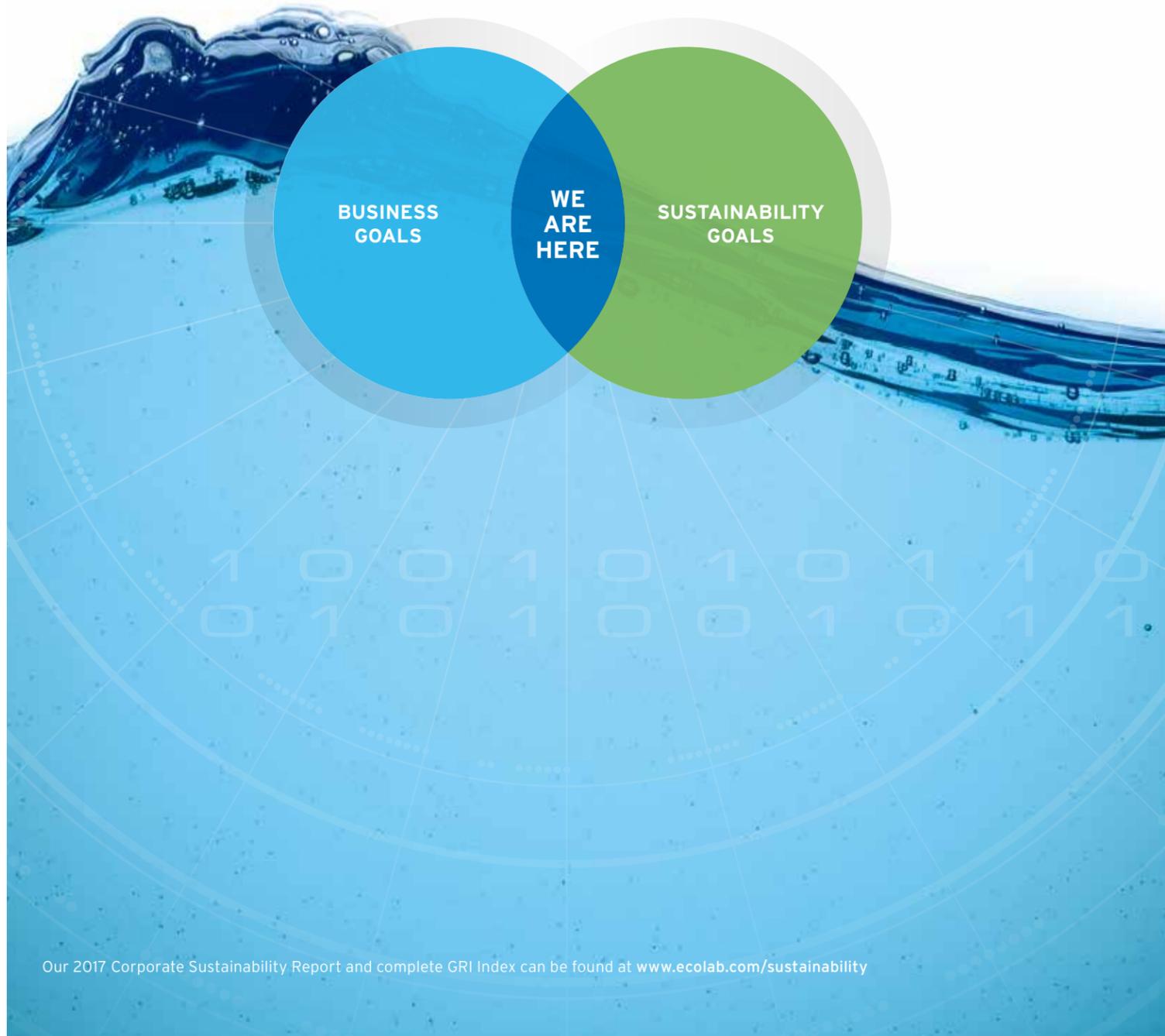


**CATALYST
FOR A
BETTER
WORLD**



Together with our customers, we integrate business goals and sustainability goals. And when these two driving forces line up, big things happen. Powerful change. Real impact. It's how the food we eat gets safer. The water we use, cleaner. The energy we need, more efficient. And the environment healthier. We're more than a purveyor of technologies and services — we're a catalyst. For our customers. For positive change. For a better world.



A letter from the Chairman and CEO

We have thousands of chemists and chemical engineers at Ecolab, and they all know what a catalyst is: a substance that causes or accelerates a chemical reaction. Outside of the laboratory, a catalyst is defined as something that brings about a change.

We like to think of our company as a catalyst, because the work we do delivers both economic and environmental benefits to drive positive change in the world. We work behind the scenes at nearly three million customer locations globally to promote safe food, maintain clean environments and improve operational efficiencies, while reducing water, energy and waste. We help our customers operate more efficiently — saving them money and reducing their impact on the planet. Over the years, we've learned that when economic and environmental goals come together, positive change accelerates.

As we expand our capabilities to do more for our customers, we are shifting our focus beyond conservation to a circular approach to resource management that encourages reuse and recycling of finite resources — in particular, water. This shift is essential because we are facing a future that will place even greater demands on our limited resources.

In 2017, we helped customers conserve more than 171 billion gallons of water, save 12 trillion British thermal units

(BTUs) of energy and eliminate 52 million pounds of waste.

Our more than 26,500 service professionals and 1,600 scientists are crucial to our efforts to serve our customers and advance the common good. Together, they deliver on what we consider a truly noble purpose — to make the world cleaner, safer and healthier, protecting people and vital resources.

Our talented Ecolab team is backed up by our 95-year history of innovation. Today, through expanded digital technologies and “connected” chemistries, we turn data into real-time, actionable insights and smarter solutions to drive operational efficiency and reduce environmental impact for our customers. We are developing solutions to customer problems faster and more comprehensively than ever, helping customers meet their own sustainability goals and supporting their growth.

Our biggest impact on our planet is through the work we do around the world — for our customers and in support of partnerships and programs that protect the environment, such as the U.N. Sustainable Development Goals. But we also set internal goals to leverage our technology to reduce water, energy and waste in our own operations.

At Ecolab, sustainability is a core value that we all share. It's what guides our

efforts to create solutions that will drive growth for our customers, and for our company, while reducing our combined impact on the planet. Operating at the nexus of business and sustainability, we strive to lead by example and serve as a catalyst for a better world.

Sincerely,

Douglas M. Baker, Jr.
Chairman and CEO

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OUR APPROACH

At Ecolab, sustainability is an integral part of everything we do. Through technology, information, on-site service and training, we help companies around the world achieve exceptional business results, while minimizing environmental and social impact. The work we do matters, and the way we do it matters to our employees, customers and our communities.

We focus every day on finding new solutions to help deliver clean water, safe food, abundant energy and healthy environments while saving water and energy and reducing waste. Our expertise helps our customers reduce their reliance on finite natural resources and achieve the best results at the lowest total cost. Within our own facilities, we work on reducing our water consumption, carbon emissions and waste stream, now and in the future.



Ecolab is committed to partnerships and programs that fulfill the United Nations Sustainable Development Goals — in particular, Goal 6, to ensure the availability and sustainable management of water and sanitation for all. (See page 31 for more on this effort.)



MEASURING OUR IMPACT

Through our patented eROISM approach, we measure the economic, operational and environmental impact of our solutions for our customers.

-  **Safety**
We strive to create cleaner, safer and healthier operating environments for employees and customers.
-  **Water**
Our solutions conserve water and optimize water quality.
-  **Energy**
We save energy by enabling more efficient operations, and help produce more energy by uncovering oil and gas reserves.
-  **Air**
We manage greenhouse gas emissions and improve indoor air quality.
-  **Waste**
We help keep waste out of landfills.
-  **Assets**
Our programs and services improve asset use and increase asset life.
-  **Costs**
Our solutions can help reduce the total cost of operations.
-  **Productivity**
We help improve the productivity of operations by saving time and increasing efficiency.
-  **Food Safety**
We help ensure safe food by reducing the risk of illness-causing pathogens.
-  **Product Quality**
We help improve product quality.



ECOLAB AT A GLANCE



Nearly
3 million
customer locations



95-year history
of innovation



8,100 patents



48,000 associates
including 26,000 service professionals and 1,600 RD&E scientists, engineers & technical specialists



\$11 million donated
through Ecolab Foundation, corporate giving and volunteer hours



CLEAN WATER

OUR PILLARS

In 2017, we helped our customers:

Conserve more than **171 billion** gallons of water

Manage **1.1 trillion** gallons of water

Conserve drinking water for more than **590 million people**

And we are working to help our customers save **300 billion** gallons of water annually by 2030



SAFE FOOD

Safely produce more than **25%** of the world's processed food

Safely produce **44%** of the global milk supply

Support clean kitchens, serving **45 billion** restaurant meals

And we work to help customers prevent more than **1 million** foodborne illnesses each year



ABUNDANT ENERGY

Conserve more than **12 trillion** BTUs

Reduce the water and energy footprint of **40%** of the world's petroleum production

Generate more than **20%** of the world's power

And we aim to reduce CO₂e by **10%** in our own operations by 2020



HEALTHY ENVIRONMENTS

Clean more than **40 billion** hands

Delight guests with more than **800 million** clean hotel rooms

Clean **6 million** patient rooms

Help hotels clean more than **110 million** loads of linens

And we work to help healthcare facilities reduce the risk of HAIs for as many as **10,000 people**



CHANGE FOR OUR CUSTOMERS

1

REAL DIFFERENCES IN THE REAL WORLD

We are a catalyst for change in a wide range of industries, from food production, restaurants, hotels and hospitals, to oil platforms, paper mills and manufacturing plants. We help our customers meet their business and sustainability goals through the work of our more than 26,500 field associates, our advanced digital technologies and “connected chemistries.”

We’ve been a pioneer in smart technologies, combining our chemistries with customer data to deliver insights and actions that reduce water and energy use and optimize operations.

Because we are on the ground in nearly three million customer locations, we understand the daily challenges our customers face in meeting their business objectives and sustainability goals.



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 Ford Motor Company has reduced water use by more than 10 billion gallons since 2000 and is aiming for an additional 30 percent reduction per vehicle from 2015 to 2020.



On the road to greater water savings with smart technology

INSIGHT

When it comes to water management, Ford Motor Company has pulled ahead. The company has reduced water use by more than 10 billion gallons since 2000 and is aiming for an additional 30 percent reduction per vehicle from 2015 to 2020. Its long-term ambition: zero freshwater use in manufacturing.

To enhance efficiency and cut water consumption at its Chicago assembly plant, Ford worked with Nalco Water.

INNOVATION

The partnership focused on two areas that are heavily dependent on water:

- Cooling towers, which consume large quantities of water and have operational challenges such as scaling, corrosion, fouling and biological growth — all of which impact water usage, performance and costs.
- Pre-treatment baths, where metal is treated before it is painted — a process that also consumes a significant amount of water. To improve efficiency, Ford wanted to continuously monitor water overflow when the baths were refilled.

Nalco Water implemented two projects to help the plant use water more efficiently:

- 3D TRASAR™ Water Saver Technology, a digital “connected chemistries” solution, was installed to optimize cooling tower performance and reduce water use. The system is continuously monitored by the Ecolab System Assurance Center, which provides real-time resolution of problems — preventing significant water loss.
- Nalco Water’s Wireless Meters were set up in the pre-treatment baths to constantly track the programmed water flow rate. If there is a change, paint process engineers and on-site representatives receive an instant alert. Previously, problem identification and resolution could take days or even months.

Circular water strategies (reuse and recycling of water) also are playing an important role in the plant’s future water management strategy. Nalco Water is working with Ford to implement technology that will potentially lead to a significant reduction in water use by recycling phosphate rinse water. The plant is developing processes to enable reuse of a portion of the pre-treatment process water, which will greatly reduce the need to tap into the municipal water supply.

TECHNOLOGY

- 3D TRASAR™ Water Saver Technology
- Wireless Water Meters

eROISM

ANNUAL SAVINGS

WATER

Reduced freshwater use by **23 million** gallons in four months — equivalent to the annual drinking water needs of more than **79,000 people**

Potential to save an additional **55 million** gallons per year through recycling phosphate rinse water

COSTS

Savings from reduced water use — equivalent to more than **\$186,000** per year

Potential to save an additional **\$481,000** through recycling phosphate rinse water

TOTAL COST SAVINGS

\$186 THOUSAND ANNUALLY



^
 Samsung's Austin plant produces chips that go into mobile devices. 3D TRASAR™ Technology has helped the plant dramatically reduce its water use, control corrosion and microbial growth, and optimize its operations.

SAMSUNG
 AUSTIN SEMICONDUCTOR

Helping Samsung save water and improve operations in Texas

INSIGHT

Precise temperature and humidity control are essential to the semiconductor fabrication process, which is why these facilities have large chiller operations. They also consume significant amounts of Ultra Pure Water (UPW) and generate substantial wastewater.

High-volume water consumption can present significant challenges in water-stressed areas such as Austin, Texas, where Samsung operates one of North America's largest chip fabrication plants. It has 45,000 tons of chilling capacity and 34 chillers connected to two cooling towers. The challenge for this technology provider? To ensure reliable production climate control while reducing the plant's water footprint and protecting its assets.

INNOVATION

Given its location in a water-scarce region, the Samsung facility had to increase operational reliability while optimizing water use. To support those goals, Nalco Water conducted a detailed analysis and implemented 3D TRASAR™ Technology, addressing key areas of improvement.

The solution benefits include:

- Real-time notification of changing conditions
- Detailed modeling and optimization of water sources so the facility managers could better understand the impact of improved flow management of the different streams
- 24/7 automation to enable immediate response to scaling or corrosion
- Technology to identify and control Key Process Indicators (KPIs) to minimize the risk of downtime or disruptions

The successful 3D TRASAR installation delivered on its promises and enabled Samsung to achieve its objectives – water reduction, corrosion and microbial control, and optimization of its operations.

TECHNOLOGY

- **3D TRASAR™ Technology**

eROISM

ANNUAL SAVINGS

WATER

73.8 million gallons saved — equivalent to the annual drinking water needs of more than **255,000 people**

\$73,791 in water savings

\$36,895 in sewer savings

ASSETS

\$1.6 million saved in reduced maintenance and equipment replacement

TOTAL COST SAVINGS

\$1.7 MILLION
 ANNUALLY

PRODUCTION AND MANUFACTURING



Round-the-clock monitoring helps Kraft Heinz enhance food safety, sustainability and savings



INSIGHT

For Kraft Heinz, one of the largest food and beverage companies in the world, food safety is paramount. That's why their central California plant looked to Ecolab to help them ensure consistent cleaning on every level – microbiological, physical and chemical. The aim was to implement proactive, effective and efficient solutions that would not only boost safety, but also drive more efficient use of resources.

INNOVATION

Ecolab's team of experts identified a solution: 3D TRASAR™ Clean-in-Place (CIP) Technology for two of the plant's systems. The technology continuously monitors the controls that track the plant's cleaning and sanitizing performance. It collects data

directly from the plant's Programmable Logic Controller via a smart box, which sends it to a secure server. Ecolab analysts translate the data into recommended corrective actions, which the customer and the on-site Ecolab account manager can then implement. The technology identified and resolved a number of issues, including fixing a leak in the heat exchanger valve, reducing wash times, and lowering sanitizer chemical use by 50 percent. The combination of 3D TRASAR CIP Technology and Ecolab's personalized service helped the plant achieve energy savings while enhancing food safety and reducing total costs by \$244,000 annually.

TECHNOLOGY

3D TRASAR™ Technology CIP

eROISM

ANNUAL SAVINGS

FOOD SAFETY

Prevented potential food safety problems through early identification of **1,800** emerging issues



ENERGY

4,321 ft³ in natural gas saved – equivalent to **\$33,573** in energy savings



ASSETS

Achieved **\$7,300** in sanitizer savings and optimized sanitizer pump efficiency



PRODUCTIVITY

Reduced wash time by **2,041 hours**, saving **\$204,100**



TOTAL COST SAVINGS

\$244 THOUSAND ANNUALLY

PRODUCTION AND MANUFACTURING



Circular solution helps Nestlé save water and energy in Brazil

INSIGHT

As the world's largest food and beverage company, Nestlé is committed to preserving resources for future generations by:

- Reducing water across its operations
- Using sustainably managed and renewable resources
- Achieving its zero-waste goal

A Nestlé milk production plant in southeastern Brazil challenged its suppliers to develop improvement projects that would deliver energy savings and reduce water consumption and CO₂ emissions. In particular, the plant was looking for an economically viable way to reuse the condensate organic water (COW) stream generated by the production of powdered milk. Nalco Water presented a plan that was approved, implemented and delivered sustainability savings within six months.

INNOVATION

Nalco Water conducted studies and prepared a water map to identify potential uses for COW water recovery. A work plan followed, which led to the recommendation that the COW water be used as cooling tower make-up.

The solution required a novel approach: creating and installing customized pre-treatment and heat recovery systems along with 3D TRASAR™ monitoring and control technology. This had a considerable impact on the plant, reducing costs as well as water and energy use, further supporting Nestlé's ambitious sustainability goals.

TECHNOLOGY

- **3D TRASAR™ Technology for Cooling Water**

eROISM

ANNUAL SAVINGS

WATER

175,000 m³ freshwater saved – equivalent to the annual drinking water needs of more than **159,000 people**



\$13,500 in reduced water costs

25,000 m³ of wastewater effluent eliminated

\$140,000 a year in cost savings

ENERGY

14,500 GJ reduction in fuel consumption



\$100,000 in reduced energy costs

AIR

Decreased CO₂ emissions by **496 metric tons** per year – equivalent to the CO₂ absorbed by more than **22,000 trees** a year



TOTAL COST SAVINGS

\$253 THOUSAND ANNUALLY



^
 “We want to be known as the world’s favorite travel company while fulfilling our global responsibility to be a force for good. Partnering with a solutions provider such as Ecolab helps us achieve our sustainability goals and ensure that we provide an exemplary experience to our guests.”

Denise Naguib
 Vice President, Sustainability and Supplier Diversity
 Marriott International



Sustainability goals for 2025 and beyond

INSIGHT

What do the largest single operator of hotels in the world and the global leader in water, hygiene and energy technologies and services have in common? Shared values that put people first, a commitment to sustainability and a global reach. These common principles underlie Marriott and Ecolab’s successful, longstanding partnership.

“We want to be known as the world’s favorite travel company while fulfilling our global responsibility to be a force for good,” said Denise Naguib, vice president, sustainability and supplier diversity, Marriott International. “Partnering with a solutions provider such as Ecolab helps us achieve our sustainability goals and ensure that we provide an exemplary experience to our guests.”

Marriott has ambitious 2025 sustainability and social impact goals for its more than 6,500 global properties and Ecolab’s technologies directly impact three key goals:

- Reducing water intensity by 15 percent
- Reducing carbon intensity by 30 percent
- Reducing waste to landfill by 45 percent

At the same time, Marriott needs to ensure that the experience it delivers to its guests meets or exceeds expectations. The challenge is to maintain the highest standards of cleanliness for dishes, linens and water, while driving operational efficiency and sustainability.

INNOVATION

From the guest room to the kitchen, the laundries to the cooling towers, Ecolab’s solutions deliver a positive environmental impact without sacrificing the quality that guests expect from a Marriott property.

Technology highlights:

- Aquanomic™ Low-Temp Laundry Program, which produces consistently superior results and extends linen life, reduces rewash, saves water and energy, and reduces greenhouse gas emissions.
- 3D TRASAR™ Technology for Cooling Water delivers on-demand control and optimization of cooling systems, helping customers protect their assets while delivering water and energy savings. The innovative technology detects the upsets that precede scaling, corrosion, and biofouling using real-time data and determines the correct response, to deliver optimal performance and savings.

These and other solutions have helped Marriott International maintain the highest guest standards and achieve significant savings in water, energy, CO₂ emissions and solid waste that help contribute to Marriott’s 2025 sustainability goals.



ANNUAL SAVINGS

WATER

3.34 billion liters of water – equivalent to the annual drinking water needs of more than **3 million people**

ENERGY

114 million kWh of energy

AIR

21,500 metric tons of CO₂e

WASTE

2 million pounds of waste

TECHNOLOGY

- 3D TRASAR™ Technology for Cooling Water
- Apex™ Warewashing
- Aquanomic™ Low-Temp Laundry Program
- Oasis Pro™ Housekeeping
- Sanitizing Wash ‘n Walk™ Floor Cleaner



Wringing out big savings for commercial laundries

INSIGHT

Each year in Asia Pacific alone, more than 6,500 commercial laundries consume more than 35 billion gallons of water and 500 million cubic meters of gas to wash more than 20 billion pounds of textiles. And they must comply with strict – and costly – discharge regulations.

That's why five leading textile service groups in Australia and New Zealand turned to Ecolab to help them:

- Reduce water and energy consumption
- Minimize their environmental footprint
- Improve wash quality

INNOVATION

To accomplish these goals, Ecolab deployed a circular water strategy with the BlueOcean™, Aquabatch™ and AquaDrain™ filtration systems.

These state-of-the-art systems, combined with wash process expertise, helped the laundries filter, recycle and reuse water. This not only reduced freshwater demand, it cut gas consumption in boilers and dryers. Ecolab also implemented its latest 40C ultra-low temperature washing process, OxyGuard™ 40, which helped reduce water and energy consumption at 22 laundries even further.

The total water savings? 446 million gallons annually for 22 laundries, which represent just 1.3 percent of Asia Pacific's commercial laundry water use. Imagine the potential impact if a much larger percentage of the region's commercial laundries implemented these solutions.

TECHNOLOGY

- AquaBatch™
- AquaDrain™ filtration systems
- BlueOcean™
- OxyGuard™ 40 low-temp washing

eROISM

ANNUAL SAVINGS

WATER

445 million
gallons saved — equivalent to the annual drinking water needs of more than
1.5 million people

ENERGY

219 billion
BTUs of energy

ASSETS

Optimized asset use through improved process control and increased consistency in water quality

SAFETY

Automatic and pre-assembled process improved safety

TOTAL COST SAVINGS

\$1.5
MILLION
ANNUALLY



Paper mill's power plant turns the page on a persistent problem



INSIGHT

DS Smith, a global manufacturer of sustainable corrugated packaging materials and specialty papers, operates a power plant in Porcari, Italy, that produces electricity for the power grid and steam for an adjacent paper mill.

The power plant was experiencing ongoing challenges with intermittent, high levels of iron corrosion particles in its steam generation system. This was negatively affecting its boilers as well as its productivity, profitability and overall operations.

INNOVATION

Enter Nalco Water's team of experts. They identified the source of the magnetite loss and implemented 3D TRASAR™ Technology to reduce iron oxides in the boiler water, which greatly reduced the risk of the plant being taken offline. It also led to reduced boiler water blowdown, erosion and corrosion, which lowered maintenance costs and cut water consumption, decreasing the plant's environmental impact.

TECHNOLOGY

- 3D TRASAR™ Technology for Boilers

eROISM

ANNUAL SAVINGS

WATER

14,430 m³
water saved — equivalent to the annual drinking water needs of more than
13,000 people

\$88,881
total water savings

ENERGY

4,330 tons
of steam saved

3 million
MJ of energy saved by reducing natural gas consumption

\$30,769
in natural gas savings

AIR

160 metric tons
of CO₂e

ASSETS

Extended equipment life through reductions in iron oxide release

Prevented erosion/corrosion that would require costly repairs

PRODUCTIVITY

\$3,692
in maintenance cost savings

100 hours
of reduced maintenance time

TOTAL COST SAVINGS

\$123
THOUSAND
ANNUALLY

RAW MATERIAL & INGREDIENT PROCESSING



West Coast refinery reduces water consumption in drought-stricken region

INSIGHT

When a business depends on water for its operations, being located in a drought-stricken region can pose a serious threat to growth, reliability and reputation. A West Coast refinery knew it had to act quickly to reduce the amount of water it was drawing from the area water supply. So, it sought the help of Nalco Champion, a technology services provider that specializes in water- and energy-saving solutions for oil and gas refineries.

INNOVATION

Using its Best Practices Gap Analysis, Nalco Champion identified the refinery's boiler system as a potential reliability risk. An audit confirmed that poor control of the cycles of concentration was contributing to high water use. Nalco Champion installed a trial of 3D TRASAR™ Technology for Boilers,

a solution that enhances sustainability performance and operational efficiency, while protecting assets. Before this, the boiler chemistry and cycles had been maintained manually. With its continuous monitoring and immediate responses to system changes, 3D TRASAR significantly improved the boiler system's reliability and performance, and greatly reduced its water and energy use. Encouraged by such dramatic improvements, the refinery chose to install eight more 3D TRASAR units.

TECHNOLOGY

- **3D TRASAR™ Technology for Boilers**

eROISM

ANNUAL SAVINGS

WATER

38 million gallons saved – equivalent to the annual drinking water needs of more than **131,000 people**

\$456,000 in savings

ENERGY

134,949 million BTUs of energy

\$529,000 in savings

AIR

3,796 metric tons reduction in greenhouse gas emissions

TOTAL COST SAVINGS

\$985 THOUSAND ANNUALLY

RAW MATERIAL & INGREDIENT PROCESSING



Abundant savings for Egyptian Fertilizers Company



INSIGHT

Egyptian Fertilizers Company (EFC) is a leading global producer and distributor of high-quality nitrogen fertilizer products and industrial chemicals that provides clean, environmentally sound solutions to its customers. Its Suez plant is one of the largest fertilizer complexes in Egypt, producing 1,400 tons a day of ammonia and 5,000 tons a day of urea. It has four different recirculating cooling water systems designed to manage critical process operations.

INNOVATION

One of the biggest challenges in open, recirculating cooling systems is a high risk of bacterial proliferation due to ammonia contamination and the high temperature of the cooling tower. This can lead to increased water, energy and chemical consumption as well as:

- Lower production
- Heat exchanger failure
- Microbiologically induced corrosion
- Loss of revenue

Nalco Water provided a comprehensive solution that included on-site expertise and Purate™ Technology, a patented, proprietary chlorine dioxide program that controls biologic growth in cooling towers and other industrial water treatment applications. The treatment program has helped the EFC plant reduce:

- Water consumption
- Maintenance costs
- Corrosion rates
- Chemical usage

In addition, overall plant performance has improved, and safety has increased, due to the replacement of volatile chlorine gas with stable and reliable Purate biocide technology.

TECHNOLOGY

- **PURATE™ Technology**

eROISM

ANNUAL SAVINGS

WATER

192,000 m³ freshwater saved – equivalent to the annual drinking water needs of more than **175,300 people**

\$40,000 in reduced water costs

ASSETS

\$300,000 saved due to reduced chemical use

\$56,000 saved as a result of reduced corrosion rates

PRODUCTIVITY

\$100,000 in reduced maintenance costs

TOTAL COST SAVINGS

\$496 THOUSAND ANNUALLY

HOW WE INNOVATE

Our customers are at the heart of the innovation process. Ecolab develops solutions that deliver clean water, safe food, abundant energy and healthy environments while reducing environmental impact. In 2017, we introduced a range of new offerings — many enabled by digital technology — to help our customers save water and energy and reduce waste, solve critical challenges, and improve operational efficiency.



WE CREATE CUSTOMER-FOCUSED SOLUTIONS

THE MINING OPTIMIZER

Scale formation, an undesirable deposit of minerals in mining processes, is a leading cause of excess energy and water use by the industry. The Mining Optimizer is a proprietary software package developed by Ecolab for the mining industry. It enables the use of water mapping techniques to identify and mitigate scale formation. The software employs predictive models and advanced blending algorithms adjusted to the customer's water to dramatically improve the effectiveness of scale treatment and help better manage mine site water. By preventing scale from forming, customers save both energy and water — resulting in more sustainable operations.

OMNI™ CONDENSER PERFORMANCE

The generating capacity (megawatts) and efficiency (heat rate) of power plants are largely determined by the performance of the surface condenser, a key component in the cooling water system. Operational issues and fouling of surface condensers force power customers to use more fuel and water to produce electric power. Through advanced analytics, the OMNI Condenser Performance program uses key performance data from the condenser, as well as leading indicators from 3D TRASAR™ Technology, to assess current performance and predict future issues so they can be prevented. This allows our customers to efficiently produce more energy, use less water and fuel, and lower their total cost of operation.

HAND HYGIENE COMPLIANCE MONITORING SYSTEM

Hand hygiene is the first defense against healthcare-associated infections (HAIs), yet studies show healthcare workers are less than 40 percent compliant. Through an integrated system of healthcare worker badges, hand hygiene dispensers, and bed monitors, this solution can help hospitals accurately monitor hand hygiene to increase compliance and reduce the risk of HAIs. Data is compiled to track performance by individual, department, hospital or system to identify compliance trends and improve performance.



WE'RE ADVANCING DIGITAL TO DELIVER BETTER OUTCOMES

SMARTPOWER™

Changing food preferences and increasing operating costs are driving restaurateurs to take a closer look at every aspect of their operations. Operators want warewashing to deliver more than clean place settings. They want a process that reduces labor, water and energy costs to help boost profit margins. The SMARTPOWER Program includes a full line of warewashing products, on-site digital monitoring of the dishmachine's performance and Ecolab personalized service. The program enables customers to clean wares in one cycle, reducing hand-polishing and rewash, and delivering labor, water and utility cost savings.

KAY® PROTECT PROGRAM

With more fresh-food items being added to quick service restaurant menus, food safety issues that were once prevented with frozen products have become more difficult to manage. To reduce risks, operators are turning to digital platforms to replace paper reports. The result: checklists can be more easily managed and shared, reminders can be set at the store level, and risks can be flagged quickly. Kay Protect automates food safety checklists and integrates data across sources, such as food safety audits, health department inspections, and cleaning and sanitation product usage. It provides quick service operators with real-time, actionable insights to protect against sanitation challenges, while speeding operations and improving data visibility and accuracy.

OMNI™ HEAT EXCHANGER PERFORMANCE PROGRAM

The efficiency of process-critical heat exchangers is the bottleneck of the chemical production process. It directly impacts production rates and the overall cost of operation for manufacturers. For years, customers have relied on past performance to guide maintenance and outage routines. This solution provides the insights customers need to make the right decision at the right time. OMNI combines sensor data, simulation tools and analytics to maximize performance and deliver a step-change in reliability and profitability. It helps our customers extend asset life, prevent unscheduled downtime, use water more efficiently, and reduce overall power consumption.



WE SOLVE INDUSTRY CHALLENGES

ULTRASIL™ MEMBRANECARE 2.0

Dairy manufacturing customers face many challenges in cleaning membranes. First, the surface is like a sponge and difficult to wash out, so it takes a long time and lots of water and energy to clean. Second, the membrane collects fats, carbohydrates, protein and microorganisms, and the chemistry must address them all. And third, harsh cleaning solutions can change membrane characteristics, leading to production and efficacy loss — and costly replacement. Ecolab's Ultrasil MembraneCare 2.0 is an environmentally friendly, membrane-cleaning program that significantly reduces residue risks, increases membrane life, enhances the productivity of membrane filtration units, and reduces the consumption of energy and water throughout the cleaning process.

CORROSION INHIBITOR CORR 11540A

This proprietary offering helps increase production and reduce environmental impact through a combination of patented Clean n Cor technology and a new non-corrosive iron sulfide dissolver that is 30 percent more effective at two-thirds the dosage rate of existing products.

ECOLAB HIGH-TEMPERATURE (EHT) DISHMACHINE

To ensure the proper temperature for clean, sanitized ware and to reduce spotting, streaking and filming on glassware, customers previously had to select manual settings on their dishmachines. This was time-consuming and if the settings were incorrect, it could lead to rewash and higher water and energy usage. The Ecolab High-Temperature (EHT) Dishmachine features automated procedures that help reduce reliance on the dishmachine operator to maintain a clean tank and ensure wares are cleaned the first time. In addition, SMARTCYCLE™ racks automatically adjust the wash cycle based on the type of wares in the rack, and high-pressure rinse technology helps lower water and energy usage up to 50 percent.

2

CHANGE THROUGH STEWARDSHIP

PARTNERING FOR THE GREATER GOOD

Our efforts to ensure a healthy and sustainable future include investments in people and nature. Protecting water and other natural resources. Educating the next generation of leaders. Championing hygiene throughout the world. These are just some of the ways that we are working to drive positive change — for a better tomorrow and a better world.

WATER STEWARDSHIP

We know that water is a precious resource and we are always working to do more with less for greater efficiency within our own operations, and to protect the watersheds in which we operate.

Our greatest impact comes through the water-saving solutions we deliver to our customers and the partnerships we have formed to support responsible use of the world's limited freshwater resources. This includes advancing the United Nations Sustainable Development Goals, specifically Goal 6, to ensure access to clean water and sanitation worldwide. (See page 31 to learn more.)

We're committed to helping our company and our customers use water resources in a manner that benefits business, communities and nature. We understand the importance of the food-energy-water nexus and consider the impact on water as we explore new solutions in our innovation process. The products and services we provide help our customers implement their own water stewardship strategies and achieve their sustainability goals.



Water covers **71%** of the Earth's surface,¹ but only

0.5%

is readily available and safe for human consumption



2
in **5**

people are affected by water scarcity today²



By 2050, the global population is projected to increase from

7.4 billion to 9.7 billion³



By 2030, water demand will exceed supply by

40%⁴



Since 2011, corporate water use has declined by only

10%⁵

< 3%

Less than 3% of wastewater is recycled globally.⁶

In the **BLUE**
RETHINK WATER. REINVENT BUSINESS.

RENEWING AND VALUING WATER TO CAPTURE ITS CIRCULAR POTENTIAL

No resource has more circular potential than water, yet less than 3 percent of wastewater is currently reused. That has to change. We're committed to helping companies move beyond conservation and efficiency to a circular water stewardship model based on recycling, reusing and repurposing water.

To help advance more robust water strategies, this year we launched a publicly available tool to help companies collect data and analyze risk based on water use, costs and market pressures so they can determine where they are on a four-stage "water maturity curve." It's a practical roadmap that will help businesses adopt smart water management practices to move to a truly sustainable circular water model that we call "In the Blue."



USING DATA TO REDUCE, REUSE AND RECYCLE WATER

The Water Risk Monetizer was developed by Ecolab in partnership with Trucost and Microsoft. It provides actionable information to help businesses understand water-related risks and quantify those risks in financial terms to inform responsible decisions that enable growth. In 2017, we enhanced the tool to incorporate water quality into the site-specific risk analysis to provide a more comprehensive risk assessment and worked with Microsoft to power the tool through Microsoft Azure cloud technology. We are proud to have been recognized for these efforts with a 2017 Sustainability Services Award from the Business Intelligence Group.



SMARTER, BETTER WATER MANAGEMENT

Ecolab has been a pioneer in water stewardship. Working with the World Wildlife Fund (WWF), we were a founding partner of the Alliance for Water Stewardship (AWS) to support the launch and implementation of the International Water Stewardship Standard, a global framework to promote sustainable freshwater use. Our manufacturing plant in Taicang, China, was the first site in the world to be independently certified under this standard. It was joined in 2017 by our City of Industry and Carson manufacturing plants in California, where extreme drought has impacted all water users.

Since the Foundation's inception in 1986, Ecolab has contributed more than

\$101 million

to nonprofit organizations around the world

CONTRIBUTIONS IN 2017



FUNDING

Ecolab contributed more than **\$15 million** to local communities through foundation and corporate giving, volunteer efforts and in-kind donations.

Through the Foundation's four focus areas, **1,060 grants** were distributed totaling **\$6.7 million**, including **\$1 million** focused on STEM (science, technology, engineering and math).

Our annual employee-giving campaign raised a record **\$3.2 million** for **2,080 nonprofit organizations** across the U.S. An additional match to local United Ways brought the full impact to more than **\$4 million**.

In-kind product donations totaled more than **\$5 million**, where much-needed Ecolab cleaning and sanitizing products benefited communities in Angola, Argentina, the British Virgin Islands, Cambodia, Mexico, Moldova, Puerto Rico, Romania, Sierra Leone and the U.S.

We provided **\$245,000** in matching funds for employee gifts and volunteer time to **434 nonprofit organizations**.



VOLUNTEERISM

Our employees volunteered more than **43,000 hours** with Ecolab local community nonprofit partners and in support of larger community events such as Nelson Mandela Day in South Africa, where more than **80 Ecolab associates** in three cities volunteered to pack more than **15,500 meals** to help end child hunger. More than **435 employees** in the Twin Cities, Minnesota, and Naperville, Illinois, helped make more than **4.9 million meals** in support of global famine relief.

More than **3,000 employees** worldwide participated in our Global Team Volunteer Grant program, which awarded **\$300,000** to nonprofit organizations where our employees volunteered. Twenty-five percent of this funding went to Habitat for Humanity. Other efforts included a team in Calgary, Canada, assembling **1,000 hygiene kits** to address the humanitarian need in Venezuela and a volunteer challenge among U.S. Quick Service Restaurant division employees to benefit local food banks.

FOR A BETTER WORLD

We believe that partnerships make us stronger — and that to advance the greater good, we need to reach beyond our customers and our own operations. The Ecolab Foundation implements programs to benefit the communities where our employees live and work. The Foundation gives to local nonprofit organizations that support youth and education, civic and community development, arts and culture, and conservation and the environment.



SOLUTIONS FOR LIFE FROM ECOLAB

One of the Ecolab Foundation's key initiatives is the Solutions for Life program. Its mission is to conserve water and improve hygiene around the world through nonprofit partnerships, global philanthropy and employee volunteerism. The program aligns with our efforts to support the U.N. Sustainable Development Goals, in particular Goal 6—ensuring the availability and sustainable management of water and sanitation for all. Since 2014, we have helped to advance this important initiative through partnerships with two leading global nonprofits: the Project WET Foundation and The Nature Conservancy (TNC).

PROJECT WET FOUNDATION

We believe it's important to educate young people about what they can do to keep themselves, their communities and our planet healthy. To accomplish these goals, Ecolab and Project WET developed the Clean and Conserve Education Program, an interactive curriculum designed to help youth, ages four and older, learn about water conservation and healthy hygiene practices.

Since its kickoff in 2014, the Clean and Conserve Education Program has reached a total of 6.8 million educators, young people and Ecolab employees in 72 different countries.

The curriculum is customized in Spanish, Mandarin and German, in addition to English, and the Activity Guide for Educators is also available in Canadian French and Brazilian Portuguese. Free online teaching tools can be found at www.projectwet.org/cleanandconserve.

THE NATURE CONSERVANCY

Solutions for Life expands Ecolab's partnership with The Nature Conservancy (TNC). Ecolab's initial investment has been vital to TNC's freshwater work in Mexico, China and Minnesota (U.S.). Protection of critical land and water resources in these regions has been guided by TNC's Urban Water Blueprint, which is sponsored in part by Ecolab. This innovative mapping tool looks at the state of water in more than 2,000 watersheds around the world and provides science-based

recommendations for natural solutions to improve water quality for the benefit of ecosystems and communities.

Mexico

Ecolab's support of the Monterrey Metropolitan Water Fund helps TNC expand its conservation efforts in the Cumbres de Monterrey National Park, which provides 60 percent of the water for 4.5 million people living downstream in the Monterrey metropolitan area. In 2017, Ecolab volunteers joined TNC to plant 500 trees to help with reforestation of the pine forest, building on the tree planting that we supported in 2016. These trees increase rainwater capture, mitigate flooding, improve water filtration and regulate water flow.

Minnesota

Ecolab's support of TNC in Minnesota through the Solutions for Life partnership is directed to the Minnesota Headwaters Fund, which focuses on protection and conservation throughout the Upper Mississippi River Basin. The fund has targeted conservation projects that protect 6,000 acres of forests and wetlands to provide clean water to more than 1.4 million people. In 2017, its conservation efforts were concentrated in five primary watersheds: Crow Wing River, Pine River, Sauk River, Root River and the Rum River.

China

With Ecolab's support, TNC China has made progress on groundbreaking work focused on sustainable water systems. This includes exploring a source water protection program for the Dongjiang River Basin, which provides water to millions of people in the cities of Hong Kong, Guangzhou and Shenzhen; development of recommendations for a "sponge city" program in Shanghai, which would reduce flooding, improve downstream water quality and develop more urban green space through natural infrastructure; and providing training for more than 50 River Chiefs (local government officials responsible for cleanup and protection of water resources) in the Qiandao Lake area to help them gain a deeper understanding of their responsibilities and to enhance their knowledge of source water protection and agricultural practices that reduce pollution.



CHANGE FROM WITHIN

3

LEADING BY EXAMPLE

While our greatest impact will always be through our work with customers, our ability to do more with less internally is also important to the long-term success of our company and the health of the environment. As our production facilities around the world evolve, we drive a process of constant improvement to minimize our impact on the environment. Working at our own plants and with neighboring companies and communities, we focus on responsible water stewardship, which includes water safety, quality and efficiency, as well as on reducing greenhouse gas emissions and waste.

GOALS AND PERFORMANCE

From our plants to our partnerships, we strive to do all we can to enhance our sustainability performance and results. This includes ambitious goals for reducing water and energy use.

In 2017, we helped our customers save more than 171 billion gallons of water. By 2030, we aim to conserve 300 billion gallons of water annually by reducing water consumption within our own and our customers' operations. This equals the annual drinking water needs of more than 1 billion people.

In our own operations in 2017, water withdrawal reduction was flat and the reduction in greenhouse gas emissions was 4.3 percent, as compared to a 2015 baseline.* By 2020 we seek to reduce water withdrawal by 25 percent and greenhouse gas emissions by 10 percent.

Also in 2017, we moved to our new Ecolab Global Headquarters in St. Paul, Minnesota. Through capital upgrades, electricity use was reduced by nearly 40 percent, or almost 3 million kWh, as compared to the annualized use during the period from 2012–2016. In addition, recycling and upcycling during the renovation greatly minimized construction waste, leading to the diversion of more than 700 tons of material from landfills, equivalent to the yearly waste of 1,600 people.

But that is not all that we are doing. With an outcome-based approach to product design, we are moving beyond compliance. And through our partnerships and our support of the United Nations Sustainable Development Goals we are working to ensure access to safe and clean water for everyone. It's all part of our effort to drive continuous improvement inside and out.

Ecolab's 2020 Sustainability Goals

Reduce water withdrawal by 25%*



Reduce greenhouse gas emissions by 10%*



Customer Impact Goal

In 2017, we helped our customers save more than



By 2030, we aim to conserve



This equals annual drinking water needs of more than



OUR APPROACH TO PRODUCT STEWARDSHIP

We recognize the need to better understand the impacts of our products and to document and clearly communicate these impacts to key stakeholders. Through a range of programs and initiatives, we continuously work to identify opportunities for improvement.

This work begins with our global chemical substance portfolio. We collect information on the substance composition of all of our ingredients. Our state-of-the-art Enterprise Resource Planning (ERP) system is central to this effort, enabling us to store and manage complete product formulations in our database, down to parts per million (ppm):

- The system ensures that our products comply with all relevant regulations in the regions where they are sold and is supported by more than 200 subject matter experts in 35 countries.
- Products and ingredients are reviewed against regional and global restricted substance lists (RSLs) embedded in our ERP system.
- The broad group of RSLs includes more than 400 lists, both those associated with regulatory compliance requirements as well as lists that exceed compliance requirements, such as those specified by the Dow Jones Sustainability Index.

Our comprehensive database enables us to view, manage and report on our substance portfolio globally. To benchmark these efforts, Ecolab participates in the Chemical Footprint Project, a nonprofit effort with a mission to transform global chemical use by measuring and disclosing data on progress to safer chemicals.

Our outcome-based approach to product design is driving Ecolab beyond compliance and will support the increased transparency requested by customers, governments, investors and nongovernmental organizations (NGOs). Our solutions are evaluated according to key human health and safety criteria and based on clearly defined product stewardship principles so that they can be embedded in the product development process across our organization.

OUR COMMITMENT TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

We are dedicated to supporting partnerships and programs that fulfill the United Nations Sustainable Development Goals. While we support several goals, our efforts are primarily devoted to Goal 6 — to ensure the availability and sustainable management of water and sanitation for all — where we believe we can have the greatest impact.

Our technologies help customers save billions of gallons of water each year. Our Water Risk Monetizer, a publicly available tool, helps businesses determine the true value of water so they can make the business case for water stewardship. And our In the Blue diagnostic tool helps customers assess where they are on a four-stage water maturity curve, so they can adopt smart water management strategies and get to a truly circular water model.

Our partnerships are aligned with these goals. We have close relationships with a range of NGOs, other organizations and programs that support water stewardship and access to safe, clean water, including the Alliance for Water Stewardship, Project WET, the CEO Water Mandate, The Nature Conservancy and the Minnesota Headwaters Fund.

Ecolab sponsored the China Urban Water Blueprint, a report from The Nature Conservancy that analyzes the state of water resources in China's 30 largest and fastest growing cities and offers science-based recommendations for natural solutions. Ecolab's funding also supported The Nature Conservancy's efforts to protect key lands and waters in Minnesota, Shanghai, and Monterrey, Mexico. (For more on these efforts, see page 27).



LEADING THE WAY

WATER SAFETY

Our number one priority is — and has always been — the safety of our employees and customers. Water safety is no exception to this rule.

Ecolab is the leader in providing solutions that reduce risks associated with waterborne pathogens such as *Legionella*.

Ellwood City, Pennsylvania

In 2017, our plant in Ellwood City, Pennsylvania, completed a water safety audit to ensure that its water safety plan was comprehensive and that it protected the plant's employees and neighbors. Testing the cooling towers daily and keeping up with regular cleanings and inspections, we prioritized water safety and reduced risks to safeguard the health of those located in and around the plant.



Teams at our production facilities worldwide strive to minimize our impact on the environment through a process of continuous improvement and a focus on water safety, quality, efficiency and stewardship.



From top to bottom:
Fresno, Texas
Elk Grove Village, Illinois
Yangsan, South Korea

WATER QUALITY

Ecolab makes the world cleaner, safer and healthier — this includes the water we use at our own facilities.

Fresno, Texas

Our plant in Fresno, Texas, was experiencing high copper and zinc concentrations in its cooling tower and boiler blowdown, affecting system reliability and wastewater quality. Working with Nalco Water's commercial team, the Fresno plant team solved the problem and reduced operating costs at the same time.

A new chemistry program was adopted to address microbiological activity in the cooling towers and prevent corrosion. The plant addressed microbiological contamination by switching from a bleach feed to Nalco Water ControlBrom CB70, which is easier on metals such as zinc and copper, and by monitoring water chemistry in the cooling towers. The new treatment program was automatically controlled and monitored using the plant's existing 3D TRASAR™ system, significantly reducing metal content in the wastewater. As a result, the plant no longer needed to haul off wastewater, saving the associated cost.

Celra, Spain

Located in Northern Spain, Ecolab's Celra plant looked to improve its effluent quality and wastewater management. The plant manufactures products that include surfactants, used in numerous cleaning and sanitizing products. But the surfactants also ended up in the wastewater, posing a wastewater treatment challenge.

Nalco Water partnered with the Celra plant team to come up with a science-based solution to manage the wastewater stream at the on-site waste treatment plant. Using a reactive process called Fenton, this approach lowered surfactant levels in the wastewater by 85 percent and reduced treatment costs significantly, saving an estimated USD \$230,000 per year.

WATER EFFICIENCY

As a global leader in water treatment technologies for more than 90 years, our technologies help our customers do more with less water. In our own facilities, we also are committed to reducing our water use and increasing water efficiency using our own technologies.

Circular water management helps Ecolab customers in water-stressed regions lessen their environmental impact. We take the same approach at our own plants.

Elk Grove Village, Illinois

Our plant in Elk Grove Village, Illinois, specializes in refurbishing Ecolab dishmachines for Institutional customers. This water-intensive process was mainly a manual operation with little automation.

In 2017, the Elk Grove Village plant partnered with Ecolab's Food & Beverage team to build a custom Clean-in-Place (CIP) system that recirculates all the water used in dishmachine testing. The plant also upgraded the restrooms with LEED-certified fixtures. Together, these two projects resulted in savings of more than 600,000 gallons of water annually, a 50 percent reduction in the plant's water use.

Yangsan, South Korea

At our Yangsan, South Korea, plant, the team identified an opportunity to reclaim a significant amount of water for their cleaning processes.

A key ingredient for many of our products is pure water, which is produced using reverse osmosis. The reject water from the reverse osmosis process is filtered and reclaimed for cleaning vessels. Instead of discharging it as waste, the Yangsan plant devised a way to re-route this high-quality water to clean blending vessels.

Using this circular approach, the plant saves more than 1.3 million gallons of freshwater per year, along with 137,000 kWh of energy and USD \$24,800 in costs. Most importantly, the plant was able to reduce its impact on the local watershed, resulting in more water being available for the community.

WATER STEWARDSHIP

City of Industry and Carson, California

As a founding partner of the Alliance for Water Stewardship (AWS) International Water Stewardship Standard, Ecolab is committed to collaboration with other businesses at the local level and sustainable water use in its facilities.

The AWS Standard is a globally consistent and locally adaptable framework to promote sustainable freshwater use. These certifications further solidify Ecolab's commitment to water stewardship, the preservation of natural resources and environmental protection.

In September 2015, our Taicang, China, plant became the first facility in the world to be certified under the AWS Standard. At the end of 2017, we achieved our second and third AWS certifications for Ecolab's manufacturing facilities in City of Industry and Carson, both located in water-stressed southern California.

Thanks to steps taken during the AWS certification process and Ecolab's own water-saving technologies, including 3D TRASAR™ Technology, these plants saved a combined total of more than three million gallons of water annually, which is equivalent to the annual drinking water needs of more than 10,000 people.

Both facilities also worked with other users in the same watershed to drive collective action on water stewardship. The California Water Action Collaborative allowed the two plants to share best practices and current projects with other large companies in the same watershed.

GOAL ZERO

Our overarching safety goal is zero incidents. But Goal Zero is not just a number, it is a journey. On the way there, Ecolab places great value on training and education. Both at our own facilities and customer locations, we assess risk before we start work, identify and address safety issues, and remedy hazardous situations.

IT STARTS WITH SAFETY

At Ecolab, safety is everybody's business. We blend a disciplined, data-driven approach to risk reduction with initiatives to educate, engage, and empower our team members, so they can go home safe every day.

DRIVING DOWN ROAD RISKS

For a company with a large number of field associates who spend a lot of their time visiting customers, driving is an important risk factor as well as a prominent area for improvement. Over the last year, Ecolab has reduced its total vehicle accident rate by 3 percent, down to 3.1 per million miles driven.

In 2017, we adapted our Drive Safe programs to address local risks. This is important for a company with a presence in over 170 countries with very different driving environments. We also focused on programs that help us identify risky drivers before they have an accident, combining technology and coaching to improve road skills.

The benefits of these programs extend beyond the workplace. Good driving habits learned at work transfer to employees' off-duty driving, increasing safety for their families and the community.

SHARING SAFETY WITH CUSTOMERS

Ecolab is one of the few companies that performs safety compliance audits at customer locations. As a result, our Safety, Health and Environment practices often spill over into the customer's own safety culture and end up making the entire workforce safer.

Our method centers on the Ecolab Compliance Assessment Process (ECAP). This intentional approach enables us to eliminate safety and environmental concerns while increasing risk awareness and safe behaviors among our associates.

At two different customer locations, our auditors found that employees were manually lifting 60 kilogram containers of chemicals. Following the audit, Ecolab started shipping the product in smaller, 20 kilogram containers, greatly reducing the risk of ergonomic injury.

Visiting another customer, Ecolab auditors found issues with deteriorating staircases and employees working at heights in slippery conditions, leading to accidents and employee turnover. Following the ECAP, the customer improved safety procedures and introduced more stringent rules for personal protective equipment use.

"When it comes to safety, Ecolab walks the talk," the customer reacted. "None of our other suppliers have done this."



2017 SAFETY METRICS

TOTAL RECORDABLE INJURY RATE (TRIR)

(Number of injuries and illnesses per 100 workers)

	2016	2017	
North America	1.94	1.84	-5%
Europe	0.73	0.68	-7%
Asia Pacific	0.58	0.31	-47%
Greater China	0.34	0.27	-21%
Latin America	0.86	0.67	-22%
Middle East Africa	0.72	0.63	-13%
Ecolab Total	1.31	1.21	-8%

LOST TIME INJURY RATE (LTIR)

(Lost days per 100 workers)

	2016	2017	
North America	1.00	0.89	-11%

As Ecolab transitioned to a web-based platform for injury and incident reporting we identified opportunities to improve the consistency of lost time injury rates outside of North America. This improvement will continue in 2018.

TOTAL VEHICLE ACCIDENT RATE (TVAR)

(Per million miles driven)

Fatalities: 1

	2016	2017	
North America	2.76	2.82	2%
Europe	4.90	4.94	1%
Asia Pacific	2.53	2.26	-11%
Greater China	1.96	1.91	-3%
Latin America	3.24	2.82	-13%
Middle East Africa	3.81	2.71	-29%
Ecolab Total	3.19	3.10	-3%

SEVERE VEHICLE ACCIDENT RATE (SVAR)

(Number of severe vehicular accidents per million miles driven)

	2016	2017	
Global	0.14	0.12	-14%

Our Severe Vehicle Accident definition includes:

- Fatality
- Bodily injury
- Vehicle rollover
- Incident involving drugs and/or alcohol
- Environmental spill to ground or waterway

Recipient of 2018 Gold Medal for International Corporate Achievement in Sustainable Development



AWARDS AND RECOGNITION

We are proud to be recognized by so many organizations for our leadership, innovation and commitment to operating responsibly and sustainably as we grow our business to meet the needs of our customers.

Ranked #2 U.S. 500 List	50 Most Community-Minded Companies	Ranked #43	Ranked #87
12th Consecutive Year	12th Consecutive Year	2017 North America Index	4th Consecutive Year
Named Best for Vets Employer	100% Corporate Equality Index	2017 Visionary Award	Ranked #31

ABOUT THIS SUMMARY

SUMMARY

This summary provides highlights of Ecolab's 2017 Corporate Sustainability Report, focused on where we have the greatest impact on the world: our customers, our operations and the communities in which we live.

Ecolab's comprehensive 2017 Corporate Sustainability Report, for reporting period January 1 through December 31, 2017, is available at www.ecolab.com/sustainability. The report has been completed in alignment with the guidelines of the Global Reporting Initiative's G4 framework.

In keeping with our commitment to transparency and disclosures, Ecolab responds to the Dow Jones Sustainability Index RobecoSAM Sustainability Assessment and the CDP's Carbon, Water and Supply Chain surveys. In addition, we are a signatory of the United Nations Global Compact and CEO Water Mandate and file an annual Communication on Progress as part of those commitments.

The customer impact stories included in this summary are supported by comprehensive case studies.

WATER SCARCITY SOURCES

¹U.S. Geological Survey.

²The World Bank. <https://www.linkedin.com/feed/update/urn:li:activity:6379724692705677313/>

³"World Population Projected to Reach 9.7 Billion by 2050 | UN DESA Department of Economic and Social Affairs." *United Nations*, United Nations, www.un.org/en/development/desa/news/population/2015-report.html.

⁴"The United Nations World Water Development Report." *World Water Development Report/United Nations Educational, Scientific and Cultural Organization*. UNESCO, 2015. Web. 26. May 2016

⁵Makower, Joel. "The State of Green Business, 2017." *GreenBiz*, GreenBiz Group Inc., 31 Jan. 2017, www.greenbiz.com/article/state-green-business-2017.

⁶Nahal, Sarbjit, and Valery Lucas Leclin. "A Blue Revolution-Global Water." *ESG & Sustainability*. Bank of America Merrill Lynch (2012); 40. *A Blue Revolution-Global Water*. Bank of America Merrill Lynch, 07 Nov. 2012. Web. 26 Apr. 2017. <http://www.merrilledge.com/Publish/Content/application/pdf/GWMOL/ABlueRevolution-globalwater.pdf>.

MATERIALITY

At Ecolab, sustainability is core to our business strategy of delivering solutions that help companies around the world achieve great results and operate more sustainably. The work we do matters, and the way we do it matters to our employees, customers, investors and communities.

The parameters of our 2017 Corporate Sustainability Report have been established based on a strategic assessment of the issues that our stakeholders care most about, are of greatest relevance to our business strategy and impact our ability to deliver on our promise to make the world cleaner, safer and healthier. This approach to materiality aligns with our corporate sustainability strategy to address some of the world's most pressing and complex challenges through our own operations and the solutions that we provide to customers.

For more information on our approach to sustainability and materiality assessment, please refer to pages 12-17 in our 2017 GRI Index.



ON THE COVER

Tony Mackovski, Ecolab senior Global Account manager, with our Ford Motor Company partner Tamberlyn Shell, environmental engineer.

Our 2017 Corporate Sustainability Report and complete GRI Index can be found at www.ecolab.com/sustainability.

