

Navigating Japan's Industrial Crossroads

With Japan's key industrial sectors at a crossroads amid challenges laid bare by COVID-19, energy shifts, and chemical industry dynamics, resilient firms across the country continue to innovate.

Challenges ranging from the disruptive impact of COVID-19 to the complexities of the U.S.-China decoupling have precipitated significant disruptions in the global supply chain over the past three years. Corporate entities are therefore actively seeking supplier diversification to bolster reliability. Renowned for their steadfastness and cutting-edge technology, Japanese firms find themselves in a compelling position amid this dynamic landscape, with the weakened Japanese yen adding an extra layer of uniqueness to the perceived opportunity.

"Japanese suppliers, both large companies and small and medium-sized companies like ours, all see this time as an opportunity," says Shinji Okuda, President of TAKUWA Corporation, a leading company in flood control and disaster prevention. "Over the past three years, we Japanese have invested aggressively to increase our reliability and advanced technology. We have worked hard to prepare for when the economy recovers and gets back on track. We intend to make the most of the opportunity now that the global market is showing strong interest in Japanese suppliers."

Yasuhiro Saito, President of NIHON GENRYO – a pioneer in filter manufacturing and water treatment solutions – expands on some of the challenges faced by Japanese industry over this recent disruptive period, and how perseverance has seen such hurdles effectively overcome.

"We previously sourced our raw materials from countries such as China, Malaysia, Cambodia, and South Korea. However, COVID-19 disrupted the functioning of governments in these countries, leading to problems in raw material procurement," he explains. "Additionally, the devaluation of the yen made these imported raw materials more expensive for us. To resolve these issues, we decided to reconsider our raw material sourcing strategy and considered the possibility of finding domestic sources. Now that COVID-19 restrictions have eased, the projects and activities we initiated are finally gaining momentum, and we are starting to receive projects from overseas clients. The trend of a cheaper yen has also been advantageous for us, as it has improved our price competitiveness."

When it comes to competing on the global market, Japanese firms possess an extensive wealth of accumulated knowledge, technological innovation, and manufacturing capabilities, highlights Tetsunori Kondo, President of Mutsumi Industry, a leading die maker. "Japanese companies adhere to quality standards that surpass those of any other nation on the planet," he says.

"I can point to a number of primary advantages that, in my view, Japanese suppliers enjoy within the prevailing global macroeconomic framework. Foremost is quality; especially in our realm of stamping-die manufacturing, quality stands as the de facto metric for our business. Another key strength lies in the

national character of the Japanese people. Japanese individuals dedicate their lives to their crafts. They invest their all into production, aiming to manufacture top-quality products, unwavering in their dedication to the most crucial element: customer satisfaction."

Japan's Shift to Resilient Power Sources

The Japanese economy has encountered several challenges, with its energy sector being a particularly critical aspect. One of the most significant hurdles has been the heavy dependence on energy imports, constituting a staggering 95% of its total energy consumption. This reliance on external sources places Japan in a vulnerable position.

The turning point for Japan's energy landscape occurred in 2011 with the Fukushima Daiichi nuclear disaster. The catastrophic event not only resulted in immediate loss of life and widespread displacement but also left an enduring impact on the nation's energy policies. The Fukushima incident raised serious concerns about the safety and viability of nuclear power, prompting Japan to reevaluate its energy strategy. One of the primary changes was a deliberate shift away from nuclear power as a primary energy source, with the government recognizing the need for a more diversified and resilient energy portfolio.

As part of the new direction, Japan has now begun to prioritize renewable energy sources to meet its energy demands, introducing incentives and subsidies to encourage the development and adoption of renewable technologies. The government has since set ambitious targets for renewable energy capacity, aiming to not only enhance energy security but also to contribute to global efforts in mitigating climate change. Despite these positive strides, the transition to a more sustainable energy landscape is not without its own set of obstacles, namely the intermittent nature of renewable energy sources, such as solar and wind, posing new complexities in terms of energy storage and grid management demands. Additionally, the capital-intensive nature of renewable energy infrastructure requires substantial investments, making the transition both a technological and economic challenge.

In this respect, many in Japan still defend nuclear as having a crucial part to play, highlighting its potential to reduce industrial manufacturing costs, which are significantly high compared to global benchmarks. The narrative in some quarters is that Japan's current energy mix is robbing it of its international competitiveness.

"While renewable energy is an excellent energy source for Japan, its adoption comes with a considerable cost," says Takaaki Achiha, Representative Director of Achiha, a leading renewable energy solutions business. "Generating sufficient variable renewable energy can be challenging due to the substantial energy requirements. I believe that the ideal energy mix should be a



Hideshige Tsubouchi, President,
Tokyo Boeki Holdings Corporation

combination of renewable energy, thermal energy and nuclear power. However, the majority of this mix should be composed of renewable energy sources. Going forward, in order for Japan's wind power to flourish it is vital that we continue to collaborate with overseas companies to leverage their advanced technologies."

Morimasa Matsuda, President of Daiwa Energy & Infrastructure, generally agrees with this sentiment. "To be honest, the best energy mix changes over time, and it is difficult to foresee what will be the optimal mix for 2050," he says.

"However, the ultimate target is to achieve carbon neutrality and zero emissions by 2050. Currently, we are searching for the best energy mix to achieve these goals. Technological advancement is crucial in this regard. For example, if solar power with batteries becomes advanced enough to significantly reduce costs, it could be the primary energy source. However, at present, solar power does not possess that capability. Therefore, nuclear energy remains a viable option, especially with the development of small-scale nuclear power plants called SMRs (Small Modular Reactors)."

With three plants in Osaka, Nagano and Aomori prefecture, Misuzu Seiko is one such company involved in this field, whose R&D teams are developing products necessary for the processing of spent nuclear fuel. "At present, the focus of R&D is on products for the Fukushima Daiichi Nuclear Power Plant, which was decommissioned due to damage caused by the significant earthquake of 2011," says the company's president, Nobuharu Sato. "The ensuing meltdown within the reactor resulted in a substantial volume of contaminated water. To address this challenge, the Advanced Liquid Processing System (ALPS) was introduced to treat the contaminated water, utilizing ceramic filters. We are currently involved in a project to develop a high-performance filter, which will be delivered to Fukushima Daiichi in mid-2024, and operational in ALPS."

As part of this evolving energy mix, Japan has also been actively incorporating hydrogen as part of broader efforts to diversify energy sources, reduce carbon emissions, and enhance energy security.

"To realize a decarbonized society, I think that hydrogen is a good option for Japan compared

with other renewable options,” says Hideshige Tsubouchi, President of Tokyo Boeki Holdings, which recently developed the world's first rigid type loading arm for liquified hydrogen with Kawasaki Heavy Industries (KHI). “We as a company have been envisioning a future of a hydrogen society while the government promoted the vision, but right now it is hard to tell exactly what form of the hydrogen society we would need; it could be a liquid form, a gas form, or even an ammonium form. We were trying to get involved in one of the many options out there, and KHI contacted us to develop a loading arm dedicated to liquid hydrogen.”

He adds: “The uniqueness of Japan is that it is an island nation, and if the country is unable to produce enough energy it means we have to rely on imports. KHI is now focusing on transporting hydrogen from overseas to Japan in the form of liquid because you cannot transport it as a gas. By liquefying the hydrogen you can reduce its mass by one over eight hundred. Additionally, the Japanese government is actively subsidizing multiple possible options and the KHI project is one of them, in order to promote the pursuit of a hydrogen society.”

Chemical Industry: Thriving Amid Challenges

When it comes to Japanese manufacturing, specifically the chemical industry, the country also faces challenges when it comes to production. In this case, the production of base chemicals. This is due to regional competitors lowering their costs. However, Japanese chemical manufacturers remain leaders in highly functional and specialized materials. Furthermore, Japan can count on a variety of *chusho kigyos* (small and medium-sized enterprises) who are able to develop niche chemical and material technologies.

“One of the hallmark traits of the Japanese chemical industry is the enduring longevity of its companies, with many having been in operation for over 50 years and some for even over a century,” says Yoshiki Minoura, President of

Kansai Catalyt. “The strength of this industry resides in the extensive core technologies amassed over this extended span.”

These core technologies have enabled the Japanese chemical industry to develop key products and innovative technologies; a strategy that has ensured a harmonized and sustainable business approach.

“In our case, our base technology revolves around batteries, and this has steered our operations for more than 50 years,” adds Mr. Minoura. “Nevertheless, our reliance does not solely hinge on battery technology, and we have strategically applied our technology and expertise to other areas such as electronic components, catalysts, and surface treatments. Our capacity to cater to the requirements of these distinct sectors has been instrumental in maintaining the stability of our business. Another strength of the Japanese chemical industry is its unwavering commitment to quality, a trait that is synonymous with Japanese products and services. Japanese chemical companies have a high level of experience in quality control and process control that has been honed by responding to the strict quality requirements of Japan, and we continue to achieve high quality while making improvements based on this.”

Super Resin, a pioneer in fiber reinforced plastics (FRP) molding, is another example of this dedication to quality, having for over 60 years established its expertise in advanced composite materials offering one-stop solutions tailored to the requirements of its customers, including parts manufacturing for aerospace equipment, LCD/OLED and semiconductor manufacturing equipment, industrial machinery, and defense. “In addition to utilizing high-quality composite product design and manufacturing technologies, we propose optimized one-stop solutions by applying advanced design technologies that cover every stage through electrical, mechanism, and optical design,” explains Akio Asakura, President of Super Resin. “We now have over 60 years of

experience specializing in FRP, firstly in Glass Fiber Reinforced Plastics (GFRP) and later in Carbon Fiber Reinforced Plastics (CFRP), and throughout our history we have tended to produce high-mix-low-volume, providing cutting-edge technologies and products to the market.”

When it comes to the cleanup of toxic and chemical waste for land development, Eco-Cycle Corporation has developed a comprehensive approach with a key strategy of ‘in-situ remediation’ – which has revolutionized the process of cleaning soil and groundwater contaminated with toxic chemicals.

“We are committed to changing the perception of real estate developers and manufacturers toward handling the problem of soil pollution,” says President Dr. Srihari Chandraghatgi. “In Japan we have pioneered developing and applying state-of-the-art in-situ remediation technologies to clean soil and groundwater contamination. And we have worked on hundreds of sites.”

Resilience and Innovation Define Japan's Industrial Evolution

In this dynamic landscape of Japanese industry, challenges leftover from the pandemic combined with ongoing global shifts continue to be met with resilience and strategic innovation. Facing disruptions, corporations pursue supplier diversification and cutting-edge technology, capitalizing on the unique strengths of Japanese culture and *monozukuri*. Whilst the aftermath of the Fukushima disaster has prompted an overdue shift to renewable energy, the debate on the optimal energy mix for Japan going forward persists, highlighting the continued importance of nuclear power for industrial competitiveness. In the chemical industry, challenges in base chemical production are countered by a commitment to quality and innovation. As Japan adapts, its firms stand ready to seize opportunities with adaptability and a focus on strengths in a rapidly changing world.

SHO-BOND MATERIAL Eyes Global Expansion

Leader in construction maintenance meeting the challenge of aging infrastructure.



“We hope to be able to collaborate on new material development and products.”

Shigeru Naraoka, President,
SHO-BOND MATERIAL Co., Ltd.

Through SHO-BOND Holdings' merging of subsidiaries SHO-BOND Chemical and SHO-BOND Coupling, SHO-BOND MATERIAL was established to provide a wide range of solutions and materials for construction maintenance and disaster prevention. The company boasts a portfolio of some 500 products for civil construction projects, including

pipe couplings, resins, expansion devices and adhesives.

In Japan, the field of civil engineering and maintenance will continue to be a growing market, which bodes well for SHO-BOND MATERIAL and the wider group. “It is important that we continue to work on improving the technology, materials and equipment

used. We have been vigorously engaged in joint R&D projects with other players in the market to enhance the overall market,” says Shigeru Naraoka, President of SHO-BOND MATERIAL.

In the wider global market, the company aims to strengthen its business in the ASEAN region, with manufacturing operations already established in Thailand. Meanwhile in the U.S., it has partnered with Structural Technologies (ST) to support infrastructure maintenance there. Mr. Naraoka adds: “ST has a very strong track record in sewer-related business and we look forward to partnering with them in this area as well.”



Restraining chain



Straub couplings



www.sb-material.co.jp/index.html

Achiha Aiming to Become Japan's Leading Renewable Energy Company

The company is constructing an integrated structure for whole wind power project life in both the onshore and offshore wind industry in Japan.



"We always strive to make comprehensive improvements, and recognize that we need to go beyond our company's boundaries."

Takaaki Achiha,
President, Achiha Co., Ltd.

First established in 1923 as a transportation and installation firm, Achiha Co., Ltd. has since diversified into the renewables sector and is now one of the leading wind turbine operations and maintenance companies in Japan.

Where energy is concerned, the picture in Japan is, of course, complex, with 95% of the country's supply currently imported. For his part, Achiha President Takaaki Achiha is in no doubt about the island nation's ideal energy mix.



FTV blade lifter

"A balance between variable renewable energy, fixed-type energy like nuclear power and even a controlled amount of thermal power is essential."

The majority of this mix, however, "should be composed of renewable energy sources."

Generating renewable energy sources with wind turbines can be challenging for various reasons, but Mr. Achiha is adamant that his company's approach sets it apart from competitors.



Installing blade on site

"Our method involves strategic considerations such as developing innovative products geared towards cost reduction. In fact, our primary concern is not just our operational expenses but the impact on civil engineering costs, a factor that significantly improves customer satisfaction."

One such innovation is Japan's first tower crane developed exclusively for wind turbines. With a maximum working height of 150 meters and a capacity of 140 tons, tower cranes offer the advantage of working within existing spaces, not only helping to conserve the

surrounding forest area, but also enabling operations in narrow spaces, thus contributing to environmental sustainability.

As well as having impeccable environmental credentials, the cranes also adhere to stringent Japanese production standards and are designed to withstand giant earthquakes.

Not that the company regards itself as the finished article. "In order for Japan's wind power generation sector to develop further," Mr. Achiha confirms, "it is vital that we continue to collaborate with overseas companies to leverage their advanced technologies."



Meeting with local residents

Now, the company is expanding its business to both the onshore and offshore wind power sectors, leveraging its position

as project owner, EPC contractor, and operation and maintenance contractor.



Mountain transportation

Closer to home, in 2024 wind power projects are slated to be launched in both Hokkaido and Ishikawa Prefectures.

Mr. Achiha, meanwhile, has his sights firmly set on the next five years. "We are aiming to become Japan's leading company in the renewable energy sector," he states, "providing comprehensive services from wind power business development to construction and operation and maintenance works."



www.achiha.co.jp

Pioneering Products for the Future of Water Supply

A company with an expanding international reach, the Japanese firm **NIHON GENRYO** supplies cutting-edge filtration technology that stands to play a crucial role in global water treatment in the years ahead.



"We're striving to pioneer a new type of water treatment system, which is why we've developed the Mobile SIPHON TANK."

Yasuhiro Saito, President, NIHON GENRYO Co., Ltd.

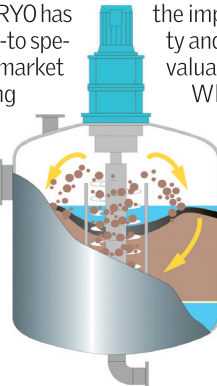
A Japanese company that supplies leading-edge water filtration technology, NIHON GENRYO has established itself as a go-to specialist in the domestic market – and boasts a growing international presence.

Having entered the water treatment sector eight decades ago as a supplier of premium-quality filter media, particularly filter sand, NIHON GENRYO can today proudly say that four out of five water purification plants in Japan use its filter media. Over the years, though, the company has expanded its capabilities; indeed, its flagship products are

now its state-of-the-art system for washing filter sand, and its series of water filtration tanks that incorporate this cleaning technology.

Founded in 1939, NIHON GENRYO began life as a firm that manufactured glass raw materials from sand. In the aftermath of World War II, however, it shifted focus amid reconstruction efforts in Japan, applying its expertise in handling sand to provide filter media for new water treatment facilities.

While supplying filter media has certainly proved a successful venture, it has come with the challenge of tackling the finite availability of suitable sand. "To be used as filter sand, it must meet specific criteria in terms of composition and particle size," reveals NIHON GENRYO President Yasuhiro Saito. "Such sand is in limited supply. We're mindful of the importance of sustainability and the need to protect this valuable natural resource."



SIPHON washing

Where, previously, filter sand in water treatment facilities would be discarded and replaced once it grew dirty and less effective, NIHON GENRYO has since the mid-1950s devised technology that cleans filter media for continued use. Most notably, at the turn of the millennium the company developed its ground-breaking SIPHON Washing System, which

cleans sand so thoroughly that it restores it to its original state.

"This product has become an essential piece of technology in the water treatment industry,"

sula in January, and has also been an integral element of the company's participation in an infrastructure support initiative carried out by the Japanese government in Ukraine.



Emergency disaster assistance (MST-2300 UKRAINE Model)

Mr. Saito says. "It's critical to maintaining the quality and lifespan of filtering media, resulting in more efficient water treatment processes."



Noto Peninsula ST3000

Building on the introduction of the SIPHON sand washer, NIHON GENRYO has now also created the SIPHON TANK, an all-in-one system that purifies water and comes with built-in filter cleaning, and the Mobile SIPHON TANK (MST), a version of the SIPHON TANK that can easily be moved from location to location.

"This mobility is crucial, especially during disasters," Mr. Saito says. "We believe this mobile system will become the global standard in the future. The MST gives you the flexibility to install the water treatment equipment you need where you need it. This approach represents the future of water supply."

The MST has been central to NIHON GENRYO's key role in water supply restoration following the earthquake in Japan's Noto Penin-

"Following the Russian invasion of Ukraine, ensuring a safe water supply became a critical challenge," Mr. Saito explains. "Many water purification plants were severely damaged or malfunctioning. Ukrainian engineers have been invited to Japan for training, and four MSTs are arriving in Ukraine."



Tasting filtered water

Ukraine is one of several countries outside Japan that stand to benefit from NIHON GENRYO's cutting-edge technology. "We're committed to offering infrastructure equipment to Ukraine and engaging in comprehensive support for their reconstruction efforts," Mr. Saito says. "We're also actively pursuing business expansion in Central and South America, and have ongoing projects in the APEC Area as part of our global endeavors."



Uwajima City MST-2300

Misuzu Seiko: Navigating Nuclear Innovation

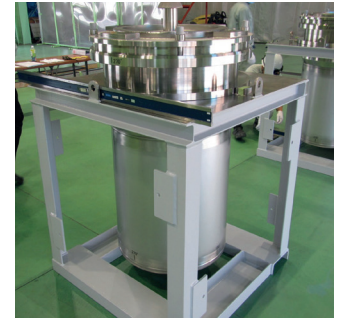
Through nuclear innovation, domestic focus, and global aspirations, Misuzu Seiko envisions becoming an "Eco-Energy" source as the company evolves beyond its strainer-specialist identity.

Celebrating its 75th anniversary, Misuzu Seiko, a mid-tier manufacturer with a significant role in the nuclear industry, continues to contribute to nuclear innovation in Japan. President of the organization, Nobuharu Sato, sheds light on its pivotal role, saying: "We are one of the mid-tier manufacturers supporting the nuclear industry, an increasingly important source of energy as the world decarbonizes."



"We are one of the mid-tier manufacturers supporting the nuclear industry, an increasingly important source of energy as the world decarbonizes."

Nobuharu Sato,
President, Misuzu Seiko



Canister (Radioactive Contaminated Waste Storage Containers)

His dream is for Misuzu Seiko to become a leading mid-tier manufacturer in the nuclear industry and to become a long-living company that will last beyond 100 years, placing the highest priority on technological innovation, customer satisfaction, and social contribution, while respecting tradition and innovation.



Main factory located in Nagano Pref., Japan

Despite challenges post-Fukushima, the Japanese government's commitment to nuclear energy presents opportunities for Misuzu Seiko, with Mr. Sato outlining the

company's strategic ventures, such as developing specialized filters to safeguard nuclear power plants during restarts. The company's products and solutions – which extend beyond nuclear, being used in thermal power plants and the chemical industry also – are characterized by rigorous quality control, including tackling challenges of erosion and wear in harsh environments.

Misuzu Seiko aims to recruit and train new engineers, passing on valuable skills. Currently, the company is focusing on domestic projects, but is also looking to expand its business globally and has cooperative relationships with Chinese companies.



Three-way Interlocking Switching Valve

Mr. Sato envisions Misuzu Seiko becoming "Misuzu Eco-Energy", evolving beyond its strainer-specialist identity.



<http://misuzu-seiko.co.jp>

Trusted Supplier of Wire Ropes Bids to Branch Out

A Japanese firm that specializes in ropes and slings for construction, Daiko is now targeting new industries.



decline, the sustainable supply of products to Japanese companies remains important. There is strong domestic demand for large construction equipment in Japan, and many companies rely on wire ropes that we provide from overseas."



Hiroshima Orizuru Tower

ness fields. For example, it now imports architectural components that incorporate wire rope. It has partnered with TTM Rossi, an Italian interior-design company, and with the Swiss firm Jakob Rope Systems, whose Webnet wire mesh is part of Hiroshima's Orizuru Tower.



Hand splice for high-strength wire rope

"The Orizuru Tower has an open-air observation deck," Mr. Baba explains. "The wire rope net prevents people from falling, but doesn't obstruct their view. It also allows a high level of airflow, making the environment comfortable. The project has been a great success."

"We're looking to establish ourselves in the interior-design world through our wire ropes."

Akihito Baba, President,
Daiko Corporation

A trader and manufacturer specializing in wire ropes and slings for construction machinery, Daiko Corporation supplies premium-quality products for all applications and models.

"We're solely concerned with the Japanese market, with a particular focus on importing products into the country," says the Osaka-based firm's president, Akihito Baba.

"Although the domestic market is shrinking due to Japan's population



Textile rope sling for wind-farm construction

A trading company since 1960, Daiko began manufacturing its own products two decades ago – a move that reflected a commitment to listening to its customers' needs.

Released in 2006, the Gokunan series of super soft, high-strength wire ropes and slings make it significantly easier to lift heavy and biased-load objects. "Through conversations with end users, we began to un-

derstand how they were struggling with the wire ropes," Mr. Baba says. "We took on board the issues they were experiencing and developed the Gokunan. The product name Gokunan means 'extremely soft.'"

"Another product we've created is called Kiwami, which also uses a high-strength material. It's 20% lighter than conventional products, so it reduces the burden of on-site work."

As Daiko endeavors to widen the reach of the ropes and slings it provides for construction equipment, the renewable-energy sector is a particular target. "We're focusing on expanding sales of our products for offshore wind-power generation projects," Mr. Baba reveals.

Meanwhile, Daiko has begun supplying products in new busi-



www.wirerope.co.jp

Flood control pioneer TAKUWA Corporation targets overseas markets for growth

A conqueror of the domestic market, the company is concentrating expansion efforts further afield.

Although Japan is a narrow country accounting for just 0.25% of the world's land area, due to its geographical conditions, it repeatedly suffers from various natural disasters and is often prone to flooding due to typhoons and torrential rains, earthquakes, tsunamis, and volcanic eruptions.

However, for centuries the Japanese have been successful in facing these disasters and overcoming the difficulties thanks to the unique flood control culture and technology cultivated throughout its history. This has resulted in the establishment of extremely high flood control standards that are unparalleled worldwide, and TAKUWA Corporation is one of the country's true pioneers in this area, having become regarded as one of Japan's leading companies in flood control and disaster prevention.

"For more than 50 years, we have continued to provide technologies and solutions specialized in Japan's flood control and disaster countermeasures," says Shinji Okuda, President of TAKUWA Corporation. The company holds a 60% domestic market share in water level gauges, thanks to products such as the quartz type water level gauge developed in 1978, and its predecessor, the reed switch type water level gauge, which was developed in 1968. It has gone on to pioneer other sensor-based gauge technologies, including the small water level observation buoy (which uses drones and underwater communication technology to observe the water level of natural dams created when river channels are blocked by landslides) and a laser scanning type water level gauge.

"While other companies may offer similar water level gauges, our competitive advantage also extends to our prompt maintenance service and low failure rates. This track record reflects confidence in

"For more than 50 years, we have continued to provide technologies and solutions specialized in Japan's flood control and disaster countermeasures."

Shinji Okuda, President,
TAKUWA Corporation



Small water level observation buoy



Laser scanning type
water level gauge



Quartz type water level gauge

our sensors not only through quality, but also through overall effectiveness," says Mr. Okuda.

Though the company is not well-known overseas, the TAKUWA president explains that it is the organization's policy to develop overseas markets going forward, and as part of this international focus it has ensured it is accredited by internationally-recognized standards, including four ISO Certifications: ISO 9001 (Quality), ISO 14001 (Environment), ISO 45001 (Occupational Health and Safety) and ISO 27001 (Information Security).

"Companies are required by society to meet these four and they will enable us to gain at least a minimum level of trust from overseas customers who

are not familiar with our company and facilitate our sales activities," stresses Mr. Okuda.

Another area of focus for the company has been to place increasing importance on risk assessment. "In today's uncertain times, when the future is uncertain and society is in turmoil, the only way for a company to survive is to always take on risks and take on challenges. Risk assessment is a way of estimating how much risk you can tolerate when taking on any new challenge," he says.

Such challenges in the market exist both at home and overseas when it comes to TAKUWA Corporation's growth strategy. With natural disasters now occurring more frequently on a global scale due

to climate change, the company is considering the export of its technology as a business opportunity, but at the same time, keeping a close eye on Japan's evolving domestic situation.

"Since our current main customer base is almost exclusively national and local governments, we believe that overseas expansion is a must," says Mr. Okuda. "While global demographics are on the rise, Japan's population has been declining since 2008, and with the aging of the population and declining birthrate, the government's tax revenue is also declining. Therefore, the government's budget has a direct impact on our sales. As a disaster-prone country, disaster countermeasures for land preservation are important, but now we are forced to allocate much of our budget to medical care, long-term care, and social security; in fact, the national budget is almost half of what it was 20 years ago. To overcome these changes in the situation, we need to explore opportunities not only in the domestic market but also aggressively seek opportunities in the private market and expand our presence overseas."

Mr. Okuda adds: "We are currently concentrating our global business in Thailand and Korea. In Thailand, we are working with a consulting firm to challenge ourselves to build strong ties with the Thai government, and in Korea we are aiming to develop the market by participating in projects related to major river systems that are determined by national policy."

"My dream is for TAKUWA Corporation to become a company that contributes to people and society around the world," concludes Mr. Okuda.



www.takuwa.co.jp/en