§sas

2018
CSR
corporate social responsibility

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LETTER FROM THE CEO

Caring for our people, our communities and our planet is simply the right thing to do. Our commitment to social responsibility continues to evolve and expand as we witness the power of connecting analytics and advocacy. For decades, we've developed software not only for commercial applications, but also aimed at addressing economic, social and environmental issues.

Our dedication to corporate social responsibility and innovation runs deep. In this year's report, you'll find examples of how we are helping to ensure quality education for students worldwide, improve human well-being, and promote climate action – a testament to our support of the United Nations' Sustainable Development Goals. These are part of our continued efforts as an education advocate, a sustainability innovator and a champion for work/life integration.

Among SAS' many social innovation initiatives, our greatest philanthropic focus is education. Our global education programs promote learning and literacy for all, foster STEM skills and build diversity in the workforce pipeline. SAS is deeply rooted in academia since the company began as a university project in 1967, and we believe we have a significant role to play in helping a new generation gain skills to quickly adapt to rapidly changing technology.

Reinforcing our use of analytics to make a difference in the world underpins our long-running Data for Good effort and includes SAS' free GatherIQ™ app, which became the official analytics partner for Global GoalsCast in 2018. With GatherIQ, everyone from students to social advocates can learn about the United Nations' 17 Global Goals and take action to make the world a better place.

Beyond being a good corporate citizen, our dedication to serving the greater good is driven by a commitment to our employees. An award-winning workplace culture helps our employees balance their careers and personal lives. This keeps our creative workforce motivated and loyal, which in turn helps our customers stay happy.

Our global workforce of 14,000 strong is built on the belief that diversity is a creative asset. In 2018, we continued to expand our inclusion and diversity initiatives across all perspectives, backgrounds and cultures. And this diversity of thought inspires some of the world's most innovative software.

We believe in practicing what you preach, so our use of analytics to help drive sustainability is not just for our customers, but also evident at our own headquarters and global offices. From energy conservation and solar projects connected by our smart campus technology to green buildings, waste reduction and recycling, we continue to foster a sustainable workplace while reducing our environmental footprint.

We're furthering those efforts with a commitment to reduce our global greenhouse emissions by 25%, improve energy efficiency by 40% and emissions efficiency by 50% at every building on campus by 2025.

We're applying our time, technology and expertise toward a social purpose to help better the future. I hope you enjoy reading about the results of these efforts in this year's Corporate Social Responsibility report.

Jim Goodnight
CEO of SAS

Snapshot of SAS Impact

Education & Philanthropy

- For preschool-12, SAS invests approximately $5 million annually to offer free digital tools, resources and apps through Curriculum Pathways.®

- In 2018, nearly 4.5 million teachers and students used the free digital resources for preschool-12.

- In 2018, SAS volunteers conducted Hours of Code that introduced more than 2,000 students to careers in STEM during national Computer Science Education Week.

- Downloads and registrations of the no-cost offerings of SAS® University Edition and SAS OnDemand for Academics grew more than 30% in 2018 to approximately 1.7 million. Also, more than 300,000 people registered for free e-learning courses in statistics and programming.

- SAS trained more than 3,700 professors and students in the use and instruction of analytics in 2018.

- SAS donated more than $95 million in total to nonprofits across the globe in 2018, including $79 million of in-kind training, software, hardware, services, volunteer time, and surplus equipment and furniture.
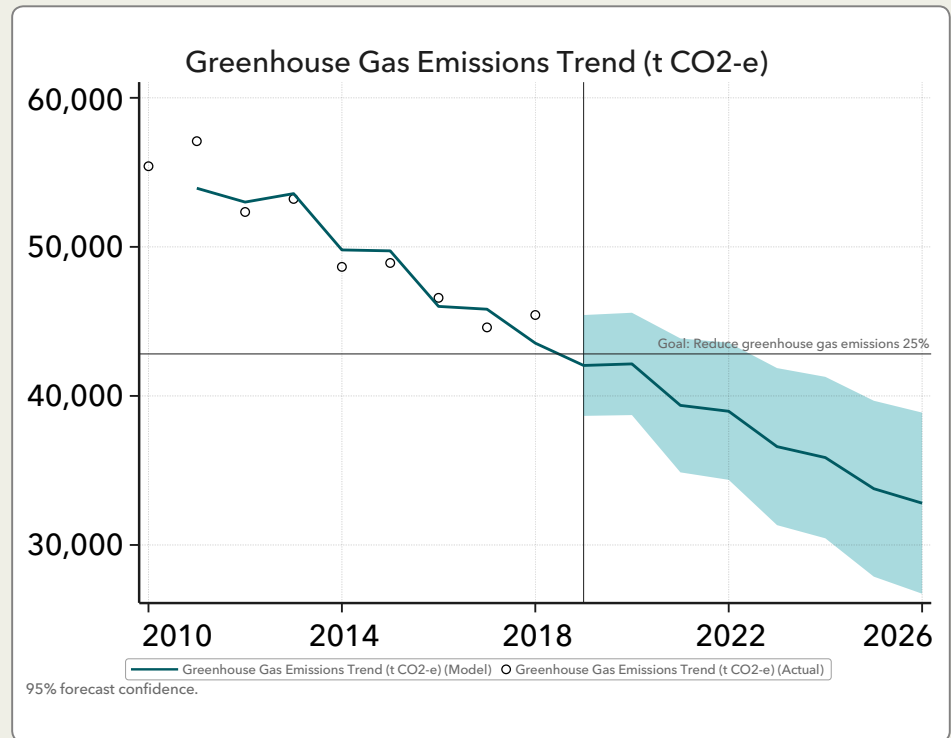

Data for Good

- With GatherIQ, SAS is bringing global issues into the classroom. The free app details 17 Global Goals set by the United Nations for a better world and can inspire the next generation of changemakers to help solve sustainability issues.

- Helped analyze prescription data through opioid "toolkit" to empower organizations to identify people at risk of overdose.

- Provided 90,000 service members, veterans and family members with a smoother transition.

- Protected people at risk of suicide through prevention strategies.

- Enhanced conservation methods with artificial intelligence to protect endangered species.

- Improved care and informed better health policy for cancer patients.

- Proactively treated or even prevented infections in premature babies.

Environment

- At the end of 2018, SAS emissions are 20.4% lower than its 2011 baseline year.

- Energy use intensity for office buildings decreased 2.3% to 15.3 kWh per square foot.

- Energy consumption in SAS data centers decreased 1.5% despite a 27% increase in servers.

- Diverted 55.3% of operational and construction waste from landfills globally.

- Reduced paper use per employee from 954 sheets to 635 – a 33% decrease from 2017 and almost a 76% reduction since 2009.

- Generated 3.8 million kWh of clean, renewably sourced energy from rooftop and ground-mounted solar systems.

Greenhouse Gas Emissions Trend (t CO2-e)

Goal: Reduce greenhouse gas emissions 25%

95% forecast confidence.

Greenhouse Gas Emissions Trend (t CO2-e) (Model)   O Greenhouse Gas Emissions Trend (t CO2-e) (Actual)

Graph created by SAS® Visual Analytics

Employees and Culture

- Commitment to diversity and inclusion through CEO Action for Diversity and Inclusion pledge, Employee Inclusion Groups, diversity and inclusion programs and partnerships.

- In the US, the average SAS employee tenure is 12.6 years, compared to an industry average of 4.2 years.

- At the end of 2018, SAS had 14,166 employees worldwide and hired 1,431 employees during the year.

- Approximately 96% of employees participated in professional training, totaling 183,500 hours.

DOWNLOAD SECTION
01 EDUCATION & PHILANTHROPY

Meeting the challenges of tomorrow

The rise of new technologies demands a new generation of skills. SAS supports education at all levels to shrink the analytics skills gap and prepare more students for college, work and success in the analytics economy.

SAS has deep roots in academia. Its founders were part of a consortium of eight universities to analyze vast amounts of agricultural data. These bold minds were pioneers in using data for the greater good. Decades later, education is still its primary philanthropic focus. From preschoolers to graduate students, SAS supports countless educational programs to raise the collective intelligence and advance the UN Sustainable Development Goal of ensuring quality education for students worldwide.

As an essential part of its commitment to education and philanthropy, SAS contributes to charitable initiatives in the U.S. and abroad. While some programs aim to help students reach their full potential as future leaders and innovators, others support underprivileged families with food, clothing and money. By driving efforts to improve education and society, SAS embraces its role in the greater global community.

Preschool - 12 Education

"Providing kids from lower-income families with a good education is a path out of poverty."
Jim Goodnight, SAS CEO

It should come as no surprise that teaching children to read at an early age sets them up for greater success in school. In fact, students who can't read proficiently by the end of third grade are four times more likely to leave school before graduating.

Early reading is critical for all future learning, including studies in high-demand STEM fields. In its effort to increase access to skills in the critical areas of STEM, SAS offers several products and services at no cost to schools. For preschool-12, SAS invests approximately $5 million annually to offer free digital tools, resources and apps through Curriculum Pathways.® In 2018, nearly 4.5 million teachers and students used these free digital resources.

Global and National Efforts

Curriculum Pathways® and Mobile Learning Apps

Curriculum Pathways from SAS provides interactive, standards-based resources in the core disciplines for middle and high school students in traditional, virtual or home learning environments. From preschool children to lifelong learners, Curriculum Pathways mobile learning apps engage students of all ages.

Support for STEM Careers

SAS STEM Career Day, in conjunction with Hour of Code, STEM Career Showcase for Students with Disabilities, and Computer Science Education Week, saw SAS volunteers venturing into classrooms to generate enthusiasm about careers in STEM. Employees engaged students with real-world examples, shared insights from their own careers and emphasized how school prepared them for success. In 2018, SAS volunteers conducting Hours of Code introduced more than 2,000 students to this national effort. SAS also supports other organizations devoted to improving the quality of education, including the Institute for Emerging Issues, BEST NC, NC Public School Forum, Business Roundtable and other nonprofit organizations.

SAS® Programming for High School

SAS provides five days of training, all instructional materials, assessments and teaching guides necessary to teach SAS programming to high school students. Students will leave this course with skills that allow them to sit for the SAS Certification exam, a globally recognized certification. These resources are available to educators at no cost.

Global Education Initiatives

Employees at offices around the world participated in several preschool-12 projects that supported education initiatives. Here are a few examples:

• In Belgium, SAS employees made donations toward a new fully equipped IT skills center in Nepal that teaches underprivileged children. They also supported projects that provided children with the opportunity to program robots through coding, and offered programming and robotics lessons at a local school.

• In India, the office worked with a local school to purchase school transportation, update and build new classrooms, establish a computer lab and enhance the school grounds. In addition to sponsoring several students, employees also participate in a variety of events for the school such as donation drives, birthday celebrations for the children and volunteer opportunities.

• SAS has tapped into its global employee population to help kids around the world learn the fundamentals of computer programming. SAS offices in 21 countries and five US states have received CodeSnaps kits so that employees can conduct coding lessons with local schools and nonprofits. CodeSnaps is a free Curriculum Pathways app that teaches coding basics by enticing students to actively work together to control Sphero, an app-enabled robotic ball that students command using code and an iPad.®

Local Efforts

STEM Career Showcase for Students With Disabilities

SAS partnered with the North Carolina Museum of Natural Sciences to create an annual event where students with disabilities in grades six through 12 interact with college students and professionals with a variety of disabilities who have forged successful career paths in STEM fields. Students network with role models who are pushing the boundaries of knowledge, building innovative products and creating the technologies of the future. The 2018 event was attended by 320 students and chaperones in person and viewed nearly 900 times online.

Triangle High Five Math Collaborative

This collaborative effort has helped mathematics teachers identify and engage in highly effective instructional practices and address disparities in math achievement related to race and income. Schools in the Triangle High Five partnership, which includes five public school districts, are striving to prepare more students to be successful in math and achieve their highest potential. From 2010 to 2017, nearly 800 elementary and middle school teachers each year attended the annual Math Summit at SAS, a two-day professional development event. Although the summit is now being hosted by NC State University, SAS continued to be a sponsor for the 2018 summit.

SAS Education Policy Priorities

To increase third-grade reading proficiency in North Carolina, SAS focused on helping pre-service and in-service educators understand the importance of early reading and math skills, identifying ways for educators to be more effective in their instruction. SAS is participating in an Education Preparation Program Advisory Group, spearheaded by the University of North Carolina System, to work with the system's 15 colleges of education to improve the way in which pre-service teachers are taught to teach reading to young students.

SAS is supporting the Early Learning and Literacy Impact Coalition, facilitated by Deans for Impact. This group of five invited North Carolina colleges of education is exploring ways to strengthen preparation of pre-service early learning teachers for children ages 0-8 to ensure these teachers are ready for the classroom on day one.

SAS has an appointed member on the state entity – the B-3 Interagency Council – charged with developing a comprehensive system for children (from birth through third grade) to ensure they are on the path to grade level reading proficiency. SAS is also advising the council on how to develop a statewide birth-through-third-grade data system, tied to other statewide systems, to capture data relevant to child development and proficiency in both reading and math, providing early indicators for success in school and beyond.

SAS is chairing the Workforce Readiness Committee of the North Carolina Chamber of Commerce, whose priorities for strengthening education in North Carolina are:

- Increasing third-grade reading proficiency, including more access to the state's high-quality NC Pre-K program for four-year-olds, where the foundations for reading proficiency are laid.

- Bringing more career relevance into North Carolina classrooms, such as dual enrollment and early college high schools, to get students more interested in post-secondary education and training, especially in the STEM fields.

As a commission and steering committee member with myFutureNC, SAS seeks to work with business, education and philanthropic leaders across North Carolina to develop a statewide education attainment goal.

Higher Education

Preparing the Next Generation

Big data has created an unprecedented demand for analytics talent that outpaces qualified applicants. To address that skills gap, SAS Academic Programs offers free software, university partnerships and compelling user communities focused on helping students gain new skills and provide more opportunities for their education and career. SAS has helped launch 75 master's and undergraduate degrees and 214 certificate programs in analytics and related disciplines.

Free Software for Higher Education and Adult Learners

Through SAS University Edition and SAS OnDemand for Academics, professors, students, researchers and independent learners have free access to SAS software for teaching and learning valuable analytics skills. Downloads and registrations of SAS University Edition and SAS OnDemand for Academics grew more than 30% in 2018 to approximately 1.7 million. Also, more than 300,000 people registered for free e-learning courses in statistics and programming.

Students and independent learners can jump-start careers and appeal to talent-hungry employers by building analytics expertise. In 2017, SAS launched the global, online SAS Academy for Data Science, which offers colleges and universities free access to academy content to help students earn valuable SAS credentials.

Support to Universities and Community Colleges

The SAS Education division provides training and teaching materials to help professors and instructors incorporate SAS into their teaching. Resources include slides, data sets and printable/editable files of the student manual. These materials are provided free of charge, with copyright permission for professors to use any of the content in their own class notes.

SAS also provides numerous guest lecturers to universities and community colleges – at no cost to the institutions. SAS trained more than 3,700 professors and students in the use and instruction of analytics in 2018.

Analytics Degree Programs

SAS partners with traditional and nontraditional graduate and undergraduate programs around the world to create degree and certificate programs that generate the analytical talent organizations need to make the most of big data. New programs in 2018 include ones at the University of Louisville, State University of New York at New Paltz, Melbourne Polytechnic (Australia), Universite de Reims Champagne-Ardennes (France), and Warsaw School of Economics (Poland).

SAS Student Programs and Scholarships

SAS has many programs that recognize, support and propel students toward a career in analytics or other STEM fields. Through opportunities such as the SAS Student Ambassador Program, the SAS Scholar Award Program, the SAS Analytics Shootout, the SAS Global Forum Student Scholarship Program, the SAS Global Forum Student Symposium and others, students receive valuable assistance, experience, networking and professional exposure. Also, in 2018, Capella University and SAS announced four winners of the Capella Women in Analytics Scholarships program, which was created to encourage more women to enter and rise in the analytics and big data fields.

Global Education Initiatives

Employees at SAS offices around the world participated in numerous projects that supported education initiatives. Here are a few examples:

- In Australia and New Zealand, the offices collaborated with universities such as Melbourne Business School, University of Technology Sydney and James Cook University to develop students as analytics leaders. They also connected students and graduates with STEM skills and SAS certification to customers via the SAS Work Placement Program.

- In Belgium, employees' donations are being used to provide hardware and other materials for a training center in Nepal.

- In Canada, the Academic Program held 25 workshops, education courses, and industry networking opportunities for partner universities and colleges.

- In China, employees volunteered to teach SAS at Peking University and Tsinghua University and hosted an annual nonprofit competition, the SAS China Data Analytics Championship, for Chinese college students majoring in analytics-related specialties to showcase their work. More than 3,600 students from a variety of universities throughout the country participated.

- In India, the office helped fund an app to help the higher education and learning needs of the visually challenged. In addition, employees purchased laptops and sponsored students. Employees also contributed to upgrading education experiences that enabled better learning for women through totally digital classrooms.

- In Italy, the office mentored and hosted learning sessions for students.

- In Russia, the office established a new SAS department at the Higher School of Economy that is free for students to learn how to use models, choose a proper algorithm, and apply analytics to business tasks. They also hosted a group of students at the SAS office and SAS Innovation Center to educate them about analytics.

- In South Korea, three universities joined the global SAS Joint Certificate Program to incorporate SAS training. The office also held its 16th annual SAS Analytics Championship, where hundreds of university students analyzed traffic accident data and developed predictive models to increase traffic safety. Winners had the opportunity to work as a SAS intern.

- In Spain, the office partnered with several universities to offer opportunities to learn SAS software.

Philanthropy

The cornerstone of SAS' philanthropic efforts is education. We believe education can change what's possible by empowering each new generation. SAS supports global education initiatives that promote early learning and literacy for all, foster STEM skills and build diversity in a technology-driven workforce.

As part of our philanthropic efforts, we provide in-kind donations of computer hardware, software, office equipment and other tangible items to nonprofit organizations in the community. We offer free digital tools, resources and apps to students of all ages – and we partner with colleges and universities around the world to prepare more graduates to succeed in analytics and data science careers.

Programs must generate a long-term impact and affect significant numbers of people, without discrimination. Examples include:

- #GivingTuesday, a global day of giving. Since its inception in 2012, the movement has raised over $1 billion in the US alone.

- Communities in Schools, the nation's largest dropout prevention organization.

- Computer Science Education Week, including Hour of Code. This is a national effort that SAS joins by providing volunteers with training, activities and materials to work with students and pique their interest in computer science.

- Deans for Impact, preparing educators to measurably improve student learning.

- DonorsChoose.org, a national nonprofit that connects donors with classrooms in need. Each year, SAS matches employee contributions to the cause. In 2018, our total impact was more than $122,400, which funded 535 classroom projects and benefitted 18,725 students in 42 states.

- EDGE 5 Raleigh Chamber of Commerce, spearheading economic development and growth for Raleigh, Wake County and the local community.

- Leadership NC, supporting improvements in government, education, health and human services, economic development and the environment.

- Mapping the Nation, an online resource that reveals the importance of a globally competent workforce and citizenry.

- NC State College of Education Math Summit, promoting equity and excellence in math education and providing teachers with an opportunity to network, develop leadership skills and share ideas.

- North Carolina K-12 State Chess Championships, which encourages young people to take up chess, a known gateway to STEM careers

- North Carolina Science Festival, a statewide showcase of science activities.

- Student U, empowering students in the Durham Public Schools to succeed in college and beyond.

- University of North Carolina Data Dashboard, an interactive online database built by SAS that gives students, parents, policymakers and taxpayers expanded access to detailed UNC system data to track system performance.

- University of North Carolina Educator Quality Dashboard, an interactive online tool built with SAS data visualization software that enables citizens to analyze and display data on the UNC system's efforts to prepare more and higher-quality teachers and school leaders for the state's public schools.

- YMCA of the Triangle, strengthening our communities through nurturing youth development, improving health and well-being and fostering a sense of social responsibility.

2018 Data

As shown below, SAS donated more than $95 million in total to nonprofits across the globe in 2018, including $79 million of in-kind training, software, hardware, services, volunteer time, and surplus equipment and furniture.

2018 Donations	Type	Global Total
Cash donations	Worldwide cash	$1,195,147
In-kind donations	Software, hardware and services	$14,690,148
	Additional JMP® software donated	$9,403
	Value of in-kind global training for students and educators	$79,516,448
	Surplus equipment/furniture/hardware	$164,920
Total		$95,576,066

Community Engagement

As an integral part of SAS culture, the company encourages employees to donate their talent, time and/or finances to projects supporting education, the environment and social welfare. Offices across the globe manage programs tailored to fit the needs of their communities and the interests of SAS employees.

To foster a culture of volunteerism at SAS, the company provides regular full-time and part-time employees with paid hours to volunteer with the organization(s) of their choice. SAS also manages the Employee Volunteer Fund a program that contributes cash to education-based nonprofit organizations after an employee has provided at least 50 hours of volunteer support in a 12-month period. In 2018, employees in the US volunteered more than 26,000 hours, resulting in almost $93,000 paid to schools across the country.

2018 Data

On #GivingTuesday, SAS employees in every corner of the globe rallied to help the less fortunate in their communities. In addition to SAS world headquarters, offices in a record-breaking 25 countries and 13 US regional offices embraced giving efforts that not only helped those in need but brought employees together for a common good. At SAS world headquarters, employees participated in the below activities:

- Collected 3,065 children's books to donate to four NC childhood literacy organizations.

- Donated 160 units of blood at the American Red Cross blood drive.

- Provided clothes and toys for 425 Salvation Army Angels.

- Raised over $40,000 in one day for DonorsChoose.org classroom projects. The total impact for the year was more than $122,400.

SAS Calgary employees raised $2,640 to purchase gifts for the Adopt-a-Family organization and held a gift-wrapping pizza party.

In China, employees donated 586 items of winter clothes, two computers and 12,000 yuan to poor children and families in the remote mountain areas of Yunnan Province.

In India, employees held a charity fair that raised $1,200 for special needs children.

In addition to hosting a blood drive, SAS France employees collected children's books, toys, professional clothing and monetary donations for those in need.

In the Netherlands, employees collected almost 1,000 books to donate.

Community Board Membership

SAS staff members carry the company's corporate responsibility values outside the office by serving on the boards of community organizations that support education, disaster relief, the arts, science innovation, environmental conservation and other issues important to employees.

2018 Data

SAS executives served on numerous boards, including the following:

- Business Council
- Business Roundtable
- BEST-NC (Business for Educational Success and Transformation in North Carolina)
- Cary Academy Board of Directors
- CEO Roundtable on Cancer
- CSC Strategic Advisory Board at North Carolina State University – Board Emeritus
- Dix Conservancy
- Friday Institute for Educational Innovation (North Carolina State University)
- Inter-Faith Food Shuttle
- Lipscomb University Computing and Technology Board
- Meredith College Board of Trustees
- My Future NC

- North Carolina State University Industrial and Systems Engineering Advisory Board
- North Carolina State University School of Business HR Advisory Board
- North Carolina Museum of Art
- North Carolina Museum of Natural Sciences – Friends
- North Carolina Science Festival
- North Carolina State University Board of Trustees
- Oklahoma State University Corporate Advisory Board
- Smithsonian National Museum of Natural History, Advisory Board
- WildTrack
- World Wildlife Fund US
- YMCA of the Triangle
- Youth Thrive

Photo credit: Kara Welter Photography

02
Data
for Good

Analytics helping humanity

There is widespread evidence that big data analytics helps achieve short- and long-term development goals around the world. As the global leader in analytics, SAS jumps at the opportunity to apply its cutting-edge technology and expertise to help solve some of society's biggest problems such as poverty, disease, hunger and illiteracy.

SAS has always been an organization motivated by challenges to use its technology to build a better world. As the UN Sustainable Development Goals work to reduce inequalities and ensure healthy living, SAS seeks out opportunities where it can help create a brighter future for all. One of the ways that SAS supports this goal is through the Data for Good movement, which encourages using data in meaningful ways to solve humanitarian issues around poverty, health, human rights, education and the environment. From preventing life-threatening illnesses to protecting endangered species to rebuilding after natural disasters, organizations across the globe are harnessing data to make a difference. Applying data for social good has led to new and creative ways to address global issues.

GatherIQ™

With GatherIQ, SAS is bringing global issues into the classroom. The free app details 17 global Sustainable Development Goals set by the United Nations for a better world, and shows what organizations are doing to address them. Educators and parents can download the app to help students learn more about the goals, unlock donations for nonprofits working toward the goals and explore global issues through interactive data visualizations, quizzes and other multimedia activities.

"ZOE Empowers equips orphans with tools and training to overcome life-threatening poverty. When ZOE needed to showcase the effectiveness of its solutions, SAS helped to develop and conduct a systematic program analysis. We also promote our work and methodology through GatherIQ to bring awareness to the issues of and solutions to extreme poverty. Now, ZOE can show specific outcomes in each intervention area that can be used to improve the program and demonstrate measurable results with partners."

Gaston Warner
Chief Executive Officer
ZOE Empowers

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Preventing substance use disorder and overprescribing

To combat the ongoing opioid epidemic, the US Department of Health and Human Services (DHHS) published a toolkit for using prescription drug claims data to analyze patients' opioid levels and identify those at risk of opioid misuse or overdose. The methodologies used to identify over-prescribers when applied to Medicare Part D data include the SAS® software code used by the DHHS Office of the Inspector General (OIG) in its extensive work on opioids.

Using SAS code, OIG found about 71,000 Medicare beneficiaries at serious risk of opioid misuse or overdose. The toolkit provides guidance on conducting data quality control checks, investigating patients with specific conditions and pinpointing at-risk patients. The code may be modified to fit the needs of different users and applied to state Medicaid data or a variety of other sources.

"We can't effectively fight the opioid problem if we don't understand it. Data and analytics are critical to getting citizens the help they need, and thwarting the illegal trafficking of these drugs."

Dr. R. Kirk Jonas | *Director*
**National Governors Association
Center for Best Practices**

Providing a smooth transition for military veterans

Each year, hundreds of thousands of service members transition back into civilian life. For many, this is a time of uncertainty around establishing a new career and securing needed resources and support for a successful transition. Launched in 2011 at Syracuse University, the Institute for Veterans and Military Families (IVMF) is committed to advancing the lives of these veterans and their families. The institute uses SAS Analytics to drive programs and operations, enabling greater insights into impact on those it serves. With a central analytics and data management platform, the IVMF can generate and distribute insights more quickly across the organization and to stakeholders and partners. This has allowed the staff to focus on more strategic best practices for their data management and reporting efforts, helping to drive decision making with strong measurement and evaluation.

"One of the obligations we have when they take off that uniform should be to knock down as many barriers as possible. Everything we do at the IVMF is about knocking down those barriers, and SAS is key to this mission."

Dr. Mike Haynie | *Executive Director* | **IVMF**

Shifting perception of suicide through advanced analytics and artificial intelligence

Suicide is the leading cause of death for Australians aged 15-44 years. Determined to understand and slow this horrific trend, the Black Dog Institute introduced LifeSpan, a new approach to suicide prevention. Black Dog's research found that previous approaches to suicide prevention were fragmented and often not based on solid evidence. This came as LifeSpan itself was grappling with disparate data sets from emergency services, health services, universities and government agencies. SAS helped Black Dog Institute implement an analytics framework for evaluating the success of its suicide prevention initiative. By applying analytics, LifeSpan now has unprecedented data quality and the ability to measure the program's impact across trial sites. As the program matures, text analytics and data mining will be applied to 1,000 new media articles a month, enabling LifeSpan to measure the evolution of media coverage on suicide, and track whether its efforts have shifted the perceptions of suicide across trial sites.
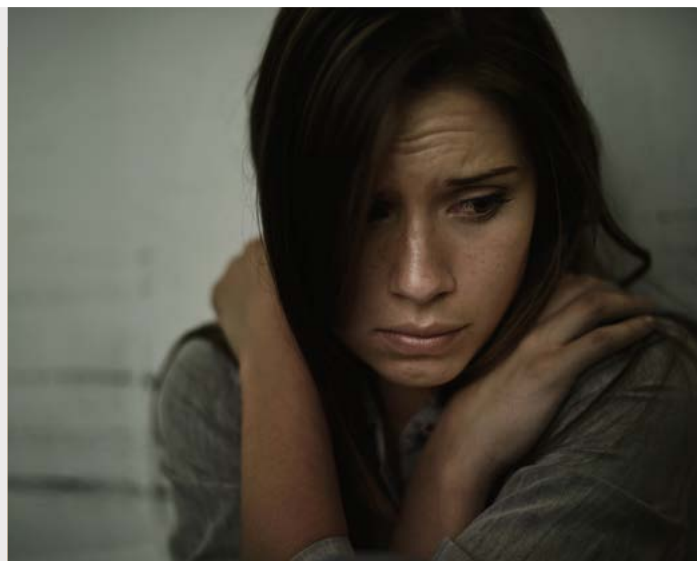

"Right now, we have the best-quality suicide data available in Australia, ever. It hasn't been available at this level of detail before. Until now, we haven't had the knowledge of where suicide incidents are occurring, when they are occurring or how, to the level of precision and accuracy that we do now."

Helen Christensen | *Director and Chief Scientist*
Black Dog Institute

Using artificial intelligence to help protect endangered species

WildTrack identifies and monitors endangered species by analyzing animal footprints. Working with SAS software and employees, WildTrack is exploring how artificial intelligence and crowd-sourced footprint data from all over the world could help find answers to global conservation questions. This machine learning process also helps to further improve and enhance SAS software that can be used for other conservation efforts.
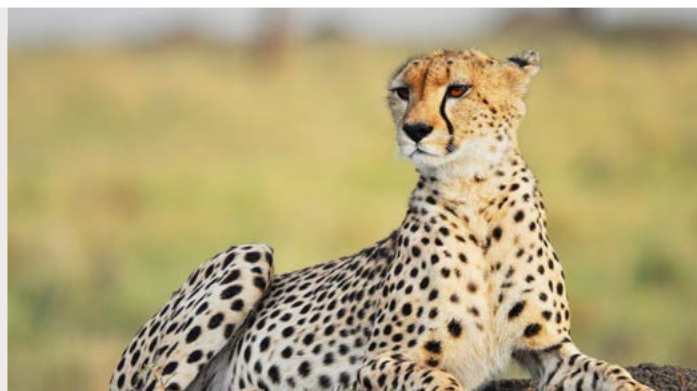
"Our challenge is how to harness artificial intelligence to create an environment where there's room for us, and all species in this world."

Sky Alibhai | *Director and Co-Founder* | **WildTrack**

Removing roadblocks for cancer patients with analytics

Founded in 2008, the Latin American Cooperative Oncology Group (LACOG) is a nonprofit research group, the first multinational cooperative group in Latin America exclusively dedicated to clinical and translational research in cancer. The network of 250 Brazilian and Latin American medical researchers – oncologists, radiotherapists and other specialists among them – conducts studies at more than 150 hospitals in 15 countries.

With the use of SAS, LACOG generates scientifically based real-world data that spans the entire patient journey, from diagnosis through treatment to mortality or survival beyond treatment. Since 2015, LACOG has generated data profiles representing nearly 4,000 patients, helping identify known roadblocks to optimal care, such as poor access to treatment, medication and preventive care. Such insights enable clinicians to better serve patients, facilitate the development of new techniques and technologies to improve cancer care, and even affect public policy.
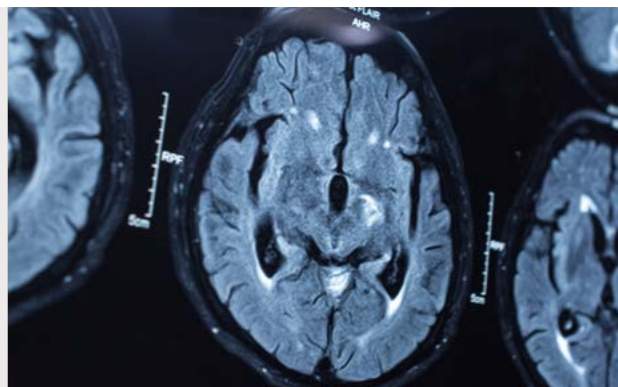
"Often, in the treatment of various types of cancer, data from developed countries are applied to local patients. Our work makes it possible to analyze data directly related to Brazil and the countries of Latin America, bringing research much closer to our reality."

Gustavo Werutsky, MD
*General Director of LACOG
and an oncologist*
**Pontifical Catholic University
of Rio Grande do Sul**

Using smart algorithms to help treat babies

Universitair Medisch Centrum (UMC) Utrecht, a leading international university medical center, wanted to put 10 years of patient data to good use, so they started the Applied Data Science in Medicine (ADAM) project. With ADAM, UMC Utrecht uses the well-known approach of large-scale data analysis to ensure that it chooses the treatment that is most beneficial to a specific patient. The Big Data for Small Babies was one of four projects within the ADAM program that was seeking to answer whether it was possible to proactively treat or even prevent an infection in premature babies using data analytics.

By using SAS to access, analyze and visualize the data, the team developed a smart algorithm that discovered 60% of the babies were treated unnecessarily with antibiotics. Also, the model that was developed had an accuracy of 90% in forecasting the presence of the bacteria that causes sepsis.

"The aim is to develop multiple models in SAS in order to better inform parents, provide the best possible health care for babies for a better long-term neurodevelopmental outcome and to eventually apply it to other intensive care departments."

Manon Benders
Professor and Head of Neonatology
UMC Utrecht

03
Environmental
Program

Sustainability for a brighter future

While SAS helps more than 80,000 customers innovate for the future, the company itself is a sustainability innovator, from streaming data to improve operations through its smart campus project to powering office buildings with clean energy from its solar farms. SAS works closely with employees, suppliers and customers to reduce its environmental footprint with programs focused on energy conservation, emissions management, pollution mitigation, water conservation, green building and others. See how SAS uses its own software to collect, manage, calculate and report its global environmental footprint through these environmental performance reports that use SAS® Visual Analytics.

SAS Environmental Goals

BY **2020**
50% more charging stations at HQ

BY **2025**
Reduce greenhouse gas emissions **25%**

Improve office building efficiencies
40% for energy
50% for emissions

LEED® Gold certification for all new buildings

Continue investment in more smart technologies, renewable energy, EV infrastructure and environmentally friendly practices

Report progress in support of the Paris Climate Agreement

In addition to its own sustainable initiatives, customers use SAS' analytic expertise and powerful software solutions to support the UN Sustainable Development Goals of affordable and clean energy, climate action, and sustainable cities and communities. SAS is committed to achieving the following environmental goals:

- By 2025, SAS will reduce global greenhouse emissions by 25% compared to its 2011 base year.

- By 2025, office buildings at SAS headquarters will improve energy efficiency by 40% (per square foot) and emissions efficiency by 50% (per square foot) compared to its 2010 base year.

- All new building construction projects will earn LEED Gold level certification.

- SAS will add 50% more charging stations at its headquarters by 2020 and continue to explore ways to support electric vehicle infrastructure.

- SAS will continue to use analytics to improve operational efficiencies and invest in the highest-efficiency smart technologies, renewable energy, electric vehicle infrastructure and environmentally friendly practices across its operations.

- SAS will plan and report progress against science-based targets in support of the Paris Climate Agreement.

Building on its corporate sustainability leadership and IoT technology prowess, SAS continued progress on its smart campus project at its Cary, NC, headquarters. Through SAS' advanced, real-time analytics, the smart campus project is improving energy usage while proactively monitoring equipment performance to boost operational longevity. Starting with a handful of buildings, two on-site solar farms, and select waste containers, the project will eventually span across most of the 24 buildings on campus. By using analytics to help SAS operate more efficiently and identify ways to make improvements on campus, the company can pass on the firsthand insight of products and best practices to customers for their smart city related initiatives.

SAS' top 2018 achievements with its environmental program include:

- At the end of 2018, SAS emissions are 20.4% lower than 2011 baseline year.

- Energy use intensity for office buildings decreased 2.3% and 15.3 kWh per square foot – a 34% improvement over 2010 base year.

- Carbon use intensity for office buildings decreased 3.3% to 11.6 CO2 pounds per square foot – a 54% improvement over 2010 base year.

- Energy consumption in SAS data centers decreased 1.5% despite a 27% increase in servers.

- Diverted 55.3% of operational and construction waste from landfills globally.

- Reduced paper use per employee from 954 sheets to 635 – a 33% decrease from 2017 and almost a 76% reduction since 2009.

- SAS is pursuing a high-level LEED certification for its newest and largest office building, which opened in February 2019 at world headquarters. All SAS HQ office buildings and data centers built in the last 25 years are LEED certified.

Greenhouse Gas

20%

Absolute greenhouse gas reduction from 2011 base year

Energy Efficiency

34%

Energy use intensity improvement for office buildings

Carbon Efficiency

54%

Carbon use intensity improvement for office buildings

Paper Conservation

76%

Reduction in paper use per employee

LEED Certification

78%

LEED-certified office space at headquarters
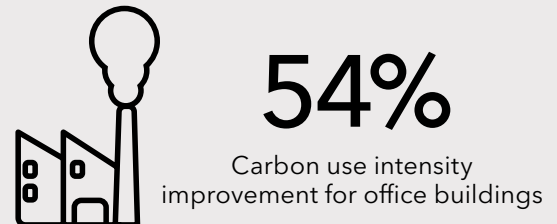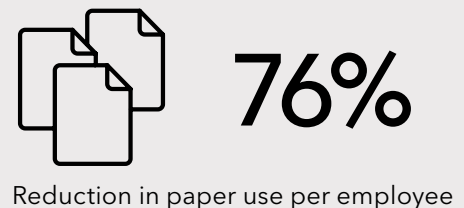
Environmental Governance

SAS' sustainability performance is reviewed by executive leadership to provide guidance on conducting global operations in a sustainable manner.

Implementing environmental goals and strategies is largely the domain of the SAS Corporate Services Division Environmental Management Program. The program facilitates environmental efforts at company headquarters in the US, collects and reports key environmental performance indicators for global operations, conducts environmental risk and impact assessments and provides guidance and support to all offices worldwide. Offices around the globe have personnel who manage site-specific environmental initiatives.

Environmental Policy

SAS recognizes that its most material environmental issues are related to the use of energy and related greenhouse gas emissions from site operations, data centers and the development of software solutions. SAS encourages its business operations around the world to minimize environmental impacts by optimizing operational efficiencies, supporting long-term goals and complying with all environmental regulations. To accomplish this, all employees are asked to integrate environmentally responsible practices in support of the above previously stated goals and the following mandates.

Environmental Mandates

SAS conducts business in accordance with the Ten Principles of the United Nations (UN) Global Compact and supports their Sustainable Development Goals.
The following corporate mandates provide guidance for adhering to policy and establishing priorities for environmental initiatives.

- Corporate priority: Establish policies, goals, programs and practices for conducting operations in an environmentally sound manner.

- Integrated management: Integrate environmental policies, programs and practices into all functions, business units and global offices.

- Continual improvement: Continue to raise the bar on performance, aligning with technological developments, scientific understanding and stakeholder expectations.

- Assessment: Conduct impact assessments of existing and planned activities to understand environmental impact.

- Facilities and operations: Develop, design and operate facilities and conduct activities with ongoing consideration for minimizing resource consumption, pollution and other adverse environmental impacts, and responsibly handling waste from its operations.

- Products and services: Provide products and services that have no undue environmental impact throughout the product life cycle – from development to delivery, use and disposal.

- Employee education: Educate, train and motivate employees to conduct activities in an environmentally responsible manner.

- Customer support: Advise and educate customers, distributors and the public in the safe and environmentally responsible use, transportation, storage and disposal of SAS products.

- Contractors and suppliers: Promote these principles to SAS contractors and suppliers, encouraging and (where appropriate) requiring improvements.

ISO Compliance

The Environmental Management Program applies best practice ISO 14001 Environmental Management System processes and structure to drive continual improvement across business operations, and in the development of solutions and services to address its environmental impacts. These include:

- Using SAS software solutions and other tools to measure and improve environmental performance.

- Ensuring environmental affairs are addressed by executive management.

- Addressing immediate and long-term impacts of products, services and processes on the environment.

- Providing global direction about addressing environmental concerns through the allocation of resources, assignment of responsibility, and ongoing evaluation of practices, procedures and processes.

• Enabling continual improvement of environmental processes.

SAS uses its own technology to measure and analyze the performance of its sustainability initiatives. SAS software calculates the company's global carbon footprint and the impacts of business processes and mitigation initiatives. SAS solutions support the application of global standards such as the Greenhouse Gas Protocol and the Global Reporting Initiative.

Precautionary Approach

Aligning with UN Global Compact Principle 7, SAS supports a precautionary approach to environmental challenges and minimizing anthropogenic impacts from business operations. This aligns with SAS' philosophy in five meaningful ways:

1. To ensure business operations do not expose the public and environment to harm.

2. To comply with all environmental regulations.

3. To encourage the development and diffusion of environmentally friendly technologies.

4. To promote environmental awareness via increased transparency and access to meaningful data so analytics can be used to make intelligent and responsible decisions.

5. To show that environmental responsibility is not just about goodwill; it makes good business sense.
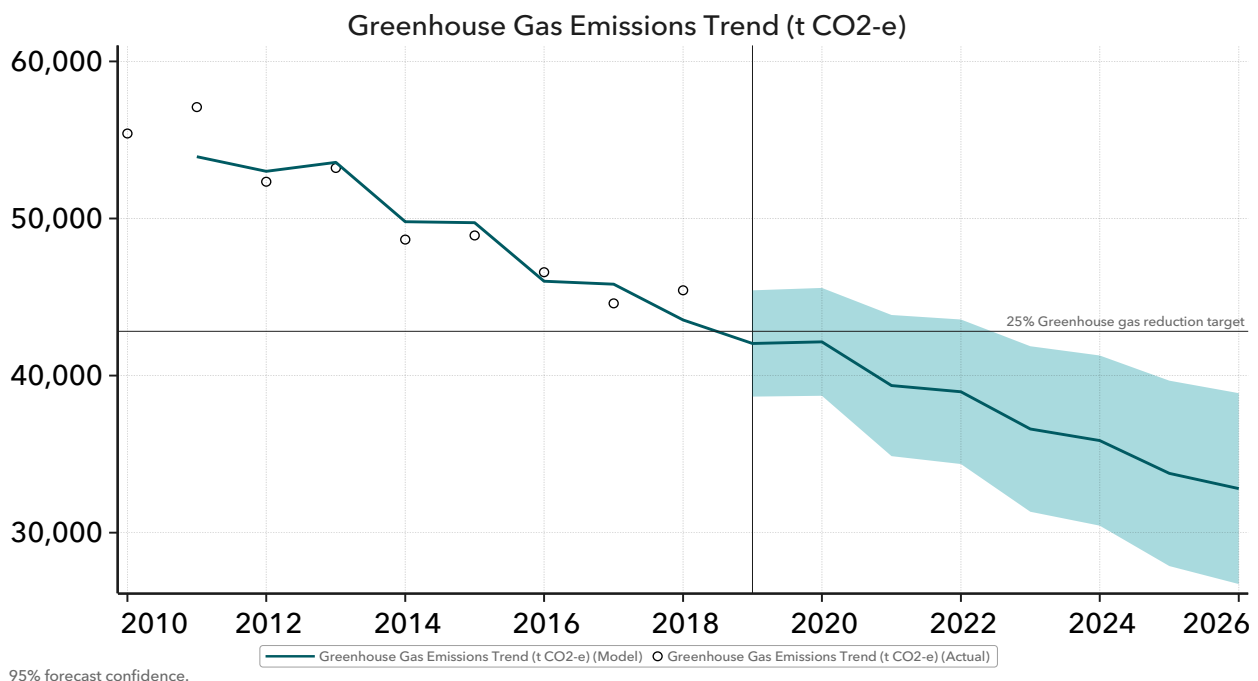
Energy and Emissions

SAS' Environmental Management Program assigns top priority to minimizing energy consumption and related emissions from its operations. Key energy and emissions mitigation initiatives include establishing energy and emission reduction goals, building and maintaining facilities to LEED® guidelines, installing electric vehicle charging stations, investing in renewable energy, pursuing smart energy-efficient technologies for operating buildings and data centers, and proactively maintaining SAS-owned facilities to the highest efficiency standards.

SAS software improves processes for collecting, understanding and managing energy and emissions requirements for facilities worldwide, increasing the ability to report and proactively influence consumption trends. The environmental reporting program uses SAS software to identify reduction strategies, develop and monitor performance indicators, understand relationships between measures, determine initiatives with the greatest effect, and communicate strategy, goals and

objectives to facilitate execution. Click here to access dynamic environmental reporting using SAS Visual Analytics.

SAS actively advocates for the deployment of renewable energy and the economic and environmental benefits of clean energy. In recognition of its ongoing support, the SAS solar farm was selected as the site for North Carolina Governor Roy Cooper to sign an Executive Order for a clean energy economy and support for the Paris Agreement. SAS also partners with organizations such as The Smart Cities Council, Envision America and the Research Triangle Region Cleantech Cluster (RTCC) to help municipalities become smarter by harnessing the explosion of data sourced from connected devices, social media and the Internet of Things (IoT). Increasing the understanding of interdependent technologies such as artificial intelligence (AI), broadband wireless, cloud computing and IoT networks will help improve efficiencies, reduce costs, identify opportunities and mitigate the impacts of climate change.

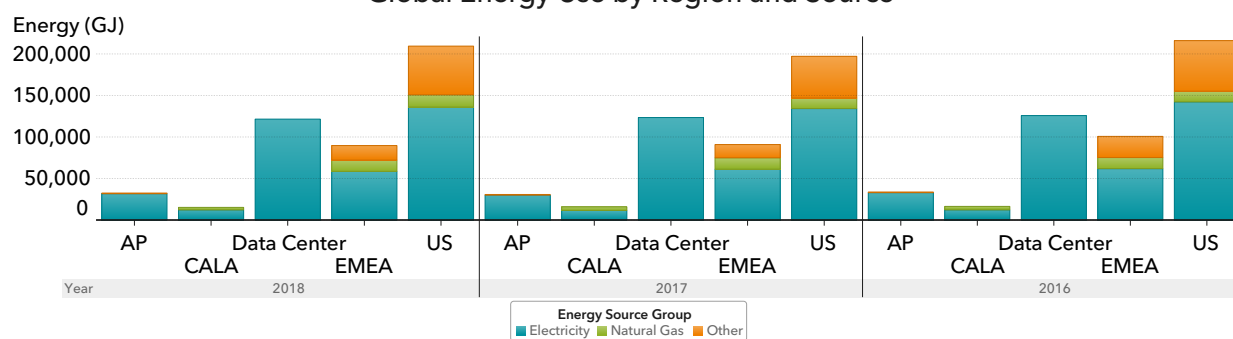## Greenhouse Gas Emissions Trend (t CO2-e)

95% forecast confidence.

Legend: Greenhouse Gas Emissions Trend (t CO2-e) (Model) | ○ Greenhouse Gas Emissions Trend (t CO2-e) (Actual)

25% Greenhouse gas reduction target

Charts created by SAS Visual Analytics

Global Energy Use and Variance by Region

Regions Group ▲	2018 (GJ)	2017 (GJ)	2016 (GJ)	2018-17 Variance ▲	2018-17 Var. %
Data Center	121,502	123,406	125,751	-1,905	-1.5%
EMEA	89,624	90,864	100,712	-1,240	-1.4%
CALA	15,228	15,885	16,404	-657	-4.1%
AP	31,722	30,022	32,989	1,700	5.7%
US	209,431	197,134	216,004	12,297	6.2%
Total	**467,507**	**457,311**	**491,860**	**10,195**	**2.2%**

Global Energy Use by Region and Source

Energy (GJ)

Energy Source Group
Electricity — Natural Gas — Other

Global Greenhouse Gas Emissions by Region

Regions Group ▲	2018 (t CO2-e)	2017 (t CO2-e)	2016 (t CO2-e)	2018-17 Em. Var.	2018-17 Em.Var. %
AP	5,640	5,345	5,846	295	5.5%
CALA	850	894	946	-44	-4.9%
Data Center	12,402	12,597	12,836	-194	-1.5%
EMEA	7,687	7,826	7,408	-138	-1.8%
US	18,849	17,935	19,544	914	5.1%
Total	**45,429**	**44,597**	**46,580**	**832**	**1.9%**

Global Emissions by Region and Scope

Emissions (t CO2-e)

Scope Type
Scope 2 — Scope 1

Charts created by SAS Visual Analytics
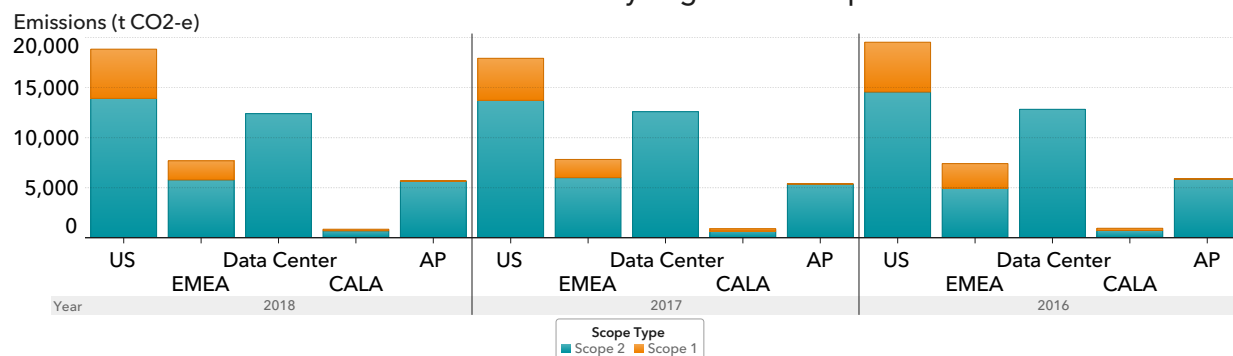
Buttercup and Miss Fleece are part of the Dorper sheep flock that help to maintain the grass under the SAS solar panels. They make quick work of trimming the landscape where traditional equipment had difficulty accessing and do so without the use of chemicals or disturbing the technology.

Emissions Management and Emissions Mitigation

SAS' smart campus project and use of advanced, real-time analytics helps to improve energy usage while proactively identifying ways to make improvements on campus. SAS increased energy consumption by just 2.2% in 2018, despite adding almost 100,000 square feet of new office space and continued construction of a new 420,000 square foot office building. Completed in early 2019, it is SAS' largest building. Despite the increase for 2018, SAS is on a trajectory for achieving its 25% emission reduction goal by 2025. Since 2011, emissions are down 20.4%.
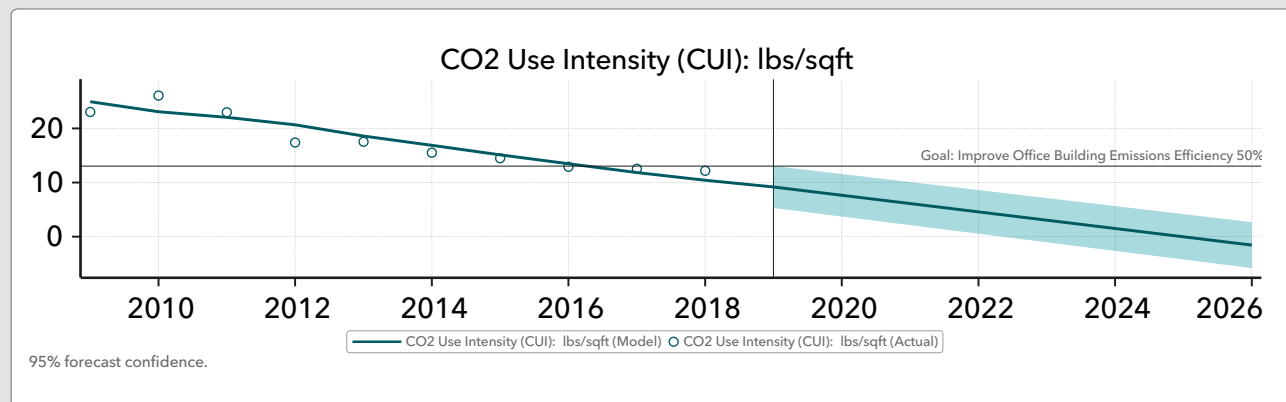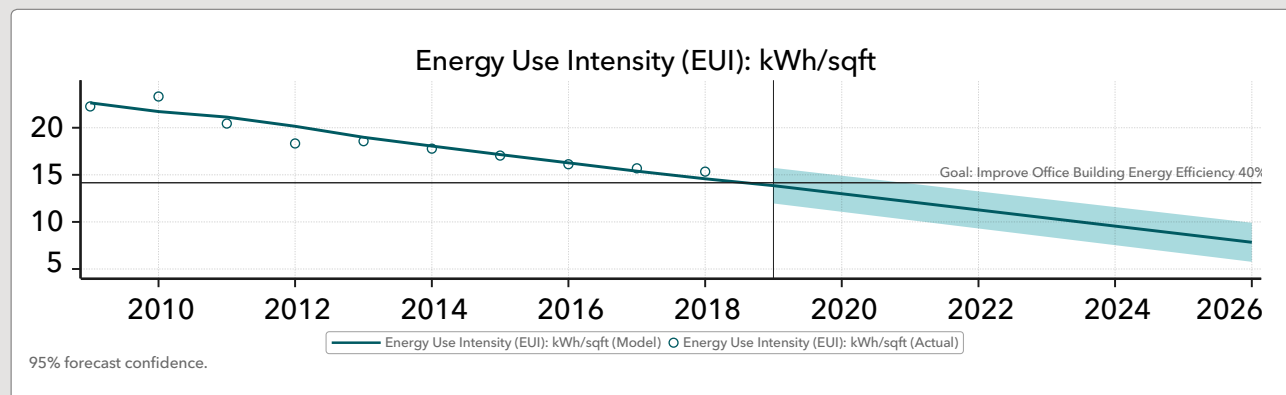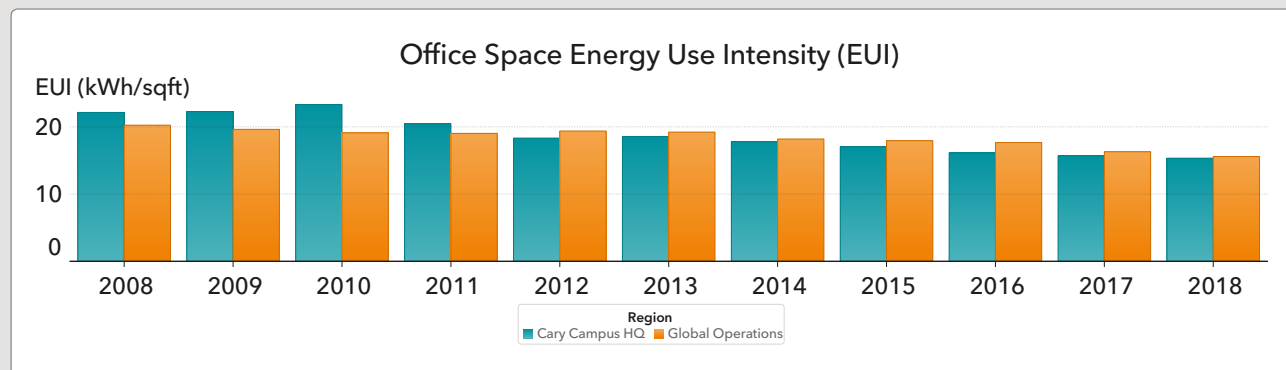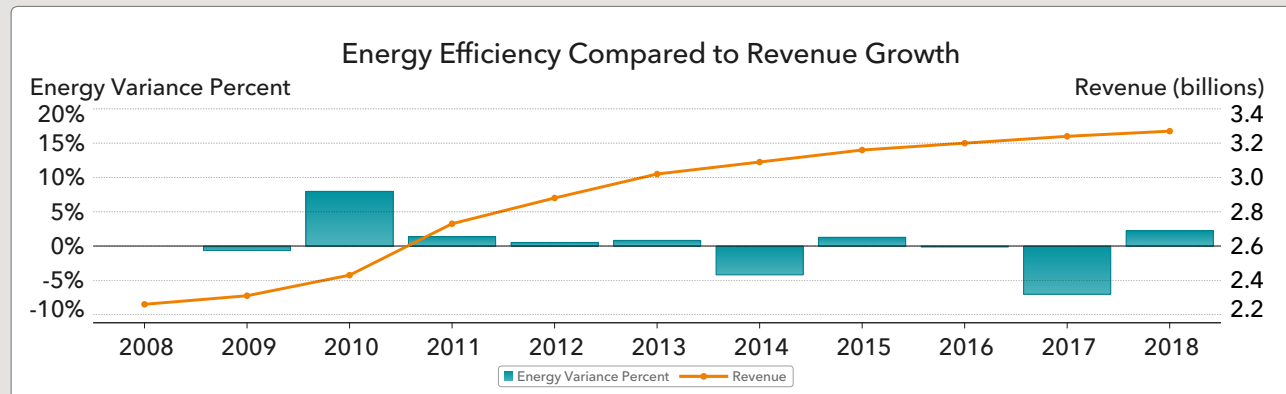
Energy Efficiency

SAS analyzes operational data to optimize development and delivery of its products and services to customers. The efficiency charts below highlight a sustainable trend of decreasing energy growth against increasing revenues. In 2018, SAS' revenue and overall energy consumption increased. However, SAS' long-term progress is resulting in a reduced environmental impact for the solutions it provides to customers. SAS' office energy use intensity has improved by 34% from its 2010 baseline year – a reduction from 23.3 kilowatt hours per square feet down to 15.3. This trend supports SAS' 2025 goals of improving energy efficiency per square foot of office space by 40% and emissions efficiency by 50%.

Environmental Surveys

SAS annually completes the CDP and EcoVadis Supply Chain surveys to show its customers how environmental and social responsibility is incorporated across operations. In 2018, SAS achieved an overall CDP performance score of B-. The average performance score for all respondents was D. SAS achieved Silver recognition and is ranked in the top 12% of all suppliers on the EcoVadis supplier assessment.

Data Center Operations

Energy for data center operations is the largest contributor to SAS' environmental footprint. This is due to increased demand by customers for energy and data center space to handle additional computing and storage solutions as well as IT globalization. To maintain the support expected by customers, SAS invested in high-efficiency technologies and designs to construct a new, dedicated computing facility at its world headquarters, emphasizing efficiency, flexibility and sustainability. SAS data center operations regularly achieve an average power usage effectiveness (PUE) of 1.35 or better. A PUE of 2.0 means that for every watt of IT power consumed, an additional watt is consumed to cool and distribute power. Thus, a PUE closer to 1.0 indicates greater efficiency. SAS is helping customers deploy SAS software in a variety of cloud-friendly configurations. SAS has a thriving business hosting solutions for its customers in the SAS Cloud, using SAS-owned data centers as well as public cloud infrastructure.

Energy Efficiency Compared to Revenue Growth

Energy Variance Percent

Revenue (billions)

Energy Variance Percent ■ Revenue ●—

Office Space Energy Use Intensity (EUI)

EUI (kWh/sqft)

Region
■ Cary Campus HQ ■ Global Operations

Energy Use Intensity (EUI): kWh/sqft

Goal: Improve Office Building Energy Efficiency 40%

—— Energy Use Intensity (EUI): kWh/sqft (Model) ○ Energy Use Intensity (EUI): kWh/sqft (Actual)

95% forecast confidence.

CO2 Use Intensity (CUI): lbs/sqft

Goal: Improve Office Building Emissions Efficiency 50%

—— CO2 Use Intensity (CUI): lbs/sqft (Model) ○ CO2 Use Intensity (CUI): lbs/sqft (Actual)

95% forecast confidence.

Charts created by SAS Visual Analytics

Solar and Renewable Energy

Since 2008, when SAS broke the solar energy 1 megawatt barrier for the Southeast US, the capacity of solar installations in North Carolina has grown to 5,260 MW – ranking the state No. 2 nationally. SAS proved solar was viable, and the community responded.

SAS' nine global solar installations generated 13,719 gigajoules of clean renewable energy. Since 2008, SAS has generated more than 122,000 gigajoules of solar energy – approximately 88 percent was sold to North Carolina utilities in support of the state's Renewable Energy Portfolio Standard.

At a combined 2.3 MW in capacity, SAS' solar farms are located on 12 acres at world headquarters in Cary, NC. The photovoltaic (PV) solar arrays generate 3.8 million kilowatt-hours of clean, renewable energy each year, reducing carbon dioxide emissions by more than 2,000 tons annually — the amount of emissions produced by consuming more than 367,000 gallons of gasoline.

Electric Vehicle Support and the Eco-Commuter Program

The SAS Eco-Commuter Parking Program encourages employees to mitigate the environmental impacts of their daily commute by providing specially marked preferred parking spaces for plug-in electric vehicles (PEVs), low-emission vehicles and active carpool participants. Eco-Commuter parking includes designated PEV spaces with access to 94 charging stations. SAS provides free charging for all employees and visitors at most of its buildings at the Cary, NC headquarters as well as some other office locations.

Employees share the charging station infrastructure by following the SAS Electric Vehicle Supply Equipment Use Policy and Guidelines.

The SAS Eco-Commuter Program also provides subsidized employee vanpools and bike racks at all office buildings. SAS Belgium has free electrical bikes for employee use to either commute or run errands during the work day.

2018 Data

- SAS' environmental footprint was mitigated by ongoing investment in energy-efficient technologies, smart energy sensors, solar, retro-commissioning of primary office buildings, and adoption of LEED best practices.

- Global scope 1 and scope 2 emissions increased 1.9%. From 44,597 to 45,429 CO2e T.

- Global scope 3 emissions from commercial air travel increased 11%, from 17,950 to 19,901 CO2e T.

- Two primary office buildings at SAS headquarters have more than 300 wireless energy sensors as part of a smart campus initiative to improve access to interval energy data in older SAS buildings.

- SAS is pursuing a high-level LEED certification for its newest and largest office building, which was completed in February 2019 at world headquarters.

- SAS renewable energy generation from solar installations totaled more than 3.8 million kWh.

- SAS continued support for plug-in electric vehicles by providing charging stations with free electricity and premium parking for employees and visitors. SAS now has 94 electric vehicle charging stations with plans for more in 2019.

- SAS offices in France, Netherlands, Spain and the United Kingdom moved to LED lighting for greater efficiency.

- In 2018, 77.1% of SAS energy consumption was sourced from electricity suppliers and on-site solar generation. Approximately 28% was used for building heating, ventilation and cooling.

- Despite adding 27% more servers in 2018, SAS data centers managed to decrease energy consumption by 1.5%.
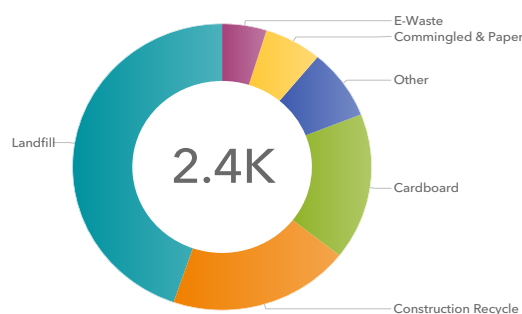
Operational Waste by Region

Region	2018 (Metric Tons)	2017 (Metric Tons)	2016 (Metric Tons)	2018-17 Var.	2018-17 Var. %
LA	40	46	38	-6	-13%
CAN	58	66	70	-8	-12%
AP	209	243	227	-34	-14%
EMEA	457	524	539	-67	-13%
US	1,663	2,207	2,433	-544	-25%
Total	**2,428**	**3,086**	**3,307**	**-659**	**-21%**

US/Global Recycle Rates

US / Global
Global US
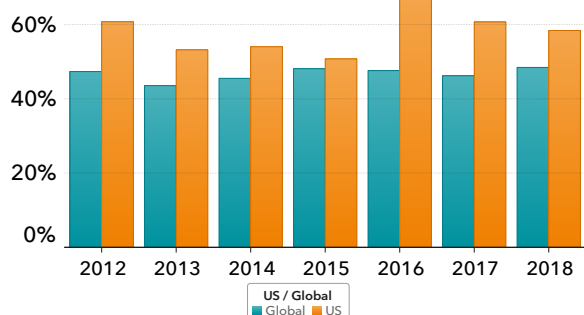
2018 Waste Type (Metric Tons)

E-Waste
Commingled & Paper
Other
Landfill
Cardboard
2.4K
Construction Recycle

Charts created by SAS Visual Analytics

Landfill Diversion

The SAS Waste Management Program at world headquarters measures and monitors the waste stream, with significant environmental benefits resulting from efforts at individual and local levels. For example:

- SAS provides on-site recycling for aluminum, batteries, cardboard, electronics, magazines, glass, newspaper, pallets, paper, plastic bottles, printer cartridges, scrap metal and more.

- SAS strives for 100% e-waste recycling from landfills.

- Polystyrene-based disposables have been replaced with compostable options.

- Cafeteria food waste is composted and used by SAS landscapers; waste vegetable oil is recycled and converted into biodiesel fuel.

- Online resources reduce paper consumption globally.

- SAS strongly encourages the use of biodegradable, compostable and recyclable materials, and minimizing single use plastics.

- At SAS' discretion, building construction projects regularly exceed 85% waste diversion from landfills.

- Grassroots programs for employees reduce waste and encourage recycling efforts.

- Since 2009, operational waste diverted from landfills has increased from 26% to better than 50%.
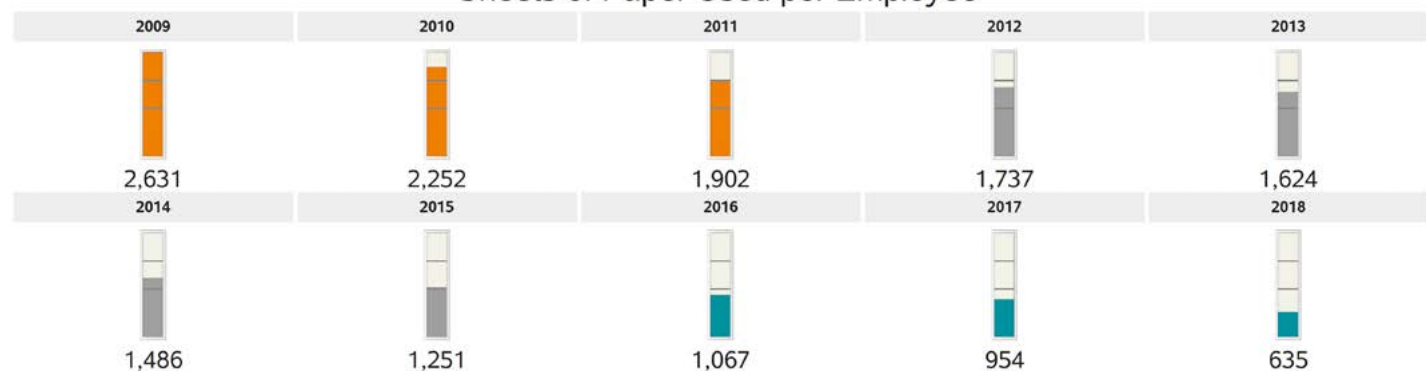
SAS country offices around the world also participate in waste management programs. Some examples include:

- SAS Argentina has an on-site recycling program.

- SAS Brazil has an on-site recycling program, uses biodegradable cups and conducts an electronic waste collection campaign.

- SAS Chile participates in the Recycling to Clean Point program where it hosts recycling centers for paper, Tetra Pak containers, plastic bottles and glass containers.

- SAS France and SAS Netherlands have on-site recycling for employees.

- SAS United Kingdom introduced on-site recycling containers and fully compostable coffee cups.

US and Global Paper Use by Year

Sheets of Paper Used per Employee

2009	2010	2011	2012	2013
2,631	2,252	1,902	1,737	1,624

2014	2015	2016	2017	2018
1,486	1,251	1,067	954	635

Charts created by SAS Visual Analytics

Paper Consumption

Like most businesses, SAS depends on paper products to conduct business operations, but SAS embraces the three R's – reduce, reuse and recycle – to help minimize impact of paper consumption:

Reduce. SAS has significantly reduced print volumes by delivering less physical media to customers. This includes reducing inventories and increasing efficiencies by using a print-on-demand model; convenient access to online documentation; education and aware-ness campaigns; and personal choices. Since 2009, the average annual pages of paper used per employee has dropped from 2,631 to 635 – a 76% decrease. Globally, SAS used 58 metric tons of paper for printing in 2018. This is 3.3% less than 2017.

Reuse. When SAS does print, employ-ees are encouraged to find creative ways to reuse scrap paper. Ideas include using scrap paper for notes, reprinting, packaging material for shipping and on-site composting.

Recycle. SAS recycled 97 metric tons of paper materials in 2018 – the 34% reduction from 2017 is due to employ-ees using less paper. In 2018, the average recycled content for all paper at SAS headquarters is 36%.

2018 Data

Globally, SAS disposed of 1,817 metric tons of operational waste, including paper, food, cardboard, composting, aluminum and plastic, and other non-construction waste material. This amount is 10%, or 208 metric tons, less than 2017.

Highlights from 2018 include:

- SAS diverted 55.3% of operational and construction waste (1,342 metric tons) from landfills through recycling and waste management worldwide.

- Construction projects at world head-quarters achieved an astounding 78% landfill diversion rate on more than 610 metric tons of waste. SAS had 25% (204 metric tons) less construction waste in 2018.

- SAS diverted 100% of e-waste from landfills by repurposing equipment for internal use, recycling and donating to educational institutions.

Click here to access dynamic environ-mental reporting using SAS Visual Analytics.
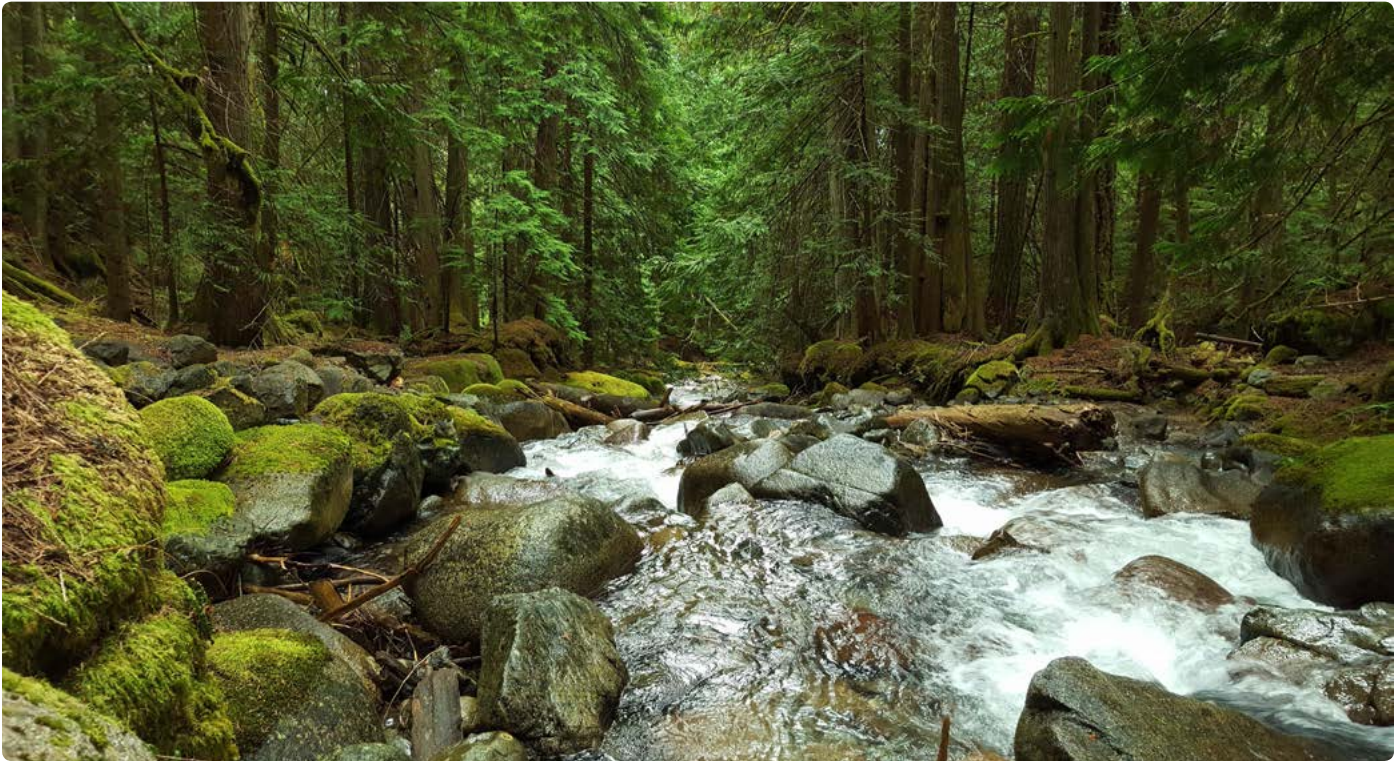
Water Conservation

Water conservation is of paramount importance to SAS, with many facilities operating in communities where water shortages and water use restrictions are standard. At SAS headquarters, coupling water-saving technologies and practice with increased employee awareness has resulted in significant savings. For example:

- Low-flow and electronically activated plumbing fixtures greatly reduce employee water consumption, saving 63% more compared to standard fixtures.

- Rooftop rainwater collection systems capture water for use in bathrooms.

- Cooling towers are replaced with high-efficiency models that use reclaimed water.

- Wastewater options, such as reclaimed and gray water, lower potable water consumption.

- Reducing and customizing irrigation schedules avoids overwatering plants.

- Collecting rainwater in retention ponds and cisterns minimizes stormwater runoff and provides water for landscape irrigation.

- Native and drought-resistant plants and warm-season grasses require less frequent irrigation.

- Timely repair of leaking pipes and the installation of low-flow toilets, shower heads and faucet aerators save at least 1.4 million gallons each year.

2018 Data

SAS water use decreased by 1.1% globally in 2018 despite adding almost 100,000 square feet of office space. The 3,036 cubic meter decrease was primarily due to increased rainfall totals at SAS' campus headquarters and ongoing facility efficiency upgrades.

- Overall building efficiency improvements contributed to a lower employee water use intensity rate of 15.7 gallons per square foot – a 3% decrease from 2017.

- Returned 47% (117,588 cubic meters) of municipal water for treatment by local utilities.

Global Water Use by Region

Regions	2018 (Cubic Meters)	2017 (Cubic Meters)	2016 (Cubic Meters)	2018-17 Variance	2018-17 Var. %
US	195,362	201,547	205,552	-6,185	-3.1%
LA	3,081	2,812	2,882	269	9.6%
EMEA	58,362	56,952	53,311	1,411	2.5%
CAN	5,813	5,599	5,099	214	3.8%
AP	20,093	18,838	18,489	1,255	6.7%
Total	**282,711**	**285,747**	**285,333**	**-3,036**	**-1.1%**

Global Water Use by Region and Source
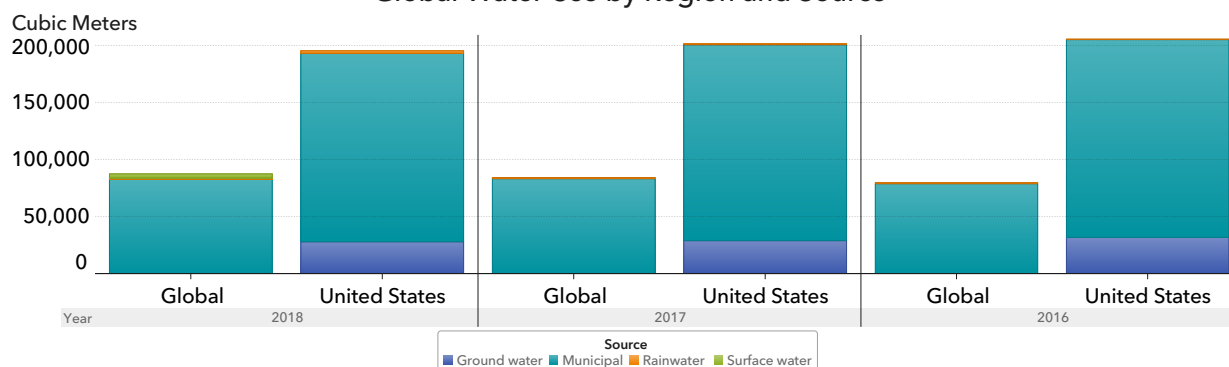
Charts created by SAS Visual Analytics

• Completed a pilot project to test the use of sphagnum moss as a water treatment option in building cooling towers. The data indicated this solution improved overall water quality, increased equipment efficiency, removed corrosive organic material, reduced potable water consumption, and minimized the need for chemical treatments.

Click here to access dynamic environmental reporting using SAS Visual Analytics.

Hazardous Materials
Water Discharge Management
Preservation of ecosystems in proximity to its operations is standard business practice for SAS and common across all operations. Facilities staff work closely with local water utilities to ensure compliance with all environ-

mental regulations and are trained to manage storm water runoff and pollution prevention. The Neuse River Basin is the primary water source for SAS headquarters and has the greatest risk of impacts from discharges and storm water runoff.

As a software company, SAS does not handle raw materials, conflict minerals, hazardous wastes or related supplies typical of traditional manufacturing. While risks are minimal, SAS places the utmost importance in abiding by industry best practices and governing regulations, including:

• Compliance with all Occupational Safety and Health Administration regulations for handling hazardous materials.

• Plans for the Spill Prevention, Control and Countermeasure rule that meet US Environmental Protection Agency regulations.

2018 Data
SAS did not have any spills of hazardous materials, oil, fuel, waste or chemicals, and did not have any fines for noncompliance with environmental legislation. SAS is very careful to minimize environmental impact as the company continues to grow. The company strictly adheres to environmental regulations.

All reports are based on actual resource data collected from owned and leased offices, and intensity metrics applied to approximately 21% of leased office space that does not have access to actual data.

Green Building Practices

SAS strives to be a leader in environmental sustainability and is committed to making a difference around the world. To achieve this goal, SAS embraces Leadership in Energy and Environmental Design (LEED®) guidelines for new construction, and remodeling and retrofitting existing buildings. SAS holds a Silver level national membership with the USGBC. Since 2005, all new office buildings and data centers at world headquarters have achieved LEED certification. For offices located in countries that do not use LEED, SAS is incorporating country-specific best practices and pursuing equivalent certifications for new construction and maintenance.

SAS has 10 LEED-certified buildings, including:

World Headquarters: Building C – LEED Platinum Certified Office Building

Building C includes the Executive Briefing Center, café and an office tower for employees. The Executive Briefing Center uses cutting-edge technologies to help customers learn about SAS software. Building C achieved LEED Platinum certification for water and energy conservation, the first for any building in Wake County and only the fifth in North Carolina in 2011. The building consumes 40% less energy and 50% less water by integrating highly efficient technologies and sustainable features such as: photovoltaic panels that generate 100,000 kWh annually to support lighting and building systems; solar thermal panels provide hot water for the café; thermal slab floor cooling uses water cooled in off-peak hours by building chillers to help maximize air conditioning efficiency; and a rainwater collection system with two 20,000-gallon cisterns captures water for use in bathrooms.

World Headquarters: Building Q – LEED Gold Certified Office Building

The 220,660-square-foot office building features rooftop solar photovoltaic panels, highly insulated exterior wall and roofing systems, highly efficient heating and air conditioning, mechanical systems, energy recovery units and a water-side heat exchanger, extensive use of LED lighting, and reclaimed water use for cooling towers, irrigation and toilets. The parking lot has 12 spaces designated for plug-in electric vehicles with access to electric vehicle charging stations.

Solna, Sweden: LEED Gold Certified Office Building

Sweden's newest office building was awarded LEED Gold certification. The facility features geothermal energy wells for efficient heating and cooling, rooftop solar photovoltaic panels, a sedum-covered green roof, and even on-site beehives, which provide natural honey for the cafeteria.

Toronto: LEED Silver Certified Office Building

Toronto was the first LEED-certified new office building in Canada. With rainwater harvesting and energy conservation measures saving more than 6 million kWh of energy per year, the SAS building has served as an inspiration for many other new buildings in Toronto.

2018 Data

Green building highlights from 2018 include:

- Announced environmental goals including a commitment to achieve a minimum level of LEED Gold certification for all new buildings.

- Continued to incorporate environmental best practices in the construction of a new office building completed in early 2019. Building A is the largest SAS facility and is expected to earn a high-level LEED certification. Approximately 50% of its electricity comes from one of SAS' solar farms. It uses a smart building analytics platform to optimize building performance, 100% LED lighting and 17 free electric vehicle charging stations.

- SAS started using sphagnum moss as a water treatment option in building cooling towers after data from a pilot project indicated this solution improved overall water quality, increased equipment efficiency, removed corrosive organic material, reduced potable water consumption, and minimized the need for chemical treatments.

Biodiversity

SAS is careful to minimize impact on biodiversity and surrounding habitats as it grows and expands its operational footprint. SAS adheres to the US Green Building Council LEED guidelines for protecting natural environments and promoting biodiversity in areas where the company operates. Of approximately 900 acres at SAS headquarters, about 100 acres feature buildings, roads or other impervious surfaces. The remaining 800 acres are retained as old-growth woodland, lakes and streams, farmland, natural areas and approximately 60 acres of maintained lawns, primarily for employee recreation and landscaping.

The company applies LEED best practice guidelines for new and existing building projects, smart land use planning and campus landscaping, such as:

- Preserving large areas of open space in construction projects to minimize disruption to local ecosystems.

- Reducing the heat island effect by installing white reflective materials and planting sedum on rooftops. Sedum increases insulation, minimizes stormwater runoff and provides habitat for wildlife.

- Collecting rainwater from rooftop systems, retention ponds and cisterns to minimize stormwater runoff and provide water for landscape irrigation.

- Harvesting timber from construction sites so artisans can craft unique pieces of furniture and accent walls for buildings.

- Restoring land disturbed by construction projects with native and adaptive drought-tolerant plants that help local ecosystems thrive and reduce dependence on water and chemicals.

- Growing local produce for SAS cafeterias in on-site gardens.

2018 Data

SAS is pursuing a high-level LEED certification for its newest and largest office building at world headquarters which opened in early 2019. Adoption of green building practices included a substantial effort to minimize environmental impact for both construction and ongoing operation. Building design and construction processes ensured a minimal site footprint, higher than mandated erosion and stormwater controls, reduced heat island impact and maximized green space. Additional features include:

- A rooftop garden to slow the rate of storm water runoff, help keep the building cool and reduce the heat island (areas of higher temperature) effects on the building.

- Interconnection with a SAS Solar Farm which will provide approximately half of the building's electricity.

- Use of native and drought-tolerant plants throughout the site.

Awareness and Engagement

In addition to employing sustainability measures globally, SAS promotes environmental education and awareness. Activities include advocacy for clean energy, educational campaigns, speaking engagements, SAS solar farm visits, companywide Earth Day activities, articles on the internal green website, white papers and webcasts. By engaging with customers, employees, industry and world leaders, SAS seeks to extend the reach of its sustainability initiatives. Forbes even featured SAS sustainability initiatives among efforts that attract and retain top millennial talent.

SAS works with leading international organizations to apply technology to address greenhouse gas emissions, as well as other environmental and social concerns. Customers use SAS software to generate power efficiently, promote better use of critical resources, minimize waste, assist environmental protection agencies, and improve the production and delivery of goods.

2018 Data

SAS believes ongoing advocacy for sound climate policies resulting from unbiased data, research and collaboration will help establish a course of action that benefits sustainable, long-term health. Examples include:

- Supporting a clean energy advocacy day at the NC General Assembly.
- Hosting a Business Strategies and Climate Change Roundtable sponsored by The Nature Conservancy. Panelists included US Senator (NC) Thom Tillis.
- Hosting NC Governor Roy Cooper's executive order signing. The order commits NC to a clean energy economy and support for the Paris Agreement.

SAS employees joined in various activities to raise awareness about the benefits of renewable energy, conserving energy, reducing waste, reducing water use and protecting the environment.

Some activities included:
- Learning from bees:
  - o In Cary, NC, SAS installed two additional beehives at its apiary located near a tranquil pond by the solar farms to help promote the repopulation of bees in urban locations. Throughout the year, employees donned bee suits and experienced hands-on tours of the apiary to learn more about beekeeping and the importance of pollinators in SAS ecosystem.
  - o SAS employees helped harvest 70 pounds of honey from the SAS apiary.
  - o In addition to tours and harvesting, SAS hosted a three-part, deep-learning Bee Biology series for employees to learn about the fascinating world of honeybees.
  - o SAS also has beehives at its Canada, France and Netherland offices.

- SAS Canada formed a green committee, which organizes various employee events to encourage eco-friendly initiatives such as planting rooftop gardens.

- SAS United Kingdom provides land at the Marlow Estate office building where employees can grow fruit and vegetables.

- At headquarters in Cary, NC, SAS Eco Advocates, an employee volunteer group who supports environmental activities, participating in numerous events:

  - o SAS is a regular participant in EarthShare NC's annual Corporate Earth Day Challenge. This year a group of SAS Eco Advocates traveled to the Carolina Tiger Rescue to clear space for future big cat habitation. The team also learned the importance of saving and protecting wild cats in both captivity and in the wild.
  - o Another related project involved collecting tiger footprint data from Carolina Tiger Rescue to improve techniques for identifying endangered tiger species in the wild.
  - o Partnered with the Duke Nicholas School of the Environment to collect data from SAS office buildings and contribute toward a global initiative to reduce bird collisions with buildings.

04

Employees & Culture

Ssas

World-changing innovation starts with happy employees

SAS' culture has always been an integral part of who it is as a company, connecting the curious nature that started SAS and the spirit of innovation that moves it forward. Originating at its North Carolina headquarters and spreading to more than 150 global offices, SAS cultivates an award-winning culture anchored by meaningful work, empowering leadership and a world-class work environment.

Fostering a good work/life balance continues to make great business sense. So in support of the UN Sustainable Development Goal of providing good health and well-being, SAS remains strongly committed to promoting a world-class environment that inspires innovation. Throughout more than 40 years of analytics innovation, SAS has invested heavily in its workplace culture to make employees feel inspired and energized.

Diversity and Inclusion

At SAS, it's not about fitting into the culture, it's about adding to it. Diversity and inclusion are more than just gender or race. SAS culture blends different backgrounds, experiences, perspectives and cultures from 59 countries around the world. As innovators, SAS relies on employees' diverse creativity and differences to create great software. From the technology SAS designs to the conversations shared, SAS' diversity is a creative asset.

SAS CEO Jim Goodnight leads a task force of the Business Roundtable, by using his voice as a LinkedIn Influencer, and by sponsoring numerous STEM education initiatives that open these fields to people of all backgrounds. And to further formalize the commitment, in 2017 he joined leaders of the world's 500 top companies in signing the CEO Action for Diversity and Inclusion pledge to use their individual and collective voices to advance diversity and inclusion in the workplace through practical strategies.

SAS Employee Inclusion Groups

Women's Initiative Network (WIN) is dedicated to inspiring, encouraging and empowering women through networking, career development and community service.

Young Professionals Network provides ongoing opportunities for professional development, engaging with the community through volunteerism, and social networking for the younger employee population – and the young at heart.
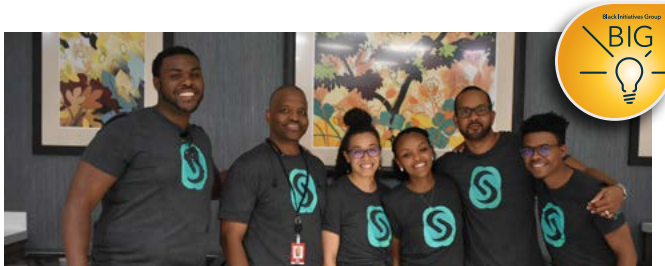
Black Initiatives Group (BIG) is an inclusive group of employees who identify as Black, African, African-American, West Indian, Copper Skinned, Indigenous, American Indian, Afro-Latinx or of African descent, and those interested in the mission to advance SAS' global diversity initiatives and support the interests and professional development of SAS employees, the STEM field and our communities.

SAS Military Network (VETS) engages SAS employee service members, veterans, family members and supporters of the US military by providing an inclusive community that focuses on employee professional development and networking, customer engagement, and community involvement while supporting SAS' strategic goals.

SAS Pride – LGBTQ+ and Allies provides a safe and welcoming network for lesbian, gay, bisexual, transgender and queer employees, and allies in support of equality and inclusion.

SAS International Connections has been dedicated to fostering, supporting and promoting international inclusiveness at SAS for more than 25 years.

Diversity and Inclusion Programs

- The "Tribe" – started by the Accessibility and Applied Assistive Technology Team and comprised of employees from all divisions in the organization – believes everyone should be able to work with and benefit from data. They are fundamentally changing the way people interact with data by developing innovative technology that makes data visualizations like charts, graphs and maps accessible to all, regardless of technical savvy or physical abilities. This online community shares resources and best practices, and serves as a forum to ask questions.

- The SAS intern program, ranked No. 6 Best Tech & Engineering Internship by Vault, is a mechanism for us to cultivate diverse talent throughout our organization and build a SAS programming pipeline for our customers. We cultivate a diverse talent pool through university outreach and engagement to several schools' student organizations throughout the United States.

  Two signature programs that pipeline diversity through our internship program include:

  o The Autism Spectrum Technical Internship Program helps to bridge the gap between academic and on-the-job learning for autistic technical students by providing an inclusive interviewing process and training program that addresses the challenges and barriers often encountered in obtaining meaningful employment.

  o The Veteran Employment, Training and Support (VETS) Internship Program provides an internship experience for uniformed service members, veterans and military spouses who are pursuing an accredited degree, in various roles throughout SAS.

- SAS STEM Connect with North Carolina historically black colleges and universities (HBCUs).

- STEM Career Showcase for students with disabilities.

- Executive Women's Day during SAS Championship golf tournament.

- Diversity recruitment events.

  o Grace Hopper Celebration.
  o HBCU Career Development Marketplace.
  o Student Veterans of America.
  o Service Academy Career Conference.
  o Women in Data Science and Statistics.
  o WomenHACK.

Diversity and Inclusion Partnerships

- Triangle Women in STEM is a partnership among companies in the Research Triangle Park area focused on increasing representation of women in the workforce with distinctive programs promoting inclusion and pathways to success by recruiting, retaining and advancing women in STEM fields. SAS participates every year by hosting an annual event for summer interns and by engaging in their yearly programming.

- SAS is proud to participate in Pride in the Triangle, a collaboration of Triangle area LGBTQ+ employees and allies from various organizations that come together to share best practices, work together on LGBTQ+ issues in our corporations and in North Carolina, and network with other out employees and allies. Through networking and community events as well as thought leadership opportunities, the goal is to create a more inclusive LGBTQ+ friendly work environment together.

- For more than 20 years, SAS has partnered with the UNC TEACCH Autism program through the supported employment initiative, which provides job coaches for long-term autistic employees who work in SAS' cafes. In addition, SAS has launched the Autism Spectrum Internship program for technical college students who identify as autistic to mitigate the social challenges that students on the spectrum encounter when going through a neurotypical interviewing process. The students spent the summer interning in SAS' research and development department and received ongoing support and feedback from TEACCH Autism Program.

- Students from Wake County Public Schools receive credit toward their Occupational Course of Study diploma by volunteering with corporate mentors from SAS to learn basic workplace skills.

- SAS has been involved with the programming and sponsorship of Statfest and the Diversity Mentoring program run by the American Statistical Association's Committee on minorities in statistics to increase representation in the field. In addition, SAS partners with the International Biometric Society's Eastern North American Region conference to help foster diversity in biostatistics through conferences and workshops.

- SAS partners with many nonprofit organizations to provide mentorship and career development resources for veterans transitioning to civilian life. In addition to the VETS internship program that provides valuable work experience for military personnel pursing an IT degree, SAS joined forces with the Institute for Veterans and Military Families in 2017 to offer free SAS programming courses to transitioning service members and their families.

Equal Employment Opportunity

SAS is committed to providing an equal employment opportunity that treats all employees and applicants equally based on merit and experience – without regard to age, race, color, gender identity, religion, creed, ancestry, national origin, citizenship, marital status, sexual orientation, disability, medical condition, veteran status, pregnancy or any other protected class as defined by federal, state or local law. We recruit, hire, train and promote without regard to protected characteristics and ensure that all our employment decisions are based only on valid job requirements.

Hiring and Retaining Staff

SAS cultivates the optimal environment for creativity, encouraging employees to take risks and exceed expectations while helping them balance work and life. SAS not only invests in employee career development, but also health and well-being through several services, programs and benefits. For example, SAS offers up to 12 weeks of paid parental leave for birth mothers, fathers, domestic partners and adoptive parents to provide employees with paid time off to bond with and care for newborns or a newly adopted child.

2018 Data

SAS maintained its perennially low turnover rate while sustaining its worldwide headcount. SAS did not have any substantiated and material negative incidents with regard to employee discrimination or harassment. At the end of 2018, SAS had 14,166 employees worldwide and 7,088 US employees. In the US, the average SAS employee tenure is 12.6 years, compared to an industry average of 4.2 years.[1] Reducing turnover reduces recruitment costs, helping the company retain knowledge and deliver deeper, longer-term customer relationships. This means SAS employees spend more time on productivity and less time training new hires. SAS sees a strong connection between employee loyalty and business success.

SAS' voluntary employee turnover rate was 5.9%.
The average industry voluntary turnover rate was 13.5%.[2]

1 US Bureau of Labor Statistics
2 Radford/Aon Hewitt

US Turnover Summary		2018
Type	Turnover number	420
	Turnover percentage	5.9%
By age group	19-31	82
	32-44	127
	45-63	150
	64 and up	61
By gender	Female	154
	Male	266

US Hire Summary		2018
By age group	19-31	174
	32-44	175
	45-63	140
	64 and up	3
	NA	11
By gender	Female	169
	Male	334

Global Employee Hires		2018
By region	Asia Pacific	383
	Canada and Latin America	128
	Europe, Middle East and Africa	417
	United States	503

Skills Development

SAS supports the idea that all employees have a natural desire to learn and grow. As part of its culture and benefits, SAS provides many development opportunities for employees, whether for specific job skills, business acumen or interpersonal competence. Training includes instructor-led classes, e-learning and live web training. SAS encourages employees at all levels to pursue training to hone their skills. Employees with sharp, updated and relevant skills offer more value to SAS customers in the dynamic, evolving world of data and analytics.

2018 Data

Approximately 96% of employees participated in professional training, totaling 183,500 hours.

In addition to skills training, SAS has created a program specifically for employees pursuing leadership and management training. Courses are offered at different levels within the organization to cultivate and nurture internal talent. In 2018, SAS provided 30 courses on leadership development, training 2,370 people.

SAS offers a wide array of training options that enable employees to find their best learning method to meet work and career goals.

How many hours in 2018 were devoted to professional training overall?	183,500 hours	Training breakdown	
Average hours for full-time employees	27 hours	Classroom	69%
		Webcast and video	30%
What % of employees participated in professional training?	96%	Reading material	1%

How many leadership development trainings were held, and how many participants overall?	
There were over 30 different leadership development programs, including certifications, courses and classes.	2,370 employees attended

Health and Safety

Around the globe, SAS provides a safe and healthy working environment for all its employees. Each SAS office manages its own health and safety programs. Resources and best practices are available from the headquarters office in the US; however, each program is designed to fit the needs of that particular location.

The Security & Safety and Risk Management departments investigate any incidents that pose a danger to company employees or third parties and take measures to reduce or eliminate these hazards. These departments provide additional training and resources to help identify and prevent similar incidents from causing damage or injury to individuals.

The Safety Team will complete a comprehensive investigation of all reportable work-related incidents and provide corrective actions when necessary.

SAS also has an Ergonomics department that supports employees through personal assessments and training. The department provides further educational resources through an intranet site, which includes FAQs, tips and information about a safe work skills program for manual labor employees. It also provides an assessment request form that employees can complete for a personal work-site evaluation by one of two full-time ergonomics specialists.

Absenteeism

By providing a safe, nurturing work environment, SAS strives to keep employees productive and effective in their roles. One measure of that success is the absenteeism rate.

2018 Data

SAS recorded an absence rate of 4.14 days per full-time employee. This accounts for the following absence types: sick, time away medical, time away non-medical, floating holiday, school leave, jury duty, military and bereavement.

DOWNLOAD SECTION
05 GOVERNANCE & MANGEMENT

Integrity, ethics and compliance

As a good corporate citizen, SAS knows its success depends on upholding high ethical standards in dealings with colleagues, customers, suppliers and competitors. This moral compass also steers SAS' workplace culture, which attracts and retains like-minded employees who perpetuate these high standards.

Guided by its Code of Ethics, SAS is committed to maintaining its reputation as a company that conducts all aspects of the business with the utmost integrity. SAS compliance programs use training, policies, processes and audits to ensure compliance in areas such as anti-corruption, international trade and privacy.

These practices have earned SAS its exceptional reputation as an ethical and responsible employer and business partner. As a result, SAS is known as a great place to work, a great company to do business with and a valued community member. SAS' reputation is hard-earned and invaluable, so protecting it with constant diligence remains a top company priority.

Governance Structure

SAS is the leader in business analytics software and services. SAS is committed to employing high ethical standards in its dealings with colleagues, customers, suppliers and competitors.

Company Profile

SAS Institute Inc. is a North Carolina corporation that has been privately held since its inception in 1976. Headquartered in Cary, NC, the company operates through functional divisions that include Worldwide Marketing, Sales, Research and Development, Finance, Legal and Corporate Services. SAS delivers software and related services to customers throughout the world. Sales activities are conducted primarily through SAS Institute Inc. and its controlled sales subsidiaries in approximately 150 countries. The sales subsidiary entities are grouped into three regional sales divisions: the Americas; Europe, Middle East and Africa (EMEA); and Asia Pacific.

SAS' global corporate organization, including our parent company, SAS Institute Inc., and a group of operating subsidiaries, provides software and services to customers in various geographic regions around the world. The Americas, EMEA and Asia Pacific regions comprise approximately 50 standalone operating subsidiaries. Additional subsidiaries in the EMEA and Asia Pacific regions are dedicated to research and development activities. Together with several representative and branch offices of these subsidiaries, SAS maintains a corporate presence in approximately 60 international jurisdictions. Continuity of business is paramount as well, with a focus on corporate governance, information security and corporate social responsibility.
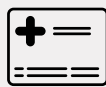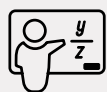
Industries served

Automotive	**Health Care**	**Media**	**Banking**	**Health Insurance**	**Energy & Utilities**	**Capital Markets**
Education	**Higher Education**	**Retail**	**Communications**	**Hotels**	**Consumer Goods**	**Insurance**
Defense & Security	**Life Sciences**	**Travel & Transportation**	**Government**	**Manufacturing**	**Sports**	

CEO Jim Goodnight and co-founder and Executive Vice President John Sall constitute the board of directors of SAS Institute Inc. They also serve as executive officers, overseeing corporate performance and investment decisions across environmental, social and economic interests. Goodnight and Sall are the company's principal shareholders.

Employee rights, including employment-based compliance issues, are managed through SAS' Human Resources Division under the direction of the executive vice president and chief human resources officer. The Ethics and Compliance group in the SAS Legal Division, overseen by the vice president and general counsel for ethics and compliance, manages other compliance responsibilities, including anti-corruption, privacy, trade, lobbying, gifts and anti-aggression laws. Environmental conservation is managed through the Facilities group in the Corporate Services Division.

Corporate Social Responsibility

SAS maintains a Corporate Social Responsibility (CSR) Task Force comprising employees across business functions, including legal, facilities, marketing and communications. This group meets bimonthly to advance annual goals and priorities, and to address topics related to sustainability throughout the year. The group's function is to ensure the integration of corporate social responsibility efforts across the business. This team works closely with various departments and communicates with SAS executive leadership to ensure that CSR policies and initiatives are considered in all aspects of the business. SAS conducts business in accordance with the Ten Principles of the United Nations (UN) Global Compact and supports the UN Global Compact's Sustainable Development Goals.

Public Policy

SAS also actively engages in public policy discussions, particularly related to the role of technologies in solving larger societal issues that challenge local, state, federal and international agencies. These challenges include delivering better and safer health care while minimizing fraud, waste and abuse; ensuring that vulnerable children receive appropriate government services, including quality pre-K through third-grade education; providing better stewardship of taxpayer resources with greater government accountability; and helping governments make better use of their data assets to fulfill their missions, such as helping detect terrorist financing and money laundering schemes. SAS actively engages in

public policy discussions to help protect the valuable intellectual property resources that are the underpinning of its business. SAS also engages in discussions with legislators and regulators worldwide to help shape laws and policies that affect the handling of data, including discussions related to data protection and data security. Recently, SAS has begun to engage policymakers to help educate them as to the role and benefits of artificial intelligence, with an end to shaping a workable regulatory framework that encourages its use. Additionally, SAS engages with policymakers to enable reasonable rules to promote digital trade, and to ensure fair tax rules for organizations of all types.

SAS abides by political contribution laws and prohibits the use of corporate funds for political contributions to individual candidates. Corporate contributions may be made to political parties or national or state political party organizations if approved through established procedures. SAS records and reports all corporate political contributions in accordance with applicable local laws.

SAS complies with relevant lobbying laws in its operations. Lobbyist registrations and disclosure reports are filed by SAS on a regular and timely basis.

Ethics and Regulatory Compliance

Guided by the Code of Ethics, SAS is committed to maintaining its reputation as a company that conducts all aspects of the business with integrity and reflects ethical practices. SAS compliance programs use training, policies, processes and audits to ensure compliance in areas such as anti-corruption, international trade and privacy.

SAS is committed to demonstrating honesty, fairness and accountability in every decision and action, including each interaction with employees, customers, suppliers and competitors. The SAS Code of Ethics helps the company define and maintain high standards for respect, honesty, fairness and accountability. This SAS Code of Ethics applies to every employee – at every subsidiary

and in every region – as well as all members of the board of directors, officers appointed by the board of directors and agents. Failure to comply with the SAS Code of Ethics or other applicable policies can result in disciplinary action, up to and including termination.

The Code of Ethics is publicly available and linked to in this report. The Code of Ethics is made available to the public to demonstrate the company's vision and values for the benefit of customers, suppliers and other stakeholders. The Code of Ethics is also available to all employees on the company's intranet and is periodically promoted by the company's communications program. The content of the Code of Ethics is the same in both the publicly available and employee version; however, the internal version also includes live hyperlinks to associated internal SAS policies and procedures, which serve as a guide for employees on specific requirements to ensure and maintain compliance with the Code of Ethics and with SAS' overall mission and core values.

2018 Data

SAS did not have any substantiated, materially negative incidents with regard to public policy, privacy, corruption, ethics, bribery, anti-competitive actions, anti-trust violations or monopoly practices, societal impacts, the environment, labor practices, or employee discrimination or harassment; nor were there any sanctions or fines for noncompliance.

Training

The Ethics and Compliance group at SAS has developed courses to help employees abide by the SAS Code of Ethics and applicable external rules and regulations. SAS provides this training to equip all employees to make the right choices when ethical and regulatory challenges arise.

Online training was developed under the management and oversight of the vice president and general counsel for ethics and compliance, with input from many departments across SAS, and with ultimate approval by the chief legal officer. All global training courses developed since 2012 are available in English, simplified Chinese, French, German, Italian, Japanese, Portuguese, Russian and Spanish.

How SAS monitors completion and renewal of training varies, depending on relevant policies, strategies, trainings and codes. Online training completions are tracked by the third-party vendor that helped to create them and are monitored by the Ethics and Compliance group. Automated reminders are sent to those who have not completed training as the deadline approaches, and managers are contacted as trainings become overdue. All new employees and certain contract workers are required to take some or all of the following training:

- Code of Ethics.

- Information Security.

- Effective Trade Compliance.

- Workplace Respect.

- Global Anti-Corruption.

- Data Privacy.

SAS provides specialized training for personnel as needed. For example, certain California and India employees take additional anti-sexual harassment training as required by law. In-person, targeted compliance training is conducted periodically. These courses are developed by the Ethics and Compliance group in the Legal Division with input from the relevant functional business units. For example, in 2018, SAS conducted anti-corruption training for government sales and marketing groups, privacy training for IT staff, export training for federal government sales and services, and HIPAA training for employees interacting with data in the company's health care center or associated with its health care industry solutions.

Employee Feedback

Employees are responsible for appropriately communicating concerns regarding suspected unethical or illegal conduct to a supervisor, Human Resources or the Legal Division. Specific procedures for reporting concerns are displayed on the Legal Division's internal website. Employees may submit comments to SAS Ethics and Compliance via email, telephone or an anonymous online form.

SAS does not retaliate against anyone who reports suspected violations in good faith. All reports of misconduct are investigated in a timely fashion. Unless the complaining individual chooses to remain anonymous, he or she receives feedback on the results of the investigation, to the extent allowed by applicable law.

2018 Data

100% of complaints to SAS Ethics and Compliance were investigated and addressed as needed.

Anti-Corruption

SAS has an anti-corruption program to provide training and monitoring across the company. This program includes an online anti-corruption course for all new employees and certain third parties; and in-person, targeted training for sales, marketing, finance and other affected groups. In addition, SAS has implemented gift, marketing event, "revolving door," conflict of interest, lobbying and donation policies – as well as review procedures – to comply with applicable laws and customer requirements. These documents are available to all employees on the Ethics and Compliance internal website.

SAS conducts advance and ongoing due diligence on subcontractors, partners and other third parties to verify their reputability and identify and mitigate anti-corruption risks. SAS also contractually requires that its subcontractors comply with the principles set forth in its Code of Ethics, including anti-bribery provisions. SAS also conducts audits and transaction-specific due diligence measures to support compliance in high-risk transactions.

Export Controls

SAS maintains an export management system complete with product licensing and screening processes that include checking employees, customers and suppliers against the Office of Foreign Asset Control (OFAC) Specially Designated Nationals and Blocked Persons list and certain other government lists of prohibited parties. SAS also files regular and timely anti-boycott reports as required by US law.

SAS classifies its products according to US export laws and makes such classifications available to its customers at the SAS Current Export Designation Information page.

Privacy

The Ethics and Compliance group in the SAS Legal Division works to ensure that SAS' use of personal data complies with applicable laws, SAS policies and customer expectations. SAS Global Information Security establishes processes and deploys technologies to protect the confidentiality, availability and integrity of data in the custody or control of SAS.

These groups work closely together to manage data privacy issues and security by, among other things, establishing information governance policies, standards, guidelines and processes based on regulations, business needs and industry best practices. Periodic privacy and security-related assessments and compliance reviews include privacy impact assessments for newly developed or modified applications that may affect individual privacy interests, and for any new or significantly modified uses of personal data that may affect those interests.

The Ethics and Compliance group also takes a leadership role with the SAS Privacy Champions Network, a cross-functional, global network of employees who are on the "front lines" of privacy and SAS' handling of personal data on a daily basis. The Ethics and Compliance group ensures that timely and accurate privacy guidance is distributed through the network, and responds to concerns identified in the field by network members. The network was crucial in preparing SAS for the May 25, 2018 implementation of the EU's General Data Protection Regulation (GDPR), including reviewing and reforming

hundreds of business practices to drive a "privacy by design and by default" culture at SAS. The Privacy Champions Network continues to operate and adapt to the GDPR and the increasing number of privacy laws like it.

The Ethics and Compliance group ensures that SAS' externally posted privacy statement accurately reflects its information collection and use practices with respect to external parties, and works with our Human Resources team to provide similar notice to SAS' workforce.

SAS' privacy statement is global, covering SAS US and its foreign subsidiaries and other business units. Translated versions of the privacy statement with country-specific requirements are linked to the English version.

SAS requires all its employees and certain categories of contractors to complete training on privacy and information security. SAS Global Information Security publishes a monthly information security awareness newsletter to inform employees about information security and privacy issues.

Continuity of Business

At SAS, continuity of business (COB) is an important global corporate initiative, addressing threats or hazards that may affect employees and customers and disrupt business operations. COB planning supports corporate governance, information security and corporate social responsibility.

Supply Chain

SAS strives to build long-term relationships with both direct and indirect suppliers. A wide range of best practices, tools and policies are used to ensure that the supply chain remains strong and the company is identifying the best fit for all procurement needs. Direct suppliers provide products or services used in creating the products and services SAS provides to customers. These include software, software as a service, hardware, consultants and IT infrastructure. Indirect suppliers in areas such as food services, legal and accounting, real estate, facilities services and travel provide support for operating the business. SAS places a priority on contracting with local suppliers when it makes sense for the company.

SAS uses mechanisms such as service level agreements, key performance indicators, benchmarking and supplier relationship management to monitor and manage suppliers' results. Suppliers are subject to ongoing anti-corruption due diligence, which – proportionate to the level of the supplier's business and risks presented – screens prospective suppliers and relevant or high-risk individuals within those organizations.

The company also has an advance due diligence process for suppliers who assist in sales efforts and potential acquisitions. The process involves investigation of the supplier at levels that are proportionate to the risks

presented by the supplier, including investigating the supplier's background, qualifications, conflicts of interest, financial condition and history of regulatory violations.

SAS has confirmed via supply chain due diligence that no conflict minerals are necessary to the functionality or production of any product manufactured by or contracted for manufacture by SAS.

The supply chain compliance program also consists of contractual requirements for anti-corruption and ethics rules for all contractors and consultants. SAS also conducts in-person and online training, expense record and expenditure reviews, audits, and global outreach through organizations such as the UN Global Compact. SAS voluntarily provides supply chain information for the Carbon Disclosure Project (CDP) and Great Place to Work.

SAS uses competitive bidding to help ensure competition and fairness in the marketplace for suppliers. SAS' standard request for proposal form emphasizes the importance of corporate social responsibility, including environmental stewardship and promotion of supplier diversity. Additionally, if the bidder is not a diverse company, SAS requests a statement regarding its active supplier diversity programs or opportunities it may subcontract to diverse suppliers.

Beginning in 2017, the Strategic Sourcing and Procurement Department requires adherence to the SAS Business Partner Code of Conduct and SAS Sustainable Procurement Charter in SAS' standard vendor agreements and purchase orders.

Supplier Diversity

SAS' Supplier Diversity Department was formed in 2005 out of a need to satisfy customer requirements during the sales contracting process. Over the years, responsibilities have evolved to reflect SAS' corporate conscience and competitive advantage as a global leader in analytics software and solutions.

As part of the Corporate Services Division, the manager of supplier diversity is responsible for the supplier diversity process and mission, which includes:

• Reviewing RFPs and contracts and responding to customers with diversity requirements.
• Preparing and providing diversity spending reports to customers.
• Providing information and access to SAS' procurement opportunities by supporting and conducting various diversity activities and events (e.g., sponsorships, education and attendance).
• Providing internal training to buyers and stakeholders regarding the importance and value of providing access to and utilization of diverse suppliers.

By developing and maintaining effective relationships with suppliers, SAS aims to create value throughout the life of each contract based upon economy, quality, environmental preservation and social values. SAS is a member of the National Minority Supplier Development Council, the Women's Business Center of North Carolina, the North Carolina Veterans Business Association, the local LGTBQ Chamber of Commerce and the local chapter of Disability:IN. SAS is also represented on the boards of various diverse supplier development councils and economic development initiatives. Three examples of active board chair positions include the Carolinas Virginia Minority Supplier Development Council, Piedmont Chapter; the Carolina/Virginia Chapter of the Institute for Supply Chain Management and the North Carolina Chapter of Disability:IN. SAS believes that active participation and collaboration with these organizations fosters a strong climate for diverse business development.

SAS Supplier Diversity is a member of the North Carolina MWBE Coordinators' Network, a professional development organization for supplier diversity professionals. Membership ensures SAS' program stays relevant on legislation and industry changes. SAS partners with the Small Business and Technology Development Center to provide procurement-related educational services to small and diverse-owned businesses.

SAS values extend into the community in which we live and work. In 2018, SAS volunteered with Dress for Success to provide mock interviews and business training to women entrepreneurs. The organization partnered with several minority business owners to collect and pack truckloads of supplies to deliver basic necessitates to the victims of Hurricane Florence. Giving back strengthens local communities and in turn strengthens the suppliers with which SAS does business.

Supplier Diversity Policy Statement

SAS customers represent a wide range of industries, people and locations – and the company seeks this same level of diversity in its supplier community. Unlike a typical manufacturing environment, the creation of SAS products does not require purchasing materials or component parts, but rather relies on a highly skilled staff of technical professionals. SAS complies with federal laws and regulations that prohibit discrimination in employment based on race, color, religion, gender, national origin, age, disability or veteran status.

As a federal contractor, SAS complies with Executive Order 11246, as amended, and the implementing rules and regulations of the Office of Federal Contract Compliance, Vietnam Era Veterans' Readjustment Assistance Act of 1974, and the Rehabilitation Act of 1973.

Regarding the procurement of goods and services to support corporate operations, SAS continually seeks ways to make business opportunities available to all certified, diverse business categories: These categories include:

- Minority-Owned Business Enterprises.
- Women-Owned Business Enterprises.
- Disability-Owned Business Enterprises.
- LGBTQ-Owned Business Enterprises.
- Veteran or Service-Disabled Veteran-Owned Businesses.
- Federal HUB Zone-Certified Businesses.

In the area of professional services offered to its customers, SAS provides small and diverse-owned businesses the opportunity to participate in the subcontracts it awards. As with all SAS suppliers, there must be a demonstrated "value-added" benefit. SAS seeks out suppliers that show a commitment to our values, innovative business solutions, cost savings and competitive pricing.

SAS encourages diverse businesses interested in more information about potential working opportunities and relationships to email supplierdiversity@sas.com.

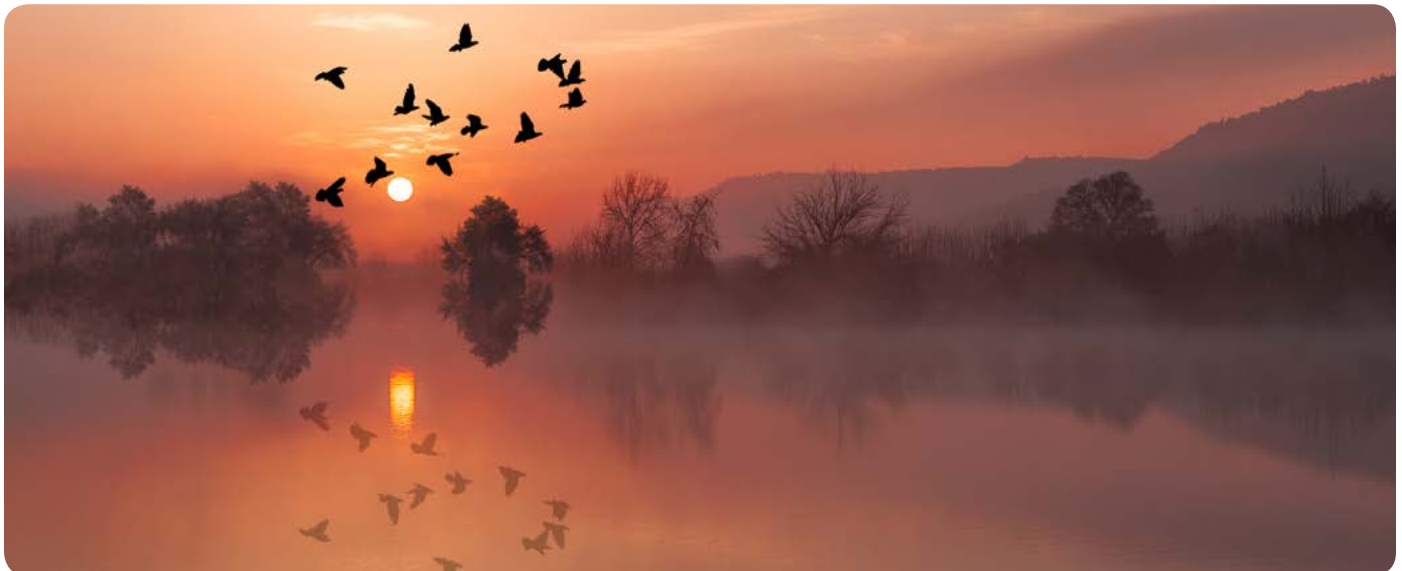## Suppliers and the Environment

The environmental impact of business activities extends beyond the SAS campus and work spaces to the entire supply chain, from suppliers to distribution channels to product use. The Environmental Management Program researches ways to incorporate corporate social responsibility into procurement efforts and reduce the environmental impact of supply chain processes. To accomplish this, SAS:

- Strongly encourages employees to give consideration and preference to suppliers with environmental practices and programs.
- Promotes the adoption of environmental principles by contractors and suppliers, encouraging or requiring improvements.
- Completes the annual CDP supply chain questionnaire.

- Makes extensive use of green products, such as environmentally friendly cleaning supplies and low-emissions paints and products for campus buildings. The procurement teams routinely assist with finding the most efficient and Earth-friendly options.
- Maximizes investments by eliminating unnecessary purchases, extending the life of assets through repurposing and reselling outdated equipment to employees as well as donating materials to educational institutions. Only then are materials processed for responsible recycling.

As a software company, SAS has limited risks and concerns in regard to raw materials, hazardous wastes and supplier practices. Because the primary input to SAS products is intellectual property, SAS does not currently collect data on GHG emissions and climate change strategy from suppliers.

2018 Data

SAS continued to research options for incorporating corporate social responsibility elements into procurement processes and reducing environmental impact of supply chain processes. As in years past, SAS completed its annual CDP supply chain questionnaire related to greenhouse gas emissions inventory and related climate change management, and water management and stewardship. SAS achieved an overall CDP performance score of B- for both surveys. The average performance score for supplier responses was D for climate management and C for water management.

The SAS 2018 Corporate Social Responsibility (CSR) Report is based on the calendar year Jan. 1 to Dec. 31, 2018, and updated annually. All data and information pertain to SAS Institute Inc., the US-based parent company for SAS, unless otherwise stated. Environmental reports are based on global operations data. The most recent report was the 2017 CSR report, which was published online in June 2018. That data has now been updated for the 2018 report. In 2018, SAS made strides to improve global reporting of its programs and initiatives, and will continue to improve reporting on offices outside of the US. There have been no other significant changes during the reporting period.

The report was developed using the Global Reporting Initiative (GRI) Sustainability Reporting Standards and was prepared in accordance with Core GRI requirements. SAS' CSR efforts focus on four core areas: education and philanthropy, environment, employees, and governance and ethics. The report can be viewed in a PDF document by separate sections or as a complete report so information is more accessible and customizable. The report format allows for greater explanation and transparency on SAS' practices and policies and provides space for updates to relevant and material topics. Over time, this report will evolve in response to the needs of stakeholders, employees, customers and the community.

SAS Visual Analytics data visualization software is used to generate charts and graphs to illustrate the data and provide additional analytics capabilities. This provides far greater visibility, transparency and accuracy in reporting SAS' environmental impact. Charts and graphs included in the PDF documents reflect a specific time frame for gathering and analyzing data for this report. Executive leaders and other relevant internal stakeholders have reviewed content in this report.

SAS welcomes your comments and questions regarding this report and its corporate responsibility efforts. For questions about this report or its contents, please email globalreporting@sas.com.

Scope and Boundaries

Since SAS headquarters are in Cary, NC, the scope of this CSR report focuses primarily on SAS' United States operations. Where available, global data is provided and appropriately labeled. There have been no significant changes to the scope and boundaries for SAS; however, there have been improvements in the reporting of such boundaries.

Because SAS is a software company, much of the company's impact is related to its own operation rather than the products and services provided to customers. Externally, impacts generally occur related to the business practices of suppliers.

Examples of impacts include:

• Environmental: energy use in offices and data centers, waste, and construction of new buildings.

• Societal: compliance with local, national and international laws; ethical treatment of employees, customers, suppliers, partners and communities; supporting and fostering a strong workforce.

• Economic: creating value in communities where SAS operates; job creation and economic growth; supporting the community through philanthropy.

At this time, SAS does not collect environmental information on suppliers or partners; however, the company seeks to work with organizations that have a similar approach to reducing their environmental impact. SAS' standard procurement agreements require that suppliers must abide by required ethics and compliance rules, which can be found in the Governance & Management section under Supply Chain.

Materiality Matrix

The CSR Task Force, a cross-departmental sustainability team based in the US, underwent a facilitated process to determine the primary issues that affect SAS and its stakeholders. This included issues that affect the industry as a whole, peer businesses, communities, customers, employees and management. Through this process, the team determined areas where SAS has a significant environmental, social or economic impact. These issues were then rated to determine their importance to stakeholders and/or SAS' operations. Using the GRI standards, these issues have been reported as "material topics." Each team member then gathered information specific to these areas of impact for inclusion in this report. The focus areas of this report include:

Internal: Issues Relevant to Employees and Management

Great workplace
Training for next generation of employees
Health and safety Talent development
Ethics Environment
Diversity and Inclusion Workers' rights
Volunteerism and community engagement
Energy and emissions Recycling
Water Smart Campus
IoT

External: Issues Relevant to Other Stakeholders, Including Customers,
Communities, Governments, Partners, Subcontractors, Suppliers, etc.

Quality of support
Giving Back Ethics Privacy
Continuity of business
Global trade **Environment**
Diversity Anti-corruption
Gift law Fair business practices
Government relations
Civic participation

Stakeholder Engagement

SAS' stakeholders include communities, employees, regulatory and governmental bodies, industry organizations, students and teachers, and business partners and suppliers. Engagement with stakeholders provides SAS with the opportunity to gain a greater understanding of the needs in the community and in the market. It allows the company to build strong partnerships with regulatory bodies and organizations within the industry, and lasting relationships with communities, employees, partners and suppliers.

Stakeholder	Engagement	2018
Communities	Employee volunteers, community grants, in-kind donations and training, fundraising.	Employee donations and corporate matching for DonorsChoose.org totaled more than $112,400, funding 535 classroom projects and benefiting 18,725 students in 42 states. SAS employees volunteered almost 26,000 hours, resulting in more than $93,000 donated to education from the Employee Volunteer Fund.
Employees	Enhance the SAS workplace culture by communicating with and informing employees about company activities and internal and external programs.	Intranet, webcasts, videos, webzines, blogs and The Hub, an enterprise-wide social networking platform.
Regulatory and government	Domestic and international policy and legislation development on topics that affect SAS customers and the development of new products.	Data protection and privacy; big data; copyright protections; review of legislation targeting frivolous patent lawsuits; revision of administrative policies to ensure strong, quality patents are issued.
Industry organizations	Industry associations, think tanks and academia.	Public speaking engagements, development or contribution to industry position papers, and one-to-one meetings.
Business partners and suppliers	Meetings, webcasts and representation on boards.	Board memberships include Business Council, Business Roundtable, CEO Roundtable on Cancer and My Future NC.

Stakeholder	Engagement	2018
Customers	Host ongoing dialogue with customers to answer questions and gather input for product improvement.	SAS interacts with customers through the SAS Global Forum conference, customer advisory boards, self-help and assisted-help resources, focus groups, training, books, technical papers, social media, support communities, samples, SAS notes and focus areas, and more.
Analysts	Inform and solicit feedback from industry analysts.	SAS' Analyst Relations group is responsible for informing, influencing and soliciting feedback from industry analysts and thought leaders with the purpose of validating technology and corporate direction and to provide SAS with a crucial third-party perspective.
Students and teachers	Free online and mobile curriculum resources, free SAS software, teacher and professor training, summits and meetings, classroom volunteers.	Curriculum Pathways® provides free online resources and mobile apps for early learners to grade 12. SAS offers free software, training and communities for people to gain valuable analytics skills, and supports analytics degree and certificate programs at colleges and universities around the world. SAS is a regular convener of important education meetings, and focuses volunteer efforts on education.
Communications	Build awareness and shape the SAS brand through communications.	Communications helps build awareness and shape the SAS brand by influencing what others think and say about the company. SAS uses communications to guide the flow of information to educate and persuade various public stakeholders, including the news media, bloggers, customers, prospects, analysts and partners.

GRI STANDARD	DISCLOSURE	DESCRIPTION	REFERENCE
organizational profile	102-1	Name of the organization	Governance and Management> Governance Structure>Company Profile
	102-2	Primary brands, products and services	Governance and Management> Governance Structure>Company Profile
	102-3	Location of headquarters	Governance and Management> Governance Structure>Company Profile
	102-4	Number of countries where organization operates	Governance and Management> Governance Structure>Company Profile
	102-5	Nature of ownership and legal form	Governance and Management> Governance Structure>Company Profile
	102-6	Markets served	Governance and Management> Governance Structure>Company Profile
	102-7	Scale of organization	Governance and Management> Governance Structure>Company Profile
	102-8	Size and composition of workforce	Governance and Management> Governance Structure>Company Profile
	102-9	Organization's supply chain	Governance and Management> Supply Chain
	102-10	Significant organizational changes during the reporting period	None
	102-11	Precautionary approach or principle is addressed by the organization	Environmental Program>Environmental Governance>Precautionary Approach
	102-12	Externally developed economic, environmental and social charters the organization endorses	Governance and Management> Supply Chain Management
	102-13	Memberships and associations	Education Philanthropy> Community Engagement

GRI STANDARD	DISCLOSURE	DESCRIPTION	REFERENCE
strategy and analysis	**102-14**	Statement from the most senior decision maker of the organization	From the CEO
ethics and integrity	**102-16**	Organization's values, codes of conduct and codes of ethics	Governance and Management> Ethics and Regulatory Compliance
	102-17	Mechanisms for advice and concerns about ethics	Governance and Management> Ethics and Regulatory Compliance
governance	**102-18**	Governance	Governance and Management> Governance Structure>Company Profile
	102-19	Delegating authority	Governance and Management> Governance Structure>Company Profile
	102-20	Executive-level responsibility for economic, environmental, and social topics	Governance and Management> Governance Structure>Company Profile
	102-21	Consulting stakeholders on economic, environmental, and social topics	Governance and Management> Governance Structure>Company Profile
	102-22	Composition of the highest governance body and its committees	Governance and Management> Governance Structure>Company Profile
	102-25	Conflicts of interest	Governance and Management> Ethics and Regulatory Compliance
	102-26	Role of highest governance body in setting purpose, values, and strategy	Governance and Management> Governance Structure> Corporate Social Responsibility Governance
	102-27	Collective knowledge of highest governance body	Governance and Management> Governance Structure> Corporate Social Responsibility Governance
	102-29	Identifying and managing economic, environmental,and social impacts	Governance and Management> Governance Structure> Corporate Social Responsibility Governance
	102-33	Communicating critical concerns	Governance and Management> Governance Structure> Corporate Social Responsibility Governance
	102-34	Nature and total number of critical concerns	Governance and Management> Governance Structure> Corporate Social Responsibility Governance

GRI STANDARD	DISCLOSURE	DESCRIPTION	REFERENCE
stakeholder engagement	**102-40**	List of stakeholders	About This Report>Stakeholder Engagement
	102-41	Percentage of employees covered by collective bargaining	None
	102-42	Basis for identification and selection of stakeholders with whom to engage	About This Report>Stakeholder Engagement
	102-43	Approach to stakeholder engagement	About This Report>Stakeholder Engagement
	102-44	Key topics and concerns raised by stakeholders	About This Report>Materiality Matrix
reporting practices	**102-45**	List all entities and explain omissions	Governance and Management> Company Profile; About This Report
	102-46	How report content was defined	About This Report>Scope and Boundaries
	102-47	List of material topics	About This Report>Materiality Matrix
	102-48	Restatements	About This Report>Scope and Boundaries
	102-49	Significant changes in scope or boundary	About This Report>Scope and Boundaries
	102-50	Reporting Period	About This Report
	102-51	Date of most recent previous report	About This Report
	102-52	Reporting cycle	About This Report
	102-53	Contact point	About This Report
	102-54	GRI "in accordance" option	About This Report
	102-55	GRI content index	GRI Index
economic- economic performance	**201-1**	Direct economic value generated and distributed	CEO Letter; Philanthropy
	201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change	Not applicable
economic- procurement practices	**204-1**	Proportion of spending on local suppliers	Governance and Management> Supply Chain Management - North Carolina only

GRI STANDARD	DISCLOSURE	DESCRIPTION	REFERENCE
economic- *anti-corruption*	**205-1**	Operations assessed for risks related to corruption	Governance and Management> Ethics and Regulatory Compliance> Anti-Corruption
	205-2	Communication and training on anti-corruption policies and procedures	Governance and Management> Ethics and Regulatory Compliance> Anti-Corruption
	205-3	Confirmed incidents of corruption and actions taken	Governance and Management> Ethics and Regulatory Compliance
economic- *anti-competitive behavior*	**206-1**	Total number of legal actions for anti-competitive behavior, anti-trust and monopoly practices and their outcomes	Governance and Management> Ethics and Regulatory Compliance
environmental- *materials*	**301-1**	Materials used by weight or volume	Environmental Program> Energy and Emissions
	301-2	Recycled input materials used	Environmental Program> Landfill Diversion
environmental- *energy*	**302-1**	Energy consumption within the organization	Environmental Program> Energy and Emissions
	302-2	Energy consumption outside of the organization	Environmental Program> Energy and Emissions
	302-3	Energy intensity	Environmental Program> Energy and Emissions
	302-4	Reduction of energy consumption	Environmental Program> Energy and Emissions
	302-5	Reductions in energy requirements of products and services	Environmental Program> Energy and Emissions
environmental- *water*	**303-1**	Total water withdrawal by source	Environmental Program> Water Conservation
	303-2	Water sources significantly affected by withdrawal of water	Environmental Program> Water Conservation – US only
	303-3	Percentage and total volume of water recycled and reused	Environmental Program> Water Conservation

GRI STANDARD	DISCLOSURE	DESCRIPTION	REFERENCE
environmental-*biodiversity*	304-1	Operational sites owned, leased, managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas	Environmental Program>Biodiversity
	304-2	Description of significant impacts of activities, products and services on biodiversity	Environmental Program>Biodiversity
	304-3	Habitats protected or restored	Environmental Program>Biodiversity
environmental-*emissions*	305-1	Direct greenhouse gas emissions (scope 1)	Environmental Program> Energy and Emissions
	305-2	Indirect greenhouse gas emissions (scope 2)	Environmental Program> Energy and Emissions
	305-3	Other indirect (Scope 3) GHG emissions	Environmental Program> Energy and Emissions
	305-4	GHG emissions intensity 13	Environmental Program> Energy and Emissions
	305-5	Reduction of GhG emissions	Environmental Program> Energy and Emissions
environmental-*effluents and waste*	306-1	Water discharge by quality and destination	Environmental Program>Landfill Diversion
	306-2	Waste by type and disposal method	Environmental Program>Landfill Diversion
	306-3	Significant spills	Environmental Program>Landfill Diversion
	306-5	Water bodies affected by water discharges and/or runoff	Environmental Program>Landfill Diversion
environmental-*compliance*	307-1	Non-compliance with environmental laws and regulations	Governance and Management> Ethics and Regulatory Compliance
environmental-*supplier environmental assessment*	308-1	New suppliers screened using environmental criteria	About This Report
	308-2	Negative environmental impacts in the supply chain and actions taken	Environmental Program> Environmental Governance
social-*employment*	401-1	New employee hires and employee turnover	Employees and Culture> Hiring and Retaining Staff
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employees and Culture> Hiring and Retaining Staff
	401-3	Parental leave	Employees and Culture> Hiring and Retaining Staff

GRI STANDARD	DISCLOSURE	DESCRIPTION	REFERENCE
social- *occupational health and safety*	**403-2**	Type of injury and rates of injury, occupational diseases, lost days and absenteeism	Employees and Culture> Hiring and Retaining Staff
social- *training and education*	**404-1**	Average hours of training per year per employee	Employees and Culture>Skills Development
	404-2	Programs for upgrading employee skills and transition assistance programs	Employees and Culture>Skills Development
social- *non-discrimination*	**406-1**	Total number of incidents of discrimination and corrective actions taken	Governance and Management> Ethics and Regulatory Compliance
social- *human rights assessment*	**412-2**	Employee training on human rights policies or procedures	Governance and Management> Ethics and Regulatory Compliance>Training
social- *local communities*	**413-1**	Operations with local community engagement, impact assessments, and development programs	Education Philanthropy; partial reporting
social- *supplier social assessment*	**414-1**	New suppliers that were screened using social criteria	Governance and Management>Supply Chain
	414-2	Negative social impacts in the supply chain and actions taken	Governance and Management> Ethics and Regulatory Compliance
social- *public policy*	**415-1**	Political contributions	Governance and Management> Governance Structure>Public Policy
social- *customer privacy*	**418-1**	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Governance and Management> Ethics and Regulatory Compliance
social- *socioeconomic compliance*	**419-1**	Non-compliance with laws and regulations in the social and economic area	Governance and Management> Ethics and Regulatory Compliance