TRE HOLDINGS

未来へ、捨てない創造力を。

TRE HOLDINGS CORPORATION Integrated report 2022

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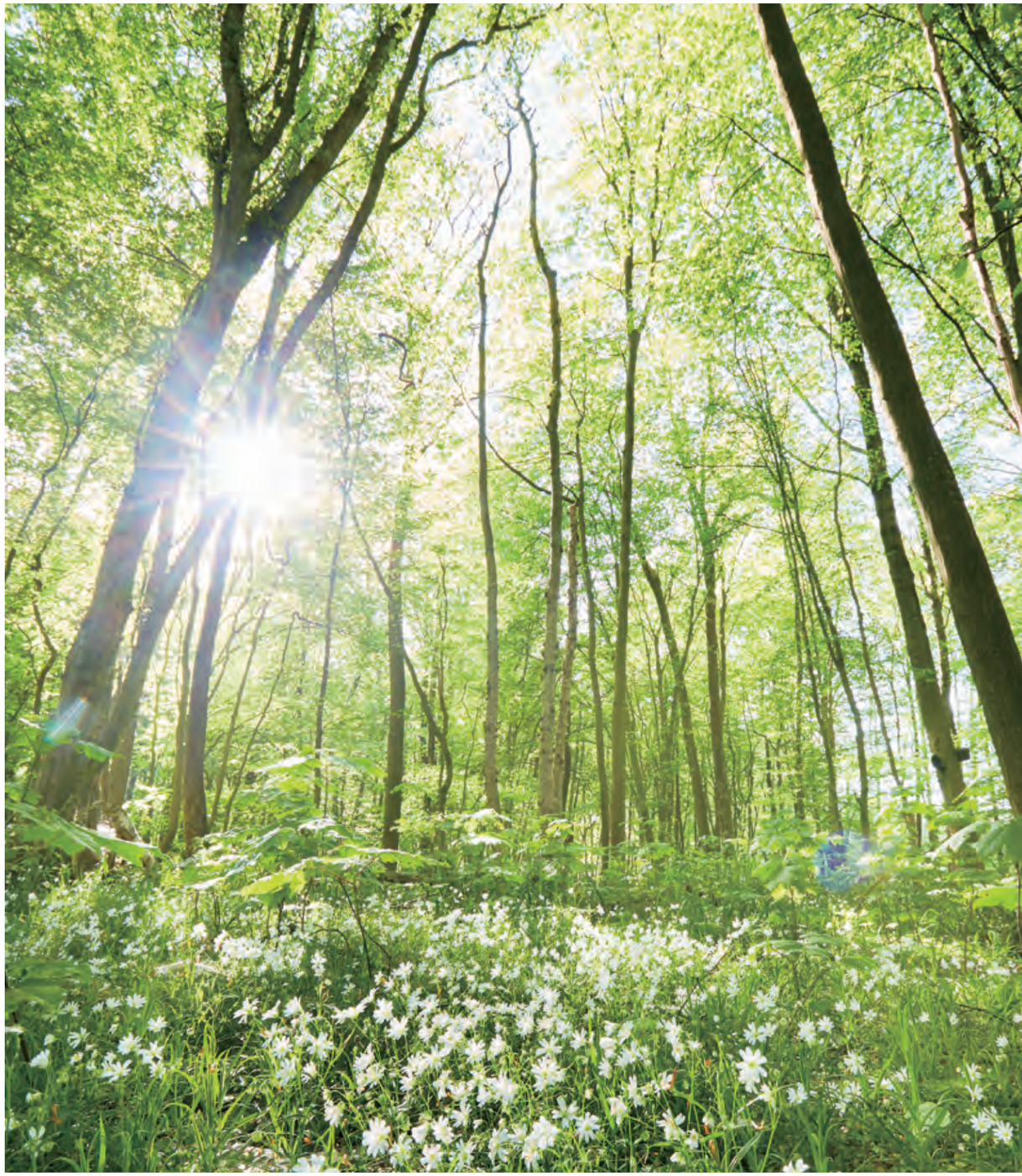

TRE HOLDINGS CORPORATION Integrated report 2022

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Is the Earth sustainable?

The issues facing the global environment become more serious and more apparent.

The limits a society of mass-production/consumption/ disposal

Mankind is now beginning to face the limits of the social model of mass-production/ consumption/disposal that supported development in the 20th century.

One issue is the amount of fossil fuel and natural resources consumed, which is expected to increase greatly as economic development and human population growth continue, prompting concerns about their eventual depletion. In specific terms, demand for the world's natural resources has doubled in the approximately 40 years since the 1980s, and it is said that we will need 2.8 Earths' worth of natural resources to maintain current consumer lifestyles by 2030.*1 Furthermore, the amount of waste generated worldwide is expected to increase by 70% from the current figure, and controlling or reducing waste generation is becoming a major challenge.*2 Issues involving waste plastic are worsening as well. International society has been paying close attention recently to the problem of marine plastics, where plastic waste not treated properly flows into oceans and negatively affects marine ecosystems.

To overcome such global environmental problems and create a sustainable world and society, it is essential that we switch to an economic system with a lower impact on the environment.

*1 Source: WWF "Living Planet Report," Ministry of the Environment "Annual Report on the Environment, the Sound Material-Cycle Society and Biodiversity in Japan 2016"
*2 Source: World Bank, "What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050"

The effects of intensifying climate change

Since the Industrial Revolution, humanity has consumed fossil fuels such as coal and oil for energy to bring about prosperous lifestyles. At the same time, however, the consumption of large quantities of fossil fuels led to an increase in atmospheric concentrations of greenhouse gases, which is causing progressive global warming. The average global temperature (2011–2020) was 1.09°C higher than in pre-industrial times, and it is predicted to continue rising at least until the middle of this century. If there is no reduction in the amount of greenhouse gas emitted in the next new decades, the rise in average global temperature is estimated to exceed 1.5°C to 2.0°C in the 21st century. Even worse, if we pursue a scenario where greenhouse gas emissions are extremely high, it is predicted that the average global temperature will rise to a maximum of 5.7°C by the end of the 21st century.*

These climate change issues worsen every year, affecting the amount of precipitation and changes in sea level in nature, impacting ecosystems, causing floods, droughts, deforestation and other natural disasters, and they also affect human society by causing food and water shortages while natural disasters are damaging social infrastructure.

*Source: Intergovernmental Panel on Climate Change (IPCC) "Sixth Assessment Report (AR6)"

Creating environmental value

TRE HOLDINGS CORPORATION faces challenges as a Comprehensive environmental management company.

Helping create an efficient recycling society

To create a sustainable world and society, it is essential that we make the switch to an economic system with a lower impact on the environment as soon as possible. In other words, we now need to shift from a linear economy where we used massive quantities of natural resources and fossil fuels and mass-produced/consumed/disposed of industrial products, to a circular economy where used industrial products which under the conventional economic system were considered to be "waste" are instead treated as "resources" and are reused and recycled in order to circulate resources.

TRE HOLDINGS was established in 2021 as a result of the business integration between TAKEEI CORPORATION and REVER HOLDINGS CORPORATION, two leading waste treatment and recycling businesses in Japan, with the mission of helping to create an efficient recycling society. As the foremost comprehensive environmental management company in Japan, TRE HOLDINGS will contribute to the creation of an efficient recycling society through its waste recycling businesses and its resource recycling business for unused resources while strengthening cooperation with the other industries that drive Japan's manufacturing and with governments and local authorities.

Helping create a carbon-neutral society

The Paris Agreement, an international framework for climate change issues from 2020 onwards, sets a goal of keeping the rise in average global temperature to less than 2°C compared to pre-Industrial Revolution times while continuing to make every effort to keep it below 1.5°C. Based on that framework, in October 2020, Japan declared its goal of becoming carbon-neutral by 2050. To meet that goal, structural changes in the fields of energy and industry, and the creation of innovation through bold investments are under way.

In these circumstances, we at TRE HOLDINGS have set contributing to the creation of a carbon-neutral society as our mission as a comprehensive environmental management company, and we are working to reduce greenhouse gas emissions through our businesses. Through our waste treatment and recycling business, the TRE Group aims to reduce greenhouse gas emissions across the entire life cycle of products, from manufacturing until disposal. Additionally, we run a woody biomass power generation business with six locations in Japan, so we will also contribute to the creation of a carbon-neutral society through the stable supply of renewable energy.

Editorial policy

This is the first ever integrated report from TRE HOLDINGS CORPORATION.

On October 1, 2021, TAKEEI CORPORATION and REVER HOLDINGS CORPORATION established TRE HOLDINGS CORPORATION as a joint holding company and integrated their businesses. This aim of the business integration is to allow the two companies, who share the same commitment to the conservation of the global environment, to carry out the large-scale investments and technological development needed to address pressing issues such as reducing CO_2 emissions and recycling waste plastic, and also allow them to leverage each other's management resources in order to contribute to the creation of an efficient recycling society as the leading corporate group in Japan's environmental industry.

This integrated report introduces the corporate image of TRE HOLDINGS as a comprehensive environmental management company and explains its medium- to long-term vision and strategy.

Scope of report

Organizations covered
TRE HOLDINGS CORPORATION and consolidated subsidiaries (including some affiliates accounted for by the equity method)

Period covered
October 1, 2021 to March 31, 2022
(including some information from outside the coverage period)

Guidelines referenced
- The International Financial Reporting Standards (IFRS) Foundation "International Integrated Reporting Framework"
- Japan's Ministry of Economy, Trade and Industry, "Guidance for Integrated Corporate Disclosure and Company-Investor Dialogue for Collaborative Value Creation"
- Global Reporting Initiative "GRI Sustainability Reporting Standards"
- Task Force on Climate-Related Financial Disclosures (TCFD) Final Report
- Japan's Ministry of the Environment, Ministry of Economy, Trade and Industry, "Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (ver. 2.4)"

The TRE Group's information disclosure

	TRE HOLDINGS CORPORATION	TAKEEI CORPORATION	REVER HOLDINGS CORPORATION
Website	 https://tre-hd.co.jp/en/	 https://www.takeei.co.jp/en/index.html	 https://www.re-ver.co.jp/english/
Company guide			
Report	 **Integrated report** (FY2022 onwards)	 **CSR report** (up to FY2021)	 **Sustainability report** (up to FY2021)

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As a comprehensive environmental management company, our technological strengths, reputation and scale give us the platform to pursue sustainable, stakeholder-driven growth.

Naoto Matsuoka
Chairman and CEO

Our mission to create an efficient recycling society and carbon-neutral society

Issues such as climate change, resource exhaustion and plastic waste are dominating the social agenda like never before. It is clear that our linear economy based around mass-production/consumption/disposal is beginning to reach its limit. There is a growing movement toward extended producer responsibility, whereby industries that manufacture products from natural resources also bear responsibility for the disposal and recycling of these products. In October 2020, the Japanese government declared its intention to become carbon neutral by 2050 and the Government's Ministry of Economy, Trade and Industry (METI) released its Circular Economy Vision 2020, which encourages industries to transition into circular business models.

Waste management companies like ours will play a crucial role in this transition, as we already possess the technology and expertise to recycle waste and restore resources to society. Now more than ever, other industries need to work with the waste management industry to ensure that extended producer responsibilities are met. Together our industries can achieve a recycling-oriented, carbon-neutral society.

Waste management companies, however, tend to be smaller in scale than those in other industries. Technologies to sort and classify waste are key to building a circular economy, but companies in our industry often lack the human resources and investment capabilities needed to develop such technologies. There are also issues with public trust, as waste management companies tend to be less well known and less financially stable, relatively speaking.

It is to address these very challenges that, in October 2021, we formed TRE HOLDINGS (a joint-holdings corporation) by integrating TAKEEI CORPORATION and REVER HOLDINGS CORPORATION.

The formation of TRE HOLDINGS is the next step in our mission to conserve the global environment. Although the two companies involved in the integration specialized in waste management, TAKEEI CORPORATION focused on waste treatment/recycling and renewable energy businesses, while REVER HOLDINGS CORPORATION focused on resource recycling. Despite these differing strengths, both companies are united in their commitment to the global environment. This integration has allowed us to supplement and share management resources, expand our fields of business and increase in scale—benefits which we are confident will enable us to grow as a comprehensive environmental management company. Having scaled up the businesses, we plan to work in close cooperation with other industries, consumer society, and local and national governments, as an integral piece of the circular economy infrastructure.

How a comprehensive environmental management company can provide a platform for society's needs

In our new role as a comprehensive environmental management company—one that is capable of leading in environmental industries—we must not only fully utilize the technologies, expertise, human resources, facilities and other management assets gained through our integration, but also develop these assets to higher levels. As we do so, there are three main points we should keep in mind.

The first is that we must support circular production in other industries by further strengthening our sorting, classification and processing technologies. Extended producer responsibility is gaining traction among automakers, consumer electronics manufacturers and other such companies, while major CO_2 emitters such as the chemical and steel industries are constantly exploring new ways to achieve carbon neutrality. Particularly in Europe, there is a growing tendency for companies and governments to incorporate data such as CO_2 emissions throughout the product life cycle and ratio of recycled materials in products into their purchasing rules, and products that fail to meet such targets will miss out on sales opportunities. As a result, many companies now focus not only on incorporating recycled materials into their products, but also designing products in a way that allows recyclable materials to be more efficiently extracted after use. These companies are also in search of new sorting, classification and processing technologies—vital elements in expanding use of recycled materials. As partners to industry in the new circular economy, TRE HOLDINGS must not only ensure that recycled materials fulfill quality standards and are suitable for use, but also develop new technologies that will further increase the ratio of recycling materials in products, driving down landfill waste and CO_2 emissions in the process.

The second point is that we must provide a flexible recycling environment for manufacturers with locations in multiple countries. In Japan, the types of waste that can be handled and the treatment methods allowed are closely regulated by law. Companies must also comply with the regulations of individual municipalities. These different regulatory environments can impede the expansion of waste management companies. Our integration, however, has allowed us to expand our business portfolio as well as expand the areas in which we can collect. Utilizing this advantage to its maximum will allow us to better contribute to an efficient recycling society and offer unique services to private companies and municipalities.

The third point is that we must strengthen cooperation within the waste management industry. Through our integration, TRE HOLDINGS has greatly increased its technological capabilities and expanded its areas of collection. However, even our current scope still falls short of that needed to cover a wide enough domestic and overseas collection area and deliver the public–private infrastructure needed for an efficient recycling society. This is why our Group aims to operate as a platform to proactively promote domestic and overseas industry cooperation. We aim to bring together other like-minded waste management companies under our banner as a comprehensive environmental management company, including through proactive pursuit of alliances and M&A. There are three overarching goals we hope to pursue through such cooperation: "Integration/Expansion," by increasing technological scope, expanding business fields, and expanding areas of collection, with the goal of establishing a nation-wide network; "Specialization," by developing waste treatment technologies and expertise in specific fields, and cooperating with industries to provide services for both upstream and downstream processes; and "Diversification," by expanding into the renewable energies business by capitalizing on underused forest resources such as offcuts from forest thinning.

Meeting new challenges together with stakeholders

The year 2050, when the world hopes to achieve carbon neutrality, is not that far away. If we are to achieve this goal by 2050, the necessary infrastructure will need to be in place by 2040 at the very latest. When taking into account the need for R&D and proofs-of-concept, the time for concrete action is now. TRE HOLDINGS understands the importance of this work. Day by day, our Group employees are tasked with the rewarding job of drawing up an image for 2050 and moving that image toward fruition. We are proud to work with the many stakeholders in our industry, and it thrills us to know that we are in a position to help achieve the efficient recycling, carbon-neutral society that the world has set as its goal.

The creation of TRE HOLDINGS was not a goal in itself, but rather a starting point. As we continue our journey toward becoming a comprehensive environmental management company and a leader in our industry, I hope we will touch the lives of as many people as possible.

Message from the COO

Our integration has already produced performance gains and enhanced our reputation in the market. Now we are doubling down on four key strategies to ensure these benefits translate into growth.

Mitsuo Abe
President and COO

First year of integration delivers solid results

TRE HOLDINGS was established October 1, 2021, and our first annual financial results were released in March 2022. Looking back on our first year, I take great pride in what the company has achieved so far.

We exceeded all financial targets for the year ended March 31, 2022, including for net sales and operating profit, and were able to meet ROE and other financial indicators set in our medium-term business plan. These financial results are very satisfying to report, but even more importantly we have increased our technological prowess, public trust and scale—which are all key to achieving our ultimate environmental mission. These are invaluable first steps on our journey toward achieving an efficient recycling, carbon-neutral society, as an integral platform for fostering cooperation with other industries.

For evidence of this progress, look no further than the growing number of customers approaching us with new and specific challenges related to waste treatment and recycling. The seeds of many new projects are found here, including collaborations and joint technological development with companies such as chemical, automotive and consumer electronics manufacturers, as well as proposals for M&As with companies in our industry.

From the beginning, when contemplating this integration, our Group understood that it was the differing strengths of the two original companies that would enable us to become a comprehensive environmental management company. The goal of the integration was not to increase our share in the limited markets already available to us, but rather to offer scaled-up, comprehensive solutions to a much broader market and geographical area. The increase in new customer inquiries post-integration is evidence of how the market is already beginning to perceive us differently. We are not simply the sum of TAKEEI CORPORATION, which handled construction waste and woody biomass power generation, and REVER HOLDINGS CORPORATION, which handled recycling for ferrous/non-ferrous scraps, used vehicles and consumer electronics. With our newly combined strengths, we can safely say that customers do indeed expect more from us today.

Many subcommittees that were already formed under the two separate companies are continuing their excellent work in areas such as sales organization and technological development. This has led to many new ideas, proposals and projects, such as collaboration with materials manufacturers on research into recycled materials, recycling businesses in new fields such as glass and new services for municipal governments. Less than a year since our integration, the possibilities for growth already abound.

Exceeding our planned business results

My mission is to help lay the groundwork that will enable TRE HOLDINGS to become a comprehensive environmental management company—one that is fully abreast of rapid changes and momentum in the business environment and that capitalizes on potential business opportunities.

To help achieve this mission, we formulated and released a medium-term business plan in October 2021. Specific quantitative goals included targets of 92 billion in net sales and 9 billion in operating profit for the year ended March 31, 2024, as well as 100 billion yen in net sales (through an additional 10 billion from new synergies from our integration) and an operating profit margin of 10% or greater for the year ended March 31, 2026 (Five years after the integration). Moreover, we established four key strategies to further grow the strengths of the two original companies while also creating new synergies. These strategies are pursuing growth for recycling businesses, promoting eco-friendly energy businesses, developing new technologies and managing sustainability.

The results for our first fiscal year ended March 2022 included net sales of 68,234 million yen, operating profit of 7,659 million yen, ordinary profit of 7,547 million yen and profit attributable to owners of parent of 4,742 million yen. Medium-term business plan forecasts established at the time of the integration were revised upward in February 2022. Despite this, figures still exceeded forecasts. Second and third year targets were also revised in May, taking into consideration the immediate economic environment and trends in resource prices.

Positive contributing factors behind increased income and profits include a slight easing of the negative effects of COVID-19 and, in the waste treatment and recycling business, an increase in the amount of valuable materials collected due to improvements in sorting and classification during intermediate processing. There were also increases in value and successful productization of recycled materials and other transported materials, leading to a significant increase in operating profit. Ongoing high resource prices have also boosted sales and operating profit in our resource recycling business.

By contrast, our renewable energy business experienced a drop in operating profit. Factors behind this included temporary repair work that was needed at Green Power Ichihara Co., Ltd., which generates power from woody biomass, and unstable operations at power plants in Kanagawa and Fukushima in the first half of the fiscal year. In addition, power purchasing prices surged due to an LNG shortage in February and March, and the business also had to account for amortization of goodwill for Green Power Ichihara, which was purchased in fiscal 03/2021.

Management places high importance on shareholder returns, which is why our medium-term business plan sets a dividend payout ratio target of 30% or greater as part of plans to maximize corporate value over the medium- to long-term. After taking into account our results for the year ended March 31, 2022, together with expectations for the business environment, in addition to the planned year-end dividends of 20 yen per share (15 yen on common stock plus a 5 yen commemorative dividend), we increased the amount by 5 yen per share, for a total of 25 yen per share (20 yen on common stock plus a 5 yen commemorative dividend).

Progress on key strategies

As well as the synergies created by the integration, a number of major initiatives have contributed to our financial success. Let me explain those here, under the headings of the four key strategies.

Pursuing growth for recycling businesses

By integrating TAKEEI CORPORATION's waste treatment and recycling business with REVER HOLDINGS CORPORATION's resource recycling business, we are striving to increase scale as well as to further enhance technologies used for collecting, sorting, classifying and processing waste and valuable materials. We aim to make recycling an integrated business ranging from collection and transport of waste and valuable materials to recycling of underused resources, along with proposals to recycle materials such as waste plastics and treated residues, or dust.

Plastic recycling demand is set to rise following Japan's introduction of the Act on Promotion of Resource Circulation for Plastics in 2022. Through joint research with Sumitomo Chemical Co., Ltd. we have confirmed that use of materials recycled from waste plastics provides superior CO_2 emissions reductions throughout product Life cycle assessments (LCAs) compared to previous products made from virgin materials.

We are also currently carrying out tests into using waste plastics received by REVER HOLDINGS to create

RPF (solid fuel created from waste paper and plastic) during intermediate processing at TAKEEI, with operations scheduled to ramp up to full scale this term.

At the time of the integration, REVER HOLDINGS was incurring approximately 3 billion yen per year in disposal costs for dust produced during processes such as waste plastic treatment, which we expected to reduce by using the final landfill site managed by TAKEEI. However, we changed course after determining that it would be more advantageous to recycle this dust into RPF and then to use that RPF in-Group as fuel for generation at Green Power Ichihara Co., Ltd. RPF brings together three businesses—waste treatment, resource recycling and renewable energy—and is a prime example of synergies created by our integration.

Our patented Eco Foam™ product, which is also created from dust collected during intermediate processing, came about through technological collaboration with steel manufacturing companies and is an additive (foaming inhibitor) for use in steelmaking furnaces. Eco Foam™ continues to perform well and contribute to strong business results.

These are some examples of the ways our Group uses technological capabilities to transform what our customers consider waste into valuable recycled materials and products. Restoring such value to industries and the environment is one of our main contributions to society.

Promoting eco-friendly energy businesses

Our energy businesses include power generation from woody biomass and thermal recycling of waste. During the period ending March 2022 we operated six woody biomass power generation plants in the Tohoku and Kanto regions of Japan, and we are looking into increasing this number further while monitoring the status of FIT schemes.

Potential for growth in our Renewable Energy Business is tied to our ability to secure fuel for generation. Previously our Group used sources such as cedar, cypress and pine offcuts from forest thinnings or prunings from apple trees. Over the last two years we have been purchasing abandoned offcuts from forestry companies and sharing profits from the use of such offcuts for fuel. We are also looking at rice husks as a potential fuel source, as well as at raising fast-growing crops such as sorghum (millet) on company-owned land.

Other initiatives include forest management, with plans to begin thinning of a 240ha plot that we recently acquired in Hanamaki city, Iwate. We are also looking into developing agriculture and forestry businesses in the future to contribute to increasing Japan's self-sufficiency in food.

Developing new technologies

A major goal of this integration was to increase our capacity to develop more advanced recycling and energy technologies. We are pursuing this aim on multiple fronts including M&As and tie-ups with academia and government.

In May 2022, TAKEEI CORPORATION acquired all shares of JW GLASS RECYCLE CO.,LTD. from Asahi Pretec Corp. Previously our Group could only handle items such as automotive glass or plate glass from building demolitions as landfill, which is an impediment toward achieving a circular economy. Automakers and construction companies, on the other hand, have been increasing their efforts to use recycled glass in order to meet public demand, achieve carbon neutral status, and position themselves as leading environmental companies.

Demand for recycled glass products is strong, and the M&A with JW GLASS RECYCLE helps to increase recycling ratios for both TAKEEI and REVER HOLDINGS. The M&A also delivers useful synergies—Group company Shinshu Takeei Co., Ltd. had already begun recycling of solar panels, and recycled glass from JW Glass Recycle can be used for materials such as glass wool or exterior construction. The Group's expanded portfolio creates a wide range of synergies that enable us to make bolder moves toward business expansion. This has been one of the integration's greatest benefits.

Additionally, while we have previously focused on material recycling of plastics, we have also begun developing chemical recycling and Carbon capture, utilization and storage (CCUS) technologies, along with other products that will help achieve carbon neutrality. We have also begun exploring plans to create methane using CO_2 from incinerators and hydrogen from solar power generation.

Managing sustainability

Sustainability initiatives are an increasingly important strategy for the future. As part of our efforts to make sustainability fundamental to our business, our medium-term business plan aims for complete carbon neutrality within five years for all power used by the Group. Additionally, this June we expressed our support for the Task Force on Climate-related Financial Disclosures (TCFD) and began working to expand disclosure in line with TCFD recommendations, which includes using digital technologies to visualize the CO_2 emissions of our Group. At the same time, we have identified five material issues for management that incorporate the Group's growth strategies and the Sustainable Development Goals (SDGs).

Tackling social and environmental issues through our Group businesses is a key approach for achieving continual growth and increasing brand awareness as a comprehensive environmental management company. Our corporate mission is to contribute to conserving the global environment. While many companies strive to contribute to society, only a few make it their core business as we have done.

Customers entrust us with their waste and recyclables, confident that we will handle these in a way that reduces CO_2 emissions and environmental impact. Meanwhile, our employees are highly motivated in their work because they know our businesses make a difference. By operating from a solid foundation of environmental and social sustainability, we aim to further enhance our core businesses so as to meet customer expectations and leverage the dedication of our employees.

Incorporating stakeholder engagement into management

Today there is intense public demand for environmental action, which includes calls for stricter regulation of CO_2 emissions, waste plastics and other issues. Helping customers and society to meet these demands is where the TRE Group can excel. Our integration is the beginning of a virtuous cycle, combining resources from two companies to create powerful new synergies. However, there is no denying that the business environment is uncertain, due to such issues as the spread of COVID-19, rising material and energy prices and emergent geopolitical risks. Indeed, major waste management industries in Europe and America are already working closely with government agencies and other industries to backcast from 2050 and begin regulating now for a more sustainable society.

With this backdrop in mind, those of us in senior management must look beyond immediate financial results and engage in meaningful dialogue with a range of stakeholders to identify the actions we should take, such as strengthening the business and expanding overseas in ways that go beyond the medium-term business plan.

As we shift to a longer-term mentality and adopt more non-financial components such as ESG, it is important that we maintain dialogue with investors and shareholders, in particular, to hone our Group philosophy and business decisions. For instance, our business may require development of large-scale facilities and massive infrastructural investments. These projects necessitate large amounts of capital and protracted return times, sometimes 10 years or more. Furthermore, as a company focused on creating environmental value, some of our businesses may not be as highly profitable in the short term. Yet we continue to support such investments, because these businesses contribute to the public good and lead to synergy in other fields. We are proud to be a company capable of creating environmental and financial value in the medium and long term. Naturally, as managers we also strive to maximize results on a year-by-year basis, but it is incumbent on us not to neglect our firm's positioning, growth strategies and public standing.

An important task for us when engaging with stakeholders is to clarify short, medium and long-term time frames, and to accurately disclose a 'true to life' image of TRE HOLDINGS, including internal discussions and progress with current businesses. Such engagement is invaluable—not only for investors and shareholders but for a broad audience—and will lead to increased corporate value.

This integrated report, the first published by TRE HOLDINGS, is a first step toward such engagement, and one which I hope will help to promote productive communication with all those interested in TRE. I sincerely look forward to receiving your candid comments, questions and feedback.

Part 1 Corporate Profile

TRE HOLDINGS CORPORATION Comprehensive Environmental Management Company

The birth of a new company group to lead the Japanese environmental industry towards an efficient recycling society

The economic system of mass-production/consumption/disposal (a linear economy) brought much advancement and development to the economies, industries and societies of the 20th century and much prosperity to human lives. However, it also resulted in global warming, the depletion of fossil fuels and mineral resources, environmental pollution from waste plastics and various other negative effects on the Earth's environment, and those effects worsen by the year. To solve these environmental problems, there is a growing movement to abandon the conventional linear economy and shift to a new economic system that recycles limited resources: a circular economy.

A shift to a circular economy will require the waste management companies that handle the treatment and recycling of waste to play an even more important role than ever before. However many waste management companies in Japan are micro, small and medium-sized companies and face challenges such as management efficiency, financial foundations, human capital, business recognition and social credibility.

To overcome these challenges facing waste management companies, two of Japan's leading waste treatment and recycling companies, TAKEEI CORPORATION and REVER HOLDINGS CORPORATION, established TRE HOLDINGS CORPORATION as a joint holding company and integrated their businesses on October 1, 2021. Based on the shared conviction that this business integration would contribute to the conservation of the global environment, the two companies aimed to deliver speedier and more competitive solutions by leveraging their respective resources. As a leading company in Japan's environmental industry, TRE HOLDINGS CORPORATION will go beyond the limits of waste management companies and aim to help create an efficient recycling society and a carbon-neutral society through its business activities. Our ambition is to grow as a comprehensive environmental management company by using and supplementing the management resources of both companies to expand our fields and areas of business and increase our scale. And in the future, we aim to work closely with other industries, consumer society, authorities and local governments to establish our presence as an indispensable part of the social infrastructure of the circular economy.

Issues in the macro environment

Earth	Japan	Industry
Global warming Resource exhaustion Plastic waste problems	Declining population Shrinking market Deteriorating infrastructure	Inefficient management Low credibility Succession problems

What society needs

Creation of an efficient recycling society

Creation of a carbon-neutral society

To achieve those objective

two companies that share the same commitment to Earth's environment have joined hands to accelerate efficiency through joint capital expenditure

To leverage all management resources and display synergy, TAKEEI CORPORATION and REVER HOLDINGS CORPORATION established a joint holding company on October 1, 2021.

TRE HOLDINGS

Try
- *Technology*
- *Recycling*
- *Renewable Energy*

Earth Ecology

Try
Developing new technologies
Pursuing growth for recycling businesses
Promoting eco-friendly energy businesses
Conserving the global environment

We are committed to the conservation of the global environment.
TRE HOLDINGS CORPORATION
Comprehensive environmental management company

Principles

We are committed to the conservation of the global environment.

With the serious impact of destruction of environments and climate change across the globe underway, we strive to support the creation of an efficient recycling and carbon-neutral society.

As a comprehensive environmental management company that places value on harmony with nature and coexistence with the local ecosystem, we are pursuing growth for recycling businesses and promoting eco-friendly energy businesses. To that end, we also actively pursue the development of innovative technology.

We work to develop further well-balanced relationships with all stakeholders and implement sustainability management to facilitate the delivery of continuous socioeconomic growth.

Mission statement

Toward the future through our sustainable creativity.

It is said that if consumer lifestyles continue at their current pace, we will eventually need 2.8 planet Earths' worth of natural resources to keep going.
There is a limit to the Earth's resources. What if, however, we managed to turn the waste emitted into resources again?

Things believed to have no use may very well hold massive potential and open up a future for all of us.

That is what we want to create: a sustainable society that discards nothing in the future.

We are TRE HOLDINGS, and we will never give up until that dream is fulfilled.

The origin of the company name

TRE HOLDINGS

Try — **Try**

- ***Technology*** — **Developing new technologies**
- ***Recycling*** — **Pursuing growth for recycling businesses**
- ***Renewable Energy*** — **Promoting eco-friendly energy businesses**

Earth Ecology — **Conserving the global environment**

The name TRE HOLDINGS contains a great deal of meaning and emotion for us. The "T" stands for "Try" as well as for the "Technology" of the two companies, and both words indicate our spirited determination to develop new technologies. The "R" stands for "Recycle," representing an efficient recycling society, and for the "Renewable energy" emblematic of a carbon-neutral society, showing the ambitions of two of our businesses. The "E" stands for the "Earth" and its "Ecology" that will be conserved through our activities. The company name was chosen by all employees of both the TAKEEI Group and the REVER Group. Over 500 people voted, and they all participated with the desire to create a new company for themselves.

The meaning behind the logo

Our logo represents a "vortex of circulation" that draws the surroundings into the ecological flow. The upper and lower circles stand for industries and waste companies. The connecting circles also spell out the three letters TRE. This shows the determination of TRE HOLDINGS to be at the center of the creation of an efficient recycling society. The color is a beautiful green inspired by jasper, a precious stone that was been used for Japanese magatama jewels (representing "the source of life") since ancient times. We place great importance on the invigorating impression made by the bright and highly pure color scheme.

It is a symbolization of the "vortex of circulation" decided on through the votes of employees of the TAKEEI Group and the REVER Group.

TRE HOLDINGS

T
R
E

Two leading companies in the waste treatment and recycling business break new ground and begin a new era as a comprehensive environmental management company

TRE HOLDINGS was established in October 2021 when TAKEEI CORPORATION and REVER HOLDINGS CORPORATION, two leading waste treatment and recycling businesses in Japan, established a joint holding company and integrated their businesses. REVER HOLDINGS CORPORATION dates its history back to 1904 while TAKEEI CORPORATION was founded in 1967. The two companies have strengthened their business functions while supporting the rapid growth of the Japanese economy from behind, adapting to the environmental regulations that changed along with developments in Japan's economy and society. The TRE Group will use the trust we have built through our histories as a foundation to pioneer a new age for Japan.

1900 1960s 1970s 1980s 1990s 2000s 2010s 2020s

Rapid economic growth due to a linear economy that prioritized economic activity → **Promotion of global warming countermeasures** → **Invigorated recycling activity for an efficient recycling society** → **Initiatives for the achievement of a circular economy and renewable energy**

Increased demand for steel due to heavy industrialization → **Pollution becomes a societal problem** → **Unlawful dumping becomes an apparent issue** → **Serious global warming measures begin** → **The Paris Agreement is adopted**

Regulations and events related to environmental laws

1967
Basic Law for Environmental Pollution Control

1968
Air Pollution Control Act and Noise Regulation Law

1970
Waste Management and Public Cleansing Law

1971
Environment Agency established

1972
Environment Agency publishes the "Environment White Paper"
Nature Conservation Act

1993
Basic Act on the Environment

1998
Home Appliance Recycling Law

2000
Basic Law for Establishing the Recycling-based Society
Construction Material Recycling Law

2001
Environment Agency becomes the Ministry of the Environment

2002
End-of-Life Vehicle Recycling Law
Act on Special Measures Concerning New Energy Use by Electricity Providers

2011
Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources by Electricity Utilities

2012
Act on Promotion of Recycling of Small Waste Electrical and Electronic Equipment

2021
Act on Promotion of Resource Circulation for Plastics

REVER

Established and strengthened the foundation of the metal recycling business → **Expanded the "metal recycling business" to the "comprehensive recycling business"** → **Enlarged network of waste management companies**

1904
Suzuki Tokugoro Shoten founded

1935
Incorporated as Suzuki Tokugoro Shoten Co., Ltd.

1972
Changed company name to Suzutoku LTD.
(now: REVER CORPORATION)

1987
Installed and began to operate the first shredder at the Suzutoku Kodama Plant
(now the REVER CORPORATION Kodama Plant)

1994
Operation of a TV cathode-ray tube recycling demonstration plant at Nakadaya Corp.

2003
Acquired Nakadaya Corp. as a subsidiary and made its subsidiaries into group companies

2006
Shinsei Co., Ltd. became a subsidiary

2007
Established Suzutoku Holdings Corporation
(now REVER HOLDINGS CORPORATION)

2013
Registered as an authorized business under the Act on Promotion of Recycling of Small Waste Electrical and Electronic Equipment

2014
Established HIDAKA SUZUTOKU (Thailand) Co., Ltd.

2017
Changed company name to REVER HOLDINGS CORPORATION

2019
Metal Recycling Co., Ltd. became a fully owned subsidiary

2020
Listed on the Second Section of the Tokyo Stock Exchange

2021
Merger of REVER CORPORATION Group companies
(from eight group companies to six)*1

2022
Merger of REVER CORPORATION Group companies
(from six group companies to three)*1

*1 Does not include REVER HOLDINGS CORPORATION and affiliates accounted for by the equity method

タケエイ

Established integrated management structure for industrial waste from collection to treatment → **Established an intermediate treatment plant quickly** → **Pursued M&As and collaborations between companies and expanded network** → **Strengthened renewable energy business Entered power generation business taking advantage of the FIT system*2**

*2 Renewable energy feed-in tariff system

1967
Takeshi Fujimoto (former Chairman of TAKEEI CORPORATION) started a private business in Kawasaki, Kanagawa

1977
Incorporated and established as TAKEEI Construction Co., Ltd.

1984
Completed a landfill at Narita, Chiba
(closed in 1999)

1987
Initiated the operation of the Okido Final Landfill in the city of Chiba.

1988
Changed its company name to TAKEEI CORPORATION

1991
Constructed the Kawasaki Intermediate Treatment Facility in Kawasaki, Kanagawa

1992
Completed an intermediate treatment facility at Yotsukaidou, Chiba

2004
Invested in New Energy Supply Corporation and Ichihara New Energy Co., Ltd. to enter the renewable energy business

2005
Recycle Peer Co., Ltd, established as a joint venture subsidiary of 24 companies
Constructed Tokyo Eco-Town Facility in Jonanjima, Ota ward, Tokyo (now TAKEEI CORPORATION's Tokyo Recycling Center)

2006
Constructed the Kawasaki Recycling Center in Kawasaki, Kanagawa

2007 (May 30 = Zero Waste Day)
Listed on the Mothers of the Tokyo Stock Exchange

2012
Changed market to the First Section of the Tokyo Stock Exchange

2014
Business and capital alliance with Veolia Japan K.K.

2015
Tsugaru Biomass Power Generation Co., Ltd. completed the Hirakawa Power Plant in Hirakawa, Aomori.
Tsugaru Apple Power Co., Ltd. started electricity retailing business.

2020
Established TAKEEI Forestry Co., Ltd.
Established TAKEEI Foundation for SDGs Promotion (now TRE Foundation for SDGs Promotion)

2022
Merger of five power retailing companies

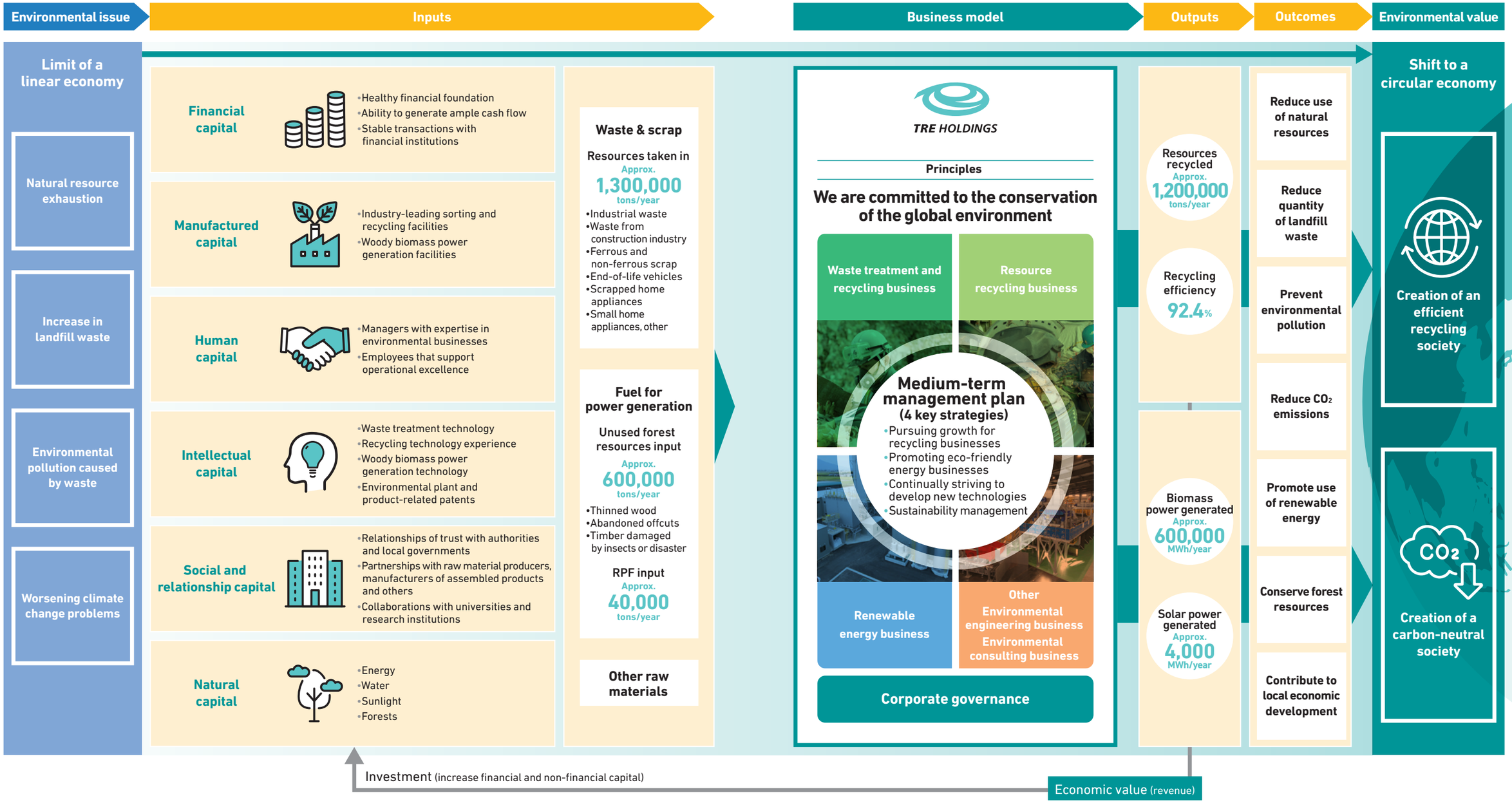
TRE HOLDINGS
未来へ、捨てない創造力を。

October 2021
TRE HOLDINGS CORPORATION established

April 2022
TRE HOLDINGS CORPORATION Listed in the Tokyo Stock Exchange Prime Market

Structure for creating environmental value that will contribute to the creation of an efficient recycling, carbon-neutral society

TRE HOLDINGS is building a value creation model aimed at accelerating the shift from a linear to a circular economy and contributing to the creation of an efficient recycling, carbon-neutral society. As a comprehensive environmental management company, the TRE Group is engaged in waste treatment and recycling, resource recycling, renewable energy, environmental engineering and environmental consulting businesses. We create various types of environmental value by taking in the waste generated by a consumer society and repurposing it as energy and resources.



We will aim to increase corporate value by developing the various types of capital that support the growth of TRE HOLDINGS

Financial capital
Finances

To achieve sustainable growth, we must establish a solid financial foundation and prepare for the various risks surrounding the market environment. At the same time, we must also secure the financial leeway to make investment decisions nimbly and flexibly when it comes to capital expenditure, R&D, M&A and alliances aimed at increasing corporate value. TRE HOLDINGS will aim for an ROE of 8% or more, a dividend payout ratio of at least 30%, a capital adequacy ratio of 40% or higher and a minimum rating of BBB to provide balanced shareholder returns, make new investments and achieve a stable financial foundation.

ROE
11.6%

Dividend payout ratio
36.1%
Based on full-year results

Capital adequacy ratio
48.3%

Rating
We intend to obtain one as TRE HOLDINGS CORPORATION.

Manufactured capital
Facilities management

The TRE Group's business activities are centered on the Kanto region, where the highest volume of waste in Japan is generated. We own numerous locations such as recycling and resource recovery facilities and final landfill sites as well as a fleet of various types of waste collection and transporting vehicles. Additionally, by using unused wood generated and collected from the areas around the power plant and neighboring municipalities in our woody biomass power generation business, we produce renewable energy and supply communities with energy that is "local production for local consumption"

Intermediate waste treatment and recycling facilities
34 locations

Final landfill sites
5 locations
(including two under development)

Collection and transportation vehicles
462

Woody biomass power generation plants
6

Human capital
Human resources

Providing a pleasant working environment for employees is an important management issue for companies. The TRE Group strives to create an environment that respects diversity and where every individual can work positively and live fulfilling lives not only at work but also in their own personal time. Moreover, it is essential to the sustained growth of the TRE Group that employees acquire and improve their knowledge and skills. We will help employees improve their skillsets by supporting attendance at training courses and seminars and enhancing up the support system for obtaining qualifications.

Number of employees in the whole Group
2,103

Intellectual capital
Business expertise

To contribute to the creation of an efficient recycling society, we will use the wealth of accomplishments and experience TRE Group has cultivated so far to further advance our sorting and classification and processing technologies. Apart from mobilizing our accumulated technological capabilities towards the development of new technologies, we will also carry out R&D together with partners such as universities and business partners in order to contribute to the creation of a carbon-neutral society as well.

R&D personnel
33

Patents obtained for recycling-related technologies
33

Social and relationship capital
Business relationship

Over the years, we have built relationships of trust with the residents around our waste treatment and recycling facilities as well as all other stakeholders. We have also obtained permits and licenses, which are indispensable for waste treatment and recycling, from local governments in many prefectures in Japan as we strive to accurately meet the diverse needs of our customers. In the renewable energy business, we work together with local authorities and forestry workers to not only build a stable fuel procurement structure but also to contribute to restoring and revitalizing forests.

Business partners
Approx. 15,000 companies

Authorities from which permits and licenses have been obtained (for collection and transportation)
36 prefectures

Authorities from which permits and licenses have been obtained (for disposal)
23 prefectures

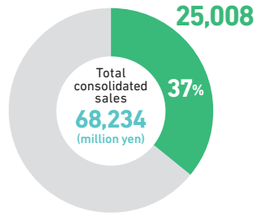
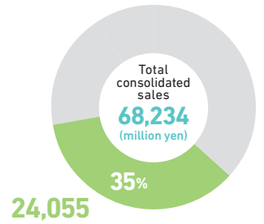
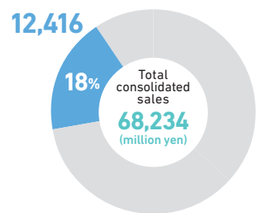
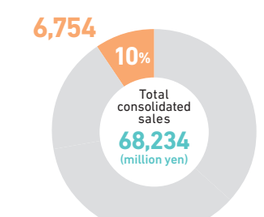
Natural capital
Environmental resources

The philosophy of the TRE Group is "We are committed to the conservation of the global environment," and based on that, we endeavor to use natural resources effectively and reduce our environmental footprint in the course of our business activities. We prioritize material recycling during waste treatment and recycling, and we try to recover energy from items that are difficult to recycle for materials through thermal recycling. We also plan to be fully carbon neutral by FY2026 in terms of CO_2 emitted from the power used by the TRE Group.

Fuel input for Woody biomass power generation
Approx. 600,000 tons/year

Forest area owned
360 ha

We are involved in various environmental businesses aimed at creating an efficient recycling, carbon-neutral society

Business segment		Business function	Business overview*1	FY03/2022 sales composition ratio*2
Waste Treatment and Recycling Business		**Collection and transportation** **Waste treatment** (construction-related) **Recycling** **Landfill** (final disposal)	TRE HOLDINGS offers integrated processing in waste treatment and recycling businesses. In collection and transportation, we collect waste from construction and building demolition sites and transport them to intermediate treatment facilities. In intermediate treatment, we accurately sort the delivered waste by item type, remove extraneous material, crush, compress and chemically treat it. In recycling, we process, compact and check the quality of recyclable waste such as construction work materials, plasterboard, wastepaper and plastics. In landfilling, we treat residue that is difficult to recycle at landfills for final disposal. **Operating companies: TAKEEI CORPORATION and 12 other Group companies**	
Resource Recycling Business		**Metal recycling** **Automobile recycling** **Home appliance recycling** **Waste treatment** (metal)	We recycle different types of materials. In metal recycling, we purchase scrap metal from manufacturers, building demolition contractors and local governments, and shear, compress, crush, sort and recycle it into metal raw materials, depending on the type of material. In automobile recycling, we disassemble end-of-life vehicles sourced from dealers and auctions, sell the reusable parts and crush and sort after disassemble. In home appliance recycling, we receive the four home appliances collected under the Home Appliance Recycling Law from recycling system management companies, and manage designated transaction points and recycling facilities depending on the region. In metal waste treatment, we compress and crush metal waste. **Operating companies: REVER HOLDINGS CORPORATION and 3 other Group companies**	
Renewable Energy Business		**Woody biomass power generation** **Power retailing** **Forest management** **Use of residual heat** (for agricultural and other purposes)	We produce green power through woody biomass power generation and supply it to local elementary and middle schools and public facilities, ensuring the local production and consumption of energy. We have built a stable fuel procurement structure of unused forest resources such as offcuts from forest thinning and pruned branches through collaborations with local and surrounding authorities and forestry workers. We also use the residual heat that results from power generation in the cultivation of sweet tomatoes*3 and wood ear mushrooms. The Group is strengthening its efforts in forestry management (planning, staged logging, afforestation) for the forests it owns. We are also promoting more renewable energies that can be recycled as resources. **Operating companies: Tsugaru Biomass Power Generation Co., Ltd. and 10 other Group companies**	
Other **Environmental Engineering Business** **Environmental Consulting Business**		**Design and construction of environmental devices and plants** **Development, manufacture and sale of special vehicles** **Environmental measurement, surveys and analysis** **Real estate appraisal and valuation**	The environmental engineering business designs and constructs environmental equipment and plants and develops, manufactures and sells special vehicles with a focus on environmental device and plant-related businesses, LPG bulk lorries, and garbage collection trucks. It also offers a maintenance service structure so that the equipment and vehicles introduced can always be used in excellent condition. We provide various consulting services in our environmental consulting business. These include industrial waste management and measurement certification operations for companies, environmental protection work, environmental measurement, investigation and analysis of waste, soil, water quality and air. We also undertake environmental assessment work for local governments and authorities. **Operating companies: Fuji Car Manufacturing Co., Ltd. (environmental engineering), Environmental Conservation Co., Ltd., Earth-Appraisal Co., Ltd. (environmental consulting)**	

*1 The number of operating companies is current as of September 1, 2022
*3 High-sugar-content tomatoes
*2 Sales posted represent figures after "Adjustments" under "Financial Highlights (consolidated)" on pp. 73–74 have been reflected

Creating environmental value through waste treatment and recycling, resource recycling and renewable energy businesses

TRE HOLDINGS is committed to creating environmental value that contributes to the creation of an efficient recycling, carbon-neutral society.

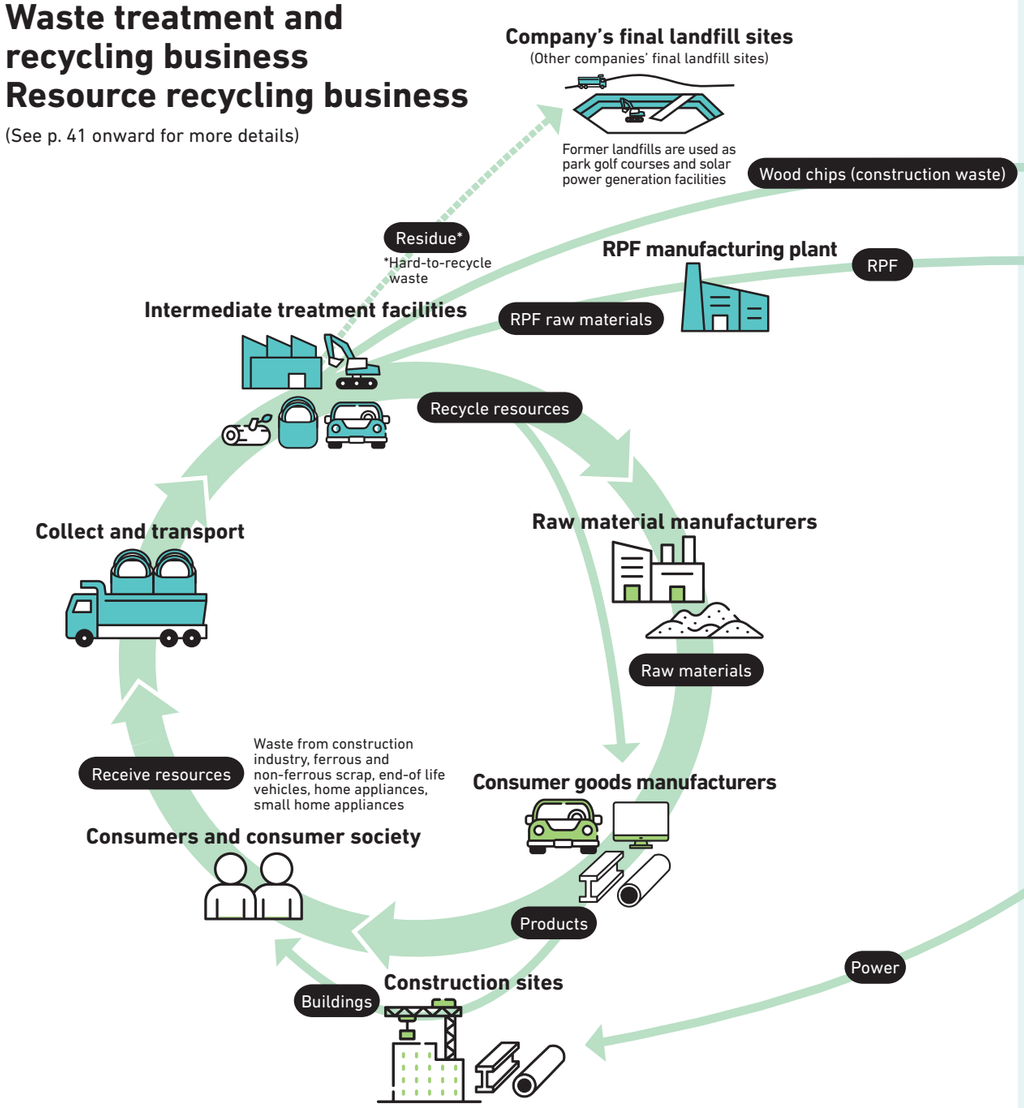
Our efforts are centered on three businesses: waste treatment and recycling, resource recycling and renewable energy.

In the waste treatment and recycling business, we are promoting the recycling of resources using the high-level sorting technology we have developed since our founding. There are two established business models in the renewable energy business: the urban model and the integrated forest model. We are developing woody biomass power generation businesses rooted in local communities.

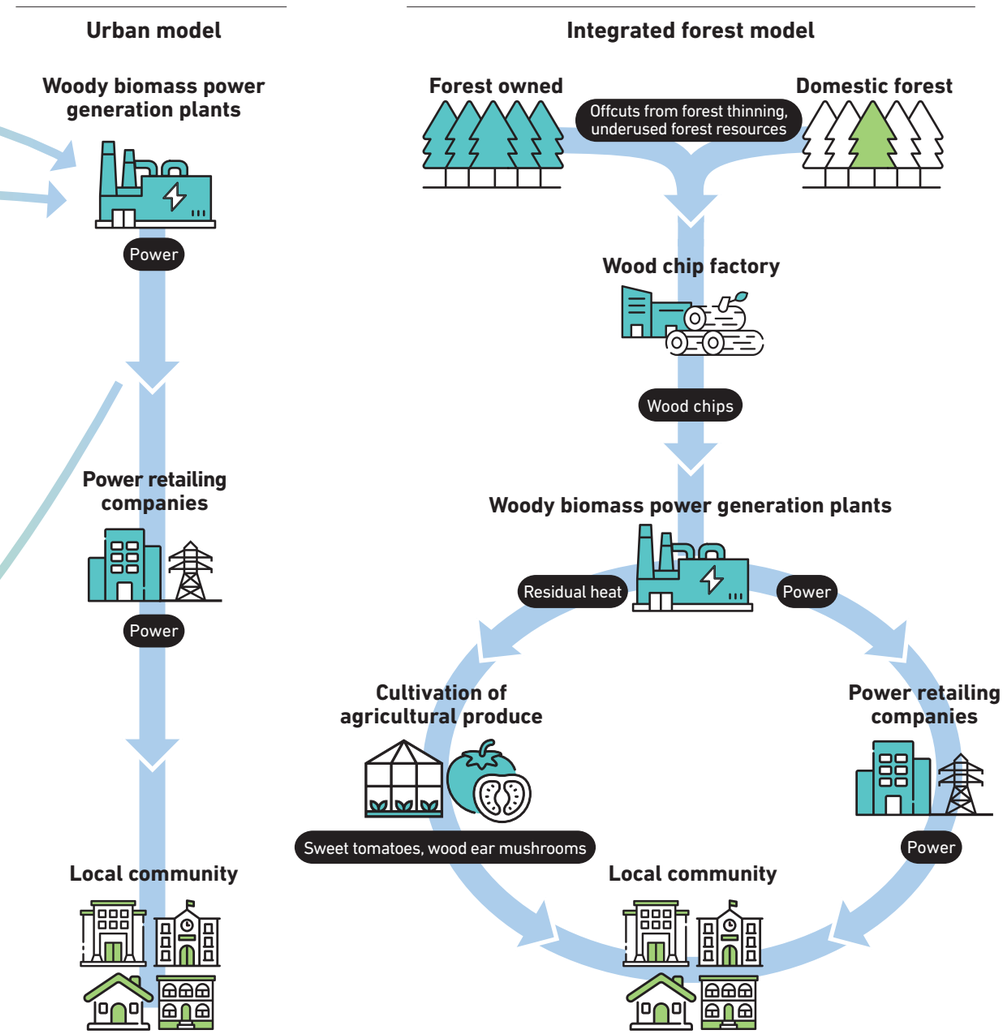
TRE Group business areas

Waste treatment and recycling business Resource recycling business

(See p. 41 onward for more details)



Renewable energy business (see p. 51 onward for more details)



Part 2
Vision and Strategy

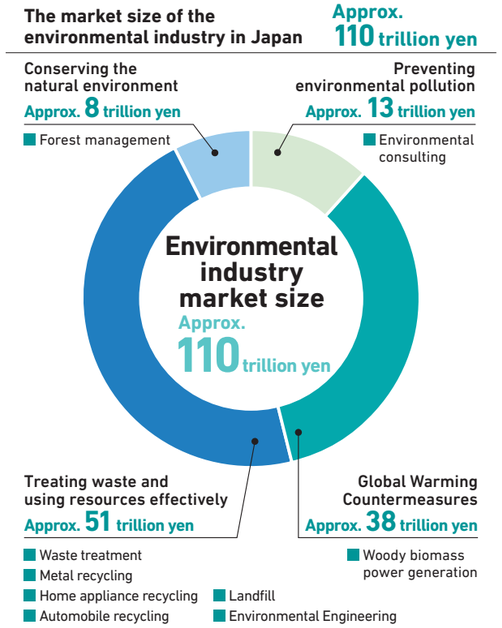
Becoming a Comprehensive Environmental Management Company that Leads the Environmental Industry

A growth strategy that will enhance existing businesses while considering M&A, alliances and expansion overseas

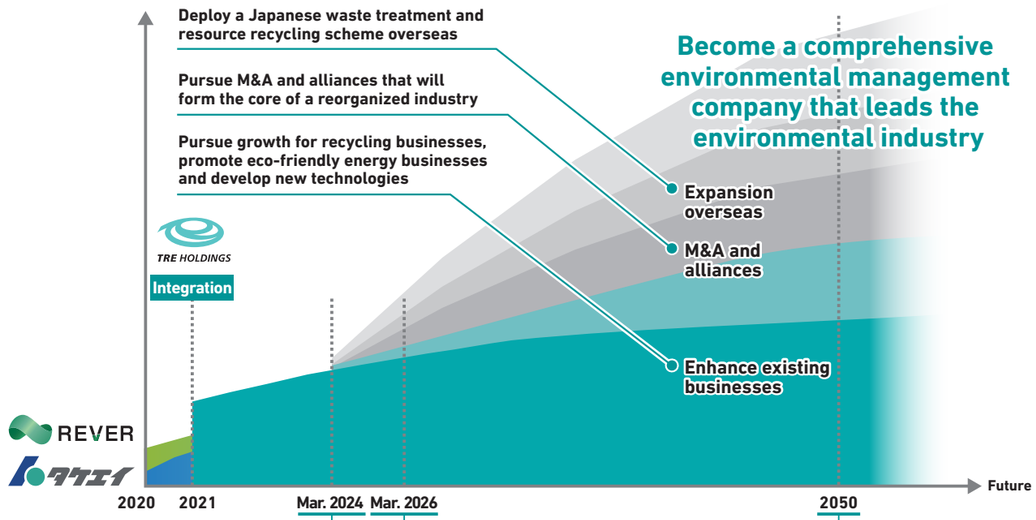
To transition from a linear economy of mass-production/consumption/disposal to a circular economy focused on reducing resource use and recycling, there must be an effective connection between industries that handle manufacturing and the waste management companies that recycle or dispose of waste. The issue in Japan, however, is that waste management companies largely consist of small and medium-scale companies, which means that their scale of business as those responsible for the circular economy is extremely small.

That is why TRE HOLDINGS has set a long-term vision for the year 2050 of acquiring enough technological capability, scale, and social credibility to play a leading role in the circular economy as a comprehensive environmental management company. To make that vision a reality, we will pursue a growth strategy of enhancing existing businesses while considering various options such as M&A, alliances and expansion overseas. At the same time, as a company that seeks to help achieve a carbon-neutral society, we intend to make all the energy used by our Group carbon-neutral in the within five years of the integration of the two companies that form TRE HOLDINGS, and to make the greenhouse gas emissions from all of our business activities net zero by FY2050.

To serve as a milestone on the way to achieving this vision, we have set a target of growing into a company with sales of 100 billion yen with an operating profit margin of 10% or more by FY2026.



Source: "Report on the Market Size and Employment of the Environmental Industry" released in June 2021 (2019 edition) by the Environmental Industry Market Size Study Group.



Targets for FY2024
Net sales: 98.0 billion yen*
Operating profit: 10.1 billion yen*
*after an upward revision in May 2022

Targets for FY2026
Net sales: 100.0 billion yen
Operating profit margin: 10% or more
Integrated synergy: Create 10 billion yen in new sales

Targets for year 2050
Net zero greenhouse gas emissions

We have identified five material issues as priority issues to be tackled

Basic approach

In recent years, there has been an accelerating movement globally to resolve social problems, represented by initiatives such as the goals of the Paris agreement and the UN's Sustainable Development Goals (SDGs). To respond to this societal demand while also putting TRE HOLDINGS' principles that state "We are committed to the conservation of the global environment" into practice, we have identified material (key) issues that we will prioritize. To identify these issues, we held multiple discussions and debates from views such as which social issues we could help resolve through our strengths and expertise as a comprehensive environmental management company, which matters we should use as a foundation for the continued business of TRE HOLDINGS, and which matters would be necessary for sustained growth in corporate value. At the end of this repeated processes, we identified five material issues.

The process of identifying material issues

We collected and organized a wide range of social issues, analyzed the material issues from two viewpoints—their importance to TRE HOLDINGS and their importance to stakeholders—and broadly selected the issues. The five issues were identified after an employee workshop had been held and the CSR and Sustainability Promotion Committee deliberated the issue.

Going forward, we will set medium and long-term targets, action plans and KPIs based on the identified material issues and work steadily through the PDCA cycle. However, these material issues will be continuously revised based on factors such as changes in social conditions and changes in our medium- to long-term management strategies.

STEP 1
Considering candidates for material issues
We drew up a comprehensive longlist of issues, drawing on international guidelines such as the GRI standard and SASB standard, as well as recent social demands and trends. From the longlist, we grouped similar items, eliminated those with little relation to our business and finally selected 53 issues as material issue candidates.

STEP 2
Scoring material issue candidates
We performed a four-stage evaluation (scoring) of the 53 material issue candidates from two viewpoints: their importance to TRE HOLDINGS and their importance to stakeholders.

STEP 3
Narrowing down candidates for material issues
We ranked the scoring results in order of importance, then gathered employees from a range of departments and held a workshop with them divided into four teams. They debated the appropriateness of the ranking in light of TRE HOLDINGS' corporate principles and business strategy. Based on the contents of those debates and with TRE HOLDINGS' vision for its future self in mind, we finally narrowed the material issues down to five.

STEP 4
Approval from management
The CSR and Sustainability Promotion Committee exchanged opinions on the organized material issues and judged them to be appropriate, and they were settled upon after the approval of the Board of Directors in July 2022.

Five material issues

	Material issues	Vision for the future (KPIs, etc.)	Main initiatives	SDGs we can contribute to	Related pages
Solving social issues through our businesses	**Create an efficient recycling society**	We will respond appropriately and accurately to the increasingly sophisticated recycling needs of waste generators using the strengths and expertise of the Waste Treatment & Recycling Business.	• Build a resource recycling scheme by linking waste management companies and other industries. • Improve facilities and realize plans for advanced sorting sites. • Add value to unused resources or turn them into products. • Build a business scheme for recycling waste plastic.	9, 11, 12, 14	pp. 41–50
	Create a carbon-neutral society	We will generate renewable energy, reduce the greenhouse gases emitted from our businesses (make energy used carbon neutral by 2026), and contribute to carbon neutrality throughout society by providing environmental devices and technologies.	• Establish/operate sustainable woody biomass power generation plants integrated with forest management. • Visualize greenhouse gas (CO_2) emissions from our business activities and implement measures to reduce them. • Provide environmental equipment, technology and services that help stakeholders reduce greenhouse gases (CO_2).	7, 13, 14, 15	pp. 51–56
The foundation of business continuity	**Provide pleasant working environments**	We will provide working environments where diverse talents can work actively with peace of mind and where all individuals can display their potential to the fullest.	• Create workplaces where anyone can work in health and safety and with peace of mind. • Promote work-life balance. • Develop the human resources that will support the company's sustained growth by carrying out all kinds of training and providing a system to support obtaining qualifications.	3, 4, 5, 8	pp. 65–68
	Strengthen the corporate governance structure	We will ensure that we have a sound and highly-transparent governance structure, including compliance, in order to promote sustainability management.	• Maintain the transparency of management by establishing various committees. • Conduct training to ensure thorough compliance and check the state of observance. • Practice appropriate information management and risk management	—	pp. 60–64
Sustainable growth in corporate value	**Enhance our brand value and increase our recognition as a comprehensive environmental management company**	We will undertake initiatives and share information that earns us the trust and business of customers, business partners, shareholders and investors.	• Disclose information in a timely and suitable fashion. • Practice fair and equitable IR activities. • Engage stakeholders	—	p. 12 pp. 37–38 p. 61

In the first year after integration, we achieved our targets and revised our medium-term business plan upwards

To serve as a milestone on the way to achieving our long-term vision of becoming the leading comprehensive environmental management company in the environmental industry, TRE HOLDINGS has set a target of growing into a company with net sales of 100 billion yen with an operating profit margin of 10% or more by FY2026, five years after integration.

With this goal in mind, we formulated and announced our medium-term business plan: "Towards an Efficient Recycling and Carbon-Neutral Society" at the same time as the company's founding in October 2021. Under this plan, we aim to achieve sales of 98.0 billion yen and an operating profit of 10.1 billion yen by FY2024. (after an upward revision in May 2022)

Under the medium-term business plan, we established four basic strategies to achieve this target, namely "pursuing growth for recycling businesses," "promoting eco-friendly energy businesses," "developing new technologies" and "sustainability management," and each business is carrying out specific measures according to these strategies.

The effect of COVID-19 on the Waste Treatment & Recycling Business was minor in FY03/2022, and our revenue improved as efforts to add value to and commercialize waste bore fruit. In the Resource Recycling Business, the quantity of valuable resources recovered increased due to improved sorting at intermediate treatment facilities. This, coupled with the synergistic effect of higher prices in resource markets, contributed significantly to overall performance together with the Waste Treatment & Recycling Business. In the Renewable Energy Business, we generate and sell power through a system of six power plants including Tamura Biomass Energy Co., Ltd. which began business operations in April 2021. We are also engaged in forest management. In other businesses, we are harnessing synergy within the Group to proactively engage in product development, research and technology development, cross-selling and other activities.

As a result of these initiatives, in FY03/2022, we recorded net sales of 68,234 million yen, operating profit of 7,659 million yen, ordinary profit of 7,547 million yen and profit attributable to owners of the parent of 4,742 million yen, steadily accomplishing the goals that were set at integration and revised upwards in February 2022.

In May 2022, after comprehensively considering the current coronavirus crisis and resource market prices and other factors in the economic environment, the Group increased the numerical targets for the second and third year post-integration that it had announced at the time of integration.

Summary of consolidated cumulative FY03/2022 results

(Millions of yen)

	FY03/22		
	Full-year results	1st year of the Medium-term business plan (Full-year forecast)	
			Progress
Net sales	**68,234**	67,400	101.2%
Operating profit	**7,659**	7,430	103.1%
Ordinary profit	**7,547**	7,220	104.5%
Profit attributable to owners of parent	**4,742**	4,420	107.3%

* TRE HOLDINGS was established on October 1, 2021 as a joint holding company, and its business is integrated with TAKEEI CORPORATION as the acquiring corporation and REVER HOLDINGS CORPORATION as the acquired corporation. Accordingly, in the fiscal year under review, the consolidated financial results are a consolidation, with TAKEEI CORPORATION's consolidated results from April 1, 2021 to March 31, 2022 serving as the base to which REVER HOLDINGS CORPORATION's consolidated results for October 1, 2021 to March 3, 2022 have been added.
* YoY comparisons are not provided as this is the first fiscal year since the establishment of the Company.
* Earnings forecast shows figures revised upward on February 14, 2022.

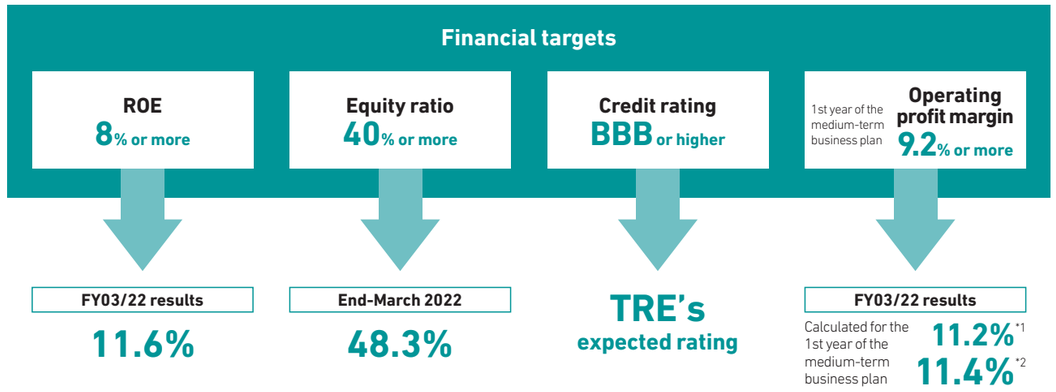
Dividends	FY03/22	
Dividend per share	Ordinary dividend	JPY20.0
	Commemorative dividend	JPY5.0
	Total	**JPY25.0**

Dividend payout ratio: Over 30%

* Calculating based on dividends of JPY25 per share for results from October 2021-March 2022, plus TAKEEI's interim dividend of 15 yen for Q2 of the fiscal year. The dividend payout ratio is 36.1% in real terms.

	FY03/22
Earnings per share	**JPY110.79**

Progress of financial targets



*1. Calculated for the period of FY03/22. (April 1, 2021 to March 31, 2022 for TAKEEI CORPORATION; October 1, 2021 to March 31, 2022 for REVER HOLDINGS CORPORATION)

*2. Calculated for the 1st year of the Medium-term Business Plan. (April 1, 2021 to March 31, 2022 for both TAKEEI CORPORATION and REVER HOLDINGS CORPORATION)

Progress of medium-term business plan (Review of 2nd and 3rd year numerical targets)

(Millions of yen)

	Results					Plan					
	FY03/21 Full-year results (Note 1)	1st year of medium-term business plan (FY03/22)				2nd year of medium-term business plan (FY03/23)			3rd year of medium-term business plan (FY03/24)		
		Full-year results (Note1, 2)	YoY	1st year of medium-term business plan (Note 4)		2nd year of medium-term business plan	2nd after review (Note 2)	Change	3rd year of medium-term business plan	3rd year after review (Note 2)	Change
					Progress						
Net sales	73,470	**90,584**	+23.3%	**89,700**	101.0%	**90,000**	**94,200**	+4.7%	**92,000**	**98,000**	+6.5%
Operating profit	6,727	**10,326**	+53.5%	**10,100**	102.2%	**8,400**	**9,300**	+10.7%	**9,000**	**10,150**	+12.8%
Operating profit margin	9.2%	**11.4%**	+24.5%	**11.3%**	101.2%	**9.3%**	**9.9%**	+5.8%	**9.8%**	**10.4%**	+5.9%
Profit attributable to owners of parent	4,084	**7,248**	+77.5%	**6,930**	104.6%	**5,460**	**5,900**	+8.1%	**5,890**	**6,440**	+9.3%
Earnings per share (Note 3)	-	¥141.1	-	¥131.7	107.1%	¥106.3	¥114.8	+8.0%	¥114.6	¥125.3	+9.3%

Note 1: Results for the integrated companies, TAKEEI CORPORATION and REVER HOLDINGS CORPORATION, for the period from April to March of the following year, have been combined to make YoY comparisons.
Note 2: Forecasts for operating profit include impact from goodwill related to the business integration (JPY89 million for FY03/22, and JPY178 million for FY03/23 onward).
Note 3: Earnings per share is calculated based on 51,362,030 shares, which is the number of issued shares at the end of FY03/22 minus the number of treasury shares at the end of the same year, to facilitate understanding of the actual progress of the medium-term business plan.
Note 4: Forecasts for the first year of the medium-term business plan have also been adjusted upward based on the full-year consolidated earnings forecast disclosed on February 14, 2022

We will aim to maximize business integration synergy and steadily implement policies based on our growth strategy themes

Growth strategy theme 1 Pursuing growth for recycling businesses

By maximizing the synergy of integration in order to share, combine and restructure the technology, expertise and facilities that both TAKEEI CORPORATION and REVER HOLDINGS CORPORATION have accumulated over many years, we will provide our customers with an even safer, enriched value chain that affords them peace of mind.

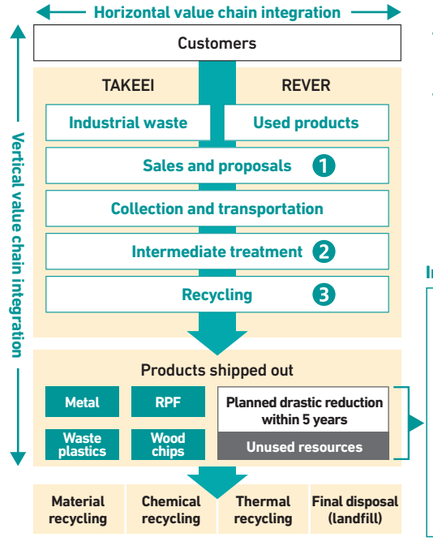
Specifically, by boosting capital investments, adding increased value to goods shipped out and increasing the recycling rate, we will aim to satisfy the demands and expectations of customers and break into new customer segments. Additionally, we will press forward with cross-selling that leverages the strengths of both companies and meet recycling needs accurately in order to expand the volumes and the types of waste we handle, increasing sales. We also plan to focus on improving facilities, making effective use of the business locations of both companies and optimizing logistics while also striving to reduce costs through efforts to convert waste to raw materials and fuel. In particular, this will involve improving our shredder dust sorting abilities, boosting our capacity to produce RPF from waste plastics and other materials, increasing the production of "Eco Foam™," a secondary material used in steelmaking, and enhancing the waste tile carpet recycling business. Through these and other efforts, we will try to enhance our recycling functionality so that we can reduce cost prices and create more sales at the same time.

Furthermore, going forward we will endeavor to recycle waste glass working primarily with solar panels, which are expected to generate a large volume of waste in the 2030s and an area where recycling needs are expected to grow, while also handling construction glass and used automobile glass. Through this, we hope to reduce the consumption of natural resources, help decrease the CO_2 emitted in manufacturing processes, and also help lower the amount of residual landfill waste.

Progress of integration synergy in FY03/2022

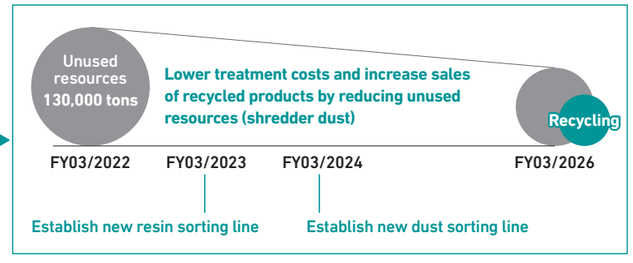
- Made efforts to commercialize the recycling of solar panels and automobile glass, where recycling needs are growing. Made progress on collaborations, including with companies in different businesses, when it comes to glass recycling, solar panels, waste plastic treatment and RPF.
- Facility improvements progressed, and we made more concrete efforts to realize plans for advanced sorting sites.
- Added value to unused resources and/or turned them into products. (RPF, steelmaking secondary materials, etc.)

Create synergy by integrating and reorganizing the value chain



- Integrate the processes from receiving valuables and waste to making recycling proposals by sharing the information and expertise both companies have accumulated over many years, which will translate into an improvement in service quality. 1
- Promote capital expenditure and technological development and link that to added value for products produced and the recycling of unused resources (shredder dust) that are not fully used by TRE HOLDINGS.
  - Enhance the sorting process during intermediate treatment and increase production of RPF, a high valued-added fuel made with waste plastic and other materials, and Eco Foam™, a secondary material used in steelmaking processes. 2
  - Introduce the latest research and technology and promote recycled plastics and other resource recycling. 3

Image of reduction in unused resources



Growth strategy theme 2 Promoting eco-friendly energy businesses

The government of Japan has declared that Japan will realize carbon-neutrality by 2050. To achieve that, in addition to woody biomass power generating businesses, businesses that generate power from waste, such as those that turn waste plastic into fuel, have been positioned as important resource recycling-related businesses. TRE HOLDINGS is engaged in unique renewable energy businesses that are rooted in the local community. Along with striving to expand our woody biomass power generation business, we will also focus on energy recovery from waste.

(1) Expand the woody biomass power generation business

The Group operates woody biomass power generation plants in six cities, namely Hirakawa in Aomori, Hanamaki in Iwate, Daisen in Akita, Tamura in Fukushima, Ichihara in Chiba and Yokosuka in Kanagawa.

We use the knowledge and management expertise gained in these areas to provide sustainable woody biomass power generation rooted in the local community. In terms of specific plans, to help ensure the stable procurement of fuel, in addition to participating in regional forest management planning (drawing up forest management plans), we will cooperate with local forestry associations to build long-term stable fuel collection structures. We also intend to expand our areas of business into fields such as power retailing and the use of residual heat from power plants to cultivate agricultural produce. We are establishing a fully integrated business flow in the woody biomass power generation business to cover everything from upstream to downstream.

In the medium to long term, we will also strengthen the forest management business to serve as the basis on which to build relationships of trust with regional communities.

(2) Commercialize energy recovery from waste

The Group promotes material recycling through enhanced waste sorting. We will also pursue thermal recycling going forward for waste that is difficult to recycle for materials. Specifically, we plan to own waste incineration facility with high efficiency power generation functionality.*

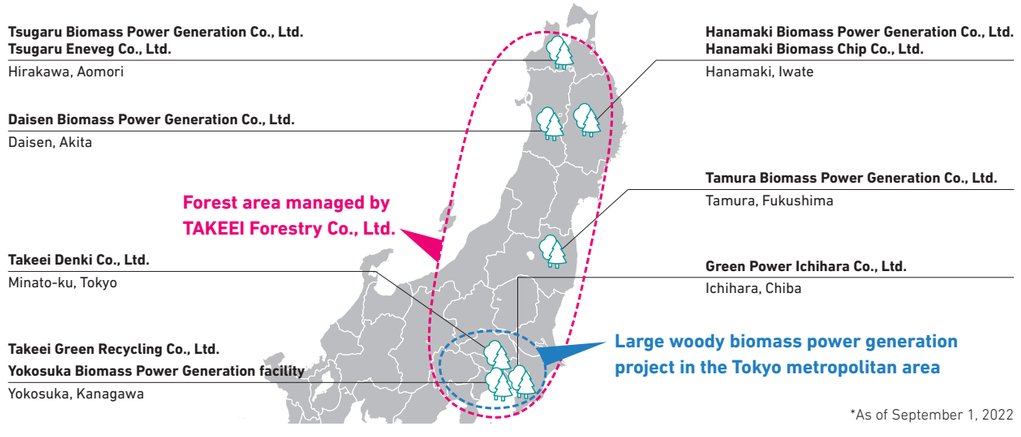
Additionally, in the medium to long term, we will also consider commercialization in terms of the feasibility of businesses such as those that make effective use of the CO_2 emitted from burning waste, with potential collaborations with other industries in mind.

*Thermal energy conversion that can issue non-fossil fuel certificates.

Results of activities in FY03/2022

- Enhanced forest management business initiatives rooted in the local community; promoted the use of residual heat in agriculture
- Expanded the supply of renewable energy, including our in-house power sources
- Made progress on plans for a facility using waste thermal energy in the Tokyo metropolitan area

Expansion of the Renewable Energy Business (including woody biomass power generation businesses)*



*As of September 1, 2022

Growth strategy theme 3 Developing new technologies and building new business models

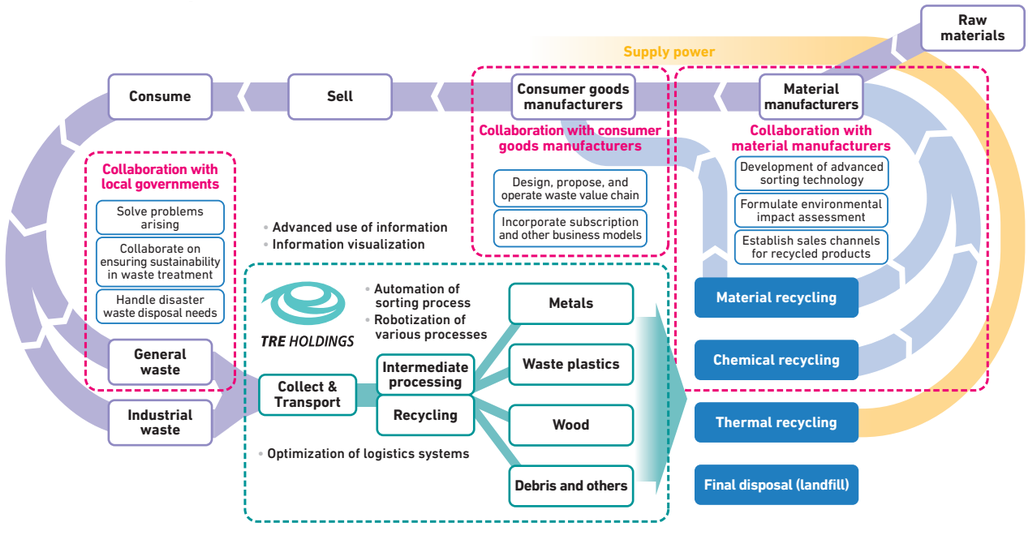
Developing new technologies such as waste plastic recycling technology, CO_2 emission reduction technology and waste material power generation technology will be the major challenge to solving global environmental issues including climate change, waste plastic and energy resources.

In these circumstances, TRE HOLDINGS will help to bring about an efficient recycling society by striving to increase the sophistication of its disassembling, crushing and sorting technologies and by producing recycled resources in the quality and quantity desired by customers, even for composite materials that were previously difficult to sort. We will also enhance the development of technologies related to the removal and component adjustment of repellents, which are processes needed to increase the efficiency of waste power generation, as well as technologies that increase the efficiency of the recovery of rare metals. Through these efforts we hope to realize even greater gains and results than before. Furthermore, when handling a variety of used products, we will pursue safety while aiming for the stable supply of a large volume of high-quality recycled resources through the use of automatic sorting that employs the latest digital technology featuring robotized sorting processes realized through the use of sensor (IoT) information and AI technology.

In order to create an efficient recycling and carbon-neutral society, and to bring about a world that gives all kinds of waste new life in the form of resources and reuses them, the Group is working to build new business models such as supplying recycled resources that visualize CO_2 emissions and other environmental values, and decarbonizing the value chain through product life cycle design. When undertaking such initiatives, we will link up with consumer goods manufacturers, material manufacturers, local governments, trading companies, plant manufacturers and other industries to actively build schemes and thereby intensify cooperation with other industries.

From now on, we need to shift from a linear economy to a circular economy. The Group will explore a new era of manufacturing that considers the recycling of products into resources after disposal, and we will create new business models through analysis and verification carried out in cooperation with other industries.

New initiatives to cooperate with other industries



Topics

Enhancing glass recycling by making JW GLASS RECYCLE CO., LTD. a subsidiary

In May 2022, JW GLASS RECYCLE CO., LTD. became a subsidiary of TAKEEI CORPORATION.

Since its establishment in 1951 JW GLASS RECYCLE has been involved in a resource recycling business where it collects, crushes and sorts bottles and plate glass. The company sells the resulting cullet (crushed pieces of glass) to bottle, plate glass and glass wool manufacturers as raw material for recycled glass. Its main business locations are in Tokyo, Hokkaido, Gunma and Shizuoka. The pieces of glass that become recycling material are generated from households and collected by glass manufacturing and processing companies and local authorities, but even now many of them end up as landfill at final landfill sites. However, as glass and glass wool manufacturers continue efforts towards carbon neutrality, there is expected to be stable demand for good quality cullet that helps to reduce CO_2 emissions in the manufacturing process when used as raw material.

As a member of TRE HOLDINGS, JW GLASS RECYCLE will supply high quality cullet and actively engage in recycling laminated glass, glass from end-of-life vehicles and solar panels, where demand is expected to grow massively in future.

A study aimed at a business partnership with Sumitomo Chemical Co., Ltd. in preparation for the shift to a circular economy

Since June 2021, REVER HOLDINGS CORPORATION and Sumitomo Chemical Co., Ltd. have been carrying out a study aimed at a business partnership with the intent of helping to resolve societal issues by quickly establishing a sustainable circular economy through a business that recycles the materials and chemicals in plastic waste. In the study, Sumitomo Chemical Co., Ltd. is combining its accumulated plastic manufacturing technology with TRE HOLDINGS' waste recycling expertise in order to recycle collected plastic waste as products. As of June 2022, we have carried out investigations and analyses into the potential for material recycling using waste plastic treated at TRE HOLDINGS' crushing and sorting plants. In the process, we also conducted an environmental impact evaluation of recycled plastics from manufacture to recycling. The results made it clear in numbers that, compared to conventional products manufactured from virgin raw materials, recycled plastic products using waste plastic are superior in a life cycle assessment (LCA) from the viewpoint of reducing CO_2 emissions. Going forward, we will increase the sophistication of our sorting, refine our data by using a new sorting line, and proceed with even more detailed studies aimed at a business partnership.

Installation of a new resin sorting line at REVER CORPORATION's Nasu plant to augment its plastic recycling capabilities

In line with the enactment of the Act on Promotion of Resource Circulation for Plastics in Japan in 2021, the demands from consumer goods manufacturers and material manufacturers concerning plastic recycling have become more sophisticated and more diverse. Under these circumstances, in August 2022, REVER CORPORATION put a new line into operation at the Nasu plant in Tochigi, to upgrade and enhance the functions of its resin sorting lines. Not only will the new line increase the purity of the polypropylene (PP) and polyethylene (PE) plastics recovered but it will also boost the volume of resin recovered from 600 tons a year to 1,800 tons a year. In addition to the increase in capacity, it is expected to recover in 420 tons a year in terms of materials for RPF and other alternative fuels.

In the future, demand for plastic for a variety of uses such as material recycling, chemical recycling and alternative fuels is expected to rise, and so we will actively consider capital expenditures that allow us to sort all kinds of materials effectively. By building systems that can supply large volumes of recycled plastic while maintaining accuracy, we aim to reduce CO_2 emissions while recycling plastic products which are expected to increase in future.

We regard climate change as an important management issue and understand and analyze the medium- to long-term risks and opportunities

Basic approach

Climate change is one of the most pressing issues confronting global society at the moment. It is an issue with a great deal of urgency, as extreme weather events are occurring and intensifying all around the world even now, with serious effects on the natural environment and human livelihoods. The Paris Agreement, an international agreement on climate change countermeasures, has established the following two long-term goals for all nations.

- Limit the global average temperature increase in this century to 2 degrees Celsius compared to pre-Industrial Revolution times while pursuing efforts to limit the increase to 1.5 degrees
- To achieve that, worldwide greenhouse gas emissions must past their peak and decline as soon as possible, and in the second half of the 21st century there must be a balance between the emission and the absorption (through forests, for example) of greenhouse gases.

TRE HOLDINGS is highly aware of the worsening effects of climate change and the destruction of the environment on a global level as well as of the need to develop countermeasures. As a comprehensive environmental management company, we will contribute to the creation of an efficient recycling, carbon-neutral society through our waste treatment and recycling-related businesses and our renewable energy business.

Starting in 2022, the Group has begun to disclose information according to the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) established by the Financial Stability Board (FSB). We will continue to analyze issues and hold discussions to gradually expand the disclosure of information. Additionally, in June 2022, along with announcing our endorsement of the TCFD recommendations, we also joined the TCFD Consortium, a forum for companies and financial institutions endorsing the TCFD recommendations to hold discussions.

Governance

In June 2022, the Group established the CSR and Sustainability Promotion Committee as an organization to set targets and plan, announce, execute and evaluate strategies concerning the Group's climate change countermeasures and other initiatives aimed at solving social issues.

The CSR and Sustainability Promotion Committee is chaired by the President and COO. As the body for deliberating sustainability-related initiatives, its functions include determining relevant policies and managing the progress of targets. It meets at least twice a year, in principle, and reports to the Board of Directors after holding discussions and obtaining a consensus at Group management meetings. The Board of Directors supervises the progress of targets and policies.

Strategy

The Group seeks to understand the risks and opportunities posed to business by the migration risks and physical risks of climate change, and to reflect that understanding in business strategies and in the planning of climate change countermeasures. In 2022, we began an analysis of the impact of climate change risks. As a result, we realized that for the Group, which is engaged in waste treatment, recycling and renewable energy businesses, the risks posed by climate change to business continuity are significantly outweighed by the business opportunities, which are linked to future growth opportunities.

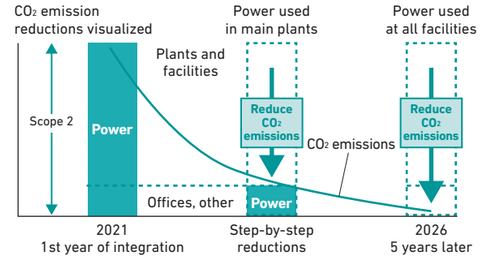
In light of the fact that the Group's businesses contribute to conserving the global environment, including climate change countermeasures, we have established the creation of an efficient recycling, carbon-neutral society as material issues to address, and we will focus on reducing the risks of climate change while seizing business opportunities.

Risk management

In 2022, the CSR and Sustainability Promotion Committee discussed the impact of the risks and opportunities of climate change on the Group's business and how to manage those risks going forward, and the results are disclosed in this integrated report.

Indicators and targets

We have set practicing sustainability management as a key strategy in the Group's medium-term management plan. As an initiative under that strategy, we plan to make all the energy used in-house carbon-neutral within five years of our business integration, i.e. by 2026. We intend to do this by promoting energy-saving activities while also efficiently procuring non-fossil fuel certificates and CO_2 credits. We also began and announced the calculation of our scope 3 CO_2 emissions in 2022.



Assumed impact on TRE HOLDINGS' business (risks and opportunities)

Broad category	Intermediate category	Sub category	Indicators	Impact (Risks)	Risk assessment	Impact (Opportunities)	Opportunity assessment
Migration risks	Policies and regulations	Stricter regulations such as carbon taxes and greenhouse gas emissions quotas	Revenue Expenditure	• Increased costs due to burden of new taxes (carbon taxes) if we do not conserve energy at our workplaces and in our logistics	Minor	• Expansion in the steel recycling business due to a global increase in demand for electric furnace steel • A rise in the needs of customers and social demands for lower carbon throughout the supply chain, contributing to reduced Scope 3 CO_2 from customers as workplaces use less carbon, leading to increased differentiation and competitiveness • Increased demand for renewable energy	Major
		Stricter environmental laws and regulations	Revenue Expenditure	• Increased capital investment costs and external (secondary) processing costs in order to comply with laws and regulations	Minor	• Rapid increase in demand for recycled resources and recycling from local governments and various manufacturers	Major
		Stricter information disclosure obligations	Expenditure	• Decline in the company's credibility if it does not comply appropriately with requests for disclosure • Increased costs due to an increase in indirect operations	Minor	• Clear display of superiority in the industry through information disclosure	Minor
	Market	Sharp increases in resource prices	Revenue	• Increased costs as a result of a sharp rise in energy costs and the prices of materials and raw materials	Medium	• Greater demand for reclaimed and recycled goods	Medium
Physical risks	Acute	Intensification and frequent occurrence of natural disasters	Revenue Expenditure Assets	• Stoppage of operations due to damage to workplaces or disruption of supply chain.	Major	• Increased disaster-related waste treatment costs following a natural disaster such as a major typhoon	Minor
	Chronic	Rise in average temperature, frequent floods and storm surges	Revenue Expenditure Assets	• Deterioration of the working environment and reduced labor productivity due to heat stress • Storm surge damage to workplaces and plants located in coastal areas	Major	• Increased opportunities for worn out infrastructure repair work and waste treatment businesses as a result of disaster prevention, disaster mitigation and national structural reinforcement • Increased opportunities for waste treatment businesses accompanying the movement of workplaces away from regions expected to face disasters	Minor

Part 3 Business Strategy by Segment

Creating Environmental Value through Business

Growth strategy background

Business activities accelerating the evolution and growth of an efficient recycling, carbon-neutral society

TRE HOLDINGS CORPORATION aims to evolve and grow as a comprehensive environmental management company through our business activities. The TRE Group addresses the global environmental issues of climate change, energy, and resources, and supports a circular economy.

Our focus is on the three main business areas of waste treatment and recycling, resource recycling, and renewable energy (woody biomass power generation).

We also operate an environmental engineering business that designs and constructs environmental equipment and plants, and develops, manufactures, and sells special vehicles. Additionally, we run an environmental consulting business that provides assessment services including measurement, investigation, and analysis.

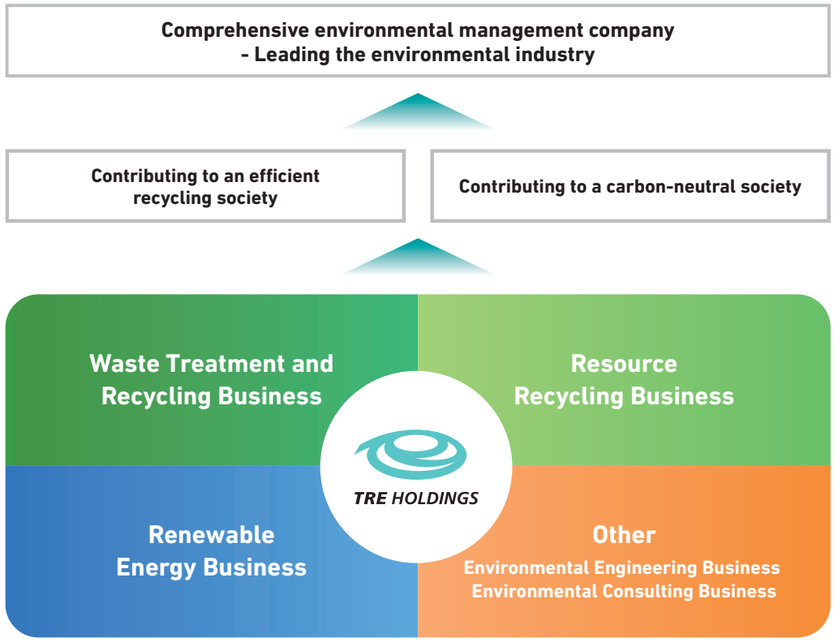
The integration of such business activities will contribute to the creation of an efficient recycling, carbon-neutral society.

In parallel with the shift to a circular economy, we are investing in facilities and developing technologies in our waste treatment and recycling and resource recycling businesses in order to provide a stable supply of high-quality recycled materials to meet the needs of our business partners. We are also engaging in M&A and promoting business alliances to more rapidly introduce advanced technologies and expertise within the Group of companies.

Along with our priority on waste disposal, we are focusing on collaboration and alliances with our partners to be able to work together for environmentally conscious design and to achieve an efficient recycling society. We contribute to the creation of a carbon neutral society through our efforts to reduce CO_2 emissions (Scope 3) associated with waste treatment and recycling in the supply chain of industries.

Generation and sales of woody biomass electricity in the Group's renewable energy business contributes to the realization of a carbon-neutral society. In addition to the utilization of unused forest resources, construction waste, and waste plastic-derived RPF as a fuel for woody biomass power generation, we are working to absorb and fix CO_2 and revitalize the local forest industry by conserving forest resources. This will, in turn, lead to the creation of environmental and social value.

In this way, by organically integrating several business fields, the Group, as a comprehensive environmental management company, aims to create new environmental value and grow sustainably.



Establishing a process for receiving, properly processing, and recycling various types of waste and ferrous scrap

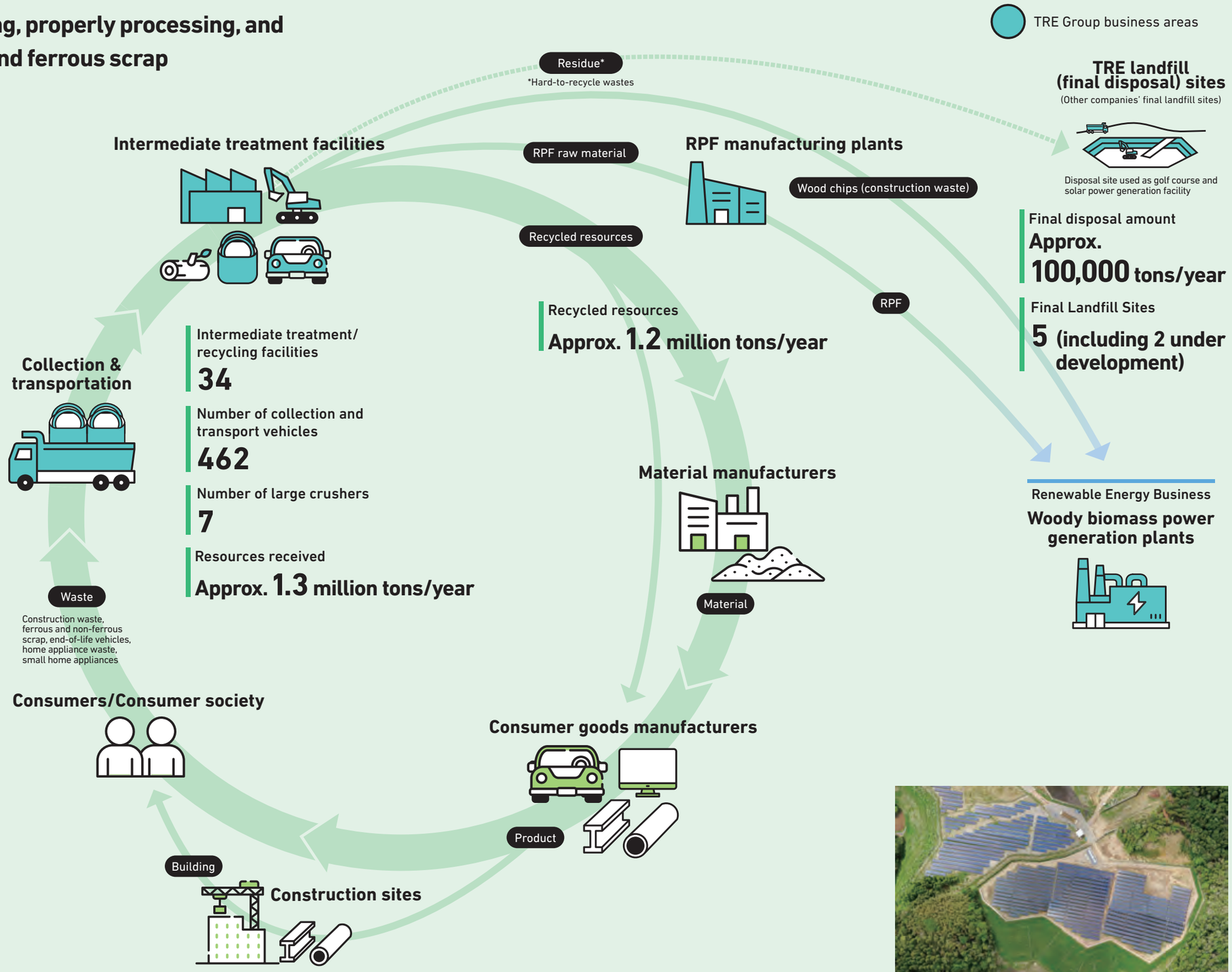
The waste treatment and recycling business involves the collection, transport, and receiving of scrap iron and waste from construction and demolition sites, automobile dismantlers, local governments, etc. at the recycling plant.

We aim to enhance the recycling ratio by sorting the received waste, removing extraneous material, extracting reusable ferrous and non-ferrous metals, plastics, and other materials, and applying processes of crushing and compression. Even materials not suitable for reuse can be converted to RPF solid fuel for woody biomass power generation plants, thus reducing CO_2 emissions.

Ferrous scrap, however, is processed (cut, crushed, etc.) according to the quality and size requirements of client manufacturers. The suitable recycled materials are then transformed to new iron and steel material.

Such waste treatment and recycling serves to prevent resource depletion and contributes to the circular economy, preserving and maintaining product and resource value through circulation rather than in the linear economy of mass-production/consumption/disposal.

Non-recyclable materials such as residues from the processing of waste and ferrous scrap are properly disposed of in final landfill sites, or incinerated.




Golf course (converted Okido final landfill site)

Solar power generation facility (at Narita landfill (final disposal) site)

Developing processing technology and treatment facilities for unused resource recycling

In order to achieve an efficient recycling society, it is essential to develop processing technology and treatment facilities to recycle unused resources that in the past had been landfilled for being difficult to recycle.

TRE HOLDINGS works to recycle unused resources through activities such as proactive capital expenditure and treatment process improvement. For example, we are bolstering RPF (Refuse derived paper and plastics densified fuel) production by utilizing waste plastics and other materials that can be used for power generation. We are also pursuing sophistication of our recycling technology with enhanced sorting of shredder dust, an unused resource. Another area of focus is increased production of Eco-Foam™, a secondary material that uses recycled dust and other materials as a foaming inhibitor in the steelmaking process. We are also engaging in the heretofore difficult recycling of waste tile carpet.

1 RPF

■ Effective use of solid fuel for power generation (RPF)

2 Eco-Foam™

■ Use as foaming inhibitor in steelmaking processes

3 Eco-Flake

■ Tile carpet transformation

Topics

Improving shredder dust sorting and increasing RPF production

In the processing of industrial waste, TRE HOLDINGS promotes conversion of waste into fuel by enhancing the sorting of waste plastics and other materials used as raw materials for RPF.

We also give attention to sorting after shredding. A new sorting line installed in August 2022 at REVER CORPORATION's plant in Nasu made it possible to sort the plastic, metals, and other waste materials from shredder dust disposed of in landfills. Using these as raw material for RPF contributes to in-house fuel production for power generation and also to reducing landfill waste.

This endeavor also contributes to increased RPF production at TAKEEI CORPORATION and leads to integration synergies.

Increasing Eco-Foam™ compressors for heightened production

TAKEEI CORPORATION's Tokyo Recycling Center invested in facilities to increase production and productivity of Eco-Foam™, a secondary material used in steelmaking. In September 2020, a production line was added, doubling from one line to two. Compressors were also upgraded, reducing maintenance time and improving productivity.

■ Eco-Foam™ compressor

Increasing waste tile carpet recycling

Tile carpets are used in large quantities in office buildings. They have a top layer of fiber backed by a polyvinyl chloride (PVC) layer. Because the two layers are strongly glued together, separating them and crushing the tile carpets has been difficult. Most were simply disposed of in landfills.

In 2016, TAKEEI CORPORATION installed dedicated equipment at the Tokyo Recycle Center's No. 2 factory to recycle waste tile carpet. In 2020, the recycling equipment was upgraded to include a crusher that enabled removal of the fibers, a process that had previously been difficult to do. This resulted in efficient production of high-quality recycled raw material. The fiber portion extracted in the process can be used as recycled material. The PVC portion is sold to tile carpet manufacturers as Eco-Flake, a raw material.

■ Eco-Flake

Ferrous scrap recycling and CO_2 emission reduction
Steel production shifts from blast furnaces to electric furnaces

The Paris Agreement was agreed upon at the 2015 Paris COP (Conference of the Parties) to the United Nations Framework Convention on Climate Change, which was held to discuss international agreements related to greenhouse gas reduction.

In reference to the agreement, the Japanese government announced a policy to reduce greenhouse gas emissions to net zero by 2050 and the industrial sector is implementing initiatives to achieve this.

Even the energy-intensive steel industry, for example, is progressing in reduction of greenhouse gas emissions. The steel industry CO_2 emissions account for more than 10% of Japan's total CO_2 emissions, but the industry has to date been making efforts in various kinds of action to reduce CO_2 emissions. Notably, there is a trend in steelmaking to shift from blast furnaces to electric furnaces.

Blast furnace steelmaking uses natural resources such as iron ore and coke and emits approximately 2 tons of CO_2 for every one ton of steel produced. Electric furnace steelmaking, on the other hand, uses ferrous scrap as the raw material and emits approximately 0.5 tons of CO_2 per ton of steel produced. This means that CO_2 emissions can be reduced by about one-fourth by shifting from blast furnaces to electric furnaces.

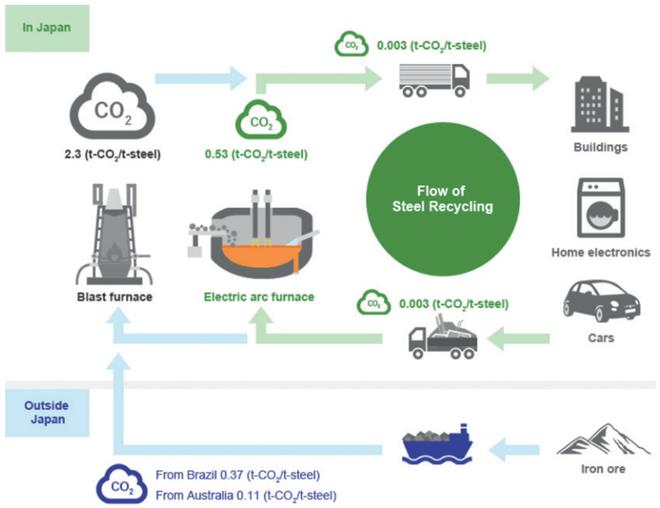
Blast furnace produced steel using natural resources such as iron ore and coke is transported to manufacturers who transform it into automobiles, home appliances, machinery and equipment, building materials, etc. that support our industrial society and our lives. After such products have outlived their useful life, they are transported to recycling plants and waste treatment facilities. The discarded materials might include plastics, non-ferrous metals such as copper and stainless steel, fiber materials, and glass—some of which are difficult to separate and sort. Iron materials, however, no matter how small, can be recovered by using magnetic force in the sorting process. The collected iron is then processed, treated, and shipped to Japanese or overseas steelworks to re-emerge, mainly through the electric furnace steelmaking process, as new steel.

Iron can be recycled many times because the properties of iron make it easy to sort and because quality deterioration during the manufacturing process is negligible. Further, the collection and recycling of manufactured iron makes it possible to prevent depletion of limited natural resources such as iron ore and coke, and at the same time to reduce CO_2 emissions. Given this environmental value creation, expectations are high for effective uses of ferrous scrap.

Iron lifecycle and recycling

Source: Japan Iron and Steel Federation

CO_2 emissions from Japan's steel sector and flow of steel recycling



Source: Tokyo Steel Co., Ltd.

Topics

Metal recycling through automobile and home appliance recycling

Our Group's automobile recycling is based on the 2005 Law for the Recycling of End-of-Life Vehicles (The Automobile Recycling Law). In addition to selling disassembled reusable parts to repair markets in Japan and overseas we are also engaged in general sales at retail outlets and online. We exhaustively recover and recycle reusable items such as tires, batteries, and engines. The remaining automobile bodies are crushed with a shredder and sorted with items that can be reused and shipped to ferrous and non-ferrous metal manufacturers. By transforming them into new resources such as construction steel material and secondary alloy metals, we are contributing to an efficient recycling society.

For home appliance recycling, the Law for the Recycling of Specified Kinds of Home Appliances (Home Appliance Recycling Law) requires that four items—air conditioners, TVs, refrigerators, and washing machines—be collected and processed for recycling by authorized operators. Our Group conducted joint recycling technology research with major home appliance manufacturers before the 2001 law was in place and indeed contributed to the law's enactment. Relationships of trust we cultivated with the major home appliance manufactures continued after the law came into effect and we are entrusted with recycling 1.4 million units of the four specified appliances annually. This amounts to around 10% of the total generated in Japan. Under the law, home appliances are collected from homes and offices and transported to home appliance recycling plants where recovery of fluorocarbons is carried out. Plastics and circuit boards are disassembled and sorted by hand, while ferrous and non-ferrous metals are recovered with crushers and sorting machines to be reused as resources. For 2021, ferrous metal accounted for around half of the recycling composition ratio by material for refrigerators, washing machines, and LCD/plasma TVs.*

*Source: *Home Appliance Recycling Annual Report*, Association for Home Appliances, 2021.

Metal recycling business in Southeast Asia: HIDAKA SUZUTOKU (Thailand) Co., Ltd.

HIDAKA SUZUTOKU (Thailand) Co., Ltd. is a joint venture between Hidaka Yookoo Enterprises Co., Ltd, which has been operating a metal recycling business in Thailand for over 90 years, and REVER HOLDINGS CORPORATION. The joint venture has, since its establishment in 2014, been engaged in comprehensive resource recycling, particularly metals, in Thailand and the ASEAN region. The company mainly purchases paid waste (ferrous and non-ferrous metals) for corporate partners and provides collection services (issuing destruction certificates) for disassembling production equipment and defective products. Further, after sorting and processing collected paid waste in-house according to the standards of the receiving company, the company ships them as raw materials for steelmaking and reuse as resources.

HIDAKA SUZUTOKU is strengthening sorting and processing functions in order to improve the recycling ratio. Component analysis is one way to measure this. The introduction of a high-performance component analyzer has resulted in higher-grade scrap metal sorting and processing. Providing products to meet the needs of our partners has enabled us to improve our recycling ratio.

In a recycling business that converts waste into resources, an important measure of success in creating an efficient recycling society is an improved recycling ratio. HIDAKA SUZUTOKU is committed to contributing to the resolution of a range of social, environmental, and economic issues in accordance with the SDGs advocated by the United Nations.

Scrap metal conveyed into a shredder

Case study 3 Environmental contributions through RPF

Promoting the use of RPF for the creation of a carbon-neutral society and effective use of resources

Refuse derived paper and plastics densified fuel (RPF) is solid fuel made mainly from waste paper and plastic. Made from plastic waste as raw material, RPF has a heating value comparable to coal and coke, and is used as an alternative to fossil fuels in the paper, cement, and steel manufacturing industries.

By using recycled paper and plastic waste, that are difficult to recycle, RPF offers the advantages of reducing the consumption of fossil fuels and contributing to the reduction of landfill waste.

TRE HOLDINGS CORPORATION is making efforts for even more effective use of waste by strengthening the sorting of plastic waste and other waste materials that can be used as RPF raw materials. In addition, some of the woody biomass power generation plants operated by our Group use RPF as part of their fuel. In this way, thermal recycling, from waste treatment to RPF production and use as fuel for power generation, is being practiced within the Group.

We will continue to promote the use of RPF to reach the goal of a carbon-neutral society and to contribute to the reduction of use of limited resources such as fossil fuels.

RPF Features

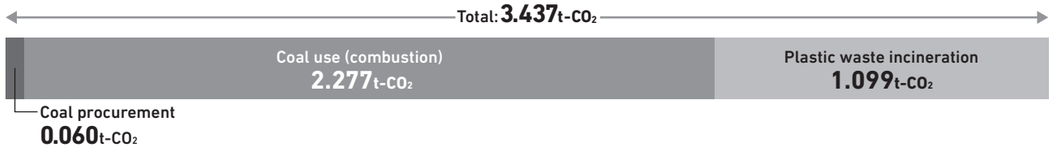
- Solid and highly dense, ease of handling, transport and storage
- Heating value easily adjusted by changing the paper/plastic ratio
- Low risk of fire and explosion with use of paper and plastic waste
- Lower cost than coal; less ash than coal after combustion, reducing ash disposal costs

Source: based on *RPF Features (Benefits)*, Japan RPF Industry Association.

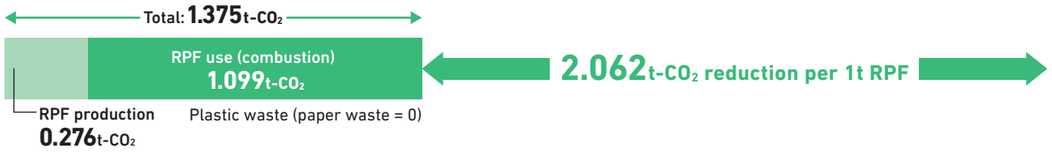
CO_2 emissions: Coal and RPF compared

RPF used as an alternative fuel to coal reduces CO_2 emissions by 2.062t per ton of RPF.

When using coal as fuel in a boiler and incinerating plastic waste



When using RPF as an alternative to coal



*Source: Based on New Energy and Industrial Technology Development Organization (NEDO), "Commercialization Reports : Development of a new fuel "RPF" with low CO_2 emissions and at a low cost"

Topics

Research and development of recycled crushed stone processed from biomass incinerated ash

Carbon recycling technology that captures and uses CO_2 as a resource is gaining attention as a way to reduce CO_2 emissions and achieve carbon neutrality.

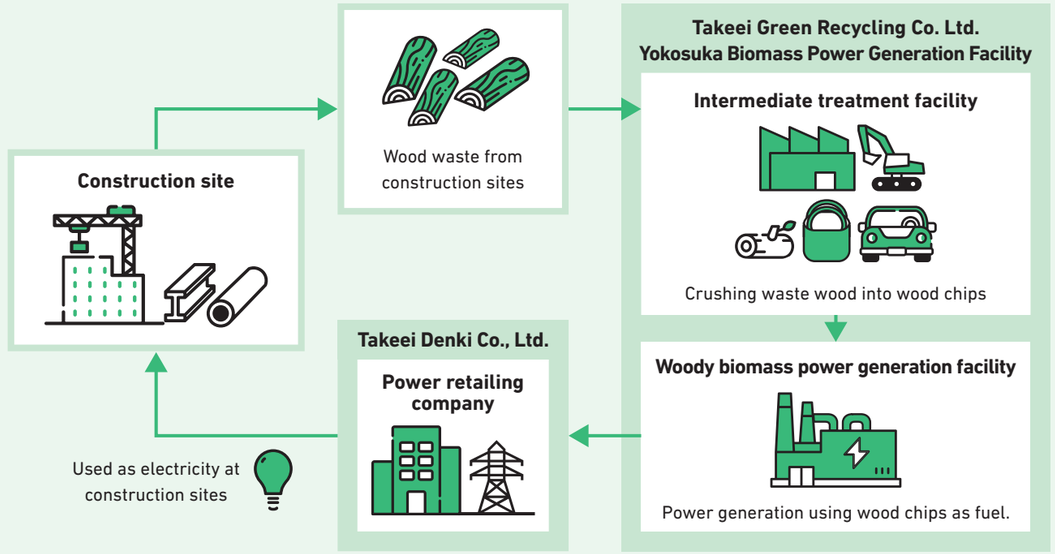
Tohoku Koueki Recycling Technology Co., Ltd. is studying carbon dioxide capture, utilization and storage (CCUS) technology to absorb CO_2 in biomass incineration ash from woody biomass power generation plants and recycled crushed stone (RC) processed from ash. We are planning to carry out tests and verification in collaboration with Yamagata University and Nihon University under an industry-academia partnership.

Joint meeting with Yamagata University and Nihon University

Construction site electricity fueled by construction waste

At Takeei Green Recycling Co., Ltd.'s Yokosuka Biomass Power Generation Facility, wood chips made from logs, branches, offcuts from forest thinning, etc. generated by local governments, landscaping, construction, and other industries on the outskirts of the Tokyo metropolitan area are used as fuel for power generation.

The power plant also processes construction site waste wood into wood chips. Along with using these as fuel for woody biomass power generation plants, we are also utilizing the electricity generated in the plants as temporary power at construction sites to implement resource recycling.



Meeting the needs of the times with advanced waste treatment and recycling capabilities

New dedicated electronic waste processing line at Higashi Matsuyama Plant, REVER CORPORATION

REVER CORPORATION's Higashi Matsuyama Plant provides one-stop processing from transport to breakdown for disposal of products such as clothing and shoes from apparel companies, or collection and shredding of sealed confidential document packages.

In April 2022, we expanded and put into operation a new plant specialized in processing electronic scrap such as circuit boards recovered from urban mining and units from home appliance and telecommunication devices processed at each of TRE HOLDINGS bases. After the collected boards and other units are crushed in a four-shaft crusher sorting, they are sorted by particle size, magnetic, and eddy current and recycled into ferrous metal, aluminum, gold, silver, and copper slag, and other materials. The electronic scrap line with a processing capacity of 700 tons a month is one of the largest in Japan.

Furthermore, solar panels (100kw generating capacity) have been installed on the roof of the new plant, providing 26% of the electricity required to run the facility through renewable energy, and promoting our carbon-neutral initiatives. In February 2022, the Higashi Matsuyama Plant became the second in our Group to achieve ISO/IEC27001 (factory category) certification.

New dedicated electronic waste processing line

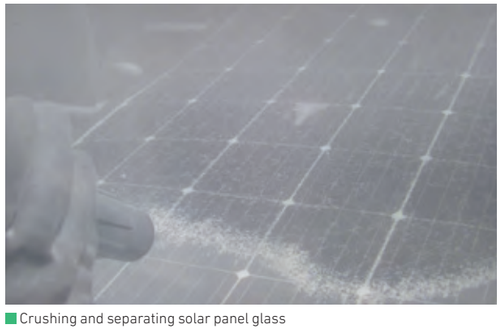
Solar panel recycling business initiated at Shinshu Takeei Co., Ltd.

Shinshu Takeei, Co., Ltd. launched a solar panel recycling business in January 2022.

With the start of the feed-in tariff (FIT) system for renewable energy, solar power generation has rapidly expanded. It is expected that there will be a significant increase in solar panel disposal as solar panels are replaced to improve power generation efficiency or because they have reached the end of their lifespans. For this reason, the proper disposal and recycling of solar panels has become a point of interest. There is also a need for appropriate treatment and recycling in response to increased natural disasters in recent years that have made solar panels unusable.

Shinshu Takeei introduced a dedicated solar panel processing facility to address these issues and is promoting effective use of resources by removing the unusable aluminum solar panel frames, crushing and sorting the glass, and recycling these into metal and glass raw materials.

TAKEEI CORPORATION is also pursuing a plan for solar panel recycling operations in Fukushima.



Crushing and separating solar panel glass

REVER CORPORATION Kumagaya Plant acquires ISO 27001 (factory category) and ISO 45001 certification

REVER CORPORATION's Kumagaya Plant disassembles office automation (OA) equipment and telecommunication devices, etc. by hand to meet the needs of our partners for reuse and material recycling. We also provide hard drive data (HDD) erasure services.

For security, the plant interior and exterior is monitored 24 hours a day, 365 days a year. Measures such as sensitive area access logs management and employee pocketless work uniforms are also in place for complete security.

In 2018, the Kumagaya Plant acquired ISO 27001 (factory category) certification, an international standard for information security management systems based on an awareness of growing dangers of corporate information leakage. The Kumagaya Plant also received third-party evaluations on its information security. It is the only group member to acquire the ISO 45001 certification for occupational health and safety management systems.

Disassembly by hand

EQUAL ZERO Inc. extracts phosphorus from waste water to produce fertilizer

EQUAL ZERO Inc. has established a technology to extract metals from waste liquids and has been extracting and recycling useful metals such as nickel and copper that conventionally had been landfilled with sludge.

With this technology, the company has successfully extracted phosphorus from waste liquid and commercialized it as fertilizer. The 35 calcium phosphate acid*1 in this fertilizer is a citrate-soluble phosphoric acid,*2 easily absorbed by plant roots and known to improve root growth and make plants grow strong. The company began shipping the product in July 2021 and is able to produce 100 to 150 tons annually.

Japan is not capable of generating rock phosphate and relies on imports for all its domestic needs. The initiative to recover resources from waste liquids, therefore, is expected to both reduce the use of limited resources through recycling and contribute to an efficient recycling society.

*1 35 calcium phosphate acid is a commercial fertilizer containing 35% citrate-soluble phosphoric acid.
*2 Citrate-soluble phosphoric acid is fertilizer soluble in citric acid solution. It dissolves and is absorbed slowly.

Fertilizer production from phosphorus extracted from waste liquids

Integrated forest model and urban model
Two types of local community-based woody biomass power generation

TRE's Renewable Energy Business is involved in woody biomass power generation and forest management.

Our woody biomass power generation business has two business models.

One is our integrated forest model that generates fuel with offcuts from forest thinning and other materials from local forests in the vicinity of our woody biomass power generation plants in Hirakawa, Aomori; Hanamaki, Iwate; and Tamura, Fukushima. Electricity is supplied to the local community with fuel generated from unused forest resources, such as offcuts from forest thinning, collected from within a 50km radius of the woody biomass generation power plant region (Iwate, Miyagi and Fukushima).

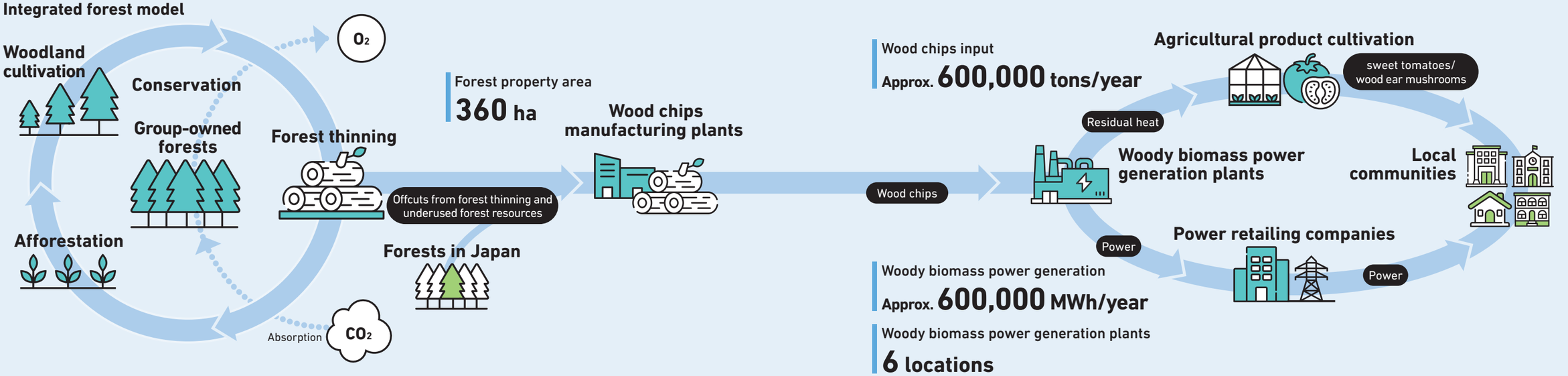
Further, the residual heat generated by the power plant is used to grow sweet tomatoes (high sugar content tomatoes) and wood ear mushrooms for the local community.

The other model is the urban model that generates power with wood waste and other materials from construction sites and pruned branches from roadside trees in the vicinity of the woody biomass power generation plants in Yokosuka, Kanagawa and Ichihara, Chiba. In addition, Green Power Ichihara Co., Ltd. that operates woody biomass power generation plant uses RPF produced by TAKEEI CORPORATION from paper and waste plastic as raw materials for fuel.

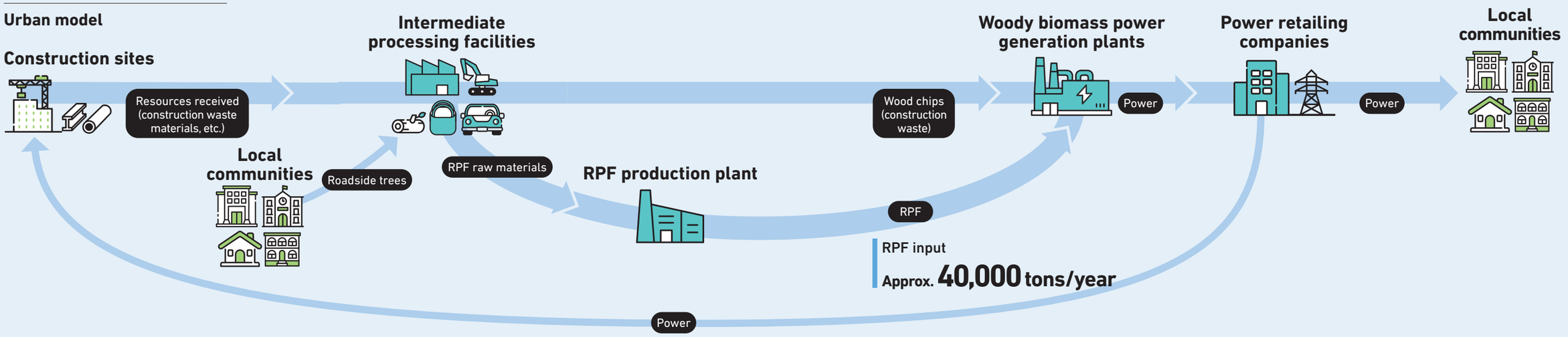
Through these two types of community-based woody biomass power generation businesses, The TRE Group is contributing to the realization of an efficient recycling society and a carbon-neutral society.

TRE Group Business Areas

Integrated forest model



Urban model



Integrated forest model establishing new path in renewable energy industry

Woody biomass power generation business launched in Tohoku

TRE HOLDINGS CORPORATION is currently operating woody biomass power generation projects in four Tohoku areas: Hirakawa, Aomori; Hanamaki, Iwate; Daisen, Akita; Tamura Fukushima. The project features "local production for local consumption" with fuel generated by wood collected within a 50 km radius of a power plant being used to supply electricity to the local communities.

Biomass power generation activities in Hanamaki began in February 2017 when Hanamaki Biomass Power Generation Co., Ltd. started power transmission. Iwate is Japan's largest producer of Japanese red pine. Hanamaki is located nearly in the geographic center of this region that has a major forestry industry.

After the 2011 Great East Japan Earthquake, our Group engaged in the treatment and recycling of Tohoku region (Iwate, Miyagi, Fukushima) waste from the disaster. Even after the project was completed, we continued to consult with local governments and organizations on ways to contribute to further Tohoku development.

We recognized the forest industry had potential for growth and that there was an essential need for new business initiatives to maintain and revitalize the forest industry and create jobs. We began to consider developing the business model of the Tsugaru Biomass Power Generation Co., Ltd., our first woody biomass power generation plant in the Tohoku region.

Proper tree thinning is essential to forest conservation and disaster mitigation. It is therefore important to have supportive relations with existing forestry enterprises and to meet new demands beyond a certain set scale. Woody biomass power generation is expected to create new demand for offcuts from forest thinning as a fuel source in the region. At the same time, this will lead to stability and revitalization in the forest industry and also enhance disaster prevention possibilities.

It was in this context that the TRE Group established the Hanamaki Biomass Power Generation Co., Ltd. and started woody biomass power generation business with the support of Iwate Prefecture and surrounding municipalities, as well as lumber companies and local foresters that supply raw materials.

Hanamaki Biomass Power Generation Co., Ltd.

The issue of stable supply of wood for fuel

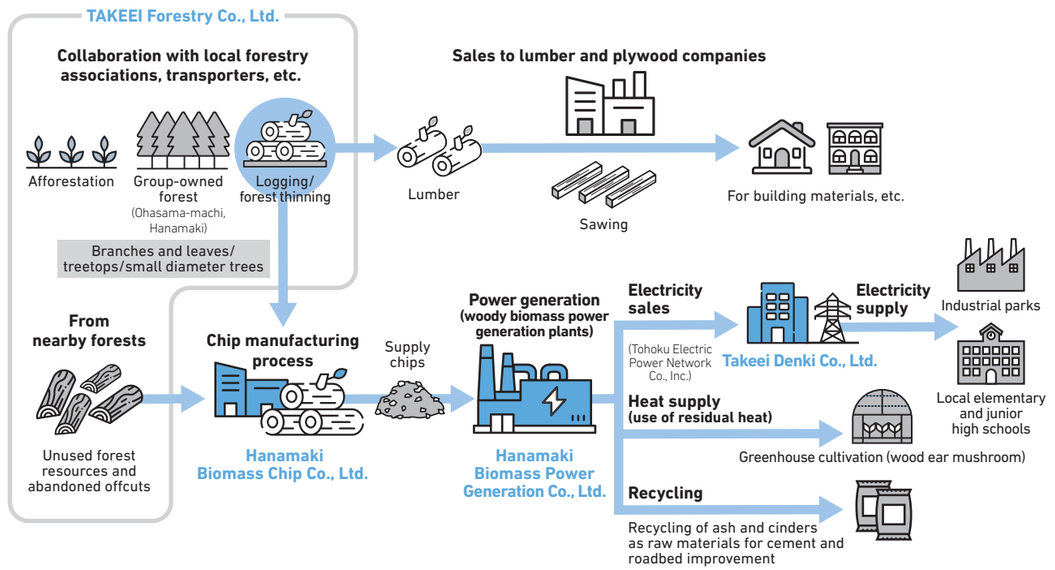
Stable procurement of wood as fuel for woody biomass power generation is essential for a stable power supply. The maximum output of the Hanamaki Biomass Power Generation Co., Ltd.'s Hanamaki Power Plant is 6.25 MW. This is based on the amount of fuel that can be procured within a 50 km radius of Hanamaki City. The power plant uses approximately 80,000 tons of fuel annually and, with the cooperation of the Hanamaki City Forestry Cooperative, is working to achieve stable procurement of wood for fuel.

TAKEEI CORPORATION established the Hanamaki Biomass Chip Co., Ltd. in February 2015 to ensure stable procurement of wood for fuel. This company systematically produces wood chips by drying timber in a large-scale lumber yard adjacent to the power plant.

With the aim of achieving systematic sustainable fuel procurement, TAKEEI CORPORATION established TAKEEI Forestry Co., Ltd. in May 2020. In collaboration with a local forestry cooperative, the company handles everything from forest management to the supply of wood chips. In April 2021, TAKEEI CORPORATION acquired approximately 240 hectares of forest land in Ohasama-machi, Hanamaki. Through repeated dialogue, a forest management plan was created with the city of Hanamaki and the Hanamaki City Forestry Cooperative. In addition to fully utilizing trees by shipping logged timber as lumber and plywood, and processing it into fuel chips, the company is also engaged in seedling cultivation and planting, and reforestation after logging. Logging, afforestation, and other operations are outsourced to local forestry cooperatives. This strengthens relations with the local forest industry and economy.

Hanamaki Biomass Chip Co., Ltd.

Flow of woody biomass power generation based on forest maintenance (Hanamaki model)



Case study Hanamaki woody biomass power generation project

Fuel from pine-weevil-damaged wood

Iwate is the largest producer of red pine in Japan. Damage and withering caused by pine weevils, however, has been increasing in recent years. Measures against pine weevils and treatment of damaged trees in a timely manner are major regional forestry issues concerned with pine forest conservation.

Hanamaki Biomass Power Generation Co., Ltd.'s research and experiments conducted since the spring of 2016 in collaboration with industry, government, and academic institutions—the Hanamaki City Agriculture and Forestry Department/ Forestry Cooperative; the Iwate Prefecture Agriculture and Forestry Department and the Forestry and Forest Products Research Institute of the National Forestry Research and Development Agency—have shown that it is possible to convert damaged red pine trees into fuel. The company succeeded in converting 7,500 tons (around 10% of logs needed to produce wood chips as fuel for power generation) of damaged red pine trees into fuel in 2017. The electricity generated was supplied to all Hanamaki elementary and junior high schools and public facilities. We are putting "local production for local consumption" into practice supplying electricity generated from local pest-damaged trees and offcuts from forest thinning to the local community.

Forest discolored and withered by pine weevils

Local production for local consumption

Hanamaki Biomass Power Generation Co., Ltd. supplies approximately 40,000 MWh of electricity annually through electricity retailer Takeei Denki Co., Ltd. This equals the annual electricity consumption of around 14,000 households. Since April 1, 2017, the company has practiced "local production for local consumption" in supplying electricity to 28 elementary and junior high schools in Hanamaki.

Hanamaki Biomass Power Generation has additionally succeeded in using residual heat from power generation to cultivate wood-ear mushrooms. The first mushrooms were shipped in March 2021. The mushrooms are processed into pickles in Hanamaki and used in school lunches and by local lodging facilities. By commercializing agriculture in this way, the company is planning to creating new employment opportunities and contributing to environmental education.

The above efforts gained Hanamaki Biomass Power Generation the 2018 Tohoku Bureau of Economy, Trade, and Industry's Renewable Energy Utilization Award* Grand Prize, and selection by the Ministry of Economy, Trade, and Industry as a "The Driving Company for the Regional Future."

The company will continue through its core business of woody biomass power generation to contribute to the revitalization of local communities and economies, and to the realization of a carbon-neutral society, through local collaboration and practices of "local production for local consumption."

*A company that is actively developing businesses and strongly driving regional economic growth by creating high added value through the use of regional characteristics, thereby having a positive effect on local businesses.

Local employees harvesting wood ear mushrooms

Actively contributing to a carbon-neutral society

Tamura Biomass Power Generation Co., Ltd. launches commercial operation with total in-house management

Tamura Biomass Power Generation Co., Ltd., the Group's sixth woody biomass power generation plant, has the advantage of the accumulated experience of four power plants that preceded it in operation. Also, thanks to the resources and knowledge of Green Power Ichihara Co., Ltd. that has become a consolidated subsidiary in April 2020. Tamura Biomass Power Generation started commercial operation in April 2021 as the first Group woody biomass power generation plant to operate totally in-house.

The sixth Group woody biomass power generation plant, Tamura Biomass Power Generation aims to operate business rooted in Fukushima Prefecture and the city of Tamura. In addition to using materials produced in the prefecture for biomass power generated fuel, the company has established a chip supply system in cooperation with local forestry cooperatives, chip manufacturers, and government (chip supply council), and gives priority to hiring local residents. We will continue to develop community-based projects, including operating local council meeting with local residents.

Tamura Biomass Power Generation Co., Ltd. Power Plant

Ministry of Economy, Trade and Industry GX League endorser

The GX League was established in 2022 by the Ministry of Economy, Trade and Industry as a framework for companies with robust carbon reduction targets to voluntarily trade emissions to achieve their goals while investing in emissions reduction. The framework provides Japanese companies striving for carbon neutrality an opportunity to lead in the transformation of the overall socioeconomic system and the creation of new markets. It also allows them to demonstrate competitiveness in global business through the three functions of "a forum for dialogue on the vision of a future society," "a forum for the formation of market rules," and "a forum for voluntary emissions trading."

TAKEEI CORPORATION endorsed the GX League's Basic Concept in April 2022 and aims to achieve 100% electricity consumption decarbonization (carbon neutrality) at all of its facilities by 2026. As a supporting company, TAKEEI is active in the GX League Subcommittee.

Topic

Takeei Denki Co., Ltd. formed through integration of five group power retailing companies

On September 1, 2022, five TAKEEI Group power retail companies* merged with Takeei Denki Co., Ltd. (formerly Yokosuka Urban-Wood Power Co., Ltd.). This unifies the management of the electric power retail business, related operations and data, improving the company's ability to respond to a variety of issues.

We are also working on the establishment of a resource and energy recycling scheme where wood waste from construction sites is used as fuel for woody biomass power generation. The resulting renewable energy is supplied to our partners, who are general contractors and real estate developers, for power at construction sites.

In addition, we will contribute to the realization of a carbon-neutral society by promoting expansion of the Group's energy sources and selling non-fossil fuel certificates that correspond to SBT/CDP/RE100 and other global initiatives.

* Tsugaru Apple Power Co., Ltd., Hanamaki Ginga Power Co., Ltd., Daisen Komachi Power Co., Ltd., Fukushima Mirai Power Co., Ltd., and Yokosuka Urban-Wood Power Co., Ltd.

Business model

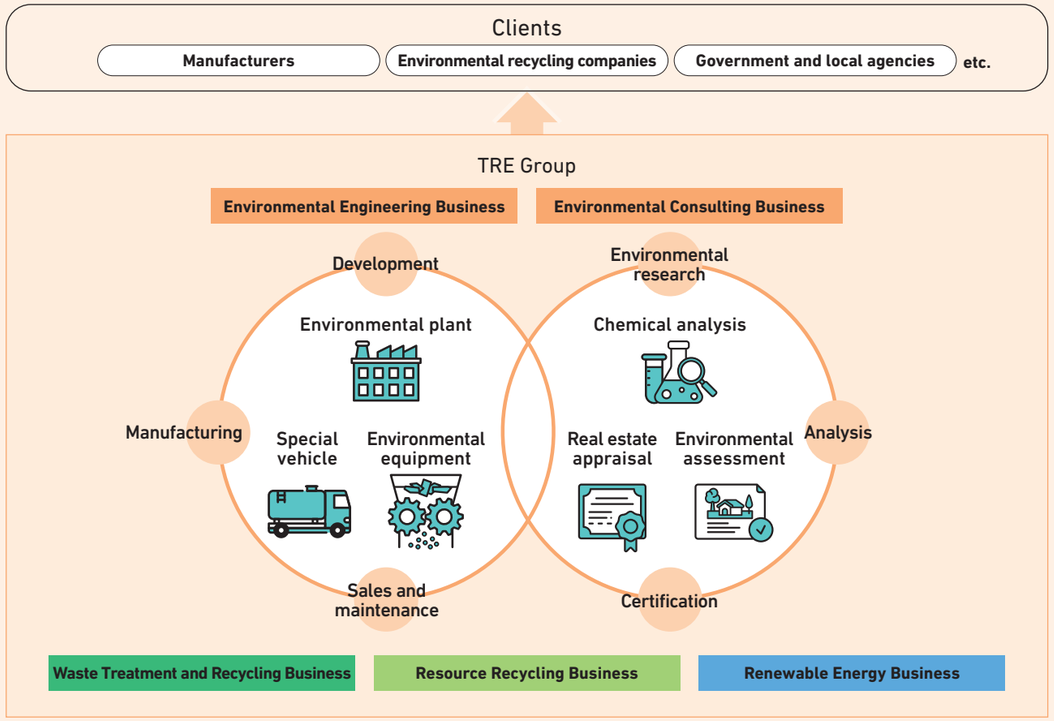
Contributing to the solution of environmental problems as a Comprehensive environmental management company providing recycling technology and expertise

TRE HOLDINGS is expanding into environmental engineering and environmental consulting businesses.

In our environmental engineering business, we develop, manufacture, and sell environmental equipment and plants, and special vehicles. Our concentration in the two business areas (environmental equipment and plants; vehicles) reflects our core policy of providing technology and services that contribute to the effective use of resources. Our product maintenance service system ensures that our environmental equipment and plants, and special vehicles are in good working condition for our clients throughout Japan in each of our business areas, including waste treatment and recycling, steelmaking, metal recycling, and energy production related fields.

In our environmental consulting businesses, we provide a wide range of services, including industrial waste management and measurement certifications for corporations, environmental countermeasures, waste, soil, water and air quality research and analysis and other, as well as a variety of environmental assessment-related services for municipalities and government agencies. For the proper disposal of waste, regardless of type or property, we provide our clients in a wide range of industries, including manufacturing, construction, and waste disposal, with consulting services, research, and analysis. We use our Group network to make the best proposals for handling everything from collection and transportation to final disposal.

Because a large number of specialized operational procedures are necessary to meet legal requirements for the proper disposal of waste, customers need to select an outstanding waste disposal contractor with excellent technology and experience. Our Group can handle a wide range of waste disposal requests and consultations and can offer our clients the optimal response that minimizes burden and risk.



2022 highlights

Developing and providing products and services required by the times

Environmental engineering supporting advanced sorting technology

Fuji Car Manufacturing Co., Ltd. is an engineering company with two core businesses: environmental machinery/recycling plants and special vehicles. The company handles the integrated development, manufacturing, sales, and maintenance of each of its products.

In addition to waste crushing and sorting plants, the company also has expertise in scrap-related equipment and has a strong track record of deliveries. Furthermore, The Recycle Test Center has been set up in the plant head office to verify all processes and performance from crushing to sorting and recycling. This is useful for the development of new products.

Fuji Car Manufacturing advanced sorting line

Manufacturing LPG/ammonia tanks

Fuji Car Manufacturing uses its own high-pressure container manufacturing technology to produce special vehicles and containers that safely and efficiently transport energy such as liquefied petroleum gas (LPG). liquefied hydrogen chloride (HCl) containers and "Fuji Hose One" LPG Bulk Trucks and other special vehicles are highly rated. The company is also actively engaged in manufacturing trucks and tanks to store ammonia that has seen a significant increase in demand and is attracting attention in Japan as an alternative energy source to fossil fuels.

Fuji Car Manufacturing ammonia tank truck

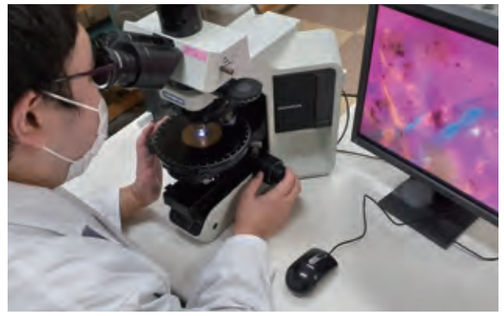
Asbestos inspection and analysis services

Environmental Conservation Co., Ltd. and Earth-Appraisal Co., Ltd. provide asbestos inspection services as part of their environmental consulting business.

Businesses that own buildings or are engaged in demolition or renovation of buildings are required by the Air Pollution Control Law to check for the presence of asbestos in advance of their operations. If the inspection finds asbestos present, measures must be taken to prevent exposure of workers to asbestos dust, as stipulated in the Ordinance on Prevention of Asbestos-related Diseases.

Environmental Conservation Co., Ltd. provides services using analytical methods including X-ray diffraction, dispersion staining, and polarized light microscopy to correctly determine asbestos presence and to take appropriate measures in compliance with current laws and regulations.

Asbestos field inspection



Polarized light microscopy asbestos analysis

Part 4 ESG

The Business Infrastructure for Our Growth Strategy

We will establish a suitable corporate governance structure in order to practice sound, efficient and highly transparent management

Basic approach

The TRE Group is aware that its businesses are built on the healthy relationships of trust it has developed with shareholders, employees, business partners, the residents of the areas around its business locations and various other stakeholders. Based on that mindset, we have positioned the strengthening and enhancement of corporate governance as a key management task in order to pursue sound management and live up to the trust that society has in us.

To practice highly sound, efficient and transparent management, we are preparing and establishing appropriate structures and implementing the necessary measures for management decision-making, the execution of duties, supervision and internal controls. We also ensure that business is carried out according to laws, regulations and internal rules throughout the organization, and since we are a company with an Audit and Supervisory Committee, our management decision-making and execution are supervised from an independent standpoint.

The Group endorses the Corporate Governance Code stipulated by the Financial Instruments Exchange, and as a basic policy, we strive to strengthen corporate governance by implementing an array of measures based on the spirit and intent of our principles and beliefs.

Corporate governance structure

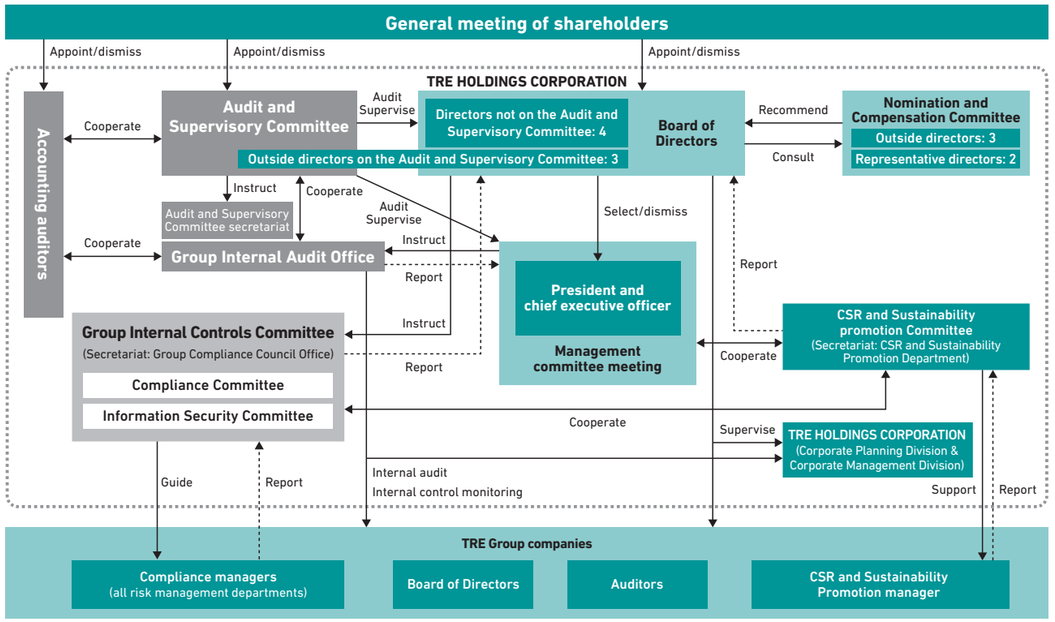
Board of Directors

The Board of Directors takes important decisions about management strategies and plans and other matters. It also supervisions the execution of business. Three of the seven board members are outside directors (including one female), and the members possess a wealth of experience and a broad range of knowledge as they include a lawyer, a certified public accountant and a former vice-minister of the Ministry of Agriculture, Forestry and Fisheries. When selecting company directors, the Nomination and Compensation committee deliberates on whether they have the foresight needed for future business expansion as well as on their expertise regarding corporate management and management strategy, internal controls and governance, sales and marketing, environmental issues and sustainability, manufacturing and technology, finance and accounting, human resources and labor, and legal issues and compliance.

Audit and Supervisory Committee

We are a company with an Audit and Supervisory Committee, and we have built a structure where all of the members (three members, including one female) are outside directors so that they can supervise the directors' execution of business from an independent standpoint.

TRE Group corporate governance structure



Establishment of a Nomination and Compensation committee

To improve the efficiency of the board of directors and further enhance the corporate governance structure, we have established a Nomination and Compensation Committee as a discretionary advisory body for the Board of Directors. It consists of representative directors and outside directors, with outside directors forming the majority. The committee selects director candidates, evaluates officer compensation, assigns points for the board benefit trust (BBT), assesses the effectiveness of the board of directors and, when consulted by the Board of Directors, provides suitable reports on important matters that concern management.

Analysis and assessment of the effectiveness of the Board of Directors

We plan to survey all of the members of the Board of Directors to increase the effectiveness of the board. The Nomination and Compensation Committee will discuss and evaluate the results of the survey, share the analysis results at a Board of Directors' meeting and publish the results.

Training for directors

TRE HOLDINGS provides directors with external training opportunities so that they can gain new knowledge and information about the company's businesses, finances and organization, and fulfill the roles and responsibilities expected of them. We also actively support these initiatives, including by bearing the expenses for those training courses.

Officer compensation

Compensation for directors consists of a fixed basic compensation, a performance-based compensation that is determined every year based on the company's results, and a medium-term performance-based compensation in the form of a board benefit trust (BBT) provided from the company's own shares, given upon retirement. Outside directors are paid a fixed basic compensation that takes their responsibilities into account.

Furthermore, to ensure the objectivity and transparency of director compensation, the company has established a Nomination and Compensation Committee as a discretionary advisory body made up of a majority of outside directors, and the committee chairman is selected from the outside directors.

Additionally, according to the officer compensation regulations set in June 2022, when a director's compensation is being determined, the amount of their management responsibility as a director or executive officer will be taken into account. The Audit and Supervisory Committee will take decisions on directors who are Audit and Supervisory Committee members after deliberations.

Cross-shareholdings policy

To expand the Group's business areas, apart from capital and business alliances, we may also possess shares if we deem them necessary for maintaining and strengthening positive business ties. We scrutinize the shares held for their purpose, business status and dividend yield to verify the rationality of holding them.

Furthermore, when exercising voting rights for shares held, we closely examine the contents of the agenda and determine whether it is a proposal that will increase the corporate value of the issuing company in the medium to long term. We make this decision comprehensively for each business partner.

We cast an opposing vote for proposals that would seriously damage the shareholder's value or cases that cause major concern from a corporate governance point of view such as a social scandal.

Policy on constructive dialogue with shareholders

TRE HOLDINGS has established a department in charge of investor relations (IR), and the president and CEO and IR Department handle communications with shareholders and investors.

Furthermore, at quarterly financial briefings, the president and CEO and the IR Department provide explanations about new businesses, trends in business results and important businesses included in the medium-term business plan, and they also endeavor to increase understanding through a question-and-answer session. In addition to the above, to facilitate sustainable growth and increase medium- to long-term corporate value, we have a policy of responding positively as far as reasonably possible to interview and reporting requests from shareholders and investors who wish to communicate constructively with us while ensuring that important non-public information is not disclosed to one section of investors only.

Sustainability management

The Group has set forth sustainability management in its medium-term business plan as a means to achieve an efficient recycling and carbon-neutral society as a comprehensive environmental management company.

In June 2022, we established the CSR and Sustainability Promotion Committee to promote sustainability management across all Group companies in order to further enhance our initiatives, such as declaring our endorsement of TCFD recommendations, to address climate change and social issues.

The committee formulates action plans on climate change and social issues for the Group and monitors their progress. It also deliberates and supervises their contents at the Board of Directors' meeting after discussing and obtaining a consensus on them at Group management committee meetings.

The president and CEO, in addition to chairing the CSR and Sustainability Promotion Committee, also chairs the Group Internal Controls Committee and management committee meetings and recognizes the many sustainability-related issues as the most important risk to management. Through speedy decision-making, we will continue to discover and handle issues quickly and manage the PDCA cycle so as to strengthen our management foundation.

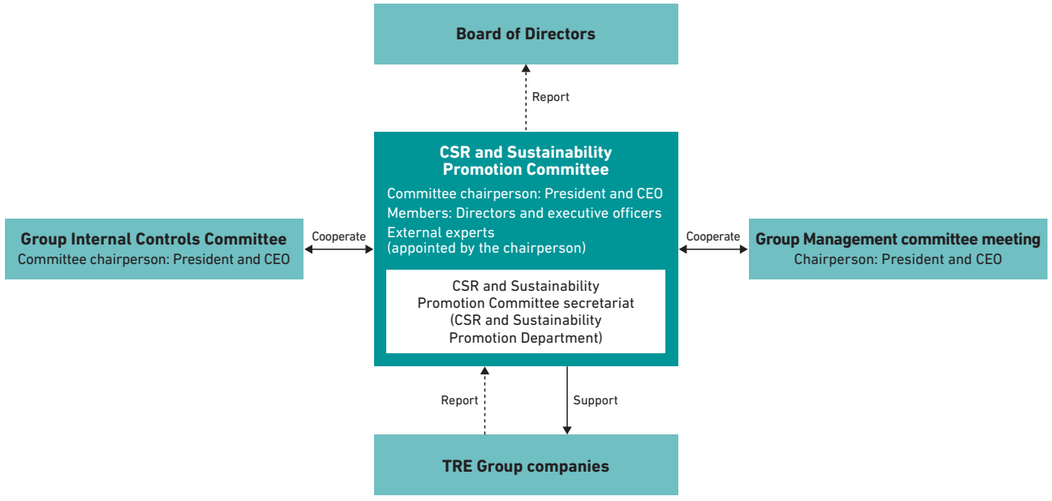
For society to become sustainable and for the company's continued growth, it is essential for every employee to understand and share our ideas and policies. Through our integrated reports and various kinds of training, we will endeavor to spread and establish the Group's objectives and initiatives about sustainability.

Environment-related risk management

The Group regards environmental risk, including climate change, as a management risk for the Group as a whole. The CSR and Sustainability Promotion Committee deliberates plans and measures for combating climate change and reports the progress of plans to the Board of Directors.

For critical environmental issues, the committee works with the Group Internal Controls Committee to share information. The Board of Directors receives regular reports on the progress of management plans about climate change and other issues and monitors the state of their execution.

TRE Group sustainability management (structure)



List of executives (As of October 1, 2022)

Directors

Naoto Matsuoka
Chairman and CEO

Number of shares of the Company held: 10,000
Attendance at Board of Directors' meetings: 7/7

Apr. 1972	Joined Mitsubishi Corporation
Apr. 1999	President and Representative Director, Ueno Tekko Co., Ltd.
Mar. 2001	Director, Metal Recycling Co., Ltd. (currently REVER CORPORATION)
Apr. 2004	President, Metal One Structural Steel & Resource Corporation (currently MM&KENZAI Corporation)
Apr. 2008	Senior Managing Executive Officer and Division COO, Steel Plate, Tube & Construction Materials Division, Metal One Corporation
Apr. 2009	President & CEO, Director, Metal One Corporation
Sep. 2015	President and Representative Director, SUZUTOKU Holdings Co., Ltd. (currently REVER HOLDINGS CORPORATION)
Sep. 2016	Director, HIDAKA SUZUTOKU (Thailand) CO., LTD.
Jun. 2017	Director, SUNNY METAL CORPORATION Director, PHOENIX METAL CORPORATION (currently REVER CORPORATION)
May 2018	President, Representative Director and Executive Officer, REVER HOLDINGS CORPORATION (current position)
Oct. 2021	Member of the Board, TAKEEI CORPORATION (current position) Chairman and Executive Officer, the Company (current position)
Jun. 2022	Representative Director, TRE Foundation for SDGs Promotion (current position)
Jul. 2022	President and chief executive officer, REVER CORPORATION (current position)

Mitsuo Abe
President and COO

Number of shares of the Company held: 16,716
Attendance at board of directors' meetings: 7/7

Mar. 2016	Retired as Managing Executive Officer, Resona Bank, Limited
Mar. 2017	Retired as Representative Director and President, Resona Kessai Service Co., Ltd.
Apr. 2017	Joined TAKEEI CORPORATION, Executive Officer, Deputy General Manager, Corporate Planning Division
Jan. 2018	Executive Officer, Deputy General Manager, Sales Division and General Manager, Related Business Department
Jun. 2018	Member of the Board, Managing Executive Officer and General Manager, Corporate Planning Division
Jun. 2019	Member of the Board, Chief Operating Officer (current position) Representative Director, T-V Energy Holdings, Inc.
May 2020	Director, Green Power Ichihara Co., Ltd. (current position) Chairman, TAKEEI Foundation for SDGs Promotion (currently TRE Foundation for SDGs Promotion) (current position)
Sep. 2021	Director, REVER HOLDINGS CORPORATION (current position)
Oct. 2021	President and Executive Officer, the Company (current position)

Takao Suzuki
Director

Number of shares of the Company held: 1,000,000
Attendance at Board of Directors' meetings: 7/7

Apr. 1968	Joined Suzuki Tokugoro Shoten Co., Ltd. (currently REVER CORPORATION)
Apr. 1973	Director
Jul. 1978	Managing Director
Apr. 1985	President and Representative Director
Jun. 1996	Chairman, Japan Iron and Steel Recycling Institute
Jan. 2002	Chairman of the Board, Metal Recycling Co., Ltd. (currently REVER CORPORATION)
Dec. 2003	Chairman and Representative Director, NAKADAYA CORPORATION
Apr. 2006	Chairman and Representative Director, Suzutoku LTD. (currently REVER CORPORATION)
Jul. 2007	President and Representative Director, SUZUTOKU Holdings Co., Ltd. (currently REVER HOLDINGS CORPORATION)
Sep. 2013	Chairman and Representative Director (current position)
Dec. 2015	Chairman and Representative Director, Major Venous Japan Co., Ltd.
Jul. 2017	Chairman and Representative Director, RUN Ltd.
Apr. 2021	Outside Director, BESTERRA CO., LTD. (current position)
Oct. 2021	Director, the Company (current position)

Mamoru Mitsumoto
Director

Number of shares of the Company held: 2,116,556
Attendance at Board of Directors' meetings: 7/7

Mar. 1977	Member of the Board, Takeei Construction Co., Ltd. (currently TAKEEI CORPORATION)
Jun. 1983	Member of the Board, Chief Operating Officer
May 2002	Representative director, Gypro Co. Ltd.
Mar. 2003	Representative director, Recycle Peer Co., Ltd. (currently TAKEEI CORPORATION)
Jun. 2004	Director, New Energy Supply Corporation
Aug. 2006	Representative Director, Monzen Clean Park Co., Ltd. (current position)
Sep. 2007	Representative Director, Green Arrows Holdings, Inc. (current position)
Jun. 2008	Representative Director, Green Arrows Kantou Co., Ltd.
Jun. 2010	Chairman of the Board of Directors, TAKEEI CORPORATION (current position)
Jun. 2013	Representative Director, New Energy Supply Corporation
May 2020	Representative Director, TAKEEI Foundation for SDGs Promotion (currently TRE Foundation for SDGs Promotion)
Oct. 2021	Director, the Company (current position)

Outside directors (Audit and Supervisory Committee members)

Naoto Yokoi

Number of shares of the Company held: 0
Attendance at Board of Directors' meetings: - (newly appointed in October 2022)

Apr. 1975	Joined Asahi & Co. (currently KPMG AZSA LLC)
Aug. 1979	Registered as a certified public accountant
May 1990	Partner, Asahi Shinwa & Co. (currently KPMG AZSA LLC)
May 2000	Representative partner, Asahi Audit Corp. (currently KPMG AZSA LLC)
Jun. 2013	Resigned from KPMG AZSA LLC
Jun. 2014	Outside Member of the Board, TAKEEI CORPORATION
Jun. 2014	Outside Corporate Auditor, Nichiban Co., Ltd.
Mar. 2015	Outside Corporate Auditor, JAC Recruitment Co., Ltd. Outside Member of the Board, Inageya Co., Ltd.
Mar. 2022	Outside Director, JAC Recruitment Co., Ltd. (Audit and supervisory committee member) (current position)
Oct. 2022	Outside Director, the Company (Audit and supervisory committee member) (current position)

Fumie Omura

Number of shares of the Company held: 0
Attendance at Board of Directors' meetings: 6/7

Apr. 1994	Joined BLAKEMORE & MITSUKI
Oct. 1996	Joined Hideyuki Sakai Law Firm
Jun. 2006	Established Ichigaya International Law Firm (currently SHINDO & MATSUMURA LAW OFFICE) (current position)
Sep. 2019	Outside Director, REVER HOLDINGS CORPORATION REVER HOLDINGS CORPORATION
Oct. 2021	Outside Director (Audit and supervisory committee member) (current position)

Hiroyuki Suematsu

Number of shares of the Company held: 0
Attendance at Board of Directors' meetings: 7/7

Apr. 1983	Joined Ministry of Agriculture, Forestry and Fisheries
Mar. 2002	Counsellor, Cabinet Secretariat, Prime Minister's Office of Japan
Oct. 2006	Director, Environment Policy Division, Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries
Jul. 2007	Director, Policy Planning and Evaluation Division, Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries
Apr. 2008	Director, Food Security Division, Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries
Apr. 2009	Policy Planning Division, Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries
Jul. 2010	Director-General, Forest Policy Planning Department, Forestry Agency, Ministry of Agriculture, Forestry and Fisheries
Apr. 2014	Director-General, Kanto Regional Agricultural Administration Office, Ministry of Agriculture, Forestry and Fisheries
Jul. 2015	Director-General, Rural Development Bureau, Ministry of Agriculture, Forestry and Fisheries
Jun. 2016	Director-General, Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry
Jul. 2018	Vice-Minister of Agriculture, Forestry and Fisheries, Ministry of Agriculture, Forestry and Fisheries
Oct. 2020	President and Representative Director, Next-generation Industry Research Institute Co., Ltd. (current position)
Jan. 2021	Specially Appointed Professor, Research Institute for Agricultural and Life Sciences, Tokyo University of Agriculture (current position)
Jun. 2021	Outside Director, SBI Holdings (current position)
Oct. 2021	Outside Director (Audit and supervisory committee member) (current position)
Dec. 2021	Outside Director, Nexyz.Group Corporation (Audit and Supervisory Committee member) (current position)

Expertise of directors and outside directors

		Corporate management/ management strategy	Internal control/ governance	Sales/ marketing	Environment/ sustainability	Production/ technology	Finance/ accounting	HR/ labor management	Legal/ compliance
Director	Naoto Matsuoka	●	●	●			●	●	●
	Mitsuo Abe	●	●	●			●	●	●
	Takao Suzuki	●		●	●	●			●
	Mamoru Mitsumoto	●		●	●	●			●
Outside Director	Naoto Yokoi	○	○				○		
	Fumie Omura	○	○		○			○	○
	Hiroyuki Suematsu	○	○		○				

We are dedicated to creating work environments and introducing and improving systems where all employees can work in safety and with peace of mind

Response to emergencies

Emergency drills

To ensure that employees can quickly play their roles when a fire or other emergency occurs, the TRE Group regularly carries out emergency drills at all of its facilities.

To improve the effectiveness of reporting, guidance, aid and initial firefighting, we also work with local fire stations to hold fire drills and standard first aid courses at certain plants. In the unlikely event of an emergency, we are fully prepared to respond calmly.

A fire drill in progress at REVER CORPORATION's Kumagaya Plant

Introduction of a safety confirmation system

The Group is in the process of developing a safety confirmation system that will check the safety of employees when an earthquake strikes. With this system, an email will be sent to employees automatically when a 5.0 or higher earthquake occurs. The responses will be automatically and separately tallied for each office, and management will be able to check the responses. The aim is to speedily confirm the safety of employees in order to gain an accurate understanding of the situation so that efforts at restoration can progress smoothly. We will also conduct regular safety confirmation drills so that employees can use the system without hesitation in an emergency.

Fire prevention measures

The Group takes the following hard (engineering) and soft (management) measures to prevent fires, mainly at its shredder plants.

1. Install and increase number of fire detectors.
2. Install and increase number of fire hydrants and water cannons.
3. Install mist sprayers inside the shredders themselves.
4. Patrol with portable thermo-sensors.

At night and on holidays when employees are absent, the fire detectors are linked to a security company to minimize the risk of a fire outbreak. The mist sprayers spray a fine mist inside the shredders and create a moist environment that prevents fires and explosions in the machines. Portable thermo-sensors allow us to sense a wide range of temperature increases from the color displayed on the screen, preventing ignition fires. In addition to these steps, we also take management measures to prevent fires such as spreading information about preventing contamination by hazardous materials, strengthening inspections, sprinkling water on base metals and dust yards, and strengthening the system through initial firefighting drills.

Transportation safety management

Alcohol testing

The Group owns 462 vehicles for collection and transportation. There are two aspects to safe transportation: ensuring the safety of the areas where the vehicles move, and ensuring the occupational safety of the employees who work in the vehicles. To ensure safety, we conduct alcohol testing on transport staff at the roll-call before and after they drive. This is not limited to transport staff only. We also test employees from sales and other departments whenever they drive the vehicles. The revised Road Safety Act which comes into effect in Japan in October 2022 will make alcohol testing using detectors mandatory for drivers of standard private cars (with white license plates) as well. Accordingly, we are reviewing our management system for alcohol testing to ensure full compliance with the revised law.

Taking an alcohol test before driving

Annual driving aptitude test

EQUAL ZERO Inc. performs an annual driving aptitude test for all employees, testing them in five areas including reaction speed and attention distribution and awareness. Undergoing the yearly test allows employees to review their own driving and provides a good opportunity for them to pay attention to their everyday driving, including driving for work and commuting.

Responding to legal changes (fall arrest equipment)

As a result of a revision to the Industrial Safety and Health Act, it is now obligatory that safety harnesses (fall arrest equipment) used must be full harnesses. In accordance with this, the Group has installed fall arrest equipment at all plants and implemented measures to comply with the revised law and eliminate accidents when working in high places at every office. One company, Gypro Co., Ltd., has introduced a new standard full-harness safety belt for customers with large vehicles that hang sheets in high places.

Additionally, to teach on-site employees about safety, the REVER Group carried out online safety education courses with the help of two safety equipment manufacturing companies. A total of 90 personnel in charge of safety from all Group companies participated, listening to lectures on how to use fall arrest equipment and dust masks correctly and the standard for selecting them.

Through the courses, they were able to gain essential knowledge and also deepen their awareness of safety.

Column

Isesaki Plant records 5,000 days without an accident

On November 17, 2021, REVER CORPORATION's Isesaki Plant recorded 5,000 consecutive days without an accident. Before that, the plant had received a Fifth-class Gold Award from the Japan Industrial Safety & Health Association (JISHA) for achieving 4,400 days without an accident.

Moreover, on December 3, 2021, REVER CORPORATION's Nasu Plant also recorded 3,050 consecutive days without an accident and was awarded a Fifth-class Gold Award from JISHA. Following the Isesaki plant, this makes two REVER CORPORATION plants that have received the Gold Award.

President Matsuoka of TRE HOLDINGS CORPORATION (right) and General Manager Okawa of the Nasu Plant (left) receiving the Fifth-class Gold Award

Workplace COVID-19 vaccinations

TAKEEI CORPORATION held workplace vaccination events for employees of all Group companies and other interested parties such as those from partner companies. The first and second doses were administered between July and September 2021 while the third dose was given in April 2022. We also instituted "special COVID-19 vaccine leave (paid)" so that employees could get vaccinated outside of the workplace events.

A workplace vaccination event held at TAKEEI CORPORATION's Kawasaki Recycling Center

We will create work environments where every individual employee can work positively and display their skills sufficiently

Diversity and inclusion

Providing an environment that is easy for employees to work in is an important management issue for the TRE Group. We have clearly expressed our opposition to gender discrimination and child labor, and we strive to create an environment where all employees can use their diversity equally and live fulfilling lives both at work and in their private time.

In creating that environment, we also strive, through efforts such as appointing female managers and encouraging men to take childcare leave, to make it a place where everyone can work positively and display their individuality and talents to the fullest.

Promoting greater success for female employees

The Group does not discriminate between men and women, and we have female employees succeeding in a variety of areas including factory work, sales, planning and management.

We also have systems in place that promote greater success for female employees such as the Limited Area Career-track System that makes it possible to boost one's career without relocating, and the introduction of the Job Group Change System (at TAKEEI CORPORATION) that responds flexibly to requests to change job groups. Both of these systems make a variety of career paths available, prevent the loss of human resources through resignation and help with the recruitment of talented personnel locally. At present the ratio of female managers in the Group is 5.1%, but we will work to improve the business and work environment and promote employees to management positions based on their abilities, regardless of gender.

■ A female employee doing sorting work at a construction site

Support for balancing work with childcare and care-giving

The Group has introduced a Reduced Working Hours for Childcare System to support employees caring for children. It allows them to choose to work six or seven hours in a day until their children graduate from elementary school. To support care-giving, we have made care-giving leave, care-giving absences and reduced working hours available so that employees can focus on caring for their families without worry.

Going a step further, the REVER Group has introduced an Accumulated Paid Leave System for employees with family members who need care, allowing them to accumulate paid leave that would otherwise expire. TAKEEI CORPORATION also has a Comeback System that provides recruitment information to former employees who left because of childcare, care-giving, a spouse's transfer or another reason but wish to rejoin the company.

We are also working to enhance systems that make it possible for individual employees to adopt their preferred working styles depending on their circumstances.

Work environment creation

Opening an employee canteen

In September 2021, TAKEEI CORPORATION's Tokyo Recycling Center opened a new canteen for its employees.

The menu consists of nutritionally balanced daily set meals which switch from Japanese fare to Western, Chinese and noodle dishes depending on the day. Dishes made with sweet tomatoes or wood ear mushrooms cultivated using the residual heat from the Group's woody biomass power generation plants are also served on occasion.

■ Providing nutritious daily set meals

Education, training and career support for employees

Implementing training by rank, career and issue

The TAKEEI Group carries out training for employees divided by rank, career and topic, with the aim of developing a great number of human resources who are aware of their own roles and responsibilities and who can create the future of the TAKEEI Group by taking on new challenges. These training courses include a lot of group work and are aimed at getting employees in different departments to interact. We also have an Elder System where young employees act as educators to support new employees who joined after them, offering them practical guidance and workplace life assistance throughout the year. This initiative increases the communication skills of young employees and their ability to provide practical guidance.

REVER Academy Training Program

The REVER Group runs the REVER Academy Training Program to give employees an understanding of the various businesses and tasks in the company so that they can learn and master skills related to the jobs they are involved in. In 2021, the program was held at REVER CORPORATION's Funabashi Plant for the company's clerical workers. They toured the plant, held discussions with plant workers and gained a deeper mutual understanding of their respective work areas and duties.

■ The REVER Academy Training Program held at REVER CORPORATION's Funabashi Plant

Introducing external training through e-learning

To support employee self-improvement, REVER HOLDINGS CORPORATION has introduced e-learning training where all employees can select and take courses based on the skills they wish to improve or topics related to their positions. The initiative aims to help them develop and use the results in their day-to-day operations.

Flexible personnel changes

To respect the wishes of the individual when it comes to personnel placement, the Group provides many opportunities for employees to convey their ideal career plans to their supervisors and the human resources department so that, by increasing mutual understanding between the company and the individual, we can create an organization where individuals can exhibit their abilities to the fullest.

TAKEEI CORPORATION also distributes a job card annually where employees can enter the future tasks and transfer locations they are interested in, providing an opportunity for them to challenge themselves in the jobs they are aiming for of their own accord. The company has also introduced an Internal Recruitment System designed for the optimal placement of motivated personnel in departments that need them. Moreover, based on the results of employee job satisfaction surveys, the REVER Group endeavors to create fulfilling workplaces that reflect the thoughts of its employees.

Interview

A male employee who took childcare leave

I was able to spend precious and irreplaceable moments with my family.

Kenta Ootake
REVER CORPORATION, Fujisawa Plant

I took about a month of childcare leave in 2021.

I had always wanted to take childcare leave to relieve my wife of some of the burden if we ever had a child, but very few men in the company have taken childcare leave, and at the time, no one had ever done so at my plant. I thought it would be difficult for me to get childcare leave, but my supervisor, who I often consulted about family issues, recommended that I take the time off, and thanks to the support and encouragement of my understanding supervisors, colleagues and those around me, I was able to do it.

I spent about a month before the break preparing and adjusting my work duties. During the break, I stepped away from work completely and focused on sharing housework and childcare duties with my wife. It was much harder than I had imagined. I was fortunate to spend a lot of time with them, which made my child much more familiar with me, and I was able to experience my child's development on a daily basis, so it was a very precious time for me. Although I was worried that taking a fixed period of childcare leave would leave a hole at work, I was able to spend irreplaceable time with my family.

When I returned to work, I was able to resume the same duties as before, and the people at the plant warmly welcomed me back. Since I returned, I have approached my work with a greater awareness of balance so that I can handle both working life and family life in the limited time available. It is essential to have the understanding and cooperation of everyone involved when taking childcare leave, so I hope the company will continue to create environments that are easy to work in and that my example will lead to more people taking leave like I did.

We place great importance on communication with local residents and actively participate in social contribution activities as a member of the community

SDG contribution activities

Initiatives of the TAKEEI Foundation for SDGs Promotion

Founded on May 1, 2020, the TAKEEI Foundation for SDGs Promotion promotes activities that contribute to the achievement of the SDGs, and in 2021 it engaged in environmental conservation activities after taking thorough measures to prevent the spread of COVID-19.

In an endorsement of the "Umigomi Zero Week" (zero marine litter week) promoted by the Ministry of the Environment and the Nippon Foundation, in June and September TAKEEI CORPORATION cleaned up the area around its main office. Awareness spread widely to other offices and Group companies, and a total of 429 persons took part in cleanup exercises around their companies and in cleaning activities organized by local authorities. In November, 51 persons participated in the "Minato Cleanup Campaign 2021" organized by Minato ward in Tokyo. By uploading their activities on Pirika, a social media network that can be sent worldwide, they were able to connect with other people collecting litter around the globe as well as to those within the company, which became a catalyst for employees who had never taken part in such activities to want to join the next cleanup exercise.

To accompany the establishment of TRE HOLDINGS in 2022, the name of the foundation was changed to TRE Foundation for SDGs Promotion, and it will cover the activities of the TRE Group as a whole from now on.

■ The cleanup exercise carried out around the TAKEEI CORPORATION main office

Registered as an SDG-promoting company

All prefectures in Japan have established an SDG-Promoting Company Registration System to create opportunities for companies in their regions to pursue the SDGs and to encourage them to undertake specific initiatives.

Shinshu Takeei Co., Ltd. registered in the Nagano SDG-Promoting Companies Registration System in January 2021. In March 2022, four of REVER CORPORATION's offices in Chiba (the Funabashi, ELV Kashiwa, Chiba, Ichihara plants) registered under the Chiba SDGs Partner Registration System. And in June 2022, Daisen Biomass Power Generation Co., Ltd. registered in the Akita SDGs Partner Registration System.

■ Four of REVER CORPORATION's plants registered in the Chiba SDGs Registration System

Chiba Prefecture mascot CHI-BA+KUN

Chiba SDGs Partner No. 326

Sponsoring the WE LEAGUE

TRE HOLDINGS empathizes with the ideals of the WE LEAGUE, Japan's first-ever women's professional soccer league, which was founded with the main objective of promoting gender equality and women's advancement. Accordingly, we began to sponsor the league as a silver partner in 2022. Through our activities with the league, we will promote gender equality and SDGs initiatives in the TRE Group and in society as a whole.

The specific aim of this sponsorship is to increase the visibility of the name of TRE HOLDINGS among a wide range of people interested in soccer, women's soccer, women's social progression, and environmental conservation, including families and Generation Z, through soccer fields and video media. We will also deepen the understanding of people in the community towards the Group by supporting the activities of league member teams who hail from areas where the Group has offices. Apart from that, we will make every effort to interact with other corporate sponsors of the league so that, through participation in league-organized study groups and other events, we will be able to strengthen our corporate network and understand the activities other companies are engaged in towards achieving the SDGs.

■ WE LEAGUE official matches

Social contribution activities

Vocational training guidance at a special needs school

The Nasu Plant of REVER CORPORATION conducts its business in Tochigi, and it dispatches employees to special needs schools in the prefecture to serve as corporate advisors during practical lessons. They mainly instruct students on how to manually disassemble PCs and remove circuit boards and other parts. The Nasu Plant has participated in this effort since 2017 as part of the Educational Enhancement Program for Special Needs Schools promoted by the Ministry of Education, Culture, Sports, Science and Technology. They also support students to become professionally independent when they graduate.

■ On-site guidance as a corporate advisor

Supporting fire department rescue unit training

REVER CORPORATION's ELV Kashiwa Plant donated an end-of-life vehicle to the Kashiwa City Fire Department to be used in traffic rescue incident response training for the special rescue unit. The structure of vehicles becomes more complicated every year, so having a donated vehicle to use for practical training will help the unit members to increase their knowledge and rescue skills.

■ Traffic rescue incident response training carried out by the Kashiwa Fire Department using a vehicle donated by the REVER CORPORATION's ELV Kashiwa Plant.

A letter of thanks from a fire station

In November 2021, the Midori fire station in Chiba sent a thank-you letter and commemorative gifts to two employees of Takeei Energy & Park Co., Ltd., which manages Takeei Eco-Park Golf Okido, a park golf course built on the remains of a former landfill. By cooperating with the rescue unit to use an automated external defibrillator (AED) and perform cardiac massages, the two employees saved the life of a customer who fell ill while playing on the golf course in September 2021. Thanks to their rapid response and appropriate treatment, the customer successfully escaped death, and the letter praised their achievement.

Satoyama development

As part of its efforts to develop satoyama (woodland near populated areas), Hokuriku Environmental Services Co., Ltd. has created a sunflower field from fallow fields it has rented in the Hiraguri area in Kanazawa city, Ishikawa, where the company conducts its business. Around May, they make ridges and sow seeds, and from August onwards the early-blooming and late-blooming varieties begin to bloom, giving everyone in the area about one month to appreciate the sunflowers. In addition to that, the company is involved in other efforts to protect the natural environment of the region, such as cleaning up the place nicknamed HOTARU IKE (Firefly Pond) in the same area to provide an environment that is easy for fireflies to live in.

■ The sunflower field cultivated by Hokuriku Environmental Services Co., Ltd.

Participation in tree-planting activities

Tohoku Koueki Recycling Technology Co., Ltd., TAKEEI CORPORATION's Tohoku branch and Tamura Biomass Power Generation Co., Ltd. took part in the 4th Fukushima Tree-planting Event held in Namie in Fukushima. TAKEEI CORPORATION's Tohoku branch and Environmental Conservation Co., Ltd., Sendai branch took part in the 2021 Millennium Hope Hills Tree-planting Event in Iwanuma, Miyagi. As a measure to prevent the spread of COVID-19, both events were limited to residents of Miyagi only, so offices close to the venues came together to participate and contribute to the regional activity.

■ 2021 Millennium Hope Hills Tree-planting Event

Helping disaster-stricken areas to recover as quickly as possible by treating disaster waste, the first step to disaster recovery

Great East Japan Earthquake recovery project

On March 11, 2011, the largest Tohoku Pacific Offshore Earthquake (Great East Japan Earthquake) in recorded history struck, and the accompanying tsunami devastated the pacific coast of Japan from Hokkaido to Chiba, with the most damage occurring in Iwate, Miyagi and Fukushima. The TRE Group entered Iwate on March 27th, half a month after the earthquake, and searched for ways to contribute to the recovery of each area while investigating and trying to understand the situation on the ground.

Kamaishi, Iwate recovery project

The first Great East Japan earthquake recovery project the Group tackled in the Tohoku region was a disaster waste treatment trial run implemented in Kamaishi, Iwate, by the Ministry of the Environment. We participated as one company in a joint venture.

Under the trial run, we carried out investigations and analysis while collecting a large amount of data in order to clarify the issues involved in disaster waste. As a result we were able to clarify the methods for dealing with the estimated 23,000,000 tons of disaster waste. All of the data obtained through the trail run was publicized and used widely in recovery work in various areas. Besides this, the Group installed an intermediate treatment plant at the site and contributed to the treatment of about 50,000 tons out of the approximately 760,000 tons of disaster waste in Kamaishi city through mechanical sorting and recycling.

At the disaster recovery support site

Otsuchi, Kamihei, Iwate recovery project

In Otsuchi town in Iwate, the Group formed a joint venture with major construction companies and local construction companies which received an order to transport disaster waste from the primary temporary storage area to the secondary temporary storage area for sorting and crushing. The Group's role was to sort and crush the mixed waste (burnable and non-burnable). We processed the waste using nine crushers suitable for treating each kind of item and thirteen sorting machines known as trommel screens and vibration screens, as well as several other heavy machines. The people in the disaster-stricken area also cooperated with us in the sorting and heavy machinery work.

The disaster recovery support site (Otsuchi, Iwate)

Watari, Miyagi recovery project

As a result of the tsunami, 48% (35km^2) of Watari town in Miyagi was damaged by being submerged in water, 465,000 tons of disaster waste were generated and there was tsunami sediment over an area of 186,000m^3, the fourth largest affected area in the Miyagi.

A joint venture of major and local construction companies received the order for all the waste treatment work. The TRE Group assumed the responsibility for sorting and crushing mixed waste. In providing this kind of intermediate treatment, the Group was required to treat over 370,000 tons of waste in a limited time, sort recyclable materials as much as possible and recycle them to minimize the amount of landfill waste, and increase quality and accuracy for sorted earth and sand so that the fine sand could be reused as reconstruction material. To serve as a treatment plant for the mixed waste, we installed facilities on the same level as the Group's Kawasaki recycling center and processed the waste there.

The disaster recovery support site (Watari town, Miyagi)

Our current projects in Fukushima

TAKEEI CORPORATION is involved in the planning of "Waste Treatment Project No. 1 at the Futaba Town Volume Reduction Facility (Interim Storage Facility) from 2021 to 2022" in Futaba town, Fukushima. As part of the project, the Group is working to collect and transport disaster waste, clean up trash and detoxified waste to the Futaba Town Temporary Incineration Facility No. 1 and Futaba Town Temporary Ash Treatment Facility No. 1 and transport products detoxified at those two facilities.

Elsewhere, in Okuma town in Fukushima, we are involved in planning the "2021 Interim Storage (Okuma 5 Construction Area) Soil Storage Facility Project." We are engaged in operating and maintaining a plant that separates foreign objects (metal, wood, burnable waste, debris) from decontaminated soil collected in Fukushima so that it can be stored and managed at interim storage facilities. We will continue to contribute to the recovery and restoration of disaster-stricken areas.

A letter of appreciation from the city of Ishinomaki

In March 2021, 10 years after the earthquake, TAKEEI CORPORATION received a letter of appreciation from Ishinomaki in Miyagi. To assist in the early recovery of disaster-stricken areas, the Tokyo metropolis accepted disaster waste from Iwate and Miyagi, and Recycle Peer Co., Ltd.* collaborated in the processing.

* Absorbed by TAKEEI CORPORATION in 2015. Now the Tokyo Recycling Center of TAKEEI CORPORATION.

Joining Japan Disaster Treatment Systems

TAKEEI CORPORATION is a member of Japan Disaster Treatment Systems (JDTS), an association jointly established by waste treatment companies across the country to build a network that allows for fast and efficient waste treatment in the event of a disaster. JDTS is a member of the Ministry of the Environment's D.Waste-Net (Disaster Waste Treatment Support Network), and it provides support during disasters based on requests for cooperation from the ministry. As waste treatment professionals, we will use the knowledge and experience we have gained to support the recovery of the areas affected in order to contribute to recovery and restoration as quickly as possible when an emergency occurs.

Disaster recovery support after typhoon no. 19 in 2019

Participated in the "Disaster Waste Treatment Support Project in Nagano"

In October 2019, typhoon no. 19 approached Nagano, and the resulting fierce rainstorm caused flood damage in the Chikuma river basin from the cities of Chikuma to Iiyama. EQUAL ZERO Inc. participated in the "Disaster Waste Treatment Support Project" directed by Nagano aimed at recovery from the disaster.

The company was entrusted by the Nagano Prefecture Resource Circulation and Preservation Association with part of the guidance and assistance with unloading, internal classification and organization at the storage site. It also handled administrative duties such as selecting treatment destinations and transportation companies, managing daily vehicle dispatches and the quantities taken out, and creating documents for submission to the authorities.

The company was also directly commissioned by the city of Nagano to remove and transport earth and sand mixed with disaster debris to accompany the repair works aimed at restoring temporary storage sites to their original state after waste had been transported away.

A letter of appreciation from Chiba city

In October 2019, a major landslide occurred in Chiba as a result of unprecedented heavy rains caused by typhoons no. 19 and no. 21. In response to the situation, TAKEEI CORPORATION performed repairs on the slopes where the earth had spilled. This initiative contributed to the region, for which reason the city of Chiba sent a letter of appreciation to the company in February 2021.

Afterwards, based on an "Agreement on Collaborations on Emergency Measures during Disasters" concluded with Chiba, the company also removed the spilled earth, repaired the slopes and greened the area for free.

A letter of appreciation from Koriyama city

In March 2021, TAKEEI CORPORATION's Tohoku branch received a letter of appreciation from the city of Koriyama in Fukushima. The letter expressed gratitude for the company's support by collecting waste in small cars and transporting it to receiving sites when the Fukuyama Clean Center in Koriyama was damaged by typhoon no. 19 in 2019.

Financial highlights (consolidated)

(FY)

	Unit	Company name	2017	2018	2019	2020	2021 TRE HD
Net sales	(Millions of yen)	REVER HD	39,285	36,681	28,375	36,203	**68,234**
		TAKEEI	31,084	32,271	37,713	42,062	
Ordinary profit	(Millions of yen)	REVER HD	1,516	1,645	1,281	4,131	**7,547**
		TAKEEI	2,292	1,814	3,025	3,893	
Profit attributable to owners of parent	(Millions of yen)	REVER HD	2,264	1,268	1,217	3,135	**4,742**
		TAKEEI	1,356	275	1,765	2,272	
Comprehensive income	(Millions of yen)	REVER HD	2,301	1,241	1,245	3,121	**4,833**
		TAKEEI	1,459	318	1,813	2,438	
Net assets	(Millions of yen)	REVER HD	14,450	15,474	16,209	18,731	**64,173**
		TAKEEI	27,791	26,960	28,270	34,505	
Total assets	(Millions of yen)	REVER HD	28,271	27,746	28,244	30,561	**129,524**
		TAKEEI	67,141	71,047	80,257	87,806	
Net assets per share	(Yen)	REVER HD	833.70	903.52	946.46	1,093.74	**1,218.70**
		TAKEEI	1,152.27	1,131.93	1,186.86	1,196.98	
Earnings per share	(Yen)	REVER HD	152.99	74.07	81.12	183.06	**110.79**
		TAKEEI	57.72	11.92	76.65	89.07	
Equity ratio	(%)	REVER HD	50.5	55.8	57.4	61.3	**48.3**
		TAKEEI	40.1	36.7	34.1	37.6	
Return on equity	(%)	REVER HD	19.6	8.5	7.7	17.9	**9.9**
		TAKEEI	5.1	1.0	6.6	7.5	
Price-earnings ratio	(times)	REVER HD	–	–	7.96	7.07	**17.9**
		TAKEEI	22.5	61.5	10.2	14.5	
Cash flows from operating activities	(Millions of yen)	REVER HD	2,612	1,369	1,973	5,249	**11,017**
		TAKEEI	4,439	2,916	5,354	7,401	
Cash flows from investing activities	(Millions of yen)	REVER HD	315	(1,713)	(2,112)	(65)	**(2,149)**
		TAKEEI	(7,003)	(7,899)	(7,963)	(13,607)	
Cash flows from financing activities	(Millions of yen)	REVER HD	1,331	(769)	(558)	(3,107)	**(3,700)**
		TAKEEI	4,097	1,243	4,714	5,458	
Cash and cash equivalents at end of period	(Millions of yen)	REVER HD	8,049	6,936	6,238	8,315	**24,014**
		TAKEEI	12,661	8,922	11,028	10,282	

*Fiscal year-end REVER HD: June TAKEEI: March
*REVER HD was delisted in FY03/2017 and FY03/2018, so its price-earnings ratio is not listed.

Cumulative net sales and operating profit by segment

(Millions of yen)

	FY03/22 Full-year results		
	Net sales	Operating profit	Operating profit margin
Consolidated	68,234	7,659	11.2%
Waste treatment and recycling*1	25,146	5,113	20.3%
Resource recycling*2*3	24,068	2,787	11.6%
Renewable energy*4	12,617	(305)	–
Other businesses*1 Environmental engineering Environmental consulting	7,102	441	6.2%
Adjustments	(700)	(376)	–

*1 The Accounting Standard for Revenue Recognition, etc. has been applied from the beginning of Q1 FY03/2022.
*2 For the resource recycling business, the consolidated results of REVER HOLDINGS CORPORATION, which is the acquired company for accounting purposes in the business integration, reflect only the results for the six-month period from October 1, 2021 to March 31, 2022.
*3 The resource recycling business includes JPY89 million of goodwill related to the business integration for the six months from October 1, 2021 to March 31, 2022.
*4 The renewable energy business includes JPY376 million of goodwill associated with the acquisition of Green Power Ichihara Co., Ltd.

Movement in results and plans (by segment)

(Millions of yen)

		FY03/21 (Actual)*5	FY03/22 (Actual)*5*7		FY03/23 (Forecast)		FY03/24 Third year of Medium-term plan	
		Apr. 2020-Mar. 2021	Apr. 2021-Mar. 2022	YoY	Apr. 2022-Mar. 2023	YoY	Apr. 2023-Mar. 2024	YoY
Consolidated	Net sales	73,470	90,584	+23.3%	94,200	+4.0%	98,000	+4.0%
	Operating profit	6,727	10,326	+53.5%	9,300	-9.9%	10,150	+9.1%
	Operating profit margin	9.2%	11.4%	+24.5%	9.9%	-13.4%	10.4%	+4.9%
Waste treatment and recycling	Net sales	24,738	25,146	+1.6%	25,829	+2.7%	27,028	+4.6%
	Operating profit	3,468	5,113	+47.4%	4,786	-6.4%	4,836	+1.0%
	Operating profit margin	14.0%	20.3%	+45.0%	18.5%	-8.9%	17.9%	-3.4%
Resource recycling*5 *6	Net sales	31,408	46,418	+47.8%	47,100	+1.5%	49,500	+5.1%
	Operating profit	2,660	5,454	+105.0%	4,361	-20.0%	4,791	+9.9%
	Operating profit margin	8.5%	11.7%	+38.7%	9.3%	-21.2%	9.7%	+4.5%
Renewable energy	Net sales	11,457	12,617	+10.1%	14,088	+11.7%	15,151	+7.5%
	Operating profit	325	(305)	–	388	–	865	+122.9%
	Operating profit margin	2.8%	–	–	2.8%	–	5.7%	+107.3%
Other businesses Environmental engineering Environmental consulting	Net sales	6,828	7,102	+4.0%	7,893	+11.1%	8,841	+12.0%
	Operating profit	349	441	+26.4%	420	-4.8%	753	+79.3%
	Operating profit margin	5.1%	6.2%	+21.5%	5.3%	-14.3%	8.5%	+60.1%
Adjustments	Net sales	(962)	(700)	–	(710)	–	(2,520)	–
	Operating profit	(76)	(376)	–	(655)	–	(1,095)	–

*5: Although REVER HD's fiscal year ends in June, since it is necessary to compare it to other businesses across the same period of time to make it possible to understand the actual state of progress of the medium-term business plan, REVER HD's results data from April to March the following year is displayed under results for resource recycling businesses.
*6: The resource recycling business includes goodwill amortization (JPY89 million/year in FY03/2022, JPY178 million/year from FY03/2023 onwards) related to the business integration.
*7: The renewable energy business includes goodwill amortization of JPY376 million associated with Green Power Ichihara Co., Ltd.

Environmental data

Energy investments and CO_2 emissions in the TRE Group's business activities

Energy input into business activities

Electricity	55,643Mwh
Diesel oil	8,597kl
Gasoline	584kl
LNG	1,150,000m³
LPG	192,000m³
Kerosene	224kl
Type-A heavy oil	202kl
Acetylene	3,413kg

Business activities

Waste treatment and recycling business

Resource recycling business

- Sales
- Collection and transportation
- Intermediate treatment (Recycling)
- Final disposal (landfill)

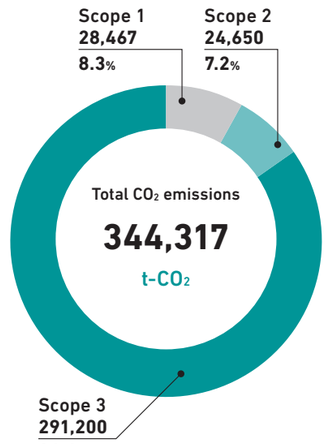
Renewable energy business

- Woody biomass power generation

Other environmental businesses

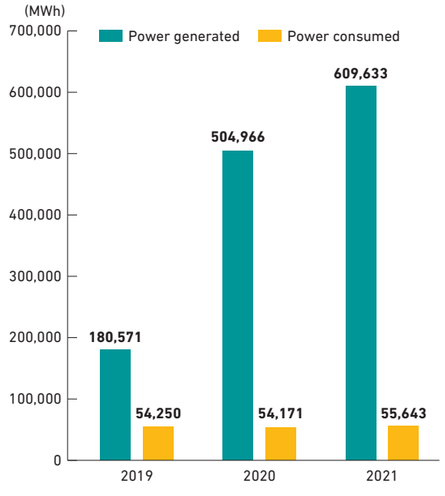
- Environmental analysis
- Manufacture and sale of environmental equipments

Breakdown of CO_2 emissions



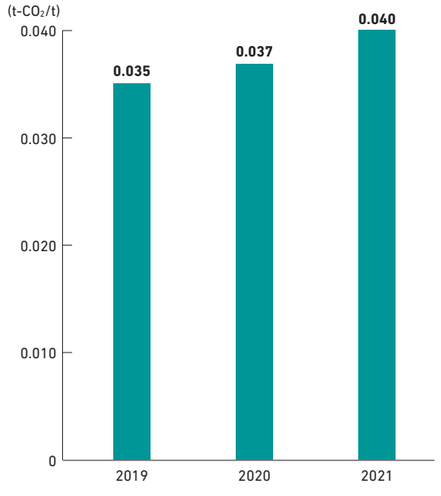
*CO_2 emissions factor: Electricity 0.000443 t-CO_2/kWh

Trends in power generation and consumption



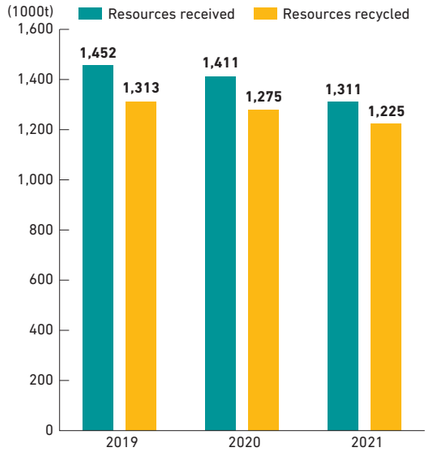
*The TRE Group generates more renewable energy than the amount of electricity used by each Group company.

CO_2 emissions per resource received (per unit)



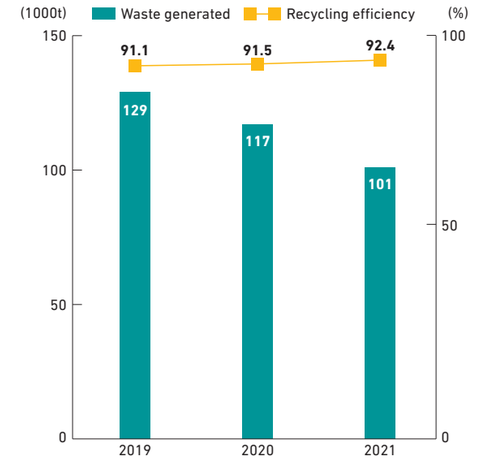
*CO_2 emissions associated with energy use ÷ resources received
Resources received: Volume of valuables and waste received by the Group

Resources received and recycled



*Resources received: Volume of valuables and waste received by the Group
*Resources recycled: Volume of resources received that could be used as recycled resources

Waste generation and recycling efficiency



*Recycling efficiency: Resources recycled ÷ (Resources recycled + Waste generated) × 100
*Waste generated: Volume of resources received that could not be recycled and was disposed of

Social data

Breakdown of employees

(persons)

Number of employees	Male	Female
2,103	1,711	392

Waste treatment and recycling business	Resource recycling business	Renewable energy business	Other	All companies (shared)*
899	696	165	293	50

*All companies (shared) refers to employees in the company's management departments such as the general affairs department and accounting and finance department, and in planning departments such as the corporate planning department.

Employment status

Average age (years)	43.6
Average length of employment (years)	10.4
New female graduates hired (%)	57.1 (Average in past 5 years: 41.6)
Persons with disabilities employed (persons)	21

Ratio of female workers by job classification

(%)

General employee	20.6
Manager	5.1
Officer	14.2

Childcare leave

(persons)

Leave taken before and after childbirth			Childcare leave taken		
Male	Female	Total	Male	Female	Total
0	15	15	8	23	31

Health and safety (frequency and severity)

	Frequency rate	Severity rate
TRE Group	2.78	0.05
Average for the general and industrial waste treatment industry*	7.36	0.17

*Source: Health and Safety Committee, Japan Federation of Industrial Waste Management and Recycling Associations, "Occurrence of Occupational Accidents in the Industrial Waste Treatment Industry" (July 2022).

Company information (as of March 31, 2022)

Company name: TRE HOLDINGS CORPORATION

Date of establishment: October 1, 2021

Address: 15th floor of Tokyo Sankei Bldg., 1-7-2 Otemachi, Chiyoda-ku, Tokyo, 100-0004

Contact information: Tel: 03-6327-2620 (main)
Fax: 03-3277-3273

Capital: 10 billion yen

Group businesses: Waste treatment and recycling, resource recycling, renewable energy, environmental engineering, environmental consulting

Number of employees: 2,103 employees (on a consolidated basis)

Share information (as of March 31, 2022)

Stock exchange listing: Tokyo Stock Exchange Prime Market
(Moved on April 4, 2022)

Securities code: 9247

1 share-trading unit of stock: 100 shares

Total authorized shares: 200,000,000 shares

Total shares issued: 52,610,712 shares
(including 918,593 shares in treasury stock)

Number of shareholders: 12,043

Settlement date: March 31

Interim dividend record date: September 30

Year-end dividend from surplus (dividends) record date: March 31

Ordinary general meeting of shareholders: June

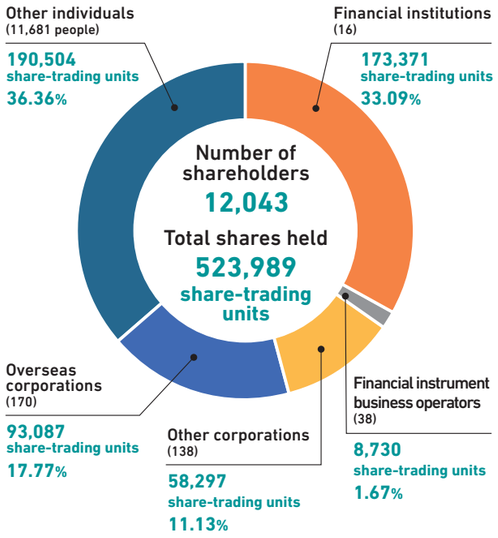
Administrator of Shareholders' Register: Mitsubishi UFJ Trust and Banking Corporation

Major shareholders (as of March 31, 2022)*

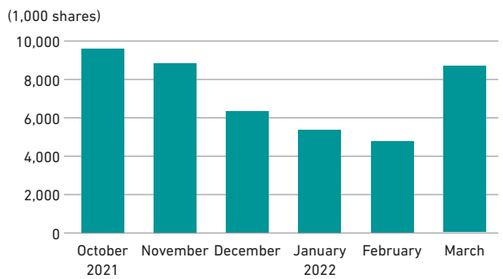
Name or title	Shares held (1,000 shares)	Percentage of shares owned (%)
The Master Trust Bank of Japan, Ltd. (trust account)	8,098	15.67
Custody Bank of Japan, Ltd. (trust account)	7,134	13.80
Besterra Co., Ltd.	2,570	4.97
Mamoru Mitsumoto	2,116	4.09
Government of Norway (standing proxy: Citibank, N.A. Tokyo branch)	1,510	2.92
TREHD Employee Shareholding Association	1,191	2.30
Toru Suzuki	1,050	2.03
Takao Suzuki	1,000	1.93
Custody Bank of Japan, Ltd. (securities trust account)	701	1.36
KIA Fund 136 (standing proxy: Citibank, N.A. Tokyo branch)	610	1.18

*The company owns 918,593 shares as treasury stock, but it is excluded from the list of major shareholders above.

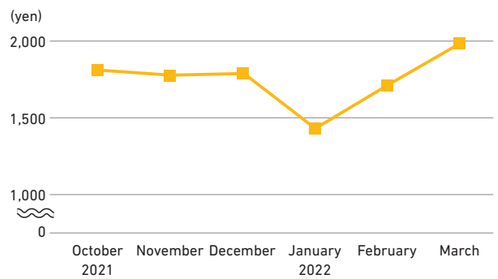
Shareholder distribution (as of March 31, 2022)



Trading volume

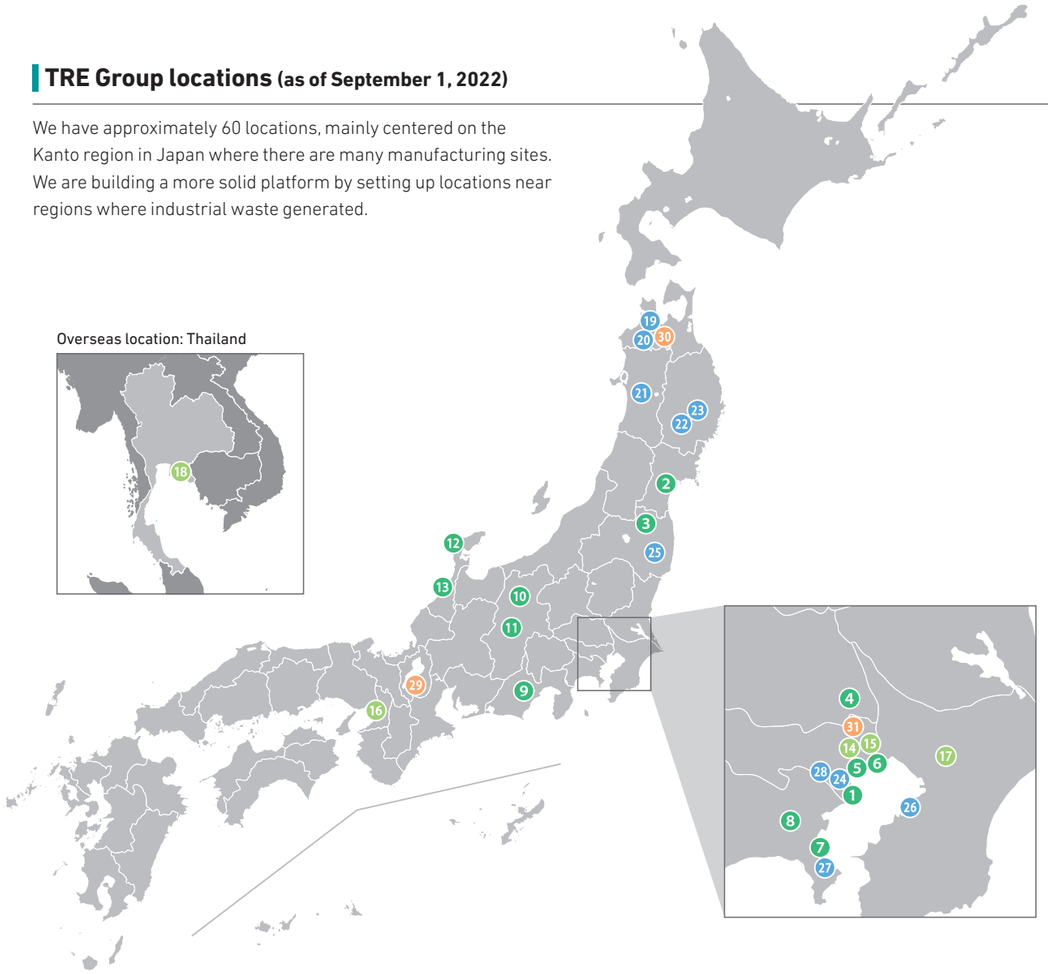


Share price



TRE Group locations (as of September 1, 2022)

We have approximately 60 locations, mainly centered on the Kanto region in Japan where there are many manufacturing sites. We are building a more solid platform by setting up locations near regions where industrial waste generated.



Waste Treatment & Recycling Business

1. TAKEEI CORPORATION (10 locations)
2. Green Arrows Tohoku Co., Ltd.
3. Tohoku Koueki Recycling Technology Co., Ltd.
4. Gypro Co., Ltd.
5. Takeei Energy & Park Co., Ltd.
6. JW GLASS RECYCLE CO., LTD.
7. Green Arrows Kantou Co., Ltd.
8. Ikeda Construction Materials Co., Ltd.
9. Takeei Metal Co., Ltd.
10. EQUAL ZERO Inc.
11. Shinshu Takeei Co., Ltd.
12. Monzen Clean Park Co., Ltd.
13. Hokuriku Environmental Services Co., Ltd.

Resource Recycling Business

14. REVER HOLDINGS CORPORATION
15. REVER CORPORATION (18 locations)
16. Sunny Metal Corp.
17. ITSUMO Corp.
18. HIDAKA SUZUTOKU (Thailand) Co., Ltd.

Renewable Energy Business

19. Tsugaru Biomass Power Generation Co., Ltd.
20. Tsugaru Eneveg Co., Ltd.
21. Daisen Biomass Power Generation Co., Ltd.
22. Hanamaki Biomass Power Generation Co., Ltd.
23. Hanamaki Biomass Chip Co., Ltd.
24. TAKEEI Forestry Co., Ltd.
25. Tamura Biomass Power Generation Co., Ltd.
26. Green Power Ichihara Co., Ltd.
27. Takeei Green Recycling Co., Ltd.
28. Takeei Denki Co., Ltd.

Environmental Engineering Business/ Environmental Consulting Business

29. Fuji Car Manufacturing Co., Ltd.
30. Environmental Conservation Co., Ltd.
31. Earth-Appraisal Co., Ltd.