
LIVING
PROGRESS
REPORT
2018
Hewlett Packard
Enterprise

A MESSAGE FROM OUR CEO

We live in an incredible time—where climate change, population, food, healthcare, and security all present urgent and interrelated challenges for our society. Fortunately, I believe technology can play an important role in addressing these rapidly-evolving global needs. And that is why we at HPE have dedicated ourselves to a clear, simple, and extremely important cause—developing and using technology to advance the way people live and work.

To accelerate our purpose, I believe we must focus on three priorities as a company: investing in our culture, creating new value for our customers and partners, and doubling-down on sustainable innovation.

CULTURE

Being a purpose-driven organization starts from the inside. Our HPE Board and executive committee firmly believe that trust, integrity, and strong environmental, social, and governance (ESG) performance are core to our business. We regularly discuss our ongoing efforts to build our culture, deepen our relationships with customers and partners, and bring to market innovative products and solutions which make our world better.

Our culture is centered on always doing the right thing. Good business always requires good judgment, and I continually stress the importance of "winning the right way." Our culture must also be defined by our commitment to and progress in building a diverse and inclusive environment for our global team members. Two-thirds of our business is outside the U.S.—and our people and insights should mirror that. Our leaders and managers are now directly accountable for driving even-higher levels of inclusion and employee engagement, shaping an inclusive culture which will yield the innovative thinking needed to help our customers thrive.

CUSTOMERS

HPE is focused on helping our customers harvest the economic potential of their data, from every edge to any cloud. We need to innovate faster, better, smarter—and use those innovations to solve our customers' most vexing problems. Many of our partnership projects across healthcare, manufacturing, finance, and agriculture are tapping into previously unused data resources to reveal new solutions to social and environmental challenges.

Customers already consider HPE's sustainable IT solutions to be a strategic differentiator. For example, HPE's new supercomputer for the U.S. National Renewable Energy Laboratory will advance research on energy technologies, including renewables, while at the same time delivering much greater compute power within a much smaller carbon footprint than the system it replaces. Our circular economy services and new consumption models offer our customers efficiency, flexibility, and upgradability to reduce the cost of IT, as well as its environmental impact, while also unlocking the value of their old IT assets for investment in new technologies.

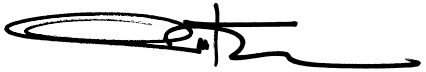
INNOVATION

Our team's unique capability for innovation holds the promise of even bigger solutions. The limitations of our conventional computing systems are the main roadblock to utilizing vast resource pools of data for the good of society. We need to reinvent the most basic functions of a computing system from the ground up. Memory-Driven Computing is one approach that delivers an entirely new way of computing specifically designed for the Big Data era, reducing the time needed to process complex problems from days to hours.

In one early pilot, a cutting-edge medical research project with biotech startup Jungla, our new Memory-Driven Computing Sandbox is processing massive sets of molecular data to more rapidly unlock medical breakthroughs hidden within patient genomes. I am confident that advancements such as this will play a key role in breaking through barriers to create meaningful change—making the impossible possible.

The challenges we're facing are not insurmountable. And that's why, after more than 20 years with HPE, this is the most exciting time of my career. Technology and data will be the key to enabling governments and businesses around the world to navigate a path to a sustainable future. Our world demands that we look ahead and defy convention. It is our duty—and HPE's responsibility—to do so.

Regards,



Antonio Neri
President and Chief Executive Officer

CONTENT

Complete 2018 data and statement of assurance can be found in the 2018 Data Summary

CREATING SHAREHOLDER VALUE

Sustainability is a business driver for HPE, boosting investment, winning business, attracting talent, and future-proofing our products from regulatory risk.

ATTRACTING ESG INVESTMENT FUNDS

Investor interest in environmental, social, and governance (ESG) performance continues to trend upward. In the U.S., ESG-focused assets grew to $12 trillion in 2018, an increase of 38% from 2016.[1] Investors study ESG performance to assess a company's risk management competence as well as its future-proofing from consumer and regulatory trends.

HPE qualifies for many ESG investments due to our strong ranking performance and transparency, such as the following:

- Only company in our industry to receive a AAA ranking from MSCI ESG
- Seventh consecutive year HPE has been named to the Dow Jones Sustainability World Index (DJSI)
- Sixth consecutive year HPE made the CDP Climate A List
- Gold Level recognition from EcoVadis, the leading sustainability scorecard for procurement teams
- Member of the FTSE4Good Index Series

Since investor assessment methodologies differ, we prioritize the information requests of the following investor-driven ranking organizations: CDP, Dow Jones Sustainability Index (DJSI), EcoVadis, FTSE Russell, MSCI, Sustainalytics, Institutional Shareholder Services (ISS) and ISS-oekom, and Thomson Reuters. We serve the needs of the wider investment and analyst communities through our Living Progress Report and website, and our ESG key performance indicator Data Summary.

MSCI

MEMBER OF Dow Jones Sustainability Indices In Collaboration with RobecoSAM

CDP A LIST 2018 CLIMATE CHANGE

GOLD 2018 ecovadis CSR Rating

BUILDING CUSTOMER RELATIONSHIPS

HPE's sustainability capabilities are a strategic differentiator in customer relationships, helping to drive new business. Our sustainability expertise as a commercial partner, as well as the sustainability performance of our products, operations, and supply chain, give us a competitive advantage across sectors, including healthcare, agriculture, manufacturing, and finance.

Our customer engagement practice boosts our commercial partnerships, supported by sales and sustainability teams that demonstrate how commercial benefits stem from IT-enabled advances in sustainability. Our customers leverage our efficient IT solutions to help them achieve their own industry-leading sustainability goals, an important factor in sales wins.

In 2018, we participated in 55 one-to-one customer meetings and 87 multi-customer meetings with a sustainability focus. Customers representing nearly $5 billion of total revenue took part in these sustainability engagements, and we estimate that these meetings contributed to approximately $312 million in net revenue.

"Adobe® and HPE are among the leading companies in sustainability. We share A List rankings on CDP, we work together on RE100 goals and science-based targets, and we are proud to be long-time partners, for our companies and our customers, in energy efficiency and digital transformation."

VINCE DIGNEO, HEAD OF SUSTAINABILITY AND CORPORATE RESPONSIBILITY, ADOBE

"Arrow Electronics and HPE have enjoyed a long-standing partnership and shared commitment to exploring sustainability within our value chains and solutions. Together, we are excited to work toward more sustainable IT solutions so our partners can operate more efficiently, enhance the customer experience, and generate new revenue."

JOHN SZABO, VICE PRESIDENT, GLOBAL SUPPLIER MANAGEMENT, ARROW ELECTRONICS, INC.

EXPANDING OUR MARKET

The global imperative for more-sustainable societies and industries is driving innovation across the public and private sectors. IT is enabling step changes in the efficiency of numerous organizational, societal, and industrial systems. This creates new markets for bespoke HPE products and services. Examples include:

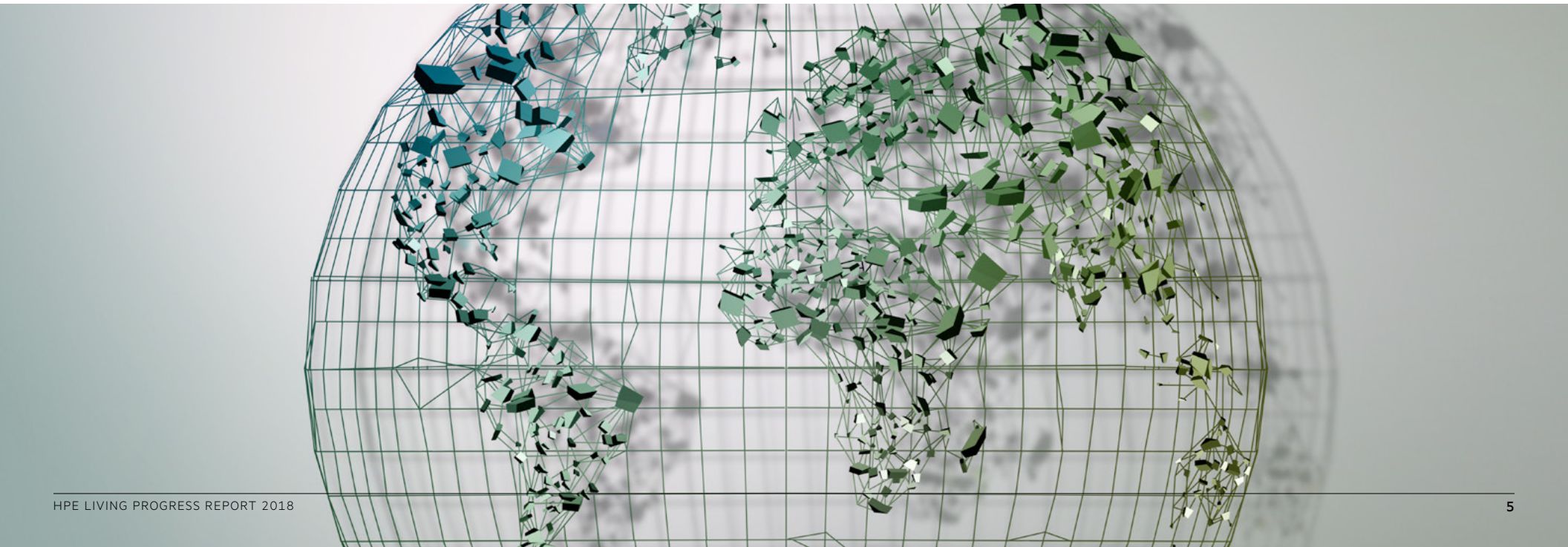
Healthcare—The global healthcare sector, accounting for more than 10% of global GDP, offers numerous opportunities for increased efficiency. Advanced IT is providing savings for healthcare funders, accelerating research, and improving treatment for patients.

Agriculture—The global population is anticipated to top 9 billion people by 2050, and experts estimate that agricultural output must double to meet the impending demand. Advanced IT solutions are at the leading edge of the agricultural sector's innovation toward higher food production from finite land resources.

Manufacturing—The Industrial Internet of Things (IIoT) is powering a new revolution in industry, with efficiency and environmental impact reset to new levels. The market opportunities extend across many industries and regions.

Finance—The complexity and importance of the financial sector create multiple opportunities for improving efficiency and security. HPE is leveraging next-generation predictive analytics to stop fraud in real time, while supporting customers as they migrate to faster and more efficient infrastructures.

Cities—Over half the world's population lives in urban areas, and the proportion is increasing. Our customers are leveraging HPE technology to make cities more sustainable and resilient. The edge, paired with the cloud, can optimize multiple functions critical to city life, including essential services such as transport, energy, water, security, and education.



ATTRACTING TOP TALENT

HPE relies on attracting the best talent to develop the future of IT and to ensure our company's continued success. Increasingly, our prospective talent pool expects a workplace aligned with it's values and life priorities. Living Progress provides potential employees with strong evidence of our longstanding commitment to social and environmental sustainability, as well as our progressive employment environment. In 2018, HPE received the industry-leading score for Talent Attraction & Retention on the DJSI.

We share our sustainability credentials with candidates through student and intern briefing packs and invitations to volunteering events. We also promote Living Progress on the Careers@hpe website and on social media.

ENSURING PRODUCT MARKET ACCESS

We market our products globally, tracking and anticipating changes to regulations with the potential to affect our products. HPE's Environmental New Product Introduction process ensures all our products meet or exceed regulatory requirements, enabling access to markets anywhere in the world. We ensure environmental compliance across 44 deliverables in subjects including materials, energy, end-of-life management, and product documentation.

Many HPE products go above and beyond regulatory requirements, conforming to third-party verified eco-labels which make it easy for customers to incorporate sustainability qualifications in their procurement criteria. We are one of only two companies with Electronic Product Environmental Assessment Tool (EPEAT) qualified servers meeting more than 23 criteria such as product longevity and energy efficiency. EPEAT is widely used by public- and private-sector purchasers and is often required for sales to federal, state, local, and education customers in the U.S., contributing millions to our annual sales.

As a best practice, HPE produces IT Eco Declarations for all new HPE products, providing visibility into substances of concern and product treatment information and market requirements, such as design disassembly and product lifetime.

In 2018, HPE received the industry-leading score for Talent Attraction & Retention on the DJSI.

LIVING PROGRESS OVERVIEW

As enterprises leverage the power of connectivity to generate value, they are investing in expanding IT infrastructure to process exponentially more data. This technological advancement has the ability to advance the way we live and work, but it demands a renewed focus on sustainable innovation.

Living Progress is HPE's plan to sustainably meet the technology demands of the future by driving a circular economy, investing in our people, and operating responsibly.

Our sustainable solutions power smarter, hyper-efficient operations and unlock data to accelerate sustainable outcomes. We are building a world where factories monitor themselves in real-time; where healthcare is personalized and genetic diseases are a thing of the past; where clean energy technologies power the economy; where women earn equal pay for equal work; where technology is secure and trusted, basic services are available to all, and everything computes.

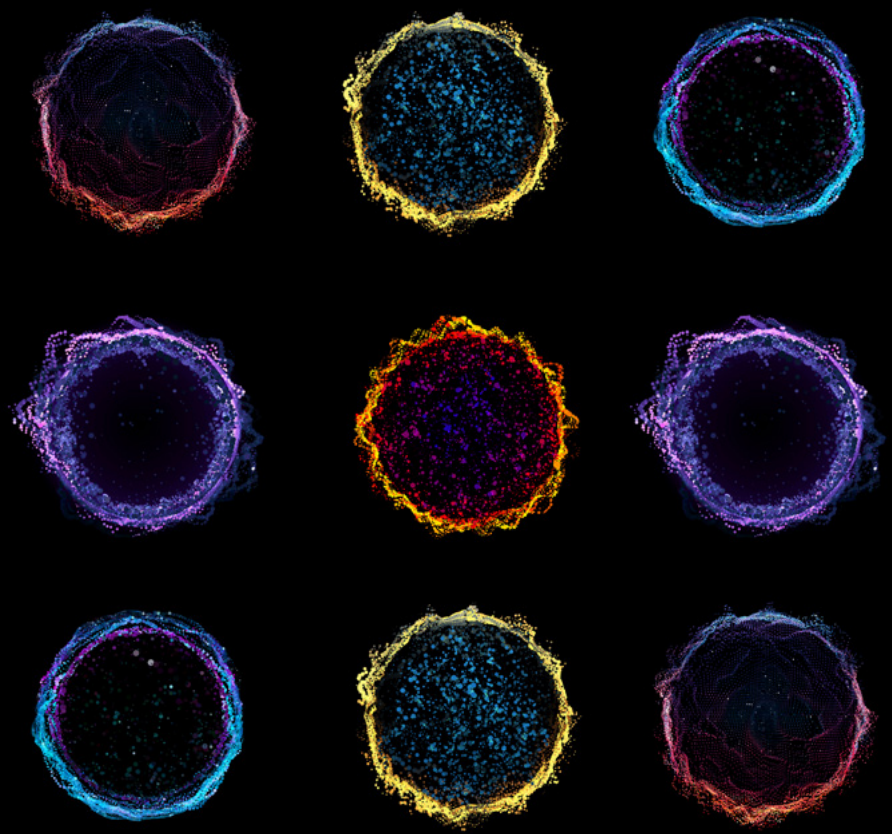
Achieving a sustainable future will require disruptive transformation across every industry. In an era of infinite connectivity but finite resources, we must partner with our customers and stakeholders to catalyze sustainable innovation in our industry and beyond. Only together can we solve the world's most complex challenges.

"The betterment of society is not a job to be left to a few. It's a responsibility to be shared by all."

DAVID PACKARD, 1947

HARNESSING THE POTENTIAL OF IT

IT is reaching into activities that were, until recently, entirely analog. IT systems now monitor, analyze, and optimize farms, hospitals, banks, factories, and municipal services. Almost anything humanity does can be made more efficient by harnessing technology, and HPE unlocks this potential for our customers.



HOW IT CAN CREATE A SUSTAINABLE WORLD

We create bespoke systems that enable our customers to optimize their operations and accelerate outcomes—helping them solve social and environmental challenges by meeting more needs with fewer resources. From finance to farming, medicine to manufacturing, HPE's unique hybrid cloud edge, and artificial intelligence (AI) capabilities are providing solutions to longstanding sustainability issues.

While technologies such as AI and blockchain have the power to do a great deal of good, they also have the potential to create new problems. Ethical issues, displacement of workers, and the carbon footprint of IT are at the forefront of concerns. We must not only deliver on the promise of innovation, but also carefully consider the impact of technology on the environment, economy, and society in the long term.

THE REFINERY OF THE FUTURE

When Texmark Chemicals decided to build their refinery of the future, they turned to HPE to provide an IIoT edge solution.

In the high-volume chemicals sector, safety is paramount and competition is stiff. Texmark launched a multiphase project to implement an end-to-end IIoT solution. It selected HPE and Aruba to support the project with technology, expertise, and the extensive ecosystem of HPE partners.

The solution enabled seamless edge-to-cloud connectivity and high-speed data capture and analytics to meet Texmark's safety and security standards. The result is a refinery that is developing solutions to monitor itself in real time. If there is a fault with a component, the system creates an alert and determines appropriate action. Safety is improved, downtime minimized, and the cost of manual inspections is greatly reduced.

"We're building a refinery of the future that combs through data and reveals how the entire plant is interconnected. It becomes like a living, breathing, organic plant that knows how it should operate; if any part falls out of line, it flags for intervention."

LINDA SALINAS, VP OPERATIONS, TEXMARK CHEMICALS.

CASE STUDY

SERVING THE NEEDS OF MODERN INDIA

India is a nation of 1.3 billion people, more than half under the age of 30. Youthful drive is transforming India into a global economic powerhouse, yet the country still grapples with historic issues of poverty and corruption. Until recently many Indians lacked bank accounts, using cash for more than 90% of consumer purchasing transactions.

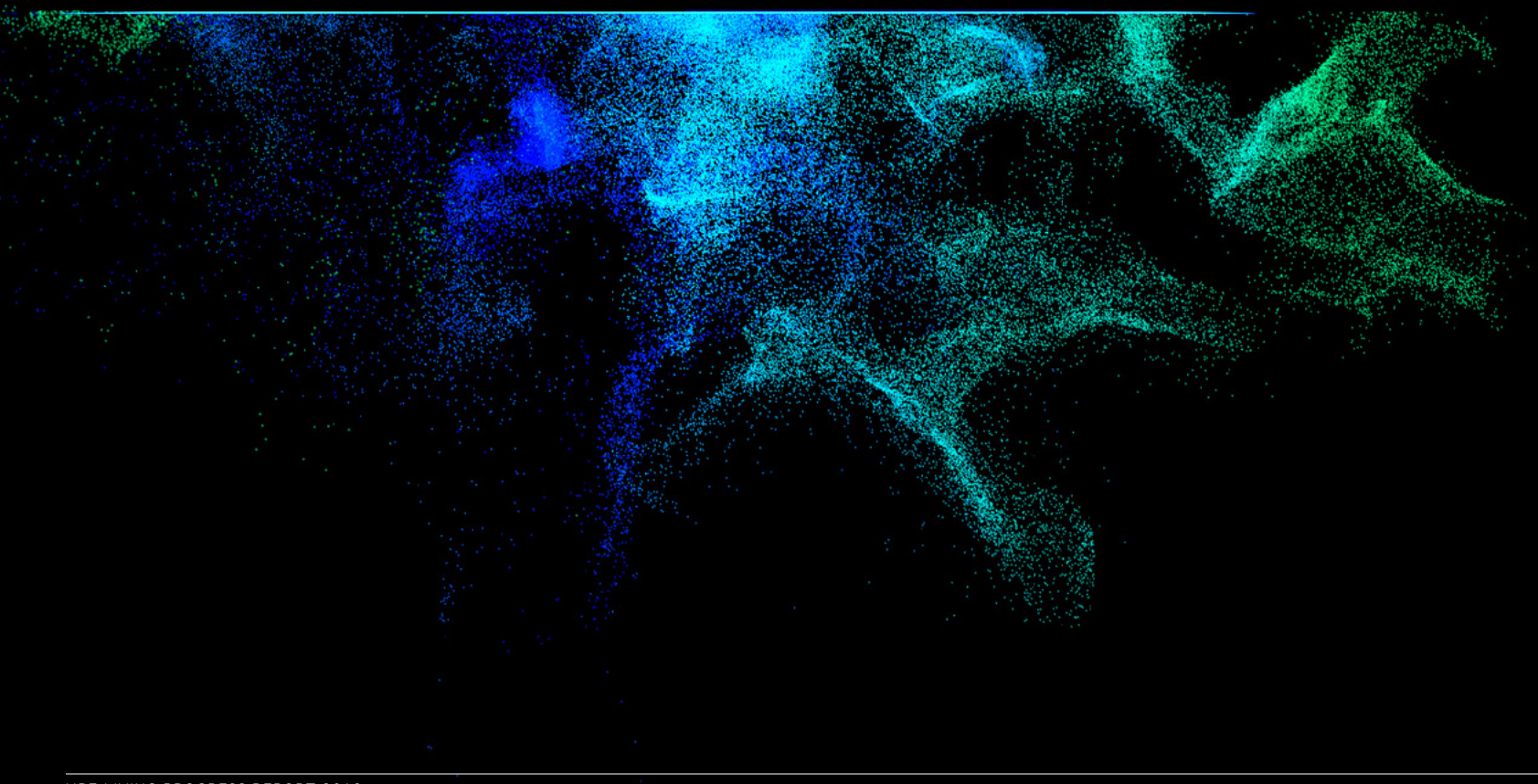
State Bank of India (SBI) is the nation's biggest and oldest bank. As a government-run entity, it serves a social mission, including support of the "Digital India" initiative to transform India into a modern cashless society. Skyrocketing growth, combined with the rise of new digital channels, called for IT transformation of a magnitude SBI had never before experienced. In order to support up to two billion accounts in the future, along with the resulting data explosion, SBI upgraded to a new high-availability infrastructure comprised of high-performance computing and all-flash storage from HPE.

By providing massive scalability, business agility, security, and a seamless customer experience through all of the bank's delivery channels around the world, SBI stands ready to help each Indian citizen participate in a thriving economy.

CASE STUDY

COLLABORATING TO SOLVE SOCIETAL CHALLENGES

Our world has limited resources and increasing needs and pressures. We passionately believe that technology offers the potential to drive real change toward sustainability, if we can harness it effectively. Despite the many advances we have made, society hasn't fully realized this potential because we aren't yet applying new technology universally or systematically. And of course, IT's capabilities are continually increasing. This is the rationale for Tech Impact 2030, a collaboration with the World Economic Forum (WEF) that brings together leaders across industry, technology, academia, and government to make progress on societal challenges in key industries. Along with WEF, we will set milestones, contribute ideas, and recruit partners to accelerate solutions to critical sustainability problems. In 2018, we launched two challenges to focus initial efforts: help solve world hunger through precision agriculture and enable personalized medicine.



Challenge 1 Help to solve world hunger by eliminating food insecurity and sustainably, nutritiously, and inclusively feeding a growing population

PARTNER: Purdue University College of Agriculture

Nearly 800 million people are chronically undernourished and more than two billion are micronutrient deficient.[2] These problems are likely to get worse. By 2050, the UN predicts that the global population will grow to nine billion and will require almost double the amount of food produced today. Technology can help on two fronts—increasing productivity and reducing waste.

Digital agriculture technologies can help solve the predicted food productivity gap. By employing IoT sensors and measurement and mapping tools, farmers can monitor crops meter by meter instead of field by field. This enables them to deliver calibrated doses of water and fertilizer only to areas that need it, simultaneously boosting yields and reducing potentially harmful environmental impacts.

We believe digital agriculture will accelerate the productivity of food systems while cutting farming inputs. It can also improve traceability, reducing losses between the farm and the store, as well as informing consumers about the length of time it is safe to store food. Collectively, food savings at every stage from field to fork can make a significant contribution to future food sustainability.

Challenge 2 Enable real-time, personalized medical care for patients by using technology to radically improve the cost, speed, and accuracy of medical research and patient care

PARTNERS: German Center for Neurodegenerative Diseases (DZNE), The Living Heart Project, Jungla

The global healthcare sector, accounting for more than 10% of global GDP, offers numerous opportunities for increased efficiency. Advanced IT is providing savings for healthcare funders, accelerating research, and improving treatment for patients.

Medical research in particular is developing rapidly toward personalized treatment, based on individual genome sequencing. Gene-based research generates vast data sets that overwhelm traditional IT architecture. HPE's advanced Memory-Driven Computing technology can remove that data blockage, accelerating research findings with dramatically faster data analysis.

CAN DIGITAL AGRICULTURE FEED THE NINE BILLION?

As the world converges on a record population of nine billion, the race is on to provide adequate food for all—without destroying the environment in the process.

HPE's partnership with Purdue University College of Agriculture, one of the top U.S. agricultural research organizations, is opening exciting new avenues of research to transform the efficiency of the global food system.

Building on our 2018 progress using remote sensing and edge technology to grow sorghum and corn, the research is now expanding to other staple crops. Live data from the crops are captured and used to help discover correlations in the natural growing environment that could inform and automate precision application of water and agri-chemicals, resulting in higher yields for lower inputs.

During 2019, the partnership is focusing on new ways to collect plant growing data and measure gas emissions—as well as on automating that data from source to consumption, lowering the time to discovery, and removing low value tasks from researchers. Researchers at a state-of-the-art facility are analyzing the most successful yield innovations in real-world growing environments. This generates petabytes of visual data per week, which HPE systems will be processing using new algorithms, machine learning, and AI.

"Disruptive technologies like digital agriculture can accelerate implementation and adoption of solutions across the global food chain and allow mitigation of critical food safety concerns."

KEERTI MELKOTE, PRESIDENT, INTELLIGENT EDGE, AND SVP/GM AND FOUNDER OF ARUBA NETWORKS, A BUSINESS UNIT OF HPE

CASE STUDY

HPE AND JUNGLA TAKE A STEP TOWARD REAL-TIME PERSONALIZED MEDICAL CARE FOR PATIENTS

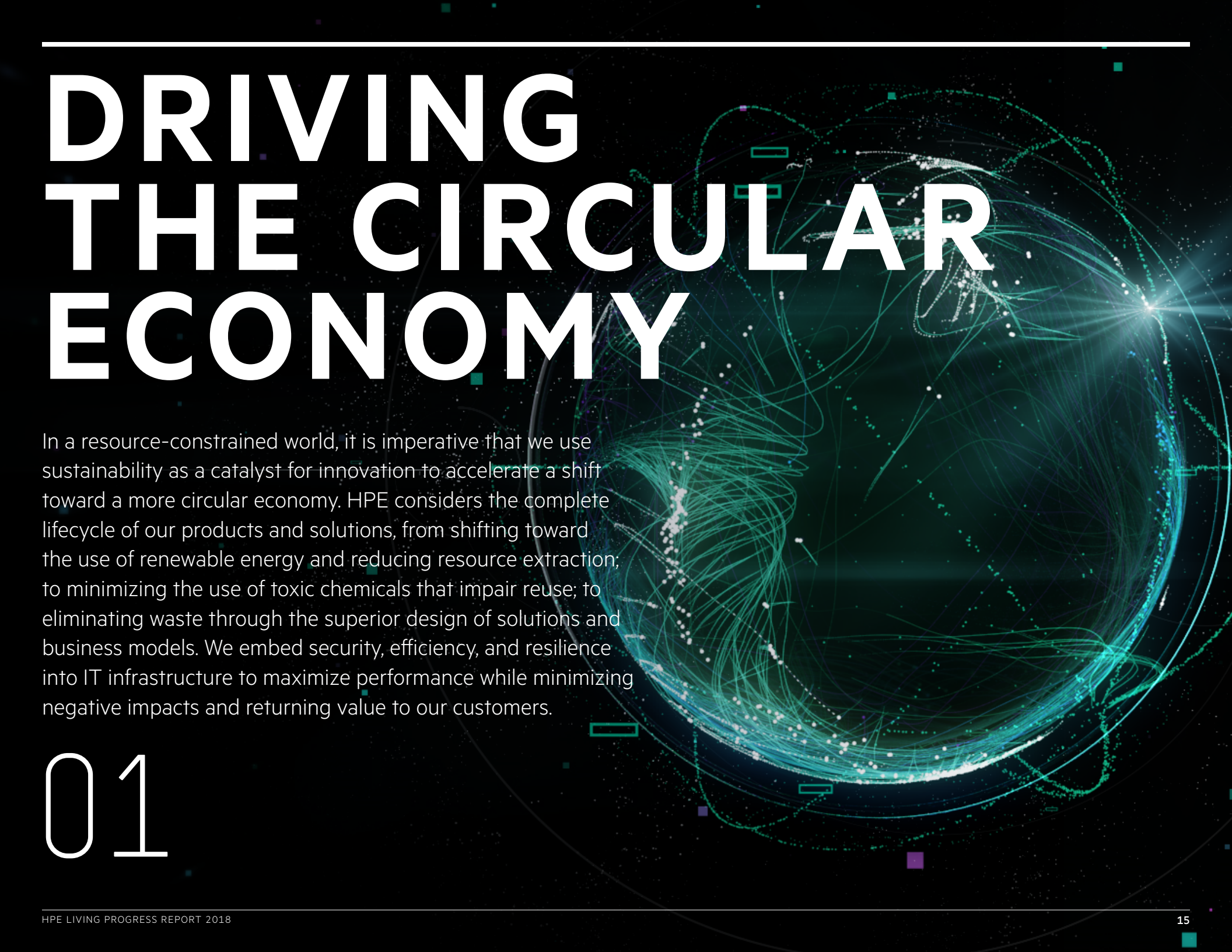
Biotech startup Jungla is the first HPE customer to use the new Memory-Driven Computing Sandbox to accelerate processing of individualized genomic testing data. Translating this into the reality of personalized treatment requires analysis of massive data sets—the bottleneck has been the ability to process it. While remarkable advances in sequencing technologies have brought the costs of genome sequences to less than $1000, making personal, affordable genomes a reality, the challenges of leveraging this data in the clinic are now abundant. HPE technology is enabling state-of-the-art computational modeling to proceed more than 200X faster than traditional hardware, bringing the time to unlock detailed, molecular insights down from months to as little as a day.[3]

"With its unprecedented capacity to process data at scale, Memory-Driven Computing has allowed Jungla to use its analysis platform as a high-speed, high-resolution scientific instrument, reducing the risk of human error in clinical genetics and dramatically speeding the path to insights for patients."

MICHAEL WOODACRE, HPE FELLOW

CASE STUDY

DRIVING THE CIRCULAR ECONOMY



In a resource-constrained world, it is imperative that we use sustainability as a catalyst for innovation to accelerate a shift toward a more circular economy. HPE considers the complete lifecycle of our products and solutions, from shifting toward the use of renewable energy and reducing resource extraction; to minimizing the use of toxic chemicals that impair reuse; to eliminating waste through the superior design of solutions and business models. We embed security, efficiency, and resilience into IT infrastructure to maximize performance while minimizing negative impacts and returning value to our customers.

01

IT EFFICIENCY

Efficient IT from HPE is purpose-built, converges seamlessly with existing infrastructure, and gives our customers a business advantage. We work to maximize the efficiency of our technology—without compromising performance.

A REVOLUTION IN IT EFFICIENCY

IT drives business productivity, but it is also one of the world's largest consumers of electricity. By minimizing IT's resource demand, we can cut costs and reduce its environmental impact—both of which are priorities for our customers. Our commitment includes a goal to increase the energy performance of our product portfolio 30X by 2025.

Our approach to efficient IT includes the following guiding principles:

- **Energy efficiency**—delivering an optimum level of power, storage, and connectivity in exchange for the lowest input of energy possible, spearheaded by our Design for the Environment (DfE) program
- **Equipment efficiency**—maximizing IT processing power and storage capabilities while minimizing cost and resource demand
- **Resource efficiency**—engineering products to work efficiently within the data centers that will operate them, matching type and quantity of material to space, power, and cooling needs

Learn how we reduce financial and environmental total cost of ownership through our circular IT programs.

In 2018, efficient IT products and services[4] represented more than $7 billion in revenue at HPE.

IMPROVING PORTFOLIO ENERGY PERFORMANCE

In 2018, we continued to increase product energy performance to 1.6X our 2015 baseline, moving toward our goal of 30X by 2025.[5]

Our family of Gen10 servers sets IT efficiency records while upholding our high-performance standards:

- **HPE Synergy 480 and 660**—combined, these composable infrastructure products hold 27 world records for server efficiency
- **HPE ProLiant ML350**—awarded the world's most energy-efficient server tower for Intel® Xeon® Scalable processors and second most efficient tower server, according to the Standard Performance Evaluation Corporation (SPEC) power benchmark
- **HPE ProLiant DL360 Gen10 servers**—recorded the world's highest score on the SPEC Power benchmark, making them the most efficient 1U and 1P servers, with up to 14% more energy efficiency than 1U competitors
- **HPE Intelligent System Tuning (IST)**—this feature of the Gen10 product line fine-tunes servers to load, improving performance and reducing energy use

Our goal is to increase the energy performance of our product portfolio by 30X.

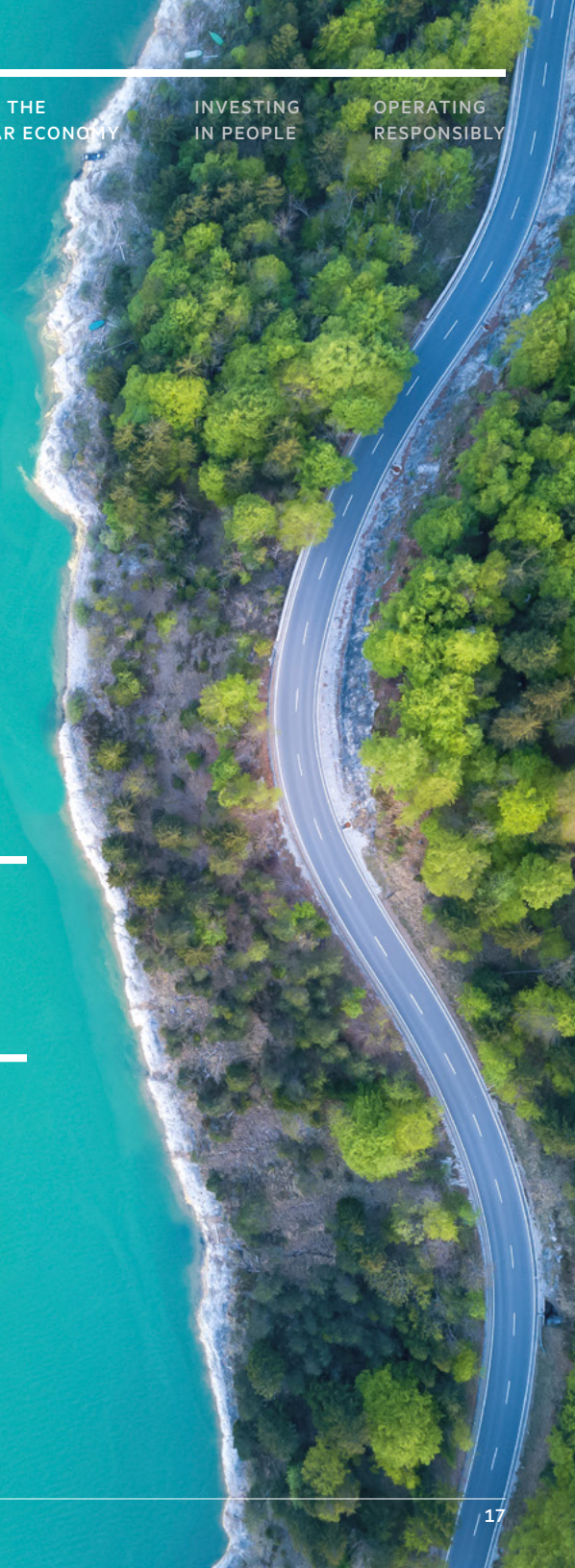
While we continue to improve the energy performance of our processor-based products, we are also investing in new, more efficient compute technologies. In 2018, HPE became a member of the World Economic Forum Global Future Council on Computing, a global group of forward-looking technology experts dedicated to advancing compute technology and understanding of how it can benefit society.

Hewlett Packard Labs is developing Memory-Driven Computing, a revolutionary architecture that uses hyper-fast memory to solve problems thousands of times faster than any current computer. With faster processing, Memory-Driven Computing requires less energy to complete calculations. DZNE achieved a 60% reduction in energy use by converting their Alzheimer's research processors to Memory-Driven Computing. In 2018, we introduced the Memory-Driven Computing Sandbox, an operating and development environment for customers to pilot the technology before broad commercial availability.

EXPANDING HYBRID CLOUD ADOPTION

On average, customers overprovision IT capacity by 59% for storage and 48% for computing.[6] We can change this statistic through HPE GreenLake, a service from HPE Pointnext, that helps customers use only the IT resources and electricity they truly need. This hybrid cloud solution and pay-as-you-go model gives our customers the flexibility to easily modify their storage and computing capacity. Customers report that HPE GreenLake can reduce CAPEX by 30% by eliminating overprovisioning, yielding economic and environmental savings.[7]

45 HPE supercomputers made the November 2018 Green500 list.

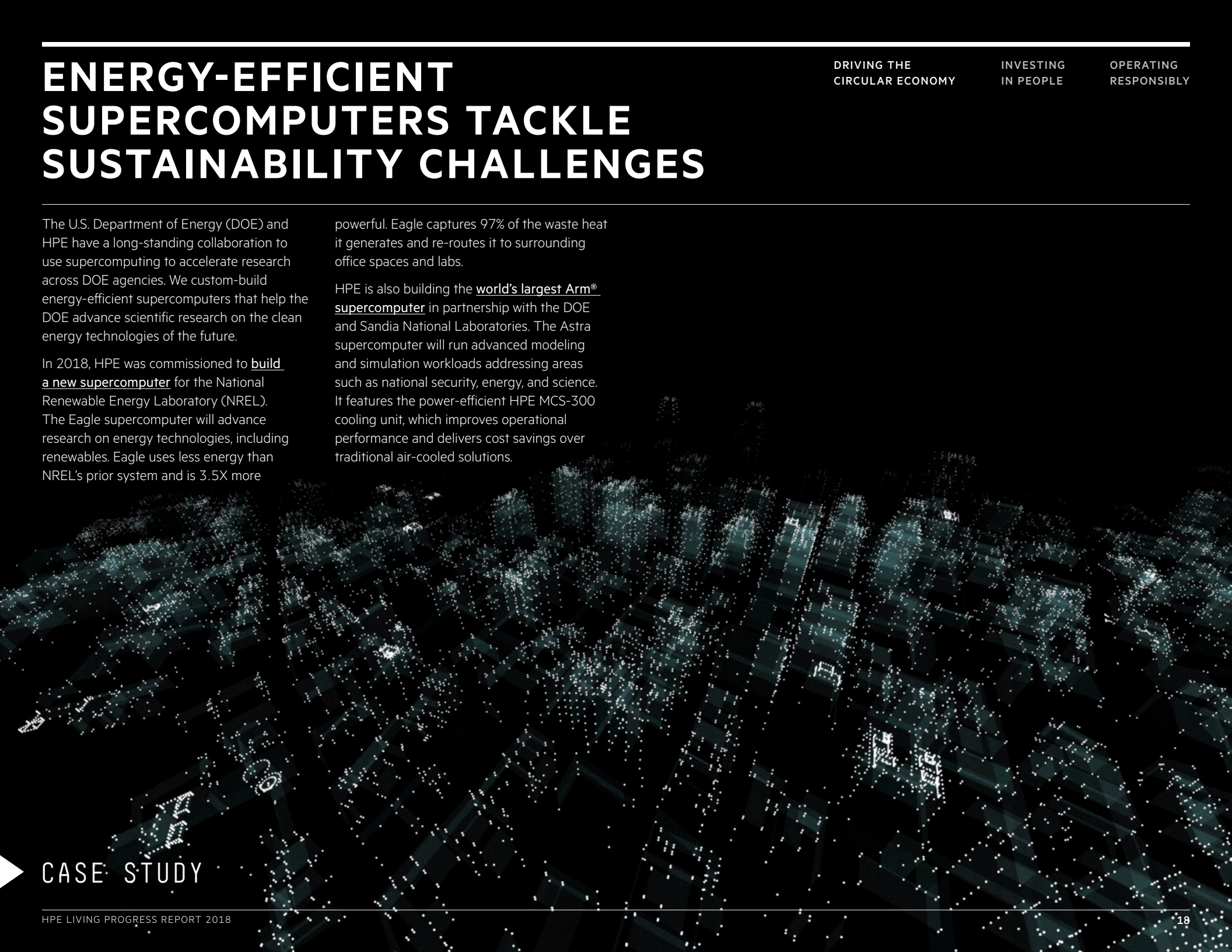


ENERGY-EFFICIENT SUPERCOMPUTERS TACKLE SUSTAINABILITY CHALLENGES

The U.S. Department of Energy (DOE) and HPE have a long-standing collaboration to use supercomputing to accelerate research across DOE agencies. We custom-build energy-efficient supercomputers that help the DOE advance scientific research on the clean energy technologies of the future.

In 2018, HPE was commissioned to build a new supercomputer for the National Renewable Energy Laboratory (NREL). The Eagle supercomputer will advance research on energy technologies, including renewables. Eagle uses less energy than NREL's prior system and is 3.5X more powerful. Eagle captures 97% of the waste heat it generates and re-routes it to surrounding office spaces and labs.

HPE is also building the world's largest Arm® supercomputer in partnership with the DOE and Sandia National Laboratories. The Astra supercomputer will run advanced modeling and simulation workloads addressing areas such as national security, energy, and science. It features the power-efficient HPE MCS-300 cooling unit, which improves operational performance and delivers cost savings over traditional air-cooled solutions.



CASE STUDY

THE FUTURE OF DATA CENTERS

The digital universe doubles in size every two years, and is projected to reach 20 billion mobile devices and 1 trillion applications by 2020.[8] As a result, the physical footprint and environmental impact of data centers are growing rapidly. Our customers manage more data than ever before, so we develop data center innovations that decrease energy consumption, improve performance, and save space.

In 2018, we released HPE Memory-Driven Flash, featured in HPE 3PAR and HPE Nimble Storage. The technology is 50% faster than all-flash arrays and can reduce operating costs by 79%, based on customer data reported to HPE.[9] Through AI and machine learning, the technology self-manages and optimizes IT, using significantly less resources to store the same amount of data, reducing energy consumption.

HPE Datacenter Care, a service from HPE Pointnext, modernizes hybrid environments and helps customers identify IT inefficiencies. In 2018, HPE Datacenter Care expanded to include new automation tools and performance analytics, delivering an estimated 25% more efficient IT management for customers.

REDUCING IDLE ENERGY IN NETWORKS

Networks offer "always-on" connectivity through a complex web of hardware and software. In 2018, Aruba Networks introduced Green AP mode, a solution designed to conserve energy without affecting the end-user experience. Through predictive analytics and machine learning, Green AP mode maps Wi-Fi usage patterns and automatically switches to "sleep mode" when users are absent. Electricity usage at each access point can be cut by approximately 15 watts–resulting in a savings of more than 70%. When scaled to large facilities, such as stadiums or shopping malls, these energy and cost savings can be increasingly significant.

PRODUCT LIFECYCLE MANAGEMENT

Our lifecycle approach to design enables businesses to build more efficient and effective IT systems, helping them simultaneously meet sustainability and business goals.

DESIGN FOR ENVIRONMENT

As billions of connected devices and people come online, the technology sector alone is consuming as many resources as entire countries. This puts the responsibility on IT companies to design and build products that manage the explosive demand for data while using less energy, materials, and space. We use sustainability as a catalyst for innovation across our value chain, focusing on our most significant impacts: the manufacture and use of our products.

At HPE, we apply a holistic approach to product design that results in lower power consumption and reduced waste, helping our company and our entire value chain contribute to a more circular economy. We address the environmental impacts of HPE products by applying our Design for Environment (DfE) principles, which include energy efficiency, design for recyclability, and materials innovation.

Energy efficiency

HPE product solutions push the industry to be more energy efficient, lowering costs and greenhouse gas emissions.

Calculating carbon footprints across the entire lifecycle of our products enables us to quantify our impacts and identify opportunities for improvement. In 2018, we obtained a detailed understanding of the impacts of 80% of our product categories by applying the Product Attribute to Impact Algorithm (PAIA). HPE was a founding member of this cross-industry tool, which is currently being expanded to include impact categories beyond carbon, such as water, to continually raise compute power while lowering environmental and financial costs.

New ways of managing technology solutions, such as consumption-based models that create efficiencies and lead to higher rates of reuse by shifting ownership away from the customer. By allowing organizations to purchase only what is needed, solutions like HPE GreenLake can prevent overprovisioning and drive more efficient use of energy, materials, and resources. Learn more about our approach to efficient IT.

Recyclability

Increasing recyclability starts at the design phase. We utilize the internationally accepted standard IEC 62635 for calculating the recyclability of electronic products. In 2018, we updated our methodology for calculating our Recyclability Assessment Tool (RAT) to meet new EPEAT standards. Our HPE ProLiant DL380 Gen10 server is 98.5% recyclable, and both our XL190r node and BL460c blade are more than 99% recyclable.

We uphold recyclability requirements for our products across our design teams and suppliers through internal policies. To learn more about the recyclability of our products, see the Material composition and recyclability of typical HPE products table in the Data Summary.

Materials innovation

We include environmental and financial criteria in materials innovation across the value chain, which helps HPE, our suppliers, and customers dematerialize, using less raw materials and lowering environmental impact. For example, our global packaging initiatives help protect HPE products while improving reusability, efficiency, and cost competitiveness by optimizing size, weight, storage space, and packaging time. This year, our packaging design teams continued to reduce packaging waste wherever possible across regions and product lines, avoiding 2,045 metric tons of CO_2e emissions.

Our new packaging reduction initiatives in Singapore reduced packaging weight by 12 metric tons and plastic use by 235 metric tons, saving $210,000. These efforts earned HPE recognition from the Singapore Packaging Agreement (SPA) Awards for the fifth consecutive year.

2018 marked the fifth consecutive year our packaging teams were recognized by the SPA Awards.

MARKET ACCESS

Offering eco-label qualifying products across our portfolio makes sustainable IT purchasing easy, enabling businesses to meet social and environmental qualifications in their procurement criteria. Many HPE products meet eco-label standards such as the Electronic Product Environmental Assessment Tool (EPEAT), ENERGY STAR®, the China State Environmental Protection Administration (China SEPA), 80 Plus, and the China Energy Conservation Program (CECP).

Recognizing the need for greater leadership on developing enterprise-grade market access, we partnered with the Green Electronics Council to co-develop a new EPEAT standard for servers in 2018. HPE was one of only two companies to qualify servers for the EPEAT registry when it opened in August 2018, providing a market advantage particularly with government customers. The reference to EPEAT in the Federal Acquisition Regulation requires federal purchasers to select products from the EPEAT registry; and many state, local, and education customers are also choosing products from the registry.

Additionally, all new HPE products are paired with IT Eco Declarations,[10] which include legally mandated disclosures and industry-specific details such as disassembly instructions. These help stakeholders understand product components and follow better end-of-life practices.

EXTENDING PRODUCT LIFE

The rapid pace of technology drives the evolution of products while also leading to the obsolescence of the previous generation of hardware and an estimated 50 million tons of e-waste[11] generated worldwide in 2018 alone.

We recognize that we play a role in resolving this problem. Our business model creates products that are rapidly replaced by newer, higher-performing, more energy-efficient products, and our customers often refresh their infrastructure to take advantage of those new products. However, the end-of-use of a product for one customer doesn't mean the product is at end-of-life. Our circular economy initiatives provide opportunities to return those products to HPE Technology Renewal Centers (TRCs) to be refurbished and remarketed where possible, and returned back into the circle, or recycled if they are no longer usable. In order to lead by example, HPE refurbishes and recycles our own retired Global IT equipment through our TRCs, and will launch an asset recovery goal in 2019 to publicly report our end-of-use IT management. In 2018, we launched a new Circular Economy Report to help customers track progress toward their business and sustainability goals by calculating the carbon, energy, and landfill waste savings achieved by returning retired or end-of-use assets to HPE TRCs.

> Of the 4 million units that were returned to our Technology Renewal Centers, 89% of them were given new life, and only 11% were sent to recycling.

Our products are designed to be easily repaired, upgraded, or reused to extend their useful life. To facilitate this, we provide guidance on self-repair and upgrades, including spare parts availability. If a product or a part is damaged beyond repair or has no resale value, they are then sent to our recycling process, where the material can be returned back to a production cycle by way of commodity recovery. Our recycling services securely destroy disk drives and other storage devices through shredding and metal-recovery smelting. In 2018, of the 4 million units that were returned to our TRCs, 89% of them were given new life, and only 11% were sent to recycling.

We offer multiple programs across our global markets[12] to encourage participation in the circular economy, including:

- **HPE IT Asset Lifecycle Solutions**—provides investment and asset management services—such as Asset Upcycling, Certified Pre-Owned, and HPE Trade-In—that help optimize existing IT infrastructure and transition to new technology
- **HPE Renew**—offers a comprehensive portfolio of completely remanufactured products with the same reliability and performance of new HPE products with at least 15% financial savings[13]
- **Hardware Recycling**—creates custom recycling for business customers, including secure asset destruction and removal in multiple countries worldwide

In 2018, we joined the Ellen MacArthur Foundation's Circular Economy (CE) 100 group—an innovative multi-stakeholder platform enabling organizations to develop their circular economy ambitions faster. Looking ahead, we're identifying research opportunities into rare metals, minerals, and element scarcity as a foundation to transitioning industries to the circular economy.

SUBSTANCES OF CONCERN

We anticipate regulatory changes and deliver materials innovation to improve the safety and reliability of every HPE product.

ASSESSING AND RESTRICTING SUBSTANCES IN OUR PRODUCTS

Recognizing that materials are an increasing concern across industries, our product stewards work to ensure materials implemented throughout our design process make products safer without compromising cost or performance. We analyze potential risks to people and the environment through a precautionary substance assessment based on the latest scientific analyses, published lists of substances of concern, and legal requirements. Today, we have completed more than 100 substance assessments. Learn more about our material restrictions, disclosures, and declarations in our General Specification for the Environment.

When a substance of concern is identified, we work to replace the substance with a viable alternative with lower risks. Leveraging Clean Production Action's GreenScreen® for Safer Chemicals, a globally recognized tool for assessing and benchmarking chemicals based on hazard, we identify alternatives and predict potential future restrictions. We also collaborate with governments, industry peers, trade associations, and the chemical task force of the Responsible Business Alliance.[14] Recently, we improved the reliability of our products through improved testing methods leveraging specific plastic vendors that restrict the use of red phosphorus, a substance that can limit the longevity and safety of products.

Through materials analysis, we've also improved the recyclability of our products, helping us transition to a circular economy. Read more about product lifecycle management.

Regulatory requirements

HPE meets regulatory and compliance requirements for our products, components, and owned equipment everywhere we operate. We support legislation that contributes to the protection of people and the environment. Read more about our Regulatory and Eco Declarations, including safety data sheets.

MANUFACTURING PROCESS SUBSTANCES

Technology manufacturing involves chemicals and materials absent from the final product that can cause hazards when handled. We uphold material innovation with our suppliers, providing them with a full list of restricted substances and clear guidance on suitable alternatives.

Through the HPE Supplier Code of Conduct and audits and assessments, we ensure that our suppliers understand our expectations and maintain controls to ensure safety throughout the manufacturing process. In fact, across our 2018 environmental audits, our suppliers demonstrated 100% conformance with our materials restrictions requirements.

DATA SECURITY

Leading companies and government institutions trust HPE to protect their data because we build security into everything we do. Ultimately, this helps our customers remain resilient to attacks and safeguard one of their most important assets—their data.

HELPING OUR CUSTOMERS STAY SECURE

As technology becomes more complex, so do the threats against it. In 2017, the cost of cybercrime climbed 23% compared to 2016,[15] averaging $11.7 million per organization. One estimate suggests that cybercrime will cost the world economy $6 trillion annually by 2021.[16] And the true cost, including a company's investment and reputational damage, is even greater.

We take a holistic approach to security, defending against cybercrime at every step in our value chain.

Supply chain

A known threat in our industry is malicious firmware or malware entering products in the supply chain. To protect against this, we maintain strict control over firmware code access, including running malware scans and checking code signatures prior to sending products to customers. We only use vendors on our approved vendor list that have been thoroughly vetted for their strong security protocols. In 2019, we will implement third-party evaluations in our supply chain for products at a higher risk for security threats.

Products

Our HPE ProLiant Gen10 Servers are the most secure on the market.[17] Designed with our Silicon Root of Trust technology, they will not run if the firmware has been compromised in any way. Additionally, these are the only servers equipped with run-time detections that can scan firmware on a daily, weekly, and monthly basis.

HPE is the only company to develop our servers following the high standards of the National Institute of Standards and Technology (NIST) 800-53 controls. NIST brings together the people, processes, and technologies that are necessary to configure and operate a secure computing environment. Building our servers to this standard also helps our customers earn NIST certification for their own computing systems. Details about the other standards and best practices that our servers meet are available on our website.

Services

HPE Aruba Central, which includes Aruba ClearPass and Introspect, gives our customers the confidence to operate in the cloud while we manage the complexities of security. ClearPass is a network access control solution that brings visibility, control, and security response to the anywhere, anytime, any-device enterprise. Introspect uses machine learning-based detection designed to identify and stop attacks that evade traditional defenses before they can do any damage.

Our Pointnext backup and recovery services from HPE Pointnext keep data safe while optimizing performance in hybrid cloud environments. HPE Server System Restore provides the option to restore the firmware to a last known good state, or, in the event of a compromise, automatically loads its own authenticated firmware from an integrated backup, making a complete recovery quick and seamless.

As security threats continue to evolve, so must the solutions to defend against them. Our Hewlett Packard Pathfinder program invests in and scales new businesses, several of which offer state-of-the-art data security services. By partnering with and supporting these companies, we can further offer our customers innovative and tailored security solutions.

PROTECTING OUR BUSINESS FROM EVOLVING THREATS

Our employees are key to keeping our business secure. Employees have 24x7 access to cybersecurity information through the HPE Cybersecurity Yammer group, the cybersecurity organization website, and cybersecurity central website.

We keep employees up-to-date on the latest cybersecurity threats and protocols through three types of training:

- Mandatory annual training for all employees, including monthly phishing exercises
- Role-based training for higher-risk jobs
- Product training for developers

We have two Security Operations Centers that monitor potential threats to our business. In 2018, they reviewed an average of 4.6 billion cybersecurity events each day, resulting in more than 300 actionable incidents. During the year, we promoted collaboration between our security centers and internal teams to better use information gathered from security threats. For example, our product developers can now prioritize specific security features in new products based on real-world events.

In addition to our security centers, we analyze and remediate data security issues reported by customers or identified through NIST's National Vulnerability Database.

We are not alone in the fight for cybersecurity. We continue to work with governments globally and participate in a number of external engagements, including the National Technology Security Coalition and the World Economic Forum's new fintech cybersecurity consortium. In 2018, we endorsed the Paris Call for Trust and Security in Cyberspace, an international declaration between NGOs, companies, and governments to develop common principles for cybersecurity.

NETWORK RESILIENCE

Information speeds through networks in our connected, data-rich world. Modern network infrastructure is adaptable, secure, and designed to capture the value of the information flowing through it. As the digital universe grows and society becomes more reliant on IT, network resilience is paramount.

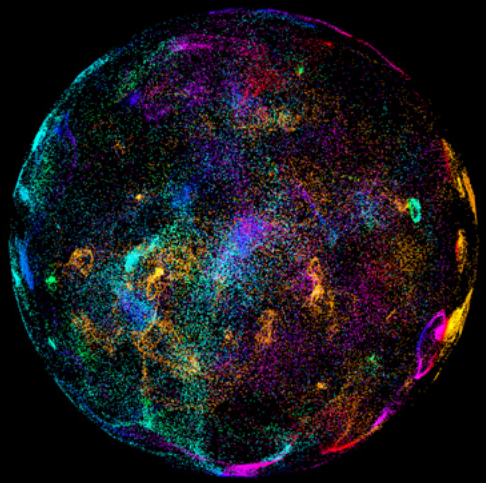
INTELLIGENT NETWORKS FOR A COMPLEX WORLD

The universe of connected devices and the volume of data they generate are growing at an unprecedented rate. To keep pace with the increasingly digital world, organizations of all types—from healthcare to manufacturing to government—are adapting network infrastructure that allows them to absorb, analyze, and act on data.

Networks seamlessly connect IoT devices and allow information to travel between the edge, where data is generated, to the core of a business. Hybrid cloud environments supports modern network architecture, reducing time-to-insight with data processed at the optimum location—on-site or in the cloud. HPE and its partner companies deliver comprehensive network solutions including hardware, software, architecture design, deployment, management, and advisory services.

A network infrastructure is optimized when it is secure, adaptable, policy-driven, and aligned to business goals. To protect businesses and society, we design network architectures to withstand a growing volume and variety of threats. These include disruptors such as cyberattacks, extreme weather conditions, and unexpected demands. Read more about cybersecurity in Data security.

Our technology also helps customers keep pace with changing global security standards and compliance requirements. The Aruba 360 Secure Fabric controls network access, assurance, threat detection, and response, helping users comply with the EU General Data Protection Regulation. And with AI-based machine learning, pinpoint visualizations, and forensic insight, Aruba IntroSpect finds and remediates attacks before they damage operations and reputation.



In 2018, we launched new products and services to bring increased network resilience and security to our customers:

- **Aruba Network Analytics Engine (NAE)** Embedded in our Aruba 8400 solution, this industry-first service provides network administrators more visibility, faster troubleshooting, and proactive security capabilities. If a network anomaly is detected, NAE automatically collects data and takes corrective action based on defined policies.
- **Network-as-a-Service (NaaS)** This flexible, subscription-based model provides Advisory, Professional, and Operational Services to strengthen networks. NaaS customers benefit from this scalable solution, which reduces risk through HPE's expertise and technologies.

MODERNIZING THE WORLD'S MOST EFFICIENT AIRPORT

HPE and Aruba Networks upgraded Gatwick Airport's entire networking infrastructure, bringing immediate benefits to passengers, including stronger Wi-Fi and new IT-enabled enhancements for passenger experience. With the investment in this technology, we have significantly improved the resilience of the network, providing a better level of service. The network paves the way for Gatwick's future use of IoT, machine learning, and artificial intelligence technologies that will drive operational efficiency and increase airport security.

"Gatwick is poised to become the showpiece for airport IT and a shining example of what the future of travel will look like. Farewell single points of failure and bottlenecks. Hello powerful, seamlessly integrated internal network and data center ready."

MARC WATERS,
MANAGING DIRECTOR UK&I, HPE

CASE STUDY

HPE INTERNAL NETWORKS

We're using HPE Pointnext to redefine the workplace. In 2018, we began converting HPE's corporate offices to intelligent workplaces, installing network solutions that engage and enable our employees in their day-to-day work, increase productivity, and help sites manage costs.

In our smart digital workplaces, networks deliver high-performance connectivity that improves employee and guest experience. Aruba ClearPass Policy Manager seamlessly manages visitor access to buildings and Wi-Fi. Location-based services from Aruba Meridian provide employees way-finding, concierge, room availability, and reservation capabilities through a mobile app.

Our Pointnext services help us:

- Ensure consistent levels of contact and service for customers with secure, pervasive wired and wireless connectivity
- Enable our global workforce to access relevant tools, collaborate, and stay connected anywhere, at any time, on any device
- Retrieve data securely from sources within and outside of HPE by merging appropriate security measures with network infrastructure

ENVIRONMENT

We believe the transition to a low-carbon economy is a business opportunity. Our environmental strategy helps guide our business decisions to ensure we maintain a resilient operation while minimizing our impact on the planet.

BUILDING A CLIMATE-RESILIENT BUSINESS

Our climate strategy touches all areas of our organization and is critical to our business. As a technology company, HPE has a key role to play in responding to climate change—both through transformative efficiency gains and building the capacity to adapt. We face climate-related risks, such as compromised supply chains and infrastructure, which have the potential for significant negative impact to our business. For HPE, maintaining operational and reputational resilience is paramount to being a trusted partner for our customers, especially in a carbon-constrained world.

We are increasing our climate resilience and mitigating exposure in vulnerable areas. Programs such as our Business Continuity Management improve our resiliency by mapping and mitigating risks within our supply chain, while our Supply Chain Responsibility (SCR) program helps us enforce strict social and environmental standards.

In 2018, we adopted recommendations set forth by the G20 Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) to report the financial impact of climate-related risks and opportunities to our business. In alignment with the Intergovernmental Panel on Climate Change's latest special report, we conducted a forward-looking analysis comparing 1.5ºC and business-as-usual climate scenarios to better understand our organization's business resiliency over the short, medium, and long term.

Full disclosure and results from our climate scenario analysis can be found in our TCFD index.

OUR ENVIRONMENTAL FOOTPRINT

We set strategic goals to minimize our environmental footprint across our entire value chain, ensuring focus on those areas where our impact is greatest. In 2018, HPE emitted 10.3 million metric tons of greenhouse gas (GHG) emissions and withdrew 76.5 million cubic meters of water.

Get the data behind our environmental footprint in the Data Summary.

Emission reduction targets

HPE was the first IT company to set science-based targets (SBTs) to reduce GHG emissions across the value chain, including our operations and supply chain. These goals are approved by the Science Based Target initiative and align with the recommendations of the internationally recognized Paris Climate Agreement to limit global average temperature rise to 1.5°C in order to substantially reduce the risks and effects of climate change.

This year, HPE set a new goal to reduce our operational GHG emissions by 55% by 2025 compared to 2016 levels.[18]

PROGRESS TOWARD CLIMATE GOALS

By 2025 Reduce operational GHG emissions by 55% compared to 2016 levels[19]

In 2018 We reduced our emissions by 37% from 2016 levels

ON TRACK

By 2025 Source 50% of total electricity consumption in our operations from renewables

In 2018 We sourced 37% of our operational electricity from renewables

ON TRACK

By 2025 Increase the energy performance of our product portfolio 30X compared to 2015 levels

In 2018 We increased the energy performance of our product portfolio 1.6X from a 2015 baseline[20]

ON TRACK

By 2025 Reduce absolute manufacturing-related GHG emissions in our supply chain by 15% compared to 2016 levels[21]

In 2017 We reduced emissions by 1% compared to 2016 levels[22]

ON TRACK

By 2025 Enable 80% of our production suppliers (by spend) to set science-based targets

In 2017 13% of our suppliers have set science-based targets

ON TRACK

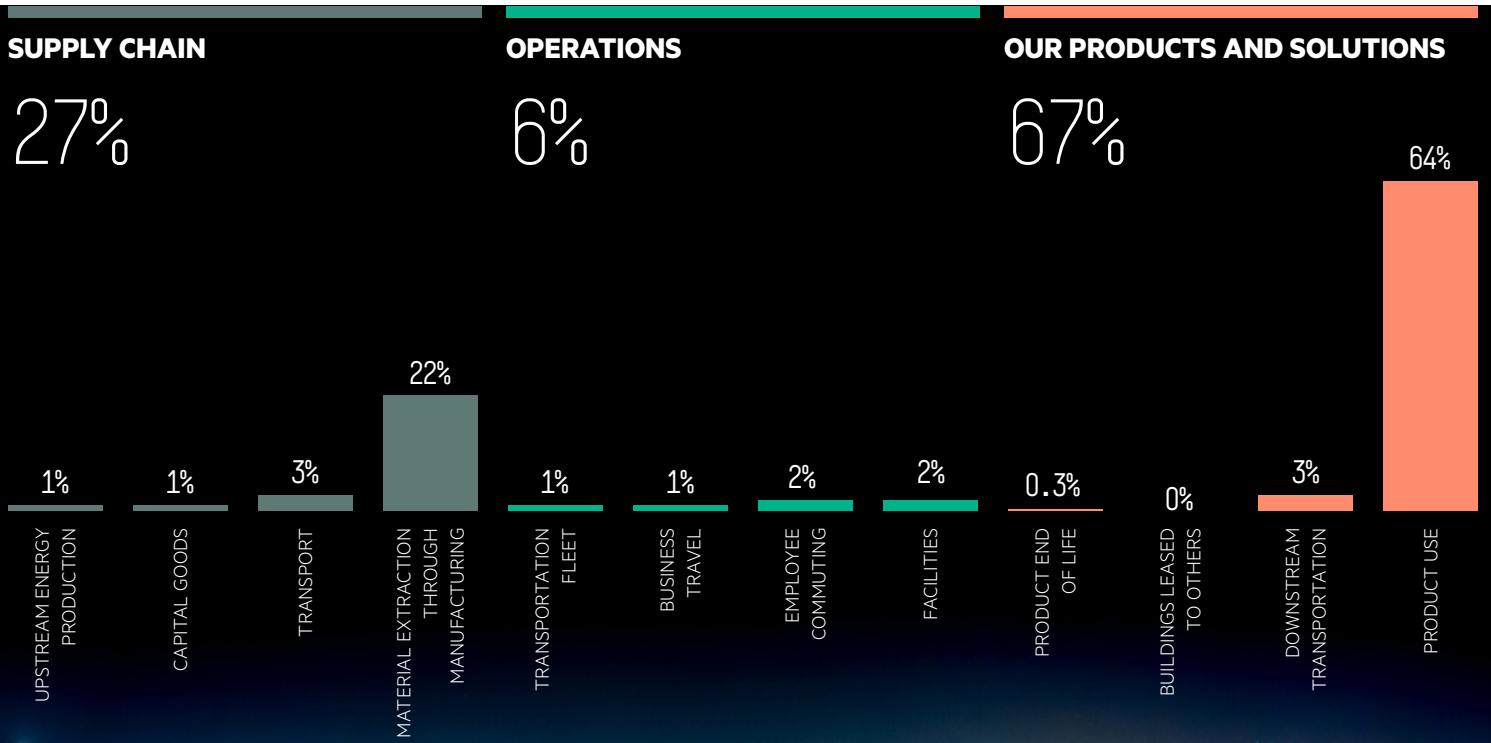
Carbon footprint

In 2018, 94% of our GHG emissions occurred in the use and manufacture of our products, making it a business imperative to design more efficient IT solutions and to partner with our suppliers to reduce impacts in our supply chain.

Our operations accounted for only 6% of our total emissions, however we remain committed to reducing our energy use by procuring renewable energy where possible, improving our building energy efficiency, optimizing the logistics of our products, and minimizing impacts from employee commuting and business travel.

OUR GLOBAL CARBON FOOTPRINT 2018

PERCENTAGE OF 10.3 MILLION METRIC TONS



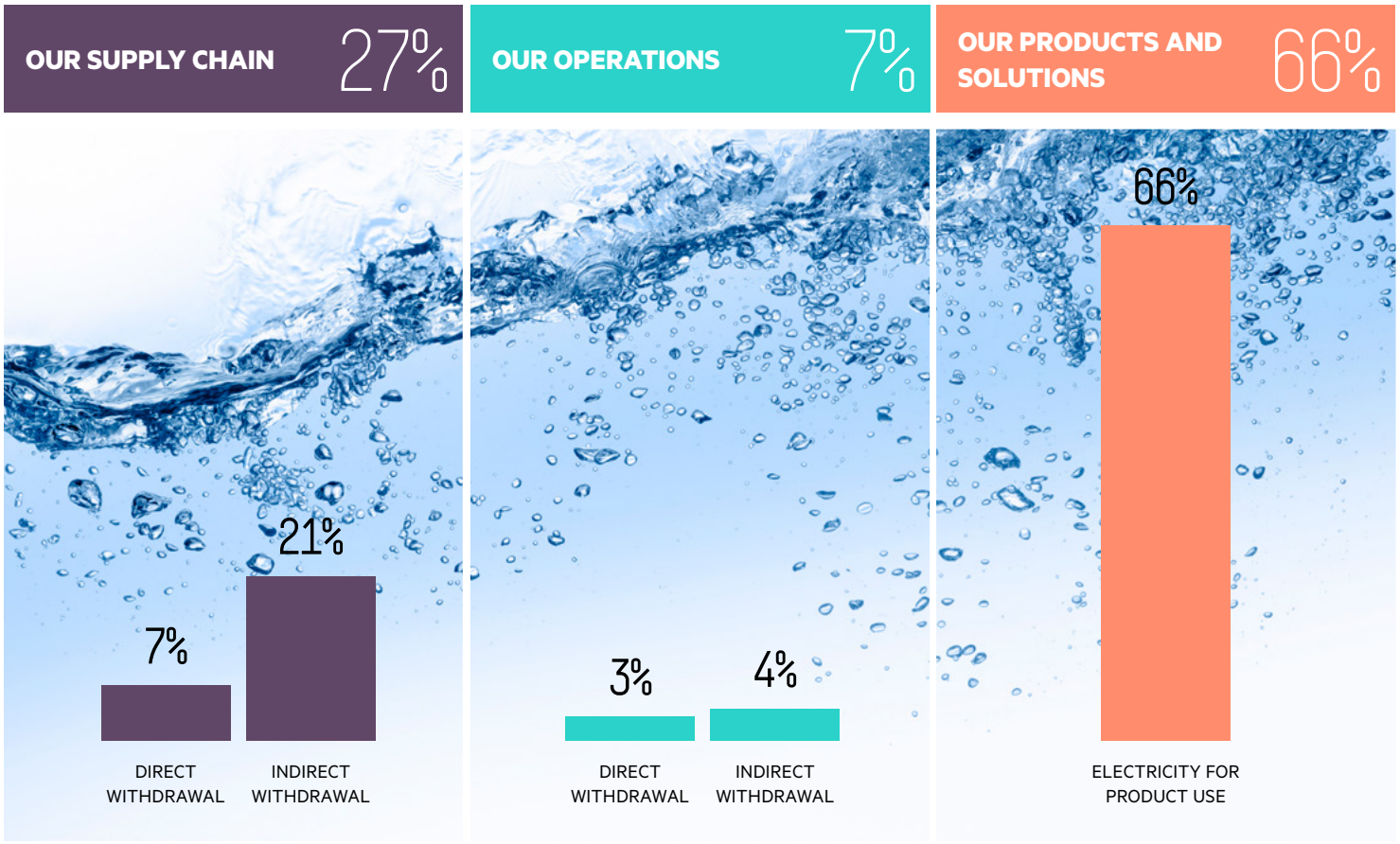
Totals may not add up due to rounding.

Water footprint

Vast amounts of water are consumed during the production of electricity and the majority of our water footprint is attributed to this energy-water nexus.[23] For HPE, this primarily includes electricity associated with the use of our products (66%) and the energy needs of our supply chain (27%). For this reason, HPE is establishing new targets to minimize water withdrawals associated with energy production in our supply chain, direct operations, and product portfolio.

While HPE is not a large water consumer compared to other industries and companies, we are expanding efforts to improve water management in locations that face water-related risk. Over the next year, we will be developing context-based water goals for our direct operations.

OUR GLOBAL WATER FOOTPRINT 2018



PERCENTAGE OF
76.5 MILLION CUBIC METERS

Totals may not add up due to rounding.

ENERGY AND GREENHOUSE GAS EMISSIONS

HPE is dedicated to innovating transformative, sustainable solutions that enable our customers to achieve more with less environmental impact, while also working with our suppliers to drive strategies that reduce climate impacts.

Our climate strategy is influenced by our wide range of alliances and partner organizations. We stand with the international community in supporting the Paris Climate Agreement and joined more than 2,000 other U.S. businesses, higher-education institutions, and cities to sign the We Are Still In pledge.

Our work to reduce GHG emissions and climate-related risks continues to be recognized by reputable organizations including the Dow Jones Sustainability Index (DJSI) and CDP.[24] In 2018, HPE received the highest ranking from CDP for the sixth year[25] in a row, placing among the top 2% of more than 7,000 companies evaluated worldwide, and was recognized as a leader in our efforts to address climate-related impacts across our supply chain.

Energy use and greenhouse gas emissions in our supply chain

An environmentally responsible supply chain helps us remain a trusted sourcing provider. We continue to work with our suppliers and industry peers to set industry-leading standards to aggressively reduce the climate impacts of our supply chain. With nearly 10 years of insight into our supply chain GHG emissions, we have a responsibility to share our experiences and best practices with our suppliers.

We classify our suppliers into three groups, based on the services they provide HPE:

- **Production**—manufacture and assemble products, provide materials and parts
- **Nonproduction**—provide services, such as staffing and telecommunications
- **Transport**—provide transport in support of our logistics requirements

Our primary focus is on our production manufacturers, including final assembly and strategic commodity suppliers, with whom we have a direct contractual relationship.

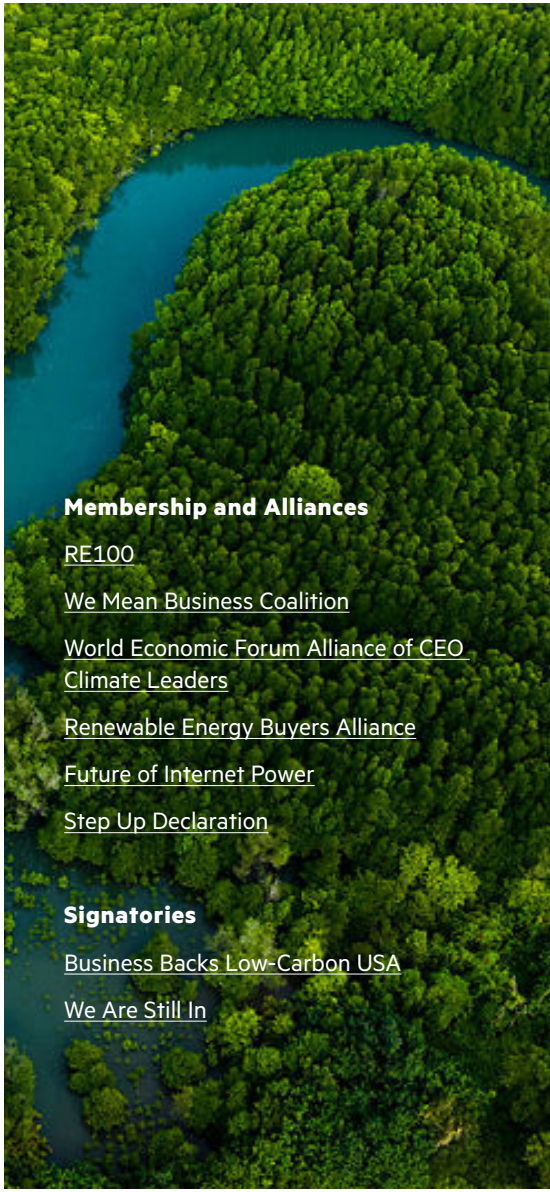
In 2017, HPE became the first company to create a comprehensive science-based supply chain management program to reduce the impact of our manufacturing suppliers. We aim to have 80% of our production suppliers, by spend, set their own SBTs by 2025. As of 2017, 78% of our supply base is engaged in the program, 11% have set Scope 1 and 2 targets that track with climate science, and 67% have committed to set science-based targets in the next two years.[26]

We are also committed to reducing our absolute manufacturing-related GHG emissions by 15% from 2016 levels[27] by 2025. In our first year of reporting toward our new target, we are pleased to see that our manufacturing suppliers reduced their collective GHG emissions by 1%, for a total reduction of 6,970 metric tons CO_2e in 2017,[28] compared to 2016.

> 78% of our supply base is engaged in setting science-based targets.

Our comprehensive Supplier Code of Conduct sets out guidelines to help suppliers reduce the environmental impact of their activities. In addition, HPE supports our manufacturing suppliers by offering capability-building programs focused on low-carbon strategies that eliminate barriers to participation and increase accountability. As SBTs become standard practice, we are enabling suppliers to become early actors in setting emission-reduction targets and preparing their businesses for future climate policies, regulations, and increasing stakeholder demands.

In 2018, in collaboration with our nonprofit partners BSR and POINT380, we developed



tools for our suppliers to set and achieve best-in-class SBTs. We hosted three webinars to guide suppliers on how to overcome the complexities of setting targets. These webinars focused on setting comprehensive climate strategy, achieving emission reductions, and measuring ongoing progress. Additionally, we held one-on-one calls with suppliers, providing feedback on their climate strategy and customized their SBTs.

The IT industry has a complex supply chain with a vast global reach, and suppliers that often share multiple customers. We are working with our partners to publish a white paper that outlines a supply chain standard for GHG emissions engagement and abatement. Our aim is to help suppliers progress to a leadership position by providing them with a pathway to a best-in-class SBT strategy as part of an industry-standardized approach. In order to truly move the IT industry and beyond, HPE is challenging other companies to join us in enabling suppliers to set SBTs and working collectively across the IT supply chain to implement high-level capability-building programs.

Our approach to supply chain GHG management

- We created a custom SBT for 90% of our manufacturing suppliers' operations, and we are providing resources to help suppliers achieve those targets
- We incentivize supplier compliance through our Social and Environmental Responsibility (SER) scorecard, which directly ties SER performance to procurement decisions. Requirements include committing to SBTs and third-party verification of GHG emissions in line with CDP verification standards
- We established a system to publicly track each supplier's progress in setting SBTs on GHG emissions and emissions strategies, disclosing a corporate-wide GHG footprint, and verifying emissions by an independent third party

Energy use and greenhouse gas emissions in our operations

In 2017, we surpassed our goal to reduce our operational emissions by 25% by 2025. To ensure we continue on this trajectory, in 2018 we set a new target to reduce operational emissions by 55% by 2025 compared to a 2016 base year.[29] Currently, our operations use 782,151 MWh of energy annually, down 12% compared to 2017.

To meet our new goal, we will continue to invest in renewable energy, prioritize building efficiency projects, and optimize our transportation modalities.

In 2018, we set a new target to reduce operational emissions by 55% by 2025.

Renewable energy

In 2018, HPE sourced approximately 256,355 MWh of renewable energy, representing 37% of our global electricity consumption, a 27% increase relative to 2017. Our goal is to source 50% renewable electricity in our operations by 2025 and to procure 100% renewable electricity in the long term.

HPE supports the proliferation of renewable energy as co-founders of both the Renewable Energy Buyers Alliance and the Future of Internet Power initiative and a member of the RE100. Through these organizations, we work with our peers to address challenges and collaborate on solutions that will improve companies' ability to procure renewable energy.

As of 2018, HPE is sourcing 68% of our total renewable electricity from the Americas, 23% from EMEA, and 8% from APJ. We are working to leverage our purchasing power to bring reliable clean energy to regions that still heavily depend on fossil fuels. In 2018, HPE opened a 45 GWh solar farm in India through a 10-year Power Purchase Agreement (PPA). This contract makes India the country in which we source the second-largest amount of renewable power. We understand the influence we have to bring new renewable energy to regions that traditionally lack the adequate resources to do so and will continue to explore additional opportunities to reduce the use of carbon-intensive energy.

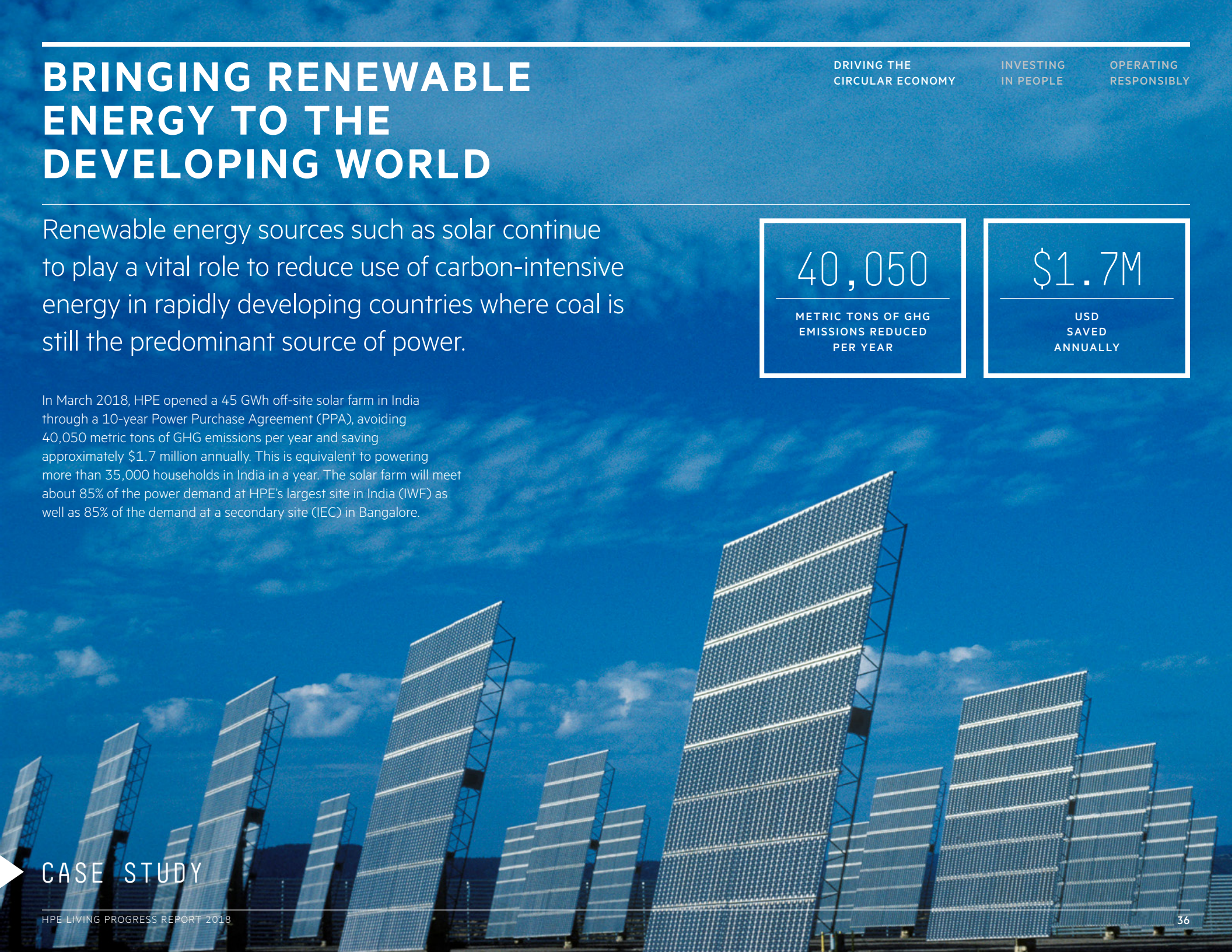
BRINGING RENEWABLE ENERGY TO THE DEVELOPING WORLD

Renewable energy sources such as solar continue to play a vital role to reduce use of carbon-intensive energy in rapidly developing countries where coal is still the predominant source of power.

40,050
METRIC TONS OF GHG EMISSIONS REDUCED PER YEAR

$1.7M
USD SAVED ANNUALLY

In March 2018, HPE opened a 45 GWh off-site solar farm in India through a 10-year Power Purchase Agreement (PPA), avoiding 40,050 metric tons of GHG emissions per year and saving approximately $1.7 million annually. This is equivalent to powering more than 35,000 households in India in a year. The solar farm will meet about 85% of the power demand at HPE's largest site in India (IWF) as well as 85% of the demand at a secondary site (IEC) in Bangalore.



CASE STUDY

Building efficiency

Our facilities account for the largest portion of emissions from our operational footprint. HPE owns and operates facilities around the world, and energy efficiency is embedded in our corporate real estate strategy. As part of this strategy, we conduct energy audits at several facilities on an annual basis and implement energy retrofit projects, integrating the latest efficiency technologies. In addition, we monitor changes in consumption patterns in order to identify and implement efficiency opportunities. We also continue to push HVAC set points in order to maintain a healthy balance between being efficient and occupant comfort.

We conducted capital expenditure projects, including HVAC replacements, lighting upgrades, and retrofits, at nine of our facilities in 2018. Altogether, these projects yielded a savings of approximately $1.5 million, helping reduce our operational energy consumption by 14 MWh. Our facility in Fort Collins earned recognition from the ClimateWise Program, a green business program that serves the Fort Collins community in Colorado, as a Platinum-level building for its overall excellence in operational efficiency.

Transportation modalities

In 2018, we increased our ocean traffic by 55% for the transport of Aruba and supplier owned inventory to our factories. We also reduced the number of empty truck miles along one of our main U.S. shuttle routes by 45%, resulting in a 2% reduction of our total carbon emissions in the Americas.

A commitment to reducing emissions remains a criterion for HPE product transport providers. We are working to optimize our transportation routes in the U.S. and building out a new transportation network to help minimize the amount of mileage needed to carry goods to their final destinations. As part of this new network, we've identified six locations to create regional transportation hubs that will improve the efficiency and resiliency of our ground operations. By design, the new operating model is HPE customer-centric and will deliver full truckload shipments into these regional hubs. In our previous model, shipped goods entered into a supplier's network, resulting in excess miles driven to reach our end customer.

Whenever possible, we use virtual collaboration tools in place of employee travel and encourage a flexible workplace environment, allowing employees to work remotely upon management approval. When travel is necessary, we work with our employees and transport providers to support sustainable travel practices such as incentivizing rideshare programs. Our auto fleet transformation program aims to:

- Reduce fuel consumption across the fleet
- Improve the efficiency of our vehicles individually, and the efficiency of the fleet delivery model overall
- Reduce the total cost of ownership

OPERATIONS ENERGY USE IN MWH

2016	2017	2018
1,079,481	891,537	782,151

WATER AND WASTE

Catalyzing actions in our supply chain

We reduce the upstream environmental impact of HPE products by encouraging our production suppliers to focus on their water and waste-management practices. We support suppliers by providing clear expectations, prescriptive guidelines, and helpful tools to raise awareness of our requirements for water stewardship and waste minimization as part of our Supply Chain Responsibility (SCR) program. Specifically, suppliers must meet HPE's General Specification for the Environment, including requirements for substances used in the manufacturing process.

In 2017, we added corporate-wide reporting on water and waste to the HPE SER supplier scorecard, which informs our procurement decisions. This incentivizes production suppliers to measure impact, set goals, and report progress on their waste and water impacts. Following the model we use for carbon accounting, this data-based approach gives our procurement teams greater visibility into a supplier's environmental footprint. As of 2018, 64% of our production suppliers set water-related goals and 60% set waste-related goals, compared to 62% and 61%, the year before.[30]

Managing the use of water in our supply chain is essential to the future of our business and planet. We completed a supplier water-risk assessment to facilitate the creation of new KPIs and capability-building programs for our first-tier suppliers. The assessment leveraged public data made available by the World Resources Institute Aqueduct tool and the WWF Water Risk Filter, in addition to information provided by other organizations, to help inform a scientific understanding of conditions of water basins where our suppliers operate.

Managing our own water and waste

In 2018, our operations withdrew 2 million cubic meters of water, a decrease of 9% from the previous year. The majority of our operational consumption is attributed to the water used for electricity production. We disclose our performance and water management approach annually through the CDP water program and achieved an A- score in 2018.

Similar to our supply chain water assessment, we are working to set best-in-class water efficiency targets for our facilities that operate in water-stressed regions. These regions include Azerbaijan, China, India, Indonesia, Israel, Peru, Pakistan, Puerto Rico, Morocco, Singapore, and Tunisia. We refer to the WRI Aqueduct tool to remain well-informed of these locations and plan to roll out context-based goals within the year.

Waste from our operations consists primarily of nonhazardous recyclables and electronic waste; as well as limited hazardous waste, such as lead-acid batteries, which accounts for only 0.9% of total waste generated. In 2018, we diverted 90% of our waste from landfill, surpassing our annual target of an 83% diversion rate. We are currently re-evaluating our annual waste diversion goal and plan to increase our target to at least an 87% diversion rate.

While we will continue to pursue initiatives that increase our annual waste diversion, we are also working to reduce the amount of waste we generate in the first place. In 2018, our UK-based employees led an initiative to eliminate single-use plastics from our owned offices in the UK and Ireland. This included replacing plastic cups with reusable cups, engaging with on-site vendors to create financial incentives for employees to bring their reusable cups, and changing logistics products. While the waste generated from our offices is insignificant compared to other parts of our business, these small steps forward can add up to create a large impact and foster a culture of sustainability.

2018

NONHAZARDOUS WASTE
metric tons

13,208

HAZARDOUS WASTE
metric tons

113

INVESTING IN PEOPLE

Our people are our greatest asset. We are fostering an inclusive culture that enables our employees, customers, and communities to succeed in the digital age. To this end, we are building a stronger workforce by supporting STEM training and fostering equal opportunities for underrepresented and female talent. We recognize that when our employees succeed, the company thrives, making the engagement of our employees a priority.

02

INCLUSION AND DIVERSITY

We believe that innovation is the by-product of inclusion. Our inclusive culture ensures that every person brings their whole self to work and maximizes their contribution to HPE.

ADVANCING DIVERSITY THROUGH A CULTURE OF INCLUSION

2018 challenged companies across industries to re-examine how they uphold a safe and equal workplace where employees feel valued, respected, and supported. We responded by evolving our inclusion[31] and diversity[32] strategy into a multi-year, global and cross-functional plan focused on creating an environment that advances the way people live and work.

We recognize that in order to continue to drive technological breakthroughs, we need a workforce that brings together a diversity of ideas, experiences, and perspectives that allow us to solve for customer challenges in completely new ways. At HPE, we are creating an inclusive culture where every employee can optimize their potential and have opportunities to share in the rewards of being a part of an iconic company—one that continues to create history in an ever-evolving industry.

Diverse Leadership

In 2018, we maintained our position of having one of the most diverse boards in the tech industry, compounded with appointing Antonio Neri as our new President and CEO—the only Latin-born CEO of a Fortune 500 Silicon Valley company. Having a diverse Board and CEO is essential to attracting, retaining, and empowering a diverse workforce. Diverse leaders help us to activate inclusion and ensure that unconscious bias is not only recognized, but continually mitigated.

As CEO, Antonio signed the CEO Action for Diversity & Inclusion Pledge, cementing his commitment to continually evolve how HPE drives inclusion and diversity. He implemented culture among his top three priorities—making noticeable progress in transforming the employee experience, fostering active Employee Resources Groups (ERGs), investing in professional development opportunities, and supporting community service engagements.

This commitment from the top extends to leaders across our regions and functions. Many of our executives leverage their influence and expertise as technology leaders to bridge diversity and workforce skill gaps in Science, Technology, Engineering, and Mathematics (STEM); and provide early exposure in computing—from partnering and investing in organizations such as the National Center for Women & Information Technology (NCWIT), to leading ground-breaking programs like Curated Pathways.

Employee Resource Groups

Our culture is activated at the site level through more than 125 ERG chapters, representing nine constituencies across 38 countries. These groups provide space for employees to connect and grow together through common characteristics such as sexual orientation, cultural identity, disability, age, gender identity, race and ethnicity, and veteran status.

As Hewlett-Packard, we were the first company to establish ERGs, and we are proud to continually evolve this program as a unique learning and development opportunity that fosters employee collaboration, innovation, and creativity. ERGs also cultivate our diverse talent and help to ensure a more equitable talent pipeline and succession across the business. For example, our ERG-led Inclusive Mentoring program hosts more than 400 employees in 46 countries, offering mentoring based on diversity and gender, as well as reverse mentoring, where early career employees are empowered to share their expertise and ideas with more senior employees. The practice has provided fresh perspectives into the elements, experiences, and skills of a multi-generational workforce.

With culture set as one of our CEO's top priorities, it came as no surprise that 2018 marked record-breaking employee engagement. 19 new ERGs were created and 13,000 ERG members participated in more than 400 ERG events centering on professional development, community volunteering, and social activities. Our signature ERG-led events included celebrations focused on International Women's Day, Lunar New Year, Diwali, Black History Month, Hispanic Heritage Month, Military Veterans Appreciation, and PRIDE. These events welcome employees outside the represented group, garnering engagement from nearly half of our workforce and providing an invaluable experience to learn from the culture and identity of colleagues.

Women and underrepresented groups in technology

The underrepresentation of women in tech is undeniable. In 2018, we saw an increase in the number of women across our global workforce—including leaders. Women make up 32% of our workforce, representing 24% of our management positions and 32% of our new hires.

Recruiting women to HPE is only the beginning of how we work to establish a more gender-balanced workforce. We are ensuring pay equity, expanding our benefits to support employees through work-life transitions, and nurturing female talent by hosting engagement events, sponsoring interest groups, and encouraging participation in leadership and technical conferences. As a platinum sponsor of the 2018 Grace Hopper Celebration in Houston, Texas, HPE sent more than 130 women technologists to the conference for career development and to recruit future talent. We also sent another 80 employees to the Grace Hopper Celebration in India, Asia's largest gathering of female technologists.

We know that more work must be done to improve diverse representation in our industry and we continually push for remedying the underrepresentation of minorities by engaging with leading organizations that promote women and minority representation in technology. Since 1978, we have partnered with the National Action Council for Minorities in Engineering (NACME), contributing more than $1.5 million in financial support toward scholarships and programs. Learn about how we're working to better connect women and underrepresented minorities to STEM-related careers in Community investment.

ACTIVATION AND ACCOUNTABILITY

HPE has always disclosed our diversity metrics in our efforts to be accountable, and in 2018 we earned a 100% rating on the Corporate Equality Index for the 15th year in a row. Yet even as a tech sector corporate diversity leader, we recognize that the bar is simply not high enough.

All departments at HPE set goals aligned with our Global Inclusion and Diversity strategy and policies, and we evaluate our people leaders based on inclusion training, programs, and events. In 2018, we also trained more than 80% of our human resources department on being effective first-responders to provide them with the necessary tools to resolve particularly sensitive issues. This training helps to build touchpoints throughout our company to ensure inclusion is respected and supported at all levels.

In today's post #MeToo era, it is more important than ever that we uphold our zero-tolerance policy for discrimination and harassment and our Open Door Policy for employees to have a safe space to express any concerns over experiences at work. We have always encouraged employees to report ethics violations; and this year, we launched OpenLine, a confidential tool to help employees resolve sensitive issues with trained consultants. We encourage anyone with a concern or question to raise the matter without

fear of reprisal and we investigate all matters thoroughly, carrying out disciplinary or remedial actions when necessary. Learn more about how we maintain the highest ethical standards.

Looking ahead to 2019, our Executive Committee has pledged their continued support and desire to champion diversity from the top, and we will expand our Unconscious Bias training across the organization to enable every employee to contribute to our inclusive workplace. We are also exploring career development practices that facilitate better identification and creation of "bench strength," particularly in the incorporation of gender and racial diversity within our succession planning for key positions.

SUPPLIER DIVERSITY

Beyond our workforce, we accelerate a more inclusive economy through our Supplier Diversity Program. In 2018, we spent $1.3 billion with small enterprises and businesses owned by women, minorities, and veterans.

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Despite our smaller spend portfolio in 2018, HPE delivered on our commitments for small and diverse business inclusion. HPE attended national and regional supplier diversity industry events, where we met and educated numerous prospective suppliers on working with HPE. We also collaborated with diverse suppliers on unique ways to unlock value through partnerships and created touchpoints across HPE's organizational landscape.

EMPLOYEE DEVELOPMENT AND ENGAGEMENT

Our people are at the heart of how we deliver results. By investing in careers and listening to opinions, we foster a highly capable and engaged workforce that can achieve breakthrough innovations.

INVESTING IN OUR LEADERS

Our teams bring together the best and brightest minds. Strong leadership is key to helping them thrive. We have an HPE Leadership Development curriculum dedicated to supporting and developing our leaders at all levels with an emphasis on the following focus areas:

- Welcoming new leaders to HPE and those who are new to leading
- Advancing the capabilities of experienced leaders so they can guide their teams through change in pursuit of innovation and growth
- Elevating the performance of leaders through executive coaching
- Guiding individual leadership development through Development Assessments and 360-degree feedback surveys

In 2019, investment to build and launch an end-to-end People Leader Academy at HPE is underway.

Leaders are key to talent retention. Managers meet biannually with employees to review performance, contributions to business objectives, and set goals. These reviews also provide the opportunity to discuss employee career aspirations and identify the best-suited learning and development programs for each employee.

We hold our leaders to the highest standards so they can be role models for their teams. In 2019, we will establish goals for our senior executives on diversity and employee engagement. We will also launch new programs to support leader capabilities at all levels, including leadership development for high-potential talent and enhanced executive on-boarding.

SUPPORTING OUR TALENTED WORKFORCE

We want our employees to have a bias for action, be innovators at heart, and put customers first. When we invest in them, we directly invest in the success of our business.

Accelerating U is our self-directed employee learning platform. It features on-demand, interactive, and mobile access to personalized learning opportunities. The platform contains thousands of courses, including hundreds on core and emerging technologies. In 2019, we will expand our digital learning to include more courses on project management, value selling, Big Data, AI, and machine learning.

We also support employees pursuing external education. In 2018, we provided grants to 240 employees working toward bachelor's, master's, or doctorate degrees through our Employee Development Grant program.[33] During the year, we also launched our Student Loan Repayment program. Driven by our CEO, the program offers eligible employees the opportunity to receive up to $9,000 in student loan repayments.

Recognition and compensation

Celebrating the successes of individual employees is integral to our culture. Through our Recognition@HPE program, employees are acknowledged by peers and leaders via in-person events, online platforms like Connect Now, and monetary bonuses. In 2018, 95% of employees were recognized through the program.

Competitive compensation and benefits help us attract and retain top talent. Consistent with our Nondiscrimination Policy and our commitment to inclusion and diversity, we believe that equal work deserves equal pay. HPE maintains policies to ensure pay equity and we regularly review our pay practices to ensure that employees performing similar work in a similar location are paid fairly and equitably. Additionally, we believe that equity must also encompass fostering equal opportunities, evaluating and addressing biases, and accommodating flexible work. To this end, we are committed to supporting STEM education and nurturing female talent by working with internship programs to encourage the interest of women in technical roles.

In efforts to support our employees through work-life transitions, we allow flexibility in where and how employees work, including working remotely, flexible hours, part-time, and job share programs.[34] In 2019, we will broaden return-to-work benefits to extend our paid parental leave policy to a minimum of six months globally, expand our flexible work offerings for new parents and employees nearing retirement, and offer "returnships" for experienced professionals re-entering the workforce.

In 2018, 95% of employees were recognized through Recognition@HPE.

ENGAGING EMPLOYEES

We continuously engage with our employees through channels including Connect Now, HPE Insider, and Living Progress Champions. In 2018, we launched HPE Spirit Week to connect with employees on our culture, customers and partners, Living Progress, innovation, and inclusion and diversity. More than 38,000 employees participated in local and virtual events at 84 sites across 44 countries.

Every year we seek employee feedback through our Voice of the Workforce survey. In 2018, 73% of employees participated. We were encouraged to see our engagement score rise to 71%, eight percentage points higher than 2017. Employees reported feeling reconnected to HPE culture and values and that they are treated equitably, with respect, and included.

Employees said they are confident about learning experiences at HPE but require further support to reach their career goals. Based on this insight, we are ramping up our investments in training, skills and succession management, and driving more internal talent-sourcing efforts. In 2018, 3,000 job positions went to internal hires.

We send employees monthly pulse surveys to get feedback on specific programs or timely issues. Topics in 2018 included customers first, role clarity, recognition, and sales excellence.

DEVELOPING RESILIENCE THROUGH RESKILLING

In the digital economy, machine learning and AI will yield highly efficient productivity, but threats of job loss due to automation are a concern. As disruptive technology advances, employees with technology skills will be more resilient to workforce transitions.

HPE is one of 11 founding members of the World Economic Forum (WEF) IT Skills Initiative, empowering workers to gain new, marketable skills by providing a free online technology curriculum on the WEF SkillSET portal. HPE helped develop the content for several courses, including IT4IT™ Awareness, IT Service Management Security Overview, Development Operations Awareness, and more. The portal will help workers, including our own HPE employees, navigate the coming digital transformation.

EMPLOYEE HEALTH, SAFETY, AND WELL-BEING

Good health is good business. Safe and healthy workplaces improve employee engagement, motivation, and productivity. Our well-being programs also play a key role in attracting and retaining the best talent, as candidates increasingly expect employers to offer comprehensive wellness packages.

MAINTAINING SAFE AND HEALTHY WORKPLACES

Our commitment to employee health and safety extends to every HPE supplier and office. Within our own operations, we establish a culture of responsibility and awareness by engaging employees through our Environment, Health, and Safety (EHS) programs. In 2018, we made the "Introduction to EHS@HPE" course mandatory for all new employees so that they fully understand their roles and responsibilities when it comes to EHS. We also launched an organization-wide campaign on root-cause analysis to hone the skills of our EHS professionals, with the goal of preventing the recurrence of work-related incidents. For employees and contractors in supplier workplaces across our value chain, we collaborate with suppliers to implement EHS programs, policies, and initiatives.

As a global employer, we meet or exceed regulations at both the national and regional level. Our Environmental, Health, and Safety Policy and management systems are aligned with industry best practices. By 2020, we plan to certify six sites to the new ISO 45001 occupational health and safety standard, including all HPE managed and operated manufacturing sites, as well as select country sales offices. We currently have three sites certified to OHSAS 18001 standard.

When workplace injuries do occur, we track them in compliance with the International Labour Organization. In 2018, our lost workday case rate was 0.05, a rate well below industry standards. Our recordable incident rate, also below industry standards, was 0.12.

0.05

LOST WORKDAY CASE RATE

0.12

RECORDABLE INCIDENT RATE

Lost workday case rate is the number of work-related injuries that result in time away from work per 100 employees working a full year. Rates are calculated using Occupational Safety and Health Administration (OSHA) definitions for recordability around the world and using OSHA calculation methodologies.

Recordable incident rate is the number of all work-related lost-time and no-lost-time cases requiring more than first aid per 100 employees working a full year. Rates are calculated using OSHA definitions for recordability around the world and using OSHA calculation methodologies.

PROMOTING EMPLOYEE WELL-BEING

Our well-being programs are an investment in our employees' health and happiness, helping them thrive personally and professionally. In 2018, HPE launched more than 200 health and wellness activities that 25,000 employees participated in.

Our Winning with Wellness program takes a comprehensive approach to well-being, helping employees maintain physical health, manage stress, and achieve financial security. Through this program we run monthly educational campaigns, on-site health services, and site-specific initiatives.

In September 2018, we launched a U.S.-based behavioral health pilot program, which provided managers with specialty training to recognize behavioral health concerns and, ultimately, aimed to combat stigmas and encourage employees to feel comfortable seeking support. Based on the success of the pilot, we will roll out behavioral health initiatives globally in 2019.

We also ran our annual Power of Prevention campaign, promoting broad cancer-prevention awareness among employees. As a key part of the campaign, thousands of cancer screenings took place across locations globally. Sites also offered prevention activities such as workshops, presentations by healthcare professionals, and virtual-learning tools including webinars and tutorials. Beyond the campaign, many sites continue to offer on-site and virtual resources year-round for their employees.

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We support employees in their day-to-day needs through our Employee Assistance Program (EAP). The program offers resources including counseling, referrals for childcare, professional assistance for emotional and behavioral health, and much more. Company-wide, EAP provides critical incident support for sites affected by natural disasters or other events.

Additionally, local teams may implement well-being programs tailored to meet a site's specific needs. This may include offerings such as financial planning, access to fitness centers, and on-site health and medical services. In 2018, local Occupational Health Services teams provided more than 10,000 medical tests in several countries in Latin America; Europe, Middle East, and Africa; Taiwan; and Japan.

The work environment can play a key role in employee health and happiness. Our Healthy Site Reference Guide, combined with our Global Real Estate Workplace Transformation projects, improve our offices by providing standing desks, healthier food options, exercise opportunities, and better lighting and air quality, to name a few.

COMMUNITY INVESTMENT

HPE is doubling down on our culture of giving to accelerate the positive social impact of our employees and technology.

2018 PROGRAM ENHANCEMENTS

In 2018, HPE worked to redefine and reignite our company culture, including giving and volunteering through our global HPE Gives program. The HPE Foundation increased HPE Gives employee matching limits by 5X to inspire and further amplify the impact of our employees in the communities where they live and work.

The HPE Foundation increased HPE Gives employee matching limits by 5X to $5,000.

In efforts to better on-board new employees into our culture of giving, we also implemented a $25 charitable reward for all new hires to donate to a cause of their choice. Following these enhancements to the HPE Gives program, employee participation hit the highest level since the program's inception, and employee donations increased 315% through the end of the fiscal year.

All new hires receive a $25 charitable credit to donate to a cause of their choice, helping on-board them to our culture of giving.

HOW WE GIVE BACK

HPE's community investment and social impact strategy is built around three areas of focus:

Amplifying employee impact

First, we empower our employees and amplify their impact through HPE Gives. In 2018, HPE Gives distributed $5.4 million to support more than 3,500 nonprofits around the world.

HPE Gives distributed $5.4 million in 2018, supporting more than 3,500 nonprofits around the world.

To support volunteer efforts, HPE provides employees with 60 hours of paid volunteer time each year, allowing them to enrich their communities, spend meaningful team-building time with colleagues, and develop leadership skills. Employees can then receive charitable rewards for their volunteer hours, doubling the impact of their service with a financial investment in a cause they believe in. Despite a smaller employee base in 2018, HPE's commitment to service remained steadfast as employees volunteered over 181,000 total hours. A remarkable 44% of volunteer time was skills-based, with employees leveraging their unique strengths through board service and pro bono services. To further drive global volunteering, HPE launched our inaugural Global Day of Service, which saw 5,500 employees across more than 100 sites volunteer in their local communities.

Supporting our communities

Secondly, we support the communities where we live and work through our employee-nominated Community Impact Grants (CIG) and our disaster-relief efforts. CIGs are awarded to local organizations where HPE employees have an existing relationship through volunteering or giving. In 2018, a total of 10 CIGs were awarded, including a grant to Alzheimer Scotland, an organization that was selected by HPE Erskine employees as their Charity of the Year. The grant supplemented employees' creative year-round fundraising and volunteering efforts, and helped fund Purple Alert, a free mobile app that notifies members of the community and helps locate people living with dementia when they are lost.

When destructive wildfires swept across HPE's home state of California, we responded by raising more than $200,000 for the Wildfire Relief Fund. Additionally, HPE donated Aruba networking products to help the Butte County Office of Education restore connectivity and resume education for students. Employees from our Roseville site traveled to an American Red Cross site near Paradise, California, sorting the warehouse's donations and helping to distribute supplies to those affected. The HPE Foundation has been a longtime supporter of the American Red Cross Disaster Responder Program, which enables Red Cross organizations to preposition supplies and resources, and respond immediately to disasters.

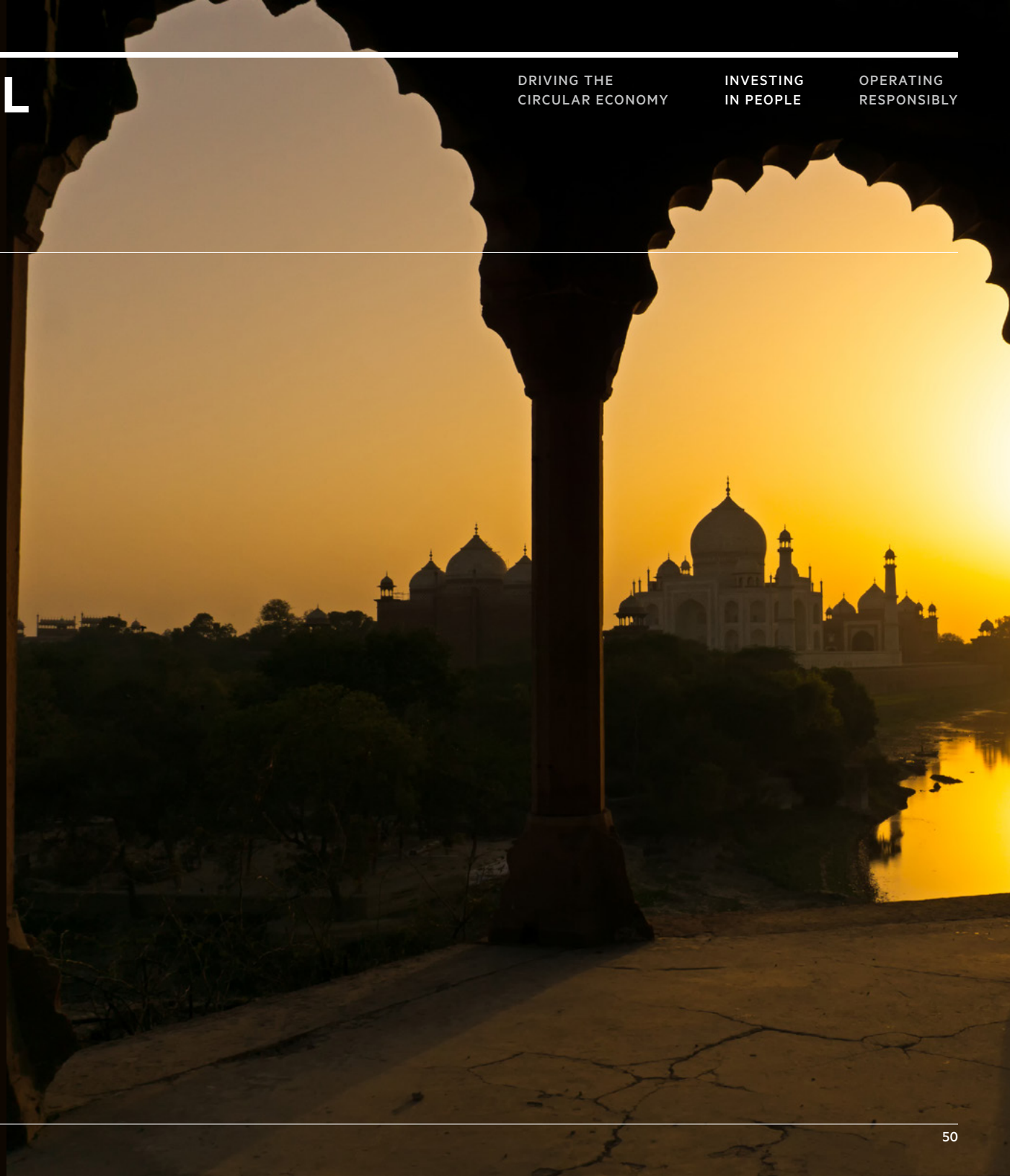
Accelerating social impact in the digital age

Lastly, as a technology leader, we work to leverage our unique strengths to drive social impact in the digital age. HPE partnered with YWCA Silicon Valley, Santa Clara University, and Purdue University to jointly create the Curated Pathways to Innovation (CPI) initiative, an AI and machine learning-based app and immersive model that helps set girls and underrepresented minorities on the path to STEM careers. CPI's pilot year focused on local middle school students in San Jose and further laid the groundwork to scale both regionally and nationally, receiving recognition from the National Science Foundation. The pilot program moved a group of students with no knowledge about computer-related careers to 25% of students expressing interest in a computer-related field, results that are unparalleled by other STEM programs. HPE employees themselves recorded more than 500 skills-based volunteer hours related to CPI. For example, employees hosted a "reverse science fair" for local students to learn first-hand about STEM careers and technology innovations happening within HPE.

BRINGING DIGITAL LITERACY TO RURAL INDIA

HPE partnered with the NASSCOM Foundation to support the Indian government's National Digital Literacy Mission to empower at least one person per household with digital literacy skills by 2020. Digital connectivity and the skills to use digital tools can serve as a fast track out of poverty for India's underserved communities.

Deploying more than 40 fully containerized digital classrooms equipped with modern IT and the HPE ERP platform, the program has reached 50,000 students across 17 Indian states. Several programs focus specifically on digital empowerment for women, creating opportunities to further their education without migrating to cities and providing a pathway out of poverty.



CASE STUDY

FIVE YEARS OF IMPACT THROUGH FINANCIAL INCLUSION

We celebrated five years of impact with Matter to a Million, our partnership program with Kiva, a nonprofit online platform dedicated to economic empowerment through loans. This program, funded by the HPE Foundation, provided all employees with credits to loan to small business entrepreneurs through the Kiva platform, which housed thousands of projects from agricultural development, to education, medical treatment, and more. Employees selected loan recipients to receive the credit and even receive notifications when repayments are made on the loan.

Since 2013, HPE employees and the HPE Foundation turned $25 and $50 credits into nearly $17 million in loans, empowering more than 225,000 entrepreneurs in 60 countries, 81% of whom were women. Ninety-seven percent of these loans have been repaid. This partnership is particularly unique because it empowers HPE employees to drive our philanthropy. In the 2018 campaign, more than 100 HPE sites had 50% participation or greater.

CASE STUDY

OPERATING RESPONSIBLY

We firmly believe that trust, integrity, and strong ESG performance are integral to our business success. This extends from how we operate, to our supply chain and products, and is the foundation to remaining a trusted supplier to our customers across the globe. We share a responsibility with our partners to protect people and the environment, and uphold these standards in our innovation principles, business decisions and procurement choices.

03

CORPORATE GOVERNANCE AND ETHICAL BEHAVIOR

We have high ethical standards and expect every employee to abide by them. Our governance structure helps us operate responsibly, facilitates good decision-making, and holds everyone accountable for maintaining our reputation.

CORPORATE GOVERNANCE

Oversight

Our approach to governance protects investor interests, reduces fiduciary risk, and propels our business through sustainable innovation. Our CEO and Board of Directors oversee environmental, social, and governance (ESG) issues and are committed to operating HPE in a responsible manner.

Our Board participates in five standing committees:

- Audit
- Finance and Investment
- Human Resources and Compensation
- Nominating, Governance, and Social Responsibility
- Technology

Of our 12 board members, five are women and three identify with one or more diverse groups in ethnicity, race, or nationality. Nine members are independent of HPE.

Living Progress governance

To advance our Living Progress plan, we collaborate with internal and external stakeholders and we report transparently on our ESG performance. Our Chief Sustainability Officer, a member of the HPE Office of Legal and Administrative Affairs (OLAA), manages the Living Progress program, which is governed by the following groups:

HPE Board of Directors' Nominating, Governance, and Social Responsibility Committee (NGSR):

- Guides HPE's global citizenship activities, providing strategic direction on policies and programs
- Identifies, evaluates, and monitors issues that could significantly affect the company's reputation or operations, including social, political, regulatory, and environmental concerns
- Oversees our Political Action Committee (PAC), government affairs, and public policy engagement

HPE Executive Council (led by CEO):

- Oversees the Living Progress program

HPE Living Progress Strategy Council:

- Evaluates the company's ESG focus areas and priorities
- Provides support for Living Progress objectives and commitments
- Oversees communication of ESG strategy to internal stakeholders
- Leads materiality assessment, reporting activities, and engages with external stakeholders

Senior leaders from Corporate Affairs and the Ethics and Compliance Office (ECO):

- Provide direct guidance to the Nominating, Governance, and Social Responsibility Committee and other relevant Executive Council-level committees

Economic governance

HPE contributes to local economies, providing high-quality employment for more than 60,000 workers. We strive to grow our business, and its positive economic impact, in a socially and environmentally sustainable manner.

HPE fulfills taxation responsibilities in every location where we operate and we advocate for tax reform that supports an evolving IT industry in a modern marketplace. Read more about our approach to economic policy issues.

Our compensation programs have been structured to balance near-term results with long-term success, and enable us to attract, retain, focus, and reward our Executive Team for delivering stockholder value. Review of executive compensation is managed by the Board of Directors' Human Resources and Compensation Committee.

LIVING PROGRESS GOVERNANCE STRUCTURE

ETHICAL BEHAVIOR

Maintaining the highest ethical standards requires everyone at HPE to take responsibility for their actions. Behaving with honesty and integrity is the right thing to do; it also supports the stability and sustainable growth of our business. HPE has been recognized as one of the World's Most Ethical Companies by the Ethisphere Institute.

Anti-corruption program

We do not tolerate corrupt behavior, including bribery or kickbacks, in any circumstance. We comply with relevant laws in every country in which we do business, and we set and share our expectations with employees through our anti-corruption program. Our anti-corruption program includes:

- Policies that provide clear guidance, including the HPE Anti-Corruption Policy and the HPE Global Business Amenities Policy. In 2018, we substantially updated both policies and accompanying FAQ guides for employees. These documents are available in 23 languages.
- Tools and training to help employees identify and avoid potential issues, including the Amenities Approval Tool (AAT). We strengthened the amenities approval process this year by improving data collection and reporting within the AAT and by updating training for users and approvers.
- Process controls to review higher-risk transactions and screen third-party partners. We identify countries at a high risk for corruption based in part on Transparency International's Corruption Perceptions Index. We audit the controls, and in 2018, we expanded our audit program to conduct more sophisticated and complex audits and to test new areas of risk.
- Support and advice from specialized anti-corruption attorneys and other compliance professionals.
- A transparent, systematic process for investigating and addressing potential concerns.

HPE remains an active member of the World Economic Forum's Partnering Against Corruption Initiative (PACI), committing to zero tolerance of corruption in all forms and engaging in a coordinated response to the challenges of corruption globally.

ETHICS & COMPLIANCE GOVERNANCE STRUCTURE

Ethics and compliance program

We expect everyone involved in our business to behave responsibly and ethically, setting expectations and holding people accountable through relevant policies and procedures. We require compliance with the law and with our Standards of Business Conduct, which we recently revised to make more accessible and interactive, and we set specific requirements for suppliers, business partners, and contingent workers.

Our Ethics and Compliance Committee and our Audit Committee oversee our approach to ethical conduct, with the HPE Board of Directors taking ultimate responsibility.

If something is not right, we want to know. We encourage anyone with a concern or question about business conduct to raise it via one of our reporting channels, without fear of reprisal.

Reports are confidential and can be made anonymously where local law allows. For each report made, we:

- Add a record to our global case management system, which we use to identify trends and priorities
- Review and respond promptly
- Conduct any required investigations appropriately, carrying out disciplinary or remedial action when needed

We track the nature of ethics and compliance items reported to us each year. In 2018, the majority of items related to labor law.

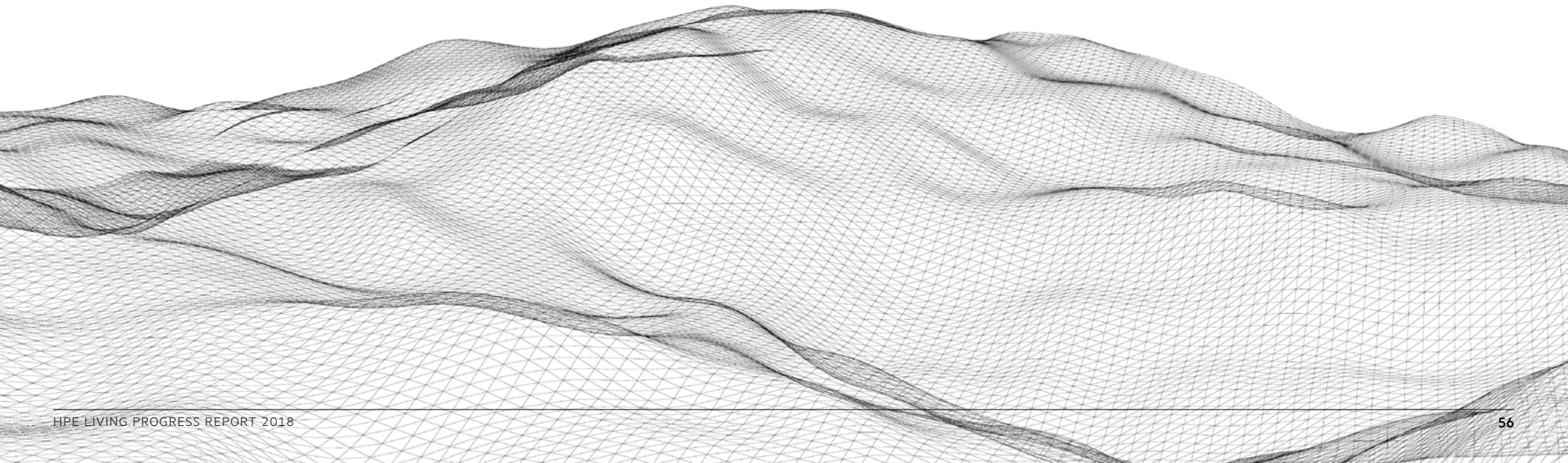
Training and communication

We reinforce and support our ethics and compliance programs with regular training and communications. We evaluate and update training and communications each year to ensure we address trends and areas for improvement. Our training and communications are relevant, timely, and tailored to employee roles.

Our program includes the following:

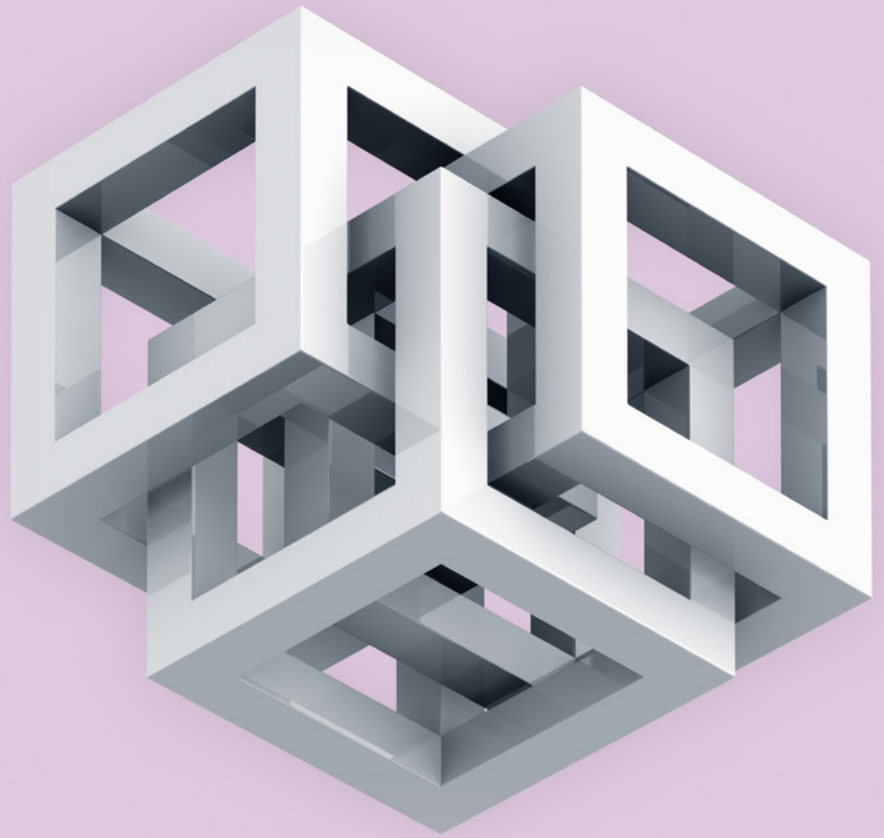
- **Training on our Standards of Business Conduct (SBC)**—All employees must complete the annual SBC refresher course, which covers key policies, procedures, and high-risk issues. Board members take SBC training every two years. New hires complete an SBC course within 30 days of joining HPE.
- **Internal ethics and compliance social media platform**—Part of our internal social network Connect Now, the platform allows our employees to ask questions, access resources, and debate ethics and compliance issues.
- **Ethics Road Show**—The Road Show connects senior members of the Ethics and Compliance Office (ECO) with HPE business leaders in our regions. This face-to-face contact helps to strengthen our culture of ethical conduct and enables ECO to remain alert to real-life challenges and successes across our business.

We also communicate with employees on important ethics and compliance issues throughout the year through targeted email messages, videos, and live training sessions which were conducted in over 20 countries in 2018.



ETHICAL SOURCING

Our extensive Supply Chain Responsibility program guides our approach to assessing risks, monitoring and improving performance, and working collaboratively with suppliers to share knowledge on key issues. Our efforts help us to retain a stable, high-quality supply chain, ensuring we remain a trusted sourcing partner to our customers.



At HPE, we hold our supply chain partners to high ethical standards and regularly audit and engage with suppliers to ensure compliance with HPE standards through our Supply Chain Responsibility (SCR) program. Our mission is to protect and elevate workers; reduce global and community environmental impact; and benefit our company, our business partners, and our customers.

Through our longstanding SCR program, we assess social and environmental risks in our supply chain and set rigorous targets and standards, including our Foreign Migrant Worker Standard and first-of-its-kind science-based supply chain greenhouse gas (GHG) emission reduction goal. While we continue to hone our program and policies to address emerging risks and monitor compliance, we also work to further elevate supply chain social and environmental standards by sharing knowledge and collaborating with our suppliers and industry partners.

To learn more about our program purpose, objectives, and procedures, read our approach to supply chain responsibility.

COMBATTING HUMAN TRAFFICKING AND FORCED LABOR IN OUR SUPPLY CHAIN

Every individual has the right to choose the work they do, and to be treated with dignity and respect. We work to lead our industry and influence other sectors to protect workers from the risks of forced labor. We set clear standards to promote practices designed to prevent

forced labor and human trafficking, and encourage others to do the same.

Anyone concerned about potential human trafficking or forced labor in our supply chain can use a range of reporting channels to report it.

How we map and respond to risks of forced labor in our supply chain

Through systematic assessments of labor risks, we identified two groups of workers in our supply chain as especially vulnerable to exploitation—foreign migrant workers and student and dispatch workers in China.

We respond to these risks with a step-by-step process to detect and address unacceptable labor practices in our supply chain.

Building on our legacy of industry-leading standards, HPE developed our Foreign Migrant Workers Standard in 2015.

We understand migration is a necessity and an opportunity, in parts of the world, for workers to support themselves and their families. Our standard aims to reduce the risk of forced labor by ensuring our suppliers take direct responsibility for conditions of employment. The standard also prohibits worker-paid recruitment fees, requires that migrant workers be allowed to keep their passports and personal documentation, and encourages suppliers to monitor the compliance of recruitment agencies.

Working closely with our suppliers, we clearly convey our expectations, assess risks, monitor progress, and take corrective actions where needed. We provide support and training for suppliers as an important step to build a resilient supply chain and avoid conditions that might contribute to human trafficking or forced labor.

In 2018, KnowTheChain ranked HPE third in their corporate benchmark of 40 ICT companies for our efforts to address forced labor in our supply chain.

HPE ranked third on the KnowTheChain benchmark of 40 ICT companies for our efforts to address forced labor in our supply chain.

To protect the rights of student and dispatch workers at our suppliers' plants in China, we require relevant suppliers to adhere to our Student and Dispatch Worker Standard for Supplier Facilities in the People's Republic of China.

Advocating for stronger standards and reporting

The global recruitment industry spans multiple sectors. We engage with partners within and outside of the IT industry to drive wider change in working practices and encourage others to join in our approach. HPE also takes initiative to promote large-scale collaboration between the public and private sectors to address the root cause of modern slavery and forced labor.

For example:

- In collaboration with HP Inc., in 2015 we donated a guidance document for suppliers to the Responsible Business Alliance (RBA)[35] to help any member to develop their approach to protecting foreign migrant workers.
- Similarly, with help from our partner Verité, we mapped the legal regulations and estimated financial costs of recruitment along several common recruitment corridors and donated this document to the Responsible Labor Initiative to help member companies understand, and properly reimburse, worker-paid recruitment fees.
- HPE worked with the Responsible Labor Initiative and Global Reporting Initiative to develop a toolkit for companies reporting on efforts to combat modern slavery. HPE provided strategic advice on the project, and was joined by a number of companies across industries and geographies in contributing best practices and preferred resources.

Read our statement to meet the requirements of the California Transparency in Supply Chains Act of 2010 and the UK Modern Slavery Act of 2015.

Learn more about how we build supplier capability and advocate for stronger labor standards.

WORKING BEYOND OUR DIRECT SUPPLY CHAIN

HPE e-waste recycling vendor, TES, provides long-term job opportunities and a safe workplace. However, like many labor-intensive industries in Singapore, the company hired foreign workers who paid agencies recruitment fees in exchange for job placement in Singapore. HPE is one of the few companies that requires suppliers to adhere to a no-fees Foreign Migrant Worker Standard.

After conducting an audit, we provided TES written guidance materials, and connected them with another local HPE supplier that already successfully followed our no-fees standard. TES worked with us cooperatively to improve its understanding of our standard and then fully reimbursed the recruitment fees to affected workers.

By stretching our standards beyond HPE's first-tier manufacturing suppliers, our standard helps second-tier and end-of-cycle vendors commit to meet global best labor practices. This demonstrates the rippling impact our standards have on workers across our supply chain.

CASE STUDY

SUPPLY CHAIN LEADERSHIP AND TRANSPARENCY

Leadership and transparency are at the core of our SCR program. We engage with peers, industry bodies, and cross-sectoral organizations, including the RBA, the Global Business Initiative, and the Leadership Group for Responsible Recruitment to share best practices and new challenges, along with advance supply chain programs and standards beyond our own business.

Our Board of Directors recognizes the leading role we play and approves our commitments to the UK Modern Slavery Act of 2015 and the Dodd-Frank Act's Section 1502 on Conflict Minerals. In 2017, HPE was asked to join the UK government Home Office working group to address modern slavery. This executive-level working group creates partnerships between government and business, and aims to accelerate the steps to eliminate slavery from global supply chains.

We support supply chain transparency and publish:

- A list of suppliers and their addresses
- Our Supply Chain Responsibility dashboard
- Results of supplier audits and our Social and Environmental Responsibility (SER) scorecard
- Information about our capability-building programs
- A list of 3TG (tin, tantalum, tungsten, and gold) smelters and refiners and their locations

HOW WE WORK WITH SUPPLIERS

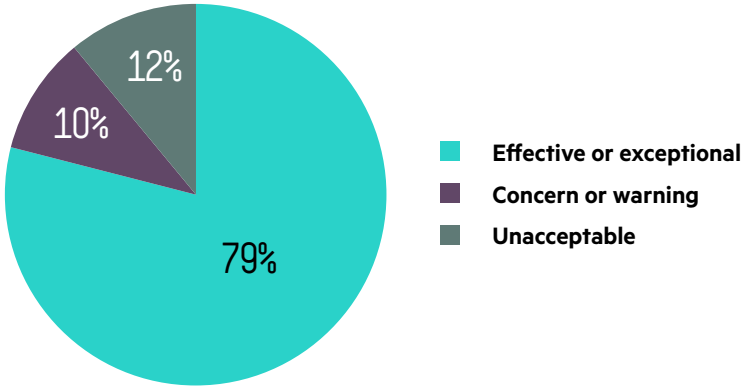
We undertake regular, independent audits against our Supplier Code of Conduct,[36] supported by targeted assessments on specific risk areas including foreign migrant workers. In 2018, we arranged third-party audits of suppliers representing 95% of our spend. We also undertook the process of refreshing our supplier map, which led us to expand the scope of suppliers included in our SCR program. We are actively working to expand our focus to encompass more of our sub-tier, as well as our service providers, recycling and end-of-life suppliers, and other indirect suppliers to create more positive change across our supply chain.

We ensure that SER is factored into our business decisions through our supplier business scorecard. The inclusion of SER indicators in the scorecard links supplier social and environmental performance with our procurement choices. In 2018, we made changes to our SER scorecard, raising the bar significantly by adding stringent requirements around science-based GHG targets, water, and waste. We also required third-party verified GHG data. Even with these changes, 79% of suppliers were in our effective or exceptional category.

Read more about our SCR data and findings in 2018.

SER SCORECARD DISTRIBUTION, 2018

(percentage of total)



Distribution includes top 95% of spend for our final assembly and strategic commodity supplier sites. Total does not add up to 100% due to rounding.

Supporting workers and building capability

We have long-term relationships with many of our suppliers and invest resources to deliver training and capability-building programs to foster a stable supply chain that is more responsive to emerging SER risks.

Among the notable examples of our training and capability-building programs in 2018:

- We completed on-site capability-building activities for a supplier in Taiwan, investing in efforts to identify the root causes of problems that surfaced in an audit. As a result, we were able to help the supplier develop the most effective remediation and implementation plans.
- HPE hosted a two-day ethical recruitment training in Kuala Lumpur for HPE suppliers and their sending and receiving country-recruitment agents based in Malaysia, Indonesia, and Thailand.
- We worked with our service provider, Elevate, to offer factory workers mobile surveys, allowing them to report their experiences and concerns to management anonymously.

Read more about how we work with suppliers.

CONFLICT MINERALS

We have a responsibility to ensure that the materials used to make HPE products—including metals found in most IT products such as tin, tantalum, tungsten, and gold (3TG)—are ethically sourced.

The sale and use of 3TG from the Democratic Republic of the Congo (DRC) or an adjoining country—collectively known as the Covered Countries—has been linked to funding for violent groups who commit human rights offenses. Through our conflict minerals program, we work to advance the responsible sourcing of 3TG minerals from Covered Countries used in our products.

Our aim is to achieve DRC conflict-free status[37] for our products, which requires working closely with our suppliers and peers. HPE encourages responsible sourcing from the DRC and its adjoining countries and is an active member of the Responsible Minerals Initiative (RMI). As a member of RMI, we participate in multiple working groups, including the Smelter Engagement Team (SET) and the Multi-Stakeholder Group. Our annual Conflict Minerals Report—required by the U.S. Securities and Exchange Commission (SEC)—shows the status of smelters and refiners involved in our supply chain.

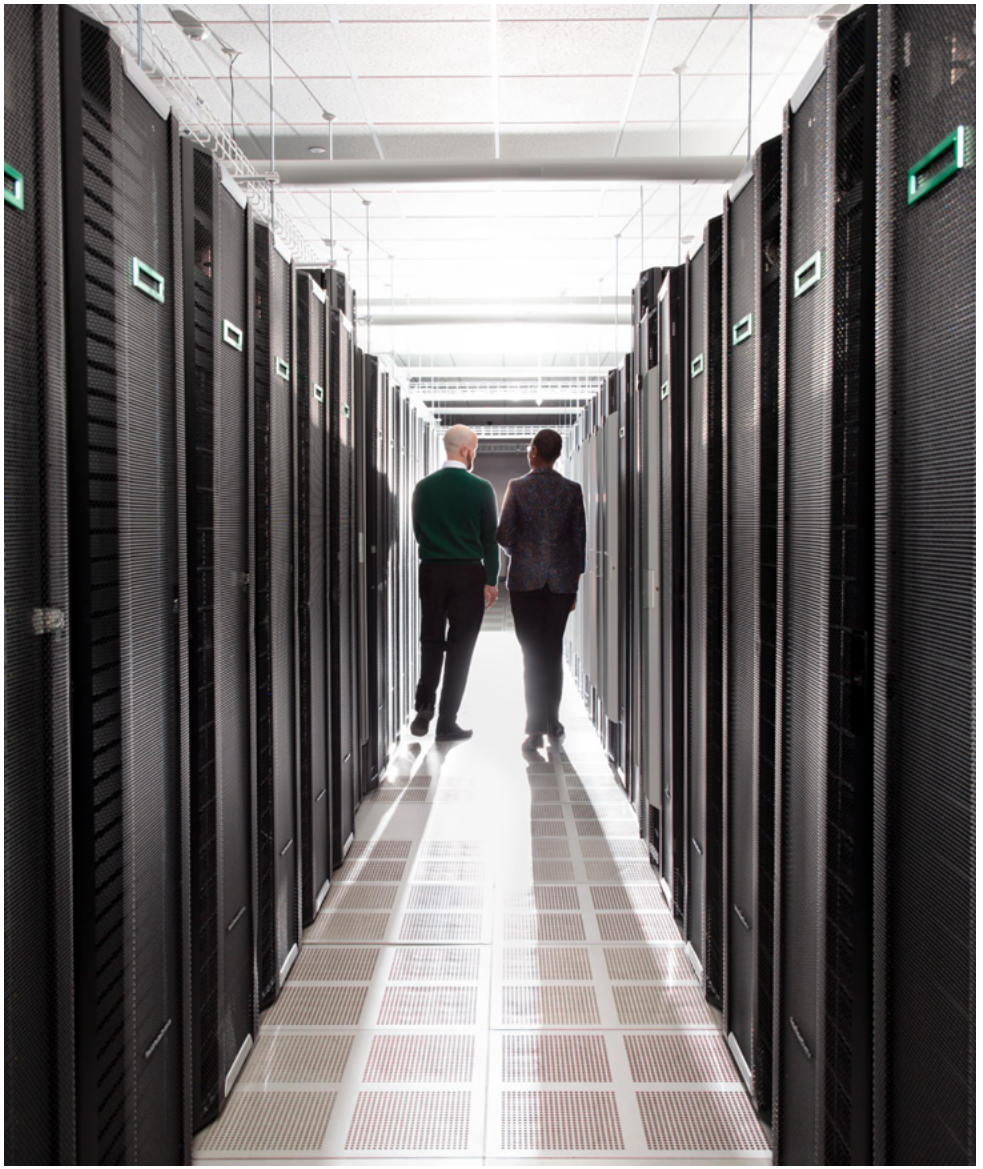
In 2018, we facilitated outreach to more than 40 smelters and refiners to encourage their involvement in RMI's Responsible Minerals Assurance Process (RMAP) and began participating in RMI's Single Point of Contact Program (SPOC). Through SPOC, HPE works closely with an eligible smelter, encouraging their participation in RMAP and supporting them through the pre-audit and audit process should they decide to participate. We also provided financial support to RMI's Initial Audit Fund for Participating Smelters, a fund that supports smelters with the costs of RMAP audits.

HPE continues to support financially KEMET Corporation's (KEMET) closed-loop tantalum supply chain by purchasing "conflict-free" tantalum capacitors. In 2018, HPE became one of the first donors to make a financial contribution to KEMET's Friends of Kisengo Foundation, a nonprofit dedicated to effectively and sustainably improving the lives people in the DRC through an integrated rural development program focusing on infrastructure, health, education, and environmental development. HPE's contribution facilitated support for the educational needs of over 1,500 children in the mining village of Kisengo, DRC for a month.

In 2018, 94% of smelters and refiners reported by suppliers made progress toward DRC conflict-free status.[38]

HUMAN RIGHTS

Respect for human rights is a core value at HPE and is fundamental to the way we do business. Our integrity and performance depend on the value we place on people. Our deep commitment extends across our value chain—to our employees, our suppliers and partners, and our customers.



PROTECTING HUMAN RIGHTS ACROSS OUR VALUE CHAIN

We believe that the basic freedoms and standards of treatment to which all people are entitled are universal. Upholding these rights is fundamental to our values. The HPE Global Human Rights Policy is the foundation for our approach, which is rooted in the expectations set out by the UN Guiding Principles on Business and Human Rights. We reinforce our statements with a transparent approach to identifying risks to these rights across our value chain and work to prevent, mitigate, and remediate any human rights impacts associated with our business.

The HPE Office of Legal and Administrative Affairs guides our approach to human rights and works across the business to address specific issues as they arise. We engage with external stakeholders, governments, industry organizations, specialized consultants, and across our own company to identify potential human rights issues to ensure that we focus our resources where they are most needed.

Any parties concerned about activities within our value chain should contact us immediately through one of our reporting channels.

Human rights at HPE

We manage workplace risk through our Standards of Business Conduct, our Nondiscrimination Policy, and our Harassment-Free Work Environment Policy. Our goal is to build a respectful and inclusive culture at HPE, where individuals are valued for their skills and the knowledge they bring, regardless of factors that are irrelevant to their work.

Human rights in our supply chain

We manage supply chain risk through our Supply Chain Responsibility program, which focuses on improving labor standards and protecting workers. We emphasize the importance of respect for human rights with suppliers, helping them to identify and remediate emerging risks through on-site audits based on our Supplier Code of Conduct and our supplier standards.

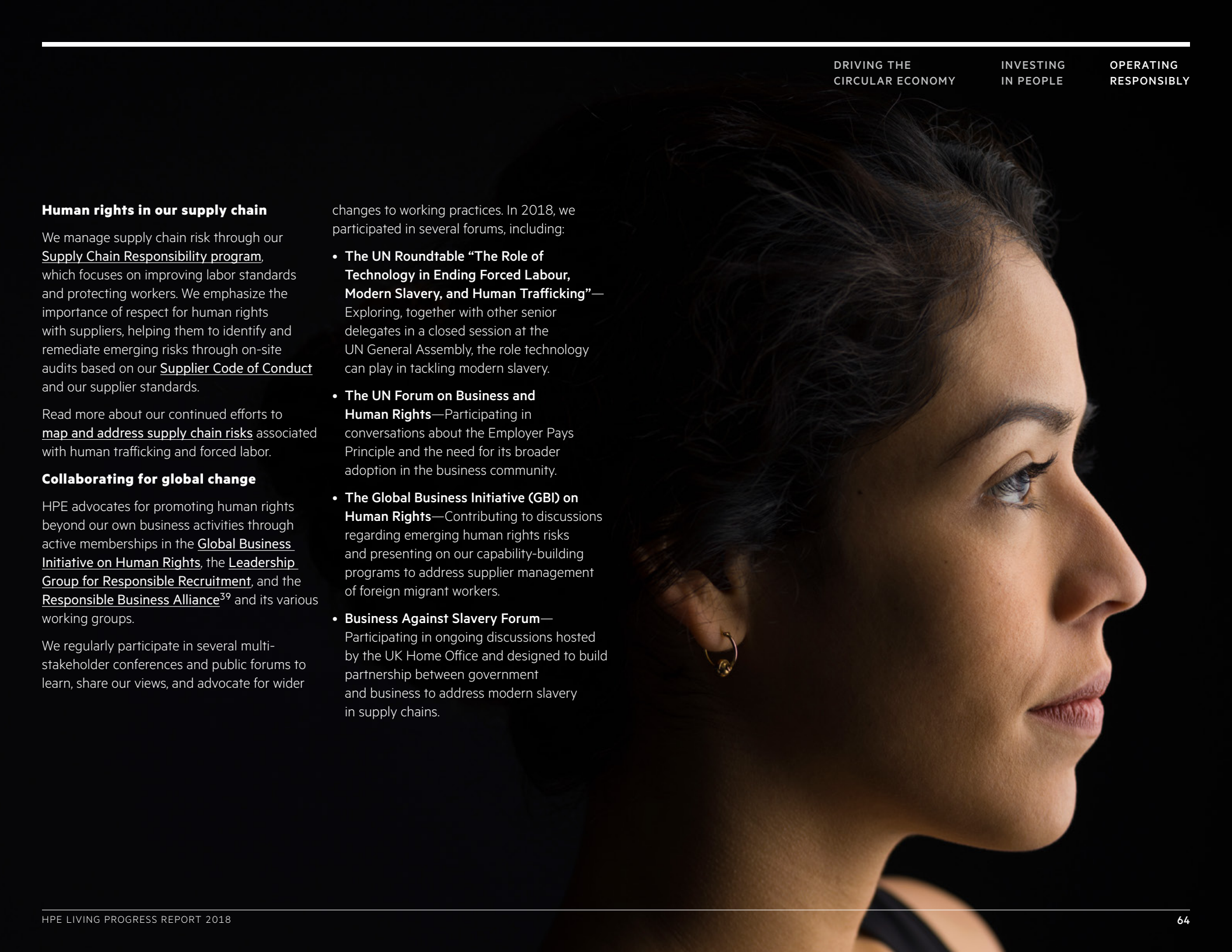
Read more about our continued efforts to map and address supply chain risks associated with human trafficking and forced labor.

Collaborating for global change

HPE advocates for promoting human rights beyond our own business activities through active memberships in the Global Business Initiative on Human Rights, the Leadership Group for Responsible Recruitment, and the Responsible Business Alliance[39] and its various working groups.

We regularly participate in several multi-stakeholder conferences and public forums to learn, share our views, and advocate for wider changes to working practices. In 2018, we participated in several forums, including:

- **The UN Roundtable "The Role of Technology in Ending Forced Labour, Modern Slavery, and Human Trafficking"**—Exploring, together with other senior delegates in a closed session at the UN General Assembly, the role technology can play in tackling modern slavery.
- **The UN Forum on Business and Human Rights**—Participating in conversations about the Employer Pays Principle and the need for its broader adoption in the business community.
- **The Global Business Initiative (GBI) on Human Rights**—Contributing to discussions regarding emerging human rights risks and presenting on our capability-building programs to address supplier management of foreign migrant workers.
- **Business Against Slavery Forum**—Participating in ongoing discussions hosted by the UK Home Office and designed to build partnership between government and business to address modern slavery in supply chains.



IT PRODUCTS AND SERVICES AND HUMAN RIGHTS

Innovative technologies have the power to disrupt industries and create significant solutions for some of the world's toughest problems. However, they also bring with them the risk that products and services could be used for unintended purposes, resulting in negative impacts on human rights.

Guided by the HPE Global Human Rights Policy, we seek to reduce the potential for our products or services to be used by companies, individuals, organizations, or regimes to infringe on people's human rights by:

- Evaluating specific concerns connected with existing or future customers and partners
- Conducting due diligence on relevant business activities in appropriate circumstances
- Complying with all relevant sanctions, restrictions, and embargoes in our business operations worldwide

Artificial Intelligence and Human Rights

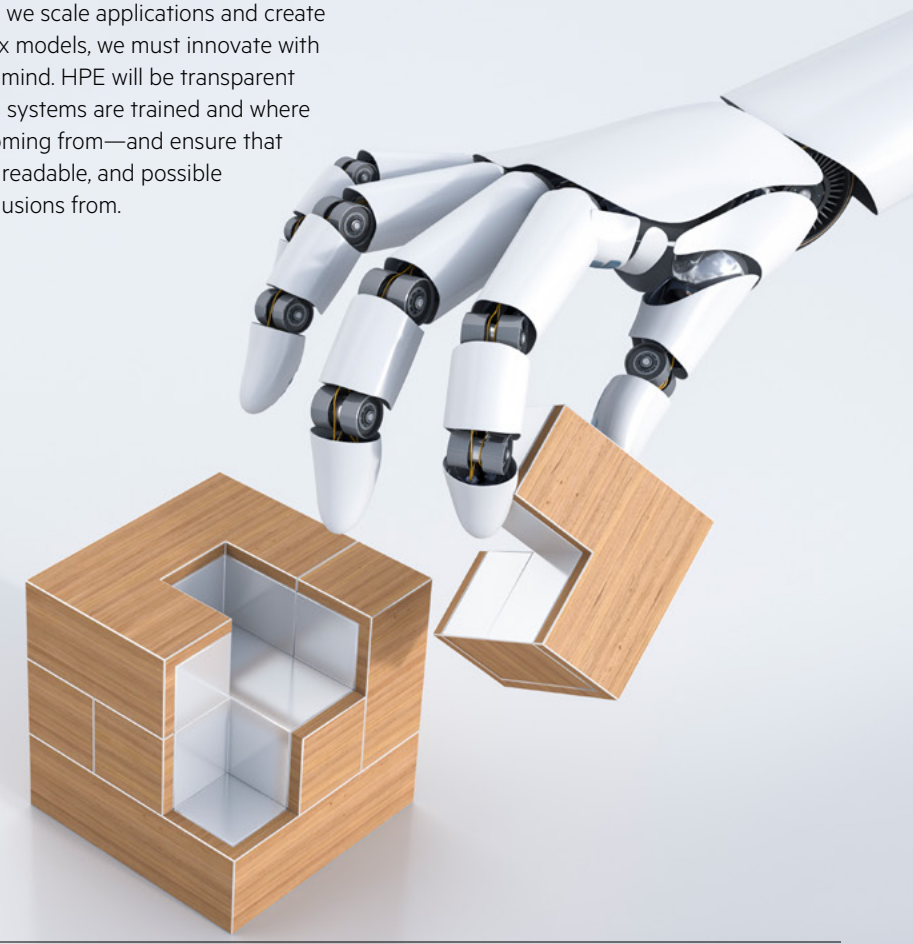
Emerging technologies such as AI may hold the answers to some of the world's most complex challenges. Yet, the pace of innovation is raising fears and concerns about the governance of technology. AI brings new human rights risks, including discrimination from algorithmic bias and labor impacts associated with automation. We believe AI systems must be designed consistent with international conventions that preserve human dignity, rights, and freedoms.

While source code and proprietary algorithms should be protected, organizations should also be able to demonstrate that a technology is designed, deployed, and operated responsibly. This includes testing for potential bias throughout the deployment of AI systems. The first step to eliminating biases in AI is to eliminate biases in the human intelligence that creates it. HPE is focused on incentivizing the development of diverse teams of people to design and build these systems.

HPE is working in many key markets to advise on national or regional strategies related to AI. For example, in 2018, we participated in the White House Summit on Artificial Intelligence in Washington D.C., which resulted in R&D and workforce recommendations, and provided input to the subsequent research road map initiative at the National Science Foundation.

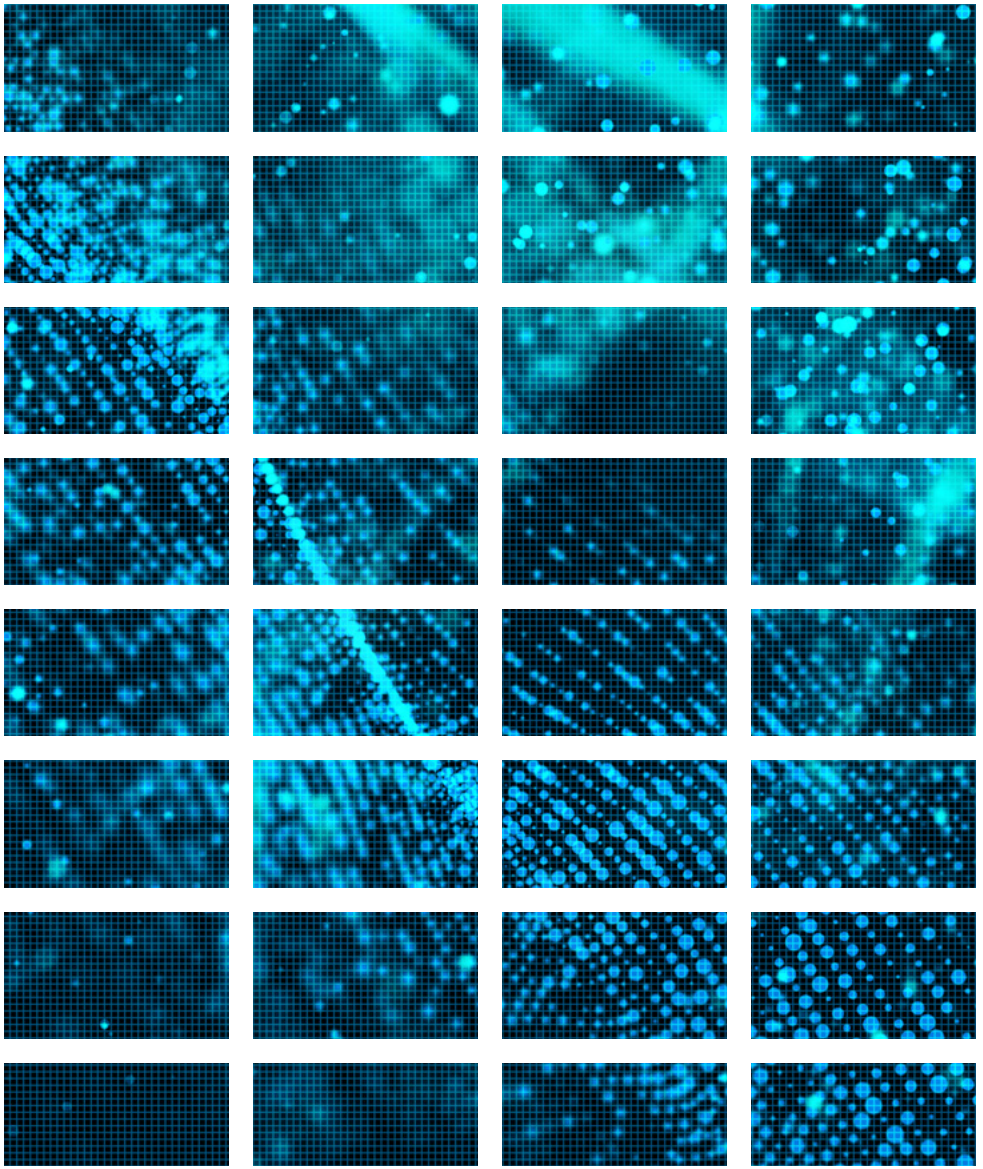
In 2018, HPE participated in the Business Roundtable on Human Rights and Artificial Intelligence (AI). This roundtable was launched by Article One and aims to facilitate cross-company learning to ensure participating technology companies are managing human rights risks related to the development and deployment of AI.

AI has already achieved milestones in applications such as human trafficking and healthcare—however, what's possible today is nothing compared to the potential of AI in the future. But as we scale applications and create more complex models, we must innovate with our values in mind. HPE will be transparent about how AI systems are trained and where the data is coming from—and ensure that data is clean, readable, and possible to draw conclusions from.



PRIVACY

We use technology and internal accountability measures to stay ahead of security threats and protect privacy. By anticipating and meeting evolving privacy regulations, we ensure our ability to operate across global markets. HPE products feature built-in security that supports customer needs.



INTERNAL ACCOUNTABILITY PROTECTIONS

Protecting data is mission-critical for HPE. Our motivation is twofold—to comply with regulatory requirements and to maintain the trust of our employees, customers, and business partners.

The HPE Privacy Office is responsible for our corporate privacy strategy and works in close partnership with HPE Cyber Security business units and functions to ensure the company meets its obligations under privacy laws. We use a suite of compliance and internal accountability measures to ensure we protect personal data wherever it is accessed, stored, or processed. These measures include policies and standards, employee training, and our Privacy Impact and Compliance Assessment (PICA) tool. PICA is used to evaluate compliance and assess the privacy risks of our services, solutions, and business processes.

Our internal audit and privacy audit teams help us assure the effectiveness of our program by evaluating and improving governance, risk management, and internal controls. If we uncover an issue through proactive internal audits, we address it in a timely manner.

EVOLVING PRIVACY REGULATIONS

The EU's General Data Protection Regulation (GDPR) was a major focus across our organization in 2018. It has influenced the development of privacy laws globally, including the new California Consumer Privacy Act and forthcoming privacy laws in Brazil and India. We adapted and enhanced our privacy practices to meet the requirements of the GDPR, creating a firm foundation from which to address new privacy laws.

We advance privacy protections by partnering with regulators, think tanks, and industry groups including the Centre for Information Policy Leadership the International Association of Privacy Professionals, and the Information Technology Industry Council.

HELPING CUSTOMERS MEET PRIVACY REGULATIONS

With the growth of the digital economy and an increase in connected devices, the threat landscape is increasingly complex and sophisticated. Combined with new privacy regulations, companies face the urgent need to improve how they protect and manage data. We see this as an opportunity for customers to future-proof their business and uncover new data insights through technology:

- HPE Pointnext advises customers on privacy programs, providing risk assessment, systems design, and technology-implementation services.
- The HPE infrastructure stack, including servers, storage, and Aruba networking, has been validated against the National Institute of Standards and Technology 800-53 security controls and helps customers meet their security obligations under privacy laws such as the GDPR.

PUBLIC POLICY ENGAGEMENT

Through public policy engagement, we help governments understand how legislation and regulations can either accelerate the adoption of emerging technologies or be a barrier to progress. We advocate for policies that open trade, boost economic development, and expand market opportunities.

POLICY PRIORITIES

The actions of policy makers influence how emerging technologies are developed, deployed, and adopted. As our personal and professional lives become more intertwined with technology, policy decisions become increasingly important.

We engage in public policy discussions to advance the adoption of technologies such as high-performance computing (HPC), artificial intelligence (AI), and the Internet of Things (IoT). We encourage governments to open markets, foster a competitive landscape, and ensure that technology improves the way we live and work.

In 2018, we advanced significant public policy developments impacting technology, including:

- **Spectrum allocation**—We actively participated in a U.S. coalition encouraging the Federal Communications Commission to open the 6 GHz band, a development that would quintuple the available spectrum for anticipated growth in Wi-Fi traffic.
- **Investments in HPC**—In the U.S., HPE worked with Congress as it passed record government funding for HPC technologies at the Department of Defense and Department of Energy. Internationally, HPE worked closely with EU institutions, various EU member states, and others as they developed and advanced strategies on HPC.
- **Government advisement on AI**—HPE continues to serve as a trusted advisor to governments on the positive potential of AI and emerging policy issues. In the U.S., we participated in the development of the U.S. National Artificial Intelligence Strategic Plan and research road map with the National Science Foundation. We also contributed to the EU High-Level Expert Group on AI, which shapes AI policy and adoption.
- **Edge and IoT**—At Startup India incubation and innovation centers, HPE teams advance citizen-centric smart city solutions, collaborating with cities, startups, professors, and students. HPE is also assessing how AI-based smart city solutions can be brought to the city of Darmstadt, Germany.

Additionally, we participated in public policy engagement to address social issues associated with technology. This includes working to address forced labor and human trafficking in the IT sector's global supply chain. Read about our work to counter modern slavery in ethical sourcing.

Details on our policy positions, as well as a list of our industry coalitions, are available on our Public Policy website.

POLITICAL CONTRIBUTIONS

As we engage in the political process, we ensure that our actions are ethical, legal, transparent, and align with the HPE Standards of Business Conduct.

HPE makes corporate contributions to U.S. state and local candidates, committees, and ballot measures. We publicly disclose the candidates, groups, and Section 527 organizations that receive corporate contributions from HPE. The company does not make political contributions outside the U.S. The HPE Political Action Committee (PAC), a separate legal entity funded by voluntary employee donations, makes bipartisan contributions to U.S. Congressional and state and local candidates and committees who share our public policy views. We publicly disclose the candidates and groups that receive HPE PAC contributions.

ACCELERATING STARTUPS

Founded in partnership with The Singapore Economic Development Board, InnovateNext provides HPE technology and expertise to tech start-ups. The three-year public-private partnership is designed to cultivate a community of small- to medium-sized businesses and bring ideas to life through an incubator, an innovation lab, and a customer engagement center. In 2018, we on-boarded 12 businesses to the program.

Singaporean startup gridComm, the first start-up to join the program, worked with HPE to deploy a smart city solution that optimizes streetlight infrastructure so that it consumes energy more efficiently and can be monitored more effectively for repairs.

CASE STUDY

HOW WE REPORT

Our transparent reporting ensures accountability and builds trust with our stakeholders. We recognize that social and environmental challenges facing our world today cannot be solved by one sector alone and are committed to collaborating across sectors and industries to make meaningful progress on the issues most relevant to our business.

HOW WE REPORT

Our fourth annual Living Progress Report offers an overview of our approach, our programs, and our progress on the environmental, social, and governance issues most significant to our business.

ABOUT THIS REPORT

This report covers HPE's fiscal year 2018 (November 1, 2017–October 31, 2018) and is part of the Living Progress reporting suite, along with our complete performance data available in our 2018 Data Summary.

Our Living Progress reporting and disclosure to third parties keeps us accountable and builds trust with our stakeholders. We report each year to third-party organizations including:

- CDP[40]
- Dow Jones Sustainability Index
- EcoVadis

We also contract external assurance provider Ernst & Young LLP to perform an independent review of selected key performance indicators in the 2018 Data Summary. This is in accordance with attestation standards established by the American Institute of Certified Public Accountants, including AT-C sections 105 and 210.

Information within this report adheres to the following specifications:

- Contents cover all HPE operations but do not cover joint ventures
- Data are rounded to reflect the appropriate level of certainty
- References to years are to HPE's fiscal year, unless otherwise stated
- References to dollars are to U.S. dollars

All the information in the report is current as of the date of initial publication. The report has not been updated to reflect any changes that may have occurred after such date, including any changes to HPE's business or strategy.

As a forward-looking document, our report contains statements that involve inherent assumptions, risks, and uncertainties. HPE assumes no obligation and does not intend to update these statements based on changes resulting from the emergence of any of these risks or uncertainties, or in the case of assumptions proving incorrect.

We welcome any questions or feedback relating to our Living Progress report. Contact us here.

You can remain up-to-date on Living Progress through our Inspiring Progress blog, website, and by joining us in conversation on Twitter at @HPE_LivingProg.

Complete 2018 data and statement of assurance can be found in the 2018 Data Summary.

MATERIALITY

Materiality guides our Living Progress plan, helping to meet the expectations of our stakeholders, integrate sustainability across our business, and ensure overall accountability. We believe that a stakeholder-centric approach will help HPE achieve our objective to create sustainable solutions that benefit our company, our customers, and our world.

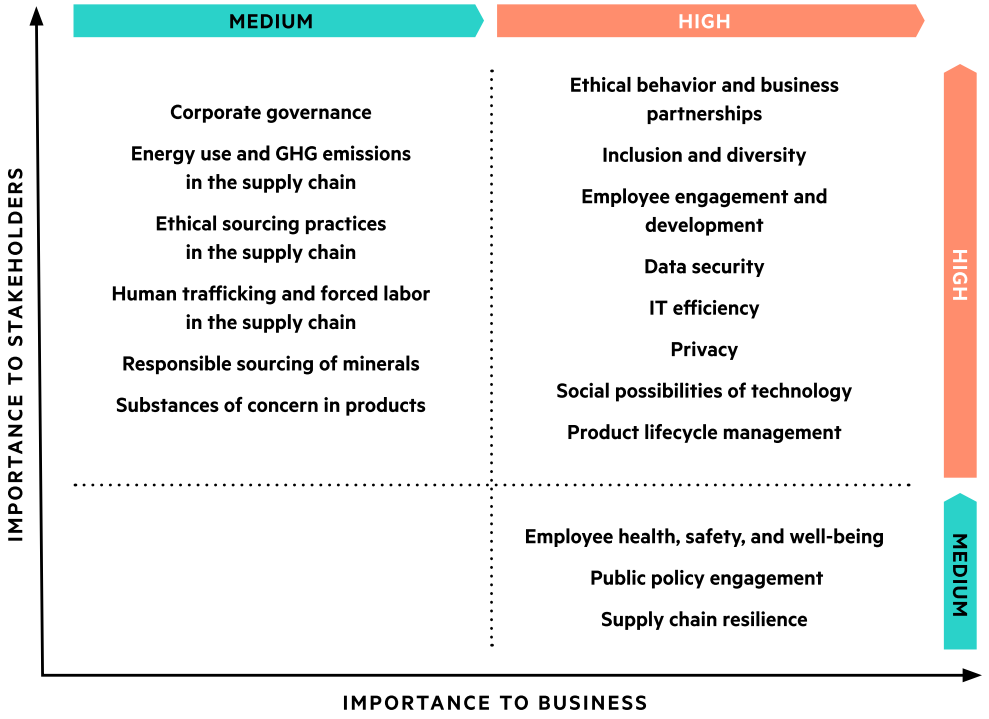
In October 2017, we completed our latest ESG-related materiality assessment—something we review regularly to ensure our material issues and commitments are relevant. This assessment took into account changes to HPE's operations from spin-offs, as well as emerging priorities in the external sustainability agenda. Conducted by external consultant BSR, our materiality assessment engaged customers, industry analysts, nongovernmental organizations, and HPE management to identify priority issues. We have paired this with a data-driven approach that leverages artificial intelligence software to analyze digital media conversations that detect emerging issues and may indicate current or potential sustainability risks.

Five key themes emerged from this materiality assessment:

- Strong ethics and governance are fundamental expectations of our operations
- Our customers expect our products and services to be secure, protect their privacy, and facilitate their operations in a data-rich business environment
- Our ability to effectively manage our supply chain will be critical to meet customer expectations on social and environmental risks
- Employees are fundamental to our ability to innovate and provide solutions to our customers and society
- The social possibilities of technology are rapidly developing with the evolution of AI and IoT

Through ongoing stakeholder engagement, we continuously evaluate the issues most relevant to our business and our stakeholders. In 2018, we escalated product lifecycle management to a tier-one issue, recognizing new opportunities to drive innovation and brand reputation by accelerating the circular economy for IT.

The issues in the following chart met the materiality threshold for this report. Issues are rated by their importance to HPE's business and importance to external stakeholders. Although these issues are the primary focus for this report, we also provide information about several other issues that have particular significance to either stakeholders or the business, such as our environmental footprint and community investment. Definitions of the issues in the chart can be found in the Appendix.



SUSTAINABLE DEVELOPMENT GOALS

Our materiality assessment also informs our focus on advancing the UN Sustainable Development Goals (SDGs). We recognize that achieving the SDGs could open up an estimated $12 trillion in market opportunities and believe all of the SDGs are essential to sustainable development. However, we have focused our efforts on the SDGs where we believe we can make the biggest impact and best apply our capacity and innovations as a global technology company.

In 2017, we mapped the goals and their supporting targets, against our materiality assessment to focus our implementation efforts on four material SDGs. This year, we reassessed the biggest risks and opportunities of our environmental, social, and governance (ESG) efforts, and identified two additional SDGs to prioritize—Gender Equality (SDG 5) and Responsible Consumption and Production (SDG 12). With this prioritization completed, we will continue to improve our measurement and accountability toward these goals in the coming year.

Gender Equality—We work to address inequalities in our industry by supporting women at HPE, in our supply chain, and in our communities through a variety of capability-building programs and a commitment to equal opportunity. We recognize that a diverse and inclusive workforce nurtures innovation and enables each individual to contribute to the success of our company.

Affordable and Clean Energy—We support the transition to a low-carbon economy through our own commitment to renewable energy procurement, by advocating for more access to renewable energy sources for businesses, and by working with our customers to develop low-carbon technologies for data centers, smart factories, energy grids, and other sectors.

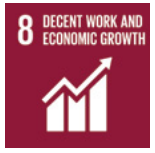
Decent Work and Economic Growth—We are committed to protecting workers throughout our company and our supply chain, and we set industry-leading standards to prevent forced labor. HPE also provides our own employees with a safe and healthy work environment to improve employee engagement, productivity, and retention.

Industry, Innovation, and Infrastructure—We research and develop technologies that radically change the way data moves and is processed, innovating with sustainability in mind as we address cost and scalability challenges. As our customers undergo digital transformation, we are transforming their businesses with edge and hybrid cloud solutions that increase the security and efficiency of their IT infrastructure.

Responsible Consumption and Production—We contribute to the circular economy with new products and services that extend product life and facilitate more efficient use of energy, materials, and resources. We enable our customers to reach their financial and sustainability goals simultaneously through our Design for Environment (DfE) program, Asset Upcycling Services, and new consumption models, to name a few.

Climate Action—We are leaders in corporate climate action, with science-based emission reduction targets across our value chain that limit our environmental impact to align with the Paris Climate Agreement. This year we disclosed our climate-related risks and opportunities in alignment with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

The following index highlights how HPE's business practices or activities have helped to advance the SDGs and targets most material to our business.

SDG	Targets	HPE material issues	Activity or Business practice
	**5.1: End gender-based discrimination.** **5.5: Ensure women's full and effective participation and equal opportunities for leadership.**	Inclusion and diversity Employee development and engagement	• We nurture the development of our employees, particularly women, by offering leadership trainings, opportunities, and resource groups. In 2018, we sent more than 180 women to Grace Hopper conferences in the U.S. and India to better develop their talents and recruit future talent. • We provide a variety of internal trainings to our employees to encourage inclusion, ranging from unconscious bias to skills development. In 2018, more than 200 face-to-face career workshops were held at 55 HPE sites around the globe. • We offer equal employment opportunity, flexible work arrangements, and parental leave policies in order to provide flexibility to working parents and caregivers.
	**7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.** **7.3: By 2030, double the global rate of improvement in energy efficiency.**	IT efficiency Social applications of technology	• Through RE100, we have committed to sourcing 100% renewable power by 2030, with a 2025 interim goal of achieving 50%. • We advocate for more access to renewable energy sources for businesses through the Renewable Energy Buyers Alliance and the Future of Internet Power initiative. • Since 2015, we have increased our product energy effectiveness 1.6X, toward our goal of 30X by 2025. • We are partnering with our customers to develop multiple low-carbon and carbon-free technologies for data centers, smart factories, energy grids, and other production sectors.
	**8.5: Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.** **8.7: Eradicate forced labor, modern slavery, child labor, and human trafficking.** **8.8: Protect labor rights and promote safe and secure working environments for all workers.**	Ethical sourcing practices in the supply chain Human trafficking and forced labor in the supply chain Responsible sourcing of minerals Employee health, safety, and well-being	• We work to lead our industry and influence other sectors to protect workers from the risks of forced labor. In 2018, we ranked third on the KnowTheChain benchmark of 40 ICT companies for our efforts to address forced labor in our supply chain. • We were the first IT company to require our suppliers to hold direct employment contracts with foreign migrant workers, and we advocate for others to make similar commitments in the IT sector and beyond. • We spend more than $1 billion annually with small enterprises and minority-, women-, and veteran-owned businesses. • In 2018, our lost workday case rate and our recordable incident rates were well below industry standards.

SDG	Targets	HPE material issues	Activity or Business practice
	**9.4: Upgrade and retrofit existing infrastructure to make industries sustainable.**	IT efficiency Data security Privacy	• HPE customers use our efficient IT solutions to improve the sustainability of industries such as manufacturing and agriculture. • Through our IoT technologies we help enable a more intelligent energy grid, improving the quality of energy services with Big Data. • Our research organization—Hewlett Packard Labs—is developing Memory-Driven Computing, a revolutionary architecture that uses hyper-fast memory to solve problems thousands of times faster than any current computer, and requiring 1% of the energy per calculation.
	**12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.**	Product lifecycle management IT efficiency	• We address the environmental impacts of HPE products by applying our Design for Environment (DfE) principles, which include energy efficiency, design for recyclability, and materials innovation. • We are reducing the environmental impacts of our customers' IT infrastructure with efficient solutions such as new consumption-based models. In 2018, HPE GreenLake grew at a 54% rate to a $2.1 billion contract value.[41] • We offer multiple programs across our global markets to encourage participation in the circular economy. For example, HPE Technology Renewal Centers processed 58 million pounds of equipment in 2018. • In 2018, we launched a new Circular Economy Report based on lifecycle analysis that provides IT and sustainability organizations with a tool to quantify and share the energy, material, and landfill savings achieved by returning retired assets to HPE for processing.
	**13.3: Improve education, awareness raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.**	IT efficiency Energy use and GHG emissions in the supply chain Supply chain resilience	• We proactively support the leading climate organizations/campaigns, including Paris Climate Agreement, Business Backs Low-Carbon USA pledge, We Mean Business, and the WEF Alliance of CEO Climate Leaders. • Our operations and supply chain goals have been approved by the Science Based Targets Initiative. In 2018, we set a new goal to reduce our operational GHG emissions by 55% by 2025. • We disclose our climate-related risks and opportunities in alignment with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). • Customers such as the National Center for Atmospheric Research (NCAR) use HPE high-performance computing solutions to increase accuracy and timeliness in weather and climate modeling.

STAKEHOLDER ENGAGEMENT

As a technology company, we strive to leave a lasting legacy on the world far greater than the footprint of our company. We recognize that meaningful sustainable impact will require collaboration, and we are increasingly partnering within and beyond our industry to realize our company purpose—to advance the way people live and work.

Engagement with stakeholders on our shared sustainability objectives helps us understand expectations and priorities and form leading-edge partnerships. We regularly collaborate with our stakeholders through varying approaches such as partnerships, industry forums, supplier capability-building, direct customer engagements, mentoring, surveys and assessments, and more.

In addition, our annual Living Progress report builds trust with our stakeholders by providing transparency on key engagements, actions, and performance related to our most material issues. The following table includes just a few of the key collaborations referenced in this report:

Material issue	Key engagements
Product lifecycle management	We joined the Ellen MacArthur Foundation's CE100 program in 2018, offering our product development experts the opportunity to collaborate with other companies and innovators to drive progress toward a more circular economy.
Inclusion and diversity	We help women and minority groups thrive at HPE by hosting engagement events, sponsoring interest groups, and encouraging women's participation in technical conferences. HPE sent more than 180 women to Grace Hopper conferences in the U.S. and India to better develop their talents and recruit future talent.
Employee engagement and development	We seek employee feedback through our annual Voice of the Workforce survey. In 2018, we were encouraged to see our engagement score rise to 71%, eight percentage points higher than 2017.
Data security	We continue to combat cybersecurity threats by working with governments globally and participate in external engagements, including The National Technology Security Coalition and the World Economic Forum's Financial Stability, Innovation, and Economic Growth Cyber Initiative.
IT efficiency	We leverage our sustainability capabilities as a strategic differentiator in customer relationships and participate in the development of sustainable IT standards such as the EPEAT server standard to accelerate sustainable purchasing.
Privacy	The HPE infrastructure stack, including servers, storage, and Aruba networking, has been validated against the National Institute Standards and Technology 800-53 security controls and provides our customers with a solid foundation to help meet their obligations under privacy laws such as the GDPR.
Social possibilities of technology	Together with our customers and partners, HPE is on a mission to advance the way people live and work. Across sectors as diverse as healthcare, agriculture, manufacturing, and finance, we are revolutionizing the efficiency of customer IT and harnessing the power of IT to accelerate sustainability.
Ethical behavior and business partnerships	Every employee, board member, partner, and supplier is required to complete our Standards of Business Conduct training annually. Our Ethics and Compliance Committee and our Audit Committee oversee our approach to ethical conduct, with the HPE Board of Directors taking ultimate responsibility.

STANDARDS INDEX

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

In October 2018, the Intergovernmental Panel on Climate Change (IPCC) published a special report projecting the impacts of climate change on natural and human systems, including risks to livelihoods, human health and security, and the global economy. The report compared the consequences of a global average temperature increase of 1.5° Celsius (C) relative to 2°C above pre-industrial levels and emphasized that:

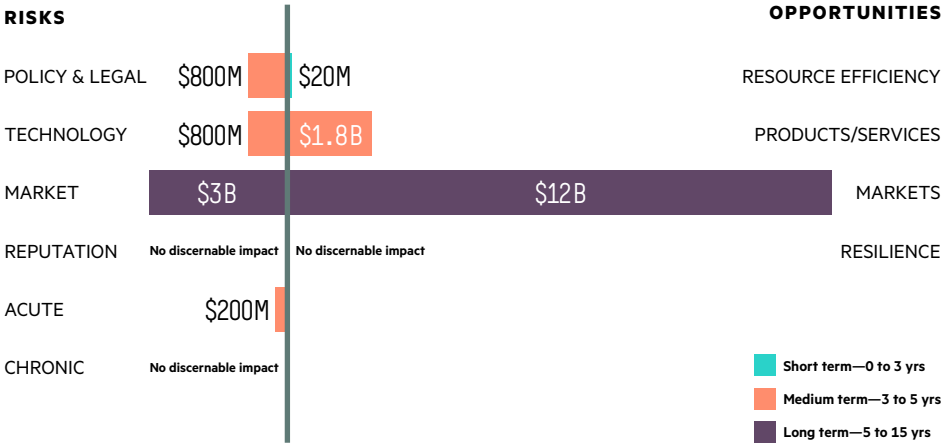
- Aiming for a 2°C scenario is no longer a viable option to avoid the worst impacts of climate change
- Reducing industry energy consumption is critical to achieve a 1.5°C scenario
- Industries must act with a sense of urgency

The financial implications of these projections are significant. With limited climate mitigation, aggravated natural disasters and fluctuating commodity prices could disrupt worldwide business operations, while, conversely, transitioning to a low-carbon economy presents its own challenges and will require disruptive change across multiple sectors. We believe that technology will be fundamental to accelerating this transition and that HPE has a responsibility to collaborate with industry, business groups, and governments to promote ways that our technology can be used to address climate change and facilitate compliance with related laws, regulations, and treaties.

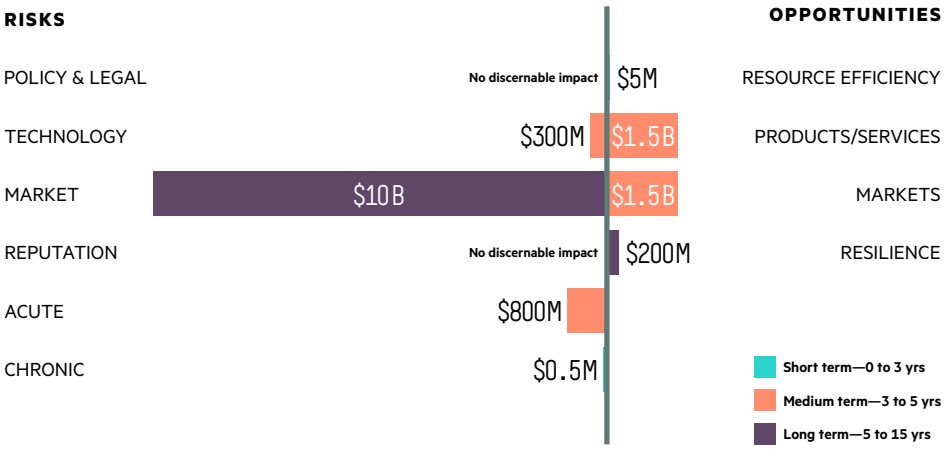
In 2018, HPE conducted a forward-looking analysis assuming two climate scenarios, detailed here, to better understand the environmental and financial opportunities of enhancing our current climate strategies and how resilient these strategies are over the short (0–3 years), medium (3–5 years), and long-term (5–15 years). This analysis adopts the recommendations set forth by the G20 Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD), which links climate-related risks and opportunities with the financial stability of our organization.

Our modeling confirms that the physical risks of climate change present potential negative financial impacts to our company, which are most pronounced in the limited mitigation scenario. However, the 1.5°C scenario revealed that the opportunities from developing technology solutions to facilitate a low-carbon transition will outweigh the risks. As presented here, we predict numerous business opportunities for HPE and our customers if we continue to advocate for a low-carbon economy, apply innovative technologies to reduce operational energy use, and create aggressive proof-of-concept solutions that help our customers thrive in a carbon-constrained market.

1.5°C SCENARIO



LIMITED MITIGATION SCENARIO (>2°C)



Scenario assumptions

In a 1.5°C scenario we assume:

- The power sector is fully decarbonized by 2050; reduced energy demand by industry, buildings, and transport lowers emissions further
- Reduced energy demand depends on efficiency and efficiency depends on adopting the best available technology
- Policies emerge that accelerate the socio-technical transition and the phase out of existing systems
- Aggressive policies on energy efficiency lower mitigation and energy costs
- Carbon-pricing mechanisms increase the cost of non-renewable energy by making GHG emissions expensive

1.5°C SCENARIO

	Impact quantification	Timeline	Potential results
OPPORTUNITIES			
Resource efficiency and energy sources	$20M	0–3 years	Aggressive building energy reduction through innovative technologies as well as renewable energy procurement reduces operational energy cost.
Products and services	$1.8B	3–5 years	Need to reduce industry electricity use increases demand for IT solutions that are also energy efficient.
Markets	$12B	5–15 years	Economy-wide drive for socio-technical transition opens new markets to IT infrastructure and increases need for solutions such has hybrid cloud and edge compute.
Resilience	No discernable impact	N/A	Increased investments in renewable energy, efficiency, and IT infrastructure builds resilience by minimizing single points of failure and improving data feedback to response times. Enhanced partnerships with supply chain partners and customers builds resiliency.
TRANSITION RISKS			
Policy and legal	$800M	3–5 years	Stringent regulation on carbon-pricing, technology policies, and energy-efficiency requirements raise the bar for market entry and cost of energy consumption.
Technology	$800M	3–5 years	Technologies that do not facilitate transition to a low-carbon economy will not be viable, which includes low-performing IT technologies.
Market	$3B	5–15 years	Inability to anticipate new applications of IT solutions that reduce industry energy demand and facilitate transition to a low-carbon economy may lead to lost opportunities in emerging markets.
Reputation	No discernable impact	N/A	Companies that do not accelerate transition to a low-carbon economy are less competitive with customers. Investors and analysts evaluate companies based on ESG metrics.
PHYSICAL RISKS			
Acute	$200M	3–5 years	Frequency of extreme weather events continues at current rate and current severity.
Chronic	No discernable impact	N/A	Today's frequency and duration of drought conditions continues, but does not increase or expand to other areas vulnerable to water scarcity.

In a limited mitigation (business-as-usual) scenario we assume:

- Policies and regulations around GHG and energy efficiency maintain status quo
- Extreme weather events such as hurricanes, flooding, and wildfires occur with higher frequency and intensity
- Water-related issues such as scarcity, flooding, and low water quality not only threatens human health but also impacts power generation
- Coastal cities and businesses are forced to relocate due to sea-level rise

LIMITED MITIGATION SCENARIO (>2°C)

	Impact quantification	Timeline	Potential results
OPPORTUNITIES			
Resource efficiency and energy sources	$5M	0–3 years	Less ambitious reduction of energy demand leads to moderate cost savings.
Products and services	$1.5B	3–5 years	Adoption of IT solutions continues at current rate. Limited drive beyond status quo for technologies that are energy-efficient and reduce end-user energy demand.
Markets	$1.5B	3–5 years	New markets continue to adopt IT solutions at current rate. But expedited adoption for socio-technical change is severely delayed.
Resilience	$200M	5–15 years	Current rate of renewable energy procurement continues. Moderate investment in IT infrastructure to increase efficiency. Sporadic partnerships with suppliers and customers.
TRANSITION RISKS			
Policy and legal	No discernable impact	N/A	Emergence of carbon pricing mechanism and energy- efficiency regulation continues as is—globally disparate. No discernable impact.
Technology	$300M	3–5 years	Transition to high-performance technology is slow compared to 1.5°C scenario with less-efficient technologies persisting in the marketplace. Stunts adoption of innovative IT solutions.
Market	$10B	5–15 years	New markets to adopt IT solutions are slow to emerge, which constrains the application of technologies with edge computing.
Reputation	No discernable impact	N/A	No discernable impact to reputation beyond status quo.
PHYSICAL RISKS			
Acute	$800M	3–5 years	Frequency and severity of extreme weather events increases. Sea-level rise threatens both HPE facilities and employees that live near the coast. Supply chain vulnerability increases.
Chronic	$0.5M	0–3 years	Increased frequency and duration of droughts. Regions that experience drought-like conditions increase. In some instances, water scarcity impacts reliability of power generation.

The index is intended to help our stakeholders locate content of interest. It does not represent a complete or inclusive view of HPE's reporting or practices.

GRI INDEX

Disclosure number	Metric description	HPE 2018 disclosure location
102-1	Name of the organization	2018 HPE 10-K
102-2	Activities, brands, products, and services	2018 HPE 10-K
102-3	Location of headquarters	2018 HPE 10-K
102-4	Location of operations	2018 HPE 10-K
102-5	Ownership and legal form	2018 HPE 10-K
102-6	Markets served	2018 HPE 10-K
102-7	Scale of the organization	2018 HPE 10-K
102-8	Information on employees and other workers	2018 Data Summary—Employees
102-9	Description of the supply chain	Environment
102-10	Significant changes to the organization and its supply chain	2018 HPE 10-K
102-11	Precautionary Principle or approach	Substances of concern
102-12	External economic, environmental, and social initiatives to which the organization subscribes	Environment Privacy Employee health, safety and well-being Product lifecycle management Data security TCFD Index
102-13	Membership of associations	Environment Substances of concern Data security Ethical sourcing Human rights Privacy Public policy Corporate governance and ethical behavior
102-14	Statement from senior decision-maker	A message from our CEO

GRI INDEX (CONTINUED)

Disclosure number	Metric description	HPE 2018 disclosure location
102-15	Key impacts, risks, and opportunities	2018 HPE 10-K Creating shareholder value TCFD Index
102-16	Values, principles, standards, and norms of behavior	Corporate governance and ethical behavior Policies and Standards
102-17	Mechanisms for advice and concerns about ethics	Corporate governance and ethical behavior
102-18	Governance structure	Corporate governance and ethical behavior HPE Governance
102-20	Executive-level responsibility for economic, environmental, and social topics	Corporate governance and ethical behavior
102-21	Consulting stakeholders on economic, environmental, and social topics	Corporate governance and ethical behavior HPE Governance Stakeholder engagement
102-22	Composition of the highest governance body and its committees	Corporate governance and ethical behavior HPE Governance 2019 HPE Proxy Statement
102-23	Chair of the highest governance body	Corporate governance and ethical behavior
102-24	Nominating and selecting the highest governance body	Corporate governance and ethical behavior
102-25	Conflicts of interest	Corporate governance and ethical behavior 2019 HPE Proxy Statement
102-29	Identifying and managing economic, environmental, and social impacts	Corporate governance and ethical behavior Materiality 2018 HPE 10-K
102-30	Effectiveness of risk management process	2018 HPE 10-K
102-31	Review of economic, environmental, and social topics	Corporate governance and ethical behavior
102-32	Highest governance body's role in sustainability reporting	Corporate governance and ethical behavior
102-33	Communicating critical concerns	Corporate governance and ethical behavior HPE Governance
102-35	Remuneration policies	2018 HPE 10-K
102-40	List of stakeholder groups	Stakeholder engagement

GRI INDEX (CONTINUED)

Disclosure number	Metric description	HPE 2018 disclosure location
102-42	Identifying and selecting stakeholders	Stakeholder engagement
102-43	Approach to stakeholder engagement	Stakeholder engagement
102-45	Entities included in the consolidated financial statements	2018 HPE 10-K
102-46	Defining report content and topic Boundaries	Materiality
102-47	List of material topics	Materiality
102-48	Restatements of information	About this report
102-49	Changes in reporting	Environment Materiality TCFD Index
102-50	Reporting period	About this report
102-51	Date of most recent report	June 2018
102-52	Reporting cycle	About this report
102-53	Contact point for questions regarding the report	About this report
102-55	GRI content index	Standards Index
102-56	External assurance	About this report 2018 Data Summary
201-1	Direct economic value generated and distributed	2018 HPE 10-K
201-2	Financial implications and other risks and opportunities due to climate change	2018 CDP Submission TCFD Index
201-3	Defined benefit plan obligations and other retirement plans	2018 HPE 10-K
205-2	Communication and training about anti-corruption policies and procedures	Corporate governance and ethical behavior
301-1	Materials used by weight or volume	Product lifecycle management 2018 Data Summary—Materials and packaging
301-2	Recycled input materials used	Product lifecycle management 2018 Data Summary—Materials and packaging
301-3	Reclaimed products and their packaging materials	Product lifecycle management 2018 Data Summary—Product return, reuse, and recycling

GRI INDEX (CONTINUED)

Disclosure number	Metric description	HPE 2018 disclosure location
302-1	Energy consumption within the organization	Environment 2018 Data Summary—Environmental footprint
302-2	Energy consumption outside of the organization	Environment 2018 Data Summary—Environmental footprint
302-3	Energy intensity	Environment 2018 Data Summary—Environmental footprint
302-4	Reduction of energy consumption	Environment 2018 Data Summary—Environmental footprint
302-5	Reductions in energy requirements of products and services	IT efficiency
303-1	Water withdrawal by source	Environment 2018 Data Summary—Environmental footprint HPE Water Accounting Manual
303-3	Water recycled and reused	2018 Data Summary—Environmental footprint
305-1	Direct (Scope 1) GHG emissions	HPE Carbon Accounting Manual Environment 2018 Data Summary—Environmental footprint
305-2	Energy indirect (Scope 2) GHG emissions	HPE Carbon Accounting Manual Environment 2018 Data Summary—Environmental footprint
305-3	Other indirect (Scope 3) GHG emissions	HPE Carbon Accounting Manual Environment 2018 Data Summary—Environmental footprint
305-4	GHG emissions intensity	HPE Carbon Accounting Manual Environment 2018 Data Summary—Environmental footprint
305-5	Reduction of GHG emissions	HPE Carbon Accounting Manual Environment 2018 Data Summary—Environmental footprint
305-6	Emissions of ozone-depleting substances (ODS)	HPE Carbon Accounting Manual Environment 2018 Data Summary—Environmental footprint

GRI INDEX (CONTINUED)

Disclosure number	Metric description	HPE 2018 disclosure location
306-2	Waste by type and disposal method	Environment 2018 Data Summary—Environmental footprint
308-2	Negative environmental impacts in the supply chain and actions taken	Environment 2018 Data Summary—Environmental footprint
401-1	New employee hires and employee turnover	2018 Data Summary—Employees
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Employee health, safety, and well-being 2018 Data Summary—Employees
403-6	Promotion of worker health	Employee health, safety, and well-being
403-9	Worker-related injuries	Employee health, safety, and well-being 2018 Data Summary—Employees
404-2	Programs for upgrading employee skills and transition assistance programs	Employee development and engagement
405-1	Diversity of governance bodies and employees	Inclusion and diversity Corporate governance and ethical behavior 2018 Data Summary—Employees
408-1	Operations and suppliers at significant risk for incidents of child labor	Ethical sourcing 2018 Data Summary—Supply chain responsibility
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Ethical sourcing 2018 Data Summary—Supply chain responsibility
414-2	Negative social impacts in the supply chain and actions taken	Ethical sourcing 2018 Data Summary—Supply chain responsibility
415-1	Political contributions	Public policy Political contributions
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	2018 Data Summary—Privacy

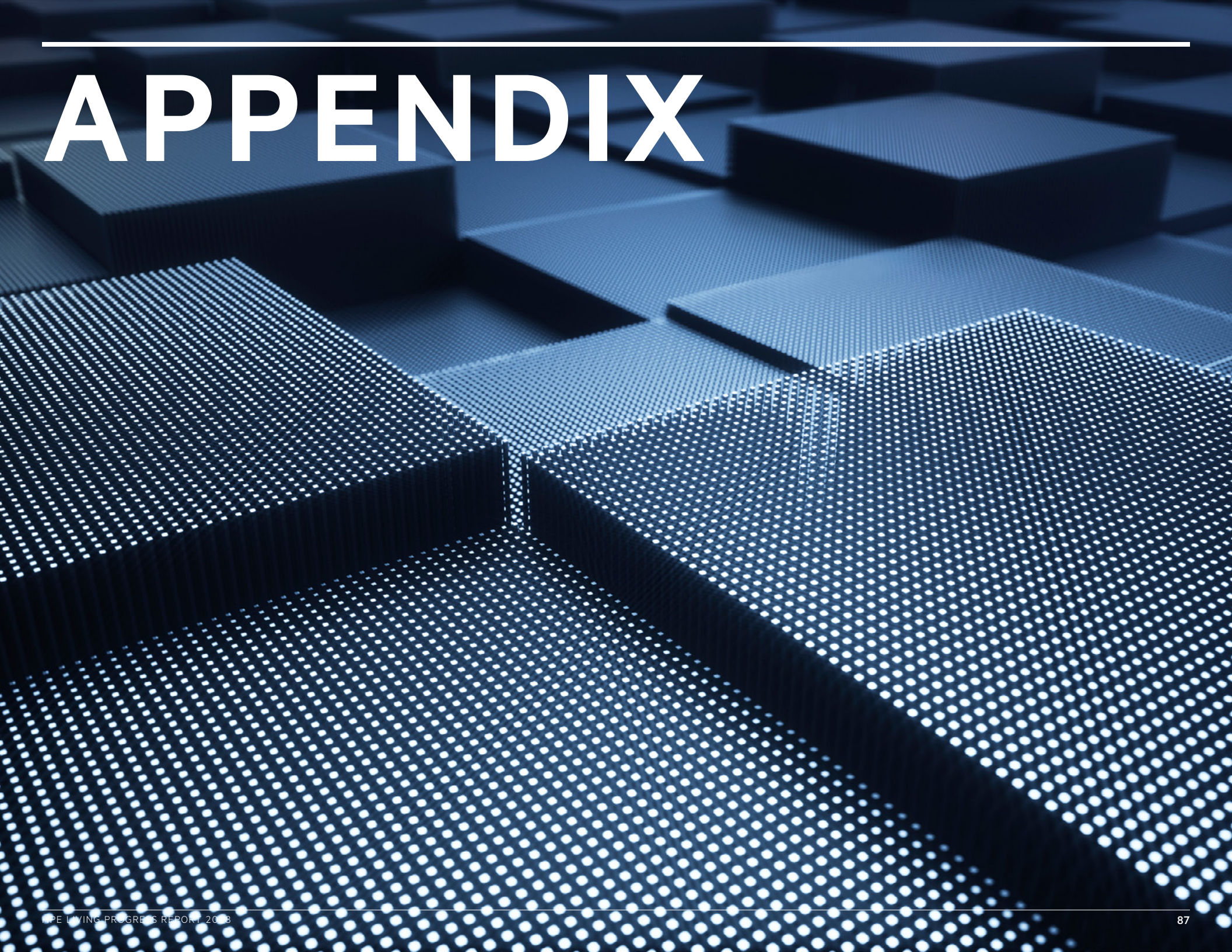
SASB INDEX

Code	Metric description	HPE 2018 disclosure location
Technology & Communications—Software & IT Services		
ENVIRONMENTAL FOOTPRINT OF HARDWARE INFRASTRUCTURE		
TC-SI-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Environment 2018 Data Summary—Environmental footprint
TC-SI-130a.2	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Environment 2018 Data Summary—Environmental footprint
TC-SI-130a.3	Discussion of the integration of environmental considerations into strategic planning for data center needs	IT efficiency Environment
DATA PRIVACY & FREEDOM OF EXPRESSION		
TC-SI-220a.1	Description of policies and practices relating to behavioral advertising and user privacy	Privacy HPE Global Master Privacy Policy HPE Privacy Statement
DATA SECURITY		
TC-SI-230a.1	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected	Data security
TC-SI-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	Data security 2018 HPE 10-K
RECRUITING & MANAGING A GLOBAL, DIVERSE SKILLED WORKFORCE		
TC-SI-330a.2	Employee engagement as a percentage	Employee development and engagement Inclusion and diversity
TC-SI-330a.3	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	Inclusion and diversity 2018 Data Summary—Employees 2018 HPE EEO-1 Report
INTELLECTUAL PROPERTY PROTECTION & COMPETITIVE BEHAVIOR		
TC-SI-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	2018 HPE 10-K
MANAGING SYSTEMIC RISKS FROM TECHNOLOGY DISRUPTIONS		
TC-SI-550a.2	Description of business continuity risks related to disruptions of operations	Network resilience 2018 HPE 10-K

SASB INDEX (CONTINUED)

Code	Metric description	HPE 2018 disclosure location
Technology & Communications—Hardware		
PRODUCT SECURITY		
TC-HW-230a.1	Discussion of approach to identifying and addressing data security risks in products	Data security 2018 HPE 10-K
EMPLOYEE DIVERSITY & INCLUSION		
TC-HW-330a.1	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	Inclusion and diversity 2018 Data Summary—Employees 2018 HPE EEO-1 Report
PRODUCT LIFECYCLE MANAGEMENT		
TC-HW410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Substances of concern Product lifecycle management HPE General Specification for the Environment
TC-HW410a.2	Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	Product lifecycle management 2018 Data Summary—Design for Environment
TC-HW410a.3	Percentage of eligible products, by revenue, meeting ENERGY STAR criteria	2018 Data Summary—Design for Environment
TC-HW410a.4	Weight of end-of-life products and e-waste recovered, percentage recycled	2018 Data Summary—Product return, reuse, and recycling
SUPPLY CHAIN MANAGEMENT		
TC-HW-430a.1	Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities	Ethical sourcing 2018 Data Summary—Supply chain responsibility
TC-HW-430a.2	Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances	Ethical sourcing 2018 Data Summary—Supply chain responsibility
MATERIAL SOURCING		
TC-HW-440a.1	Description of the management of risks associated with the use of critical materials	Ethical sourcing 2018 Data Summary—Supply chain responsibility 2018 Conflict Minerals Report 2018 HPE 10-K

APPENDIX



POLICIES AND STANDARDS

ACCESSIBILITY, HUMAN RIGHTS & LABOR PRACTICES

Accessibility Policy

HPE Supply Chain Foreign Migrant Worker Standard

HPE Global Human Rights Policy

Open Door Policy

CORPORATE GOVERNANCE

Corporate Governance Guidelines

HPE Tax Policy

DIVERSITY

Harassment-Free Work Environment Policy

Nondiscrimination Policy

Equal Opportunity Policy

ENVIRONMENT

Environmental, Health, and Safety Policy

Export of Electronic Waste to Developing Countries Policy

HPE Vendor Requirements for Hardware Recycling

HPE General Specification for the Environment

HPE European WEEE Compliance

ETHICS, ANTI-CORRUPTION AND PRIVACY

Anti-corruption Policy

Contingent Worker Code of Conduct

Global Business Amenities Policy

Partner Code of Conduct

HPE Partner Ready Partner Privacy and Data Protection Addendum

Political Contributions Policy

Standards of Business Conduct

U.S. Public Sector Code of Conduct

HPE Global Master Privacy Policy

SUPPLY CHAIN

HPE Student and Dispatch Worker Standard for Supplier Facilities in the People's Republic of China

HPE Supplier Code of Conduct

HPE Supply Chain Social and Environmental Responsibility Policy

HPE Supplier SER Requirements

MATERIAL ISSUE DEFINITIONS

The following definitions of HPE material issues are based on input from internal and external stakeholders, as well as best practice guidelines from the Global Reporting Initiative and the Sustainability Accounting Standards Board.

Report section	Issue	Definition
High importance to external stakeholders, high importance to HPE's business success		
Operating responsibly: Corporate governance and ethical behavior	Ethical behavior and business partnerships	Promoting high standards of ethics and eliminating corruption, extortion, and bribery in employee, business partner, joint venture, and customer relationships. Ensuring that the marketing and communication of products and services is honest, transparent, and fair.
Investing in people: Employee engagement and development	Employee engagement and development	Promoting rapid professional growth and matching employee skills to future business needs in the ever-evolving technology industry. Fostering employee engagement and open communication. This includes effectively managing the negative impacts of workforce reductions and relocations.
Investing in people: Inclusion and diversity	Inclusion and diversity	Ensuring that the HPE workforce reflects our global business and customers. Maintaining a supply chain that is diverse, inclusive, and global. Preventing discriminatory outcomes resulting from the use of customer data and Big Data analytics.
Driving the circular economy: Data security	Data security	Protecting information managed by HPE and customers from unwanted parties and unauthorized access, such as security threats and cyberattacks. Processes managed include the collection, use, processing, storage, transfer, sharing, and end-of-life disposal of data.
Driving the circular economy: IT efficiency	IT efficiency	Providing IT services, products, and solutions and engaging with customers to solve customer business and sustainability challenges. Increasing the energy efficiency of HPE products and enabling customers to reduce their energy use.
Operating responsibly: Privacy	Privacy	Upholding the right to privacy and protecting personal data from unwanted parties, including privacy by design. This includes the management of requests for private or personal information from government or law enforcement agencies to determine their legitimacy and comply with local, regional, and national laws and standards.
Driving the circular economy: Product lifecycle management	Product lifecycle management	Managing the impacts of HPE products and services through their entire lifecycle, including production of raw materials, engineering, design, manufacturing, use, and end-of-life options. Contributing to a more circular economy.
Introduction: Harnessing the potential of IT	Social applications of technology	Providing IT solutions that improve access to health, finance, food, government services, education, information, and markets. Taking account of ethical considerations in the social applications of Big Data and the social implications of IoT.

Report section	Issue	Definition
High importance to external stakeholders, medium importance to HPE's business success		
Operating responsibly: Corporate governance and ethical behavior	Corporate governance	Improving diversity of HPE's board structure, as well as its independent oversight of the company, governance of sustainability, and role of CEO/Chairman. Managing executive compensation relative to average worker salaries. Providing accessible, clear, and comparable business and sustainability information on products, operations, and the supply chain.
Driving the circular economy: Environment	Energy use and GHG emissions in the supply chain	Encouraging our suppliers to adopt energy efficiency and GHG emission reduction practices in their operations.
Operating responsibly: Ethical sourcing	Ethical sourcing practices in the supply chain	Maintaining and elevating ethical standards in the supply chain, including services and manufacturing supply chains, which maintain labor standards in working hours and conditions, wages and benefits, and humane treatment of workers employed. Achieving fair and beneficial outcomes for supply chain participants, especially workers and communities.
Operating responsibly: Ethical sourcing	Human trafficking and forced labor in the supply chain	Eliminating slavery and forced labor in the HPE supply chain.
Operating responsibly: Ethical sourcing	Responsible sourcing of minerals	Responsible sourcing of raw minerals for HPE products, reducing the negative social and environmental impacts of raw materials extraction, including rare earth elements and conflict minerals.
Driving the circular economy: Substances of concern	Substances of concern in products	Designing and developing products and solutions that use alternatives to materials and substances of concern to human health and the environment.
Medium importance to external stakeholders, high importance to HPE's business success		
Investing in people: Employee health, safety, and well-being	Employee health, safety, and well-being	Creating a healthy, safe, and secure working environment for all HPE employees. Promoting employee well-being.
Operating responsibly: Public policy engagement	Public policy engagement	Influencing public policy development through direct engagement and multi-stakeholder associations or initiatives. Responsible and ethical public policy engagement, including lobbying and political contributions. Fulfilling taxation responsibilities to the economies in which HPE operates.
Driving the circular economy: Environment	Supply chain resilience	Managing risk and potential exposure of our supply chain to impacts from natural resource constraints, extreme and unpredictable weather events related to climate change, and geographic-specific considerations of supply chain risk.

Report section	Issue	Definition
Additional fundamental issues covered in the report		
Driving the circular economy: Environment	Energy use and GHG emissions in our operations	Improving energy efficiency and using renewable energy sources to reduce GHG emissions in our operations, including for HPE buildings, employee travel, and transportation logistics.
Driving the circular economy: Environment	Waste and hazardous materials in our value chain and operations	Managing and disposing of hazardous and nonhazardous waste responsibly across the HPE value chain.
Driving the circular economy: Environment	Water in our value chain and operations	Conserving water across the HPE value chain and improving transparency and water stewardship of suppliers.
Operating responsibly: Human rights	IT products and services and human rights	Taking measures to prevent the use of HPE products and services by individuals, groups, or entities that are restricted or who may use IT to infringe on human rights.
Driving the circular economy: Network resilience	Network resilience	Managing reliable information networks—including those that support critical infrastructure and public goods—to reduce and rapidly respond to systemic risks and disruptions such as programming errors or server downtime.
Investing in people: Community investment	Community investment	Supporting local communities through employee volunteering or providing monetary contributions to qualified organizations. Additional monetary and product contributions are donated in response to natural disasters.

FOOTNOTES

1 USSIF ussif.org/blog_home.asp?Display=118

2 who.int/nutrition/pressrelease-FAOWHO-symposium-malnutrition/en/

3 hpe.com/us/en/newsroom/press-release/2018/11/hewlett-packard-enterprise-advances-precision-medicine-through-memory-driven-computing-with-biotechnology-startup-jungla.html

4 All HPE products demonstrate essential sustainability elements; however, we focus our suite of IT efficient solutions on approximately 40% of the HPE portfolio, which demonstrate the highest level of efficiency, as compared to our peers. These attributes are based upon efficient equipment, energy efficient products, and resource efficiency. Efficient solutions enable our customers to compute at the highest level, while exhausting the least amount of resources possible.

5 Significant increases in energy performance occur when new product generations are introduced. In 2018, HPE focused on increasing customer use of the latest generation products, Gen10, which were introduced in 2017.

6 451 Research, saturnb2b.com/wp-content/uploads/2018/10/1.pdf

7 hpe.com/us/en/pdfViewer.html?docId=4aa4-4248&q

8 emc.com/leadership/digital-universe/2014iview/executive-summary.htm

9 hpe.com/us/en/pdfViewer.html?docId=a00060171&resourceTitle=Empower+data+at+the+speed+of+memory+solution+brief

10 IT Eco Declarations are not generated for individual parts and accessories. Nor do IT Eco Declarations include proactive declarations for company products acquired by HPE. For such products, we retroactively create the declarations.

11 HPE defines e-waste as nonworking parts or devices. This does not include materials defined as nonhazardous under the Basel Convention; working equipment and parts that are not intended for disposal or recycling, but are for donation, reuse, or resale; components being returned to the original equipment manufacturer that are under warranty; and materials to be used in manufacturing that do not require further reprocessing or preparation.

12 Available services differ among countries and regions.

13 h20195.www2.hpe.com/v2/Getdocument.aspx?docname=a00056516eew

14 Formerly, the Electronic Industry Citizenship Coalition (EICC).

15 Security Magazine. securitymagazine.com/articles/88338-cyber-crime-costs-117-million-per-business-annually

16 Cybersecurity Ventures. 1c7fab3im83f5gqiow2qqs2k-wpengine.netdna-ssl.com/2015-wp/wp-content/uploads/2017/10/2017-Cybercrime-Report.pdf

17 Based on external firm conducting cybersecurity penetration testing of a range of server products from a range of manufactures, May 2017.

18 In FY18, HPE recalibrated this GHG emissions target and reset the baseline to 2016 to align with the first year of complete data for the company.

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21 In FY18, HPE recalibrated this GHG emission target and reset the baseline to 2016 to align with the first year of complete data for the company.

22 With the exception of product transport, supplier data is reported as a one-year lag. Therefore, the most recent data available is from 2017.

23 The majority of HPE's water footprint is related to the electricity associated with the use of our products, including consumption related to power generation and infrastructure cooling.

24 Formerly, the Climate Disclosure Project.

25 This recognition was received by Hewlett Packard Enterprise for the first time in 2016. Hewlett-Packard Company received all prior recognitions.

26 Targets to reduce GHG emissions are considered "science-based" if they are in line with the latest climate science to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C. Supplier targets may or may not be approved by the Science Based Target initiative (SBTi), which champions science-based target setting and independently assesses companies' targets. Supplier targets and stated commitments are based upon suppliers' reporting to CDP.

27 In FY18, HPE recalibrated this GHG emissions target and reset the baseline to 2016 to align with the first year of complete data for the company.

28 With the exception of product transport, supplier data is reported as a one-year lag. Therefore, the most recent data available is from 2017.

29 In FY18, HPE recalibrated this GHG emissions target and reset the baseline to 2016 to align with the first year of complete data for the company.

30 Historic percentages can change based on shifts in spend and better data management.

31 At HPE, we define inclusion as the difference made by people, or promoting the full engagement of diverse employees by encouraging and facilitating experiences of belongingness, and being valued for one's uniqueness.

32 At HPE, we define diversity as the differences in people, or a variety of differences among people in an organization encompassing race, gender identity, ethnicity, age, disability, cognitive style, sexual orientation, education, and more.

33 Previously named the Degree Assistance program.

34 Benefits offered vary by country.

35 Formerly, the Electronic Industry Citizenship Coalition (EICC).

36 For audits on RBA member facilities and their suppliers' facilities, independent third-party specialists trained in social and environmental auditing carry out the audits, using the RBA Validated Audit Process.

37 DRC conflict-free as defined in the U.S. Securities and Exchange Commission's conflict minerals rule@: products that do not contain conflict minerals that directly or indirectly finance or benefit armed groups in the DRC or an adjoining country.

38 Our progress toward DRC conflict-free status is based on the number (as of the 2018 Cut-Off Date of April 24, 2018) of all supplier-reported 3TG facilities that were either RMAP conformant or active, and/or that we reasonably believe exclusively source conflict minerals from recycled or scrap sources or from outside of the Covered Countries.

39 Formerly, the Electronic Industry Citizenship Coalition (EICC).

40 Search for Hewlett-Packard for historical Hewlett-Packard Company submissions, and Hewlett Packard Enterprise for post-separation HPE submissions.

41 hpe.com/us/en/newsroom/press-release/2018/12/hpe-reports-fiscal-2018-full-year-and-fourth-quarter-results.html

RESOURCES

HPE REPORTS AND ONLINE CONTENT

HPE 2018 Living Progress Data Summary

HPE 2018 Annual 10-K Report

HPE 2019 Proxy Statement

HPE Investor Relations

HPE Carbon Accounting Manual

HPE Water Accounting Manual

FEEDBACK

We welcome feedback on any aspect of our Living Progress reporting and performance.
Contact us here.

STAY UP TO DATE

a00069386ENW, May 2019