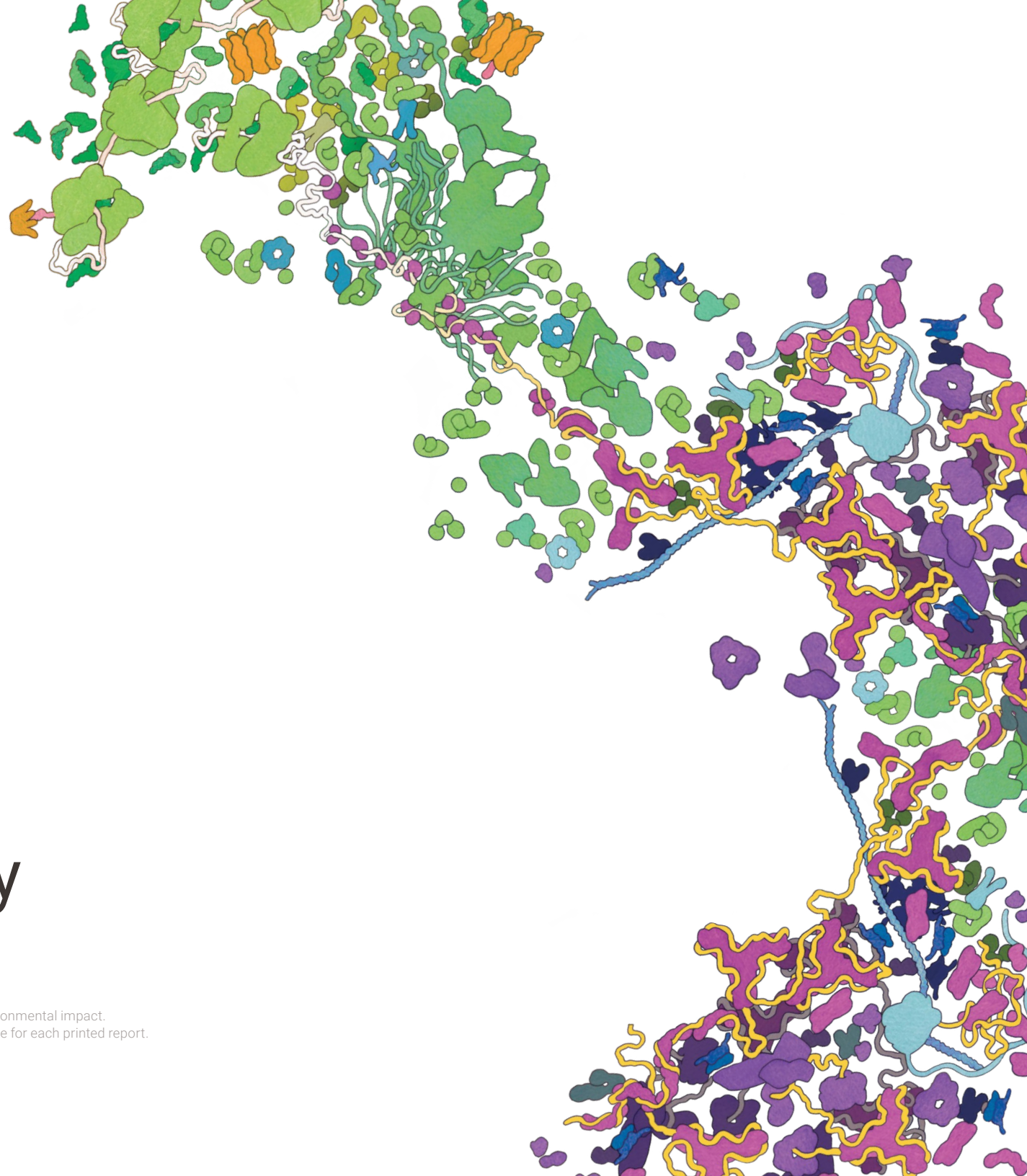




Promega

Discovering
a better world,
together

2021 CORPORATE RESPONSIBILITY REPORT



Corporate Responsibility Report **2021**



An extremely limited quantity is printed to minimize environmental impact.
We use Forest Stewardship Council paper and plant a tree for each printed report.

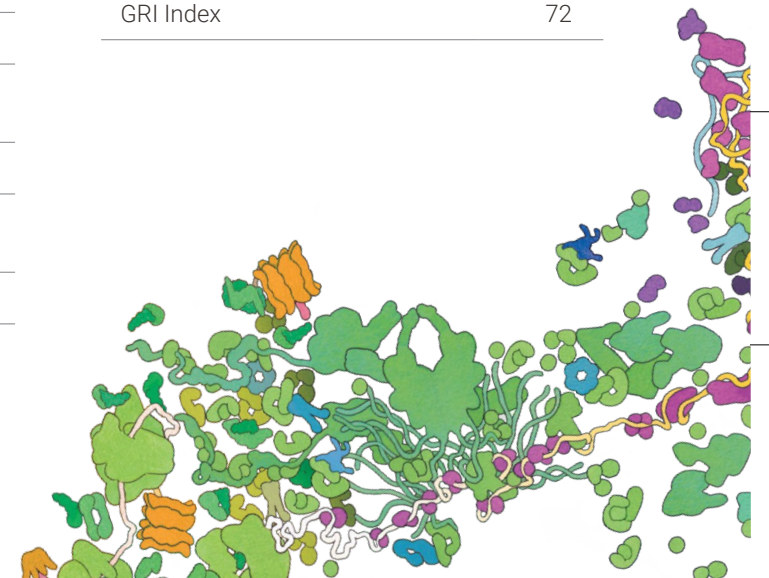


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Our Quality Control team almost doubled product testing output in 2020 to support our significant scale up of manufacturing for global COVID-19 response.

OVERVIEW

Life science companies like Promega faced unprecedented demand in 2020 for products used in COVID-19 testing and research. The urgency of the pandemic, and our company's unique position in providing tools for the response, required us to leverage every possible strength to support scientists working to provide clarity and hope.

We witnessed first-hand how a long-term vision benefits our planet and people. How we can dramatically ramp up production with a minimal increase in energy and emissions. And that we have the ability to not only triage but quickly transform our business because we have a ready

runway that's available for an uncertain future. Despite all that changed in the last year, our commitments to employee well-being and community support remain as strong as ever.

We hope we never have to face a situation like this in the future, but if we do, the planning and sustainability sensibilities that we live every day, that have been part of Promega culture for the last 40 years, will serve us well once again.

LETTER FROM THE CEO

This past year there was new meaning in connection. Living in COVID-19 separation, we were driven to find new ways to connect, exchange and encourage that we are safe and hopeful.

We found the power of open connections in science and sharing our discoveries brought amazing solutions at unprecedented speed.

At Promega, our teams served the needs of COVID-19 testing and research. Living with that connection to the health and wellbeing of humanity fostered strength and ingenuity to manufacture products at two to ten-fold our typical volumes to support the critical needs around the world.

And we saw the power of connection across different entities. Public and private sectors were problem solving together to rapidly provide a coherent regional response. We knew that no one group—healthcare, scientists, government or business—could manage this global pandemic alone.

Connection can take us to positive places and enable a journey from despair to awe.

The poignant lessons and better ways of working that we learned from this pandemic can guide us in other ways, particularly in taking a stronger position that protects our planet. In addition, with global perspective from the UN Sustainable Development Goals and the Paris Climate Accord, we keep expanding with both science and sensibility in how we contribute to our future. It is encouraging to see more engagement across research, business and government in developing pathways to address some of the most pressing issues of our society. Individually we can achieve great things, but when we connect on common ground we begin to achieve the impossible.

As these critical connections continue to mature, we not only hope for reductions in emissions, water use and waste, but we look for new ways of living a more connected life—connected to ourselves, to each other and to our planet—and that may be just what we need to sustain a healthy world for another millennium or more.



Bill Linton

WILLIAM A. LINTON
Chairman and CEO



Corporate Mind

Maxwell® instruments and kits consistently, reliably and easily purify DNA or RNA from a variety of samples



Thank you for the *commitment and diligence* you have given every day of this year, supporting our customers, your colleagues, and your family. We can only succeed working together.

WILLIAM A. LINTON
Chairman and CEO

Statement from the first virtual town hall in April 2020

Corporate Mind

In a rapidly changing world, we reflect on how Promega contributes to scientific advancement and improving life around the globe. Our long-term focus allows flexibility for immediate needs. Never has that been more crucial than in 2020, when long term planning provided an accessible pathway for a rapid response to the global need from the COVID-19 pandemic.

So, we look for qualities that stand the test of time – the sense that we can seek and co-create meaning and purpose for the larger community of customers, suppliers and stakeholders, both as an organization and for ourselves as individuals. Our business is life science, and our lives are fueled by curiosity and life-long learning. It's a thread that appears in countless forms across our global organization.



learn more

PROMEGA BY THE NUMBERS: 2020

 **4,000+**
PRODUCTS

SALES BRANCHES IN
16
COUNTRIES

62

NEW PATENT FILINGS IN 2020

1,827
EMPLOYEES



OVER
110,000
SQUARE METERS OF BUILDING FOOTPRINT

OVER **7%**
OF REVENUE INVESTED IN
RESEARCH AND DEVELOPMENT*

 **36**
NEW PRODUCTS LAUNCHED IN 2020

50+
GLOBAL DISTRIBUTORS

2M
KWH OF RENEWABLE
ENERGY ADDED

669 ISSUED AND
PENDING PATENTS

REVENUE OVER
\$750M

*Over the last decade at least 10% of revenue has been invested annually in R&D and the drop in 2020 was due to increases in revenue from COVID-19.




**Promega
 Headquarters**

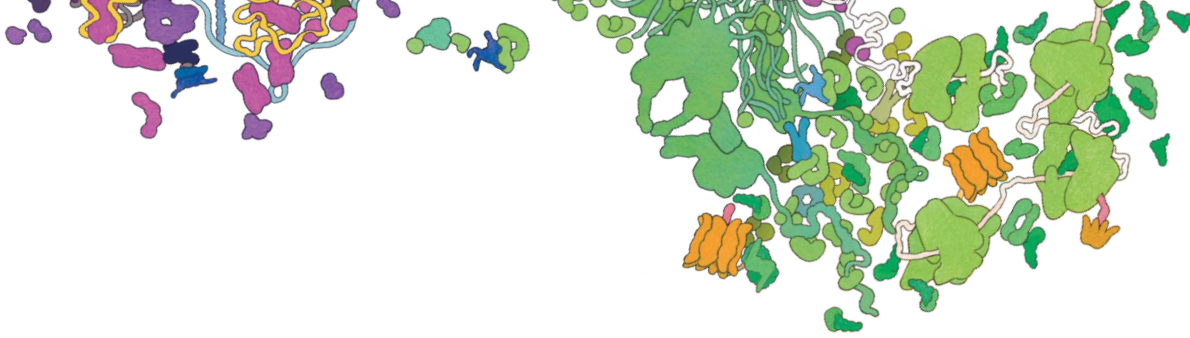

**Manufacturing &
 Research facilities**


Branch Office


Distributor

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 and 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.



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 customers and 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 help accelerate discovery and realize 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.

Values

Promega reflects a set of living values that include:

- Contributing to the advancement of science for improving life in the global community.
- Operating as an adaptable living organism in which each element and human contribution are a vital part of a whole and 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 cultivate wholeness and wholeheartedness. We do this 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.

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



INVESTING IN A LONG FUTURE

We often reference the idea of “Promega 2078” – the first 100 years of Promega. Setting a course to span our first 100 years includes committed investment in people, innovation, sustainable practice, infrastructure, and community. The integrated nature of our commitments and the strength that comes through respecting our many connections to any one life create the ever-evolving fabric of Promega.

Life at work and life at home are inclined to flow into one another. What happens in one place can affect the other. So, Promega creates an environment to help employees harmonize the many parts of their lives. By living with regard to the interactions and dependencies of each part of our life we become more fully fueled in ourselves, our work and our understanding of each other. We meet customer needs and generate increased value that equates to not only financial growth but also for the goods, services, incomes, and community well-being.

We appreciate the ripple effects into the community around us. Maintaining a strong business brings growth and impact to the community bottom line. Promega branches worldwide contribute to the communities where they operate. In the state of Wisconsin alone, Promega has an annual economic impact of over \$1B each year. Beyond the economic impact, the relationships we build foster responsiveness, growth and opportunity. The benefit of those connections was crystal clear in 2020, when we requested a significant increase in supplies from a certain vendor and their immediate response was “we have your back.”

And it was this kind of connection that generated critical public-private partnerships in quick response to the pandemic and community needs.



As the pandemic emerged, Promega was part of a public-private partnership among Wisconsin biotech and health leaders to increase the state’s laboratory testing capacity for SARS-CoV-2. The task force shared knowledge, resources and technology to help Wisconsin labs find the quickest approach to the most tests with their validated methods. Promega provided testing reagents for labs and field support scientists and engineers also helped fine-tune methods for robots and instrumentation, enabling high-throughput testing.

In 2020...



735M Samples tested

for SARS-CoV-2 thanks to amplification reagents and enzymes provided by Promega



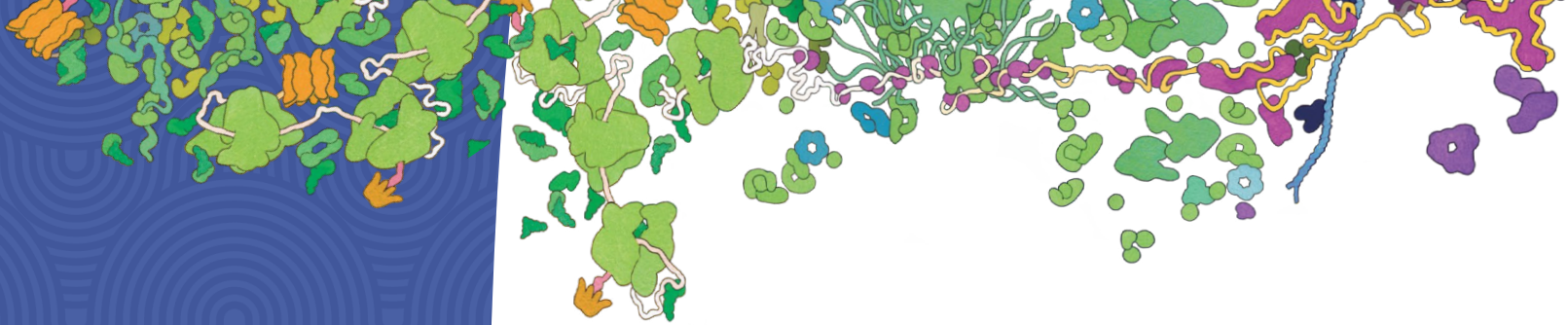
30 COVID-19 test kits

marketed by diagnostic manufacturers around the world supported by Promega products



725 Clinical labs worldwide

were using Promega products to process patient samples for COVID-19 testing



Impacts 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 the last year, product revenue exceeded \$775 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 62 new patent filings in 2020, bringing our intellectual property library to over 479 granted patents and 190 pending patents. In the last year, Promega launched 36 new products, fulfilling customer needs by:

- Inventing faster PCR processes to meet COVID-19 testing:
XpressAmp™ Direct Amplification Reagents
- Providing easy, sensitive new ways to detect antibodies:
Lumit® Immunoassays
- Aiding life science research with new DNA sequencing tools:
Spectrum™ Compact CE System



Investments in People and Place

Our global facilities exceeded 1.1 million square feet or 110,000 square meters, all applying sustainable design approaches. Expansion of our facilities provide creative and healthy spaces for our employees, customers and community outreach globally. Promega Madison opened its newly constructed research facility in early 2021 and is nearing completion of a new state-of-the-art component manufacturing facility, expected to open in late 2021. These buildings will add 40,000 m² (435,000 ft²) to the Promega footprint. 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 an understanding of the interdependent, complex and dynamic nature of systems. With over 1,800 individuals worldwide, this complexity is increasingly true at Promega as well. In rapidly changing environments, our leaders use their minds as well as their hearts to flourish. We are continuously developing an environment that fosters personal connections and creates trust in the face of ambiguity to encourage conscientious and courageous action. Our goal is a 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.

Integrated renewable energy took a big leap forward in the last year with our three largest solar arrays coming online. These arrays will generate over 2 million kWh and more than quadruple our current onsite capacity. Learn more about all sustainability initiatives in the [Planet Aware](#) section.

2020 Kick-off Meeting
| 06-08 Jan | 2020 |



We embrace the principles of emotional and social intelligence (ESI) to foster a supportive and dynamic work environment. ESI check-ins and other programs during the pandemic have helped employees manage stress and enhance connections. See the [People Care](#) section to learn more ways we prioritize employee growth and well-being.

Advancing Diversity

Our collective voices ask that everyone be heard and that each human be treated with respect and dignity. Being relevant requires continued focus on building diversity and inclusion. With offices in 16 culturally diverse locations, we benefit from the unique cultures and experiences of all employees. Women represent approximately 47% of Promega employees worldwide and occupy 39% of management positions. Increasing minority and gender diversity is a goal for our hiring and promotion teams. 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.

Respecting Human Rights

As a member of 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. Our priorities include:

- Protecting children from exploitation
- Protecting all workers from modern slavery
- Paying at least minimum wage
- Maintaining/providing safe working conditions

Promega complies with all local workplace regulations and ensures that our employees and community members are treated with respect and dignity.

Aligning Values for Employees and Suppliers

Expanding on an anti-corruption code of conduct, in 2020, Promega created codes for employees and suppliers. These codes operate with the greatest integrity and 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.



[learn more](#)

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 has a zero-tolerance approach to modern slavery and issued our first Modern Slavery Policy in the last year. We are committed to acting in an ethical manner, with integrity and transparency in all business dealings worldwide.



In the summer of 2020, Promega North America Branch launched the Diversification of Our Research Scientists (D.O.O.R.S) Scholarship to recognize and empower underrepresented minority students who demonstrate a strong interest in pursuing a career in a biotechnology related field. Ten students representing nine US colleges and universities were awarded the scholarship. See the [Community Touch](#) section to learn more about efforts to give back.



Product Reach

Our line of Maxwell® instruments for the automated purification of biological macromolecules are developed and manufactured at Korea Biosystems in Seoul, South Korea.



**We get the question:
‘Do you think you’re going to get there?’
*We have to.***

SARA MANN

General Manager, North America

when interviewed by WMTV News on

April 21, 2020 about meeting unprecedented

demand for reagents for COVID-19 testing

Product Reach

Close customer connections, science-driven solutions and personalized service for real-world settings enable Promega to fully support customers as they do the work of advancing science and human health. This approach has proven critical to meeting the rapidly changing needs of a world responding to the COVID-19 pandemic.

For decades within its product portfolio, Promega has manufactured the reagents, assays and benchtop instruments used in various kinds of virus research and testing. These products took on critical importance with the advent of the COVID-19 pandemic. Since then, Promega technologies have been leveraged for virtually every step of pandemic response including viral testing and surveillance and research studies to understand SARS-CoV-2 and characterize potential vaccine responses.

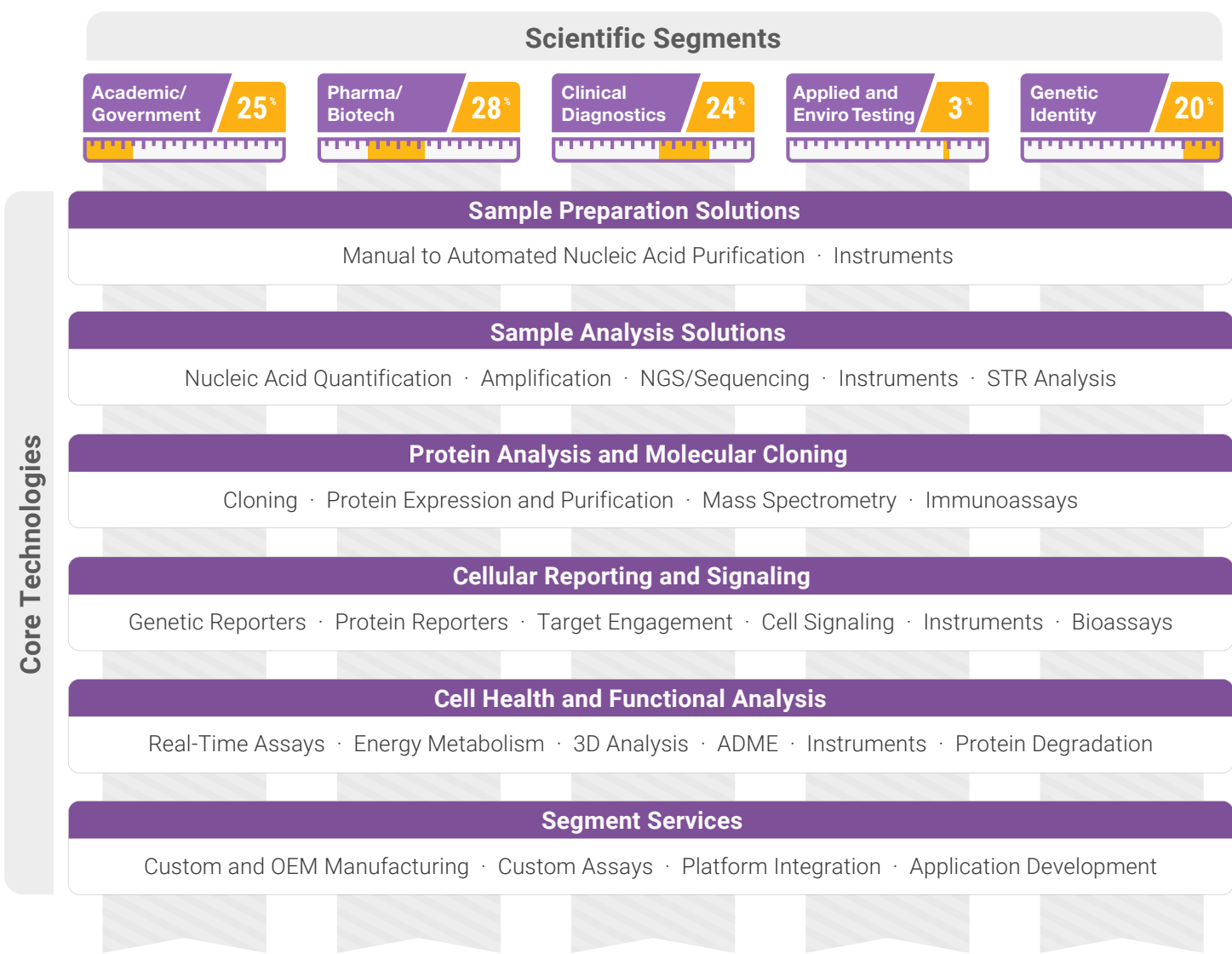
By the end of 2020, Promega had provided enough amplification reagents and enzymes to enable testing an estimated 735 million samples for SARS-CoV-2.



learn more



Breadth of Capabilities



Tools supporting the worldwide COVID-19 response are a small subset of the 4,000 products Promega develops, manufactures and distributes. Scientists in academic, industrial, clinical and forensic labs around the globe are using Promega products every day to answer complex questions at the forefront of scientific discovery, testing, analysis and diagnosis.

CUSTOMER FOCUS

Clinical and Molecular Diagnostics Laboratories

Clinical research and molecular diagnostics labs are constantly finding new ways to better diagnose and provide treatment. They have accessed a broad range of Promega offerings including Current Good Manufacturing Practice (cGMP) reagents, instruments, and custom solutions to meet specific requirements. Throughout the pandemic, Promega was fully engaged in serving needs related to COVID-19. By the end of 2020, Promega products supported approximately 30 COVID-19 test kits marketed by diagnostic manufacturers around the world; an estimated 725 clinical labs worldwide were using Promega products to process patient samples for COVID-19 testing; and Promega provided enough amplification reagents and enzymes to enable testing an estimated 735 million samples for SARS-CoV-2.

Microsatellite Instability Testing – Promega MSI Analysis (research use) System is a gold standard MSI assay in clinical research. The OncoMate™ MSI product became available as an in-vitro diagnostic (CE-IVD) to the European market in March 2020. It enables labs to determine MSI status in tumor tissue when diagnosing and treating cancer patients. In addition to hereditary tumor testing, MSI status is recognized as a key factor in determining if patients are eligible for a new and effective class of oncology drugs, PD-1 inhibitors, that are having dramatic results in extending the lives of late-stage cancer patients.

Promega COVID-19 Support

Promega products in US Centers for Disease Control (CDC) SARS-CoV-2 test protocols for emergency use

CDC Influenza SARS-CoV-2 (Flu SC2) Multiplex Assay:



Maxwell® RSC 48 and
CSC 48 instruments



Maxwell® RSC Viral Total
Nucleic Acid Purification Kit

CDC 2019-Novel Coronavirus
Real-Time RT-PCR Diagnostic Panel:



GoTaq® Probe 1-Step
RT-qPCR System



Maxwell® RSC Viral Total
Nucleic Acid Purification Kit



Maxwell® RSC 48 and
CSC 48 instruments

Promega-developed products for COVID-19 response:



Lumit® Dx SARS-CoV-2
Immunoassay

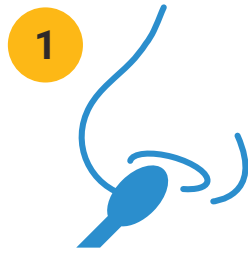


Promega SARS-CoV-2
RT-qPCR Kit for Wastewater



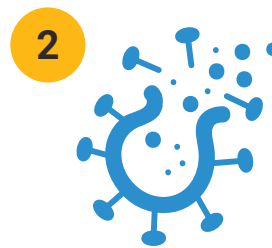
XpressAmp™ Direct
Amplification Reagents

XpressAmp™ Reagents Simplify and Accelerate Workflow for Testing Labs



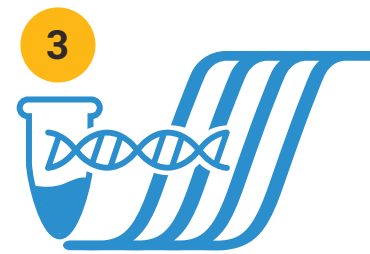
1 Collect and Store Sample.

Use commonly available nasopharyngeal swabs stored in transport medium.



2 Lyse Sample.

Mix sample and XpressAmp™ Lysis Buffer (1:1). Incubate for 10 minutes at room temperature.



3 Amplify and Analyze.

Add lysed sample to RT-qPCR containing XpressAmp™ Solution.

Clinical and Molecular Diagnostics Labs

PROMEGA IN THE REAL WORLD: RAMPING UP COVID-19 TESTING WITH THE MAXWELL® HT VIRAL TNA KIT

John Longshore, Director of Molecular Pathology for Atrium Health in Charlotte, North Carolina, admits he was not a big Promega customer before the COVID-19 pandemic. His team uses a wide variety of suppliers to assemble the types of testing protocols needed to serve over 50 hospitals throughout the southeastern United States. However, when he began to face supply chain disruptions in early 2020, he needed a supplier he could depend on to support the rapid scale-up of COVID-19 testing.

John's lab started testing for COVID-19 on March 7, and by the end of the month they were processing 2,500–3,000 tests per day and reporting hundreds of positive results. Some of the COVID-19 diagnostic test protocols the lab used required a separate step to purify the viral RNA from patient samples. A widespread shortage of these reagents led John to implement the Promega Maxwell® HT Viral TNA Kit in his lab.

"We've had supply interruptions here and there over my 25 years in this business, but never anything like this," he says. "For the past

ten years, everyone in large diagnostic labs have been talking about efficiency, lean management, and just-in-time delivery. That backfires when you're facing a pandemic of this scale."

John's lab installed a Hamilton STAR liquid handling system to process more extractions and contacted Promega about ordering large volumes of purification reagents. At this time, global demand for Promega products related to viral testing was increasing 10- to 100-fold. By applying Quick Response Manufacturing principles, Promega kept up with the demand and promised John that the company could supply enough kits to process 15,000 samples every week.

Promega Field Support Scientists (FSS) also helped to adapt protocols and program instruments so John's lab was able to quickly implement the chemistry on their new liquid handler.

"I thought, this will go well for a while, but I'm sure at some point they'll have shortage. That has not been the experience at all. It has been very consistent all along," says John.



During lockdown and Chinese New Year, an urgent demand of RNasin® was requested to support COVID-19 testing in China. Shanghai Promega immediately applied for a work permit to manufacture, test and ship. The team also arranged a driver to drive 18 hours to deliver the product to the customer.



Our Environmentally Preferable Products require less packaging, include fewer hazardous components and generate less waste to support sustainability efforts of customers. To learn more, visit: [Promega.com/EnvironmentallyPreferred](https://www.promega.com/EnvironmentallyPreferred)

Government and Academic Research Laboratories

Academic and government researchers work on the front lines of discovery. Many of these scientists are currently engaged in massive worldwide efforts to develop a more comprehensive understanding of SARS-CoV-2 biology to develop sensitive detection methods, drug treatments and vaccine options. Promega offers collaborative technical support and a broad portfolio of reagents and instruments that streamline workflows and expedite the work of research labs studying coronaviruses, as well as the many labs engaged in answering a vast array of complex biological questions that vitally affect our world. Promega continues to develop and improve technologies from 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. These advanced tools help researchers successfully publish results, fulfill their research programs and explore scientific frontiers.



Government and Academic Research Laboratories

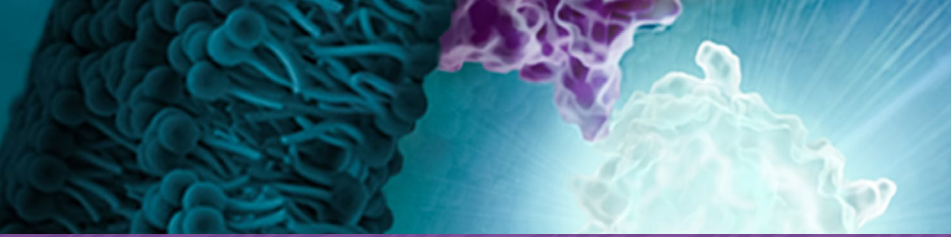
PROMEGA IN THE REAL WORLD:

RAPID TEST TO DETECT SARS-2-COV DEVELOPED IN BRAZIL

As the global threat from COVID-19 was emerging in early 2020, the virology lab at the Universidade Federal da Bahia (UFBA) in Brazil applied past experience with Zika to develop a rapid test to detect SARS-CoV-2. Led by Dr. Gúbio Soares, this is the same lab that first identified the Zika virus as the etiologic agent in the large outbreaks of acute exanthematous illness (AEI) in northeast Brazil in April 2015. Zika was eventually declared a public health emergency of international importance by the World Health Organization in February 2016.

Dr. Soares and his colleagues developed a fast and specific real-time PCR assay for detection of SARS-CoV-2 using Promega GoTaq® 1-Step RT-qPCR. The test protocol also includes the Promega Maxwell RSC instrument for automated extraction of RNA from oral-pharyngeal secretion collected by swab or bronchial wash prior to the assay. The coronavirus-specific assay shortened the time to identify SARS-2-CoV from 48 hours to 3 hours, providing critical information to public health officials in a timely fashion.

“Promega has been providing all our reagents for standard and real-time PCR and also for nucleic acid extraction,” says Dr. Soares. “It’s a company I can rely on the relationship; they are our partners and have provided excellent support.”



Pharmaceutical and Biotechnology Industries

PROMEGA IN THE REAL WORLD: AIDING IN DRUG DEVELOPMENT AND DISCOVERY

The cell is the basic structural and biological unit of all organisms. How our cells function, including if they divide or die, is tightly controlled by a large collection of proteins called kinases. When these proteins mutate and their signaling capabilities become faulty, cell growth and division can be negatively impacted and diseases such as cancer can occur.

Live cell model systems are an important tool for laboratory researchers in their quest to develop and evaluate cancer drugs against target kinases. In the past, scientists typically used biochemical methods with kinase proteins purified from ruptured cells, but this testing approach isn't relevant to how drugs behave in the body. A useful live cell model can reflect the endogenous biology, or true-to-life conditions, observed within the human body. With the target proteins contained inside a live cell, researchers can better predict how the drug would behave in the human body. Obtaining this more predictive data in the early stages of drug exploration will allow researchers to move through research and development faster and continue to advance human health.

Promega scientists developed a unique way to study kinases using an energy transfer technique and specially designed cell-permeable detection probes that enable testing in a live cell environment. The NanoBRET™ TE Intracellular Kinase Assays use Bioluminescence Resonance Energy Transfer, or BRET, to measure the binding of the drug to the kinase. This new technique helps researchers determine if the drug gets into the cell, if it interacts with the intended target, and for how long it stays bound despite other things in the cell trying to bump it off. With this new live cell approach, pharmaceutical researchers can arm themselves with the comprehensive data they need for a more complete picture of kinase target effects as they move to the next phases of development.

Pharmaceutical and Biotechnology Industries

Pharmaceutical and biotechnology industries are accelerating methods in drug discovery thanks to advanced techniques that get to answers faster. Promega bioluminescent technologies are powerful tools that enable scientists a real-time approach to learning. Promega technologies apply to research for both small molecule drugs and biological medicines.

- **Small Molecule Drugs** – The process of small molecule drug discovery can be complex and challenging. At early phases, researchers may 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 assays serves a crucial step toward discovering new safe and effective drugs. Small molecule drugs treat a variety of conditions, are chemically synthesized and can enter cells easily to affect specific target proteins.
- **Biological Medicines** – Biologics are large molecules with complex, heterogeneous structures. Due to their high degree of complexity, the development of biologics drugs requires a comprehensive set of quantitative, accurate and precise bioanalytical tools. Biological medicines tend to be at the forefront of modern medical advances.

During the pandemic when graduate students, post-docs and PIs in academic research labs were working in shifts to reduce the density of people in the lab, Promega's various cell-based assays in a Thaw-and-Use format helped scientists continue their work without the need to continuously culture cells. Also, in the labs of our Pharma and Biotech clients, in addition to the efficiency of using Promega's Thaw-and-Use cells, they outsourced important research projects to our Elite Access Services so Promega's scientists could assist in the continuation of their research and discovery programs.

Environmental and Food Testing Laboratories

Scientists working in applied fields like environmental and food testing provide a wide range of checks and balances from testing for contaminant and viruses to confirming genetic make-up. Promega technologies support these molecular-based methods to solve problems and expedite results for the following types of testing:

- **Water Quality** – Microbiological analysis of drinking water and industrial water systems is crucial for protecting public health and infrastructure integrity. The luminescence-based technology in the Promega Water-Glo™ System allows consistent low-level detection of all live microbes in minutes, providing an ideal early warning system for environmental and industrial water monitoring. In 2020, Promega developed protocols specifically for detecting SARS-CoV-2 RNA in wastewater, as well as a new product, the SARS-CoV-2 RT-qPCR Kit for Wastewater, in response to this emerging customer need.
- **Plants and Food** – Testing of DNA in plant tissues is an important process in various fields of agricultural research, including crop trait development and seed quality control. Food testing ensures that food products are pathogen-free and safe for consumption. DNA extraction chemistries are also used to purify nucleic acids from food, seeds or plants for use in downstream GMO testing to confirm the amount of GMO present in plant or food samples and ensure compliance with EU and global regulations.
- **Cosmetics** – Promega bioluminescence-based assays have been the gold standard used in research and drug discovery applications for many years. These simple “add-mix-measure” assays also provide a scalable way to assess cosmetic formulations for toxicity/irritants without using animal testing.

Environmental and Food Testing Laboratories

PROMEGA IN THE REAL WORLD: TESTING WASTEWATER FOR COVID-19

Microbac Laboratories in Oak Ridge, Tennessee is a network of privately owned laboratories that provide testing services for food products, environmental samples and the life science industry. “When people have odd-ball issues, they give us a call,” says Microbac Technical Director and Operations Manager Robert Brooks.

In the fall of 2020, Microbac began receiving calls from universities needing a low-cost solution to monitor SARS-CoV-2 throughout entire campuses. Clinical testing, although useful for identifying infected individuals, is expensive and results take time. Ideally, the universities would be able to determine if students were being infected even before they showed symptoms. Wastewater testing could be an answer.

Microbac’s challenge was to develop a method for testing using technology specifically designed for wastewater. After considering several suppliers, Microbac decided to work with Promega. Besides the flexibility Promega technology provided, Brooks says he was impressed by the company’s willingness to work collaboratively. “I’ve worked with groups in the past who decided they were always right, and we just had to deal with it. Promega is not like that. You can’t ask for more in a partnership when both sides are trying to give it their all,” says Brooks.

The result was a kit designed specifically for detecting viral RNA in wastewater with multiple internal controls, taking into account all the different parameters that need to be monitored. Microbac is now using the Promega SARS-CoV-2 RT-qPCR Kit for Wastewater to help universities monitor COVID-19.

While wastewater-based epidemiology remains an emerging field, technology developed for testing SARS-CoV-2 will be useful for testing other pathogens and in response to any future pandemics. “This pandemic has really taught us how to coordinate and work with each other in the scientific community to apply our knowledge and background to the problem,” says Brooks. “Microbac and Promega are a good example of that.”



Forensics and Paternity Laboratories

SUPPORTING LAW ENFORCEMENT AROUND THE WORLD

In early 2020, one of India's central forensic laboratories, Forensic Science Laboratory Delhi hosted the Forensic DNA Profiling Forum in collaboration with Promega India. The 6-day hands-on workshop shared technical expertise in the field of human identification, from sample preparation to STR analysis. More than 70 DNA investigative officers and laboratory assistants attended. Forensic Science Laboratory Delhi is a multi-disciplinary scientific organization that supports forensic crime labs in India with hi-tech DNA testing capabilities.

Promega launched the annual International Symposium on Human Identification (ISHI) more than 30 years ago. Since then, it has grown into the world's largest conference focused on technologies, policies, and innovations in forensic DNA analysis for human identification. 2020 served as the first virtual ISHI conference with over 2,600 people participating. The meeting draws scientists, DNA analysts, law enforcement professionals, and legal and ethical experts from 40+ countries 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. ISHI is an inclusive forum open to all practitioners and suppliers of DNA analysis for human identification. Learn more at: ishinews.com

Forensics and Paternity Laboratories

Labs engaged in the work of DNA-based human identification are obtaining DNA from biological samples to develop investigative leads from crime scenes, help bring closure to the families of loved ones lost in mass disasters, or even help exonerate people wrongly convicted of a crime. Capillary electrophoresis (CE) and massively parallel sequencing (MPS) are two common methods used for human identification in forensic and paternity testing labs. Promega offers reagents and instrumentation for both CE and MPS analysis workflows and supports these products with specialized teams of former forensic DNA practitioners who assist laboratories with applications training, validation of DNA analysis methods, as well as with setup and maintenance of equipment for workflow automation. Promega has worked with human identification laboratories since the emergence of DNA forensics 30 years ago.

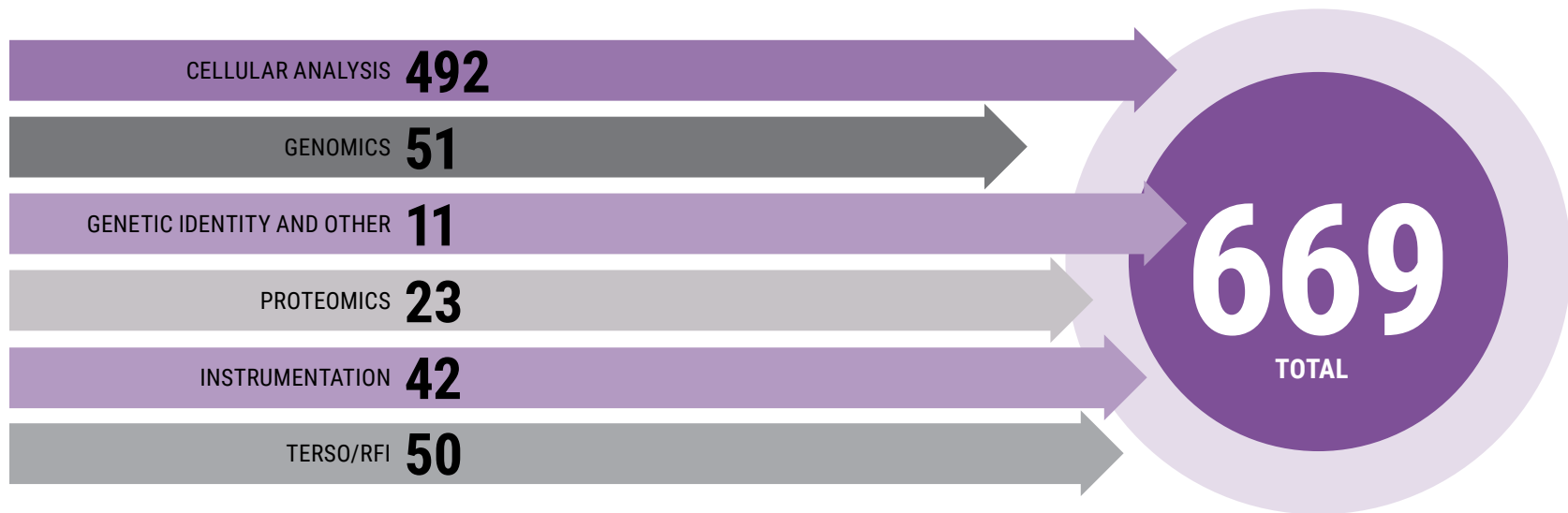
Supporting and Servicing Our Products

Our customers have a wide range of unique needs. From invention to delivery, these Promega teams ensure that we meet the highest bar in precision, quality and service.

Medical Affairs – Medical Affairs plays a critical role in the interchange of scientific and medical knowledge as it relates to patient care. From infectious disease to oncology, this team engages with key scientific leaders and clinicians to provide perspective on medical information, education and support of new product development efforts.

Patents

Issued and Pending Applications



R&D – Promega invests in the discovery and development of new technologies to sustain our contributions to scientific exploration and application. These innovations enable simplified customer processes and provide new technology in anticipation of future needs. Promega R&D contains experts around each of our technology platforms, and we have teams dedicated to creating custom assays and solutions to solve unique customer needs. Looking ahead, the Advanced Technology Group invents technologies for needs 5–10 years in the future.

Our growing investment in innovative research resulted in 62 new patent filings in 2020, bringing our intellectual property library to 479 granted patents and 190 pending patents. Promega research scientists had 21 scientific papers published in the last year. We also work with academic institutions and other entities to license and develop promising technologies.



Quality – Promega Madison, WI, USA, was first certified to International Organization for Standardization (ISO) for quality management systems in 1998, and our commitment continues with our current ISO 13485 and ISO 9001 certifications. ISO certification exemplifies commitments to our customers, to our business, and to all those who rely on and benefit from the use of our products. Currently, all 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 to minimize the risk of human DNA contamination in products used to collect, store and analyze biological material. In 2017, Promega became the first major forensic manufacturer to achieve third-party certification of the published ISO 18385 standard.

Technical Support – Promega technical scientists are available to answer customer questions about all 4000 Promega products, including selecting and using the right product and understanding results. These scientists have an average of 10 years of bench expertise. The Promega Instrument Service and Support team also provides customers with on-site specialized service and support for all Promega instruments, assisting with troubleshooting, reagent and application information and serving as a scientific resource for customer success.

TOP: With travel severely restricted, all teams developed agile ways to support customers in lockdown. The technical support team at our UK branch provided remote training for new Maxwell customers within the NHS and for labs in Guernsey and Gibraltar. They also performed remote demonstrations for both Maxwell and GloMax instruments.

BOTTOM: Promega BioSystems celebrates the 1000th Maxwell® instrument shipped in 2020.



MANUFACTURING: RESPONDING TO THE CORONAVIRUS PANDEMIC

As the pandemic emerged, Promega quickly experienced a 10-fold increase in demand for our products used in COVID-19 response. Clinicians, researchers, government officials and the general public were all understandably concerned about the worldwide availability of reagents for testing.

As a global company with thousands of products, Promega has been meeting customer demand in response to market dynamics for decades. While COVID-19 was not like anything we have ever faced, our long-term, sustainable approach to manufacturing served us well in the past and propelled us forward in 2020.

We are highly vertically integrated, meaning that much of our critical direct material spend is produced by in-house operations. Where we are not vertically integrated, we carry significant inventory to avoid supply disruptions. We partner closely with our vendors and have multiple suppliers qualified where possible. Most of our suppliers are in the U.S, and many in the Midwest, which allows for tighter partnerships and often quicker response times. We also worked with critical suppliers to take partial shipments so we could continue to make smaller batches of products to supply end customers.

Our long-term approach to facility planning gives us the extra physical space in our manufacturing areas to quickly expand operations without major construction. As global demand grew for COVID-19 testing products, we rapidly scaled up production, making numerous investments in new equipment and increasing our workforce. Production lines that were running one shift 5 days a week began operating 3 shifts seven days a week.

Our custom business has grown rapidly over the last 10 years. That demand by its nature is unpredictable, so we implemented Quick Response Manufacturing (QRM) principles in our custom manufacturing area several years ago. These QRM practices greatly helped us respond during unexpected situations.

Finally, it is the experience of our staff that enable us to respond efficiently and effectively. Our average tenure across Manufacturing Operations is over 10 years, and our management team's average tenure is over 15 years. I am deeply appreciative of the extreme dedication of our entire Operations team. Their commitment is the most important factor in our company's ability to serve our customers in unprecedented times like these.



CHUCK YORK
Vice President of
Manufacturing Operations

*Adapted from a Promega Connections
blog published March 30, 2020.*



Planet Aware

The Sustainability in ACTION team held trash pickups and food waste lunch and learns in 2020.



I'm grateful for the opportunity to share stories and ideas with the European Sustainability Team. *Together we are inspiring each other* to find new solutions on how to work with consideration and care for the environment.

ELISABETH PERSSON
Customer Service Representative,
Promega Biotech AB, Sweden

Planet Aware

Promega began scaling up manufacturing in January 2020 to address 10-fold increase in product demand for COVID-19 testing, research, and vaccine development. The company added additional shifts and equipment. Even amid this accelerated production, we exceeded all environmental goals set for 2020. Promega saw gross reduction in emissions due to energy usage thanks to investments in renewable energy. Compared to 2019 we saw a 6% increase in carbon emissions, but carbon emissions as indexed to revenue reduced by 36% over the previous year.

From environmental crises to pandemics, the world is facing issues that require urgent and unprecedented action. In setting our company's next generation of environmental targets, we are aligning with guidance from scientists and world leaders in taking actions that align with the United Nations Global Compact Sustainable Development Goals.



learn more



Our 2030 Vision



WASTE MINIMIZATION
Reduce waste to landfill by 30%



WATER CONSERVATION
Reduce water usage by 30%



CLIMATE ACTION
Reduce emissions by 50%

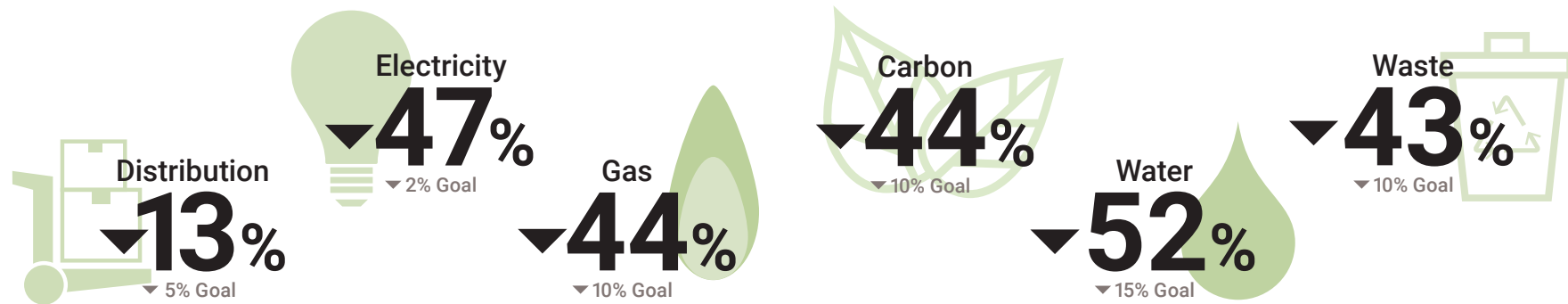
All goals are indexed to revenue, over a 2019 baseline.



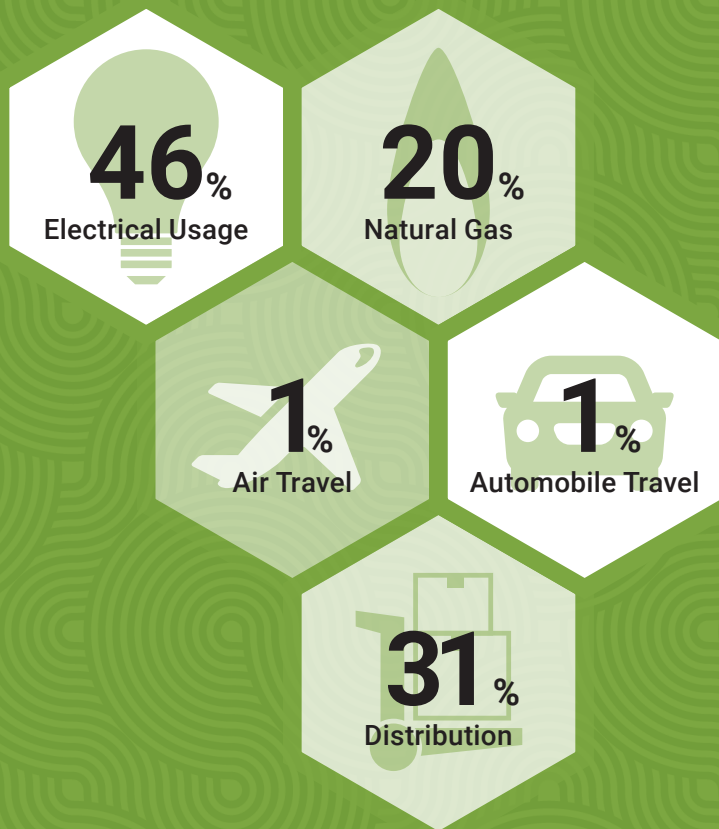
The European Sustainability Summit in February 2020 identified aggressive environmental goals for climate action, vehicle electrification and more sustainable packaging.

All 2020 Goals Achieved

Reductions and targets are indexed to revenue and over a 2015 baseline.



Global Carbon Footprint Composition



RESPONDING TO CLIMATE CHANGE

Promega prioritizes greenhouse gas reduction from all global operations. In evaluating emissions, we consider fuel combustion, purchased electricity, indirect emissions from business travel, outgoing distribution, water usage and paper usage at all Promega locations worldwide (see Figure 1).

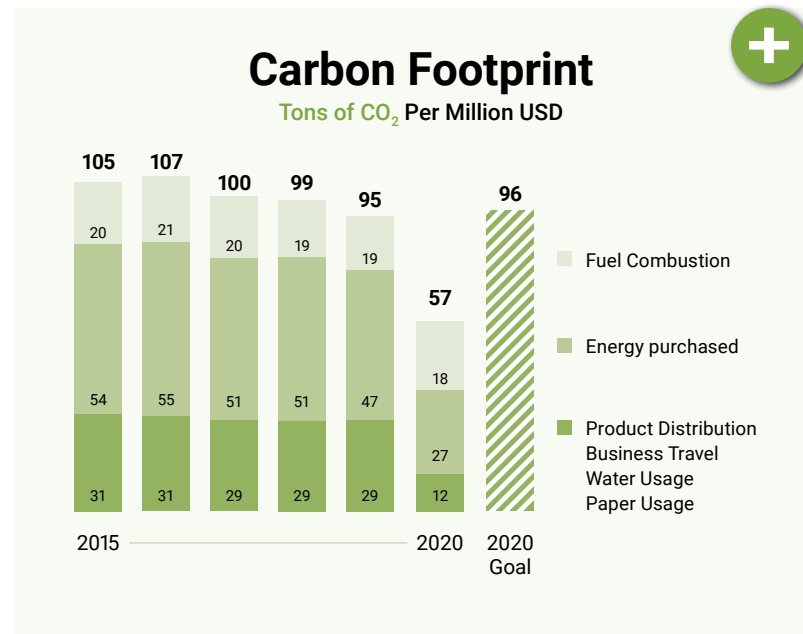


Figure 1: Global carbon footprint as indexed to revenue has reduced by 45% since 2015. Carbon is calculated from fuel combustion (scope 1), purchased electricity (scope 2), and business travel, outgoing distribution, water usage and paper usage (scope 3).










Our three largest solar arrays came online in last year at the Feynman Parking Garage, Feynman Center, and Kornberg Center on our Madison campus.



Solar panels are on part of the sustainable design of our facility in Walldorf, Germany.

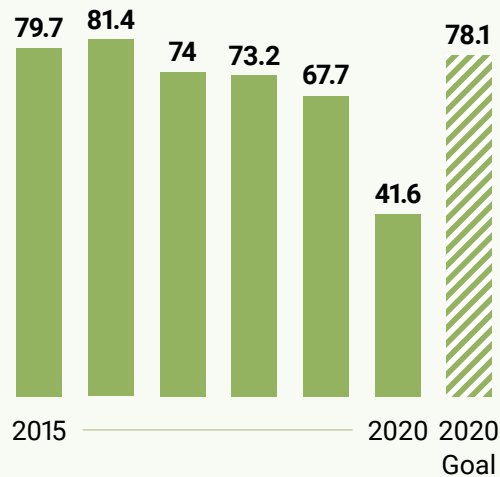
Our new facilities in Walldorf, Germany and in Southampton, United Kingdom use renewable energy and are designed for energy efficiency. Both facilities use ground source heat pumps and are incorporating solar arrays to generate electricity on-site. Additional facilities that generate or purchase renewable electricity include:

-  Promega Italia in Milan
-  Promega Biotech Ibérica in Alcobendas, Spain
-  Promega Biotech AB in Stockholm, Sweden
-  Promega AG in Zurich, Switzerland
-  Promega Brazil in Sao Paulo
-  The Aviation Operations building in Madison, WI, USA
-  The da Vinci facility in Madison, WI, USA

Even with significant increases to production and factoring in the energy used by employees working remotely, gross electricity usage increased by just 2% in the last year. As indexed to revenue we saw a 38% reduction in electricity used in 2020. Electricity usage contributes to roughly 50% of our carbon emissions and minimizing these effects remains a focus at all Promega locations. Recent investments to maximize energy efficiency range from retrofits for LED lighting to a new central utility plant that reduces energy needed for chilled water on our Madison, WI campus.

Electricity

Thousands of kWh Per Million USD



Minimizing Electricity Usage and Emissions

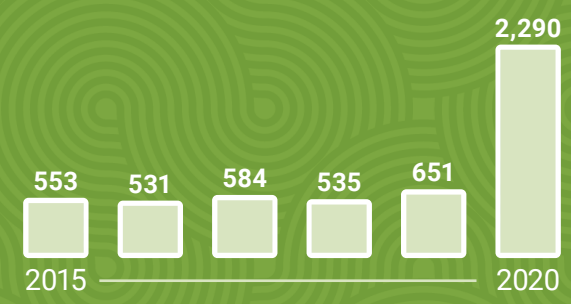
To minimize the effects of electricity usage we invest in renewable energy and prioritize energy efficiency. In the last year, our three largest solar arrays came online at the Feynman Parking Garage, Feynman Center, and Kornberg Center on our Madison campus. These systems are comprised of over 4,100 panels, 1,300 kW and will generate over 2 million kWh annually.

In addition, Promega joined a new clean energy initiative with Madison Gas & Electric (MGE) on a 160-acre solar array in Fitchburg, WI. This 20-megawatt (MW) solar array is the largest solar project in Dane County. Promega will purchase 2 MW to supply more than 12% of current annual electrical consumption. When the O'Brien Solar Fields comes online in summer 2021, Promega will be sourcing over 20% of our current energy needs from renewable sources.



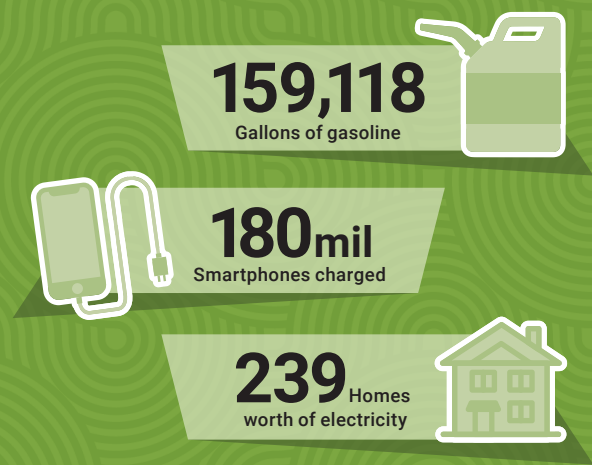
Renewable Energy Usage

Thousands of kWh Per Million USD



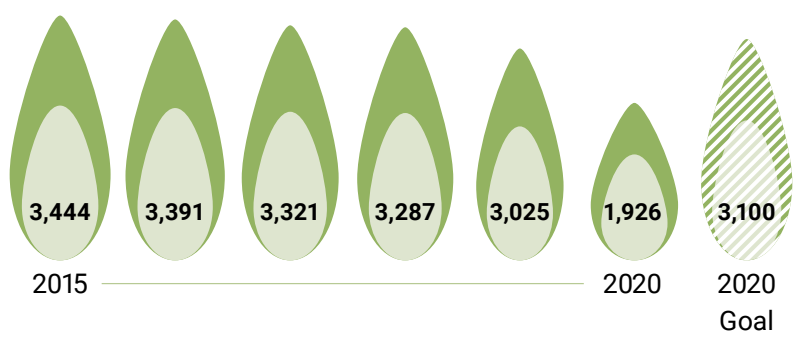
Solar arrays added on Feynman Parking Garage, Feynman Center, and Kornberg Center will generate over 2 million kWh annually and avoid over 1,400 tons of carbon dioxide.

Savings equivalent of...



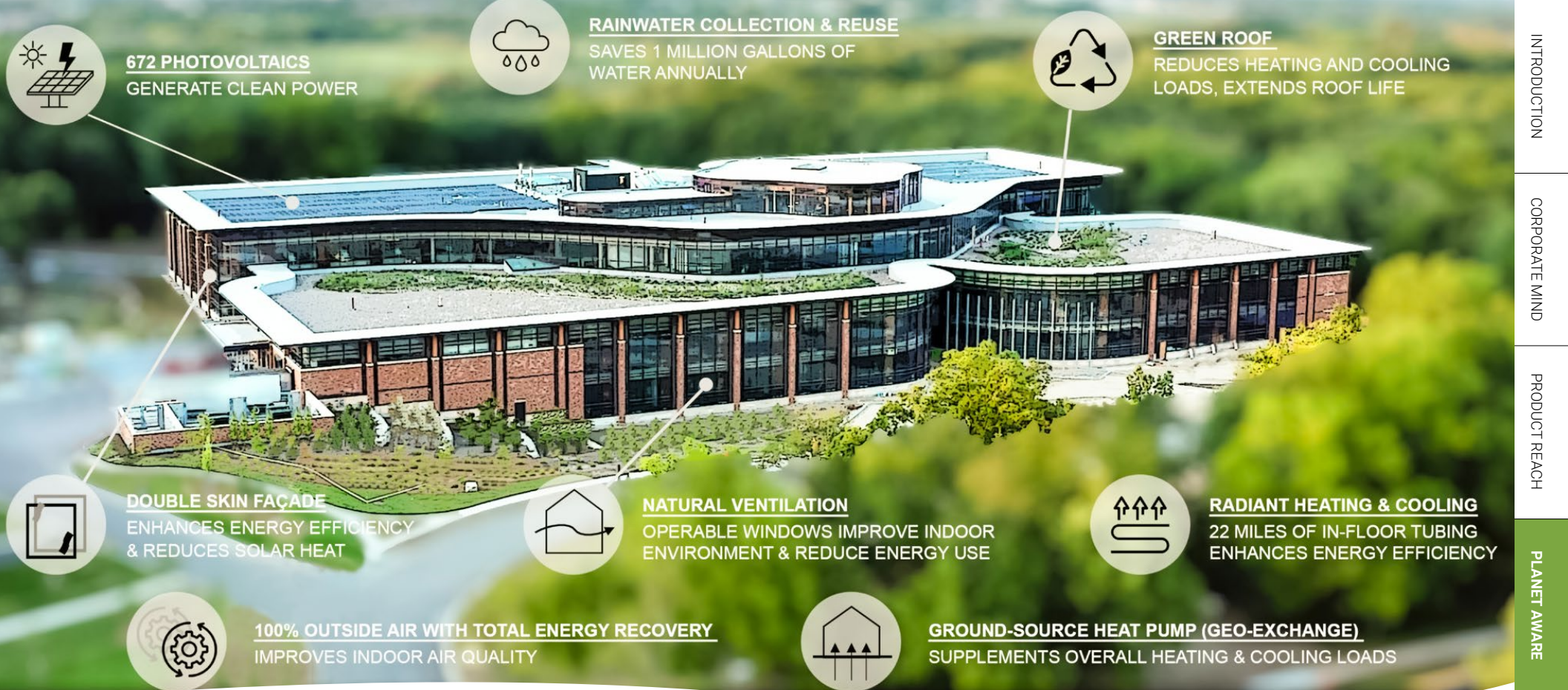
Natural Gas

Therms Per Million USD



Conserving Natural Gas

Natural gas usage as indexed to revenue decreased by 36% in the last year. Natural gas is our largest source of direct air emissions and our third largest source of overall emissions. Natural gas is used primarily at manufacturing sites for heating and production-related processes. Ground-sourced heat pumps, solar water heaters and heat recovery technology help minimize heating requirements and related emissions.



672 PHOTOVOLTAICS
GENERATE CLEAN POWER



RAINWATER COLLECTION & REUSE
SAVES 1 MILLION GALLONS OF WATER ANNUALLY



GREEN ROOF
REDUCES HEATING AND COOLING LOADS, EXTENDS ROOF LIFE



DOUBLE SKIN FAÇADE
ENHANCES ENERGY EFFICIENCY & REDUCES SOLAR HEAT



NATURAL VENTILATION
OPERABLE WINDOWS IMPROVE INDOOR ENVIRONMENT & REDUCE ENERGY USE



RADIANT HEATING & COOLING
22 MILES OF IN-FLOOR TUBING ENHANCES ENERGY EFFICIENCY



100% OUTSIDE AIR WITH TOTAL ENERGY RECOVERY
IMPROVES INDOOR AIR QUALITY



GROUND-SOURCE HEAT PUMP (GEO-EXCHANGE)
SUPPLEMENTS OVERALL HEATING & COOLING LOADS

INTRODUCTION

CORPORATE MIND

PRODUCT REACH

PLANET AWARE

PEOPLE CARE

COMMUNITY TOUCH

ADDITIONAL INFO

The newly completed Kornberg Center integrates sustainable best practices from around the world that reduce energy use by 65% relative to comparable facilities.

Building a Sustainable Future

The Global Facilities Planning Team emphasizes environmental stewardship and long-term planning for each new facility and significant remodel. The two new facilities on the Promega Madison campus include:

The Kornberg Center

The Kornberg Center is a 26,300 m² (283,000ft²) research and development facility completed in early 2021 providing laboratory and office space on three floors. The building’s architecture interconnects laboratories, office areas, and meeting spaces in a unique manner, providing an environment that is designed to nurture communication and innovation.

Sustainability and energy efficiency are cornerstones of the design, factoring in learning from past projects like the facility in Walldorf, Germany completed in 2019. Kornberg Center features a double skin facade for insulation, expansive windows for daylighting, natural ventilation, active slab heating and cooling, and energy recovery or enthalpy wheels. Ground-source heat pumps enhance efficiencies of heating and cooling systems and a 250-kw photovoltaic array help to power the facility. A rainwater collection system with 50,000 gallons of storage capacity and a green roof further reduces impacts. These sustainability features reduce energy use in Kornberg by 65% compared to a facility built to code.

Each year our 'Ship Ambient' program saves over 12 tons of dry ice, avoids 32 metric tons of carbon dioxide, and eliminates the need for more than 3,000 EPS coolers.

The Component Manufacturing Center

The Component Manufacturing Center, opening in late 2021, will house newly developed product manufacturing lines in a 14,600m² (158,000ft²) facility only a few miles from the Promega headquarters. This facility will complement existing manufacturing capacities in Madison and California by supplying small molecule components for use in other manufacturing processes. The facility has office spaces with a timber framed structure, double skin facade structure for insulation and uses natural ventilation to maximize energy efficiency. The site has an extensive on-site stormwater treatment pond system and will be powered with renewable energy from the MGE's O'Brien Solar Farms that will come online in 2021. This facility is designed to provide future flexibility with a raised floor system containing air handling, electrical and communications below. This feature allows for re-configuring the space without demolition and re-construction.

Tracking and Reducing Effects from Product Distribution

Promega is reducing distribution emissions by shipping smaller and lighter packages that optimize dry and gel ice requirements. We achieved a 32% reduction in distribution emissions as indexed to revenue in the last 10 years.

Ambient Shipping Initiative

With significant testing to assure quality, more of our cold chain products can ship at room temperature (ambient), instead of dry or gel ice. Each year our 'Ship Ambient' program saves over 12 tons of dry ice, avoids 32 metric tons of carbon dioxide, and eliminates the need for more than 3,000 EPS coolers. We are currently analyzing additional product lines to transition to ship ambient to further reduce carbon emissions and minimize waste.



Promega UK Helix Awards go to accounts that reduced impacts from product distribution the most by partnering with Helix.

Net Zero Emissions from our Helix® On-Site Stocking System

Our on-site inventory management system called Helix reduces emissions through consolidated restocking shipments. The Helix® program uses RFID technology that tracks product use in real time, and orders when needed. This automated inventory management system ensures that customers have uninterrupted access to supplies while reducing the effect on our planet.

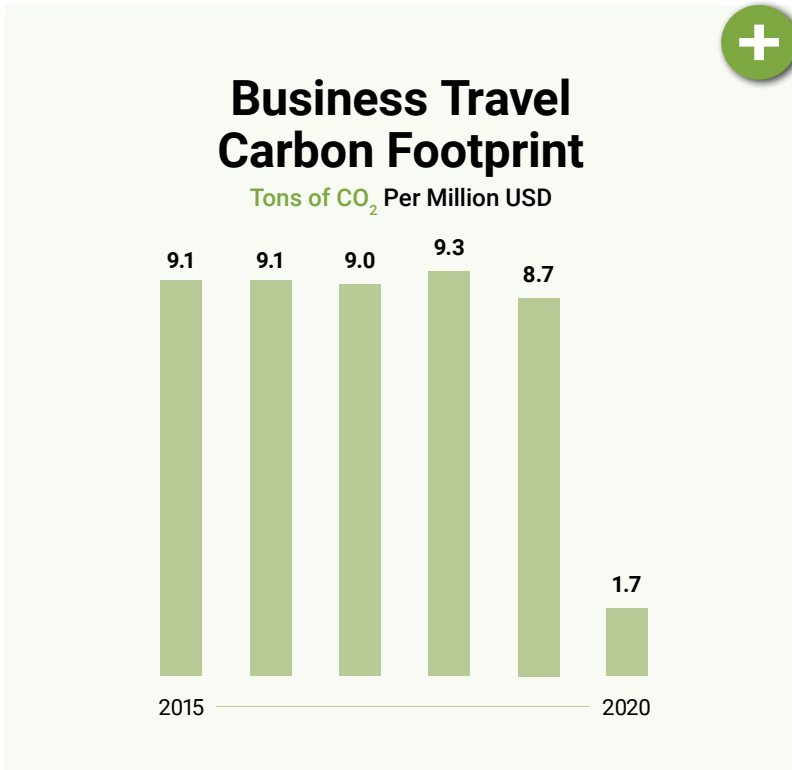


[learn more](#)

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 2020, Helix® on-site stocking offset 600 tons of emissions worldwide by supporting the following projects:

- Blandin Improved Forest Management Project in Minnesota, United States
- Kibale Forest Restoration in Uganda

Since 2010, the Helix® program has offset over nearly 7,600 tons of carbon dioxide. To see more information and learn how to participate, please visit www.promega.com/helix



Minimizing Effects from Business Travel

The pandemic significantly limited our travel in the last year and we saw a 63% reduction in emissions from business travel. While we realize that such a low level of travel is not sustainable to maintain important relationships, we recognize that alternatively fueled vehicles will be key in helping us reduce carbon emissions. Our European branches have committed to exclusively use electric vehicles by 2030 for sales and field applications to minimize carbon emissions.

Carbon offsets are another strategy we have used to mitigate emissions from unavoidable travel. Since 2009 we have offset over 3,000 tons of CO₂ from automobile and air travel in North America.



With a recent addition of electric vehicle chargers, up to 34 vehicles can be charged simultaneously on the Promega campus. Charging stations are also available at Promega Benelux, Promega AG, Promega France (pictured) and Promega Biosciences in California.

Alternative Transportation

Alternate transportation programs have been implemented by 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 such as pumps and bike repair kits. Many locations worldwide have similar programs in place.

“Working with the Sustainability Team adds another dimension to my job and highlights an additional way that Promega helps to create a better world. My experience with sustainability generates value that goes beyond just my interactions at work.”

EMMANUELLE KILLIAN-MARTEL,
Genomic Product Manager, Promega France

PRESERVING NATURAL CAPITAL

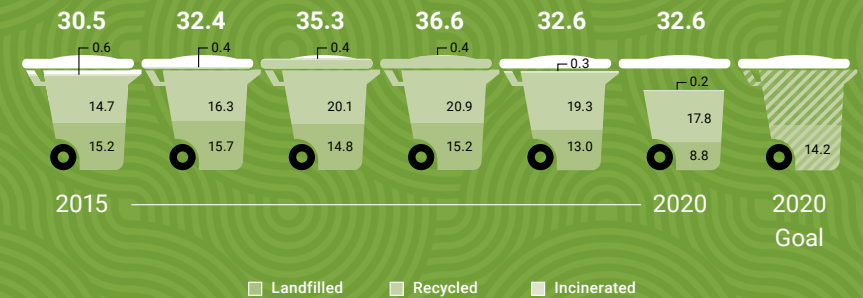
Minimizing Waste

To reduce waste, Promega locations globally focus on avoiding single-use and difficult to recycle materials, enhancing recycling programs and increasing employee awareness of what is recyclable. Employees embrace the mantra “Reduce, Reuse, Recycle” and have championed this effort. In the last year, gross waste and recycling increased due to additional manufacturing, yet a higher percentage of waste is recycled and diverted from the landfill. Some highlights include:

- Recycling nitrile glove and protective garments – 5.4 tons of waste diverted from landfills
- Plastic film, banding and bottles – 20 tons of challenging materials recycled
- Eliminating single-use plastic for reusable materials at the Promega campus in Wisconsin as well as offices in California, Switzerland, France, Germany and the UK.

Non-Hazardous Waste

Cubic Meters Per Million USD



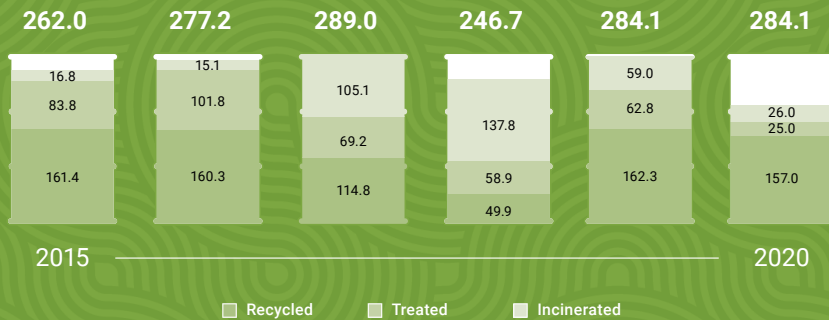
The Sustainability in ACTION team held trash pickups and food waste lunch and learns in 2020.



Promega AG in Switzerland upcycled banners from tradeshows into wallets and mask pouches. The recycling partner also provides employment opportunities for disadvantaged individuals.

Hazardous Waste

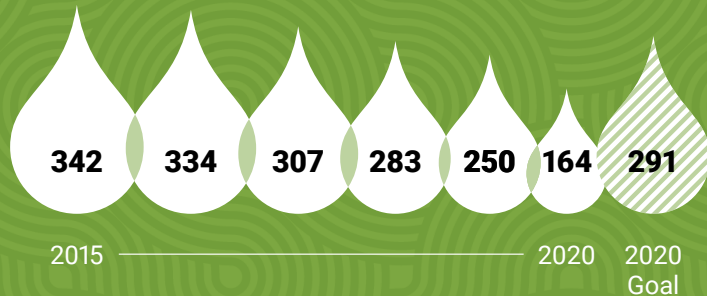
Kilograms Per Million USD



■ Recycled
 ■ Treated
 ■ Incinerated

Water Usage

Thousands of Liters Per Million USD



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. Promega works with certified providers to reuse and recycle waste safely.

Conserving Water

In the last year, water usage decreased by 34% as indexed to revenue and has decreased by over 50% as indexed to revenue since 2015. Promega evaluates initiatives to conserve water in manufacturing, landscaping and other everyday needs.

- A project to reuse wastewater generated from our water purification system on the Madison campus saved over 1 million gallons (3.7 million liters) annually. Madison also uses rainwater collection and rain gardens for natural filtration.
- Offices in Sydney, Australia, collect rainwater for cleaning, flushing toilets and irrigating plants.
- Promega Biosciences in San Luis Obispo, CA, utilizes a custom-designed water recirculating system for distilled water. In the last ten years, gross water usage has decreased by over 50% despite significant increases in headcount and manufacturing levels.



New kit packaging uses sustainably sourced materials, reduces the amount of material used, and promotes recycling to customers.

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.

New kit packaging uses sustainably sourced materials, reduces the amount of material used, and promotes recycling to customers. These packages have been recognized with the Graphic Design USA Award for Sustainable Packaging.

To reduce the environmental effects of packaging, Promega has also:

- Transitioned to recycled paper padding for shipments from plastic bubble wrap, saving 61 km of plastic per year in both European and US distribution centers.

- Switched to smaller shipping boxes to use less packaging materials.
- Implemented self-adhesive shipping boxes at our European logistics hub that avoids over 2,800 meters of tape each year.
- Transitioned to Biomass EPS coolers in Europe that eliminate the need for fossil fuels in generating polystyrene foam coolers.
- 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.

Promega is supporting and reporting progress toward the Australian Packaging Covenant Organization's goal of preventing packaging materials from ending up in the landfill by 2025.



People Care



I am grateful that *Promega has my back* and supports me in my personal life as well as my work life.

TODD SWANSON

Senior Analytical Method Validation Scientist

People Care

Promega prioritizes the physical and emotional health and well-being of employees. This took critical importance with the emergence of COVID-19. In early 2020, in the same way the company began to scale up manufacturing capacity in anticipation of unprecedented demand for testing products, so too did Promega mobilize a multitude of diverse resources to protect the health and safety of all employees and also to support them as they faced unique and specific challenges brought on by the pandemic crisis. From PPE, social distancing protocols and surveillance testing, to mental health interventions and additional paid time off to support virtual schooling, the company's 19 worldwide locations provided support in ways that met the specific needs of each team and employee worldwide.



[learn more](#)



Promega Madison and Promega Biosciences in San Luis Obispo, CA implemented weekly COVID-19 surveillance testing for employees. Samples in Madison are processed at the company's own Clinical Laboratory Improvement Amendments (CLIA) certified laboratory, which Promega developed in 2020 to perform in-house diagnostic services for the Promega Madison Wellness Center.

PRIORITIZING EMPLOYEE HEALTH & WELL-BEING

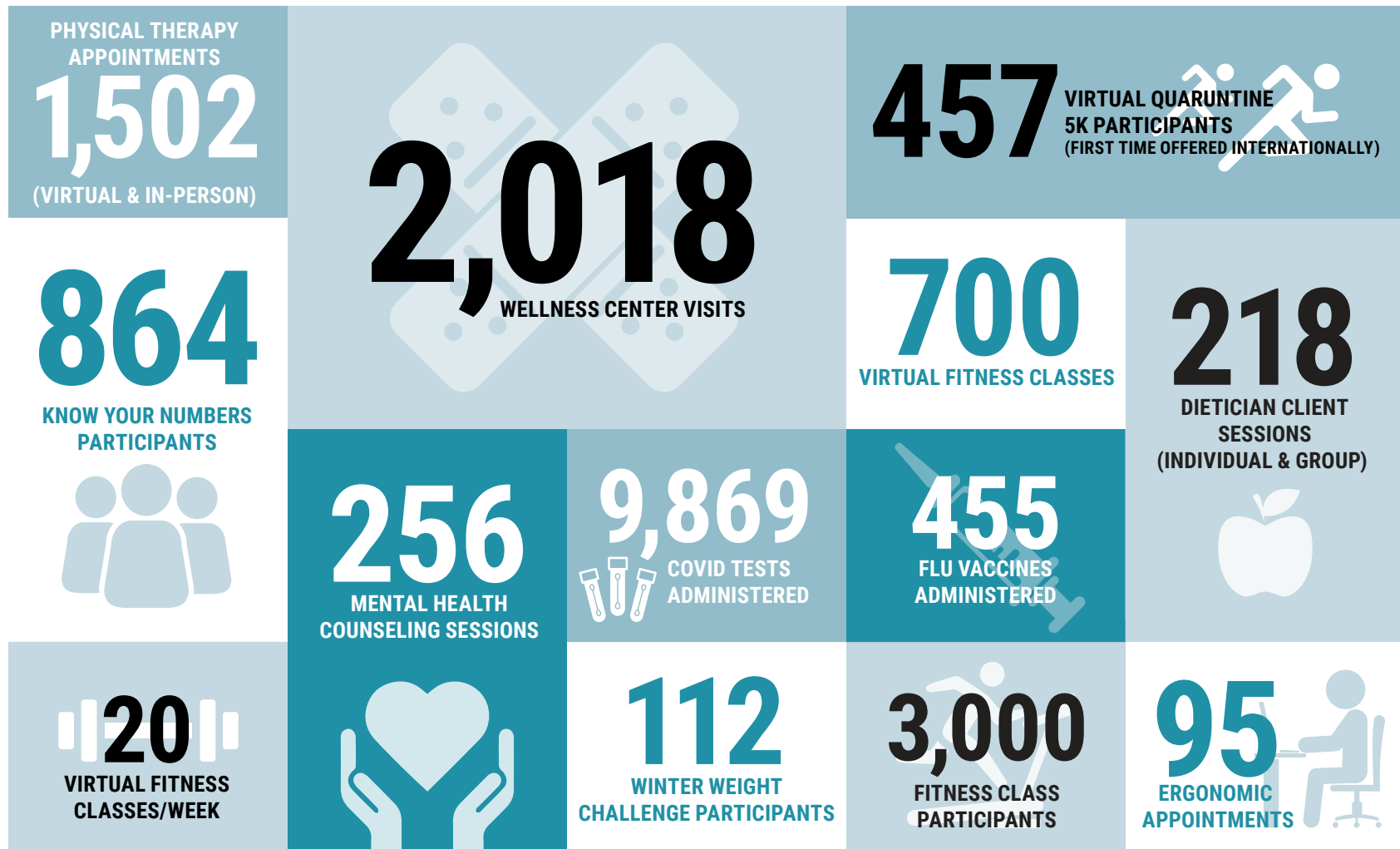
Promega supports employee well-being to help each individual harmonize their life at work and at home. Physical health and wellness start with safety but expand to include mental health services, fitness and nutrition, wellness programs and benefits packages.

Employee Safety

Environmental Health and Safety programs establish, maintain and improve work environments for the safety and well-being of employees, as well as the communities in which Promega operates. As COVID-19 emerged in early 2020, Promega locations around the world implemented

interventions to help prevent and control the spread of the virus to support employee safety, ensure business continuity and instill confidence in a safe workplace. Employees not required to be on-site began working at home. Employees at global locations supporting product manufacturing, quality and R&D began working split shifts, used additional PPE, practiced social distancing and restricted movement within facilities. Promega Madison put in place a COVID-19 surveillance testing program for employees working onsite and also provided vaccinations for employees as vaccines became available. Interventions to protect employee safety continue globally as local conditions require.

PROMEGA WELLNESS BY THE NUMBERS: 2020



Supporting Physical and Mental Health

The Wellness Center, located at our Madison, WI headquarters, provides all employees, as well as spouses and/or partners, free on-site health consultations and counseling. The clinic is staffed by one full-time Nurse Practitioner and one part-time Physician Assistant. Services include

routine blood draws, travel and routine immunizations, consultations for general health concerns, physical examinations and physical therapy. Wellness Center staff also include a registered dietician and two professional mental health counselors.



VOICES OF RESILIENCE

Promega employees share their thoughts on the pandemic

“It’s given me time to reflect on how important it is to see the opportunities amongst the challenges.”

—Meghan Rollins, Supervisor of Creative Services

Wellness Center COVID-19 support includes:

- Telehealth visits
- COVID-19 testing for employees experiencing virus symptoms
- COVID-19 vaccinations
- Expanded mental health services, including general mental wellbeing and parenting-focused support
- Extended physical therapy (in-person and virtual)
- Nutrition support
- Home office ergonomics assessments
- General well-being support

Encouraging Active Lifestyles

Promega provides employees around the globe with a multitude of resources to support active lifestyles, including on-site fitness facilities, group fitness classes, reimbursement for health club memberships and bike commuter subsidy. That commitment did not waiver in 2020 amid COVID-19 restrictions. Instructors offered classes virtually or in outdoor settings where permitted and the company’s annual 5K run became a global virtual event. Employees participating in the 2020 Promega Qua-run-tine 5K completed the run/walk on their own during a 2-week window.



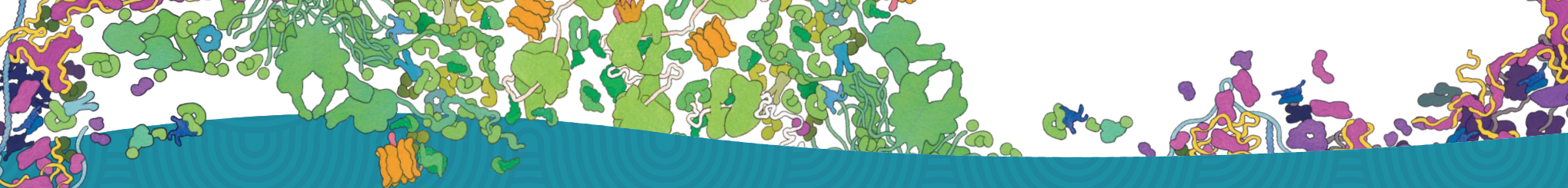
LEFT: Promega Culinary provides fresh family-style take and bake meals for employees.
RIGHT: Employees in France keep honeybees at their office in Lyon to harvest fresh honey.

Know Your Numbers' Health Assessments

Employees are encouraged to participate yearly in the Know Your Numbers free basic health screening to help understand potential health risks. These diagnostic indicators can help employees formulate a plan around lifestyle changes to prevent or delay the onset of certain diseases such as diabetes and heart disease. In 2020, 97% of employees participated in this program.

Eating Well, Living Well

Thousands of pounds of fresh produce are harvested annually from on-site gardens at the Promega Madison, WI location. The culinary team uses this produce, along with food from over three dozen local farms, to create healthy menus for employees. In 2020, Promega Culinary provided free scratch-made lunches for employees working onsite and also prepared fresh take-home family style meals for employees.



COMPREHENSIVE BENEFITS

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. To continually improve the total compensation package for our current and future workforce, we raised the minimum wage for both existing and incoming Promega Madison employees to \$15 per hour.

CIRCLE OF CARING

A grassroots effort to provide help to any Promega employee struggling with crises or challenges such as death of a loved one, illness/injury or other difficult life transitions became the Circle of Caring. Employees provide fellow coworkers support where and when it is needed, like a fire brigade called in to help in an emergency. Requests range from providing meals and doing yardwork to sand bagging during torrential rains.

“In what company would the Senior Financial Officer come and mow your lawn?!”

LOTTE DOWNEY, Marketing Manager
In reference to the Circle of Caring, a grassroots effort to help employees struggling crises or challenges.

PARENTAL SUPPORT

In 2020, Promega Madison began offering support to parents managing the unique and specific challenges of virtual schooling, disrupted schedules and quarantine restrictions. Interventions include virtual, parent-focused consultations with a mental health therapist, up to 80 hours of additional paid time off to support virtual schooling and/or to care for children due

to daycare or school closings and a monthly stipend to help pay for an individual or service to assist children with virtual schooling.

Promega also partnered with a local learning community to provide a safe “pod” in a large unused meeting space on the Madison campus. “Camp Ideation” allows school-aged children of employees to attend their own school district’s virtual learning classes under the supervision of in-person teachers. Students are also provided opportunities for outdoor education, enrichment activities, and programming that supports mindfulness, creativity, and social and emotional well-being.

“As a household with two working parents, [Camp Ideation] allowed us to continue working our regular hours and without much disruption to our schedule.”

PAULA SEQUEIRA, Production Scientist

CAREGIVER LEAVE

US employees are eligible for 120 hours of paid time annually to care for aging parents, ill spouses or domestic partners, children with medical needs, or to bond with a newborn or newly adopted child without sacrificing their own paid sick leave or vacation. Employees have used more than 10,000 hours of paid Caregiver Leave since the benefit went into effect in 2018.

“Caregiver Leave enables me to take care of my family without the added stress of worry about work obligations or having enough sick leave to cover both me and my parents’ health issues.”

TODD SWANSON, Validation Scientist



VOICES OF RESILIENCE

Promega employees share their thoughts on the pandemic

“I love spending actual time with my kids outside of chauffeuring them all around to activities.”

—Sarah Mahan, Research Scientist

NOURISHING CONNECTION

We know the positive power of connection and relationship. The connection-restricted world brought about by the pandemic made nurturing strong relationships even more important. Here are some examples of how Promega made every effort to create connection during a challenging year.


- Virtual global Town Halls during 2020 kept employees around the world informed and inspired.
- As part of weekly initiatives to stay connected to over 300 employees working on site, Vice President of Manufacturing Operations Chuck York followed protocol restrictions on moving between buildings and managed to safely visit teams across campus virtually via the “Chuck Wagon.”
- Promega employees were inspired by a line in the animated movie Finding Nemo as they encouraged one another to “Just keep swimming.” Even the movie’s writer and director, Andrew Stanton, sent Promega some encouragement.
- Virtual gatherings fostered employee connections.



TOP LEFT: Our Chief Medical Officer provides an update at a virtual town hall.
 TOP RIGHT: VP of Manufacturing, Chuck York, made virtual visits to operations employees with the ‘Chuck Wagon’.
 MIDDLE: Employees were inspired by the mantra “Just keep swimming” early in the pandemic.
 BOTTOM: Virtual gathering of the Promega GmbH team fostered connection.

SUPPORTING EMPLOYEES AROUND THE GLOBE DURING COVID-19

Branch managers made a point to connect with each employee during the pandemic just to see how each person was doing. 'Take care of your people and they take care of the business' was the overwhelming sentiment of Promega leaders around the world. Here are some examples of how Promega supported employees around the world.

-  **France** – Virtual platforms to help employees manage the transition to teleworking
-  **Spain** – Expanded health care benefits for family members of employees
-  **Sweden** – Reorganized office to allow for more individual space
-  **Italy** – Extended benefits and support of flexible hours to help children learning remotely
-  **Japan** – Increased indoor ventilation, temperature checks, social distancing and PPE
-  **Korea** – Employee run/walk challenge to raise funds for Doctors Without Borders
-  **Singapore** – Virtual celebration of the branch's 14th anniversary with employee families
-  **US** – Food trucks, surprise treats and socially distanced activities for on-site workers
-  **Australia** – Virtual meetings, flexible scheduling for staff managing home schooling and occasional in-person gatherings
-  **India** – Virtual Diwali Festival for Promega families
-  **UK** – Virtual monthly breakfast meetings
-  **Shanghai** – Sharing time in nature



TOP: Various programs and benefits were offered to help employees and their families during the pandemic.
 BOTTOM LEFT: Promega India celebrated Diwali with employees and their families.
 BOTTOM RIGHT: Promega France celebrates the holidays.



NURTURING EMPLOYEE GROWTH, CREATIVITY AND SELF-ACTUALIZATION

Promega provides opportunity and space for employees to grow as individuals and professionals. Our culture nurtures creativity and emphasizes self-actualization, or—simply put—encourages people to explore within their Promega roles and beyond how they might evolve their greatest strengths and contributions. 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. We live the notion that every one of our employees has the potential to make a meaningful difference. And they do.

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. Promega has a 5% employee turnover rate attributed to several factors including a creative environment, opportunities to explore new ideas and excellent benefits. But most employees say they stay because of the culture.



Promega employees in Seoul, South Korea celebrated the manufacturing of the 1,000th Maxwell[®] instrument in 2020 which helped clinical labs across the world during the pandemic.

Building a Thriving Society

Promega honors the fundamental value and dignity of all individuals. As a global company, our continued and evolving focus on diversity and inclusion is fueled by our drive to create and maintain an environment that respects diverse traditions, heritages, experiences and perspectives. We start with the long-standing belief that every individual at Promega can make a difference. As a result, this work starts with each of us continually seeking an honest understanding of who we are and what we can do. Grounded in that self-honesty, we look for action that will last long term.

Promega engages in a variety of initiatives that, for decades in some cases, have supported diversity and inclusion in our workplaces and communities. Many of those programs are covered in this report, such as matching employee donations to community organizations, paid time to volunteer and the work of BTC Institute, of which Promega is a founding and primary financial supporter, to improve access to science for underserved communities. These initiatives are part of who we are, and they provide a stepping stone to what we can do next.

In 2020, Community of Belonging teams made up of energized Promega employees began efforts to help us keep evolving our practices to truly include diverse perspectives and people. These groups are working in the areas of:

- **How we hire:** Evolving recruitment and hiring practices to create more opportunities to support diversity and inclusivity at Promega.
- **How we support employees:** Continuing to build on our benefit offerings to create more inclusivity and ensure all employees feel supported.
- **How we contribute:** Exploring new ways for Promega to support diversity initiatives in the community.
- **How we learn:** Identifying opportunities for growth related to diversity and inclusion at Promega.





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 enables employees to more effectively manage their own internal responses, moods, and states of mind, thereby improving relationships, managing stress and enhancing connections. Employees report that shared ESI language allows them to connect and evolve in response to challenges in ways that are more satisfying and effective. Components of the Promega ESI program include 1:1 and group coaching, daily guided meditations, formal trainings such as an immersive ESI Bootcamp and company-wide initiatives.

ESI has been a powerful tool for employees managing the uncertainty of the pandemic. Promega offers weekly virtual drop-in meetings for employees to listen, share a story or a laugh and feel support from others. Members of the ESI team also meet with individuals or teams.



RIGHT: Korean branch celebrating their anniversary in 2020.

LEFT: Employees at Promega KK in Japan infuse emotional and social intelligence into their working relationships to better connect and support each other.



VOICES OF RESILIENCE

Promega employees share their thoughts on the pandemic

“Each time there is a new challenge, I hear a voice saying, ‘You have made it this far, you can do this too.’”

—Becca McKnight, Integrative Employee Development Partner



CREATING WORKSPACES TO INSPIRE

As a business based on creative output and employee satisfaction, Promega prioritizes work environments that are inspiring, flexible and aligned with the needs of employees. Key features include abundant light, comfortable furnishings and design that brings the outdoors in with natural light and extensive greenery with plants and even trees in some cases. Locations globally use local resources, art and culture to provide comfortable, functional work environments. Unique “third spaces” draw in employees and facilitate creativity and connection.



VOICES OF RESILIENCE

Promega employees share their thoughts on the pandemic

“We’re recognizing the importance of traditions and connections.”

—Katie Anderson, Assistant Calibration Technician

Providing Personal Development and Growth for Employees

Promega takes a relational approach to employee development that uses 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 programs support managers and employees throughout the organization, either in person or virtually. Managers have access to sessions like Coaching for Leaders, Leadership Forums, Transformational Leadership, Leadership Conversations and Manager Roundtables. Employees have access to sessions like Seeking & Receiving Feedback, Influence without Authority, Conflict Management, and Employee Connections. In addition, managers and employees alike have access to organizational development services including talent management resources, personality/leadership assessments, coaching, and consulting. Initially these programs were limited to North America, but they have expanded to our branches in Italy, Sweden, Australia, France, BNL, Spain, and UK.



Scientific Training

The Scientific Training team designs, develops and implements product and sales trainings for Promega employees. In years past, these trainings were delivered in both live and virtual classrooms. With COVID-19 restrictions, the team pivoted to all virtual courses in 2020 to address the training needs of employees globally.

English Classes for Employees

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 careers.



VOICES OF RESILIENCE

Promega employees share their thoughts on the pandemic

“Just experiencing life at a slower pace and on a smaller scale brings a certain amount of self-reflection and inner peace”

—Brian Schiro, Senior Director of I.T.

TOP: Shanghai Promega took a company trip to Mount JiuHua where they hiked and reflected on how the team worked and lived during the pandemic.

MIDDLE: With travel severely restricted, all teams developed agile ways to support customers in lockdown. The technical support team at our UK branch provided remote training for new Maxwell® customers within the NHS and for labs in Guernsey and Gibraltar. They also performed remote demonstrations for both Maxwell® and GloMax® instruments.

BOTTOM: Individual development classes are offered for employees globally and here employees in Japan participate in English classes.



Community Touch

The Corporate Affairs Team harvested 770 pounds of vegetables at the St. Vincent de Paul Food Pantry Garden as part of Promega in Action.



Being awarded time through the Promega in Action program to volunteer with a local hospice on their inpatient unit was a true gift. I'm grateful that Promega supported my passion for comfort and care while *providing support to a community organization* that does such meaningful and honorable work.

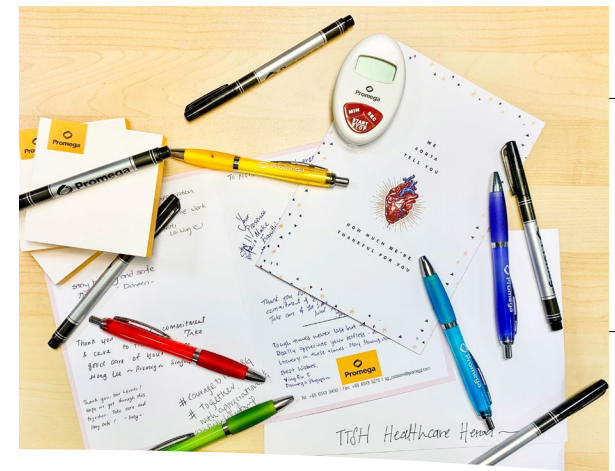
MARLA SHOOP
External Audit Program Lead

Community Touch

Promega celebrates employee philanthropic passion and supports a culture that catalyzes employee involvement through policies such as volunteer time-off and matching gifts. Employees are encouraged to put action behind ideas for how they, their team or the company can engage meaningfully in the world. Branches and manufacturing locations around the world have the autonomy to focus on the unique needs of their communities through an integrative and authentic approach to provide support at a local level. Promega corporate giving prioritizes involvement and support in the areas of education, science and creativity.



[learn more](#)



SUPPORTING OUR GLOBAL COMMUNITIES

Promega employees seek to better the world in the distinctive ways that match their unique skills and talents and also bring meaning to their lives. This took on profound new importance in the wake of the COVID-19 pandemic as Promega teams around the world mobilized to support their communities in crisis.

TOP LEFT: Promega Beijing donated goggles and coveralls to hospitals that were short of medical supplies.

TOP RIGHT: Promega France transferred instrumentation and provided training to a diagnostic lab to allow for high throughput COVID testing.

BOTTOM LEFT: The Promega Madison Culinary team helped local food shelves meet unprecedented demand by preparing and packaging fresh meals made from produce grown in Promega culinary gardens.

BOTTOM MIDDLE: Promega Biosciences in San Luis Obispo, CA, donated PPE to a local hospital.

BOTTOM RIGHT: Promega Singapore sent care packages to those working in hospital labs.



Operations team members at Promega Madison pick up litter for "Adopt a Highway."

For over 23 years, the **Promega Employee Giving Campaign** has matched employee donations dollar-for-dollar to **United Way of Dane County** or **Community Shares of Wisconsin**. (Promega has been recognized by both organizations for the company's sustained commitment to giving.) Employees may also designate Giving Campaign matching gifts to any nonprofit organization of their choice. In 2020, employees expressed a desire to begin the annual Giving Campaign two months earlier than usual to address both the challenge of racial injustice and the stress of COVID-19 in communities. Employee donations to organizations working in DEI (diversity, equity, and inclusion) increased 83% compared to 2019 and donations to local food banks increased 75% compared to 2019.

Causes Promega Employee Donations Support:

Specific to Promega Madison



**COVID-19
Fund**



**Diversity,
Inclusion,
and Equity**



**Food
Insecurity**

1,920

Employee
volunteer hours

163

Employee donations
to non-profits

21

Non-profit organizations
received grants


\$1.5M

In total
donations

48 Non-profit organizations
benefitted from the Promega
in Action volunteer program



Promega in Action enables employees at Promega corporate offices in Madison, Wisconsin to use paid time to volunteer in the global community. Employees can apply for a grant of up to 40 hours to work for the charity or organization of their choice. In return, employees are asked to document their interactions and present their experiences and insights to their colleagues.

 To date, 48 organizations have benefitted from the Promega in Action program, including local programs such as **Madison Area Food Pantry Gardens** and global programs such as **SizaBantwana** in South Africa. Employees' involvement with these groups often does not end when paid volunteer hours are exhausted. Many continue to actively volunteer, as well as recruit others to the cause.


Employees at the Rosalind Franklin Center collected food, personal hygiene supplies, and monetary donations for the Green County Food Bank.


■ The employee-lead Community Action Team (CAT) at **Promega Biosciences in San Luis Obispo, CA**, supports 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 2020, the team supported the **United Way, Central Coast Funds for Kids, Woods Humane Society** and **EL Camino Homeless Organization**. They also organized road clean-ups and provided lunch for People's Kitchen. Promega Biosciences offers all full-time employees four hours of paid time each month to use toward volunteer activities and matches employee donations.




TOP: Employees from Korea celebrate the completion of the “Just Keep Swimming Challenge” to benefit Doctors Without Borders.

BOTTOM: Gingerbread house submitted from a customer at the University of Helsinki raised money for cancer research.

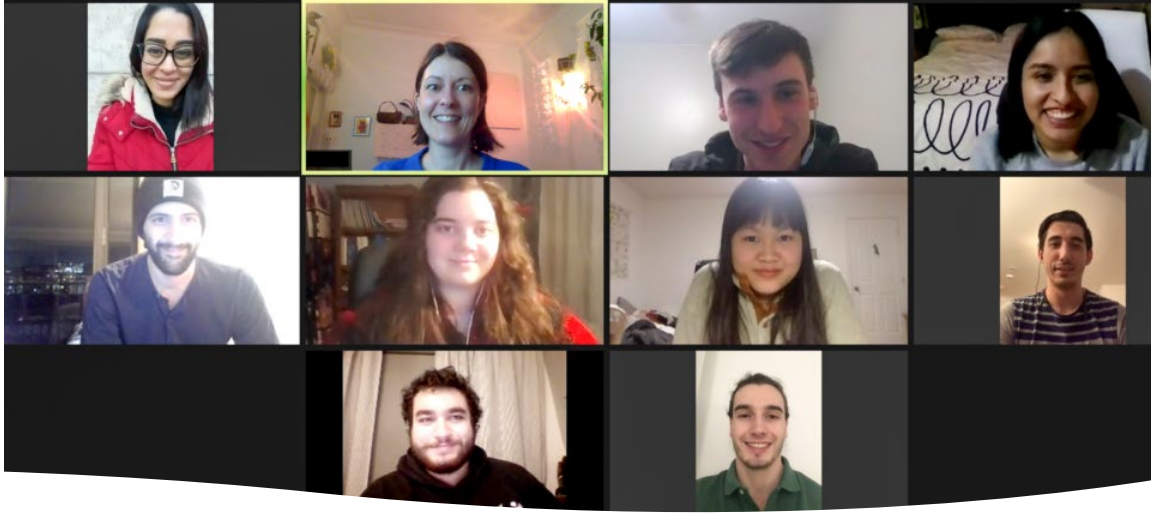
 **Promega UK** supports the **Trussell Trust** as part of their 2020 holiday promotion. The Trussell Trust supports a nationwide network of food banks and provides emergency food and support to people in poverty.

 **Promega Korea and Promega BioSystems Korea** organized a fun and meaningful “Just Keep Swimming Challenge.” Employees were challenged to run three kilometers twelve times, walk 10,000 steps and bike ten kilometers within a four-week period. When employees completed the challenge, a corporate donation was made in their name to **Doctors Without Borders**.

 **Promega Sweden** worked with their distributor in Finland, Labnet, to encourage customers to send in their creations of Gingerbread Houses, a Nordic childhood tradition. For each submission and vote, Promega donated to **cancer research**.

 **Promega Spain** is a part of the **Live Healthy Be Happy** initiative organized by FUNDAL, the local sport council association to impact young students with healthy food habits. Promega Spain shared information about genetically modified organisms for a video FUNDAL produced for schools. The Spain branch also contributed a practical tutorial to extract DNA from strawberries with materials easily found at home.





LEFT: Promega's D.O.O.R.S. program was launched in 2020 to empower and support minority students in pursuing a career in biotechnology.
RIGHT: Members of the iGEM Concordia team checking in virtually.

SUPPORTING SCIENCE AROUND THE WORLD

Promega supports a wide array of scientific endeavors throughout the world including education, research and aiding those working on the leading edge of scientific discovery. As a community of scientists, we understand the capacity of science to change the world for the better.

■ In the summer of 2020, **Promega US** launched the **Diversification of Our Research Scientists (D.O.O.R.S) Scholarship** to recognize and empower underrepresented minority students who demonstrate a strong interest in pursuing a career in a biotechnology related field. The award offers \$5,000 to support tuition and fees required for enrollment or attendance at an educational institution, as well as books, supplies, and equipment required for courses. D.O.O.R.S. awardees also have access to scientific, career-path and technical writing mentorships. Ten students representing nine US colleges and universities are 2020 scholarship recipients.

“With the generous support of Promega, we are able to execute our experiment in the way that best supports good results.”

LANCIA LEFEBVRE,
Team Leader of iGEM Concordia

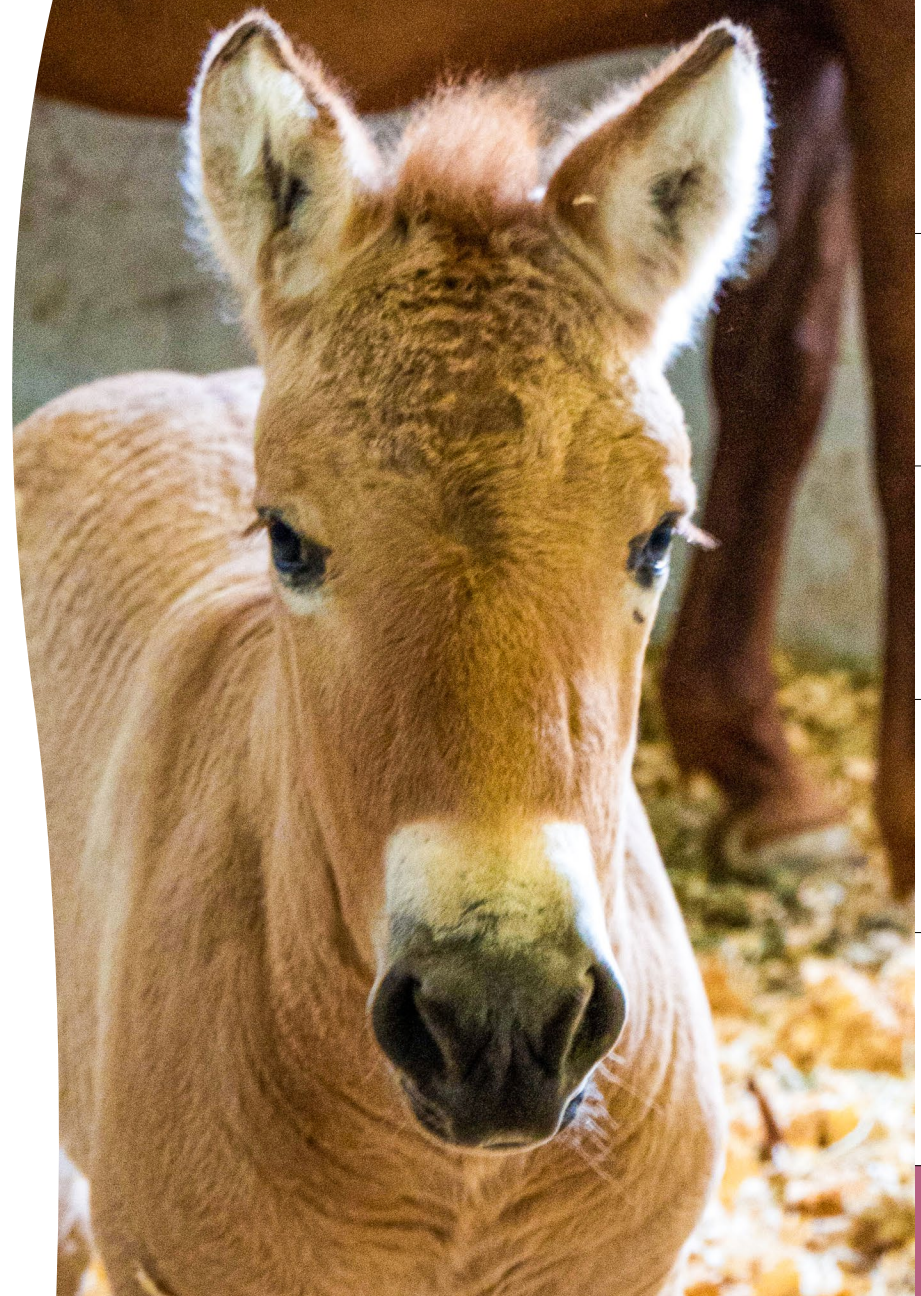
■ Promega supports students participating in the **International Genetically Engineered Machines (iGEM)** competition as a Partner Sponsor of the iGEM Foundation. This annual competition encourages education, collaboration and the advancement of synthetic biology. Multidisciplinary teams of high school 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 provided 10 teams with either \$2,500 in reagent sponsorships or \$2,500 to cover teams' registration for the Giant Jamboree, which was held virtually in 2020. Promega also paired with non-profit partner **My Green Lab** to present a workshop for Virtual Jamboree attendees on how to make laboratories more sustainable. **Promega Germany** sponsored and allowed teams to take over their social media channel for four days during the competition, and branches and distributors in Spain, Japan, Switzerland and Israel sponsored additional teams.

Founded in 1888, the **Marine Biological Laboratory (MBL)**, located in Woods Hole, MA., explores fundamental biology, understanding biodiversity and the environment, and informing the human condition through research and education. 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 providing tools and technologies. Promega scientists also work 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. Learn more at [MBL.edu](https://www.mbl.edu)

The nonprofit **Revive & Restore Catalyst Science Fund** identifies and develops advanced techniques for genetic rescue and brings new tools to conservation work benefiting endangered species and threatened ecosystems. Promega supports the fund with a 3-year pledge of \$1 million annually. Designed to hasten impactful innovations in conservation that enhance biodiversity, the fund supports early-stage, transformative bio-science research and proof-of-concept projects that can be applied to a variety of high-value, high-impact conservation challenges. A key barrier to the adoption of genomic solutions by the conservation community is the lack of success stories. The Catalyst Science Fund aims to support the work that results in these innovative scientific solutions.



ABOVE: The first successfully cloned Przewalski's horse is the culmination of a collaborative effort between San Diego Zoo Global, ViaGen Equine and Revive & Restore. The Revive & Restore Catalyst Science Fund, to which Promega has pledged \$3 million, awards grants to labs that are exploring the use of biotechnology to solve conservation challenges.



LEFT: Dr. Haitao Yang (right) receives the Promega Award for Biochemistry from Promega Beijing General Manager, Tao Cui (left).

RIGHT: Dr. Peng Chang (left) is recognized with the Promega Award for Biochemistry.

■ 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.

■ To encourage life science research, **Promega Germany** participated in **LSR Action Day** in 2020. This event is held several times a year throughout Germany to guide and mentor young scientists and doctoral students in the life science sector.




■ The **Promega Award for Biochemistry** recognizes important collaborations in the study of stem cells by innovative researchers in China. **Promega Beijing** grants the award annually in partnership with the Chinese Society of Biochemistry and Molecular Biology (CSBMB). The 2020 winners are Peng Cheng, PhD, a Professor and the Chairman of the Department of Chemical Biology at Peking University, and Haitao Yang, PhD, an Associate Professor and the Deputy Director of the Shanghai Institute for Advanced Immunochemical Studies at Shanghai Tech University.

■ Promega is a sponsor of the annual **Wisconsin Science Festival**, a four-day statewide celebration that connects people of all ages with science, technology, engineering, art, and math. In 2020, an estimated 43,000 people participated in online and physically distanced events in 35 Wisconsin counties.



 **Promega Spain** participated in the **BATX2LAB Initiative**, a collaboration with **Barcelona Science Park** which offers mentorship to upper secondary school students and provides them with an opportunity to conduct their research projects in several PCB laboratories under the tutelage of a researcher. The program included 45 students from 39 schools in 2020.

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

 The **National Young Researchers Prize**, awarded by **Promega France**, recognizes researchers in university programs who are pursuing outstanding research, as nominated and voted on by their peers. The winner receives a trip to the United States to attend the scientific conference of their choice and visit Promega Madison.

COMMITTING TO CORNERSTONE INITIATIVES

Promega values long-term commitment to initiatives that allow us to contribute to meaningful impact over time. Thousands of children and adults have been served by two cornerstone nonprofit organizations established by Promega twenty years ago, demonstrating the unlimited potential of sustained engagement.

■ 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.

The BTC Institute and Dane County School Consortium Biotechnology Youth Apprenticeship Program has helped train young scientists for over twenty years. Many former Youth Apprentices have gone on to further STEM training and careers. In 2020, “A Celebration of Life XXV: To the Moon and Beyond!” was the twenty-fifth offering of the BTC Institute and The African American Ethnic Academy summer science program. Held virtually, 23 students grades 3-9 experimented at home with “Mission Packs” (activity kits) and joined video conferences to engage with NASA guest speakers. This program, supported in part by the Wisconsin Space Grant Consortium, engages a diverse group of students in the fun of science while featuring STEM Professionals of Color. Learn more at BTCL.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. Learn more at: woodshollow.org

PARTNERS

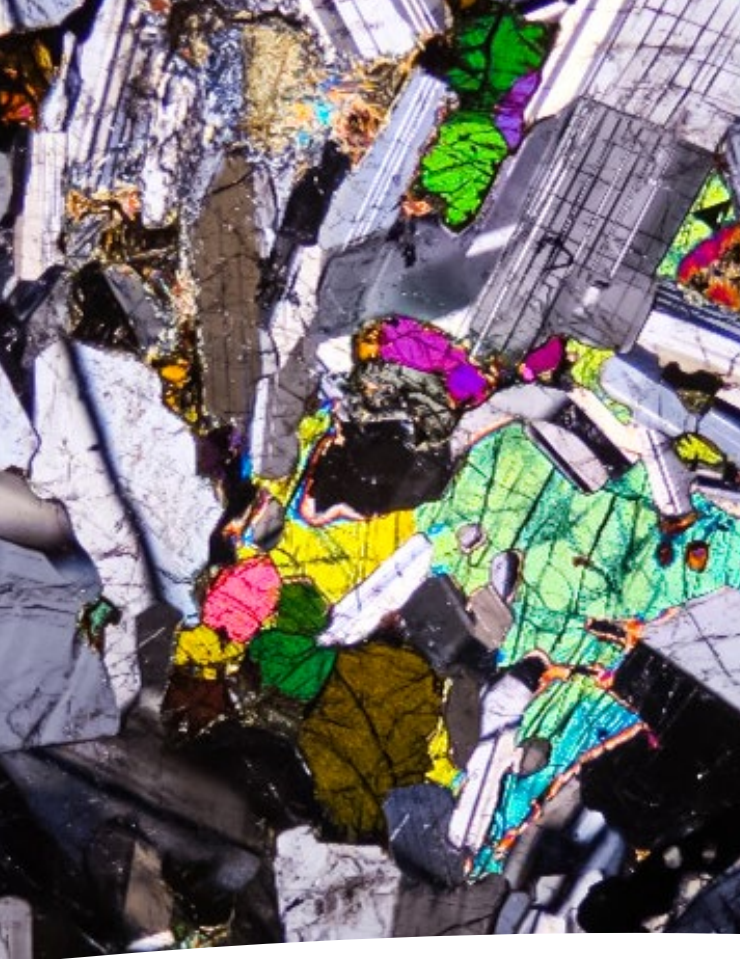


The 2020 Promega Spring Art Showcase featured the artwork of three artist couples.

ENCOURAGING CREATIVITY

Scientists are charged to seek what is unknown and answer questions ultimately designed to improve quality of life. Creativity is central to this process. As such, art – both in observing and creating – reenergizes an imagination that inspires scientific pursuit.

For more than 25 years, Promega has hosted the **Promega Art Showcase** on the Madison, WI campus. The quarterly art shows feature the work of local, national and international painters, photographers, sculptors and artists in many other media. Professionally curated exhibitions are free and open to the public and offer both well-established and up-and-coming artists a venue to showcase 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. Learn more at: promega-artshow.com



The **University of Wisconsin-Madison Cool Science Image Contest** celebrates the art of science. Promega sponsors the contest and provides gallery space for the winning images. Images honored in 2020 capture neural stem cells, eyeball licking geckos and a thin section of troctolite, an igneous rock composed of feldspar and olivine collected near Duluth, MN.

The **Promega Art Contest for Creative Scientists**, sponsored by Promega in partnership with the Hello PhD podcast, supports the convergence of science, education and creativity.

RIGHT: Vince Debes, a Master of Science student in Geological Sciences in the School of Earth and Space Exploration at Arizona State University, won the Promega Art Contest for Creative Scientists with a long-exposure image of the Tetons at night.

LEFT: This thin section of troctolite was photographed to analyze the composition of rock samples to determine their origin and age to further elucidate plate tectonic movement.



Additional Information

We supported customers virtually and in person to comply with safety regulations during the pandemic. Pictured are employees installing a Maxprep™ liquid handler instrument in Lombardia, Italy.

2021 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, 2020 to December 31, 2020. This is the thirteenth 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 and business travel. Reported emissions from distribution were calculated with the conversion factors provided by DEFRA's 2020 Greenhouse Gas Conversion Factors and have incorporated the new methodology for emissions for air freight that include radiative forcing. Lastly, the Environmental Defense Fund's Paper Calculator has been used for calculating the life cycle impacts of our paper usage. Current and previous years' carbon footprints have been calculated using the most updated 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 2020 we had no incidents or issues in the following areas:

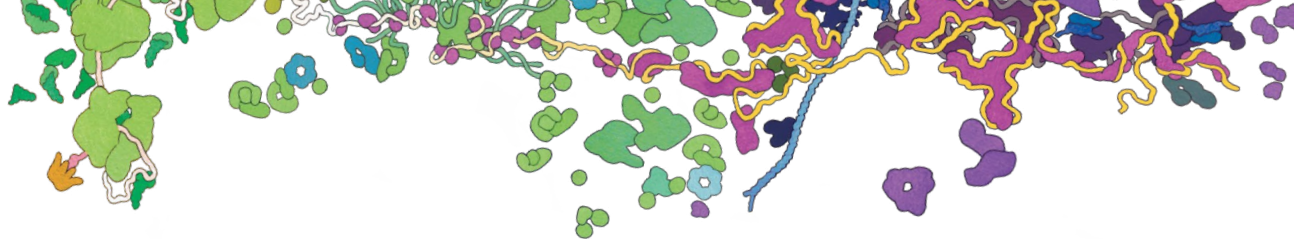
- Environmental fines or sanctions (G4-EN29)
- Incidents of discrimination and action taken (G4-HR3)
- Incidents of violations involving rights of indigenous people and actions taken (G4-HR 8)
- Legal actions for anti-competitive behavior, anti-trust, and monopoly practices (G4-SO 7)
- Fines and non-monetary sanctions for noncompliance with laws and regulations (G4-SO 8)

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



Key Indicators

Economic	2008	2015	2016	2017	2018	2019	2020
Number of Employees	958	1,381	1,440	1,483	1,601	1,696	1,827
Building Footprint (Square Meters)	66,991	101,722	104,601	107,241	107,941	110,685	112,852
Number of Global Locations	16	19	19	19	19	19	19
Percent of Revenue Invested in R&D	10%	12%	10%	11%	11%	12%	7%
Environmental							
Greenhouse Gas Emissions (Tons of CO ₂)	22,397	37,021	38,983	39,154	42,291	42,010	44,538
Emissions Per Million in Revenue (Tons of CO ₂ /Million Dollars)	111.1	106	106	99	99	92	59
Emissions Per Building Footprint (Tons of CO ₂ /Thousand Sq. Meters)	334.3	364	373	365	392	380	395
Energy Consumption							
Electricity (kWh)	16,880,814	27,772,864	29,915,213	29,263,972	31,352,221	30,827,243	31,569,224
Natural Gas (Therms)	683,201	1,200,449	1,246,266	1,313,131	1,408,187	1,376,992	1,461,006
Water Consumption (Liters)	53,909,442	119,265,434	122,648,487	121,627,418	121,472,799	113,552,272	124,286,599
Solid Non-Hazardous Waste (Cubic Meters)	7,884	10,622	11,912	13,947	15,751	15,659	20,307
Incinerated (Cubic Meters)	249	214	163	162	174	133	115
Land Filled (Cubic Meters)	3,973	5,297	5,752	5,854	6,528	6,331	6,666
Recycled (Cubic Meters)	3,661	5,111	5,996	7,932	9,049	9,195	13,527
Chemical Waste (Kilograms)	65,950	83,949	92,444	104,104	94,099	117,127	157,805
Infectious Waste (Kilograms)	4,226	7,475	9,527	10,446	11,681	12,241	11,018



GRI Index

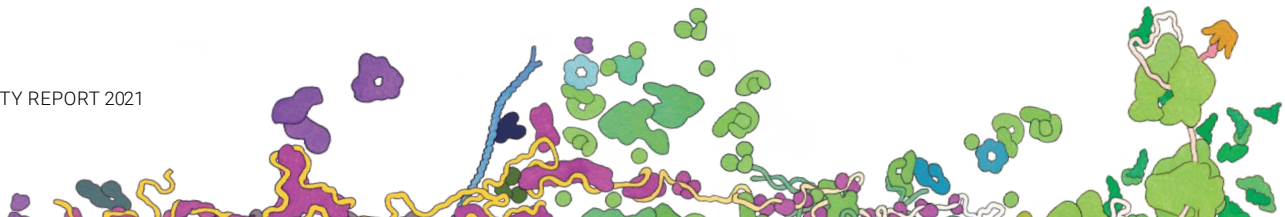
We are committed to transparent reporting on our environmental, social and economic performance. This report uses Standard Disclosures the Global Reporting Initiative (GRI) Sustainability Reporting G4 Guidelines. The following table has been developed to help users locate specific information in the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

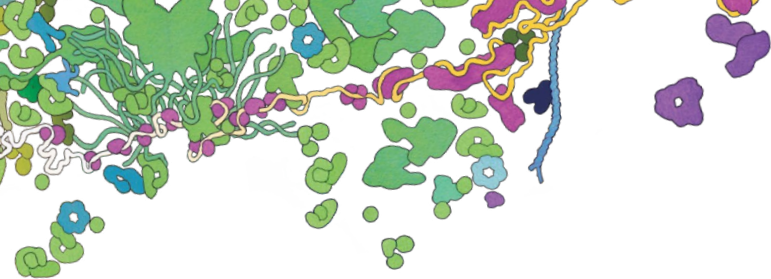
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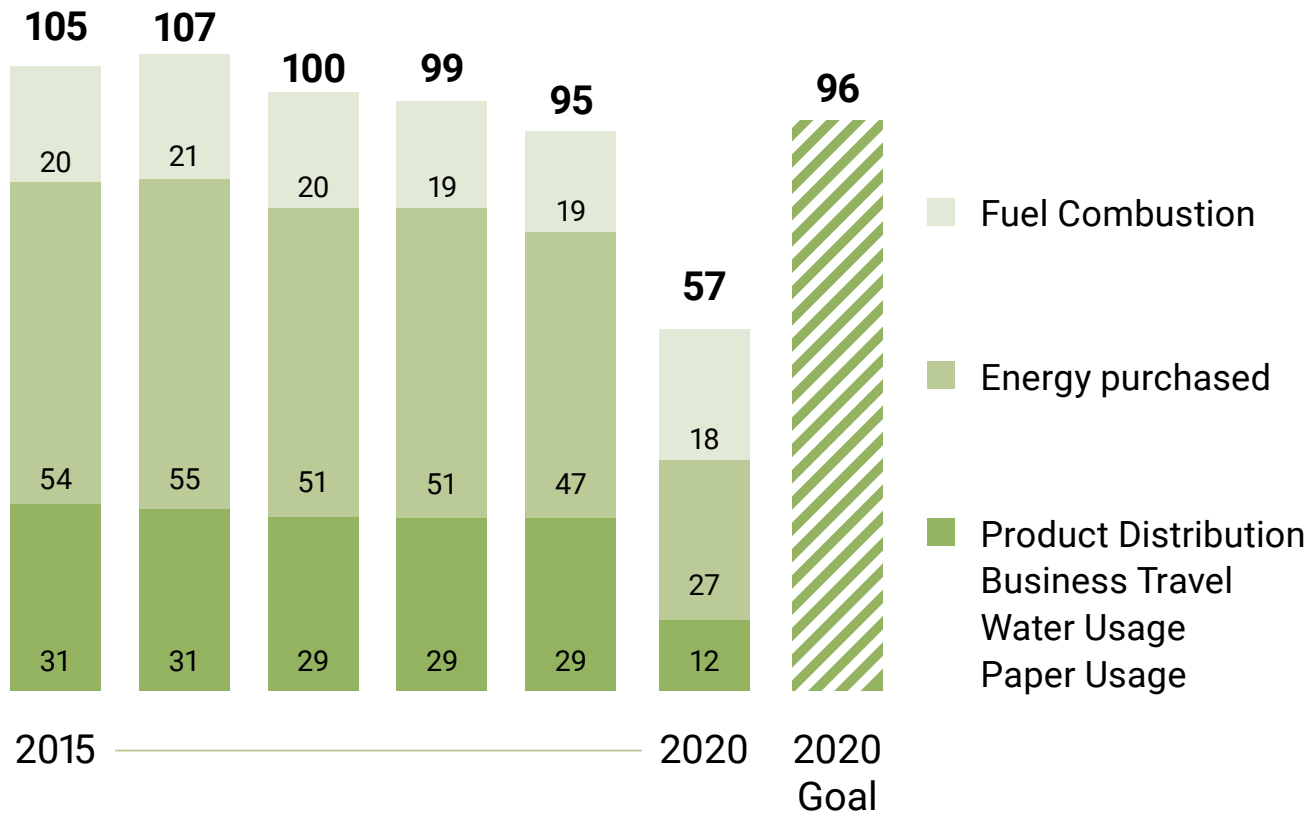
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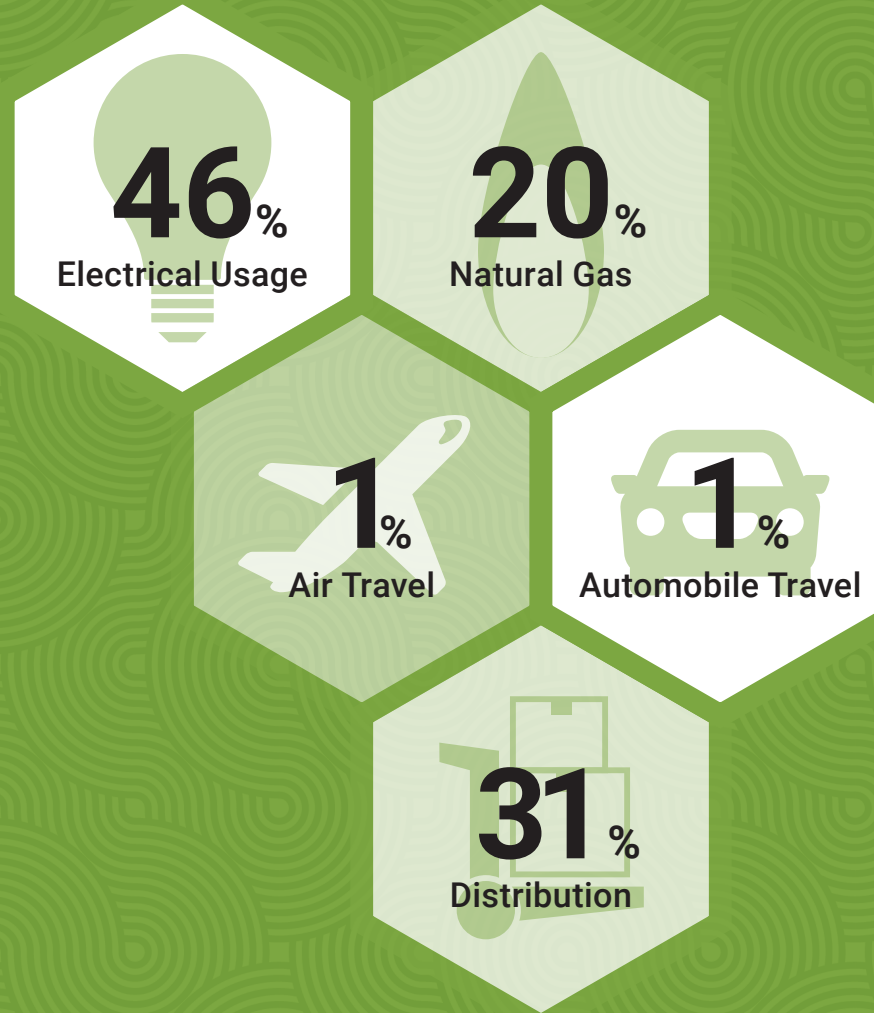
Carbon Footprint

Tons of CO₂ Per Million USD



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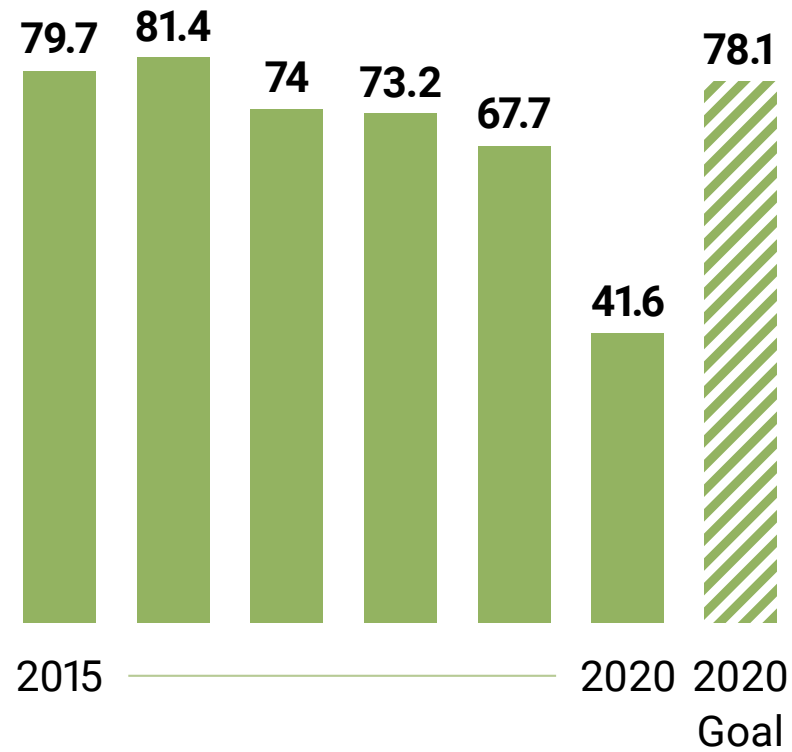
Global Carbon Footprint Composition





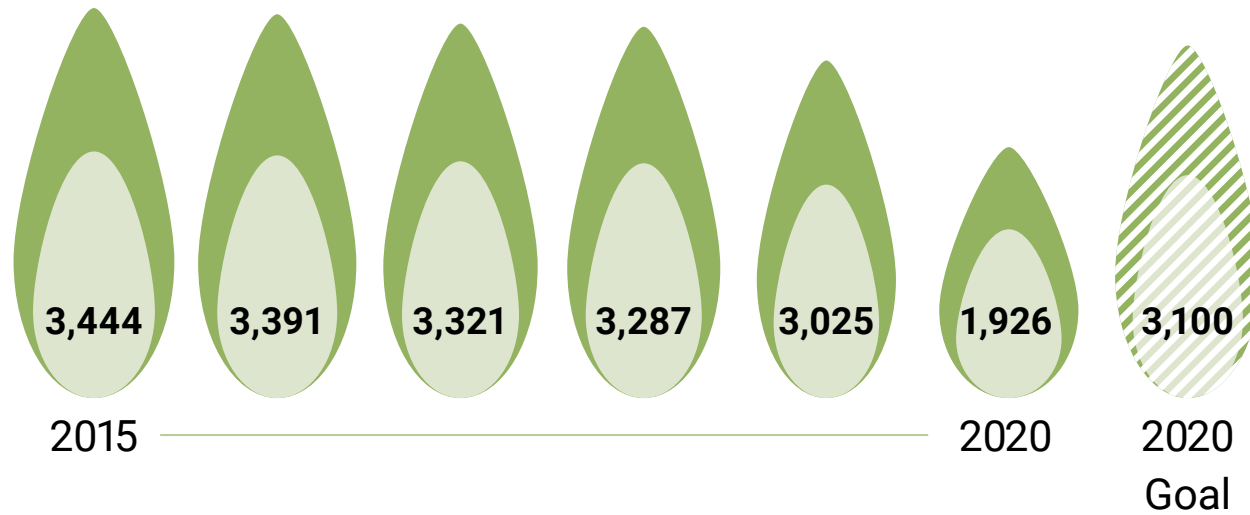
Electricity

Thousands of kWh Per Million USD



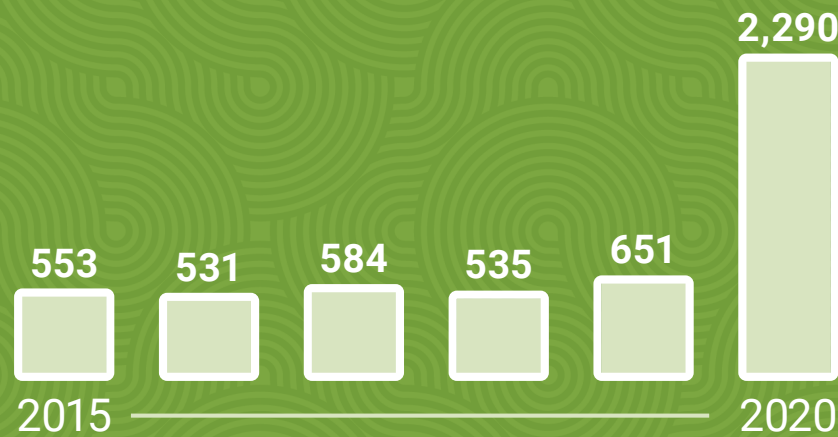
Natural Gas

Therms Per Million USD



Renewable Energy Usage

Thousands of kWh Per Million USD

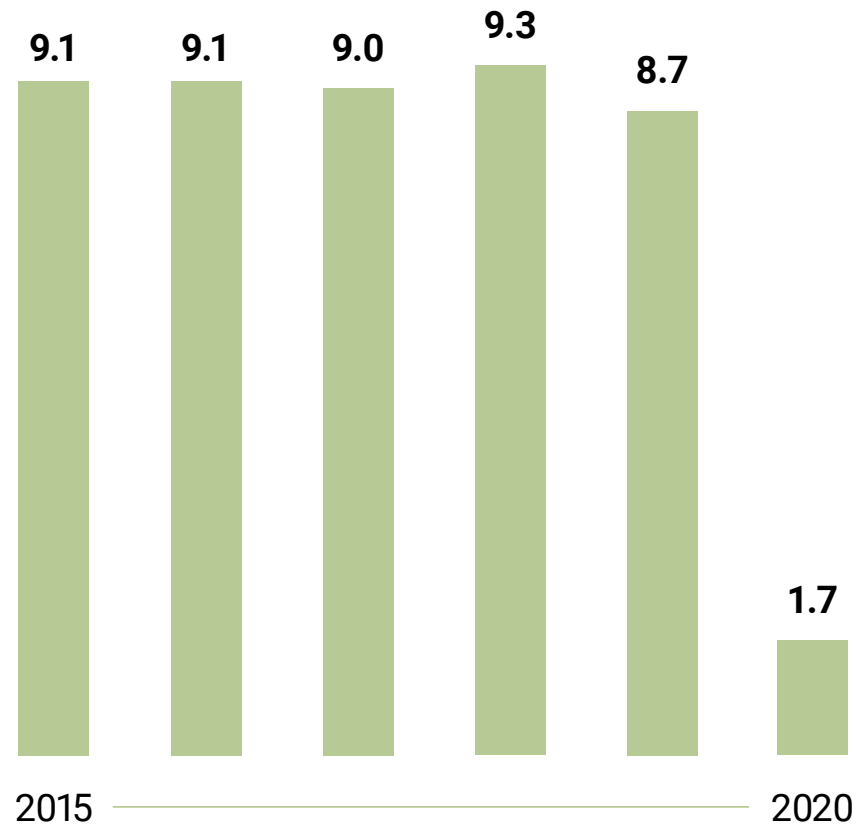


Solar arrays added on Feynman Parking Garage, Feynman Center, and Kornberg Center will generate over 2 million kWh annually and avoid over 1,400 tons of carbon dioxide.



Business Travel Carbon Footprint

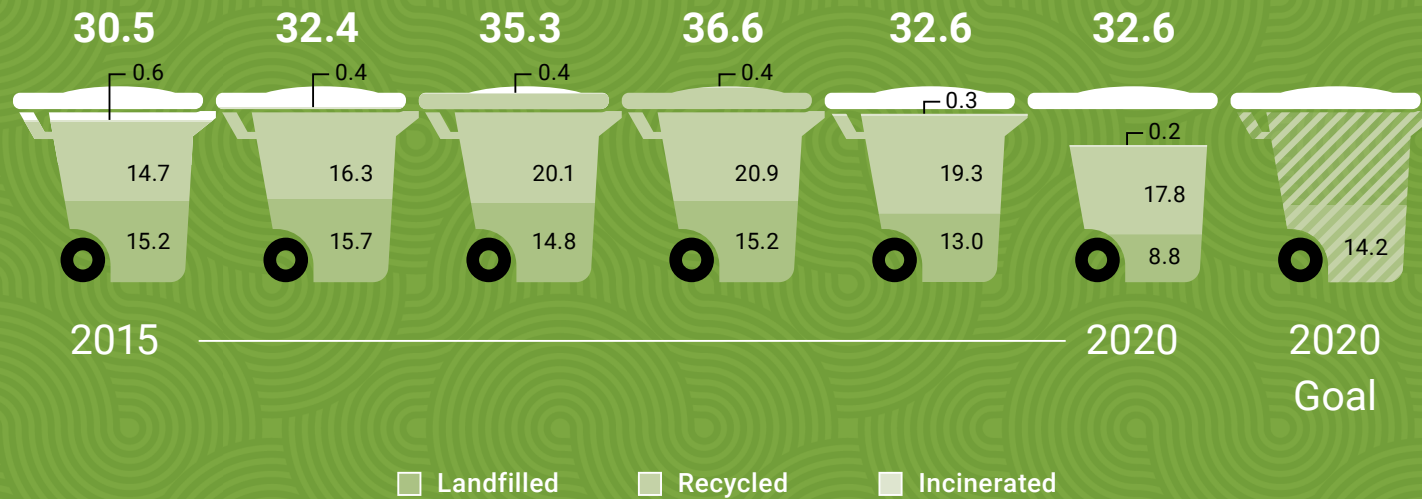
Tons of CO₂ Per Million USD



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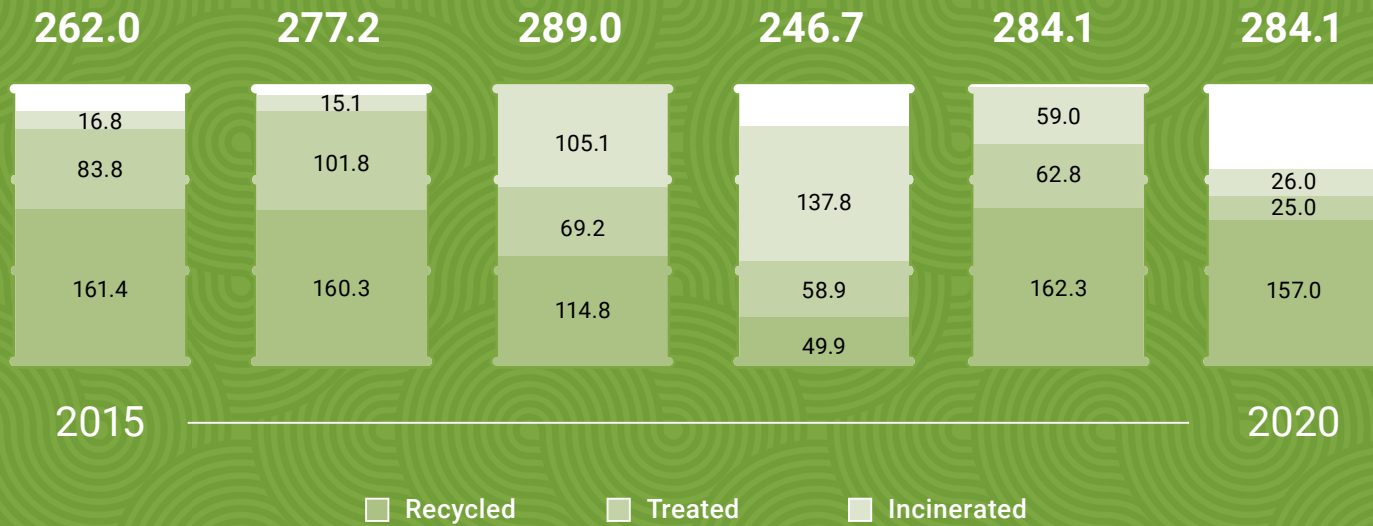
Non-Hazardous Waste

Cubic Meters Per Million USD



Hazardous Waste

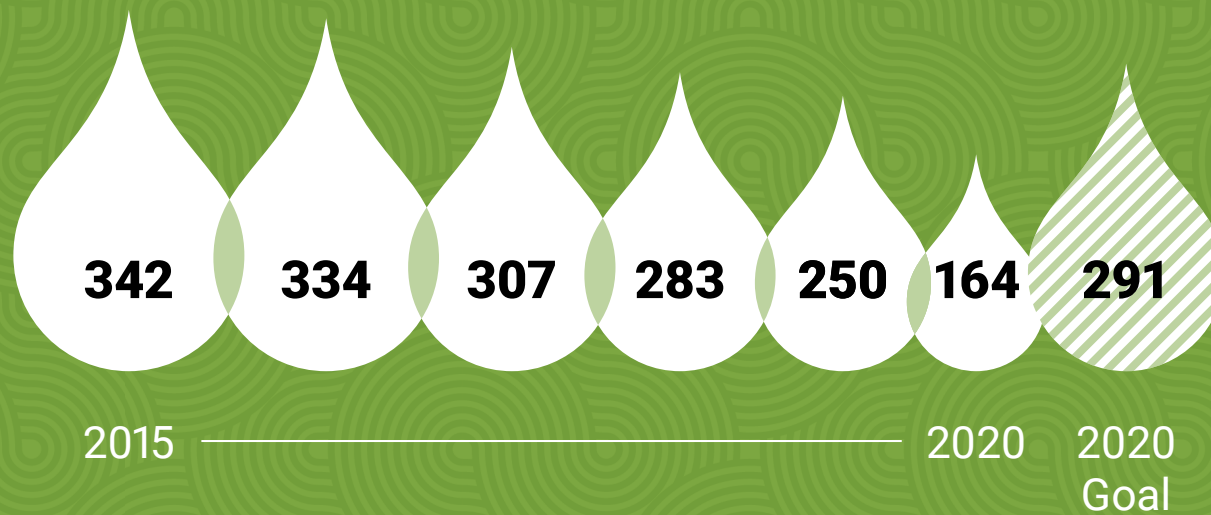
Kilograms Per Million USD



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Water Usage

Thousands of Liters Per Million USD





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