Investor Guide

Torishima is a pump manufacturer established in 1919.

We will continue to evolve, aspiring to be “a company that is indispensable to society”
while taking over passion and traditional skills since its foundation.

Philosophy

Never lose the public trust,
even if monetary loss proves unavoidable

Mission

Passion for our Products and Services.
Evolving to meet demands of an ever changing world.

Purpose

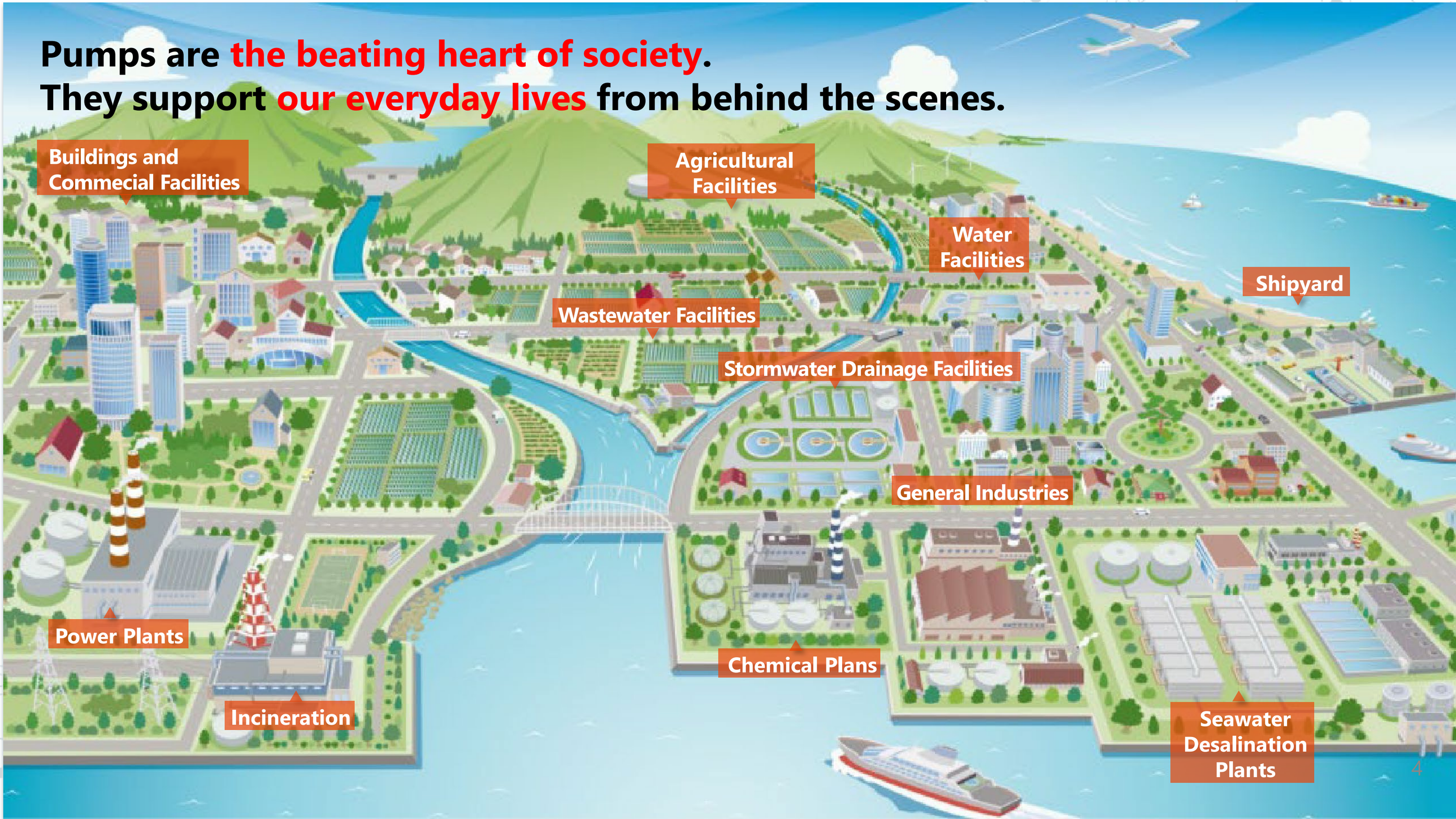
Drawing on Torishima’s strengths and technology,
we will contribute to sustainable society
by connecting lifestyle, lives and the future.

Vision

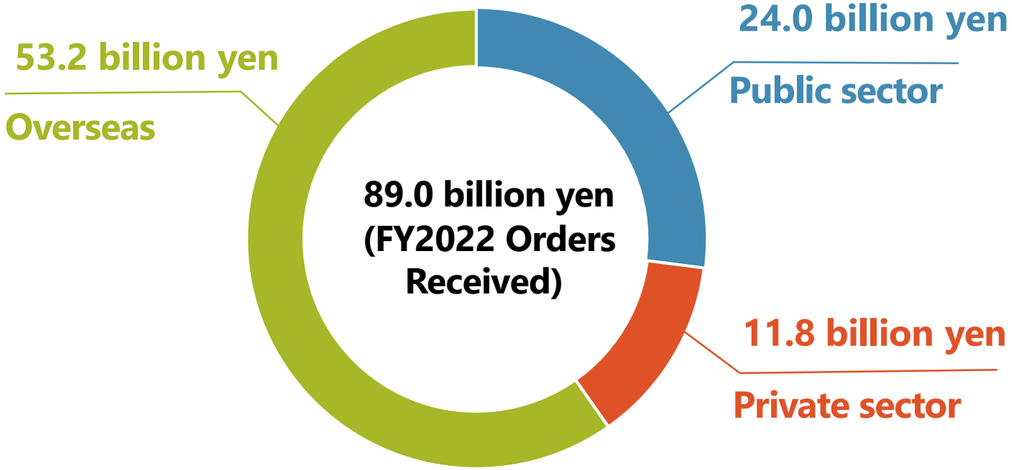
TEAMWORK
DIVERSITY
PROFESSIONAL
CLARITY
ENTHUSIASM
INNOVATION
EVOLUTION

Our Business

Pumps are the beating heart of society.
They support our everyday lives from behind the scenes.

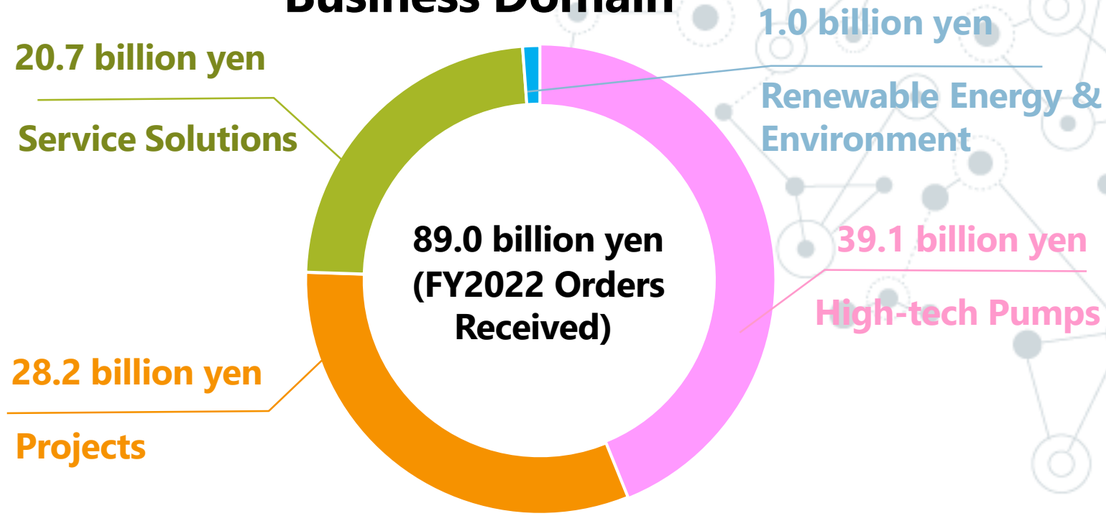


Sector



Public sector	• EPC services for national and local governments in Japan for water and wastewater facilities, drainage facilities, irrigation facilities, etc. (engineering, procurement, construction and testing)
Private sector	• Supply pumps and services for power plants in Japan (thermal, biomass, geothermal) • Supply pumps and services for various factories in general industries, building equipment, commercial facilities, etc.
Overseas	• Overseas seawater desalination plants, thermal power plants, water and wastewater facilities, irrigation facilities, etc.

Business Domain



	Japan	Overseas
High-tech Pumps	• Large high-pressure engineered pumps for power plants (thermal, biomass, geothermal) • Standard pumps (The Eco-pumps) for various factories in general industries, building equipment, commercial facilities, etc.	• Large high-pressure engineered pumps for seawater desalination plants, water facilities, power plants, and irrigation facilities
Projects	• EPC services for national and local governments in Japan for water and wastewater facilities, drainage facilities, irrigation facilities, etc. (public sector)	• Contracting business for plants related to pumps, including machinery and electrical engineering and construction (EPC business)
Service Solutions	• Pump overhaul, part replacement, spare equipment, energy-efficiency proposals, etc.	
Renewable Energy & Environment	• Maintenance of wind power generation equipment	—

Since its founding, the company has laid the foundation that has made Torishima known for its technologies, and has grown to become one of three major pump companies in Japan.

1919
Founded in Torishima-cho, Nishi-ku (currently Konohana-ku), Osaka, Japan, by a group of pump engineers including Shusuke Takeo.

1927
Set the foundation of Torishima becoming known for its technologies by being recognized as No. 1 in Japan for agricultural-use pumps. However, business stagnated due to the turmoil during and after the war.

1949
Former banker Ryuhei Harada joined the company. He restructured the Company's management with the firmly-held belief that "the pump business will grow in the future." He was the Company's patriarch who turned Torishima into a 100-year-old company.

1958
Formed a technical alliance with a world-class pump manufacturer as part of internationalization

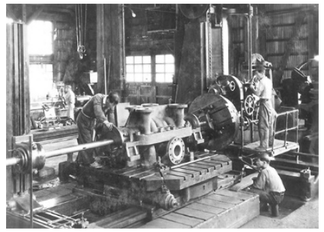
From 1975
Increased pump orders for seawater desalination plants in the Middle East and other overseas plants.

1985 Opened its first overseas manufacturing plant in Indonesia

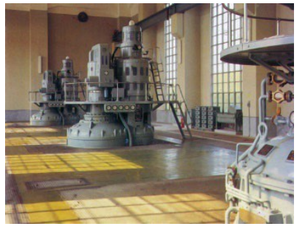
1978 Established its first overseas office in Singapore.

1981
Listed on the First Section of the Tokyo Stock Exchange.

Business expanded with the development of Japan



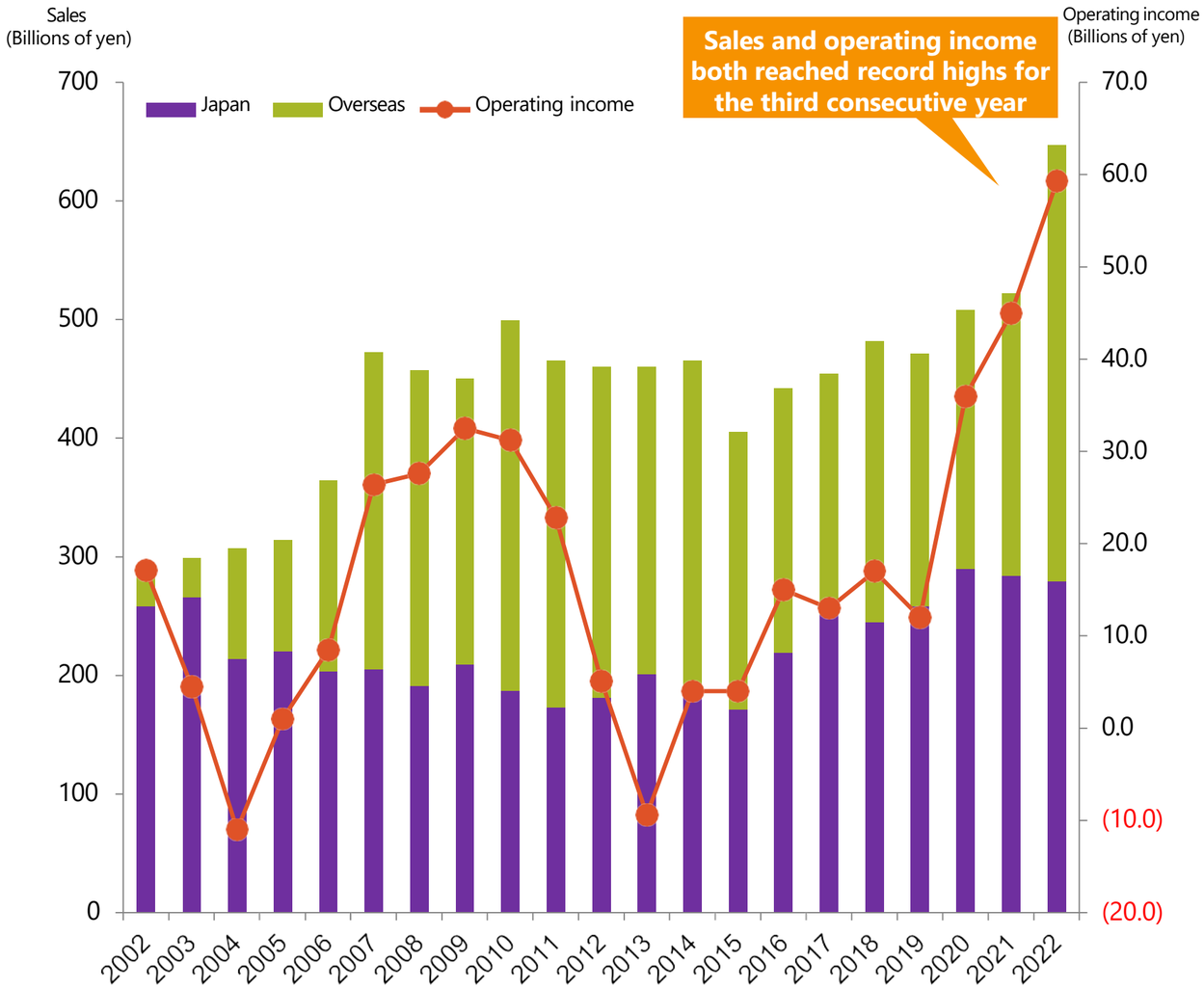
1952 Boiler feed pumps upgraded to higher pressure in line with the shift to larger, higher-pressure power plants.



1955 Received an order for ultra-large pumps for a drainage pumping station, the largest of its kind in the East, and received an award from the Ministry of Agriculture, Forestry and Fisheries.

Recent Progress over the Past 20 Years
(Disruption Caused by the rapid growth and Strengthening of Corporate Structure)

Launch of TGT → Rapid Overseas Expansion → Production and Design Disruption → Restructuring of Manufacturing Infrastructure



2002 Launch of Torishima Global Team (TGT)

Since the beginning of the 2000s, public-sector projects have been scaled back due to financial restructuring in Japan. With the Japanese population approaching its peak, the Company therefore established the Torishima Global Team (TGT). It began full-scale overseas expansion to grow further

Favorable conditions led to rapid growth in overseas sales

As the market for seawater desalination in Middle Eastern countries boomed, partly due to soaring oil prices, Torishima rapidly expanded our business in the core areas we excel in by winning EPC orders for pumps for seawater desalination plants and other water supply plants. Although the overseas ratio was around 10% when TGT was launched, it quickly rose to the 50% mark.

Disruption in design and production due to rapid growth, lowering profit margins

However, the organization could not cope with the rapid growth and design and production were disrupted. Unable to respond quickly and flexibly to customer demands in various countries worldwide, mistakes were made, and costs and expenses increased. This coincided with the appreciation of the yen to below 100 yen against the US dollar (from 2009 to 2013), so the Company was unable to remain profitable despite receiving orders, leading to a vicious cycle of further disruption as more orders continued to flow in.

2012 Restructuring(Promoted fundamental reforms) of manufacturing infrastructure

To further grow as a truly global company, the Company determined that it was necessary to rebuild the manufacturing base, even if it meant temporarily limiting the number of orders received. The Company launched a strategy to strengthen its corporate structure by introducing an integrated system and BOM, standardizing products, improving efficiency in design and production, and thoroughly managing profitability from the time of orders are received.

Service business expansion

At the same time, the Company focused on the service business, which has higher profit margins than sales of new pumps. By expanding its offices to Asia, the Middle East, Europe, and the U.S., TGT has increased its service ratio from 10% at launch to 30% now.

Efforts were successful and corporate structure was strengthened

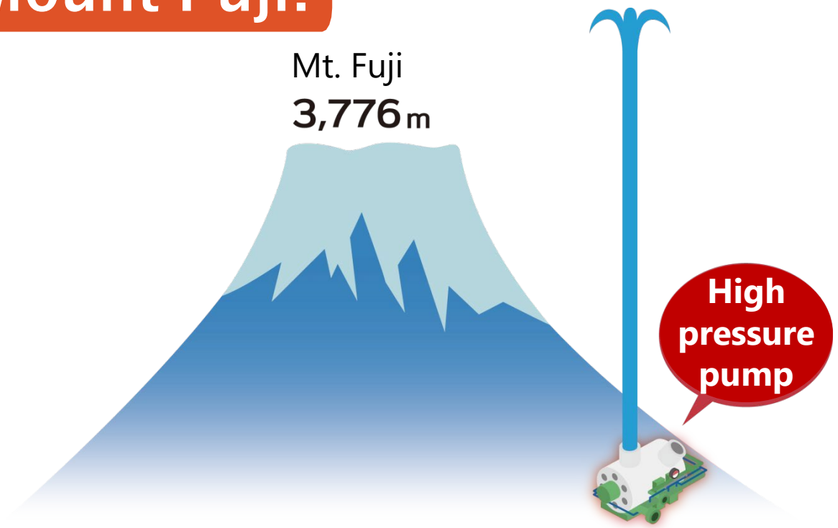
Strengths of Torishima

1. Advanced technical capabilities cultivated over more than a century of history

Despite the number of pump manufacturers worldwide, only a few can manufacture these extraordinary pumps.
Torishima's strength is in large, high-pressure pumps used in water and wastewater facilities, power plants, and other facilities.
For example, our pumps that can transfer tremendous amounts of water are so powerful that they can empty a 25-meter pool in five seconds.
Our pumps with high pressure can pump water as high as 4,200 meters, and pumps that can operate in extremely harsh environments can operate at supercritical pressures at 350 degrees Celsius or higher.
Torishima has delivered numerous pumps to more than 100 countries around the world.

Can empty a 25m pool in
5 seconds!

Can pump water
higher than **Mount Fuji!**



Can operate under supercritical pressure
at temperatures of 350℃ and higher!

2. Pursuit of higher pump efficiency and reduced power consumption and CO_2 emissions

The electricity consumed by pumps used in industrial plants can be very significant. While energy-efficient models are now preferred in both cars and home appliances, the pump industry has seen vigorous pursuit of technological advancements to make pumps more energy efficient for many years.
Improving pump efficiency by even 0.1% can lead to running cost savings of millions or tens of millions of yen in electricity expenses.
Leveraging the latest in CFD (Computational Fluid Dynamics) analysis, Torishima sought to improve pump efficiency through design that allow water to flow through pumps without energy loss. This can help reduce power consumption and CO_2 emissions for entire plants.
Pumps are machines with high power consumption. In other words, there is significant room for energy savings.

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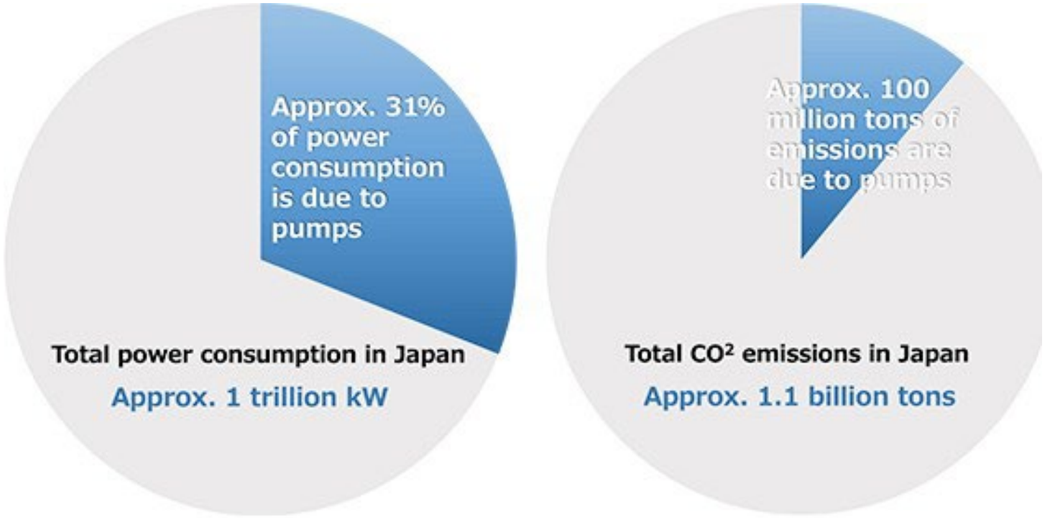
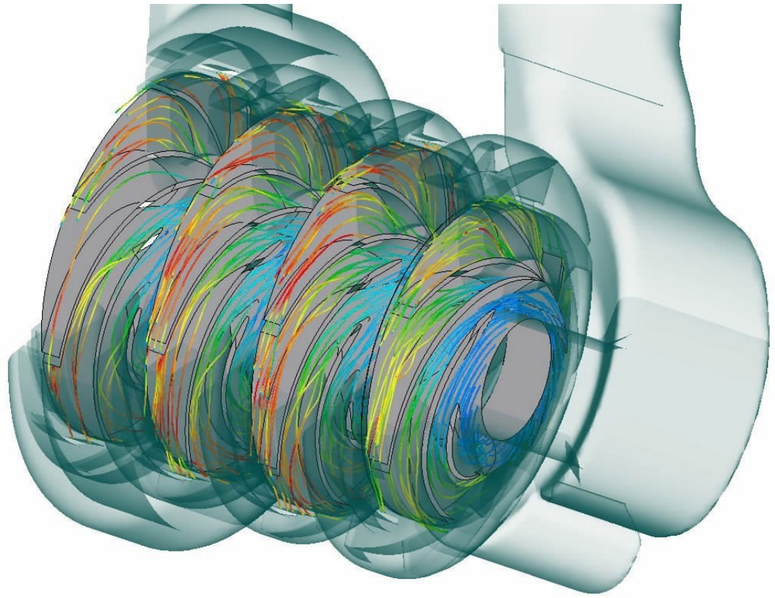


Approx. 31% of power consumption is due to pumps Total power consumption in Japan Approx. 1 trillion kW
Approx. 100 million tons of emissions are due to pumps Total CO2 emissions in Japan Approx. 1.1 billion tons
Enerdata, Global Energy Statistics Yearbook 2018 The Energy Conservation Center, Japan, FY2014 Report on the Infrastructure

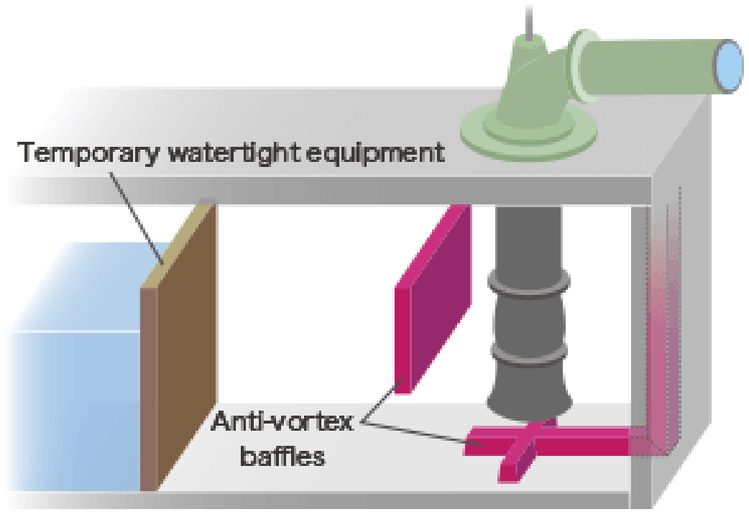
Optimizing water flow using state-of-the-art fluid analysis



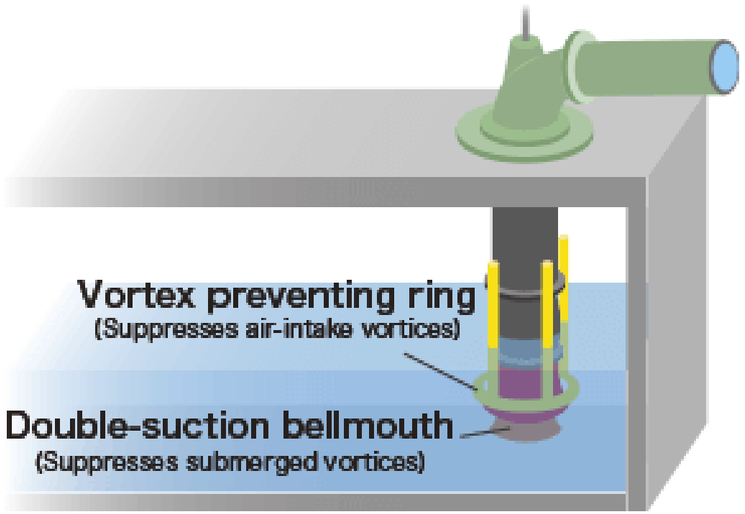
3. Pumps acting as climate change countermeasures also contribute to disaster prevention and mitigation

There is increasing demand to expand drainage capacity at drainage pumping stations to cope with the torrential rains that have been occurring more frequently in recent years.
However, if the dimensions of existing water tanks remain the same, the flow velocity in the water tank will increase and lead to increased vortices that adversely affects pump performance.
Traditionally, preventing vortices meant installing anti-vortex baffles, a type of civil engineering structure, but installing them is costly and time-consuming.
By suppressing vortices in the pump itself, Torishima eliminated the need for anti-vortex baffles, which lowers construction costs, ensures construction safety, and reduces construction time and pump downtime.

Conventional vortex control method



Torishima's unique vortex control method



See Videos (in Japanese)

4. Became a Global Niche Top (GNT) company with pumps for seawater desalination plants

While Japan is fortunate to be blessed with an abundant supply of fresh water, many countries suffer from severe water shortages. In those places, seawater desalination plants, which convert ocean water to fresh water, are an important part of the infrastructure.
Since the 1970s, Torishima has supplied pumps to seawater desalination plants in countries in the Middle East and around the world.
The Company has a high global market share and has been recognized as a Global Niche Top (GNT) company by Ministry of Economy, Trade and Industry 2020.
Considering the reality that approximately two billion people still do not have access to safe and reliable drinking water, the demand for seawater desalination plants is expected to increase.

Supplied pumps to nearly all of the world's top 20 largest seawater desalination plants

1	Jubail 2 Replacement	Saudi Arabia	✓	2022
2	Taweelah	UAE	✓	2019
3	Shoaiba 3	Saudi Arabia	✓	2005
4	Al Jubail	Saudi Arabia	✓	2007
5	Ras Al-Khair	Saudi Arabia	✓	2010
6	Umm al Quwain	UAE	✓	2019
7	Soreq 2	Israel		2020
8	Jebel Ali M Station	UAE	✓	2007
9	Khobar 2 Replacement	Saudi Arabia	✓	2019
10	Soreq	Israel		2010
11	Shoaiba 3 IWPP Conversion	Saudi Arabia	✓	2022
12	Rabigh 3	Saudi Arabia	✓	2019
13	Jubail 3a	Saudi Arabia	✓	2020
14	Shoaiba 5	Saudi Arabia		2020
15	Jubail 3b IWP	Saudi Arabia	✓	202
16	Yanbu 3	Saudi Arabia	✓	2012
17	Magtaa	Algeria	✓	2009
18	Az-Zour North	Kuwait	✓	2014
19	Al Jubail Phase 2	Saudi Arabia	✓	1979
20	Shuweihat 2	UAE	✓	2009

出典:IDA DESALINATION & REUSE HANDBOOK 2022-2023

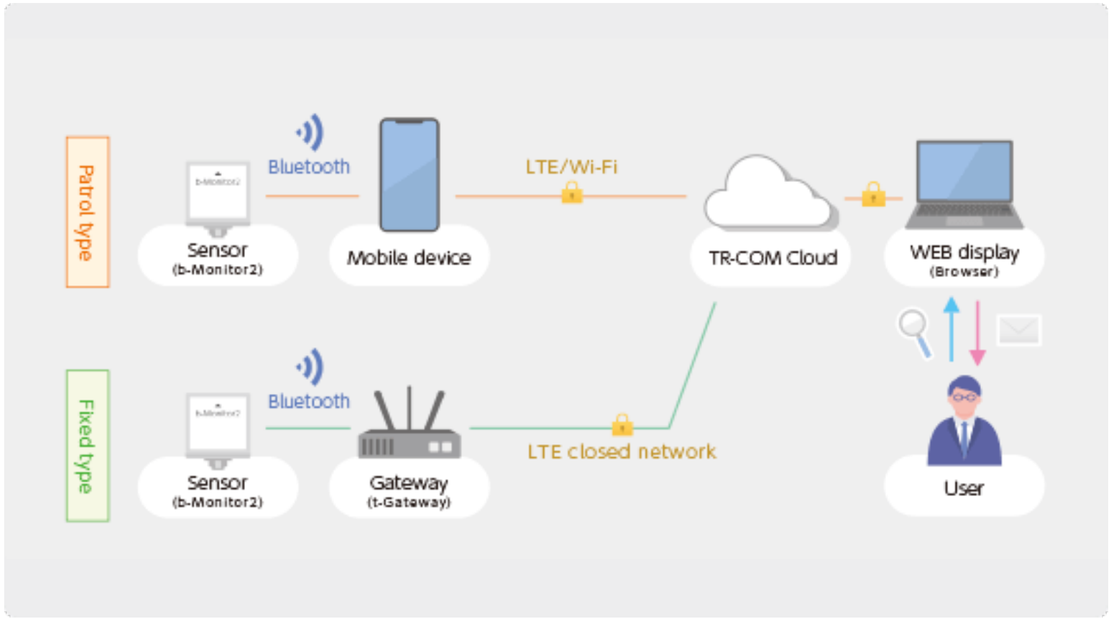
Certified by Ministry of Economy, Trade and Industry
Global Niche Top Companies Selection 100


RO High pressure pump

5. Promoting smart maintenance service with unique rotating machinery monitoring system

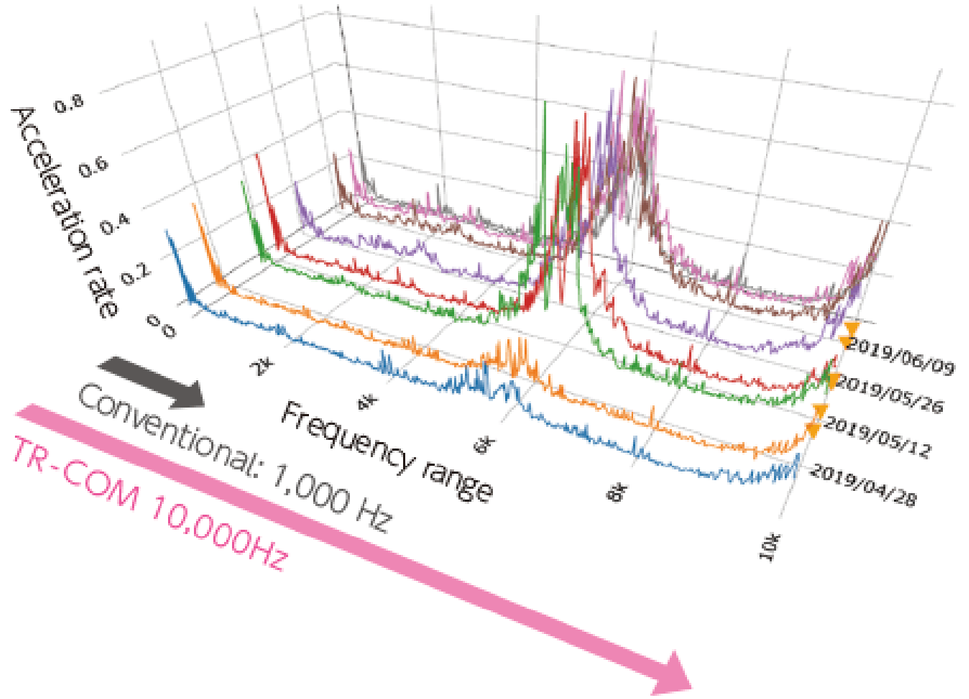
In response to labor shortage and technology succession issues caused by the low birthrates and aging societies, the manufacturing industry is promoting on-site use of smart maintenance services that utilize IoT and AI.
Leveraging its technology and experience as a pump manufacturer, Torishima has developed its own unique Rotating Equipment Monitoring System, TR-COM.
Through the ability to capture high-frequency waves of up to 10,000 Hz, it can perform failure prediction, which was difficult in the past. This makes it possible to offer solutions that only a pump professional can provide, such as analysis of failure causes, maintenance advice, and pump repair.
In 2022, it was also certified as a Smart Security Technology by the Ministry of Economy, Trade and Industry (METI).

Overview of TR-COM system



Torishima's TR-COM has been adopted as a next-generation facility management model for the realization of Society 5.0, by Mitsubishi Estate Co.

Website of Mitsubishi Estate



Observing vibrations every 1/10,000th of a second allows for advanced analysis!

Torishima's Materiality (Key Issues)

We will continue to contribute to solving social issues, aiming a company that is indispensable to society.

Global Social Issues	Torishima's Materiality (Key Issues)	Products and Services That Contribute to Society

Global warming due to increased CO_2

Energy crisis

Abnormal weather, flooding

Aging infrastructure in developed countries

Population growth, increasing demand for infrastructure in emerging countries

Water shortages, food crises

Population decline, difficulty in passing on technology in developed countries

Key Issues for Creating Shared Value

1. Address energy issues while working toward carbon neutrality
2. Provide safety and reliability
3. Establish new manufacturing and services with data and AI

Key Issues for Building Essential Foundations

4. Maximize employees' energy
5. Improve corporate governance
6. Improve Torishima quality

(1) Boost energy-efficiency initiatives with Super-Eco Pumps

(2) Provide pumps for clean energy market

(3) Provide pumps for water shortages and food crises

(4) Enhance technology for specially designed pumps to mitigate heavy flooding

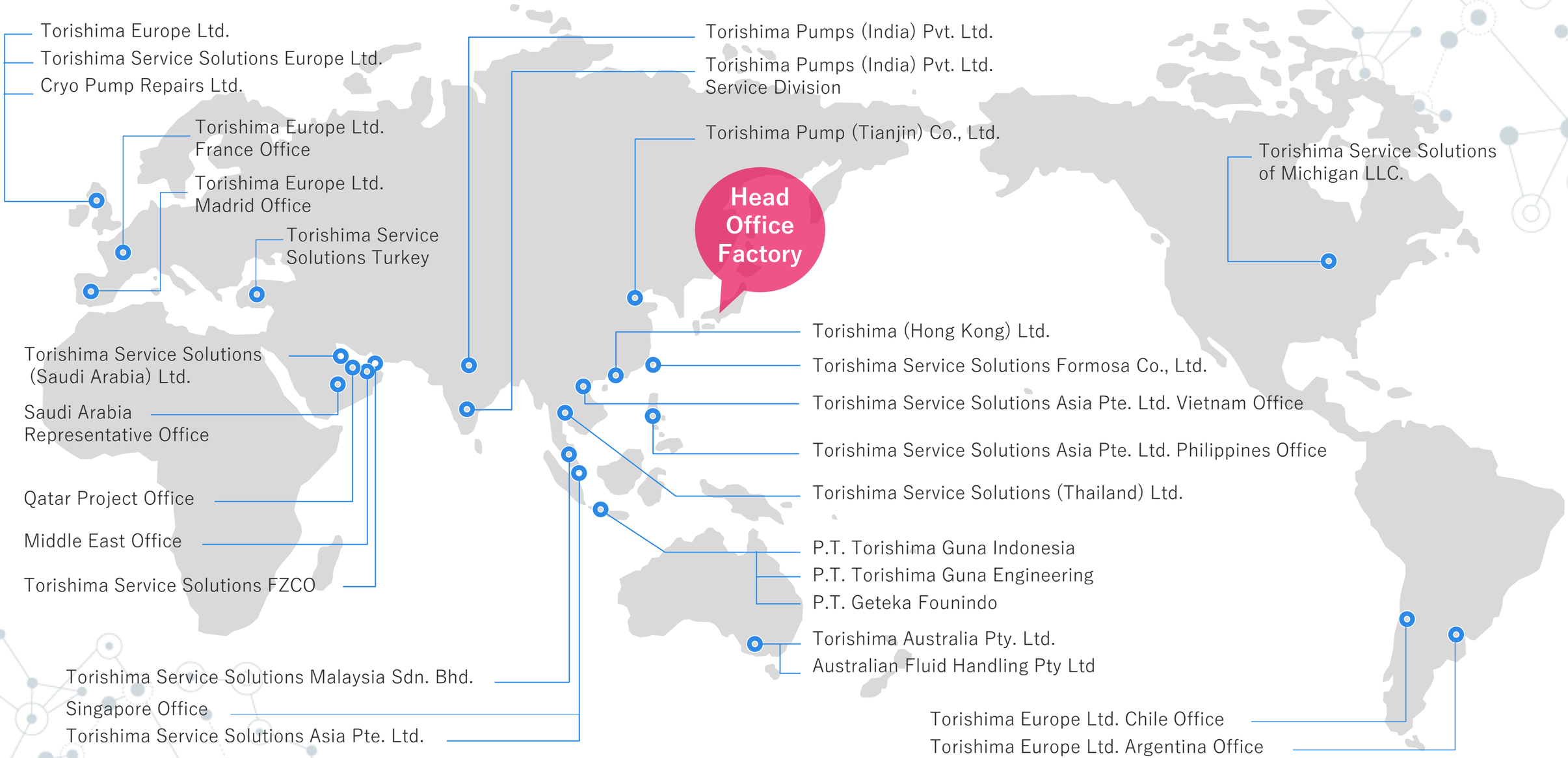
(5) Promote smart maintenance services based on data with TR-COM

- Human resource development and DE&I
- Compliance management
- Strengthen risk management
- Promote environmental management

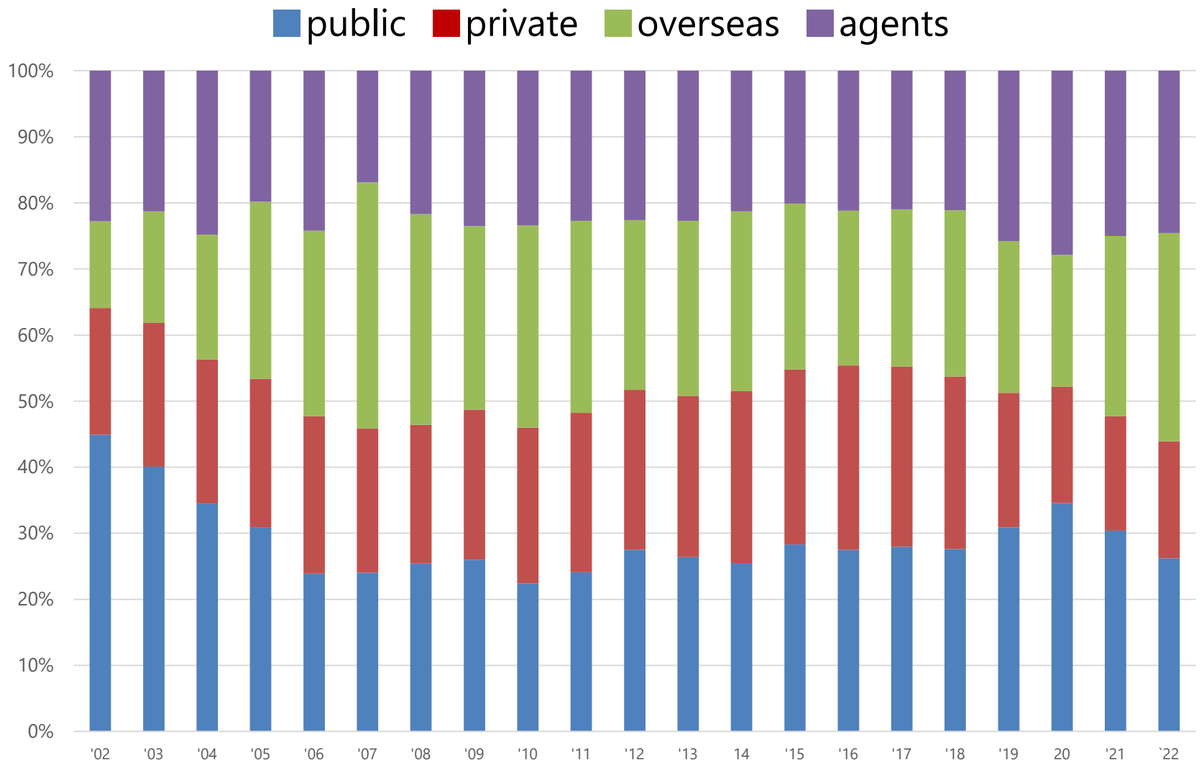
Our Aim

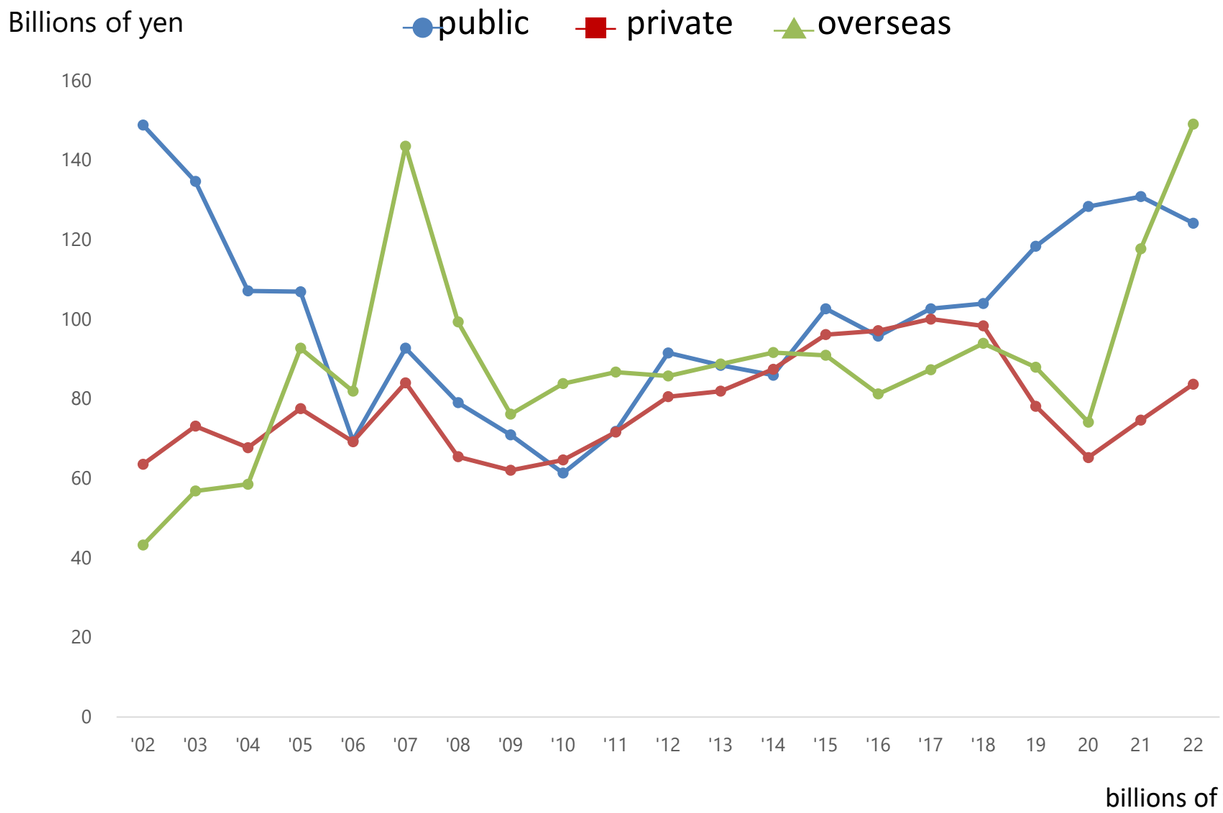
To be Indispensable to Society

Global Network



Pump Market in Japan





billions of yen

	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	19	20	21	22	YOY
Public	149	135	107	107	70	93	79	71	61	72	92	88	86	103	96	103	104	118	128	131	124	94.9%
Private	64	73	68	78	69	84	65	62	65	72	81	82	87	96	97	100	98	78	65	75	84	112.1%
Overseas	43	57	59	93	82	144	99	76	84	87	86	89	92	91	81	87	94	88	74	118	149	126.6%
Agents	76	72	77	68	70	65	68	64	64	68	75	76	72	73	74	77	79	99	104	107	116	108.2%
Total	331	336	310	346	291	386	311	273	274	298	333	335	336	363	348	367	376	383	371	431	466	108.3%

Source: The Japan Society of Industrial Machinery Manufactures

Contact Us

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