<b>Supplier Social Assessment 2016</b>		
414-1	New suppliers that were screened using social criteria	P.44 Supplier Relationship Management	
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<b>GRI 415:</b>	<b>Public Policy 2016</b>		
415-1	Political contributions	—	
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416-1	Assessment of the health and safety impacts of product and service categories	P.58 Customer Health and Safety	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	P.58 Customer Health and Safety	
<b>GRI 417:</b>	<b>Marketing and Labeling 2016</b>		
417-1	Requirements for product and service information and labeling	P.58 Marketing and Labeling	
417-2	Incidents of non-compliance concerning product and service information and labeling	P.58 Marketing and Labeling	

417-3	Incidents of non-compliance concerning marketing communications	—	
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418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	—	
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