



2016

CORPORATE RESPONSIBILITY REPORT

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A letter to our stakeholders from the Chairman and CEO

Randall J. Hogan

Dear Stakeholders,

Pentair is a company built on a strong foundation of Win Right values. For 50 years, these values have guided and sustained the actions of our 19,000 global employees. Our values constantly inspire us to seek out new opportunities amid an ever-shifting market landscape. They also ground our focus on Pentair's role as a responsible corporate citizen.

In 2016, we renewed and continued to formalize our commitment to citizenship and sustainability. We are considering how our business will operate over the next 50 years, and the challenges and opportunities that we, and our customers, may face. Some of the most pressing challenges of our time – including water scarcity, food scarcity, and resilience – present opportunities for Pentair to be a leader and innovator, and to help support a more sustainable future for us all.

Our company provides solutions to build a safer, more sustainable world. Our Water segment, which comprises more than half our revenue, delivers sustainable solutions to help our customers better manage water resources so they can more efficiently manufacture goods, produce food, and save energy. Our Electrical segment provides solutions to protect critical processes, people, and the environment. We apply many of these same innovations to our own operations to mitigate environmental impacts. Our philanthropic programs leverage Pentair solutions to help communities in need gain sustainable access to clean, safe drinking water.

None of this would be possible without the innovation, dedication, and success of our people. They are our greatest competitive advantage. Our culture fosters respect for a variety of perspectives, allowing a free exchange of ideas. We actively encourage employees to support the communities where we live and work. In 2016, we piloted the Team Pentair matching gift program to further empower employee volunteering and charitable giving.

We know that we cannot achieve our ambitions to positively impact society alone. It will take great companies, and involved communities, working together to meet the challenges of resource scarcity, changing patterns of demand,



and continued globalization. By supporting and integrating our philanthropic work with the UN Sustainable Development goals, we will work alongside the global business community to pursue collective progress on our shared global challenges.

We are proud of our corporate responsibility work to date and excited to share our annual progress going forward as proof of our commitment to transparency and accountability. This report serves as a baseline, from which we intend to set goals in key material areas, following a robust materiality and stakeholder engagement project currently underway. The result of this engagement will be a lean, focused strategy that helps Pentair drive continuous improvement in the areas that deliver the greatest value to customers, support productive relationships with employees and supplier partners, and leverage our solutions to empower and support global communities.

Sincerely,

A handwritten signature in black ink that reads "Randall J. Hogan". The signature is fluid and cursive, with a long horizontal stroke at the end.

Randall J. Hogan
Chairman and CEO



**A WINNING
COMPANY**

AT PENTAIR, COMMERCIAL SUCCESS ALONE IS NOT ENOUGH. OUR WIN RIGHT VALUES ARE THE HEARTBEAT OF OUR COMPANY. WE WIN BY DELIVERING ON OUR VALUES OF CUSTOMER FIRST, ACCOUNTABILITY FOR PERFORMANCE, AND INNOVATION AND ADAPTABILITY. AND WE DO IT THE RIGHT WAY, THROUGH POSITIVE ENERGY, RESPECT AND TEAMWORK, AND ABSOLUTE INTEGRITY.

We Win Right through
OUR VALUES

Our work is driven by our purpose of building a safer, more sustainable world. A deep-rooted culture energizes our employees to make a difference within and beyond the workplace. They do so by delivering innovative technologies and solutions to our customers, pursuing continuous improvement across our operations, supporting their teams and communities, and contributing to our philanthropic work and corporate responsibility initiatives. Our Win Right Values and guiding behaviors are the foundation of our company and shape how we do business and treat one another.



Delivering leading solutions through

OUR COMPANY

Pentair delivers industry-leading products, services, and solutions that help people make the best use of the resources they rely on most. Our technology moves the world forward by ensuring that water is plentiful, useful, and pure, and that critical equipment and those near it are protected. Collaborating with industry partners, governments, nongovernmental organizations (NGOs), and other companies, we serve a wide variety of customers in the residential and commercial, industrial, food and beverage, infrastructure, and energy verticals. Pentair reports the performance of its business in two segments: Water and Electrical.

WATER

Our water segment designs, manufactures, markets, and services innovative water system products and solutions for the toughest filtration, separation, flow and water management challenges in agriculture, aquaculture, foodservice, food and beverage processing, swimming pools, water supply and disposal, and a variety of industrial applications.



ELECTRICAL

Our electrical segment designs, manufactures, markets, and services products that guard and protect some of the world's most sensitive electrical and electronic equipment, as well as heat management solutions designed to provide thermal protection to temperature-sensitive fluid applications and engineered electrical and fastening products for electrical, mechanical, and civil applications.



Overview of Business

We have 19,000 employees in 40 countries on 6 continents.

● Our main U.S. offices
Minneapolis, Minnesota

● Our headquarters
London, United Kingdom

WATER

39

Manufacturing
Plants

11

Service Centers

28

Sales Offices

29

Warehouses

ELECTRICAL

20

Manufacturing
Plants

3

Service Centers

52

Sales Offices

16

Warehouses

Our Footprint

	FY 2014	FY 2015	FY 2016
Facilities			
Office	82	83	86
Assembly / Engineering	5	5	5
Manufacturing	60	61	59
Service Center	17	15	14
Warehouse	52	53	45
Total	216	217	209

Square Footage

Office	769,756	747,308	806,235
Assembly / Engineering	127,297	119,849	116,834
Manufacturing	9,914,949	9,701,114	9,491,872
Service Center	229,671	172,264	168,685
Warehouse	1,689,170	1,733,524	1,759,597
Total	12,730,843	12,474,059	12,343,223

Sales

Total (in millions)	\$4,666.8	\$4,616.4	\$4,890
By Segment			
Water	\$2,941.3	\$2,808.3	\$2,777.7
Electrical	\$1,728.1	\$1,809.3	\$2,116.0
Other	\$(2.6)	\$(1.2)	\$(3.7)

All data adjusted to reflect Pentair post-sale of Valves & Controls business

For detailed information on sales by business and region, see our [Annual Report](#).

2016 Industry Awards



Pentair Hypro

AE50 Outstanding Innovations Award

American Society of Agricultural and Biological Engineers



Pentair Haffmans

Best Process Optimization

Anaerobic Digestion & Biogas Association



Pentair CADDY

Gold Level Award

Cabling Installation & Maintenance 2016 Innovators Awards



Pentair Aquatic Systems

ENERGY STAR™ Partner of the Year

Sustained Excellence Award, U.S. Environmental Protection Agency



Pentair X-Flow

Water Innovator of the Year

Water Vision Congress

OUR APPROACH TO CORPORATE RESPONSIBILITY

In an increasingly developed and resource-hungry world, there are intense pressures on water, energy, and food requiring solutions that promote efficiency and sustainable consumption. These pressing global challenges inform not only Pentair's business strategy, but our corporate responsibility (CR) approach as well.

WINNING SOLUTIONS

Our focus, every day, is on developing solutions that help our customers better manage water resources, getting more food, energy, and efficiencies from each drop while protecting people and the environment. With some of the world's biggest companies among our customers, our product innovations, described in [Winning Solutions](#), can deliver wide-reaching CR impacts that further a sustainable world.

WINNING OPERATIONS

We apply the same sustainability-focused innovation from our products to our operations, continuously pursuing improvement in water use, energy use, waste, and emissions. We manage our global operations with care for the health, safety, and well-being of our employees, customers, communities, and the environment.

WINNING WORKPLACE

Pentair's Win Right values, including our commitment to absolute integrity, guide how we conduct business every day. We cultivate a positive culture, embrace diversity, and foster innovation and curiosity and employee learning and development.

WINNING COMMUNITIES

Through our philanthropic programs, we work to strengthen communities around the world, increasing access to quality education and providing sustainable access to safe, clean water to people in need.

ENGAGING WITH STAKEHOLDERS

Understanding the key concerns and priorities of our stakeholders enables Pentair to refine its strategy and focus resources on improving performance in key areas. We are in the process of conducting a materiality analysis and stakeholder engagement initiative with internal stakeholders, investors, customers, and partners. Our goal is to better understand critical areas of business opportunity and risk, the broader context within which our company operates, and the priority actions that we should take to further refine our strategy and communications. We plan to report on our findings and refine our strategic direction in 2017.

ALIGNING WITH GLOBAL GOALS

Pentair believes we can do more together than we can alone. We view the United Nations Sustainable Development Goals (SDGs) as an important road map for addressing the world's toughest challenges. Through our business solutions and the innovation and commitment of our talented employees, we have an opportunity to make unique contributions to global efforts for greater sustainability, equality, and opportunity. Working with nonprofit partners, Pentair will measure and communicate the contribution our philanthropic corporate responsibility efforts make toward accomplishment of the SDGs.



2

**WINNING
SOLUTIONS**

BY 2050, WE CAN EXPECT A GLOBAL POPULATION OF 9.7 BILLION PEOPLE INHABITING AN INCREASINGLY DEVELOPED AND RESOURCE-HUNGRY WORLD.* INTENSE PRESSURES ON WATER, ENERGY, AND FOOD WILL REQUIRE SOLUTIONS THAT PROMOTE EFFICIENCY AND SUSTAINABLE CONSUMPTION.

Combining our global perspective, deep expertise, and proven innovation process, Pentair delivers solutions that help our customers meet today's needs, and prepare for tomorrow's opportunities. By building sustainable life-cycle design into our products and solutions, we enable customers to anticipate the changes to their business and industry that result from increased resource costs, evolving regulations, and stakeholder demands.

Our solutions support a diverse range of industries, including residential and commercial, industrial, food and beverage, agriculture, and infrastructure. Our business trajectory is in developing and delivering solutions for a safer and more sustainable world. With this in mind, we entered into an agreement in 2016 to sell our Valves & Controls business, which historically supported the oil, gas, and extractives markets. Once the transaction has closed, Pentair's focus will be on developing and delivering solutions to help maximize the use of resources people use most, and protecting critical processes, people, and the environment.

**Source: UN DESA Report, "World Population Prospects: The 2015 Revision"*



Our Proven

THREE-STEP INNOVATION PROCESS

Pentair’s proven 3-D Innovation Process — **DISCOVER, DEVELOP, DEPLOY** — delivers technologies and solutions that solve critical challenges for our diverse customers while providing opportunity for growth. In designing holistic solutions for each industry we serve,

we focus on adaptability, creative problem solving, and continuous improvement. At each stage, our designers and engineers look for opportunities to reduce the environmental impact of our products and solutions.

SUSTAINABILITY CHECK POINTS IN OUR INNOVATION PROCESS

Discover	<ul style="list-style-type: none"> Reduce energy/water footprint Recover valuable byproducts and waste Improve overall efficiency Improve quality Meet new regulations Address new and emerging needs of key industries
Develop	<ul style="list-style-type: none"> Focus on meeting the key needs identified in “Discover” phase Design products with fewer parts and more sustainable materials Design for longer product lifespans
Deploy	<ul style="list-style-type: none"> Deliver via sustainable transportation alternatives Focus on maintenance and service to extend product life Elicit feedback from customers on performance to drive continuous improvement

R&D data

FY2016

Patents	1,212 active international patents 422 active U.S. patents
R&D Investments	\$114.1 million invested in 2016 2 segment teams dedicated to R&D 750 engineers dedicated to R&D

The impact of our

WATER SOLUTIONS

Population growth, urbanization, and increased consumption of goods will all increase global pressure on water resources. Tackling these critical challenges provides opportunities for Pentair to drive business results while delivering real value to society.

Pentair offers innovative solutions across the industry spectrum, from filtering drinking water, to treating wastewater for reuse or safe return to the environment, to helping to manage bodies of water.

Our water filtration and reuse solutions support communities around the world that need access to potable water, as well as industries seeking technologies that improve water efficiency and reduce costs. As water resources become more scarce, they will need to be transported longer distances from source to end-user. Our energy-efficient pumping solutions help reduce the cost and improve the efficiency of transporting water from source to treatment facility, and ultimately to the user.

Making every drop count

The impact of our solutions

65%

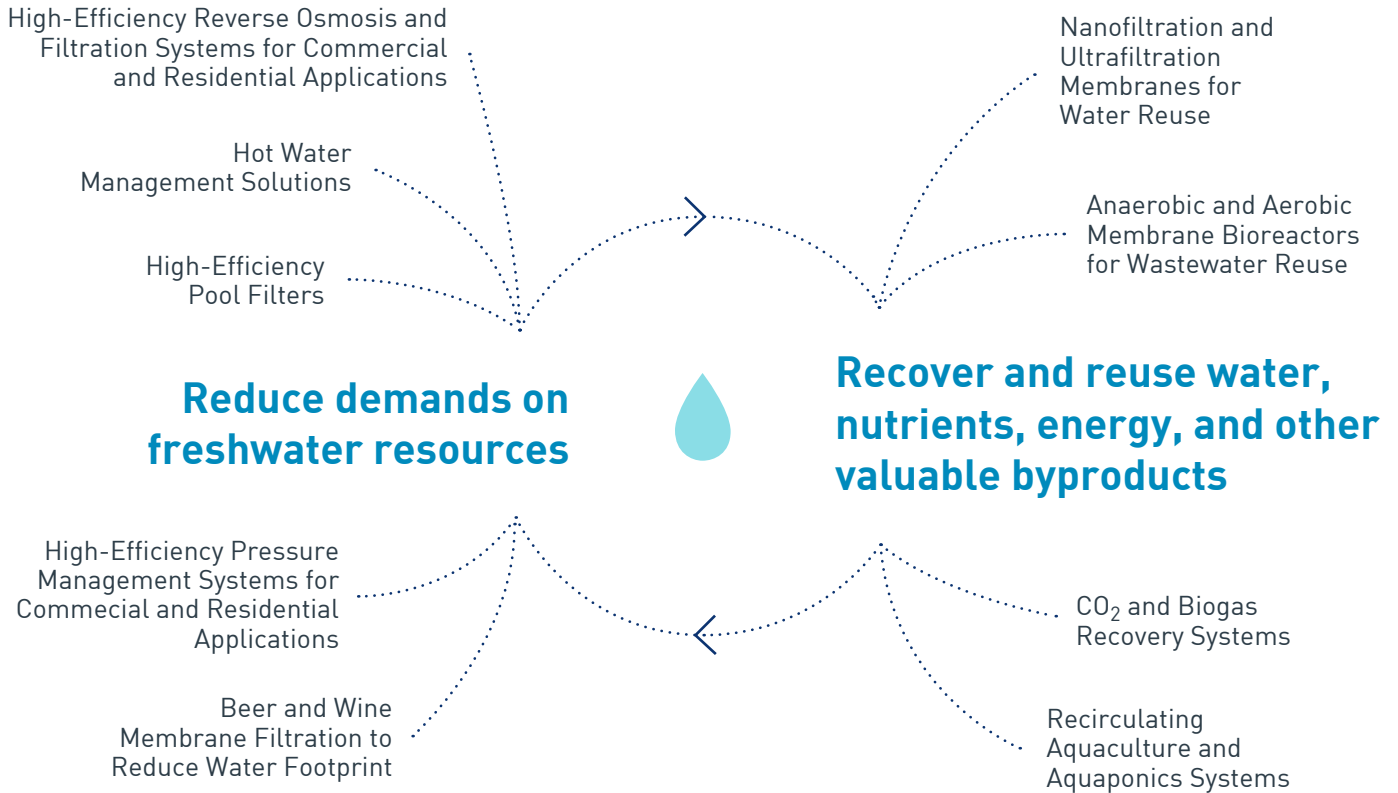
OF SOLUTIONS FROM OUR WATER SEGMENT SUPPORT WATER EFFICIENCY, HELPING TO REDUCE, REUSE, OR RECOVER WATER, DIRECTLY OR INDIRECTLY.*

62%

OF SOLUTIONS FROM OUR WATER SEGMENT HELP IMPROVE WATER QUALITY, DELIVERING CLEAN, SAFE WATER AS WELL AS PURIFYING WATER FOR REUSE IN MANUFACTURING AND INDUSTRIAL APPLICATIONS, OR ITS SAFE RETURN TO THE ENVIRONMENT.*

** based on Pentair's top brands as a percentage of total revenue*

Our Water Solutions: **Reduce, Reuse, Recover**



“WATER INNOVATOR OF THE YEAR”

THE 2016 WATER VISION CONGRESS IN ROTTERDAM, THE NETHERLANDS, NAMED PENTAIR “WATER INNOVATOR OF THE YEAR.”

Innovating to deliver

ENERGY EFFICIENCY SOLUTIONS

As demand for energy increases, industry, consumers, homeowners, and communities across the globe are striving to reduce energy consumption and waste. Pentair provides targeted solutions ranging from energy-efficient pumps to thermal heating cables and membrane bio reactors. We reduce costs for customers through innovative technologies that require less energy to operate, or recover energy to offset the energy required for operations. Pentair applies a Lean Enterprise mentality to solution design, emphasizing continuous improvement in product energy efficiency. We work hard to design each new generation of solutions with reduced energy use demands.

75%

OF PENTAIR SOLUTIONS SUPPORT ENERGY EFFICIENCY, BY REQUIRING LESS ENERGY TO OPERATE, OR BY AIDING BROADER SYSTEMS TO OPERATE MORE EFFICIENTLY.*

**based on Pentair's top brands as a percentage of total revenue*

Photo: Pentair's Bi Directional Turbine generates energy from tidal streams, and also features a fish-friendly design.



Energy Efficiency Solutions

Pentair has invested resources for research and innovation to make our products more efficient, helping to reduce the energy footprint of many of our industrial, residential, commercial, and municipal pumping technologies. Examples of these solutions and their benefits include:

MPE SERIES PUMPS

The Hydromatic MPE Series energy-efficient pumps use 10 percent less energy than a conventional design motor, providing annual energy bill savings of up to \$6,000 each year for each of its municipal, commercial, and industrial customers.

POOL PUMPS

Pentair produces one of the most energy-efficient pool pumps in the world. From 2005 to 2016, our Eco-Select pool pumps saved U.S. consumers \$1.2

billion in energy costs.

HOT WATER MANAGEMENT SOLUTIONS

Our Hot Water Management Solutions (HWAT) deliver reliable hot water more cost-effectively than market alternatives. The technology reduces water use by up to six percent through shorter wait time for hot water, and reduces energy use by 16 percent. In addition, by eliminating the return lines and recirculation pumps needed in conventional hot water recirculation systems, HWAT saves up to 40 percent in materials (mostly pipes and insulation) during installation.

Energy Recovery Solutions

Our solutions enable customers to get more value from the resources they use. We look for opportunities at every stage of the manufacturing process to extract greater value from waste. For example, in industries such as distilleries, dairies, and bio ethanol production, wastewater streams contain high levels of liquid and solid organic matter such as carbohydrates, alcohols, and bio solids.

Using our anaerobic membrane bioreactor technologies, customers can convert wastewater into three valuable resources: water that can be recycled for non-food contact applications within the manufacturing facility; methane that can be used as an energy source; and carbon dioxide that can be reused within the carbonation process. The case study on the next page is a prime example.

PENTAIR INDUSTRY AND TECHNOLOGY

CAPTURES AND REUSES
3 MILLION METRIC TONS
 OF CARBON DIOXIDE
 EVERY YEAR.

SOLUTIONS SPOTLIGHT

Turning Farm Waste into Energy and Fertilizer

In the autumn of 2013, a large tomato grower and one of Britain's "front runners" in technology and sustainability, started a new concept—the production of sustainable natural gas together with the production of sustainable carbon dioxide (CO₂).

At the time, the farm faced a costly challenge: Its 30 acres of greenhouses were heated and "fertilized" by carbon dioxide from the natural gas boiler. While carbon dioxide is complementary with the production of heat, this is not a sustainable solution. One of the efficiency problems is that the heat is mostly needed in the winter, while the carbon dioxide is mostly needed in the summer. This resulted in the usage of natural gas heating in the summer for the production of carbon dioxide.

So the farm turned to Pentair's award-winning Haffmans technology to meet its energy and carbon dioxide needs. They started a biodigester, which is fed by farm waste, to produce biomethane and carbon dioxide, year-round. Using a unique process, Haffmans generates biomethane, a purer, more environmentally friendly form of natural gas, and recovers carbon dioxide byproduct for use as natural fertilizer in the farm's tomato greenhouses.

The biomethane can be used in the winter for heating, and the produced carbon dioxide is used in the summer, creating a 100 percent yield in the two products: biomethane and sustainable carbon dioxide.

Today, the farm generates enough biomethane to supply 1,000 households' annual natural gas needs. The recovered carbon dioxide is proving to be a valuable natural fertilizer, supporting a 15 percent higher tomato output. The farm saved 20 percent on natural gas bills in 2016 by eliminating the production of heat in the summer to produce carbon dioxide, and generated 14 percent higher revenues, all while reducing planet-harming carbon dioxide emissions.

TODAY, THE TOMATO FARM GENERATES
ENOUGH BIOMETHANE TO SUPPLY 1,000 HOUSEHOLDS
WITH THEIR ANNUAL NATURAL GAS NEEDS.



AWARD SPOTLIGHT

2016 ENERGY STAR™

Partner of the Year

For over a decade, Pentair has led the industry in energy-saving pool technology.

In 2016, the U.S. Environmental Protection Agency (EPA) recognized the achievements and ongoing leadership of Pentair with the ENERGY STAR™ Partner of the Year – Sustained Excellence Award.

The first manufacturer to introduce variable-speed technology to the pool industry in 2005, Pentair became an ENERGY STAR™ partner in 2013 and today offers 63 ENERGY STAR™-certified pool pump models. These certified models are 30–72 percent more energy efficient than typical alternatives. Customer use of these pool pumps saved 8.0 billion kilowatt hours of energy from 2005 to 2015, preventing the release of 5.2 million tons of CO₂—the equivalent of 10.8 billion car-driven miles.

Alongside technological innovation, the EPA award cited our leadership in educating customers to save energy and money with ENERGY STAR™. In 2015, we held more than 1,000 hands-on pool pump demonstrations at retail outlets and consumer home shows showcasing the benefits of certified models. In partnership with the EPA, we also provided training initiatives for employees, dealers, and distributors on how to incorporate ENERGY STAR™ educational information and messaging into training sessions. More than 2,500 industry professionals attended trainings at nearly 60 locations.

WE HELPED PREVENT
THE RELEASE OF 5.2
MILLION TONS OF CO₂

THE EQUIVALENT OF

10.8 BILLION

CAR-DRIVEN MILES.



Our sustainable

FOOD AND AGRICULTURE SOLUTIONS

As the global population grows, food demand is expected to increase 98 percent by 2050. Industry must take a lead in finding ways to deliver more food, using fewer resources, to meet this demand. Innovative products and services from Pentair help support sustainable food production by using less water and energy, reducing potentially harmful runoffs, and improving resource efficiency.

Precise Application of Resources

Seventy percent of the fresh water used each year is used for agriculture. Pentair's pumps, spray tips, controls, and accessories support the precise application of water and agricultural chemicals to reduce waste and runoff and support productivity. Our centrifugal pumps, submersible motors, and other irrigation products ensure that water resources are used only where they are needed. Our precision spray solutions including smart nozzles, precision nozzles, and smart pumps help protect crops through accurate chemical applications, improving coverage and uniformity. Farmers reduce costs by using significantly less chemical spray, and protect the environment by reducing potential runoff to nearby surface water.

New Ways of Farming

With oceans under unprecedented stress and global resources strained as never before, aquaculture is a new food frontier. Pentair's aquaculture and aquaponics solutions are expanding farming techniques, including in urban areas, and supporting greater access to protein worldwide. Aquaponics blends aquaculture and hydroponics to create a sustainable solution for private or industrial farming. Pentair's end-to-end systems for filtration, circulation, treatment, and operation make ecologically conscious urban fish culture management more cost-efficient. In addition, our aquaculture and aquaponics technologies can move the farm closer to the market. By finding more efficient uses for urban land and resources, aquaponics farms can deliver fresh food with fewer transportation impacts.

Protecting people, processes, and the environment with our

SOLUTIONS FOR RESILIENCE

Extreme weather, flooding, and harsh conditions threaten the security of essential infrastructure management systems. From enclosures that protect sensitive equipment to fire and leak detection technologies and flood control systems, our products maintain and protect customers' critical processes and equipment, keeping people, communities, and the environment safe.



Photo: Pentair's customized scalable data center infrastructure solutions.

Protecting Sensitive Equipment

Pentair helps keep data networking and telecommunications systems up and running, staying in step with data storage growth and anticipating future IT infrastructure requirements. Our standards-based, and custom-built enclosures help protect critical systems from dust, dirt, oil, water, corrosion, and other contaminants to maximize service life. Pentair's cooling technologies for electrical and electronic components increase performance reliability, extend component life, and reduce overheating and maintenance.



Photo: Pentair's massive pumps are installed at the Gulf Intracoastal Waterway in New Orleans.

Flood Control Systems

Pentair manufactures highly engineered systems including vertical turbine, axial, and mixed-flow propeller pumps capable of moving up to one million gallons per minute of floodwater and averting widespread damage. Our installations range from small municipalities to the world's largest pumping station, which helps keep the city of New Orleans dry.

WINNING

OPERATIONS

3

AS A LARGE MANUFACTURING COMPANY, PENTAIR HAS AN OBLIGATION TO DELIVER CUSTOMER SOLUTIONS RESPONSIBLY AND SUSTAINABLY. WE STRIVE TO IMPLEMENT RESPONSIBLE BUSINESS PRACTICES AND TO ELIMINATE HARMFUL ENVIRONMENTAL IMPACTS FROM OUR OPERATIONS BY MINIMIZING EMISSIONS, WASTE, AND WATER USAGE.

Our focus on continuous improvement is driven by our Lean Enterprise management approach, promoting innovation and creative problem solving. This winning approach results in cost efficiencies for both our customers and our business while supporting the health of our communities and planet.

Our approach to

DRIVING OPERATIONAL EFFICIENCIES

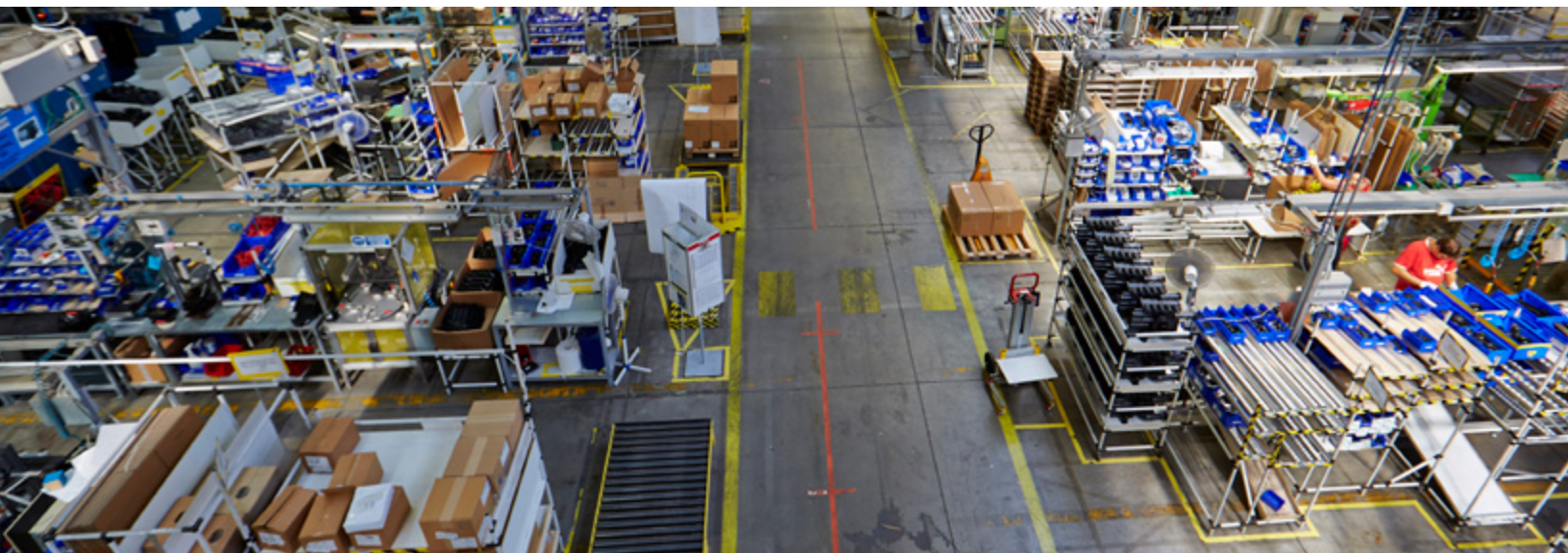
By applying the same innovation and teamwork that we bring to developing product solutions, we strive to implement operational efficiencies that help reduce our environmental impact. We learn from our successes and failures, looking to spot challenges early and deliver impactful solutions at every opportunity. Our [Environmental Health & Safety \(EHS\) policy](#) outlines our commitment to developing, manufacturing, and delivering our products safely and sustainably.

The Pentair Integrated Management System (PIMS) is the primary mechanism by which we measure and manage our global operational impacts. PIMS methodology drives continuous progress towards reducing water and energy use and waste diversion from manufacturing facilities. In parallel, by practicing Lean Enterprise management, we uncover ways to produce more while using less energy and fewer resources.

In order to set a performance baseline and improvement targets, we reviewed our global water, waste and energy consumption over the last three years. In 2017, we will further analyze this data, and establish five-year goals to hold ourselves accountable for continuous operational improvements.

Further, we will report impacts due to material changes to our business, such as an acquisition or divestiture, and make adjustments to these goals as appropriate. For instance, in September 2015 we completed the acquisition of ERICO, and we have reported our water, natural gas and electricity usage and carbon dioxide emissions to reflect this impact.

Photo: Pentair's manufacturing facility in Pisa, Italy.



Annual Environment Treasure Hunt

Saving energy is a team activity at Pentair. Across the globe, employees rally around our annual Environmental Treasure Hunt, during which site-level teams look for creative ways to drive efficiencies in energy and water use, as well as to reduce waste and emissions.

Every year, we fund and implement promising solutions, resulting in financial and resource savings. In 2016, we implemented 55 employee solutions, generating \$714,000 in resource efficiency savings.

For example, in 2013 at Pentair’s manufacturing site in Anoka, Minnesota, a large electricity savings project was identified that would replace the existing High Intensity Discharge (HID) lighting with more efficient fluorescent lighting.

The proposals for this project were not initially cost-effective due to the significant cost of re-wiring that this project would require. The Anoka Energy team reevaluated this project annually for the next three years. In 2016, lighting product improvements and cost-reductions finally made this project cost effective. The project was implemented and saved 2,500,000 kWh of electricity annually, saving over \$200,000, while greatly improving the manufacturing area light levels.



2,500,000 kWh

SAVED ANNUALLY

TOTAL SAVINGS

FROM IMPLEMENTED ENVIRONMENTAL TREASURE HUNT PROJECTS

	FY 2014	FY 2015	FY 2016
	\$1,354,000	\$526,000	\$714,000

MANAGING OUR WATER USE

Pentair has a deep understanding of water as a precious resource. We address the threat of water scarcity not only through our products and philanthropic work, but also by monitoring and managing our operational impacts.

Water consumption is closely measured and managed across our facilities by extracting data from utility bills monthly and tracking overall consumption through EHS scorecards. In many cases, we drill down our analysis to the manufacturing process level. For particularly water intensive processes, this allows us to closely track usage and drive targeted improvements. As a way to understand how efficiently we use resources, water intensity is calculated by U.S. Gallons/Earned Hour. We define Earned Hour as the number of products manufactured multiplied by the standard hours to manufacture.

Each Pentair site operations team is tasked with identifying, developing, and implementing water conservation measures, with assistance from the corporate EHS department. In 2016, we saw an increase in both water consumption and intensity, primarily caused by changes in production technology and the mix of products, as well as customer testing requirements that use particularly water-intensive processes. We have identified the sites that contributed the greatest increases, and are proactively working with site managers to use our water engineering expertise and technologies to implement solutions.

Photo: Pentair's manufacturing facility in Enschede, the Netherlands, utilizes a water reuse system



Our Water Performance

Two product manufacturing processes are the main drivers of water use across Pentair's operations

1 Driver: Water test lab/
product cycle testing
for pumps and filtration
products



Our approach: By reengineering this widely used process and incorporating our own filtration products into the system, we have increased the reuse of test water. For example, annual water use has been reduced at sites including Chardon, Ohio, by 3.9 million gallons, Moorpark, Calif., by 1.2 million gallons, and in Suzhou, China, by 2.3 million gallons. The resulting wastewater is treated and used for irrigation and other non-potable water needs at our sites, further reducing water intake.

2 Driver: Paint process/
product washing for
painted products



Our approach: Pentair is reducing the evaporative loss of water used in the parts washing process of our products by lowering the water temperature during nonoperational periods.

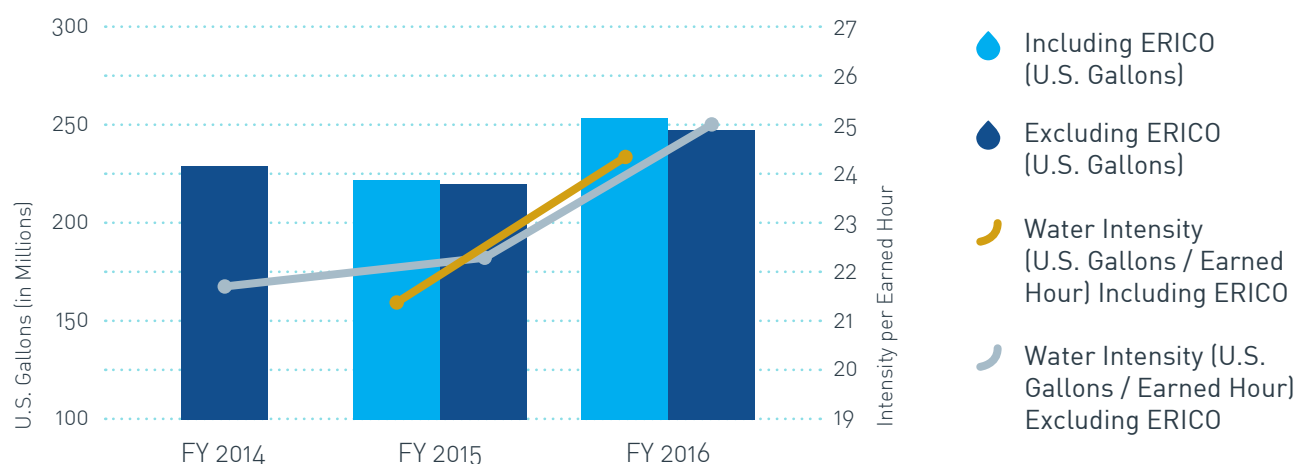
Investments in infrastructure upgrades over several years have also reduced our operational water use. Highlights include:

Enschede, the Netherlands: This facility previously produced approximately 159,000 gallons of wastewater per day, resulting in approximately 42,000 pollution units. In 2013, a team of Pentair experts designed and installed a water reuse system that separates industrial wastewater into two high-value resources: a chemical solvent used in manufacturing, and water for reuse in the facility. The result is a daily savings of approximately 106,000 gallons of wastewater and approximately USD \$2.2 million annually.

Straubenhardt, Germany: In 2016, this facility installed a 25,000-square-foot "green roof," reducing storm water discharge, improving insulation, and providing habitat for local species.

Our Water Performance

WATER USAGE



Water* (gallons)	FY 2014	FY 2015	FY 2016
------------------	---------	---------	---------

Total volume of water withdrawals

Including ERICO		223,998,157	253,632,700
Excluding ERICO	225,784,314	221,706,127	245,026,500
Water Intensity Including ERICO (U.S. Gallons / Earned Hour)		21.7	24.4
Water Intensity Excluding ERICO (U.S. Gallons / Earned Hour)	21.7	22.2	25.0

Water use by region

APAC

Including ERICO		36,532,353	31,619,937
Excluding ERICO	34,702,510	36,532,353	31,619,937

EMEA

Including ERICO		51,575,409	56,607,686
Excluding ERICO	50,684,244	51,389,000	55,913,363

Americas

Including ERICO		135,890,395	165,405,077
Excluding ERICO	140,397,560	133,784,774	157,493,200

*Water withdrawals from municipal water supplies or other water utilities

Pentair acquired ERICO in September 2015, a product line that is now part of the Electrical segment, and its data was incorporated beginning Q4 of 2015.

How Pentair is

DRIVING ENERGY EFFICIENCY

As the need for access to fresh water and nutritious food increases, so will demands on our energy resources. We understand these interdependencies and work to address them in our operations as well as our products and solutions.

Our approach combines renewable energy solutions like solar and wind power with smart conservation measures to drive a consistent, year over year reduction in our operational energy use per earned hour. Our facilities gather energy use data from utility invoices and track performance on EHS scorecards monthly. As a way to understand how efficiently we use resources, energy consumption is calculated by mWH/Earned Hour for natural gas and electricity and Metric Tonnes/Earned Hour for CO₂. We define Earned Hour as the number of products manufactured multiplied by the standard hours to manufacture.

With support from our annual Environment Treasure Hunt process and the corporate EHS department, each site operations team is responsible for identifying, developing, and implementing energy use reduction programs. We regularly communicate with site employees to improve awareness of, and support for, energy-saving initiatives and related process changes.



Photo: A solar roof on Pentair's manufacturing facility in Pisa, Italy.

Investing In Renewables

Generating clean, renewable on-site energy is a long-term approach we take to managing our impacts. To date, solar power, wind turbines, and/or electricity co-generation equipment has been installed at four facilities to reduce GHG emissions. At one of our plants in Italy, rooftop solar panels generate 100 percent of the site's electricity, and the excess electricity is sold back to the power grid, providing clean, renewable energy for the city.

Energy Consumption and Emissions Performance

The main drivers of energy use across the company include manufacturing processes and facility heating and cooling.

1 **Driver:**
Manufacturing processes



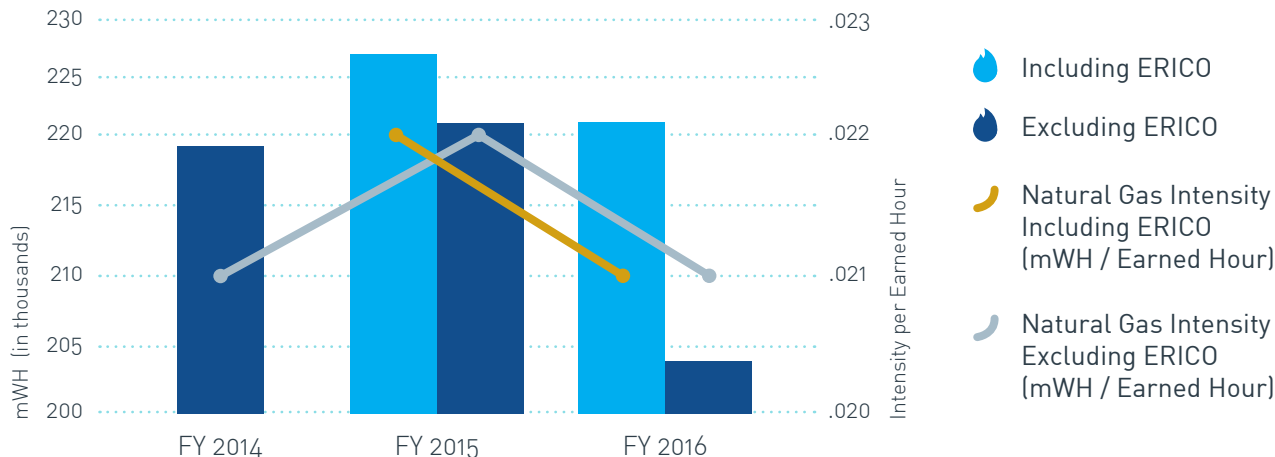
Our approach: We work to achieve energy savings through extensive Lean Enterprise manufacturing improvements implemented through the Pentair Integrated Management System (PIMS). These improvements enable us to manufacture more product with less energy.

2 **Driver:**
Facility heating and cooling

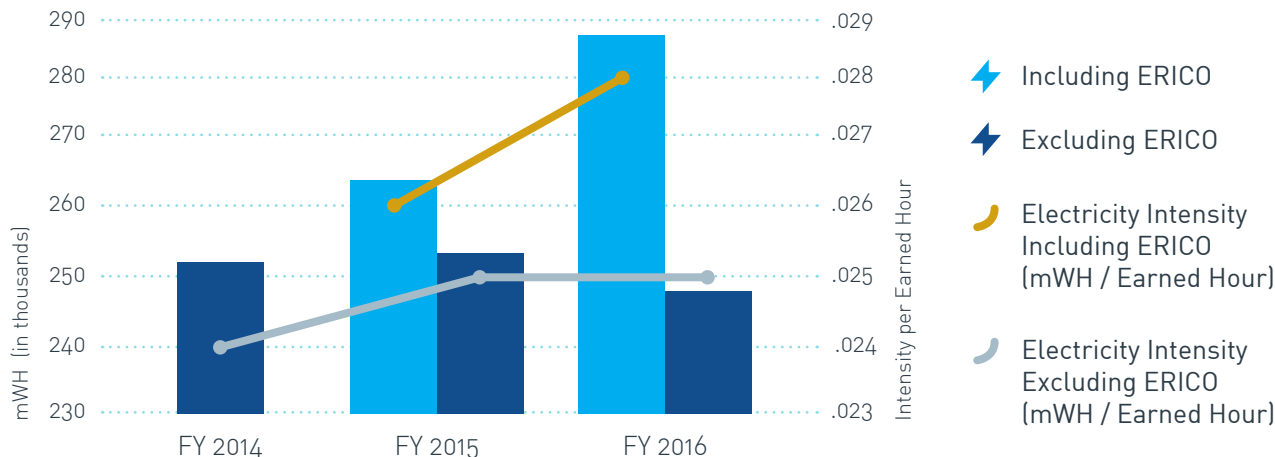


Our approach: By consolidating facilities, we have reduced energy used to heat and cool excess or unused space. We have also realized energy savings by using heat generated from manufacturing processes to offset the need for additional facility heating during cold seasons. For example, at our Water plant in Reynosa, Mexico, we have installed sensors and auto controlled vents that compare the internal and external temperatures, and use the external cool air to reduce energy consumption.

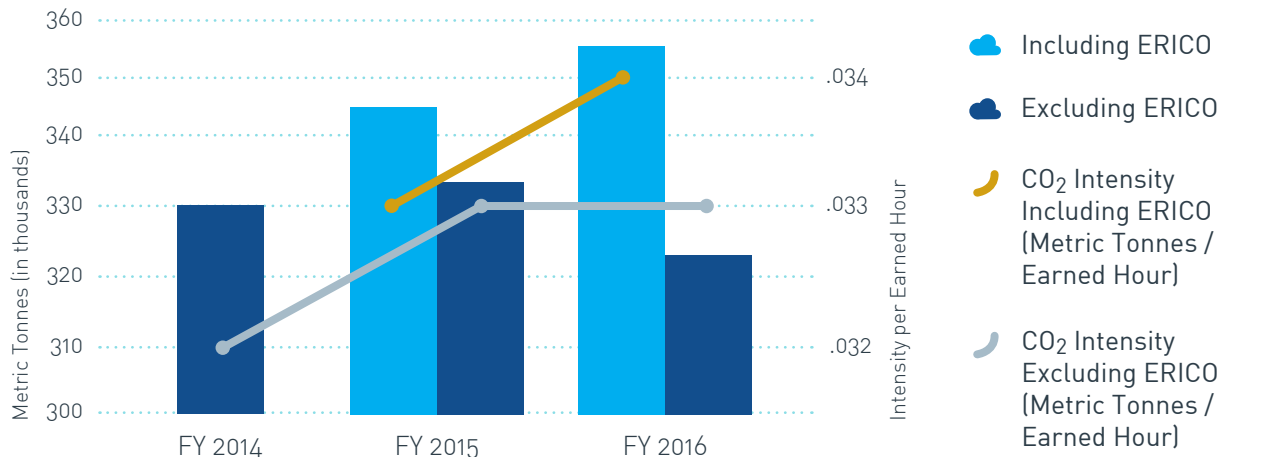
NATURAL GAS CONSUMPTION



ELECTRICITY CONSUMPTION



CO2 EMISSIONS



Natural Gas Consumption (mWH)	FY 2014	FY 2015	FY 2016
Total Natural Gas Consumption			
Including ERICO		226,694	221,240
Excluding ERICO	219,395	220,812	203,929
Natural Gas Intensity Including ERICO (mWH / Earned Hour)		.022	.021
Natural Gas Intensity Excluding ERICO (mWH / Earned Hour)	.021	.022	.021
Natural Gas Use by Region			
APAC			
Including ERICO		8,196	7,716
Excluding ERICO	9,406	8,196	7,716
EMEA			
Including ERICO		33,693	36,217
Excluding ERICO	29,682	33,487	35,734
Americas			
Including ERICO		184,806	177,307
Excluding ERICO	180,307	179,130	160,477

ERICO acquisition data incorporated beginning Q4 of 2015

Electricity Consumption (mWH)	FY 2014	FY 2015	FY 2016
Total electricity consumption			
Including ERICO		264,603	287,833
Excluding ERICO	251,104	253,028	248,073
Electricity Intensity Including ERICO (mWH / Earned Hour)		.026	.028
Electricity Intensity Excluding ERICO (mWH / Earned Hour)	.024	.025	.025
Electricity use by region			
APAC			
Including ERICO		22,721	20,957
Excluding ERICO	22,107	22,721	20,957
EMEA			
Including ERICO		30,065	32,319
Excluding ERICO	29,754	29,237	29,774
Americas			
Including ERICO		211,816	234,557
Excluding ERICO	199,244	201,070	197,342

ERICO acquisition data incorporated beginning Q4 of 2015

CO ₂ Emissions (MT)	FY 2014	FY 2015	FY 2016
Natural Gas Emissions			
Including ERICO		188,186	190,360
Excluding ERICO	188,772	183,254	175,464
Natural Gas Emissions Intensity Including ERICO (Metric Tonne / Earned Hour)		.018	.018
Natural Gas Emissions Intensity Excluding ERICO (Metric Tonne / Earned Hour)	.018	.018	.018
Electricity Emissions			
Including ERICO		156,850	166,262
Excluding ERICO	141,288	151,569	148,186
Electricity Emissions Intensity Including ERICO (Metric Tonne / Earned Hour)		.015	.016
Electricity Emissions Intensity Excluding ERICO (Metric Tonne / Earned Hour)	.014	.015	.015

All data covers Pentair scope, post-sale of V&C business
ERICO acquisition data incorporated beginning Q4 of 2015

WASTE REDUCTION AND MATERIALS USE PERFORMANCE

Through PIMS Lean Enterprise, our materials management process helps us reduce and eliminate waste and maximize the use of natural resources. All our manufacturing sites identify and track operational waste, and develop and deliver plans designed to reduce waste. Each site reports its results monthly and tracks progress via EHS scorecards. On-site assessments are conducted and supported by the regional EHS teams, as needed. Our goal is to achieve an average landfill waste diversion of 97 percent or greater across our manufacturing sites by 2021 through the prevention and reduction of generated waste through source reduction, recycling, reuse, or composting. In 2016, we diverted from landfill 92 percent of waste tonnage generated at all manufacturing locations.

In addition, we have policies, processes and assessment tools in place to ensure and maintain the safe handling and disposal of materials of concern, and conduct compliance and risk assessments as needed. Labeling, storage, handling, and transportation of hazardous goods at Pentair sites is guided by legal requirements based on country, state, and municipal regulations.

Waste from manufacturing in FY2016 (Tons)	Waste Generated	Waste Diverted	% of Waste Diverted
Electrical Segment	32,930	32,434	98%
Water Segment	27,882	23,488	84%
Total	60,812	55,922	92%



4

WINNING WORKPLACE

AT PENTAIR, WE HAVE A SHARED BELIEF, PASSION, AND CALLING, COMING TOGETHER IN PURSUIT OF A COMMON GOAL. WE ARE ONE GLOBAL TEAM, INSPIRED BY OUR ROLE IN THE WORLD, OUR CUSTOMERS, AND EACH OTHER. WE STRIVE TO BE THE DESTINATION FOR TOP TALENT, AND WORK HARD TO DEVELOP AND RETAIN HIGH PERFORMERS THROUGHOUT THEIR CAREERS.

When our nearly 19,000 employees come to work, we want them to bring their whole selves. Our Win Right values, positive culture, and embracing of diversity and inclusion foster innovation and curiosity, which in turn contributes to Pentair being a market leader. At work and at home, we want our employees to be happy, healthy, and well cared for.

Employee Data	FY 2016
Employees by region	
North America	8,502
Mexico / Latin America	3,066
EMEA	4,343
APAC	2,683
Total	18,594

FORBES HONORED PENTAIR WITH THE

291ST

SPOT OF 500 FOR THE 2016 LIST OF

AMERICA'S BEST EMPLOYERS

Pentair's commitment to

EMPLOYEE ENGAGEMENT AND DEVELOPMENT

Engaging our employees and developing their careers is important to Pentair's long-term success and ties directly to our Win Right culture and values.

We offer three key culture development programs – the One Pentair Culture sessions, our Win Right Orientation for new hires, and Team Reinforcement sessions. These programs strengthen the capability of individuals and teams to live the Pentair values. Approximately 14,000 management and professional employees have attended these sessions since the culture program first launched in 2013. In 2016, the sessions were extended to approximately 1,200 production employees, and we intend to roll the program out to additional groups of production employees in 2017, along with new employees.

WE GATHER FEEDBACK ON THESE PROGRAMS AND OTHER EMPLOYEE PRACTICES AND POLICIES THROUGH:

1

Town hall meetings where Pentair leaders share strategies and perspectives

3

Annual global leadership meeting attended by approximately 150 of the company's top leaders to drive growth and productivity initiatives and share best practices

2

Quarterly leadership webcasts to ensure that our results and expectations are clearly communicated

4

Feedback feature on our employee intranet, myPentair.com.

Training and Development

When we invest in our people, we invest in our future. We encourage all employees to agree on a continuing development plan with their managers and to regularly review their progress and learning. Managers are encouraged to support employees' development through honest, candid feedback on their performance and potential. We expect managers to understand the interests and aspirations of everyone under their supervision. Our formal development programs include:

Executive Development Program

This provides high-potential leaders at director and above levels with the strategic, global, and people leadership skills necessary to succeed in global leadership roles. Attendees also develop a network of peer-mentor leaders from across the company. Each class enrolls 25 leaders and focuses on four key areas: leadership, finance, high-performance growth, and global business. The program is a valuable way to engage and retain high-potential leadership talent, and prepare them for greater responsibility.

Leadership Essentials for Managers

This three-day course targets managers with one to five years of experience leading teams. The aim is to strengthen and improve management skills and provide grounding in Pentair's values and expectations for leaders. In 2016, 305 managers took part.

Global Effectiveness Workshop

Targeted at managers and professionals, this program builds skills for working effectively with customers and colleagues across diverse cultures. Real world scenarios help participants understand and apply concepts related to the challenges of being a global business. In 2016, there were 290 participants.

Team Pentair

A key aspect of our corporate responsibility approach and commitment is the "Team Pentair" philanthropic engagement program. Volunteerism is a powerful way to impact the communities where we live and work and to keep employees engaged. Through Team Pentair our employees give their time and talent to support nonprofit organizations.

TEAM PENTAIR ACTIVITIES IN 2016 INCLUDED:

- Mentoring high school students on science education and employment skills in Minnesota, United States
- Participating in charity walks, runs, and rides in Europe and the United States
- Volunteering for organizations that support children in need, including a Children's Cancer Center in Mexico and an orphanage in Goa, India
- Assembling nearly 10,000 meals for families facing food insecurity in Minnesota.
- Donating in-kind products, such as drinking water systems for schools in India and water purification systems for a refugee camp in Tanzania.

VOLUNTEERING SPOTLIGHT

Matching Gift Program

In 2016, we celebrated the company's 50th anniversary by scaling our efforts to make life better for our communities. Under Team Pentair's new matching gift program, employees can now earn matching grants for team volunteerism and personal charitable giving.

EMPLOYEES CAN RAISE FUNDS FOR ELIGIBLE ORGANIZATIONS IN THE FOLLOWING WAYS:



VOLUNTEERING

- Five or more employees volunteering as a team can earn a matching \$1,000 grant for an eligible organization for each collective total of 25 hours reached
- Employees who serve on the Board of Directors for an eligible nonprofit organization can earn a \$1,000 grant for the organization after volunteering 25 hours in a calendar year.



GIVING

- Pentair matches personal monetary donations that employees make to accredited and approved nonprofit/nongovernmental organizations for charitable purposes up to \$1,000 per employee, per year
- We match personal monetary donations made to accredited and approved educational institutions up to \$5,000 per employee, per year.

In addition, in 2016 we launched a new online tool to make it easier for our employees to connect with volunteer opportunities that inspire them, and to request matching gifts.

Diversity and Inclusion

We value diversity in our workforce, supplier base, and customers. Our business benefits from the unique contributions of individuals with varying backgrounds and experiences, and our inclusive workplace culture empowers employees to contribute their best each and every day.

[Pentair's Code of Conduct](#) spells out our commitment to equal opportunity and fair treatment for all. The company does not tolerate acts of harassment, including any conduct or statements made on the basis of protected status that are intimidating, hostile, or abusive.

We take an integrated approach to supporting and promoting workplace diversity, based on the following three pillars:

Talent Acquisition and

Deployment: We aim to grow our diverse talent pipeline and pursue this goal in our hiring practices at every level.

Talent Development and

Retention: We aim to develop and retain diverse talent for leadership roles. Focus areas include expanding diverse participation in leadership development programs, prioritizing career development planning for key diverse talent, and leveraging our employee resource group networks to attract, retain, and develop people from diverse backgrounds.

Leadership of Diverse

Teams: We aim to cultivate an environment that values differences, fairness, and inclusion. Our Global Effectiveness training fosters insights about global differences and strengthens manager and employee capabilities in working across countries, cultures, and languages.

Diversity and inclusion performance

FY 2016

Minorities*

Minorities in the workforce

Total 34.6%

Minorities in leadership roles

Total 17.4%

Women**

Women in the workforce 24.7%

Women in leadership roles 22.0%

*Data for U.S. population only

**Global data

Providing a **HEALTHY WORKPLACE**

We are committed to preventing workplace injuries and maintaining a positive, healthy work environment. All employees have a responsibility to put safety first, speak up when they observe unsafe practices, and always follow Pentair safety practices. We also expect everyone to watch out for colleagues, and maintain a workplace free from illegal or controlled substances and weapons, or potentially dangerous devices. All Pentair locations must meet or exceed all state and local EHS requirements. Globally, we have a common standard that we follow based on U.S. OSHA.

Pentair monitors health and safety data, including injury incident rates and EHS Lean Scores across all its sites. In addition, a Corporate-led team conducts audits annually to drive improvement in our EHS Lean Score and monitor the OSHA Incident Rate across operations.

Each manufacturing site has safety and EHS committees that meet monthly to review relevant data and progress against targets. Our Board of Directors reviews a yearly internal assessment of our EHS approach and companywide results.

Engaging employees in proactively keeping our workplaces safe is a top priority for Pentair. We provide yearly EHS workshops in each geographic region, supplemented by more specific training as needed for targeted employees, depending on risk assessments or manufacturing processes.

Our OSHA Incident Rate is calculated by multiplying the number of OSHA injuries by 200,000, divided by the number of hours worked across Pentair. The Total Case Incident Rate (TCIR) was 1.2 for 2016, down significantly from 2.9 in 2008. Other site certifications are shown in the table below.

At Pentair, we have achieved this safety record by proactive risk management. We do this by our “EHS Lean Maturity Index,” which tracks behaviors, processes, and other leading indicators. For more information, see our [Code of Business Conduct and Ethics](#) and [EHS Policy](#).

EHS manufacturing site certifications	Location Count	% of Locations
Unique locations with certifications	14	23%
ISO 14001	8	13%
ISO 50001	1	2%
OHSAS18001	6	10%
OSHA-SHARP	1	2%
Safety Std. Certification*	5	8%
Clean Industry-PROFEPA	1	2%
Other certification	2	3%

*Certifications are country-specific

COMPENSATION AND BENEFITS

In the United States, all full-time employees can participate in the following benefits:

- Disability and invalidity insurance
- Flexible and health saving accounts and wellness programs
- Health insurance (medical, pharmacy, dental)
- Legal services
- Retirement provision
- Stock ownership
- Tuition reimbursement
- Vacation, holidays, and sick time.

LABOR RELATIONS

As of December 31, 2016, excluding employees of the Values and Controls business, we employed 18,594 people worldwide, of which 8,108 were in the U.S. and 6,830 were covered by collective bargaining agreements or works councils. We believe that our relations with the labor unions have generally been good.

Photo: Pentair's employees in Moorpark, California.



WINNING

COMMUNITIES

5

AS THE GLOBAL POPULATION GROWS, SO DOES PRESSURE ON WATER, FOOD, AND ENERGY RESOURCES. BY SOME ESTIMATES, NEARLY HALF OF HUMANITY WILL BE LIVING IN AREAS OF HIGH WATER STRESS BY 2030, AFFECTING NOT ONLY WATER SUPPLY BUT ALSO ENERGY AND FOOD SECURITY.

These looming challenges require bold, innovative solutions. Beyond its business solutions, Pentair partners with nonprofit organizations to mobilize our expertise, talent, products, and philanthropic dollars to benefit vulnerable people and communities. We leverage our global perspective and deep expertise to develop effective, scalable, collaborative philanthropic solutions focused on three key issue areas:

WATER

Delivering sustainable clean water



FOOD

Improving access to sustainable solutions



EDUCATION

Increasing opportunities



Through the Pentair Foundation and corporate charitable giving, our philanthropic impact spans six continents. In 2016, programs funded by the Foundation reached more than 13 million people worldwide.

Community Giving Performance

FY 2016

Amount donated in FY 2016	\$4.2 million
Donations to date (since 1998)	\$59 million

Our expertise in

DELIVERING CLEAN WATER

Water scarcity is a challenge that informs not only our business strategy, but our philanthropic work as well. We believe safe water is a fundamental human right, and foundational to freedom and economic development.

Pentair has spent decades developing solutions to protect and deliver clean, safe drinking water. Our Foundation collaborates with nonprofit partners to combine our technology with microenterprise business models and scientific research to expand access to safe water, and support water conservation and reuse in the developing world.

In 2007, Pentair launched a groundbreaking program with Water Mission to deliver sustainable safe, clean water in western Honduras (see case study, page 45). In 2016, we made a five year, \$5 million commitment to expand the program to an additional 150,000 residents. By extending the successful program in Honduras, we seek to reduce water-borne illness and death rates as well as to study the long term positive economic impact safe water brings to communities in need.

Photo: Pentair worked with Water Mission to deliver safe drinking water at a refugee camp in Tanzania.



Scalable Solutions to **the Safe Water Crisis**

Access to safe drinking water saves lives and empowers entire communities. Pentair has witnessed this firsthand in Colón, Honduras, where we have worked for a decade to sustainably deliver safe water to hundreds of thousands of people.

Our innovative approach, which we call Project Safewater, is based on a combination of technology, innovative microenterprise business models, and sanitation and hygiene education. Together with Water Mission, an international nonprofit, we have installed more than 200 water treatment systems and over 15,000 individual latrines in the impoverished coastal region.

To ensure that residents knew about and used the purified water instead of reverting to contaminated sources, we ran community education programs on the importance of safe, clean drinking water, sanitation, and hygiene. Additionally, residents helped build the systems and were trained on how to maintain and run them. The community now owns and operates the water treatment systems as microenterprise businesses.

Custom designed for use in remote, underserved areas, our systems can produce clean water for only \$3–6 per person, per year. The success in Colón served as a model to expand Project Safewater to other developing countries. Since 2007, we have implemented numerous programs to provide sustainable access to clean, safe drinking water to nearly three million people. For instance, we proudly helped launch 110 safe water stations in the states of Uttar Pradesh and Telangana, India, with Safe Water Network, providing clean water to over 380,000 people for \$0.06 per 20 liters. In Kibera, Nairobi, Kenya, we are working with Shining Hope for Communities (SHOFCO) to create a more stable, fairly priced supply of clean water to community members through an innovative filtration and aerial piping system. Anticipated to be completed by mid-2017, the system is expected to deliver clean, safe water to around 40,000 people and help fund the Kibera School for Girls.

In Colón, our affordable clean water systems have transformed quality of life. An external study undertaken from 2009 to 2010 found that clinical visits for diarrheal disease declined by 54 percent, and rates of waterborne illness decreased by 80 percent in the first 34 months after our water system became fully functional. A separate study by Water Mission and the Pentair Foundation, which analyzed data from 2004 and 2012, found that Colón's infant mortality rate fell twice as much as the national average, which translates to saving the lives of 40 children each year.

“The world’s safe drinking water crisis is solvable. What we’ve learned from Project Safewater in Colón can help address the United Nations’ Sustainable Development Goals.”

- Randall J. Hogan, Pentair Chairman and CEO

Working to advance

SUSTAINABLE FOOD PRODUCTION

A rising global demand for food, combined with water-intensive irrigation and food production processes puts tremendous stress on the world's fresh water supply. Pentair is collaborating with expert organizations in government, academia, and the NGO sector to accelerate innovation development in sustainable agriculture and food and beverage processing.

For example:

- A Pentair-funded grant to the Water Environment & Reuse Foundation is helping advance the use of innovative water reuse technologies that have the potential to dramatically reduce a farm's water footprint.
- In March 2016, Pentair attended the White House Water Summit and announced a commitment to open an application center dedicated to water stewardship in food and beverage processing at the University of California, Davis.

Photo: Pentair technology is used at an urban aquaponics farm in St. Paul, Minnesota.



INCREASING OPPORTUNITIES THROUGH EDUCATION

Pentair believes that all students should have access to high quality educational opportunities that enable them to build complex skills, and work collaboratively with adults and peers. Education is key to economic development and the improvement of living standards around the world.

In communities where Pentair operates, we fund a variety of innovative and effective Science, Technology, Engineering, and Math (STEM) education programs for K-12 and graduate level students.

We partner with organizations like Boys and Girls Club, FIRST Robotics, Junior Achievement, North Carolina State University, Purdue University, and the Science Museum of Minnesota to offer programs such as:

- Fellowships for graduate students who are addressing social and environmental issues
- After school programs for at-risk youth, focused on STEM principles and STEM career opportunities
- Senior level, pre-college summer fellowships to help underserved students improve critical thinking and writing skills, gain confidence, and view college attendance as an obtainable goal
- International Robotics development and competitions
- Community-driven projects led by middle and high school students, incorporating principles of engineering, computing, and technology
- Training and equipping teachers for STEM disciplines
- Field trips to STEM museums, camps, and programs.

In India and other developing countries, we work with partners such as Pratham, Opportunity International, and Sightsavers to help children, including those with disabilities, gain access to quality education. Programs we support include:

- Improving schools, for example by building a secondary school on a site where previously only a primary school existed
- Establishing new schools
- Covering school expenses for orphan children
- Funding microfinance loans for critical school improvements, such as building new classrooms, installing running water, buying computers, and hiring additional teachers and staff
- Providing alternative ways to access education for students forced to drop out of school, enabling them to complete required grades and pass national exams.



6

GOVERNANCE

“OUR WIN RIGHT VALUES SPRING FROM PENTAIR’S LONG-STANDING CODE OF BUSINESS CONDUCT AND ETHICS, WHICH ORIGINATED IN THE 1970S AND STILL GOVERNS HOW WE MANAGE AND OPERATE OUR BUSINESSES.”

– RANDALL J. HOGAN, CHAIRMAN AND CHIEF EXECUTIVE OFFICER

At Pentair, we work hard to “Improve Every Day” and “Win Right.” Those two phrases embody our drive for success as well our dedication to conducting business to the highest ethical standards. We believe that honesty and integrity should define our relationships with customers, suppliers, investors, and each other. We have the same expectations of our suppliers.

Pentair has long believed that good governance sets the foundation for success. The governance principles we practice today are built on the [Pentair Code of Business Conduct and Ethics](#), established more than 30 years ago and annually affirmed by our employees.

THESE PRINCIPLES AND PRACTICES INCLUDE:

- A strong-minded Board of Directors with a majority of independent members
- An independent Lead Director who serves as a direct liaison with management
- Direct access by the Board to independent advisors and experts
- Executive Board sessions without management present
- Audit & Finance Committee responsibility for the retention and supervision of external auditors and for oversight of our internal auditors
- A hotline available to employees for reporting compliance or other concerns
- [A Related Person Transactions Policy](#) to ensure independence and the absence of conflicts
- [A Political Contributions Policy](#) to ensure that financial contributions the company makes are consistent with our core values and protect and/or enhance stakeholder value.

For more information on our responsible approach to business, read our [Corporate Governance Principles](#)

GOVERNANCE STRUCTURES

PENTAIR'S BOARD OF DIRECTORS HAS THREE STANDING COMMITTEES:

- [Audit and Finance Committee](#): Assists the Board with oversight of accounting and financial reporting processes and audits of financial statements.
- [Compensation Committee](#): Sets and administers policies that govern executive compensation, including setting the Named Executive Officers' compensation.
- [Governance Committee](#): Identifies individuals qualified to become Directors. Recommends nominees to the Board for election at annual meetings of shareholders. Oversees public policy matters and compliance with the Code of Conduct.

For more information, visit our [Corporate Governance page](#)

Governance Structures

FY 2016

Board Members

Total	12
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Board Composition

Minority Members	4
Female Members	2
Independent Members	11

CODE OF CONDUCT

Our [Code of Conduct](#) outlines our commitment to abiding by international laws, regulations, and global standards as well as to following the local laws of each country where we do business. It also describes our commitment to, and policies for, doing business with integrity, including provisions on anti-corruption and anti-bribery. The Code applies to all full-time and part-time employees, contractors, and Pentair executives and Directors. We communicate our anti-corruption policies and procedures to employees on Pentair's intranet site as well as through annual and new-hire compliance trainings (online and in-person), with 100 percent of professional-level employees completing the training in 2016.

In addition, we maintain a proactive third-party risk management program designed to prevent corruption and promote ethical practices. Every employee is asked to sign a commitment statement indicating they have read and understood the Code and will act in full compliance.

Speak Up Resources

We encourage employees to speak up whenever they observe improper or unethical behavior or actions. Pentair does not tolerate retaliation in any form against employees for raising concerns or making good-faith reports about possible breaches of law or policy, or ethical violations.

Pentair maintains several reporting options, including an Ethics HelpLine as a confidential means to report violations of our Code, internal policies, or the law. Available 24/7, in the languages of all countries where we operate, the HelpLine can be accessed on the web or by phone through toll-free numbers in 47 countries. Employees may also report suspected violations directly to their human resources representative or supervisor. In addition to the HelpLine, employees can file a report using the web reporting form available at PentairEthics.com. Employees may also contact the Office of Business Conduct and Ethics directly by phone, e-mail, or letter.

For more information, contact the Office of Business Conduct & Ethics at Ethics@Pentair.com.

SUPPLIER RELATIONSHIPS

Our commitment to responsible, sustainable business practices extends to our supplier partnerships.

OUR CODE DESCRIBES RESPONSIBILITIES WE EXPECT OF OUR BUSINESS PARTNERS AND SUPPLIERS, INCLUDING:

- Providing clean and safe working conditions
- Delivering fair wages and benefits according to local laws and practices
- Not tolerating human rights abuses including, but not limited to, child labor.

Through our procurement policies, we seek to select to business partners, suppliers, and contractors who share Pentair's commitment to socially responsible business practices.

All suppliers must also agree to abide by our [Supplier Code of Conduct](#), which requires our business partners to commit to ethical standards and business practices compatible with those of Pentair.

We evaluate strategic suppliers using scorecards that we review with them regularly. We identify key needs and gaps related to responsible business for these suppliers, and develop plans to address outstanding issues. In a few selected cases, we invest resources to develop specific skills sets for strategic suppliers.

For information on our Extractives and Conflict Minerals policies and programs, please visit our [Partner and Supplier Information](#) page.

Pentair's [Code of Business Conduct and Ethics](#).

PRIVACY AND DATA SECURITY

Pentair is committed to providing data privacy and security for our customers, employees, investors, vendors, and other stakeholders around the world. Pentair's global information security and data privacy policies govern how we collect, process, store, and transmit data lawfully as well as the safeguards we have in place to maintain and prevent the unauthorized use or disclosure. Pentair reinforces its commitment through a global awareness training.

Pentair provides a reliable and secure environment to protect the customer and employee data provided to us. Pentair has implemented several physical and system security measures and invested significantly in industry leading technologies to provide the appropriate protections that our customers and employees deserve.

Pentair is committed to complying with all applicable privacy and data protection laws, wherever it does business. Any personal information Pentair collects, regarding employees or any third party, will be treated with care, protected, and used lawfully and properly.

Pentair has not received any substantiated complaints regarding breaches of customer privacy losses of customers data.

Review our [Privacy Policy](#)

POLITICAL CONTRIBUTIONS

In 2016, Pentair made no political contributions. As defined in Pentair's [Political Contributions Policy](#), such contributions generally include any corporate spending in the form of a gift, loan, advance, or deposit of money to political candidates, political parties, organizations primarily engaged in political activities, and ballot initiative organizations.

In addition, no U.S.-based trade association or other tax-exempt organization to which Pentair made a payment of \$50,000 or more in 2016 reported to Pentair that any portion of that payment was used for political activity purposes, with the exception of two organizations, the Water Quality Association and the Minnesota Business Partnership, which used a portion of their funds for lobbying activities.

The Water Quality Association is a not-for-profit international trade association representing the residential, commercial, and industrial water treatment industry. The Minnesota Business Partnership is a not-for-profit organization whose purpose is to maintain a high quality of life for all Minnesotans by ensuring that the state's economy remains strong and globally competitive.



About This Report

This report provides data and highlights covering Pentair's fiscal year 2016, which runs from January 1st, 2016, to December 31st, 2016, and references GRI G4 standards. When we refer to 2016 in the text, we are referencing our fiscal year.

In future reports, we will refine our reporting scope to align with an analysis of our material issues. This analysis is currently underway, and will be completed in early 2017. We will also pursue GRI Core status, and work to align with additional leading ratings and rankings to further bolster the strength of our approach and performance.

For more information, or to provide feedback on this report please contact PentairCSR@Pentair.com.

PENTAIR 2016 GRI G4 INDEX

Indicator Response * Reported

General Standard Disclosures

Strategy and Analysis

G4-1: Statement from most senior decision maker.	Letter from Pentair Chairman and CEO: Randall J. Hogan, page 3	Fully
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Organizational Profile

G4-3: Name of the organization.	Pentair plc	Fully
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G4-4: Primary brands, products, and services.	A Winning Company → Our Company, page 6	Fully
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G4-5: Location of the organization's headquarters.	London, United Kingdom	Fully
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G4-6: Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	A Winning Company → Our Company, page 7	Fully
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G4-7: Nature of ownership and legal form.	Pentair 2016 Annual Report and Form 10-K	Fully
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G4-8: Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	A Winning Company → Our Company, page 6 Winning Solutions, page 11 Pentair 2016 Annual Report and Form 10-K	Fully
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G4-9: Scale of organization.	A Winning Company → Our Company, page 6 Winning Workplace, page 34 Pentair 2016 Annual Report and Form 10-K	Fully
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G4-10: Total workforce by employment contract and gender.	Winning Workplace, page 34	Partially
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G4-11: Percentage of total employees covered by collective bargaining agreements.	Winning Workplace, page 41 Pentair 2016 Annual Report and Form 10-K	Fully
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G4-12: Describe the organization's supply chain.	Governance → Supplier Relationships, page 52	Partially
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G4-13: Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	Pentair 2016 Annual Report and Form 10-K	Fully
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* Page numbers correspond to the Pentair 2016 Corporate Responsibility Report, unless otherwise indicated)

Indicator	Response	Reported
G4-14: Whether and how the precautionary approach or principle is addressed by the organization.	Pentair 2016 Annual Report and Form 10-K	Fully
G4-15: Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	A Winning Company → Our Approach to Corporate Responsibility, page 10	Fully
G4-16: Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: has positions in governance bodies; participates in projects or committees; provides substantive funding beyond routine membership dues; or views membership as strategic.	Pentair 2016 Corporate Responsibility Report	Fully
Identified Material Aspects and Boundaries		
G4-18: Explain the process for defining the report content and the Aspect Boundaries and how the organization has implemented the Reporting Principles for Defining Report Content.	A Winning Company → Our Approach to Corporate Responsibility, page 10	Partially
Stakeholder Engagement		
G4-24: A list of stakeholder groups engaged by the organization.	A Winning Company → Our Approach to Corporate Responsibility, page 10	Partially
G4-25: The basis for identification and selection of stakeholders with whom to engage.	A Winning Company → Our Approach to Corporate Responsibility, page 10	Partially
G4-26: The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	A Winning Company → Our Approach to Corporate Responsibility, page 10	Partially
G4-27: Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. The stakeholder groups that raised each of the key topics and concerns.	We are in the process of conducting a materiality analysis and stakeholder engagement project. We plan to report on our findings and refine our strategic direction in 2017.	Not Reported
Report Profile		
G4-28: Reporting period for information provided.	2016 fiscal year (January 1, 2016 – December 31, 2016)	Fully

Indicator	Response	Reported
G4-29: Date of most recent previous report.	2008	Fully
G4-30: Reporting cycle.	Annual	Fully
G4-31: The contact point for questions regarding the report or its contents.	About This Report, page 54	Fully
G4-32: Report the “in accordance” option the organization has chosen; the GRI Content Index for the chosen option and the reference to the External Assurance Report, if the report has been externally assured.	This report contains Standard Disclosures from the GRI Sustainability Reporting Guidelines. We have prepared this report using GRI G4 guidelines as a reference.	Fully
G4-33: The organization’s policy and current practice with regard to seeking external assurance for the report.	Pentair does not currently engage any third party to assure the data presented in this report.	Fully
Governance		
G4-34: The governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision making on economic, environmental, and social impacts.	Governance → Governance Structures, page 50 Pentair 2016 Annual Report and Form 10-K Pentair 2016 Proxy Statement	Fully
G4-38: The composition of the highest governance body and its committees.	Pentair Corporate Governance Pentair 2016 Annual Report and Form 10-K	Fully
G4-39: Whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organization’s management and the reasons for this arrangement).	Pentair Corporate Governance Pentair 2016 Annual Report and Form 10-K and Proxy	Fully
G4-40: The nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members.	Corporate Governance Principles	Fully
G4-41: Processes for the highest governance body to ensure conflicts of interest are avoided and managed. Whether conflicts of interest are disclosed to stakeholders.	Corporate Governance Principles	Fully
G4-44: The processes for evaluation of the highest governance body’s performance with respect to governance of economic, environmental, and social topics.	Corporate Governance Principles	Fully

Indicator	Response	Reported
Ethics and Integrity		
G4-56: The organization's values, principles, standards, and norms of behavior such as codes of conduct and codes of ethics.	A Winning Company → Our Values, page 5 Governance, page 48	Fully
G4-57: The internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	Pentair Code of Business Conduct and Ethics	Fully
G4-58: The internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms, or hotlines.	Pentair Code of Business Conduct and Ethics	Fully

Specific Standard Disclosures

Environmental

Energy

G4-EN: Disclosure on management approach.	Winning Operations → Our Approach and Driving Energy Efficiency, pages 23 and 28	
G4-EN3: Energy consumption	Winning Operations → Driving Energy Efficiency and Energy Consumption and Emissions Performance, pages 28 and 29-32	Fully
G4-EN5: Energy intensity	Winning Operations → Driving Energy Efficiency and Energy Consumption and Emissions Performance, page 28 and 29-32	Fully

Water

G4-EN: Disclosure on management approach.	Winning Operations → Managing Our Water Use, page 25	
G4-EN8: Water consumption	Winning Operations → Managing Our Water Use, page 25	Fully
G4-EN10: Percentage and total volume of water recycled and reused	Winning Operations → Managing Our Water Use, page 26	Partially

Emissions

G4-EN: Disclosure on management approach.	Winning Operations → Driving Energy Efficiency, page 28	
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Indicator	Response	Reported
G4-EN15: GHG emissions (Scope 1)	Winning Operations → Driving Energy Efficiency and Energy Consumption and Emissions Performance, pages 28 and 29-32	Fully
G4-EN16: GHG emissions (Scope 2)	Winning Operations → Driving Energy Efficiency and Energy Consumption and Emissions Performance, pages 28 and 29-32	Fully
G4-EN18: Greenhouse gas (GHG) emissions intensity	Winning Operations → Driving Energy Efficiency and Energy Consumption and Emissions Performance, page 28 and 29-32	Fully
Effluents and Waste		
G4-EN: Disclosure on management approach.	Winning Operations → Waste Reduction and Materials Use Performance, page 33	
G4-EN23: Total weight of waste by type and disposal method.	Winning Operations → Waste Reduction and Materials Use Performance, page 33	Fully
Products and Services		
G4-EN: Disclosure on management approach.	Winning Solutions, page 11	
G4-EN27: Extent of impact mitigation of environmental impacts of products and services.	Winning Solutions → Water Solutions, page 14 Winning Solutions → Energy Efficiency Solutions, page 16	Partially
Social: Labor Practices and Decent Work		
Employment		
G4-LA: Disclosure on management approach.	Winning Workplace, page 34	
G4-LA1: Total number and rates of new employee hires and employee turnover by age group, gender, and region.	Winning Workplace, page 34	Fully
G4-LA2: Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation.	Winning Workplace → Compensation and Benefits, page 41 Pentair 2016 Annual Report and Form 10-K	Fully
Labor/Management Relations		
G4-LA: Disclosure on management approach.	Winning Workplace → Employee Engagement and Development, page 36	
G4-LA4: Minimum notice periods regarding operational changes, including whether these are specified in collective agreements.	Winning Workplace → Labor Relations, page 41	Partially

Indicator	Response	Reported
Occupational Health and Safety		
G4-LA: Disclosure on management approach.	Winning Workplace → Healthy Workplace, page 40 Pentair Code of Conduct	
G4-LA6: Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.	Winning Workplace → Healthy Workplace, page 40	Partially
Training and Education		
G4-LA: Disclosure on management approach.	Winning Workplace → Employee Engagement and Development, page 36	
G4-LA11: Percentage of employees receiving regular performance and career development reviews, by gender and by employee category.	Winning Workplace → Employee Engagement and Development, page 36	Partially
Diversity and Equal Opportunity		
G4-LA: Disclosure on management approach.	Winning Workplace → Employee Engagement and Development, page 36	
G4-LA12: Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	Winning Workplace → Employee Engagement and Development, page 36 Governance → Governance Structures, p. 50	Partially
Social: Human Rights		
Freedom of Association and Collective Bargaining		
G4-HR: Disclosure on management approach.	Winning Workplace, page 34	
G4-HR4: Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights.	Winning Workplace → Labor Relations, page 41	Partially
Social: Society		
Anti-Corruption		
G4-S0: Disclosure on management approach	Governance → Code of Conduct, page 51	
G4-S04: Communication and training on anti-corruption policies and procedures	Governance → Code of Conduct, page 51	Fully
G4-S06: Total value of political contributions by country and recipient/beneficiary	Governance → Political Contributions, page 53	Fully

Indicator	Response	Reported
Social: Product Responsibility		
Customer Privacy		
G4-PR: Disclosure on management approach	Governance → Privacy and Data Security, page 53	
G4-PR8: Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Governance → Privacy and Data Security, page 53	Fully