

HARIMA CHEMICALS GROUP

INTEGRATED REPORT 2023



Leading the Way with Pine Chemicals

Harima Chemicals Group is a chemical manufacturer built on products developed using pine chemical resources like rosin, fatty acids, turpentine and other materials all obtained from pine trees. We transform these key active ingredients into daily essentials.

Our products are used in a variety of fields, as resins for printing inks, paints and adhesives, emulsifiers for synthetic rubber, paper chemicals, solders used in electronic devices, and flavor and fragrance ingredients.

Indispensable everyday products derived in some way from pine trees are all around us:
Printed items such as newspapers, books and catalogues
Paints used to coat buildings and cars
Adhesives used for glues and packing tapes
Synthetic rubber used in car tires
Paper goods including notebooks, books and cardboard
Electronic devices such as computers and mobile phones
Cosmetics and perfumes, etc.

And now with an international network of manufacturing bases in 11 countries, we meet the needs of our customers all over the world.

Corporate Philosophy | HARIMA PHILOSOPHY

Harima is a company which strives to cooperate with nature in the utilization of its blessings to enhance the quality of life.

Our mission is to help build a productive and humanistic society, with our goal being the creation of a truly global company which places a premium on its people and technology.

Our policy is to provide a cooperative atmosphere in which we seek mutual understanding and trust, and to intelligently and responsibly meet all challenges.

In the depth of our sincerity, we're number one.

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Company Overview and Stock Information

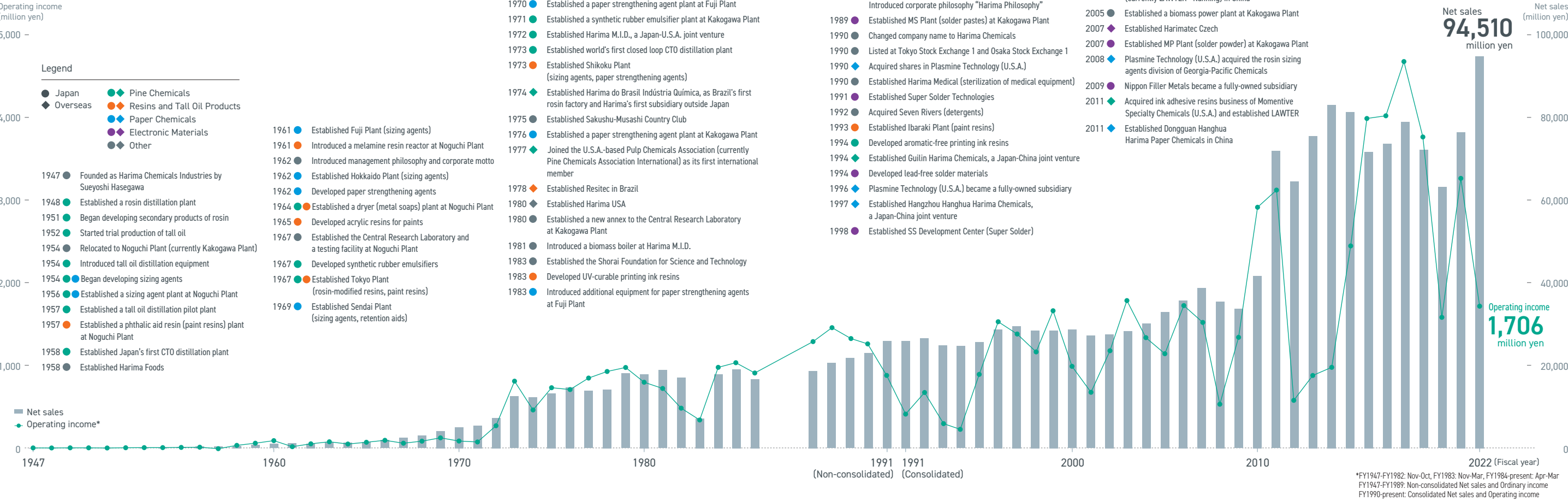
33 Company Overview and Stock Information

This report aims to provide our shareholders, investors and various other stakeholders with an overview of the Company's latest activities and initiatives. The report covers the activities and performance of Harima Chemicals Group and its consolidated subsidiaries and affiliates, during the fiscal year 2022 (April 1, 2022~ March 31, 2023) with some matters pertaining to FY2023 also included.

Descriptions pertaining to the future are based on assumptions, expectations, and views derived from the information available at the time of preparing this report. These descriptions encompass known and unknown risks, uncertainties and other factors, and the actual financial condition, operating performance and cash flow of our company may potentially differ from such future-oriented statements.

Value Creation Over the Years

Founded in 1947 in the city of Kakogawa, Japan, we have grown as a chemical manufacturer built on products developed using pine chemical resources like rosin, fatty acids, turpentine and other materials all obtained from pine trees. With the opening of Japan's first distillation plant that utilizes crude tall oil (CTO), a raw material derived from the kraft-pulping process of pine trees, at Kakogawa Plant in 1958, we expanded our business into the fields of resins and tall oil products, paper chemicals and electronic materials. To increase global presence, we acquired the rosin business of U.S.A.-based Momenive Specialty Chemicals in 2011, which enabled us to grow into a company that operates manufacturing bases in 11 countries. In October 2012, the company name was changed to Harima Chemicals Group, Inc. and we adopted a holding company structure.



Finding Rosin, a Natural Resource

The Company was founded under the name Harima Chemicals Industry in 1947 by Sueyoshi Hasegawa, who was inspired by the potential of rosin—a material that had long been used for adhesives, paints, flavors and fragrances, clothes and more—as a valuable resource in post-WWII Japan. A rosin distillation plant was established in 1948, and with the technology and experience accumulated during that time, we began production of fatty acids. It was this technology that eventually laid the foundation for our tall oil business. In time, extensive research of pine chemicals led to the development of secondary rosin products with a key role in further business expansion.



Japan's First Tall Oil Business

Harima's tall oil business was launched in 1952, inspired by the black liquor derived as a byproduct of the kraft-pulping process. We went on to establish the technology of fractional distillation, and with the assistance of government incentives and programs, completed the construction of Japan's first tall oil distillation plant in 1958. Its construction cost 120 million yen, a staggering amount for a company with a capital stock of only 8 million yen.

Opening New Business Frontiers

Along with tall oil products, we developed paint resins, sizing agents, synthetic rubber emulsifiers, etc. In 1961, we expanded into the city of Fuji, an area dubbed as "Asia's paper-making hub". Following the Fuji Plant, we opened factories in Hokkaido, Tokyo, and Sendai. In Kakogawa, we established our very first R&D center, the Central Research Laboratory. In 1962, we introduced our management philosophy and corporate motto, the concepts of which have remained the Company's staple to this day.

[Management Philosophy]
Management that is prudent and stable
Management that values people
Management that actively promotes technological advancement
[Corporate Motto]
Understanding, Cooperation and Trust



Seeking New Opportunities Abroad

Economic growth and expanding demand in new fields presented the challenge of securing stable supplies of CTO, but we managed to contract several suppliers after minute evaluation. In 1972, we established Harima M.I.D., a joint venture with then-Mead Corporation, a U.S.A.-based forestry and paper manufacturing company. In 1974, we set up our first subsidiary in Brazil, a country rich in pine resources. We have since been contributing to Brazil's industry, employment, and foreign currency acquisition.

The World's First Closed-loop System

In 1973, we established the world's first non-polluting closed-loop tall oil distillation plant at Kakogawa Plant. The plant's annual capacity of 70,000 tons placed it among the world's largest at the time. A logistics base was also built at the Port in the nearby city of Takasago, to store CTO imported from the U.S.A. This marked the beginning of stable supplies of CTO and tall oil-derived products in Japan.



Shifting Away from Petroleum Energy

Due to the oil crisis and soaring prices, energy-saving initiatives became a requirement of the time. We began joint development of boilers fueled by tall oil pitch, a byproduct of CTO distillation, and started operation of a large-scale, non-polluting steam boiler in 1981. The use of byproducts as fuel led to a drastic cut in energy costs and enabled the shift to alternative energy sources, paving the way for the Company's biomass power generation business.



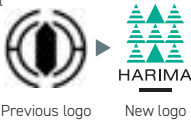
"Utilize the Blessings of Nature to Enhance the Quality of Life"

In 1988, we introduced the Harima Philosophy. Building on the principles of the management philosophy and the corporate motto, we set out on a challenge to become a global company under the slogan of "Utilize Nature's Blessings to Enhance the Quality of Life."



New Beginnings

In 1990, our scope of business expanded to cover nine fields: oil chemical products, paper chemicals, synthetic resins, biotechnology, electronic materials, recording materials, foods, and everyday items. We entered the electronic materials field with the launch of electronic materials developed through the 1980s in collaboration with manufacturers of electrical and automotive components. Also, we continued expansion overseas, by establishing paper chemical companies in the U.S.A. and China, and resins and tall oil product companies in China.



For the Advancement of Science and Technology

The Shorai Foundation for Science and Technology was founded in 1983 to promote advancement of science and technology through encouraging and subsidizing research, study and international exchange.



Mitigating CO₂ Emissions

In 2005, we opened a biomass power plant at Kakogawa Plant. This marked the acceleration of our efforts to reduce CO₂ emissions by generating power using the byproducts of tall oil distillation as a biomass-derived fuel.



New Business Areas

Our electronic materials business, which started off with solder materials, expanded its scope with organic synthesis technology-based brazing materials for automotive heat exchangers and resist resins for semiconductors. Meanwhile, we increased businesses in China, the U.S.A., Asia and Europe in an effort to accelerate global expansion.

Becoming a Global Company

In 2011, we acquired the rosin business of U.S.A.-based Momenive Specialty Chemicals Inc. and established LAWTER. With pine chemical operations covering Japan, China, Asia, Europe, North America, South America and Oceania, and expansion of paper chemicals and electronic materials outside Japan, overseas-derived Net sales now topped approx. 60%.



Expansion of Electronic Materials Business

In 2022, we acquired the solder materials business of German manufacturer Henkel. With an expanded customer base and product lineup, we aim to further build our global network. We will accelerate growth of solder materials, functional resins for semiconductors, brazing materials, and other electronic materials that support such applications as automotive electrification/self-driving systems, 5G, digital transformation (DX), etc.



Core Competencies for Sustainable Growth

Harima is a pine chemical manufacturer that utilizes natural and renewable resources to their full potential, creating a diverse portfolio of items used in daily essentials since its founding in 1947. Our innovative lineup, a result of extensive R&D, has been the driving force behind our reputation as a leading company in the industry. We will continue to strengthen and expand our global network in a broad range of businesses with a focus on future trends.

Diverse Product Applications

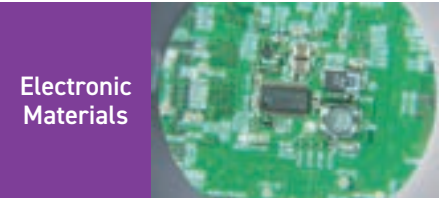
Our products are used in a variety of fields, as resins for printing inks, paints and adhesives, emulsifiers for synthetic rubber, paper chemicals, solders used in electronic devices, and flavor and fragrance ingredients.

Indispensable everyday products, derived in some way from pine trees, are all around us: printed items such as newspapers, books and catalogues, paints used to coat buildings and cars, adhesives used for glues and packing tapes, synthetic rubber used in car tires, various paper goods including notebooks, books and cardboard, electronic devices such as computers and mobile phones, cosmetics and perfumes, etc.

Core Businesses and Products



■ Paint resins ■ Printing ink resins
■ Synthetic rubber emulsifiers ■ Adhesive resins, etc.



■ Solder materials ■ Brazing materials for heat exchangers
■ Functional resins for semiconductors, etc.



■ Paper strengthening agents ■ Sizing agents, etc.

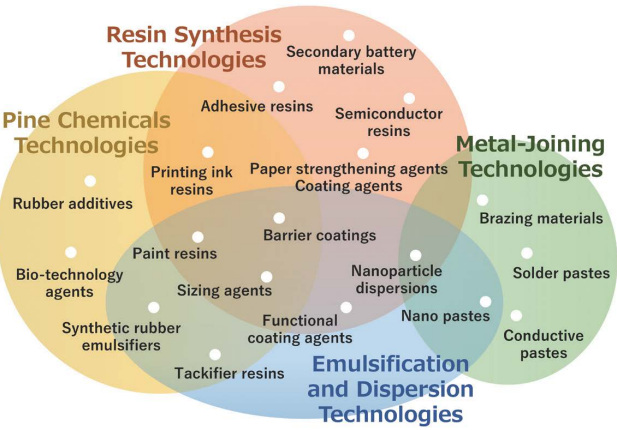


■ Adhesive resins ■ Printing ink resins, etc.

*Pie charts: FY2022 Net sales by business (as of March 31, 2023)

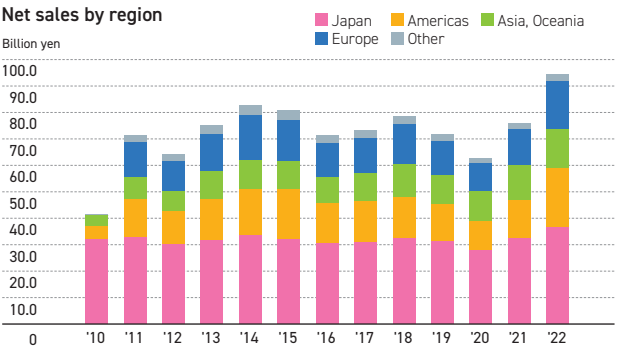
Diverse Portfolio

To meet ever-changing market needs, we strive to develop new materials and technologies around our core technologies: pine chemical technologies that utilize the natural qualities found in pines, resin synthesis technologies, emulsification and dispersion technologies and metal-joining technologies.



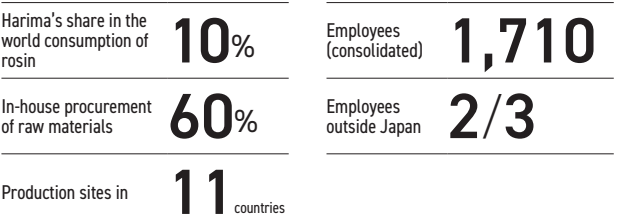
Customer Base

Harima's overseas network enables creation of strong connections with the global market. In FY2022, we expanded our customer base by acquiring the solder materials business of German manufacturer Henkel, whose long list of customers spans across automotive, industrial machinery, and telecommunications equipment industries in Europe and the world.



Global Expansion

Harima's rosin consumption accounts for 10% of the total amount produced worldwide. We have factories in 11 countries, and about 60% of the rosin we use is procured within the Group. Two-thirds of our employees work outside of Japan, which enhances diversity and expertise.



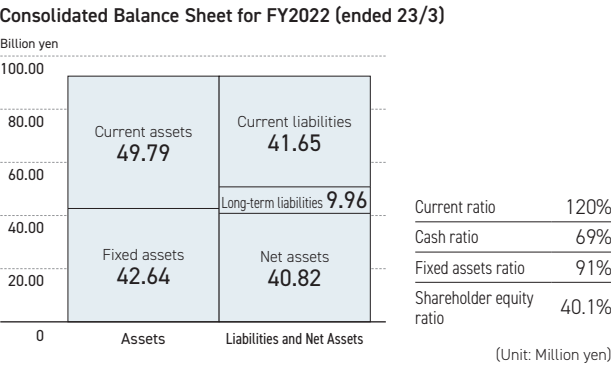
Brand Value

To increase positive recognition from customers in and outside Japan, we are committed to improving R&D capability, manufacturing technologies and quality management, while delivering products that help solve social and environmental issues. Our initiatives are evaluated by various rating organizations, whose feedback is incorporated into management to improve corporate value.

Rating organization	Description	Rating	
EcoVadis	Sustainability ratings for global supply chains	LAWTER	Silver 2023 (Top 25%)
		Plasmine	
		SunPine	Platinum 2022 (Top 1%)
SMBC ESG/SDGs Evaluation	Rating of ESG initiatives, information disclosure, and SDGs contribution	Rated AAA in 2022 (highest grade)	
Toyo Keizai SDGs Corporate Ranking 2023	Ranking of SDGs contribution and business performance	234th (Out of 1,702 companies)	
Nikkei Management Survey 2023	Rating of SDGs contribution and how they affect corporate value	SDGs management : ★★★ (T-score of 50-54)	
		Smart Work : ★★★ (T-score of 50-54)	

Stable Financial Foundation

We consider having a good balance between assets and liabilities crucial for financial stability. With funding sourced from around the world through diverse means and efficient administration of Company-wide funds, using an international cash management system, we strive to maintain and improve our financial foundation. In FY2022, free cash flow was mainly used for strategic investments aimed at business growth, which we will seek to recoup and further improve financial stability.



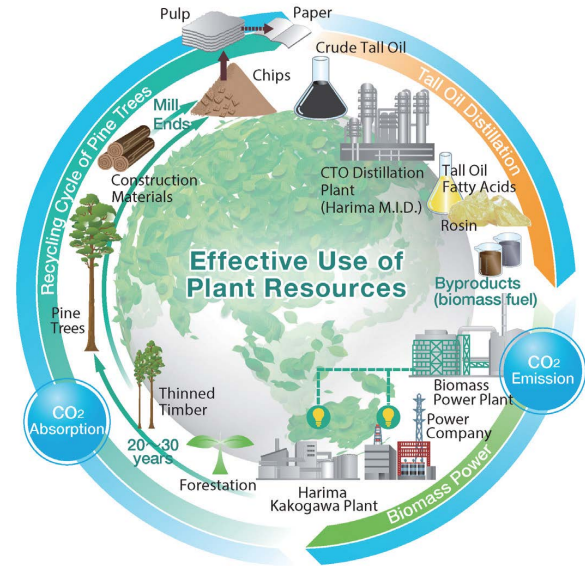
	FY2020 (ended 21/3)	FY2021 (ended 22/3)	FY2022 (ended 23/3)
Cash flow from operating activities	3,007	2,833	(466)
Cash flow from investing activities	(1,858)	(3,438)	(6,649)
Cash flow from financing activities	(1,564)	2,106	7,657

Quality Management and Environmental Conservation

With a view to improving customer satisfaction, many of our sites in Japan and overseas have acquired ISO 9001 (international standard for quality management systems) certification to demonstrate competence with client requirements and compliance with international regulations, as well as increase communication with customers. We are also committed to ISO 14001 (international standard for environmental management systems) as part of our continuous efforts for environmental conservation.

No. of sites certified	Japan	Overseas
ISO 9001 quality management system	13	14
ISO 14001 environmental management system	7	12

Circular Business Model – Harmony Among People, Nature and Technology



Byproducts of the distillation process are effectively used as biomass fuel for power generation, letting us utilize every bit of the raw material's value. Water and heat discharged during production are also reused.

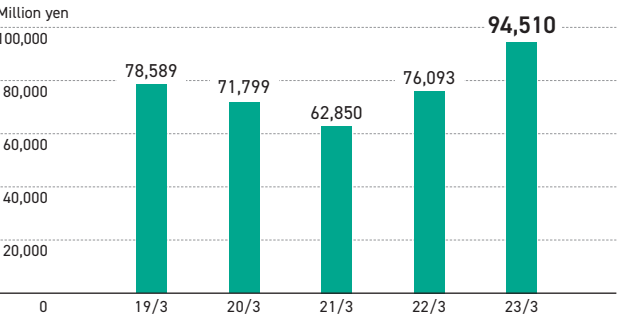
Our chemical technologies reduce the impact on the environment and living organisms and contribute to the achievement of a sustainable society. Harima was founded as a chemical manufacturer that utilizes materials obtained from pine trees, a renewable resource that is nurtured by sunlight and water. Our business has grown while contributing to the solution of social and environmental issues through our nature-friendly production systems and manufacturing operations.



Our legacy dates back to 1958 when we began operations as the first company in Japan to specialize in crude tall oil (CTO) refinery, further extending our value in 1973 by establishing the world's first closed-loop tall oil distillation plant. We will continue our mission to further improve our circular business model and contribute to the realization of a sustainable society.

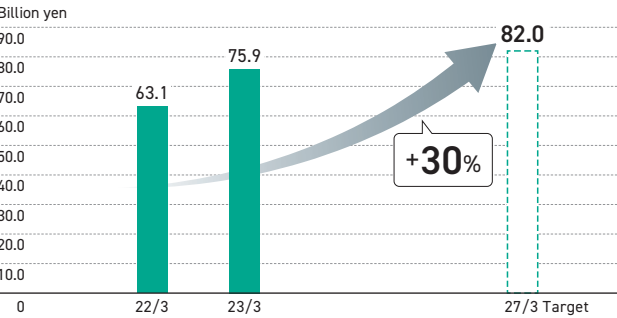
Financial and Non-financial Highlights

Net Sales



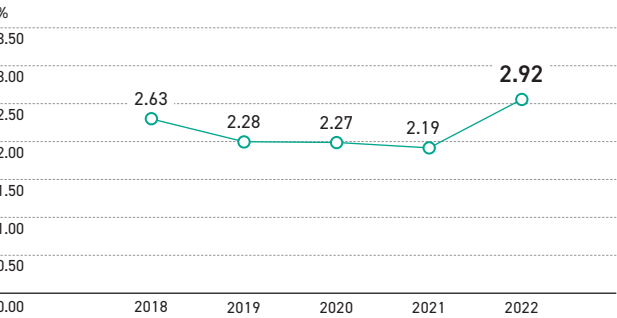
Overseas-derived Net sales increased compared to the previous fiscal year, mainly owing to increased sales of adhesive resins in Europe and America, as well as the stable performance of paper chemicals. Net sales in Japan also increased compared to the previous fiscal year, mainly because of an increase in selling prices set to offset the impact of high raw material prices.

Sales of Sustainable Products



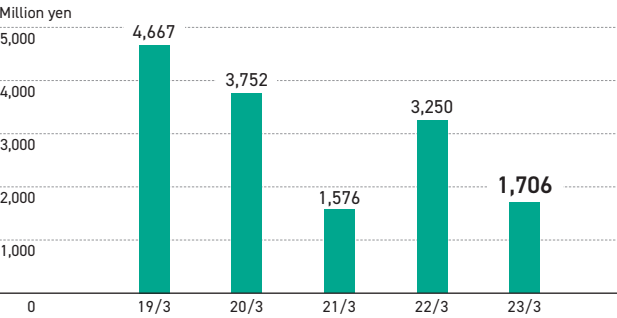
Under our definition, a sustainable product is a product that reduces environmental load and serves to solve social issues such as SDGs, while taking advantage of our technological strengths. Our FY2026 sales expansion plan stipulates an increase by 30% relative to FY2021 results.

Employment Rate of People with Disabilities



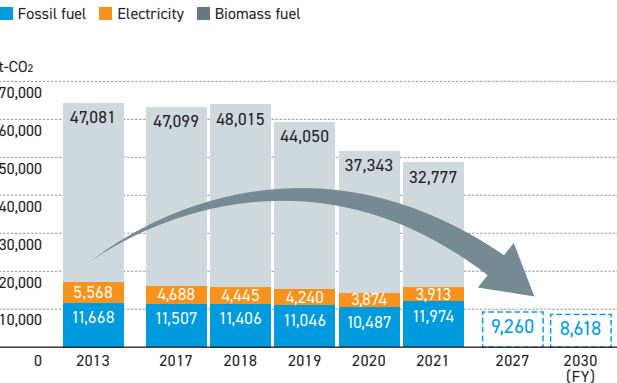
Harima has been long involved in the employment of individuals with disabilities and will continue initiatives that actively promote the creation of a more diverse and inclusive workplace and society.
Scope: Harima Chemicals Group and Harima Chemicals

Operating Income



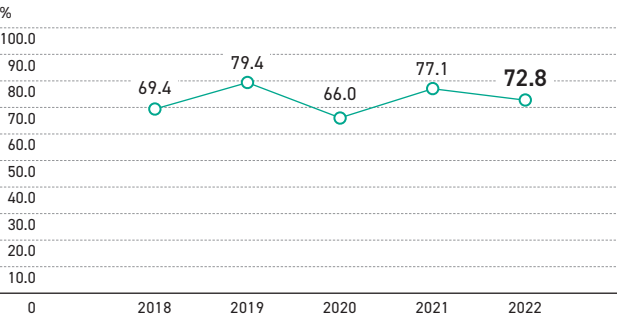
Consolidated Operating income decreased significantly compared to the previous fiscal year, mainly due to soaring raw material and energy prices.

Greenhouse Gas Emissions



Harima is committed to reducing greenhouse gas emissions and, in this regard, opened a biomass power plant in 2005 that utilizes byproducts of crude tall oil distillation, and in 2023, established a floating solar power generation business and introduced carbon-neutral LNG and renewable energy promotion programs at some of our production sites in Japan.
Scope: Harima Chemicals, Harima M.I.D., Seven Rivers, Harima Trading and Nippon Filler Metals

Rate of Paid Leave Taken



We encourage employees to take their designated paid time off and reduce overtime work for a better work-life balance. We will continue efforts to create a positive work environment that meets the diverse needs of our employees.
Scope: Harima Chemicals Group and Harima Chemicals

Risks and Opportunities, Materiality

We analyzed our future business environment and identified core risks and opportunities, taking into consideration changes in environment, society and economy. These risks and opportunities are expected to have a significant impact on the continuous growth of the Company and therefore need to be managed and dealt with appropriately.

Having examined the financial impacts of society and the environment, we determined "Materiality". Based on the Company's long-term vision and mid-term plan and taking into consideration assessment indicators and guidelines related to SDGs and ESG, we identified more than 200 keywords associated with social issues and changes, and organized them as follows: grouped them in 9 materiality themes, examined and analyzed the details of those social issues and changes expected to arise between now and around 2030, assessed their impact on the Company, and their significance from two perspectives: significance for the Company and significance for our stakeholders. The results were reported and accepted at a Board of Directors' meeting of the Company.

Focus areas	Materiality	Identified risks and opportunities	Company undertakings
Environment	Response to global warming	<div><div>Risks</div>Transition risks (policy and legal risks, technology risks, market risks) Physical risks (increased severity of extreme weather events, impact on the habitats of pine trees, our principal raw material, etc.)</div> <div><div>Opportunities</div>Expand sales of products that help solve environmental issues such as decarbonization</div>	<div><div>■</div>Reduce emissions, diversify procurement methods, control risks with non-life insurance, promote operation of the environmental management system/rigorous internal control</div> <div><div>■</div>Expansion of sustainable product sales; entry into markets for high value-added products</div>
	Mitigation of environmental impact	<div><div>Risks</div>Breach of laws and regulations; impact on the regions and the global environment that affect our operations</div> <div><div>Opportunities</div>Expansion of sustainable product sales</div>	<div><div>■</div>Promote business activities and initiatives that harmonize with the environment (accurately understand and lower environmental impact, promote energy savings, reduce discharge of chemical substances into the environment, reduce waste, conduct R&D, etc.)</div>
	GHG emissions reduction	<div><div>Risks</div>Being a large emitter of GHG affects the sales of our products; levy of carbon tax and other possible future taxes</div> <div><div>Opportunities</div>Differentiate our products as low-emission products once carbon footprint gains more recognition</div>	<div><div>■</div>Develop and publish a GHG reduction roadmap</div> <div><div>■</div>Promote floating solar-power generation business, transition to sustainable energy, etc.</div> <div><div>■</div>Calculate Scope 1, 2 and 3 emissions and use the data for product carbon footprints</div>
Society	Supply chain management	<div><div>Risks</div>Delays in raw materials procurement, fluctuation in raw material prices, accidental purchasing of illegal resources/resources that violate human rights</div> <div><div>Opportunities</div>Administration of purchasing costs, improvement in productivity, fulfillment of social responsibility/supplier responsibility</div>	<div><div>■</div>Promote diversification and strengthening of procurement methods, develop alternative products</div> <div><div>■</div>Avoid use of "conflict minerals" that provide funds to armed groups, publish purchasing policy/guidelines, conduct supply chain due diligence</div>
	Human capital management	<div><div>Risks</div>Insufficient preparation of the organizational structure and human resources that suit the business growth plan affecting business growth, work environment preventing employees from performing at the best of their abilities</div> <div><div>Opportunities</div>Enhancement of corporate value resulting from the development and publishing of a human resource strategy that drives our medium- to long-term corporate growth</div>	<div><div>■</div>Develop and promote human resource strategies linked to our long-term vision and mid-term plan</div> <div><div>■</div>Upgrade the level of employee engagement and talent management</div>
	Technological innovation	<div><div>Risks</div>Loss of profits due to delays in new product development, increase in investment and R&D expenses on eco-friendly products</div> <div><div>Opportunities</div>Opportunities to enter new markets and expanded demand brought on by eco-friendly products and other newly developed products</div>	<div><div>■</div>Conduct R&D based on our unique technologies and industry-academia-government collaborative research projects</div> <div><div>■</div>Develop research talent through training, overseas assignments and study, exchange programs with various organizations in Japan and overseas, etc.</div> <div><div>■</div>Allocate resources on strategic R&D investments</div> <div><div>■</div>Subsidize and encourage activities including research, study and international exchanges in science and technology with the aim of promoting science and technology as well as world culture (Shorai Foundation for Science and Technology)</div>
Governance	Labor safety	<div><div>Risks</div>Injury or sickness of employees at manufacturing sites, accidents due to lack of professional knowledge/skill, damage to corporate image</div> <div><div>Opportunities</div>Maintenance of employees' good health, enhancement of productivity, fulfillment of social responsibility, maintenance and improvement of corporate credibility</div>	<div><div>■</div>Introduce chemical substance management system to ensure appropriate management</div> <div><div>■</div>Conduct hazard prediction (KY) activities, preventive maintenance and improvement activities based on risk assessment</div> <div><div>■</div>Raise safety awareness through disaster drills and hands-on safety training programs</div>
	Risk management	<div><div>Risks</div>Occurrence of compliance risks and business risks triggered by non-observance of corporate philosophy, code of conduct, or internal regulations</div> <div><div>Opportunities</div>Evaluation and promotion of business achieved with appropriate risk analysis, assessment and resilience</div>	<div><div>■</div>Maintain and enhance readiness within the Company to keep misconducts in check; internal training (ongoing)</div> <div><div>■</div>Apply PDCA to make improvements and prevent recurrence, analyze, quantify and control potential risks</div>
	Improvement of corporate governance	<div><div>Risks</div>Occurrence of misconduct, deterioration of corporate value, legal risks, criticism from society</div> <div><div>Opportunities</div>Establish credibility as a Prime Market-listed company, and maintain and strengthen the foundation for sound and continuous business growth</div>	<div><div>■</div>We strive to improve our corporate governance to achieve speedy decision-making, better transparency and rationality, which will enable us to carry out activities that enhance corporate value for all stakeholders</div>

Value Creation Process

Harima operates four main businesses: Resins and Tall Oil Products Business, Paper Chemicals Business, Electronic Materials Business, and LAWTER Business. The Company generates value by providing products that meet customer needs, while contributing to the realization of a sustainable society.

Through this process, we aim to realize our long-term vision, Harima Vision 2030: “Deliver a sustainable future through advanced technologies and passion for excellence - Pine Chemicals & Beyond”.



CEO Message



President
Yoshihiro Hasegawa

Utilizing the
blessings of nature
to enhance the
quality of life
~Pine Chemicals~

CEO MESSAGE

Gratitude for the Chemical Resources Provided by Pine Trees

Ever since the Company founding in 1947, we have been fortunate enough to have continued operating in the pine chemicals industry, and in 2022 we celebrated our 75th anniversary. These days, many companies are forced to switch businesses for a variety of reasons, including depletion of resources and declining demand. I therefore believe that Harima has been extremely lucky to have been able to continue in the same business focused on chemical resources derived from pine trees.

However, there is no guarantee that this good fortune will continue in the future. We need to be aware of the issues that could impede sustained growth and take a long-term approach to dealing with them.

At one time, when petrochemicals were in their heyday, we were asking ourselves whether it was wise to focus on “old-fashioned” natural products. The question arose because petrochemical technology had made it possible to synthesize a substance with properties similar to those of rosin. However, rosin has its own exceptional qualities and remains in demand worldwide. Believing that this business offers future potential and plenty of scope for further growth, we chose to continue on the same path. Our know-how is world-class, including the R&D and manufacturing technologies we have dedicated ourselves to cultivating over the years. We believe that developing our strengths in this field will support sustainable growth.

In May 2022, we announced our latest long-term vision, “Harima Vision 2030”, that defines the type of enterprise we want to be by the fiscal year ending March 31, 2031 (FY2030). We will continue to move steadily forward, aiming to remain a top-tier company within the pine chemicals industry by going beyond short-term targets and picking up on changes in our business environment promptly.

The Outstanding Properties of Pine Chemicals

Rosin is obtained by refining pine tree resin. It is a little-known fact that people have used rosin in a diverse range of activities ever since the start of human history. Pine trees exist all over the world, and I believe they are among the trees that have played the most useful roles in our lives. One familiar use of rosin is in baseball’s “rosin bag.” When baseball players put a little rosin powder on their fingers, it helps them to grip the ball better. This makes the ball spin, enabling them to throw penetrating straight pitches or a whole variety of breaking pitches.

Another distinctive characteristic of rosin is that its chemical composition is mildly acidic. One application for rosin that makes use of this property is soldering. Solder is an alloy of lead and tin that melts when heated and can be used to join metals together. However, the metal surfaces to be joined are generally oxidized, which causes the solder to be repelled in the form of droplets like water, making it impossible to join the pieces of metal together. Rosin is well suited for removing this oxide layer. It melts at around the temperature used for soldering, and the relatively mild acid in the rosin referred to as a carboxyl group removes the oxide layer, enabling the solder to wet the metal surfaces and join pieces of metal together. Throughout the ages, rosin has been used in this way as part of soldering technology, and even today, this use of rosin continues to be passed on from one generation to the next.

Thus, the pine tree is an extremely useful resource. It is Harima’s role to use the natural resin provided by pine trees as a raw material for manufacturing products essential to our daily lives.

CEO Message

Pine Chemicals Enter the Spotlight as a Renewable Resource

The pine tree is a renewable resource from which many valuable constituents can be extracted.

In the case of fossil fuels such as coal and oil, reserves are finite, but plant resources such as pine trees can be regenerated an infinite number of times for as long as they continue to grow in the natural world. Accordingly, pine trees and other plants have attracted a great deal of attention in recent years as renewable, sustainable resources.

As pine trees have the capacity to absorb carbon dioxide through photosynthesis, they have come to be recognized as carbon-neutral biomass resources that are outstanding in terms of environmental conservation.

Focus on Pinewood as a Biomass Fuel

Pinewood used to be burned in the form of torches, but as a company, we have mixed feelings about the current interest in its potential as a biomass fuel. In recent years, decarbonization initiatives have gained pace, and attention has focused on renewable energy as a substitute for fossil fuels. The fatty acids derived from pine trees are also now garnering interest as biomass fuels. In the past, fuel prices were fundamentally linked to oil prices, but I believe that from now on the value of biomass resources as fuels will increase. Sweden, for example, has a policy of completely eliminating all fossil fuels and replacing them with renewable energy by 2045. The Swedish government is therefore subsidizing biomass fuels that replace fossil fuels. Europe is leading the way in introducing regulations specifying the ratio of overall fuel usage to be accounted for by biomass. Government subsidies have made it profitable to use even the expensive fatty acids derived from pine trees, and demand for these fatty acids as fuel is growing. The biomass industry is therefore now in competition with the pine chemicals industry, which uses pine trees as a raw material to manufacture chemicals. This constitutes a risk and undoubtedly gives cause for concern going forward.

Expanding Our Business from Japan to the World

One application for pine chemical products are rosin-based sizing agents, which are paper chemicals that make paper water-resistant. Used in photocopier paper, notepads, and other paper, they prevent ink from bleeding when writing with a fountain pen or printing newspapers and the like.

Printing inks also contain rosin-based resins. Consequently, paper and printing ink are the two core usages of rosin. However, information is now increasingly in digital form and less paper is being used, even newspapers are often read on smartphones, and as a result, per-capita paper usage is declining. Moreover, Japan's dwindling population means that paper usage will decline further. In light of these trends, we predict that the Japanese markets for paper and printing ink will continue to contract. On the other hand, from a global perspective, demand for paper and printing ink in emerging economies can be expected to continue growing as their development progresses. We anticipated some time ago that in the Japanese market Harima would have to vie with its industry peers for market share, eventually leading to price competition. We therefore acted early to turn our attention overseas and expand our business outside Japan. And just as we were looking for overseas markets, the opportunity to acquire LAWTER B.V. presented itself. LAWTER was engaged primarily in operating a global printing ink resin business. Despite shrinking demand within this market, we concluded that acquiring LAWTER could be expected to yield benefits for the time being at least, and that our involvement in the same business domain would generate synergies. We therefore decided to go ahead with the acquisition of LAWTER. Given that the business we had been operating in Japan was similar to LAWTER's business in the Americas and Europe, it was easy to assess the value of the company's business. After the acquisition, our overseas sales ratio exceeded 60%, and our outlook on the world changed. I know that a considerable proportion of M&As end in failure, but 12 years after acquiring LAWTER, I believe that this M&A is one of the success stories.

Acquisition of Henkel's Solder Materials Business

The acquisition of the solder materials operations of German manufacturer Henkel also involved a business very similar to our own, so it was easy for us to understand and evaluate this opportunity. We pursued this acquisition, even if that meant stretching our expenses to a certain extent.

Harima's own solder materials business targets the automotive sector, which requires outstanding reliability. Over the years, we have established ourselves as a truly reliable supplier in Japan, and we expect that our acquisition of Henkel's solder materials business will enable us to also supply to major automotive component manufacturers overseas.

Fostering Businesses We Are Capable of Evaluating

It can be challenging to expand business in sectors that impose high demands in terms of quality, price, and other requirements. However, we have learned a great deal in this regard from our customers, so I intend to leverage that know-how as we expand overseas. At the same time, I hope we can repay the customers we learned from by further improving our technological capabilities.

Moreover, the shift in our outlook that I mentioned earlier in connection with LAWTER occurred again to some extent with our acquisition of Henkel's solder materials business. We came to realize that one of the challenges we face is to evolve into a global corporation trusted for embodying the virtues of sincerity, sturdiness and fairness.

We receive information about a whole array of potential M&As in Japan and overseas, but as the industry to which we belong is itself a niche sector, opportunities that match what we are looking for are few and far between. There was a time when our policy was diversification and we became involved in sectors with little connection to our core business, but in the end, fostering sectors we are capable of evaluating has remained our basic policy.

Creating a Company that Employees Feel Pleased to Have Joined

For more than 30 years since I took over from my father and Harima founder, I have thought constantly in my own way about the purpose of business management. Peter Drucker, who is known as the leading authority in business management studies, proposed that the purpose of a business is to "create a customer." I personally believe that, in a situation where a company, employees, and customers exist, the purpose of a business is to enhance satisfaction (to use a somewhat hackneyed phrase) among the customers, shareholders, employees, and local communities who are the company's stakeholders, and to "create customers" in the sense of turning each of these stakeholder groups into fans of the company.

In my opinion, of all our stakeholders, employees are especially important. I want to ensure that the employees we are fortunate enough to have working at Harima continue to feel pleased to have joined this company. I believe it is important not only that employees feel a moderate amount of pressure to perform in their work, but also that we enhance employee satisfaction by offering remuneration commensurate with that pressure to perform and providing employees with a pleasant company to work in. At Harima, we are constantly exploring the best way forward to achieve these aims.

In recent years, more people are changing jobs than previously. It seems to me that this is because employees' ties to their companies have become weaker than they were in the past. That is why I believe we must ensure that the people who choose to work at Harima remain pleased to be a part of this company.

To this end, we must of course ensure that Harima continues to operate, and we are also aiming to gradually increase our business scale and corporate value.

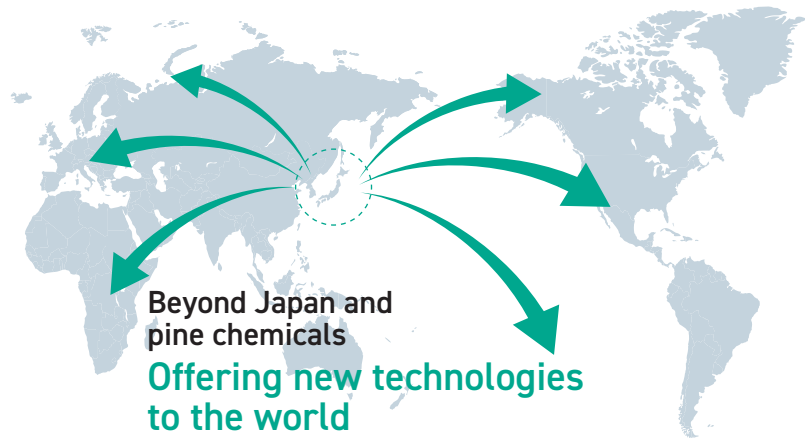
Long-term Vision: Harima Vision 2030

Deliver a sustainable future through advanced technologies and passion for excellence

Pine Chemicals & Beyond

Objectives of Harima Vision 2030

As a company that utilizes the blessings of nature to enhance the quality of life, Harima has grown through its pine chemicals business, which uses pine chemical resources like rosin, fatty acids, turpentine and other materials all obtained from pine trees to develop products. Our pine chemicals business employs a circular business model that makes effective use of natural resources. This ensures that the business is highly compatible with the target of achieving a sustainable society. We will continue to explore the potential of the pine chemicals business, striving to develop new applications and strengthen business fundamentals, as we aim to establish a leading position at global level.



FY2030 Targets	
Net sales	120.0 billion yen or more
Operating income	8.5 billion yen or more
ROE	10 % or more
Overseas sales ratio	65 % or more
Greenhouse gas emissions	50 % reduction*

* Compared with FY2013; in the Japanese operations of Harima Chemicals, Inc.

Sales Expansion Plan for Sustainable Products

We aim to contribute to the realization of a circular society through the development of environment-friendly pine chemical-based materials and expansion of sustainable products.

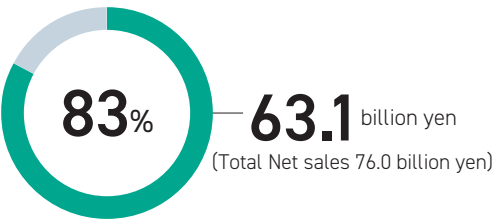
Under our definition, a sustainable product is a product that reduces environmental load and serves to solve social issues such as SDGs, while taking advantage of our technological strengths.

Environmental value	Products
Renewable raw materials	Pine chemical products
Reduction of hazardous substances	Paint resins
Reduction of volatile organic compounds (VOCs)	Water-based resins and solvent-free resins
Promotion of recycling	Paper strengthening agents
Reduction of plastics	Barrier coatings

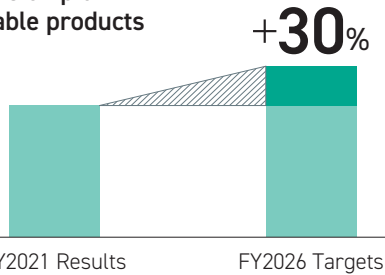


In our sales expansion plan for sustainable products, we are aiming for a 30% increase in sales by 2026.

Sustainable products sales ratio in FY2021

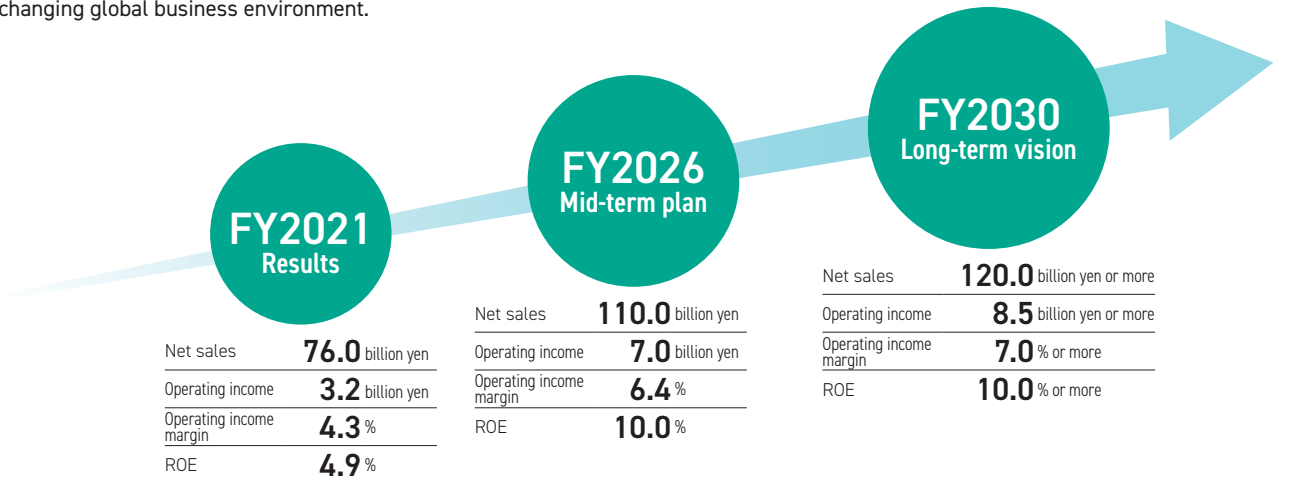


Sales expansion plan for sustainable products



Mid-term Plan: NEW HARIMA 2026

As a milestone to be achieved on the way to realizing Harima Vision 2030, we will aim for sustained growth under our mid-term plan, NEW HARIMA 2026, in light of the following three core strategies: (1) Strengthen business fundamentals and expand business scope, (2) Conduct R&D that propels the company into new businesses and growth fields, and (3) Refine business management to better address ever-changing global business environment.

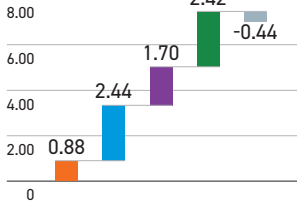
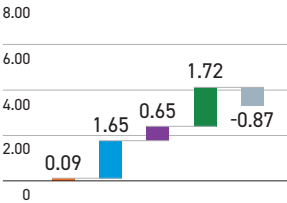
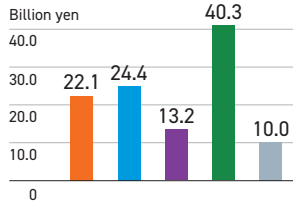
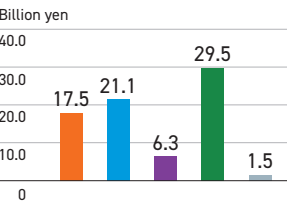
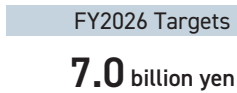


Financial Targets

Net sales



Operating income



Basic Policies

Strengthen business fundamentals and expand business scope	Improve competitiveness of the pine chemicals business	Strengthen supply chain operations, develop new applications, pursue new businesses (alternatives to petrochemicals, infrastructure, flavors and fragrances)
	Expand overseas operations	Solder materials, paper chemicals, adhesive resins
	Reconfigure product portfolio and business scope	Focus investments on growth areas and eliminate unprofitable products and businesses
Conduct R&D that propels the company into new businesses and growth fields	Rubber additives	Polymerization emulsifiers for functional rubber, additives for rubber used in shock-absorbing dampers, additives to improve rubber functionality
	Semiconductors, 5G, and the Internet of Things (IoT)	Functional resins for semiconductors (photoresist resins), electronic component processing materials, high-durability solder, materials for LIB batteries
	Environment and life sciences	Barrier coatings, surface coatings using fluorine alternatives, bioprocessing, CCS/CCU* (CO ₂ capture and use)
Refine business management to better address ever-changing global business environment	Digital technologies	Upgrade production activities, speed up research, manage information, reorganize work processes
	ESG-oriented management	Strengthen governance, disclose climate change-related risks, disclose non-financial information, enhance IR activities
	Working practices	Human resource (HR) management, diversity, remote working, HR system
	Reducing greenhouse gas emissions	Reduce by 46% by 2027, use renewable energy, increase use of biomass fuels, save energy

* CCS: Carbon dioxide Capture and Storage
CCU: Carbon dioxide Capture and Utilization

Financial Capital Strategy

Towards the future of pine chemicals

Expanding into new areas, accelerating business growth



Shunichiro Taoka

Executive Managing Director
Managing Executive Officer
Global Business Director
Corporate Planning Director
Chairman, LAWTER B.V.



Research and Development

Building the Future, Creating New Value

Harima's R&D puts a focus on creating new product value that contributes to building the future, and on speedily transforming research results and technologies into marketable products.

We will continue to meet ever-changing market needs, always ready to challenge new and unexplored realms with an eye on the future.



Ichiro Taninaka

Senior Executive Managing Director
Senior Managing Executive Officer
R&D Company President

Aiming to Achieve Our ROE Target

Our mid-term plan announced in May 2022 indicates a target of 10% for return on equity (ROE). This target is designed to improve Harima's evaluation in the stock market by raising ROE to the guideline level for listed companies of 8% or more, thereby restoring our ROE to its pre-pandemic level. During FY2022 (Apr 1, 2022 ~ Mar 31, 2023), ROE declined to 2.4%, primarily as a result of upfront investments including the acquisition of German manufacturer Henkel's solder materials business, combined with lower Operating income, and the posting of extraordinary losses.

Aiming to increase ROE and further enhance business profitability, we will prioritize strategic investments while at the same time giving due consideration to financial soundness.

Core Strategies of the Mid-term Plan

Harima's operating environment is subject to major trends including Japan's declining population, fluctuating raw material availability and prices, advancing digital transformation (DX), and increasing ecological awareness. Taking these trends into consideration, we determined three core strategies as pillars of the mid-term plan: (1) Strengthen business fundamentals and expand business scope, (2) Conduct R&D that propels the company into new businesses and growth fields, (3) Refine business management to better address ever-changing global business environment.

The first of the three core strategies is "Strengthen business fundamentals and expand business scope". As part of this strategy, in 2023 we opened a facility for the production of myrcene, key ingredient in aroma oils and fragrances, on the premises of our manufacturing hub, Kakogawa Plant. This initiative meets the rising demand for flavors and fragrances in world markets, and is part of a larger strategy to diversify and create new opportunities for our pine chemicals business, that can successfully support business growth into the future.

Also, the acquisition of Henkel's solder materials business in June 2022 opened opportunities to expand our customer base outside Japan, in the industrial and communications equipment fields, particularly in the European automotive industry. We will continue to strengthen our presence overseas, also through such means as strategic acquisitions.

Moreover, we are in the process of reviewing our businesses and products for which the market has matured, including lithographic ink resins, paint resins and domestic paper chemicals, and have taken measures to boost the efficiency of their production systems, while overseas we integrated our production facilities in Malaysia with a view to reinforce operations at the plant acquired during the Henkel acquisition.

The second of the three core strategies is "Conduct R&D that propels the company into new businesses and growth fields". Harima spends an annual average of 2.5 billion yen on R&D initiatives, and will look into further expanding this amount with a focus on strategic areas.

Regarding our paper chemicals business, in 2023 we announced the world's first indirect food additive to be certified by the United States' FDA, Germany's BfR and China's GB9685 regulations for food packaging materials, and which is expected to highly contribute to the reuse, reduction and recycling of paper in world markets. Other developments include rubber additives for car tires and shock-absorbing dampers for buildings, as well as barrier coating agents to be applied to paper surfaces in lieu of plastic conventionally used to laminate paper, thereby improving product sustainability. Our future initiatives will also focus on the development of resins for the promising sector of semiconductor materials.

The third of the three core strategies is "Refine business management to better address ever-changing global business environment". In this area, we will increase use of digital and AI technologies to enhance operations in the production, sales and R&D departments. In R&D, we are confident that we will be able to speed up development by creating a database of information obtained through the years, and leveraging AI to conduct experiments more efficiently. In production, we will aim to create an optimal manufacturing system and establish a preventive maintenance system to enhance operations safety. To this end, we will be using sensors to gather data and monitor status of the production equipment, as well as that of raw materials and semi-finished products during the entire production process. In sales, we aim for a better customer approach through sharing relevant customer data among related departments, and will further employ DX technologies to enhance operations.

In light of these three core strategies, we aim to revamp overall operations and management towards sustainable business growth into the future, together with high levels of profitability and ROE.

Shareholder Return Policy

The Company has always strived to return profits to shareholders by maintaining stable dividend distribution and steadily increasing dividends, as well as by conducting share buybacks. We will continue aiming to improve returns to shareholders, while seeking to balance such returns with business performance and the shareholders' equity ratio.

Creation of New Technologies through Human Resource Development and Vitalization

We foster a research environment that encourages originality through talent development and corporate vitalization. A number of educational training opportunities, international exchanges and overseas dispatch programs are in place to strengthen collaboration with prominent research institutes around the world. We also have an award system that recognizes particularly remarkable company projects, as a way to stimulate innovation and motivation. In addition, we promote cross-industry and industry-academia-government interaction in an effort to develop talent who lead the way to the next generation of technologies.

R&D with an Eye on the Future

Harima actively incorporates leading-edge technology into the development of new, eco-friendly products with energy and resource-saving properties. Tireless research efforts bear fruit in the form of patents and a diverse product lineup for which we receive widespread global recognition.

Our Central Research Laboratory at Kakogawa, and Tsukuba Research Laboratory in the heart of Tsukuba Science City form the backbone of domestic R&D activities. Using the latest equipment and analytical tools, we conduct research that pushes the boundaries of our knowledge and our business. With the significant boost of R&D capability in 2011 with the addition of LAWTER and its research facilities located worldwide, the Company is fully utilizing its diverse network to meet the ever-changing needs of the global market. The passion and dedication we put into our unique technologies are the driving force behind what enhances the quality of life for all.

R&D in Core Business Fields				
Functional Resins	Paint resins	UV-curable resins	Printing ink resins	Adhesive resins
Paper Chemicals	Sizing agents	Paper strengthening agents	Coating agents, barrier coatings	Process improvement agents, pitch control agents
Electronic Materials	Lead-free solder pastes	Brazing materials	Functional resins for semiconductors	–

R&D in New Business Fields	
Surface/Interface Control Materials	Functional coating agents (optical, scratch-protective, mold releasing, antistatic), functional nanoparticle dispersions, material recycling technology
New-age Water-based Materials	Additives/coating agents for food packaging materials, secondary battery materials
New-age Electronic Materials	Conductive pastes, nano pastes
Pine Chemical Materials	Rubber additives (for tires, anti-vibration and shock absorbing rubber), rubber softeners, biotechnology-related products

Research Planning
Intellectual property strategy, new business exploration, R&D support



Resins and Tall Oil Products

The Resins and Tall Oil Products business operates production sites around the world for rosin, fatty acids and turpentine, base ingredients in pine chemicals and foundation of our circular business model. Core products include printing ink resins, adhesive resins, synthetic rubber emulsifiers and flavor and fragrance ingredients. We also target new fields that use resin synthesis technologies and emulsification and dispersion technologies, which we have cultivated through the R&D of pine chemical products, in addition to various eco-friendly paint resins, nanoparticle dispersions-derived functional resins, coating agents for LCDs and films, and more. Our strengths include eco-friendly manufacturing operations, high-level technologies and broad product portfolio that reflect our R&D capabilities.



Yoshifumi Kajitani

Senior Operating Officer
Resins and Tall Oil Products Company President



Paper Chemicals

The Paper Chemicals business operates in Japan, China and the U.S.A., and its main products include paper strengthening agents that add strength to paper such as corrugated cardboard, sizing agents that improve water resistance and printability while preventing ink bleed, and other chemicals used in paper manufacturing processes such as surface coating agents.

Paper strengthening agents play a vital role in environmental protection by enhancing the strength and quality of recycled paper and a multitude of paper options employed in lieu of single-use plastics and therefore demand is expected to grow. Harima developed the world's first high molecular weight, amphoteric polyacrylamide (PAM)-based paper strengthening agent to be certified by all 3 of the world's leading regulations as an indirect food additive. Core strengths of the Paper Chemicals business include a host of technologies developed in Japan over the years, the R&D we conduct overseas, as well as our ability to respond to the needs of customers worldwide.

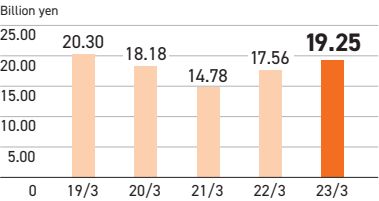


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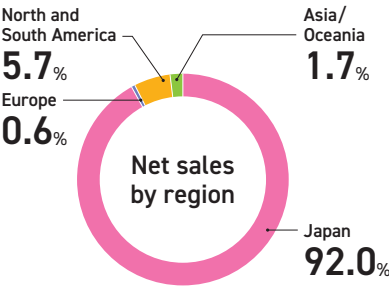
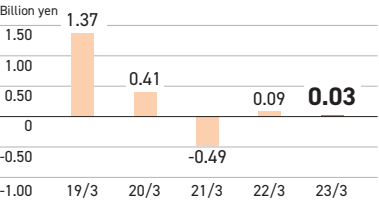
Executive Managing Director
Managing Executive Officer
Paper Chemicals Company President

Performance

Net sales



Operating income



Review of FY2022

Net sales increased by 1,685 million yen (9.6%) compared to fiscal 2021, to 19,251 million yen, owing to increases in selling prices set to offset the impact of high raw material prices. Operating income decreased by 55 million yen (61.5%) to 35 million yen, due to higher raw material prices and other manufacturing costs.

Tapping Into Growth Opportunities

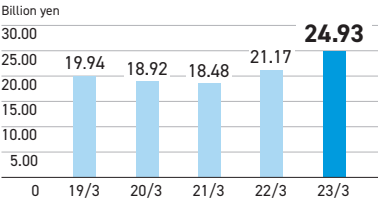
As a manufacturer that utilizes natural and renewable resources, we contribute to the realization of carbon neutrality and economic circularity by developing pine chemical products sourced from biomass materials. In addition to our existing lineup, we aim to develop new markets, products and services that truly contribute to the creation of a sustainable society.

Responding to Risks

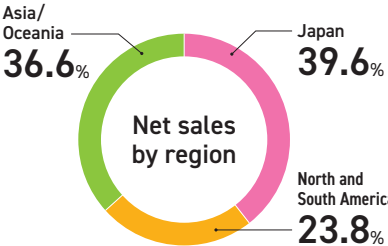
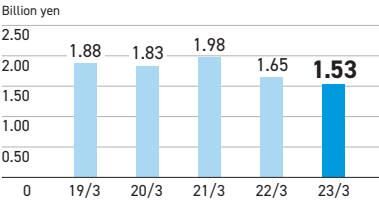
We consider drastic fluctuations in the supply and prices of raw materials and fuels as risks for our business. In an effort to stabilize supply chain operations, we are promoting diversification of procurement methods. For such mature businesses as the lithographic ink resins business and paint resins business, we will reform and streamline operations and production systems.

Performance

Net sales



Operating income



Review of FY2022

Net sales increased by 3,759 million yen (17.8%) compared to fiscal 2021, to 24,933 million yen, owing to increases in selling prices set to offset the impact of high raw material prices as well as a weaker yen. Operating income decreased by 116 million yen (7.0%) to 1,534 million yen, due to higher raw material prices and other manufacturing costs.

Tapping Into Growth Opportunities

We aim to expand business and strengthen supply chain operations in North America, China and Southeast Asia, in addition to meeting the growing demand in Japan for paper packaging materials, deriving from the ease of pandemic restrictions, and new regulations that promote better ways for plastic resource circulation. We will also expand lineup of products for food packaging applications, with a view to accommodating market shifts from plastic to paper products and contributing to the realization of a sustainable society.

Responding to Risks

We consider the market's maturity and subsequent long-term shrinkage a risk for our domestic business, to which we are reconfiguring operations and streamlining production systems. Meanwhile, we plan to expand overseas business by capturing growth markets for such products as corrugated cardboard and coating agents used in a multitude of paper applications employed in lieu of single-use plastics.

Social Issues to Be Addressed

- Contributing to achieving a decarbonized society as an extension of our circular business model
- Environmental value creation
Reducing hazardous substances and VOCs, expanding sales of solvent-free resins, providing alternatives to plastics and petrochemicals
- Creating a DX society through development of ultrafine-particle based high-refractive index coating agents

NEW HARIMA 2026 Targets

- Refine basic research on pine chemicals and crude tall oil* distillation technology**
- Develop technologies and create markets for additives to improve rubber functionality
- Enter new markets for alternatives to petrochemicals
- Develop technologies for eco-friendly water-based and solvent-free resins
- Eliminate unprofitable products and businesses

Performance During NEW HARIMA 2026 Period (FY2022 Results)

INPUT		OUTPUT		OUTCOME
Capital expenditure	692 million yen	Production output	17.34 billion yen (+16.3% YOY)	Promote pine-derived products with high environmental value
R&D expenses	Resins and Tall Oil Products 395 million yen	Net sales	19.25 billion yen (+9.6% YOY)	Mitigate earthquake damage through development of additives for rubber used in shock-absorbing dampers
	Pine Chemicals 430 million yen	Operating income	35 million yen (-61.5% YOY)	Enhance traceability by performing supply chain due diligence
Employees	226	Established myrcene (flavor and fragrance ingredient) production facility		
Manufacturing sites	Japan 5	Launched additives for rubber used in shock-absorbing dampers and conducted user evaluation surveys		
	South America 1	Launched a new line of lithographic ink resins with high-printability		
		Developed and started sales expansion of eco-friendly, weak solvent-based paint resins for building facades		
		Promoted acquisition of traceability-related certification to improve value of tall oil products		

*1 Crude tall oil: A raw material derived from the kraft-pulping process of pine trees
*2 Distillation technology: Technology used to distill crude tall oil to extract rosin, fatty acids, biomass fuel, etc.

Social Issues to Be Addressed

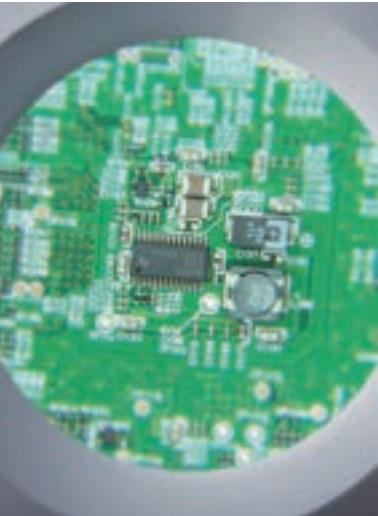
- Environmental value creation
 - Reduction of petrochemicals and plastics
 - Higher percentage of recycled waste paper
 - Paper production fluctuation by region

NEW HARIMA 2026 Targets

- Allocate resources to growth areas and expand into new markets with newly developed products
 - Expand market for agents certified as indirect food additives through development of and market creation for functional coating agents that help reduce plastics
 - Accelerate business expansion in North America, China and South Asia
 - Strengthen supply chain operations and support flexible distribution

Performance During NEW HARIMA 2026 Period (FY2022 Results)

INPUT		OUTPUT		OUTCOME
Capital expenditure	303 million yen	Production output	21.76 billion yen (+15.4% YOY)	Expand lineup of products that contribute to the reduction of petrochemicals and plastics
R&D expenses	739 million yen	Net sales	24.93 billion yen (+17.8% YOY)	
Employees	256	Operating income	1,534 million yen (-7.0% YOY)	Environmental value creation Promote products that contribute to increasing the percentage of recycled waste paper
Manufacturing sites	Japan	Responded to growing market competition by expanding product lineup, increasing sales and improving profitability through supply chain reconfiguration		
	North America	Expanded lineup of products compliant with regulations for indirect food additives in U.S.A., Germany, and China (Rosin-based emulsion sizing agent "NeuRoz" series, PAM-based paper strengthening agent "Harmide C-10," and Amphoteric PAM-based paper strengthening agent "Harmide T2")		
	China			



Electronic Materials

The core products of the Electronic Materials business are solder materials that use metal-joining technologies to bond electronic parts. With a rich lineup of products including high durability solder for cars and environmentally friendly lead-free solder, our main customers have long been automotive component manufacturers in Japan, however, the acquisition of the solder materials business of German manufacturer Henkel in June 2022 has accelerated expansion into the global market. Our strengths also include fields of mobility and electronic products in the form of aluminum brazing materials, which employ a combination of metal-joining and resin synthesis technologies for devices with heat exchangers such as air conditioners and radiators for cars, as well as functional resins for semiconductors which apply technologies of metal-joining, resin synthesis and interface control to serve a variety of growing applications.



Seishi Kumamoto

Senior Operating Officer
Electronic Materials Company President



LAWTER

LAWTER primarily engages in the pine chemicals business with operations in seven countries around the world. Core products include adhesive resins, printing ink resins, paint resins for road marking, synthetic rubber emulsifiers and flavor and fragrance ingredients. The water-based tackifier resin series Snowtack™ in particular, holds top share in the global market, and is used for labels and stickers, and more recently for industrial tapes. In response to the growing demand for alternatives to petrochemicals, we offer a large number of sustainable products made from plant resources such as rosin-derived water-based flexographic ink resin series Snowpack™. With rosin production bases located in South America, Oceania and Europe, a high rate of our raw materials are procured in-house.

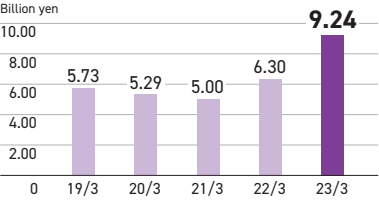


Mikio Katayama

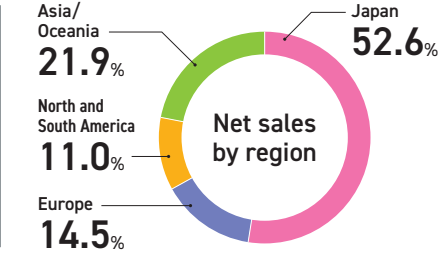
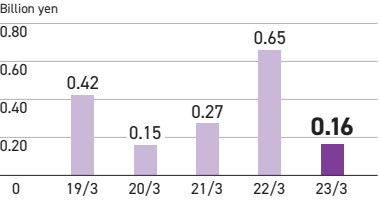
Senior Operating Officer
LAWTER President and CEO

Performance

Net sales



Operating income



Review of FY2022

Net sales increased by 2,937 million yen (46.6%) compared to fiscal 2021, to 9,241 million yen, owing to the successful integration of the newly acquired solder materials business. Operating income decreased by 494 million yen (75.1%) to 163 million yen, due to higher raw material prices and amortization costs of said solder materials business.

Tapping Into Growth Opportunities

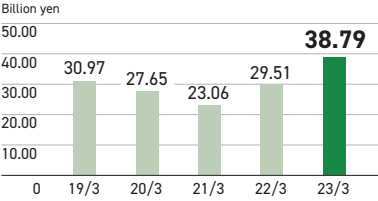
We are pursuing synergies resulting from the acquisition of Henkel's solder materials business and its customer base, technology, manufacturing sites and workforce to further expand business. We are also reinforcing production system to meet the growing demand of functional resins for semiconductors.

Responding to Risks

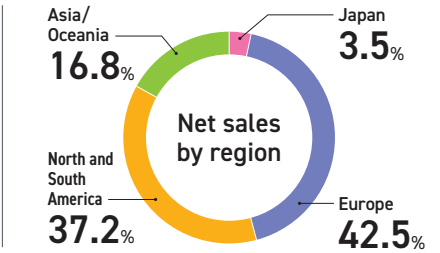
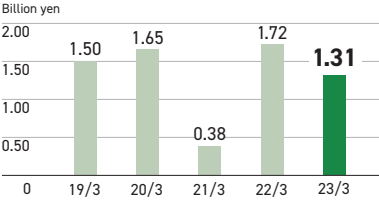
We consider the decline in automobile production and high raw material prices as risks for our business. We are steadily expanding portfolio and sales in the growing market of functional resins for semiconductors as well as high-profit products, and strengthening production capacity to ensure stable supply.

Performance

Net sales



Operating income



Review of FY2022

Net sales increased by 9,279 million yen (31.4%) compared to fiscal 2021, to 38,797 million yen, despite the declining demand caused by concern over global recession, owing to increases in selling prices set to offset high raw material prices. Operating income decreased by 405 million yen (23.6%) to 1,315 million yen, due to increases in manufacturing costs triggered by higher energy prices and global inflation.

Tapping Into Growth Opportunities

We are expanding share in the growing market of adhesive resins, as well as conducting R&D for the innovation of sustainable products.

Responding to Risks

We consider high raw material prices and the global shrinkage of demand as risks for our business. We are promoting diversification of procurement methods by utilizing various supply chains, as well as conducting R&D for alternative products.

Social Issues to Be Addressed

- Contributing to the realization of a mobility society through such technologies as CASE
- Contributing to the realization of a decarbonized society
Developing technologies and expanding markets for products that promote carbon neutrality

NEW HARIMA 2026 Targets

- Consolidate the solder materials business acquired from Henkel and create synergies with existing businesses
- Reinforce production system and develop new products to meet growing demand of functional resins for semiconductors
- Expand markets of eco-friendly brazing materials for heat exchangers

Performance During NEW HARIMA 2026 Period (FY2022 Results)

INPUT		OUTPUT		OUTCOME
Capital expenditure	5.42 billion yen	Production output	7.39 billion yen (+22.8% YOY)	Expand into overseas markets technologies highly recognized for use with Japanese cars, and expand in Japan technologies obtained through the Henkel solder materials business acquisition
R&D expenses	0.52 billion yen	Net sales	9.24 billion yen (+46.6% YOY)	
Employees	212	Operating income	163 million yen (-75.1% YOY)	
Manufacturing sites	Japan	Promoted post-merger integration (established a site for technical sales in the UK, integrated plants in Malaysia, increased share in growth markets, integrated/innovated technologies to develop new products and enhance product value)		Expand lineup of products with high environmental value (products that help reduce the weight of heat exchangers, improve heat efficiency, or reduce energy consumption in the customers' production processes)
	North America			
	Europe			
	China			
	Asia			
		Reinforced production capacity of functional resins for semiconductors to meet growing demand		Promoted overseas expansion of aluminum brazing materials for automobiles and developed stainless steel brazing materials for water heaters

Social Issues to Be Addressed

- Co-creation of environmental and social values towards the realization of a sustainable society

NEW HARIMA 2026 Targets

- Further expand share in the growing market of adhesive resins
- Enter new markets for alternatives to petrochemicals
- Conduct R&D of sustainable products and manufacturing methods

Performance During NEW HARIMA 2026 Period (FY2022 Results)

INPUT		OUTPUT		OUTCOME
Capital expenditure	1,327 million yen	Production output	56.24 billion yen (+27.4% YOY)	Promote products with high environmental value that contribute to decarbonization, energy saving, etc.
R&D expenses	645 million yen	Net sales	38.79 billion yen (+31.4% YOY)	
Employees	594	Operating income	1,315 million yen (-23.6% YOY)	
Manufacturing sites	North America	Maintained large market share of water-based tackifier resins		Expanded application of tackifier resins to the industrial tapes market
	South America			
	Europe	Promoted energy saving		Developed high-concentration water-based tackifier resins, developed and prepared for mass production of tackifier resins for no-heat UV adhesives
	China			
	Asia	Our UV-curable printing ink resins adopted by leading printing ink manufacturers to meet growing demand for related inks triggered by digitalization and small-batch printing		Introduced and commercialized plant-based inks, coating agents and water-based flexographic ink resins that contribute to reducing GHG emissions
	Oceania			

Corporate Governance

Managing Directors (as of July 10, 2023)



Yoshihiro Hasegawa
President

April 1977
December 1977
August 1983
June 1985
June 1987
May 1988
June 1988
November 1994
April 2004
October 2012
June 2014

Joined the Company
Managing Director
Executive Managing Director
Vice President
Representative Managing Director and Vice President
President, Harima Shoji, Inc. (currently Harima Trading, Inc.) (current position)
President, the Company (current position)
President, Harima M.I.D., Inc. (current position)
Chairman, Shorai Foundation for Science and Technology (current position)
President, Harima Chemicals, Inc. (current position)
Chairman, LAWTER B.V.



Teruo Kaneshiro
Senior Executive Managing Director
Senior Managing Executive Officer

April 1973
February 2004
June 2004
June 2009
June 2010
October 2012
October 2012
June 2014
June 2016
June 2016
April 2020

Joined Kobe Bank (currently Sumitomo Mitsui Banking Corporation)
Accounting Director, the Company
Managing Director
Management Senior Division Manager
Executive Managing Director
Executive of Accounting, General Affairs, Legal Affairs, Human Resources, Public Relations
Managing Director, Harima Chemicals, Inc.
Head Office Group Management Control, the Company
Senior Executive Managing Director (current position)
Senior Managing Executive Officer (current position)
Nomination and Remuneration Committee Member (current position)



Ichiro Taninaka
Senior Executive Managing Director
Senior Managing Executive Officer
R&D Company President

April 1993
April 2005
June 2008
June 2010
January 2011
October 2012
October 2012
October 2012
June 2014
June 2014
June 2014
June 2020
June 2020
June 2021
June 2021
March 2023
March 2023
June 2023

Joined the Company
Development Director, Central Research Laboratory
Operating Officer
Managing Director
Corporate Planning Director
Corporate Planning Director
Information System Director
Auditing Director, Operation Director
Executive Managing Director
Managing Executive Officer
President and CEO, LAWTER B.V.
Senior Executive Managing Director, the Company (current position)
Senior Managing Executive Officer (current position)
Resins & Tall Oil Products Business Exercise Controller
Managing Director, Harima Chemicals, Inc. (current position)
R&D Exercise Controller, the Company
R&D Company President (current position)
Chairman, LAWTER B.V.



Shunichiro Taoka
Executive Managing Director
Managing Executive Officer
Global Business Executive
Corporate Planning Director
Chairman, LAWTER B.V.

April 1982
August 2008
October 2012
October 2013
June 2015
June 2017
June 2017
June 2017
June 2017
June 2021
June 2021
July 2023

Joined Taiyo Kobe Bank (currently Sumitomo Mitsui Banking Corporation)
General Manager attached to Business Audit Department (New York)
Auditing Director, the Company
Operating Officer
Global Business Director
Managing Director
Senior Operating Officer
Global Business Executive (current position)
Corporate Planning Director (current position)
Executive Managing Director (current position)
Managing Executive Officer (current position)
Chairman, LAWTER B.V. (current position)



Eiketsu Ro
Executive Managing Director
Managing Executive Officer
Paper Chemicals Company President

April 1998
September 2012
June 2017
April 2018
June 2018
June 2018
June 2019
June 2022
June 2022
June 2022

Joined the Company
Vice President, Hangzhou Hanghua Harima Chemicals Co., Ltd.
Operating Officer
Vice President, Paper Chemicals Company
Senior Operating Officer
President, Paper Chemicals Company (current position)
Managing Director
Resigned as Managing Director
Managing Executive Officer (current position)
Executive Managing Director (current position)

Managing Directors Serving as Audit & Supervisory Committee Members (as of the end of June 2023)



Hideo Yamada
Managing Director Serving as Audit & Supervisory Committee Member

April 1978
October 2003
April 2010
June 2011
June 2012
October 2012
June 2014
June 2014
June 2017
June 2017

Joined Taiyo Kobe Bank (currently Sumitomo Mitsui Banking Corporation)
General Manager, Keihankyobashi Branch
Executive Officer, Manager of Financial Group, Corporate Planning Division, ARRK Corporation
Joined the Company, Global Business Director
Operating Officer
Corporate Planning Director
Corporate Planning Director
Information System Director
Managing Director Serving as Audit & Supervisory Committee Member (current position)
Corporate Auditor, Harima Chemicals, Inc. (current position)



Tatsuya Michigami
Managing Director Serving as Audit & Supervisory Committee Member (Outside)

April 1984
April 1987
June 1987
June 2015
April 2020

Registered as an attorney
Opened Kitamon General Law Office (to present)
Outside Corporate Auditor, the Company
Managing Director Serving as Audit & Supervisory Committee Member (current position)
Nomination and Remuneration Committee Chair (current position)



Tsuneo Takahashi
Managing Director Serving as Audit & Supervisory Committee Member (Outside)

April 1976
May 1986
October 2003
March 2006
June 2012
February 2016
June 2017
April 2020

Joined Mitsubishi Corporation
Mitsubishi Corporation Finance PLC
President, Mitsubishi Corporation Securities Ltd.
Director, Natsource Japan Co., Ltd.
Full-time Auditor, Mitsubishi Corporation Plastics Ltd.
Director, Institute of Corporate Governance, Japan (current position)
Managing Director Serving as Audit & Supervisory Committee Member (current position)
Nomination and Remuneration Committee Member (current position)



Yuka Hayashi
Managing Director Serving as Audit & Supervisory Committee Member (Outside)

September 1985
April 1991
August 1998
July 2010
September 2015
September 2019
June 2022

Joined Minato Audit Corporation (currently Ernst & Young ShinNihon LLC)
Registered as a certified public accountant (to present)
Member (currently Partner), Century Audit Corporation (currently Ernst & Young ShinNihon LLC)
Senior Partner (currently Partner), ShinNihon & Co. (currently Ernst & Young ShinNihon LLC)
Governance Council member, Ernst & Young ShinNihon LLC
Vice-Chairperson, Governance Council, Member, Audit Committee
Managing Director Serving as Audit & Supervisory Committee Member (current position)

Basic Approach to Corporate Governance

The Company's basic approach to corporate governance is to continuously increase its corporate value for its stakeholders, including shareholders, customers, employees, business partners, and local communities, through sound corporate activities. Based on this basic policy and in order to make swift and decisive judgments and increase the transparency and rationality of management, we strive to enhance the activities of the Board of Directors, the Audit & Supervisory Committee, and the Auditing department, and develop internal control systems. We also work to strengthen information disclosure, compliance and risk management systems. In accordance with the provisions of the Articles of Incorporation, the Company has concluded an agreement with three Outside Managing Directors serving as Audit & Supervisory Committee members that limits their liability for damages pursuant to Article 427, Paragraph 1 of the Companies Act. The maximum amount of liability for damages based on the agreement is the amount stipulated by law. The Company is actively developing its business overseas, with the overseas sales ratio at approximately 60%. As part of our IR initiatives for overseas investors, we constantly update our corporate website in Japanese, English, and Chinese and enhance its content. We work to improve information disclosure in line with globalization trends in an effort to increase communication with our investors and various others stakeholders.

Effectiveness of the Board of Directors

The Board of Directors is chaired by President Yoshihiro Hasegawa. The Board consists of nine Managing Directors (four of whom serve as Audit & Supervisory Committee Members), three of whom are Outside Managing Directors.

In addition to the regular monthly Board meeting, the Company holds irregular Board meetings as needed, and all important management matters stipulated in laws and regulations, the Articles of Incorporation, and the Rules of the Board of Directors are brought up for discussion.

The Company has introduced an Operating Officer system. Under a management structure comprised of nine Managing Directors and 20 Operating Officers (four of whom concurrently serve as Managing Directors), we have segregated the functions of the Board of Directors, namely, creating management strategies, making decisions, and supervising the execution of business, from the function of Operating Officers, that is, execution of business, to establish a system that allows us to respond to changes in the business environment efficiently and swiftly.

Furthermore, pursuant to Article 399-13, Paragraph 6 of the Companies Act of Japan, we are now able to delegate all or part of the decisions on the execution of important business to Managing Directors by a resolution of the Board of Directors, so that we can execute our business more flexibly than before.

The Articles of Incorporation of the Company stipulate that the number of Managing Directors of the Company (excluding Managing Directors serving as Audit & Supervisory Committee Members) shall be nine or less, and in addition to that, the number of Managing Directors serving as Audit & Supervisory Committee Members shall be five or less.

Internal Control Activities

The Internal Control department, headed by a Managing Director, collects and inspects monthly internal control reports submitted by divisions and companies, administrative departments of the holding company, and domestic and overseas subsidiaries, and holds internal control meetings regularly (bimonthly) to monitor the Company's enforcement of compliance, status of risk avoidance and management, and status of compliance with the Harima Global Business Code of Conduct.

Policy on Executive Remuneration

The Company's basic policy is to determine remuneration for individual Managing Directors within the limit of the total remuneration amount approved at a General Meeting of Shareholders, taking into account their position, degree of contribution to the operating results of the Company, and generally accepted standards.

When determining the details of remuneration for individual Managing Directors, the Nomination and Remuneration Committee, a voluntary advisory body, performs a multifaceted examination of the draft proposal for the fiscal year, including consistency with the Determination Policy, and the Board of Directors respects its report in principle.

Process for Electing Managing Directors and Operating Officers, CEO Succession Planning and Its Determination

The Articles of Incorporation of the Company stipulate that a resolution to elect Managing Directors shall be made by a majority of the voting rights of shareholders present at a General Meeting of Shareholders where shareholders holding one-third or more of the voting rights of shareholders who are entitled to exercise their voting rights are present, and that such resolution shall not be by cumulative voting.

In electing Outside Managing Directors, we have appointed those who are unlikely to have conflicts of interest with general shareholders, with reference to the Independent Directors/Auditors systems stipulated by the Tokyo Stock Exchange.

At present, we have not formulated a specific succession plan for the CEO, etc. in consultation with the Board of Directors. Although we have several Representative Managing Directors, we recognize that succession planning is an issue. We will consider it as appropriate, taking into account the future situation of the Company and the environment, also by utilizing the Nomination and Remuneration Committee, which was established as a voluntary advisory body to the Board of Directors in April 2020.

Approach to Independence of Outside Officers

In electing Outside Managing Directors, we have appointed those who are unlikely to have conflicts of interest with general shareholders, with reference to the Independent Directors/Auditors systems stipulated by the Tokyo Stock Exchange.

The Company has three Outside Managing Directors. After examining the attributes of the independent Officers, etc., we have determined that there is no risk of conflicts of interest with general shareholders and thus have appointed them as independent Officers. They do not hold any shares of the Company. We have registered them as independent Officers with the Tokyo Stock Exchange.

Compliance

Basic Approach to Compliance

We have established the Harima Global Business Code of Conduct as a standard of behavior to be observed by all Group companies and their executives and employees in implementing business activities under our corporate philosophy. All Group companies and their executives and employees (including non-fulitime employees) understand the spirit of this Code of Conduct, and will fulfill their social responsibilities with high ethical standards toward the creation of a sustainable society while respecting human rights and complying with relevant laws and regulations of each country and international rules.

This Code of Conduct does not cover all situations of our corporate activities or all laws and regulations in each country. Therefore, it can be complemented by establishing additional codes of conduct, policies, etc. in each country or region, based on and not conflicting with this Code of Conduct.

Executives of all Group companies recognize that thorough compliance with this Code of Conduct is essential, and will strive to lead by example to ensure that all concerned parties are fully aware of compliance, and develop an internal system to ensure compliance. Furthermore, in the event of a violation of this Code of Conduct, executives themselves will take responsibility for resolving the problems, as well as investigate the causes, strive to make improvements, and prevent recurrence.

Business Ethics Committee and Risk Management Committee

We have established the Harima Global Business Code of Conduct, which serves as the Company's common code of behavior, in implementing business activities that put into practice our corporate philosophy of "Utilizing the blessings of nature to enhance the quality of life".

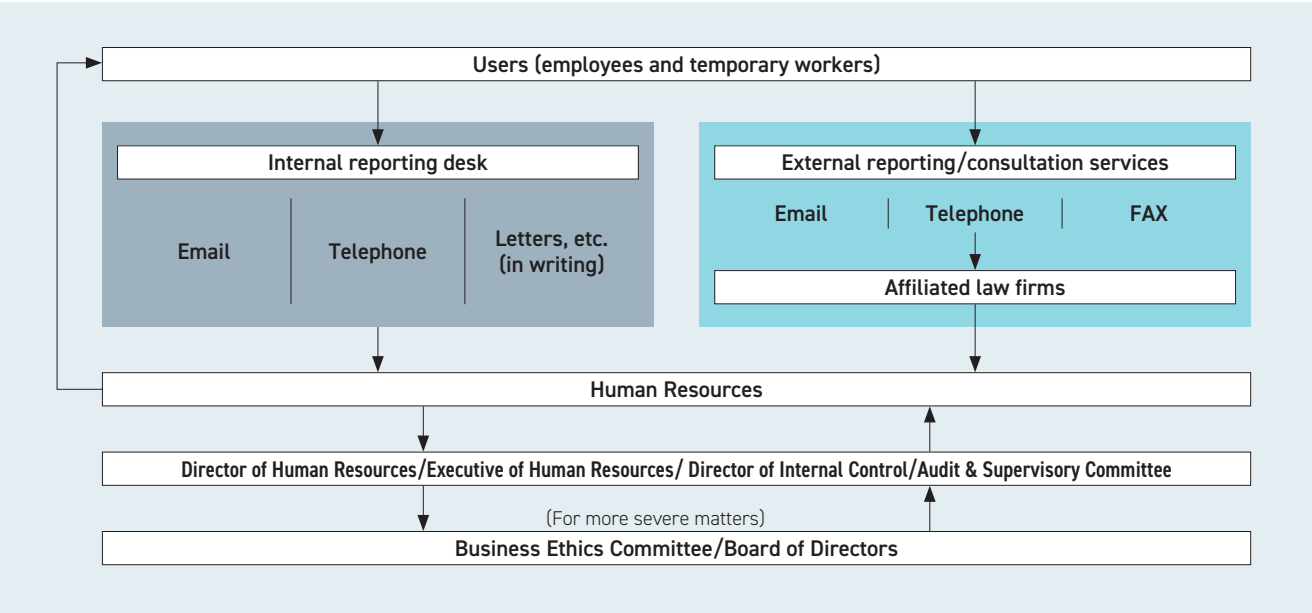
Observing the Harima Global Business Code of Conduct and ensuring thorough compliance are promoted by the Business Ethics Committee, which consists mainly of Managing Directors. Risks surrounding Harima Chemicals Group are reviewed and verified by the Risk Management Committee.

Internal and External Compliance Reporting System

For the improvement of corporate ethics, we have distributed the Harima Global Business Code of Conduct and Business Code of Conduct Handbook to all employees and established internal reporting and consultation services. In addition to that, and in order to further strengthen the prevention of illegal acts in our corporate activities and ensure swift and appropriate responses in the event of the occurrence of such acts, we have established compliance reporting and consultation services outside the Company so that employees can directly report to or consult with external lawyers.

This internal and external reporting system is operated with the utmost consideration given to the privacy of those who consult with, in accordance with the Whistleblower Protection Act, and it is clearly stated in the Company's internal regulations that no disadvantages will be inflicted on them.

Internal and External Compliance Reporting System



Meet Our Outside Managing Directors

Targeting further improvement of the Harima Chemicals Group's corporate value

The Company is pursuing various strategies in line with its long-term vision, "Harima Vision 2030" and mid-term plan, "NEW HARIMA 2026". Our three Outside Managing Directors, who play an essential role in performing the supervisory function of the Board of Directors, shared their views on how to further improve the Company's corporate value.



Tsuneo Takahashi

Outside Managing Director

Yuka Hayashi

Outside Managing Director

Tatsuya Michigami

Outside Managing Director

Michigami

What roles do you think are expected of you as Outside Managing Directors in light of your individual fields of expertise? And what aspects do you focus on when contributing to meetings of the Board of Directors or other bodies?

As an attorney, for a long time, I've worked mainly in corporate legal affairs and as an external committee member for a range of organizations. Given that my involvement in Harima Chemicals Group is as an Outside Audit & Supervisory Committee member, I think the roles required of me are to assess from a legal perspective whether the Company Directors are fulfilling their obligation to faithfully perform their duties, and to check from a third-party perspective whether the interests of the Company are being taken fully into account in the management of the business.

My approach at meetings of the Board of Directors is to check whether all the advantages and disadvantages of a proposal have been examined to determine a viewpoint, identify how things might play out in the future, and assess what the risks might be. I also check whether the proposal is presented using content and materials that are easy to understand from the shareholders' perspective. After verifying that these steps have been taken, I check that proposals are properly discussed and decided upon.

Hayashi

As a certified public accountant, I have been involved for many years in auditing numerous listed companies. I believe that, ultimately, a company's culture in terms of its management and organization is of key importance, not only with regard to accounting and financial matters, but also in relation to other areas such as risk management and compliance. Around a year has passed since I took up the position of Outside Managing Director at Harima, and I have experienced at first hand the organizational culture of "sincerity and sturdiness," the strong leadership provided by the President, and the power

Takahashi

of the management philosophy and business strategies to penetrate throughout the Group. The aspects I want to focus on when contributing to meetings of the Board of Directors include confirming that the Company has made the most of the advantages provided by this organizational culture to ensure full management transparency and objectivity, and ascertaining how the Company intends to deal with changes in its operating environment.

I have many years of experience in financial services and finance-related work in a trading company; the last position I held before starting my role at Harima was as a full-time auditor. I think one of the most important roles of Outside Managing Directors is to assess how the Company is well managed. For example, when a new business opportunity is identified, we should monitor the way it is managed from the broad perspective of a typical third-party observer, focusing on the aspects that those inside the Company may overlook. This might include verifying how much profit the business would generate, checking whether everybody is keeping an eye on the yardsticks that measure various risks, and considering whether it would be good to take those risks or not. Of course, it is the President who observes the Company more closely than anybody else and his continuous feedback is very helpful for us.

Challenges of the long-term vision and mid-term plan

Takahashi

The duration of the mid-term plan has been extended from its previous three years to five years. In the current situation, it is extremely difficult to make and implement business plans over a short time span, so I do think the decision to start considering changes to the Company over a period of around five years was a step forward. Harima's determination to improve its performance and engage with new businesses is very evident. During the course of this plan, I would like to see the Company making

Meet Our Outside Managing Directors

Hayashi

tangible progress in exploiting each of its businesses more fully, and expanding pine chemicals and associated businesses.

Harima's long-term vision and mid-term plan set out the intention to expand its business areas overseas. One particular way in which the Company demonstrated its determination in this regard was by challenging itself to scale up its overseas business through the acquisition of the solder materials business of German manufacturer Henkel, thereby breaking into automotive components and related businesses at global level. The long-term vision sets a target of 10% or more for ROE, but the results for FY2021 and FY2022 were 4.9% and 2.4%, respectively. In my opinion, therefore, improving profitability remains a key challenge. In order to tackle this challenge, it will be essential to steadily implement and further develop the policies created for the mid-term plan.

Michigami

Most important of all, I think, is Harima's founding philosophy, which advocates a circular business model that makes use of natural resources. Harima has maintained the same philosophy ever since its founding, and I believe this is what has always underpinned the Company and driven its business results by earning public support. Even in today's social environment, where the SDGs are a key topic of discussion, the philosophy certainly remains relevant; I see it as a long-term ideal that we should continue to value and appreciate. The question now is how we go about putting the philosophy into practice during the current mid-term plan. The plan incorporates an impressive core vision for the pine chemicals business, as well as strategies for cultivating associated businesses and taking concrete steps to move these businesses forward. I think Harima deserves praise particularly for taking on challenges of all kinds, including its acquisition of Henkel's solder materials business. However, one issue is that this company originally founded in Kakogawa, a regional Japanese city, has now grown to the extent that overseas operations account for more than 50% of its total business. It seems to me that a significant challenge in this regard will be securing the management resources necessary to support sustained growth going forward, and in the case of human resources, this also includes ensuring diversity.

Business risk management

Takahashi

If the Company is to achieve evolutionary growth, I believe it needs to reorganize its business portfolio, which currently relies heavily on the pine chemicals business. LAWTER, the company Harima acquired in 2011, has grown steadily, and the Company is also putting tremendous effort into developing the solder materials business it acquired from Henkel in 2022. A major challenge Harima now faces, however, is identifying how to seek out and grow such new business potential in the future. In addition, some businesses are achieving sales, but are just not profitable, so I think that another significant challenge is likely to be the replacement of certain businesses in the portfolio. During my time working at a trading company, I was tasked with running

Hayashi

two companies. While doing so, I was constantly thinking about how to grow the businesses, and about which risks we should accept, avoid or manage, so I believe I could offer advice in these regards.

I think that nurturing a successor to run the Company over the long term is an important issue. The current President demonstrates leadership, has a keen eye for detail, and takes risks into account as he manages the business. Moreover, the Company has an outstanding corporate philosophy, so I think it is now time to nurture a successor who has the vision to uphold that philosophy and tackle new challenges, as well as the capacity to effect change. In order to cultivate business overseas and in new areas, it will be essential to make the most of a diverse range of human resources. I intend to support any related initiatives that seek to increase the value of Harima's human capital by ensuring diversity through recruiting global talent or promoting active participation by women. From a long-term perspective, I want to do whatever I can to help in pursuing concrete measures such as positive action to nurture young employees by enabling them to gain experience, provision of the necessary education and guidance regarding female representation, or establishment of a mentoring system.

Michigami

In terms of challenges, I think the biggest one the Company faces is identifying a successor to the current President. Harima's President always puts the Company first, which is very reassuring, but the question of how to go about finding his successor presents a huge challenge. And the next biggest challenge is raw material prices in the core pine chemicals business. Then there is the issue of securing personnel, given that further expansion overseas will necessitate additional human resources. As was mentioned earlier, for the Company to enter new businesses, it will need people who can properly understand, assess and make decisions on those businesses. So, how should Harima go about nurturing diverse human resources? Traditionally, the manufacturing industry, that we are a part of, has been dominated by workplace environments focused on the shop floor and technology, where most employees are men. Accordingly, an urgent imperative as Harima pursues future business overseas will be to commit more proactively than ever before to diversity-aware hiring and training of human resources. In this regard, I do think that Harima's current HR strategy already reflects awareness of these issues.

Participation at Board of Directors' meetings

Takahashi

The atmosphere during meetings allows us to speak frankly about anything. In addition, provision has been made for us to receive reports on necessary matters such as progress with investment projects or periodic reviews. It is also very helpful for the Outside Managing Directors that adequate time is allocated to provide briefing sessions for us prior to the meetings. We use these sessions to ask questions about technical points in relation

Hayashi

to Harima as a manufacturer and improve our understanding of the business. However, discussions during actual Board meetings do inevitably tend to focus on specific proposals, so I would ideally like to see some changes to the meetings, such as slightly more free-ranging discussions that take place on a regular basis. I have already suggested this to the secretariat of the Board of Directors, and they are currently looking into it.

Yes, I agree that the atmosphere at Board meetings is one in which it is easy to ask questions and express opinions. I think the current system works extremely well: the Company arranges for very thorough explanations to be provided ahead of meetings, so that during the actual meetings we can focus on in-depth discussions based on our earlier questions and requests for clarification. In addition to this, however, I would be grateful for opportunities to discuss topics other than proposals, such as internal deliberations on strategy, or progress in implementing associated measures. Of course, I am sure that plenty of discussions are taking place internally, but it would be helpful if we could monitor these from our perspective as Outside Managing Directors. For topics that are difficult to resolve, we could perhaps contribute somehow to finding a way forward by discussing them among ourselves.

Michigami

In the pre-meeting briefing sessions, the three of us make a variety of requests according to our respective areas of expertise, with a view to ensuring that the content of proposals—and the related proceedings—are easily understandable for shareholders as well. The materials included in proposals often comprise internal documentation and there are many instances in which the wording and technical terminology are not understandable to outsiders. But when we suggest improvements, the Company is quick to make changes, and I think progress has been made in producing materials with explanations that are more immediately understandable to shareholders than in the past. Although I expect it is quite a hassle for the departments involved. In my opinion, the company culture is rooted in a willingness to seek proper guidance from an external perspective and use that guidance as the basis for the corporate decision-making process. It has become clear to me that the Company's approach is to listen to external opinion. One way in which it does so is by holding informal shareholder discussions after its annual General Meetings of Shareholders, although these discussions were temporarily suspended during the pandemic.

Towards sustainable improvement of corporate value

I am very impressed by the effort Harima is putting into addressing corporate governance properly to maintain its listed status. The Company has taken determined action on a succession of issues, implementing one change after another. It is also proactively addressing problems such as global warming and climate change, as well as the adoption of renewable energy including the use of biomass fuels and solar power generation.

Hayashi

Harima also merits praise for its efforts to seek mutually beneficial coexistence with society at large, having created a marigold garden in the environs of its manufacturing hub, Kakogawa Plant, where events are held to strengthen community ties. In addition to initiatives such as these, another focus for ensuring sustained improvement of Harima's corporate value should be human resources. What kind of human resources is the Company looking for, and how will it nurture these people? Well, if Harima's ethos is to create a company that can contribute to the world in general, surely people who want to work in such an organization will seek employment at Harima, so that is the course I think the Company should follow.

As has been pointed out, Harima developed as a hardworking manufacturer with a culture of "sincerity and sturdiness." The President is constantly thinking about how to grow the Company and ensure mutually beneficial coexistence with society at large, so in these respects, I feel very reassured. I hope that, as Outside Managing Directors, we can continue to provide assistance and advice to facilitate future growth. When all is said and done, I believe that cultivating human capital and employee diversity, thereby opening up new strategic possibilities, is what enables sustained improvement of corporate value. In my opinion, further corporate growth can be achieved by taking action in multiple areas including DX and expansion of overseas business, while establishing a solid foundation of human resources who can guide the Company toward growth.

Michigami

Increasing the diversity of human resources is also one strategy for ensuring that risks are not overlooked due to internal groupthink. I would like Harima to invest effort in such diversification, and while I believe this is an issue that will eventually be resolved anyway, I consider it our role as Outside Managing Directors to identify risks that are likely to be overlooked internally. In this regard, all necessary reports on matters subject to risks and vulnerabilities are presented in the Company's internal control meetings. In these meetings, I want us to continue placing importance on the process of identifying issues from reports provided in person by those working on the frontlines, and enabling us as Outside Managing Directors to point out challenges to be addressed. I myself am available to give straightforward responses to requests for advice on legal issues or other matters at all times. I perform my duties in the belief that our role is to attend various meetings including those of the Board of Directors and monitor risks within the Company.

Environmental Protection

In light of our corporate philosophy, "Utilizing nature's blessings to enhance the quality of life", we are committed to actively contributing to the realization of a circular society, through provision of indispensable pine chemical products developed using natural and renewable resources.

Initiatives for Environmental Conservation

Basic Approach to the Environment

We are actively working to prevent environmental pollution and reduce environmental impact, and are promoting environmental management throughout the Company.

Harima Chemicals Group Environmental Policy (Revised on September 4, 2017)

In light of our corporate philosophy "Utilizing the blessings of nature to enhance the quality of life", we urge our employees to actively and continuously promote environmental conservation according to the Environmental Policy.

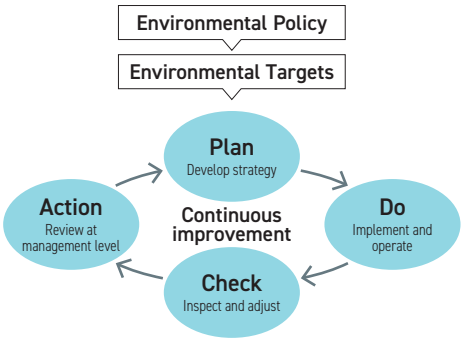
- 1 With an awareness that the pine chemical business makes effective use of renewable natural resources, we strive to develop environmentally friendly products that take into account their life cycle from production to use and disposal.
- 2 We comply with related laws and regulations, agreements, and other requirements agreed by each Group company, relating to our business activities, products, and services and work to prevent environmental pollution and accidents.
- 3 We established environmental targets and aim to continuously improve our environmental performance and environmental management system.
 - (1) Reduction of environmental impact (energy, waste, environmental pollution/air and water quality)
 - (2) Appropriate management of hazardous chemicals
 - (3) Conservation and management of greenery
- 4 Through environmental education and awareness-raising activities, we ensure that environmental management is thoroughly disseminated, and all of those who work at Harima Chemicals Group will act in an environmentally conscious manner both internally and externally.
- 5 Recognizing that biodiversity is an important foundation for a sustainable circular society, we conduct business activities in harmony with society and nature, taking into consideration natural ecosystems.
- 6 This environmental policy is disclosed to stakeholders including related companies and local residents, as well as to the general public.

Environmental Management System

In accordance with our Environmental Policy and ISO 14001, the international standard for environmental management systems, each division and department sets targets for the fiscal year and conducts activities that reduce environmental impact and preserve the environment.

Operations

We strive to continuously improve the environmental management system and reduce environmental impact by implementing the PDCA cycle based on our Environmental Policy and Targets.



Environmental Targets and Results

Committees set FY2030 environmental targets and annual targets for each theme to track progress and promote implementation.

Environmental Education

In order to improve environmental awareness in the workplace, we conduct workshops and lectures.
In FY2021, we invited outside speakers to give lectures on confronting climate change as a company, which was a good opportunity for employees to learn about global trends. We also hold periodic meetings to report environmental impact at each site, as well as workshops and study sessions for energy conservation and recycling.

ISO 14001 Certification

We encourage all our sites to commit to ISO 14001 as part of our continuous effort for environmental conservation.

Internal Environment Audit

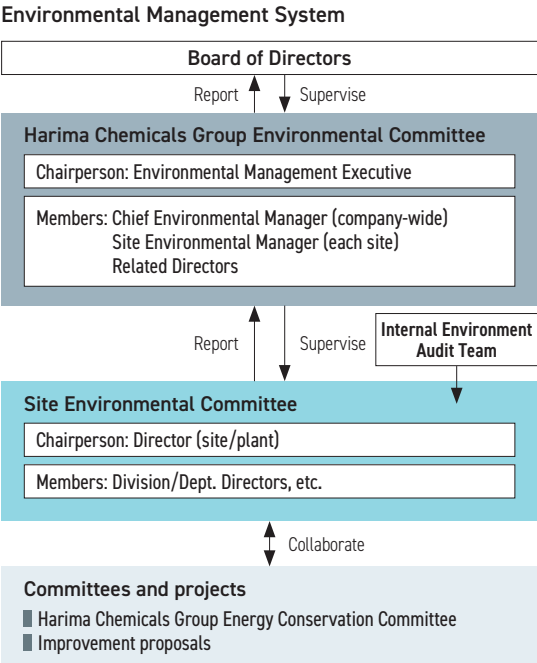
Inspection is conducted with a focus on whether the measures to achieve targets and plans are clearly defined and verified, whether risk identification and compliance assessments/procedures of relevant laws and regulations are appropriate, and whether action has been taken to improve issues pointed out at previous internal and external audits, if any.

Environmental Management System

In order to promote environmental management and to thoroughly conduct environmental management activities, we established the Harima Chemicals Group Environmental Committee that oversees the entire Company and environmental committees at each site.

Harima Chemicals Group Environmental Committee
Deliberates on and determines the Company's environmental policy, targets and plans, and manages their progress.

Environmental Committee at Each Site
Based on the matters determined by the Harima Chemicals Group Environmental Committee, develops activities suited to the environment at each location.

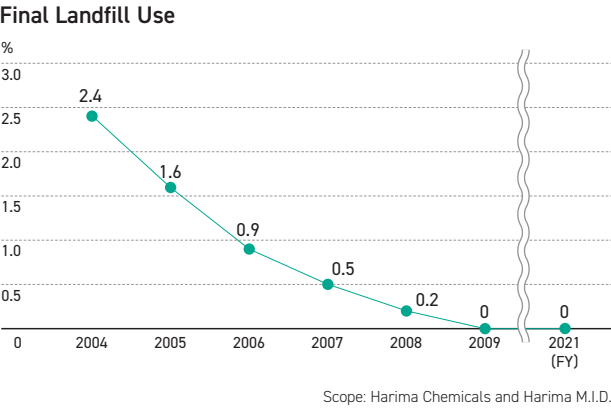


Zero-Emissions

Landfill use is a less-visible aspect of emission that only occurs at the very end of a product's life cycle. In the past, landfill disposal rates were over 2%, mostly composed of residue from biomass combustion that contain high levels of Na and K. In FY2005, we started recycling the residue by using it for cement, gradually shifting landfill use to less than 1% in FY2006.

The rate was further reduced to zero in FY2011 when we established means to recycle waste glass, accomplishing the zero-emission level we maintain to this day.

* Zero-emissions: The idea of creating integrated industrial systems in which waste products of one industry/sector become value-added inputs for another, coined by the United Nations University. We aim to maintain the "ratio of landfill disposal to the total volume of waste generated at our sites" at 1% or less.



Environmental Protection

Initiatives for Climate Action

Basic Approach to Climate Action

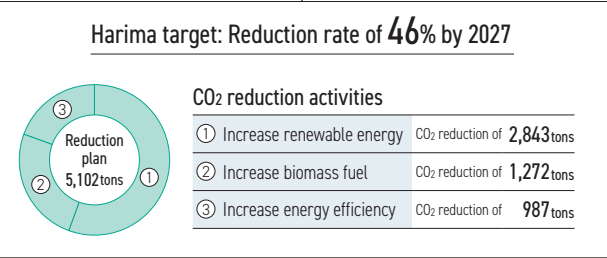
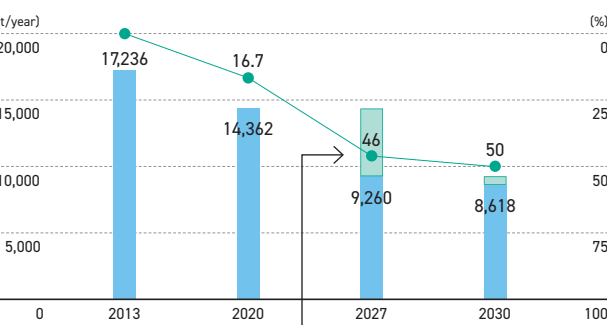
While energy use is now an indispensable part of everyday life, we continue to explore energy sources that can successfully replace fossil fuels such as oil, coal and natural gas. Renewable energy is instrumental in achieving this goal, as it derives from natural sources that are constantly replenished and can be used stably and sustainably. Having worked closely with nature for over 75 years, we are committed to making efficient use of renewable resources and reducing environmental impact.

* Renewable energy: energy derived from natural sources that are replenished at a higher rate than they are consumed, such as sunlight and wind; fossil fuels such as oil or coal are finite and not as sustainable.

Greenhouse Gas (GHG) Emission Reduction Policy

In June 2021, we announced our GHG Emission Reduction Policy, which stipulates curbing GHG emissions by 46%, relative to FY2013 levels, by 2027, 3 years ahead of Japan's national target, and further aiming for carbon-neutral operations by 2050.

National target: 46% reduction in GHG emissions relative to FY2013 by 2030



Information Disclosure Based on the TCFD Recommendations Climate Change Response

Global initiatives for decarbonization may cause medium to long-term effects on laws and regulations, as well as raw fuel supply chains. Increased severity of climate change may also pose threats to business operations.

We analyze risks and opportunities to prepare for such climate change scenarios, and are promoting disclosure of governance, strategy and risk management based on TCFD recommendations.

Initiatives for Reducing GHG Emissions

In 2003 we introduced a plan for more assertive GHG emissions reduction.

Biomass Power Generation

Our biomass power plant at Kakogawa Site was approved by the Japanese Ministry of Economy, Trade and Industry in FY2003 as a green initiative for the future of energy production and was established in March 2005. The facility uses byproducts of CTO distillation, letting us utilize every bit of the raw material's value.

Solar Power Generation

We established solar power generation facilities at Iho Site in Takasago city, Japan (2014) and LAWTER - Concordia, Argentina (2018). We also started our first floating solar power generation business on a reservoir located in the vicinity of Kakogawa Plant (2023).

Introduction of Carbon-Neutral Liquid Natural Gas (LNG), and Emission Mitigation Programs

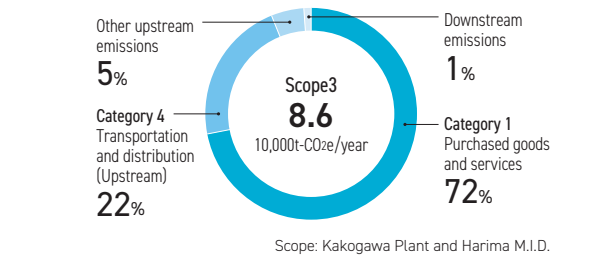
We started use of carbon-neutral LNG at Kakogawa Plant, Harima M.I.D. and Iho Site in FY2022. We also introduced programs that pair utilization of electricity with non-fossil fuel energy certificates, to eliminate carbon dioxide emissions from electricity use.

GHG Emissions in the Supply Chain

In FY2022, we calculated and analyzed the amount of CO2 emissions released at Kakogawa Site (Harima Chemicals Kakogawa Plant and Harima M.I.D. Kakogawa Plant). From among Scope 1 (direct emissions from owned or controlled sources), Scope 2 (indirect emissions from the purchase of power supplied by external sources) and Scope 3 (indirect emissions from external sources in the supply chain), Scope 3 was responsible for more than 90% of emissions, of which Category 1 (Purchased goods and services) took up the most percentage.

We will expand this analysis to other sites and review calculation methods to improve accuracy in order to further implement effective measures to reduce GHG emissions through the supply chain.

CO2 emissions (FY2021)		Emissions (t)	Percentage (%)
Scope1	Direct emissions from fuel combustion	5,878	6.3
Scope2	Indirect emissions from purchased power	736	0.8
Scope3	Indirect emissions not included in Scope1 and 2	86,170	92.9
Total		92,784	100



Human Capital Management

Working with Employees and Their Families

With the recognition that employees are important stakeholders as well as the greatest asset for the Company, and their growth will lead to the development of the Company as a whole, we are working to create an environment where each and every employee can thrive and achieve self-fulfillment through work.

Employment Opportunities

The Harima Global Business Code of Conduct sets forth the Company's basic policy of not discriminating on the grounds of race, religion, nationality, age, gender, and other factors. We provide a wide range of opportunities to apply for jobs through our corporate website and various public relations media.

Human Resources Development

We conduct employee development, training and rigorous follow-up, aiming to create an environment in which employees can grow and work with a high sense of job satisfaction.

Achieving the Mid-term Plan Targets Towards Realizing Long-term Vision					
Purpose		Develop competitive new products, improve technical capabilities			Increase engagement
		Strengthen development capabilities	Create new markets	Safe manufacturing	
Human resources development	Reskilling/ recurrent education	Business concept		Manufacturing technology	Organizational development
		DX (MI, AI, IoT, BPR, etc.)			
	Basic training	Base skills (philosophy, norms, language, business/operational knowledge, etc.) Training by level, selective training, support for self-development, e-learning			
Personnel system		Personnel evaluation system (degree of theme achievement × degree of value practice)			
		Career development program			
		Internal environment (benefits, safety net, consulting services, reporting system)			
Recruitment		Recruitment in a wide range of fields			

Promotion of Work Style Reforms

To promote Women's Participation and Advancement in the Workplace, we provide career development training and female manager development. In addition, we have adopted a two-way conversion system for staff and career-track positions, promoting measures to expand opportunities for women in the workplace and introducing more flexible systems tailored to diverse life stages and circumstances.

Health and Productivity Management

To create a vibrant organization, we have introduced a health management system to centrally manage data including health checkups and stress checks, visualize issues, and work to maintain and promote employees' health, thereby revitalizing the organization and improving productivity.

Re-Employment System After the Age of 60

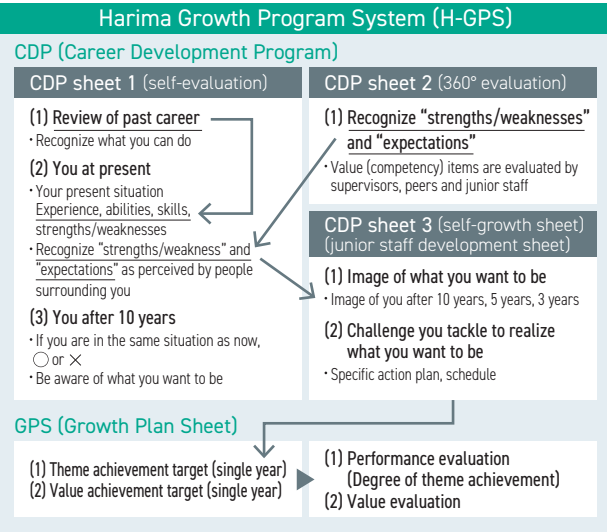
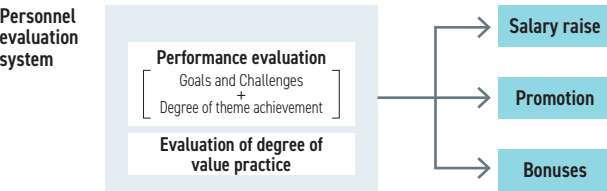
For the purpose of securing competent human resources and stabilizing the lives of retirees, we have adopted a continued employment system. Employees can fully utilize their knowledge and experience, and work with a sense of job satisfaction up to the age of 70. This system also helps to alleviate concerns about income shortfalls.

Wage System for a Diversified Workforce

To promote diversity in the workplace, we abolished archaic benefits and allowance systems unique to Japan, and instead adopted a global standard wage system based on performance.

Personnel System for Human Resources Development

Our personnel evaluation system is based on a planned human resources development system with career development program sheets (CDP sheets) and performance and value evaluations linked to such a system. Under this personnel evaluation system, employees can demonstrate their abilities to achieve organizational goals in the context of diversifying values, enhancing the driving force of corporate value creation.



Employment of People with Disabilities

Considering that establishing a workplace where all employees, regardless of whether with disabilities or not, can work generates positive effects on management, we continue to employ people with disabilities. They are active in various fields such as office work, assistance for manufacturing, and farm business, depending on their individual characteristics.

Employee Benefits

We have developed an employee benefit system that fosters an environment where employees can make best use of their unique skills, and a system that serves as a safety net in the event of an emergency such as when employees become ill or need to care for their families.

Safety Net/Compensation System for Long-term Absence from Work

A system to cover the loss of income to support the family in the event that an employee becomes unable to work due to illness or injury. This system covers employee's income up to the age of 65.

Health, Medical and Mental Health Consultation Services

We have consultation services in place for issues of health, medical and mental health, to maintain and promote the physical and mental health of employees and their families as well as support each individual's wellbeing.

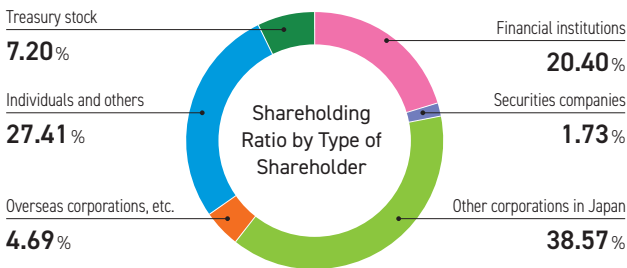
Company Overview and Stock Information

(as of March 31, 2023)

Company Overview

Company name	Harima Chemicals Group, Inc.
Founded	November 18, 1947
Representative	Yoshihiro Hasegawa, President
Tokyo Head Office	3-8-4 Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan TEL +81-3-5205-3080
Osaka Head Office	4-4-7 Imabashi, Chuo-ku, Osaka 541-0042, Japan TEL +81-6-6201-2461
Capital stock	10,000 million yen
Listing	Tokyo Stock Exchange (Securities code: 4410)
Number of employees	(consolidated) 1,710
Business description	Manufacture and sale of products developed using pine chemical resources such as rosin, fatty acids and turpentine

Composition of Shareholders



Stock Information

Total number of authorized shares	59,500,000 shares
Total number of issued shares	26,080,396 shares
Total number of shareholders	10,144

Top 10 Shareholders

Shareholder	Number of shares held (Thousand shares)	Shareholding ratio (%)
Hasegawa Kosan, Inc.	2,913	12.03
Matsukawa, Inc.	2,913	12.03
Harima Chemicals Mutual Prosperity Association	1,392	5.75
Shorai Ltd.	1,284	5.30
The Master Trust Bank of Japan, Ltd. (Trust account)	1,263	5.22
Sumitomo Mitsui Banking Corporation	1,094	4.52
Hyogo Prefectural Credit Federation of Agricultural Cooperatives	1,028	4.24
Shorai Foundation for Science and Technology	965	3.98
MUFG Bank, Ltd.	476	1.96
Harima Chemicals Employee Stock Ownership Association	422	1.74

(Notes) 1. In "Number of shares held," figures less than one thousand are rounded down.
2. The shareholding ratio is determined based on the total number of issued shares minus the number of treasury stocks (1,878,064 shares), which amounts to 24,202,332 shares. The numbers shown are rounded down to two decimal places.

Global Network

Business description

Japan

Harima Chemicals, Inc.

Tokyo Head Office
3-8-4 Nihonbashi, Chuo-ku, Tokyo 103-0027
Head Office TEL +81-3-5205-3080
FAX +81-3-3241-3035
Sales TEL +81-3-5205-3033
FAX +81-3-5205-3049

Osaka Head Office
4-4-7 Imabashi, Chuo-ku, Osaka 541-0042
Head Office TEL +81-6-6201-2461
FAX +81-6-6227-1030
Sales TEL +81-6-6201-2464
FAX +81-6-6201-0391

Kakogawa Plant / Central Research Laboratory
Resins and tall oil products
Paper chemicals
Electronic materials
671-4 Mizuashi, Noguchi-cho, Kakogawa, Hyogo 675-0019
Kakogawa Plant TEL +81-79-422-3301
FAX +81-79-426-6008

Central Research Laboratory
TEL +81-79-422-3301
FAX +81-79-426-2650

Tsukuba Research Laboratory
Electronic materials
5-9-3 Tokodai, Tsukuba, Ibaraki 300-2635
TEL +81-29-847-5080
FAX +81-29-847-5081

Sendai Plant/Sales Office
Paper chemicals
1-2-1 Suehiro, Iwanuma, Miyagi 989-2426
TEL +81-223-22-1201
FAX +81-223-24-2790

Ibaraki Plant
Resins and tall oil products
13-1 Kasuminosato, Ami-machi, Inashiki-gun, Ibaraki 300-0315
TEL +81-29-889-2911
FAX +81-29-889-2880

Tokyo Plant
Resins and tall oil products
6-18-1 Inari, Soka, Saitama 340-0003
TEL +81-48-931-4311
FAX +81-48-935-0664

Fuji Plant/Sales Office

Paper chemicals
Resins and tall oil products
311-9 Hina, Fuji, Shizuoka 417-0847
TEL +81-545-38-2254
FAX +81-545-38-2151

Shikoku Plant

Paper chemicals
365-1 Muramatsu-cho, Shikokuchuo, Ehime 799-0401
TEL +81-896-24-1001
FAX +81-896-24-1003

Harima M.I.D., Inc.

Resins and tall oil products

Head Office
4-4-7 Imabashi, Chuo-ku, Osaka 541-0042
TEL +81-6-6201-2461
FAX +81-6-6227-1030

Kakogawa Plant
671-4 Mizuashi, Noguchi-cho, Kakogawa, Hyogo 675-0019
TEL +81-79-424-2312
FAX +81-79-424-2118

Harima Trading, Inc.

Warehouse, hotel, golf course and real estate management

Head Office
4-4-7 Imabashi, Chuo-ku, Osaka 541-0042
TEL +81-6-6201-2461
FAX +81-6-6227-1030

Kakogawa Sales Office
827-6 Mizuashi, Noguchi-cho, Kakogawa, Hyogo 675-0019
TEL +81-79-425-0300
FAX +81-79-425-0100

Hotel Sakushu-Musashi/Sakushu-Musashi Country Club
878 Omachi, Mimasaka, Okayama 707-0124

Hotel Sakushu-Musashi
TEL +81-868-77-1380
FAX +81-868-77-0939

Sakushu-Musashi Country Club
TEL +81-868-77-0153
FAX +81-868-77-1381

Nippon Filter Metals, Ltd.

Electronic materials

Head Office/Sekiyado Plant
487 Sekiyadomotomachi, Noda, Chiba 270-0203
TEL +81-4-7196-2551
FAX +81-4-7196-2553

Seven Rivers, Inc.

Manufacture and sale of industrial detergents and cleaning equipment

Head Office/Plant
3-5-1 Tomonishi, Asaminami-ku, Hiroshima 731-3169
TEL +81-82-848-9111
FAX +81-82-848-2218

Tokyo Branch
6-17-8 Inari, Soka, Saitama 340-0003
TEL +81-48-931-6468
FAX +81-48-935-1830

Harima Foods, Inc.

Manufacture and sale of business-use foods, and sale of health foods and functional ingredients

Osaka Head Office
1-4-22 Kyomachibori, Nishi-ku, Osaka 550-0003
TEL +81-6-6447-7711
FAX +81-6-6447-7811

Kakogawa Plant
179-12 Mizuashi, Noguchi-cho, Kakogawa, Hyogo 675-0019
TEL +81-79-426-6462
FAX +81-79-426-8827

Tokyo Sales Office
3-8-4 Nihonbashi, Chuo-ku, Tokyo 103-0027
TEL +81-3-3243-2555
FAX +81-3-3243-2556

Europe

<Czech Rep.>

Harimatec Czech, s.r.o.

Head Office/Plant Electronic materials

<UK>

HARIMA UK LTD.

Head Office/R&D Electronic materials

<Belgium>

LAWTER - Kallo

R&D/Plant Resins and tall oil products

<The Netherlands>

LAWTER - Maastricht

R&D/Plant Resins and tall oil products

Asia and Oceania

<China>

Harima Chemicals (Shanghai) Co., Ltd.

Head Office
Management and support of Group companies in China

Harimatec Hangzhou Co., Ltd.

Head Office/Plant Electronic materials

Hangzhou Hanghua Harima Chemicals Co., Ltd.

Head Office/Plant Paper chemicals

Dongguan Hanghua Harima Paper Chemicals Co., Ltd.
Head Office/Plant Paper chemicals

Shandong Hanghua Harima Chemicals Co., Ltd.

Head Office/Plant Paper chemicals

LAWTER - Shanghai
Asia Headquarters/Sales Office
LAWTER Asia Headquarters and sales

LAWTER - Nanping
Plant Resins and tall oil products

LAWTER - Fengkai
Plant Resins and tall oil products

LAWTER - Nanning
Plant Resins and tall oil products

<Korea>

LAWTER - Gunsan

Plant Resins and tall oil products

<Malaysia>

Harimatec Malaysia Sdn. Bhd.

Head Office/Plant Electronic materials

<Taiwan>

Harima Chemicals, Inc. Taipei Office

Liaison Office

<India>

LAWTER - India

Liaison Office

<New Zealand>

LAWTER - Mt. Maunganui

Plant Resins and tall oil products

North and South Americas

<U.S.A.>

Harima USA, Inc.

Head Office
Holding company of Plasmine Technology, Inc. and Harimatec Inc.

Harimatec Inc.

Head Office/Plant Electronic materials

Plasmine Technology, Inc.

Head Office/Bay Minette Plant
Paper chemicals

LAWTER Global Headquarters

LAWTER Global Headquarters

LAWTER - Elgin, IL

R&D

LAWTER - Baxley, GA

Plant Resins and tall oil products

<Brazil>

Harima do Brasil Indústria Química Ltda.

Head Office/Parana Plant/Sao Paulo Office
Resins and tall oil products

<Argentina>

LAWTER - Concordia

R&D/Plant Resins and tall oil products

LAWTER - Buenos Aires

South America Headquarters/Sales Office
LAWTER South America Headquarters and sales

