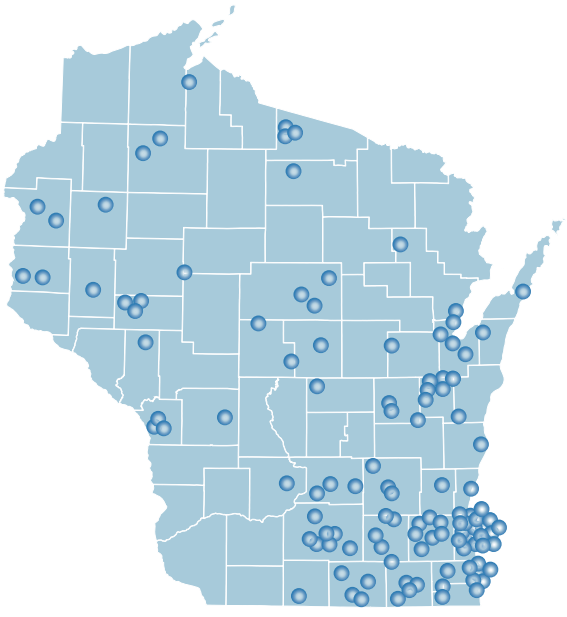

EXPERTISE IN
WATER TECHNOLOGY
RUNS DEEP IN WISCONSIN.®
THINK • MAKE • HAPPEN
in WISCONSIN

WHY WATER TECHNOLOGY COMPANIES CHOOSE WISCONSIN

Companies looking to start, relocate or expand their operations in Wisconsin benefit from the state's central location, reliable infrastructure, talented workforce and business-friendly policies—all of which create competitive advantages that help businesses capitalize upon regional, national and global market opportunities.

Wisconsin's long history of innovation continues to fuel new solutions to challenges facing people, companies, nations and our very planet, with some of the most respected companies in the world drawing upon Wisconsin's plentiful natural resources, renowned research capabilities and the can-do spirit of its citizens to grow and succeed.

200+ water technology companies in Wisconsin create and manufacture solutions for water users around the world.



Access to fresh water has long been viewed as one of Wisconsin's key attributes. With the two largest Great Lakes—Lake Michigan and Lake Superior—and the Mississippi River forming three of Wisconsin's borders, plus 15,000 lakes within the state's boundaries, Wisconsin has made the most of its unique geography to build core industry strengths that draw upon abundant fresh water: agriculture, food processing, pulp and paper production, manufacturing, power generation and shipping, to name a few. The state's name literally translates from Native American roots to mean, "river running through a red place."

In tapping this precious natural resource to create commercial activity and improve the lives of our citizens, we've also learned to treat it with the respect it deserves. When it comes to moving, metering, treating and using water in a sustainable manner, Wisconsin possesses world-leading knowledge based on a long history of innovation.

> "Southeastern Wisconsin has become an ecosystem where businesses, universities and other groups can come to collectively solve global water challenges."
>
> ~Craig Wehr, President, Zurn Industries

UNIQUE INDUSTRY ADVANTAGES

INDUSTRY LEADERSHIP

Wisconsin is home to more than 200 companies[1] with ties to the state's burgeoning water technology industry. These companies together employ nearly 37,000 people and generate $5.7 billion in annual sales. And while Milwaukee stands as the leading water technology hub in the U.S., the distribution of water sector companies throughout the state underscores the breadth of Wisconsin's industry-critical capabilities.

$5.7 BILLION ANNUAL SALES

Source: WEDC analysis

The water technology industry also plays a crucial supporting role to other industries that drive the state's economy. Wisconsin's manufacturing sector—a $56 billion industry[2] that employs 16 percent of the state's workers[3]—and its food and beverage sector—an $88 billion industry [4]—both depend heavily on water technology for innovations that create efficiencies in their processes and enable increased productivity and profit, with attention to sustainability.

1 University of Wisconsin - Milwaukee research, 2014
2 Bureau of Economic Analysis, 2016
3 Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Annual 2016 Employment
4 Contribution of Agriculture to the Wisconsin Economy: Updated for 2012, University of Wisconsin-Madison/Extension, Department of Agriculture and Applied Economics, by Steven C. Deller and David Williams

TALENT

Wisconsin is well known for its industrious, Midwestern work ethic, and its educational system is universally admired. Wisconsin's high school graduation rate is consistently ranked among the top in the nation, and the University of Wisconsin System is regularly cited as a leader in terms of size and quality.

Wisconsin's public and private colleges support the resources, companies and policy makers throughout the state that are working to develop new, innovative products to fulfill market needs. And as the first state in the nation to develop a technical college system, Wisconsin has more than 100 years' experience training its workforce to fulfill ever-changing industry demands.

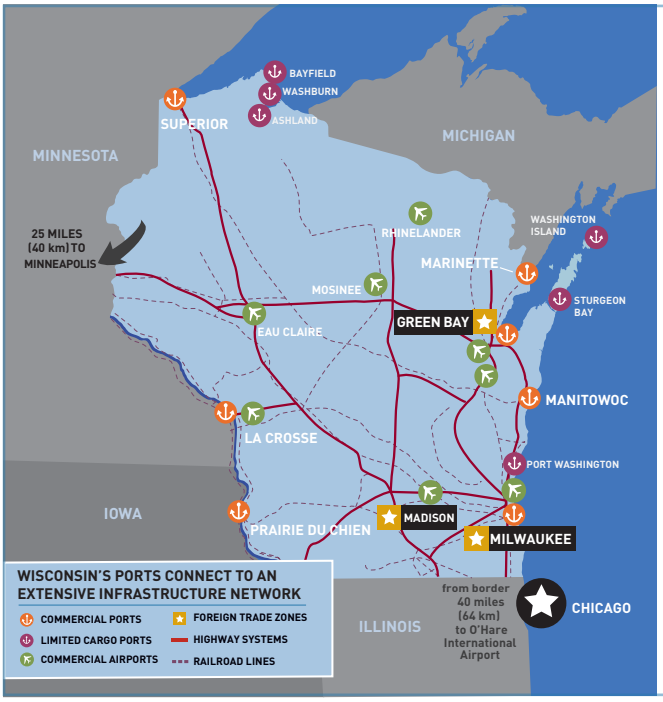
INFRASTRUCTURE

Wisconsin's central location and robust infrastructure give companies operating in the state one-day access to major markets throughout the U.S. and beyond. Wisconsin's roads, railways and ports provide seamless, convenient access to the world's busiest multimodal transportation hub, located just 55 miles south of the state's border.

37,000

EMPLOYEES CONNECTED TO INDUSTRY OPPORTUNITIES

Source: WEDC analysis



INFRASTRUCTURE IN WISCONSIN

09 HIGHWAY SYSTEMS
State commerce and industry relies on nine major highways covering more than 11,800 miles (18,990 km) to move our goods to market. Our interstate system connects us to major industrial cities across the U.S.

13 RAILROAD LINES
Rail traffic throughout the state continues to grow and move more than $122 billion in freight each year, creating a seamless link in the nationwide intermodal system. Amtrak travels between Chicago and Milwaukee multiple times daily.

08 COMMERCIAL AIRPORTS
Eight commercial airport locations serving major industrial and metropolitan areas statewide. These airports are served by all major carriers, linking to every point in the nation within one business day. In addition, these larger airports are within driving distance:

CHICAGO: O'Hare is American's second largest hub, with 963 domestic flights daily to 153 U.S. cities and more than 100 direct flights daily to 55 international destinations.
MINNEAPOLIS: 135 nonstop flights including 115 domestic and 20 international markets.

13 COMMERCIAL PORTS
Uniquely situated on the nation's greatest waterways, Wisconsin ships 39 million ton of product from commercial cargo ports and 6 limited cargo ports located along Lake Michigan, Lake Superior and the Mississippi River.

03 FOREIGN TRADE ZONES (FTZ)
Companies located in one of our three Foreign Trade Zones (FTZs) can import merchandise (by truck, rail, air or boat) without going through formal customs entry procedures or paying import duties. These companies have the option to pay tariffs after their product inventory is sold, improving cash flow and saving money. Other benefits include, but are not limited to: global market competitiveness, minimized bureaucratic regulations, and improved supply chain efficiencies.

GLOBAL LEADERSHIP

Milwaukee's water technology honors include the following:

- Host of the annual Water Leaders Summit, which has grown to become a premier global event for the discussion of resources, issues, challenges and solutions related to fresh water.
- 2012 U.S. Water Prize awarded to the Milwaukee Metropolitan Sewerage District (MMSD) for initiation of its innovative watershed-based permitting pilot program. The pilot program has the promise of increasing the effectiveness and efficiency of reducing watershed pollution across political jurisdictions and industries.
- MMSD has also received acclaim for its Fresh Coast 740 initiative, which leads the way in water conservation and environmental protection, setting a goal that the city will capture 740 million gallons of stormwater with each rain event. MMSD executive director Kevin Shafer received the 2013 Water Infrastructure Management Award from *Water Utility Infrastructure Management Journal*, and in 2017 MMSD was recognized by the international Global Water Leaders Group as a "Leading Utility of the World."
- Milwaukee received its third U.S. Water Prize in 2013, with MillerCoors being recognized for its comprehensive water management practices.

IDEALLY LOCATED ON THE GREAT LAKES

MILWAUKEE
ONE OF FIVE IN THE WORLD

Source: The Water Council, 2017

The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with 10 universally accepted principles in the area of human rights, labor, environment and anti-corruption. On April 28, 2009, The Water Council was inducted into the UN Global Compact Cities Programme. The Cities Programme, the urban arm of the United Nations Global Compact, works directly with cities, regions and partners to advance social equality and justice, environmental sustainability and good governance in the urban environment. **Today Milwaukee is one of only five cities participating in the Cities Programme as an "Innovating City," the highest level of engagement.**

IN GOOD COMPANY

Wisconsin's global water technology strength is fueled by an emphasis on companies or providers that create solutions used by water-intensive industries and communities around the world.

Global industry leaders headquartered here include:

A. O. Smith Corp.
ABB Inc.
Badger Meter
Johnson Controls
Kohler Co.
MillerCoors
P&H Mining
Pentair Water Group Inc.
Rexnord
Rockwell Automation

> When it comes to water technology, Wisconsin is the best state to enter from abroad to establish a base for the U.S. market and collaborate with U.S. partners.
>
> ~ Harrison Richarz, founder and CEO, ICONAC

"MILWAUKEE, WISCONSIN IS THE CAPITAL OF WATER"

Source: *Forbes*

The more than 150 water technology companies located in and around Milwaukee contribute to Wisconsin's reputation for sustainability leadership. The Water Council, based in Milwaukee, is a global authority on advanced water technology development and deployment.

WORLD WATER HUB

The Water Council, the only organization of its kind in the U.S., is an industry-led nonprofit dedicated to achieving global freshwater sustainability through total water cycle solutions. In order to ensure a broad knowledge base, The Water Council drew its initial membership from industry, academic, utility and private sector leaders. As a result, the Council remains at the forefront of economic, talent and research issues in the water technology sector. By building strategic partnerships, supporting education and facilitating access to capital investment, The Water Council fosters economic opportunities for Wisconsin's water industry participants. Its work has drawn praise both nationally and internationally:

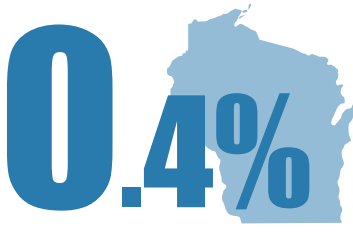
- U.S. Water Partnership member. One of 47 U.S. government agencies, private sector and civil society organizations uniting to mobilize U.S. expertise, resources and ingenuity to address global water challenges.
- 2016 CoreNet Global Economic Development Leadership Award recipient for Water Technology Cluster Leadership.
- 2016 Gold Award recipient in the Entrepreneurship category from the International Economic Development Council.
- Water Council board member Glen Daigger was named one of 25 global thought leaders for 2016 by *Water & Wastewater International.*
- 2015 winner of the Excellence in Technology-Based Economic Development Award from the State Science & Technology Institute.
- 2011 U.S. Water Prize by the U.S. Water Alliance. As Ben Grumbles, president of the U.S. Water Alliance, noted, "The Water Council is a world-class example of regional collaboration and technological innovation for a future of clean water and good jobs."

THE WATER COUNCIL

The Water Council has signed memoranda of understanding with organizations in the Netherlands, France, the UK, Germany, China and South Korea. These partnerships connect entrepreneurs in each location in a "borderless innovation network," allowing them to learn from and collaborate with their overseas counterparts and gain new perspectives on problems and solutions in water technology. The networks also make it easier for young companies to connect with potential funding sources, and for early-stage companies to connect with experienced mentors in the sector.

In addition, The Water Council member companies have won numerous awards, including:

- Kohler Co. has received the U.S. Environmental Protection Agency's WaterSense Sustained Excellence Award four times, and in 2017 was awarded the prestigious U.S. Water Prize for its development and promotion of water-efficient products that meet the U.S. Environmental Protection Agency's WaterSense® efficiency requirements.
- PaveDrain received the Early Revenue Track Award in Imagine H2O's Innovations Business Contest. In 2016, the company was awarded one of the first-ever China BlueTech awards, recognizing its outstanding innovation and its technology's readiness for the China market.



CUTTING-EDGE ACADEMIC PROGRAMS AND INDUSTRY-ACADEMIC COLLABORATIONS

More than 50 different water-focused degree programs can be found at 30 major public and private educational institutions in Wisconsin. This breadth of expertise creates opportunities for specialization, research, product development and professional education at every level. Examples include:

UNIVERSITY OF WISCONSIN SYSTEM

FRESH WATER UNIVERSITY™

The UW System is committed to inititatives related to fresh water in Wisconsin. Focused on engaging students, faculty and industry leaders in research, thought leadership and hands-on experiences offering collaborative research and degree opportunities, the UW System invests in the key role that fresh water plays in the state of Wisconsin.

School of Freshwater Sciences (UW-Milwaukee) (See next page.)
Institute for Water Business (UW-Whitewater)
College of Natural Resources (UW-Stevens Point)
Aquatic Sciences and Sea Grant Institute (UW-Madison)
Department of Engineering Professional Development (UW-Madison)
Environmental Resources and Biodigester Lab (UW-Oshkosh)
Lake Superior Research Institute (UW-Superior)

MARQUETTE UNIVERSITY

The **Water Quality Center** brings together researchers, industries, government agencies, private foundations and others to solve problems related to lake, river and groundwater quality, working in the areas of environmental engineering and water resources engineering.

NORTHLAND COLLEGE

The **Burke Center for Freshwater Innovation** focuses on scientific research, communication and thought leadership on water issues in the Great Lakes region and beyond, with a special focus on translating science for the general public, government agencies, NGOs, agriculture and the private sector.

MILWAUKEE SCHOOL OF ENGINEERING

The school offers a specialization in **environmental and water resources engineering** as part of its Master of Science in Civil Engineering program.

The **WISCONSIN TECHNICAL COLLEGE SYSTEM** proudly offers programs in:
Environmental engineering (Northeast)
Water quality technology (Milwaukee)
Applied engineering technology (North Central)
Civil engineering technology (Gateway)
Sustainable facility operations (Milwaukee)
Process and biorefinery technology (Mid-state)

The National Science Foundation Industry/ University Collaborative Research Center Program, a partnership between UW-Milwaukee and Marquette University, links corporate sponsors with university researchers to address industry-identified challenges.

The **SCHOOL OF FRESHWATER SCIENCES** provides talent, tools and techniques to inform freshwater management, business initiatives, community nonprofits and environmental agencies. Conducting $7 million of research annually, the school's students and faculty serve as a dynamic resource for water policy and innovation nationally and internationally.

Based at the University of Wisconsin-Milwaukee and located on Milwaukee's harbor, the school is home to 21 research laboratories, including an extensive analytical chemistry facility and the first DNA sequencing lab in the country dedicated to freshwater issues. Its combination of lab capabilities, from microbiology and genomics to aquaculture and groundwater, results in revolutionary research collaborations. On-site partners include the University of Wisconsin Sea Grant, the Wisconsin Department of Natural Resources, the U.S. Department of Agriculture and the U.S. Environmental Protection Agency.

Lake Michigan serves as a living laboratory for this one-of-a-kind school, which is the largest academic research institution for the Great Lakes. Its assets include:

- Analytical Chemistry Facility
- Center for Water Policy
- Great Lakes Aquaculture Research
- Great Lakes Genomics Center
- Research Vessel Neeskay and A Fleet of Small Craft
- Water Equipment and Policy Research Center
- Water Technology Accelerator

Photo courtesy of UW-Milwaukee School of Freshwater Sciences

SUPPORTING SMALL BUSINESS IN THE WATER SECTOR

Since 2014, The Water Council has been implementing a Regional Innovation Cluster contract from the U.S. Small Business Administration to create a "small business channel" with resources and assistance specifically for small and midsize water technology companies. Services offered by The Water Council's Small Business Channel include:

- Matchmaking assistance, pairing smaller water sector companies with larger ones for mentoring purposes
- Facilitated connections to capital resources, export and procurement assistance, and training and workshop opportunities
- The Global Water Port, an online research and collaboration powerhouse—and the only tool of its kind—developed to enhance connectivity within the water technology sector and among those interested in finding solutions to water-related challenges. Powered by the Innovation Exchange™ and enabled by its affiliate inno360™, a cognitive intelligence and predictive research engine equipped with IBM Watson™, individuals from any industry, organization or enterprise can use the Port to inform, accelerate and evolve water technology innovation.

Source: Center for Retirement Research at Boston College, 2016

ACCELERATING INNOVATION IN THE WATER SECTOR

The Global Water Center is the centerpiece of a bustling Water Technology District in Milwaukee. More than $211 million in public and private investment was made in the district from 2010 to 2015, with the pace of investment still accelerating. Since 2012, the district has been home to six major new developments totaling $116 million in construction costs, in addition to many smaller-scale renovation and construction projects. The Reed Street Yards project alone is ultimately expected to house more than 1 million square feet of office space. Located on a former railyard and truck terminal, Reed Street Yards will be one of Wisconsin's first eco-industrial parks, balancing natural resources with economic development. The Wisconsin Economic Development Corporation and the City of Milwaukee have come together to provide funding to help remediate this brownfield site and develop the infrastructure for a modern, state-of-the-art commerce park, and water technology firms have already begun announcing plans to relocate to the new development. The first building, a 52,000-square-foot office building, will serve as corporate headquarters for Zurn Industries, which relocated from Erie, Pennsylvania, to join Milwaukee's water cluster. And The Water Council recently announced the Oasis—a shared co-working space that will offer access to mentors, technical assistance, workshops and research partnerships.The Oasis is intended as a "soft landing" spot for companies moving to Wisconsin from other locales, so they can easily integrate into Wisconsin's water technology hub while searching for a more permanent office space.

IN 2016, **WISCONSIN'S** COLLEGES AND UNIVERSITIES AWARDED MORE THAN

4,000

ACADEMIC DEGREES IN **ENGINEERING** AND ENGINEERING TECHNOLOGY FIELDS, INCLUDING CERTIFICATES, ASSOCIATE DEGREES, BACHELOR'S AND ADVANCED DEGREES.

Source: National IPEDS database published by the U.S. Department of Education's NCES

THE WATER COUNCIL

The 98,000-square-foot **GLOBAL WATER CENTER** celebrated its grand opening in September 2013; by 2015, the building was full.

In addition to providing operational space to some of the world's leading water technology companies, the center is also home to a one-of-a-kind freshwater seed accelerator, the BREW (Business. Research. Entrepreneurship. In Wisconsin.). The goal of the BREW Accelerator is to foster unique water technology startups, thereby advancing Milwaukee's leadership as a global water hub and inspiring new opportunities in the water industry. With an annual application cycle each spring, the BREW Accelerator accepts up to six water technology startups in each class to advance their business goals. Participating companies receive the following:

- A 12-month lease at the Global Water Center
- Mentorship from dozens of area water technology experts
- Business model and operations training through The Water Council and University of Wisconsin-Whitewater Institute for Water Business
- Access to investment capital funding sources and the Water Technology Network

Additionally, the BREW Corporate accelerates the development of high-caliber startups by offering them the chance to work closely with a global corporation looking for new technology to solve a specific challenge. Sponsors thus far have included Veolia and A. O. Smith. Startups compete in a challenge related to the problem the company seeks to solve; those who show the highest likelihood of solving the challenge are selected to participate and receive funding and access to executive-level mentors, corporate R&D and intensive business training.

> "The Water Council's efforts in Milwaukee are a perfect example of how we can grow public-private partnerships to create jobs and build a 'Made in Wisconsin' economy."
>
> ~ U.S. Senator Tammy Baldwin

BRIDGING THE GAPS AMONG DATA, PEOPLE AND INNOVATION

Launched in 2016, The Water Council's Research and Commercialization (R&C) Program connects members to an ecosystem of experts and innovations, and technical and programmatic support to advance technology development to meet the direct needs of industry. The program accelerates innovation, commercialization opportunities and adoption of technological water solutions for a wide range of industries including utilities, agriculture and manufacturing. Through a nationwide scouting team, a detailed database and clear-inghouse, and product matching and development teams, the R&C Program saves members time and cost, expands access and finds emerging technologies and processes from federal, university and private labs and entrepreneurs from around the world.

> "The Water Council's R&C Program is like having an executive search firm for water-related technology."
>
> ~ Dean Amhaus, President and CEO, The Water Council

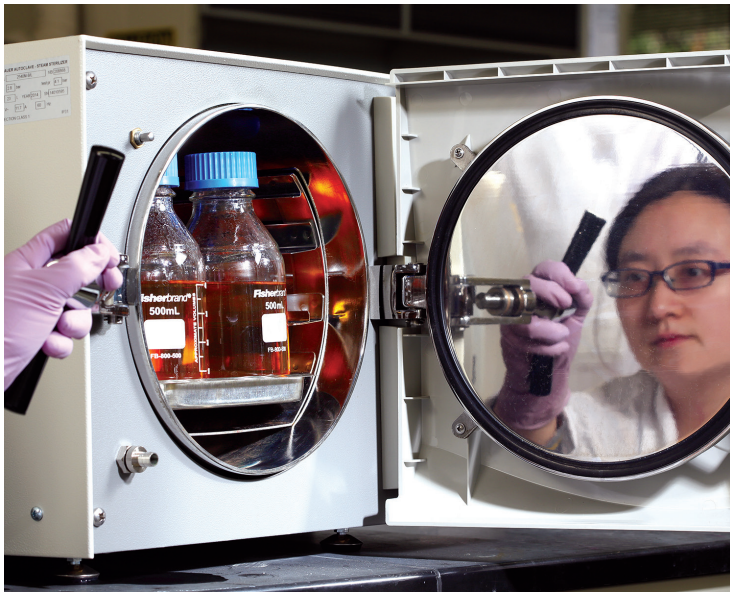
A GUIDING LIGHT IN THE FUTURE OF WATER

ALLIANCE FOR WATER STEWARDSHIP

Since 2014, The Water Council has been the official North American regional partner of the Alliance for Water Stewardship. In this role, The Water Council is charged with overseeing the implementation within North America of the Germany-based nonprofit's international standards for water quality and use, and has hired a North America region executive director for the Alliance for Water Stewardship to lead the development of stewardship and sustainability initiatives. This designation helps further cement Milwaukee as an epicenter for water sustainability thought leadership, and positions The Water Council to be a driver of change in solving problems of national and international scale—such as drought and water shortage in the western U.S.

WISCONSIN

A. O. SMITH CORP.
Milwaukee



With headquarters in Milwaukee, A. O. Smith is a global water technology company and a leader in applying innovative technology and energy-efficient solutions to products marketed worldwide. The company is one of the world's leading manufacturers of residential and commercial water heaters and boilers, with operations in the U.S., Canada, China, India, Mexico, the Netherlands, Turkey and the UK. A. O. Smith offers a comprehensive product line and some of the best-known brands in the industry.

The company is also a manufacturer and marketer of water treatment equipment for residential and light commercial applications. A. O. Smith is one of the leading brands of reverse osmosis products in China, India and Vietnam, thanks to patented "sidestream" membrane technology that significantly increases the clean water output while prolonging the life of the membrane. In 2016, the company entered the North American water treatment market with its acquisition of Austin, Texas-based Aquasana.

KOHLER CO.
Kohler

After immigrating to Wisconsin from Austria, businessman and visionary John Michael Kohler acquired a foundry in 1873. The foundry produced a variety of cast-iron and steel products, but one particular product defined the company's direction: in 1883, Kohler heated a large basin to 1,700°F and sprinkled it with enamel powder. Placing a picture of it in his catalog, he called it "a horse trough/hog scalder" but noted that "when furnished with four legs will serve as a bathtub."

Today, Kohler has grown from a world-renowned plumbing company into a multifaceted global family of brands focused on the concept of gracious living. A global leader in the manufacture of kitchen and bath products, engines and power systems, and cabinetry and tile, the company also owns and operates hospitality and golf resort destinations. With more than 50 manufacturing locations worldwide, Kohler Co. is one of the U.S.'s oldest and largest privately held companies, comprising 35,000 associates.

The company continues its legacy of product innovation, with plumbing fixtures, faucets and showerheads that use less water while maximizing performance. Recent advances include digital technology in the bathroom and kitchen, including temperature sensors, programmable interfaces, and web-enabled functionality to offer customized showering and spa-like experiences and digital connectivity. In addition, Kohler partners with public and private organizations to conduct research on home water use and wastewater treatment, with the goal of ensuring that residents across the globe have access to safe drinking water and hygienic sanitation.

WATER TECHNOLOGY
COMPANIES

BADGER METER
Milwaukee

Badger Meter helps measure what matters today, protecting precious resources for tomorrow's generation. Its industry-leading flow measurement solutions help optimize operations, leading to a better bottom line and a better world.

Badger Meter offers an end-to-end solution that helps water utilities generate needed revenue, monitor and conserve their resources, and better serve their valued water customers. In addition to water utilities, Badger Meter serves a wide range of industrial and commercial markets including energy and petroleum, food and beverage, pharmaceutical, chemical, HVAC, process, wastewater, aerospace and automotive.

Flow instrumentation solutions include meters and valves sold worldwide to measure and control materials flowing through a pipe or pipeline including water, air, steam, oil and other liquids and gases. These products are used to control, manage and optimize applications across a variety of industries. Specialty products include radio technology to natural gas utilities for installation on their gas meters, and concrete vibrators used in the concrete construction process. Badger Meter employs more than 1,600 people worldwide.

REXNORD ZURN
Milwaukee

Headquartered in Milwaukee, Rexnord comprises two strategic platforms, process and motion control and water management, with approximately 8,000 employees worldwide. Its process and motion control platform provides high-value, mission-critical solutions. Rexnord bearings, couplings and gears keep industry in motion — from power plants to mining operations. Its conveyer components help make everything from cars to food, and Rexnord aerospace products can be found throughout aircraft from the engine to the landing gear.

Its water management platform aspires to provide the safest and most efficient water solutions to protect human health and the environment. Rexnord products keep water flowing in hospitals, schools, homes and businesses, and can be found in applications from roadway and roof drainage to dams and hydropower. In 2016, Rexnord opened its new water management platform headquarters in the Reed Street Yards development. Prior to opening this building, Rexnord joined The Water Council in 2009 and moved its corporate headquarters to Milwaukee's Global Water Center in 2014.

Rexnord is operated in a disciplined way with the Rexnord Business System (RBS), a process-based framework for world-class operating performance and continuous improvement. RBS enables speed, scalability and consistency to drive superior customer satisfaction and financial results.

The Wisconsin Economic Development Corporation (WEDC) leads economic development efforts for the state by advancing and maximizing opportunities in Wisconsin for businesses, communities and people to thrive in a globally competitive environment. WEDC provides resources, operational support and financial assistance to companies, partners and communities in Wisconsin. WEDC achieves its mission through initiatives driven by five strategic pillars: business development; community and economic opportunity; strategic economic competitiveness; state brand management and promotion; and operational and fiscal excellence. Working with more than 600 regional and local partners, WEDC develops and delivers solutions representative of a highly responsive and coordinated economic development network.

Visit **InWisconsin.com** to learn more.

THINK•MAKE•HAPPEN

in WISCONSIN

WISCONSIN ECONOMIC DEVELOPMENT CORPORATION

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