Resonac Holdings Corporation
Resonac Corporation

Tokyo Shiodome Bldg., 1-9-1, Higashi-Shimbashi, Minato-ku,
Tokyo 105-7325, Japan
https://www.resonac.com/

About the cover page Resonac holds AHA!, a global award, as an initiative to penetrate the Company's Purpose and Values among employees. The 2025 cover once again features the team members who won the Gold Award at the previous year's awards! The 2023 cover showed full-body photos and the 2024 upper body photos, so this year we chose close-ups photos. This represents how the efforts of the people working at Resonac are becoming more in-depth, clearer, and have a higher resolution.



RESONAC
Chemistry for Change

RESONAC REPORT 2025

English Version



Dear Reader,

The endless debate about Resonac's identity

As we create our fourth Integrated Report since Resonac's second founding, we initially considered structuring the entire report around the theme of what defines Resonac. The idea was to present what we mean by value creation unique to Resonac. However, we realized that proclaiming what makes Resonac unique ourselves might come across as self-centered and self-complacent. After all, our identity is something that can only be truly defined by how our stakeholders evaluate us.

That said, as you read through this report, you may notice that terms like "identity" and "unique" appear quite frequently in the comments from various members. Indeed, each of us strives within our own role to embody the unique qualities that define Resonac. At the same time, we have come to realize once again that we haven't (yet?) converged on a plausible, definitive definition.

What constitutes Resonac's distinctive "true corporate value"?

During these discussions, one question that needed to be addressed was, "What is corporate value?" In management, corporate value is defined as the present value of future cash flows, while in the investment world, it is discussed as stock price. In this year's Message from the CEO P05), Takahashi states that "the stock price mirrors an approximation of a company's value. P08" However, this comes with a caveat that the capital markets must function properly and be close to fully efficient. Therefore, it is now essential for management to revisit the company's Purpose, Values, and core competencies to maximize true corporate value.

Reflecting on the past three years, we have been dedicated to increasing corporate value, defining "Corporate value = Strategy × Individual strength × Corporate culture" P13. Many of the individuals featured in this publication have also expressed their commitment to "maximizing corporate value." That term appears far more frequently than "identity" and may carry an even wider range of meanings. This suggests that if true corporate value exists, the aspects highlighted will vary depending on perspective, observer, and time frame considered.

To reconsider "What is corporate value?" we took a step back and began by asking, "What constitutes corporate value?" This led us to create the diagram titled "Resonac's Value Creation Hypothesis—2025 Integrated Report Edition." P13 This is a question asking: The value we aim to create is composed of these elements (including those we will strengthen going forward), and should manifest in these ways, and we commit to value creation in belief that the quality and combination of our "secret ingredients" are crucial – what do you think?

Now, we invite you to join in the conversation. We hope you'll join us!



Discussion of Resonac's Value Creation Hypothesis

What Does an Integrated Report Mean to Resonac?

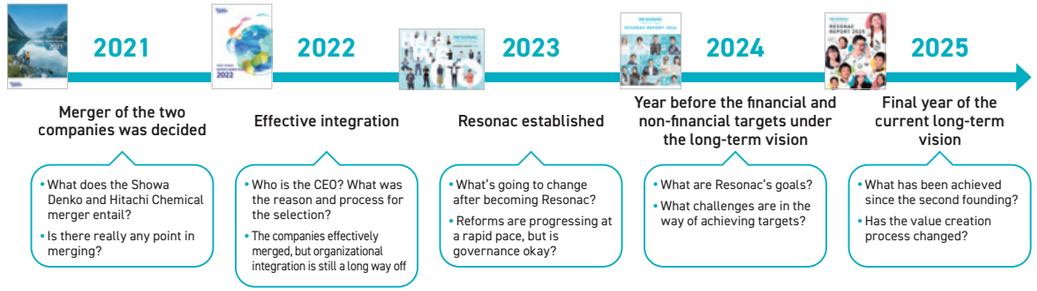
We prepared our Integrated Report with the following in mind.

Provide what? How we have created **value** from the **past** to the **present** and whether we have the structure (business model) and capabilities to create **value** in the future.

To whom? **Our valued stakeholders** with whom we wish to have a long-lasting relationship, including investors with medium- to long-term perspectives

What for? **A communication tool for building trust in Resonac's management, engaging in persuasive dialogue, and co-creating value.** It also plays a role in fostering a corporate culture by aligning the direction of Resonac employees.

Marking the integration of Showa Denko and Hitachi Chemical as a "second founding phase," we have been shifting our business portfolio to one centered on functional materials, strengthening collaboration both internally and externally, and responding flexibly and quickly to the rapidly changing market environment. In order to confidently assure stakeholders of their trust and expectations for Resonac following the start of operations under a new structure, we are preparing this Integrated Report with the aim of proactively answering questions from stakeholders both inside and outside the company.



Key opinions from last year's report and incorporation into RESONAC REPORT 2025

- The 2023 results seem to show that Resonac failed to generate sufficient profit. I need an explanation for the path to improving profitability. I want to determine its feasibility.
- I understand the enthusiasm and teamwork of the CEO and management team. But is the situation on the ground really keeping up?
- I'd like to see an illustrated model that links financial and non-financial activities within the value creation model.

- We have included a three-year review and plan on each page, detailing the implementation of items from the current long-term vision and the strategies and achievements of each business. The path to improving profitability and corporate value is also outlined in the Message from the CEO and a series of dialogues.
- We delved into the important matters for each theme through dialogues, and made an effort to convey our thinking in a way that is easy to understand. Employees explain our initiatives at each site to communicate them more effectively. Over the past three years, Resonac's sense of unity has strengthened significantly.
- Alongside our achievements to date, it is crucial that our story for the future is compelling. We examined and included Resonac's value creation hypothesis. We want to use it to facilitate dialogue with stakeholders.

How RESONAC REPORT is made

1. Planning and preparation of editorial policies and contents by means of planning meetings held every two months
   Members: CFO, CSO/CRO, CHRO, CSuO, and staff from the Investor Relations Department, the Human Capital Management Department, the Corporate Planning Department, the Brand Communication Department, and the Sustainability Department
2. Decision of direction and message during meetings of the Sustainability Promotion Council, attended by the CEO, all other chief officers, and all general managers of business units
3. Discussion of each page with Sustainability Partners and those in charge of each department, and draft writing
4. Discussion and approval by the Management Committee and the Board of Directors



CONTENTS

01 Dear Reader,
03 Brief Overviews! & Contents

Chapter 1 Hypothesis: Source of Value Creation

05 **Message from the CEO**
13 Resonac's Value Creation Hypothesis
17 How Far We've Come! Fostering Resonac's Corporate Culture
23 Management: Team Takahashi
27 Long-Term Vision
31 Technologies and Co-creation Accumulated by Resonac
33 Co-creation with Stakeholders

Chapter 2 Refining Our Capital

35 Dialogue: CFO and Investors Dialogue
41 Financial and Capital Strategies — Overview of strategies
45 Dialogue: Choosing to Execute a Partial Spin-off
51 Resonac's R&D — A microcosm of R&D
59 Human Resource Strategies — Resonac's human capital management model

Chapter 3 Business Driven by Co-creation

65 Dialogue: Resonac's Co-creation "Kata"
71 Overview of Resonac's Business
73 Business Strategies
(Front-end / Back-end Semiconductor Materials)
77 Business Strategies (Hard Disk Media)
78 Business Strategies (SiC Epitaxial Wafers)
79 Business Strategies (Mobility)
80 Business Strategies (Innovation Enabling Materials)
81 Business Strategies (Basic Chemicals)
82 Business Strategies (Graphite)

Chapter 4 Resonac's Sustainability

83 Dialogue: Implementing Sustainability in Business
97 Response to Companywide Key Risks

89 Measures to Combat Climate Change
91 Toward Circular Economy / Efforts for Preservation of Biodiversity
93 Quality Assurance / Chemicals Management / Procurement and Supply Chain
95 Safety / Compliance / Respect for Human Rights

Chapter 5 Resonac's Governance

99 Dialogue: Dialogue Between Outside Directors and an Executive
105 Directors and Audit & Supervisory Board Members / Corporate Officers / Skill Matrix
110 Corporate Governance

Data

119 Global Business Composition / Financial and Non-financial Highlights
121 Consolidated 11-Year Summary
123 Material Issues and Non-financial KPI Targets and Results
127 Resonac Pride Products and Services, an Initiative to Visualize Our Purpose and Values / External Evaluation Status
129 Environmental Initiatives — Road to carbon neutrality
135 Consolidated Financial Statements
139 Corporate Data / Editorial Policies

Brief Overviews!

RESONAC REPORT 2025

So, what's our CEO like?



The CEO believes that without maintaining our technological edge or making the company a place employees enjoy fun working, we will not be able to enhance our corporate value.

We frequently receive questions from our readers about our initiatives to adhere to the Task Force on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD) recommendations, as well as material issues and non-financial KPI targets and results. These details, among others, are provided in our Data section.



What are we aiming for?



Portfolio reforms that we have been carrying out since our second founding. These efforts are still ongoing, and present some challenges. We intend to utilize the honest feedback and critical opinions of investors to work toward improvement together, thereby enhancing our corporate value. We will continue our endeavors on this front.



For example, the partial spin-off of the olefins and derivatives business. In order to make our society a better place through the power of chemistry, we will select optimal solutions that enable further growth and enhance the corporate values of both Resonac and Crasus Chemical.

Where do our strengths lie?



We solve customer issues through the power of chemistry together with various partners. This is Resonac's co-creation model, or "kata." We provide information on our present and future, starting with the PSC and PMiC.



We will fulfill our Purpose of "change society through the power of chemistry," thereby creating the future we envision. We discuss the challenges we face and implementation efforts with our Sustainability Advisors, roles newly established this year.

How far have our governance reforms come?



The enhancement of governance is vital to taking appropriate risks while also implementing aggressive measures. We have one goal: the enhancement of corporate value. This serves as proof that Resonac is a resilient company.

01 Hypothesis: Source of Value Creation

Here we will share our hypothesis of how Resonac creates value.

05 Message from the CEO
13 Resonac's Value Creation Hypothesis
17 How Far We've Come! Fostering Resonac's Corporate Culture
23 Management: Team Takahashi
27 Long-Term Vision
31 Technologies and Co-creation Accumulated by Resonac
33 Co-creation with Stakeholders



Message from CEO

Message from the CEO

The mission of management is to maximize true corporate value

R&D is our core. We continue investing to lead with technology.

Looking back from our second founding

Transformation of business portfolio is nearly complete

Resonac aims to transform into a World-class Functional Chemical Company from Japan, and we have implemented various strategies to achieve this. These initiatives can be broadly categorized into three areas: (1) business portfolio reform, (2) strengthening human capital management and (3) fostering corporate culture. I will discuss Resonac's current progress on these three initiatives.

First, in business portfolio reform, I believe we are now starting to see a path forward for the near future. Before the merger of the former Showa Denko and former Hitachi Chemical, we evaluated businesses based on three criteria: fitness for strategy, profitability and capital efficiency, and best owner (that is, whether Resonac is the best owner for the business). Businesses that did not meet these standards were divested. By July 2025, we had divested 15 businesses. In February 2024, we announced plans to explore a partial spinoff of our olefins and derivatives business. Then in January of this year, we initiated a group restructuring to support this process. Once the partial spinoff is complete, Resonac's portfolio will be crystal clear from a strategic perspective. However, as I always say, portfolio reform is an ongoing process with no end. With defensive aspects of our reform nearing completion, we will now shift to a more offensive stance as part of continuously optimizing the Resonac portfolio to the demands of the times.

We are a functional chemical company, not a semiconductor materials company. Our foundation is built on refining our functional materials technology. Our technology today is primarily applied in the semiconductor field, so our strategy is to maintain a competitive edge in semiconductor materials.

A new opportunity for our technology is beginning to emerge. This lies in the mobility field, specifically in automobiles. The automotive industry is undergoing a once-in-a-century transformation from internal combustion engines to electric vehicles. New materials are essential for industries undergoing transformation, and functional materials will surely be required. Seizing this major business opportunity will now depend on how effectively we can refine our materials technologies and respond.

We must maintain our competitive edge in semiconductors, transform our automotive sector venture into a profitable business, and refine underlying technologies for them. We will focus on these three pillars. I view the business portfolio for this purpose as nearing its final form.

Degree of implementation with the Purpose and Values up to 60%—clear shift in corporate culture underway

Next, I will discuss our progress in strengthening human capital management and fostering corporate culture.

Message from the CEO

I take pride in having dedicated myself to this critical management issue since our companies effectively merged in 2022. I visited 70 business sites each year and held over 100 roundtable discussions and town-hall meetings, using these opportunities to convey a variety of messages to employees.

In the first year, we focused on clearly communicating our planned transformation and our Purpose and Values. In the second year, noticing a culture where employees found it difficult to speak up, we launched the "Moyamoya Meetings" program to encourage staff to voice their moyamoya (concerns and frustrations). In the third year, we started the "Purpose Exploration Café" sessions for reflecting on personal purpose. Through these sessions, I encouraged employees to think of the Company as a vehicle for everyone to achieve their own purpose and think about how they can leverage Resonac, and urged them to be autonomous.

Each year, Resonac conducts an engagement survey. We place special emphasis on the degree of implementation with the Purpose and Values as a key indicator of how deeply our culture has taken root. This score was 34% in the first year, 49% in the second year, and rose to 60% last year, the third year of the program. I view this change as a major advancement.

For instance, last year, we gathered about ten section manager-level employees for a roundtable discussion at a business site, and I caught them off guard with the following surprise question. I asked them what were the engagement survey results and scores for their sections and to share what actions they took if performance improved compared to last year, and what they would do if it declined. They all responded perfectly. Four years ago this would have been unimaginable. I was impressed by how deeply the new corporate culture has taken root. We now use the "-san" honorific instead of formal, hierarchical titles. We have embraced a casual dress code, and have adopted the "Go Anzen Ni! (Be safe!)" greeting from the former Showa Denko. These practices have become so ingrained that it is hard to recall how things were before. I call the phenomenon where the unimaginable becomes commonplace "ex-ante discontinuity and ex-post common sense." To me, this is the essence of transformation. I can clearly see this transformation unfolding within Resonac. We are making significant progress and have no intention of slowing down. We aim to achieve a 70% to 80% penetration and implementation rate for our Purpose and Values.

Profitability was driven by materials for AI semiconductors and hard disk media businesses, exceeding market expectations in 2024

Our business portfolio reform is progressing, and the new corporate culture is firmly taking root. Next, I will discuss the Resonac's performance.

In fiscal 2023, net sales were approximately ¥1,288.9 billion, and we recorded an operating loss of approximately ¥3.8 billion. Although I took these results seriously, I was not overly concerned. This is because we took necessary actions, like investing in the semiconductor and electronic materials fields and reforming our business portfolio. I believed that results would soon follow. But when we were drafting the 2024 budget, I thought achieving a significant profit this year would be difficult. However, under Japanese Generally Accepted Accounting Principles (JGAAP), we achieved significant profits with net sales of approximately ¥1,389.3 billion and operating income of approximately ¥78.7 billion. I believe these figures to a certain extent exceeded the expectations of investors and analysts.

Our return to profitability was driven by increased sales in AI semiconductor materials and the hard disk media business. Resonac has two materials critical for AI semiconductors that have significantly boosted sales. Furthermore, in the hard disk media business, closing the Taiwan plant in 2023 significantly reduced fixed costs. Additionally, the rebound in data center investments greatly boosted sales. We achieved strong performance, and I am deeply grateful to everyone in each business segment for their dedication.

Resonac began applying International Financial Reporting Standards (IFRS) from the fiscal year ended December 31, 2024. The goal is to enhance our appeal to international investors and strengthen Group business management. Throughout this year, we plan to carefully brief stakeholders on the differences from the previous accounting standards.

Resonac's strengths

We absolutely must not fall behind in technology—our focus this year

Since early 2025, the capital markets have remained unstable. Going back to the basics of management, I believe that a corporate manager's role is to maximize corporate value. In many cases, the stock price mirrors an approximation of a company's value. However, this requires two conditions: capitalism must function properly, and capital markets must be nearly perfect in their efficiency. But in these times, capitalism is not functioning properly due to tariffs, a policy that hinders free competition, and capital markets are in imperfect state due to extreme information asymmetry.

The stock price is an important indicator. But in such a distorted market, the stock price cannot be considered a correct approximation of corporate value. I also believe that hastily reacting to short-term stock price fluctuations is not sound judgment for a corporate manager. In times like these, it is crucial to focus on our purpose and core competencies. Instead of being distracted by short-term stock price volatility, we must aim to maximize true corporate value. I believe that is the right way to manage a business. Our purpose is to "change society through the power of chemistry." By implementing various initiatives to achieve this purpose, we have increased our corporate value. I strongly believe that we must never stray from this core principle.

Resonac's core competence clearly lies in research and development. We must continue investing in it to maintain our technological edge. This is where the size of our material development pipelines becomes crucial. Material development cannot be precisely targeted; it starts with a hypothesis, such as "To create this function, we should probably experiment in this general area." However, outcomes do not always align perfectly with expectations, and success can emerge in unexpected areas. That is why, even amid volatile stock prices, we will carefully consider what kind of technology portfolio to build and how to build it.

Tariffs and supply chain disruptions may occur, but the march of technological progress is inevitable. To keep pace with or stay ahead of evolving technologies, it is vital that we continually refine our technologies through research and development. We can address supply chain issues later. This is why we absolutely must not fall behind in technology. That will be where we focus our efforts this year.



Ex-ante discontinuity and ex-post common sense, this is the essence of transformation. I can clearly see this transformation unfolding within Resonac.

Message from the CEO

Establishing co-creation platforms in semiconductors and mobility respectively to drive R&D

So how can we maintain our technological edge? Let me explore Resonac's strengths and our tactics for leveraging them to win.

The greatest strength of Resonac's semiconductor materials business lies in its foundation for co-creation. We offer a lineup that covers approximately 80%, presumably, of the key semiconductor back-end process materials. This facilitates the formation of consortia such as "JOINT2" and "US-JOINT." We have most of the necessary materials in-house. By collaborating with equipment manufacturers and suppliers of materials we lack, we can create an environment where, at least for semiconductor back-end processes, customers think of us as having everything they need under one roof.

In US-JOINT, we are taking a step further by building interfaces with businesses we have had limited interaction with, such as hyperscalers like Google and Amazon, and prospective semiconductor designers. In the ever-evolving world of AI semiconductors, we will build a system to co-create with consortium partners and gear up for the next breakthrough materials. Our Packaging Solution Center (PSC) is fully equipped with devices for semiconductor back-end processes, enabling us to perform verification in manufacturing processes using actual equipment with our co-creation partners. Resonac's strength lies in its ability to seamlessly transition from idea generation to actual execution phases.

Another key aspect of the semiconductor materials business is enhancing the presence of materials used in semiconductor back-end processes.

In the semiconductor profit pool, the back-end processes are often seen as the most disadvantaged. However, the miniaturization of semiconductor front-end processes has become increasingly challenging both technically and financially. As a result, attention is shifting to innovations in back-end processes, presenting us with a rare opportunity. To seize this opportunity, we will continue producing AI semiconductor materials unique to Resonac. I believe this will enhance our presence in the entire back-end process materials sector. At the same time, we are exploring the possibility of considering collaboration with front-end material suppliers as an option to sustain our competitive advantage.

As I mentioned at the outset, another application of our technology, following semiconductors, is in the automotive mobility business. To turn the mobility business into a profitable venture, we are steadily implementing strategies based on our successful experiences with semiconductor materials.

We offer eight to ten materials for power modules, the core component of electric vehicles. Resonac is the only company worldwide that offers such a wide range of materials for power modules. Leveraging this prime position, we established the Power Module Integration Center (PMiC), based on the same concept as the PSC, our co-creation hub in semiconductors that drives Resonac's technology development. The PMiC is equipped with the capabilities to combine our materials to create power modules and test their performance.

We can use our materials to directly present customers with various test results. For example, we can demonstrate how one combination yields a certain performance, while another combination produces a different result. We can also propose material configurations that could deliver the highest performance for customers' power module designs. For power module manufacturers, collaborating with the PMiC can significantly reduce development lead times, making it a highly practical and valuable facility. Starting in 2025, joint evaluations with customers on heat management and improvements in fuel efficiency and range are set to begin, further speeding up the customer co-creation cycle within the PMiC.

This is our tactics to develop the mobility business into a profitable venture. The PMiC launched full-scale operations in

Our greatest strength lies in our foundation for co-creation. Resonac is the only company worldwide that offers such a wide range of materials for power modules.



2023 and is actively conducting various promotional activities to attract a large customer base. I have asked the head of the PSC to concurrently serve as the head of the PMiC. He has experience in transforming the PSC into the place for co-creation it is today. We are sharing this expertise with members in the mobility field to help them achieve a strong presence in a shorter timeframe, emphasizing speed in our efforts.

A merger of two companies with different origins Initiating communication in a common language and aligning business and human resource development strategies to expand the contributions of co-creative talent

Resonac's human capital management is characterized by the complete alignment of business strategy and human resource development strategy. From what I have covered so far, it should be clear how important co-creation is to us. Without co-creation, new value cannot be created, nor can we develop applications for our technology. This is why we cultivate co-creative talent.

Resonac's goal is to become a World-class Functional Chemical Company. Such a company is defined by its ability to align materials. Functional materials are created by mixing organic resin with inorganic filler. After delivering this mix to customers, we use their feedback to collaborate with material manufacturers on new material combinations. Then we mix it again and present it to customers once more. This iterative approach leads to a continuous and thorough alignment process.

This continuous alignment occurs not only within the Company but also externally. External interactions encompass diverse touchpoints with customers, suppliers, and consortium partners. We aim to cultivate co-creative talent capable of effectively managing this alignment process.

As we pursue business strategies rooted in our purpose, we develop human resources aligned with these strategies, ensuring that their actions embody our values. Everything is clearly interconnected, which I believe strengthens Resonac's human capital management.

Looking back, we believed that if the former Showa Denko, which produced materials, and the former Hitachi Chemical, skilled at transforming those materials into finished products, could work closely together and easily consult on creating specific materials, it would surely result in a strong company. We saw it as a way to leverage the capabilities of developers at Showa Denko, which has molecular design technology for creating materials. That was the original aim of merging the two companies.

However, it took time for a common language to develop between the two companies with different origins. One reason for this was that the former Showa Denko and former Hitachi Chemical were in separate sites, which limited opportunities for communication. So we designated several centers of

excellence and gathered personnel from both organizations' material and technology hubs. Additionally, Resonac has a research and development base in Yokohama called the Stage for Co-creation, where it has co-located semiconductor researchers and computational science and informatics researchers. This approach has increased opportunities for direct communication, leading to the development of a common language. This represents a major transformation, and I am eager to see what technologies will emerge in the future.

Towards a future where society is changed through the power of chemistry.

Sustainability is now an essential component of corporate management

The path forward for our business strategy is clear. The crucial issue I must tackle as a corporate manager is sustainability.

I believe sustainability has now become an essential component of corporate management. Even with temporary setbacks, the overarching trend of sustainability remains unchanged. For carbon neutrality, it is crucial to maintain targets despite tightening timelines and continue efforts even if there are delays.

On the other hand, I view sustainability for a company as the pursuit of maximizing corporate value. However, the era when a company was evaluated solely on its ability to generate profits is already over. Investors and capital markets now assess whether a company benefits society and people, including its efforts in environmental, social, and governance (ESG) areas. This evaluation influences stock prices and ultimately determines corporate value. It is crucial to take action with this understanding in mind.

I also see sustainability as a business opportunity, which is why I am currently focusing on it. As a functional materials company, we should supply the necessary materials when a new industry emerges to replace semiconductors. In this context, we intend to pinpoint the materials needed under the broad theme of sustainability and seek out business opportunities.

By expanding the circle of respect, our 24,000-member orchestra is performing an excellent harmony

Since our second founding, as CEO of Resonac, I have focused on semiconductor materials. Our efforts, such as developing materials for AI semiconductors and establishing consortia in Japan and the U.S., are now beginning to yield results. While we have yet to launch US-JOINT, we expect the results to follow soon thereafter. Our performance has improved, and we are garnering strong public recognition. We increasingly hear comments that Resonac is impressive.

However, this does not mean we are content with Resonac as it stands. We want Resonac to be recognized as the world's leading functional chemical company and to be seen as an enjoyable place to work. To achieve this, there are many things that we must do and want to do.

I am particularly focused on building a foundation for interpersonal relationships. For example, we conduct company-wide training for leaders on providing feedback to subordinates, conducting one-on-one meetings, and embodying a co-creative leadership style. When developing human resources, people often focus on knowledge areas like finance and marketing. However, these are like apps. As long as you have a solid "operating system (OS)" in place, you can download any app later. I believe building a robust OS is essential to human capital.

We are now in an era where generative AI can swiftly craft a business strategy. What we truly need are people with the execution skills to implement it. Execution is ultimately about alignment. We aim to develop talent who can align, have high emotional intelligence, influence others, and engage people emotionally.

This year, I am emphasizing the term "respect." For a team to perform well, mutual respect is essential. When managers respect their subordinates, it maintains psychological safety, making it easier for employees to voice concerns. Managers respect their subordinates, subordinates respect their managers, and colleagues respect each other. I believe expanding that circle of respect will definitely make the Company enjoyable.

Resonac employs about 24,000 people. If each finds the Company enjoyable to work for and boosts their effort by just 2%, our productivity will soar. Boosting productivity is not about higher salaries or fear of reprimand from managers, but about employees finding joy in their work. Achieving this is truly wonderful. It is taken for granted that human rights are respected, and therefore, it is vital to build a work environment where employees' safety is properly ensured, and they are able to work in good health and with vitality. We prioritize safety and health as the foundation of everything. I believe that a workplace where employees can work in good physical and mental health will also be a company where they can work happily and enjoyably.

In summary, I aim to make Resonac a company where everyone works confidently and enjoyably, with strong teamwork. As the conductor of an orchestra, I leave the musicians to play, and each produces outstanding music. Moreover, each instrument respects the others, creating a powerful harmony. I believe an impressive orchestra of around 24,000 members is taking shape.

Since becoming CEO in 2022, I have dedicated the past three years to showing how we can revive traditional companies and embed an entrepreneurial mindset. I have had to firmly convince Japanese executives who had not thought seriously about business management. As discussed, I am confident our actions were right, and we are now seeing tangible results. This is why I can now confidently say that we will make Resonac a great company.

"Selling dreams and seeking out challenges" (In Japanese only)

By steadily continuing initiatives we have taken so far and our current strategies, we can enhance Resonac's corporate value and ensure employee happiness. I am committed to this with an open mind and genuine intent.



By steadily continuing initiatives we have taken so far and our current strategies, we can enhance Resonac's corporate value and ensure employee happiness.



See the next page for our value creation hypothesis based on the strengths we see in ourselves.

See here to watch the CEO message video. (in Jpananese only)

Resonac's Value Creation Hypothesis

We have illustrated the "Resonac value creation hypothesis" we came up with as a tool for dialogue with our stakeholders. While not perfect and still incomplete, this is our current approach to how we create value. Moving forward, we will strive to update our initiatives aimed at creating even more value based on your feedback, and make revisions to this hypothetical diagram.

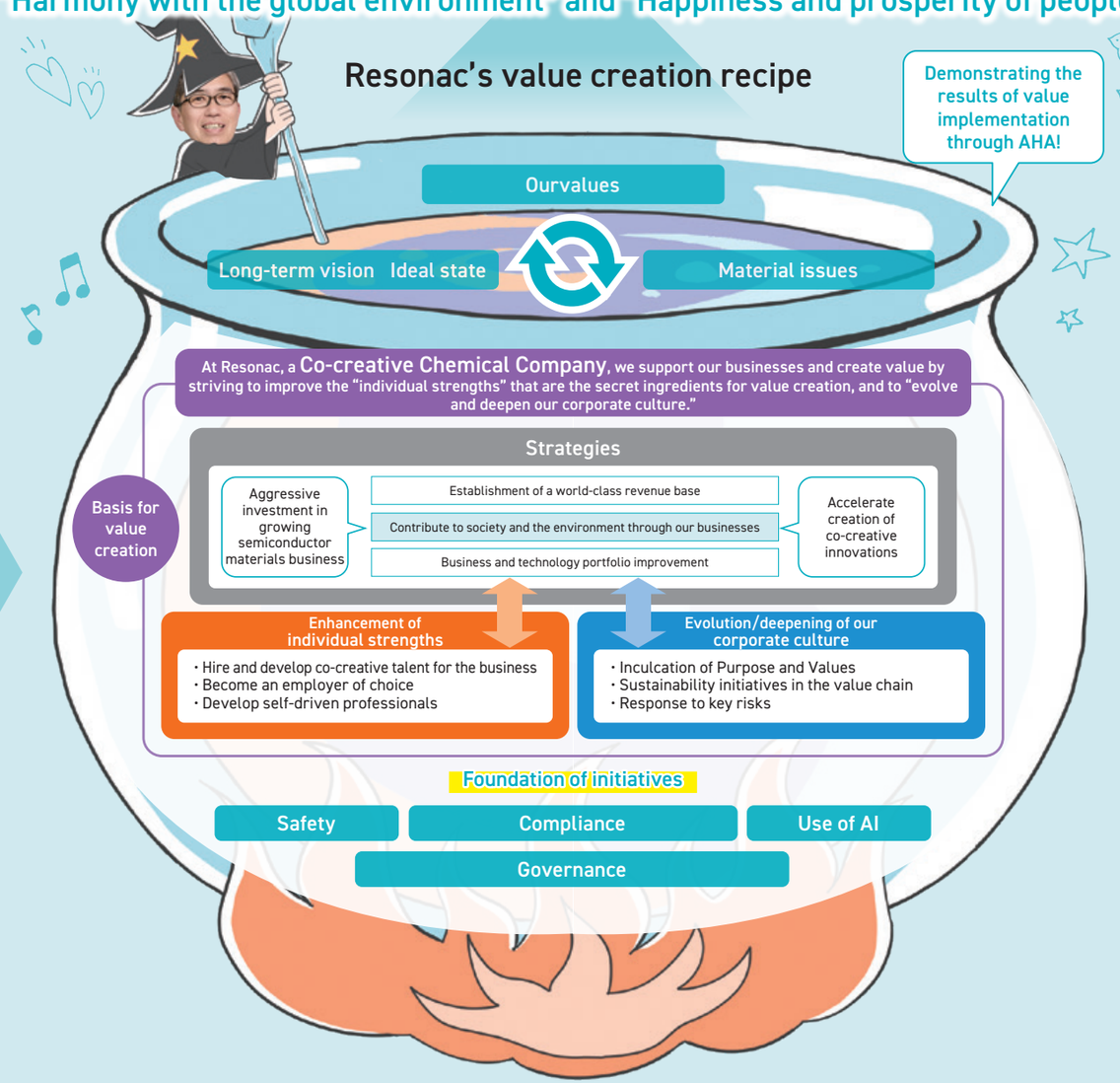
Purpose

Change Society through the Power of Chemistry

The value Resonac provides to society and the environment, such as "Harmony with the global environment" and "Happiness and prosperity of people"

Visualize implementation of Purposes through Resonac Pride Products and Services

Demonstrating the results of value implementation through AHA!



Resonac's value creation recipe

Ourvalues

Long-term vision Ideal state

Material issues

At Resonac, a **Co-creative Chemical Company**, we support our businesses and create value by striving to improve the "individual strengths" that are the secret ingredients for value creation, and to "evolve and deepen our corporate culture."

Basis for value creation

Strategies

- Aggressive investment in growing semiconductor materials business
- Establishment of a world-class revenue base
- Contribute to society and the environment through our businesses
- Business and technology portfolio improvement
- Accelerate creation of co-creative innovations

Enhancement of individual strengths

- Hire and develop co-creative talent for the business
- Become an employer of choice
- Develop self-driven professionals

Evolution/deepening of our corporate culture

- Inculcation of Purpose and Values
- Sustainability initiatives in the value chain
- Response to key risks

Foundation of initiatives

Safety | Compliance | Use of AI

Governance

Resonac's cultivated strengths and the issues we aim to resolve

The strengths we see in ourselves

People	Leadership of the management team and speed of reforms	P23, P99
People	Active roles of autonomous and creative co-creative talent	P59
People	The ability to turn the Values of 24,000 people into action	P19
Organization	Culture of co-creation that embraces innovation and taking on challenges	P17
Organization	On-site capabilities that enable us to respond flexibly to changing circumstances	P73, P83
Organization	Ability to align with customers and partners	P31, P65
Organization	Cultivated customer base and manufacturing platforms	P31, P73
Organization	Co-creation model represented by PSC and PMiC	P65
Technology	Wide range of material technologies from midstream to downstream areas	P51
Technology	Advanced technological capabilities utilizing computational science and AI	P51
Technology	Technologically advanced patents aligned with our business strategies	P57

The risks we face (areas to be strengthened going forward)

- Restructuring of the talent portfolio due to the rise of AI
- Country risks, response to economic security
- Environmental initiatives, including carbon neutrality
- Advancement and automation of equipment
- Further ensuring safety
- Further strengthening of supply chain management
- AI-driven technological innovation, risks arising from market changes
- Information leak, cyberattack risks

P97 / Response to Companywide Key Risks

What indicators will show our achievements

(What indicators should be used to evaluate Resonac)

Indicators that lead to the creation of a sustainable society	Details and number of certified Resonac Pride Products and Services that visualize the realization of our Purpose	P83, P127
Indicators that lead to the creation of a sustainable society	Status of sustainability initiatives, including environmental initiatives	P83, P129
Indicators that lead to economic value	Portfolio reform achievements	P29, P35, P45, P71
Indicators that lead to economic value	Status of capital investment and capacity expansion in the semiconductor field	P41, P73
Indicators that lead to economic value	Lineup and market share of semiconductor materials	P74
Indicators that lead to economic value	Examples of co-creative innovation	P55, P65, P75
Indicators that lead to economic value	Ability to generate cash	P71
Indicators that lead to economic value	Sales x EBITDA	P41
Indicators that lead to economic value	Capital policy	P71
Indicators that lead to economic value	Growth investments, TSR	P43
Indicators that measure our talent and organizational capabilities	Status of future talent portfolio formation, Succession planning readiness rate	P59
Indicators that measure our talent and organizational capabilities	Trends in employee engagement score	P61
Indicators that measure our talent and organizational capabilities	Participation rate for co-creative talent training programs	P17, P21, P59
Indicators that measure our talent and organizational capabilities	Implementation of our Purpose and Values among employees and AHA! results	P17, P59
Indicators that measure our talent and organizational capabilities	Status of response to key risks	P97

P27 / Long-term vision
P123 / Material Issues and Non-financial KPI Targets and Results

What is Resonac's value?

A Framework for Achieving Our Purpose

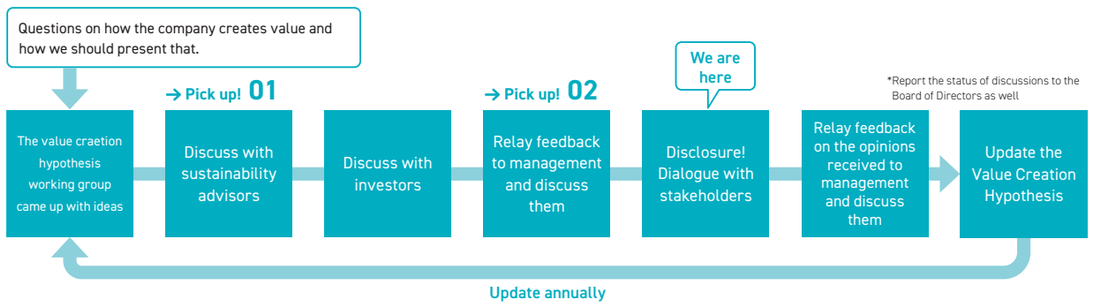
Our deliberation process for Value Creation Hypothesis

Why consider the value creation hypothesis?

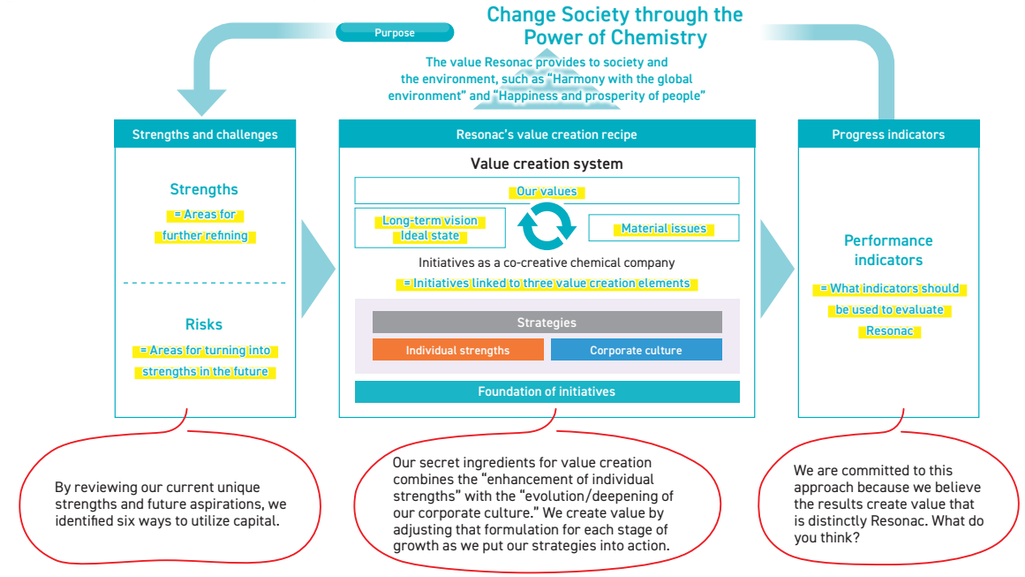
Three years have passed since Resonac's second founding. By combining our cultivated materials technologies, process and evaluation technologies, computational science and infomatics, and by refining our alignment and market development capabilities, we are advancing co-creation to deliver value to people and the planet.

To realize value creation for the economy, society, and environment that only Resonac can achieve, in a way unique to Resonac, we first identified our accumulated strengths and the challenges we must address as the components underlying our corporate value. This is the source of our growth and represents various financial and non-financial capitals (≒ inputs). And the central part of the diagram, which shows how we realize our strategy with the combination of our "individual strengths" and "corporate culture" – our so-called "secret ingredients" – is our "value creation recipe" (≒ business model), and it is connected to the indicators we believe will demonstrate the results (≒ outputs and outcomes). Going forward, we intend to update our initiatives towards further value creation through dialogue with stakeholders, including investors.

Discussion of the Value Creation Hypothesis



Elements of the Value Creation Hypothesis





→ Pick up! 01

Review at Sustainability Advisory Meeting



Action: Review Resonac's value creation hypothesis
Attendees: Sustainability Advisor, CSuO, staff from the Sustainability Department

Opinions shared in the meeting (excerpt)

- It is good to treat this as a **tool for dialogue that keeps evolving through regular review**. It's impressive that you have reached this point.
- I see this as Resonac's own vision for bringing together financial and non-financial factors in a forward-looking way. However, **if you go too far outside the usual boundaries, you** might get **misunderstanding you did not expect**. It is necessary **to clearly explain the intention that Resonac, a company unafraid of creative destruction, is aiming for creative destruction of corporate value**.
- **It is important to define the boundaries** of where in the value chain you capture value creation, and for whom.
- It might be better to show how the indicators that should be used to evaluate Resonac connect with the **current non-financial KPIs and material issues**.
- You need to make sure you **effectively convey your message to the right people**. Engaging in dialogue and incorporating feedback into management creates a positive cycle.

→ Pick up! 02

Discussion in the value creation hypothesis working group and senior executive study sessions

Discussion in the value creation hypothesis working group and senior executive study sessions
Attendees: Value creation hypothesis working group
CFO, CSO/CRO, CHRO, CSuO, and staff in charge of corporate planning, investor relations, brand communication, human capital management and sustainability
Senior executives study session Team Takahashi (all management personnel)

Opinions shared in the meeting (excerpt)

- Corporate value is hard to define. For example, how do you measure the value of a private organization? For us, does value creation lie in leveraging our accumulated technologies, combined with the power of AI, to act as a materials enabler and create a new society?
- Measurable indicators such as stock prices and financial indicators should capture the value created by non-financial factors, too.
- We want to present the value creation hypothetical diagram as a tool to demonstrate how we would like investors to evaluate Resonac and to facilitate a dialogue to bridge any gaps in understanding.
- We want to clearly define what sets Resonac apart—including our strengths, challenges, and risks—so we can explain this to stakeholders and engage with them.
- The value we create includes both what we have already achieved and what we have not yet realized. We want to build on what we have done in the past and keep creating value for the present and future.
- Requirements for individual strengths and corporate culture shift depending on the strategy. Resonac will strengthen its ability to execute as a co-creative chemical company
- Our strategy is to become a world-class functional chemical company to achieve this, we will focus on fostering individual capabilities and corporate culture
- Operational strength is crucial and this is where our capabilities stand out. Many teams are also driving citizen development
- Business units are also focusing on fostering individual strengths and culture. Securing safety is also important
- It is important to connect value creation for society, not just functional aspects, to economic value. but for society as well. We are also working to strengthen our resilience



These days, strategy alone does not set you apart! It has become a commodity. What sets you apart is how well you execute on the ground. We focus on evolving and deepening individual strengths and our corporate culture because these are what truly impacts Resonac's corporate value.

Resonac's pursuit of value creation continues...

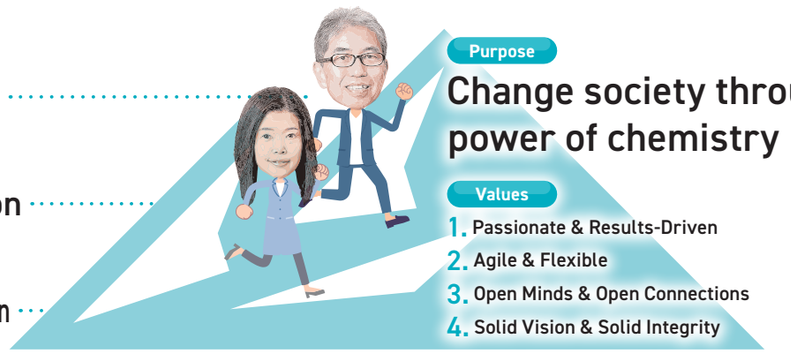
How Far We've Come! Fostering Resonac's Corporate Culture

Prior to the integration of former Showa Denko and the former Hitachi Chemical to form Resonac in 2023, we established our Purpose and Values in 2022, the year we effectively integrated our management structure. With an eye to the penetration and implementation of our Purpose and Values, the CEO and CHRO visited business sites and plants in Japan and overseas over 70 times over the course of the year to engage in dialogue with employees. By setting key points of focus every year such as communication, co-creation, and autonomy, and hosting roundtable discussions, Moyamoya Meetings, and Purpose Exploration Cafés, we increased the degree of implementation with the Purpose and Values from 34% in 2022 to 60% in 2024. As the degree of penetration and implementation of the Purpose and Values rises, an increasing number of employees are taking concrete action to implement our Values. This will continue to fuel the acceleration of Resonac's value-driven approach going forward.

2024
Autonomy

2023
Co-creation

2022
Communication



Purpose

Change society through the power of chemistry

Values

1. Passionate & Results-Driven
2. Agile & Flexible
3. Open Minds & Open Connections
4. Solid Vision & Solid Integrity

The quest to penetrate and implement of our purpose and values

	2022	2023	2024	2025
Key points of focus	● **Communication:** Corporate philosophy, corporate policy ● From recognition/ understanding to empathy	● **Dialogue:** Interactive communication ● **Team management across each organization:** Implementation of Values ● **Psychological safety:** Step toward co-creation	● **Deeper dialogue:** Mutual feedback ● **Autonomy:** Making the Purpose a personal concern ● Implementation of co-creation that goes beyond boundaries	● Deeper dialogue ● Implementation of autonomy ● **Implementation of co-creation** focused on our Values
New measures	● Roundtable discussion ● Town-hall meeting ● Purpose and Value cascade down training ● Training sessions to bolster the co-creative collaboration capabilities	● Town-hall meeting ● Moyamoya Meeting ● AHA! ● REBLUC	● Purpose Exploration Café ● AHA!/Team exchange events and lectures ● 360-degree feedback	● Dialogue On-site ● Learning Festival ● Internal project challenges ● FFS ● AHA! matching system
Implementation of Purpose and Values	Degree of empathy **59%** (+10%) Degree of implementation **34%** (+10%)	Degree of empathy **66%** (+7%) Degree of implementation **49%** (+16%)	Degree of empathy **73%** (+7%) Degree of implementation **60%** (+11%)	Degree of empathy **Year on year increase** Degree of implementation **Year on year increase**

Sessions where the CEO and CHRO engage directly with employees on-site

Festival-style event with selective training sessions

An internal side-job system that allows employees to join projects in other departments

Building teams that maximize strengths using FFS

Encourage interaction and co-creation with teams working on similar themes

Sessions where the CEO and CHRO engage directly with on-site employees

In 2025, the CEO and CHRO will be actively touring across manufacturing sites!

In 2025, the CEO and CHRO will visit plants across Japan and overseas!
Town-hall meeting 2025 (scheduled)
38 locations in Japan
38 locations overseas



The next year's key points of focus of CEO and CHRO's visits to locations are determined based on insights gained during the visits, employee feedback, and engagement survey results, and its implementation methods are changed annually. The key point of focus for 2025 is "the frontline." The CEO and CHRO visit sites across Japan and around the world to meet with employees responsible for operations and have direct conversations about how they implement values.







Communication

STEP 1

2022

Roundtable Discussion

Held 110 times in 2022

In the first year, visits were made to over 70 plants and sales offices under the theme of thorough communication, and more than 100 roundtable discussions and town-hall meetings were held. We received a lot of feedback from employees that they didn't understand our Purpose and Values, or the vision for the future of the integrated company. Therefore, we focused on thoroughly communicating the thoughts and feelings of the management team.

While the company's image has changed from a strict one to a frank one, it will likely be difficult for this image to take hold. But I realized I need to change myself and inculcate the Purpose and Value for our organization.



Co-creation

STEP 2

2023

Moyamoya Meeting

Held 34 times in 2023

We held Moyamoya Meeting in the second year. We had feedback that employees wanted interactive communications with management and felt that our culture made it difficult to speak up. Therefore, we implemented a program in which employees shared their moyamoya (frustrations) and engage in discussion with management to solve them.

- I was surprised to find an environment where I could frankly share my opinions with management like Takahashi-san and Imai-san!
- Since everyone has similar frustrations, I think we can resolve them together



Autonomy

STEP 3

2024

Purpose Exploration Café

Held 23 times in 2024

In the third year, when employees had a basic understanding of the Purpose and Values, and our culture of co-creation had begun to take root, we began holding Purpose Exploration Café in order to make the Purpose a personal concern, thereby facilitating autonomy among our employees. Participants reflect on their past and receive feedback from others through dialogue. This helps them to gain an awareness of their own purpose as well as a deeper sense of purpose.

The workshops provided an opportunity for us to think about the overlap between Resonac's purpose and our own purpose, thereby encouraging us to take the first step toward achieving the Purpose.



How Far We've Come! Fostering Resonac's Corporate Culture

Evolution 1

From Value to Action:
Introducing Examples of Resonac's Value Implementation

Activities to thoroughly inculcate the Purpose and Values are beginning to be visibly implemented in the day-to-day actions and work of our employees.

CASE 1 | Open Minds & Open Connections

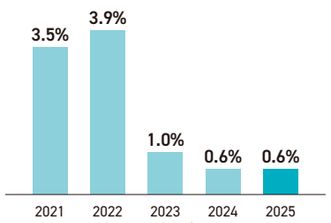
Drastic reduction in defect rate through Value implementation activities that combine development, technical management, and quality assurance! Continuing to uphold zero accidents!

At one plant, members from development, production technology, technical management*, and quality assurance departments come together to hold regular meetings aimed at reducing defects without being constrained by departmental boundaries. At daily morning meetings that include employees from these departments, all attendees reviewed all product defects that had occurred the previous day and made immediate decisions on the actions to be taken that day. Such improvement activities focused on speed led to a significant reduction in in-process defects. As a result of another integrated activities, when launching new products, members of the relevant departments are involved from the initial prototype stage of development to eliminate problems in advance. By doing so, we ensure quality and productivity after transitioning to mass production. These initiatives were also encouraged by a head of a plant, with comments like, "Since we have these values, let's try changing the way we do things to align with them!" These initiatives have created a positive atmosphere within our plants, leading to the achievement of zero accidents in 2024 and a 14-point increase in the engagement score from the previous year.

* Mold maintenance and management department



Trends in reduction of product defects





Implementation of Value (1)

Weekly meetings to address defects participated by the above-mentioned relevant departments



Implementation of Value (2)

Daily morning assembly to share changes seen the previous day and matters to be implemented that day



Implementation of Value (3)

Defect rate tracking and daily checks



Implementation of Value (4)

Continued on-site 5S activities, noticed defects, and increased sensitivity



With the belief that "departmental differences don't matter when facing the same challenges," we transformed the mindset of everyone involved. By strengthening information sharing and collaboration, we increased the speed of improvement and fostered a sense of unity within plants.
Shingo Miki, Manufacturing representative



A culture of "working together to solve problems" has taken root with development and manufacturing people, leading to fewer issues and more smiles in the workplace. Through creating an open environment and encouraging dialogue, the engagement score of our department increased to nearly 80 points.
Naoki Hirai, Quality Assurance representative



CASE 2 | Agile & Flexible

**Thoroughly analyzing the causes of low engagement scores at plants!
Listening to the voices of on-site employees to improve the work environment!**

One manufacturing plant had a lower engagement score than other sites. After analyzing the cause by item and department, we recognized the need to listen to the voices of employees working on site. Starting with town-hall meetings and roundtable discussions led by CEO Takahashi and CHRO Imai, the management team and members of various departments immediately visited the site to talk to on-site employees, including CMEO/CQO Shimpo to discuss safety and manufacturing and CFO Somemiya to discuss investments. This enabled us to identify a number of issues. At our plants, we not only increase the amount of communication along lines such as section manager - subsection chief - senior staff - team leader, but also conduct training aimed at improving the quality of one-on-one feedback. Additionally, we have begun an initiative to collect employee feedback by setting up a virtual suggestion box in order to reform work styles and improve the on-site work environment. The results are also starting to show in engagement scores as well.

1



2



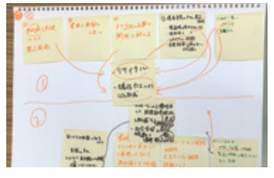


1 Roundtable discussion with CEO and CHRO
2 Roundtable discussion with CMEO/CQO and CFO

CASE 3 | Solid Vision & Solid Integrity

**Environmentally-friendly R&D and business operations!
Working on sustainability through future-oriented workshops**





The prize for the best presentation was the right to make a proposal to the CTO and appear in our internal sustainability commentary video, "Matsuko's Channel"!

Since 2024, we are holding Sustainability Day, where the CSuO visits sites in Japan and overseas with the aim of fostering a sustainability mindset among employees and making sustainability everyone's concern. To date, we have held nine such events both in Japan and overseas, including town-hall meetings, small roundtable discussions, and workshops on the environment, compliance and regional contribution.

At the Sustainability Day for research and development employees held in February 2025, we conducted a workshop on the theme of "What is environmentally-friendly R&D?" Based on the ideas of the participants, such as processes that reduce electricity consumption by simplified and low-temperature manufacturing processes, and reducing environmental impact throughout the product lifecycle including R&D stage, we have kicked off efforts aimed at changing society through the power of chemistry.



How Far We've Come! Fostering Resonac's Corporate Culture

Evolution 2

Don't think of it as just a decorative award
Co-creation born and expanded through "Global Award AHA!"

In order to promote the implementation of Values, we are implementing AHA! (Awards of Harmony), a global award that all Resonac Group employees can submit preliminary entries to. Cross-organizational teams establish declarations of action based on our Purpose and Values, set targets and concrete initiatives, and submit entries themselves. Teams are allowed to take on initiatives that were not initially set and to increase the number of team members in order to achieve their declaration of action. Afterwards, during the team exchange event, screening, and the award ceremony for the winning teams, we aim to discuss our experiences of the Values practiced in the challenge and empathize with each other. This will serve as a valuable stimulus for further practicing these Values and fostering "co-creation" beyond the framework of the program.

POINT 01
Opportunities for personal growth

POINT 02
A connection of equals

Number of teams which participated in AHA! 2024 from 17 countries and regions
997 teams
(Total of 12,209 employees)

Global Award AHA!

Hidden mastermind behind the increase in NCF production: The power of co-creation between HD, image analysis, and NCF!

The Ichihara Plant of the former Showa Denko, which manufactures hard disks (HD), and the Goi Plant of the former Hitachi Chemical, which manufactures insulating adhesive films (NCF), are located about 10 minutes apart by car. Despite this, at the time of the merger the two sites had a "close yet distant" relationship with almost no interaction between them. However, a networking event organized by the Administration Department led to technical exchanges, and from casual daily conversation, we realized that HD image analysis technology could be used in the NCF inspection process, after which co-creation progressed rapidly.

We did it!

Visual inspection of NCFs had previously relied on manual observation through microscopes, and plans to increase production meant a shortage of inspectors was becoming an issue. To address this, **we introduced HD image analysis technology to automate and streamline the inspection process.** As a result, the labor shortage issue was resolved and the inspection system was strengthened, which contributed greatly to increasing NCF production. **Going forward, we aim to deploy this image analysis technology to other plants and expand it into new co-creation activities.**

Amazing!

Under the slogan of "Start With Giving Mind," plants that had no previous interaction with each other were able to connect and achieve results through co-creation. I feel that the "AHA!" framework serves as a foundation for Open Minds & Open Connections, which made this co-creation so smooth! Noriya Seiki, Leader



Global Award AHA!

Stabilization of KPR productivity through visualization using digital technology!

In KPR, a chemical plastic recycling business operated at the Kawasaki Plant, we receive waste plastic collected by municipalities that has been separated and disposed of by consumers, crush it, mold it at high temperatures, and then gasify it to produce ammonia. Waste plastic, the raw material, comes from households, so the quality varies each time. The municipalities that accept it also change every year, making it difficult to grasp trends. Due to these circumstances, digital data is not being fully utilized, causing productivity to be impacted by the experience our personnel have gained over the years.

We did it!

Through this initiative, **important information** for the manufacturing, production technology, and engineering departments **is consolidated into a single database, enabling each department to use the data as a basis for decision-making from the same perspective.** These three departments now hold weekly meetings based on the same data to make decisions about operational policies. This has enabled them to **successfully create a manual for productivity improvement**, which had previously been **dependent on individual efforts.**

Amazing!

Our goal was not just to achieve digital transformation and cost reduction at manufacturing sites, but also to combine "data democratization" and "pushing decision-making down the hierarchy." Going forward, we plan to not only implement this initiative at KPR, but also expand it across the entire Kawasaki Plant.
Yoshito Katsuta / Yoshitada Nanbu



Evolution 3

REBLUC, a community where each member explores their passion and purpose, and continuously takes on challenges to realize their vision

We are building an internal community called REBLUC (Resonac Blue Creators) that implements concrete actions to achieve our purpose of changing society through the power of chemistry. At REBLUC, members with various backgrounds engage in dialogue to proactively rethink and refine the purpose they want to achieve. We also collaborate across departments to make new business proposals and improvement activities, and promote co-creation activities with external parties that go beyond the boundaries of our company.

POINT 01
A community that shapes the future

POINT 02
Implementation skills to create change

Number of REBLUC members so far
66

REBLUC

We want to create new technologies for use in space through the power of chemistry and co-creation!

We have started activities targeting space as a new ambitious business field to take on. Members who want to contribute to society through space-related materials as a part of REBLUC initiatives come together voluntarily to participate in projects. Various initiatives are also being conducted outside the company with the Japan Aerospace Exploration Agency (JAXA), universities, and other companies.

We did it!

In developing semiconductor materials for space applications, we made plans to conduct evaluations on the International Space Station (ISS) and worked on the manufacture of an operational evaluation device. **In cooperation with business units, we developed a prototype encapsulant that is expected to suppress operational errors caused by cosmic radiation.** Team members also worked together to create IC chips and assemble them onto boards to evaluate their operation.

This test device will be launched to the ISS this fall and exposed to space, where it will undergo operational evaluation for approximately six months. If this initiative proves successful, we believe it will expand the processing capabilities of communications satellites and other such devices, **enabling decision-making based on advanced calculations anywhere on Earth or in space, thereby helping to enrich our lives.**

Amazing!

We will contribute to the realization of a space and lunar society, which is a challenging field for the next generation, by harnessing the power of chemistry and competitiveness of Resonac as a material manufacturer!
Yohei Shimizu, Leader

"Resonac Conducts Evaluation of Semiconductor Materials for Space Applications Aboard International Space Station"



REBLUC

Approaching social issues with the power of chemistry I want to show young people what they can achieve!

Born from REBLUC, we at the "NAZE NAZE Market" aim to change Japan into a place where more people with an aspiration to become scientists are born and gather from around the world by raising awareness of the potential of chemistry to address social issues.

We did it!

We held classes and lectures that would allow students to experience the excitement of chemistry and science, with the premise that anyone who was interested could participate. Starting with a science class event for employees' families, **we also exhibited at the Dream Chemistry-21 Summer Vacation Children's Chemistry Experiment Show 2024 held at the Science Museum in Tokyo.** While our activities led us to realize the importance of communication with outside parties, we also learned that it takes time to share prerequisites and build relationships in order to foster exchanges. Therefore, **we created an original board game on the theme of semiconductors**, which is largely related to our products, **to stimulate communication both inside and outside the company and to explain semiconductors to the next generation of children in an easy-to-understand manner.**

Amazing!

We are working to consider how scientists and non-scientists, experts and non-experts, can best understand each other. One of our goals is to increase the number of aspiring chemists by conveying the power of chemistry to society and to young people!
Members of the "NAZE NAZE Market" volunteer team



Management: Team Takahashi

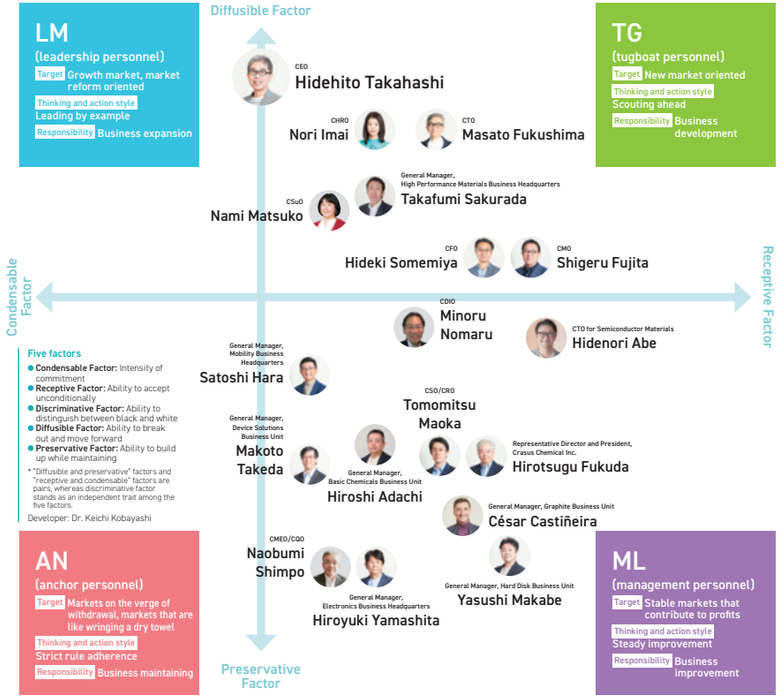
Resonac aims to be a World-class Functional Chemical Company from Japan by 2030. These reforms are being led by management team, "Team Takahashi." CEO Takahashi likened the current team composition to an orchestra. P12 / Message from the CEO To show how each member of Team Takahashi is working hard in their respective roles, achieving results, and creating harmony with the other members, we introduce them in illustrations of them playing musical instruments (the reasons for selecting their instruments can be found here: WEB). We also present their passionate messages about the goals they want to achieve through cross-organizational co-creation.

What is FFS?

The Five Factors & Stress (FFS) theory was developed in the study of stress and personality. It quantifies human thought and behavioral characteristics, which are the patterns in which people think and act arbitrarily and unconsciously, in terms of five factors and stress values, providing insight into whether an individual's latent strengths are being positively or negatively expressed.

Resonac's management team, Team Takahashi, is structured in a manner truly suitable for a period of transformation. CEO Hidehito Takahashi leverages the characteristics of LM (leadership personnel) to lead everyone, while TG (tugboat personnel) is responsible for pioneering, and ML (management personnel) is in charge of improvements.

The FFS theory is also applied to organizational structure and human resource development. We are deepening self-understanding and understanding of others, and promoting the creation of teams in which each individual is aware of their own role and are able to leverage their strengths while maintaining psychological safety.



* As of July 1, 2025

What is 360-degree Feedback?

Since 2024, Resonac has been conducting 360-degree feedback for all employees in management positions and above.

360-degree feedback is a system in which feedback is provided by multiple people, including managers, peers, and subordinates, about an individual's conduct in the workplace.

Members of Team Takahashi have already received their 360-degree feedback, analyzed the content, and are working to improve their actions. In this Integrated Report, we share some of the blunt feedback Team Takahashi members received that give an insight into their individual character.



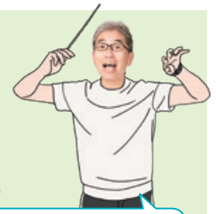


Management: Team Takahashi

LM

Chief Executive Officer (CEO)

Hidehito Takahashi



My goals for 2025

By nurturing people who will take on challenges autonomously, creating a chain of co-creation and portfolio restructuring, I will lead Resonac into a company that can compete head-to-head on the world stage!

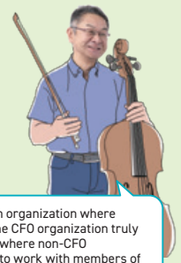
Blunt feedback from a subordinate in 360-degree feedback

He leads everyone with a high level of leadership, but sometimes his expressions are too blunt!

TG

Chief Financial Officer (CFO)

Hideki Somemiya



My goals for 2025

My goal is to create an organization where people who work in the CFO organization truly enjoy their work, and where non-CFO employees also want to work with members of the CFO organization.

Blunt feedback from a subordinate in 360-degree feedback

He is pushing ahead with reforms with a strong sense of crisis and mission, but isn't it a bit too idealistic?

ML

Chief Strategy Officer (CSO)
Chief Risk Management Officer (CRO)

Tomomitsu Maoka



My goals for 2025

Swiftly showing the way forward, I will flexibly and swiftly expand the harmony of co-creation and collaboration both inside and outside the company even in times of turbulent change.

Blunt feedback from a subordinate in 360-degree feedback

The flipside of being unfazed by severe situations is that his reactions can sometimes seem frivolous.

TG

Chief Human Resource Officer (CHRO)

Nori Imai



My goals for 2025

2025 is a year of preparation for Resonac to achieve even further growth! My goal is to dramatically change the way we manage our people and establish a system that enables flexible and agile action. I will accelerate co-creation across the organization.

Blunt feedback from a subordinate in 360-degree feedback

I want to follow your reforms, so don't leave me behind! Don't forget to look back sometimes.

TG

Chief Marketing Officer (CMO)

Shigeru Fujita



My goals for 2025

My goal is to create solution proposals that span the CMO and CTO organizations and multiple business units, and create new businesses through co-creation with leading customers in the market.

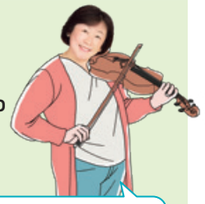
Blunt feedback from a subordinate in 360-degree feedback

He has an amazing attitude as a sales executive. Make sure to interact with young sales reps and spread the word!

TG

Chief Sustainability Officer (CSuO)

Nami Matsuko



My goals for 2025

I'm currently working to ramp up our global sustainability efforts. I will dialogue with the members of all domestic plants within 2026 (hopefully) and make lots of friends!

Blunt feedback from a subordinate in 360-degree feedback

Her ability to predict the trends of the times is impressive! So please explain the "why" step by step (in timely manner).

ML

Chief Operations, Manufacturing and Engineering Officer (CMEO)
Chief Quality Officer (CQO)

Naobumi Shimpo



My goals for 2025

My goal is to implement human resource development that embodies the idea that "safety and compliance take priority over everything" as a headquarters issue. I will drive development of human resources that are open to mutual enlightenment and connections between plants.

Blunt feedback from a subordinate in 360-degree feedback

I always model myself after his high execution skills! But I'd please give us a heads up before taking action.

TG

Chief Technology Officer (CTO)

Masato Fukushima



My goals for 2025

Just as the Cosmic Materials Business was born from REBLUC, my goal is to work together to create a future unique to Resonac.

Blunt feedback from a subordinate in 360-degree feedback

He doesn't discriminate between top, bottom, left or right. But sometimes I'd like him to take a firm top-down approach!

ML

General Manager, Mobility Business Headquarters

Satoshi Hara



My goals for 2025

Through co-creation with internal and external parties, I want to unleash the power of chemistry and create a mobility business unique to Resonac that contributes to the basic performance of new xEVs.

Blunt feedback from a subordinate in 360-degree feedback

He is eager to learn and expresses his views clearly. From a subordinate's point of view, he might be a bit too serious.

*Business Unit

TG

General Manager, High Performance Materials Business Headquarters

Takafumi Sakurada



My goals for 2025

I want to reduce friction by separating CXO and BU duties. I hope we can work together without harboring negative feelings.

Blunt feedback from a subordinate in 360-degree feedback

He's too black and white. He's completely unwavering, so it can be difficult to convince him.

ML

CTO for Semiconductor Materials

Hidenori Abe



My goals for 2025

By linking external co-creation activities, including JOINT, with material development and sales expansion, I want to make Resonac a key partner for customers, equipment manufacturers, and material manufacturers.

Blunt feedback from a subordinate in 360-degree feedback

His strategic thinking is outstanding! But I want him to properly communicate his ideas to the other members.

ML

General Manager, Device Solutions Business Unit

Makoto Takeda



My goals for 2025

My goal is for all employees in the DS Business Unit to play all the notes together in a lively manner to create an organizational culture that encourages fun and lively communication.

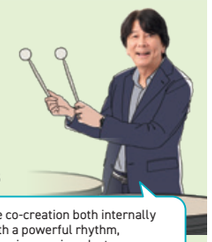
Blunt feedback from a subordinate in 360-degree feedback

He visits plants frequently and has excellent communication skills. He also replies so quickly! I'd like him to be less impulsive, though.

ML

General Manager, Electronics Business Headquarters

Hiroyuki Yamashita



My goals for 2025

My goal is to drive co-creation both internally and externally with a powerful rhythm, contribute to improving semiconductor performance through innovative material solutions, and help build a sustainable future.

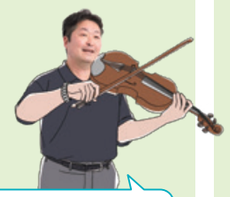
Blunt feedback from a subordinate in 360-degree feedback

He respects the opinions of others, and is a wonderful person. So come and talk to us outside of meetings, too. Reach out more.

ML

General Manager, Hard Disk Business Unit

Yasushi Makabe



My goals for 2025

My goal is to make HDDs an essential large-capacity storage solution for the data society through co-creation with all three customers and suppliers.

Blunt feedback from a subordinate in 360-degree feedback

I understand that he is busy with structural reforms, but I'd like him to have more one-on-one conversations.

ML

Chief Digital Information Officer (CDIO)

Minoru Nomaru



My goals for 2025

My goal is to build a secure IT infrastructure and align it with all businesses to co-create operational reforms and business benefits through the use of IT and digital technology.

Blunt feedback from a subordinate in 360-degree feedback

He's a fun person with a great sense of humor. But sometimes I can't tell if he's serious or joking!

ML

General Manager, Electronics Business Headquarters

Hiroshi Adachi



My goals for 2025

My goal is to expand the circle of products from CirculaC, a circular business model of Basic Chemicals Business Unit, in cooperation with people inside and outside the company.

Blunt feedback from a subordinate in 360-degree feedback

He gives accurate advice on how to achieve results and is easy to work with! I want him to visit plants much more often.

ML

General Manager, Graphite Business Unit

César Castiñeira



My goals for 2025

My goal is to build a resilient, sustainable business founded on talented people and innovative products and services. Become the preferred choice through customer focus and co-creation

Blunt feedback from a subordinate in 360-degree feedback

A high performer with a clear vision. Sometimes, flexible policy changes are also necessary.

ML CRASUS CHEMICAL

Crasus Chemical Inc.
Representative Director and President

Hirotsugu Fukuda



My goals for 2025

My goal is to share our Purpose and Values and foster a sense of unity, as well as to promote regional co-creation in Oita Prefecture and strengthen Crasus Chemical's presence in the area.

Blunt feedback from a subordinate in 360-degree feedback

He has high psychological safety. I'd like to see him to deliver messages that provide even stronger inspiration and encouragement!

Long-Term Vision

Showa Denko and Hitachi Chemical were integrated to form Resonac in 2023. We see this as our second founding, and with the stated goals of the long-term vision to transform into a world class functional chemical company from Japan by 2030, we are moving forward with our journey of value creation.

Based on the belief that sustainability is the cornerstone of its corporate strategy, Resonac has established financial and non-financial KPIs and targets linked to material issues for sustainability and its envisioned ideal state. It has established strategies for each business and function and is making progress on related initiatives.

2021 Long-term vision (2021–2030) begins

2022 Start of "Team Takahashi" management team

2023 Resonac established

We are here

2025 Establish a leading position and secure strong growth potential on a continuous basis as a materials manufacturer driving the high growth of cutting-edge semiconductors

2030 World-class functional chemical company from Japan

▶ Portfolio reform ▶ Focusing management resources on semiconductor materials business

Purpose

Change society through the power of chemistry

Material issues for sustainability

- Gain credibility through responsible business management
- Strengthen co-creativity & competitiveness and create social value through innovation and business
- Develop autonomous, creative, and active human resources and culture

Long-term vision Ideal state

Non-financial KPIs

Company that can compete on the world stage	Company that contributes to a sustainable global society	Company that develops co-creative talent that represents Japan's manufacturing industry
World-class competitiveness and profitability	Capability to create innovations and to develop new businesses	Ability to train competitive talent with shared values

Financial KPIs

Key strategies

1. Establishment of a world-class revenue base
2. Improvement in Portfolio Management
3. Innovation (technology x business model)
4. Strengthening of management foundation (platform)

Financial and non-financial KPIs

Results in 2024

Financial KPIs

- Net sales: ¥1.4 trillion
- EBITDA margin: 13.7%
- ROIC: 5.2%
- Net D/E ratio: x0.74

Scores of the survey on implementation of the Purpose and Values: Purpose: 57% Values: 67%

Greenhouse gas emissions (Scope 1 + Scope 2): 4,250 kt-CO_2

Serious occupational accidents: 1

P123 / Material Issues and Non-financial KPI Targets and Results

2025



Further focus! **Say & Do**

By actively investing in AI semiconductors and encouraging co-creative innovation, we will evolve Resonac's growth base and lead the market

Aggressive investment in growing semiconductor materials business

1. Say: Aggressive investment in growing semiconductor materials business
   Do: Active investment in AI semiconductors to accelerate growth
2. Say: Accelerate creation of co-creative innovations
   Do: Strengthening its R&D power through integration of R&D, and co-creation
3. Say: Cultural transformation and human resource development
   Do: Evolving growth base through co-creation

Ideal state

Financial KPIs

- Net sales: Over ¥1 trillion
- EBITDA margin: 20%
- ROIC: 10% over the medium to long term
- Net D/E ratio: x1.0 in a stable manner

Inculcation of Purpose and Values and cultivation of a co-creation culture

Greenhouse gas emissions (Scope 1 + Scope 2): 30% reduction from the level of 2013 (* 2030 target)

Serious occupational accidents: 0

Non-financial KGI / KPI targets that measure the progress of 15 components linked to material issues

P123 / Material Issues and Non-financial KPI Targets and Results

Long-Term Vision

Q In the four years since Showa Denko's tender offer for Hitachi Chemical shares in 2020, how far have business portfolio reforms progressed?

Done Up Until Now

Striving to become a world-class functional chemical company

Showa Denko and Hitachi Chemical merged to become a functional chemical company that covers the growth area of semiconductor materials by utilizing the technological synergies of the two companies spanning midstream to downstream sectors. Behind this lies a proven track record of improving capital efficiency through strategic selection and concentration.

We have three criteria for our portfolio management policy: (1) Fitness for strategy: Does it fit our strategy in terms of portfolio attributes on the basis of sustainability? (2) Best owner: Who is the best management entity to maximize the value of the business? (3) Profitability and capital efficiency: Does the business or investment meet the expected profitability and capital efficiency?



2021	• **SHOKO CO., LTD.** (Trading company: selling chemicals) • **Aluminum can business** • **Food wrapping film business** • **Aluminum rolling products business** • **Printed circuit board business** • **Electricity storage device and system business**
2022	• **Ceramic business** • **ISOLITE** (Heat insulation parts business as well as vehicles)
2023	• **Diagnostic reagent business**
2024	• **Regenerative medicine business** • **Surface protection films business**
2025	• **Resonac Packaging Corporation** (as well as food packaging materials) • **Clean-S Showa Co., Ltd.** (exhaust gas abatement equipment business) • **Resin molded products in China** • **F2 Chemicals Ltd.** (production and selling per- and polyfluoroalkyl substances)

* Additionally, partial spin-off of Crasus Chemical Inc. is scheduled in 2026.

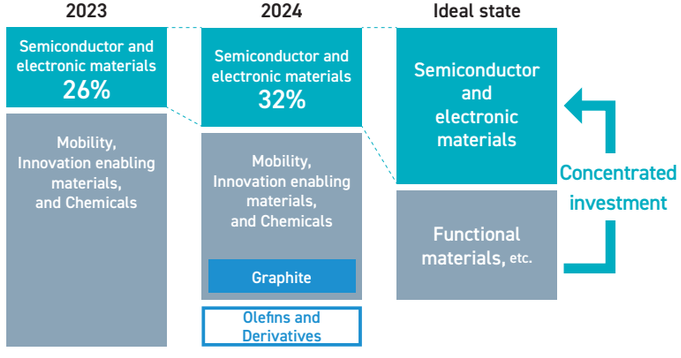
Through this strategy, we have reformed 15 businesses. In terms of corporate value, we have generated over ¥200.0 billion through business divestitures. Although we feel that we are getting closer to our ideal portfolio, we will continue to review and reshuffle our portfolio to further strengthen our growth base.

For the Future

Promotion of concentration and optimization according to business characteristics

Although we have many semiconductor material products that command a high market share, our goal is not to be a semiconductor manufacturer, but a company that provides materials that fulfill the functions required by the growing market. We will continue to make investment decisions while keeping an eye on what kind of materials we can provide to a market that is currently undergoing a transformation.

While leveraging the strengths Showa Denko and Hitachi Chemical cultivated as Japanese chemical manufacturers, we will transition to a highly profitable business structure through concentration and optimization based on business characteristics. We will continue to advance businesses that change society through the power of chemistry and generate earnings by solving social issues.



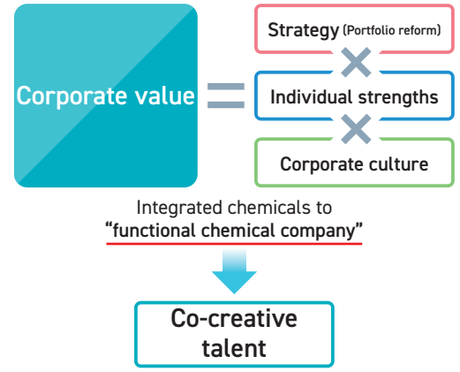
Q What have you been pursuing under your current long-term vision? What does the future hold?

Done Up Until Now

Our long-term vision, and the management team and human resource development that drive its execution

Upon integration, we announced our long-term vision for establishing the new company in December 2020. Under our purpose of changing society through the power of chemistry, we defined our vision as becoming a "company that can compete on the world stage" and a "company that contributes to a sustainable global society." Then, in 2022, Mr. Takahashi took over as CEO, bringing about major changes in the management team. Of the total 32 corporate officers from both companies, 26 were removed and Team Takahashi was born. The team includes 5 people (29% of current Management Committee members), who joined our company as mid-career hires over the past few years, including CEO Takahashi, and they have been leading activities in their respective fields by utilizing their professional skills. We also refreshed our outside directors. As a result, Resonac has changed to a structure in which experienced Board members with the skills we need are leveraging their experience to help enhance our corporate value.

In this VUCA (volatility, uncertainty, complexity, and ambiguity) era, strategy is a commodity, and the true differentiator is whether companies have developed human resources that can see things through. This is why Resonac, which is transforming from a comprehensive chemical manufacturer to a functional chemical company, has been working hard to develop co-creative talent.



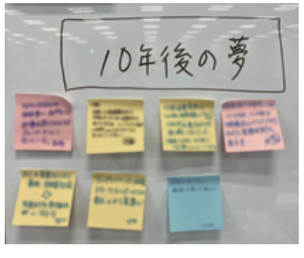
To solve social issues, we autonomously connect across companies and departments with empathy and resonance, driven by talents who can lead creative change and problem-solving through co-creation.

For the Future

Towards the next long-term vision

We are currently working to achieve our financial and non-financial targets up to 2025 with an eye to achieving our long-term vision for 2030. At the same time, we are conducting initiatives for the New Long-term Vision Project , which involves updating our long-term vision beyond 2025 and considering the material issues, priority measures, and targets for 2030. Our focus is on how we can contribute to society and the environment through the power of chemistry, and the kind of company we strive to be to achieve that. We started the project in the second half of 2024, and are finalizing the direction of the entire company by exchanging the opinions of each department, including the young employees that will lead the next generation, with the thoughts of Team Takahashi. In the next six months, we will create a vision and strategy that is not just decorative, but full of soul!

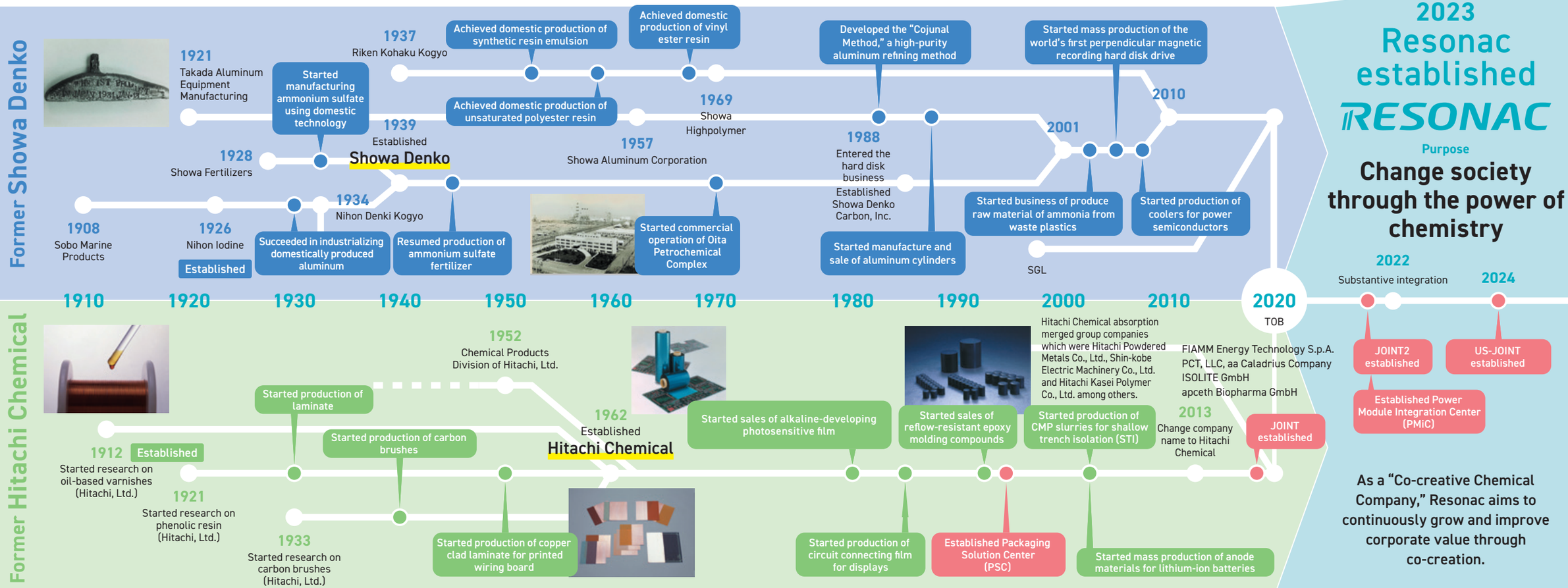




Workshop by volunteer of electronics business headquaters

Technologies and Co-creation Accumulated by the Resonac Group

Resonac was formed in 2023 as our second founding. Leveraging the technologies and integration synergies cultivated by the former Showa Denko and Hitachi Chemical, we will contribute to realizing the future of "harmony with the global environment" and the "happiness and prosperity of people" we seek as a functional chemical company that possesses a broad lineup of material and advanced material technology offerings spanning midstream and downstream areas.



Change Society through the Power of Chemistry

- The Quest to Shape the Future We Seek -

"Unyielding Perseverance" and a Passion to Help People

The motto of Nobuteru Mori (1884-1941), the founder of Showa Denko, was "unyielding perseverance." Driven by his desire to save people from hunger and enrich their lives, Showa Denko worked to facilitate the use of electricity as a material, such as by utilizing hydroelectric power generation, and to develop domestic technologies, thereby contributing to the increased competitiveness of Japan on the global stage. The power of science began here.

Ability of Alignment and Co-creation

The former Hitachi Chemical's strengths lay in its technological capabilities that allowed it to customize products to meet customer needs, including materials, processes, and evaluations for a wide range of materials. In 1994, the Packaging Solution Center (PSC) was established to demonstrate these technological capabilities and its ability of alignment. At the forefront of co-creation for 30 years, focus has been on promoting the development of materials for advanced packaging, collaborating with partners, and achieving certification through customer co-creation projects.

Resonac's Co-creation Model

In the next-generation semiconductor package field, Resonac leads consortia such as JOINT, which are joined by material and equipment manufacturers and other members. In 2021, we established the Power Module integration Center (PMiC) to promote collaboration in the development of materials for power devices and to promote certification through customer co-creation projects, and have since been pushing ahead with co-creation initiatives.

See here for details on our history.

Co-creation with Stakeholders

In order to realize our Purpose and create and provide new value to society, Resonac is committed to co-creation with our employees, customers, shareholders and investors, local communities and governments, business partners, and the next generation and students. By implementing activities from an inclusive perspective and reflecting constructive dialogue in management, we aim to achieve further growth as a Co-creative Chemical Company.

See here for Stakeholder Dialogue (Web)



Community and governments

Aiming to create value for local communities through various co-creation and activities

At each Group site, we engage in community contribution activities that lead to the creation of co-creative talent and harmony with the global environment. At our plant in Dongguan, China, we held a plant tour for children and their family members, providing them with an opportunity to learn about safety.

Participation of employees in social contribution activities
Total of **8,951 employees**
(consolidated basis for the Resonac Group)



Employees

Projects that embody our Values are underway all over the world

The Resonac Pride Award is held to honor employees that embody our Purpose and Values through their involvement in social contribution and other activities. The 2024 Grand Prix winner was the "Earth Day" project deployed globally by the Hard Disk Business Unit. Employees around the world worked to promote a low-carbon, circular economy and preserve biodiversity.

Number of Resonac Pride Award entries (cumulative total through Fiscal 2024)
157



Customers

Resolving social and customer issues through co-creation activities unique to Resonac

We are pursuing problem-solving marketing activities that combine multiple products and technologies to address customer issues, make proposals that cannot be imitated by industry rivals, have the value of these proposals recognized, and create businesses with high added value. The Packaging Solution Center and the Power Module Integration Center are symbolic initiatives of this co-creation.

P65 / Dialogue: Resonac's Co-creation "Kata"

Companies participating in JOINT2: **14**
(semiconductor material manufacturers and semiconductor equipment manufacturers)



Shareholders and investors

Actively disclosing financial and non-financial information and engaging in dialogue that is then reflected in management

We held the sustainability meeting in December 2024. We received a great deal of feedback on our human resource strategy, governance, and especially on the environmental contributions through semiconductor materials, which we have been incorporating into our current initiatives. We also proactively engage in one-on-one discussions with shareholders and investors in Japan and overseas, receiving their opinions on the progress of financial and non-financial KPIs and other matters, which we then reflect in our management.

P35 / Dialogue: CFO and Investors Dialogue

189 people, including investors and sustainability experts, participated in the meeting

Satisfaction rate of participants
97%

See here to the materials and clips of Sustainability Meeting

Business partners

Promoting sustainable procurement through deeper and stronger communication

We have formulated and published our own Sustainable Procurement Guidelines, declaring our commitment to these initiatives and requesting that our suppliers also support and join us. Using GCNJ's CSR Self-assessment Tool, we conduct surveys of approximately 1,300 suppliers once every three years, in principle. We also regularly conduct CSR visits to communicate with our suppliers.

CSR questionnaire survey response rate
93%

Suppliers above the satisfactory threshold
91%

(2024)

Next generation and students

Providing science education support and dialogue opportunities for the next generation that will lead the future

We hold experimental classes and workshops to provide education for the next generation with the aim of increasing the number of human resources that can change society through the power of chemistry. To help people understand semiconductors better, REBLUC volunteers created a new semiconductor board game. This game is played at exhibitions, schools, and other events.

Number of social contribution programs for the next generation and students
27
(Consolidated basis for the Resonac Group in 2024)



▶ See here to learn about the members of our in-house community REBLUC
P22 / How Far We've Come! Fostering Resonac's Corporate Culture

02 Refining Our Capital

Here we outline our strengths in technology, human resources, and financial and capital strategies.

35 Dialogue: CFO and Investors Dialogue
41 Financial and Capital Strategies
45 Dialogue: Choosing to Execute a Partial Spin-off
51 Resonac's R&D
59 Human Resource Strategies

CFO and Investors Dialogue

Resonac's portfolio management: our journey so far and the path forward

We held a dialogue to gather firsthand insights and objective opinions from long-term investors, aiming to improve our management practices and information disclosure. We invited our substantial top three domestic shareholders, who are leading institutional investors in Japan. CFO Somemiya spoke directly with them.



Reflecting on the second founding phase

Somemiya: We sincerely thank our shareholders for their patience and support. I first met our shareholders, including all of you, when I joined the former Showa Denko at the end of 2021. Ahead of today's discussion, I looked back at my meeting notes from that time. "Can't trust management. Too many business lines. Performance and stock prices influenced by volatile graphite electrode market. Bottom line heavily impacted by extraordinary losses. Can't evaluate Showa Denko." There was a stack of harsh criticism. But those were fair points and I clearly remember saying, "We take this seriously and will do everything we can to earn your trust."

Uesako: I remember feeling positive about the meeting with Somemiya-san. Hearing about the management structure and business strategy increased my expectations for medium- to long-term growth. We use the MBIS® framework to evaluate non-financial information, and after the meeting, we significantly increased the scores.

Noguchi: I remember our first meeting too. I recall saying we would closely watch if the externally recruited executives could properly boost employee engagement as the Company shifted its focus to semiconductor materials.

Somemiya: Honestly, I was initially unsure if employees would accept what we in management were trying to achieve. CEO Takahashi believes that boosting employee engagement is crucial. From the start, he stated that he would delegate financial and portfolio management to me, the CFO, and Maoka, the CSO, so he could devote his time to our employees.

Noguchi: Engagement seems to have increased over time, going from the integrated report.

Somemiya: Since becoming CEO, Takahashi has visited our business sites around the world. In his first year, he focused on personally conveying the new company's direction to employees in his own words. In the second year, he took a more interactive approach, visiting sites again to hear employees' thoughts on the Company's direction. I doubt many CEOs visit their business locations as often as he does. Our leadership's focused on driving transformation and embedding a new culture and our Purpose and Values has been key to improving our engagement.

Noguchi: As the focus has shifted to semiconductor materials business, I guess that management has communicated that mobility and graphite electrodes are not central priorities. How did employees involved in those businesses respond?

Somemiya: Some might see everything but semiconductor materials as non-core. However, our real aim is portfolio management. Each business has its own unique role. I want any business that contributes to achieving a 10% ROIC target to be part of the portfolio, whether or not it has synergy with semiconductor materials. I also communicate this internally.

KPIs for assessing business and management

Uesako: You referred to ROIC as a KPI just now, but using uniform KPIs—like growth—to evaluate all businesses could result in areas other than semiconductor materials being seen as inferior and undervalued internally. How are you adjusting the evaluation system for different businesses, especially in setting KPIs?

Somemiya: Currently, we use the same KPIs to evaluate each business, but the target levels, like the EBITDA margin rate, vary depending on their positioning in the business portfolio. We evaluate business unit performance by comparing it to the budget, differentiating based on how effectively the budget is stretched.

Uesako: So being in a particular business does not negatively impact the evaluation for now.

Somemiya: That is what we strive to avoid. We aim to refine our evaluation system for our growth businesses by focusing more on growth metrics to better define their positioning.

Ichihara: Chemical manufacturers are expected to deliver both growth and reliability. Creating a medium- to long-term evaluation system that balances these demands is challenging. How do you think reliability should be evaluated?

Uesako: By reliability, do you mean reliability for customers?

CFO and Investors Dialogue

Ichihara: More for shareholders.
Somemiya: In that context, we are discussing internally whether we can evaluate businesses with high market volatility, like graphite electrodes, based on their ability to control volatility and stabilize performance over the long term. Foreign investors want more focus on EPS and Net Debt/EBITDA, so we have incorporated these KPIs into our disclosures. What do you all think?
Ichihara: This is not essential, but I think it would be nice to have.
Noguchi: For EPS, in your case, it might be the same as asking when the extraordinary losses will end.

Semiconductor materials industry restructuring and scope

Somemiya: Recently, the media widely covered Takahashi's comments on restructuring in semiconductor materials. The point he was making is that industry restructuring involves other parties, so while the timing is uncertain, we definitely want to be involved when the opportunity arises. That is to say, if a company decides they want to collaborate with others instead of going it alone, we want to be the first potential partner they think of.
Uesako: I would like to see Resonac lead the industry restructuring to grow the semiconductor materials business, including inorganic options.
Ichihara: What is the scope of your restructuring in semiconductor materials? Take Shin-Etsu Chemical, for example. I believe it is Japan's top integrated manufacturer of semiconductor materials. Their strength lies in their ability to integrate lithography and specifications with wafers for cross-selling as advanced semiconductor designs grow increasingly complex. How far is Resonac considering going in that direction?
Somemiya: In that sense, we aim to have a strong lineup of front-end products. Lithography is crucial for device manufacturers. The first step in their development roadmap is to envision that process and consider what kind of circuit and device configuration they will need. Building relationships with client designers during the review process can influence back-end material choices over the following years. For restructuring, we could start by bolstering collaborations similar to those now underway with JOINT P75.
Ichihara: In joint research and development, especially in advanced materials, different companies each have their own agendas. So it is often the case that they cannot conduct evaluation they want.
Somemiya: If a company wants to delve deeper but finds it impossible within the current joint research and development framework, I believe that could trigger restructuring.



Chemical manufacturers are expected to deliver both growth and reliability. Creating a medium- to long-term evaluation system that balances these demands is challenging. [Mr. Ichihara]



If a company decides they want to collaborate with others instead of going it alone, we want to be the first potential partner they think of. [Somemiya]

Preparing to list the olefins and derivatives business

Ichihara: As you prepare to list the olefins and derivatives business, what dividend policy will you implement to increase the likelihood of the price-to-book ratio (PBR) exceeding x1? What support will the head office provide?
Somemiya: The key point as we see it is that even as the domestic petrochemical market matures or contracts, Crasus Chemical can still generate enough profit to maintain steady dividends. We will help build its equity story based on this and set up a shareholder base in Japan.
Ichihara: The Oita Petrochemical Complex as a whole appears to be weaker in midstream and downstream operations compared to other regional complexes.
Somemiya: While much of that is true, there are strong products in the current lineup of derivatives. We aim to showcase the strengths of that business and help you understand them better.
Uesako: They seem to be distancing themselves from the ongoing reorganization of domestic ethylene plants. How will Crasus Chemical navigate the restructuring?
Somemiya: Both east and west Japan are undergoing restructuring, but Oita is geographically isolated from these changes. In my view, regardless of whether a merger happens, a future possibility is collaborating with other regional complexes through maritime transport of ethylene and similar products.
Uesako: The restructuring of other complexes might cause derivative product manufacturers to lose their raw material supply. Could such companies move to Oita?
Somemiya: If there are any companies interested in Oita, we would certainly welcome them.

P45 / Discussion: Choosing to Execute a Partial Spin-off
Crasus Chemical Business Briefing (Video)

Graphite electrode business and structural reform

Noguchi: China's production capacity exceeds global demand for products like lithium-ion batteries, solar panels, and EVs. Graphite electrodes now also fall into this category. It seems that your company might not need to continue offering this product in the future. What are your thoughts?
Somemiya: The current business environment for graphite electrodes is indeed tough. We face a critical management decision: Should we sell the business and accept substantial losses, or should we drive structural reforms to responsibly restore cash flow? Due to the pressing market conditions, we are urgently pushing forward with structural reforms.
Uesako: I believe that mobility needs structural reforms similar to those for graphite electrodes.
Somemiya: Our current fundamental strategy is to select and focus, based on the belief that access to mobility is essential for application of functional materials. Specifically, we will keep functional materials that are competitive and stop those that aren't.

CFO and Investors Dialogue

Breaking out of a low multiple

Somemiya: Our valuation improved beyond the integrated chemicals sector's multiples, bringing the PBR above 1x. However, the Deepseek shock earlier this year and market shifts from the Trump tariffs have pushed our stock price back to the level when I joined, as of April 2025.

Uesako: Multiples correlate with ROE. Increasing ROE should boost multiples, enhancing certainty and credibility.

Noguchi: Valuations are still not improving, much like when former Hitachi Chemical's multiples weren't high enough in the past. Fund managers often point out that the former Hitachi Chemical didn't have a high valuation in the past.

Ichihara: We also receive similar feedback from fund managers.

Noguchi: If you can clearly show and explain how your semiconductor materials portfolio and profitability have changed since then, you might secure higher multiples than Hitachi Chemical had back then.

Somemiya: Although we have already communicated this as part of our company narrative, we believe it needs to be more widely understood. A major change since the days when Hitachi Chemical was publicly listed is the clearer definition of the "More Than Moore" semiconductor landscape and the significant expansion in advanced packaging. The focus has shifted from enhancing value through front-end miniaturization to increasing it via back-end packaging. This shift has increased the added value captured in back-end processes, which is a major change from the Hitachi Chemical era.

Noguchi: Compared to the Hitachi Chemical era, other businesses have shrunk, so expecting higher multiples now is reasonable. Expanding into front-end materials could open up new business opportunities and potentially transform the company into a comprehensive semiconductor materials manufacturer.

Capital allocation

Somemiya: As our performance improves, we are getting more questions about our current capital allocation, particularly regarding our approach to shareholder returns. What do you think about our current capital allocation policy and its disclosure?

Ichihara: Compared to other companies, the disclosure is extensive and clear, so I find it satisfactory.

Uesako: I think your disclosure is quite detailed. It includes setting a target stock price of ¥10,000, avoiding actions that dilute shares for now, and so on. The capital allocation disclosure is more detailed and deliberate compared to other companies. Regarding the policy, your company lacks financial flexibility and needs growth investment, so I personally don't think further returns are necessary.

Noguchi: I agree on the capital allocation. I don't think enhancing returns is necessary at this stage. Many companies increase returns to improve their PBR, often because they have excess net cash. However, your company does not fall into this category. With growth fields, investment should naturally be the priority.



I would like to see Resonac lead the industry restructuring to grow the semiconductor materials business, including inorganic options. [Mr. Uesako]

Achieving clear interim results helps employees understand and align with the strategy, creating a best practice example to share with other companies. [Mr. Noguchi]



Expectations for Resonac

Somemiya: Finally, what are your expectations for our company moving forward?

Noguchi: We hope Resonac becomes a successful example of management change in Japan, encouraging similar practices to spread. Achieving clear interim results helps employees understand and align with the strategy, creating a best practice example to share with other companies. We will continue to watch this closely.

Ichihara: I come from a chemical manufacturing background. In the 1990s, Europe's chemical industry restructuring saw BASF, focused on petrochemicals, become the market leader by market capitalization. Meanwhile, ICI (Imperial Chemical Industries) aggressively restructured but ultimately collapsed, while Bayer, including its spinoff companies, resulted in a lower corporate value than BASF, an integrated chemicals company. However, I believe different times would yield different results, and I expect your company, actively pursuing restructuring, to outperform in this industry.

Uesako: If your current goals are achieved, I think the stock market will recognize your company's value. This is what I expect to see. To boost employee engagement, you should increase stock compensation, aligning employees' interests with those of the company. I'd like to see employees actively hold company shares and work to boost corporate value, benefiting not just investors but themselves as well.

Somemiya: We will continue striving to meet your expectations. Thank you for your time today.

• About this dialogue

Participants: Our effective top three domestic institutional shareholders and CFO Hideki Somemiya

Aim: Listen to investors' opinions on our portfolio management and utilize them in management and information disclosure

• Keywords of the dialogue

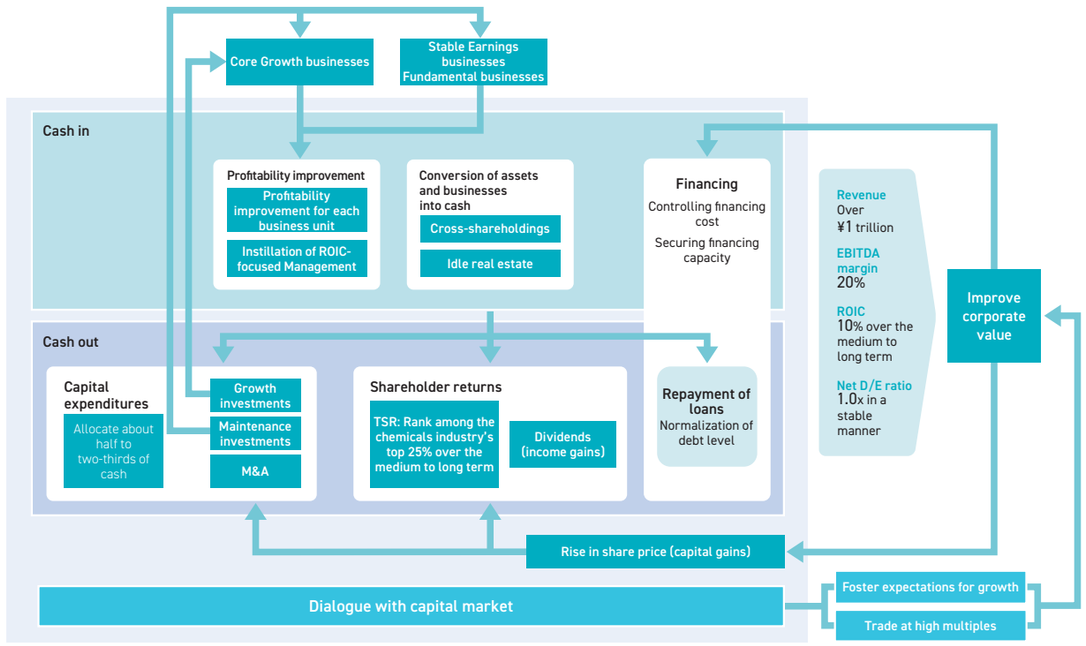
Portfolio management issue	Formulation of business evaluation criteria and mechanisms, KPIs from a shareholder perspective
Challenges in industry restructuring	The importance of front-end processes, clues for restructuring, and the equity story of our petrochemical business
Restructuring underperforming businesses	Sell or rebuild? Can they compete as functional materials?
Improving valuation and prioritizing investment	Improvement of our valuation beyond the integrated chemicals sector's multiples, and prioritization of investment in growth fields

Financial and Capital Strategies

Please also read the "For Investors" page on our website.

We believe that the Financial and Capital strategies which is the basic policy for mean of use cash are backbones that support our growth strategy. Financial condition, which temporarily deteriorated due to the acquisition of Hitachi Chemical, has successfully been normalized to a significant degree over the four years following the acquisition. Currently, we are preparing to build a corporate structure capable of taking the offensive foreseeing the silicon cycle and the next action for growth.

Financial and capital strategies overview



1. Capital Allocation Prioritizing Growth Investments

Companies prioritize spending based on their growth stage. Our company is still in a growth phase, so investing in growth is our top priority. Next, our basic policy is to allocate funds to reduce debt, which improves financial health and prepares us for the future. This is followed by paying dividends as part of shareholder returns.

To drive growth in the semiconductor materials field, we have consistently allocated 50% to 70% of our operating cash flow to capital investments, even during downturns in the silicon cycle. The semiconductor market goes through boom-and-bust cycles as a consequence of companies trying to capture strong demand amid ongoing technological innovation. Only companies that invest during downturns can reap the benefits in the next boom. During the downturn, we pinpointed when demand would recover and kept a close eye on customer inventory and forecasts. This allowed us to adjust and respond to rapid market growth, particularly in areas like AI semiconductors. In our investment decisions, we focus on capital efficiency. We allocate half of our capital expenditure to semiconductors and electronic materials, which we consider our growth drivers.

Over the past four years, as described above, we generated approximately ¥500.0 billion in operating cash flow, with ¥330.0 billion directed towards capital expenditures. This means we allocated two-thirds of our operating cash flow to capital investments. For investing cash flow other than capital expenditures, selling non-core businesses, idle assets, and cross-share holdings brought in about ¥200.0 billion, resulting in a total free cash flow of approximately ¥360.0 billion. This allowed us to reduce interest-bearing liabilities and preferred shares by about ¥300.0 billion, while distributing dividends.

In the cyclical semiconductor market, there are often times when business conditions do not align with investment levels. However, looking at multi-year averages, we believe that, in due course, we will reach a financial position where we can consistently secure at least an annual operating cash flow of ¥200.0 billion, an investing cash flow of ¥(100.0) billion, and a free cash flow of ¥100.0 billion. At this level, we can effectively invest in growth while quickly reducing debt, thereby broadening our strategic options including shareholder returns.

Summary of statements of cash flows

(Billions of yen)	2021	2022	2023	2024	Four-year total
Operating cash flow	115.3	99.4	118.7	163.7	497.0
Investing cash flow	28.6	(54.7)	(55.2)	(52.3)	(133.5)
Capital expenditures	(67.7)	(87.9)	(85.6)	(88.3)	(329.5)
Other Investing cash flow	96.3	33.2	30.4	36.0	195.9
Free cash flow	143.9	44.7	63.6	111.3	363.5
Capital expenditures/Operating cash flow	59%	88%	72%	54%	66%

*The figures for 2021 to 2023 are based on Japanese Generally Accepted Accounting Principles (JGAAP), while those for 2024 are based on IFRS.

2. Sale of Non-Core Businesses and Monetization of Non-Operating Assets

Operating cash flow is the main source of cash inflow. However, to improve capital efficiency, it is crucial to sell non-core businesses to the best-suited owners and dispose of non- operating assets. This approach generates cash for investments with higher expected returns.

Over four years since 2021, we sold 11 non-core businesses, generating proceeds of approximately ¥120.0 billion. Among non-operating assets, we have sold idle assets, such as a former plant site in Yokohama City, Kanagawa Prefecture, land and buildings of the former head office in Minato Ward, Tokyo, and a former hard disk media site in Taiwan, generating over ¥60.0 billion in cash. We advanced the sale of cross-shareholdings, completing most of these sales by the end of 2023. As of the end of March 2025, only one listed stock remains.

Over the past four years, we have largely streamlined non-operating assets, resulting in a much cleaner current position. We will continue to assess our business using three criteria: profitability and capital efficiency, fitness for strategy, and whether Resonac is the best owner.

Key inflows in investing cash flow

(Billions of yen)	2021	2022	2023	2024	Four-year total
Proceeds from sale of businesses	84.1	0	31.7	0.7	116.6
Proceeds from sale of non-current assets	2.2	21.0	5.5	32.4	61.1
Proceeds from sale of investment securities	9.3	22.0	3.3	0.6	35.2
Total major investment inflows	95.6	43.0	40.5	33.7	212.9

*The figures for 2021 to 2023 are based on Japanese Generally Accepted Accounting Principles (JGAAP), while those for 2024 are based on IFRS.

3. Reducing Debt and Improving Capital Structure

Our financial health temporarily weakened due to a major acquisition, which was a concern for potential investors. However, we believe it has now largely stabilized through liabilities repayment. We not only reduced the balance of interest-bearing debt but also made significant qualitative improvements. These include refinancing at lower financial costs and securing fixed interest rates to manage the risk of rising rates. To enhance our financial credibility with international investors, we have switched our accounting standard to the International Financial Reporting Standards (IFRS), which are recognized globally.

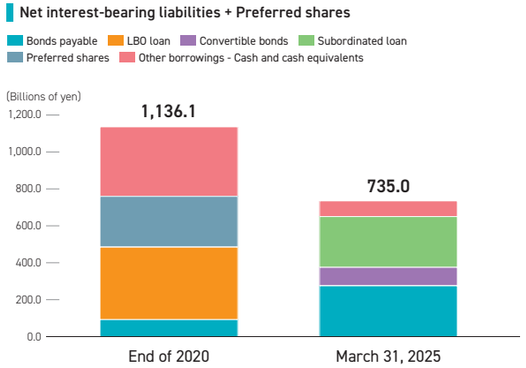
Key financial improvements (comparison between the end of 2020 and the end of March 2025)

- The Net D/E ratio decreased from 1.8x to 0.8x * but rose to about 1.1x in April 2025 due to the repayment of a subordinated loan.
- Net interest-bearing liabilities and preferred shares decreased from ¥1,136.1 billion to ¥735.0 billion.

*The figures as of the end of 2020 are based on JGAAP, while those as of the end of March 2025 are based on IFRS.

Financial and Capital Strategies

Net interest-bearing liabilities + Preferred shares



*In April 2025, the repayment of a subordinated loan reduced the balance from ¥275.0 billion to ¥137.5 billion.

As we position growth as a principal strategy, we aim to maintain a balance sheet that allows us to raise the necessary funds from capital markets when needed to effectively navigate the fluctuations of the silicon cycle, while using financial leverage to some extent. We aim not only to consistently maintain a Net D/E ratio below 1x but also to improve our financial structure to achieve this without relying on the equity component of subordinated loans. We will focus on monitoring the Net Debt/EBITDA ratio to ensure a balanced approach between borrowing and cash management. Our current Net Debt/EBITDA ratio is just under 4x, which is somewhat high, but we believe it can reach the 3x or even 2x range within the next few years. If a Net Debt/EBITDA ratio below 3x comes into view, we will be ready to pursue strategic investments and industry consolidation.

4. Focusing on TSR for Shareholder Returns

We prioritize total shareholder return (TSR), which includes capital gains, as a way to reward shareholders through growth. In 2024, annual TSR was 145%, significantly outperforming the TOPIX including dividends of 121%. With regard to income gains, despite a net loss in 2023, we maintained a dividend of ¥65 per share, ensuring stable payouts to uphold its track record. We are mindful of existing shareholders' interests and plan to avoid capital raising that would dilute shares for the foreseeable future.

We remain committed to rewarding shareholders through stock price appreciation by enhancing corporate value, while also maintaining stable dividends. We are planning a partial spin-off of Crasus Chemical (olefins and derivatives business), to not only address the conglomerate discount on our stock price but also to provide shareholder returns through in-kind dividends of Crasus Chemical stock. As our growth investments pay off over the medium to long term and our financial health improves, we might consider share buybacks as a way to return value to shareholders.

P45 / Dialogue: Choosing to Execute a Partial Spin-off

5. Valuation

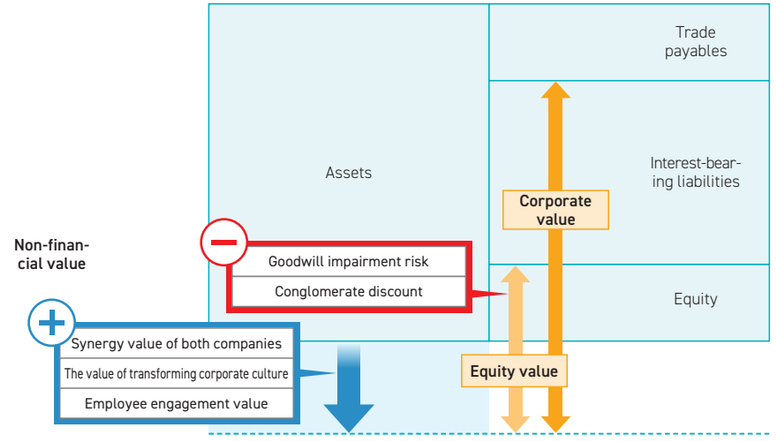
We see our stock market valuation as a direct reflection of our performance, including our financial and capital strategies, and we confront it head-on. Our stock price is still significantly below what we believe is its fair value. To bridge this gap, we need to improve our execution capacity and practical feasibility while communicating clearly and convincingly. To ensure investor confidence in our stock, CEO Takahashi and CFO Somemiya take a hands-on approach in investor relations, presenting our growth strategy and equity story and discussing their credibility with investors. This involvement is crucial to our financial and capital strategies.

After a major acquisition, we restructured our business portfolio by selling 15 businesses to the best-suited owners. The market acknowledges our strong execution capabilities to some extent in this area. Despite a downturn, we continued investing, leading to growth in advanced applications, including AI semiconductors. Through this effort, we are confident that our growth strategy in semiconductor materials, a core area for us, has proven to be right and plausible to some extent. Based on these achievements, as part of our growth story, we will continue to emphasize our transition from a general chemical manufacturer to a functional materials company centered on semiconductor materials. In 2025, by adopting IFRS, we enhanced our appeal to global investors and resolved the issue of profit reduction caused by goodwill amortization. We were also able to advance toward our selection into the SX index to attract investors who prioritize sustainability.

In corporate valuation, resolving the issue of our PBR falling below 1x was merely the starting line. The real challenge begins now. We will continue efforts to eliminate the significant conglomerate discount and ensure the market recognizes our growth potential. The key to eliminating the discount is likely the partial spin-off of the olefins and derivatives business, which is central to the business portfolio reform. We will dedicate ourselves to making the spin-off listing successful by establishing Crasus Chemical as a competitive and attractive investment entity.

To drive growth, it is important to not only strengthen our presence in advanced semiconductor materials but also to minimize non-recurring items, particularly impairments, that reduce profits in Resonac's growth businesses. To increase the probability and feasibility, we recognize that strong leadership from our management and execution capabilities as a company driven by high engagement are crucial. Although these non-financial values do not directly appear in financial statements, we view them as notional assets that increase the likelihood of achieving our growth strategy and, in turn, enhance corporate value.

Diagram of non-financial value and corporate value enhancement



6. Toward a ¥10,000 Stock Price

Our immediate performance target is to achieve revenue of ¥1 trillion with a 20% EBITDA margin, leading to an EBITDA of ¥200.0 billion. Applying an EV/EBITDA multiple of 15x gives the Company a valuation of ¥3 trillion. Assuming Net Debt at a conservative ¥1 trillion, the market capitalization would be ¥2 trillion. Considering the increase in the number of shares issued due to the conversion of convertible bonds and setting the total shares outstanding at 200 million, the stock price would be ¥10,000.

Achieving the targets of ¥1 trillion in revenue and a 20% EBITDA margin is possible if the semiconductor materials business remains strong and the restructuring of the graphite electrode business and the spin-off of the olefins and derivatives business are successfully completed. Our current EV/EBITDA multiple is significantly lower. However, global semiconductor material companies, including our benchmark DuPont, achieve around 15x. We believe that eliminating the conglomerate discount and gaining recognition as a high-growth potential semiconductor stock could help us reach this level.

Reframing the perspective, if the stock price is ¥10,000 and the current P/E ratio remains at 20x, the required EPS would be ¥500. To boost EPS to the desired level, it is essential to achieve "¥1 trillion in revenue × 20% EBITDA margin." Additionally, increasing revenue in growth fields and completing structural reforms are crucial to reducing profit declines from non-recurring items.

Both approaches face significant challenges, but by focusing on growth businesses and with resulting growth, we aim to enhance profit margins and increase corporate value through higher multiples. If the stock price reaches ¥10,000, it will not only boost shareholder returns through capital gains but also position the Company's stock as a strategic asset for future major initiatives.

▶ See here to learn about our communication with shareholders and Investors
P33 / Co-creation with Stakeholders

Dialogue: Choosing to Execute a Partial Spin-off

Road ahead for the petrochemical business

In August 2024, Crasus Chemical, a wholly-owned subsidiary to succeed Resonac Corporation's Olefins and Derivatives business, was newly established. Upper management of Crasus Chemical, which has started its journey toward becoming Japan's leading petrochemical manufacturer, and the CSO/CRO of Resonac, which is implementing initiatives geared toward the partial spin-off, got together to discuss the direction of the new subsidiary.



Hirotsugu Fukuda
Crasus Chemical Inc.
Representative Director and President

Nobuyoshi Yamada
Crasus Chemical Inc.
Board Director, Representative of Oita Petrochemical Complex

Tomomitsu Maoka
Chief Strategy Officer (CSO) / Chief Risk Management Officer (CRO)

Basic information	
Name of company	Crasus Chemical Inc.
Representative	Hirotsugu Fukuda
Main products	● Olefins (Ethylene, propylene, etc.) ● Organic chemicals (vinyl acetate monomer, ethyl acetate, allyl alcohol, etc.) ● Synthetic resin (Polypropylene)
Number of employees	848 (As of January 1, 2025; consolidated basis)
Location	● Head Office, production base Oita City, Oita (Oita Petrochemical Complex) ● Headquarters Minato-ku, Tokyo

Thoughts behind the company's purpose and name

Support lives today and tomorrow with Chemistry

CRASUS CHEMICAL

Cras ("tomorrow" in Latin)
+
Sustainable
+
Sustain

This spin-off will enable us to independently decide where to invest earned funds

Maoka: The Olefins and Derivatives Business Unit, which made a new start as Crasus Chemical, was regarded as the "eldest son" of the former Showa Denko. It was a segment that generated stable profits, and its financial results were announced first for olefins and derivatives, followed by basic chemicals. I also feel that the business has strong pool of talent.

Fukuda: There are certainly a lot of talented employees. It also developed human resources for other business units. In terms of net sales, the Olefins and Derivatives Business Unit accounted for about one-third of former Showa Denko's total net sales.

In addition, the Oita Petrochemical Complex, the largest business base of the Olefins and Derivatives Business Unit, has a unique culture. Because of the many hazardous materials handled, the Oita Petrochemical Complex provides its own extensive training for new employees on top of company-wide training, resulting in a well-disciplined organization.

Maoka: The idea of spinning off the Olefins and Derivatives Business Unit wasn't something we had from the beginning. This is because the olefins and derivatives business is an extremely important source of revenue, and also bears social responsibility in terms of achieving carbon neutrality. Given his position as a corporate executive, CEO Takahashi had not planned to easily separate such a vital businesses from the get-go. Meanwhile, discussions continued within the management team regarding whether Resonac was the best-suited owner for the Olefins and Derivatives Business Unit.

After the birth of Resonac, there were two main factors that prompted us to consider spinning off the olefins and derivatives business. One was the feedback from shareholders we received through repeated discussions with them about our strategies. The semiconductor materials business is expected to experience significant growth and high profitability in the medium to long term, but it is subject to substantial short-term fluctuations in performance. In contrast, the olefins and derivatives business generates a stable cash flow, making it an attractive investment option for investors seeking stability.

In other words, when viewing them as individual investment options, semiconductor materials and olefins and derivatives have a relationship that could potentially interfere with one other, so to investors, keeping them separate is preferable.

As various options were being considered, another incentive came in the form of the establishment of special measures based on the Act on Strengthening Industrial Competitiveness in June 2023 regarding partial spin-offs, creating a new mechanism for tax breaks. This led to the idea that these partial spin-off tax rules could be used to split up the olefins and derivatives business more smoothly and efficiently, kicking off concrete deliberations regarding this possibility.

Fukuda: I had assumed that the olefins and derivatives business would remain part of Resonac, so when I heard about the partial spin-off, I honestly had a lot of thoughts. It's not something I could simply say, "Sure, we will operate independently from now on."

At the time, Resonac was already focusing its investments on semiconductor materials, and even when we at the Olefins and Derivatives Business Unit brought up our intent to make investments at the Management Committee meetings, there were several times when we were unable to move forward with these plans. After thinking about it calmly and carefully, we realized that separating the olefins and derivatives business to establish a separate company through a partial spin-off meant that we could invest the funds we have earned at our own discretion. We felt great appeal and potential in the idea of being able to make investment decisions and move forward more flexibly toward our goals, which motivated us to take on this challenge. We were ultimately able to make the decision because the Olefins and Derivatives Business Unit had the underlying strength to operate independently, namely its stable profitability and organizational capabilities built up over the years.

Leading discussions over shaping the new company's approach and vision

Fukuda: Ever since the partial spin-off was decided, everyone involved has been working at full capacity. First were the tangible aspects, such as organizations, governance, personnel acquisition, and IT systems. Basically, shaping ourselves

Dialogue: Choosing to Execute a Partial Spin-off and the Road Ahead for the Petrochemical Business

as an operating company. These efforts were carried out with the help of Resonac and outside experts. Another crucial aspect we need to address is the intangible aspects. The culture of the new company; its soul. I think this is something that needs to be built up carefully over time.

Yamada: The plan for the partial spin-off was announced to Olefins and Derivatives Business Unit employees on February 14, 2024, the same day that Resonac announced it to the press.

In the beginning, shock and confusion spread across the Oita Petrochemical Complex. I think there were concerns over the growth potential and future of the Oita Petrochemical Complex once it became independent. However, in March and April, not long after the announcement, the management team set up a series of opportunities to talk with Oita Petrochemical Complex employees. Hearing about plans and outlooks from management at town-hall meetings and roundtable discussions helped to dispel much of this anxiety, which led an increasing number of people to start speaking of their determination to move forward with renewed enthusiasm.

Fukuda: Shortly after Resonac announced it would start considering a partial spin-off, mid-level and young employees of head office from the Olefins and Derivatives Business Unit voluntarily came together to launch the Petrochemical Vision Project, and started conducting discussions on the new company. Through this project, employees took it upon themselves to discuss and develop the new company's vision, purpose, value creation process, and so on. In August, it was renamed the ASU Project after Oita Petrochemical Complex employees joined to form a dynamic team under my direct control. The name of the project, ASU, embodies our desire that we (us) will all work together to create Crasus Chemical's tomorrow (*Asu* in Japanese). Crasus Chemical's purpose, "Sustain daily lives of tomorrow with chemistry" was also born out of discussions within this ASU Project. The activities of the ASU Project are very dependable, and I personally find them reassuring. We are currently working with the management team to formulate a long-term vision. In addition to the strong sense of unity that has existed until now, an environment is emerging that fosters various bottom-up discussions.

As Takahashi-san has been doing at Resonac, since last year, I have held more than 30 town-hall meetings and roundtable discussions, speaking with more than 200 employees so that we can exchange our thoughts.

Maoka: While maintaining organizational leadership, we will increase the value of the company through the self-driven actions of our employees. This culture shows that while Crasus Chemical is inheriting Resonac's uniqueness, it is also building its own identity.

Fukuda: After hearing about the partial spin-off, some people in other business units or those stationed overseas that used to work in the Olefins and Derivatives Business Unit are also volunteering to join Crasus Chemical. Even among people with no prior involvement with the Olefins and Derivatives Business Unit, highly motivated people have joined us who want to take on IPO-related work or transfer to Crasus Chemical to expand the scope of their work.

Superior safety and operation technologies have turned Oita Petrochemical Complex into an "unstoppable petrochemical complex"

Maoka: When we considered separating the olefins and derivatives business, we looked into the details of the business again, comparing it with the operations of industry rivals.



When we considered separating the olefins and derivatives business, we looked into the details of the business again, comparing it with the operations of industry rivals. What we learned from doing so is that our olefins and derivatives business has quite a strong edge. [Maoka]



I believe that the Oita Petrochemical Complex has become an "unstoppable petrochemical complex" thanks to the fusion of the latest technologies with the maintenance and operation technologies cultivated over the past 55 years since operations began at the complex in 1969. [Yamada]

What we learned from doing so is that our olefins and derivatives business has quite a strong edge. It became clear that we would be able to hold our own in the market even after being spun off.

Yamada: The Oita Petrochemical Complex's greatest strength is that it boasts the first- to second- highest uptime in Japan, backed by its excellent maintenance and operation technologies. With the exception of scheduled maintenance periods, there have been no plant shutdowns for over five years due to problems occurring. A single shutdown of the plant can result in losses in the hundreds of millions of yen, so the fact that it can operate stably is a major strength.

Another notable feature of the Oita Petrochemical Complex is that it is a pioneer within the Resonac Group in the use of IoT, smart solutions, and other technologies. We are actively taking on new challenges, such as introducing a system to predict plant malfunctions and using drones for inspections.

I believe that the Oita Petrochemical Complex has become an "unstoppable petrochemical complex" thanks to the fusion of the latest technologies with the maintenance and operation technologies cultivated over the past 55 years since operations began at the complex in 1969.

Fukuda: Another major strength is the ability to use various raw materials other than naphtha. While the main raw material is naphtha, which is extracted from crude oil, the Oita Petrochemical Complex has long sought to diversify its raw materials, and is also able to use LPG, kerosene, and diesel as raw materials. This means that costs can be reduced by flexibly procuring raw materials other than naphtha depending on prevailing prices. No other industrial complex exists that can use raw materials other than naphtha to this extent.

Yamada: The Oita Petrochemical Complex also produces a number of competitive and unique derivatives. We hold the top global external sales market share for high-purity allyl alcohol and the top domestic market share for ethyl acetate. In particular, following the start of operations at an additional plant for high-purity allyl alcohol in August last year, we are now well positioned to expand sales.

We cannot survive unless more emphasis is placed on co-existing harmoniously with local communities and society to promote greening

Maoka: Over a longer timeframe, a huge challenge faced by the petrochemical industry is decarbonization. The Oita Petrochemical Complex has drawn up a roadmap and has been carrying out various initiatives geared toward carbon neutrality, and unless they accelerate their initiatives, it would likely not survive as a company.

Fukuda: I agree. Up until now, we have focused on increasing profitability by selling products made from fossil fuels. However, that approach is by no means sufficient. Unless we place more emphasis on coexisting harmoniously with local communities and society to promote greening, including carbon neutrality, the olefins and derivatives business will not be viable in the future.

Yamada: With regard to greening, we have implemented various measures to date, regardless of the spin-off. I believe that moving forward, we will need to move more swiftly and flexibly than ever before in cooperation with local communities.

As our medium- to long-term plan, we have been working on the "development of a low-concentration CO_2 separation

system employing an innovative separation agent" (adopted as part of the NEDO's Green Innovation Fund Project) with Nippon Steel and several universities. We are also participating in the "Feasibility Study on a Carbon Recycling Project Utilizing Cross-industry Collaboration at the Oita Complex" (adopted as a NEDO project), and have begun considering ways to contribute to reducing CO_2 emissions from the perspective of chemical manufacturing that uses CO_2 as a raw material. Furthermore, together with Kyushu University, Marubeni Corporation, and Sumitomo Mitsui Trust Bank, we have established a "knowledge hub" in Kyushu aimed at building a circular economy model. By bringing together the strengths of Kyushu's industry, government, and academia, we aim to establish local production for local consumption processes by recycling waste plastics and other waste materials through chemical recycling.

Cherishing our synergy-creating relationship while remaining independent as two companies with the same origins

Maoka: In the near future, Crasus Chemical and Resonac will have to build a new relationship as independent, publicly listed companies.

Fukuda: Once Crasus Chemical is listed, it is natural for the two companies to go their own way. However, this does not mean that Resonac and Crasus Chemical will break off their relationship. We want to remain emotionally connected to each other, and this is reflected in Resonac continuing to hold an appropriate proportion of shares. I believe that both Resonac and Crasus Chemical will benefit from educational, technological, and personal exchanges. In the future, I think there will be opportunities for us to take on various challenges together.

Yamada: We are also confident in our safety, production, and maintenance technologies. There are aspects in which the directions of our businesses align with one another, so we would like to continue our cooperative relationship in various areas going forward.

Maoka: I would like to consider whether we can build a cooperative relationship in terms of human resources as well. Of course, ensuring a certain degree of independence will be necessary when going public, so we will need to carefully consider specific plans going forward. Even so, as companies with the same origins, I believe we have personnel that can thrive in either company. So, I'd like us to come together to consider how we can establish a relationship that will support the career development of employees from both companies.

Molding a new image of the petrochemical industry around our purpose of "sustain daily lives of tomorrow with chemistry"

Maoka: We need to make this partial spin-off something that all stakeholders will feel glad we have done. To this end, I am determined to achieve results that meet the expectations of not only our shareholders, but also our employees, customers, and local communities.

I also sincerely hope to surprise those who are worried about the future of Japan's petrochemical industry through this partial spin-off. I believe that one of the objectives of this partial spin-off is to create a company that will open up bright prospects for the petrochemical industry, and I have confidence that Crasus Chemical can and will achieve this.



I will do my best to ensure that in a few years' time, employees will feel glad they are working at Crasus Chemical. [Fukuda]

Yamada: The Oita Petrochemical Complex boasts high on-site capabilities cultivated over many years. For example, we mentioned earlier that we are diversifying raw materials and are able to use raw materials other than naphtha. In other words, the complex is capable of flexibly handling a variety of operations. I believe our strengths lie in the fact that the departments that support on-site operations have both the autonomy and expertise to fully recognize their roles and responsibilities, and the organizational capabilities and leadership to execute operations properly.

We have been carrying out various activities with the aim of becoming the strongest industrial complex in Asia, where prosperity, sustainability, and growth potential are in harmony. As the current Oita Petrochemical Complex exists on the back of steady, daily efforts, we must never forget our ambition to become the strongest industrial complex in Asia and the importance of our daily efforts. We will continue to work hard and remain steadfast in this regard.

Furthermore, having become Crasus Chemical, we will strive to be even more flexible in our research and development and technology development activities through internal and external co-creation, including with Resonac, with the aim of becoming a company that creates a sustainable future.

Fukuda: Splitting up a company through a partial spin-off and then aiming for an IPO is certainly a very challenging undertaking. Nevertheless, I bet achieving this will provide an incredible sense of accomplishment. Of course, I understand that what comes after completion of the IPO is more important, but for now, I want everyone to experience that sense of accomplishment together.

Right now, I also feel strongly about valuing the purpose we created: "Sustain daily lives of tomorrow with chemistry." Moving forward, we must constantly think about how we can truly contribute to society through our corporate activities, not solely for the sake of making money. As such, only by always keeping in mind our purpose "Sustain daily lives of tomorrow with chemistry" as we conduct our business can we gain the trust of local communities and our stakeholders. I believe that this will ultimately motivate employees, which will in turn lead to increased profitability and enhanced corporate value. I am currently doing my best to convey these thoughts to all our employees. And I will do my best to ensure that in a few years' time, all stakeholders will recognize this partial spin-off as a positive and worthwhile decision.

• About this dialogue

Participants: Resonac CSO/CRO Tomomitsu Maoka; Crasus Chemical Representative Director and President Hirotsugu Fukuda; Board Director, Corporate Officer, Representative of Oita Petrochemical Complex Nobuyoshi Yamada
Aim: Raise expectations for the future growth of both Resonac and Crasus Chemical by holding a discussion between members of Crasus Chemical, an independent entity that has started deliberating the partial spin-off, with Resonac's CSO

• Keywords of the dialogue

Background to the commencement of the deliberation on the partial spin-off	Shareholder perspective, investment in R&D and facilities in the olefins and derivatives business
Progress with preparations for establishing a new company	Steady progress with preparations for governance, organizations, IT systems, and other tangible aspects Active participation in the ASU Project, joined voluntarily by young and mid-level employees
Confidence in the operation of the "unstoppable petrochemical complex"	Maintenance and operation technologies developed over many years of operating the petrochemical complex combined with the latest IoT and smart solutions
Striving to become a green industrial complex	Promoting the realization of carbon neutrality through R&D of new technologies via industry-academia collaboration

Resonac's R&D

See the"R&D"website for additional information.



Masato Fukushima
Chief Technology Officer (CTO)

Value Nurtured by Co-creation and a Sustainable Future

The evolution of Resonac's R&D is driven by the two wheels of "cheerful challenges" taken on without fear of failure and the "solid results" that come from them. Each individual demonstrates their expertise and freely exchanges ideas to create new value. I like this culture and want everyone to empathize more.

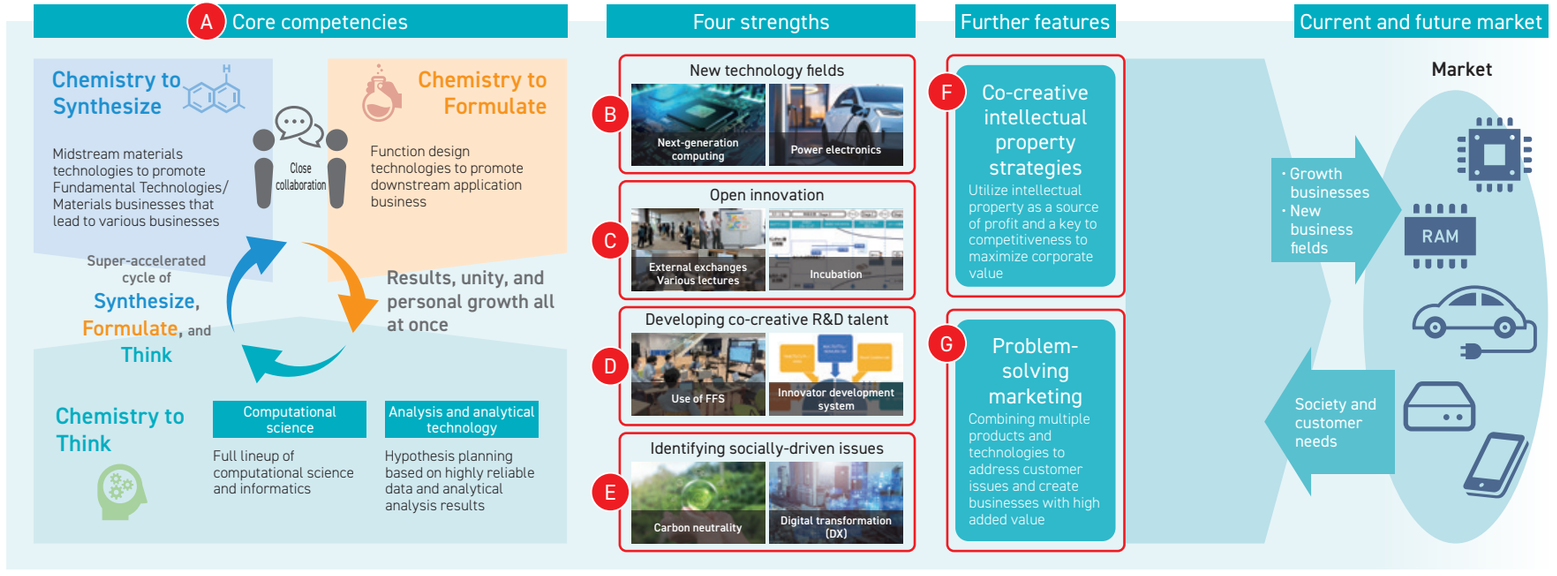
In recent years, industrial structure and social issues have become increasingly complex, so it is more difficult for a single company to solve them alone. In this context, technology is truly valuable when we work with customers to solve problems and realize the results in the field. Through the process of co-creation, we create "usable technology" and create a path to new challenges based on trust. Furthermore, it is the mission of all of us at this chemical company to promote technological development that reduces environmental impact and aim for carbon neutrality. We believe that challenges undertaken by each engineer will shape Resonac's future, and will link all elements such as computational science, generative AI, intellectual property, and marketing to research and development to deliver solid value to society.

An explanation! A microcosm of Resonac's R&D

Resonac's core competencies (A) consist of "Chemistry to Synthesize (materials technologies)," "Chemistry to Formulate (basic design technologies)," and "Chemistry to Think (computational science, analysis, and interpretation technology)" that supports them. By combining these competencies and utilizing and deepening our four strengths (B to E), we are able to develop products and technologies that correspond to a wide range of fields, from upstream to downstream of the supply chain. We also create practical and advanced innovations by increasing our corporate value through intellectual property strategies (F) and carefully understanding customer needs and fusing multiple technologies (G).

In the future, we will position the semiconductor and electronic materials fields as pillars of growth and actively invest and develop technologies. Even in these fields, where technological innovation must be speedy, we have established a system that can respond flexibly and quickly through co-creation both inside and outside the Company.

A microcosm of Resonac's R&D



Roadmap for Co-Creative R&D

By 2030, we aim for our co-creative R&D to drive continuous innovation and consistently deliver technologies that contribute to a sustainable society. We will continue to cultivate leaders and research professionals and advance their capabilities. Since the integration of the two companies, we have formulated strategies for our technology and talent platforms through 2024. From 2024 to 2030, we will embed these initiatives company-wide and aim to lead in addressing social issues through innovation by 2030. As a co-creative chemical company, we will expand the possibilities of chemistry, which underpins all industries, and help create a sustainable, prosperous future.

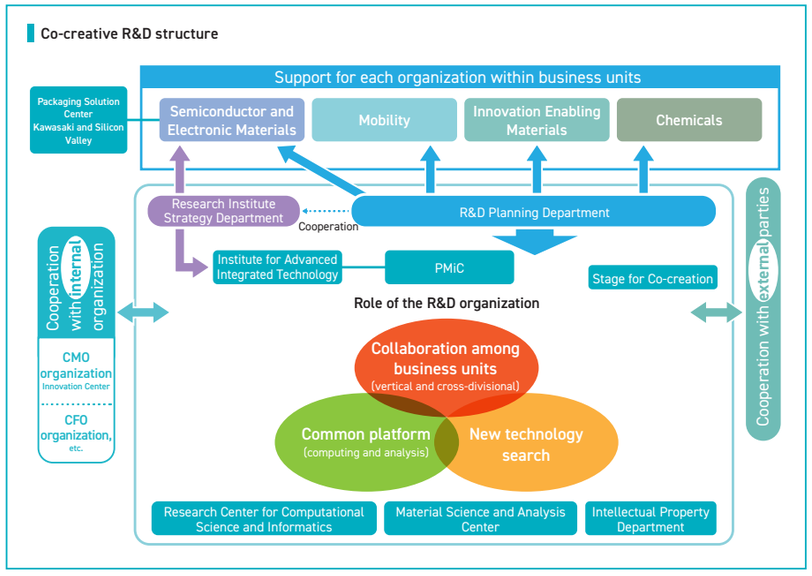
Before 2024		2024 to 2030		2030	
Technology strategy formulation Human resource platform strategy formulation	・Clarification of core technologies ・Long-term trend analysis ・Electronic laboratory notebook (ELN), to promote AI utilization activities	Penetration of each measure	・Establishment of technology landmarks ・Develop new fields and evolve core technologies in key areas ・Promote internal collaboration and co-creation ・Foster ambidextrous talents in the use of AI	Enhancing core technologies Driving innovation	・Advanced collaboration centered on core technologies ・Promoting new market development ・100% ambidextrous talents

Co-creative R&D system

We are pursuing co-creation across our business units and internal organizations, as well as with external stakeholders, to improve the likelihood of successful research outcomes. At our research sites, we are creating open environments where people from inside and outside the company can gather to discuss and collaborate freely. Our two core organizations—the Institute for Advanced Integrated Technology and the Stage for Co-creation—are advancing cutting-edge development in areas such as semiconductor materials, the creation of new research themes, and foundational technologies.

In addition, supporting organizations such as the Research Center for Computational Science and Informatics and the Materials Science and Analysis Center possess advanced capabilities in molecular design, AI-driven analytics, and structural analysis. These capabilities are accelerating our path from research to commercialization and enabling us to manufacture products with greater precision.

Co-creative R&D structure



Resonac's R&D

A Accelerating Core Competencies

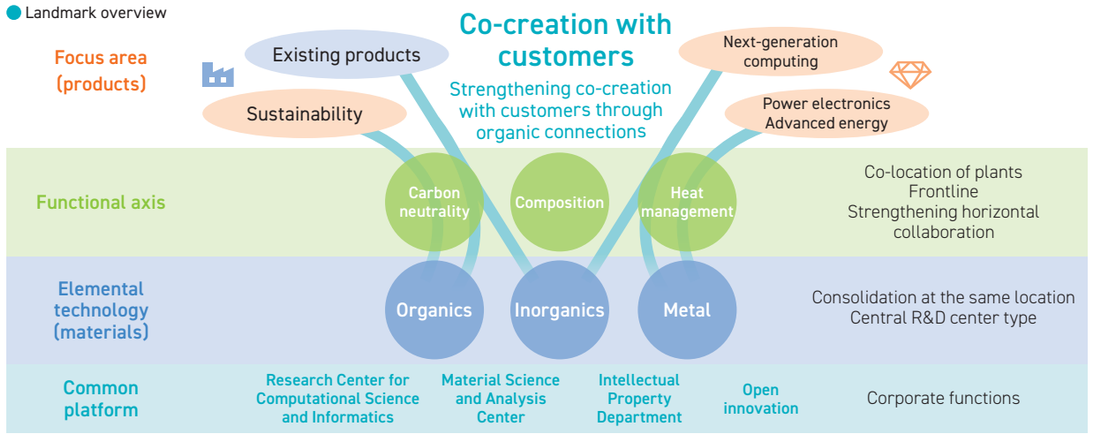
Realizing the Landmark Concept of Consolidating Elemental Technologies and Creating a Base for Co-creation with Customers

We are going deeper with the Landmark Concept, which connects elemental technologies and strengthens the network between technologies. Using the Landmark, which is based on each core competency on the common foundation, elemental technologies, and functional axes, we hope to strengthen our co-creation capabilities with customers through organic connections. This fiscal year, we are promoting the maximization of R&D functions and the realization of results, mainly through consolidating core bases for organic materials and strengthening functions in composite materials.

Purposes of Landmark Concept

- Formation of a hub and center for technology and functions
- Strengthening collaboration across functions and technologies

Landmark overview



Progress in Co-creation <Some Semiconductor-related Examples>

The Research Center for Computational Science and Informatics is an organization that integrates computational science (molecular simulation, structural and fluid simulation) and informatics (AI, MI, image analysis, natural language processing, and development of the infrastructure for data utilization) technologies at a single location. The Center's mission, as an infrastructure for all business segments, is to position Resonac as a world-class functional chemical company Here, we introduce examples and results of co-creation both inside and outside the Company.

Developed low thermal expansion copper clad laminates for next-generation semiconductor packages through simulation

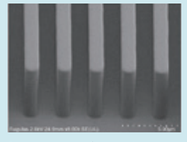
By applying "multiscale analysis*," a computational science technology, we clarified and developed the design guidelines for each material that makes up the copper clad laminates. We have developed this technology into a general-purpose physical property visualization system and have now introduced it within the Company.



Copper clad laminates for next-generation semiconductor packages

Developed a new photosensitive film for advanced semiconductor packages

We have developed a new high-resolution photosensitive film for use in the manufacturing of advanced semiconductors, such as AI processors. In the development process, co-creation was carried out by four business units. In this development, we utilized AI technology provided by the Research Center for Computational Science and Informatics to perform optimal resin design.



Resist pattern (resist line width 1.5 μm / wiring pitch 1.5 μm)

Accelerating semiconductor materials development with AI-based cutting-edge simulation technology

We have introduced a new neural network potential technology that combines first-principles calculation method and AI for the first time to simulate the semiconductor circuits polishing mechanism using CMP slurry. This technology will help clarify the behavior of complex materials, thereby leading to the rapid creation of new materials.

*An analysis that couples the physical properties or behaviors of structures at different scales.
By homogenizing the material properties of composite materials made from multiple heterogeneous materials, it facilitates understanding of the overall behavior of composite materials.

B G Linking New Field Exploration Focus Areas with Marketing Strategy

Resonac has identified four strategic focus areas for new growth—next-generation computing, power electronics, sustainable technologies, and advanced energy technologies—based on their fit with our business portfolio and their future market attractiveness. Through close collaboration between Marketing and R&D, we match market needs with our technical capabilities, accelerating the cycle from ideation to concept validation.

New field exploration focus area	Next-generation computing	Power electronics	Sustainable technology	Advanced energy technology
				
Subdomain examples	✓ Next-generation semiconductor technology ✓ Non-von Neumann type computers	✓ Next-generation heat management materials ✓ Next-generation packaging solutions	✓ Bio-based materials ✓ Next-generation mobility materials	✓ Energy generation and storage technology ✓ Clean nuclear energy

To turn proposals into formal research themes, ideas are sourced from Marketing insights and staff proposals within the focus areas, then developed into projects with appropriate resource allocation. Next, we hold a Theme Proposal Review to assess the proposal and validate the business model. We also upskill staff through training programs, and advance only those themes with a high probability of success that are jointly endorsed by Marketing and R&D.

Flow toward the development of a theme

	1 Idea creation	2 Concept verification	3 Feasibility verification
Point of activities	・Marketing in focus areas ・Proposals from staff ・Resource optimization through project development	・Overview at new theme proposal meeting ・Business model verification ・Marketing educational program ・Improve staff levels by using project management and educational programs ・Themes are developed for projects that have been agreed upon by the marketing and R&D organizations as being highly feasible	

Resonac is promoting problem-solving marketing close to the needs of customers, combining multiple products and technologies to solve customer issues. Meanwhile, in the long term, we would like to create new business ideas in fields other than semiconductors and mobility. That is why our marketing and R&D departments are currently holding repeated discussions in new theme review meetings, examining possibilities for new business ventures in advanced energy and environmental fields. We hope to eventually involve each business unit in this system, making it a company-wide effort.

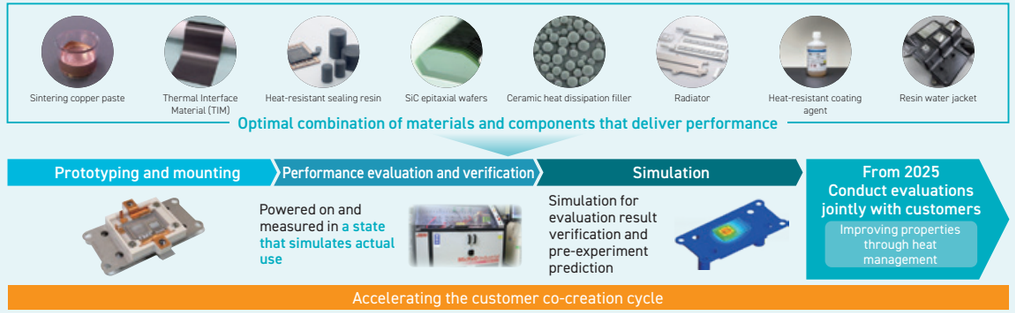


Shigeru Fujita
Chief Marketing Officer (CMO)

Accelerating the development of heat management materials through mounting and evaluation of power devices and cutting-edge semiconductor packages for automotive and data center applications

In electronics, heat management of power devices and semiconductor packages is especially crucial. Heat generation in devices leads to the deterioration of elements and junctions, reducing reliability. Efforts to minimize energy loss and designs to effectively dissipate generated heat are required, with advanced thermal conductivity and insulation of materials being particularly crucial. These heat management measures need to be optimized not only through circuit design but also in collaboration with materials development. We promote materials development through device assembly, evaluation, and analysis tailored to our customers' specifications.

Development of heat management materials through mounting and evaluation of semiconductor packages and power modules



Resonac's R&D

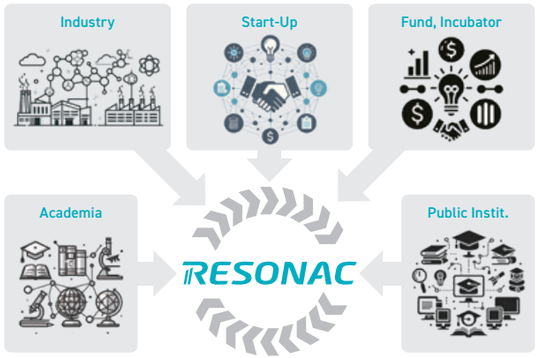
C Promoting a R&D Ecosystem by Utilizing Open Innovation (OI)

We are building an R&D ecosystem that maximizes the use of external resources worldwide, from extensive collaboration with external research institutes to partnerships with university laboratories and start-up companies, in order to promote technological development. This will help create new value that leads the way in areas such as innovative materials, carbon neutrality, thermal management, digital transformation (DX), evaluation, and process technology, and contribute to a sustainable society.

Make maximum use of external resources, from comprehensive collaboration with external research institutes to collaboration with university laboratories and start-up companies

Innovative materials
- Magnetic particles for high-frequency applications
- Particle surface treatment technology
- Heat storage and utilization system for use on the lunar surface
- High refractive index polymer
- High adhesion polymer

Carbon neutrality
- Synthetic gases to olefins
- Bio-based aromatic chemistry
- Research on CO_2 conversion catalysts
- Innovative CO_2 separation
- Plastic decomposition using microwaves
- Gas separation membranes



Heat management
- Heat diffusion evaluation of thermally conductive filler
- Thermal characteristic evaluation of filler complexes
- Spin caloritronics
- High thermal conductivity polymers

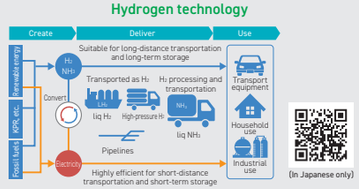
DX, evaluation, process technologies
- Data-driven analysis of polymers
- Digital twin of mass production process
- Polymer informatics
- Synthetic real-time monitoring
- Magnetic characteristics evaluation of recording media
- Seamless microfabrication technology

E Identifying Themes of Socially-Driven Issues (Carbon Neutrality, Digital Transformation)

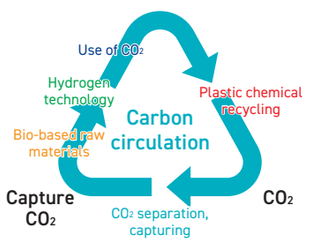
We aim to achieve carbon neutrality by 2050, and are contributing to the transition to a society that uses non-fossil-based raw materials and hydrogen. Specifically, we are promoting initiatives through industry-government-academia co-creation and collaboration, such as technology to manufacture basic chemical raw materials from waste plastic using microwaves, technology to utilize ammonia and hydrogen, CO_2 separation, capture, and utilization technologies, and CO_2 emissions reduction throughout the entire product life cycle, expanded to Scope 3.

As for digital transformation, we are focused on the advancement of AI semiconductor materials. AI semiconductor materials realize dramatic improvements in computing performance and power efficiency. Creation and implementation of innovative materials is essential as a basic technology that will play a central role in the next generation of AI, and we will focus on this as an important area that will directly lead to strengthening our competitiveness.

Hydrogen technology



Basic Chemicals

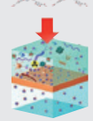


CO_2 separation, capturing, and use

Low-concentration CO_2 separation and capture system



Energy efficiency improvement membrane technology



CO_2 conversion technology Innovative catalyst technology

Scope 3 (Information sharing and use of bio-based raw materials)

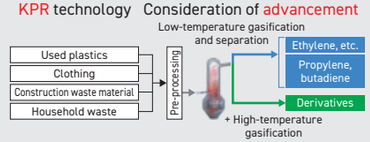


Plastic chemical recycling

Plastic to basic chemicals



KPR technology Consideration of advancement



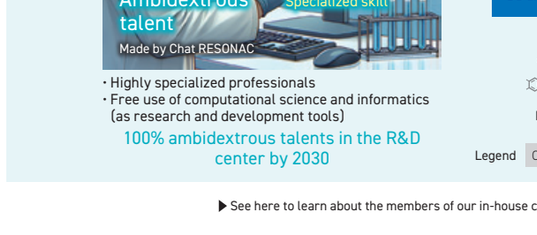
D Human Resource Development that Creates Chemistry to Synthesize, Chemistry to Formulate, and Chemistry to Think

We have set a new R&D strategy that combines research themes and technology strategies with human resource strategies, and are working to build a training guideline that understands and develops the diverse personalities of our engineers. We aim to develop diverse and outstanding professionals by actively using training plans and personnel exchanges that are suited to each individual's personality and career plan, as well as study abroad and dispatch to universities and external institutions. In addition, we foster an entrepreneurial mindset and promote the development of innovators through new business creation projects and innovation process experience programs . Furthermore, we are focusing on creating a culture and system that makes the most of personality, and are working to improve both individual and organizational performance. For example, we are also conducting FFS diagnosis in the CTO organization, and from 2025, we started building teams using it. P63

To realize co-creative R&D, we will push forward with the design of human resource diversity and a system to utilize it

R&D strategies Technical strategies × Human resource strategies ▶ CTO organization New R&D strategies "Co-creative R&D"

Innovator development system



"FFS", mean for use diversity

Previously, decision-making in our HR strategy relied heavily on experience and intuition. By adding a scientific perspective, we can achieve:
- Realization of the potential of various engineers, and
- Creation of a reproducible and sustainable human resource management system



R&D personnel use computational science and informatics like air

We will train researchers who have a high level of expertise and can autonomously select and utilize computational science, AI, and data science (DS) as one of the research and development tools. By effectively using computational science and informatics tools with specialized domain knowledge, we will further accelerate research and development. Ultimately, we will ensure that researchers use computational science and informatics like air.

What a researcher should be like in 2030



- Highly specialized professionals
- Free use of computational science and informatics (as research and development tools)

100% ambidextrous talents in the R&D center by 2030

Strategy and vision for strengthening computational and informatics skills

Processes	At present	Future (2030)
Theoretical analysis (first time only)	Theoretical analyst uses software to perform analysis	Theoretical analyst uses software and AI to perform analysis
Lab verification	Researcher conducts experiments	DS talent uses robotics
Data assetization	DS talent stores data	DS talent uses AI to collect and organize
DS analysis	DS talent uses MI to analyze	DS talent uses MI and AI to analyze

Legend: Conventional / Ambidextrous

▶ See here to learn about the members of our in-house community REBLUC
P22 / How Far We've Come! Fostering Resonac's Corporate Culture

Resonac's R&D

F Co-creative intellectual property strategies



Naotake Ota
General Manager, Intellectual Property Department

To achieve our purpose of "Change society through the power of chemistry," we are promoting a dual-purpose strategy of exclusivity and co-creation based on three principles: (1) Proactive IP: accelerating value creation through proactive IP activities, (2) Fascinate with IP: disseminate intellectual assets that contribute to realizing our Purpose in the right place at the right time, and (3) Reliable IP: protecting and guiding our business through an IP landscape and IP management platform.

In 2025, we organized a Corporate Value Enhancement Committee within the Intellectual Property Department to update our efforts to date and accelerate our IP portfolio reform. By 2028, we aim to reach the top tier globally in PatentSight's TR and MC within the functional chemicals field, contributing to the enhancement of corporate value originating from our intellectual property.

Before 2024

- Analyze the synergistic effects of the integration of the two companies through the IP landscape and report to the management
- The proportion of our international patent applications rose to 52% (compared to the overall applicant average of 39.5% according to Japan Patent Office data)
- Established the Fascinate with IP initiative to actively disseminate intellectual property-related information externally
- Support the promotion of intellectual property strategy by strengthening the foundation of our intellectual property management system (SWIPS)

2025

- Establishment of the Corporate Value Enhancement Committee
  Set annual targets and manage progress for the following activities
  — Build a value-creation foundation linked to R&D and business strategies
  — Implement measures to increase competitive advantage and presence
  — Vitalize innovation creation activities
- Restructuring the organization to execute IP strategies aligned with business strategies
- Strategic development of intellectual property ownership and contract frameworks in co-creation activities such as US-JOINT
- Expansion of the internal use of IP landscape across departments
  Use for exploration of themes and co-creation partners up 2.8x year on year

2026 onward

- Accelerate co-creation to establish intellectual property superiority over competition
- Expand our strong patent portfolio, including in overseas markets, aiming to rank in top tier for TR and MC in key technology areas of functional chemicals (TR≥1.2, MC≥1.0)
- Innovation in intellectual property operations and governance through the use of generative AI
- Redefine intellectual property skills and talent for the new era
- Visualize business contributions through effective use of intellectual property, including exercising, leveraging, and monetizing rights

Intellectual Property Strategies to Increase Corporate Value

We categorize our organization into three areas based on a matrix with technology areas on the vertical axis and portfolio attributes (stable earnings businesses / foundational businesses / core growth businesses / next-generation business areas) on the horizontal axis, and we pursue the optimal approach tailored to the characteristics of each area.

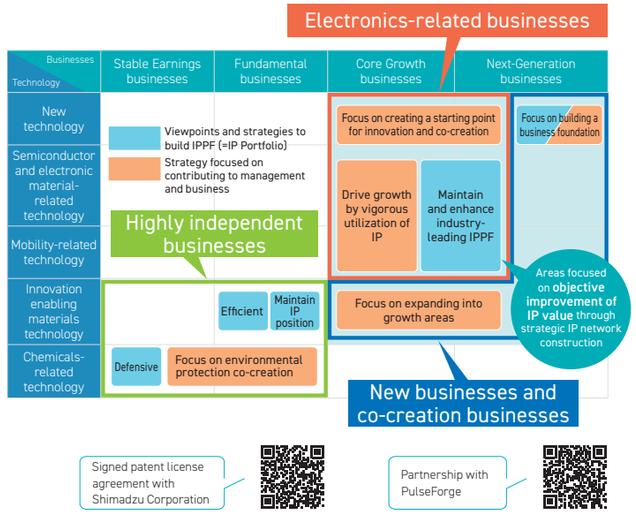
Highly independent businesses : Building barriers to entry with a multi-layered patent network that focuses on cost efficiency based on differentiated technologies

Electronics-related businesses : Overseeing the entire supply chain, we execute a dual intellectual property strategy combining exclusivity and co-creation

New businesses and co-creation businesses : Use intellectual property as a catalyst to facilitate an influx of partners, allowing for market development and risk diversification

We have assigned IP Designers to serve as hubs in the field. IP designers' mission is not only to obtain patent rights, but also to visualize the market, competitors, and customers in the IP landscape, and to design application strategies, contract structuring, and business schemes in a seamless manner. They aim to create a direct connection between intellectual property and business by working with business units to provide intellectual property solutions that push up EBITDA and support their growth stories. In the future, we plan to develop a program to systematically train IP Designers that possess strategic thinking, financial knowledge, and negotiation skills. By producing talent in such a systematic manner, we also aim to strengthen our competitive advantage in terms of human capital.

Furthermore, we are undertaking initiatives that are expected to contribute financially, while also creating new technologies and businesses that solve social issues, such as the patent license agreement with Shimadzu Corporation and the partnership with PulseForge. By communicating the results of this "IP-driven co-creation" to society, we will demonstrate the contribution of our IP strategy to enhancing corporate value.



Initiatives to Improve Intellectual Property Value

We position intellectual property as a "strategic asset that generates future cash flow" and continuously monitor TR (technology relevance) and MC (market coverage) from LexisNexis's PatentSight* as our core KPIs. TR and MC are calculated based on the number of citations and the number of countries where applications are filed, objectively demonstrating how widely our intellectual property covers the market and establishes technological advantage.

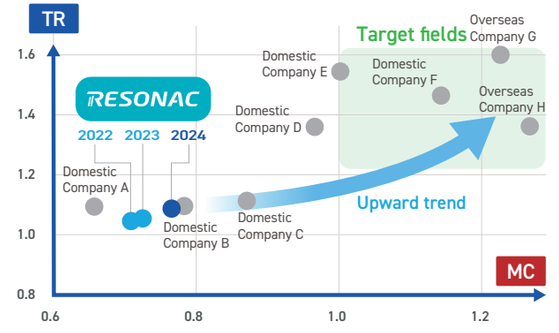
We have strengthened our market advantage and technological leadership by globally obtaining rights to our research and development results in an "early, multifaceted, and layered" manner, conducting quarterly TR and MC reviews, and dynamically inventorying low-value-added patents. As a result, TR and MC have steadily increased since 2022.

In semiconductor materials, our Competitive Impact (CI), calculated as TR × MC, has also improved significantly. The improvement in CI indicates that: (1) our patent network establishes exclusivity exceeding industry benchmarks, (2) we have built a global patent network covering key markets, and (3) strengthened barriers to entry allows us to expect sustained margins in the medium to long term.

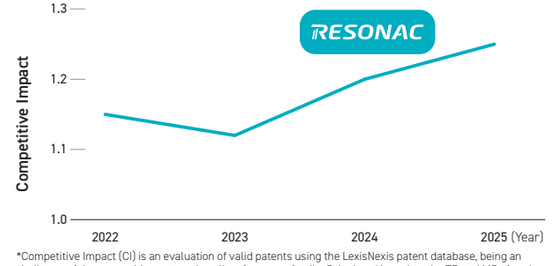
Our goal is to raise TR and MC to a globally top-tier level in the functional chemicals field by 2028, and to accelerate the creation of free cash flow and sustainable profit growth originating from our intellectual property. Through a robust IP network and portfolio optimization, we will clearly demonstrate the enhancement of long-term corporate value with continuous numerical disclosure and performance reporting.

*"PatentSight" is a registered trademark of PatentSight GmbH in Japan and other countries.

Improvements in the Technology Relevance (TR) and Market Coverage (MC) of the patent portfolio and target areas



Trend in indicator of competitiveness in the semiconductor-related field



*Competitive Impact (CI) is an evaluation of valid patents using the LexisNexis patent database, being an indicator of the competitiveness and quality of a patent family. Calculated based on the TR and MC of each patent. (CI = TR × MC)

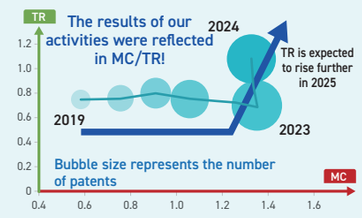
Example ## Intellectual property supporting business strategy: PSC: Packaging Solution Center

The Packaging Solution Center (PSC) works to create value by formulating intellectual property measures that are linked to our business strategies from the early stages of research and development. In PSC, we have equipment and lines equivalent to mass production processes that enable prototyping of semiconductor packages, allowing researchers and developers to immediately incorporate customer needs and conduct demonstrations. This enhances technical reliability and steadily increases our market presence and the speed of co-creation with customers.

In addition to traditional acquisition of IP for the purpose of exclusivity, PSC is actively promoting the acquisition of IP centered around co-creation. Patent portfolios reflecting the customer perspective expand the points of co-creation, strengthen our technological capabilities and brand recognition, and contribute to establishing a corporate position where we continue to be chosen. For example, through co-creation with customers, we pioneered the theme of moisture absorption in the industry, patented it*, and achieved high ratings (TR 13.9, MC 1.7). The assessed value of PSC-related intellectual property has increased year by year as a result of these initiatives. We are expanding our intellectual property portfolio as a source of competitive edge that create future cash flows.

*Patent No. 6950699

Trends in PSC TR and MC



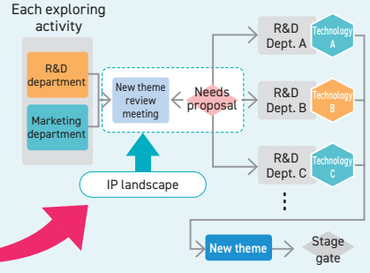
Example ## Proactive intellectual property strategies: Exploring needs to propose new themes using IP landscape

We are horizontally deploying our IP landscape beyond R&D to include the creation of new businesses and exploration of growth areas. When formulating new research themes, the R&D department, which drives technology, and the marketing department, which capture market trends, collaborate closely and set themes from a customer-centric perspective. By surveying global market trends, customer challenges, and competitor technologies through the IP landscape, we improve the accuracy of theme exploration and support appropriate decision-making.

Furthermore, we have established an environment in which all employees can use cloud-based patent research and analysis tools, normalizing the use of intellectual property information at the on-site level. This structure enables the entire organization to seize opportunities both from market and technological perspectives and quickly and flexibly translate them into value creation.



Scheme for proposing new themes



Human Resource Strategies

Please visit our website for more details on our policies, promotion system, and activities.



Nori Imai
Chief Human Resource Officer (CHRO)

Amid the rise of AI, human happiness is now more important than ever. Resonac aims to create an environment where all employees can unleash their individuality while valuing their physical and mental health, and work hard and grow together with colleagues who share the same aspirations to achieve our Purpose. We pursue happiness through physical and mental health, connections with colleagues, and a sense of accomplishment, which ultimately leads to sustainable business growth and the enhancement of corporate value.

The basis for this is the implementation of the Purpose and Values we introduced in 2022. At Resonac, all employees come together to create a culture of co-creation unique to Resonac through the combination of quick wins and self-driven activities. This year's theme is the (further) implementation of value-based co-creation. In today's fast-changing world, we need to take swift action. We will continue to hone our mindset of "just give it a try!" and continue taking on new challenges.

Schedule for the implementation of personnel measures

2023

- Preparations for introducing new human resource system
- Consideration of framework for early selection of core management personnel
- Start the introduction of talent review
- Creation of CxO/BU leader succession plan (implemented outside the system)
- Start the introduction of co-creative leadership training
- Start the introduction of training sessions to bolster the co-creative collaboration capabilities

2024

Business Integration

- Integration of personnel systems (Japan)
- Introduction of new human resource system (mainly in Japan)
- Selection and development of candidates for core management personnel (Japan)
- Implementation of succession planning / talent review (Japan)
- Implementation of co-creative leadership training (Japan)
- Implementation of training sessions to bolster the co-creative collaboration capabilities (Japan)

2025

- Global development
  - Introduction of global grades
  - MBO unification
  - Selection and development of candidates for core management personnel
  - Succession planning / talent review
  - Implementation of co-creative leadership training

2030

2025 -

- Expansion and establishment of global measures
- Trials of new measures in Japan

Ideal state

- Global development
  - Ensuring the right person is in the right position on a global scale
    - Global internal recruitment system
    - Strategic rotation, etc.
  - Optimization of global personnel system
  - Acceleration of delegation of authority to managers

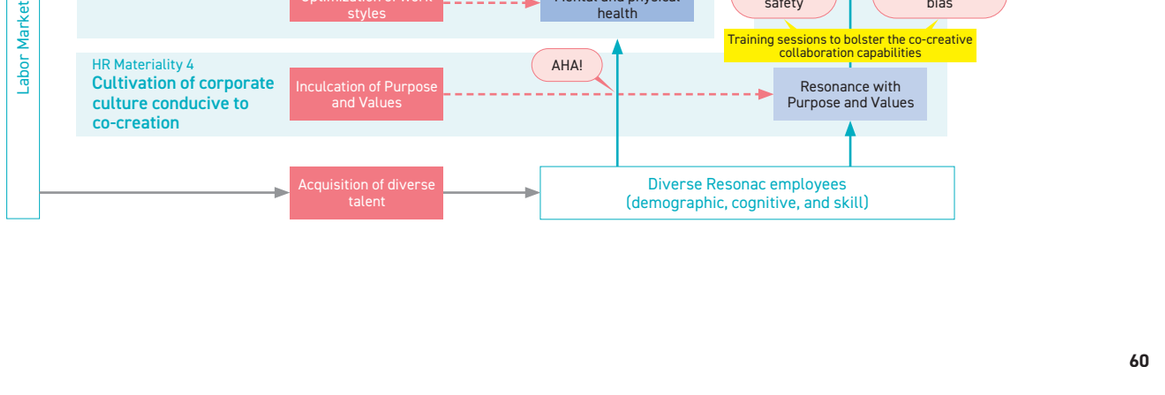
Key KGIs and KPIs that measure the progress with measures to address material issues for human resources (other items, 2025 targets, and 2024 results are provided on P126)

Composition	Key items (KGI/KPI)	2023	2024	2025 (targets)
Hire & Develop talent for the business	Future talents Portfolio formation	First target division formation	Formation for two target divisions	Portfolio formation for target divisions
	Succession planning readiness rate	135%	142.7%	150%
Become an employer of choice	Employee engagement score	54%	57%	Improved year on year
Develop self-driven professionals	Percentage of line managers who participated in co-creative leadership training	70%	87%	90%
Cultivate corporate culture conducive to co-creation	Purpose and Values implementation survey score	Purpose implementation: 48% Values implementation: 51%	Purpose implementation: 57% Values implementation: 67%	Purpose implementation: Year-on-year improvement Value implementation: Year-on-year improvement

Resonac's human capital management model

With the aim of growing our business as a functional chemical company, we are fostering co-creative talent that create and provide new functions. By formulating a human capital management model linked to our four material issues for human resources and implementing various measures to address them, we will develop co-creative talent to realize our Purpose.

Based on our four material issues for human resources and "fostering autonomous and creative human resources and cultivating the associated corporate culture," one of our material issues for sustainability, over the long term, we will create an organization that creates co-creation talent, and in the short to medium term, we will implement measures to foster co-creative talent to realize growth as a functional chemical company.



Human Resource Strategies

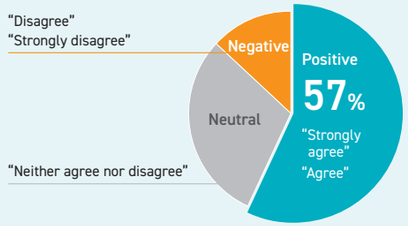
Utilizing employee feedback in management!

Engagement survey 2024

Every year, Resonac conducts engagement surveys focused on listening to employees' voices in a timely manner and utilizing them in management through various measures. In the survey conducted in 2023, positive response rate of the engagement score was 54%, but rose to 57% in the 2024 survey.

While there have been improvements in the figures for "career development support" and "workplace environment/psychological safety" (for reference: 51% in 2021), further efforts are needed for "management's response to employee feedback" and "work process," as there have been few improvements in these items and employees' actual feelings are not reflected in the figures.

Engagement score 2024



Number of respondents
21,735
Target
24,574
Response rate
Approx. 88%
(up 5 pts from the previous survey)

Response rate

2021 63% ▶ 2023 83% ▶ 2024 88%

Engagement score

2021 54% ▶ 2023 54% ▶ 2024 57%

Priority issues	Survey topics	Proposed actions for improvement in fiscal 2023	Specific measures	Positive response rate		
				Fiscal 2021*	Fiscal 2023	Fiscal 2024
Communication	Management's response to employee feedback	・Disclose the results of various surveys and the decisions based thereon to survey participants	Report the engagement survey results to employees and communicate the results via LINE	43%	44%	44%
	Expectations for positive change fueled by survey results	・Disclose progress with groupwide/departmental action plans to improve engagement	Consider implementation of actions for improvement at each workplace (1,129 cases across the Resonac Group)	23%	46%	45%
Career development	Meaningful discussions between employees and managers about one's own career development	・Provide support for improving communication skills as a co-creative manager	Start rolling out 360-degree feedback for managers and co-creative leadership training overseas, conduct one-on-one training	44%	45%	52%
	Receiving feedback that helps employees improve the quality of their work	・Build a corporate culture that praises co-creative change and improvement activities		48%	48%	51%
	Expectations toward achievement of overall career goals	・Expand career autonomy support system for employees	Launch a career portal site on the company Intranet, conduct rank- and age-based career training, external career consulting	54%	55%	57%
Work processes	Work processes that maximize employee productivity	・Build a corporate culture that praises co-creative change and improvement activities ・Streamline cross-CXO/BU work processes	Promote AHA! activities, publish tips for improving communication on the CEO blog, start operation of the Work Improvement Ideas Box, and review/reduce work issued by the CXO	32%	39%	40%
Workplace environment	Collaboration between people working together to get a job done	・Create an organizational culture where psychological safety is ensured and individuals are respected	Develop training on psychological safety through training sessions to bolster the co-creative collaboration capabilities	72%	76%	77%
	Psychological safety (composite index)			51%	60%	61%

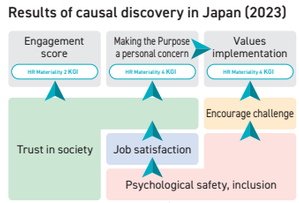
* As 2021 was before the merger of the former Showa Denko and the former Hitachi Chemical, survey items differ from those in 2023 and beyond. These numbers have thus been provided for reference only.

Analyzing causal relationships with engagement surveys and moving on to the next step

Causal discovery is a method of statistically inferring the relationship between factors that cause a certain phenomenon. At Resonac, we use Bayesian networks, one such method, to visually organize the probabilistic relationships between multiple elements, as shown in the figure below. We clarify the chain of causal relationships, such as "When A occurs, B is more likely to occur" or "When B increases, C also increases," and not just look at correlations, but also explore deeper connections, such as "What is the cause and what is the result?" which we then use to implement our initiatives.

Dialogue with superiors and career expectations emerged as factors resulting from career development support, one of our priority measures.

Results of causal discovery in Japan (2023)



*▲: Direction of causality (Bayesian network analysis using score-based structural learning)

Based on the causal discovery of the 2023 engagement survey results, we set four companywide priorities (listed on the left), incorporated them into concrete measures, and started implementing them. For "career development support," set as one of our actions for improvement, we focused on supporting the career development of team members through measures such as introducing 360-degree feedback for managers and implementing one-on-one training. These efforts led to an increase in the positive response rates for related items. As a result, the causal discovery of engagement scores for 2024 confirmed that dialogue with superiors and career expectations were causally linked to improved engagement scores.

Additionally, the causal discovery of organizational-level engagement surveys revealed that some workplaces need to take measures for improvement in terms of psychological safety and inclusion. We have subsequently implemented such initiatives as delivering messages from site managers and other members of the management team through videos and other means. From 2025 onwards, we will also focus on work engagement measures to ensure that our employees can feel job satisfaction.

Going forward, we will not only continue to verify the effectiveness of our measures, but also analyze the causal relationships obtained, grasp the current situation, and make predictions, so that we can plan and implement effective measures that are backed by data, rather than simply carrying out ad hoc measures.

Utilizing Generative AI to Improve Engagement

At Resonac, we are developing our own AI tool to help on-site managers interpret engagement survey results as they move to take concrete action.

This tool will realize the verbalization of the difference between managers' perception of their organization and the state of the organization as determined by the AI. By utilizing this tool, organizations will be able to take more effective action by approaching their issues using an objective AI perspective.

We have now created a prototype and are in the user testing stage. We are making preparations with an eye to implementation in fiscal 2026 onwards.

We are developing tools that use generative AI to support problem-solving within each organization. We will continue to carry out initiatives to further improve engagement!



Naoya Koda
Culture Communication Department

Human Resource Strategies

Our Current Priority Measures

FOCUS (1)
Understanding individuality and using it in management! Team building using FFS theory

More than 4,000 individuals have completed FFS (as of July 2025)

Resonac uses FFS (Five Factors & Stress) theory to promote the creation of teams in which each individual is aware of their unique personality and is able to leverage their strengths (See page 23 for more details on FFS theory). To date, we have conducted workshops at the organizational level that incorporate FFS theory during junior training, helping employees to understand diversity and apply it to their work. Therefore, we are utilizing the strengths of FFS theory, namely the quantification of individual behavioral characteristics (personality) and the design of relationships that takes individuality into account, to build a system that considers individuality in organizational management, which tends to rely on experience and intuition.

Case study **Use of FFS theory in the R&D field**

In May 2024, the CTO organization responsible for R&D conducted an FFS diagnosis for all employees within the organization. Employees then created self-understanding sheets based on the results, which they then shared with each other and held workshops where they could provide feedback to one another. We hope that by understanding that their own tendencies and unconscious communication can cause stress to others, our employees will be able to communicate in a way that respects and makes the most of each other's individuality.

We have also developed FFS trainers within the CTO organization, and have co-created and launched a program in collaboration with an external company in which the trainers taking the lead in using FFS theory as a tool to support organizational management.

Head of each organization will formulate training plans that take into account the individuality of their subordinates and implement communication with an awareness of FFS theory. It is a program designed to enable participants to share their realizations with other participants, thereby broadening and deepening their practical knowledge.

P56



Feedback from participants

Maki Yamada
Institute for Advanced Integrated Technology

At first, I couldn't imagine a specific use for FFS theory, and felt that it might be used to classify people. Taking this program helped me understand that it's an effective tool in team building to improve team performance. Understanding of FFS theory has deepened within the team, enabling members to respect each other's individuality and create synergies.

These are the effects we're aiming for!

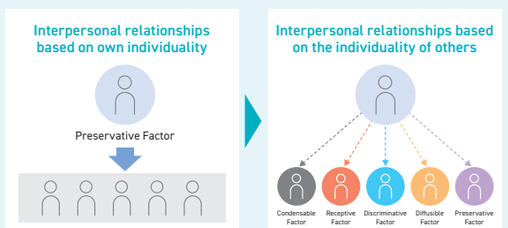
What we expect from FFS theory is to scientifically examine the quality of relationships. While this initiative is still in its early stages, we are seeing an increase in people using FFS theory when introducing themselves. This makes me feel that people are showing interest, which is a positive sign.



Feedback from organizers

Satoshi Yamaoka
Research Institute Strategy Department

The accompanying support program provided by an external company was conducted for 14 participants, mainly head of organizations, with the aim of establishing reproducible management with a scientific perspective.



Program satisfaction **4.7** / 5.0 (5: 10 persons / 4: 4 persons)

Would you recommend the program to other managers? **4.5** / 5.0 (5: 9 persons / 4: 3 persons / 3: 2 persons)

Use FFS theory as a tool to identify individuality → Understand the individuality of subordinates → Formulate training plans for subordinates → Execution of training plans

FOCUS (2)
Understanding Resonac's values and reflecting them in our actions! Ramping up leadership training on a global scale

90% of all managers have completed training on a global scale

We are implementing common global training measures to ensure that our line managers around the world understand Resonac's Values and reflect them in their day-to-day conduct as management. The core programs are co-creative leadership training and training sessions to bolster the co-creative collaboration capabilities.

In co-creative leadership training, managers learn the knowledge and skills necessary to effectively set goals, hold one-on-one meetings, and provide feedback and coaching to support the growth of their subordinates. The training focuses on how to utilize management by objective (MBO), on-the-job training (OJT), and on strengthening communication with subordinates. We also implement train-the-trainer (TTT) programs for HR overseas. More than 90% of managers have already completed training.

In training sessions to bolster the co-creative collaboration capabilities, the aim is to acquire fundamental skills to enhance team collaboration, such as bolstering their ability to provide psychological safety, understanding unconscious bias, improving communication skills, active listening skills, and facilitation skills.

Furthermore, as a follow-up measure to complement these training programs, we have developed original workshops that enable managers to reaffirm the essence of our Values and their connections to behavior, and to incorporate them into behavioral growth targets. Behavioral growth targets are targets set with the aim of achieving behavioral growth based on values of a company, and are a mechanism for achieving both individual growth and the instilling of organizational values.

Through this series of initiatives, we aim to promote the implementation of value-based management to foster a co-creative organizational culture on a global scale.

By participating in the TTT program, I was able to not only improve my facilitation skills, but also gain experience in localizing the global training program to suit the circumstances of my country. I am proud to have been able to support growth rooted in on-site operations by linking Resonac's values with employees' daily work. I hope to continue contributing to local human resource development and sustainable development through learning opportunities.



Ms. Candy Tan
Resonac Asia Pacific

Dr. Napattaramon Phalaphon
Resonac Materials (Thailand)

FOCUS (3)
Mechanisms to further encourage autonomy: internal recruitment and project challenge

As a measure to foster an awareness of career ownership among employees and to provide opportunities for them to build their own careers independently, we have been operating an internal recruitment system since 2022, which allows employees to volunteer for transfers.

Furthermore, to encourage employees to take on new challenges, we have begun operating an internal side job system (project challenge system) that allows employees to participate in projects in other departments for a certain period of time while continuing their current work. This provides employees with an opportunity to demonstrate their hidden potential, while also encouraging them to pursue the growth opportunities and career autonomy they want.

	2023	2024
Number of successful internal job postings	80	108
Co-creative leadership training participants	1,448	1,754
Training sessions to bolster the co-creative collaboration capabilities	1,172 (In Japan only)	641 (Japan: 369; Overseas: 272)

"From Resonac to a Colorful Career" has reached 100,000 views in less than a year since its launch! We want everyone who works at Resonac to enjoy their own unique career journey...! To this end, we will continue to provide opportunities for employees to think about and discuss their careers, and take on challenges with an eye to the future!



Miki Mochizuki
Organization & Talent Development Group
Human Capital Management Department

Learn About the Various Careers at Resonac!

From Resonac to a Colorful Career

In 2024, we launched an internal career information website "From Resonac to a Colorful Career." We share various career-related information, mainly through interviews with employees who work enthusiastically based on their own principles and preferences. Introducing the career histories and values of various employees in this way provides an opportunity for viewers to think about their own careers.



03 Business Driven by Co-creation

Here we introduce Resonac's business and the initiatives that drive its competitive advantage.

65 Dialogue: Resonac's Co-creation "Kata"
71 Overview of Resonac's Business
73 Business Strategies (Front-end / Back-end Semiconductor Materials)
77 Business Strategies (Hard Disk Media)
78 Business Strategies (SiC Epitaxial Wafers)
79 Business Strategies (Mobility)
80 Business Strategies (Innovation Enabling Materials)
81 Business Strategies (Basic Chemicals)
82 Business Strategies (Graphite)

Dialogue: Resonac's Co-creation "Kata"

The Present and Future of Resonac's Co-creation "Kata", Driven by PSC and PMiC



Resonac's co-creation: creating new value through customer dialogue and turning it into products.
The Packaging Solution Center (PSC) is the origin of that approach, carefully listening to customer feedback and often offering forward-thinking proposals.
This approach has come to set a new benchmark for development within the industry.
In 2023, the Power Module Integration Center (PMiC), which focuses on the mobility field, began full-fledged operations. This is ushering in a new phase in the evolution of our co-creation model, or "kata."
Three leaders in co-creation share their vision for Resonac's distinctive approach, drawing on their experience and perspectives.

A co-creation model built step by step over more than 30 years

Fukushima: Our goal is co-creation. The backbone consists of the Packaging Solution Center (PSC) and the Power Module Integration Center (PMiC). It started around 30 years ago. Setting up equipment and systems to evaluate customer products was a groundbreaking move for a functional materials company at the time. Hatakeyama-san, you have been with the PSC since you joined the company, correct?

Hatakeyama: That's right. The Electronic Packaging Center, the predecessor organization to the PSC under the former Hitachi Chemical, was established in 1994. I joined Hitachi Chemical in 1997 and was assigned there. However, when the Mounting Center was first established, it did not have the presence that the PSC commands today. There were initial concerns internally about our company, a materials manufacturer, venturing into semiconductor packages, a finished product, and taking on their evaluation. But from the early 2000s, gradual changes began to occur. Our evaluations led to the creation of new products and the adoption of our materials by new customers. These developments made the results of our efforts increasingly tangible. In the late 2000s, the focus shifted from the materials themselves to their applications. This enabled us to offer customers proposals that included usages of these materials. I believe this process provided the PSC with a prototype for today's co-creation model.

Fukushima: Particularly in the semiconductor field, it would be hard to create something from scratch that could fulfill the role of the PSC. We have a rich history, well-developed equipment, and a co-creation framework established with our customers. No other environment compares to this. A major strength in advancing our business is our ability to co-create with customers, which effectively enables us to engage with the market. We aim to showcase the value, future potential, and social and environmental contributions of the PSC as the Resonac Pride Product and Services.

P127 / Resonac Pride Products & Services

	PSC (Packaging Solution Center)	PMiC (Power Module Integration Center)
Location	Shinkawasaki, Kawasaki City, Kanagawa Prefecture 	Oyama City, Tochigi Prefecture  Entrance  Evaluation Room
Establishment	October 1994	July 2021
Functions	● Advanced packaging material development promotion (development collaboration) ● Promoting certification through customer co-creation projects (external co-creation)	● Power device material development promotion (development collaboration) ● Promoting certification through customer co-creation projects (external co-creation)  Co-creation Room  Showroom
Major external co-creation activities	● JOINT2 (ending in 2026), US-JOINT (starting operation in 2025) P75 ● Ongoing individual projects ● Annual visitors: 265 companies (2023), 255 companies (2024)	● Ongoing projects with customers ● Academic-industry projects in planning ● Annual visitors: 13 companies (2024)

Dialogue: Resonac's Co-creation "Kata"

Hara: For example, in the mobility business I oversee, our main customers are automakers. Customers often know what they want to achieve but lack clarity on whether the right materials exist, if new ones can be created, or how to combine materials effectively. There might have been cases where development stalled because customers were unaware of existing materials that met their needs or how to use them. Not only do our customers lose out in such situations, but so do we, and that is something we must avoid. Engaging with customers to quickly identify their challenges lays the foundation for developing essential products.

Co-creation benefits both companies and developers

Fukushima: Not only in mobility business, but also in semiconductors and other businesses, it is the customers themselves who are at the cutting edge of innovation. That is why engaging directly with customers enables us to be the first to pinpoint and delve into the technologies that need development. From a developer's perspective, this means being able to start testing a hypothesis quickly. Conversely, without these leads, starting hypothesis testing from a vague position almost always leads to failure. You may fail to develop the desired product, or if you manage to develop it, the process may take longer and cost more than planned. In today's fast-paced development environment, moving slowly is not an option. The co-creation framework we have built directly captures customer needs and enables most rapid hypothesis testing. This is more than just collaboration; it functions as a strategic tool to boost development productivity and success rates.

Hatakeyama: Additionally, from the developer's perspective, this environment plays a crucial role in boosting their motivation. For developers, working with cutting-edge technology is the ultimate joy. Witnessing new ideas emerge from newfound knowledge is a truly rewarding experience. When work feels enjoyable like a hobby, that is when innovation and new discoveries emerge. Another advantage is that this research is market-connected, allowing us to observe customer reactions as we progress. No matter how intriguing a technology might be, if it is not market-connected, the direction of the research will veer off course. You have to consider why you're developing it, and what the development is supposed to achieve. Clearly defining goals and making each step tangible is essential for maintaining developer motivation.

Fukushima: In that sense, I believe our launch of JOINT2 is having a positive impact on developers. JOINT2 is a consortium comprising 14 companies engaged in developing semiconductor packaging materials, substrates, and equipment. By pooling their knowledge and collaborating on research, diverse companies and developers can witness moments of new insight together. I believe this will reveal a wide range of possibilities. Say for instance Company A can't meet a request with its materials alone, but it finds that combining them with Company B's materials would make it feasible. Company A and Company B can then collaborate to propose a solution to the customer. This offers clear advantages to customers because it allows them to receive the products they're waiting for more quickly. Even companies that are usually rivals can collaborate to engage with the market. This is another example of the co-creation model.



We have a rich history, well-developed equipment, and a co-creation framework established with our customers. No other environment compares to this. [Fukushima]



It is crucial to develop and test our own hypotheses from customer dialogue to anticipate future trends and have the right information ready. [Hatakeyama]

Hara: Japanese companies have traditionally conducted research and development independently, often resulting in multiple firms investing significant time and money to develop similar products. Budget and other constraints limited the scope of development, preventing progress from reaching full speed. As our co-creation model gains traction, it can eliminate inefficiencies, propose solutions for unnoticed customer challenges, and generate new development themes, leading to diverse applications.

The PMiC as a future growth driver

Fukushima: The PMiC is the key to this. Hatakeyama-san, alongside your role at the PSC, you have served as the head of the PMiC since June 2024. Hatakeyama-san, alongside your role at the PSC, you have served as the head of the PMiC since June 2024. You are expected to rapidly advance the co-creation model within the PMiC.

Hatakeyama: That's right. The PMiC officially began operations in 2023. The PSC has established a successful co-creation model and is gaining traction with collaborations and demonstration experiments with various manufacturers. But it has taken 30 years from its predecessor organization to reach this point. The PMiC is tasked with the challenge of rapidly replicating and advancing the co-creation path that the PSC has developed over 30 years. However, customers in the semiconductor field, which the PSC mainly serves, and those in the mobility field, which the PMiC mainly serves, have distinct characteristics. The latter essentially consists of new customers, and what has been developed at the PSC may not always be applicable. How can we propose solutions that resonate with new customers and cultivate sustainable relationships with them? We aim to carefully consider this while working to establish a solid co-creation model within the next four to five years.

Hara: Our business unit development teams and sales representatives are already visiting customers with the PMiC in mind, creating opportunities for co-creation. We hear from many customers that this is exactly what they wanted.

Fukushima: Securing a foothold in both the semiconductor and mobility markets, despite their differences, is immensely significant for us due to their global importance. This initiative is essential for Resonac to compete globally.

Hatakeyama: That is why it is important to anticipate future trends based on insights gained from customer dialogue. It is crucial to develop and test our own hypotheses, ensuring we have the right information ready. It is too late to act only after a customer asks if we are able to do something.

Fukushima: Can we swiftly identify and address emerging customer issues by monitoring industry trends and engaging

in dialogue? That is where we differentiate ourselves. If you can immediately say, "We have a solution for that," the customer's response is totally different. But if the only answer you can give on the spot is vague, the customer will not want to collaborate with Resonac.

Hara: In the not-too-distant past, sales representatives would engage with customers' purchasing departments by casually bringing up insights and stories they had heard within the Company. However, that approach no longer works. Development speed is rapidly increasing every day. The era when material manufacturers could thrive by selling materials alone is over. Instead of merely delivering what is requested, we must actively engage and generate profits through co-creation.

Potential for expansion led by heat management

Fukushima: In mobility, heat management is crucial for the transition to electric vehicles, presenting significant opportunities for us. In heat management, the prevailing view has long been that heat is undesirable and must be managed. The development goal thus focused on preventing heat generation and efficiently cooling any generated heat. However, in recent years, there has been an increasing focus on how to effectively utilize generated heat, highlighting the rapid changes in the environment. The PMiC will enable us to navigate these turbulent times together with our customers.

Hara: Frankly, until recently, only a handful of people in the mobility sector were engaged in research and development for heat management. Internal combustion engine vehicles were first mass produced in 1908. Over the course of more than a century since then, the idea that a car is synonymous with an internal combustion engine became common wisdom. However, as the shift to electric vehicles gains pace, there will be a shift in perception. Cars will increasingly be seen not as machines powered by internal combustion engines, but as systems driven by batteries and electric management devices.

In times of such transformation, you can't set out to create an environment for co-creation with automakers who are directly driving that transformation. Automakers themselves undoubtedly feel a strong sense of urgency that the status quo is unsustainable. If customers clearly perceive the value of co-creating with us, we can anticipate further growth.

Fukushima: And if we can develop a third and fourth co-creation framework following the PSC and PMiC, Resonac will undoubtedly grow into a globally renowned company. Of course, we must continue to hone our accumulated technological capabilities and material development capabilities.

Hara: However, as an integrated company, Resonac faces the challenge of fragmented responsibilities, with experts in each field dispersed across the country. In such situations, research and development often leads to inefficiencies. It is not unusual for stalled development at one business site to be swiftly resolved using knowledge from another. Then it becomes a case of "Why were we spending so much time on this?" To expand our third and fourth co-creation frameworks, it is essential to clearly understand our strengths. To address these challenges, we are focusing on developing and establishing "Technology Landmarks." Technology Landmarks virtualize our internal structures, creating an environment where each team can recognize and leverage specialized technical expertise. This approach eliminates waste in the knowledge we have built up over many years, leveraging it into a greater strength.

Develop talent that can fully leverage the co-creation environment

Fukushima: We have discussed the third and fourth co-creation frameworks expanding from the PSC and PMiC. However, we have to remember that these frameworks are merely structures. These structures are only as valuable as the people who can use them effectively and the environment that supports their optimal utilization. Resonac plans to define "co-creation talent" and systematize rotations and skill development to offer diverse experiences and perspectives. Additionally, by developing the Technology Landmarks, that visualize internal knowledge assets, we are working to prevent duplication and isolation of insights while promoting internal co-creation. It's about business, organization, and talent evolving together as one. That is what Resonac achieve to be chosen in the next era.

Hara: Building diverse experiences through cross-cultural exchange is key. Instead of focusing solely on development or sales, we need to create systems that facilitate interaction across various fields and with diverse customers.

Fukushima: This area in particular requires consideration. Developing technological capabilities takes time, but focusing solely on technology hinders the growth of desired talent. It is important to take the time needed to learn technology and gain experience. But there must also be opportunities to step out and engage in roles like sales or marketing that involve co-creating with customers, as well as advancing by exploring new technologies.

Hatakeyama: That is why at the PSC we ensure new employees are encouraged to develop expertise in a specific area where they can excel beyond others. We want each of them to deepen their knowledge to the point where they are considered the top expert at Resonac in their field. We aim to instill in them an awareness that broadens the base of their knowledge.

Fukushima: While diverse experiences are important, groundbreaking innovation requires a deep technical focus. We aim to further develop human resources that respect and are respected by both the sales and technical fields.

In this time of transformation, it is not easy to build co-creative relationships with the automakers, who are directly driving that transformation. [Hara]



• About this dialogue

Participants: Masato Fukushima, Chief Technology Officer (CTO); Satoshi Hara, General Manager, Mobility Business Headquarters; Keiichi Hatakeyama, Head of Packaging Solution Center/Head of Power Module Integration Center
Aim: Look back on the co-creation model cultivated at the PSC, discuss further development of the said model and the challenges facing PMiC, and present a growth strategy from the present into the future

• Keywords of the dialogue

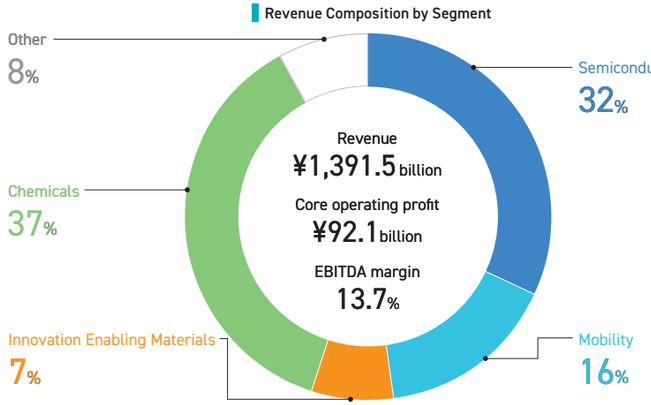
A 30-year path to building co-creation	Venturing into finished products, proposing ways to use materials, and visualizing through Resonac Pride Products and Services	Rapid response through dialogue with the market	Start testing hypotheses quickly, and anticipating customer issues
New possibilities for heat management	Automobiles to be increasingly seen as systems driven by batteries and electric management devices, and the value of co-creating with Resonac	Structures of co-creation and human resource development	Technology Landmarks, people who can effectively use structures, and business, organization, and talent evolving together as one

Overview of Resonac's Business

At the Board of Directors meeting held on November 26, 2024, the Company resolved to voluntarily adopt the International Financial Reporting Standards (IFRS) in place of Japanese Generally Accepted Accounting Principles (JGAAP) for the preparation of the consolidated financial statements and consolidated financial statements as set forth in the Companies Act. The figures on this page are also based on IFRS.

2024 Overview

Revenue Composition by Segment



Previous fiscal year (2023)

Revenue
¥1,295.4 billion
Core operating profit
¥9.9 billion
EBITDA margin
8.2%

Semiconductor and Electronic Materials

Revenue: ¥445.1 billion (¥338.1 billion in the previous fiscal year)

Front-end Semiconductor Materials: ¥86.4 billion
Back-end Semiconductor Materials: ¥209.4 billion
Device Solutions: ¥106.5 billion

Core operating profit: ¥73.7 billion (¥3.3 billion in the previous fiscal year)

EBITDA margin: 25.9% (13.0% in the previous fiscal year)

Mobility

Revenue: ¥215.5 billion (¥219.0 billion in the previous fiscal year)

Core operating profit: ¥6.7 billion (¥7.0 billion in the previous fiscal year)

EBITDA margin: 11.7% (11.5% in the previous fiscal year)

Innovation Enabling Materials

Revenue: ¥97.0 billion (¥93.0 billion in the previous fiscal year)

Core operating profit: ¥11.3 billion (¥8.7 billion in the previous fiscal year)

EBITDA margin: 17.7% (15.8% in the previous fiscal year)

Chemicals

Revenue: ¥517.2 billion (¥519.4 billion in the previous fiscal year)

Olefins and Derivatives: ¥329.8 billion
Basic Chemicals: ¥87.1 billion
Graphite Electrodes: ¥100.2 billion

Core operating profit: ¥10.1 billion (¥6.1 billion in the previous fiscal year)

EBITDA margin: 5.9% (4.8% in the previous fiscal year)

* Core operating profit is calculated by excluding gains and losses arisen from non-recurring factors from operating profit. Gains and losses from non-recurring factors refer to other income, other expenses, and impairment losses (included in cost of sales, selling, general and administrative expenses).

Business Portfolio Optimization

Some changes were made to our disclosed segments in 2025. The former Olefins and Derivatives subsegment was turned into an independent segment following the launch of Crasus Chemical, and the former Graphite Electrodes and Anode Materials subsegments were combined to form the Graphite subsegment.
We establish investment policies and target EBITDA margins according to portfolio attributes, and manage each business accordingly.

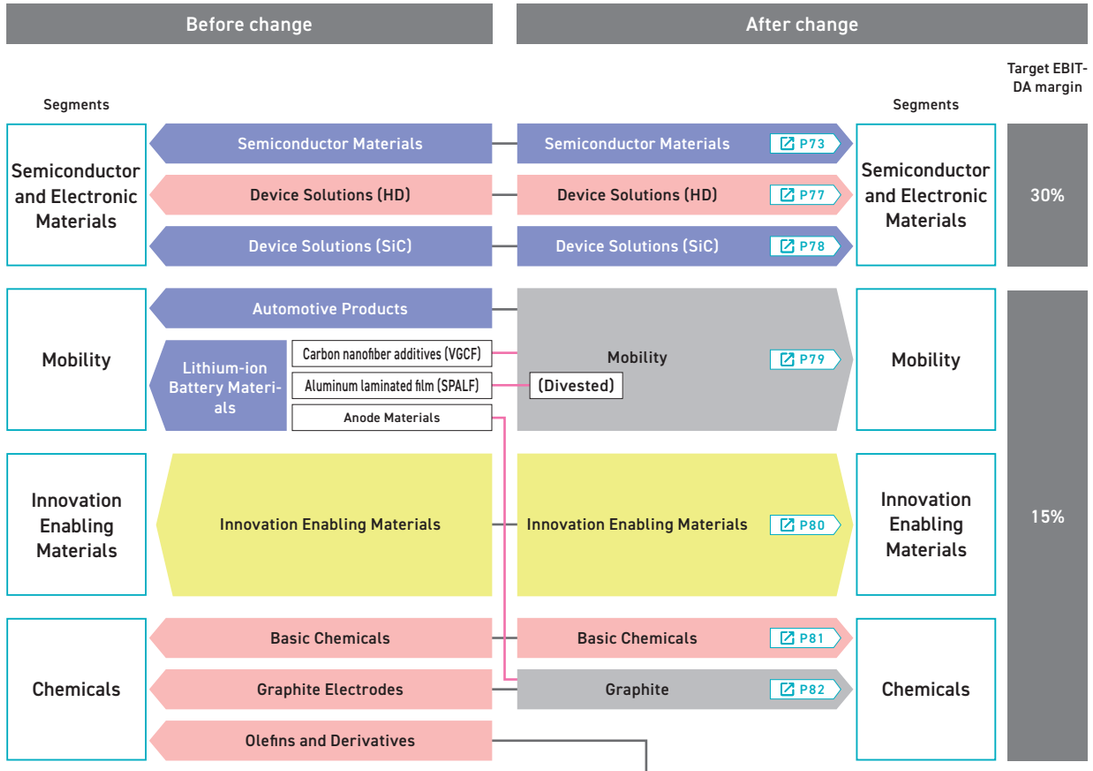
Portfolio attributes

Core Growth businesses
Businesses we will actively invest in to pursue significant future growth

Stable Earnings businesses
A revenue base that generates stable profits, producing funds for investments for the entire company

Fundamental businesses (technologies/ materials)
Technology platform businesses that support business innovation

Undergoing structural reforms
Businesses we will restructure based on the rapidly changing market environment



P45



CRASUS CHEMICAL
Dialogue: Choosing to Execute a Partial Spin-off

Crasus Chemical Business Briefing (Video)

Business Strategies

Semiconductor and Electric Materials

Front-end / Back-end Semiconductor Materials



Hiroyuki Yamashita
General Manager,
Electronics Business Headquarters

Please visit our website for more details.

Vision for the future (2030)

- **Supply advanced semiconductor materials to support the advancement of the digital society, such as the rapidly growing AI demand, and realize a sustainable society by contributing to energy conservation and reducing environmental impacts.**

Issues to Be Addressed

- Driving the semiconductor materials industry as a leader in co-creation
- Aim to gain an overwhelming position in next-generation semiconductors by strengthening our product capabilities
- Contributing to energy conservation and reducing the environmental impact of semiconductors by enhancing the performance of semiconductor materials
- Amid geopolitical risks such as soaring raw material, energy, and logistics costs and supply chain disruptions, we are working to further strengthen our supply chain management system

Results in 2024

- Revenue and profit increased year-on-year due to the acceleration of demand for AI and server applications
- Decided to invest ¥15.0 billion to expand the production capacity of advanced semiconductor materials
- Pursued product portfolio reform to increase the weighting of high-margin products in total sales and strengthen our revenue base
- Announced the establishment of US-JOINT as part of efforts to strengthen marketing for key customers and global R&D activities
- Completed the introduction of a global supply chain management (SCM) enhancement system at bases in Japan
- Fostered organizational culture and developed human resources through workshops and top interviews

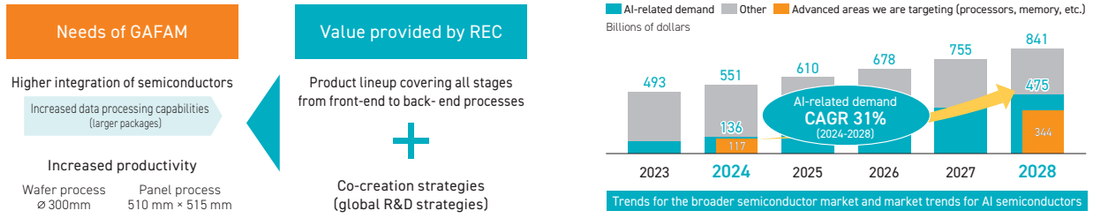
Plans for 2025

- Pursue product portfolio reform to aim for a business that generates even higher profits
- Aim to achieve steady growth of strategic products and actively introduce new products in next-generation fields to become the de facto standard
- Strengthen and implement co-creative marketing for key customers
- Move forward with preparations to start US-JOINT operations in 2025
- Introduce a global SCM enhancement system for multiple products at overseas bases
- Foster a sense of unity at business headquarters and develop human resources through global town-hall meetings and other activities
- Strengthen manufacturing capabilities by fully utilizing SPC (Statistical Process Control)
- Hold supplier meetings for the first time to build strong, sustainable co-creative relationships with suppliers

Strengths and Competitiveness for Realizing our Long-Term Vision

- Because we have a lineup of products that cover a wide range of semiconductor processes from front-end to back-end and we own several products that command the top market share, we can anticipate growth exceeding the increase in the number of chips as the number of components used rises with the higher integration of semiconductors. (Average growth rate of AI semiconductors from 2024 to 2028: 31%/year)
- With the limit to density increases in front-end processes becoming apparent as semiconductor design processes become more sophisticated and complex, attention has been turning to moves aiming for higher integration through the evolution of back-end technologies. As our particular strengths lie in our ability to make proposals for back-end materials, we are able to flexibly respond to customer needs.
- Japan and the U.S. lead JOINT, a consortium of material, equipment, and substrate manufacturers aimed at establishing next-generation semiconductor packaging and evaluation technologies. We use our expansive network to quickly grasp changes and create high-value-added products that meet the needs of our customers

Customer Needs in AI Semiconductors

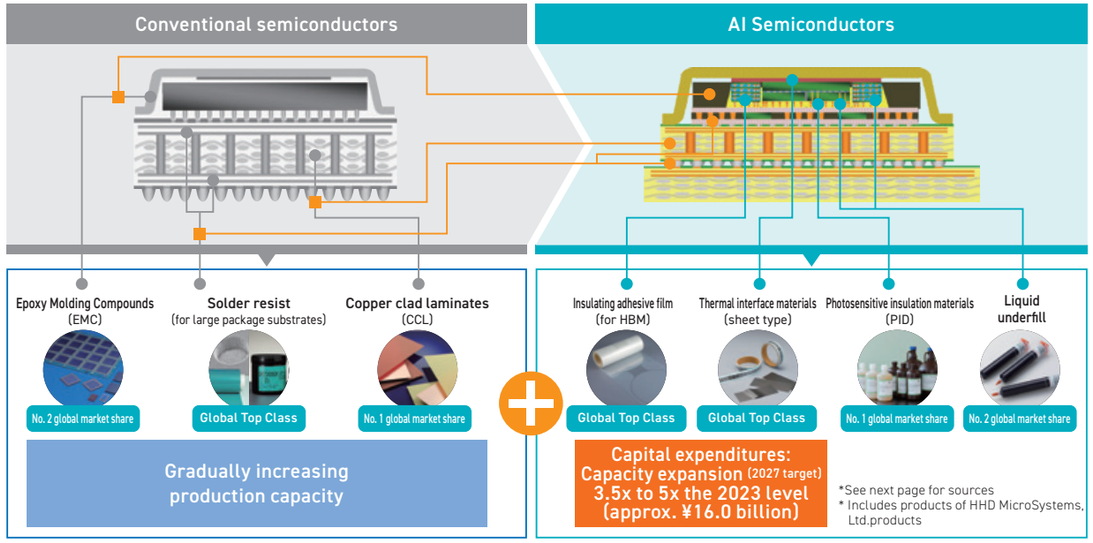


Resonac Semiconductor Materials are Becoming More Prevalent in AI Semiconductors

Compared to conventional semiconductors, AI semiconductors have a higher number of components and larger packages, which will lead to increased demand for semiconductor materials. We will continue to lead the semiconductor materials industry, as we have multiple products with top market share in both materials used in conventional semiconductors and AI semiconductors, as well as materials for AI semiconductors.

Evolution to realize functions for entire packages through the full utilization of back-end technologies

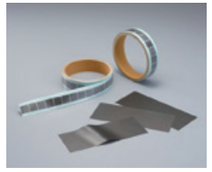
Accelerating growth by strengthening industry-leading materials and production foundations



*See next page for sources
* Includes products of HHD MicroSystems, Ltd.products

Accelerating New Product Development and Increasing Production Capacity for Advanced Semiconductor Packaging Materials

We are gradually increasing our production capacity for NCF insulating adhesive films and TIM heat dissipation sheets, which are attracting attention as materials for AI semiconductor packages, from 3.5x to 5x, with the aim of strengthening our stable supply capacity. We will continue to increase our production capacity in a timely manner to meet the rapidly expanding demand in the AI semiconductor market in a bid to further strengthen our market advantage. Additionally, we will accelerate our development of new products for advanced semiconductor packages, aiming for contribution to improving semiconductor performance from the materials side.



Next-generation TIM

Technology for vertical alignment of carbon

- Vertical alignment technology that supports high thermal dissipation
- Adhesion design that achieves low thermal resistance
- Sheet shape that enhances workability

Thermal conductivity and reliability against temperature changes

Differentiated technologies that support cutting-edge devices

Thinner film

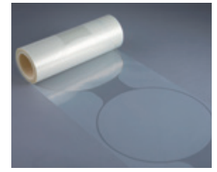
- Contributing to the multilayering of HBM* chips through ultra-thin film processing

* High Bandwidth Memory

Resin design

- Ensuring high reliability through narrow gap filling
- Further differentiation through the enhancement of thermal radiation properties and expansion of applications to next-generation devices

High-performance material that balances workability and connection reliability



NCF with high thermal dissipation

Co-Creative Development Strategy

We are leading JOINT consortium activities in Japan and the U.S. together with external semiconductor material manufacturers, equipment manufacturers, and substrate manufacturers. Furthermore, the Packaging Solution Center, which possesses semiconductor manufacturing equipment, can verify technology during the manufacturing process, and as such serves as a hub for co-creation. Resonac will promote the co-creative development of cutting-edge technologies in a bid to continue leading the semiconductor materials industry..

P65/Discussion: Resonac's Co-creation "Kata"

Resonac will promote the co-creation and development of cutting-edge technologies in a bid to continue leading the semiconductor materials industry

Co-creation activities

JOINT (Ending 2026)

Development of advanced PKG technology

RESONAC, AIMECHATEC, YAMAHA, UYEMURA, Aj, tok, DNP, DISCO, JOINT2, SHINKO, Panasonic CONNECT, EBARA, IMEC, NAMICS, ORC

Co-creation hub

Packaging Solution Center



US-JOINT (Launching 2025)

3M, RESONAC, ULVAC, Packaging Open Innovation in Silicon Valley, KLA, TOWA, US-JOINT, Kulicke & Soffa, TOPPAN, MEC, tok, NAMICS, MLI

Heat management/microbump technology

We are conducting co-creative research and development with IMEC (Interuniversity Microelectronics Centre), an international research Institute based in Belgium.

Photoelectric fusion

We participate in IOWN (Innovative Optical and Wireless Network) Global Forum, Advanced Photonics Coalition and Micro Photonics Center to strive technological development of photoelectric integration.

Hybrid bonding technology

We are the first Japanese manufacturer and materials company to participate as a strategic partner in the Texas Institute for Electronics (TIE), which aims to advance the roadmap for cutting-edge semiconductor technology by five years and to develop it in the U.S.

Back-end process automation and human resource development

We are involved in the Semiconductor Assembly and Test Automation and Standardization (SATAS), d.lab at the University of Tokyo , X-NICS at Tohoku University , SEMI, and other collaborative research, and are also engaged in manufacturing process development and human resource development through a comprehensive partnership with Yokohama National University .

Resonac Corporation and Yokohama National University concluded a comprehensive partnership agreement

Results of JOINT2 Activities

JOINT2 is a consortium aimed at developing next-generation semiconductor packaging technology joined by 14 Japanese companies. By promoting the mutual use of technology and information, we succeeded in creating a chip-embedded interposer* prototype with a view to increasing the size. This prototype uses 510 x 515 mm panels, with 20 bridge dies mounted on each panel, and insulating film and copper wiring were formed to demonstrate high-density wiring technology. We expect to commercialize this between 2027 and 2028, ahead of which we will work to enhance performance and establish mass production technology.



*510 x 515 mm panel chip-embedded interposer

US-JOINT: Building Relationships and Forums for Customers and Consortium Members to Chat Casually in the U.S.

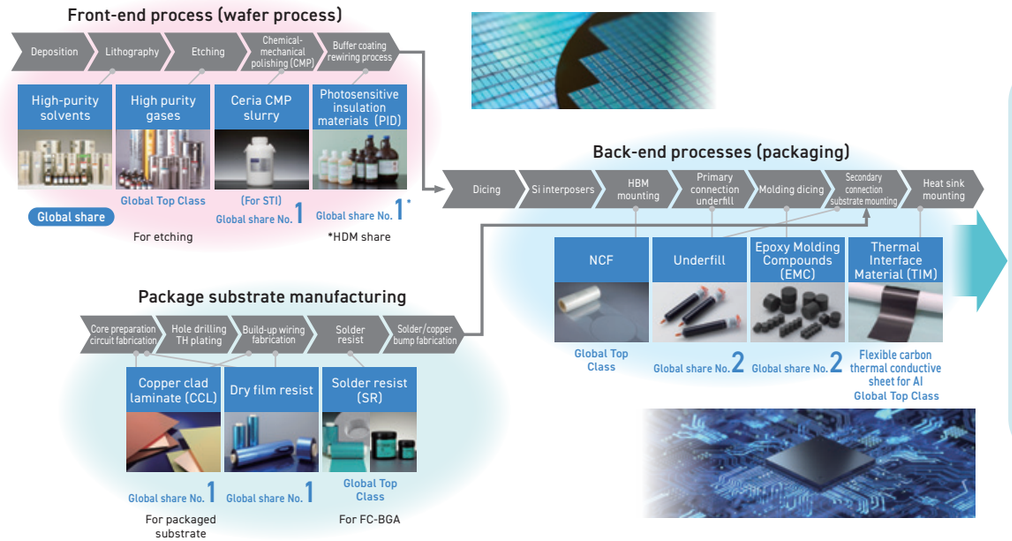
US-JOINT is a consortium for joint research on next-generation semiconductors, and is scheduled to start operations during 2025. By working closely with hyperscalers and major semiconductor manufacturers based in Silicon Valley and elsewhere in the U.S., and through co-creation with the 12 participating material- and equipment-related companies, we will contribute to realizing the concept of next-generation semiconductor packages ahead of the rest of the world.

In recognition of the consortium's efforts, Resonac received the Special Consortium Award at the 2025 3D InCites Technology Enablement Awards.

Please see A "Great Alliance from Japan and Silicon Valley. Don't Miss the New Trend in Semiconductors" (in Japanese only)

Resonac's Semiconductor Material Lineup for Semiconductor Manufacturing Processes

We offer an extensive lineup of materials for semiconductor manufacturing, covering both front-end and back-end processes, and also have several products that command top global market share. This enables us to respond to customer requests by combining our material technologies.



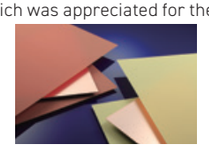
Source: Fuji Chimera Research Institute "2024 Electronics Jisso New Material Handbook",
- Photosensitive insulating materials*(PID), Buffer Coat/RDL Material, Actual Shipping Quantity of 2023 achieved **No.1** share on a volume basis.
  *HD Microsystems products: HD Microsystems L.L.C. is Joint venture between Resonac and DuPont.
- Underfill, Underfill for Primary Jisso, Actual Shipping Amount and Quantity of 2023 achieved **No.2** share on a volume and value basis.
- Epoxy Molding compounds (EMC), Semiconductor Molding Material, Actual Shipping Amount and Quantity of 2023 achieved **No.2** share on a volume and value basis.
- Copper clad laminate (CCL), Copper Clad Laminate for Package, Actual Shipping Amount of 2023 achieved **No.1** share on a value basis.
- Dry film resist, Dry Film Resist, Actual Shipping Amount of 2023 achieved **No.1** share on a volume and value basis.

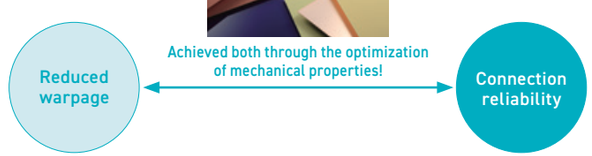
Source: Fuji Keizai "2024 Current Situation and Future Prospects of Semiconductor Material Market"
- Ceria CMP slurry (for STI), CMP slurry (for STI) Actual Sales Amount of 2023 achieved **No.1** share on a value basis.

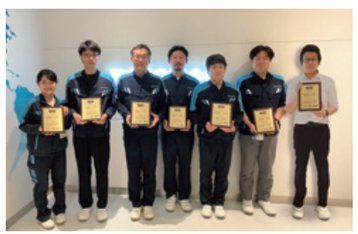
TOPICS 2024

Awarded Outstanding Interactive Presentation Paper at the 74th ECTC

The Electronic Components and Technology Conference (ECTC) is the world's largest international conference on semiconductor packaging and mounting technologies. The award ceremony was held at the ECTC 2025 event held in Dallas, U.S. in May. The increasing size of AI semiconductor packages presents the challenge of controlling warpage while maintaining connection reliability. By optimizing the mechanical properties of our MCL products, we proposed and demonstrated a solution that can address the above issues, which was appreciated for the award.







▶ See here for co-creation examples for NCF and hard disk.

P21/The unsung heroes behind the increase in NCF production: The power of collaboration between HD, image analysis, and NCF!

Business Strategies

Semiconductor and Electronic Materials: Device Solutions

Hard Disk Media



Yasushi Makabe
General Manager, Hard Disk Business Unit

Please visit our website for more details.

Vision for the future (2030)

- Meet increasing data storage demand as a large-capacity media technology leader by accelerating the development and mass production of next-generation recording technologies HAMR and MAMR media
- Quickly and strategically adapt to market and customer changes to gain a competitive advantage
- Reduce GHG (Greenhouse Gas) emissions in production processes

Issues to Be Addressed

- Through the development of our proprietary technology, achieve a thinner substrate with the aim of accelerating the increase in recording density and increasing the number of media in the drive for HAMR and MAMR
- Establishing strategic partnerships with customers and key suppliers
- Speeding up decision-making at five global bases
- Responding flexibly to fluctuations in demand

Results in 2024

- Sales of HD media increased significantly due to a recovery in demand for data centers
- Transferred the business in July 2024 through a company split with the aim of speeding up decision-making as well as stabilizing and optimizing business operations
- Commenced solar power generation (PPA agreement) at Resonac HD Singapore
- Switched the solvent used in the lubricant application process to an eco-friendly alternative at full scale

Plans for 2025

- Gain world's first certification for max capacity PMR
- Accelerate joint development of HAMR with three customers with an eye to full-scale mass production from 2026 onward
- Improve productivity of media and aluminum substrates, strengthen cost competitiveness, and establish a flexible supply system at all bases
- Explore and implement labor-saving and automation measures
- Formulate a GHG emission reduction plan for SBTi certification
- Decide on fuel conversion at the Yamagata Plant

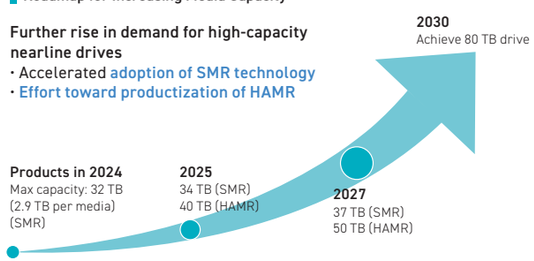
Initiatives to Strengthen Competitiveness and Examples

We possess the technological capabilities to develop and mass produce the world's most advanced media ahead of the rest of the industry, and provide Best Fit products optimized to meet customer needs through close cooperation with all three HDD customers

In current magnetic recording, combining a customer's shingled magnetic recording (SMR) technology with our own proprietary media has enabled the said customer to achieve the first certification for the max capacity program.

To meet the further rise in demand for high-capacity nearline drives expected going forward, we are conducting joint development with the three customers for next-generation HAMR technology. By combining this with our proprietary technology, we aim to continue our efforts to achieve world's first certification for the max capacity program.

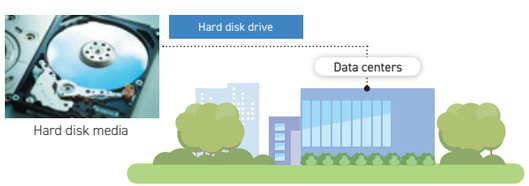
Roadmap for Increasing Media Capacity



* When magnetic particles are made smaller to achieve a higher recording density, the thermal stability of a hard disk deteriorates and data cannot be stored for long periods of time. Meanwhile, using a type of magnetic material with high thermal stability would make it impossible to write to the recording medium. Microwave Assisted Magnetic Recording (MAMR) and Heat Assisted Magnetic Recording (HAMR) are recording technologies that solve this recording density problem and support writing to the recording medium.

Relationship Between Our Products and Daily Life

HD media is incorporated into hard disk drives and is used in data centers, corporate data servers, and surveillance cameras, among others.



▶ See here for co-creation examples for NCF and hard disk.

P21/The unsung heroes behind the increase in NCF production: The power of collaboration between HD, image analysis, and NCF!

Business Strategies

Semiconductor and Electronic Materials: Device Solutions

SiC Epitaxial Wafers



Makoto Takeda
General Manager, Device Solutions Business Unit

Please visit our website for more details.

Vision for the future (2030)

- SiC epitaxial wafer technology leader to lead the industry's technological innovation
- Provision of high-quality products and solutions that meet the customer (power semiconductor manufacturers) demands for more advanced and specialized chips
- Maintaining "Best in Class" for eight-inch (200 mm) SiC epitaxial wafers, demand for which is growing rapidly in automotive applications

Issues to Be Addressed

- Maintaining and expanding our technological advantages (industry-leading low levels of surface-defect density and basal-plane dislocation, etc.)
- Strengthening technology collaborations and our ability to align with customers
- Differentiating from rivals, and improving productivity of eight-inch SiC epitaxial wafers

Results in 2024

- Sales grew due to increased shipments of SiC epitaxial wafers
- Commenced reliability testing of epitaxial wafers for power devices in addition to the evaluation of materials for power modules at the Power Module Integration Center (PMiC)

P65/Discussion: Resonac's Co-creation "Kata"

- Constructed a new production building for SiC wafers at Resonac Hard Disk's Yamagata Plant (scheduled for completion in September 2025)

Plans for 2025

- Enhance ability to supply high-quality SiC epitaxial wafers to meet customer requirements in line with growth of the power semiconductor market
- Accelerate technology development to realize "Best in Class" in mass production of eight-inch SiC epitaxial wafers

Initiatives to Strengthen Competitiveness and Examples

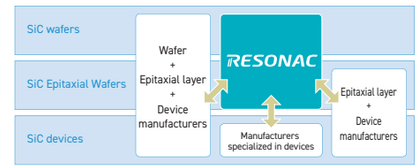
Strengths as a Manufacturer Specialized in Epitaxial Wafers

As a manufacturer specialized in epitaxial wafers that does not handle SiC devices, we attract device manufacturers that manufacture wafers and epitaxial wafers in-house as customers. This unique business model allows us to improve quality and accumulate expertise by gathering the needs of multiple customers and aligning specifications. In 2022, we began test shipments of eight-inch (200 mm) SiC epitaxial wafers, which contribute significantly to larger wafer diameters while enabling us to achieve industry-leading quality by fully utilizing technology that reduces defects.

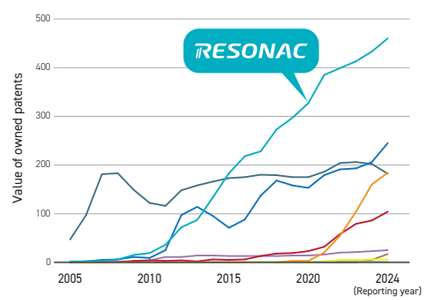
Utilization of IP Landscape in SiC Epitaxial Wafers Businesses and Evaluation of Intellectual Property Value

The value of our patents (PAI = Patent Asset Index*: registered trademark of Lexis Nexis) in the field of SiC epitaxial wafers, acquired as a result of our pioneering technological developments, more than doubled that of industry peers in 2024, demonstrating our competitive advantage. Furthermore, France-based KnowMade, which specializes in the analysis of patents and scientific information, highly rated our IP position in the development of larger diameter, low-defect SiC epitaxial wafers.

Resonac's Business Model as a Manufacturer Specialized in Epitaxial Wafers



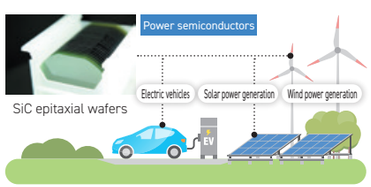
Comparison of the patent asset value of SiC Epitaxial Wafers for Power Semiconductors versus rival companies.



* Evaluation of valid patents using Lexis Nexis' PatentSight+ patent database; PAI is calculated based on Technology Relevance of each patent and Market Coverage.

Relationship Between Our Products and Daily Life

SiC epitaxial wafers are mainly used as substrates for power semiconductor devices and contribute to energy conservation in various fields, such as renewable energy and electric vehicles (EVs).



Business Strategies

Mobility

Mobility



Satoshi Hara
General Manager, Mobility Business Headquarters

Please visit our website for more details.

Vision for the future (2030)

"Unleashing the Power of Chemistry to Reinvent Acceleration, Steering, and Braking"

- Acceleration: The challenge of realizing a highly efficient powertrain
- Steering: Lowering the unsprung mass (for better ride quality) while ensuring driving safety
- Braking: Providing next-generation environmental performance and peace of mind

Issues to Be Addressed

- Contributing to the improvement of basic vehicle performance by making full use of the Group's material, processing, and evaluation technologies
- Achieving a business portfolio that combines sustainable growth, high profitability, and capital efficiency with a focus on areas that are resilient to structural changes in the automotive market
- Promoting structural reforms to optimize business sites and strengthen price negotiation capabilities

Results in 2024	Plans for 2025
● Sales of automotive products declined, impacted particularly by the situation in Thailand	● Moderate year-on-year growth of the automobile market expected as pullbacks in demand ease in various areas
● Negotiated price revision and product withdrawals centered on low-margin products as part of structural reforms	● Expand aluminum suspension materials and environmentally-friendly disc brake pads as core growth businesses
● Revised our business portfolio and sold the SPALF aluminum laminate film business	● Promote new businesses through co-creation with customers, such as next-generation heat management systems and next-generation motor cores
● Started co-creation with customers on terminal blocks and cooling modules realized by DSI* molding technology	

* Die-Slide Injection: An injection molding technology that enables the integrated molding of hollow bodies with complex structures and laminated structures

Initiatives to Strengthen Competitiveness and Examples

We are working to develop technologies such as materials and components that significantly improve the basic performance of mobility, such as "Acceleration, Steering and Braking", by utilizing the Group's wide range of materials technologies, including organic, inorganic, and metals, as well as processing and evaluation technologies.

Technological Development Resonac is Focusing On

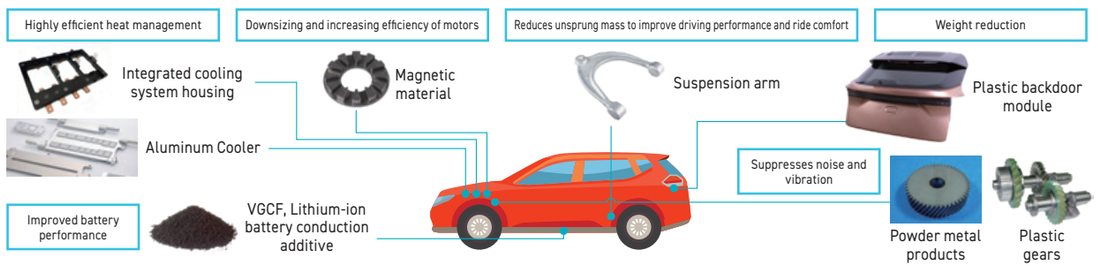
Acceleration	Steering	Braking
● Development of next-generation heat management system for efficient cooling	● Material innovation from steel to aluminum through our alloy technology	● Development of brake pads with excellent environmental performance that comply with EURO7
● New development of next-generation motor cores that do not use electromagnetic steel sheets	● Development of lightweight, high-strength aluminum suspension arms	● Popularization and expansion of green pads that are friendly to people and the planet
● Development of unique high-strength materials and plastic gears utilizing organic fibers and thermosetting resin	● Development of linkage parts using aluminum suspension arm technology	● Participation in the development of next-generation brake systems in collaboration with Tier 1 suppliers

Development of High-performance Disc Brake Pads for EVs

We have developed high-performance disc brake pads for EVs by making full use of our wide range of material technologies. They feature high braking performance and wear resistance, low environmental impact, and excellent low noise performance. With a view to mass production in 2026, we are providing samples to Tier 1 brake system manufacturers in Europe to evaluate the suitability of these products for electric brake systems.



Relationship Between Our Products and Daily Life



Business Strategies

Innovation Enabling Materials

Innovation Enabling Materials



Takafumi Sakurada
General Manager, High Performance Materials Business Headquarters

Please visit our website for more details.

Vision for the future (2030)

- Consistently create new materials and technologies as a vessel that supports the Group's innovation and enhanced competitiveness
- Consistently maintain profitability with an EBITDA margin of 15% or more as a leader in specific sectors

Issues to Be Addressed

- In next-generation semiconductor materials and promising domains, strengthen our development and manufacturing capabilities for organic and inorganic materials to be used as components in these domains
- Initiatives to improve profitability, such as the optimization of production lines and fixed costs, and portfolio revision with an eye to business growth backed by our competitive edge

Results in 2024	Plans for 2025
● Promoted the development of materials centered on next-generation semiconductor materials through in-house co-creation and identified commercialization barriers	● Deepen material development, primarily for next-generation semiconductor materials, through in-house co-creation and promote the commercialization of new materials
● Achieved EBITDA margin target (17.9%)	● Optimize management resource allocation aimed at creating new businesses and strengthening development capabilities, and establish a framework for efficient utilization
● Year-on-year increase in sales and profit due to passing on soaring raw material prices to product selling prices and an increase in sales volume	● Although demand is expected to remain strong, we forecast year-on-year sales growth but lower profit due to rising personnel costs

Initiatives to Strengthen Competitiveness and Examples

Strengthening On-site Capabilities Through the Promotion of DX and Citizen Development

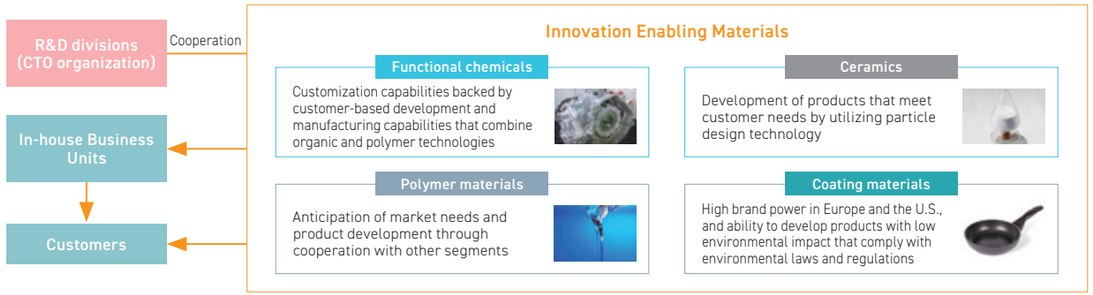
In the manufacturing section of the Ceramics Business Unit , activities are being carried out to improve work processes through citizen development of RPA and BI tool apps that the operators themselves have learned and developed. These activities contribute greatly to safe and stable operations, ensuring absolute quality, and increasing production efficiency. In order to further expand these activities, the High Performance Materials Business Headquarters has established a DX Promotion Officer to strengthen cooperation with the CDIO organization. This is expected to expand beyond production departments to other operations and business units such as SCM, accounting, general affairs, development and sales, thereby improving customer convenience and contributing to the creation of businesses for the future.

Creation of Vaneetect, Vacuum Insulated Glass Sealing Agent That Enhances Environmental Performance (Low Melting-Glass)

Vaneetect, which enables sealing at low temperatures and does not contain substances restricted by the RoHS Directive, is used as a sealing material for vacuum insulated glass (VIG), which is becoming increasingly popular in building construction. We expect this to improve environmental performance by lowering energy consumption during VIG production, reducing CO_2 emissions by shortening processing times, improving the insulation performance of window glass, and enabling glass recycling. In collaboration with R&D divisions, we are also studying its application to sealing and bonding for electronic devices and sensors.



Relationship Between Our Products and Daily Life



Business Strategies

Chemicals

Basic Chemicals



Hiroshi Adachi
General Manager, Basic Chemicals Business Unit

Please visit our website for more details.

Vision for the future (2030)

- Stably supply products that support the daily lives and social infrastructure in the Tokyo metropolitan area
- Contribute to realizing a decarbonized society and circular economy through the promotion of plastic chemical recycling and carbon neutrality
- Co-create on the global stage based on our technologies as a leading urban chemical park in Japan

Issues to Be Addressed

- Thorough implementation of measures to strengthen our supply system with the aim of ensuring the stable supply of products that support the daily lives and social infrastructure
- Acceleration of cutting-edge initiatives utilizing our technologies geared toward achieving a decarbonized society
- Expansion of our contribution to realizing a circular economy by supplying products derived from plastic chemical recycling

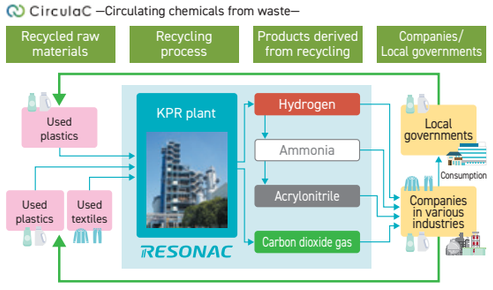
Results in 2024	Plans for 2025
● Demand remained strong. Profit decreased despite having passed on raw material price increases to selling prices for some products ● Continued to implement planned maintenance as part of our efforts to strengthen our supply system ● To meet strong demand, expanded facilities for sodium hypochlorite for tap water and sewerage and liquefied carbon dioxide, which support the infrastructure vital to people's daily lives	● Demand expected to remain strong ● Although raw material and fuel prices are expected to continue soaring, we will respond by passing on these increases to product prices, among other measures ● Launched new brand CirculaC, a circular business model for used plastics and textiles ● Promotion of examining plans aimed at decarbonization and improved recycling, such as fuel conversion of power generation facilities and increasing the mixture ratio of raw materials derived from used plastics

Initiatives to Strengthen Competitiveness and Examples

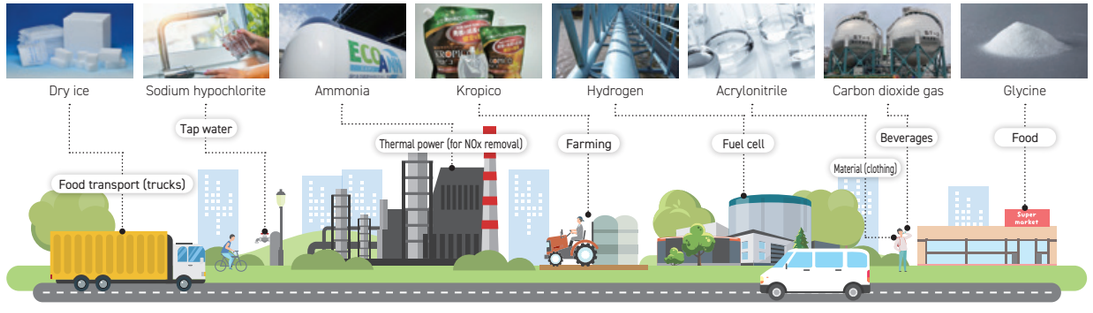
Launched CirculaC, a Circular Business Model for Used Plastics and Textiles

We launched CirculaC, a circular business model for used plastics and textiles. This is a new brand expanding the circle of resource circulation with the aim of realizing a sustainable future. In 2003, we established technology to recycle used plastics into hydrogen and carbon dioxide at the Kawasaki Plant, and by January 2023, we processed over one million tons of plastic in total. Going forward, we plan to sell these products under the CirculaC brand and expand resource recycling through co-creation with external partners. We aim to help build a sustainable society with an eye to achieving carbon neutrality.

Related article:



Relationship Between Our Products and Daily Life



Business Strategies

Chemicals segments

Graphite



César Castiñeira
General Manager, Graphite Business Unit

Please visit our website for more details.

Vision for the future (2030)

- We supply industry-leading Graphite Electrodes and Electric Arc Furnace (EAF) optimization services to steelmakers around the world, supporting the transformation to sustainable steel production and economic growth
- We supply synthetic graphite products for use in multiple industrial applications, promoting decarbonization in the manufacturing process.

Issues to Be Addressed

- Achieving a stable profit structure
- Optimizing product mix in response to expansion of electric furnace market
- Evolving into a business model that offers electric furnace optimization services
- Growing global demand for large-diameter electrodes, reducing carbon emissions in steelmaking, and addressing energy efficiency challenges

Results in 2024	Plans for 2025
● Both sales volume and price decreased due to the weak market condition, resulting in the decrease in operating income; operating loss reduced due to a reversal of inventory write-downs ● Accelerated the integration of AMI's automation solutions to enhance EAF efficiency and optimize electrode consumption ● Expanded renewable energy usage, implemented waste reduction projects, and strengthened data-driven operational efficiencies ● Advanced local production/local consumption strategies to reduce transport-related emissions	● Implement measures to improve profit margin ● Advance/Expand AMI-powered digital optimization at scale to further enhance productivity and energy efficiency in EAF operations ● Expand local supply chains to reduce logistics-related emissions ● Develop new AI-driven automation solutions to support more sustainable steel production

Initiatives to Strengthen Competitiveness and Examples

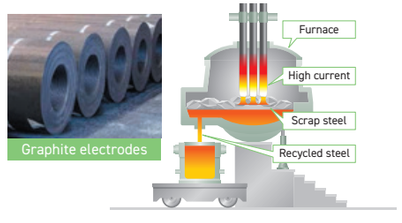
We leverage our unique strengths and competitive advantages to solidify our position as a world-class functional chemical company and a leader in the global graphite electrode market.

- Advancing Sustainable Steelmaking: Resonac is leading the global push for decarbonization as demand for large-diameter Graphite Electrodes in EAF steelmaking accelerates
- Global Production with Local Impact: With production sites in every region worldwide, we maintain strategic inventories to ensure consistent operations and reliable delivery
- Local Production for Local Consumption: Our strategy prioritizes producing close to our customers, reducing emissions, improving efficiency, and enhancing supply chain resilience
- Innovation & Digitalization: The AMI Automation acquisition enhances internal digital transformation while providing advanced Graphite Electrode optimization solutions to customers
- Sustainability: Driving positive impact for society and the environment through expanded renewable energy use

Evolving value proposition through synergies with AMI

The integration of Resonac's Graphite Electrode expertise with AMI Automation's world-leading EAF automation technology strengthens our ability to deliver comprehensive, value-added solutions tailored to the evolving needs of the steel industry.

Beyond product integration, we are also co-developing tailored service offerings with AMI — from EAF startup support to best practices in GE handling. These services are particularly relevant for customers entering the EAF space for the first time, reinforcing our role as a full-scope partner.



Relationship Between Our Products and Daily Life

Graphite Electrodes (GE) are essential to sustainable steelmaking. Traditionally used for melting scrap steel in EAFs, they are increasingly vital in the production of new steel from Direct Reduced Iron (DRI), especially in regions transitioning to low-carbon methods. Whether for recycled or new steel, GE remain critical to decarbonizing the industry.

04 Resonac's Sustainability

Here we discuss how Resonac has repeated trial and error to embed sustainability at the core of its management.

83 Dialogue: Implementing Sustainability in Business
89 Measures to Combat Climate Change
91 Toward Circular Economy / Efforts for Preservation of Biodiversity
93 Quality Assurance / Chemicals Management / Procurement and Supply Chain
95 Safety / Compliance / Respect for Human Rights / Conclusion
97 Response to Companywide Key Risks

Dialogue: Implementing Sustainability in Business

It has been three years since Resonac's "second founding." Are we ready for the next stage?

We held a discussion between CSuO Matsuko and the Sustainability Advisors to evaluate Resonac's sustainability initiatives so far, identify challenges, and outline future expectations.



What is a Sustainability Advisor?

Since sustainability spans a wide range of issues, we recognize the importance of drawing on knowledge and experience from outside the company. With this in mind, Resonac has established a new Sustainability Advisor role, filled by outside experts. Advisors serve two-year terms, providing expert guidance and advice to our Board of Directors and business execution divisions. In the first phase (April 2025 to March 2027), we appointed three Sustainability Advisors to help us achieve our Purpose "Change society through the power of chemistry," and to promote our efforts to create value. Dr. Itsubo brings expertise in technology and the environment; Dr. Hasegawa has abundant insight in management and finance; and Mr. Matsubara is an investor with a focus on sustainability.

Please visit our website for more details.

Three years after our "second founding," what have we changed?

Matsuko: Since our second founding, Resonac has focused on reforming our business portfolio and developing co-creative talent and a corporate culture essential for completing this. All of this is to practice our Purpose, to "Change society through the power of chemistry," while increasing corporate value and creating the future we envision. We see sustainability as embedded into this Purpose. Over the past three years, we have aimed to position sustainability at the core of management. The first step was to implement reforms in the mindset towards sustainability within the company. We repositioned sustainability, which had merely been a defensive tool or branding tool, as a management issue. To support this change, we set up the Sustainability Promotion Council, which meets monthly and includes all CXOs (Chief X Officers). This Council, a meeting body linked to the Board of Directors and Management Committee, has defined our material issues and related non-financial KPIs P123 / Material Issues and Non-financial KPI Targets and Results, and has begun monitoring the progress and reviewing them. Through these efforts, we have created a "common language" for sustainability among the top management team.

Among the three material issues, "Gain credibility through responsible business management" lays the foundation for our aim of becoming a World-class Functional Chemical Company. Each CXO, including the CMEO/CQO, CRO, and CDIO, is driving this initiative with responsibility, and the achievement of the 2025 KPIs is now within reach.

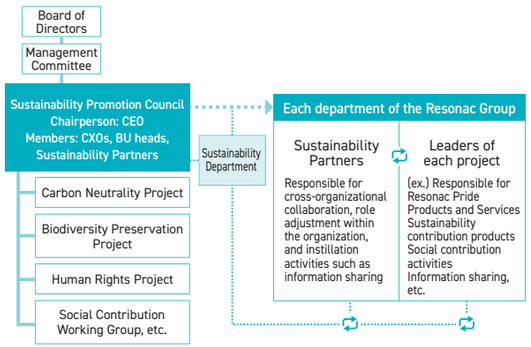
The CEO and CHRO are leading our push to "Develop autonomous, creative, and active human resources and culture," with all members of Team Takahashi steadily advancing in their respective roles. P17 / How Far We've Come! Fostering Resonac's Corporate Culture

From the second year, we have increased the participation of officers in charge of each business in the Sustainability Promotion Council. Starting this year, meetings are held every other month with all officers present. Each session includes a discussion on business initiatives, such as analysis of climate-related business opportunities and risks aligned with TCFD scenario analysis, Resonac Pride Products and Services, and customer sustainability strategy analysis.

Sustainability Partners in each division work with the Sustainability Department to embed these top-down type discussions into practical actions. This ensures that initiatives align with each division's strategies and situations. Meanwhile, we are working to foster a

Please visit our website for detailes of Promoting Sustainability

Sustainability promotion system



Dialogue: Implementing Sustainability in Business

sustainability mindset among employees to support bottom-up efforts. P20 / Fostering Corporate Culture

From 2023 onward, we launched a company-wide Carbon Neutrality Project and integrated sustainability evaluations into the remuneration for directors and corporate officers. These initiatives established a foundation for competing on the world stage and earned some external recognition.
P127 / External Evaluation Status such as Incorporating SX Index

As Advisors, how do you evaluate our progress with sustainability so far? Are we ready for the next decade?

Hasegawa: It is striking how sustainability is organically coordinated into the management strategy, driving company-wide transformation through the cultivation of corporate culture, talent development, and strengthened governance. In particular, the corporate culture is led by employees, which closely links to the development of co-creative talent, and sustainability is incorporated into decision-making processes. This an excellent example of how to achieve effective integrated management.

Looking ahead, Resonac needs to turn this sustainability foundation into a competitive advantage. For this purpose, it would be crucial to create a sustainability-driven investment decision model, and communicate more effectively with external stakeholders by showing how non-financial and financial factors connect. By taking this approach, you can clearly show your commitment and strategic intent. This will help deepen stakeholders' understanding and trust.

Matsubara: I also highly evaluate that sustainability is positioned at the core of the corporate strategy, which is revitalizing the key strategies. Material issues are also an effective framework. That is why Resonac should consider what it aims to achieve through co-creation beyond ten years from 2030. I ask you to envision the type of society you want to create, identify necessary reforms, and understand how these will enhance corporate value. This requires an approach from a high-level perspective. I expect to see Resonac enhance its functionality, integration, and credibility over the next decade, building on the sustainability management system design it has established over the past three years.

Matsuko: Thank you for the words of encouragement. I feel confident that the direction we have proceeded in has been correct, and while the upcoming challenges are daunting, they're also exciting. You have shared insights on the significance of sustainability for corporate value and the



It is striking how sustainability is organically coordinated into the management strategy, driving company-wide transformation. I expect it to turn into a competitive advantage. [Dr. Hasegawa]

Material issues and components

Gain credibility through responsible business management

CMEO	Safety, procurement
CQO	Quality assurance, chemicals management
CSuO, CMEO	Environment, human rights
CSuO	Compliance
CRO	Risk management

Strengthen co-creativity & competitiveness and create social value through innovation and business

BU	Creation of social value through our businesses
CMO	Marketing
CTO	R&D and intellectual property strategies
CDIO	Digital transformation

Develop autonomous, creative, and active human resources and culture

CHRO	Hire & develop talent for the business
CHRO	Become an employer of choice
CHRO	Develop self-driven professionals
CHRO	Cultivate corporate culture conducive to co-creation

Looking ahead to the next decade, I'd like to see the company think about the society it wants to build through co-creation, approaching this task from high-level perspectives. I look forward to seeing the company enhance its functionality and integration, building on its established management system design. [Mr. Matsubara]



links between non-financial and financial factors. This prompted us to take a fresh look at what constitutes the corporate value we should aim for. In place of our traditional value creation process diagram, we've developed a new value creation "hypothetical" diagram.
P13 / Resonac's Value Creation Hypothesis The value creation hypothetical diagram outlines our recipe to enhance true corporate value (assuming such a thing exists). It hypothesizes key areas we should focus on and what we want our stakeholders to evaluate, as well as what kind of measures they will be and the metrics they will be reflected in. Going forward, we aim to deepen our engagement with stakeholders through ongoing dialogue.

Itsubo: I was concerned about how effectively the message was being communicated both internally and externally. No matter how impressive a vision or set of initiatives might be, it's meaningless if it doesn't effectively reach the intended audience. When developing products aimed at reducing environmental impact, for instance, it might be more effective to focus on customers who can truly appreciate their value instead of a wide range of stakeholders. By highlighting the technological value to these customers and gathering their feedback, you can potentially enhance economic value. Please consider how to deliver information effectively.

Matsuko: Thank you for your advice. In past Integrated Reports and Sustainability Meetings, we have defined our target audience broadly as important stakeholders with whom we want long-term relationships and sought to address their shared concerns. We keep in mind to clearly communicate our financial strategy while emphasizing value creation through non-financial means by citing the real voices of employees as evidence. I believe this approach has fostered a good degree of understanding among our audience. P33 / Co-creation with Stakeholders
However, we realized that we are now at the stage of implement initiatives through dialogue and our co-creation "kata", or model, by assuming individual and specific customers and products by name, also in the area of sustainability.

Making environmental and social value visible with Resonac Pride Products and Services

Matsuko: The certification of Resonac Pride Products and Services is gaining momentum as we aim to connect our

Sustainability initiatives, review, and outlook



Dialogue: Implementing Sustainability in Business



Please communicate Resonac's initiatives clearly to the right audience to generate economic value. Especially, highlighting the technological value to customers is crucial. [Dr. Itsubo]

sustainability initiatives with economic value, which you have mentioned. This aligns with the third material issue, "Strengthen co-creativity & competitiveness and create social value through innovation and business."

Launched in 2023, the Resonac Pride Products and Services certification system visualizes how our products and services realize our Purpose, to "Change society through the power of chemistry," and evaluates and certifies them by incorporating third-party perspectives.

Materials are essential components of the finished products used in society. However, they are often found in powdered or liquid forms in particular, so it's not only difficult to track where and how these materials are used but also challenging to assess how they contribute to society when considered independently. Demonstrating some kind of social impact to stakeholders, including our customers, to gain their understanding of how we are changing society, is our challenge in areas where linking sustainability efforts to economic value is not easy. This whole context is expected to instill pride in employees who work on this initiative, and foster a sense of accomplishment in practicing our Purpose and Values.

The standards for deciding Resonac Pride Products and Services are not only the current sales and profits, but also their potential to increase sales and market share, become the center of our business, drive future growth, and expand their social development in the future. The certification process involves visualizing and quantifying contributions to society, the environment, and customers, as well as their validity, including any negative impacts. It also requires presenting a qualitative social value creation narrative (hypothesis) and gathering opinions from a wide range of stakeholders from a co-creation perspective. From 2025, these factors are evaluated incorporating the perspectives of the Sustainability Advisors, and certification is decided by the Sustainability Promotion Council.

We have certified the co-creation activities of the Kawasaki Plastic Chemical Recycling business and the Packaging Solution Center. By 2025, we plan to certify the core products of the remaining five businesses. We also plan to incorporate the initiative into directors' and corporate officers' evaluations.

Hasegawa: The effort to present a social value creation narrative and link it to non-financial KPIs is a proactive effort and a meaningful challenge for the whole industry.

On the other hand, when you visualize social value, you should show not only the benefits to society but also how it links it to financial results. I believe this connection is crucial for future dialogue with stakeholders and investor relations activities. I encourage you to explore how certifying Resonac Pride Products and Services can bring economic returns over the medium to long term. I would like to ask you to craft a narrative that connects social value with financial impact.

Itsubo: I view Resonac Pride as an excellent initiative that demonstrates the intent and strategy to compete on the world stage. I can see that adopting it as an internal KPI has quickly raised awareness. To develop these into growth businesses, please conduct an annual review of the certified projects. I expect you'll quickly visualize the societal benefits of implementing these initiatives and link them to investment and growth.

Matsubara: What role do companies play in stakeholder capitalism, and what exactly is a company? If Resonac was to cease to exist, what legacy would it want to leave behind? I believe that by looking further into the future, you can gain a clearer vision of what lies ahead. I hope you will find your guiding star and build the drive to pursue it, alongside remarkable initiatives like Resonac Pride Products and Services.

Matsuko: Thank you for your words. We will strengthen our communication to show how the materials we make create social value, which should be shared interests with our customers. Looking further ahead, we're committed to advancing our efforts, based on the belief that we will be able to connect the social value to financial outcome, in other words, transform it into economic value. We won't stop at certification. We'll continue our dialogue with stakeholders to show business growth and new developments. We'll thereby ensure that stakeholders understand how our certification considers future challenges like scaling up and horizontal deployment.

*From the next page, we present themes related to the material issue, "Gain credibility through responsible business management," incorporating insights from the Sustainability Advisors.

Resonac Pride Products and Services: Certification steps and key points

Steps of screening	STEP1	STEP2	STEP3	STEP4	STEP5	STEP6	STEP7	STEP8
	Application for certification by business units	Initial screening conducted by the secretariat	Collect comments from stakeholders	Collect comments from Sustainability Advisors	Internal screening by Sustainability Promotion Council	Certification as Resonac Pride Products and Services	Report to those who made comments	Report to Board of Directors

Point! **Points of certification**

Purpose implementation	Quantified value proposition to society, environment and customers with social value creation narratives
Values implementation	Implementation of four Values
Risk assessment	Risks and negative impacts from a third-party perspective
Relevance to shared global goals	Contributions to the SDGs
Challenges for the future	Potential for expanding future business opportunities and scaling up
Financial impact	Impact on sales, profit, cost saving and future cash flows, including potentials

By certifying Resonac Pride Products and Services, we aim to visualize the impact our products have on society. By linking this impact to our value creation story and gaining understanding, we want to turn it into economic value. [Matsuko]



• About this dialogue

Participants : Three of our Sustainability Advisors (external experts) and CSuO Matsuko
Objective : Gather feedback from Sustainability Advisors on evaluation of our past sustainability initiatives and their future expectations, and use these insights to enhance management and information disclosure

• Keywords of the dialogue

Three and a half years of sustainability progress	The integration of sustainability into business strategies is advancing.
Sustainability information disclosure	We have focused on engaging in dialogue with a wide range of stakeholders. We will strengthen our approach tailored to each stakeholder going forward.
Visualize environmental and social values of products and services	We will visualize values through Resonac Pride Products and Services. We will certify products of all businesses by 2025 and integrate this into directors' and corporate officers' evaluations.

Please visit our website for more details.

Measures to Combat Climate Change

P133 / Environmental Initiatives: Information disclosure in accordance with the TCFD and TNFD recommendations



Dr. Itsubo

Let's start with the initiatives for carbon neutrality.
The target of a 30% reduction by 2030 (compared to 2013) is not particularly ambitious. What are your thoughts on this? The path forward isn't clear and progress on reductions is slow.

We will obtain SBT certification to accelerate our initiatives for achieving carbon neutrality.
We will also continue our efforts to capture business opportunities and visualize our contribution to reducing emissions.



Rumi Ueyama
Sustainability Department

I agree with you. This may sound like an excuse, but the fact of the matter is that the merger has caused our carbon neutrality initiatives to fall behind. Plus, with our portfolio undergoing a reform, Resonac's GHG emissions and their breakdown will change, especially as Crasus Chemical is listed and subsequently excluded from the scope of consolidation in terms of GHG emissions. As the new Resonac, we aim to obtain SBT certification by 2027, when Crasus Chemical is scheduled to go public. Ahead of this certification, we submitted a commitment letter to SBT in June of this year. We are currently working toward changing the base year, raising our 2030 target, and setting a 2035 target that includes Scope 3 emissions, and will enter a full-scale reduction phase from 2026. The road to achieving this target by 2030 is becoming clearer, which will involve shifting to non-fossil fuel energy sources for electricity purchased, continuing thorough energy-saving and streamlining/high-efficiency measures, and undertaking fuel conversion for in-house power generation facilities P134 / Road to Carbon Neutrality.We will also complete our climate change scenario analysis for each business unit this year. The Sustainability Promotion Council discusses analysis results and countermeasures for addressing them, and reflects the results of these discussions in the five-year plans for each business unit. We will also continue our efforts to visualize emission reduction effects for Resonac PrideProducts and Services.

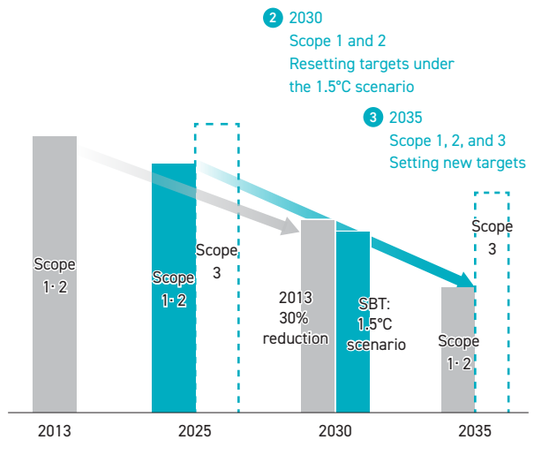
We are working to resolve issues by utilizing our production technology knowledge in order to reduce GHG emissions at our plants.

The CMEO organization also participates in the Carbon Neutrality Project and promotes GHG emission reduction initiatives. To reduce Scope 2 emissions, we are planning to increase the rate of clean electricity use, primarily by promoting the introduction of power purchase agreement (PPA) services for solar power generation. However, the reduction amount is not sufficient based on the available installation space at each plant. Due to this, we are actively considering clean electricity supplied from external power generation companies, such as through off-site PPA services. Meanwhile, this year we have been visiting plants with large GHG emissions to ask about issues they face in relation to energy conservation measures. While the remaining issues are not easy to address, we are conducting investigations including new technologies and providing support for resolving these issues to reduce GHG emissions as much as possible.



Satoshi Tsukahara
Production and Engineering Technology Division

Key points for SBT certification





Dr. Hasegawa

I believe that we need to reduce emissions to the extent possible through our own efforts, and eliminate those we are unable to reduce. What kind of initiatives are you implementing to achieve this?

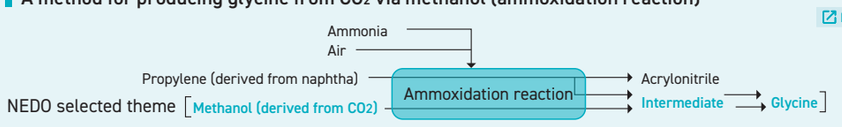
By establishing technology for the integrated production of glycine from methanol derived from CO_2 emitted from steel plants, thermal power plants, and other facilities, we will promote carbon recycling and significantly reduce CO_2 emissions.



Yoshikuni Okumura
R&D Planning Department
Strategic Planning Group

Resonac, Nippon Steel, Nippon Steel Engineering, and the University of Toyama are conducting a joint research project to produce glycine using CO_2 emitted from steel plants. This project was selected by NEDO following its call for proposals for Carbon Recycling and Next-Generation Thermal Power Generation Technology Development, and is scheduled to be implemented from fiscal 2025 through to fiscal 2027. Amid the growing need to reduce CO_2 emissions as a measure to combat climate change, technologies that utilize CO_2 as a resource are attracting attention.
Glycine is a key chemical used in agrochemicals, health foods, and electronic materials. Currently, it is mainly produced from fossil fuels such as naphtha and natural gas. The objective of this project is to establish technology for the integrated production of glycine using methanol derived from CO_2 emitted from steel plants and thermal power plants as a raw material. By doing so, we aim to promote carbon recycling and significantly reduce CO_2 emissions. Specifically, Nippon Steel, Nippon Steel Engineering, and the University of Toyama will take the lead in improving and mass producing catalysts for the synthesis of CO_2-derived methanol, and exploring methanol synthesis processes. Resonac will be responsible for the development and optimization of glycine production processes using CO_2-derived methanol, leveraging our experience with plants producing acrylonitrile from propylene.
Ultimately, we aim to develop technology that maintains the existing quality of glycine while significantly reducing CO_2 emissions from a life cycle assessment (LCA) perspective, and to achieve early social implementation.

A method for producing glycine from CO_2 via methanol (ammoxidation reaction)



Please visit our website for more details.



Dr. Itsubo

Have you introduced carbon pricing?
I think it's fine to have your own rules, but high prices must be set. (Market prices range from ¥5,000 to ¥10,000)

We have introduced carbon pricing. We set an internal carbon price based on IEA scenarios and EU emission allowance prices, using it to guide our investment decisions.



Chie Kaneko
Sustainability Department

We have introduced carbon pricing, and have set our internal carbon price at ¥10,000/t-CO_2, based on the International Energy Agency (IEA) scenarios and EU emission allowance prices. This internal carbon price is used to evaluate investments in anticipation of the future introduction of carbon taxes, etc., and encourages investment decisions in environmentally-friendly projects and technologies. However, amid fluctuating global political trends, we feel that it is extremely difficult to determine an appropriate internal carbon price level, and will also consider setting prices based on the characteristics of each business.

Toward Circular Economy / Efforts for Preservation of Biodiversity

Please visit our website for more details.



Dr. Itsubo

I have high hopes for the plastic chemical recycling at the Kawasaki Plant to help contribute to the realization of a circular economy.
Are you also implementing any new initiatives?

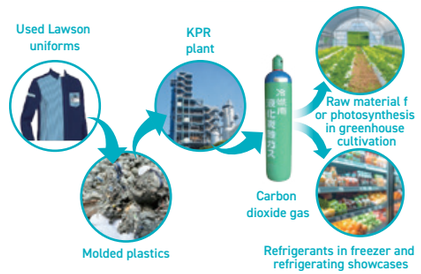
As "Measures to Combat Climate Change," "Efforts for Preservation of Biodiversity," and "Toward Circular Economy" initiatives are interrelated, we believe it is important to implement them simultaneously P129 / Environmental Initiatives .In particular, we started the plastic chemical recycling business in 2003, through which we support chemical recycling in Japan. We also have new initiatives that have been selected by NEDO. Here we introduce some of our specific initiatives.

Case Study — Lawson and Kawasaki Plastic Chemical Recycling Co-creation

We are currently facilitating the chemical recycling of uniforms for Lawson, Inc. A portion of the used uniforms from Lawson stores nationwide (approximately 3,000 pieces, weighing about 900 kg) underwent chemical recycling at the Kawasaki Plant in Kawasaki City, Kanagawa Prefecture, utilizing MC Fashion Co., Ltd.'s waste disposal license under the framework of Wide Area Certification System*1. By refraining from incinerating the used uniforms, this process is expected to reduce CO_2 emissions by approximately 80%*2 compared to traditional incineration methods, while also generating about 2,000 kg of carbon dioxide*2. The newly produced carbon dioxide will be distributed in the market through Resonac and utilized as refrigerants in freezer and refrigerating showcases, as well as a raw material for photosynthesis in greenhouse cultivation of plants.

*1: The Wide Area Certification System is a program that allows businesses to obtain certification from the Minister of the Environment to collect waste on a wide area basis and recycle it into raw materials for products or properly dispose of it.
*2: Based on Resonac research

Old Resonac uniforms are also chemically recycled.



Chemical recycling at Resonac

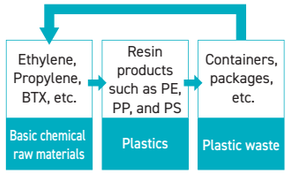
Case Study — Development of chemical recycling technology to produce basic chemicals from mixed plastic wastes



Noriyasu Tezuka
Stage for Co-creation
Carbon Recycling Group

We are engaged in the research and development of chemical recycling technology that converts and recycles various everyday plastics, such as rice ball wrappers and shampoo bottles, back into basic chemicals such as ethylene and propylene. By fiscal 2032, we aim to produce useful basic chemicals from used mixed plastics with a yield of 60 wt% or more, and to reduce CO_2 emissions during production to less than half the current level. This initiative was selected by NEDO for the Green Innovation Fund Project under the category of Development of Plastic Raw Material Manufacturing Technology Using CO_2, etc. We will first implement small-scale trial production at a laboratory, and, after examining reaction conditions and reactor types, we will scale up to medium-scale trial production and large-scale demonstration phases as we optimize operation conditions. Additionally, potential challenges arising during future commercialization will be identified and addressed concurrently. Through co-creation with related departments within the Company, our joint development partner Microwave Chemical Co., Ltd., academia, government ministries and agencies, and public institutions, we aim to produce R&D results that will change society.

Directly recycle into raw materials



Recycling plastic waste using the shortest route:

In theory, this could be the most efficient process, but recycling mixed plastics such as containers and packages is difficult to put it into practical use with existing technology

→ Working to achieve breakthrough technology

The most difficult phases of the LEAP approach are Assess (assess risks and opportunities) and Prepare (preparing to respond and report). Many companies tend to stop at Locate (discovering connections with nature) and Evaluate (assess dependency and impact), but what approach is Resonac taking?



Mr. Matsubara



Dr. Itsubo

I would like to see you accelerate initiatives for water, chemical substances, and plastics.
Are you also setting targets?

Regarding biodiversity, we are considering our vision for the future (2030), and are proceeding with assessments that follow the LEAP approach, including Assess and Prepare, to achieve this vision. Through the LEAP approach, we have reaffirmed the importance of working to preserve biodiversity as a chemical company, including addressing issues surrounding water, chemicals, and plastics, and are considering setting new medium- to long-term targets in these areas.



Rumi Ueyama
Sustainability Department

Since 2024, we have been carrying out initiatives in line with the LEAP approach advocated by TNFD. Our assessment results for the Locate, Evaluate, and Assess phases are disclosed in our annual securities report and this report P130 / Short-, Medium- to Long-term Nature-related Risks and Opportunities and Responses to Them . In the Locate phase, we assessed the natural conditions at and surrounding a total of 59 manufacturing sites and 40 major supplier sites in Japan and overseas. In the Evaluate phase, we identified key dependency and impacts on nature and evaluated their magnitude. In the Assess phase, our use of water, chemical substances, and plastics were assessed as risks.
Based on the results of these assessments, as part of the Prepare phase, we will continue to thoroughly manage chemical substances in direct operations, an initiative we implement as a chemical company on an ongoing basis, and will also strengthen our efforts, including setting medium- to long-term targets, to reduce and manage plastic and water usage. We feel the importance of conducting initiatives to reduce our plastic usage, particularly as a company that operates a plastic chemical recycling business. With this in mind, we are preparing to include this in our non-financial KPIs starting in 2026. As a specific example of our efforts in the Prepare phase, we are carrying out the following initiatives at our sites in India, which have been identified as being at risk through the LEAP approach, aimed at reducing our water usage. In this way, we will place importance on initiatives that take into account the characteristics of each business and plant, while also prioritizing and accelerating our initiatives across the Company.

Case Study — AHA! P21 — Initiatives at Allied Resonac Brake India Private Ltd. (ARBI) aimed at achieving zero water usage

India-based ARBI is a manufacturing base that primarily manufactures brake shoes, brake linings, and brake pads for automobiles. The state of Rajasthan, where it is located, has been designated a water-scarce area by the government, and water usage is subject to restrictions. In order to prepare its production system under these restrictions in 2024, ARBI implemented measures such as changing our cleaning process and reusing water, achieving a reduction in water usage of 3,600 liters per day. ARBI has set a target of zero water usage in manufacturing by 2030, and is currently planning further improvements to its manufacturing processes and a shift in cleaning technology.
ARBI has also installed water purification facilities within its sites to provide employees with safe drinking water, and it also carry out local contribution activities such as installing rainwater reservoirs and providing safe water to schools.



Environmental measures in Kitakata City, Fukushima

In October 2023, we completed environmental remediation work to address soil contamination caused by our business in the past at the Kitakata Plant (Fukushima Prefecture). We will continue to value dialogue and information sharing with local residents.

Niigata Minamata disease

As the company responsible, we once again offer our deepest apologies to the victims of the Niigata Minamata disease, which was caused by wastewater emitted from the former Showa Denko, and to the people living in the surrounding area for the great inconvenience caused. We will continue to work with national and local governments to address this issue in good faith in accordance with the law.

Quality Assurance

Please visit our website for more details.

Q What efforts are you making to control quality risks across the Group?

In 2025, we introduced the Quality Risk/Capability Assessment (QRiC), which integrates our previous quality risk assessments and product compliance audits, to strengthen quality governance across the Group. All plants self-evaluate the status of their own initiatives from seven perspectives, which serve as the basic matters for our quality assurance activities, and compare these with the head office's evaluation results to spot any gaps and highlight strengths and weaknesses across plants.

Previous quality risk assessments	QRiC
● Each year, the head office sets key themes, interviews employees about the challenges faced at each workplace, and makes improvement proposals	● Use company-wide standards, and evaluate strengths as well as weaknesses
● There are no uniform company-wide standards, making relative comparisons impossible	● Audits can be prioritized in accordance with the degree of risk
● There is some overlap with product compliance audits	● Plants can clearly see their position within the company and verify the effectiveness and appropriateness of their measures

Seven perspectives we constantly pursue

1. Customers and society
2. Product safety
3. Compliance
4. Quality assurance
5. Quality management
6. Management system
7. People and organizations

We increase audit frequency and guidance from head office for sites identified as high risk in the QRiC results, and also follow up on response measures to strengthen governance in quality assurance. We are also taking measures to reduce the risk of misconduct through quality compliance awareness surveys of domestic and overseas employees, personnel rotations, and the automation of data transfers.

Tomoaki Aoki
Quality Assurance Promotion Division



Chemicals Management

Please visit our website for more details.

Q As a chemical company, how do you manage the chemical substances contained in your products?

We have established rules regarding substances that must be prohibited or controlled, and share these with our suppliers through our Green Procurement Guidelines. We have established three management categories for controlled substances contained in products (including SVHC under EU's REACH regulation): prohibited substances, controlled substances, and self-managed substances, and manage them in accordance with customer inquiries. Resonac is currently planning to establish a new policy and revise our controlled substances contained in products to reflect current social trends. Going forward, we will continue to identify products that use these controlled substances and their usage amounts, and work to gradually reduce or restrict their use.

Examples of initiatives for specific substances of concern

Chemical substances of concern	Target	Initiatives
Toluene, xylene	Reaction solvents	Replacement with other solvents, development of reduced-impact products
Materials with high bioconcentration factors	Resin materials	Development of alternative materials
Fluorine, halogen compounds	Semiconductor-related materials	Development of reduced-impact products

With new restricted substances being added every year across various countries and regions, we recognize the importance of chemical management and hold discussions within our department, including with young managers, to discuss how to manage chemicals.
In particular, the European headquarters collects the latest information through the Japan Business Council in Europe (JBCE), and strives to properly manage the chemical substances contained in our products.

Takashi Kumaki
Chemicals Management Division



Q How are your PFAS initiatives progressing?

We are continuing efforts to collect and analyze customer trends and regulatory information regarding per- and polyfluoroalkyl substances (PFAS). In addition, we have identified key target products based on manufacturing and usage classifications and product sales volumes, and each business unit (BU) is taking concrete measures such as exploring and developing alternatives and conducting supplier surveys. Looking ahead, the Electronics Business Headquarters, which handles semiconductor material products, is conducting PFAS content surveys in collaboration with internal and external stakeholders. In the coating materials business, we view PFAS-free coating materials as a business opportunity and are actively engaging in marketing activities on this front.

Main response steps

Gain insight into external trends → Research applicable products → Check availability of alternative products → Evaluate the functionality of alternative products → Switch/sell

PFAS has attracted significant interest from customers in semiconductor-related fields, and we have initiated industry-leading research to ensure that we can respond quickly and appropriately even if regulations are introduced in the future. While it is challenging to determine PFAS content across the entire supply chain, since 2024 we have been conducting PFAS content surveys with the cooperation of over 200 major suppliers, which is gradually improving visibility into PFAS usage. We have already begun considering alternatives for some of our products. We also aim to design new PFAS-free products.

Osamu Uchida
Electronics Business Headquarters
Global Supply Chain Management Center



Procurement and Supply Chain

Please visit our website for more details.

Q How do you practice sustainable procurement with your suppliers?
What measures are you taking to manage supply chain risks (BCP)?

We ask all suppliers to comply with the Resonac Group Sustainable Procurement Guidelines and submit a written confirmation of their agreement. We are working to raise awareness by asking new suppliers to complete a CSR Questionnaire when we start working with them, as well as asking major existing suppliers to do so every three years. We also conduct CSR visits every year, visiting approximately 40 suppliers to share information on initiatives pertaining to the environment, human rights, compliance, and other areas. Going forward, we will formulate specific code of behavior for suppliers facing CSR issues to support steady improvements. Furthermore, we upgraded "instability of supply chains" from an A rank risk to an S rank risk as a companywide key risk theme, and are implementing measures to ensure stable and continuous procurement and a stable supply of products to customers, even amid an unpredictable future.

To address supply chain risks, in the procurement field, we have established a Procurement BCP Committee, which is comprised of personnel from each business unit, to standardize and visualize risk level definitions across the Company, and implements various measures to ensure stable procurement by strengthening relationships with suppliers and to prepare for political turmoil, natural disasters, and other emergencies. In the logistics field, we are working to ensure stable logistics by sharing logistics partners across the Company and formulating and promoting policies for improving logistics efficiency. In addition to these initiatives, the status of supply chain risk countermeasures is reported to the management team to promote consistent companywide BCP activities.

Masaomi Shimojima
SCM Division



Advisor's comment

To fulfill your corporate responsibility and turn sustainability into a competitive advantage, you need to go beyond philosophy and establish a consistent operational system integrated with management resource allocation, investment decisions, and human capital development. Considering the nature of Resonac's business, it is important to carry out initiatives that cover employees with diverse nationalities and employment types, as well as various aspects of the supply chain. Please take steps to create an effective framework to achieve this.



Dr. Hasegawa

Safety

Please visit our website for more details.

Q It seems quite difficult to eliminate accidents and disasters, so why have you set the target of zero occupational accidents?

We place safety as our top priority, and in 2024 we launched the "safety model line project" as one of our measures to achieve our vision for the future. We have assigned plants to be responsible for each of six themes identified from the results of past accident analysis and safety activity issues for 2023, which has enabled us to track the status of equipment and operations in the "safety model lines" at plants. Through on-site exchange meetings and spreading output such as rules, we share case studies with each plant, which leads to a reduction in occupational accidents.
We also believe that communication between managers and employees is an important element in establishing a safety culture. As part of measures to achieve this, we are focusing on companywide deployment of the Safety Communication Program (SCP), which is also part of the model lines, to raise safety awareness through feedback from employees and dialogue on accidents and facilitate safe behavior. Using the model lines as a reference, we aim to eliminate occupational accidents by building a mutual-enlightenment safety culture at each workplace.

Identifying the six key model lines

We have built safety model lines that meet basic safety requirements, developed trainers, and set rules that must be followed. Case studies are shared with each plant to prevent occupational accidents.

Six key safety model lines that Resonac focuses on and is building	Designated plant
Elimination of cut/stab injuries	Hikone
Mechanism of Safety Communication Program (SCP)	Shimodate
Model line to eliminate fall accidents	Omachi
Danger prediction training and pre-work danger prediction system	Yamazaki
Elimination of accidents caused by handling heavy objects	Goi
LOTO (lockout/tagout) operation	Oyama



Some people question whether it is realistic to aim for zero occupational accidents. However, because accidents or disasters cause people pain, we will continue to strive for zero. I believe this is a goal we can achieve if the head office and plants work together to map out the path to eliminating accidents and steadily carry out initiatives. Head office staff frequently visit plants to listen directly to on-site feedback, thereby gaining a lot of information that can help prevent accidents and increase overall safety levels.

Katsuhiro Takahashi
Environment and Safety Division

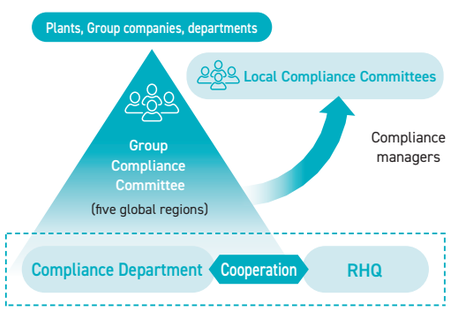


Compliance

Please visit our website for more details.

Q What is your global compliance system?

As with safety, compliance is our top priority. Based on our stance of maintaining high ethical standards, holding discussions, pointing out issues to each other, creating a workplace where violations can be prevented, and not tolerating violations, we hold Group Compliance Committee (secretariat: Compliance Department) meetings four times a year in each of our five global regions (Japan, East Asia, Southeast Asia, Europe, and the Americas). The compliance managers who attend these meetings host local compliance committees at each workplace, where they share examples of violations within the Group, implement educational activities, and conduct self-audits to ensure compliance. We are also currently building a collaboration system that connects CXOs as a mechanism for following domestic and international regulatory trends across a wide range of areas where violations may occur, implementing preventative measures including public awareness, and post-event monitoring.



Respect for Human Rights

Please visit our website for more details.

Q How far along is your human rights due diligence? What are your current challenges and future initiatives?

Regarding human rights risks within the Resonac Group and our supply chain, we conducted a desktop survey covering the business areas of both companies (Showa Denko and Hitachi Chemical) from 2022 to 2023, immediately prior to the merger, to examine human rights issues in regions with high human rights risks and chemical companies. Based on the results, we are currently identifying and addressing risks specific to Resonac's businesses. Additionally, in response to the EU Batteries Regulation*, we have begun due diligence on the environment and human rights in the supply chain for natural graphite, a raw material for anode materials. We asked several companies, including mining companies, to fill out a written questionnaire about the environmental and social risks covered by the EU Batteries Regulation, the stability of mining facilities, and their security systems. Based on the UN's Guiding Principles on Business and Human Rights and OECD guidance, we conducted an evaluation based on two axes: severity (significance) and likelihood of occurrence, and clarified the priority of the issues that need to be addressed. Going forward, we will confirm the plans of each of our relevant business partners to address the identified issues, and continue to request their cooperation in due diligence activities.

*This regulation, which came into effect in August 2023, applies to all batteries sold within the EU, including automotive, industrial, and portable batteries, and requires the reporting of carbon footprints, the introduction of upper limits, the implementation of due diligence, and the recycling of raw materials.

Advisor's comment

Human rights issues arise from interactions between people, so no company is completely free from risk. I would like to see due diligence conducted with the premise that risks are involved, and expect Resonac to disclose what insights were gained and how they were utilized in its measures.



Mr. Matsubara

Conclusion

Itsubo: I think Resonac can be proud of the results of our initiatives thus far, as evidenced by our selection into the SX index. Sustainability serves as the basis of a business, so make sure to deliver detailed information to those who need it the most. With regard to the environment, please accelerate your strategies and measures related to the CCS under Scope 1, and hydroelectric and hydrogen power generation under Scope 2 in particular!

Matsubara: My advice from an investor's perspective is that when disclosing non-financial quantitative data, make sure to explain what the data means and what you will do with it. While I believe that numbers indicate a company's intentions, and that a company's resolve can be read from disclosed data, investors do not make decisions based solely on numbers. Furthermore, CEO Takahashi states that "sustainability is now an essential component of corporate management P11," but this component should also include instructions for use, such as "keep the timeframe (for results and returns, which tend to be long) as short as possible" and "ensure thorough information disclosure." In creating value ultimately, I expect you to find a path that is unique to Team Takahashi.

Hasegawa: Sustainability is not just an admission ticket, it is a premium ticket that leads to the enhancement of corporate value. While it certainly requires initial costs and effort, it is something that only companies that are serious about it can achieve, reaping real benefits in terms of competitiveness and trust in the global market, and dialogue with investors. Furthermore, to continuously achieve value creation through co-creation, it is essential to foster a mindset that enables all employees to feel the connection between their work and social value, and to act independently. This won't happen overnight, but that's exactly why you need to be mindful of the timeframe and engage in ongoing dialogue and system building.

Matsuko: Thank you. This was so fun and exciting! We will come together to pursue ways to contribute to society and the environment through the power of chemistry, and what we want to do to achieve that. Please continue to provide your honest opinions and advice moving forward.





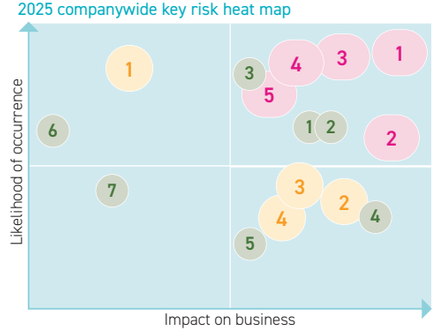
Response to Companywide Key Risks

Resonac has organized the Risk Management Committee chaired by the CEO. The Committee facilitates cross-organizational deliberations by senior executives on the risk management system, key risks facing the Group, and countermeasures for addressing them. Companywide key risk themes were identified based on the deliberations of the Risk Management Committee, at a senior executives study session held in June 2024, and reviewed annually at a senior executives study session held in March 2025.

Monitoring level*	2025 companywide key risks themes
S	① AI x Talent: Restructuring of the talent portfolio due to the rise of AI ② Country risks, economic security ③ AI-driven technological innovation, risks arising from market changes ④ Capital investment delays: Advancement and automation delays (New) ⑤ Supply chain management (SCM) issues (A rank ▸ S rank)
A	① Information leak, cyberattacks ② Misconduct and corruption, compliance scandals ③ Environmental regulatory risks ④ Human rights risks
B	① Unpredictable markets ② Industry restructuring ③ Quality issues ④ Aging facilities ⑤ Lack of IT Infrastructure ⑥ International tax ⑦ Interest rate fluctuation

* S rank: The most significant risks to the Company's operations
A rank: Significant risks to the achievement of Company's targets
B rank: Significant risks to business operations

2025 companywide key risk heat map

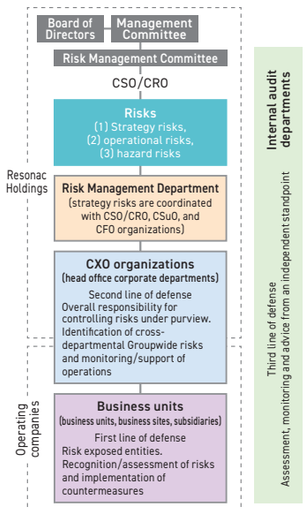


Resonac's risk management system was resolved by the Board of Directors as a key function of the internal control system, and a reporting and monitoring system is established. Our Group's Risk Management Rules are designed to comprehensively and individually address management risks affecting our business. In these rules, we have established executive bodies and responsible departments and provided for management methods that comply with ISO 31000 and other standards.

In implementing risk countermeasures, we have established a comprehensive risk assessment process that combines bottom-up companywide risk identification and top-down companywide key risk identification activities, and approaches risks from both on-site and management perspectives, creating a system that reflects changes in the external environment.

In the companywide key risk heat map analysis, risk themes ranked A or higher are designated as companywide key risks, and a promoting organization is selected to act as the "flag bearer" for addressing each risk. B rank risk themes are treated as individual risks and are addressed by each organization.

Risk management system



Companywide key risks

Rank	Companywide key risks themes	Risk classification	Flag bearer/ promoting organization	Specific risk events
S	Restructuring of the talent portfolio due to the rise of AI	Human resources / labor	CHRO	・Excess staffing arising from productivity improvements ・Obsolescence of employees' existing skills
S	Country risks, economic security	Accidents, disasters	CSO/CRO	・Increased risk of a decline in sales, supply chain disruptions, and market access restrictions due to national interest first policies by each country ・Increased employee safety risk and asset confiscation, production suspension/delay, and business suspension/delay risks due to military clashes
S	AI-driven technological innovation, risks arising from market changes	Management (business investments)	CTO	・Impact on our business operations from changes in competitiveness and market environments due to the spread of AI
S	Instability of supply chains	Procurement, logistics	CMEO/CQO	・Export restrictions imposed by a country that supplies raw materials, cutting off access to those materials
A	Information leak, cyberattacks	Information management	CDO (IT Supervisor)	・Theft of cutting-edge technology information, customers' personal information, etc., and shutdown of production and core systems due to ransomware infection, etc. ・Intentional exfiltration of confidential information by an insider
A	Misconduct and corruption, compliance scandals	Compliance	CSuO	・Damage to corporate value due to impact from the transaction suspensions and reputational damage caused by loss of trust from stakeholders due to the occurrence of compliance violations
A	Human rights risks	Management (sustainability)	CSuO	・Loss of business opportunities due to delayed response to regulations: Impact from suspension of shipments and distribution to Europe due to delayed response to new regulations, mainly in Europe
A	Environmental regulations, sustainability			

For each companywide key risk theme, we conduct a risk scenario analysis and take preventive measures. For country risks identified as S rank, we identify priority regions and businesses by analyzing sales, and then continuously monitor external environmental risks in cooperation with CXOs and business units and work to minimize risks by promotion of establishing production and supply systems based on local production for local consumption.

Example: Risk dashboard for country risks

Rank	Companywide key risks themes	Flag bearer organization	Risk events	Monitoring index (KRI)
S	Country risks	CSO/CRO	Turmoil in global markets due to accelerated economic security policies by the U.S. and China	Foreign and industrial policies by the U.S. and China

"Supply chain instability" risk scenario

Risk events: Increased risk of sales declines and supply chain disruptions, etc., due to the acceleration of economic security policies by the U.S. and China (national protection and domestic industry development policies)

Types of policies to watch

Protection policies:
(1) Import tariff hikes
(2) Acceleration of restrictions on resource imports and exports
(3) Tightening of export restrictions related to cutting-edge semiconductors
(4) Revisions to trade agreements

Development policies:
(5) Support for domestic industries and national policies promoting domestic production

Risk scenario events to watch

Impacted areas	Risk scenarios impacting our industry
U.S., China, and others	A retaliatory tariff battle between the U.S. and China triggered by the U.S. tariff hikes as well as the trend spreading to other countries.
Global	Export and sales restrictions on important minerals accelerate as part of dual-use restrictions.
China	Export restrictions on China are expanded to include not only semiconductors and their manufacturing equipment and technology, but also semiconductor materials.

Main impacts on the Company

A: Declining price competitiveness of export products (especially to China and the U.S.), declining sales, and restructuring of supply chains in various countries
B: Procurement of raw materials (especially from China) is disrupted, making it impossible to continue production*
C: Decrease in export sales to China

Response measures and plans	Preventive measures (normal times)	Ex-post measures
	●Continued monitoring of external environmental risks in cooperation with CXOs and business units (geopolitical risks, Trump 2.0 status, etc.) ●Minimization of risks by establishing a production and supply system based on local production for local consumption * Identify purchase items with high procurement risk and implement measures	Form response teams within relevant departments to discuss and implement actions to be taken.

Examples of measures in progress

● Companywide distribution of a country risk report



● Formulation of Taiwan contingency evacuation plan

- Implement officer simulation
- After reaffirming that human safety is the top priority, the decision was made to formulate an evacuation plan

In progress
- Personnel evacuation policy (creation of an action workflow in tense situations)
- Gathering information in the event of an emergency
- Transfer of authority to local subsidiaries

Security incident that occurred at Resonac



Minoru Nomaru
Chief Digital Information Officer (CDIO)

In the early morning of May 20, 2025, we experienced an incident in which files on Resonac Group servers and PCs were encrypted. Subsequent investigations confirmed that it was caused by a cyberattack using ransomware, and we established an emergency response team to respond swiftly to the incident. To prevent damage from spreading, we immediately took action, such as tentatively disabling internal networks, which resulted in some computer systems becoming unusable and business operations being halted. We then launched a detailed investigation with the cooperation of external experts. We also filed a police report, cooperated with relevant government ministries and agencies, and continued to take various actions to minimize business impact on all customers and business partners.

As a result of our emergency actions, by July 4, we confirmed that there was no impact on product shipments. Furthermore, an external cyber security expert team analyzed the ransomware and concluded that there was no risk of infection spreading to customers' and business partners' network from our network.

We sincerely apologize for the great concern and inconvenience this incident has caused to our business partners and related parties.

We have confirmed that the cause of this incident was an external attacker who somehow infiltrated the our internal network and activated the ransomware. We will thoroughly implement measures to prevent similar incidents from occurring in the future.

May 20, 2025
1. External attacks were detected on some of our servers, and ransomware infection was confirmed.
2. Immediately begin an investigation with the cooperation of external experts and establish an emergency response team to take swift action.

June 9
Transition to a task force centered on CDIO

July 4
External experts analyzed the ransomware and concluded that there is no risk of infection spreading between our network and our customers' networks.

We aim to establish a system capable of responding promptly to incidents within the next 1.5 years. Furthermore, within three years, we aim to establish a sophisticated security framework to predict and detect advanced threats beyond ransomware.

Emergency measures | Short-term measures in 2025 and long-term measures in 2026 and after

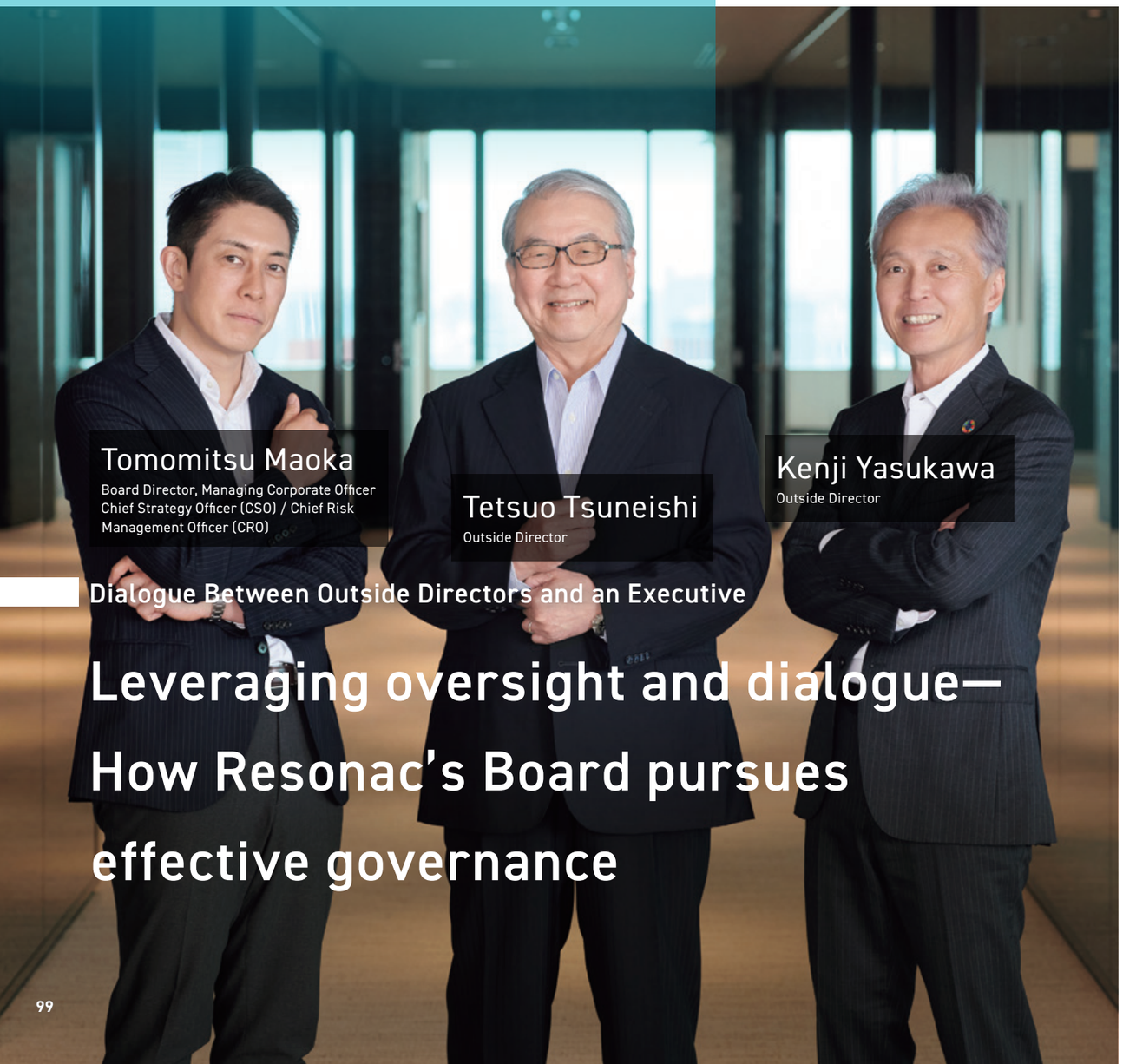
05 Resonac's Governance

Here we introduce the progress of corporate governance reformation for enhance Resonac's corporate value.

99 Dialogue: Dialogue Between Outside Directors and an Executive

105 Directors, Audit & Supervisory Board Members / Corporate Officers / Skill Matrix

110 Corporate Governance



Dialogue Between Outside Directors and an Executive

Leveraging oversight and dialogue— How Resonac's Board pursues effective governance

Since our two companies merged, Resonac has focused on building a new corporate culture and reorganizing its management system.
At the Board of Directors, we have started by clarifying the Board's monitoring role, reviewed agenda setting and the criteria for appointing directors, and strengthened communication. This has steadily improved our system, ensuring that policies and practices are aligned.
Our fiscal 2024 focus on defining Resonac-style monitoring functions has been a key initial effort to strengthen governance effectiveness.
We had a candid discussion, including perspectives of outside directors, about how to divide oversight and execution roles, optimize diversity and skills, and tackle future challenges.

Progress and current status since integration

Maoka Until recently, Board of Directors had become more like slightly stricter Management Committee. The line between oversight and execution was blurred. I think this happened because, although the "when" and "where" were clear, discussions moved forward without defining the other elements of the 5 Ws and 1 H framework. In our Board of Directors so far, we have primarily focused on clarifying the Board of Directors' role to improve the quality of its discussions. That has involved refining how we select board agenda items by raising the financial threshold for discussions. We also shifted our focus to monitoring function, and introduced pre-briefings for important matters and casual opinion exchange meetings. We especially put a lot of effort into defining the monitoring that would ensure the Board functions effectively.

Tsuneishi I joined as an outside director in March 2023, so I haven't observed changes in the Board over a long period. However, I feel that the new management team led by CEO Takahashi is strongly cohesive and has built a strong framework. Another notable feature of the Company is that, despite being long established, more than half of upper management (inside directors) joined in just the last few years. However, while Resonac has many locations both in Japan and abroad, there are still issues in terms of whether each site has built strong relationships and achieved ideal co-creation operations. Given the company's size, governance challenges are likely significant, so we need to keep a close watch on this. That said, it is unmistakably a rationally driven implementing organization that makes quick decisions. In this ultra-VUCA (volatility, uncertainty, complexity, and ambiguity) society of rapid change, Resonac's ability to make quick decisions and act swiftly is a major strength.

Yasukawa I also haven't been in my position long enough to fully assess the changes. But I'm impressed by the strong commitment to creating a new culture, along with the ability to put it into action, instead of keeping the old traditions of the former Showa Denko and the former Hitachi Chemical after their major merger. However, from a business perspective, the different areas of focus of the former companies have resulted in limited interaction among staff at the operational level, which is a challenge. Different cultures could develop at each business site, so we need to closely monitor how this issue is addressed. Portfolio management is a frequent

Dialogue Between Outside Directors and an Executive

topic in Board discussions. I feel that the Board of Directors is eager to embrace changes to meet its goals. However, since Resonac is a manufacturing company that produces complex parts and materials, it would be good, I believe, to hear more about quality control and quality improvement.

The essential elements for more effective monitoring

Maoka In 2024, the Board of Directors had in-depth discussions about the style of monitoring that would suit Resonac. "Monitoring" is easy to say, but surprisingly hard to define precisely. But to make monitoring more effective, we need a clear definition. That's why we started by discussing a Resonac style of monitoring so we could put that into words. To sum up, we haven't reached a final decision yet. We have just set up initial guidelines to gradually provide feedback as discussions continue. Tsuneishi-san and Yasukawa-san, what perspectives do you think the Board of Directors at Resonac now needs to improve the effectiveness of its monitoring functions? As outside directors, what do you focus on to ensure effective monitoring?

Tsuneishi And when you delve deeper into the term "monitoring," you find its function essentially means watching over business execution from a shareholder point of view. And when you delve deeper into the term "monitoring," you find its function essentially means watching over business execution from a shareholder point of view. With that in mind, in order to enhance functionality, the focus should be on how three bodies within the Board of Directors, namely the Nomination Advisory Committee, the Remuneration Advisory Committee, and the Audit & Supervisory Board, can stay independent and effective while improving their performance as committees. That said, if I were asked whether monitoring is the Board's ultimate goal, I would say it is not. The true objective of both the Board of Directors and the Management Committee is to increase corporate value in the short, medium and long term, and monitoring is simply one effective means of achieving this. In recent years, "diversity" often comes up with monitoring. It's also important to clearly recognize a viewpoint that the purpose of embracing "diversity" is to strengthen corporate value. Although it's not entirely a case of mixing up means and ends, we often see a focus on methods and forms without clearly defining the objectives.

Yasukawa I'll tell you about my approach to ensuring effective monitoring. From a short-term business perspective, what I focus on most is setting accurate goals. The goal must be on the highest point you can reach through effort. If the goal is too low or too high, that can slow down the business. We need to watch closely whether the goals have a solid, logical foundation. So, we would like to ask executive management to provide detailed information to support this. The priority from a medium- to long-term perspective is portfolio management. Now Resonac has a strong position in semiconductor back-end processes. But if it's recognized that this area is profitable, competitors from around the world might enter the market. What are we going to do if that happens? Will we move to another field or will we develop our experience and achievements into strengths? We need to discuss which path to take from the many options available. We also need to be well-prepared for both strategic and environmental risks. For something like decoupling, I want to ensure that the company doesn't get caught off guard, not knowing what to do next. By categorizing and focusing on various challenges and risks, I am eager to actively contribute to Board discussions myself.For something like decoupling, I want to ensure that the company doesn't get caught off guard, not knowing what to do next. By categorizing and focusing on various challenges and risks, I am eager to actively contribute to Board discussions myself.



Saying "monitoring" is easy, but defining it precisely is hard. Enhancing effectiveness requires alignment in thinking. [Maoka]

We could make the Board to further enhance its effectiveness by building a system that allows flexible adjustment of its composition to match changes in times and shareholder composition.

[Mr. Yasukawa]



Skills and diversity required for the Board

Maoka Your discussion is directly connected to the three areas defined in the fiscal 2025 action plan—sustainability, portfolio management, and risk management. In 2024, we also reviewed the selection criteria for directors. The selection criteria used before were quite generic and not tailored to Resonac. It was not an acceptable situation for us, as we stood at the new starting point following the integration of historic Japanese chemical manufacturers, determined to increase corporate value through global competition. That's why we've redefined the skills and selection criteria that Resonac needs for the future. Tsuneishi-san and Yasukawa-san, what do you think are the skills and diversity required for the Board of Directors?

Tsuneishi As I mentioned earlier, a board's diversity should increase corporate value. You could hire people with backgrounds that are not relevant to the company or its business just for the sake of diversity, but you won't increase corporate value by that. Companies should first find people who can excel in the companies, their industry, and business model. Companies should first find talented people who can excel in the companies, their industry, and business model. Then, they should decide how to increase diversity among

Dialogue Between Outside Directors and an Executive

those candidates. Recently, there has been too much focus on diversity itself without carefully tying it to increasing corporate value. We have to go back to basics. Expectations of the Board of Directors should align with the Board's core role. That means overseeing, advising, and supporting business execution from the perspective of representing shareholders. Appointments should be based on this approach.

Yasukawa Tsuneishi-san is exactly right about the skills and diversity required for the Board. Building on that, to make the Resonac's Board more stable, we need a system that allows flexible adjustment of its composition to match changes in times and shareholder composition. Resonac's Board composition is now focusing on monitoring, but in a few years, the Board might be expected to engage more in strategic discussions. To respond to changing needs and circumstances, setting fixed terms for outside directors would be one effective way to help the Board maintain an optimal composition. Setting a term enables us to find successors in advance and handle unexpected resignations more easily.

Tsuneishi It's also important to know whether they can handle their duty. Even if someone is highly capable, if they serve as outside directors for many companies other than Resonac, they will inevitably have limited time and energy to commit. Simply asking someone to join doesn't guarantee they'll do so. To keep things running smoothly, we need to expand our pool of strong candidates for the 2 to 3 years ahead.

Yasukawa Times are changing quickly, and we need to find the right people for each era. Long tenures might not be helpful for this. Of course, if someone has made a significant contribution, we can extend their term with everyone's agreement. Keeping things flexible is more beneficial.

Governance challenges in 2025 and outlook

Maoka As mentioned, Resonac is currently defining its monitoring function while incorporating feedback. Our main focus is to refine this process. We are now putting a lot of effort into cultivating corporate culture, developing human resources, and optimizing the business portfolio. But since things are always changing, it's important to regularly reassess our agenda. We are now putting a lot of effort into changing corporate culture, developing employees, and optimizing the business portfolio. But since things are always changing, it's important to regularly reassess our agenda. We must tackle the quality control issues Yasukawa-san pointed out at the beginning of the discussion and truly integrate our business processes and information systems which have become increasingly complex due to the integration. Leaving aside whether these are governance issues, without focusing on these details, the Company cannot evolve as a business.

Tsuneishi From a board governance perspective, we must strengthen the independence and effectiveness of the advisory committees. I believe the current level is already quite high, but it's not something that can ever be considered finished. We must keep working on it. From a company-wide perspective on global and group governance, Resonac has a large number of locations and businesses, so it is necessary to consider how to effectively connect them and strengthen these connections. It is especially important to ensure psychological safety and create an environment where all of our over 20,000 employees can speak their minds freely to anyone, anywhere. Building a corporate culture like this could ultimately help establish group governance. While formally written group governance structures are important, governance truly thrives in a culture and atmosphere that goes beyond rigid documentation.

Yasukawa We live in an era of multistakeholder capitalism. Companies must contribute to all stakeholders in the society we are part of, including shareholders, employees, business partners, customers, and the local community. Shareholder capitalism may focus solely on short-term profits, but multistakeholder capitalism requires us to think about sustainability as well as profits. The Board of Directors must advance discussions to benefit all stakeholders. In portfolio management, businesses should always discuss how to spot and use current market trends. When selling a business, for instance, it's crucial to regularly review and assess which factors should have been monitored to ensure a more successful sale. We are keenly aware that, having just been through the major transformation after the merger, Resonac is not yet in a stable position. Over the next year or two, I'd like to hear the Board identify promising opportunities and the investments needed to nurture growth from them. I look forward to delving into deep discussions about those opportunities.



We need to create an environment where all of our over 20,000 employees can speak their minds freely to anyone, anywhere. Building this kind of corporate culture allows governance to truly thrive. [Mr. Tsuneishi]

• About this dialogue

Participants : Tetsuo Tsuneishi, Outside Director; Kenji Yasukawa, Outside Director; Tomomitsu Maoka, Board Director, CSO/CRO

Aim : Showing the steps we have taken to strengthen governance (achievements and current status), what the governance system is needed to further enhance Resonac's strengths and which points we believe governance needs to be strengthened.

• Keywords of the dialogue

Governance reforms that have been promoted	Careful selection of agenda items for Board of Directors, shift to monitoring-focused functions, introduction of advance explanations and opinion exchange meetings for important matters, and verbalization of definitions.
Improving the effectiveness of monitoring functions	Improving the independence and performance of the Nomination and Compensation Committees and the Audit Committee, setting goals, portfolio management, strategic risk and environmental risk management
Composition of the Board of Directors	Criteria for appointing directors, diversity to enhance corporate value, supervision and support from the perspective of shareholders, and flexible system development
Issues and the Future of Governance	Agenda setting tailored to the situation, global governance, a corporate culture that ensures psychological safety, and multi-stakeholderism

Directors and Audit & Supervisory Board Members

We have set "maximizing corporate value" as a common goal for the Board of Directors (supervision) and the management team led by the CEO (execution). The Board of Directors is run with an emphasis on the monitoring function, performed mainly by Outside Directors. The Board goes beyond that and deepens discussions by offering opinions and suggestions from diverse viewpoints. We position portfolio management, sustainability, and risk management as the most important issues to be supervised and discussed at Board of Directors, and have set appropriate and specific agenda items to ensure that the Board of Directors' monitoring function is carried out effectively.



Tetsuo Tsuneishi

Outside Director

Skills possessed

Please see the website for profile WEB

Term of office as Board Director: 2 years Attendance at BoD meetings in 2024: 15/15

Introduction After joining the then Tokyo Electron Laboratories, Inc. (current Tokyo Electron Ltd.) in 1976 and gaining overseas business experience, he became Chairman of the Board of Directors in 2015. His track record of leading companies to growth as a manager has given him advanced expertise and extensive practical experience in global management and the semiconductor business. He was appointed Vice Chairman of the Japan Association of Corporate Directors in 2022. Since becoming an Outside Director of the Company in 2023, he has been providing important advice on corporate governance reforms aimed at by the Company, utilizing his knowledge of corporate governance.

Significant concurrent positions Corporate Director, Tokyo Electron Device Ltd.

Resonac is characterized by a strong sense of unity among its executive team and agile decision-making and action. To achieve corporate growth through effective monitoring, we discussed the diversity of our Board of Directors in 2024 and established the requirements and necessary skills of Board members.



Kenji Yasukawa

Outside Director

Skills possessed

Please see the website for profile WEB

Term of office as Board Director: 1 year Attendance at BoD meetings in 2024: 12/12

Introduction He joined the then Yamanouchi Pharmaceutical Co., Ltd. (current Astellas Pharma Inc.) in 1986. In April 2023, he was appointed as Representative Director, Chairman of the Board of the company (current position). With a background in a top Japanese pharmaceutical firm that operates globally and has undergone corporate integration, he possesses development experience in the U.S., has been involved in the formulation of management strategy and sales oversight, and has broad experience and insights as a manager of a leading company with diverse human resources. Since taking office in 2024, he has been providing us with important advice from various perspectives by utilizing his knowledge as a corporate manager.

Significant concurrent positions Representative Director, Chairman of the Board, Astellas Pharma Inc.

In terms of remuneration, we established a remuneration system for upper management that matches global levels. We discussed target levels for corporate growth and clarified criteria to ensure that results are reflected in remuneration. Outside directors also represent shareholders, so it is important to have governance that can be clearly explained.



Skills

We have identified the following skills required of Board members to effectively discuss agenda items.

- Global business
- Portfolio management
- Sustainability
- Risk management
- Finance / accounting / capital markets
- Innovation
- Human resource development / corporate culture
- Legal / compliance



Masaru Onishi

Outside Director

Skills possessed

Please see the website for profile WEB

Term of office as Board Director: — Attendance at BoD meetings in 2024: Newly appointed

Introduction He joined Japan Airlines Co., Ltd. in 1978. After accumulating experience in both the maintenance and planning departments, he was appointed as top management of the company immediately after it filed for bankruptcy in 2010. He led the company's rehabilitation as a corporate executives, contributing to its resurgence, and also possesses wide-ranging experience and insight as an outside director in various industries. He also has deep knowledge of and provides advice on safety, which the Company prioritizes.

I am incredibly excited to be joining the Board this year. Although Resonac and Japan Airlines, a manufacturer and an airline, are in very different industries, I plan to utilize my experience to contribute to corporate culture in areas such as safety and diversity.



Izumi Sakakibara

Outside Director

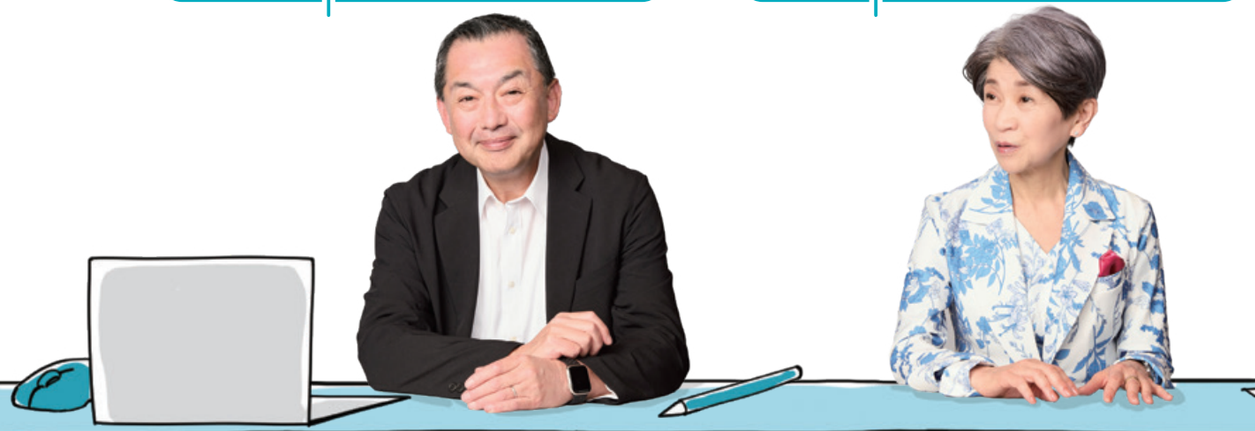
Skills possessed

Please see the website for profile WEB

Term of office as Board Director: — Attendance at BoD meetings in 2024: Newly appointed

Introduction She joined the Ministry of Health and Welfare (current Ministry of Health, Labour and Welfare) in 1982. She possesses experience in the establishment of heart transplant systems, among others, at the Health Policy Bureau, and in the life science field, she was involved in business development, portfolio restructuring, and M&As in Japan and overseas at Toray Industries, Inc., Otsuka Group, and FUJIFILM Corporation. She provides valuable advice to the Company by utilizing her strategic perspectives gained through this wide-ranging experience.

First as an engineer in the field, and then as a manager, I have been working to maximize business value and facilitate innovation. Having been appointed as a Board Director of the Company this year, I will strive to support Resonac in achieving sustainable growth.



Directors and Audit & Supervisory Board Members



Hidehito Takahashi

Skills possessed

Representative Director, President and Chief Executive Officer (CEO)

He joined the then Mitsubishi Bank, Ltd. (current MUFG Bank, Ltd .) in 1986. He has held management positions at GE Japan Holding Corporation and several other foreign companies. Having joined the Company in 2015, he has been promoting the Company's growth strategy as the Chief Strategy Officer (CSO) since 2020. Since 2022, he has overseen the company-wide management strategy as Representative Director and Chief Executive Officer (CEO) and completed the integration with Hitachi Chemical. He leads Team Takahashi with ample knowledge and practical experience in business, leadership, and execution skills.

Term of office as Board Director: 8 years
Attendance at BoD meetings in 2024: 15/15
Please see the website for profile WEB



Kohei Morikawa

Skills possessed

Board Director, Chairman of the Board President, Chairman of Japan Association for Chemical Innovation

He joined Showa Denko K.K. (currently the Company) in 1982. After being in charge of the R&D and business units for specialty chemicals and high-purity gases for semiconductors, he was appointed as Chief Technology Officer (CTO). From 2017, he oversaw company-wide management strategy as the Representative Director and Chief Executive Officer (CEO). He has knowledge and experience in the technology and markets of functional chemicals that the Company focuses on. He has been promoting reform of the Board of Directors to enhance its monitoring function since 2022, as the Chairman of the Board.

Term of office as Board Director: 9 years
Attendance at BoD meetings in 2024: 15/15
Please see the website for profile WEB



Hideki Somemiya

Skills possessed

Board Director, Chief Financial Officer (CFO)

He joined Nomura Research Institute, Ltd. in 1990. He has advanced expertise and extensive practical experience in corporate finance and accounting based on his track record as a financial officer at foreign investment banks and Sony Corporation. He also led strategies and business related to semiconductors and system solutions at Sony. Since joining the former Showa Denko in 2021, he has been implementing financial and accounting strategies to improve profitability and corporate value.

Term of office as Board Director: 3 years
Attendance at BoD meetings in 2024: 15/15
Please see the website for profile WEB



Tomomitsu Maoka

Skills possessed

Board Director, Chief Strategy Officer (CSO), Chief Risk Management Officer (CRO)

He joined A.T. Kearney, Inc. in 1999. He joined Renesas Electronics Corporation in 2013 after serving as a strategy and business manager at foreign companies. He has accumulated a track record in a number of corporate planning and China business management executive positions, and possesses advanced expertise and extensive practical experience in management strategy and global management of technology companies. Since joining the Company in October Since joining the Company in October 2021, he has been promoting the advancement of management strategy and risk management, as well as global expansion.

Term of office as Board Director: 3 years
Attendance at BoD meetings in 2024: 15/15
Please see the website for profile WEB



Nori Imai

Skills possessed

Board Director, Chief Human Resource Officer (CHRO)

She joined former Hitachi Chemical in 1995. In addition to sales experience in the US, she has experience in multiple businesses and corporate planning. She served as a leader from Hitachi Chemical during the integration of the two companies. Since 2022 after the integration, she has been leading the permeation of Purpose and Values, integration of HR systems and personnel systems, and laying the foundation for cultural transformation as the Chief Human Resource Officer (CHRO).

Term of office as Board Director: 1 year
Attendance at BoD meetings in 2024: 12/12
Please see the website for profile WEB



Toshiharu Kato

Skills possessed

Full-time Audit & Supervisory Board member

He has been involved for many years in the corporate planning department as well as in the finance and accounting departments both in Japan and overseas, and since 2017, he has served as the Chief Financial Officer (CFO), overseeing the finance and accounting departments. He has ample knowledge and extensive practical experience in management, finance, and accounting.

Term of office as A&S Board member: 6 years
Attendance at BoD meetings in 2024: 15/15
Attendance at A&S Board meetings in 2024: 14/14



Mitsuo Katayose

Skills possessed

Full-time Audit & Supervisory Board member

He joined former Hitachi Chemical in 1987. He was involved in R&D in the electronics materials area, functional materials business planning, and the automotive parts business, and led the creation of new businesses and products as Chief Technology Officer (CTO). After integration, as General Manager of the High Performance Materials Business Headquarters, he has promoted the integration of both companies' materials businesses and the creation of technical synergies. He has the ability, knowledge, and broad experience to perform audits of business operations in an accurate and fair manner.

Term of office as A&S Board member: 1 year
Attendance at BoD meetings in 2024: 12/12
Attendance at A&S Board meetings in 2024: 11/11



Masako Yajima

Skills possessed

Outside Member of Audit & Supervisory Board, Foreign Law Joint Enterprise Partner, Nishimura & Asahi

As an attorney at a law firm that focuses on corporate law, she handles cases related to crisis management and disputes. She has experience and a high level of insight as a lawyer with extensive international experience in corporate legal affairs. In addition to ensuring the appropriateness and legality of business execution in the globalization of the Company's business and M&As, she has been providing forward-looking legal advice utilizing knowledge and experience in preventive law.

Term of office as A&S Board member: 5 years
Attendance at BoD meetings in 2024: 15/15
Attendance at A&S Board meetings in 2024: 14/14



Yasuyuki Miyasaka

Skills possessed

Outside Member of Audit & Supervisory Board, President, Yasuyuki Miyasaka CPA Office

As a certified public accountant involved in audits domestically and internationally for many years, he possesses advanced expertise and extensive experience in corporate finance and accounting. He has served as an Outside Member of Audit & Supervisory Board of the Company since 2022 and provided advice from the perspective of ensuring the appropriateness of business execution. From his standpoint as a specialist, he provides useful advice on how the Company can earn sufficient returns that exceed its cost of capital.

Term of office as A&S Board member: 3 years
Attendance at BoD meetings in 2024: 15/15
Attendance at A&S Board meetings in 2024: 14/14



Kiyoko Toda

Skills possessed

Outside Member of Audit & Supervisory Board

She has extensive business experience and advanced expertise in corporate finance and accounting, and ethical compliance related to manufacturing and financial institutions that operate globally. She gained experience in the audit division of a major auditing firm, and has been involved in the management of Japanese subsidiaries of foreign companies as the head of the finance and accounting department and the ethics and compliance department.

Term of office as A&S Board member: 1 year
Attendance at BoD meetings in 2024: 12/12
Attendance at A&S Board meetings in 2024: 11/11

Corporate Officers

President

Hidehito Takahashi Chief Executive Officer (CEO)

Executive Vice President

Hiroyuki Yamashita General Manager, Electronics Business Headquarters, Resonac Corporation

Managing Corporate Officers

Hideki Somemiya Chief Financial Officer (CFO)

Managing Corporate Officers

Tomomitsu Maoka Chief Strategy Officer (CSO) / Chief Risk Management Officer (CRO)

Nori Imai Chief Human Resource Officer (CHRO)

Corporate Officers

Shigeru Fujita Chief Marketing Officer (CMO)

Nami Matsuko Chief Sustainability Officer (CSuO)

Corporate Officers

Naobumi Shimpo Chief Operations, Manufacturing and Engineering Officer (CMEO) / Chief Quality Officer (CQO)

Masato Fukushima Chief Technology Officer (CTO)

Satoshi Hara General Manager, Mobility Business Headquarters, Resonac Corporation

Takafumi Sakurada General Manager, High Performance Materials Business Headquarters, Resonac Corporation

Hidenori Abe CTO for Semiconductor Materials

Skill Matrix

The skills required of Board members identified to effectively discuss key agenda items set by Resonac Holdings are as follows:

	Name			Term of office (years)	Attendance at BoD meetings in 2024:	Attendance at A&S Board of Directors in 2024:	Global business	Portfolio management	Sustainability	Risk management	Finance / accounting / capital markets	Innovation	Human resource development / corporate culture	Legal / compliance
Board Director	Hidehito Takahashi			8	15/15		○	○	○		○		○	
	Kohei Morikawa			9	15/15		○	○	○			○		
	Hideki Somemiya			3	15/15		○	○	○		○		○	
	Tomomitsu Maoka			3	15/15		○	○	○	○				○
	Nori Imai			1	12/12		○	○	○				○	
	Tetsuo Tsuneishi	Outside	Independent	2	15/15		○				○		○	○
	Kenji Yasukawa	Outside	Independent	1	12/12		○	○	○			○	○	
	Masaru Onishi	Outside	Independent	-	Newly appointed					○			○	○
	Izumi Sakakibara	Outside	Independent	-	Newly appointed		○	○	○			○		
							8	7	7	2	3	3	6	3
Audit & Supervisory Board Members	Toshiharu Kato			6	15/15	14/14			○		○			
	Mitsuo Katayose			1	12/12	11/11		○				○		
	Masako Yajima	Outside	Independent	5	15/15	14/14				○				○
	Yasuyuki Miyasaka	Outside	Independent	3	15/15	14/14				○	○			
	Kiyoko Toda	Outside	Independent	1	12/12	11/11					○			○
							0	1	1	2	3	1	0	2

Corporate Governance

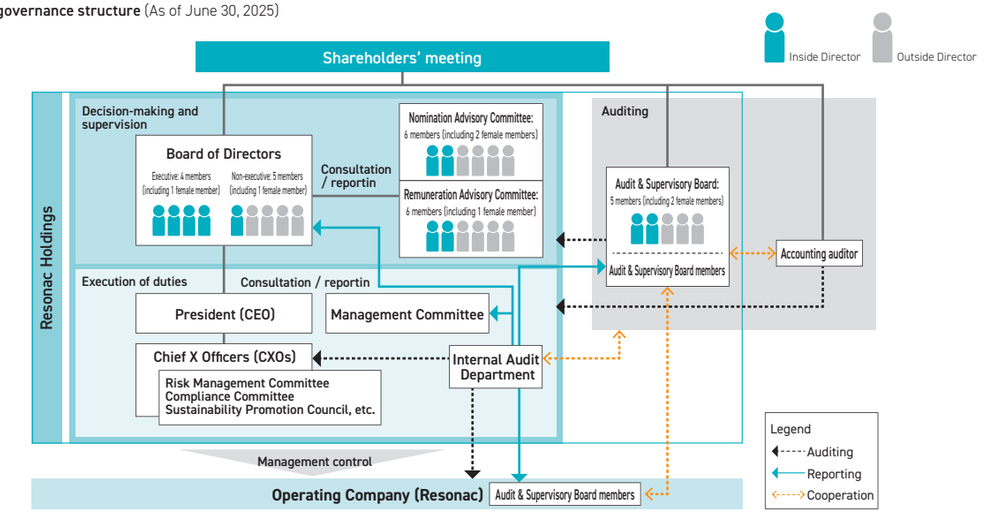
Please also read the "Corporate Governance" page on our website.

Basic Policies

Resonac believes in the importance of continuously enhancing its corporate governance in terms of supporting efforts to create the functions required of an advanced materials partner according to the times; contributing to the sustainable development of global society; and realizing the Group's Purpose of "Change society through the power of chemistry."

Company shall ensure soundness, effectiveness and transparency of management and swift decision-making. The Company shall also build a system that allows us to demonstrate our corporate value and fully take advantage of our resources, with a focus on objectives such as strengthening our management and technological foundations and improving the capabilities and motivation of our employees.

Corporate governance structure (As of June 30, 2025)



Board of Directors

Chairperson Inside director not in charge of business execution Meeting frequency Once a month in principle

Audit & Supervisory Board

Chairperson Inside full-time Audit & Supervisory Board member Meeting frequency Once a month in principle

Nomination Advisory Committee

Chairperson Outside director Meeting frequency 5 or 6 times a year

Remuneration Advisory Committee

Chairperson Outside director Meeting frequency 3 or 4 times a year

Management Committee

President, CXOs, and division heads whose presence on the committee is deemed necessary by the president

Chairperson President Meeting frequency Twice a month in principle

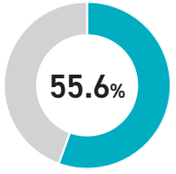
Ratio of Outside Directors



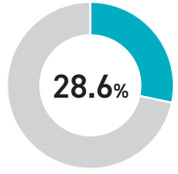
Ratio of Outside Officers
(Directors, Audit & Supervisory Board members)



Ratio of Directors Not in Charge of Business Execution



Ratio of Female Officers
(Directors, Audit & Supervisory Board members)



Corporate Governance

Evaluation of the Board of Directors' Effectiveness

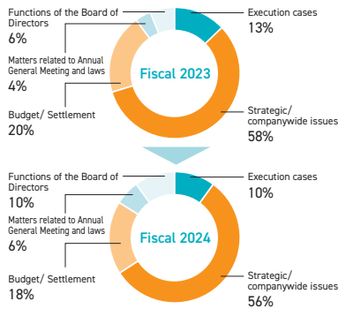
Evaluation method

The Company evaluates the effectiveness of the Board of Directors every year, aiming to strengthen corporate governance and improve effectiveness of the Board of Directors in and after the next fiscal year. To be specific, in December 2024, the Company surveyed respective Directors and Audit & Supervisory Board Members through unidentified questionnaires and free descriptions to evaluate the effectiveness of the Board of Directors in fiscal 2024. Then, in March 2025, the Board of Directors held a meeting for all directors and Audit & Supervisory Board members to discuss the collected self-evaluation results and the discussions on the Board of Directors reform held in fiscal 2024, create a summary of the evaluation results for fiscal 2024, and formulate an action plan for fiscal 2025. Note that we have outsourced the questionnaire survey and aggregation of the results to an outside institution in order to ensure its objectivity and enhance future effectiveness of the Board of Directors.

Evaluation results (Actions taken in 2024)

Issues recognized in the review of the management of business in fiscal 2023	● Discrepancies exist in the skills which are recognized as being necessary for the members of the Board of Directors. Discussion on this matter requires a lot of time. ● An agenda setting appropriate for monitoring is required. ● Some Directors said it is necessary to improve information sharing with advisory committees. Some Directors also said it is necessary for the Board of Directors to have substantial discussion about requests from investors.
Action plan for fiscal 2024	1. Continue discussion on how the Board of Directors' meetings should be (including composition of the Board of Directors and skills of each Director) in order to make it function effectively as a monitoring board. 2. Formulate and implement agenda optimized for the Board of Directors to function as a monitoring board. 3. Enhance effectiveness of the Board of Directors through continuous improvement in various opportunities of communication and information sharing.
Actions taken in fiscal 2024	1-1 To further invigorate discussions, we added a new category of agenda items titled "Discussion Items" in addition to the previous resolution and reporting matters. 1-2 Utilized "Discussion Items" and forums for exchange of opinions to articulate the Board of Directors' supervisory function, clarified the subjects of supervision, and engaged in deep discussions about the skills that the Board should possess 2-1 Conducted discussions regarding the subjects that the Board should supervise and corresponding agenda discussions, as well as discussions on agenda setting for 2025 2-2 Starting from fiscal 2024, established and commenced operation of an agenda focused on the Company-wide key issues 2-3 Established a follow-up cycle for issues identified by the Board of Directors, and set an agenda based on these identified issues 3-1 Improved the sharing of the content of pre-meeting explanations and began supplemental explanations during proposal presentations based on prior explanations 3-2 Shared the minutes of advisory committee meetings with Board members who are not committee members, and initiated presentations by committee chairs on key discussion points at the Board of Directors' meetings 3-3 Started holding meetings between the accounting auditor and outside directors 3-4 Held lunch meetings among outside officers only, including Outside Members of Audit & Supervisory Board

Changes in the characteristics of matters discussed at the Board of Directors' meetings caused by changes in standards for bringing up matters for discussion to the Board of Directors' meetings



[Strategic/companywide issues]
- Business strategies, portfolio reform, and human resource strategies Strategies for R&D and intellectual properties, governance system
- Material issues for sustainability
- Progress in risk management promotion, important CXO issues, etc.

Action plan for fiscal 2025 based on the reviews of business execution in fiscal 2024 is as follows.

Issues recognized in the review of the management of business in fiscal 2024	● While there are voices expressing appreciation for efforts to optimize the agenda in terms of the appropriateness of proposals, there is also a call for further enhancement of strategic discussions over the medium to long term ● Feedback on investor opinions and the sharing of information from advisory committees have received mixed evaluations among members. There are calls for improvements in the quantity and quality of information, opportunities for better understanding of the Company, and collaboration with various organizations. ● Although a common understanding has been established regarding the role that the Board of Directors should fulfill, there is a significant disparity in evaluations of the Board's composition between inside and outside officers, with calls for discussions on independence and diversity
Action plan for fiscal 2025	1. Focus on enhancing the functions of the Board as a monitoring body by optimizing the agenda centered around sustainability, portfolio management, and risk management as well as deepening of discussions 2. Enhance effectiveness of the Board of Directors through continuous improvement in various opportunities of communication and information sharing. 3. Continue discussion on the functioning of the Board of Directors (including its composition).

Information sharing and dialogue with outside directors

With the aim of further improving its effectiveness, the Board of Directors also holds lunch meetings and plant visits, among other measures, to increase opportunities for information sharing and dialogue. In November 2024, we held the first Board meeting outside the Head Office since the COVID-19 pandemic at the Kawasaki Plant. On the day of the meeting, Board members shared information on the status of sustainability initiatives, including carbon neutrality and non-financial KPIs, as well as activities to enhance engagement, and engaged in lively discussion. They also toured our plastic chemical recycling (KPR) facilities, which served as an opportunity to deepen their understanding of the business.



Nomination Process

Approach to nomination

In electing and nominating candidates for Directors, the Nomination Advisory Committee, an advisory body to the Board of Directors, that consists of a majority of independent outside directors shall deliberate matters related to nomination and report the results of its deliberation to the Board of Directors. Candidates for Audit & Supervisory Board Members shall have the knowledge, expertise and capabilities required to fulfill their duties, including those with strong expertise in finance and accounting.

Composition of the Nomination Advisory Committee

Chairman: Tetsuo Tsuneishi (Outside Director)
Members: Hidehito Takahashi (Representative Director; President and Chief Executive Officer)
Nori Imai (Director)
Kenji Yasukawa (Outside Director)
Kozo Isshiki (Outside Director)*1
Noriko Morikawa (Outside Director)*1
Masaru Onishi (Outside Director)*2
Izumi Sakakibara (Outside Director)*2

*1. Retired on March 26, 2025
*2. Assumed office on March 26, 2025

The meeting was held seven times from April 2024 to March 2025, and all members attended all meetings.

Selection criteria for Directors

- Directors must possess deep knowledge and insights, strong sense of ethics, and fair and impartial judgment required to fulfill their duty of enhancing corporate value over the short, medium, and long term.
- Directors must be of excellent character, possess a strong will to fulfill their duties, and be able to maintain a healthy mind and body.
- Directors must be able to secure the time and effort necessary to properly fulfill their roles and responsibilities.
- Directors must not fall under any of the grounds for disqualification of a director as stipulated in Article 331, Paragraph 1 of the Companies Act.
- The appointment of such directors must help maintain diversity in the expertise, experience and attributes of the Board of Directors and ensure efficient and effective corporate governance.

Additional selection criteria for Outside Directors

- Outside directors must supervise the management of the Group and conflicts of interest between the Company and the management team, and be able to provide appropriate advice on business execution.
- Outside directors must meet the independence criteria for outside officers established by the Company.
- In principle, the term of office shall be no more than four years. If the term of office is to be extended beyond this period, a request must be made by the Nomination Advisory Committee and the relevant outside director must consent to it.

Dismissal of the CEO or other members of management

If any concern arises that a Director may fall under the criteria for dismissal, the Nomination Advisory Committee shall investigate and deliberate the matter and report the results to the Board of Directors, which shall then make a final decision to present the matter as a proposal for the General Meeting of Shareholders.

Implementing a succession plan

The Company is conducting company-wide talent reviews, at the Groupwide and global levels, to cultivate the future leaders who will be necessary to advancing its growth strategies.

The Nomination Advisory Committee discusses and confirms the viability of management's selection of potential successors and its formulation of development processes. The Board of Directors continually monitors all succession planning initiatives based on reports from the Committee.

Corporate Governance

Officer Remuneration

Basic policies on remuneration

The policy for determining the amount of remuneration and number of shares to be granted to respective directors of the Company is established by the Board of Directors after the Remuneration Advisory Committee, comprising a majority of outside and independent officers, deliberates on the appropriateness of the policy each fiscal year. While deliberating, the Remuneration Advisory Committee considers consistency with the Policy for Determining Remuneration for Directors and Corporate Officers, the evolving business environment, and feedback from shareholders and investors. Additionally, it sources essential information for its discussions from third-party organizations with extensive global experience and knowledge.

Composition of the Remuneration Advisory Committee

Chairman: Kenji Yasukawa (Outside Director)
Members: Hidehito Takahashi (Representative Director; President and Chief Executive Officer)
Hideki Somemiya (Director)
Tetsuo Tsuneishi (Outside Director)
Kozo Isshiki (Outside Director)*1
Noriko Morikawa (Outside Director)*1
Masaru Onishi (Outside Director)*2
Izumi Sakakibara (Outside Director)*2

*1. Retired on March 26, 2025
*2. Assumed office on March 26, 2025

The meeting was held seven times from April 2024 to March 2025, and all members attended all meetings.

Primary roles and authority of the Remuneration Advisory Committee

Matters to be resolved	Matters to be deliberated or confirmed
● Basic compensation for individual directors ● Targets and evaluation of performance indicators associated with short-term incentives (STIs) for directors, and amounts paid to individual directors ● Position-based standard points, TSR evaluation,and the number of earned points and shares to be delivered to individuals associated with long-term incentives (LTIs) for directors	● Policy for determining the remuneration for Directors and Corporate Officers ● Details of remuneration for respective corporate officers (excluding those concurrently serving as directors) ● Formulation, amendment, or revocation of significant company rules and procedures related to remuneration for directors and corporate officers, along with descriptions presented in important public announcements and other relevant communications

In order to appropriately fulfill its roles and exercise authority when deliberating and making decisions, the Remuneration Advisory Committee carefully considers consistency with the Policy for Determining Remuneration for Directors and Corporate Officers, while also accounting for the evolving business environment and feedback from shareholders and investors. Furthermore, the Committee obtains information, advice, and other insights necessary for its deliberations from Willis Towers Watson (WTW), a third-party organization with a wealth of international experience and knowledge.

Compensation consultants from WTW were present at six out of the seven meetings of the Remuneration Advisory Committee throughout the period. The Remuneration Advisory Committee reported the matters deliberated upon or resolved to the Board of Directors in a timely and appropriate manner during the period. Accordingly, the Board of Directors is confirming the reasonableness and appropriateness of the reported matters.

Matters discussed, etc.

Time of meeting and matters discussed		Participants
January and March 2024	● Determined the individual standard compensation amounts and the number of LTI standard points to be granted to each director for fiscal 2024 ● Discussed the evaluation of performance indicators (consolidated financial results and personal performance) for the fiscal 2023 STI to determine the individual amounts to be paid to each director. The process of personal performance evaluations for each evaluated director (President and CEO, CRO, CFO, CSO) began with an initial assessment by the President and CEO (including a self-evaluation for the President and CEO). The final evaluations were then conducted through deliberation and confirmation of their appropriateness. ● For LTIs for fiscal 2022 and 2023, determined the number of shares to be delivered to directors who resigned in March 2024 (based on the TSR evaluation through the end of the fiscal year immediately preceding resignation). ● Discussed and determined the targets of performance indicators (consolidated financial results and personal performance) for the fiscal 2024 STI. Deliberated and confirmed the appropriateness of personal performance targets after receiving explanations from each director and candidate for a director (President and CEO, CFO, CSO/CRO, CHRO) who were under evaluation. ● Confirmed the details of remuneration for directors and corporate officers that were to be disclosed in the Business Report and Securities Report for fiscal 2023.	All members (excluding newly appointed members)
July, September, October, November and December 2024	● Confirmed that the remuneration for directors and corporate officers for fiscal 2024 was appropriate in accordance with the Policy for Determining Remuneration for Directors and Corporate Officers. Meanwhile, we also held repeated discussions about what kind of attractive remuneration would be appropriate for the management team of a company that can compete on the world stage to further support our reforms toward global top-level functional chemical company and the maximization of our corporate value. Specifically, discussions were focused on revisions to compensation benchmark companies, increasing remuneration levels (especially performance-linked remuneration), reviewing the TSR evaluation method for LTI (PSUs), introducing a new LTI (performance-linked RS), and enhancing our shareholding guidelines. ● Considered granting stock-based compensation (RS) to outside directors in order to encourage them to supervise and advise management with an awareness of enhancing corporate value over the medium to long term. ● Examined the remuneration level and composition for the position of the Chairman of the Board of Directors to be established from fiscal 2025, based on its role and responsibilities, as well as remuneration levels at other companies. ● Confirmed the submission of a remuneration revision proposal related to the above at the 116th Ordinary General Meeting of Shareholders.	

*1 PSU: Performance share unit *2 RS: Restricted stocks

Details of remuneration for Directors and Corporate Officers for fiscal 2024

Remuneration of Directors and Audit & Supervisory Board members

Category	Total amount paid (Millions of yen)	Total amount paid by remuneration type (Millions of yen)			Number of recipients
		Basic compensation	Short-term incentive (STI)	Long-term incentive (LTI)	
Directors	623	338	119	166	11
Outside directors	70	70	—	—	5
Audit & Supervisory Board members	111	111	—	—	7
Outside Audit & Supervisory Board members	44	44	—	—	4

*1 The amounts of basic compensation and STI are the total amount of compensation paid in fiscal 2024 (all monetary compensation).
*2 The amount of STI above is the total amount of compensation paid in March 2024 (all monetary compensation), based on the performance and other results achieved during fiscal 2023.
*3 The amount of LTI above is the total amount expensed in fiscal 2024. The Company's LTI represents the number of shares of the Company's stock determined based on the results of the three-year TSR (Total Shareholder Return) evaluation, which will be promptly delivered after the end of the said three-year TSR evaluation period (50% will be delivered in cash at fair market value). For the LTI management, we utilize the Stock Benefit Trust of Mizuho Trust & Banking Co.
*4 The amount of remuneration for directors for fiscal 2024 was resolved at the 113th Ordinary General Meeting of Shareholders held on March 30, 2022, and the details are as presented below. The STI and LTI amounts are paid to directors, excluding outside directors.

Category	Date of resolution of the General Meeting of Shareholders	Monetary remuneration (Basic Compensation + STI)	Stock-based compensation (LTI:BBT)		Number of applicable persons
			Contribution amount	Points granted	
Directors	The 113th Ordinary General Meeting of Shareholders held on March 30, 2022	Up to ¥850 million per year (of which, outside directors: ¥100 million)	3 fiscal years Up to ¥1.35 billion	1 fiscal year Up to 410,000 points	10 (of which, 4 outside directors)

* The amount of remuneration for directors from fiscal 2025 onward was resolved at the 116th Ordinary General Meeting of Shareholders held on March 26, 2025, and the details are as presented below. For STI and BBT, the amount is for executive directors. BBT-RS is a stock benefit trust with Mizuho Trust & Banking Co. related to newly introduced restricted stock (RS), and is available to all directors (including non-operating executive and outside directors).

Category	Date of resolution of the General Meeting of Shareholders	Monetary remuneration (Basic Compensation + STI)	Stock-based compensation (LTI:BBT and BBT-RS)		Number of applicable persons
			Contribution amount	Points granted	
Directors	The 116th Ordinary General Meeting of Shareholders held on March 26, 2025	Up to ¥1.1 billion per year (of which, outside directors: ¥150 million)	3 fiscal years Up to ¥2.2 billion per year (of which, outside directors: ¥100 million)	1 fiscal year Up to 410,000 points (of which, outside directors: 20,000 points)	9 (of which, 4 outside directors)

* The amount of remuneration for Audit & Supervisory Board members was resolved at the 96th Ordinary General Meeting of Shareholders held on March 30, 2005 to be no more than ¥12 million per month. The number of Audit & Supervisory Board Members as of the close of the said General Meeting of Shareholders was four including three Outside Member of Audit & Supervisory Board.

Individual remuneration amounts (limited to the President and CEO or those with a total amount of remuneration paid by the Group of ¥100 million yen or more)

Principal position and name during fiscal 2024	Total amount paid (Millions of yen)	Total amount paid by remuneration type (Millions of yen)			Company category
		Basic compensation	Short-term incentive (STI)	Long-term incentive (LTI)	
President and CEO Hidehito Takahashi	180	74	50	56	Resonac Holdings
Chairman of the Board Kohei Morikawa	149	66	33	50	Resonac Holdings

Please see page 89-90 of our securities reports for the calculation method and evaluation results of performance-linked compensation for fiscal 2024. (in Japanese only)

Corporate Governance

"Policy for determining the remuneration for Directors and Corporate Officers" for fiscal 2025 and changes thereto

Method for determining the Policy for determining the remuneration for Directors and Corporate Officers

The policy for determining the remuneration for respective directors of the Company is established by the Board of Directors after the Remuneration Advisory Committee, comprising a majority of outside and independent directors, deliberates on the appropriateness of the policy each fiscal year. While deliberating, the Remuneration Advisory Committee considers the evolving business environment, along with feedback from shareholders and investors. Additionally, it sources essential information for its discussions from third-party organizations with extensive global experience and knowledge.

Main changes applied in fiscal 2025

With the aim of becoming a World-class Functional Chemical Company, we are rapidly revamping our business portfolio and focusing investments on growth businesses. In order to realize attractive remuneration appropriate for a company that can compete on the world stage and to acquire and retain talented management personnel, from fiscal 2025 we have shifted to remuneration levels and systems that match those of major manufacturing companies with global operations at their core. Furthermore, to encourage outside directors to supervise and provide advice to management with an awareness of enhancing corporate value over the medium to long term, we will grant them stock-based compensation equivalent to approximately 10% of their total basic compensation (excluding allowances for committee members and chairpersons). Outside Director The main changes from fiscal 2025 are as follows.

Item	Before revision	After revision
Compensation benchmark companies	Companies of the same size and in the same industry, including the chemical industry, are selected	Major manufacturing companies with global operations at their core are selected
Compensation composition ratio (basic compensation: STI standard amount: LTI standard amount)		
President	40%:30%:30%	25%:25%:50%
Managing Corporate Officers	50%:25%:25%	42%:29%:29%
LTI		
PSU system	The Company's three-year TSR is compared and evaluated against those of domestic companies in the chemical and textile industries. Points are awarded based on this, with shares equivalent to the number of accumulated points delivered at the time of resignation.	The Company's three-year TSR is compared and evaluated against those of domestic companies in the chemical and textile industries and major stock price index constituents in Europe and the U.S. Shares, etc., and shares are delivered based on the evaluation (a certain percentage of the shares delivered (initially expected to be 50%) will be paid in cash equivalent to the market value).
Introduction of performance-linked RS	(Newly established)	RS will be delivered to executive directors based on annual sustainability evaluations (transfer restrictions will be lifted upon resignation; a certain percentage of the delivered RS (initially expected to be 30%) will be retained as points and paid in cash equivalent to their market value at the time of resignation)
Introduction of RS	(Newly established)	RS (transfer restrictions will be lifted upon resignation) equivalent to approximately 10% of basic remuneration (excluding allowances for committee members and chairpersons) will be granted to outside directors each fiscal year
Remuneration for the Chairman of the Board	(Newly established)	Remuneration for the Chairman of the Board (inside director) consists of basic remuneration and LT (IRS) based on his/her roles and responsibilities
Shareholding guidelines (President)	Strive to hold shares worth at least 1.5x basic remuneration	Strive to hold shares worth at least 3.0x basic remuneration

Policy for determining the remuneration for Directors and Corporate Officers

Basic policies

[Directors (excluding Outside Directors)]

- Establish a remuneration scheme appropriate for recruiting and retaining talented human resources from inside and outside Japan suited to a World-class Functional Chemical Company
- Incentivize them to achieve performance targets and increase medium- to long-term corporate value, thereby driving the sustainable growth of the Group
- IMaintain a transparent, fair, and rational process for deciding remuneration from the viewpoint of accountability to all shareholders including stakeholders

[Outside Directors]

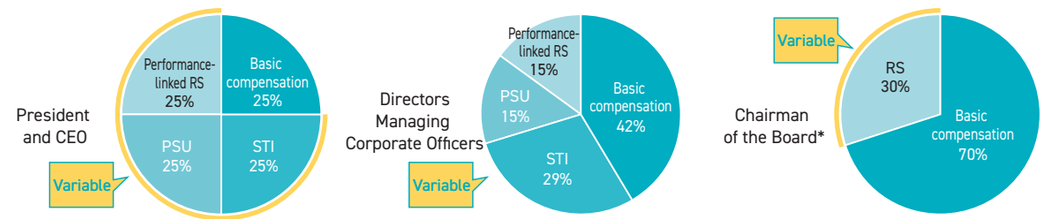
- A remuneration scheme appropriate for the role and responsibility of supervising management from an independent and objective standpoint, and providing advice on management that is conscious of enhancing corporate value over the medium to long term

Composition and levels of remuneration

[Directors (excluding Outside Directors)]

- The remuneration of directors (excluding outside directors) consists of basic compensation (fixed compensation) based on the position, a short-term incentive (STI) tied to annual performance, and a stock-based compensation (LTI) contingent upon medium- to long-term performance and corporate value. Stock-based compensation (LTI) consists of performance share units (PSUs), in which common stock of the Company is delivered according to business performance and stock price over a three-year period, and performance-linked RS, in which restricted stock (RS) is delivered based on annual sustainability evaluations.
- Remuneration levels and the ratio of variable compensation (STI and LTI) to total compensation are established at appropriate amounts and ratios, aligning with benchmarks from other companies (comparison with major manufacturing companies with global operations at their core) based on surveys conducted by external specialized organizations. Given the substantial responsibility for business performance and stock price, the proportion of variable compensation will be set higher for higher-ranking positions.
- Notwithstanding the above, remuneration for the Chairman of the Board will be individually set according to their respective roles and responsibilities.

Composition of remuneration for directors (standard amount) for fiscal 2025



* Remuneration for the Chairman of the Board, whose primary role is to oversee management (in their capacity as chairperson), will consist of base remuneration and Restricted Stock (RS) without performance conditions. Transfer restrictions for RS will be lifted upon resignation.
* As figures are rounded to the nearest whole number, the sum of each column may not add up to 100%.

[Outside Directors]

- Compensation for outside directors consists of basic compensation (fixed compensation) and restricted stocks (RS). Transfer restrictions for RS will be lifted upon resignation.
- The members and chairman of the Remuneration Advisory Committee or the Nomination Advisory Committee receive additional allowances corresponding to their designated duties.
- RS shall be approximately 10% of basic remuneration (excluding allowances for committee members and chairpersons).
- The levels of remuneration are established at appropriate amounts, considering the time and efforts spent by each outside director to fulfill their expected roles and functions, as well as benchmarks from other companies (comparison with major companies across all industries with global operations at their core) based on surveys conducted by external specialized organizations.

Corporate Governance

Short-term Incentive (STI)

The amounts to be paid to individuals as STI are calculated by multiplying the position-based standard amount by two factors: (1) companywide performance evaluation coefficient (evaluation ratio of 70%); and (2) personal performance evaluation coefficient (evaluation ratio of 30%). This approach aims to enhance incentives for achieving companywide performance targets. The performance evaluation coefficient ranges from 0% to 200%, based on performance results and other factors.

Individual amount granted as STI = Position-based standard amount × ((1) Companywide performance evaluation coefficient + (2) Personal performance evaluation coefficient)

Key performance indicators (KPIs) used to calculate the companywide performance evaluation coefficient and the personal performance evaluation coefficient are selected from the financial and strategic indicators prioritized by the Company to achieve its Long-term Vision.

Key Performance Indicators (KPIs) for the fiscal 2025 STI

	KPIs	Evaluation weight	Reasons for selection
(1) Company-wide performance evaluation	EBITDA*1	20%	**Indicators for becoming a World-class Functional Chemical Company** Through business growth centered on electronics + innovation and structural reform, we aim for scale and profitability appropriate for a company that can compete on the world stage.
	EBITDA margin to sales*2	30%	
	ROIC*3	20%	**Indicators for maximizing corporate value and profit distribution to shareholders** In addition to fitness for strategy and best owner, encourage management that is more aware of discipline (profitability and capital efficiency), aiming to further enhance portfolio management and improve medium to long-term ROE.
(2) Personal performance evaluation	Endeavors aligned with the long-term vision, actions to resolve sustainability issues, and more.	30%	Strongly encourage management from a long-term perspective to attain sustainable growth of the Company

*1. EBITDA = Core operating profit + Depreciation and amortization
*2. EBITDA margin to sales = EBITDA ÷ Consolidated revenue
* When evaluating performance for 1 and 2 above, the exchange rates used for full-year forecasts for fiscal 2025 (announced on February 13, 2025) are applied to make a foreign currency adjustment.
*3. ROIC = (Core operating profit ± Equity in earnings of unconsolidated subsidiaries and affiliates − Income taxes expense) ÷ (Interest-bearing debt + Total equity)

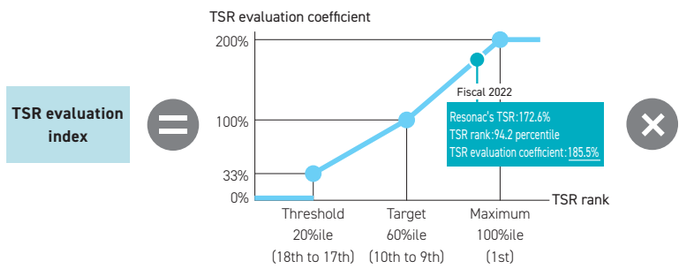
Performance Share Unit (PSU)

Our PSU system is designed to deliver a certain number of shares calculated by multiplying the standard points based on the position-based standard amount by a coefficient (0 to 240%) corresponding to the Company's TSR (Total Shareholder Return) over a three-year period, with the aim of enhancing corporate value in the medium to long term.

The TSR evaluation coefficient will be determined by comparing Resonac's three-year TSR with that of the domestic peer group (chemical and textile companies of similar size or larger that operate a similar business model to Resonac) and with the growth rate of stock indices composed of chemical companies in Europe and the U.S. To ensure objectivity and transparency, benchmark indices that are widely recognized among shareholders and investors will be selected as stock indices in Europe and the U.S. A certain percentage of the delivered shares (expected to be 50% initially) will be paid in cash equivalent to their market value.

2025 PSU plan (Evaluation period: January 2025 to December 2027)

Comparison with domestic peer group*1



*1 Chemical and textile companies of similar size or larger that operate a similar business model to Resonac (22 companies)

Comparison with major European and U.S. stock indices*2

TSR ÷ Index growth rate (European/U.S. average)	Adjustment coefficient
120% or more	120%
110% - 120%	110%
90% - 110%	100%
80% - 90%	90%
Less than 80%	80%

*2 The growth rate of the STOXX Europe 600 Chemicals index will be used for Europe, and the growth rate of the S&P 500 Chemicals (Industry) index will be used for the U.S.

The TSR evaluation coefficient (actual figure) for the fiscal 2022 LTI was 185.5%, based on our TSR (172.6%) for the three years spanning January 2022 to December 2024 and our ranking among 22 companies in the chemical and textile industries (94.2 percentile, i.e., between second and third place of the 22 companies).

TSR benchmarks (22 companies)

Chemical
- Mitsubishi Chemical Group
- SUMITOMO CHEMICAL
- Asahi Kasei
- Kao
- Mitsui Chemicals
- Shiseido
- Nippon Paint Holdings
- Nitto Denko
- Tosoh
- DIC
- FUJIFILM Holdings
- Shin-Etsu Chemical
- SEKISUI CHEMICAL
- Nippon Sanso Holdings
- AIR WATER
- Unicharm
- UBE
- MITSUBISHI GAS CHEMICAL
- KANEKA
- Kuraray

Textile
- Toray Industries
- TEIJIN

Performance-linked RS

We introduced performance-linked RS from fiscal 2025 to strengthen management that is conscious of stock price and support the realization of Sustainability Vision 2030. The performance-linked RS system is designed to deliver a certain number of restricted stock (RS) calculated by multiplying the standard points based on the position-based standard amount by a coefficient based on annual sustainability evaluations. The delivered RS will be non-transferable until resignation. A certain percentage of the calculated number (expected to be 30% initially) will be retained as points and paid in cash equivalent to the market value at the time of resignation.

The sustainability evaluation coefficient for fiscal 2025 will be determined based on the employee engagement score, the degree of implementation score for the Purpose and Values, and the achievement status of the number of certified Resonac Pride Products and Services*.

Number of shares delivered to individuals = Position-based standard points x Sustainability evaluation coefficient (85%–115%)

* Resonac Pride Products and Services are initiatives to demonstrate our Purpose and Values through our business. In terms of certification, we aim to integrate the points of view of third parties in evaluation from the perspectives of value provided to customers and society by changing society based on our Purpose as well as the appropriateness of Resonac's four Values, risk assessment such as product environmental assessment and reputation, future potential and impact such as sales plans and market share, and relevance to shared global goals (SDGs). P127 / Resonac Pride Products and Services for more details.

P127/Resonac Pride Products and Services

Restricted stocks (RS)

RS will be delivered to the Chairman of the Board (inside director) and outside directors each fiscal year (after the end of each fiscal year) to encourage them to supervise and advise management with a focus on enhancing corporate value over the medium to long term. The delivered RS will be non-transferable until resignation. RS delivered to outside directors shall be approximately 10% of basic compensation (excluding allowances for committee members and chairpersons).

Adjustment of compensation, request for return of compensation, etc.

In case of deterioration in the Company's business performance, or such problems that could damage its corporate or brand value as quality issues, serious accidents, or scandals, the Company reserves the right to temporarily decrease or withhold remuneration and other benefits for directors.

Regarding the short-term incentive (STI), if temporary special factors emerge, which was not anticipated when the targets were set at the beginning of the period, individual amounts may be recalculated based on reassessed performance and other elements with the exclusion of the impact of such factors.

Regarding the short-term incentive (STI) and long-term incentive (LTI), if a director or corporate officer is involved in misconduct or if payment was made based on incorrect financial statements, the Company may nullify the right to receive associated benefits on account of such fact or demand return of compensation already paid to the individual concerned.

Cross-Shareholdings

Policy on reduction of cross-shareholdings

In principle, the Group adheres to a policy of not engaging in cross-shareholdings, and steps are currently underway to reduce existing cross-shareholdings.

Review on the appropriateness of cross-shareholdings

The Board of Directors verifies each year whether the profitability and business feasibility of holdings are rational given the associated capital costs.

Voting right exercise standard

When the Company exercises its voting rights of cross-shareholdings, the company shall decide approval or disapproval of each item on the agenda by examining whether the item contributes to increasing corporate value and maintaining/increasing shareholders' returns or not.

Holdings for which numbers of shares held increased in fiscal 2024*

	Holdings	Acquisition costs of additional shares (Millions of yen)	Reason for increase
Unlisted stocks	—	—	—
Stocks other than unlisted stocks	—	—	—

Holdings for which numbers of shares held decreased in fiscal 2024*

	Holdings	Sales proceeds associated with reduction in the number of shares (Millions of yen)
Unlisted stocks	6	145
Stocks other than unlisted stocks	—	—

Numbers of cross-shareholdings and amount on the balance sheet*

	Holdings	Amount on the balance sheet (Millions of yen)
Unlisted stocks	62	1,709
Stocks other than unlisted stocks	1	179

*We do not hold any listed shares as of June 30, 2025.

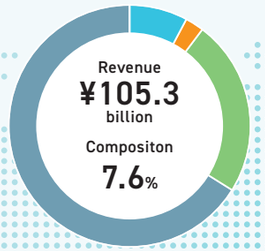
Data

This section includes information that we couldn't fully cover in the main report, focusing on questions frequently asked by our readers.

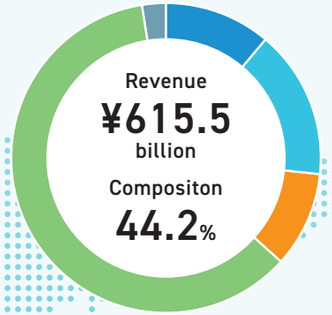
Global Business Composition / Financial and Non-financial Highlights

Resonac voluntarily adopted the International Financial Reporting Standards (IFRS) from 2024. The figures on this page are also based on IFRS.

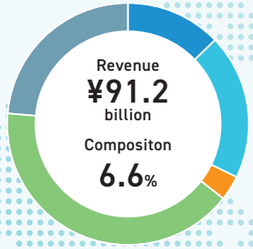
Europe
Number of employees 1,568
Number of companies 17



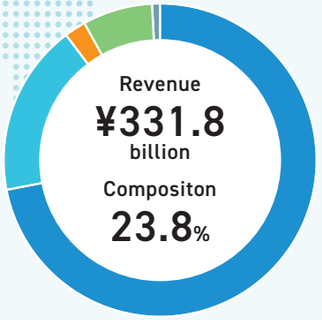
Japan
Number of employees 12,538
Number of companies 63



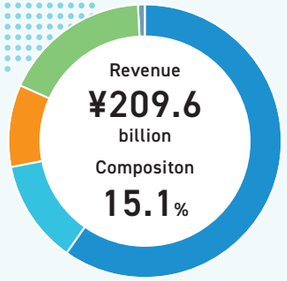
North America
Number of employees 1,186
Number of companies 10



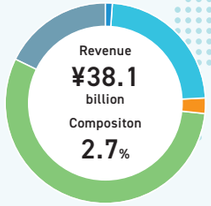
Asia
Number of employees 5,554
Number of companies 35



China
Number of employees 2,747
Number of companies 26



Other regions
Number of employees 343
Number of companies 6

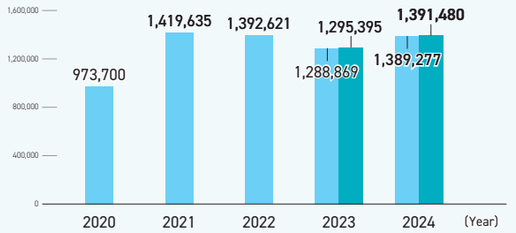


Semiconductor and Electronic Materials / Mobility / Innovation Enabling Materials / Chemicals / Others

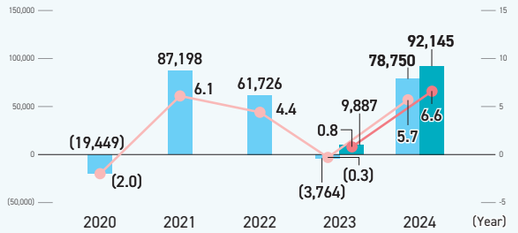
*Core operating profit is calculated by excluding gains and losses arisen from non-recurring factors from operating profit. Gains and losses from non-recurring factors refer to other income, other expenses, and impairment losses (included in cost of sales, selling, general and administrative expenses).

Resonac voluntarily adopted the International Financial Reporting Standards (IFRS) from 2024. We have disclosed figures based on IFRS retrospectively to 2023, the year prior to adoption, and also provide figures calculated under JGAAP for the periods spanning 2020 to 2024.
Resonac made former Hitachi Chemical a consolidated subsidiary, and started to incorporate and disclose Hitachi Chemical's figures into its consolidated financial statements from the third quarter of 2020.

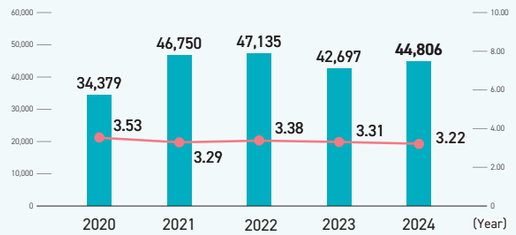
Revenue (Millions of yen)
*Net sales under JGAAP are marked with



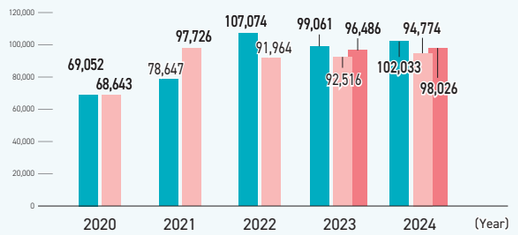
Core operating profit (Millions of yen) / Ratio of core operating profit to revenue (%)
*Operating income (loss) under JGAAP are marked with / *Ratio of operating income (loss) to sales under JGAAP are marked with



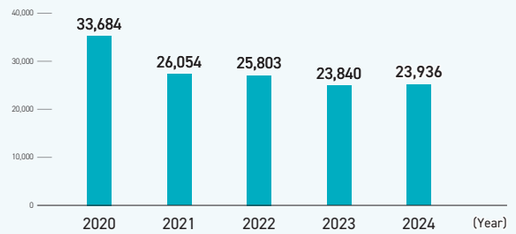
R&D expenditures (Millions of yen) / Ratio of R&D expenditures to revenue (%)
*No difference due to change of the statement



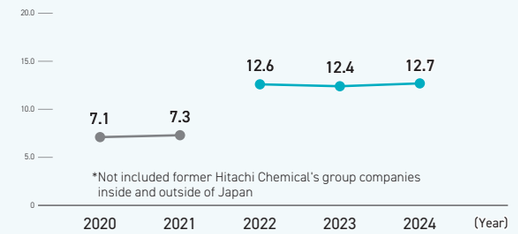
Capital expenditures (Millions of yen) / Depreciation and amortization (Millions of yen)
*The figures from 2023 on are based on IFRS / *Depreciation and amortization under JGAAP are marked with



Number of employees (persons)

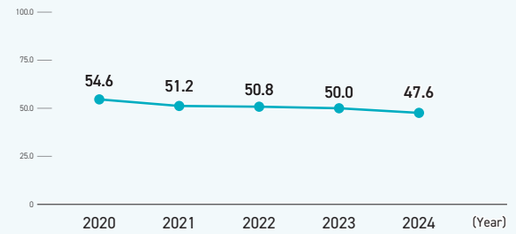


Ratio of female managers (%)

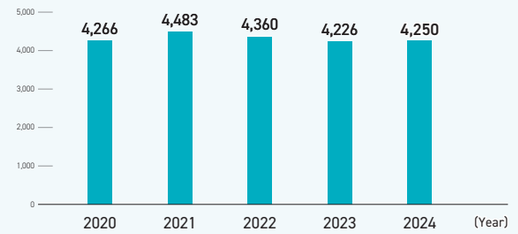


*Not included former Hitachi Chemical's group companies inside and outside of Japan

Ratio of employees working outside Japan (%)



Greenhouse gas emissions (Scope1+Scope2; kt-CO_2)



P121/ Consolidated 11-Year Summary

Consolidated 11-Year Summary

Financial data / Non-financial data

For details of the data, please refer to the relevant website.

	Japanese Generally Accepted Accounting Principles (JGAAP)										International Financial Reporting Standards (IFRS)	
	2014	2015	2016	2017	2018	2019	2020*5	2021	2022	2023*6	2023*6	2024
Financial Highlights (Consolidated) Millions of yen												
For the year												
Net sales	872,785	775,732	671,159	780,387	992,136	906,454	973,700	1,419,635	1,392,621	1,288,869		
Operating income (loss)	20,551	33,508	42,053	77,708	180,003	120,798	(19,449)	87,198	61,726	(3,764)		
Ratio of operating income (loss) to sales (%)	2.4	4.3	6.3	10.0	18.1	13.3	(2.0)	6.1	4.4	(0.3)		
Net income (loss) attributable to owners of the parent	2,929	921	12,305	37,404	111,503	73,088	(76,304)	(12,094)	32,422	(18,955)		
Cash flows from operating activities	66,996	61,170	68,949	67,235	149,785	78,554	109,286	115,283	99,376	118,686		
Cash flows from investing activities	(46,876)	(42,497)	(53,754)	(29,866)	(49,338)	(48,156)	(930,047)	28,606	(54,667)	(61,869)		
Free cash flow	20,120	18,674	15,195	37,369	100,447	30,397	(820,761)	143,889	44,709	56,817		
Cash flows from financing activities	(24,856)	(21,336)	(13,220)	(18,370)	(61,061)	(18,546)	896,521	(121,741)	(103,267)	(62,880)		
R&D expenditures	20,362	20,289	17,313	18,539	19,735	20,605	34,379	46,750	47,135	42,697		
Capital expenditures	47,318	44,059	39,276	41,787	41,727	50,216	69,052	78,647	107,074	96,633		
Depreciation	40,673	42,137	38,761	38,565	39,459	37,704	68,643	97,726	91,964	92,516		
At year-end												
Total assets	1,009,843	940,494	932,698	1,026,999	1,074,983	1,076,381	2,203,606	2,142,390	2,093,744	2,031,953	2,054,594	2,172,626
Total net assets	319,087	308,142	311,231	368,994	465,340	519,433	718,080	818,452	574,718	578,668	586,511	692,006
Shareholders' equity ratio (%)	29.7	31.5	31.8	34.3	41.5	46.4	18.4	24.0	26.3	27.2	27.3	30.6
Return on equity (ROE) (%)	1.0	0.3	4.1	11.5	27.9	15.5	(16.9)	(2.6)	6.1	(3.4)	(1.2)	12.0
Interest-bearing debt*1	383,124	368,835	359,929	346,726	287,968	303,192	1,060,146	850,603	1,062,637	1,016,532	1,030,145	1,023,706
Debt/equity ratio (times)*1	1.20	1.20	1.16	0.94	0.62	0.60	1.84	1.15	1.07	1.00	1.01	0.74
Per share*2 (yen)												
Net income (loss)—primary*3	1.99	6.45	86.27	262.44	758.15	501.03	(523.06)	(77.40)	179.02	(104.65)	(35.91)	406.61
Net assets	209.76	2,076.05	2,080.85	2,473.06	3,057.16	3,423.25	2,782.79	2,838.51	3,038.35	3,052.07	3,092.32	3,677.50
Cash dividends (applicable to the period)	3.00	3.00	—	80.00*4	120.00	130.00	65.00	65.00	65.00	65.00	65.00	65.00

*1 In regard to amount of subordinated loan and preferred stock were calculated on the basis of each characteristics of the capital structure.
*2 Resonac consolidated every 10 shares of common stock into one share on July 1, 2016. "Per share" indicators for 2015 and 2016 (except for cash dividends) are calculated on the basis of the number of outstanding shares after this consolidation.
*3 Net income (loss) per share has been computed based on the average number of shares of common stock outstanding during the respective fiscal year.
*4 Resonac resolved payment of dividends of ¥30.00 per share based on the record date of May 11, 2017 at the extraordinary general meeting of shareholders held in June 2017. Cash dividends applicable to 2017 include this amount.
*5 Resonac made former Hitachi Chemical a consolidated subsidiary, and started on July 1, 2020 to incorporate Hitachi Chemical's sales figures and income/losses into its consolidated financial statements.
*6 Resonac adopted the International Financial Reporting Standards (IFRS) from the fiscal year ended December 31, 2024. Data for fiscal 2023 that comply with IFRS are included for comparison.
*7 Core operating profit is calculated by excluding gains and losses arisen from non-recurring factors from operating profit. Gains and losses from non-recurring factors refer to other income, other expenses, and impairment losses (included in cost of sales, selling, general and administrative expenses).

Non-financial data	Scope up to 2017	2014	2015	2016	2017	Scope in and after 2018	2018	2019	2020	2021	2022	2023	2024
Number of employees (persons)	2014-2017: Former Showa Denko (consolidated)	10,577	10,561	10,146	10,864	All group companies	33,465	33,908	33,684	26,054	25,803	23,840	23,936
Ratio of employees working outside Japan (%)		43.9	44.4	40.1	44.0		54.2	54.5	54.6	51.2	50.8	50.0	47.6
Number of female managers (persons)	2014-2017: Former Showa Denko (non-consolidated)	18	23	26	28	2018-2021: Resonac (non-consolidated) + Subsidiaries of former Showa Denko in and outside Japan 2022-: All group companies	162	170	170	148	397	404	441
Ratio of female managers (%)		2.3	3.0	3.4	3.7		7.0	7.1	7.1	7.3	12.6	12.4	12.7
Greenhouse gas emissions (Scope 1 + Scope 2) (kt-CO_2)*1	2014-2017: Former Showa Denko (consolidated in Japan)	3,667	3,699	3,818	3,785	All group companies	4,827	4,657	4,266	4,483	4,360	4,226	4,250
Amount of water withdrawals (excluding seawater, thousand m^3)		62,620	60,040	58,720	59,470	2018-2021: Resonac (consolidated in Japan) and former Hitachi Chemical subsidiaries (outside Japan) 2022-: All group companies	67,306	68,060	67,522	64,261	68,292	73,361	81,572
Amount of industrial waste sent to landfills (tons)		1,158	851	323	448		3,368	3,163	1,375	2,154	15,312	10,845	8,655*2

Note:
For non-financial data, boundaries (scope of data) differ depending on the item and time period. Upon the integration of the former Showa Denko and the former Hitachi Chemical, we have re-examined boundaries and figures for past fiscal years, making some adjustments in our disclosures. Additionally, water withdrawals data up until 2017 is expressed in units of 10,000 m^3.
*1 Actual greenhouse gas emissions (Scope 1 + Scope 2) in 2013 (consolidated) were 4,634 kt.
*2 The amount of industrial waste sent to landfills in 2024 is not limited to industrial wastes. (included wastes which based on the law of each countries)

Scope of Data
All group companies: REH + REC + Group companies in Japan + Group companies overseas
Japan: REH + REC + Group companies in Japan
Overseas: Group companies overseas
REH: Resonac Holdings Corporation
REC: Resonac Corporation
REH + REC: Resonac Holdings Corporation and Resonac Corporation

Material Issues and Non-financial KPI Targets and Results

Resonac's material issues consist of management issues that contribute to realizing its long-term vision in terms of both society's expectations and degree of importance to the Company. Material issues are discussed and determined by the entire management team at the Sustainability Promotion Council, taking into consideration the intent of the frontlines through individual discussions in each CXO area (function). Material issues are reported to the Board of Directors and continually reviewed while exchanging opinions with internal and external stakeholders. We will maximize corporate value by creating an environment conducive to long-term growth, continuing to record profits (economic value), and contributing to the sustainability of society (creating social and environmental value and minimizing/eliminating negative impacts). We also continue to review the opportunities and risks associated with the three material issues.

Material issues	Gain credibility through responsible business management	Strengthen co-creativity & competitiveness and create social value through innovation and business	Develop autonomous, creative, and active human resources and culture
Economic value	**Improvement of motivation, raising of productivity, reduction of costs, and enhancement of brand value** through eradication of all types of accidents and other incidents and increased efficiency of internal processes	Enhancement of corporate value by achieving **business growth** through the provision of social and environmental value **Enhancement of employee motivation** by helping employees to gain a solid sense that we are realizing our purpose through our businesses	**Active involvement of employees and higher employee motivation** through strategic job rotations and development of leaders from the perspective of Companywide optimization and realization of high productivity
Social value	**Balancing of our contribution to the resolution of social issues and duty** as a chemical manufacturer through responsible business management	**Maximization of our positive impact and minimization of our negative impact on society and the environment** through the thorough implementation of responsible consumption and production as a chemical manufacturer that serves as the basis for a variety of industries	**Resolution of social issues by co-creation and innovation** through the growth and active involvement of autonomous and creative co-creative talent and the nurturing of a corporate culture conducive to the attainment of such objectives
Environmental value	**Reduction of environmental impact** through reduction of GHG emissions, waste reduction, and improved recycling rates		

Components of opportunities and risks

Risks	● Loss of trust in society due to environmental, safety, and quality incidents ● Weakening of the management foundation due to lack of understanding of potential risks and lack of appropriate risk-taking ● Decline in co-creation capabilities and competitiveness due to delayed response to regional and national laws and regulations and soft law, including international norms	● Obsolescence of material manufacturers' technologies due to development of digital and AI technologies ● Decline in co-creation capabilities and competitiveness due to delayed response to environmental and social issues ● Decline in co-creation capabilities and competitiveness due to delays in industry restructuring and portfolio reform	● Personnel retention risk due to inability to cultivate and maintain organizational culture and engagement ● Stagnation of innovation due to lack of psychological safety
Opportunities	● Helping customers ensure quality by offering safe and secure products and services ● Increased added value through realization and maintenance of advanced manufacturing processes	● Creation of social value based on applicability to resolution of wide-ranging social issues (environment-friendly products, new materials, etc.) ● Enhancement of corporate value by flexibly responding to changes in customers and capital markets and to their expectations	● Facilitation of innovation through development and creation of co-creative human resources

Strengthen co-creativity & competitiveness and create social value through innovation and business

Composition	Key items (Non-financial KPIs)	2025 Targets	2024 targets
Creation of social value through our businesses	Resonac Pride Products and Services*1	● Completion of accreditation for major products by open process in each business	● Through internal and external review committees, the gasification chemical recycling business for used plastics at the Kawasaki Plant and the Packaging Solution Center's initiatives to promote open innovation in semiconductor packaging materials and processes were certified as Resonac Pride Products and Services. ● Set as a key performance indicator (KPI) for executive remuneration
	CFP*2-related initiatives	● Completion of CFP calculation for major products	● In Japan: Complete calculations for approximately 50% of applicable products
Marketing	Create large-scale projects through the penetration of problem-solving marketing	● Launch new theme creation projects in each business area	● Establishment of a new development team to identify key development areas for major themes. Start exploring how to approach projects to create new themes
	Use of digital platforms	● Strengthening of overseas and regional information dissemination using digital marketing	● Automation of digital marketing in cooperation with business units takes root, contributing to the creation of new key projects
		● Contribute to sales efficiency and business growth by utilizing customer data and project information from CRM*3 tools	● Increase in the number of business units using CRM tools. Utilization of data from CRM tools to increase sales productivity
Open innovation, R&D and intellectual property strategies	Co-creation with internal and external parties	● Promotion of open innovation and increase of the ratio of external cooperation themes / year on year increase in the number of papers and external presentations	● Promotion of open innovation / Cooperation outside the Company: 56 (2023: 59) ● Number of papers and external presentations: 196 (2023: 192)
	Strengthening of R&D and intellectual property strategies	● Increase in the CFP calculation ratio and enhancement of intellectual property indicators, such as Market Coverage (MC), which indicates market value, and Technology Relevance (TR), which indicates technological value	● CFP calculation ratio: 32% (2023: 31%) ● Intellectual property indicators MC: 0.76, TR: 1.09 (2023: MC: 0.75, TR: 1.02)
	Human resource development	● Assignment of leaders and professional-minded human resources at an appropriate ratio / Completion of a venue for co-creation	● Start exploring human resource development and placement using the Five Factors & Stress (FFS) theory ● Fostering a culture of co-creation through leadership networking events and various working groups within the CTO organization
Digital transformation	Data-driven management	● Completion of preparations for level-one master data for financial KPIs that can be automatically accumulated ● Completion of creation of GHG visualization and data acquisition process	● Definition of master structure for unified management across the Company with a focus on the key master data. Completion of a prototype management tool for some master data ● Company-wide rollout of a unified management system aimed at visualizing and reducing GHG emissions. Start of process design for the visualization and reduction of Scope 3 emissions, and product-specific LCA calculation
	Promotion of digital transformation and development of professional-minded human resources	● Horizontal deployment of IT/DX business partners' activity knowledge and start of business units' self-led BPR project promotion activities ● Optimization of personnel allocation by utilizing the skills and competencies of talent in the CDO organization	● Promotion of BPR projects utilizing business process improvement methods, as it was discovered that half of the company's IT/DX issues were caused by business processes ● Implementation of training using visualized skill assessments and clarification of organizations' human resource issues
	Enhancement of IT and digital literacy	● Entrenched use of IT and digital tools in operations	● Implementation of company-wide training to foster a digital mindset and contribute to improving employees' IT/digital literacy

*1 Resonac Pride Products and Services: Please see P127
*2 Carbon Footprint of Products (CFP): Calculated by converting the amount of GHG emissions emitted across the entire lifecycle of a product or the GHG emissions associated with it into the equivalent amount of CO_2
*3 CRM: Customer Relationship Management

Material Issues and Non-financial KPI Targets and Results

Gain credibility through responsible business management

Composition	Key items (Non-financial KPIs)	2025 Targets	2024 Results
Safety	Fostering a culture emphasizing safety	●Establishment of a culture emphasizing safety to eliminate occupational accidents	●Safety message delivered by upper management ●Employees' "My Safety Declaration" ●Raise safety awareness and create opportunities for dialogue with superiors ●Expansion of the Safety Communication Program (SCP*6)
	Number of serious occupational accidents*4	●Serious occupational accidents (All group companies, including partner companies):0	●Serious occupational accident (All group companies, including partner companies): 1
	Lost time incident rate	●Lost time incident rate (Japan): less than 0.1	●Lost time incident rate (Japan): 0.64
	Number of serious equipment-related accidents*5	●Serious equipment-related accidents (All group companies): 0	●Serious equipment-related accidents (All group companies): 0
Quality assurance	Number of serious product-related accidents*7	●Serious product-related accidents (All group companies): 0	●Serious product-related accidents (All group companies): 0
	Number of serious quality compliance violations	●Serious quality compliance violations (All group companies): 0	●Serious quality compliance violations (All group companies): 0
Chemicals management	Product stewardship	●Establishment of a Resonac policy for containment controlled substances and designation of chemical substances based on the said policy*5	●100% completion of risk assessment of priority risk assessment substances and issuance of safety summary reports. 10 new cases, 49 revisions. ●Also awarded the JIPS*8 Award by the Japan Chemical Industry Association (JCIA) in 2024 (fourth consecutive year)
Environment	Reduction of greenhouse gas emissions	●GHG emissions (All group companies): 30% reduction (Scope 1 + Scope 2) from fiscal 2013 (2030 target)	●Scope 1 + Scope 2: 2023 results (All group companies): 8.3% reduction from the level of 2013
	Reduction of industrial waste sent to landfills	●Reduction of waste sent to landfills compared to 2024 (All group companies)	●2023: 10,845 tons → 2024: 8,655 tons (All group companies)
	Number of serious environmental accidents*7	●Serious environmental accidents (All group companies): 0	●Serious environmental accidents (All group companies): 0
Human rights	Respect for human rights	●Establishment of a human rights due diligence operation structure	●Implemented human rights training on a global basis ●Started due diligence for suppliers, focusing on high-risk regions and businesses (including compliance with European Batteries Regulation)
Procurement	Improvement of quality of communication with suppliers	●Maintain a response rate of at least 90% for CSR questionnaires	●CSR questionnaire response rate: 93% (2023: 91%)
		●Improvement of the ratio of suppliers above the satisfactory threshold 85% or more (2028 target: 90% or more)	●Suppliers above the satisfactory threshold: 91% (2023: 89%)
Compliance	Inculcation of "Our Code of Conduct"	●Improve inculcation of "Our Code of Conduct"	●Inculcation of Code of Conduct across all employees through e-learning
	Thorough implementation of Group global compliance standards	●100% adoption of regulations at overseas Group companies*9	●60% adoption of regulations at overseas Group companies
	Increase in number of whistleblowing reports	●Increase in number of reports through the whistleblowing system	●Increase in the number of whistleblowing cases through raising awareness of the system (81 in 2022 → 97 in 2023 → 101 in 2024)
Risk management	Operation of comprehensive risk management systems	●Development of a new comprehensive risk management system	●Scenario-based top-down risks were identified in addition to bottom-up risks from the field, and key risks were identified through detailed analysis using generative AI. Risks were ranked through deliberation by the management team
	Reinforcement of the function of the second line of defense	●Expansion of the Group's internal control framework	●Collaborated with flag bearers for managing critical risks (S and A-ranked risks) to define risk scenarios, developed a shared CXO dashboard, and clarified the potential business impact and mitigation strategies.
		●Launch of expansion outside Japan and centralization of risk data	●Steadily rotate the cycle of the Risk Control Implementation Evaluation Function introduced in 2023

*4 Serious occupational accidents are defined as those that qualify for disability certification (Disability Grades 1 to 7 under the Labor Standards Act) or death.
*5 Among fires, leaks, equipment damage, etc., serious equipment-related accidents are defined as those involving the following: (1) an accident resulting in lost work time or more occurs within the workplace; (2) an emergency transport, evacuation order, environmental pollution, etc., occurs outside the workplace, and has a large social impact.
*6 SCP (Safety Communication Program): Safety patrol activities conducted by managers and supervisors that are not aimed at pointing out issues. Managers are expected to recognize risks by observing the on-site situation and conversing with employees in the field, and take responsibility for solving problems.
*7 Definitions are based on the Company's accident standards.
*8 JIPS (Japan Initiative of Product Stewardship): The JIPS award is presented by the Japan Chemical Industry Association to member companies that have conducted superior initiatives in disclosing their safety summary reports as part of the autonomous/self-motivated initiatives in chemicals management.
*9 Revised KPIs

Develop autonomous, creative, and active human resources and culture

Composition		Key items (KGI/KPI)	2025 Targets	2024 Results
Hire & Develop talent for the business	KGI	Future talent portfolio formation (REH + REC)	●Portfolio formation for target divisions	●Formation for two target divisions
	KGI	Succession planning readiness rate (REH + some Group companies in Japan)	●150%*10	●142.7%
		Establish portfolio role models, positions, and development plans (REH + REC)	●Formulate role models for target divisions	●Formation for two target divisions
Become an Employer of choice	KGI	Employee engagement score (All group companies)	●Improved year on year	●57%
		Engagement survey response rate (All group companies)	●85% or more	●88%
		Rate of male employees taking childcare leave and number of days taken (REH + REC)	●Acquisition rate: 100% ●Number of days: Greater than or equal to the previous year	●Acquisition rate: 97% ●Number of days: 37.3 days
		Gender wage gap (REH + REC)	——	●75.6%
Develop self-driven professionals		Percentage of line managers who participated in co-creative leadership training (filing company and Resonac Corporation)	●90%	●87%
Cultivation of corporate culture conducive to co-creation	KGI	Purpose and Values implementation survey score (All group companies)	●Improved year on year*11	●Purpose implementation: 57% ●Values implementation: 67%
		Purpose and Values empathy survey score (All group companies)	●Improved year on year*11	●Purpose implementation: 71% ●Values implementation: 74%
		Positive evaluations for global award AHA! (All group companies)	●Improved year on year	●71%
		Psychological safety survey score (All group companies)	●Improved year on year*11	●61%
		Inclusion safety survey score (All group companies)	●Improved year on year*11	●59%
		Ratio of female managers (All group companies)	●13%	●12.7%
		Diversity at the decision-making level (All group companies)	●Under consideration	●12.1%
		Employment rate of persons with disabilities (REH+REC)	●2.50%*11	●2.51%

*10 Succession planning readiness rate: (the number of people in succession pool/the number of general managers of business units/CXO-1 and higher positions) x 100
*11 Targets for 2025 have been revised based on 2024 results
While the Group manages indicators and related data, and is implementing specific initiatives, some indicators do not apply to all companies in the consolidated Group. As such, some indicators cover Resonac Holdings Corporation, Resonac Corporation, and some domestic Group companies.

Scope of Data

All group companies: REH + REC + Group companies in Japan + Group companies overseas
Japan: REH + REC + Group companies in Japan
Overseas: Group companies overseas

REH: Resonac Holdings Corporation
REC: Resonac Corporation
REH + REC: Resonac Holdings Corporation and Resonac Corporation

Please visit our website for more details.

Resonac Pride Products and Services, an Initiative to Visualize Our Purpose and Values

As an advanced materials partner, our aim is to "change society through the power of chemistry" and realize "happiness and prosperity of people" and "harmony with the global environment" by creating the functions that the times demand of us. To achieve this, it is important to visualize what kind of value and how much our products and services, which spans in a wide range of areas from midstream to downstream in the value chain, have provided to society, environment and customers. The number of certified Resonac Pride Products and Services are positioned as a KPI to achieve the material issue "Strengthen co-creativity & competitiveness and create social value through innovation and business," and being promoted while linking them to remuneration for directors and corporate officers.

Certification steps and point of Resonac Price Products and Services

Steps of screening	STEP1	STEP2	STEP3	STEP4	STEP5	STEP6	STEP7	STEP8
	Application for certification by business units	Initial screening conducted by the secretariat	Collect comments from stakeholders	Collect comments from Sustainability Advisors	Internal screening by Sustainability Promotion Council	Certification as Resonac Pride Products and Services	Report to those who made comments	Report to Board of Directors

Point! Points of certification

Purpose implementation contents	Value provided to society, the environment, and customers (quantified where possible) + social value creation narrative (hypothetical, qualitative)
Values implementation	Implementation of four Values
Risk assessment	Risks and negative impacts from third party points of view
Relevance to shared global goals	Contribution to SDGs
Challenges for the future	Potential for expanding future business opportunities and scaling up
Financial impact	Impact on future sales, profits, and cash flow

Progress of Certification

We completed certification for the efforts of chemical plastic recycling (KPR) and the Packaging Solution Center (PSC) in 2024. We are currently working to visualize the value we provide to society, environment and customers for each of the representative products and services of our other businesses. We are working to certify the representative products and services of all businesses by the end of 2025. Furthermore, from 2025, we have included the number of certifications in the KPI for the incentive portion of remuneration for directors and corporate officers. In addition, in order to increase objectivity, we have added a step to seek opinions from experts (Sustainability Advisors P83).

		2024	2025	2026 onward
Business	Electronics Business	Certification completed (No. 2: PSC)	—	Second case certified
	Hard Disk Media Business	—	Scheduled for certification	
	Device Solutions Business	—		
	Mobility Business	—		
	High Performance Materials Business	—		
	Basic Chemicals Business	Certification completed (No. 1: KPR)	—	
	Graphite Business	—	Scheduled for certification	

External evaluation status

Selected ESG indices

FTSE4Good Global Index
FTSE Blossom Japan Index
FTSE Blossom Japan Sector Relative Index
MSCI Nihonkabu ESG Select Leaders Index
MSCI Japan ESG Select Leaders Index
MSCI Japan Empowering Women Index (WIN)
S&P/JPX Carbon Efficient Index
SNAM Sustainability Index
Morningstar Japan ex-REIT Gender Diversity Tilt Indexes (GenDi J)

External evaluations and awards (excerpts)

July 2025:Green and Sustainable Chemistry (GSC) Awards, Minister of Economy, Trade and Industry Prize (Japan Association for Chemical Innovation) WEB
March 2025:SX Brands (Tokyo Stock Exchange (TSE) and The Ministry of Economy, Trade and Industry (METI)) WEB
March 2025:JIPS Award Grand Prize(Japan Chemical Industry Association)
February 2025:Nikkei Integrated Report Awards Excellence Award (Nikkei Inc.)
January 2025:Disaster Prevention and Mitigation × Sustainability Award 2025 Smartace Award Grand Prize (Society for Sustainable Mitigation And Related Technologies Against Catastrophic Events)

The second certified Resonac Pride Products and Services

Packaging Solution Center



Co-creation activities
Number of companies joined in JOINT2 : 14

Technological innovation
High-density semiconductor packaging
Reducing the spacing between electrodes and interconnects to 1/3 of conventional values

P75

The Packaging Solution Center is a place for open innovation that uses and provides advanced semiconductor packaging technologies and the latest equipment to co-create with customers. In 2018, we launched the consortium "JOINT" to realize co-creation with external stakeholders. By moving away from individual optimization, each equipment and materials manufacturer is enabling efficient development through the integration and optimization of equipment and materials. The PSC's efforts contribute to social development and the reduction of environmental impact through "co-creation with stakeholders" and "technological innovation."

Points of Certification (Excerpt)

- Through one-on-one collaboration with customers, we are contributing to the early realization of next-generation semiconductor packages used for generative AI, which are currently attracting a lot of attention.
- By increasing the density of the semiconductor packages, we can improve the performance of generative AI and increase the computing speed of supercomputers.

Purpose implementation contents	Development time reduced to one-third of previous levels = time to market reduced For example, improved performance of generative AI and improved computing speed of supercomputers
Contents of Values implemented	Demonstrated all Values including "Open Minds & Open Connections"
Relevance to shared global goals	Contributed to 7: Affordable and Clean Energy, 9: Industry, Innovation and Infrastructure, 12: Responsible Consumption and Production
Contribution to environment	Reduced GHG emissions per performance by more than 90%
Challenges for the future	Expanded co-creation activities both domestically and overseas, such as the start of JOINT activities in the U.S.
Financial impact	Confirmed the amount of contribution to sales in the Electronics Business as of 2026

Contribution to social development

For example
- **Improved performance of generative AI**
  The evolution of GPT will reduce work hours and improve productivity in society (44% of work hours will be affected on average in the industry)
- **Improved computing speed of supercomputers**
  Improved accuracy of weather forecasts, with 25 times the resolution. We can now respond to sudden changes in weather.

Contributing to reducing environmental impact

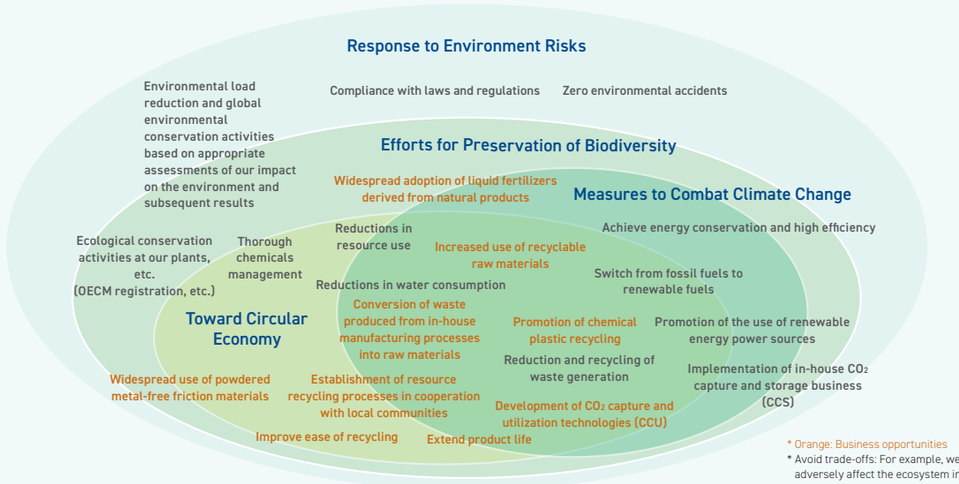
For example
- **Reduction of GHG emissions**
  Early realization of high-performance packaging reduces GHG emissions per performance by 90%

Comments fromStakeholders

		Expectations and improvements for the Packaging Solution Center (PSC)
Stakeholders	Co-creation partners	・As the importance of semiconductor packaging technology increases, expect PSC to maintain and strengthen Japan's strength in materials and equipment ・Hope to promote human exchanges and human resource development together, such as opportunities to identify issues between JOINT2 participating companies ・Expect clarification of the positioning of the results of JOINT2 participating companies and discussion of exit strategies for business development to device companies and foundries
	Customers	・Expect higher contribution to the packaging industry through diverse process and product prototyping using materials from multiple companies
	Experts	・Expect co-creation activities that will lead the semiconductor industry (e.g. development of international standards, etc.) ・Expect that the significance of co-creation will be understood by society, investors, and employees, by disclosing how this initiative will drive Resonac's growth
	Investors	・With the development of AI and other technologies, the total amount of electricity used by society as a whole will increase. Expect activities that will lead to improvements in the system level of society as a whole, including the impact on the environment ・Hope that this will lead to contributions not only to the economy but also to society as a whole and to the affluence of people

Environmental Initiatives

The four pillars of our environmental initiatives are “Measures to Combat Climate Change,” “Efforts for Preservation of Biodiversity,” “Toward Circular Economy” and “Response to Environmental Risks.” As each of these initiatives relate, “Efforts for Preservation of Biodiversity” and “Toward Circular Economy” must be addressed simultaneously in order to implement “Measures to Combat Climate Change,” which is an urgent matter. We will view the entire environment as a social issue more than ever, and as such, we will take on the challenge of changing society through the power of chemistry. We will strengthen our efforts to manage risks and seize opportunities through “Response to Environmental Risks” spanning across all of our environmental initiatives.



* Orange: Business opportunities
* Avoid trade-offs: For example, we will not adversely affect the ecosystem in order to install solar panels

Information disclosure in line with the TCFD* and TNFD recommendations

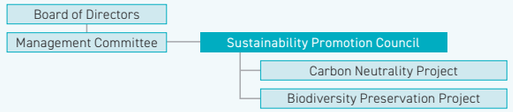
* The Task Force on Climate-related Financial Disclosures (TCFD) disbanded in October 2023. Its functions have been taken over by the IFRS Foundation .

Governance

Role of the Board of Directors and monitoring system

The President and CEO supervises the risks and business opportunities, targets, and specific initiatives associated with the environment including climate change, while the Chief Sustainability Officer (CSuO) takes responsibility for promoting actions. These issues are deliberated at the Sustainability Promotion Council and the Management Committee. The progress of each initiative is regularly monitored, and remedial measures are discussed when needed. The Board of Directors receives periodic reports of what the Sustainability Promotion Council and the Management Committee discussed, and on which points they made decisions and deliberates and supervises them from the perspective of maximizing corporate value. From 2022, we have aligned the evaluation indexes for inside directors and corporate officers with the initiatives in the long-term vision and countermeasures against sustainability issues, including climate change, with the aim to strongly incentivize them to manage the Group from a long-term perspective and promote the sustainable growth of the Group. Furthermore, in March 2024, we revised our Corporate Governance Basic Policies to clarify the role of the Board of Directors in addressing climate change and protecting biodiversity. To achieve carbon neutrality, we are implementing initiatives through a company-wide Carbon Neutrality Project involving all CXOs and business units.

Promotion system of Resonac's environmental initiatives



Risk Management

Process to assess, identify, and manage risks

The Group conducts climate change and nature risk assessments for each business, assesses "transition risks" and "physical risks" arising from climate change, as well as dependency, impact, and risks related to nature. We then identify material risks for the Group and develop countermeasures against them. Material issues in identifying risks and developing countermeasures are reported to the Board of Directors. We will continue to conduct the risk assessments to update risks and countermeasures, along with monitoring the progress of the existing countermeasures.

Integration into enterprise risk management

Given the importance of building an enterprise risk management system, the Group pursues integrated risk management using a common framework across the Group. Information on climate change, nature and other risks with the potential to impact the Group's management is registered in an integrated manner into our risk management system via companywide risk identification activities. Key risks, which have very high significance or priority, are deliberated by a dedicated committee (Risk Management Committee). Important matters are submitted to the Management Committee for deliberation and decision before being reported to the Board of Directors.

Short-, Medium- to Long-term Nature-related Risks and Opportunities and Responses to Them

(i) Climate change-related

Amid the successful transition to a carbon-neutral society, the Group sees climate change as both a risk and opportunity. The Group will exercise its social responsibility as a company and build further competitive advantages to reduce GHG emissions across the value chain by providing products and services that contribute to decarbonization, achieving co-creation with partners, improving energy efficiency, and increasing usage of renewable energy. Given the above, the Group analyzes risks and opportunities to evaluate the impact of climate change on the Group businesses under the following two scenarios: (1) The average global temperature will increase by 4°C or more and (2) The average global temperature rise can be kept well below 2°C and continue efforts to limit it to 1.5°C based on the Paris Agreement, which were released by the Intergovernmental Panel on Climate Change (IPCC) or the International Energy Agency (IEA). Based on the analysis, we determine the necessary countermeasures. Business impact assessments were conducted in the Semiconductor and Electronic Materials segments in 2023, followed by the Mobility and Innovation Enabling Materials segments in 2024. Assessments are scheduled to be completed for all businesses by 2025. We will make disclosures on this front starting with the segments for which impact assessments have been completed.

Assumptions for scenario analysis

Item		Detailes
Estimated duration		Until fiscal 2030
Adopted scenario	4°C scenario	IPCC/RCP8.5, IEA/STEPS
	1.5/2°C scenario	IPCC/RCP2.6, IEA/SDS (partly IEA/NZE)
Timeline definition	Short-term	less than three years
	medium-term	three to less than ten years
	long-term	ten to thirty years
Scenario analysis target		Existing businesses

(ii) Nature-related

In order to realize a nature-positive economy, we are working to address climate change through our businesses and promote the realization of a circular economy, while taking into account our dependency and impact on nature and making efforts to reduce and manage our impact and conserve the environment. As part of these efforts, we analyzed the dependency and impact on nature and nature-related risks and opportunities in our direct operations and value chains in accordance with the LEAP approach recommended by the TNFD, which reaffirmed our need to take action. In 2024, we conducted evaluations of our major businesses and suppliers.

Evaluation process that follows the LEAP approach

Discovering connections with nature (Locate)	Organize priority regions for evaluation and response based on geographical location information and external tools
Assess dependency and impact (Evaluate)	Identify key dependency and impact on nature and assess this magnitude for areas subject to assessment
Assess risks and opportunities (Assess)	Identify key nature-related risks and opportunities and assess this magnitude for areas subject to assessment
Preparing to respond and report (Prepare)	Compare the assessment results with our initiatives and explore and implement response measures

Discovering connections with nature (Locate)

In the locate phase, we identified the locations of our manufacturing sites and major supplier sites and assessed the natural conditions of their surrounding areas. We assessed a total of 59 manufacturing sites and 40 major supplier sites in Japan and overseas. After identifying the biomes around each site, we carried out assessments at each site in accordance with the five criteria defined by the TNFD (importance for biodiversity, high ecosystem integrity, rapid decline in ecosystem integrity, water-related physical risks, and importance for ecosystem service provision) using data obtained from external tools and other sources.
Looking at the trends in the assessment results, we found that some of our manufacturing sites were important for biodiversity and had high ecosystem integrity. One domestic site overlaps a key biodiversity area (KBA) and is close to a protected area, and was also deemed to have high ecosystem integrity. As another site in Southeast Asia also overlaps with a KBA, we recognized the need to prioritize the management of our impact on nature going forward. Furthermore, since water risks tend to be high at manufacturing sites in Southeast Asia, we recognized the need to prioritize measures such as water usage reduction and flood prevention. In terms of other criteria, no sites were found to have particularly notable results.

In the assessment results for supplier sites, some sites were found to be important for biodiversity and have high ecosystem integrity. We also discovered that water risks are particularly high in Southeast Asia. It became clear that we need to pay attention to risks throughout the supply chain and, if necessary, to implement activities to reduce risks and preserve the environment across our supply chain through engagement and other means.

Outline of assessment results for priority locations at manufacturing sites

Item	Explanation
Importance for biodiversity	One site in Japan and one site in Southeast Asia overlaps a KBA, and several other sites were found to be near protected areas
High ecosystem integrity	Ecosystem integrity is high at one site in Japan, but low at most other sites
Decline in ecosystem integrity	Integrity was found to be declining at many sites
Physical water risks	There were several sites with high water risk, mainly in Southeast Asia
Importance of ecosystem services	Most sites did not overlap or were not close to areas managed by IPLCs

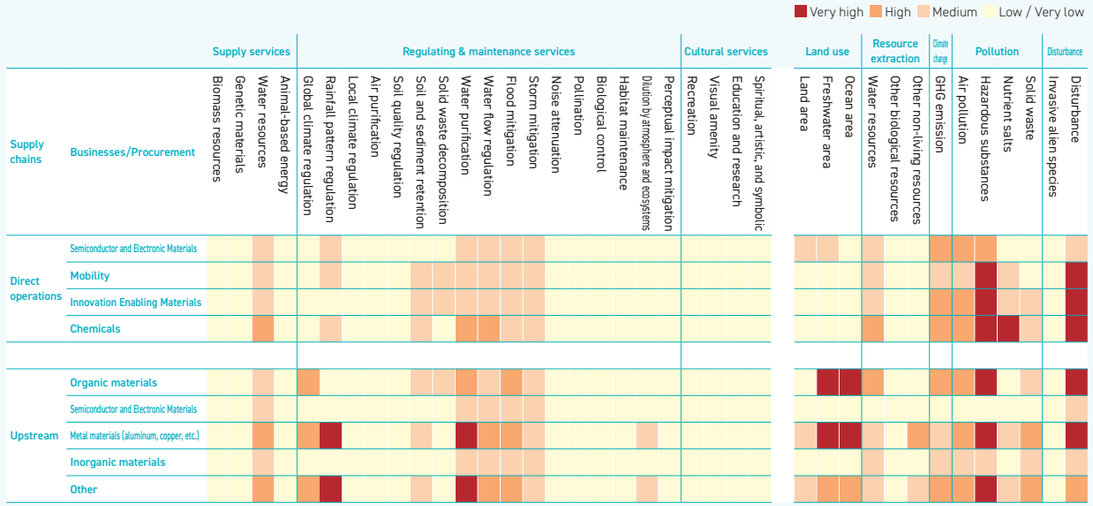
* Assessments were conducted in accordance with these five criteria using the following data and tools.
- Importance for biodiversity: Confirmed and assessed proximity to areas important for biodiversity (protected areas, Key Biodiversity Area, Critical Habitat Screening layer, WWF Global 200 regions).
- High ecosystem integrity/rapid decline in ecosystem integrity: Confirmed and assessed based on the GLOBIO MSA and the Biodiversity Intactness Index provided by the National History Museum.
- Physical water risks: Confirmed and assessed baseline water stress and flood risk (rivers and coasts) using Aqueduct.
- Importance for ecosystem service provision: Confirmed and assessed proximity to areas managed by indigenous people and local communities (IPLCs) using Global Forest Watch.

Assess dependency and impact (Evaluate)

In the evaluate phase, we identified and evaluated the significant dependency and impacts on nature in our core businesses. We conducted assessments using ENCORE, a tool recommended by the TNFD, as well as our internal information, and compiled the results into a heat map. Direct operations were found to have a significant impact on disturbances such as emission of atmospheric pollutants and GHG emissions, discharge of hazardous substances to water and soil, noise, and light pollution associated with our manufacturing process. We also discovered that we have a high dependency on water, including water resource supplies and water purification.

In upstream value chains, we reaffirmed that the procurement of organic and metallic materials is heavily dependent and has a significant impact on nature in many items, including land use, water usage, pollution, and disturbance. While we have established sustainable procurement standards and Sustainable Procurement Guidelines to help facilitate the understanding of these standards, we still continue our efforts to understand and address the dependency and impact on nature across our supply chain.

Dependency and impact on nature across the supply chain



Assess risks and opportunities (Assess)

In the assess phase, we identified and organized the nature-related risks and opportunities in our businesses based on the assessment results of the locate and evaluate phases.

(iii) Climate and nature-related risks and opportunities and main response

Opportunity/ Risk category		Time frame	Impacts on the Company	Domain	Response measures	Impact on climate*1 1.5 / 2°C	Impact on climate*1 4°C	Impact on nature*1
Transition opportunities and risks	Risks	Medium term	Increase in tax (cost) due to the introduction of carbon pricing (ICP)	All businesses	● Revision of GHG emission reduction targets for 2030 and establishment of the roadmap ● Set targets and implement reduction initiatives for each business ● Expand the introduction of renewable energy ● Raw materials/fuels conversion ● Participation in the GX League	Large	Large	—
	Risks	Short to medium term	Shift to renewable energy due to tighter regulations on GHG emissions / Increase in procurement costs		● Introduction of solar power generation and utilization of hydroelectric power generation facilities	Medium	—	—
	Opportunities and risks	Short to medium term	Government support under the policies for decarbonization initiatives of companies		● Project for the development of eight-inch SiC wafers for next-generation green power semiconductors (adopted as part of the NEDO Green Innovation Fund project) ● Project for the development of a low-concentration CO_2 separation system employing an innovative separation agent (adopted as part of the NEDO Green Innovation Fund project) ● Reinforcement of the global semiconductor material supply chain (adopted under the Ministry of Economy, Trade and Industry subsidiary program for overseas market survey projects for building resilient supply chains in the Indo-Pacific area)	○	○	—
	Opportunities and risks	Short to medium term	Increases/decreases in sales due to changes in consumer behavior and awareness related to climate change	All businesses	● Promotion of products, development of new products, and improvement of competitiveness in response to the needs of a decarbonized society ● Advancement of R&D based on long-term themes at the Stage for Co-creation	○	○	—
	Opportunities and risks	Medium term	Increases/decreases in sales due to changes in consumer behavior and awareness related to plastic pollution and resource recycling		● Reduction of waste in manufacturing processes and reduction of disposal costs through recycling ● Use of recycled and bio-based raw materials, and development of technologies therefor ● Improvement of ease of recycling and lengthening of product life ● Initiatives for recycling resources in cooperation with local communities, such as the reuse of marine plastic waste	—	—	○
	Risks	Medium term	Increase in costs and damage to reputation due to stricter regulations aimed at reducing the impact on nature, such as water withdrawal and water/air pollution in areas important for biodiversity		● Thorough chemicals management ● Initiatives to reduce environmental impacts on water quality ● Efficient use of water and reduction of water usage	—	—	○
	Risks	Short to medium term	Greater request for initiatives and disclosure related to decarbonization from customers		● Establishment of carbon footprint of products (CFP) calculation frameworks, tracking of GHG emissions, and formulation of reduction plans	○	○	—
	Risks	Medium term	Increase in costs associated with sustainability measures for raw materials and traceability, etc.		● Sourcing of raw materials produced in a sustainable manner	—	—	○
	Opportunities and risks	Short to medium term	Re-evaluation by investors depending on how effectively the Group captures needs from society and customers to solve environmental issues		● Adding value to our products/services (Resonac Pride Products and Services) to help solve the problems that society and customers face ● Attracting investments through proactive measures against climate change and promotion of a circular economy	○	○	—
	Opportunities	Medium term	Capture of demand through the development of products that contribute to biodiversity conservation		● Sell products that contribute to reducing impact on nature and to the conservation, restoration, and regeneration of nature, such as biostimulant materials	—	—	○
	Opportunities and risks	Medium term	Increase in resilience and improvement in reputation in the procurement of water resources through biodiversity conservation activities centered on water withdrawal and drainage areas		● Conduct biological research within and around sites, protect rare species, and conserve local biodiversity ● Continue and promote environmental restoration projects in the Lake Kasumigaura basin, which is used for industrial water (maintain and increase number of Nationally Certified Sustainably Managed Natural Sites)	—	—	○
	Risks	Short to medium term	Increase in procurement costs due to soaring prices of raw materials and switching materials	Semiconductor and Electronic Materials	● Reduce raw material consumption by improving productivity	Small	Small	—
				Mobility	● Promote the development of materials and components that contribute to resource recycling	Medium	Small	—
				All businesses	● Diversification of raw material suppliers and resources ● Consideration of using recycled raw materials ● Shift to in-house production and local production for local consumption of raw materials with unstable supply ● Collaboration with supply chains (suppliers / customers) to reduce GHG emissions ● Adoption of a formula system to respond to fluctuations in major raw material prices (changes in raw material prices are automatically reflected in product prices) ● Reflect increases in raw material prices in product prices	○	○	—
	Opportunities and risks	Short to medium term	Increases/decreases in procurement costs due to price fluctuations of naphtha-derived raw materials	Innovation Enabling Materials	● Adjust production plans based on sales trend forecasts and thorough inventory management	Large	Medium	—
	Risks	Short to medium term	Decrease in sales due to changes in consumer behavior and awareness	Semiconductor and Electronic Materials	● Participate in working groups of the Semiconductor Climate Consortium (SCC)	Medium to large	—	—
				Mobility	● Increase the number of environmentally friendly products	Small to medium	—	—
				Innovation Enabling Materials	● Promote the development of products that help customers reduce Scope 3 emissions	Small to medium	—	—
				All businesses	● Reduce GHG emissions in manufacturing processes and information disclosure to customers ● Quantitatively and scientifically calculate the amount of GHG reduced by society through the utilization of our products and technologies (calculate avoided GHG emissions/CFP) ● Explore environmentally friendly manufacturing processe	○	○	—

	Opportunity/ Risk category	Time frame	Impacts on the Company	Domain	Response measures	Impact on climate*1 1.5 / 2°C	Impact on climate*1 4°C	Impact on nature*1
Transition opportunities and risks	Opportunities	Short to medium term	Increase in sales due to growing demand for EVs/ autonomous driving	Semiconductor and Electronic Materials	● Response to increased demand for SiC power semiconductors	Large	Large	—
				Mobility	● Increase the number of sites in regions where EVs are spreading, and conduct on-site development and local production ● Co-create with customers at the Power Module Integration Center ● Promote co-creation with customers on aluminum recycling technologies	Medium	Medium	—
				Innovation Enabling Materials	● Timely confirmation of required performance through close cooperation with end users	Medium	Medium	—
				All businesses	● Develop and expand sales of materials that contribute to smaller and lighter parts	○	○	—
	Opportunities	Short to medium term	Increase in sales due to growing demand for low-power semiconductors and environmentally friendly products that contribute to the reduction of Scope 3 emissions by customers	Innovation Enabling Materials	● Promote sales of products using recycled raw materials ● Promote the development of products that contribute to shortening customer processes and reducing product CFP ● Promote the development of products that contribute to semiconductor manufacturing processes and energy reduction	Medium	—	—
				Semiconductor and Electronic Materials	● Assess the environmental standard conformity of product designs ● Response to increased demand for SiC power semiconductors ● Develop materials that contribute to smaller and lighter parts for customer products ● Develop 8 inch SiC wafers for next-generation green power semiconductors ● Develop etching gas for semiconductors with low GWP ● Develop encapsulants that contribute to GHG-reducing processes ● Take measures to produce thinner adhesive film for memory applications ● Establish Packaging Solution Center in Silicon Valley, U.S. ● Participate in working groups of the Semiconductor Climate Consortium (SCC) ● Participate in the Texas Institute for Electronics (TIE), a consortium for advanced semiconductor	Large	Medium	—
	Opportunities	Short to medium term	Increase in sales due to decarbonization of server- related facilities and data centers through the spread of remote work, automation, and data usage			Large	Small	—
Physical risks	Risks	Short term	Suspended operation of manufacturing sites due to natural disasters caused by climate change and ecosystem degradation, and decrease in profit caused by an increase in the equipment repair cost and unstable raw material procurement	All businesses	● Conduct an analysis of flood risks at manufacturing sites and major suppliers ● Regular risk identification and reduction activities, and enhancement of business continuity planning	Small*2	Small*2	○
	Risks	Short term	Suspended operation due to water shortage attributable to climate change and ecosystem degradation, and decrease in profit caused by an increase in costs to address them		● Efficient use of water and reduction of water usage ● Actively engage in dialogue with local stakeholders on water use and water conservation	—	—	○

*1 The financial impact of climate and biodiversity-related opportunities and risks is being calculated sequentially, and will thus be disclosed in stages. As such, the impact of the same risks and opportunities may differ from those disclosed in the previous fiscal year.
Large: We expect regulations and policies to tackle climate change to continue impacting the Group going forward. As a result, we estimate the annual impact on our operating income to be ¥10.0 billion or higher.
Medium: Moves to address climate change are already underway, and we expect this to continue impacting the Group going forward. As a result, we estimate the annual impact on our operating income to range from ¥3.0 billion to less than ¥10.0 billion.
Small: There are moves to address climate change. As a result, we estimate the annual impact on our annual operating income to be less than ¥3.0 billion.
○: We have deemed there to be impact on climate change and biodiversity.
—: We have deemed there to be no impact on climate change and biodiversity.

*2 This year, physical risks were analyzed at an additional 21 Group company sites in Japan and overseas (57 sites in total) using hazard maps and AQUEDUCT. In the event of a once-in-a-century disaster, combined with the analysis results of last year, it was discovered that 20 sites are exposed to risks. However, we set the impact as "small" because the annual impact taking into account the recurrence interval is small for both the 1.5/2°C and 4°C scenarios. We also analyzed risks at 40 major supplier sites, and confirmed that the impact on these businesses would be small.

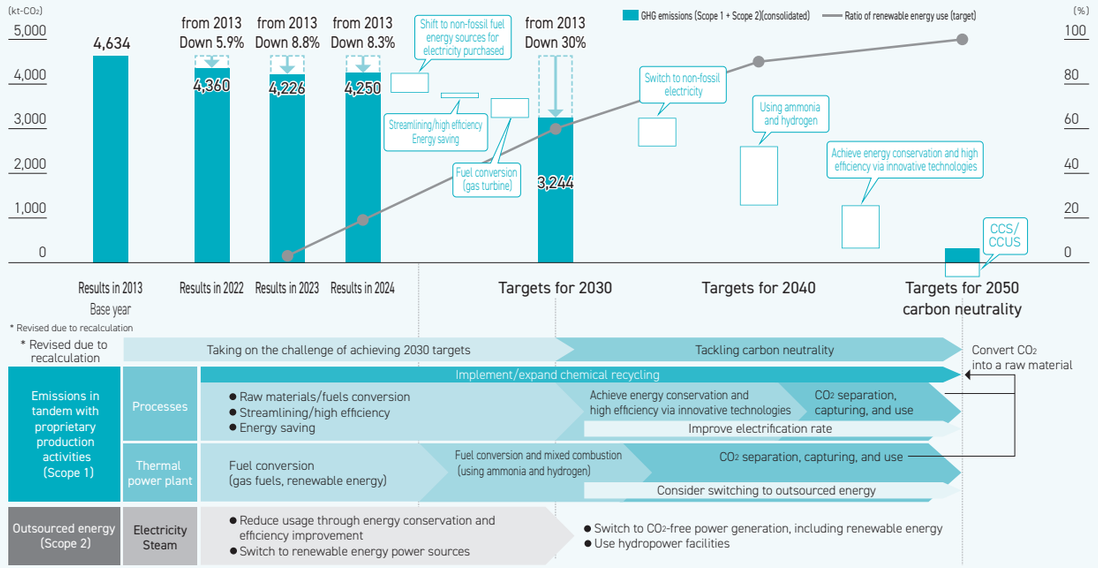
Metrics and Targets

(i) Climate change-related

We are pursuing carbon neutrality leading up to 2050, to accomplish the goal of becoming a company that contributes to a sustainable global society as put forth by our long-term vision. We have also set a milestone target of reducing Scope 1 and 2 GHG emissions by 30% (compared to 2013) by 2030. In 2024, we switched 100% of its electricity usage to electricity derived from solar power at our Head Office, and the entire Resonac Group purchased 196,700 MWh of electricity derived from renewable energy. We reduced GHG emissions by 8.3% compared to 2013 by switching to non-fossil fuel energy sources such as solar power generation. Going forward, we will accelerate our efforts to achieve our targets and further promote information disclosure. For Scope 3, we are gradually disclosing figures on our website for categories where calculations have been completed. We will continue to improve the accuracy of these calculations while working to reduce our GHG emissions.

Road to carbon neutrality

● Non-financial KPI Results and Targets Reduction of GHG Emissions : 30% reduction from the level of 2013 (Scope 1 and 2) (2030 target)



* We consider starting the calculation and disclosure of Scope 3 emissions from upstream activities before setting a reduction target.

(ii) Nature-related

We monitor and set targets for our environmental performance. Preparations are underway for the future disclosure of core global disclosure targets recommended by the TNFD, which we have not yet disclosed.

TNFD global core disclosure metrics		Monitoring details	Target setting status
C2.1	Wastewater discharged	Monitoring and disclosure of the amount of wastewater and amount of water pollutants discharged	Reduction of volume of water pollutants discharged compared to 2024 (2025)
C2.2	Waste generation and disposal	Monitor and disclose waste generation per unit of output.	Aiming for zero landfill waste by 2050, with landfill waste reduced from 2024 levels by 2025.
C2.3	Plastic pollution	Monitoring of the amount of waste plastic generated, the amount and rate of plastic recycling	Objectives under review
C2.4	Total amount of non-GHG air pollutants	Monitoring and disclosure of air pollutant emissions	• Reduction of chemical substance* air emission intensity by 1% compared to 2024 (2025) • Reduction of volume of atmospheric pollutants discharged compared to 2024 (2025) *The 30 substances selected by the Resonac Group based on hazard and atmospheric emissions
C3.0	Water withdrawal and consumption from areas of water scarcity	Monitoring and disclosure of water withdrawal	Reduction of freshwater withdrawal intensity by 1% compared to 2024 (2025)
C5.0	Ecosystem condition and species extinction risk	Annual monitoring of the species and numbers of plants and animals that live in the area are monitored every year in the Kasumigaura Surrounding Environment Regeneration Project , our social contribution activity Monitoring of the population of the Japanese fire-bellied newt, classified as a near-threatened species on the Fukushima Prefecture's Red List, at our Kitakata Plant.	Year-on-year increase in the number of plant and animal species and populations (2025)
C7.2	Description and value of fines/penalties received/litigation action in the year due to negative nature-related impacts	Monitoring and disclosure of the number of violations of laws and regulations related to environmental pollution	Zero serious environmental accidents that adversely impacted human health or the environment
C7.4	Increase in and proportion of revenue from products and services producing demonstrable positive impacts on nature	Disclosure of the number of certified Resonac Pride Products and Services (achievement of our purpose = products and services that change society) (including nature-related elements in "change society")	One certification as Resonac Pride Products and Services for each business headquarters (2025)

Consolidated Financial Statements

Consolidated Statement of Financial Position

Millions of yen

	2023	2024
Assets		
Current assets		
Cash and cash equivalents	190,642	294,656
Trade receivables	265,511	274,485
Inventories	224,571	220,812
Income taxes receivable	7,574	3,674
Other financial assets	27,572	28,735
Other current assets	35,214	36,184
Subtotal	751,084	858,546
Assets held for sale	14,346	28,002
Total current assets	765,430	886,548
Non-current assets		
Property, plant and equipment	668,686	670,776
Intangible assets	461,422	442,417
Retirement benefit asset	28,038	38,514
Deferred tax assets	14,174	17,867
Investments accounted for using the equity method	68,707	70,396
Other financial assets	22,127	23,640
Other non-current assets	26,011	22,468
Total non-current assets	1,289,164	1,286,078
Total assets	2,054,594	2,172,626

Millions of yen

	2023	2024
Liabilities		
Current liabilities		
Trade payables	177,776	171,433
Bonds and borrowings	123,343	137,862
Accrued expenses	37,766	38,157
Income taxes payable	3,779	8,344
Lease liabilities	5,228	4,837
Provisions	927	3,358
Other financial liabilities	93,445	96,934
Other current liabilities	21,695	17,707
Subtotal	463,959	478,632
Liabilities directly associated with assets held for sale	—	16,541
Total current liabilities	463,959	495,173
Non-current liabilities		
Bonds and borrowings	875,377	858,399
Retirement benefit liability	10,513	10,300
Provisions	6,106	5,970
Lease liabilities	26,197	22,608
Other financial liabilities	14,685	10,731
Deferred tax liabilities	65,647	71,273
Other non-current liabilities	5,599	6,166
Total non-current liabilities	1,004,124	985,447
Total liabilities	1,468,083	1,480,620
Equity		
Share capital	182,146	182,146
Capital surplus	104,692	108,863
Treasury shares	(11,593)	(13,172)
Retained earnings	249,838	318,643
Accumulated other comprehensive income	35,046	68,136
Total equity attributable to owners of the parent	560,129	664,616
Non-controlling interests	26,382	27,390
Total equity	586,511	692,006
Total liabilities and equity	2,054,594	2,172,626

Consolidated Statement of Profit or Loss

Millions of yen

	2023	2024
Revenue	1,295,395	1,391,480
Cost of sales	(1,066,822)	(1,080,381)
Gross profit	228,573	311,099
Selling, general and administrative expenses	(246,476)	(242,936)
Other income	37,319	38,713
Other expenses	(28,823)	(17,840)
Operating profit (loss)	(9,407)	89,036
Finance income	4,151	4,755
Finance costs	(14,869)	(15,942)
Share of profit of investments accounted for using the equity method	5,907	6,798
Profit (loss) before tax	(14,218)	84,647
Income tax expense	7,701	(9,875)
Profit (loss)	(6,517)	74,772
Profit (loss) attributable to		
Owners of the parent	(6,505)	73,503
Non-controlling interests	(12)	1,269
Earnings per share (Yen)		
Basic earnings (loss) per share (Yen)	(35.91)	406.61
Diluted earnings (loss) per share (Yen)	(35.91)	406.61

Consolidated Statement of Comprehensive Income

Millions of yen

	2023	2024
Profit (loss)	(6,517)	74,772
Other comprehensive income		
Items that will not be reclassified to profit or loss		
Net changes in fair value of financial assets measured at fair value through other comprehensive income	(400)	1,646
Remeasurements of defined benefit plans	7,781	6,997
Share of other comprehensive income of investments accounted for using the equity method	118	(83)
Total	7,499	8,560
Items that may be reclassified to profit or loss		
Exchange differences on translation of foreign operations	29,538	33,519
Net changes in fair value of cash flow hedges	(269)	(1,418)
Share of other comprehensive income of investments accounted for using the equity method	796	1,309
Total	30,065	33,410
Total other comprehensive income	37,564	41,970
Comprehensive income	31,047	116,742
Comprehensive income attributable to		
Owners of the parent	29,141	113,682
Non-controlling interests	1,906	3,060

Consolidated Financial Statements

Consolidated Statement of Changes in Equity

Millions of yen

2023	Equity attributable to owners of the parent										Non-controlling interests	Total equity
	Share capital	Capital surplus	Treasury shares	Retained earnings	Accumulated other comprehensive income		Equity attributable to owners of the parent			Total		
					Financial assets measured at FVTOCI	Remeasurements of defined benefit plans	Accumulated other comprehensive income					
							Exchange differences on translation of foreign operations	Cash flow hedges	Total			
Balance at beginning of period	182,146	101,743	(11,612)	260,375	5,697	—	—	1,458	7,155	539,807	26,771	566,578
Loss	—	—	—	(6,505)	—	—	—	—	—	(6,505)	(12)	(6,517)
Other comprehensive income	—	—	—	—	(695)	7,797	28,813	(269)	35,646	35,646	1,918	37,564
Total comprehensive income	—	—	—	(6,505)	(695)	7,797	28,813	(269)	35,646	29,141	1,906	31,047
Dividends	—	—	—	(11,788)	—	—	—	—	—	(11,788)	(1,203)	(12,991)
Purchase of treasury shares	—	—	(4)	—	—	—	—	—	—	(4)	—	(4)
Disposal of treasury shares	—	(0)	23	—	—	—	—	—	—	23	—	23
Share-based payment transactions	—	275	—	—	—	—	—	—	—	275	—	275
Purchase of non-controlling interests	—	2,674	—	—	—	—	—	—	—	2,674	(1,092)	1,582
Issuance of convertible bonds with share acquisition rights	—	—	—	—	—	—	—	—	—	—	—	—
Transfer from accumulated other comprehensive income to retained earnings	—	—	—	7,755	41	(7,797)	1	—	(7,755)	—	—	—
Total transactions with owners	—	2,949	19	(4,033)	41	(7,797)	1	—	(7,755)	(8,820)	(2,295)	(11,115)
Balance at end of period	182,146	104,692	(11,593)	249,838	5,043	—	28,814	1,189	35,046	560,129	26,382	586,511

Millions of yen

2024	Equity attributable to owners of the parent										Non-controlling interests	Total equity
	Share capital	Capital surplus	Treasury shares	Retained earnings	Accumulated other comprehensive income		Equity attributable to owners of the parent			Total		
					Financial assets measured at FVTOCI	Remeasurements of defined benefit plans	Accumulated other comprehensive income					
							Exchange differences on translation of foreign operations	Cash flow hedges	Total			
Balance at beginning of period	182,146	104,692	(11,593)	249,838	5,043	—	28,814	1,189	35,046	560,129	26,382	586,511
Profit	—	—	—	73,503	—	—	—	—	—	73,503	1,269	74,772
Other comprehensive income	—	—	—	—	1,564	6,999	33,034	(1,418)	40,179	40,179	1,791	41,970
Total comprehensive income	—	—	—	73,503	1,564	6,999	33,034	(1,418)	40,179	113,682	3,060	116,742
Dividends	—	—	—	(11,787)	—	—	—	—	—	(11,787)	(1,176)	(12,963)
Purchase of treasury shares	—	—	(1,883)	—	—	—	—	—	—	(1,883)	—	(1,883)
Disposal of treasury share	—	0	304	—	—	—	—	—	—	304	—	304
Share-based payment transactions	—	389	—	—	—	—	—	—	—	389	—	389
Purchase of non-controlling interests	—	239	—	—	—	—	—	—	—	239	(876)	(637)
Issuance of convertible bonds with share acquisition rights	—	3,543	—	—	—	—	—	—	—	3,543	—	3,543
Transfer from accumulated other comprehensive income to retained earnings	—	—	—	7,089	(90)	(6,999)	—	—	(7,089)	—	—	—
Total transactions with owners	—	4,171	(1,579)	(4,698)	(90)	(6,999)	—	—	(7,089)	(9,195)	(2,052)	(11,247)
Balance at end of period	182,146	108,863	(13,172)	318,643	6,517	—	61,848	(229)	68,136	664,616	27,390	692,006

Consolidated Statement of Cash Flows

Millions of yen

	2023	2024
Cash flows from operating activities		
Profit (loss)	(6,517)	74,772
Depreciation and amortization	96,486	98,026
Income tax expense	(7,701)	9,875
Impairment losses (reversal of impairment losses)	27,790	23,982
Interest and dividend income	(2,245)	(2,743)
Interest expenses	13,702	14,268
Share of loss (profit) of investments accounted for using the equity method	(5,907)	(6,798)
Decrease (increase) in trade receivables	6,572	(5,695)
Decrease (increase) in accounts receivable - other	21,972	(1,417)
Decrease (increase) in inventories	31,592	7,726
Increase (decrease) in trade payables	(21,808)	(3,415)
Increase or decrease in retirement benefit asset or liability	(10,466)	(10,966)
Other	(11,491)	(23,452)
Subtotal	131,979	174,163
Interest received	1,955	2,196
Dividends received	5,265	6,987
Interest paid	(12,425)	(12,390)
Income taxes refund (paid)	(8,059)	(7,303)
Net cash provided by (used in) operating activities	118,715	163,653
Cash flows from investing activities		
Purchase of property, plant and equipment	(85,559)	(88,312)
Proceeds from sale of property, plant and equipment	5,535	32,385
Proceeds from sale of subsidiaries and businesses	31,692	732
Purchase of securities and other investments	(358)	(288)
Proceeds from sale and redemption of securities and other investments	3,283	602
Net decrease (increase) in short-term loans receivable	688	36
Other	(10,439)	2,539
Net cash provided by (used in) investing activities	(55,158)	(52,306)

Millions of yen

	2023	2024
Cash flows from financing activities		
Net increase (decrease) in short-term borrowings	(23,721)	4,900
Net increase (decrease) in commercial papers	10,000	(10,000)
Proceeds from long-term borrowings	65,300	172,436
Repayments of long-term borrowings	(131,724)	(250,708)
Proceeds from issuance of bonds	29,843	24,887
Redemption of bonds	—	(40,000)
Proceeds from issuance of convertible bonds with share acquisition rights	—	99,904
Repayments of lease liabilities	(5,171)	(6,411)
Payments for acquisition of interests in subsidiaries from non-controlling interests	(4,552)	(538)
Purchase of treasury shares	(4)	(1,883)
Dividends paid to owners of the parent	(11,794)	(11,760)
Dividends paid to non-controlling interests	(1,263)	(1,220)
Other	—	(75)
Net cash provided by (used in) financing activities	(73,086)	(20,468)
Effect of exchange rate changes on cash and cash equivalents	11,471	14,593
Net increase (decrease) in cash and cash equivalents	1,942	105,472
Cash and cash equivalents at beginning of period	188,700	190,642
Net increase (decrease) in cash and cash equivalents resulting from transfer to assets held for sale	—	(1,458)
Cash and cash equivalents at end of period	190,642	294,656

Corporate Data/Editorial Policies

Corporate Data

(As of December 31, 2024)

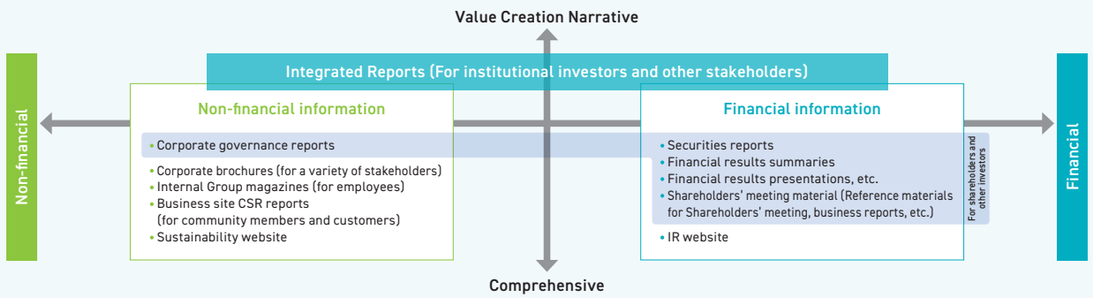
Company Name	Resonac Holdings Corporation
Head Office	Tokyo Shiodome Bldg., 1-9-1, Higashi-Shimbashi, Minato-ku, Tokyo 105-7325, Japan
Formed	June 1939
Capital	¥182,146 million
Consolidated Number of Employee	23,936
Subsidiaries and Associates Subsidiaries (Japan) Web Subsidiaries (Global) Web	Subsidiaries: 123 Associates and others: 33

Editorial Policies

Publication Date	July 2025
Reporting Period	January 1, 2024 to December 31, 2024. Some information on disclosure items and business activities from after January 1, 2025, is also provided.
Reporting scope and display methods in this report	Figures and information in this report refer to the Resonac Group. Official names or their abbreviations (REH, REC) are used when referring to Resonac Holdings Corporation (REH) or Resonac Corporation (REC) as a non-consolidated entity. Regarding performance data, financial data covers Resonac Holdings Corporation and its subsidiaries, associates and others (including Resonac Corporation), while the scope of non-financial data is specified for each dataset.
Reference guidelines	"IFRS Sustainability Disclosure Standards," International Financial Reporting Standards (IFRS) Foundation SASB Standards, U.S. Sustainability Accounting Standards Board International Integrated Reporting Framework TCFD (Task Force on Climate-related Financial Disclosures) TNFD (Taskforce on Nature-related Financial Disclosures) "Sustainability Reporting Standard," GRI "Guidance for Collaborative Value Creation," Ministry of Economy, Trade and Industry, etc.
Third-Party Verification of Environmental and Safety Data	Data disclosed by the Company are submitted to third-party verification each year to ensure reliability. For details, please refer to the relevant website. Web
Caution Regarding Forward-Looking Statements	Performance forecasts and other forward-looking statements are based on information available as of the time of publication of this report and certain assumptions judged to be reasonable. Actual performance may vary materially due to risks, uncertainty, or other factors.

Disclosure Materials

Resonac discloses information through its integrated reports and a variety of other communication tools.



Stock Information

(As of December 31, 2024)

Authorized number of shares	330,000,000
Number of shares outstanding	184,901,292
Number of shareholders	86,469

Shareholders by Sector



Foreign corporate entities, etc.	68,035 thousand	37%
Financial institutions	64,434 thousand	35%
Individuals	33,384 thousand	18%
Securities firms	11,594 thousand	6%
Japanese corporate entities	3,893 thousand	2%
Treasury shares	3,561 thousand	2%

Shareholders (Top 10)

(As of December 31, 2024)

Name of shareholders	Stake in the Company: Number of shares held (in thousands)	Stake in the Company: Rate of shareholding (%)
The Master Trust Bank of Japan Ltd. (Trust Account)	30,103	16.60
Custody Bank of Japan, Ltd. (Trust Account)	11,481	6.33
KOREA SECURITIES DEPOSITORY – SAMSUNG	9,061	5.00
JPMorgan Securities Japan Co., Ltd.	5,590	3.08
Fukoku Mutual Life Insurance Company	4,516	2.49
STATE STREET BANK AND TRUST COMPANY 505223	3,467	1.91
BNY GCM CLIENT ACCOUNT JPRD AC ISG (FE-AC)	3,219	1.78
BNYM SA/NV FOR BNYM FOR BNYM GCM CLIENT ACCTS M ILM FE	2,824	1.56
STATE STREET BANK AND TRUST COMPANY 505103	2,781	1.53
The Dai-ichi Life Insurance Company, Limited	2,700	1.49

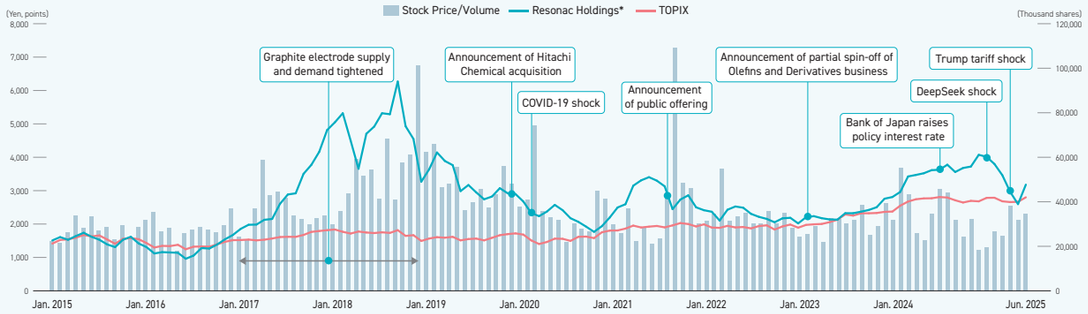
*Each rate of shareholding was calculated after deducting the number of treasury shares (3,561 thousand) from the number of shares outstanding.

		Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Fiscal 2024
Year-end stock price	(yen)	2,197	2,415	2,020	2,810	4,015
Dividends per share	(yen)	65	65	65	65	65
Payout ratio	(%) (Non-consolidated)	34.8	33.1	35.5	284.2	45.4
	(Consolidated)	—	—	36.3	—	16.0

Total shareholder return (TSR)	Past year	Past 3 years	Past 5 years	Past 10 years
Resonac Holdings	145.2%	174.3%	149.7%	315.4%
TOPIX (including dividends)	120.5%	150.7%	182.5%	248.8%

*As of the end of 2024
* TSR: Total shareholder return The total rate of return on investments, consisting of capital gains and dividend payouts.
* TSR for Resonac is calculated based on accumulated dividends and stock price fluctuations. TSR for TOPIX is calculated based on dividend included stock index (see Japan Exchange Group's monthly statistics report data).

Stock Price/Volume



*Figures from before 2022 are from former Showa Denko.