



YACHIYO
Engineering



yec Yachiyo Engineering Co., Ltd.

Sustainability Report 2023



Vision >>>

Innovative solutions for the society



Mission >>>

Respect for humanity and management by all members is the foundation of our company's philosophy;

To sincerely and genuinely conduct business that would earn our clients' trust, to improve capabilities and productivity through technology, to develop our business by building and increasing trust through outstanding work, and, ultimately, to contribute to society with reliable technologies and innovative ideas.

Values >>>

- **Start from the ideal**
As a starting point, envision ideal results from the perspective of society and clients. Thoroughly understand changing environments and values, instead of approaching projects from current resources or technologies. Take on new solutions that benefit future generations.
- **Be professional**
Constant growth and improvement of our own expertise calls on each of us to maintain a high level of professionalism, be proactive, and commit to results.
- **Have confidence in colleagues and seize success**
The best results come from mutual trust and respectful support. Yachiyo is a team where everyone can demonstrate their strengths to the fullest.



The change in the environment means a change in values. From population increase to global environmental issues, new values for conservation/preservation were created, as well as bringing to light new social issues. What is required now is to face these combined issues and proactively create new ways in addressing them, which is a difficult task yet a worthy challenge.

Beyond our expertise of engineering consultancy, our unique strengths rest in our vast stock of accumulated technologies and knowledge, unprecedented and original problem-solving strategies and ideas, and a noble vision that shall lead us into the next millennium.

All members of the company wish to march forward to sincerely face and support those who wish for a brighter future, enabling us to further innovate solutions for society.

We at Yachiyo Engineering Co., Ltd. rise up to the challenge of realizing and creating what the next millennium could become.

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Editorial Policy

Our Sustainability Report is published as comprehensive communication tool for our stakeholders. Through this report, we aim to provide our stakeholders with a deep understanding of our corporate stance and the efforts to enhance our corporate value. In editing this report, we refer to the GRI Standards.

- Subject organization: Yachiyo Engineering Co.Ltd.
- Period covered: In principle, the period ending June 30, 2023 (July 2022 to June 2023).

We will continue to face social issues and take on challenges with our technological capabilities and creativity.

In January 2023, Yachiyo Engineering celebrated its 60th anniversary.

Since our founding in 1963, our corporate philosophy based on “respect for humanity and management with the participation of all employees” has been our constant values, and we are determined to take on the challenge of creating solutions that will lead to the next generation, starting with the realization of the ideals of society and our customers. We believe that each and every one of our employees can create high social value and enhance our corporate value in this context, and that we can realize our mission of “continuing to contribute and develop for the benefit of humanity” by always facing challenges from a high long-term perspective, without compromising on short-term solutions.

As a company that has contributed to society by addressing the various issues involved in building and maintaining the social infrastructure that supports comfortable, safe, and secure living, we are constantly confronted with the social conditions and social issues of the moment. The world is changing at an accelerating pace, with frequent natural disasters, unstable international situations, and evolving technologies, and social issues are becoming more diverse and complex. In this context, we believe that our mission as a company “living in the present” is to constantly advance the realization of a sustainable society and to pass it on to the next generation, and that this is the practice of our corporate philosophy.

Investment in People

Human resources are the most important factor in our contribution to society. In particular, we, as general construction consultants, invest in our employees because each one of them is the key to solving our clients’ problems. Based on the premise that this will lead to improve consulting performance

and contribution to social value, we are further improving ease of work and enhancing skill development through “reskilling” to learn new knowledge and skills to respond to new business models and changing times.

First, to improve the working conditions of our employees, we are promoting “hybrid work,” which combines office work and telework, and an enhanced “childcare/nursing care” system. Aiming to go even further than the government policy, we will continue to work together with our employees to create and update an optimal form of work comfort that fits diverse ways of thinking, such as more flexible teleworking.

We are promoting skill development that combines “digital” and “management” skills, which are the demands of the times, for all employees, regardless of whether they are clerical or technical staff, by 2025, and we are also holding in-house AI (Artificial Intelligence) study sessions. In addition, we are also developing voluntary efforts to acquire technology through in-house short-term training at our research institute called RIIPS (Research Institute for Infrastructure Paradigm Shift), and are accelerating the evolution of “respect for humanity and management with the participation of all employees.

An era of “co-creation” between public sector and private sector

While the current fusion of technology and consultants is creating new solutions and value, social issues continue to swell. Many

people recognize that these are not simple and easy problems that companies can solve on their own, but have reached a scale where the government and private sector, or even the private sector in a competitive relationship, can bring together their knowledge and technology to work together toward solutions. In fact, the knowledge and technologies we have developed in our public sector business are increasingly being sought by the private market, and we are expanding our business into the private sector, including sustainability services, facility maintenance and management, smart city-related projects, and energy projects. New solutions from the private sector are also being extended to the public sector and shared to form a higher level of social infrastructure, leading to a safer and more secure society. With a strong awareness of the environment, society, and governance, and the SDGs becoming the global standard for how companies should operate, “co-creation” is a strategy that will lead to the optimal solution for the future in this current era of “sustainability”.

Challenges and Opportunities

Contributing more to the development of society and the resolution of issues is a challenge moving forward. We believe that in the future, companies should take on challenges in unison with their employees. And we see challenges such as carbon neutrality and smart city development as opportunities to create enormous growth through social transformation, investment promotion, regional revitalization, corporate productivity

improvement, and a major shift in industrial structure. We will contribute to create innovation, decarbonization, and regional revitalization through “co-creation” with companies and related organizations, while leveraging our network with public agencies and local governments.

Pledge to Sustainability

We have changed the name of our report from “CSR Report” to “Sustainability Report”. This is based on our desire to convey to our stakeholders our approach and ideas for achieving both sustainable development of society and sustainable growth of our company, and to link this to “co-creation”.

The recent outbreak of COVID-19 and international conflicts have also reminded us firsthand that our own lives and businesses cannot be sustained or developed without a stable society.

To ensure sustainability of our company in such a business environment, we have a mountain of work to do, including development of human resources to continue creating innovation, technological capabilities to solve social issues, productivity improvement through optimal digitalization and management, and fostering a culture of challenge. We will overcome these challenges together with our employees one by one.

President

TAKAHASHI Tsutomu

Corporate History and Businesses

Yachiyo Engineering was founded on January 29, 1963 by Morinosuke Kajima, former chairman of Kajima Corporation, and Rokuro Ishikawa, former vice president of Kajima Corporation, with the vision of becoming a global consulting and engineering company.

Our company name came from the hope that we will continue to live on for a thousand and more and contribute to and develop human society for all eternity. Moreover we will continue to challenge ourselves to realize a better society while remaining flexible in our efforts so that we can keep up with the world's trends.

We will continue to work as one to face social issues and move toward a future that will last a thousand years.

**2023
60th
Anniversary**



Construction Consulting Services

Construction consultants contribute to society through their expertise by addressing various issues to build and maintain social infrastructure such as roads, bridges, dams, erosion control, ports, water supply and sewerage systems, railways, and airports that support comfortable, safe, and secure living.

We are technical professionals who serve as the "brain" of the client in each stage of a social infrastructure project, except for construction. We always comply with the law and promote projects from a neutral and fair standpoint. In addition to our traditional role as a construction consultant, we also play a role as a service provider in the field of management, providing public services directly to users.

Construction Consultant



Private Sector

- ICT
- Business Sustainability
- Community Development
- Private Infrastructure Business





Public Sector (Domestic)

Main Business Domains	
National Land Conservation	Geology / Soil Engineering
Transportation Infrastructure	Maintenance
Urban / Regional Planning and Management	Mechanical / Electrical
Environment / Energy	ICT

Business Overview

We have seven head offices and 37 centers, sales offices, and sales branches in Japan, and are expanding our business nationwide. Currently, we have four technical groups, namely, the Co-Creation Group, the Urban Design Group, the Road & Railroad Group, and the River & Water Engineering Group. We are working to solve social issues through “co-creation” that brings together our core technologies.

Market Trends and Our Strengths

In the development of social infrastructure in Japan, there has been a shift from new construction to maintenance management and life extension. In addition, the role of construction consultants is expanding year by year in response to changes in social conditions, such as the need to strengthen the national land structure in the face of increasingly severe natural disasters and efforts to achieve carbon neutrality by 2050. In contrast, there is a serious shortage of human resources in the civil engineering and construction industry, and both private companies and local governments are facing the challenge of securing human resources. We will promote the efficiency and sophistication of our work through the use of ICT and other technologies, as well as leveraging our strength of “comprehensive capabilities,” such as management, including proposals and support for PPP/PFI projects that utilize private-sector know-how.

Public Sector (Overseas)

Main Business Domains	
National Land Conservation	Geology / Soil Engineering
Transportation Infrastructure	Maintenance
Urban / Regional Planning and Management	Mechanical / Electrical
Environment / Energy	ICT

Business Overview

To date, we have provided consulting services related to social infrastructure development to approximately 150 countries. In 2023 we opened our Nepal Office in May and our Philippine Office in June. Now we have nine offices overseas. In addition to ODA work for the Japan International Cooperation Agency (JICA) and other international organizations, our work is expanding in a wide and diverse range of areas, including PPP and PFI, which are partnerships between the public and private sectors.

Market Trends and Our Strengths

Travel restrictions due to the impact of the COVID-19 pandemic have been eased, and overseas business is on a recovery trend. In addition, changes in social conditions, such as geopolitical risks including conflicts in Ukraine and other countries, large-scale earthquakes, and disasters due to climate change, have created a mountain of social issues, and client demands are becoming increasingly complex and sophisticated. In order to solve social issues in such a world, we need to have “comprehensive capabilities” to respond flexibly, accurately, and with a sense of speed. Starting in July 2021 (our 60th term), our International Division adopted a Project System in which teams are organized by assigning appropriate personnel from within and outside the company to each project. We will continue to contribute to development and the resolution of social issues by leveraging our comprehensive strengths.

Private Sector

Main Business Domains	
ICT	
Business Sustainability	
Community Development	
Private Infrastructure Business	

Business Overview

We have been developing and deploying services for private companies in addition to social infrastructure development, which is our core business, by leveraging the technologies and know-how we have accumulated over the past 60 years as a general construction consultant. In recent years, companies have been required to respond quickly and flexibly to a wide range of issues, such as SDGs and ESG. For companies that promote sustainable management and business, we work to solve client issues by providing sustainability consulting and SaaS (software as a service) that contributes to business efficiency.

Market Trends and Strengths

The environment surrounding companies is changing at a dizzying pace. Frequent natural disasters around the world, prolonged pandemics, heightened geopolitical risks, energy issues, and soaring prices are having a major impact on corporate management. In these uncertain times, companies are further required to proactively address various social issues. In addition to providing support (consulting services) and DX-related solutions (SaaS) to address natural capital issues that have become increasingly important in recent years, such as climate change, water risk, and biodiversity loss, we also promote renewable energy projects (solar, hydro, biomass, etc.) and community projects (facility operation, etc.) as a business operator.



Consulting Headquarters Director General, Domestic Division

WATANABE Tomoaki

Creation of “Co-Creation Group” to respond to changes in the business environment

In July 2022 (61st term), we established the Co-Creation Group. The Co-Creation Group will flexibly respond to changes in the business environment as a cross-functional and cross-sectoral team, and will serve as a hub for each group in the domestic business and lead the strengthening of company-wide collaboration.

For example, national land resilience and disaster prevention not only involve infrastructure development such as dams, rivers, roads, and railway are involved, but other various

elements such as urban planning, environment, geology, and water circulation are relevant.

We view this as infrastructure management, which we will promote with our “integrated corporate strength” that brings together the technologies of each group. We will also create new businesses through “co-creation” in partnership and collaboration not only within the company but also with our partner companies.



Consulting Headquarters Director General, International Division

FUJII Katsumi

Facing and solving new social issues

Since the spread of COVID-19, the world’s needs related to infectious diseases have increased remarkably. We are currently developing medical waste treatment systems in Nigeria, Sri Lanka, and Cambodia to handle infectious disease waste. In addition, “sewage epidemiology,” in which pathogens are extracted through sewage surveys and converted into data and platforms, is one of the initiatives we intend to promote overseas.

In 2023, we have established new offices in Nepal and the

Philippines. In Nepal, floods and landslides are frequent, and we will further strengthen our support for them. In the Philippines, where PPP/PFI is active, we will also strengthen and promote its operations.

We will continue to earnestly address and solve new social issues around the world.



Business Planning and Development Division Director General

SENO Yoshiyuki

Contribution to the sustainable development of society

In our sustainability management, “ambidextrous management” is a key measure. Ambidextrous management involves “deepening of knowledge” and “search for knowledge,” and new business development activities that our division are engaged in falls under the category of search for knowledge.

As a company involved in the development and management of social infrastructure, we are consulted by private companies in a variety of areas because of our extensive knowledge in natural capital and other areas.

In the midst of a rapidly changing social conditions, we are promoting initiatives to solve critical issues (materiality) with a creative approach based on flexible ideas. Public-private partnerships are becoming increasingly important in solving social issues. We believe that we can do this only because our core business is for the public sector, and we are working on this every day.

Further Social Value Creation

High-quality Infrastructure Development P.09

Extending the Service Life of Social Infrastructure P.09

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High-quality Infrastructure Development

Minami-Aso Railway Restoration Project

The Minami-Aso Railway in Kumamoto Prefecture was severely damaged by the 2016 Kumamoto Earthquakes. We were in charge of the survey for disaster recovery of railway facilities, project management for the restoration of the entire Minami-Aso Railway Line, and detailed design of the sub-structures of the Daiichi Shirakawa Bridge, a railway bridge over the Shirakawa River, a first-class river.



The Daiichi Shirakawa Bridge, which was built in 1927 and selected as a Civil Engineering Heritage Site by the Japan Society of Civil Engineers for its outstanding construction technology and excellent scenery, was severely damaged due to the earthquake. The bridge experienced abnormal deformation such as tilting due to the force exerted from both the right and left banks towards the center of the bridge caused by the earthquake, resulting in several damaged structural members. Therefore, restoration through reconstruction was planned. The new bridge was designed and constructed to coincide with the original scenery of the former bridge, such as structural style, colors and dimensions, while also meeting with necessary seismic performance requirements. The new bridge received the JSCE Award*, Tanaka Award; Excellence in Bridge Design and Construction in 2022.

*The JSCE Award was established in 1920 as the "Civil Engineering Award", 6 years after the founding of JSCE. Since then, excluding the period from 1945 to 1948 due to World War II, it has been a prestigious award system based on a tradition of more than 100 years.

The Water-sprinkler Snow Melting System Contributes to the Continuous Operation of Hokuriku Shinkansen

The *Hokuriku Shinkansen*, which runs through one of Japan's snowiest regions, has implemented snow damage countermeasures to prevent snow accumulation from affecting its operations.



We have designed "water-sprinkler snow melting equipment," which is a major form of snow damage countermeasure, at 9 locations between Nagano Station and Kanazawa Station, and 25 locations between Kanazawa Station and Tsuruga Station, a newly extended section which will start operation in the spring of 2024.

We had previously designed the same type of equipment for the Hachinohe Station to Shin-Aomori Station section of the *Tohoku Shinkansen*, and we could utilize the experience of designing with consideration of the snow conditions in the Hokuriku region.

Even in the heavy snowfall in 2018 that caused disruptions of transportation such as stranded cars on highways or train service suspension, the *Hokuriku Shinkansen* continued to operate, albeit with some slow sections. The combination of multiple snow damage countermeasures, such as snow sheds with roofs and snow melting devices, contribute to the continuation of operations during snowfall. The sprinkler snow melting equipment was one of the major countermeasures that contributed to the continuation of operation during heavy snowfall.

Extending the Service Life of Social Infrastructure

Comprehensive Management Project for Bridges in Tama City through Public-Private Partnership

Of all 175 bridges managed by Tama City, Tokyo, most were built in a short period of time in conjunction with the development of Tama New Town during the period of Japan's rapid economic growth in the 1950s, and there were concerns that they would deteriorate in the near future and require intensive repairs. To avoid concentration of repair needs and reduce management costs, the city tried to switch its management policy from post maintenance to preventive maintenance, but it was not possible as there were many bridges already in need of repair. Therefore, this project was launched to promote the transition to preventive maintenance and extend the service life of bridges through consistent bridge management. It includes combining regular inspections, repair design, and long-term life plan revision services as one project and contract period is 5-year-long. By implementing the bridge management process solely by our company, it enabled us to implement a variety of innovative solutions which could lead to further effectiveness. With our proposed solutions including improvement of diagnostic flow during inspections, testing of immediate measures, and AI-based tracking surveys, the structural health of the bridges have significantly improved, and the transition to preventive maintenance is progressing towards extending the service life of the bridges.



Initiatives towards Life Extension of Volcanic Sabo Infrastructure Inspection and Health Evaluation of Sabo Facilities using Autonomous UAV

Mt. Tarumae, located southeast of Lake Shikotsu in Hokkaido, is one of the most active volcanoes in Japan. The surrounding area of Mt. Tarumae has nurtured a rich natural environment and has benefited from abundant groundwater resources. However, due to the potential damage caused by volcanic mudflows resulting from volcanic eruptions, sabo facilities are being developed as part of the Mt. Tarumae Direct Volcanic Sabo Project to mitigate damage in urban areas such as Tomakomai City.

To maintain the sabo facilities functional for a long time, regular inspection to diagnose the soundness of the facilities is necessary. By using UAVs for regular inspections, it is possible to assess the condition of facilities in a short flight time, without requiring people to directly enter dangerous areas, and to quantitatively evaluate facility deterioration using 3D models created from the images taken. We are also actively incorporating "i-Construction*" into our operations to improve the efficiency and sophistication of existing technologies.

In FY2022 our work was highly regarded for the series of initiatives we carried out, including receiving the *Hokkaido Development Bureau's i-Con Incentive Award 2023*.

*i-Construction: Initiatives to improve productivity of the entire construction process through the introduction of ICT



Advanced Disaster Prevention and Mitigation

Implementation of National Early Warning System in the Kingdom of Tonga

Tonga is prone to cyclones and is also at high risk of tsunamis as it is situated in an earthquake-prone area. Because the population is dispersed throughout various islands, it has been difficult to promptly disseminate disaster warning information. The implementation of disaster information dissemination infrastructure with Japanese official development assistance (ODA) included: (1) strengthening coordination among disaster prevention-related organizations through an emergency radio system; (2) transmitting early warnings to residents in tsunami hazard areas through a siren system; and (3) upgrading the national broadcasting station's studio building, transmission station, and medium wave radio broadcasting system to ensure nationwide coverage. We were in charge of the entire project from the planning stage, including survey and design, to construction supervision. Although there was a temporary suspension of construction due to the COVID-19 pandemic, the project was successfully completed in September 2022.



The arrival time of tsunami warnings was improved from a maximum of 90 minutes to less than 8 minutes. The studio building and the transmission station were built with floor and foundation heights of at least 1.8 m based on tsunami simulations so that radio broadcasting could continue even in the event of a tsunami. Also, the building is equipped with emergency power generators and its rooftop can be used as an evacuation site for residents. During the eruption of Hunga Ha'apai volcano in January 2022, the building was used for the evacuation of residents.

Promoting Disaster Prevention and Mitigation Risk Communication

The concept of "My Timeline" is providing a disaster prevention action plan that is unique to each of its users. It is intended to help residents think for themselves and take life-saving evacuation actions by organizing their own standard disaster prevention actions in chronological order when river levels rise due to heavy rainfall caused by approaching typhoons and other events. In the process of examining this plan, users can learn about their own flood risk, think about what kind of evacuation action is necessary and when it is best to evacuate. It also encourages users to think about their plan on a daily basis considering their family members.

For residents living in areas alongside the Yamato River, a first-class river that flows through Nara and Osaka Prefectures, we have examined effective measures to promote making their own "My Timeline". These include holding seminars on how to make a "My Timeline" in areas with high risk of flooding, and creating publicity videos. In addition, we are promoting the *Marugoto Machigoto Hazard Map* project, in which information related to flood prevention and disaster prevention are displayed in several signages across the town, so that people would realize the danger of flooding in the area in which they live. With our experience participating in editing the Marugoto Machigoto Hazard Map Implementation Guide (2nd Edition), which aims to promote the spread and awareness of the project, we supported the project from the preliminary survey stage to the installation and utilization of the maps.



My Timeline
Public Relations Video
<Published on YouTube>
<https://www.youtube.com/watch?v=jf4dPu0Y50>



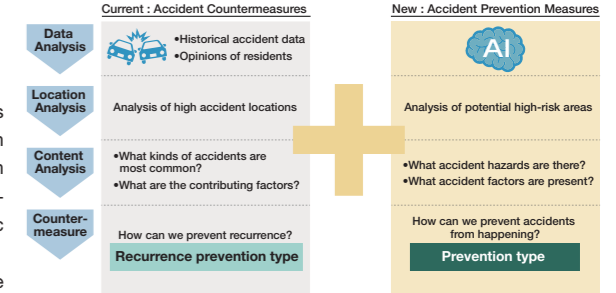
Realization of Smart City

Development of solutions to reduce the risk of traffic accidents

In March 2023 we have signed a business agreement with MS&AD InterRisk Research & Consulting, Inc. for mutual collaboration in new solutions and jointly developing new technologies, including solutions to reduce traffic accident risks.

To achieve road safety, which is also one of the targets of the SDGs, we are conducting accident risk AI assessments to provide solutions for the city.

MS&AD InterRisk Research & Consulting, Inc. uses AI to quantitatively evaluate the magnitude of potential risks using a variety of data, including the MS&AD Group's large traffic risk data and past accident data. Making effective use of the evaluation results, we examine specific measures to reduce traffic accidents. Through these approaches, we will realize effective accident countermeasures from recurrence prevention type to prevention type.



Digital Technology Drives Sustainable Economy and Society Ehime Prefecture Participates in the Vision for a Digital Garden City Nation

The Government of Japan's *Vision for a Digital Garden City Nation*, which aims to revitalize rural areas and create a sustainable economic society by utilizing digital technology while making the most of each region's uniqueness, is being promoted throughout Japan. From December 2022 to March 2023, we established the Ehime Digital Infrastructure Technology Consortium and participated in Ehime Prefecture's grant project to promote this government vision.

In June 2022, Ehime Prefecture's "Resilient Digital City Planning Oriented toward Multipolar and Distributed" was adopted as a government vision's "Digital Implementation Type TYPE2", which is an initiative that utilizes data linkage infrastructure and involves multiple service implementations. The Ehime Digital Infrastructure Technology Consortium was selected for the "Ehime Data Linkage Infrastructure Construction and Operation Project", a grant project to promote the government vision in Ehime Prefecture, and developed the data linkage infrastructure and sensor infrastructure that will serve as the core of Ehime's smart city promotion. This will contribute to the acceleration of smart city promotion by consolidating and visualizing various sensor information, live camera images, and IoT sensing information that are dispersed throughout the prefecture.

Regional and Industrial Revitalization

MENTENA, a Facility Maintenance Cloud Service Supporting DX in SME

Daily facility maintenance work is extremely important to keep factories running stably. Many equipment maintenance sites are supported by tacit knowledge based on experience and intuition, and are in reality managed by paper and Excel. In addition, technological innovation and a shortage of human resources have led to calls for the realization of DX, making it an urgent task to improve the efficiency and sophistication of facility maintenance operations.



MENTENA, our facility maintenance cloud service, is a cloud-based software that visualizes facility maintenance operations and contributes to DX. MENTENA enables the shift from paper and Excel management to system management (smartphone input and database), making on-site work more efficient and enabling effective management of inspection history.

By repeatedly making improvements in response to customer issues and needs, MENTENA keeps helping DX in equipment maintenance operations, leading to sustainable facility operations.

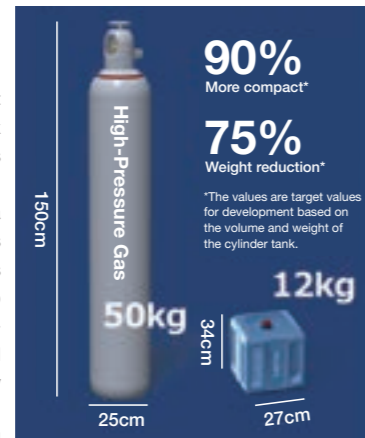
Realizing Smart Gas Network Concept using Next-Generation High-Pressure Gas Container CubiTan®

We have signed a business agreement with Atomis Inc. to realize a smart gas network concept for Indonesia and Malaysia. A smart gas network is a system in which gas is distributed without pipelines and its usage is remotely monitored and managed through IoT devices.

This business alliance will promote the construction and operation of a smart gas network utilizing CubiTan®, a next-generation high-pressure gas container developed by Atomis Inc. CubiTan® is a gas container that uses a porous coordination polymer (PCP*)/metallic organic structure (MOF*) to control methane gas at the nano-level, which has been difficult to compress at room temperature. This innovation will enable the downsizing and weight reduction of gas cylinders, which until now have been extremely heavy and large.

The utilization of CubiTan® will contribute to optimization of delivery and resource saving, and improve user convenience by understanding remaining capacity.

*PCP : Porous Coordination Polymer
*MOF : Metal Organic Framework



Conservation of Natural Capital and Biodiversity

Providing Sustainability Consulting Services

Co-prosperity with society is essential for companies to sustainably grow their existing businesses. Currently, in addition to climate change countermeasures against global warming, companies are also required to address risks to water and biodiversity, which they use as natural capital. In response to these corporate issues appealing to sustainability, frameworks such as TNFD* and SBTN* for disclosure and target setting, respectively, were developed and recognized globally.

On the other hand, the assessment and approach to natural capital are diverse and complex, and specialized expertise is required to properly assess risks and create opportunities. We contribute to the sustainable management of companies by providing a variety of consulting services from a global perspective, in addition to our skills and experience gained over more than 60 years of dealing with natural science.

In addition to consulting services focusing on research, assessment, strategy development, and information disclosure related to climate change and natural capital, we also provide a variety of support services to meet issues and needs, including CDP* and other disclosures, corporate branding based on research results, and support for collaboration with local communities and governments.

*TNFD : Taskforce on Nature-related Financial Disclosures
*SBTN : Science Based Targets for Nature
*CDP : An international environmental NGO that evaluates and discloses information on the strategies and efforts of companies and local governments to reduce climate change and greenhouse gas emissions.

Support for Implementation of Green Space Conservation Management and Environmental Programs in Nature Reserves of a Private Company

KM Biologics Co., Ltd., a member of the Meiji Group led by Meiji Holdings Co., Ltd., has a 6.35 hectare green space called KUMAMOTO KOMOREBI NO MORI, or “Komorebi Forest” in English, in its Kikuchi Research Center located in Kikuchi City, Kumamoto Prefecture. We are continuously supporting the implementation of forest conservation management and environmental programs in Komorebi Forest, including natural environment surveys.



[Forest Conservation and Management] Although the forest is rich in nature where *Satoyama** tree species grow, and owls and rare plants can be seen, there are some issues such as encroachment of bamboo and rough artificial forests that make the forest environment monotonous. Therefore, a green space conservation management plan has been formulated, and a variety of activities are being promoted, including vegetation zoning, forest management to improve forest biodiversity, and maintenance of nest boxes for owls and small birds, and egg-laying beds for insects.

[Environmental Programs] With the aim of promoting understanding of biodiversity and solving local ecological issues, we offer seasonal environmental educational programs for Meiji Group employees and their families to observe and protect forest creatures and prevent invasion, including craft making using felled bamboo. These programs will also be opened to local residents in the future.

*Satoyama : Japanese word describing an undeveloped woodland near a village



Promotion of Renewable Energy

Creating a “Port” that Responds to the Advent of a Carbon-Neutral Society Planning of “Yokkaichi Port Carbon Neutral Port Development Plan”

Ports are the hub of the global supply chain (from procurement of raw materials and parts to sales of products) through which more than 99% of import/export cargo passes, and are energy consumption areas where power plants, steel industry, chemical industry, etc., which emit large amounts of CO₂, are located. Developing decarbonization of Yokkaichi Port, which is a major energy import and supply base not only for the Chubu region but also for the whole of Japan, with its petrochemical complexes and other facilities handling approximately 10% of the country’s crude oil imports, is an extremely important initiative to achieve a sustainable society.

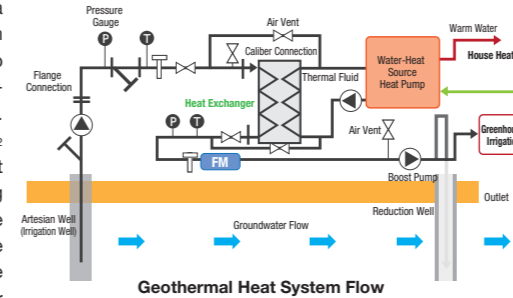
In order to create a carbon neutral port (CNP) at the Yokkaichi Port, we estimated the present and CO₂ emissions, and set reduction targets and plans through discussions at the Council. In addition, the Council discussed the development of an environment that enables the import and storage of hydrogen and fuel ammonia in large, stable, and inexpensive quantities, the upgrading of port functions in consideration of decarbonization, and collaboration with the cluster of coastal industries, and developed a road map toward carbon neutrality in 2050.



Groundwater-Utilizing Heat Pump System to Reduce CO₂ Emissions in Horticultural Greenhouses

In cooperation with local companies such as JA Tosa Kuroshio, an agricultural cooperative, and construction companies, we developed and installed a heat pump system using groundwater for winter heating of horticultural greenhouses in Susaki City, Kochi Prefecture. The introduction of this heat pump system reduces CO₂ emissions by about 55% and running costs by about 30% compared to conventional heating systems using fuel oil. This heating system takes advantage of the fact that the groundwater temperature does not change much throughout the year and is roughly the average temperature of the area, which reduces the power required by the heat pumps when heating the water.

Although Kochi Prefecture is known for its mild climate, the amount of fuel used to heat water in winter is not small. This heating system is attracting attention as one of the efforts toward carbon neutrality by 2050. Susaki City has declared to become a “Zero Carbon City” by 2050, with this groundwater heating system as one of its initiatives to achieve decarbonization, and has been adopted as a Decarbonization Leading Area by Japan’s Ministry of the Environment.



Promotion of Resource Recycling

Bangladesh Waste Management Capacity Strengthening Project

Since the 1990s, the amount of waste generated in Dhaka, the capital of Bangladesh, has increased rapidly due to population concentration and rapid economic growth. In 2000, waste management in Dhaka was so far behind that it was described as “the biggest concern left in Asia.” As such, Japan has been working on improvement activities in Dhaka through ODA of various schemes such as technical cooperation projects, grant aid, and Japan Overseas Cooperation Volunteers (JOCV). As a result, the city, which used to be infested with flies and pests from piles of garbage and smelled of rotting garbage, has become much cleaner. The waste collection rate has improved from 46% (2006) to 85% (2019), and we are currently working on the next phase which include intermediate treatment, waste reduction, and introduction of the 3Rs (reduce, reuse, and recycle).

For 20 years since 2003 we have continuously supported the improvement of waste management in Dhaka. We will continue to provide support by utilizing Japan’s experience and technological capabilities with the aim of creating a sustainable, recycling-oriented society.



Promote the Operation of Sustainable Waste Treatment Facilities Masuda District Wide-Area Clean Center

Although our 15-year operation contract with the Masuda Regional Clean Center in Shimane Prefecture, which was implemented in 2004 as a PFI* (BOT*) project and managed and operated by an SPC*, has come to an end, we provided support services to the Masuda Municipal Wide-Area Municipalities Association, to which the facility will be transferred, in order to ensure the continued long-term operation of the facility. Our services include supporting with the transfer procedures and the conclusion of a business agreement with the next operator. We are promoting a sustainable waste treatment facility operation business with the signing of a 7-year operation contract with the current SPC starting in FY2023 to extend the service life of the facility.

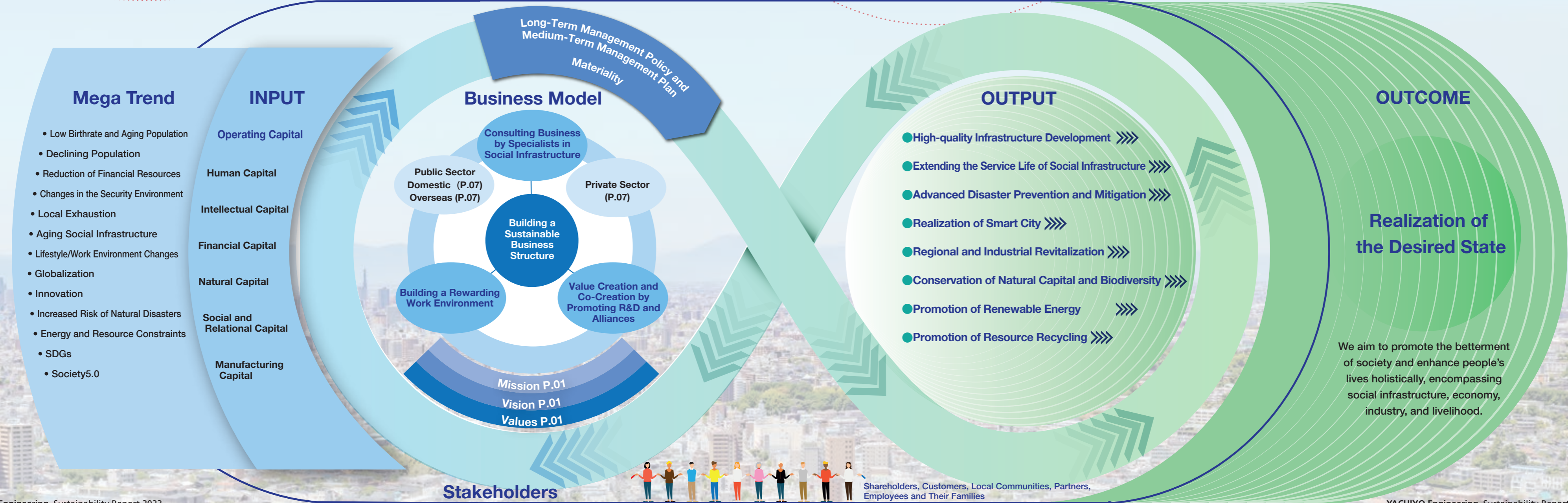
While waste treatment is an indispensable facility for resource recycling in the region, changes in the nature of waste and resource recycling strategies also occur, as well as aging facilities and increased maintenance and management costs. In order to ensure the continuous use of facilities while taking into consideration the financial burden on local governments, it is necessary to effectively carry out backbone improvement work and ensure stable operation over the long term, even after the operation project such as PFI has been completed. We will continue our efforts to realize a sustainable society.

*PFI (Private Finance Initiative) : A method to construct, maintain, and operate public facilities, etc., utilizing private-sector funds, management capabilities, and technical expertise.
*BOT (Build-Operate-Transfer) : A method in which the private sector builds a facility, maintains and operates it, and then transfers ownership of the facility to the public after the project is completed.
*SPC (Special Purpose Company) : A corporation established for a specific purpose



Value Creation Process

Our business model, based on our Mission, Vision, and Values, as well as the corporate capital we have accumulated as a comprehensive construction consultant, is aimed at solving social issues and achieving sustainable growth. We are committed to responding to social changes and needs, and promoting appropriate communication with all of our stakeholders.

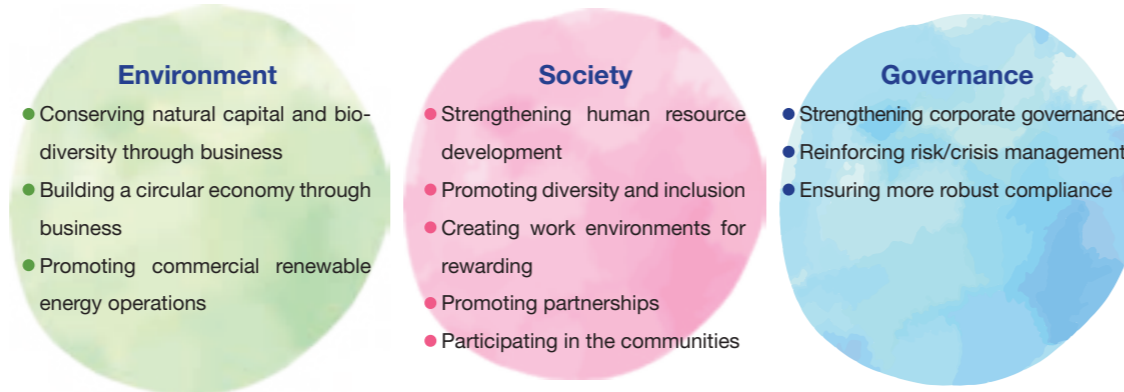


Sustainability

Basic approach to sustainability

As a general construction consultant, we have supported safe and prosperous living for people by providing technical services for social infrastructure in Japan and around the world. Based on our recognition that continuously promoting these business activities is in and of itself a contribution to the sustainability of society, we have positioned “sustainability management” as a company-wide policy in our current medium-term management plan and are strengthening our business and corporate functions from the perspectives of ESG and the SDGs.

In order to advance our company sustainability management, it is essential for all officers and employees to put into practice initiatives toward a sustainable society while sharing a high level of awareness, and we will also focus on awareness-raising activities and stimulating communication among our employees.



Commitment to SDGs

The Sustainable Development Goals (SDGs) were adopted by the United Nation in 2015 as global goals to build a more sustainable and better world by 2030. Various problems have emerged throughout the world in recent years, including climate change, energy issues, and the COVID-19 pandemic, and active engagement in the achievement of the SDGs is now expected of companies in addition to governments and international organizations.

Based on our belief that our business itself will lead to the achievement of the SDGs, we are contributing to the resolution of global social issues by promoting various initiatives.



Materiality

As a company whose mission is to contribute to the resolution of social issues, we have identified materiality that is particularly critical for us to address.

Materiality is divided into “social value creation and the resolution of social issues through our work,” response to which is mainly led by business divisions, and “social expectations regarding our management and business activities,” response to which is mainly led by corporate divisions, and each division has developed and put into practice strategies based on these issues.

Social issues	Creating social value and solving social issues through our work	Responding to social expectations regarding our management and business activities
Materiality	<ul style="list-style-type: none"> ● Developing sustainable and resilient social infrastructure ● Creating a future-oriented society ● Responding to climate change ● Supporting sustainable economic growth ● Promoting environmental conservation ● Promoting adoption of renewable energy ● Building a circular economy 	<ul style="list-style-type: none"> ● Ensuring regulatory compliance and risk management, to be ever more trusted in society ● Respecting diverse human resources and individuality, enabling a variety of working styles ● Promoting stakeholder engagement

How we identify the materiality

We established our materiality by analyzing the social environment while formulating our medium-term management plan and evaluating and analyzing activities in which to engage from the perspectives of various stakeholders. In the future, we will manage the progress of activities related to our materiality using KPIs, as well as reviewing them in a timely manner in response to changes in social and environmental issues.

A signatory of the UN Global Compact

We have signed the United Nations Global Compact (UNGC) and were registered as a participating company in June 2021. We have also joined Global Compact Network Japan, which consists of Japanese companies that have signed the UNGC.

The UNGC is a global framework for each company or organization to act as a good member of society and to achieve sustainable growth by exercising responsible and creative leadership. We endorse the Ten Principles of the UNGC in the four areas of “human rights,” “labor,” “environment,” and “anti-corruption.”



Maximizing co-creation and social value

Yachiyo Engineering has adopted “sustainability management” to achieve both the development of society and the sustainable growth of our company into the future. We discussed the future society offered by our “sustainability management” and its expected role with Junko Eda, an environmental journalist deeply knowledgeable about the interconnectedness of sustainability, environmental issues and business.



“For a thousand and more years”

TAKAHASHI In recent years, social issues are becoming increasingly diverse and complex. Issues such as disasters caused by climate change, regional decline due to shrinking populations, and global and social changes due to the COVID-19 pandemic are well known, but even the field of infrastructure development in which we are involved is increasing in complexity at an accelerating pace, and solving issues has become fraught with confusion.

However, I believe that treating this as a business opportunity rather than as a risk and seeing it as our mission to solve social issues and provide new value will make our existence more meaningful to society.

Therefore, we clearly defined “sustainability management” to achieve both the development of society and the sustainable growth of our company, not only now but also into the future, starting in our second medium-term management plan, which we formulated two years ago.

EDAHIRO Society is currently in a very difficult phase. Both the economy and society are moving at a faster pace, and immediate decision-making and action with great time efficiency are required of each employee. But taking a clear-eyed look at this society shows that problems are becoming increasingly complex, so we actually need to stop and think carefully on a long-term basis. Immediate decision-making and action can sometimes lead to superficial measures that only address the symptoms of problems. In the past, the focus has been on short-term activities to increase profit, but when it comes to getting to the roots of problems, I find that many people honestly believe this to be quite difficult.

What is now required globally is to consider problems not in terms of the individual elements in front of us but rather in terms of the systems made up of each element and the “connections” between them, to identify the underlying structures of problems rather than just their symptoms, and to transform those structures. These structural and systemic transformations cannot be achieved overnight, so we need to think on a longer timeline.



EDAHIRO Junko

M.A. in Educational Psychology, University of Tokyo
Professor, Graduate School of Leadership and Innovation, Shizenkan University
President, Mirai-Sozo-Bu Company

Ms. EDAHIRO conducts research on new paradigms for the economy and society, well-being, and ideas and examples to enhance resilience for a sustainable future. She seeks to create change through “communication” and to co-create a resilient, happy future through “connections” and “dialogue.”

effects and programs is certainly important, but at the same time, questions have arisen. Even though companies are making various efforts, why is the situation becoming worse on a global level? When a company considers engaging in sustainability, this inevitably raises questions of ROI, and investment is difficult if a business case cannot be made.

It helps to have a longer timeline, but companies that cannot do this end up only making investments that are sure to increase profit in the short term. Thus, essential issues remain unaddressed.

I believe that a time will soon come when the question of how to include research-level concepts and measures in corporate management, whether or not this is through investors, is raised. This will be

In this sense, the infrastructure business in which your company is involved has a longer timeline than ordinary businesses, so I believe that you already possess the fundamental way of thinking.

TAKAHASHI That is precisely the origin of our company name, which means “for a thousand and more years,” and we consider it our mission to contribute to the continuous growth of humanity.

EDAHIRO I believe that is your company’s defining characteristic.

Nowadays, many companies are required to produce results while facing the simultaneous pressures of the creation of social value and their own profit. Providing products and services through various projects and programs is certainly important, but at the same time, questions have arisen. Even though companies are making various efforts, why is the situation becoming worse on a global level? When a company considers engaging in sustainability, this inevitably raises questions of ROI, and investment is difficult if a business case cannot be made.

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I believe that a time will soon come when the question of how to include research-level concepts and measures in corporate management, whether or not this is through investors, is raised. This will be

a time requiring a business model like yours, a company with a long-term stance that makes it easier to adopt this way of thinking and has already done so.

TAKAHASHI In our case, even though our business is premised on shareholder return, it is very important for us to have a certain degree of flexibility to stand by our decisions. While accountability is necessary, I feel that ways of perceiving the world and public opinion have changed greatly over the past decade.

Beyond profit, toward maximum social value

SUZUKI Awareness and perceptions of social and environmental issues are also changing. While it is not just limited to younger generations, I believe that there is a growing desire to help tackle social and regional issues even in small ways by joining with many like-minded people to achieve things that cannot be accomplished alone, whether that be by reducing excess to enjoy a simpler lifestyle with an awareness that what we already have is enough, or by intentionally purchasing environmentally friendly products and foods or local products. This sentiment of committing in some way to social issues and striving together with others represents an opportunity to create various new services, and nowadays, these kinds of awareness and values have become highly regarded by society.

YOSHIHARA Creating a cycle of partnering with local communities and other companies to maintain win-win relationships while moving the economy along with the environment and society is not an easy task.

EDAHIRO There is a trick to it. In regional revitalization, a field in which I am involved, efforts by the government or private sector alone are sometimes unproductive or produce results that do not last.

For example, in a blue carbon project in which your company is involved in the town of Hirono in Iwate Prefecture, three fishing cooperatives, the town, local organizations and companies, and recently, even a regional bank are participating in activities that are among the most advanced in Japan. Local organizations are taking the lead in efforts that involve various members of the community. These kinds

of cases are gradually increasing on a trial-and-error basis in many different places. I believe that we are now at a turning point for positive change.

YOSHIHARA The Yokohama blue carbon project, in which we have been involved since 2011, was the first in the world to establish a mechanism for trading amounts of carbon dioxide absorbed via blue carbon as credits. This initiative led to the “J blue credit system” in 2022 and achieved a business model for environmental value in the field of “oceans,” which I believe has had an impact on society.

TAKAHASHI In terms of cycles, when I was involved in work on water circulation, tracing waterways upstream and downstream to the sea made me aware of their complexity and how they are connected to the activities of various people. I sensed that these can be consolidated into cycles of water and trees, of the ocean and materials, and of human connections and desires, and that at the same time, none of this can be sustained without a monetary cycle. It is important to create mechanisms that support regional economies by conveying and spreading people’s desires through monetary transactions. We are determined to be the kind of company that creates mechanisms in which people who wish to improve society can easily participate by opening up “co-creation” with business operators and individuals providing products and services that commercialize people’s desires.

EDAHIRO One example of such a mechanism is the “benefit corporations” defined by the corporate laws of many states in the US. Normally, it is considered important for a company to maximize profits for shareholders, but certified benefit corporations are



TAKAHASHI Tsutomu

President of Yachiyo Engineering

obligated to maximize their social value. These corporations no longer need to worry about being accused by shareholders of failing to maximize profit, and conversely, it may be accused of not doing enough to

maximize its social value. This enables companies to focus on real solutions to social issues rather than short-term shareholder profit. Such a trend can also be seen in Japan. I believe that it will become easier for companies to be proactive toward real, long-term solutions to social issues, but at the same time, a company needs to earn revenue to survive. I recommend that companies always keep some members with a long-term perspective on what is essential, even if they are only 5% of the workforce, in addition to those who earn short-term profits.



SUZUKI Hiromi

Environmental Planning Department, Domestic Division
Engaged in work supporting biodiversity and carbon neutrality

If you support this 5% of the workforce with a long-term perspective, even though they are still in the minority, you will be able to solve issues while achieving results and boosting your presence in the society.

A model of co-creation for the future

YOSHIHARA We are expected to play a role in solving diverse social issues and are proposing “Innovative solutions for the society” with a vision for one thousand years. Let us reexamine what the company aspires to and will achieve in the future.

TAKAHASHI First, we have adopted the YEC Declaration of Carbon Neutrality. Over the short term, we will achieve carbon neutrality as Scope 1 (direct) and Scope 2 (indirect) for greenhouse gas emissions by 2027. We are also continuing to make plans and challenge ourselves to achieve carbon neutrality for Scope 3 (other) emissions by 2050.

Nowadays, companies that fall short of their emission targets purchase offsets and credits based on the premise of reducing carbon dioxide emissions as much as possible, but our strength lies in our ability to contribute to carbon neutrality through projects such as blue carbon and plastic waste reduction. We are determined to contribute to society by being a company that actually earns its credits through hard work in the field, rather than merely solving individual issues by purchasing offsets or credits.

Looking at another example, the problem of plastic waste, although we have developed software and are studying plastic waste, we have not been able to adequately support further aspects such as countermeasures, management, results, and improvement. Our goal is to contribute to local resource recycling by providing “surveys, management, and resource recycling” as a single package, including support from planning to operation as well as local monitoring and improvement. We are currently working to establish this as a viable business by 2025.

EDAHIRO I have great hopes that public agencies, local governments, and private companies and organizations will create a cycle of “co-creation” through your company and achieve the revitalization of regional societies and economies. Thanks to your work and study sessions, etc., I have a positive image of your company and its achievements, but you deserve to be much more widely known to the world as an option of a problem-solving partner. If you can appeal more to entities outside the company, this will expand the cycle of “co-creation” and promote it at an accelerating pace.

In the future, I feel that “co-creation” will be a keyword. Rather than one-on-one efforts, it will be a question of how multilaterally problems can be tackled. The current challenge is to create mechanisms for properly circulating this as a Japanese model or a regional

model, so I hope that you will continue to provide new value to society.

TAKAHASHI Even though our company’s business itself makes great contributions to the SDGs and other aspects of sustainability, our challenge is to make each and every one of our employees more keenly aware of how this is personally relevant. Ideally, employees should view the connections between the work in which they are involved and the SDGs and local sustainability as their purpose.

Even beyond blue carbon, regional revitalization, and environmental projects, we would like to create environments and mechanisms that allow employees to feel, even a little, that their daily work is “helping people,” “interesting,” “enjoyable,” and “realizing personal growth.”

Keywords such as “aspiration” and “inspiration” are also very important when promoting initiatives. Our appeals outside the company will eventually be conveyed within the company as well, leading to greater employee awareness raising and engagement.

We will take Ms. EDAHIRO’s words to heart as we make further efforts.



YOSHIHARA Satoru

Environmental Planning Department, Domestic Division
Engaged in the globally groundbreaking Yokohama blue carbon project since 2011



Blue carbon event with public participation

of blue carbon in increasing the absorption and reducing emissions of carbon dioxide as tradable credits and selling and purchasing those credits.

In 2022, the nationally approved Japan Blue Economy (JBE) Association launched the J Blue Credit® project, which largely coincides with the content of Yokohama City’s original system, on a trial basis, and this project and activities are spreading nationwide.

*Carbon absorbed and sequestered by marine organisms such as seagrass (eelgrass) and seaweed, named in a 2009 report by the United Nations Environment Programme (UNEP)

Globally groundbreaking Yokohama blue carbon project

Yokohama City, which is actively working toward the achievement of a decarbonized society at an early stage, was among the first to focus on the potential of blue carbon* and launched a project utilizing it in 2011.

We have been involved in consulting on this “Yokohama blue carbon” project since it was launched. In 2014, the city introduced the Yokohama Blue Carbon Offset System, a globally unprecedented program for blue carbon. This system is aimed at further promoting marine environmental activities by certifying the effects

YEC Declaration of Carbon Neutrality

In July 2022, we submitted a commitment letter to the SBT Initiative (SBTI¹), an organization that certifies greenhouse gas emission reduction targets that are scientifically in line with the Paris Agreement as Science-Based Targets (SBT²), expressing in it our commitment to acquiring SBT certification within two years.

To contribute to the achievement of the SDGs, we are working to reduce the environmental impact of our customers’ businesses through our services as a general construction consultant. Therefore, we are working on the power-generation and heat-supply businesses of our corporate group to reduce the environmental impact of the society.

In the future, we will further contribute to the achievement of a decarbonized society by promoting procurement reforms such as renewable energy procurement and green purchasing in our own corporate activities and working to reduce greenhouse gas (GHG) emissions throughout our supply chain.

1: A joint initiative by the CDP, the United Nations Global Compact (UNGC), the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF)

2: Greenhouse gas emission reduction targets set by companies for the next five to ten years that are in line with levels required by the Paris Agreement

Examples of policies supporting decarbonization

Basic Policy 1 Reducing consumption

- Save energy by turning off lights when possible and by setting reasonable heating/cooling levels and air-conditioning ranges
- Adopt paperless operations
- Reduce new purchases through long-term use of equipment
- Reduce business travel by conducting meetings online

Basic Policy 2 Updating equipment and suppliers

- Switch to EVs for company-owned vehicles and rental cars for business trips
- Switch to LED lighting
- Switch to environmentally friendly air-conditioning systems

Basic Policy 3 Promoting renewable energy

- Introduce deemed renewable energy through the purchase of environmental value certificates³

Basic Policy 4 Investing in the carbon absorption/sequestration business and else

- Offset GHG emissions that cannot be reduced through basic policies 1–3 by investing in forest management and other absorption projects, utilizing government programs

3: Certificates that enable trading of the “environmental value” of electricity generated from renewable sources such as solar, wind, or biomass (not using fossil fuels)

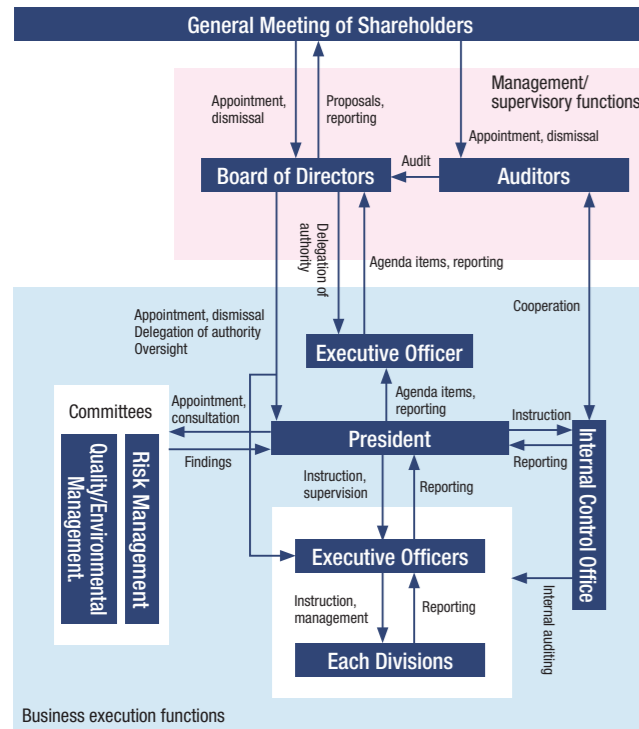


Corporate governance

Basic policy

Appropriate collaboration with diverse stakeholders including shareholders, customers, business partners, and local communities is essential in further enhancing our corporate value. To remain a company that is trusted by society and grows sustainably, we will promote the separation of management and business execution and work to reinforce and expand our corporate governance so that we can strengthen the supervisory functions of management and execute operations based on swift and resolute decision-making.

Corporate governance framework



Overview of framework

Our Board of Directors has six members in total, consisting of five executive directors and one non-executive director. The Board of Directors determines basic policies for management and operations and supervises the execution of directors' duties. Each director acts with integrity and a strong sense of ethics in compliance with our corporate philosophy and code of conduct, as well as internal rules. The rules of the Board of Directors also stipulate that if a director seeks to make any corporate transaction or to serve as an officer of another company, the matter must be implemented based on a resolution by the Board of Directors and the results be reported to the Board, thereby monitoring any conflicts of interest.

The Executive Committee deliberates and decides on matters such as specific executive policies according to basic policies for management and operations established by the Board of Directors.

We promote the separation of management and business execution through the executive officer system, delegation of authority, and other such measures and are working to expedite decision-making by corporate management and to revitalize business execution. We also promote the swift and smooth operation of the committee functions established to advance company-wide initiatives and reorganize

Directors	Total: 6 (incl. 1 non-executive director) Term: 2 years Frequency of board meetings: Generally once a month
Auditors	Total: 2 (incl. 1 outside auditor) Term: 4 years
Executive officers	Total: 20 Term: 1 year

them appropriately according to the demands of society and matters to be decided by management.

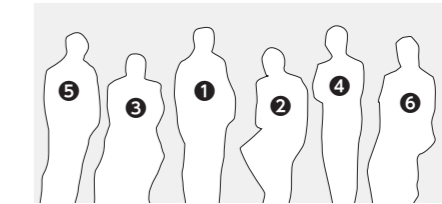
Internal controls

Our pursuit of greater corporate value and sustainable development is founded on corporate activities that respect social and corporate ethics in addition to compliance with the law, and to achieve this, we have developed a basic policy on internal controls for operating a fair, transparent, reliable, and efficient internal control system.

Based on this policy, the Internal Control Office, which was established to promote internal controls independently from operating divisions, audits business execution as well as the establishment and maintenance of compliance systems in partnership with auditors as a framework for ensuring that business execution complies with laws, regulations, and our articles of incorporation. We have also established and effectively operate a corporate ethics helpline in which information is received by the Internal Control Office, related departments, and outside attorneys as a reporting system aimed at the early detection and correction of violations.

As a framework for ensuring that auditors perform their duties effectively, auditors attend all officer meetings and state their opinions as needed, in addition to exchanging views with representative directors and other directors when appropriate. The Internal Control Office constantly coordinates to maintain and improve internal controls, such as by consulting with auditors regarding the internal auditing plan for each business year and by consulting and exchanging views on the results of internal auditing as well as matters pointed out or suggested as appropriate.

Board of Directors



Directors

- ① DEMIZU Shigemitsu, Chairman
- ② TAKAHASHI Tsutomu, President
- ③ HASEGAWA Kiyoshi, Executive Vice President
- ④ MIZUNO Takashi, Executive Vice President
- ⑤ MAMA Shuichi, Board Member, Managing Executive Officer
- ⑥ KOBAYASHI Yukihiro, Board Member, Executive Officer

Senior Managing Executive Officer

ISHIBASHI Yoshihiro
YOSHIKANE Hidenori

Managing Executive Officer

SENO Yoshiyuki
GOTO Kouji

Executive Officer

KAWABE Shinichi
YANADA Nobuka
SATO Takuya
TSUDA Mitsunori
SUMI Eigo
KASHIWAGI Hisanori

YAMAKAWA Eiichi
WATANABE Tomoaki
YAMANAKA Kenjiro
FUJII Katsumi
NAKAYAMA Hirokuni

Advisor

HANAOKA Norio

Auditors

SUZUKI Hiroyuki
SASAKI Kazunari

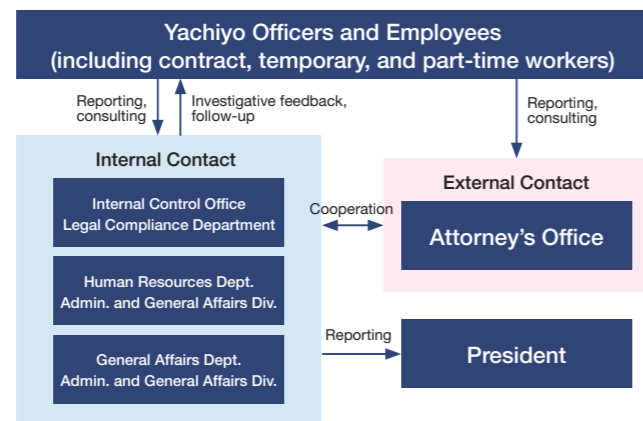


Compliance Helpline

We have established operating rules for an internal reporting system and set up a helpline (compliance, personnel treatment, and harassment) for officers and employees to consult directly with internal departments in charge or outside attorneys. This system is designed to be used when employees “struggle to make a decision,” “cannot report a suspected violation through the normal channels,” or “have a question in light of laws, regulations, or social norms” in the course of their work according to the Corporate Code of Conduct, and after a report has been dealt with, the system requires confirmation that violations of laws or regulations have not recurred, that informants and those who cooperated with the investigation have not been subjected to unfavorable treatment or harassment, and that corrective and recurrence prevention measures are functioning adequately.

Through this system, we will strengthen interorganizational communication and continually strive to be a company trusted by society where each and every one of our employees finds it comfortable to work.

Helpline Support Framework



Compliance

Basic Policy

Our management philosophy is based on treating our employees and customers with integrity and gaining their trust. To standardize this philosophy company-wide, we have developed and put into practice the Corporate Code of Conduct and Comprehensive Compliance Manual in cooperation with outside attorneys.

That manual positions the mental attitude of each individual who follows the principles of a strong sense of ethics and compliance with laws and regulations as “courageous conscience”, which is crucial in realizing our management philosophy. We believe this conscience is at the foundation of our corporate activities, and we are working to ensure the compliance with the ethical judgment based on this conscience.

Anti-corruption Initiatives

As consulting engineers, we take on social infrastructure development not only in Japan but all over the world, including in developing countries.

Many of our overseas projects are funded by official development assistance (ODA), and we consider maintaining a strong sense of ethics and complying with laws and regulations to be the most fundamental principles as a company involved in projects of such a highly public nature implemented based on the trust of the recipient country and the international community.

In our efforts to continuously secure and maintain opportunities for business transactions in overseas markets including ODA, we have developed basic principles for the prevention of bribery of foreign public officials, etc. to avoid becoming complicit in unfair competition through the bribery of foreign public officials or officers or employees of local private companies, and we have defined and put into practice specific rules to prevent the bribery of foreign public officials, etc. according to these principles.

To remain a company that provides value to society with a strong sense of ethics, we are also working to raise awareness of compliance in Japan, such as by regularly holding compliance seminars and by conducting seminars on the Subcontract Act for all employees, regardless of whether they are technical or clerical staff, to avoid unintentionally infringing on the rights of subcontractors.

Internal Reports in the Past Three Years

	2021	2022	2023
Via internal contact	1	2	1
Via external contact	1	0	0



Risk Management

Basic Policy

We have set up a crisis management committee chaired by the President as an organization to oversee crisis management and developed a crisis management framework to foresee and avoid potential management crises, along with quickly identifying any crises that occur and minimizing damage and restoring normal management activities. When a crisis occurs, crisis response headquarters are set up as an emergency organization to respond to it accurately.

Risk and Crisis Management Framework

The crisis management committee strengthens the risk and crisis management framework by planning, managing, implementing, evaluating, and improving documents related to risk and crisis management and various risk countermeasures through a PDCA cycle.

Risk Assessment

Company-wide risk assessments (analysis and evaluation of the present state of risk countermeasures in the company) are implemented every year to understand the full scope of business risks, identify risks

with a major impact on management, and foster and raise employees' awareness of risk management. Through risk assessments, we identify risks that require countermeasures as a matter of highest priority, add new rules and countermeasures for those risks as needed, and update our risk and crisis management framework.

Business Continuity Planning

In the event of a large-scale natural disaster or the outbreak of an infectious disease, we recognize that we have a social responsibility to protect the safety of employees and their families as well as employment, to fulfill the trust and demands of customers by minimizing impacts on our business, and to support the recovery of disaster-affected areas as a company involved in social infrastructure. To fulfill that responsibility, we have developed a business continuity plan along with procedures to respond quickly and appropriately according to the scale of the disaster, such as by setting up disaster response headquarters, which we review and improve as needed based on the results of regular trainings conducted annually.

Information Security

To promote corporate activities that make effective use of the most advanced ICT and to appropriately manage confidential personal, corporate, and organizational information obtained through our business activities, we have established and put into practice information security rules and implement measures to prevent information leakage due to misuse of systems, system failures, and cyberattacks. We ensure thorough familiarity with all rules and are improving information security literacy by implementing information security education and training for our employees.

In addition, our divisions that handle IT and ICT infrastructure have been certified to the international standard ISO 27001, maintaining a high level of information security management.

Quality and Environmental Management

To faithfully fulfill the trust and demands of our customers and society and to achieve greater customer satisfaction through continuous improvement, we have established and maintain a quality management system that conforms with ISO 9001.

In addition, we have established and maintain an environmental management system that conforms with JIS Q 14001 to contribute to the sustainable development of an environmentally friendly society through our corporate activities.

To operate, manage, and improve these systems, we have set up a quality and environmental management committee that discusses and decides on key issues (creation and revision of manuals, development of management programs, etc.), keeps employees informed, manages operating conditions, and verifies and improves the systems.



Human Resource Development

Basic Policy

Our management philosophy is based on “Respecting humanity and management by all members,” and these values are reflected in our organizational vision of “innovative solutions for the society.” The source of our value to date and into the future toward the resolution of various social issues is nothing less than human resources.

We aim for autonomous human resource development that enables all of our employees to clearly understand the roles required of them

according to their position or rank, to find their jobs rewarding, and to achieve personal growth. The company supports employees willing to improve and challenge themselves by providing them with opportunities and training programs both on and off the job.

These efforts are also reflected in our personnel system “Wellby,” where they are linked with evaluation and compensation as a mechanism for employees to fully exercise their skills toward the achievement of business objectives.

Optimizing Wellby with Agile HR

To realize our human resource policy of making work rewarding for employees, we will establish and effectively operate the personnel system along with agile HR for necessary improvements. An agile approach means to respond appropriately, quickly, and flexibly according to the situation.

As the management environment changes, we will entrench and continuously improve Wellby through the agile introduction,

verification, and improvement of measures to enable a high level of performance by employees, autonomous organizational conduct, and increased motivation.

Effective Personnel Evaluation and Assessment

For effective personnel evaluations, it is important that all employees understand the roles required of them and that there are clear standards for the assessment of performance.

We define the job duties of each rank and behavioral characteristics that lead to results as YACHIYO Competencies (YCs). YCs are set for each career path, such as management and specialists, in addition to rank to encourage the growth of individual employees according to their working styles and motivations and allow them to be evaluated appropriately.

Performance evaluations also assess goal achievement from the perspective of OKR*. Corporate objectives are broken down and linked from departments to sections and from sections to individuals, creating an environment in which individual employees can challenge themselves to achieve target levels set with the agreement of their supervisors while remaining aware of larger goals beyond their own performance.

Opportunities are provided for individual feedback on evaluation results from supervisors to subordinates and for verification within teams to ensure communication-based evaluation and growth opportunities.

*Objective & Key Results

Comfortable Workplaces

We promote diversity and inclusion as a company-wide policy and have implemented measures to respect the individuality of each and every one of our employees, achieve diverse and flexible working styles, and develop comfortable working environments. In addition, we aim to create workplaces where employees can gain opportunities to grow through their jobs, work with passion, challenge themselves, and maintain a work-life balance.

Specific examples of measures include introducing a telework (hybrid work) system, implementing a satellite office system on a trial basis, setting flexible working hours for employees engaged in child-care or nursing care, and introducing a system of reassignment for nursing care. In the future, we will continue to examine the optimal work-life balance as working styles and values change dramatically throughout society.

Support in Career Development

Sustainable corporate growth requires human resource development and vibrant organization building based on management plans. That is why we consider it important to promote support for career development that enables both individuals and organizations to grow by enhancing employees’ abilities and skills, alongside routine management based on personnel evaluations and assessments.

We have adopted a self-reporting system for employees to plan their own careers, giving them opportunities for feedback and reassignment to achieve those plans. We also systematically devise training programs on topics such as global human resource development, ICT, and business creation in addition to basic training by job level and position.

In the future, we will promote reskilling and support recurrent education so that we can continue to provide value to society.

Qualification Support, Training Programs

We actively support employees in acquiring the qualifications they need for work, such as a professional engineer, RCCM, or first-class architect. For example, for employees studying to become professional engineers, we provide in-house training to enhance their ability to identify and organize issues, guidance from senior engineers in the same field, and practice examinations, along with qualification allowances after certification.

We are also focusing efforts on human resource development to foster engineers with technical ethics in addition to specialized

knowledge, such as by implementing level-based training and setting up a temporary transfer system and a system for employees to enroll in graduate school (doctoral programs).

Business Brainstorming

To achieve our long-term management policy and medium-term management plan, we hold business brainstorming sessions open to all employees aimed at raising company-wide awareness of business creation as well as education and training.

In 2022, applicants from throughout all branches including both technical and clerical staff participated in the event, from the identification of customers, issues, and solutions to the development of business models, in a total of six teams focusing on “food issues,” “local issues,” “primary industries,” “disaster prevention,” “health issues,” and “environmental issues.”

For 2023, we have invited outside specialists in business creation to work on activities.





Labor Practices

Basic Policy

Our long-term management policy and medium-term management plan lay out “strategies for humanity” and clearly express our commitment to providing a rewarding work environment to all employees based on our management philosophy. We support work-life balance through diverse and flexible working styles with the introduction of telework and flextime systems.

We have also set up in-house welfare facilities implementing treatments such as acupuncture, massage, and heat therapy and promote the health of employees through measures including follow-up examinations based on the results of health checkups, stress checks, and in-house influenza vaccinations.

Health and Productivity Management

We actively develop initiatives to maintain and improve employees’ health from the perspective of well-being and have been continuously recognized as a Certified Health & Productivity Management Outstanding Organization since 2017.

Our in-house health committee also meets regularly to implement efforts to make recommendations regarding health and sanitation.

We will work to improve the health and satisfaction of each and every one of our employees and aim to be a company that is continually trusted by society based on our management philosophy of contribution to society.



Health and Productivity Management	
1	Management philosophy, management plan, and Corporate Code of Conduct clearly stipulating physically and mentally healthy, comfortable workplace environments
2	Establishment of in-house welfare facilities implementing treatments such as acupuncture, massage, and heat therapy
3	Promotion of employees’ health through measures including follow-up after health checkups, stress checks, and in-house influenza vaccinations
4	Support for employees taking leave or returning to work in partnership with occupational physicians and EAP counselors
5	Enforcement of no-overtime days and encouragement of taking annual paid leave to promote consecutive leave
6	Introduction of a flextime system and a system for taking annual paid leave in hourly increments (40 hours per year)
7	Implementation of health guidance in partnership with health insurance associations as well as research projects on health and productivity management



Diversity and Inclusion

Aiming for an environment in which all employees can play an active role regardless of nationality, gender, or disability, we are promoting the recruitment of diverse human resources and flexible working styles through measures such as increasing the number of foreign employees, holding exchange events, and making efforts to raise the ratio of female managers. We are also working to raise employees’ awareness by regularly holding seminars on harassment and other topics.

Action Plan In Line with Laws Supporting Women’s Advancement

We are making and implementing plans to promote the advancement of female employees, such as participation rates of at least 95% in various education and training programs by 2024.

Disabled Recruitment

To realize diverse workplaces, we are actively working to promote the hiring of people with disabilities. Each office sets employment targets and works to achieve them, and to realize comfortable workplaces for employees with disabilities, we have also introduced a system of one day of special leave per month for disability-related hospital visits.

Extended Retirement

We have extended the age of retirement from 60 to 62. By recognizing experienced human resources who have contributed to the company for many years as strategic assets, we aim to resolve human resource shortages, maintain a stable organization, and extend the transmission of valuable knowledge and skills to develop the next generation. We have also revised compensation during post-retirement rehiring to keep rehired employees motivated by reducing worries about their livelihoods through the provision of stable income.

Childcare and Nursing Care Support

We have established various leave systems in accordance with the Act on Childcare Leave and Caregiver Leave. We support childcare by encouraging both male and female employees to make use of childcare leave and support nursing care by implementing in-house seminars and enhancing our nursing care system, thereby ensuring that employees can continue working as they face changing life events.

Helpline Support for a Variety of Issues

We have set up helplines for harassment, corporate ethics, and personnel treatment both within and outside the company so that employees do not need to struggle with issues alone. In the event of a report from an employee, we respond promptly to prevent recurrence.

Environment

TOPICS Environmental Topics: In Harmony with Nature

To pass limited resources on to the next generation, we engage in environmental conservation leveraging unique local characteristics. We also value and promote efforts to expand these activities and raise environmental awareness.

Eat and Learn about SDGs Nutrition Education Program at Schools across Japan

Our new nutrition education program “Eat and Learn about the SDGs” incorporates plant-based foods* into school lunches and cooking practice and actually feeds them to students so that students can become more aware of various social and environmental issues connected to plant-based foods and learn about efforts to achieve the SDGs.

We will expand the program to junior high schools across Japan to contribute to the creation of a sustainable society.

*Foods made completely (or mostly) from plant-derived ingredients. They are attracting attention around the world as more people incorporate plant-based foods into their diet for health reasons or choose them out of consideration for the global environment, in addition to vegetarians.



IKEDA Yukitaka
Business Planning and Development Division

Contribution to the Environmental Education for the Future

In contemporary educational environment, there has been an increase in curricula and content that are difficult for schools to implement on their own, making it necessary for companies to participate actively. We are contributing to the development of the children who will support the future of Japan through new lessons leveraging our diverse human resources and experiences.

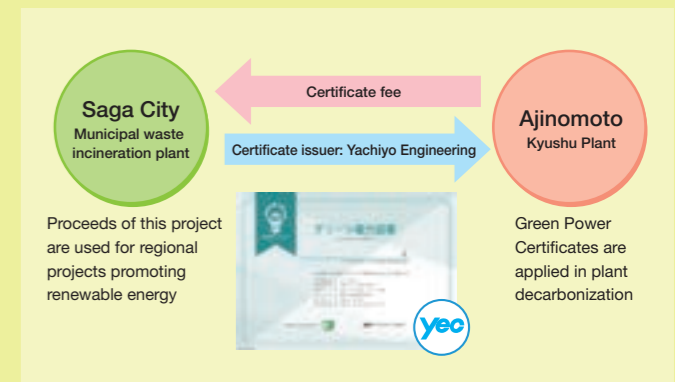
Green Power Certificates of Saga City Issuing Green Power Certificates in Saga

At Saga City Waste Incineration Plant*, which has been working on some of the most advanced energy utilization in Japan, we are implementing a new project to sell Green Power Certificates. In this project, Saga City generates biomass power (from fuel consisting of raw garbage and else collected in the city), and we trade the environmental value of the power in the form of Green Power Certificates issued by us and certified by a third party (Japan Quality Assurance Organization).

We have been selling certificates to the Kyushu Plant of Ajinomoto Co., Inc., located in Saga City, for biomass power generation at the Saga City Waste Incineration Plant starting in April 2023.

Through this project, we will support companies in achieving carbon neutrality and promote the realization of a decarbonized society.

*Saga City Waste Incineration Plant: Initiatives such as verification tests of carbon dioxide separation and capture and making effective use of biomass resources

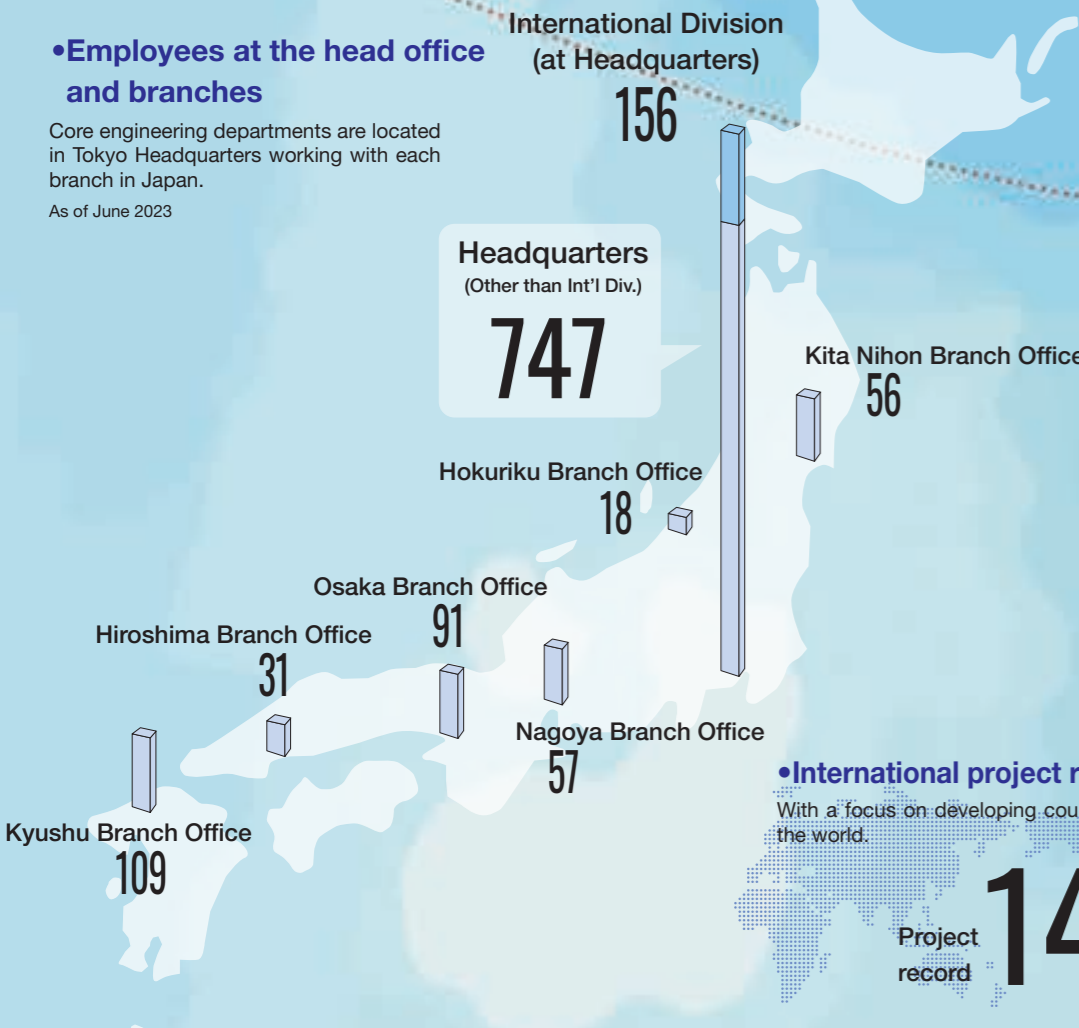


At a glance

A proud 60-year history of achievements as general consulting company active in 149 countries and regions around the world

•Employees at the head office and branches

Core engineering departments are located in Tokyo Headquarters working with each branch in Japan.
As of June 2023

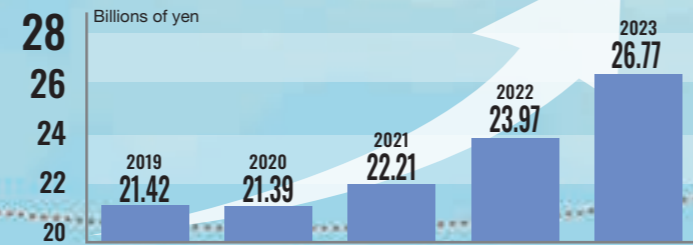


•International project record as of 2022

With a focus on developing countries, we work all over the world.

Project record **149** countries/regions

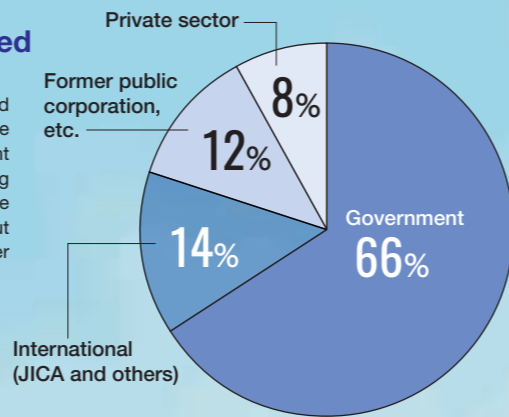
•Net sales



•Orders received

July 2022–June 2023

Sales have also increased for business outside the public sector in recent years. We are expanding activities not only in the construction segment but also in a variety of other fields.



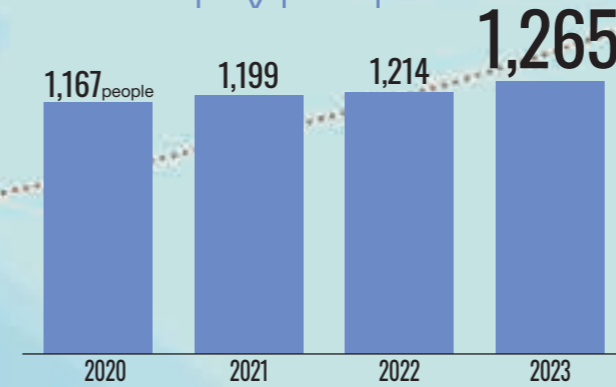
•Annual projects

As of June 2023

1,576 annual projects

•Employees

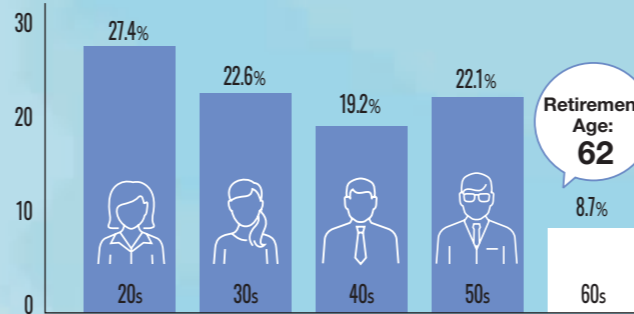
As of June 2023



•By age group

Nearly the same proportion of employees are in their 20s to 50s, but with a slightly higher level of those in their 20s, we are inviting company for early and mid-career employees.

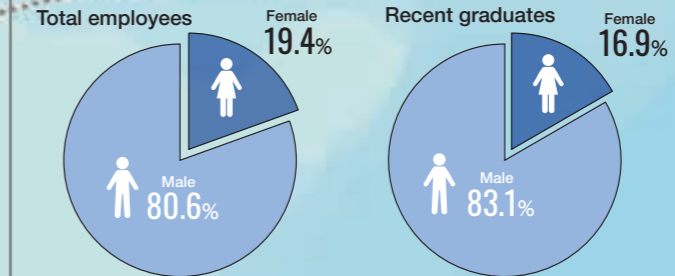
As of June 2023



•Female employees

There are 245 female employees out of a total of 1,265. Female employees account for 16.9% of newly hired graduates.

As of June 2023



•Female managers

There are 9 female managers out of a total of 331, 2.7% of the total. Efforts toward a higher ratio will be continued.

As of June 2023



•Employees taking childcare leave

A full 100% of our female employees take childcare leave and return to work. More male employees also take childcare leave than the national average. We will continue to encourage all employees to take this leave.

As of June 2023



•Consulting engineer registration

As a general engineering consultant registered in 19 disciplines, We can meet diverse client needs by integrating a broad range of technical expertise for individual projects.



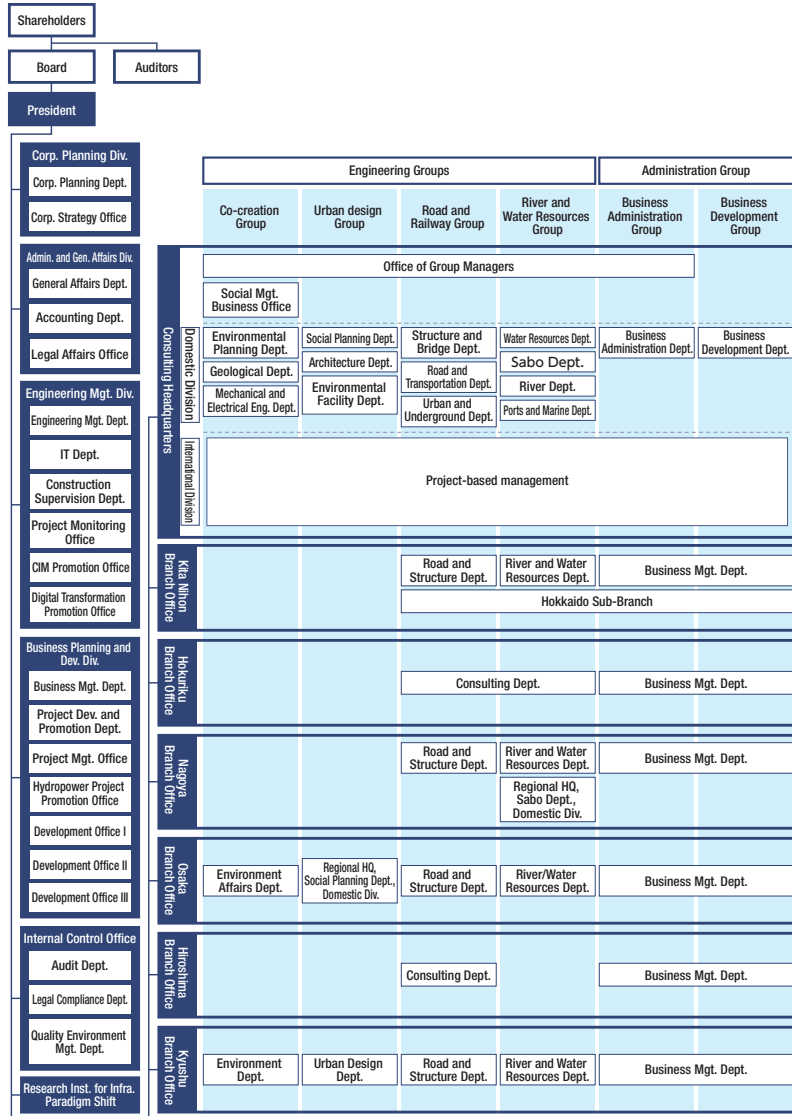
Registered in **19** of 21 engineering disciplines

•Registered professional engineers

As of June 2023



Organization



(As of July 2022)

Company Profile

- Company Name** Yachiyo Engineering Co., Ltd.
- Establishment** January 29, 1963
- Registered Address (Headquarters)** CS Tower, 5-20-8 Asakusabashi, Taito-ku, Tokyo 111-8648 Japan
- Capital** JPY 450 million
- Amount of Contracts** JPY 26.77 billion
- Number of Employees** 1,265
- Business Areas** Consulting engineering services in the following fields:
Urban Planning, Private Sector Development, Architecture, Solid Waste Management, Water Supply, Wastewater, Water Resources Management, Roads and Bridges, Railway, Transport Planning, Electricity and Power, Renewable Energy, Broadcasting, Information and Communication Technology.
- Registration**
 - Registration as Engineering Consultant
Certified by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan on October 1, 2019
 - Registration as Surveyor
Certified by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan on April 8, 2019 (Registration Number: 15-613).
 - Registration as First-class Architect Office
Certified by the Tokyo Metropolitan Government on March 14, 2017 (Registration Number: 4554).
 - Registration as Geotechnical Consultant
Certified by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan on November 30, 2017
 - Registration as Weights and Measures Inspector
Certified by the Tokyo Metropolitan Government on November 1, 1993 .
Certified by the Governor of Tokyo on November 1, 1993
 - ISO/JIS certification
JIS Q 9001:2015 Quality Management System
JIS Q 14001:2015 Environmental Management System
JIS Q 27001:2014 Information Security Management System (Information Technology Department)
JIS Q 55001:2017 Asset Management System (Social Management Business Office of the Consulting Headquarters and Consulting Section V, River Department of the Consulting Headquarters)

