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We use an image of an animal cell to represent our corporate organization because the cell represents non-hierarchical, independent structure. If each area of the cell is functioning properly, then the entire cell is healthy. It’s a reminder that our success must come through a sense of responsibility to the whole.
OVERVIEW

As we reflect on 2018, we appreciate the deepening synergy taking place at Promega among employees. Together we are creating an atmosphere where we all can thrive by contributing to life science solutions, building stronger relationships, embracing community wellness and reducing our environmental effects. This mindset and increasing employee engagement have resulted in meaningful connections and value for our customers, communities, environment and each other.

We appreciate, that just like life itself, the notion of sustaining life for the long term is complex and interdependent. For Promega, the intersection of commitments to environmental sustainability, innovation, employee wellbeing and community support generate meaning and purpose for all stakeholders. This report shares the philosophies, corporate mindset, product benefit, sustainability practices, work culture and community outreach embodied by Promega. In it, we hope to demonstrate how Promega works to actualize a vision of thoughtful growth and a purpose that exceeds just the bottom line.
LETTER FROM THE CEO

I am pleased to share the eleventh annual report of our corporate responsibility initiatives, looking back on our sustainable practices and resulting aggregate trends through 2018. We not only spend time reinforcing why this is important, but also examine how we achieve these results, and for us this begins with each person at Promega.

Individuals make a difference both as a part of teams working together, as well as the unique potential and perspective of each person. Over the years and around the world, we have grown and improved because someone had an idea and brought it forward. Promega employees, tapping into their own unique passions and expertise, have been the source of many innovative and meaningful ideas. These ideas, in turn, have helped our company invent new products, recycle materials, create innovative health programs, exceed customer expectations and support local communities.

Someone sparked an idea and the rest of us fanned the flame.

At a time when some find the needs in our world overwhelming, individual efforts may feel futile, and yet, the influence of an individual is just what we need. There’s a sentiment that we articulated decades ago in our 1992 Annual Report at Promega that still rings true for all of us today:

“…we find that as we develop the full potential inherent in each of us; our perceptions of limitations change: the impossibilities of yesterday become the probabilities of tomorrow.”

May we each find the potential in ourselves, turning the impossible to possible, and the possible into the world we live in.

WILLIAM A. LINTON
Chairman and CEO
A Shipping Specialist pulls products for distribution out of Promega Madison’s Kepler Center. Promega made changes to its packaging in 2018 to be more sustainable.
More than any product, technology, or market in guiding our path, we continue to look toward, relationship as our North Star to a fulfilling future.

WILLIAM A. LINTON
Chairman and CEO

CORPORATE MIND

In a rapidly changing world, we reflect on how Promega can continue contributing to scientific advancement and improving life around the globe. We look for qualities that stand the test of time—the sense that we can seek and create purpose and meaning for the larger community of customers, suppliers and stakeholders, both as an organization and for ourselves as individuals. Our business is life science, but our lives are fueled by curiosity and life-long learning, a thread that appears in countless forms across our global organization. Founded in 1978, our company is headquartered in Madison, WI, USA, with sales branches in 16 countries, more than 50 global distributors, and three global manufacturing locations. Promega is governed by a Board of Directors, while daily operations are led by the Corporate Leadership Team and global Branch Managers. This diverse group brings wide-ranging expertise and unique cultural experience to management decisions.
INTRODUCTION

CORPORATE MIND

PRODUCT REACH

PLANET AWARE

PEOPLE CARE

COMMUNITY TOUCH

ADDITIONAL INFO

PROMEGA CORPORATE RESPONSIBILITY REPORT 2019 | 8

1,601

EMPLOYEES

16

SALES BRANCHES IN COUNTRIES

1,601

EMPLOYEES

4,000+

PRODUCTS

56

NEW PATENT FILINGS IN 2018

21

NEW PRODUCTS LAUNCHED IN 2018

569

ISSUED AND PENDING PATENTS

50+

GLOBAL DISTRIBUTORS

REVENUE APPROACHING

OVER 10% OF REVENUE INVESTED IN RESEARCH AND DEVELOPMENT

$450M
PURPOSE, VISION AND VALUES

Purpose
Promega exists on an evolutionary frontier where the values of science, business and human well-being intersect. Acknowledging these interdependencies, Promega cultivates its environment to allow employees to flourish, develop deep and enduring relationships with all stakeholders and create intelligent life-science solutions.

Vision
Promega Corporation grows from a vision where success is measured in meaning generated for people and in relationships sustained by both value and purpose. With an eye toward a changing future, Promega continues to evolve:

- Our life sciences tools to accelerate discovery and make possible increasingly innovative and practical applications of advanced technology.
- Our commitment to improving human health.
- Our work environments, which support and perpetuate curiosity, self-awareness and community integration.
- Our capacity as a stable resource for the growth and transformation of the people and communities we touch.

In essence, our vision includes all life and moves us to act on the knowledge that we are all interdependent.

Values
Promega continues to reflect a set of living values that include:

- Contributing to the advancement of science for improving life in the global community.
- Appreciating that we operate as an adaptable living organism in which each element and human contribution are a vital part of a whole, capable of responding to the emerging complexities of our time.
- Encouraging personal development through inner and outer exploration and self-awareness practices.
- Recognizing that both work and home are places to cultivate wholeness and wholeheartedness through learning, offering the best of ourselves, integrating new insights and developing inner and outer qualities that allow each individual to be present and engaged.
- Rewarding and acknowledging achievement through creativity, risk taking, process improvements and innovation.
- Promoting adaptability and flexibility in the workplace.
INVESTMENT IN THE FUTURE

We believe that a sustainable organization must evolve as the world and customer needs change. As a result, we look at human needs to anticipate our customers’ wishes while providing an inspiring place for employees to work and supporting the communities in which we live. We are committed to building a long-term sustainable future through investments in innovation, people, products and services, infrastructure and community outreach.

In 2018, this commitment was shown by our investment in scientific innovation, expansion of global facilities and developing our technical and leadership capabilities. Our focus in these areas means we can continue to meet customer needs and generate increased value.
Our microsatellite instability (MSI) technology was recently granted innovation designation by the Chinese National Medical Products Administration on its path to being classified as in vitro diagnostic (IVD). This technology can help physicians investigate the best treatment for colon cancer. Learn more about this MSI test and how other technologies are making a difference in the Product Reach section.

**Effects of Products and Innovation**

We provide innovative solutions and technical support to researchers, technicians and analysts in life sciences, industry and government. Over 4,000 catalog and additional custom products enable our worldwide customers to advance knowledge in the fields of genomics, proteomics, cellular analysis, molecular diagnostics, human identification and applied biotechnology. In 2018, product revenue approached $450 million. The Product Reach section of this report expands on how our products benefit human health and advance the scientific community.

Our growing investment in innovative research resulted in 56 new patent filings in 2018, bringing our intellectual property library to over 380 granted patents and 187 pending patents. In addition, 21 new products were launched, fulfilling customer needs by:

- Aiding life science research with automated solutions.
- Advancing forensic DNA testing.
- Improving methods for studying protein structure and function.
- Optimizing research in clinical labs.
- Expediting discovery of biotherapeutics.
Our active and continuously developing Emotional and Social Intelligence initiative emphasizes connection and encourages employees to grow and become their best. Over 130 employees have attended an immersive ESI Bootcamp to cultivate these skills and apply them daily. Learn about all the ways Promega supports employees in the People Care section.

**Investments in People and Place**

In 2018, our global facilities exceeded 1.1 million square feet or 110,000 square meters. Expansion of our branch facilities in the UK and Germany are well underway and should be completed in 2019. Using sustainable design approaches, these new facilities will provide creative workplaces and healthy spaces for our employees, customers and community outreach. In addition, a world-class research building is under construction and a state-of-the-art component manufacturing facility will start construction in Spring 2019 in Madison, WI. These buildings will add 435,000 ft² or 40,000 m² to the Promega footprint when completed in the next few years. For details on these expansions and environmental focus of all operations, see the Planet Aware section of this report.

**CONSCIOUS LEADERSHIP**

At the heart of science is the understanding of the interdependent, complex and dynamic nature of systems. With over 1,600 individuals worldwide, this complexity is increasingly true at Promega as well. In rapidly changing environments, our leadership must use their mind and heart to flourish. We are actively and continuously developing an organizational environment that fosters deep personal connections, creates trust in the face of ambiguity to encourage conscientious and courageous action, and supports the simultaneous use of intuition and intelligence when developing vision and outlook. Ultimately, we also want to provide space in which everyone has an opportunity for self-awareness, personal transformation and professional development. The People Care section of this report expands on ways that Promega invests in our people and focuses on strengthening relationships.
General managers from our global branches at their annual gathering in Madison are photographed with a time capsule commemorating the company’s 40th anniversary.
Valuing Diversity
Promega believes in and practices equal opportunity and affirmative action. As a global company, we acknowledge and honor the fundamental value and dignity of all individuals and pledge ourselves to creating and maintaining an environment that respects diverse traditions, heritages, experiences and perspectives. With offices in 16 culturally diverse locations, the organization benefits from the unique cultures and experiences of all employees. Women represent approximately 47% of employees worldwide and occupy 43% of management positions.

Respecting Human Rights
As a member to the UN Global Compact, Promega follows all regulations regarding employment and has zero tolerance for violations of human rights. We are committed to upholding and advancing The Universal Declaration of Human Rights by developing productive business relationships around the world to continue working cooperatively among different customs and cultures. Issues that we take very seriously include:

- Protecting children from exploitation.
- Protecting all workers from modern slavery.
- Paying at least minimum wage.
- Safe working conditions.

Promega complies with all local workplace regulations and ensures that our employees and community members are treated with respect and dignity. We hold the same expectations for our suppliers and look to align with organizations that uphold international human rights and labor standards.

Used nitrite gloves and protective garments from Promega labs are boxed and ready to be shipped to a recycling facility as part of the RightCycle recycling program. Kimberly-Clark Professional recognized Promega in 2018 with a Chelsea Santucci Greenovation Award for diverting 3.6 metric tons (nearly 8,000 pounds) of materials from landfills through our employee-initiated glove and garment recycling programs. Learn more about our commitment to environmental sustainability in the Planet Aware section.
Prioritizing Anti-Corruption
Promega aims to operate with the greatest integrity and has zero tolerance for corruption or bribery. This commitment to anti-corruption is communicated to all employees in a Code of Conduct and additional training is provided to managers and employees in purchasing or sales departments.

A BROADER SENSE OF PLACE

We think of place as the integration of work, home and community. In addition to supporting employee community engagement, we support advancement of science, education, arts and community wellness. Stories showing our commitment to the communities in which we work are shared in the Community Touch section of this report.

“It’s inspiring to see how people are going the extra mile to deliver results that benefit our customers, the environment and the people working at Promega. This truly is a ‘little things can change the world’ attitude lived.”

Nina Petters, Manager eBusiness Europe, Promega GmbH
ALIGNING VALUES THROUGHOUT THE SUPPLY CHAIN

Promega recognizes the effect and importance that suppliers have in the scope of our Corporate Responsibility, and forms partnerships with companies who have similar commitments. Our Supplier Code of Conduct outlines our expectations relating to business ethics, labor, health and safety, and environmental responsibility. This document is shared with new and existing suppliers to encourage collaboration in these areas. A focus on sourcing from local suppliers also supports local communities and reduces environmental effects from shipping.

Promega values suppliers of goods and services that adhere to the highest social, ethical and environmental standards.

OUR ECONOMIC BENEFIT

Growth and success of any business, especially one the size and scope of Promega, has a positive ripple effect on the communities in which it operates. In the state of Wisconsin alone, a third-party economist has estimated our multiplied annual economic impact at more than $600 million. This analysis accounts for direct, indirect and induced Promega effects from job creation to expense of good and services.

Mindful focus on building a long-term sustainable organization, along with continued investment in infrastructure, will help us meet the rapidly changing needs of the scientific community.
Automated, high throughput dispensing at Promega.
Science is continuously evolving, so the needs of our customers are always changing. Developing the innovative solutions customers need begins with one crucial skill: listening. The solid relationships we build with our customers, taking the time to truly understand their work, allows us to anticipate their needs and problem solve together. Scientists, technicians and analysts use our products and technical expertise every day in laboratory and industrial settings around the world. Our alliance with them, coupled with determined scientific exploration and flexible manufacturing capabilities, enable us to support our customers in their important work to improve the world in profound ways using science.

With high-quality, reliable products at their disposal, basic researchers, applied researchers, clinical practitioners, forensic analysts, quality assurance personnel and others have more freedom to focus on specific...
### Breadth of Capabilities

#### Scientific Segments

<table>
<thead>
<tr>
<th>Segment</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Academic/Government</td>
<td>25%</td>
</tr>
<tr>
<td>Pharma/Biotech</td>
<td>28%</td>
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<tr>
<td>Clinical Diagnostics</td>
<td>24%</td>
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<tr>
<td>Applied and Enviro Testing</td>
<td>3%</td>
</tr>
<tr>
<td>Genetic Identity</td>
<td>20%</td>
</tr>
</tbody>
</table>

#### Core Technologies

- **Sample Preparation Solutions**
  - Manual to Automated Nucleic Acid Purification
  - Instruments

- **Sample Analysis Solutions**
  - Nucleic Acid Quantification
  - Amplification
  - NGS/Sequencing
  - Instruments
  - STR Analysis

- **Protein Analysis and Molecular Cloning**
  - Cloning
  - Protein Expression and Purification
  - Mass Spec
  - Immunoassays

- **Cellular Reporting and Signaling**
  - Genetic Reporters
  - Protein Reporters
  - Target Engagement
  - Cell Signaling
  - Instruments
  - Bioassays

- **Cell Health and Functional Analysis**
  - Real Time Assays
  - Energy Metabolism
  - 3D Analysis
  - ADME
  - Instruments
  - Protein Degradation

- **Segment Services**
  - Custom & OEM Manufacturing
  - Custom Assays
  - Platform Integration
  - Application Development
GIVING NAMES TO THE MIGRANTS IN A DEADLY SHIPWRECK

More than 1 million migrants and refugees crossed the Mediterranean Sea in 2015 during a massive immigration from the Greater Middle East and Africa to Europe. Deaths at sea rose to record levels in April 2015 when five boats sank with an estimated death toll of 1,200 people. One of the worst disasters was a fishing boat carrying nearly 1,000 people that sank off the coast of Libya. News reports state the accident happened after people saw a merchant ship in the distance and scrambled to attract its attention, overturning the crowded vessel. The Italian coast guard was only able to retrieve 28 survivors. In the months after the deadly shipwreck, only 118 bodies were recovered with hundreds more presumed to be trapped below deck. The Italian government created a task force to recover the boat and identify the victims. The Forensic Genetics lab at the University of Pavia was brought in to use DNA analysis to identify some of these victims. However, the challenge was extracting DNA from human remains that had been submerged in seawater for 3–14 months. This prolonged exposure to water can damage DNA, making identification difficult. Bone samples from 80 individuals were prepared for DNA extraction and the recovered DNA was then used for STR analysis using the PowerPlex® ESX and ESI 17 Fast Systems. These kits were provided by Promega Italy to help with the effort to give names to the shipwreck victims. Work is ongoing to compare the DNA profiles generated by the STR kits with antemortem records to give closure to those wondering if their loved ones were aboard the sunken fishing boat.

CUSTOMER FOCUS

Forensics and Paternity Laboratories

Forensics and paternity laboratories deal with unrelenting caseloads and tight turnaround times. Dependable results, fast throughput and reliable product supply are critical in this setting. These labs use limited, and often challenging samples, to develop investigative leads from crime scenes. Sexual assault evidence kit backlogs and property crime samples are some of the more challenging samples for labs to process. In addition, forensic labs process large numbers of reference samples to populate local, state and national databases. These reference databases help law enforcement connect arrestees to other crimes for identifying possible repeat offenders. The ongoing testing of the rape kit backlog has identified over 1,000 suspected serial rapists in the United States alone.

In addition to analyzing evidence collected at crime scenes, forensics and paternity labs help bring closure to families whose loved ones are missing or lost in mass disasters, and even help exonerate those who have been wrongly convicted of a crime. Researchers and analysts need to know that they will get optimal and reliable results from the valuable and often irreplaceable samples.

More than ever before, labs will be able to gain more information from challenging sample types, save time with increased sample processing capacity, and experience the flexibility to add samples during runs. All of this will be available with the same high level of service and support that customers have come to expect from Promega.
Tracking Malarial Infection

Eradicating malaria is difficult partially because the transmission cycle is complex with multiple different stages that occur inside mosquitoes after consuming a blood meal from humans. Compounds that could kill the parasite or block transmission in the mosquito during early stages of parasite maturation would be ideal. A recent study describes how our reporter enzyme NanoLuc® luciferase was combined with a Plasmodium parasite and used to create a model to identify drug compounds that block malarial transmission during the stage where male and female reproductive cells are fertilized.

Expression and activity of the luciferase gene in this mutant strain is controlled by an element that responds only to the sexual states of the parasite. When the parasite was just circulating in the blood, there was little bioluminescence. When the parasite converted into the cells that form a zygote like the stage in a mosquito, the amount of bioluminescence increased, suggesting that NanoLuc® luciferase was only expressed when these reproductive cells developed.

This NanoLuc® malaria strain called Ookluc was used to test compounds in the Pathogen Box from the Medicines for Malaria Venture. This research kit contains 400 compounds that are active against neglected tropical diseases—125 of the compounds are known to target malaria. Researchers found 31 compounds that blocked over 95% of the reporter parasite conversion into the reproductive cells, preventing the early reproductive stage. These results suggested the NanoLuc® luciferase-based Ookluc model is ideal for high-throughput screening of compounds that block malaria transmission. Thus, we are one step closer to identifying possible drugs that may eradicate malaria.

We have worked with forensic and paternity laboratories for more than 30 years and support their challenging workflow procedures by providing advanced technologies for efficient DNA extraction through discriminating STR analysis.

Government and Academic Research Laboratories

Despite increasing pressure and demands, today’s academic and government researchers are still at the front line of discovery but require more sensitive research tools to test their hypotheses. They need the newest available tools with enhanced sensitivity and specificity to address more complex biological questions compared to the methods used just a few years ago. From routine applications to more focused ones, Promega continues to develop these improved technologies from next generation nucleic acid isolation and PCR, to advanced assays for cellular biology, metabolism, 3D cellular structures and organoids, to protein manipulation and CRISPR knock-ins for tagging cell lines. To help the modern researcher successfully publish their results, fulfill their research programs and
nurture carefully planned careers, Promega is committed to developing the most advanced bioassays, target engagement and protein degradation tools. Promega values people, and we understand that every researcher is an individual with their own stresses and strains.

**Pharmaceutical and Biotechnology Industries**
Scientists within the pharmaceutical industry are continuously developing new small molecule drugs that can enter cells easily and affect specific target proteins. Targeted cancer therapies that block the growth and spread of cancer by interfering specifically with the disease cells, but not normal healthy cells are one example where small molecule drugs are used therapeutically. At early phases of drug development, researchers may need to screen more than 100,000 compounds at once to identify leads that can be further optimized and turned into new drugs. The availability of high-throughput compatible, reliable and predictable tools and assays reagents is crucial to the success of these researchers to discover new drugs that would be safe and effective in treating cancer patients.

Over the years, we have developed a broad portfolio of assay reagents that meet the needs of these pharmaceutical researchers and have been used widely during various phases of drug discovery and development. For example, our NanoBRET™ Target Engagement Assays allow researchers to quantitatively measure the interaction between a molecule and a protein in live cells reliably in a high-throughput manner. This is a significant advancement as these cellular assays can better predict compound performance. In addition to common drug targets like kinases, this NanoBRET™ Target Engagement technology has also been applied to CRISPR-Cas9 gene edited cells to help identify drugs that can lead to oncoprotein degradation.

**ISOLATING DNA FOR ANCESTRY TESTING**
For generations the Greek maxim 'know thyself' has inspired many to search inwardly and externally about who they are. With modern scientific advances it has become more accessible for humans to discover exactly where their genealogical roots lie as a step on the journey to understand ourselves. With AncestryDNA, this process can be done easily from the comfort of your home. With a saliva sample AncestryDNA can estimate your origins to more than 350 regions around the world enabling you to get inspired by your past, connect with living relatives or complete missing pieces of your family tree.

The magic in that saliva sample that enables AncestryDNA to analyze your past is genetic material called DNA, which must be extracted and analyzed. As a result of AncestryDNA’s strong sales growth, a robust laboratory workflow and reliable partner was required. This critical workflow incorporates the Promega Maxwell® HT gDNA isolation chemistry, which is used to process every sample. To date, over 7 million people have used AncestryDNA to better understand the journeys of their ancestors that continues today in each us.
Environmental and Food Testing Laboratories

The increasing demands on water and food testing facilities mean there is a need for rapid, reliable solutions to ensure products are safe and authenticate food ingredient claims. Biotechnology offers tools for these testing labs to detect bacterial or other contaminants in food, water or plants. From GMO testing and pathogen detection in food to water quality and contamination analysis, assays need to satisfy the requirements of food and water testing laboratories, including sensitive detection of unwanted microbes and undeclared ingredients.

To screen plants for GMOs or analyze food for pathogen contamination or authenticating ingredients, extracting DNA from these samples is a necessary step. The resulting DNA needs to pure enough to work in PCR-based analysis, the method most food testing labs use for detection. In Europe, our DNA purification reagents has become a reference standard in authenticity determination of meat products, and European Union Reference Laboratory for Animal Proteins in feeding stuffs (EURL) has developed a Standard Operating Procedure for DNA extraction based on our purification chemistry. In addition, our Maxwell® RSC PureFood GMO and Authentication Kit was recently selected by the European Reference Laboratory on GMO Food and Feed Testing for developing new SOPs for food DNA extraction, influencing food companies to use our products as part of their routine quality control testing.

Water treatment facilities and desalination plants test the water quality and biofilm formation to reduce energy consumption and improve plant operational efficiency. By partnering with these facilities, we have been able to improve our luminescent bacterial detection assay for specific use with water sampling to help with industrial processes like biocide dosage and timing for water cooling systems. The use of Water-Glo™

Providing Alternatives to Animal Testing

Companies that manufacture cosmetics and personal care products need a way to test products they are developing for safety, but there are few alternatives that replace animal skin. Compounds in cosmetics or personal products can potentially cause allergic responses on the skin, known as skin sensitization. This response takes place in the outer layer of the skin, the keratinocytes, and involve inflammatory response in cells and upregulation of antioxidant/electrophile response element (ARE)-dependent pathways that respond to the skin cell inflammation. By developing luciferase reporter cell lines that detect when ARE-dependent pathways are triggered by cosmetics or personal care products, we have created an alternative to animal skin testing.

The Organization for Economic Co-operation and Development (OECD) has published Test Guidelines for In Vitro Skin Sensitisation (OECD TG 442D) for two validated cell lines called KeratinoSens™ and LuSens that have been made available globally through acCELLerate (http://www.accellerate.me). These cell lines, when used with the Steady-Glo® or One-Glo® Luciferase Assay System luminescent detection assays, are a way to measure skin sensitization.
microbial analysis by measuring the amount of ATP in a sample by bioluminescence applies to drinking water, desalination and other areas, and offers a tool by which to improve plant efficiency and is part of ongoing research.

**Clinical and Molecular Diagnostics Laboratories**
Clinical laboratories rely on access to high-quality, consistently performing products for their assays. Promega manufactures reagents under a rigorous quality program that contributes to reproducible and reliably performing molecular assays. Products are manufactured to the highest quality standards through maintenance of ISO 9001 and ISO 13485 certification as well as enhanced capabilities for cGMP manufacturing. The **PCR Optimization Kit**, which launched in 2016, allows customers to rapidly define their own unique PCR master mix for a variety of applications in research or clinical use. This is just one example of how we can provide flexible solutions with product customization options to meet the needs of the clinical laboratory or IVD manufacturer.

**ESTABLISHED TOOLS FIND NEW MEANING**
Promega first developed its **microsatellite instability (MSI) Analysis System** 15 years ago as a NASA-funded effort for monitoring the effects of radiation on astronauts. The “Research Use Only” technology grew to become the gold standard in nucleic acid-based MSI testing for research labs around the world. With the recent advent of the new cancer immunotherapy treatment **Keytruda®** (pembrolizumab) based on a common biomarker rather than where in the body a tumor originates, a new application for our MSI technology emerged.

In late 2018, Japan’s Ministry of Health, Labour and Welfare approved a companion diagnostic based on our MSI technology to identify patients suitable for treatment with Keytruda®. The test was developed in collaboration with FALCO biosystems of Kyoto, Japan. The MSI-IVD Kit (FALCO) is a DNA analysis test used to detect high microsatellite instability (MSI-H). MSI-H is a biomarker in tumor tissue indicating that certain sections of DNA, called microsatellites, have become unstable. This instability biomarker shows the major mismatch repair genes that correct errors during DNA replication are not functioning properly. Keytruda® works to boost the ability of one’s immune system to identify and fight these tumor cells, and has been approved for use in patients with the MSI-H biomarker in many countries, including the US and Japan. The MSI-IVD Kit (FALCO) is the first such pan-tumor companion diagnostic test in Japan.

Our latest MSI technology was also recently granted “innovation designation” by the Chinese National Medical Products Administration (NMPA), and we intend to seek US Food and Drug Administration (FDA) clearance for an in vitro diagnostic (IVD) version of our MSI 1.2 platform.
For over 40 years, Promega Corporation has supported global clinical researchers by providing high-quality, innovative research tools and support. Those researchers evolved their clinical discoveries into today’s focus on precise, personalized medicine.

With individualized patient care in mind, we are proud to announce our newest department, Medical Affairs. Our Medical Affairs team, staffed by scientists, will work to provide scientific and clinical expertise to our clients, through medical education.

Promega and our Medical Affairs department are here to provide support to the needs of the clinical customer focused on the concept that every patient has a story, every patient has a family, and the research never stops.

“Our Medical Affairs Department allows us to increase our ability to share our knowledge of scientific advances to help physicians and make a difference for families.”

RANDY DIMOND, Vice President & Chief Scientific Officer
INVESTMENT IN INNOVATION

To sustain our contributions to scientific exploration and application, we continue to invest in the development and discovery of new technologies. In 2018, 10.8% of total revenue was allocated to research and development. Research is not solely focused on the development of new products as our Advanced Technology Group and a group funded by the Federal Government perform basic research.

Our growing investment in innovative research resulted in 56 new patent filings in 2018, bringing our intellectual property library to over 380 granted patents and 187 pending patents. Promega research scientists had 20 scientific papers published in 2018. We also work with academic institutions and other entities to license and develop promising technologies.

Patents
Issued and Pending Applications

<table>
<thead>
<tr>
<th>Area</th>
<th>Patents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellular Analysis</td>
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<tr>
<td>Genomics</td>
<td>52</td>
</tr>
<tr>
<td>Genetic Identity &amp; Other</td>
<td>20</td>
</tr>
<tr>
<td>Proteomics</td>
<td>32</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>19</td>
</tr>
</tbody>
</table>

Total: 569
Retrieving a cryogenically stored product for shipping.
QUALITY PROCESS AND PRODUCT

Promega Corporation has a long history of supporting our customers with high-quality products, services and information. Promega headquarters in Madison, WI, USA, was first certified to international standards for quality management systems in 1998, and our commitment continues with our current ISO 13485 and ISO 9001 certifications. The ISO series of quality management system standards are developed and maintained by the International Organization for Standardization. An organization achieving ISO certification has demonstrated to a third party that the organization meets all requirements of the standard and has implemented a quality system capable of developing, manufacturing, testing and delivering high-quality products around the world. ISO certification assures our global customers that Promega is committed to quality and has established reliable and effective processes. The ISO certification exemplifies commitment to our customers, our business, and all those who rely on and benefit from the use of our products. Currently, 16 Promega locations around the world are certified to meet the requirements of ISO 9001, ISO 13485 or both.

In February 2016, ISO 18385:2016 was published as the first international standard specific to the forensic manufacturing community. In 2017, Promega became the first major forensic manufacturer to achieve third-party certification of the published ISO 18385 standard to minimize the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes. Promega products manufactured in alignment with the ISO 18385 standard include a “Forensic Grade” certification logo.

SCIENTISTS SERVING SCIENTISTS

In 2018, Promega Technical Support scientists handled 15,829 new service requests from Promega customers and more than 30,000 total customer contacts through a variety of channels including phone, email, chat, web-based forms and social media accounts. Technical Support scientists help customers choose the right products, understand how to use them and overcome any issues that may occur.
The Prairie Swale that highlights the Promega campus in Madison, WI, is the result of an effort that began in 2000 to transform a simple concrete storm water spillway into an ecologically diverse seven-acre prairie restoration.
As we evaluate what it will take for Promega to thrive in the first 100 years and beyond, awareness of our natural environment is integral to this process. As a result, we are focused on reducing our ecological footprint across all aspects of our business, including the way we design and operate facilities, ship products and engage with customers. This endeavor relies on the efforts of all Promega employees and operations worldwide.

By focusing on the future, we have made facility and infrastructure investments that will enable sustainable growth for many years to come. During the last ten years, our building footprint has grown by over 90% with most of this growth in energy-intensive spaces. In addition, we have been renovating existing facilities to add more laboratory and manufacturing space. While this growth has been challenging for meeting

"Being future focused has accelerated our sustainable mindset to growth. Every time we invest in infrastructure, we add new learning and sensibilities that bring in expertise related to environmental sustainability."

COREY MEEK
Corporate Responsibility Program Lead, Promega Biosciences

PLANET AWARE
our environmental goals, it has also provided an opportunity to apply more efficient and sustainable technologies. A key component of our growth is the people that have helped us arrive where we are and will guide us in the future. Significant investment has been made in full-time individuals, consultants and advisors with expertise in sustainability. Employee-lead teams are vital in driving grassroots efforts and promoting a culture of sustainability. These efforts have resulted in an 8% reduction in our carbon footprint as indexed to revenue since 2015.

Upholding the principles of the United Nations Global Compact, we are focused on our 2020 environmental reduction goals for greenhouse gas emissions, electricity, natural gas, water, outgoing product distribution emissions and waste. Our environmental sustainability actions cover a broad range of topics and our environmental goals represent key areas of environmental effect and focus.

Status Toward 2020 Goals

**AHEAD OF TARGET**

- **Electricity** 8% (2% Goal)
- **Water** 17% (15% Goal)
- **Distribution** 10% (5% Goal)

**ON TARGET**

- **Carbon** 8% (10% Goal)

**BELOW TARGET**

- **Gas** 5% (10% Goal)
- **Waste** 0% (10% Goal)
RESPONDING TO CLIMATE CHANGE

Promega supports limiting anthropogenic greenhouse gas emissions. We actively track greenhouse gas emissions and work to reduce emissions from all global operations. We consider fuel combustion, purchased electricity and indirect emissions from business travel, outgoing distribution, water usage and paper usage (see graph below). We are currently on target to achieve our carbon emissions goal for 2020 thanks to significant focus placed on energy efficiency and efficient product distribution.

Carbon Footprint

Tons of CO₂ Per Million USD

<table>
<thead>
<tr>
<th>2015</th>
<th>2018</th>
<th>2020 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>107</td>
<td>100</td>
</tr>
<tr>
<td>54</td>
<td>55</td>
<td>51</td>
</tr>
<tr>
<td>31</td>
<td>31</td>
<td>29</td>
</tr>
</tbody>
</table>

- Fuel Combustion
- Purchased Electricity
- Business Travel
- Outgoing Distribution
- Water Usage
- Paper Usage

Global Carbon Footprint Composition

- Electrical Usage: 50%
- Natural Gas: 19%
- Distribution: 19%
- Air Travel: 7%
- Automobile Travel: 2%
- Rail Travel: 0%
- Water: 0%
- Paper: 0%
Minimizing Electricity Usage and Emissions

Electricity usage is a primary sustainability focus at all Promega locations because it makes up over half our total carbon emissions. To minimize the effects of electricity usage, we invest in energy efficiency, generate electricity from photovoltaic panels and purchase electricity from renewable sources. In the last year, electricity usage decreased by 1.1% as indexed to revenue even with growth in energy-intensive environmentally controlled rooms. This was made possible because of initiatives implemented by full-time specialists trained in energy efficiency and the efforts of all employees worldwide. Actions in 2018 included:

- Company-wide initiatives to incorporate high-efficiency LED lighting. Renovations were completed at four facilities in 2018, affecting over 475 light fixtures and saving approximately 100,000 kWh annually. In fall 2017 Promega France was renovated with LED lighting, reducing electricity usage by 12% in 2018.

- A newly formed sustainability committee at Promega hosted an LED lighting fair on campus to encourage employees to save energy at homes. This fair provided 800 lighting products to employees that are projected to save over 800,000 kWh.

- By connecting our R&D facility to a more efficient central chiller plant, we continue to save approximately 500,000 kWh each year at our R&D facility in Madison, WI.

- Air change surveys and control upgrades for select laboratories are planned for 2019 to further reduce energy consumption.

Renewable energy helps run our facilities without producing greenhouse gas emissions. Our use of renewable energy has increased 13-fold in the last ten years, providing enough energy to power 50 homes each year. In 2019, several new and existing facilities will add photovoltaics. Facilities that use renewable energy sources such as photovoltaic and geothermal currently include:

- Promega GmbH and Promega Euro Hub in Mannheim, Germany
- Promega Brazil in Sao Paulo
- Promega Italia in Milan
- Promega Biotech Ibérica in Alcobendas, Spain
- Promega Biotech AB in Stockholm, Sweden
- The Aviation Operations building in Madison, WI
- The da Vinci facility in Madison, WI
Conserving Natural Gas
Natural gas is our largest source of direct air emissions and third in overall emissions. Natural gas is used primarily at manufacturing sites for heating and production-related processes. Geothermal wells, solar water heaters and heat capture technology in many facilities minimize heating requirements and related emissions. In the last year, natural gas usage was reduced by 1% as indexed to revenue.

Geothermal wells, solar water heaters and heat capture technology in many facilities minimize heating requirements and related emissions.
Building a Sustainable Future
Environmental sustainability remains a core value for how Promega designs and builds our facilities. In 2018, we continued to work on several new facilities with aggressive sustainability goals and strategies incorporated in the designs.

Environmental sustainability remains a core value for how Promega designs and builds our facilities.

Construction of the new Promega UK facility was launched in 2018 to support our sales, logistics and customer service staff. This project is expected to be completed in the summer of 2019. During design, we developed a sustainability decision matrix for the UK facility that has now been applied to all new or substantially remodeled Promega facilities worldwide. This site will substantially exceed UK code requirements by meeting British green building (BREEAM ‘Excellent’) requirements for energy, carbon emissions and water conservation. Outstanding features include a green roof, combined mechanical ventilation and operable windows, a landscape that substantially improves the ecological value of the site, and using environmentally certified materials. Employee health and well-being, ecology and landscaping, and active community engagement were all factored into the Promega UK facility.

Construction of our largest European facility began last year and is now past the halfway mark. When complete, the 14,000 m² (150,000 ft²) Germany facility will support our largest overseas branch, our Europe distribution center (Euro Hub) and Terso Europe. This facility should be completed by the end of 2019. Advanced energy
features include active slab heating and cooling, nighttime mass cooling, geothermal energy wells and advanced heat recovery. These techniques will exceed compliance with the strenuous energy performance and green building standards of the German building code. Additional features include a green roof with integrated photovoltaic, combined mechanical ventilation and operable windows, and advanced daylight design. This commitment to sustainability also means a responsibility for a quality of experience inside and outside the facility.

- Our new 26,600 m² (287,000 ft²) Madison Research and Development Center, now under construction, combines all Madison, Wisconsin-based research and development (R&D) in one highly collaborative and stimulating space. The new R&D center is our first double-envelope building in Madison with two exterior walls to enhance comfort, energy performance and maximize solar use. The walls in desk areas will also provide generous daylight and operable windows for natural ventilation. This will be our fourth major building featuring a timber structure that reduces the embedded carbon footprint and provides a unique environment indoors. Mass cooling and displacement ventilation systems will provide energy efficient cooling. An integrated district energy system will efficiently heat and cool three Promega buildings from a single central plant. Fed by geothermal wells, our new facility is projected to use 60% less energy per square foot than the existing R&D Center. This facility will be topped with a green roof, incorporating photovoltaics while a rainwater capture system will substantially reduce municipal water demand. The expanded parking garage will also significantly increase the capacity for electric vehicle charging. In addition, we have targeted ambitious waste reduction in both construction and operation. The Madison R&D Center is expected to open in late 2020.

- Construction will begin in spring 2019 on our Component Manufacturing Center that will complement existing manufacturing capacities in Madison and California. This facility is expected to be approximately 14,600 m² (158,000 ft²) and will provide large-scale component manufacturing capacity and substantial expansion space for newly developed product manufacturing lines. Environmental sustainability and employee wellbeing are key areas of focus for the design of this facility. The Component Manufacturing Center is expected to open in 2021.
Tracking and Reducing Effects from Product Distribution

With a focus on reducing air emission from outgoing product distribution, we continue to find opportunities to decrease the size and weight of packaging materials. This approach, in concert with more efficient modes of transportation, reduces emissions and maintains our quick and safe service. As a result, we have seen a 30% reduction in distribution emissions as indexed to revenue in the last 10 years.

During the last several years, we have transitioned to smaller shipping boxes and made packaging improvements that minimize weight, optimize dry and gel ice requirements and use more sustainable materials. Our European distribution center also recently transitioned to gel ice packs without plastic as part of a larger initiative to reduce dependence on plastic.

In the last year Promega evaluated product lines that currently ship on dry or gel ice that may be able to ship at room temperature. Our ‘Ship Ambient Project’ rigorously tested DNA molecular weight markers shipping at room temperature, and the results showed that there were no changes in product performance. The first phase of this project launched in early 2019 and is expected to save 17,000 kg of dry ice annually. We will continue analysis for other product lines to reduce carbon emissions during shipping and minimize waste from foam coolers.

To understand the indirect emissions from outgoing shipments, data were collected from Promega-owned global distribution hubs on weight, distance and mode of transportation.
Net Zero Emissions from our Helix® On-Site Stocking System

Our state-of-the-art, on-site inventory management system called Helix further reduces emissions through precise consolidated restocking shipments. The Helix® program uses RFID technology that tracks product use in real time, and results in more efficient shipping. This automated inventory management system ensures that customers have uninterrupted access to supplies while reducing the effect on our planet.

In addition, Promega purchases carbon credits to offset all greenhouse gas emissions from the Helix® program, including energy usage and distribution of units and product stocking. In 2018, Helix® on-site stocking offset 820 tons of emissions worldwide by supporting the following projects:

- Blandin Improved Forest Management Project in Minnesota, United States
- Solar Water Heating in India

Since 2010, the Helix® program has offset over 6,300 tons of carbon dioxide. To see more information and learn how to participate, please visit [www.promega.com/helix](http://www.promega.com/helix).

### Distribution Emissions

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2018</th>
<th>2020 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tons of CO₂ Per Million USD</td>
<td>21.1</td>
<td>20.3</td>
<td>19.3</td>
</tr>
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<td></td>
<td></td>
<td>18.9</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>20.0</td>
</tr>
</tbody>
</table>

Solar water heating in India was supported by Helix in 2018.
Minimizing Effects from Business Travel

The increasing importance of and focus on building relationships means more travel for personal interactions, not just with customers but also with collaborators and colleagues. Business travel via air, automobile and rail comprise approximately 10% of our current carbon footprint. In the last year, we saw a 4% increase in emissions as indexed to revenue from business travel. We work to minimizing effects from travel by using fuel-efficient vehicles and environmentally sensitive modes of transportation.

Efficient Travel

For several years, Promega has actively sought out fuel-efficient vehicles for our use. Promega Benelux, Promega UK, Promega Italia, Promega AG in Switzerland and Promega KK in Japan have moved to a more efficient and ecologically sound fleet, leading to improved global vehicle fuel efficiency. In the United States, we have continued participating in the Emkay GoGreen fleet program, which offsets all fleet emissions by planting trees. Since our Emkay GoGreen enrollment in 2009, we have offset 3,000 tons of CO₂. Many locations also encourage...

LEFT
Employees at Promega Biosciences in California participate in National Bike-to-Work Day.

RIGHT
Employees had the opportunity to test drive electric vehicles at Promega Corporation.
the use of high-speed rail as a more efficient alternative to air and automobile travel.

We also encourage the use of electric vehicles by employees to minimize greenhouse gas emissions. Electric vehicle charging stations are available on our Promega Madison campus, as well as Promega Benelux, Promega AG and Promega Biosciences in California. These placements cover two-thirds of our employees globally, and we are looking to expand to other locations.

*Promega Benelux, Promega UK, Promega Italia, Promega AG in Switzerland and Promega KK in Japan have moved to a more efficient and ecologically sound fleet, leading to improved global vehicle fuel efficiency.*

**Alternative Transportation**

Alternate transportation programs have been implemented by a number of locations worldwide to reduce environmental effects. Employees are encouraged to use public transportation, ridesharing or biking to work. All buildings at Promega Madison and Promega Biosciences in California offer bicycles for employees to use, as well as resources to support cyclists, including access to pumps and bike repair kits. Many locations worldwide have similar programs in place.
PRESERVING NATURAL CAPITAL

Minimizing Waste

To reduce waste, Promega locations globally focus on improving recycling programs and increasing employee awareness about minimizing waste. This has included segregating materials for recycling, composting, and encouraging reuse by providing reusable materials in cafeterias and kitchens. Employees embrace the mantra “Reduce, Reuse, Recycle” and have championed this effort. In 2018, we saw recycling increase by 13% with the following highlights:

- Promega was the proud recipient of the 2018 Chelsea Santucci Greenovation Award from Kimberly-Clark Professional for significant efforts to reduce solid waste by collecting and recycling nitrile gloves and protective garments. In 2018, Promega diverted 3.6 metric tons (nearly 8,000 pounds) of garments and nitrile gloves from landfills through the RightCycle recycling program in Wisconsin and California.

- Segregating plastic shrink wrap, banding and bottles for recycling from our shipping and dispensing areas across the Promega campus started in 2017 and expanded in 2018. This effort diverted over 16 tons of plastic in the last year.

- Promega has been successfully segregating and recycling pipette tip boxes since 2010 and diverts more than 2 tons of plastic from landfills each year. Some pipette tip boxes were also provided to local artists.

- Multiple facilities in Madison, WI and San Luis Obispo, CA, feature employee-managed composting programs to divert organic waste and support our employee passions for gardening.
Recycling of nitrile gloves and protective garments.

An annual electronics recycling drive at our Promega Madison Earth Day celebration collected over 20 pallets worth of materials, making it the most successful employee recycling drive to date.

Promega locations in Switzerland and Germany made concerned efforts in 2018 to reduce plastic consumption by switching to glass containers for water instead of plastic. Promega Germany and our Euro Hub also provided reusable bottles to employees that supported ocean cleanup efforts.

Managing Hazardous and Infectious Wastes
In the biotech industry, manufacturing processes can require use of potentially hazardous substances, along with the obligation to minimize waste and ensure its proper disposal. In the last year hazardous waste reduced by 15% as indexed to revenue.
Conserving Water

Promega evaluates initiatives to conserve water in manufacturing, landscaping and other everyday needs. In the last year, water usage decreased by 8% as indexed to revenue. Notable reductions were seen at the Feynman Center in Madison, WI, as a result of a project completed in July 2018 to reuse wastewater generated from our water purification system. This project saved over 500,000 gallons or 1.8 million liters in less than 6 months by using captured waste water in cooling towers.

Many global locations incorporate design features to conserve and ensure proper disposal of water. Offices in Sydney, Australia, collect rain water for cleaning, flushing toilets and irrigating plants. Similarly, the Madison-based global headquarters uses rainwater collection and rain gardens for natural filtration. Promega Biosciences in San Luis Obispo, CA, has a long history of water conservation projects and designed custom water recirculating system for distilled water. Since 2009, gross water usage has decreased by over 50% at our San Luis Obispo facility despite a significant increase in headcount and manufacturing levels.

Connecting with Customers without Paper

Approximately 10 years ago, Promega transitioned away from printed corporate communications such as catalogs, instruction manuals and marketing materials. Adopting electronic communications reduced total paper usage by over 80% in the following year. Reduction in paper usage has continued with an additional 8% reduction as indexed to revenue since 2015.

Expanded use of modern technologies and emerging social media channels in recent years has enhanced communication with customers and further reduced the need for printed materials. When printed paper is needed, we use recycled paper and duplex printing to minimize paper consumption.
Reducing Packaging Materials
Many Promega products are temperature sensitive, creating unique requirements in packaging that involve use of dry ice, gel ice and foam coolers. We continually evaluate the effect of packaging on the environment, and search for innovative ways to reduce packaging, use environmentally friendly materials, and design for recycling or reuse. Environmental sustainability, product protection and quality are all key priorities.

In 2018, Promega implemented changes to our kit packaging boxes that use sustainably sourced materials, reduce material used and promote recycling for customers.

To reduce environmental effects of packaging, Promega has also:

• Switched to smaller shipping boxes to use less packaging materials.

• Incorporated new materials that provide better insulation and reduce the amount of dry ice needed.

• Implemented packaging designs that minimize air space while also reducing dry ice usage and shipment weight.

• Changed to unbleached shipping boxes that contain sustainably harvested materials.

• Used biodegradable and recyclable air pouches that protect our products with fewer environmental effects.

In 2019 Promega will begin reporting with Australian Packaging Covenant Organization to support the goal of reducing the environmental effects of packaging. As part of this effort Promega will develop a process for measuring packaging materials and the effect of our initiatives related to sustainable packaging.
Promega employees participate in yoga during ESI Bootcamp in Europe.
PEOPLE CARE

The culture at Promega emphasizes self-actualization, nurtures creativity, and prioritizes emotional and physical well-being. Investing in our employees on a professional and personal level allows them to flourish, and in turn they continue to drive our progress. Employees are given flexibility in how they work, and we acknowledge the individual differences of each employee. Our 19 worldwide locations provide support in ways that meet the specific needs of each region and encourage employees to achieve a balance of work-home integration.

“
I’m proud to be part of a company that recognizes my potential and supports my professional development.

CHRISTIAN WALCZUCH
Communications and Media Specialist, Promega GmbH
“I am getting up early and I am on my way to work with a real good feeling!”

MAXIMILIAN BECK, System Administrator, Promega GmbH
NURTURING EMPLOYEE CREATIVITY, GROWTH AND SELF-ACTUALIZATION

Feeling fulfilled is crucial to our development as humans, and realizing our personal potential means we grow and strive to achieve our true capabilities. As a company, Promega provides a work environment and culture that offers each employee the opportunity for individual development and build meaningful relationships with one another.

The Promega Culture
The psychology of the organization—our “cultural DNA”—provides a foundation through which company principles and operations are shaped. For us, these principles include:

1. Nurturing creativity, self-discovery and individual growth, creating an environment where the unique contributions of each employee are embraced.

2. Believing that both people and companies can self-actualize, and that growth at either level lifts the other into realizing their greater potential.

3. Structuring a culture that reinforces all stakeholders (customers, employees, community and shareholders) can find growth and transformation through:
   a. Organizational reporting that provides for easy collaborative communication across and at all levels of the organization.
   b. Decision making that is shared among the group, not controlled, and the organization remains nimble because people in key nodes are empowered to act, having considered all voices.
   c. Physical work environments, including design, lighting, communication systems and access to information.
   d. Resources that employees need to do their best work.
   e. A financial structure that supports organizational goals and values for personal development. Economic metrics provide guidance on sustainable business practices but are not the only drivers for business decisions.
   f. Selection and support of employees entering the organization who reflect our values.

4. Contributing to life science research and related discoveries have been and will continue to be important to society and human development by designing and supplying products, systems and services that simplify this research and give more reliable and accurate results.

We seek employee feedback in annual climate surveys and monthly employee sessions to understand employee happiness and engagement. Feedback from the survey in 2018 highlighted that employees feel they work in a collaborative environment, are proud to work at Promega, enjoy the people they work with, and find their work to be meaningful.
Creating Workspaces to Inspire

As a business based on creative output and employee satisfaction, Promega prioritizes environmental quality and stimulating experiences in the workplace. Invigorating spaces come both in the components and the variety of space offerings. Key components of work spaces include abundant light (natural light whenever possible), a variety of art and comfortable, warm furniture. The variety of spaces gives employees the opportunity to work in a creative “third space”, exercise, meditate or grab a bite to eat. Throughout Promega, there are opportunities to discover stories, history and whimsy.

Employees are engaged in design of new space and the renovation of existing workspaces to improve functionality, ergonomics and foster group collaboration. This process considers all aspects of a space, including types and quality of lighting, sound levels and air flow. Additionally, customizable work spaces for employees encourage collaboration.

Architecture and design that “brings the outdoors in” encourages an appreciation of natural beauty. For example, our new German facility is incorporating an extensive array of indoor plants and trees to add life and warmth. Locations globally use local resources, art and culture to provide comfortable, functional and unique work environments. Our priority is to create environments with an attention to detail that is inspiring, flexible and aligned with the needs of employees.
Cultivating Emotional and Social Intelligence (ESI)

To foster a supportive and dynamic work environment, Promega embraces the principles of emotional and social intelligence (ESI). ESI helps employees improve relationships, manage stress and enhance connections. The ProMindful program is an introduction to mindfulness practices comprised of 15-minute community sessions including silent and guided meditation, mindful movement and sound meditation. Beyond strengthening our ESI skills, these programs bring employees together in ways that are both professional and personal, thereby strengthening our community.

To date over 130 employees have attended our ESI Bootcamp, which is an immersive experience that gives participants the time, space and support to focus deeply on the building blocks of ESI. At the Bootcamp, participants take a deep dive into ESI through introspection, dialogue and group process that together awakens areas of potential in themselves. Over three and a half days surrounded by nature and supported in learning, participants report a new sense of well-being and dedication to their inner and outer work.

In day-to-day life, employees interested in ESI cluster together to form Climate Catalyst teams, which function to sustain community. Specifically, teams support each other in conducting “ESI micro-experiments” for personal growth, social and cultural enrichment, and enhancing workplace practices. Open to all employees, Promega’s 11 self-guided teams are made up of people new to ESI and a large fraction of Bootcamp graduates who wish to stay engaged.

After years spent in several companies, you realize that success always relies on the people who compose it and their ability to work efficiently as a team. But teamwork can’t come without a deep respect for the other, kindness and empathy and a desire to understand your colleagues and share with them. These key social components as well as the well-being you feel working in your company will clearly impact the results. The very strong human values conveyed by Promega are for most of us, the reason for our presence in this atypical company. The ESI (Emotional and Social Intelligence) program is certainly the most striking example of this desire to build on the men and women who make up our society.

Nicolas Bardonnet
General Manager, Promega France
Providing personal development and growth for employees

Promega takes an innovative approach to employee development, as featured in Chip Conley’s book “Peak”, that focuses on a series of conversations to recognize employee strengths and encourage growth based on employee passions. Since growth starts from the inside, we have shifted from the more standard manager-driven review process to one that starts with the employee. More and more departments use a conversational approach that facilitates individual development plans, personalized growth goals and a listening session to understand what our talent needs to keep them with Promega.
Leadership Training and Employee Development

Professional development such as Coaching for Leaders, Leadership Forum, Transformational Leadership, Leadership Conversations and Manager Roundtable programs support managers at all levels. Individually-targeted leadership development is available on site, or with external or training partners. In addition, organizational development services include talent management resources, personality/leadership assessments, coaching and consulting. Initially these programs were limited to North America, but they have recently expanded to Europe. The teams in France, Benelux and Spain were the most recent branches to complete the program.

An employee development project was launched in 2018 including programs such as Core Principles, Conflict Management, Influence without Authority, and Presentation Skills just to name a few. The response to this new program has been overwhelming with sessions filling in less than one hour! These on-site programs are facilitated by Human Resource team members or external training partners. Due to the positive feedback on this internal program, we are increasing the number of sessions and program variety in 2019.

Scientific Training

The Scientific Training team designs, develops and implements product and sales trainings for employees around the globe, which are delivered in live and virtual classrooms. Live courses are available in Madison, WI; Lyon, France; and Singapore to address the training needs of employees globally. These facilities also incorporate video conferencing equipment for scientists and trainers to participate from off-site locations.

English Classes for Employees

Our branches in Korea, Japan, and Germany offer employees English lessons to improve communication across the company and with clientele. These efforts help employees access the resources they need to advance their career.
BUILDING RELATIONSHIPS AND CONNECTIONS

We cultivate an environment of connection among employees so strong bonds can be nurtured and extend through the company to our families and community. From team-building activities to employees joining together to share in hobbies, strong relationships are the foundation of what we do. Here are some examples from 2018:

• Celebrating 20 Years for Promega Italia. The team in Italy celebrated their 20th anniversary with a trip to Etna, the biggest and most active volcano in Europe. Whether it was hiking around the volcano or enjoying a meal together, the emphasis was placed on building connections with colleagues. Like the Etna volcano that changes daily and modifies the landscape, the team reflected on the ways they have evolved to meet the needs of their customers over the last 20 years.

• Bonding in France at the ‘Ideal Palace’. Promega France took a team trip to Le Palais Idéal (the “Ideal Palace”) in
Hauterives. This palace took over 33 years to construct and incorporated unique rocks and shells. On this trip, the team also learned how chocolate is made and how to appropriately taste it.

- **Visiting CERN for Promega AG.** During a company outing in August 2018, our team in Switzerland visited CERN, the world’s largest particle accelerator. On the tour, the team marveled that only 6 meters of concrete separated them from particle accelerator and detector.

- **Uniting for the Love of Music at Madison, WI.** Employees at Promega headquarters who are musically-inclined have joined forces to create the band “Lead Generation.” For over a decade, employees ranging from scientists, marketers, IT specialists, and administrators have come together to share their talents and spend time making music. The 45 active participants perform at functions throughout the year such as all-company meetings and employee-recognition breakfasts.

- **Building Relationships in Bali.** Our newest branch in Promega India traveled on a team building trip to Bali, Indonesia, in 2018. On this trip the team was able to appreciate the unique backgrounds and cultural norms of team members and had fun learning a group dance.

**PRIORITIZING EMPLOYEE HEALTH AND WELL-BEING**

Promega takes a multifaceted approach towards employee well-being. Physical health and wellness start with safety but expand to include fitness and health care facilities, wellness programs and benefits packages. Each of these offerings ensure employees feel empowered to take care of their health at work.

**Employee Safety**

Employee health and safety is a high priority. Environmental Health and Safety programs are committed to establishing, maintaining and improving work environments for the safety and well-being of our employees as well as the communities in which we operate.
731
KNOW YOUR NUMBERS PARTICIPANTS

1,700
WELLNESS CENTER VISITS

1,518
PHYSICAL THERAPY APPOINTMENTS

234
FUN RUN REGISTRANTS

102
ACUPUNCTURE APPOINTMENTS

362
FOOD DONATIONS FROM FUN RUN

597
FLU VACCINES ADMINISTERED

6
WELLNESS-RELATED LUNCH N' LEARNS

250+
WELLNESS FAIR ATTENDEES

2
NEW YOGA INSTRUCTORS ADDED IN 2018

WITH A TOTAL OF

5
YOGIS

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Resources and Benefits That Support Employee Wellness
Promega employees are offered comprehensive benefit packages based on country standards. These programs typically include medical, dental and vision coverage as well as a competitive 401(k) plan and flexible spending accounts for healthcare. Short- and long-term disability insurance, life insurance, tuition assistance and paid time off are also provided to ensure the well-being of our employees and their families.

Wellness Center Offerings
The Wellness Center located at our Madison, WI, headquarters provides all employees on-site health consultations and counseling, which is available five days a week. Services include routine blood draws, travel and routine immunizations, consultations for general health concerns, physical examinations and physical therapy. In 2019, Promega added a licensed professional counselor and a registered dietician to the Wellness Center Staff, offering free consultations to all employees. Counseling services can help a variety of needs like anxiety, depression, or navigating career and workplace challenges. Nutrition counseling helps to improve health from the inside out.

Health Assessments with ‘Know Your Numbers’
Each year Promega employees are encouraged to participate in the Know Your Numbers program, which provides a free basic health screening for those interested in participating. Employees obtain a finger-stick test and meet with our Nurse Practitioner the same day to review their results. This program is offered every year and aims to help employees understand what health risks they might face. These diagnostic indicators can help employees formulate a plan around lifestyle changes they can make to prevent or delay the onset of certain diseases such as diabetes and heart disease. In 2018, 731 employees participated in this program.

Supporting Employees During Times of Need
Caregiver Leave was made available to Promega employees in the US in 2018. Employees can use two weeks of paid time to care for aging parents, ill spouses, children with medical needs, or time off to bond with a newborn or newly adopted child without sacrificing their own paid sick leave or vacation. One hundred and twenty employees used this leave in 2018 with one employee sharing their experience:

My mom was diagnosed with Stage IV Ovarian Cancer in August of 2015. We went through three years of treatments, planned and unplanned surgeries and countless hospital stays. I was granted Caregiver Leave in April 2018 when she had a severe reaction to her treatment and spent a week in the ICU. Caregiver Leave allowed me to be in the hospital and at home with her while she was at her sickest and during the last moments of her life without me having to worry about maxing out my PTO or having to take time off unpaid.

Leslie Tracy
Promega employee

Encouraging Active Lifestyles
A multitude of options are made available to employees so that they may develop healthy and active lifestyles supported by Promega at our headquarters and across the globe. Many locations offer on-site fitness facilities, yoga classes and group fitness instructions. Some branches also offer reimbursement for health club memberships and support for participation in sports or competitive events like marathons or triathlons.
Promega C25k
Each year Promega challenges employees to train for the annual Couch to 5K program, which provides new runners the education and training support to complete a 5k race.

Moving For a Cause
The Berbee Derby is a combination 5k/10k, offering the Fitchburg, WI community an opportunity to get out and stay healthy on Thanksgiving Day each year. Promega employees got together to create their own team to help raise money that went towards the Technology and Education Fund.

Wanderlust 108 in Milan
Employees from Promega Italia participated in Wanderlust 108 in September 2018. Wanderlust is dubbed ‘the world’s only mindful triathlon’ featuring a 5k run, 75 minutes of yoga and a 25-minute guided meditation in an outdoor setting. This gathering looks to spread love, peace, compassion and well-being into the world.

Promega Biosystems Korea Gets Active
To celebrate 12 years of operations at Promega Biosystems–Korea, the team went white-water rafting and hiked outdoors.

Run-for-A-Wish in Singapore
The Promega team participated in a charity run for Make-A-Wish Singapore to help bring cheer and hope to children with life-threatening medical conditions.

Promega Annual Fun Run/Walk 5k
The 9th Annual Promega Madison 5k Fun Run/Walk encourages employees to stay active and collects donations for the local food bank.

Eating Well, Living Well
Employees have access to fresh and local produce from our on-site culinary garden at the Madison, WI location. Thousands of pounds of produce are harvested annually from the garden and, in conjunction with over three dozen local farms, are used to create healthy and organic
menus across the campus. Additionally, employees may also select their own plots within an on-site community garden so they can exercise their own green thumbs.

**Bee Hives in France**

Our team at Promega France has added honey bee hives at their office in Lyon to help safeguard the bee population and educate employees on how to maintain a hive. An added benefit has been the ability to harvest fresh honey for employees to take home.
Promega supports science education by sponsoring the International Genetically Engineered Machine (iGEM).
During my time at Promega I have had countless opportunities to witness the sincere dedication to supporting employees, customers and members of the community. The sense is that we are all in this together, working towards a better future for ourselves and our communities.

BECCA MCKNIGHT
Integrative Employee Development Partner

COMMUNITY TOUCH

Meaningful engagement in the many global communities in which Promega makes its home begins with each of our employees. After all, they are most familiar with the unique needs of their own communities and the most effective approaches to address those needs. They seek to better the world in the distinctive ways that match their unique skills and talents and also bring meaning to their lives.

Employees are the DNA of the company, and what they value is expressed in all the ways Promega connects with the world, but especially in our approach to community engagement. From the company’s beginning, Promega employees have valued science and service, sustained commitment and common purpose. These priorities have formed the foundation and guided our community relationships over the last 40 years.
Promega celebrates this passion and supports a culture that catalyzes employee involvement through policies such as volunteer time off and matching gifts. There is also an overall sensibility that not only encourages but actively backs the unlimited potential of employees who put action behind ideas for how they, their team or the company as a whole can engage meaningfully in the world. On a global scale, each branch and manufacturing location has the autonomy to focus on the unique needs of its community through an integrative and authentic approach to provide support at a local level.

**SUPPORTING SCIENCE AROUND THE WORLD**

*to change the world for the better*

In 2018, Promega became a Partner Sponsor of the International Genetically Engineered Machine (iGEM) competition following the initiatives taken by many global Promega branches over the last several years to support iGEM teams in their own countries. This annual competition encourages the advancement of synthetic biology, education and collaboration as multidisciplinary teams of high school and university students from around the world design, build, test and measure a system of their own creation using interchangeable biological parts and standard molecular biology techniques.

Promega awarded $2,000 corporate sponsorships to ten international teams competing in the 2018 iGEM competition. Promega branches and distributors in Spain, Singapore, France, Switzerland, Germany and the Netherlands sponsored a total of 16 additional teams. Moreover, Promega provided technical support and informational resources such as the “iGEM Crash Course: Ask the Experts” webinar for all iGEM teams globally.

To support the exploration of new solutions for confronting significant environmental challenges, Promega pledged $3 million in 2018 to the nonprofit Revive & Restore Catalyst Science Fund. This was the first corporate pledge to a recently launched fund designed to identify and develop advanced techniques for genetic rescue and bring new tools to conservation work that enhance biodiversity. The Fund invests primarily in proof-of-concept projects applied toward effective solutions to conservation challenges. Research supported by this fund aims to produce innovative scientific solutions that offer significant conservation benefits and broad applicability for endangered species and threatened ecosystems.

Revive & Restore awarded the first grant to the laboratory of marine biologist Steve Palumbi at Stanford University’s Hopkins Marine Station. The $100,000 research grant will enable the Palumbi team to investigate the genomic “stress trigger” that may cause corals to bleach as a result of warming ocean conditions. This catalytic science could be an essential step forward in understanding the large-scale bleaching of coral reefs and the potential to engineer genomic resilience to climate change. Learn more at reviverestore.org.
The Marine Biological Laboratory (MBL) is one of the largest nonprofit biological laboratories in the world, attracting leading life scientists and students from around the globe to its facility in Woods Hole, MA. The Promega Discovery Fund, established in 2013, supports the MBL Education Department in offering highly competitive, discovery-based courses and research programs, as well as tools and technologies. A Promega scientist also works on-site to assist students during summer courses. Promega provides additional monetary support for the MBL Director’s Vision Implementation Fund to ensure the institute’s future growth.

The Promega International Scientific Internship Scholarship supports undergraduate students at the University of Wisconsin–Madison who are undertaking an international internship aimed at using science to improve the quality of life in the world. Students from all scientific fields are eligible but preference is given to those whose internships use molecular biology techniques. Students must be based in a country other than their own for at least six weeks and cannot be in a country where the recipient has already spent significant time. The scholarship is awarded annually to four students.

Sydney Roberts, a student at UW-Madison majoring in Community and Nonprofit Leadership with a certificate in Global Health, was one of four 2018 recipients of the Promega International Scientific Internship Scholarship. She spent time in spring 2018 in Kabale, Uganda, a town in the southwestern part of the country near the border of Rwanda, working as an intern with the Kigezi Healthcare Foundation (KIHEFO).

KIHEFO operates a primary care clinic, HIV/AIDS clinic, Nutrition and Rehabilitation center, and works with rural community groups. Sydney supported local staff members as they treated clients, provided counseling sessions for families affected by disease, and worked on global health initiatives that support prevention of these diseases and health complications. She had only been in Uganda for a few weeks when she sent Promega a letter letting us know that her experiences had already been life-changing.

“I have already learned so much about global health in the developing world. My role at KIHEFO is to observe the doctors, but I also support the organization in other ways. For example, I used a new medical technique of rubbing cold water on a baby’s lower abdomen to collect a urine sample, since there are no pediatric catheters here in the field. This urine sample revealed that the baby was extremely malnourished (1 year, 2 months old and weighed 5 kg). It is small tasks like this that have impacted me the most. This baby was then admitted to the KIHEFO nutrition clinic for re-feeding and is on her way back to a healthy life.”

Sydney Roberts, left, at work at a rural community outreach health clinic outside of Kabale, Uganda where she helped conduct basic health screenings.
Established in 2013, the Promega Award for Biochemistry recognizes important collaborations in the study of stem cells by innovative researchers in China. Promega grants the award annually in partnership with the Chinese Society of Biochemistry and Molecular Biology (CSBMB). Two researchers, Xu Chenqi, Ph.D., and Zhou Bin, M.D., Ph.D., were honored in 2018. Both are from the Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences.

Promega Benelux was a sponsor of the 2018 DNA Gala, raising funds to support immunotherapy research at Netherlands Cancer Institute. The event raised €919,530 for immunotherapy research at NKI.

The Asturian Biology Olympiad (OAsB) event gives high school students from the Asturias region of Spain the opportunity to learn more about scientific research and preservation of the natural environment. In 2018, Promega Spain sponsored the event aimed at Biology students in their second year of high school, both in public centers as well as private or subsidized ones. Some 100 students from 20 centers participated.

Promega AG, the Promega branch in Switzerland, has donated products for the last several years to Teaching and Research in Neurosciences for Development (TReND) in Africa. The nonprofit, run entirely by volunteer scientists at universities worldwide, supports establishing top-level scientific facilities in several African countries by leveraging large-scale, low-cost approaches to innovation and research.

Promega AG supports science communication through the yearly scientist-communicator team competition Main Focus Biology. In addition, the branch organizes annual workshops for journalists from national and regional media to inform them about current trends in bioscience and to encourage the transfer of knowledge from science to society.

Our Australian branch supports the Lorne Genome Conference each year with a student prize, which is awarded to a delegate enrolled in a post-graduate or undergraduate degree who as first author, submits the best abstract for oral presentation. Over the years, the meeting organizers have consistently placed great importance on accessibility to students by offering several free student registrations when the supervisor registers, as well as making student travel awards available.
Launched by Promega in 1998, the annual International Symposium of Human Identification (ISHI) has grown into the world’s largest conference focused on technologies, policies and innovations in forensic DNA analysis for human identification. Nearly 1,000 scientists, DNA analysts, law enforcement professionals, and legal and ethical experts from 40+ countries gather to share knowledge through interactive workshops, presentations, case studies and scientific poster sessions. Many labs and industry agencies count hours attended towards continuing education requirements. While sponsored by Promega, ISHI is an inclusive forum open to all practitioners and suppliers of DNA analysis for human identification. Learn more at: ishinews.com

Promega Spain brought together researchers and writers in 2018 for science journalism workshops, explaining the latest biotechnology innovations. Journalists had the opportunity to learn about liquid biopsy and microsatellite instability technologies.

The Wisconsin Science Festival is a four-day statewide celebration of science for people of all ages. Events across Wisconsin include hands-on science exhibitions, demonstrations, workshops, speakers and more. For the 2018 Festival, Promega sponsored the panel discussion “Living in the Anthropocene” moderated by Dennis Dimick, former environment editor for National Geographic, that explored the scale and implications of humanity’s effect on Earth and its systems.
The Cool Science Image Contest, sponsored by Promega, gives a nod to the link between science and art. Images from microscopes, satellites, telescopes and other technologies are informative, but they can also be true works of art. The annual competition challenges students, staff and faculty at the University of Wisconsin–Madison to capture and share compelling science images. Winning artwork is showcased at Promega headquarters, the Wisconsin Science Festival, and UW-Madison websites and communications.

Technical Services Scientists from Promega Madison regularly visit local elementary and middle school classrooms to provide students with hands-on experience in molecular biology. In 2018, Promega scientists visited 80 classes in 16 Madison and surrounding area schools where they helped 1,780 students extract DNA from strawberries.

The Promega Training Support Program gives instructors at the high school, undergraduate and graduate levels who teach courses using DNA, RNA, protein or cell-based techniques the opportunity to receive up to $2,000 in Promega products to supplement their classes. For more information, visit: promega.com/products/pm/na/training-support-program

Scientists at Promega Germany stepped up in 2018 to revive the BlueGenes Project. The initiative provides middle school students an early microbiology experience through two basic molecular biology experiments that can be performed safely in schools with limited reagents and lab materials provided at a discount. The German Promega branch had partnered 20 years ago with two other bioscience companies to launch the project. One of the companies recently stopped manufacturing products required for the experiments, threatening the end of the project. However, our German branch created a new set of BlueGenes experiments, protocols and web site support based on Promega products we will provide at a significant discount.
Promega Italy continued in 2018 to refine an innovative initiative to support and connect with post-doctoral students at the Molecular Oncology Institute in Milan. For the last two years, the Italy branch has offered a two-day course with Human Resources facilitators from Promega Madison leading management training sessions that focus on leadership conversations, as well as identifying strengths, motivators and challenges in oneself and team members.

"Companies usually provide workshops on the latest developments in equipment or chemicals which can be used in our research. That is useful. However, I found the workshop on soft skills unique and essential. Since the workshop I feel more engaged with Promega now than with other companies. Promega is providing added value for my career. Overall, thank you very much for your time and that you shared your knowledge with us."

—MANAGEMENT TRAINING SESSION PARTICIPANT

Promega aided Field Projects International in setting up a genetics lab in Peru by providing genomics products and a Quantus™ Fluorometer instrument, used by scientists to measure light emanating from biological molecules. Field Projects International is a nonprofit dedicated to tropical ecosystem conservation that conducts wildlife research and provides field training in tropical biology.

Promega AG hosted students for National Future Day, an annual event in Switzerland aimed at encouraging 5th to 7th grade students to explore various career options. Students were able to see themselves as future scientists while conducting an experiment with using one of our Maxwell® instruments.
COMMITTING TO CORNERSTONE INITIATIVES
maintaining long-term, deep-rooted ties for meaningful outcomes

The BioPharmaceutical Technology Center Institute (BTC Institute) is a not-for-profit organization founded by Promega in 1993 and located on the Madison, WI campus that provides educational, scientific and cultural enrichment experiences. Educational programs focus on the life sciences for a wide range of learners from upper elementary students to college and graduate students, as well as career scientists in academia and industry and the general public.

During the 2017–2018 academic year, the ever-popular Biotechnology Field Trips program served approximately 3,000 middle- and high-school students from Wisconsin and Illinois. Students and their teachers either visited BTC Institute labs for hands-on, molecular biology-based field trips or were served by an on-the-road program that brings BTC Institute teachers and lab activities directly to classrooms. These students participated in more than 4,000 lab experiences. In addition, the BTC Institute offered six graduate level courses for UW-Madison, including all three Molecular Technologies courses for the Master’s in Biotechnology Program.

Annually, BTC Institute hosts the International Forum on Consciousness, bringing together the worlds of natural and social sciences, and the Wisconsin Stem Cell Symposium in partnership with the UW-Madison Stem Cell and Regenerative Medicine Center. Learn more at: btci.org
Woods Hollow Children’s Center is located on the main corporate campus and serves Promega employees as well as families from surrounding communities. The nonprofit facility provides early childhood education and care for children 6 weeks to 10 years old and is fully accredited by the National Association for the Education of Young Children (NAEYC). Promega founded Woods Hollow in 1991 and has provided ongoing support ever since. In line with the company’s commitment to the long-term success of Woods Hollow, Promega funded a 9,300 square foot expansion in 2018 that included construction of additional classrooms for after-school programming for school-age children and a gymnasium for indoor large-motor activities for all enrolled children. Learn more at: woodshollow.org

Science is a truly creative endeavor, so is it not surprising that, for more than 20 years, Promega has hosted the Promega Art Showcase on the Madison, WI campus. These quarterly art shows feature the work of local and international painters, photographers, sculptors and artists in many other media. Professionally curated exhibitions free and open to the public offer both well-established and up-and-coming artists a venue for their work and provide opportunities for Promega employees and the surrounding community alike to explore diverse perspectives. Showcase opening symposiums consistently attract hundreds of art enthusiasts. An annual Promega Employee Art Show supports a corporate culture that encourages creative expression. Learn more at: promega-artshow.com

“We all need creativity and exposure to new perspectives to live our best lives and do our best work, so it’s only natural that a company like Promega would exhibit art from around the world.”

—DANIEL SWADENER, Art Curator
ENGAGING IN COMMUNITY: SUPPORTING GLOBAL AND LOCAL initiatives and organizations that enrich humanity

Promega in Action is a program that offers employees at its corporate office in Madison, Wisconsin, the opportunity to apply for up to five business days (40 hours) of paid time to volunteer for the charity or organization of their choice. The employee is asked to document his or her interactions through writing, videos or photographs and then present and share these insights with colleagues. Here’s how one 2018 Promega in Action participant described his experience:

“I worked with the organization Sizabantwana Children’s Benefit Organization from Hazyview, South Africa. I’ve had the ‘once in a lifetime’ experience THREE times since 2014 of traveling to South Africa to participate in the daily activities of caring for nearly 800 children affected by the HIV/AIDS epidemic supported by the Sizabantwana organization. We raise money for food, clothing and necessities, and also experience the joy of the kids of receiving items we take with us on our trip to distribute to different care centers.

In 2018 we raised enough money to bring the founders of Sizabantwana to the USA. The family of four traveled from South Africa to Wisconsin and stayed with our family for two weeks. This was truly a once in a lifetime experience for them. They were able to experience many Wisconsin traditions and continue to form the global connections we began in 2014. Most importantly, they helped us put the finishing touches on our US based non-profit ‘Friends of Sizabantwana’. The nonprofit became official in June of 2018. I appreciate all of the support and time Promega has provided to me to help make this a reality!”

—JEREMY SCHRAB, Senior Supervisor, Materials Management

2018 Promega in Action awardees donated their volunteer hours to the following organizations and programs:

- Sizabantwana Children’s Benefit Organization
- Glenn Stephens Elementary School
- St. Vincent de Paul Food Pantry
- Second Harvest Food Bank
- Badger Prairie Needs Network
- Challenged Sailors in San Diego
- Girls Scouts of America
- Girls on the Run
- Royal Oaks School Community Organization (ROSCO)
- Science Olympiad
- YMCA Y Strong Girls
- Childhood Arthritis and Rheumatology Research Alliance
- DaneNet
- Next Step Ministries
Promega India partnered in 2018 with SHEOWS (Saint Hardyal Educational and Orphans Welfare Society), a leading nonprofit in India working for nearly two decades helping destitute and abandoned elderly people. SHEOWS provides medical care, food, clothing and housing at Old Age Homes for those neglected by their families or lost or separated due to dementia, Alzheimer’s or paralysis. Promega employees spent time with some of these elderly residents, providing companionship and conversation.

“Team India celebrated Pre-Christmas brunch with all of them at their premises where [a] few among them cut the cake, danced and ate together. We (us & they) all together had a wonderful time, prayed for them for good health and [that] they can be reunited with their families. God bless them.”

—DR. RAJNISH BHARTI, General Manager, Promega India

Employees in Wisconsin and California regularly volunteer time to clean stretches of local roadway as part of the Adopt-a-Highway program.

The employee-lead Community Action Team (CAT) at Promega Biosciences in San Luis Obispo, CA, works to support the growth of their local community in civic vitality, cultural richness, human welfare, environmental sensitivity, educational opportunities and providing for and protecting those in need. In 2018, CAT supported 16 local organizations through fundraisers and employee match requests including Land Conservancy of SLO County, Santa Maria Valley Humane Society, United Way and Ronald McDonald House. Promega Biosciences also offers all full-time employees four hours of paid time each month to use toward volunteer activities.

For 22 years, the Promega Madison Employee Giving Campaign has matched dollar for dollar employee charitable donations to Community Shares of Wisconsin and United Way of Dane County. Following devastating flooding in southern Wisconsin in 2018, the Employee Giving Campaign expanded to include an option to give to the Dane County Flood Relief fund. Since its beginning, the Employee Giving Campaign has donated $2M USD for philanthropic causes.
Promega contributions support more than 200 organizations globally each year. Some examples include:

**SAN LUIS OBISPO, CA**
- United Way
- Ronald McDonald House
- Land Conservancy of SLO County
- Santa Maria Valley Humane Society

**MADISON, WI**
- United Way of Dane County
- Community Shares of Wisconsin
- American Players Theatre
- University of Wisconsin Foundation
FRANCE
L'association docteur CLOWN
iGEM

GERMANY
Arbeitstherapeutische Werkstätte
iGEM

FRANCE
Saint Hardyal Educational and Orphans Welfare Society
iGEM

NETHERLANDS
National Cancer Institute
iGEM

ITALY
Banco Alimentare della Lombardia
iGEM

IRELAND
iGEM

SPAIN
Fútbol Alcobendas Sport Foundation
iGEM

SWITZERLAND
Teaching Research in Neuroscience for Development (TReND) in Africa
iGEM

SINGAPORE
iGEM

AUSTRALIA
Genome Inc for Lorne Genome Conference

UNITED KINGDOM
Save the Children's Christmas Jumper Day

UNITED KINGDOM
iGEM
In December 2018, the employees at the Promega Italy branch collected donations for **Banco Alimentare della Lombardia**, a food bank in northern Italy. The entire staff collected monetary donations and more than 40 kilos of food for babies and children.

Promega sponsors the Advanced Manufacturing Scholarship at **Madison Area Technical College** to support students training in advanced manufacturing technology and processes—skills vital to the future success and innovation of Promega as a biotech manufacturer.

Promega leadership are lending their expertise to Edgewood College in Madison, Wisconsin, by serving on the school’s Advisory Council on Sustainable Leadership. Edgewood offers the first place-based, face-to-face social innovation and sustainability leadership MA program in the nation. The program teaches leadership that co-creates well-being “in ourselves, our workplaces and in our communities…”

**L’association docteur CLOWN** is a nonprofit organization in France that brings clowns, jugglers and professional magicians to visit and entertain hospitalized children. Promega France asks customers using Promega Helix® on-site stocking freezers to collect the RFID chips that are placed inside product packaging for the program. (Helix® units use RFID technology to identify which products are present and which have been removed.) The branch donates €0.20 per chip to the Doctor Clown organization.

The Promega EuroHub distribution center in Mannheim, Germany, contracts with the local organization **Arbeitstherapeutische Werkstätte**, which employs people with mental illnesses, for package assembling and landscape work.

Promega Spain supports the **Fútbol Alcobendas Sport Foundation**, the community outreach program of a Spanish football club in Madrid. The organization supports social programs and events that promote active and healthy lifestyle habits.
Promega UK supported Save the Children’s Christmas Jumper Day in 2018. The initiative encourages people to wear a crazy Christmas sweater (known as “jumpers” in the UK) on December 14 and donate £2 to Save the Children benefiting kids in need in the UK and around the world.

“‘Our work at YEN moves on smoothly and all our groups are happy. The reading is moving on well... The library idea will continue growing until we shall have a real Community Library. Thanks for initiating this project for our community.”

—Youth Education Network (Gertrude)

Employees from the custom manufacturing division at Promega Madison earned a $1,000 grant for Second Harvest Food Bank in exchange for their volunteer work at the 2018 American Family Professional Golfers Association (PGA) tournament, held annually in Madison. The group spent an entire day sorting, washing and drying trash to help the tournament’s ecology team achieve “zero waste” from the event, meaning 97% of the waste could be recycled.

An ongoing employee-led initiative to send books to Africa for a small traveling library allowed Kenya’s Youth Education Network in 2018 to start its own community library. To date, Promega Madison employees, supported by the Promega shipping department, have sent 702 books ranging from children’s picture to college textbooks.
The Kepler Center in Madison, WI, is home to customer service, kit packaging and shipping.
2019 Report Parameters
Reporting on Promega Corporate Responsibility progress is completed on a calendar year basis with information in this report sharing results and actions from January 1, 2018 to December 31, 2018. This is the eleventh Promega report in this area following the initial report released in July of 2009. This process of reporting will continue annually in the future. Corporate Responsibility reporting attempts to focus on the environmental and social impacts of Promega operations worldwide using the framework established by the Global Reporting Initiative Guidelines and the principles of the United Nations Global Compact.

Information for this report has been gathered from all 22 Promega branch and subsidiary locations worldwide. Engagement with internal stakeholders has been focused on areas identified as key impacts or
opportunities. Our current process captures information on a wide range of indicators but we recognize that there is still room for growth in the information we capture. In rare instances, additional or adjusted information for prior periods was captured resulting in slight variations from previously reported indicators.

Carbon footprint calculations have been made using emission factors provided by the World Resources Institute Greenhouse Gas Protocol on energy information and emission factors from the resources above.

Some sections of the GRI that were not covered in the report will be addressed below. In 2018 we had no incidents or issues in the following areas:

- Environmental fines or sanctions (307-1)
- Incidents of discrimination and action taken (406-1)
- Incidents of violations involving rights of indigenous people and actions taken. (411-1)
- Legal actions for anti-competitive behavior, anti-trust, and monopoly practices. (206-1)
- Fines and non-monetary sanctions for noncompliance with laws and regulations. (419-1)

Please contact sustainability@promega.com with any questions on the Promega Corporate Responsibility Report.
## Key Indicators

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<th>2015</th>
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<td>Number of Employees</td>
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<td>1,381</td>
<td>1,440</td>
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<td>Building Footprint (Square Meters)</td>
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<td>101,722</td>
<td>104,601</td>
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<tr>
<td>Number of Global Locations</td>
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<td>Greenhouse Gas Emissions (Tons of CO₂)</td>
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<td>37,021</td>
<td>38,983</td>
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<td>Emissions Per Million in Revenue (Tons of CO₂/Million Dollars)</td>
<td>111.1</td>
<td>106.2</td>
<td>106.1</td>
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<td>98.0</td>
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<tr>
<td>Emissions Per Building Footprint (Tons of CO₂/Thousand Sq. Meters)</td>
<td>394.6</td>
<td>363.9</td>
<td>372.7</td>
<td>365.1</td>
<td>389.1</td>
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<td>Electricity (kWh)</td>
<td>16,880,814</td>
<td>27,784,046</td>
<td>29,915,972</td>
<td>29,263,972</td>
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<td>Natural Gas (Therms)</td>
<td>683,201</td>
<td>1,200,449</td>
<td>1,246,266</td>
<td>1,313,131</td>
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<td>Water Consumption (Liters)</td>
<td>53,909,442</td>
<td>119,265,434</td>
<td>122,648,487</td>
<td>121,627,418</td>
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<td>Total Paper (Reams)</td>
<td>127,631</td>
<td>12,275</td>
<td>14,367</td>
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<td>Solid Non-Hazardous Waste (Cubic Meters)</td>
<td>7,884</td>
<td>10,622</td>
<td>11,912</td>
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<td>Incinerated (Cubic Meters)</td>
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<td>Land filled (Cubic Meters)</td>
<td>3,973</td>
<td>5,297</td>
<td>5,752</td>
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<tr>
<td>Recycled (Cubic Meters)</td>
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<td>5,111</td>
<td>5,996</td>
<td>7,932</td>
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<td>Chemical Waste (Kilograms)</td>
<td>65,950</td>
<td>83,949</td>
<td>92,444</td>
<td>104,104</td>
<td>94,014</td>
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<tr>
<td>Infectious Waste (Kilograms)</td>
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<td>7,475</td>
<td>9,527</td>
<td>10,446</td>
<td>12,518</td>
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GRI Index

We are committed to transparent reporting on our environmental, social and economic performance. This report contains Standard Disclosures from the Global Reporting Initiative (GRI) Sustainability Reporting G4 Guidelines. The following table has been developed to help users locate specific information in the report.

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#### Corporate Mind

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## Product Reach

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## Planet Aware

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Carbon Footprint

Tons of CO$_2$ Per Million USD

- Fuel Combustion
- Purchased Electricity
- Business Travel
  - Outgoing Distribution
  - Water Usage
  - Paper Usage

2015: 105 Tons
2017: 107 Tons
2018: 100 Tons
2020: Goal of 96 Tons

PROMEGA CORPORATE RESPONSIBILITY REPORT 2019 | 83
Global Carbon Footprint Composition

- 50% Electrical Usage
- 19% Natural Gas
- 19% Distribution
- 7% Air Travel
- 2% Automobile Travel
- 0% Rail Travel
- 0% Water
- 0% Paper
Electricity

Thousands of kWh Per Million USD

2015: 79.7
2018: 81.4
2020: 74
Goal: 73.2

2020: 78.1
Natural Gas

Therms Per Million USD

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
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<tbody>
<tr>
<td>2015</td>
<td>3,444</td>
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<tr>
<td>2016</td>
<td>3,391</td>
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<tr>
<td>2017</td>
<td>3,321</td>
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<td>2018</td>
<td>3,287</td>
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<td>Goal</td>
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Distribution Emissions

Tons of CO₂ Per Million USD

- 2015: 21.1
- 2018: 19.3
- Goal: 20.0
- 2020: 18.9

Goal
Non-Hazardous Waste
Cubic Meters Per Million USD

2015
30.5
Landfilled 14.7
Recycled 0.6
Incinerated 15.2

2018
32.4
Landfilled 16.3
Recycled 0.4
Incinerated 15.7

2020 Goal
36.6
Landfilled 20.9
Recycled 0.4
Incinerated 15.2

2020
35.3
Landfilled 20.1
Recycled 0.4
Incinerated 14.8

Goal
36.6
Landfilled 20.9
Recycled 0.4
Incinerated 15.2
Hazardous Waste

Kilograms Per Million USD

<table>
<thead>
<tr>
<th>Year</th>
<th>Recycled</th>
<th>Treated</th>
<th>Incinerated</th>
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<tbody>
<tr>
<td>2015</td>
<td>16.8</td>
<td>83.8</td>
<td>161.4</td>
</tr>
<tr>
<td>2018</td>
<td>15.1</td>
<td>101.8</td>
<td>160.3</td>
</tr>
<tr>
<td></td>
<td>105.1</td>
<td>69.2</td>
<td>114.8</td>
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<tr>
<td></td>
<td>137.8</td>
<td>58.9</td>
<td>49.9</td>
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2015: 262.0 Kilograms Per Million USD
2018: 277.2 Kilograms Per Million USD
2019: 289.0 Kilograms Per Million USD
2020: 246.7 Kilograms Per Million USD
Water Usage
Thousands of Liters Per Million USD

- 2015: 342
- 2018: 307
- 2020 Goal: 291

Goal:
2018: 283
2020: 291
Paper Usage
Reams Per Million USD

<table>
<thead>
<tr>
<th>Year</th>
<th>Usage</th>
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<tbody>
<tr>
<td>2015</td>
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<td>2016</td>
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