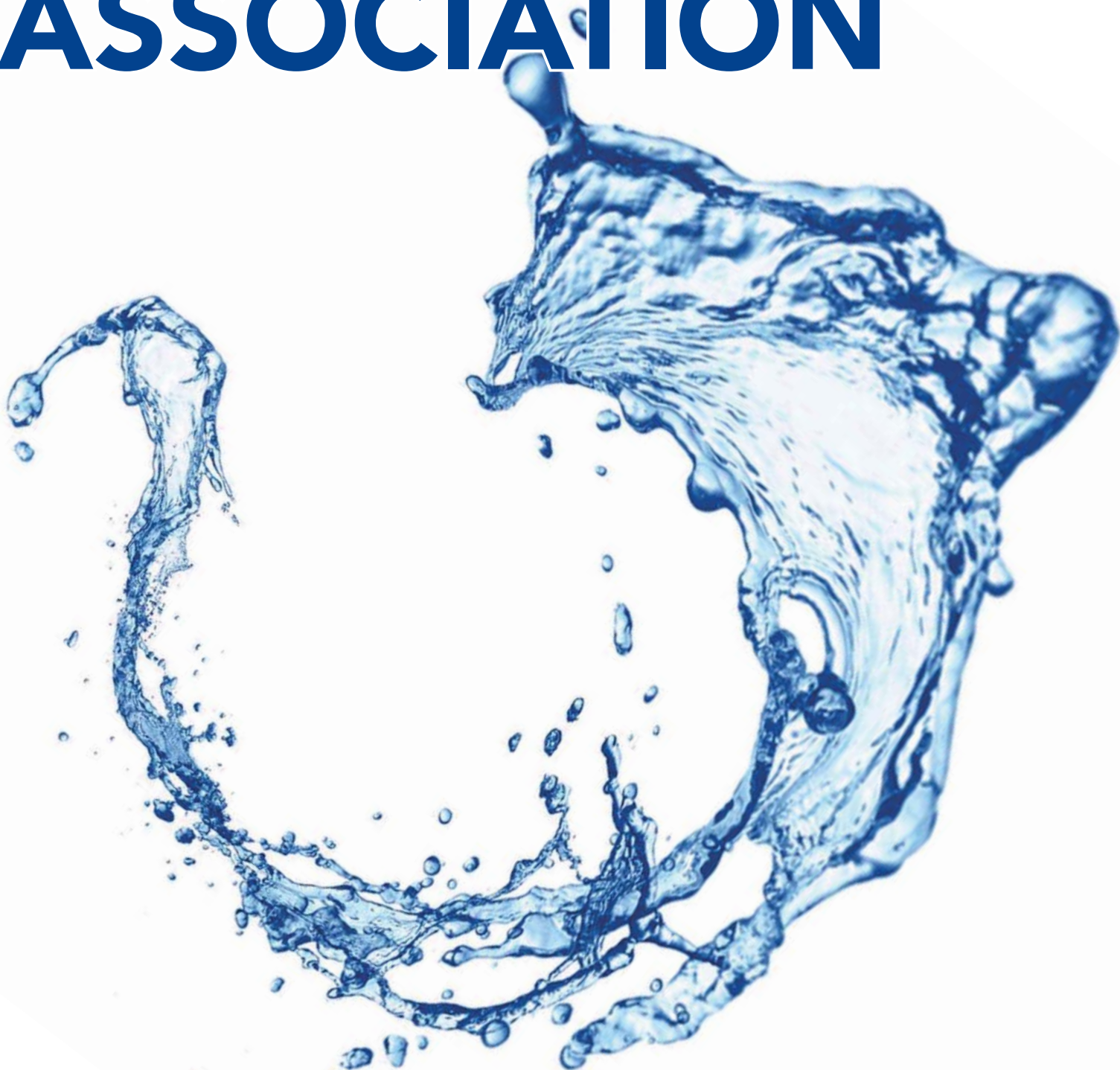


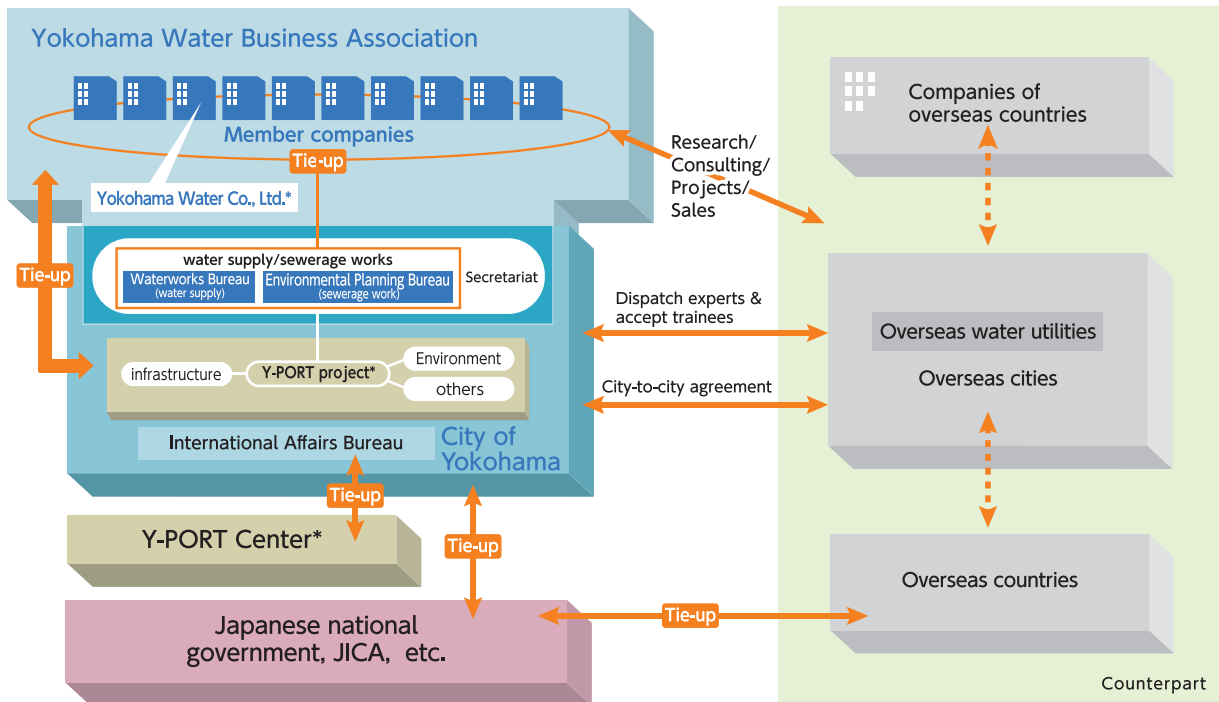
# **YOKOHAMA WATER BUSINESS ASSOCIATION**



# Overview of the Yokohama Water Business Association

The Yokohama Water Business Association was established in November 2011 as part of the Y-PORT project by the City of Yokohama, which is an international technical cooperation project that utilizes the city's resources and technology for private-public partnership. The Association's main goals are to solve water-related environmental problems in emerging countries and develop water business for Yokohama-based companies overseas.

## Basic Scheme



**Y-PORT project** A project for international technical cooperation based on public-private partnership through the utilization of Yokohama's resources and technologies.

**\*Y-PORT Center** An organization to further promote the Y-port project.

**\*Yokohama Water Co., Ltd.** Established as a wholly owned subsidiary of the Waterworks Bureau of the City of Yokohama in July 2010, to expand business opportunities by utilizing the technologies and experiences cultivated over time by the Bureau. It concluded a basic agreement with the Environmental Planning Bureau of the City of Yokohama in 2013.

## Association Structure (as of Nov, 2021)

**Chairman:** Mayor of Yokohama

**151 Company Members** (enterprises/organizations), including 13 Executive Members

**2 Special Members** (foreign enterprises)

**7 Cooperating Members** (relevant ministries, government agencies, and organizations)

**Secretariat:** Environmental Planning Bureau & Waterworks Bureau of the City of Yokohama



Inaugural meeting

## Activities

In addition to utilizing Yokohama's experience with solving water-related environmental issues and the relationships it has built with a variety of countries and regions through international contribution, the Association collaborates with member companies with advanced technologies in order to develop water business while addressing the issues faced by overseas countries.

### ▶ Research and sharing of information on demand overseas

- Conduct field surveys
- Share information on overseas water business

### ▶ Support for network building among companies

- Networking meetings among member companies
- Symposiums/seminars, workshops, etc.

### ▶ Communication & promotion of member companies' environment-related technologies

- Create brochures and websites
- Set up shared booths at overseas exhibitions
- Offer opportunities for business matching with foreign enterprises

### ▶ Public-private tie-ups in the water business field

- Build relationships with overseas municipalities by using the city-to-city cooperation scheme
- Offer the city's human resources and expertise in the fields of water supply and sewerage works



Our booth in Viet Water 2019



Overseas water business seminar

# Solutions by the Yokohama Water Business Association

**Contributions to achieving SDGs**  
– Realizing a sustainable society–

SUSTAINABLE DEVELOPMENT GOALS



Improve global water and natural environment



## About Member Companies

Many companies and organizations that have an operation base in the City of Yokohama join the Yokohama Water Business Association. Their own technologies cover various areas.

## Classification of the Member Companies

Area of business	Number of companies
Consulting (Support for planning, designing, and management of water and sewerage services)	33
Civil engineering & construction works (Civil engineering and construction for water and sewerage services)	21
Engineering (Plant design and construction for water and sewerage services)	14
Operation & maintenance (Operation and maintenance of water/sewerage services facilities)	6
Parts supply & technology provision (Supply of parts, equipment, chemicals, etc., and provision of technical expertise on machinery and electricity)	60
Financial arrangement & related services (Financial institutions, trading companies, etc.)	11
Others (Other organizations related to water and sewerage services)	6
<b>Total</b>	<b>151</b>

# The City of Yokohama's Activities and Tie-ups with Member Companies

## Water Supply

### Cooperation Projects for Central and Southern Vietnam

In Vietnam, the City of Yokohama has conducted technical cooperation projects through JICA mainly for Thua Thien Hue Water Supply Joint Stock Company (HueWACO) since 2003. It contributed to realization of "the Safe Water Declaration" in Hue Province in 2009, which assures citizens that the tap water in the whole province supplied by HueWACO is safe enough to drink. The City has signed "the Agreement on the Technical Cooperation for Water Supply" (Agreement) with five organizations including HueWACO, and shares its knowledge and experience through seminars and training sessions, introduces member companies' technologies, and conducts business matching.

#### The City's Activities ▶▶▶

**2009 to present** Activities by the Waterworks Bureau based on "**the Agreement on the Technical Cooperation for Water Supply**"  
\*Offered technical cooperation by dispatching staff and providing trainings in cooperation with the association

**2014 to 2016** JICA Partnership Program "**Vietnam-Yokohama Safety Water Supply Management Project**"

**2017 to 2019** An independent project by the Waterworks Bureau based on "**the bilateral MoU with HueWACO**"

*Continued technical cooperation and business support as part of "the Agreement on the Technical Cooperation for Water Supply"*

#### ▶▶▶ Tie-ups with Members

•Business matching (16 companies)

•Joint survey (4 companies)  
•Workshop (3 companies)  
•Business matching (4 companies)

•Business seminar (6 companies)  
•Business matching (6 companies)



Children drinking water directly from a tap



Demonstration of technologies

#### ▶▶▶ Orders Received by Members Companies

2016	Entered into a business partnership with HueWACO (result of the JICA Partnership Program)
2017	Sold water meters and flowmeters to HueWACO
2017	Provided a training course on water leakage detection to Ninh Binh Clean Water JSC-NBWS
2018	Sold two types of filtering media for a verification test to HueWACO
2019	Sold leakage monitoring devices to a Vietnamese waterworks via an agent in Vietnam
2020	Contracted for the designing work of expansion of HueWACO's purification plant as a joint venture with a Vietnam based company

### Cooperation Projects for African Countries

Inspired by the 4th Tokyo International Conference on African Development (TICAD IV) held in Yokohama in 2008, the City started accepting trainees under JICA Knowledge Co-creation Program "African Region Urban Waterworks Engineering" and received 133 trainees from 30 African countries until FY 2020. Since 2019, the City has posted long-term experts to Lilongwe Water Board in the capital city of Malawi as a JICA expert, and has been working on improvement of the water works in the country. When accepting trainings in Japan, the City offers opportunities such as business matching between trainees and member companies to share information on challenges and needs in Africa, and promote member companies' technologies.

#### The City's Activities ▶▶▶

**2008 to present** JICA Knowledge Co-creation Program "**African Region Urban Waterworks Engineering**"

**2019 to present** Posting a long-term expert to the JICA technical cooperation "**The Project for Strengthening the Capacity of Non-Revenue Water Reduction for Lilongwe Water Board**"

#### ▶▶▶ Tie-ups with Members

•Business matching (26 companies)

•Business matching (9 companies)  
•Carrying out the project through a tie-up with Yokohama Water Co., Ltd., and a member company which are entrusted with the project



Business matching



Activities in Malawi

### Cooperation Projects for Pakistan

In 2019 the City signed a Memorandum of Understanding (MoU) on technical exchange with the Water and Sanitation Agency Faisalabad (WASA-F). Since then, it accepts trainees and promotes the technologies and products of member companies. When hosting a training or an online seminar, it offers opportunities such as networking among member companies and Pakistan companies and business matching with WASA-F's executives.

#### The City's Activities ▶▶▶

**2016 to 2019** "**The Project for Water Supply, Sewerage and Drainage Master Plan of Faisalabad**" one of JICA Technical Cooperation for Development Planning programs

**2019 to present** "**Technical Exchanges based on MoU between WASA-F and Yokohama Waterworks Bureau**"

#### ▶▶▶ Tie-ups with Members

•Carrying out the project through a tie-up with Yokohama Water Co., Ltd., and a member company which are entrusted with the project

•Business matching (19 companies)



Business matching

# The City of Yokohama's Activities and its Tie-ups with Member Companies

## Sewerage Works



### Cooperation Projects for Hanoi City, Vietnam

The City of Yokohama offers technical trainings to Hanoi Sewerage and Drainage One Member State, Company Limited(HSDC) and the Hanoi City Department of Construction (DOC) to improve their capacity for the management of sewerage works utilizing the framework of the JICA Partnership Program. As part of this cooperation project, Yokohama carries out joint surveys and technical trainings in both countries in cooperation with member companies and offers opportunities such as seminars where the members introduce their technologies and business matching.

#### The City's Activities ▶▶▶

#### ▶▶▶ Tie-ups with Members

2013 to 2017	Conducting technical cooperation for HSDC	•Joint survey (37 companies)
2017 to 2023	Conducting technical cooperation for DOC 1)Operation & Maintenance of wastewater treatment plant 2)sludge treatment and 3)flood control	•Technical seminar/Business matching (49 companies)



Technical cooperation in Hanoi

#### ▶▶▶ Orders Received by Members Companies

2015	Entrusted with <a href="#">The Consulting of Hanoi City Yen Xa Sewerage System Project</a> (Order made by Hanoi City)
2016	Entrusted with <a href="#">The Technical Assistance Project for Enhancing Management Capacity of Sewerage Works</a> (Order made by JICA)
2016	Entrusted with <a href="#">The Construction of Wastewater Treatment Plant under Hoa Lac Science and Technology City Development Project</a> (Order made by Vietnamese Ministry of Science and Technology)
2018	Entrusted with <a href="#">The Construction of Yen Xa Wastewater Treatment Plant Project</a> (Order made by Hanoi City)



Member companies' presentations on their technologies

### Cooperation Projects for the Metropolitan Cebu Water District of the Philippines

The City of Yokohama has a city-to-city cooperation agreement with Cebu City and supported the formulation of Mega Cebu Roadmap 2050, which is a Metro Cebu urban development plan supported by JICA. This roadmap defines development of treatment facilities for sludge coming out of households as a short-term project, and various projects including ODA Grants Project are in progress. The Yokohama Water Business Association offers opportunities to connect its members with potential business partner in the Philippines through a joint survey with its members and information sharing via the Urban Development Forum in cooperation with Y-PORT program.

#### The City's Activities ▶▶▶

#### ▶▶▶ Tie-ups with Members

2012	The City of Yokohama and Cebu City of the Philippines concluded the "Memorandum of Understanding on Technical Cooperation for Sustainable Urban Development"	•Joint survey (6 companies)
2016	The City proposed a JICA ODA Grants project in Cebu	•Urban Development Forum (7 companies)
2017 to 2019	The City supported JICA as a technical advisor for the JICA ODA Grants project in Cebu	



Sludge collection in Cebu

#### ▶▶▶ Orders Received by Members Companies

2014	Entrusted with <a href="#">The Pilot survey for Disseminating SME's technologies for Applicability of dewatering Equipment for septage management of Cebu City, Philippines</a> (Order made by JICA)
2016	Delivered <a href="#">sludge dewatering equipment</a> to public wastewater treatment plants in the Philippines
2017	Entrusted with <a href="#">The preparatory survey for Septic tank sludge treatment construction for Metro Cebu</a> (Order made by JICA)



Sludge dewatering equipment installed

### Accepting site visits at Water and Environment Solution Hubs

The City of Yokohama is designated as AAA\*, and has exhibition facilities about technologies of water-related infrastructure in Hokubu sewerage center as WES Hubs. Upon request from foreign organizations, the City of Yokohama has hosted site visits at municipal plants for wastewater treatment and sludge treatment and has offered training sessions. As part of this, the City offers member companies opportunities such as presentations of their technologies and business matching.

#### The City's Activities ▶▶▶

#### ▶▶▶ Tie-ups with Members

2011 to 2021	Accepted 2,850 visitors from 114 countries in total for site visits	•Exhibits of member's technologies
2016	The city designated as AAA	•Business matching (total 48 companies) •Site visits and training(total 39 companies)



Egg-shaped digestion tank

#### ▶▶▶ Orders Received by Members Companies

2015	Entrusted with <a href="#">Kandy City Wastewater Management Project</a> (Order made by National Water Supply & Drainage Board)
2016	Entrusted with <a href="#">Feasibility Study for the Construction of Waste Water Treatment Plant</a> in Tehran City, Iran(Order made by METI)



Site visit to a wastewater treatment plant

\*AAA (Alliance Advanced Agency) refers to cities that the Ministry of Land, Infrastructure, Transport and Tourism designates as advanced municipalities in the international development field.



City of Yokohama(as of Feb.2022)  
 Population: 3,768,902  
 Land area: 437.78 km<sup>2</sup>



Nishiya Purification Plant

### Water Supply

Amount of annual supply : 414,982,500m<sup>3</sup>  
 Service rate: 100%  
 Non-revenue water rate: 7.2%  
 Purification plants: 3 plants



Hokubu Sewerage Center

### Sewerage Works

Amount of annual treated: 553,605,000m<sup>3</sup>  
 Usage rate: 100%  
 Wastewater treatment plants: 11 plants  
 Sludge treatment plants: 2 plants

\*as of FY2020

### Contact for YWBA

<Regarding water supply>  
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YWBA website