Living Progress Report:
2016 Positions, Policies, and Programs
Welcome to the Hewlett Packard Enterprise 2016 Living Progress Report. In the pages that follow, you’ll read about our plan to create sustainable solutions for our company, our customers, and our world. I am pleased to see such compelling evidence of HPE’s continued dedication to integrating sustainability into our business strategy. It would make our founders, who first articulated our commitment to citizenship 60 years ago, very proud.

At HPE, we believe that sustainable innovation is a powerful catalyst for change. We recognize that our efforts send strong and impactful signals to our customers, investors, and key stakeholders—and regular and transparent reporting on such efforts amplifies those signals even further.

By 2020, half of the world’s population is expected to have internet access, and machine-to-machine connections will reach over 12 billion devices (up from fewer than five billion just two years ago). This rapid transformation of global connectivity among people, devices, and intelligent systems will transform the way we live—posing both opportunities and challenges.

As a result, HPE is developing transformative solutions to reap the benefits of growing connectivity, while at the same time reducing the environmental footprint of IT infrastructure. This year, HPE committed to increasing the energy performance of our product portfolio by 30 times by 2025—driving innovations that will cut our customers’ time to value while minimizing their footprints.

These goals build upon our Living Progress strategy, leveraging the technology industry’s unique potential to disrupt industries while delivering sustainability at scale. Never before has the role of business been so crucial in achieving a low-carbon future—a task much bigger than a single company. In a world of infinite connectivity but finite resources, we must work together with our customers and stakeholders, uniting people, ideas, and technology to solve the world’s toughest challenges.

 Regards,

Meg Whitman
President and Chief Executive Officer

See more from Meg Whitman here.
# Contents

<table>
<thead>
<tr>
<th>Welcome</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Progress overview</td>
<td>4</td>
</tr>
<tr>
<td>Corporate governance</td>
<td>7</td>
</tr>
<tr>
<td>Sustainable Development Goals</td>
<td>9</td>
</tr>
<tr>
<td>Reporting on our material issues</td>
<td>11</td>
</tr>
<tr>
<td>Goals and targets</td>
<td>12</td>
</tr>
</tbody>
</table>

## Our company

| Energy use and greenhouse gas emissions in our operations and value chain | 15 |
| Water in our operations and value chain | 20 |
| Waste in our operations and value chain | 22 |
| Human rights | 24 |
| Ethical sourcing practices in the supply chain | 26 |
| Human trafficking in the supply chain | 31 |
| Substances of concern | 34 |
| Employee development and engagement | 37 |
| Employee health, safety, and well-being | 40 |
| Inclusion and diversity | 43 |
| Ethical behavior and business partnerships | 46 |
| Transparency, accountability, and reporting | 49 |
| Intellectual property protection | 51 |
| Public policy engagement | 53 |

## Our customers

| IT as an efficiency enabler | 58 |
| Product lifecycle management | 62 |
| Data security | 65 |
| Privacy and freedom of expression | 67 |
| Network resilience | 69 |

## Our world

| Social application of ICT and access to technology | 74 |

## About this report

| Defining our material issues | 78 |
| Acronyms and definitions | 80 |
| Resources | 81 |
Living Progress overview

Introduction

We’re beginning to see a world where everything is connected, and everything computes. A world where everything works smarter, everything thinks faster, and everything is possible.

As a technology company, Hewlett Packard Enterprise (HPE) recognizes the challenge of meeting the high—and growing—demand for computing power and capacity in a resource-constrained world. With 4.5 billion people and more than 50 billion devices expected to be connected by 2030, it is crucial to optimize the energy required to manage this data deluge. This is why HPE is channeling innovation to build the sustainable IT infrastructure of the future, empowering our customers to do exponentially more with less impact on the planet.

Equally, providing IT solutions and services to all layers of society is imperative to bridging the digital divide. Without it, large swaths of society remain excluded from the benefits of technology, creating a growing chasm between opportunity and exclusion. We recognize that new technology unleashes the potential to transform the way people live and how entire industries—from education and health, to finance and business—operate.

Living Progress

Our plan to create sustainable solutions for our company, our customers, and our world.

Our company
Set bold targets for our company and lead the IT sector by continuously raising the bar.

Our customers
Empower customers to do exponentially more, with less environmental impact.

Our world
Leverage technology to solve the world’s toughest social and environmental challenges.
Our approach to sustainability is set out in our Living Progress Report (“Report”), which details our efforts to take advantage of the technology industry's unique potential to deliver sustainability at scale by creating sustainable solutions for our company, our customers, and our world. The Report is structured to meet the needs of various stakeholders through three separate documents: the Living Progress Report: 2016 Positions, Policies, and Programs; the Living Progress Report: 2016 Data Summary; and the Living Progress Report: 2016 Standards Index.

In early 2017, we refocused our portfolio, spinning off our Enterprise Services business to merge with CSC, forming the new and separate company DXC Technology. It is important to note that this report covers our business in FY16 prior to this transformation. For more information, see About this report.

Living Progress Report: 2016 Positions, Policies, and Programs
Addresses HPE's approach to issues most material to our business. It lays out the environmental, social, and ethical challenges we face, and our solutions to address them. Topics covered were identified through an in-depth materiality assessment.

Living Progress Report: 2016 Data Summary
Overview of HPE's 2016 Living Progress performance data. This is our first year of reporting solely HPE data.

Living Progress Report: 2016 Standards Index
HPE's 2016 performance and disclosure against material aspects of the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines and HPE's contribution to the Sustainable Development Goals (SDGs).
Our company

Set bold targets for our company and lead the IT sector by continuously raising the bar.

We lead by example, promoting positive social and environmental change. Sustainability is integrated throughout our business, and we address impacts across our global operations and value chain by reducing our environmental footprint and improving the lives of our employees and workers.

We set bold targets for our company and supply chain to lead the IT sector by continuously raising the bar. In 2016, we committed to sourcing 50% renewable electricity for our operations by 2025—with a long-term goal to achieve 100%—and set a science-based target to reduce operational greenhouse gas (GHG) emissions by 25% compared to 2015.

Working with our supply chain partners, we invest in capability-building programs which empower them to protect workers. This fosters a stable supply chain that can adapt to emerging risks. For example, in 2016 we undertook our first “worker voice” initiative with five suppliers in China, using an anonymous mobile-based survey to identify worker training needs. We also partnered with other leading companies to deliver targeted training on risks associated with foreign migrant workers, and in Mexico, we are promoting women’s financial inclusion through the HERfinance program.

Empower customers to do exponentially more, with less environmental impact.

HPE is committed to delivering transformative solutions that create value for our customers, while also significantly decreasing their energy consumption and carbon emissions.

The best way to help our customers reduce their carbon footprint is to increase the energy efficiency of our products. Our goal is to increase the energy performance of our product portfolio 30 times by 2025, compared to 2015. We’re achieving this by delivering sustainable IT solutions—from our Synergy platform and ProLiant servers, to new approaches in cloud computing, to more compact data centers that are faster and more energy-efficient than ever before.

We also know that for each product we sell, every stage of its lifecycle offers an opportunity to reduce our customer’s impact—from end-of-life options that contribute to the circular economy, to carefully selecting how we source and utilize materials, to the avoidance of substances of concern.

In 2016, we explored an expanded approach to assessing total cost of ownership (TCO) of the product lifecycle, which takes account of direct and indirect financial costs, including environmental externalities. We contributed to a CDP report highlighting how purchasers of IT solutions can benefit from this approach, and we took part in a related panel discussion at the Bloomberg Sustainable Business Summit.

Leverage technology to solve the world’s toughest social and environmental challenges.

As we enter a digital age in which everything computes, the world still grapples with tough social and environmental challenges. We share a responsibility with other global organizations to utilize our technology, influence, and expertise to address these issues for the benefit of all.

Our products and services help our customers leverage the power of technology to transform entire industries and influence the lives of people around the world. For example, HPE next-generation mobile data centers are providing United States first responders with geospatial data—from census and vegetation information to gas and electric line data—which can be invaluable in an emergency or disaster situation.

Through strategic partnerships with nonprofits, governments, and international agencies, we also develop pioneering programs focused on global needs such as education, financial inclusion, and conservation.

And that’s just the beginning. Read more about our industry-leading efforts here.

Read more here.
Corporate governance

Our governance guidelines set the standard for our leaders and employees, translating our shared values into the way we work every day. Detailed policies, codes, and management systems offer everyone at HPE clear and consistent guidance with defined responsibilities.

A robust governance structure is the foundation for us to grow our business across our value chain in a way that benefits people and protects the environment. Sustainable growth for HPE delivers long-term positive impacts for the millions of people touched by our supply chain, operations, products, and services.

Oversight

High standards of business conduct and corporate governance are essential to our ongoing success. Our business affairs and policies are overseen by our Chief Executive Officer and Board of Directors, the majority of whom are independent of HPE.

The Board is responsible for demonstrating its commitment to good governance and HPE’s values worldwide. It oversees specific aspects of our work through five standing committees:

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

Our leadership believes it should reflect the diverse society in which we operate, and has worked to ensure strong representation of women and a mix of ethnic backgrounds on the HPE Board of Directors.

Living Progress governance

Our Chief Sustainability Officer leads our efforts to engage internal and external stakeholders in our Living Progress strategy, supported by a robust governance structure, (see below) and outlined on the following page.

Living Progress governance structure
Living Progress Report: 2016 Positions, Policies, and Programs

HPE Board of Directors’ Nominating, Governance, and Social Responsibility Committee:
- Provides a forum for raising and discussing strategic sustainability issues related to HPE operations and supply chain
- Raises concerns about social, political, and environmental factors that could significantly affect HPE’s business and reputation
- Oversees the HPE Political Action Committee
- Oversees HPE government affairs activities and related policies

HPE Executive Council (led by our CEO):
- Has overall responsibility for Living Progress

HPE Social Environmental Responsibility (SER) Council:
- Meets quarterly to evaluate the Company’s SER focus and priorities
- Supports companywide commitment to, and alignment with, robust sustainability objectives
- Ensures cohesive communication of SER strategy with key internal stakeholders

Economic governance
Our global presence directly supports local markets through employment, tax revenues, and otherwise. HPE fulfills taxation responsibilities in every location where we operate, contributing to thriving economies that can catalyze innovation and sustainable growth. We advocate for tax reforms which support a modern marketplace. Read more about our approach to tax and economic issues.

Senior leaders from HPE’s Ethics and Compliance Office and Corporate Affairs organizations:
- Provide the interface to the Nominating, Governance, and Social Responsibility Committees and other relevant Executive Council-level committees

Our Human Resources and Compensation Committee regularly reviews executive compensation at HPE, including for our CEO and other named executive officers. This ensures that we reward strong performance and offer a competitive level of remuneration consistent with our peers. Our compensation system values both near-term results and long-term success, and this balance enables us to attract, retain, and focus our executive team on achieving strong business performance both now and in the future.
In September 2015, the United Nations presented its 2030 Agenda for Sustainable Development. Over the next 15 years, the Agenda aims to unite countries, organizations, and individuals in a combined effort to end extreme poverty, fight inequality, and tackle climate change. One hundred and ninety-three countries have signed on to the Agenda and the supporting set of 17 Global Sustainable-Development Goals.

Our commitment to the Sustainable Development Goals

Achieving these Goals will require concerted effort and partnership from all sectors of society: governments, companies, civil society, and citizens. At HPE, we are proud to play our part. Contributing to the implementation of the SDGs aligns with our core values and enables us to support this urgent, worldwide call to action.

We have mapped the goals, and their supporting targets, against our materiality assessment to determine where our efforts will have the biggest contribution to sustainable development and where we can best leverage our unique capacity as a global IT company. Based on this analysis, we are targeting our implementation efforts against four SDGs:

- Goal 7. Affordable and clean energy
- Goal 8. Decent work and economic growth
- Goal 9. Industry, innovation, and infrastructure
- Goal 13. Climate action

We are taking action to advance these four Goals—see next page—and will continue to monitor the SDGs to ensure that we focus on the priorities most relevant to our company. More details are also available in our Living Progress Report: 2016 Standards Index here.

The important role that our employees have in advancing the SDGs is another consideration. HPE is a collaborating partner with Impact 2030 and we link our employee volunteering initiatives to the SDGs as part of our commitment to bringing about local impact at global scale.
Ensure access to affordable, reliable, sustainable, and modern energy for all. SDG 7

- We joined RE100 with the intent of reaching 100% renewable energy use.
- Our interim goal is to source 50% of total electricity consumption in our operations from renewables by 2025.
- HPE also advocates for more access to renewable energy sources for businesses through our participation in groups like the Renewable Energy Buyers Alliance and Future of Internet Power.

Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. SDG 8

- We are committed to protecting workers throughout our supply chain and preventing forced labor or human trafficking.
- 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.
- In 2016, HPE received the Stop Slavery Award in recognition for transparency and response to challenges.

Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation. SDG 9

- Our goal is to increase the energy performance of our product portfolio 30 times by 2025, compared to 2015.
- Our research organization—HPE Labs—focuses on developing innovative technologies that advance energy and material efficiency in future HPE products.
- Our ProLiant servers enable up to 20% energy savings. Additionally, HPE Synergy is the first solution that allows our customers to run both private cloud services and traditional applications on shared infrastructure, resulting in a more agile and cost-effective solution for hybrid IT. This lowers costs, while avoiding unnecessary use of energy and space.

Take urgent action to combat climate change and its impacts. SDG 13

- We publicly support the implementation of the Paris Climate Agreement and are signatories of the Business Backs Low-Carbon USA pledge.
- Our operations and product portfolio goals have been approved by the Science Based Target Initiative and are in line with climate science to keep global warming below 2°C.
- We are committed to 100% renewable energy. By implementing energy efficiency programs in our facilities, our goal is to reduce Scope 1 and 2 (operational) GHG emissions 25% by 2025, compared to 2015.

Relevant report sections: Energy use and greenhouse gas emissions in our operations and value chain

Relevant report section: IT as an efficiency enabler

Sourced from GHG protocol—Scope 1: All direct GHG emissions. Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat, or steam.
Reporting on our material issues

This report is structured around our material issues—the 20 topics most critical to our business success and sustainable development.

Our current materiality map (see right) is a refined version of an assessment first conducted for Hewlett-Packard Company in 2014 by Business for Social Responsibility (BSR). The first assessment conforms to best practice guidelines from reporting organizations such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB).

The HPE SER Council regularly revisits this original assessment, with an eye toward updating it to reflect our changing business focus. In so doing, the Council seeks input from key internal stakeholders, leading sustainability practitioners, and technology sector companies. This year, although our overall mapping of material issues remains consistent with our 2015 Living Progress Report, we reassigned each issue to align with our current Living Progress framework. Issues appear within the Our company, Our customers, and Our world sections of this report.

We include two additional issues that are fundamental to the operation of any business: Employee health, safety, and well-being and Human rights. Both issues appear within the Our company section.

In 2017, we plan to undertake further internal and external stakeholder engagement to guide this process, and to ensure that our priorities reflect our current organizational structure and business offerings.

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**2016 HPE materiality map**

- Energy use and greenhouse gas emissions in our operations and value chain
- Waste in our operations and value chain
- Ethical sourcing practices in the supply chain
- Human trafficking in the supply chain
- Substances of concern in products
- Product lifecycle management
- Social application of ICT and access to technology
- Corporate governance
- Water in our operations and value chain
- Intellectual property protection
- Public policy engagement
- Network resilience

- Ethical behavior and business partnerships
- IT as an efficiency enabler
- Data security
- Privacy and freedom of expression

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**Key**
- Our company
- Our customers
- Our world
Goals and targets

We believe that sustainability must be the driver of innovation. In 2016, HPE established new goals to mitigate the environmental impact of our value chain, including a science-based target (SBT) for reduction of greenhouse gas (GHG) emissions within our operations, a commitment to 100% renewable energy, a first-of-its-kind supply chain GHG goal, and a transformative product use energy performance goal. These goals build upon our Living Progress strategy to create sustainable solutions for our company, our customers, and our world.

Our company 2025 goals

- **-25%**
  - Reduce our operational GHG emissions by 25% compared to 2015

- **50%**
  - Source 50% of total electricity consumption in our operations from renewables, with a long-term target of achieving 100%

Our customers 2025 goal

- **x30**
  - Increase the energy performance of our product portfolio 30 times compared to 2015

Our world 2020 goal

- **1m**
  - Support and develop digital tools that improve the lives of one million people

HPE company summary 2016

- $50.1 billion net revenue
- 189,000 employees
- 96 countries where we operate (approximately)

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3 We measure our Scope 2 emissions using two techniques, market-based and location-based. The market-based value takes into account reductions from voluntary purchases of renewable energy and renewable energy credits from the location-based data. Our SBT is based on a baseline of 2015 emissions calculated using the market-based approach. The goal is approved by the Science Based Target Initiative.

4 See Energy Use and GHG Emissions in our supply chain for more information.
Our company

We have a long record of responsible environmental stewardship, including managing the energy, water, and waste in our operations and value chain. Our annual global carbon and water footprints inform our efforts as we strive to minimize the environmental impacts of sourcing, manufacturing, and using our products.

HPE’s values also emphasize people, and our success wouldn’t be possible without the enthusiastic commitment of our employees. We invest in their personal and professional development and strive to promote an inclusive and diverse culture. Through HPE Gives, employees have the opportunity to learn team-building and leadership skills while volunteering in their communities.

Reducing the climate impact of our operations and supply chain

We are committed to reducing the carbon intensity of our operations. In 2016, we joined RE100 with a commitment to reach 100% renewable energy, while setting an interim goal to source 50% of our total electricity consumption from renewable sources by 2025. RE100 is led by The Climate Group in partnership with CDP, as part of the We Mean Business coalition.

We recognize that our operations constitute only 19% of our total global carbon footprint, which is equivalent to powering approximately 200,000 U.S. homes for one year. Yet, in our resource-constrained world, even this is significant. Our supply chain constitutes a slightly larger portion of our global carbon footprint, which is why we’ve also set a new goal this year to enable all suppliers with which we have a contractual relationship to set science-based emissions targets. By 2025, HPE will reduce manufacturing-related GHG emissions on an absolute basis in our supply chain by 15% compared to a 2015 baseline.

Read more about our energy and GHG emissions in our operations here.
Giving workers in our supply chain a voice

Creating a supply chain that is responsive to social and environmental risks relies on clear communication of our requirements and equipping our suppliers with the knowledge and systems to manage emerging issues.

In addition to communicating with our suppliers’ management, we know that we need to reach out to their workers. This enhances our understanding of the challenges that workers face day-to-day at supplier facilities.

To do this, in 2016, we undertook our first “worker voice” initiative with five suppliers in China, focused on health and safety. Using an anonymous mobile-based survey platform, Laborlink, we asked the 1,900 participants to tell us how they felt about their workplace health and safety. We also asked them to identify where their skills and knowledge could be developed.

We provided the participating suppliers with feedback from the survey, highlighting areas where their workers might benefit from additional training. For example, around 40% of workers responding to the survey were unable to name all the chemicals they work with, so we suggested participating suppliers should revise their regular training approach to prioritize chemical handling. We will follow up to assess improvement in 6–12 months.

Feedback from the workers in our supply chain formed part of a wider dataset of more than 23,000 responses from workers in 30 other factories supplying leading Electronic Industry Citizenship Coalition (EICC) members. This enables us to benchmark our suppliers with peer and industry averages, and contribute to a wider industry effort to improve health and safety performance across the supply chain.

Read more about our capability-building programs here.
Energy use and greenhouse gas emissions in our operations and value chain

Position
Climate change is one of the most complex challenges facing our world today. HPE believes business must be the driver of transformative innovation to find and implement solutions. We are constantly working to reduce environmental impacts across our value chain and aim to inspire our suppliers and industry peers to do the same. In 2016, we set three bold targets to minimize our contribution to climate change in our operations and supply chain.

Policies
- HPE Environmental, Health, and Safety (EHS) Policy
- HPE Supplier Code of Conduct
- HPE Supply Chain Social and Environmental Responsibility Policy

Programs
- Energy and greenhouse gas emissions in our operations
- Energy and greenhouse gas emissions in our supply chain
- Transport
- IT efficiency
Our carbon footprint

In 2016, we furthered our commitment to a low-carbon economy as one of just over 30 companies to set a science-based GHG emissions reduction target in our operations. Our operations and product portfolio goals have been approved by the Science Based Target Initiative and are in line with climate science to keep global warming below 2°C.

Our 2016 carbon footprint revealed 81% of our emissions were in the upstream and downstream portions of our value chain (Scope 3), with the majority being associated with customer use of our products. According to our own product carbon footprints (PCF), over 80% of a server’s impact is generated during customer use. This result is unsurprising given that servers are almost continuously running and are used for many years. Our operations emissions (Scope 1 and 2) were largely a result of energy used to power our data centers.

We collaborate with other companies to advocate for policies that address climate change, and in 2016, we joined the Business Backs Low-Carbon USA movement to encourage our government to support the global transition to a low-carbon economy. We also set our science-based GHG reduction target through collaboration with the We Mean Business Coalition, a forum that brings businesses together to commit to climate action and encourages ambitious goal setting.

Every year we disclose our GHG emissions and management approach in the CDP climate change program. For the third year in a row, we made CDP’s Climate A list for our actions to reduce emissions and mitigate climate change. Read more about our additional awards and recognition here.

Our global carbon footprint (Figures expressed as millions of tonnes of carbon dioxide equivalent (CO2e); calculations based on the HPE 2016 Carbon Accounting Manual; total emissions in 2016 were 10,532,100 tonnes CO2e.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Emissions (Mtonnes CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream energy production</td>
<td>0.3</td>
</tr>
<tr>
<td>Transport</td>
<td>0.3</td>
</tr>
<tr>
<td>Capital goods</td>
<td>0.2</td>
</tr>
<tr>
<td>Material extraction through manufacturing</td>
<td>1.5</td>
</tr>
<tr>
<td>Facilities</td>
<td>1.1</td>
</tr>
<tr>
<td>Commercial air travel</td>
<td>0.1</td>
</tr>
<tr>
<td>Employee commuting</td>
<td>0.7</td>
</tr>
<tr>
<td>Transportation fleet</td>
<td>0.07</td>
</tr>
<tr>
<td>Investments</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Product use</td>
<td>6.2</td>
</tr>
<tr>
<td>Buildings leased to others</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Product end of life</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

Supply chain 22%  Operations 19%  Products and solutions 59%

5 A PCF is a measure of the carbon equivalent emissions that result during a product’s entire lifetime, including the emissions produced from extracting raw materials; shipping and refining materials; producing components such as printed circuit boards, processors, and metal housings; assembling the product; shipping it to the customer; emissions from the production of the electricity used by the customer; and final end-of-life disassembly and recycling.
Energy use and greenhouse gas emissions in our operations

With a changing climate, we believe it is imperative to conduct business with efficiency in mind. HPE’s approach to energy use and GHG emissions reduction is focused on four key areas.

Renewable energy

Increasing the amount of renewable energy in our portfolio is a key tool to minimize GHG emissions and can reduce potential price and regulatory risks associated with nonrenewables.

Advocating for additional supply of renewably generated electricity is an important part of our energy strategy. In 2016, we joined RE100, a global initiative composed of leading companies committed to sourcing 100% renewable electricity. We further support the global expansion of renewable energy generation through participation in the Renewable Energy Buyers’ Principles and the Future of Internet Power. These collaborative initiatives make the use of renewable energy more accessible and effective for business.

Currently, HPE has 13 sites worldwide with solar installations located in the United States, Mexico, India, Germany, and Israel.

In June 2016, our Texas renewable wind energy production went online, producing 144 million kWh of energy through October 2016. Its full annual production is the equivalent of 100% of the power used in our five Texas HPE data centers, which is equal to avoiding more than 75,000 tonnes of CO₂e. We are committed to expanding our renewable energy portfolio, and in 2017, we will complete India’s largest geothermal project, expected to prevent 811 tonnes of CO₂e emissions each year.

Our operations in Austria, Ireland, Italy, Portugal, Spain, Sweden, and the UK source 70% or more of their electricity requirements from renewable resources. In 2016, all of our new energy purchase contracts that power our operations in these countries were from sustainable sources.

Data centers

Powering our data centers results in the largest source of GHG emissions within our operations. Consequently, we design our data centers to minimize space and energy requirements while achieving leading-edge performance for our customers. We routinely track energy consumption at all of our leased and owned facilities and have a rigorous process in place to ensure that data collection is accurate.

In 2016, we closed five older data centers and continue to consolidate to fewer, more efficient facilities. Since 2010, we closed 106 less efficient data centers, reducing our space requirements by 919,000 square feet.

We support global efforts to improve data center environmental performance by participating in the European Code of Conduct for Energy Efficiency in Data Centres. By the end of 2016, we gained accreditation for seven of our data centers under this program. Additionally, we are a founding member of The Green Grid, a nonprofit consortium that aims to improve data center resource efficiency.

28% of our operations’ total electricity consumption was renewable or zero-carbon energy
Sustainable buildings

We believe the most effective building energy reduction results can be achieved in accordance with strict and established industry standards such as the Leadership in Energy and Environmental Design (LEED) certification or regional equivalents.

In 2016, we completed five LEED projects and have two more in progress. These projects cover one million square feet in area and include smart building features such as these:

- Occupancy sensors that optimize lighting energy use
- Light level sensors to dim perimeter lighting based on daylight
- Occupancy sensor HVAC interlock to turn off air conditioning systems when spaces are unoccupied
- Fault detection software to identify building operational abnormalities and alarms for correction

We plan to continue our legacy of building facilities to a high level of efficiency and sustainability. We will maintain best practices with standards and continue to implement new smart building technology as it becomes available.

Transport

Product transportation

We aim to optimize product transportation logistics efficiency, minimizing distances to market and selecting the lowest carbon transport option. When feasible, we select ocean and truck routes in preference to air freight, which has the highest carbon footprint.

In 2016, we enhanced the level of detail in our measurement of the impact of our product transportation. Using this data, we will develop a benchmark against which future initiatives can be measured. In 2017, we will work with suppliers to incorporate alternative fuels and further consolidate shipments within our operations.

Employee travel

Whenever possible, we utilize videoconferencing and other virtual collaboration tools in place of employee travel. When travel is necessary, we work with our employees and transport providers to support sustainable travel practices.

We promote the use of electric vehicles by providing charging stations at our facilities. We also partner with fleet-management suppliers to run our Auto Fleet transformation program. It aims to:

- Reduce fleet fuel consumption
- Improve efficiency of our vehicles
- Reduce the total cost of ownership

Looking ahead, we remain focused on improving our employee travel data collection and consolidating fuel suppliers so we can focus on helping them reduce their emissions.

2025 goal:
Reduce owned and leased auto fleet GHG emissions by 10% compared to 2015
Energy use and greenhouse gas emissions in our supply chain

In 2016, HPE set a first-of-its-kind supply chain GHG emissions reduction-related goal based on climate science—we aim to have 80% of our manufacturing suppliers (by spend, including final assembly and strategic commodity suppliers) set their own science-based emissions reduction targets with the overall goal of reducing manufacturing-related GHG emissions (on an absolute basis) in our supply chain by 15% by 2025 compared to 2015.

We recognize that achieving this ambitious supply chain target requires collaboration with our suppliers. This year, we began providing GHG capability building to our suppliers that included science-based target development, ongoing guidance and feedback, and access to tools and resources necessary for reducing emissions.

Our Supply Chain Responsibility program is the basis of our ethical sourcing and environmental management collaboration with suppliers. Our hands-on approach to engagement includes our Lean Manufacturing Program, wherein we go into supplier factories to identify and help implement process improvements, including energy efficiency opportunities.

Beyond reducing GHG emissions in our own supply chain, we aim to catalyze the IT industry to become a leader in emissions reductions and inspire cross-sector action. We partnered with the nonprofit BSR to develop a supply chain standard for emissions reductions and abatement. This standard will act as a framework to assist companies in establishing SBTs for their supply chain, and support suppliers in setting their own targets.

We tailor our environmental management interaction with our suppliers to suit specific supplier groups: production, nonproduction, and transport.

Production suppliers provide materials and parts, and manufacture and assemble our products. Our primary engagement with suppliers relative to GHG reporting in 2016 was focused on accurate and complete data capture. Moving forward, we will continue capability building, goal setting, and providing ongoing feedback. Production suppliers also undergo regular evaluations through our Social and Environmentally Responsible (SER) scorecard.

Nonproduction suppliers provide services such as staffing, travel accommodation, and telecommunications. They represent a minor portion of our overall carbon footprint and consequently are not included in our supply chain emissions intensity goal. Beginning in 2017, executives will review our top nonproduction suppliers to provide strategic oversight to these partnerships and identify new opportunities to have an impact on supply chain GHG emissions.

Every year, we request that our production suppliers report their emissions and approach to climate change through CDP. In 2016, we requested that 98% of production suppliers, based on spend, report through this system. See above for information on product transportation suppliers.

In 2016, HPE was among 1% of 3,300 companies to be placed on CDP’s supplier engagement leaderboard for our supply chain work to mitigate environmental impacts.
Water in our operations and value chain

Position
Recognizing that global freshwater reserves are under increasing pressure, we are committed to minimizing our consumption of this valuable resource both in our operations and across our supply chain, particularly in water-scarce regions.

Policies
- HPE Environmental, Health, and Safety (EHS) Policy
- HPE Supplier Code of Conduct
- HPE Supply Chain Social and Environmental Responsibility Policy

Programs
- Responsible water usage in our operations
- Responsible water usage in our supply chain
- Supply Chain Responsibility (SCR) program
Our global water footprint

We assess our complete water footprint to better understand and reduce our use of this precious resource. In our own operations, we aim to reduce water consumption wherever possible, predominantly in data center cooling. Most of our water consumption is indirect and is primarily used to generate electricity to power the manufacturing and use of our products. As a result, we have a strong focus on improving product efficiency, as well as helping our manufacturing suppliers improve their water accounting and management.

Responsible water usage in our operations

Although we consume relatively little water in our operations, the water we do use can have a significant impact on local communities. We are focused on reducing our consumption in water-scarce regions where HPE operates. We identify these sites through the World Business Council for Sustainable Development (WBCSD) Global Water Tool and also consider any additional locations we know to be suffering from droughts.

In 2016, our water conservation projects included:

- **Smart metering.** Automated metering improvements were implemented in the UK to increase the frequency of data reporting to provide a more accurate overview of water use. Additional metering was installed in our Shanghai campus to track water reuse quantities to increase water efficiency and monitoring as part of HPE’s building control strategy.
- **Alternative sources.** Twenty-six million liters of water, equivalent to 10.4 Olympic swimming pools, was saved through two rainwater capture projects in the water-stressed region of Bangalore, India. Our focus looking ahead remains on water-stressed regions and engaging our employees on water-saving behavior within our facilities.
- **CDP supply chain membership** — asking our suppliers (representing 95% of our direct spend) to report their water management and stewardship practices to us through the CDP system.

A full disclosure of our water management approach and performance is reported annually to the CDP water program.

Responsible water usage in our supply chain

Through our Supply Chain Responsibility (SCR) program we partner with suppliers to improve their water stewardship and management. We strongly encourage our production suppliers (materials, components, and assembly providers) to set goals, thoroughly track, and transparently report their water consumption. We offer multiple resources to assist our suppliers, such as these:

- **WBCSD Global Water Tool** — identifying suppliers in water-scarce regions to focus efforts, and assessing the water threats in local communities.
- **CDP supply chain membership** — asking our suppliers (representing 95% of our direct spend) to report their water management and stewardship practices to us through the CDP system.

Our production suppliers are making great strides in managing and reporting their water use, while our nonproduction suppliers—including staffing, telecommunications, and travel providers—are focused on increasing their awareness of water management and improving their data reporting. In 2017, we will continue to engage and support our supply chain by sharing responsible water management best practices.

Our global water footprint

(millions of cubic meters of water; calculations are based on the HPE 2016 Water Accounting Manual, total consumption in 2016 was 99,491,000 cubic meters)

- Direct consumption
- Indirect consumption

<table>
<thead>
<tr>
<th>Supply chain</th>
<th>29%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>18%</td>
</tr>
<tr>
<td>Products</td>
<td>53%</td>
</tr>
</tbody>
</table>

Electricity for product use

7.5

21.6

4.7

13.3

52.4
Waste in our operations and value chain

**Position**

The efficient use of materials reduces our impact on the environment and cuts costs. Throughout our operations and supply chain we look for opportunities to minimize waste generation, as well as recycle and reuse where possible. We extend recycling and reuse options for our products to our customers to assist in their waste management efforts.

**Policies**

- HPE Environmental, Health, and Safety (EHS) Policy
- HPE General Specification for the Environment
- HPE Supply Chain Social and Environmental Responsibility Policy
- HPE Supplier Code of Conduct

**Programs**

- Reducing waste and hazardous materials in our operations
- Reducing waste and hazardous materials in our supply chain
- Supply Chain Responsibility (SCR) program
Reducing waste and hazardous materials in our operations

Although our facilities and offices produce a minimal amount of waste, we are proactive in managing and reducing it whenever possible. Our companywide waste management approach focuses on four key areas:

- Reducing the amount of waste materials
- Reusing equipment where appropriate
- Recycling where possible
- Using disposal only as a last resort

To keep track of our waste reduction efforts, we monitor our internal diversion rate on a monthly basis. The majority of waste we produce is nonhazardous solid waste such as paper, pallets, and packaging material. Our hazardous waste is primarily lead-acid batteries from our data centers, which we provide to battery recycling facilities.

For our electronic waste, we reuse or recycle through the same programs that we offer our customers. Read more about our responsible management and disposition of electronic waste.

Reducing waste and hazardous materials in our supply chain

As part of our Supply Chain Responsibility (SCR) program, we work with suppliers on responsible waste management. This improves their environmental footprints and, indirectly, those of our products. Our suppliers must comply with HPE's General Specification for the Environment (GSE) Manufacturing Process Substances Requirements. Compliance with these requirements reduces the environmental, health, and safety risks from manufacturing process substances used to make our products. We monitor conformance with our Supplier Code of Conduct and other relevant requirements through audits to ensure that our standards for waste management are upheld. Audits include provisions related to environmental permits and reporting, pollution prevention and resource reduction, hazardous substances, wastewater and solid waste, and air emissions.

Continued transparency and engagement drives awareness across our supply chain to address inefficiencies and minimize waste. We work with our suppliers to accurately track and report performance toward their waste reduction goals and to improve the quality of reporting and engagement. We support suppliers’ progress toward achieving their goals through the GSCP. The GSCP provides Environmental Reference Tools that set expectations on waste minimization and provide clear, consistent guidelines for our suppliers.

In 2016, many of our suppliers continued to improve responsible waste management at their facilities. Highlights from this past year include:

- In the United States—use of HPE and supplier’s own foam waste to make new foam packaging cushions
- In Singapore—an award-winning initiative to collect, separate, and recycle electrostatic discharge bags

84% of nonhazardous waste in our operations was diverted from landfill in 2016.
Human rights

Position
Respecting human rights is core to our values. We base our approach on the UN Guiding Principles on Business and Human Rights, and we are committed to protecting human rights across our business activities. We work with our employees, suppliers, partners, and customers to extend this commitment throughout our value chain.

Policies
- HPE Global Human Rights Policy
- HPE Standards of Business Conduct
- HPE Partner Code of Conduct
- HPE Supplier Code of Conduct
- HPE Supply Chain Social and Environmental Responsibility Policy
- HPE Foreign Migrant Worker Standard
- HPE Student and Dispatch Worker Standard for Supplier Facilities in the People’s Republic of China (PRC)
- HPE Global Master Privacy Policy
- HPE Environmental, Health, and Safety (EHS) Policy
- HPE Harassment-Free Work Environment Policy
- HPE Nondiscrimination Policy

Programs
- Protecting human rights across our value chain
- IT products and services and human rights
- Collaboration to advance human rights
- Privacy and freedom of expression
- Inclusion and diversity
- Supply Chain Responsibility (SCR) program
Protecting human rights across our value chain

Human rights—the fundamental freedoms and standards of treatment to which all people are entitled—are fundamental to everything we do. We take 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 the General Counsel oversees our approach and holds ultimate responsibility for our human rights programs and works with HPE business units and global functions to address specific issues as they occur. Our risk-based strategy for identifying potential human rights issues ensures that we focus our resources where they are most needed.

We manage workplace risk through our Standards of Business Conduct, Non-Discrimination Policy, and Harassment-Free Work Environment Policy. Our employees share our commitment to an inclusive, diverse culture, where individuals are valued for the skills and knowledge they bring to HPE, regardless of their background.

We manage supply chain risk through the HPE SCR program, which is focused on protecting workers and improving labor standards. In 2016, we continued our focus on the rights of vulnerable groups such as foreign migrant workers, and investigated our supply chain more intensively to identify and resolve risks such as human trafficking and forced labor.

Our range of reporting channels enables anyone with a concern about activities within our business or value chain to share details directly with us. When a concern is raised, we swiftly identify issues and take appropriate action.

IT products and services and human rights

Technology has the power to transform lives, contributing to a more connected world and providing solutions to some of society’s toughest challenges. But it can also be used for unintended purposes, with potentially detrimental human rights outcomes. Guided by the HPE Global Human Rights Policy, we seek to reduce the potential for HPE products and services to be used by companies, individuals, organizations, or regimes to infringe on people’s human rights.

We evaluate concerns connected with existing or future customers and partners, and we conduct due diligence on relevant business activities in appropriate circumstances. We comply with all relevant sanctions, restrictions, and embargoes in our business operations worldwide.

In 2016, HPE received inquiries with respect to human rights impacts as a consequence of its business relationship with the Government of Israel. Based on investigations and the scope of technology and services provided, HPE believed its actions were consistent with its policies. Moving forward, HPE’s business operations in Israel are regularly monitored by our Ethics and Compliance Office to ensure that we continue to act in concert with our human rights policies.

Read more about our approach to protecting the right to personal privacy and freedom of expression.

Collaboration to advance human rights

As a global company, we have a responsibility to look beyond our own activities and drive change in the IT industry and beyond. We publicly share our views and approach to human rights with others, discussing our leadership on issues such as protecting foreign migrant workers and advocating for change.

We want to be part of a world where respect for human rights is embedded in everyday working practice across all sectors, and we contribute to several external initiatives as part of this ambition. In 2016, these included:

- Global Business Initiative on Human Rights (GBI)
- Electronic Industry Citizenship Coalition
- Business for Social Responsibility Human Rights Working Group
- Leadership Group for Responsible Recruitment
Ethical sourcing practices in the supply chain

**Position**
We share a responsibility with our suppliers to protect workers, communities, and the environment in our supply chain. Our extensive Supply Chain Responsibility (SCR) program guides our approach to assessing risks, monitoring and improving performance, and partnering with suppliers to share knowledge on key issues.

Our mission is threefold: protect and elevate workers; reduce global and community environmental impact; and benefit HPE, our business partners, and customers. We increasingly focus on carrying out more detailed assessments with higher-risk suppliers, and we report our findings transparently.

Through our conflict minerals program, our approach extends to the responsible sourcing of tin, tantalum, tungsten, and gold.

We collaborate with others and share our experiences to elevate industry standards in supply chain social and environmental management.

**Policies**
- HPE Supplier Code of Conduct
- HPE Supply Chain Social and Environmental Responsibility Policy
- HPE Foreign Migrant Worker Standard
- HPE Student and Dispatch Worker Standard for Supplier Facilities in the People’s Republic of China (PRC)
- HPE Global Human Rights Policy
- HPE General Specification for the Environment

**Programs**
- Supply Chain Responsibility (SCR) program
- Supplier audit and assessment
- Supporting workers and capability building
- Conflict minerals
- Avoiding human trafficking and forced labor in the supply chain
- Substances of concern in products
Supply Chain Responsibility (SCR) program

The HPE SCR program guides our approach to ethical sourcing. It helps us:

- Retain a stable, high-quality supply chain, ensuring that we remain a trusted sourcing partner to customers
- Empower and protect the rights of the workers making and delivering our products, services, and solutions
- Address environmental impacts in our supply chain, including energy and GHG emissions, waste, and water

Read more about our approach to supply chain responsibility.

A risk-based approach

Our SCR program enables us to identify, understand, and address social and environmental responsibility (SER) risks in our supply chain as they emerge.

We take several factors into account when assessing SER risks: location, procurement category, workforce composition, and the volume and type of business the supplier does with HPE. We combine this information with supplier self-assessment data, on-site performance evaluations, external data, stakeholder input, and the findings of our supplier key performance indicator (KPI) program.

We focus our resources on the key issues identified by our risk assessments and where we can make the most difference. We pay particular attention to these:

- Suppliers with which we have a direct contractual relationship, for example final assembly and strategic component suppliers
- Specific emerging or high-risk issues, such as human trafficking and forced labor, through deeper engagement in our supply chain where we have the opportunity to prevent specific risks from occurring
- Groups with vulnerabilities to exploitation or potential abuse, including students, dispatch workers, young workers, and foreign migrant workers

We also monitor risks further along our supply chain, including those associated with sub-tier suppliers (our first-tier suppliers' own suppliers).

We work with our suppliers to reduce risks and improve performance. For example, we use the GSCP Environmental Reference Tools to encourage good practice and provide a clear understanding of fair labor and environmental requirements and their implementation.

We strengthen our standards, monitoring, and performance indicators in response to emerging priorities. For example, read more about our focus on foreign migrant workers and preventing human trafficking and forced labor.

Effectively addressing environmental risks in our supply chain reduces our overall footprint and enables more efficient use of resources, while helping us to meet customer expectations and regulatory requirements.

Leadership and transparency

We develop our policies, standards, and mitigation strategies in response to emerging risks, and we are aware of opportunities for closer scrutiny of our supply chain to proactively uncover less visible risks and to work to resolve them.

Toward the end of 2015 and into 2016, we began to undertake more in-depth assessments at higher-risk suppliers, and we found an increased number of critical labor issues. Read more about our approach to assessing suppliers here and see specific findings here. We hope that our transparency in reporting the issues we uncover will encourage others to do the same.

HPE will continue to extend assessments within our supply chain and collaborate with others to stimulate increased transparency within and outside the IT sector.

Publishing our supply chain performance data helps us to hold ourselves and our suppliers accountable, so that we can work together to improve outcomes and prevent recurrences of high-risk issues. In turn, this leads to a more robust and resilient supply chain, with a positive impact on people and the environment.

We publish:

- A list of suppliers—since its first publication in 2007, we have added details such as names, addresses, and information about sustainability programs
- Our Supply Chain Responsibility dashboard
- Results of supplier audits
- Results of our SER Scorecard
- A list of 3TG (tin, tantalum, tungsten, and gold) smelters and refiners and their locations
**Our company**

- **ETHICAL SOURCING PRACTICES IN THE SUPPLY CHAIN**

Many SER risks arising in our own supply chain are shared across the IT industry and beyond. We work closely with the [Electronic Industry Citizenship Coalition](https://www.eiccoalition.org), the [Institute for Human Rights and Business](https://www.ihrb.org), and others to encourage the adoption of leading programs and standards to address these risks.

### Understanding supplier needs and challenges

Understanding and engaging with our suppliers is an essential part of our SCR program. We collaborate with suppliers to learn about the challenges they face and support them with additional training or capability-building programs. We work with them to integrate our social and environmental requirements into their management systems and operations. This helps to ensure that our suppliers take ownership of their policies and practices, and enables them to find opportunities to strengthen their own SER performance on an ongoing basis.

### Nonproduction suppliers

IT industry SER engagement has historically focused on production suppliers that manufacture materials, components, and completed products.

Several years ago, we extended our SER approach to nonproduction suppliers that support our products post-release and provide services associated with our brand. These include call centers, contract labor agencies, outsourced technology services, reuse and recycling, branded merchandise, and facilities management.

HPE nonproduction suppliers far outnumber production suppliers, employing a large number of workers around the globe.

We influence social and environmental business behavior across many industries beyond manufacturing. In 2016, our nonproduction supplier engagement spanned 17 countries: Argentina, Brazil, China, Colombia, India, Japan, Malaysia, Mexico, the Philippines, Poland, Romania, Serbia, Singapore, South Africa, Thailand, Turkey, and the UK.

### Sub-tier suppliers

We require our first-tier suppliers to pass along our social and environmental requirements to their own suppliers—our sub-tier suppliers—and we work with first-tier suppliers to monitor sub-tier supplier risks. This helps us to meet customer expectations and to reduce risks further along our supply chain. For example, we partner with the [Institute of Public and Environmental Affairs](https://www.ipea.gov.cn) in China, using its pollution database to monitor environmental violations at our sub-tier suppliers and ensure that corrective actions are taken.

### Supplier audit and assessment

We take a consistent approach to monitoring, assessing, and developing supplier social and environmental performance.

This process begins during our first contact with potential suppliers. Initial on-site (onboarding) assessments with selected suppliers enable them to identify and correct any nonconformances with our standards at an early stage in our business relationship.

We work with suppliers on key environment, ethics, health and safety, and labor issues on an ongoing basis. This includes encouraging them to build relevant standards into their management systems, and supporting them with targeted guidance or training on specific issues such as human trafficking and forced labor.

Our data collection and assessment processes take four main forms:

- **Comprehensive audits.** We arrange regular independent audits against our **Supplier Code of Conduct**. Whenever we find significant nonconformances, we require suppliers to produce a corrective action plan. We subsequently track the relevant issue or issues to closure and arrange a follow-up audit. Critical findings include labor, forced labor, severe discrimination, and serious environment or health and safety risks. These require immediate escalation and may result in a supplier being downgraded on our SER scorecard (see below). We require suppliers to work with us to remediate these issues, and a failure to do so can impact their future business opportunities with HPE. We require that suppliers have a process to communicate the requirements and monitor compliance in their own supply chain based on our Supplier Code of Conduct.

- **Targeted assessments.** Alongside regular audits, we undertake additional assessments on specific risk areas such as foreign migrant workers and fire safety.

- **KPI program.** We require key suppliers in high-risk locations to provide additional monthly reporting on key performance indicators.

| 108 audits and assessments conducted in 2016 at supplier facilities |

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such as working hours, vulnerable workers, and GHG emissions.

**SER scorecard.** We incorporate supplier social and environmental performance in each supplier’s business scorecard. The scorecard directly ties supplier SER performance to ongoing product procurement decisions, ensuring that SER is prioritized in business decisions. Suppliers with strong SER performance have greater opportunities for new or expanded business with HPE, while suppliers with persistently low SER performance may see reductions in business with HPE.

The HPE procurement operations function is central to our SCR Program. The team:

- Builds ongoing relationships with suppliers through day-to-day engagement and regular business reviews
- Helps to motivate and incentivize suppliers to improve performance in line with HPE requirements
- Evaluates key suppliers against SER performance standards as part of our onboarding process, which also enables early engagement with new suppliers to reinforce the link between performance and procurement

We train the procurement operations team to undertake SER performance evaluation, education, and mentoring. For audits on EICC member facilities and their suppliers’ facilities, independent third-party specialists trained in social and environmental auditing using the EICC **Validated Audit Process** carry out the audits.

**Supporting workers and capability building**

We have long-term relationships with many of our suppliers. Investing resources to build the capability of management and workers fosters a stable supply chain, responsive to emerging SER risks. We develop targeted training and capability-building programs in four key areas.

**Supplier-specific capability building**

These targeted programs help suppliers develop sustainable management systems and remediation plans for specific SER issues. They include virtual and on-site activities such as these:

- **Personal protective equipment (PPE) road show.** In September–October 2016, we collaborated with another multinational company to deliver an interactive road show and PPE demonstration with seven suppliers in China. The aim was twofold: raise worker awareness of the importance of PPE, and assist suppliers in establishing a consistent approach to PPE management.

- **Broad topic capability building**

   These programs and events address industry-wide key issues, emerging risks, and new requirements across our supply chain. Activities in 2016 included:

   - **Foreign migrant worker workshop.** In October–November 2016, we partnered with other leading companies to deliver targeted training on risks associated with foreign migrant workers—for example, exploitation and forced labor. Attendees included 22 suppliers from three countries determined to have a relatively high risk of forced labor and human trafficking. We worked with participants to amend their management practices to lower these risks, and encouraged them to implement the good practices shared at the workshop.

   - **Supplier summit and social insurance seminar in China.** The summit—attended by 51 participants from 34 suppliers—enabled us to reinforce our SCR requirements and strengthen relationships with suppliers following the 2015 separation of Hewlett-Packard Company. We held the add-on seminar to ensure that these suppliers are equipped to manage and meet our requirements on social-insurance-related issues. A follow-up survey showed that 98% of summit participants felt attending had enhanced their understanding of social insurance requirements and had given them practical knowledge they could implement at work.

   - **Ongoing access to the EICC e-Learning Academy.** Providing access to the Academy enables suppliers and sub-tier suppliers to receive targeted training on a range of SER topics in multiple languages. It is part of our collective industry effort to build capacity across a shared supply chain.
Worker well-being

These programs focus on worker empowerment and well-being, and are designed to have a positive impact beyond the workplace.

For example, to promote financial inclusion within our supply chain, we are partnering with BSR to deliver a HERfinance program with four suppliers in Mexico. Through a 9- to 12-month process of peer-to-peer on-site financial literacy training, we aim to develop the financial capability of low-income workers—enabling them to better meet their own needs, as well as those of their families and communities. A more financially literate workforce should also help to mitigate localized poverty and gender equality issues.

Worker voice

These programs are designed to engage workers and create capability-building initiatives driven by their needs. In 2016, we undertook our first worker voice program—Laborlink.

Conflict materials

Through our conflict minerals program, we work to advance the responsible sourcing of minerals used in our products. These include tin, tantalum, tungsten, and gold (3TG)—metals found in relatively small amounts in most IT products, including our own.

The sale and use of 3TG from the Democratic Republic of the Congo (DRC) and adjoining countries is linked to the funding of violent groups that commit human rights atrocities.

Any link between the manufacturing of our products and the funding of armed conflict is unacceptable.

Of the 3TG metals, the ICT industry has the most leverage and has achieved the most progress with tantalum. This is because the sector is a significant user of that metal (around 15% of the world’s consumption), compared to tin (around 0.1%), tungsten (around 2%), and gold (around 3%). Multi-industry collaboration is needed to achieve significant progress with these metals that are used less by the ICT industry.

The 3TG supply chain spans the globe and has many stages from mine to product. Working closely with our suppliers, we aim to achieve DRC conflict free status for our products.

We work to eliminate the risks associated with conflict from our supply chain by focusing on three important areas:

- **Suppliers.** Our Supply Chain Social and Environmental Responsibility Policy, Supplier Code of Conduct, and General Specifications for the Environment clearly communicate our expectations of suppliers with respect to conflict minerals. For example, we require our suppliers to source tantalum only from smelters compliant with the Conflict-Free Sourcing Initiative’s Conflict-Free Smelter Program, whether or not they are sourcing from the DRC or an adjoining country.

- **Smelters.** We report a list of smelters and refiners involved in our supply chain (provided to us by suppliers) for the purposes of our annual Conflict Minerals Report—required by the U.S. Securities and Exchange Commission (SEC). The report shows the status of the smelters’ participation in an independent assessment and compliance program.

- **Multi-stakeholder collaboration.** The supply chain associated with conflict minerals is complex and several manufacturing steps away from us. Our progress toward full conflict-free minerals status requires close collaboration with our suppliers, businesses, nongovernmental organizations, and government agencies.

HPE is an active member of the CFSI (CFSI member ID: HPE). We support the EICC Responsible Raw Materials Initiative, and an HPE representative currently sits on the EICC Board of Directors. Additionally, we engaged with Kemet Partnership for Social and Economic Sustainability, Responsible Sourcing Network’s Multi-Stakeholder Network (continuing under the banner of CFSI after 2016), and the Solutions for Hope project in 2016.

> 90% of 3TG (tin, tantalum, tungsten, and gold) smelters and refiners compliant or in process toward DRC conflict free

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6 “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.
Human trafficking in the supply chain

Position
Every person has the right to be treated with dignity and respect, and to freely choose the work they do. We are committed to protecting workers across our supply chain and preventing any form of forced labor or human trafficking. We advocate for other companies to make similar commitments.

Policies
- HPE Global Human Rights Policy
- HPE Supplier Code of Conduct
- HPE Partner Code of Conduct
- HPE Foreign Migrant Worker Standard
- HPE Student and Dispatch Worker Standard for Supplier Facilities in the People’s Republic of China (PRC)
- HPE Contingent Worker Code of Conduct
- HPE Standards of Business Conduct

Programs
- Supply Chain Responsibility (SCR) program
- Supporting workers and building capability
- Avoiding human trafficking and forced labor in our supply chain
- Advocating for stronger standards
- Reporting grievances
Avoiding human trafficking and forced labor in our supply chain

Mapping and managing risks
We proactively identify and address risks, including the potential for human trafficking and forced labor in our supply chain at global, regional, and local levels. We have taken targeted steps to enhance protection for particularly vulnerable groups that are at heightened risk of exploitation, specifically foreign migrant workers, and student and dispatch workers in China. We developed specific supplier standards to clearly communicate our expectations with respect to the rights of both these groups.

Through our Supply Chain Foreign Migrant Worker Standard, we were the first IT company to require our suppliers to hold direct employment contracts with foreign migrant workers. The Standard also prohibits worker-paid recruitment fees, requires that migrant workers keep their passports and personal documentation, and asks suppliers to minimize the use of recruitment agencies. This reduces the risk of forced labor by ensuring that our suppliers take direct responsibility for conditions of employment.

Our Student and Dispatch Worker Standard for Supplier Facilities in the People’s Republic of China (PRC) sets out specific requirements to protect these workers at our suppliers’ plants.

To ensure that suppliers continue to share our commitment to worker rights, we follow a consistent process of auditing, monitoring, and remediation through the HPE Supply Chain Responsibility (SCR) Program.

Supplier engagement
We hold regular training events with suppliers to:
- Share our expectations regarding forced labor risks
- Explain external requirements from the EICC, governments, and others
- Equip suppliers with tools, skills, and knowledge to deliver against these expectations

We often partner with other leading IT companies—including competitors and suppliers—to deliver this training. This demonstrates a consistent industry approach to suppliers and deepens the reach of our training program beyond our first-tier supply chain.

In 2016, we co-hosted training in three countries in Asia determined to have a relatively high risk of human trafficking and forced labor. Read more about our trainings here.

We encourage suppliers and relevant personnel to take courses relating to forced labor risks and requirements through the EICC’s e-Learning Academy.

Employee engagement
We require all HPE employees to comply with our Standards of Business Conduct, which include provisions prohibiting the use of child, prison, or forced labor in HPE operations.

Employees receive annual training on the Standards, and those with certain supply chain responsibilities undertake additional training on our requirements and processes with respect to human trafficking and forced labor.

Our Human Trafficking Awareness training modules are available to all employees through our virtual university—Accelerating U. These are made available to specific employees working in our Human Resources, Supply Chain, and Social and Environmental Responsibility organizations. In 2016, we updated these offerings to address specific scenarios likely to be faced in particular job roles. We conducted targeted training with our internal investigations team to alert them to concerns that could come in through our ethics hotline.

Extending supply chain investigations
In 2016, we intensified our monitoring of risks related to the recruitment and employment of foreign migrant workers at supplier sites. We prioritized sites for assessments that we considered to be highest risk based on location and supplier self-assessment questionnaires. All assessments took place in Asia and were conducted by independent third party auditors.

As we raised our requirements and implemented additional due diligence and monitoring, we knew we might uncover previously unidentified issues. As anticipated, we found more issues...
of nonconformance with HPE policies and standards, including high-risk practices and inadequate policies and programs to protect against risks of forced labor. Read more about relevant 2016 audit findings [here](#).

These findings demonstrate the importance of focusing on high-risk suppliers. By uncovering these less visible issues, we can address them and guard against their reoccurrence.

### Advocating for stronger standards

Widespread adoption of consistent policies by different companies and industries is key to transforming the recruitment industry and eradicating risks of forced labor from supply chains. We engage with others within and outside the IT sector to drive systemic change, and to encourage others to join in our approach.

Through this report and engagement with others in the electronics industry, we share our experiences and challenges to:

- **Raise awareness of the issue of human trafficking and forced labor**
- **Enable other companies to build the business case for tackling human trafficking and forced labor**
- **Advance wider stakeholder dialogue and partnerships**

We regularly meet with experts in governments, nongovernmental organizations, and other organizations. This enables us to learn more about hidden areas of risk, emerging worker recruitment practices, and new initiatives designed to tackle these issues.

In partnership with HP Inc., we donated a **guidance document for suppliers** to the EiCC so that it can be used by any member to develop their approach to protecting foreign migrant workers.

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### Recognition of our efforts to tackle human trafficking and forced labor

HPE received a **2016 Stop Slavery Award** from the Thomson Reuters Foundation, in the “Transparency and Response to Challenge” category. The awards recognize companies that have taken concrete steps to eradicate forced labor from their supply chains.

In 2016, HPE was a founding member of the IHRB’s **Leadership Group for Responsible Recruitment (LGRR)**. Group members are committed to driving broad, cross-sectoral adoption of the “Employer Pays Principle.” The Principle states that no worker should pay for a job and that the costs of recruitment should be borne by the employer, since debt incurred by workers during the recruitment process is one of the key risks of forced labor. Membership in LGRR aligns with the principles of our own **Foreign Migrant Worker Standard**, and is part of our position that all workers should be treated with dignity and respect during their employment.

Transparent reporting of our efforts ensures that we hold ourselves accountable to the commitments we make. It enables us to engage in dialogue with others about this important issue. Read our statement to meet the requirements of the [California Transparency in Supply Chains Act](#) of 2010 and the [UK’s Modern Slavery Act](#) of 2015.
Substances of concern

Position
We select the materials in each of our products for performance and quality, paying close attention to the lifecycle impacts of everything we make. We evaluate the substances used in our products and during the manufacturing process. Where we have concerns about potential impacts on people or the environment, we research better alternatives.

Policies
- HPE Supplier Code of Conduct
- HPE Supply Chain Social and Environmental Responsibility Policy
- HPE General Specification for the Environment

Programs
- Supply Chain Responsibility (SCR) program
- Evaluating substances of concern
- Collaboration and engagement on substances of concern
Evaluating substances of concern

Assessing and restricting substances

The selection of materials for our products begins at the design stage. We assess substances with potentially significant risks to people or the environment on an ongoing basis. Where we have identified concerns and through the use of precautionary principles, we look for viable lower-risk alternatives. For example, we use Clean Production Action’s GreenScreen® for Safer Chemicals framework to identify preferable alternatives (see below). As a precautionary measure, we may restrict use of a substance that is under investigation but has not been established to present a risk.

We base our decisions on the best available evidence, including scientific analysis, current and upcoming legal requirements, and published lists of substances of concern. We share our findings with our suppliers, alongside guidance on suitable substitutions, to ensure that they understand our restrictions and are aware of the alternatives.

HPE has a history of commitment to practicing safer materials assessment. We possess a library of more than 100 substances that have been through an assessment process, and we are committed to continually evaluating additional substances as needed. The presence of hazardous substances in products can make end of use disposition and recycling more challenging; read more about our approach to product lifecycle management, including recyclability assessment, here.

Working toward low halogen

Phthalates and halogen-containing materials are of concern to environmental and human health due to their toxicity. Some can take a long time to break down when released into the environment, adding a secondary concern of “bioaccumulation.” These materials include brominated flame retardants, chlorinated flame retardants, and polyvinyl chloride (PVC). We continue to work toward phasing out these materials where technically feasible.

Manufacturing process substances

Many chemicals and materials used during the manufacturing process do not end up in the final product, but could pose a hazard to those who handle them. We give these manufacturing process substances the same level of attention as other materials, undertaking science-based assessments of potential risks.

We restrict the use of hazardous substances such as benzene and n-hexane in our manufacturing supply chain. Our General Specification for the Environment details a full list of substances restricted in our products and manufacturing processes, and we provide our suppliers with clear guidance on suitable alternatives.

Other chemicals and materials used in the manufacturing of HPE products, although not restricted, still need to be handled safely and used appropriately to avoid risk to people and the environment. We work with our suppliers to ensure that they have effective environment, health, and safety management systems and controls in place. The HPE Supplier Code of Conduct communicates our expectations on this issue. Our program of supplier audit and assessment enables us to track performance and agree to follow-up actions with suppliers if needed.

We require our suppliers to undertake their own substance evaluations and eliminate or minimize risks of exposure to workers. Where substances presenting a human exposure risk cannot be eliminated, we require suppliers to protect their workers by providing training and effective personal protective equipment.

Regulatory requirements

We meet or exceed legal requirements on materials wherever we operate, including:

- Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH)
- The European Union Restriction of Hazardous Substances (RoHS) Directive
- The European Union Restriction of Hazardous Substances (RoHS) Directive

We support advances in legislation that contribute to the protection of people and the environment—for example, the inclusion of brominated flame retardants, phthalates, PVC, and other substances of concern in future legislation.

Read more about our:

- REACH and RoHS compliance
- ECO declarations
- Material Safety Data Sheets
Collaboration and engagement on substances of concern

Meeting all legal requirements on substances of concern is essential, but we look beyond compliance. By contributing our knowledge and partnering with others, we can improve materials policies and practices within and beyond our own operations. We:

- Collaborate with peers, governments, and nongovernmental organizations (NGOs) to promote the responsible use of product materials and manufacturing process substances
- Engage in advocacy efforts with industry trade associations
- Work to progress standards for materials assessments and alternatives
- Support and engage in GreenScreen alternatives assessments to ensure that replacement substances provide a significant environmental improvement over old materials

We are an active member of the EICC—including endorsing and participating in its chemical management task force.

GreenScreen®

We use Clean Production Action’s (CPA) GreenScreen® for Safer Chemicals—a materials hazard assessment tool. It enables us to identify safer alternatives when replacing a restricted substance, and to predict substances that may become restricted by global regulatory bodies in the future.

HPE has an in-house authorized GreenScreen® practitioner, which enables us to build internal capacity and undertake assessments without waiting for external input.

We use GreenScreen® to engage closely with HPE product developers at the product design stage, and to communicate specific preferences or opportunities with suppliers. We regularly update past assessments to ensure that we stay up to date.

We work closely with CPA on improvements to GreenScreen®, to drive better and standardized practices across industries.
Employee development and engagement

Position

Our employees drive the success of our company, and their talents push us to the leading edge of our industry. HPE invests in and celebrates the personal and professional development of our employees to expand their skillsets and empower them to reach new heights.

Our culture values two-way communication between and among employees and leaders, and at a corporate level we frequently request feedback from our workforce via surveys, intranet communities, local focus groups, and other forums. This engagement fosters a culture of recognition, where achievements are acknowledged and widely celebrated.

Policies

- HPE Standards of Business Conduct

Programs

- Employee development
- Engagement and recognition
**Employee development**

Our industry is constantly evolving. HPE’s ability to meet the changing needs of our customers depends upon our specialized and skilled workforce. To help employees progress in their careers and keep us competitive, we offer a multitude of development resources in three key areas.

**Leadership development and excellence**

Leaders are the shepherds of company culture. Their values, attitudes, and actions permeate the work environment and signal their expectations of employees. Strong leaders create a strong culture where employees want to do their best. To support leaders, we offer core leadership courses and development activities based on our business strategy and company values. Our flagship offering is the Leading at HPE experience that equips our people leaders, directors, and vice presidents with key leadership skills to guide their teams to success.

**Mentoring**

Peer-to-peer interaction is a meaningful way for our employees to learn on the job. HPE’s Mentoring Network brings employees together from all over the world to collaborate by sharing ideas and insights. This social network enables participants to engage in conversations, post articles and topics for discussion, and support their fellow team members.

**Professional development, continuing education, and job rotation**

Leaders are critical to the professional development of our workforce. People leaders hold regular goal-setting sessions, career conversations, and performance discussions with employees to provide open feedback and foster continued progress. These activities are supported by Workday®, a human capital management software that enables employees and their leaders to collaborate online regarding goal-setting and monitoring, development plans, self-evaluations, and feedback requests. These activities are rooted in and include team and organizational contributions and HPE’s values.

Employee development options are available via Accelerating U, a virtual university of nine colleges available worldwide, to align with HPE’s strategic priorities, including Business and Professional Skills, Services and Solutions, and Sales. Employees can choose from thousands of self-directed activities and instructor-led courses to support business requirements and development goals.

As HPE continues to drive and deliver innovative market solutions, the Global Sales and Partner Enablement organization remains intent on developing our next generation sales force. Education and development activities centered on products and solutions, sales methodologies and skills, value messaging, and social selling support sales as a distinctive, esteemed profession. In 2016, HPE designed and developed “QuickStart,” an end-to-end, best-in-class field and partner sales onboarding program implemented across the globe, helping new employees reach productivity more swiftly through customized regional solutions.

We also encourage employees to leverageexternal experiences that support their personal and professional development. Employees who pursue qualifying bachelors, masters, and doctorate degrees at accredited institutions are eligible to apply for funding from HPE’s Degree Assistance Program. In addition, we partner with external organizations to offer discounted and specialty programs to HPE employees.

Finally—and most importantly—we encourage and value on-the-job development through job rotations and project-based work. Internal practices and policies put employees first when filling open roles. During times of restructuring and change, we engage our current employees in the leadership of these efforts. Internal talent management practices support and enable these rotations by searchable online employee profiles—and at certain levels, succession plans.
Engagement and recognition

As a global company and community, HPE stays connected through shared communication platforms to nurture a culture of recognition, where individuals are celebrated for their contribution to our company’s success.

Connect Now

As HPE’s internal social collaboration platform, Connect Now invites and imparts dialogue around programs, initiatives, and ideas. Employees easily interact and collaborate using hashtags, file sharing, online chats, and more. Connect Now is also one forum for peer-to-peer recognition, enabling employees to celebrate successes publicly.

HPE Insider

Our online news service, HPE Insider, is an in-house monthly television show featuring HPE leaders and employees, providing education and information about HPE products, innovation, and technology in a fun and creative way. Employees can tune into nine different segment categories to stay up to date on all things HPE. In 2016, topics included the Internet of Things, products such as ProLiant and Apollo servers, and the Living Progress Challenge.

Feedback Systems: Voice of the Workforce (VoW) and pulse surveys

We consistently solicit employee feedback and sentiment via an ongoing feedback ecosystem. Our annual companywide Voice of the Workforce survey covers key topics such as inclusion and diversity, leadership, and innovation. People leaders use results to inform action plans they create with their teams. Companywide and regional analyses are also conducted to identify areas of success and opportunities for improvement. In addition, frequent pulse surveys are sent to a random sampling of employees for use at a corporate, group, or team level to gauge sentiment and reaction to recent events or communications. These results then guide the leadership team on how to handle similar topics and events in the future.

Take Our Children to Work

To encourage science, technology, engineering, and math (STEM) interests in future generations and to support a culture of inclusion, we host annual Take Our Children to Work events around the globe. These on-site and virtual events encourage employees to share their HPE experiences with their school-aged children. The program is a cultural icon for HPE in developing younger generations who have a passion for technology and related careers.

HPE Sustainability Network

HPE Sustainability Network, our 12-chapter environmental volunteer and engagement group, brings together employees with a passion for protecting our natural world. Members promote sustainable practices by coordinating localized activities such as educational seminars, Earth Day and World Environment Day celebrations, Earth Hour, and on-site recycling initiatives. The group also supports sustainable commuting practices such as carpooling, bike riding, and the use of electric vehicles as well as community projects such as tree-planting and clean-up days.

Volunteering

Our employees care about the world and their fellow global citizens. Through HPE Gives, our global volunteering program, every employee is gifted 60 hours of paid time each year to spend on volunteer activities. This time allows them to give back to their communities while leveraging their team-building and leadership skills. HPE Gives also supports employees through donation matching, outlined here.

For additional employee engagement activities, see Global Wellness Challenge and Employee Resource Groups.

Recognition@HPE program

Employees and managers celebrate our culture by recognizing our values in action and finding public ways to share individual contributions. The MyRecognition@HPE online forum and community includes four key programs:

- **Peer-to-Peer**—Social recognition through platforms such as Connect Now and HPE Mentorship
- **Manager-to-Employee**—Recognition for above-and-beyond business contributions that bring our values to life; includes recognition points to be used for online shopping among contracted retail providers
- **Company-to-Employee**—Leadership team’s recognition of an employee through ad hoc bonuses
- **Celebrating Years of Service**—Service anniversaries celebrated at year five and at 5- or 10-year intervals thereafter.

16,000
children were hosted at 121 on-site Take Our Children to Work events across 46 countries

530,000
recognition moments occurred in 2016, with 86% of our workforce receiving recognition

Volunteering
Employee health, safety, and well-being

Position

HPE is committed to the health, safety, and well-being of employees. We engage them through communications and training to ensure that safety is implemented in every part of our business, and opportunities available to optimize one's health and well-being are well understood.

Policies

- HPE Environmental, Health, and Safety Policy

Programs

- Ensuring a healthy and safe workplace
- Health and safety communications and training
- Employee well-being
Ensuring a healthy and safe workplace

Our comprehensive Environment, Health, and Safety (EHS) programs and policies ensure that we stay up to date with changes in relevant legislation and meet legal requirements wherever we operate. We continually monitor and improve EHS management processes globally to make them more efficient and effective. Several of our sites across the world have occupational health staff who provide services to employees, ranging from consultations to first aid, medical treatment, health promotion, and disease prevention, as well as specialized services like medical testing and immunizations.

We align our Environment, Health, and Safety (EHS) Policy and corresponding management systems with industry best practice standards. These standards include the Occupational Health and Safety Assessment Series (OHSAS) 18001, ISO 140001, American National Standards Institute Z10, and International Labour Organization (ILO) OSH 2001. We track and monitor injury trends across our company in compliance with the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases. As of 2016, six of our sites were OHSAS 18001 certified.

In 2016, we focused on implementing our quality business management system within the EHS organization. Program highlights include:

- Standardization of multiple processes across our global EHS organization.
- Release of the Healthy Site Reference Guide to provide a systematic approach to improving the health and well-being of individuals by recognizing the importance of certain key factors in the office environment. The guide addresses parameters affecting day-to-day health such as nutrition, ergonomics, access to nature, fitness, and indoor air quality, to name a few.

We collaborate with our business partners to implement programs and policies to certify the health and safety of contractors and HPE employees working at non-HPE locations. We provide guidance through training programs and our HPE Global Contractor Environment, Health, Safety, and Security Handbook.

We always comply with legal minimum standards on environment, health, and safety wherever we operate, often going beyond what is required. Whenever we acquire a new site or company, we introduce our EHS management system during the integration process to ensure that every part of our business adheres to the same high standards. Our approach to employee health and safety takes into consideration regional and country-specific requirements. We regularly review our policies and programs to confirm their alignment with current legislation and industry best practices.

Health and safety communications and training

We frequently engage employees on workplace health and safety topics to establish a culture of responsibility and awareness. We provide online and in-person instructor-led training to communicate relevant health and safety issues and remain compliant with regulatory requirements.

If a global disease event arises, such as the Zika virus, we quickly communicate with our workforce and join in external engagement when appropriate. We address ongoing health and safety issues, such as ergonomics, by hosting training courses and providing guidance through our online risk assessment tool.
Employee well-being

Our Winning with Wellness initiative goes beyond basic health and safety to improve the well-being of employees in the workplace and at home. A dedicated web page on our intranet is accessible to all employees and provides news, programs, and guidance on resilience and well-being.

Our Winning with Wellness initiative focuses on three key areas.

**Physical health.** We offer a number of resources and tools to help our employees stay healthy, including two flagship global programs. Our Power of Prevention initiative spreads awareness on the importance of cancer preventative measures such as screenings, risk-reduction techniques, and education on the causes of the disease. Our Global Wellness Challenge promotes a fit and healthy lifestyle by having employees set fitness goals spanning a six-week period. Through a dedicated social network, fellow participants support and celebrate one another on reaching their goals.

**Stress management.** Work-life balance and the ability to manage stress is imperative to our employees enjoying and succeeding in their careers. Our meQuilibrium program is tailored toward each employee, providing them the tools they need to effectively deal with stress. We also provide personal assistant services and backup child and adult care to help with everyday pressures that may arise.

**Financial wellness.** We invest in our employees by helping them achieve financial security now and for the future. My HPE Financial Wellness is our online guide offering advice on all aspects of financial management such as saving, investing, retirement planning, and debt management.

A number of HPE sites were recognized for their work in employee health and well-being in 2016. Two notable examples are these:

- For the second consecutive year, HPE Italy received the prestigious Workplace Health Promotion accreditation from the Lombardy Region’s Health Services, which recognizes companies demonstrating a strong engagement with healthcare and well-being at work.
- HPE Spain received the first “Concurso Reto Interprofesional” award for their Healthy Living Program to improve employees’ health and well-being by reducing their exposure to certain cardiovascular risk factors and promoting healthier living habits.
Inclusion and diversity

Position

A diverse and skilled workforce drives our company’s success. We foster a culture of inclusiveness where every employee is respected, and courtesy and dignity come naturally.

We are committed to increasing the diversity of our workforce and creating an inclusive environment in which everyone can thrive. From our Board of Directors to our global workforce, this focus helps to drive new business, fuel innovation, and attract and retain the best employees. It makes a difference in the workplace, marketplace, and community, advancing the way we work and live.

We also aim to ensure that the handling of customer data and big data analytics does not result in discriminatory outcomes. Read more about our approach to privacy and data security.

Policies

- HPE Global Human Rights Policy
- HPE Harassment-Free Work Environment Policy
- HPE Nondiscrimination Policy
- HPE Standards of Business Conduct

Programs

- An environment of inclusion
- Employee Resource Groups
- People with disabilities
- Women in technology
- Leadership and accountability
- Supplier diversity
An environment of inclusion

Our global workforce brings a diverse set of skills, backgrounds, and experiences to work each day. In 2016, our primary focus was broadening our inclusive culture to be shared by every employee and implemented companywide. Inclusion allows us to celebrate differences, promote collaboration, and ultimately inspire innovation. We see this as a competitive advantage.

We expect all of our employees to share in our core value of treating one another with respect and standing up against discrimination. We provide training on the benefits of an inclusive culture and how each person can play a role in guaranteeing it is upheld. Cultural Navigator is an online tool used by our various departments to increase awareness around cultural differences. This guidance allows teams to communicate better and build stronger relationships.

In support of our Lesbian, Gay, Bisexual, and Transgender (LGBT) community, we offer an online platform where LGBT employees and their allies can post personal stories. This channel offers an impactful way to share experiences with others and provides a network of support. For the 15th year in a row, HPE received 100% on the Human Rights Campaign Corporate Equality Index. This rating measures a company’s policies and practices in support of the LGBT community.

Read more about why inclusion and diversity is important to HPE.

Employee Resource Groups

Employee Resource Groups (ERGs) are voluntary employee-led communities that provide our people with an opportunity to connect with and support one another. As of 2016, we had 150 chapters across 30 countries. Our ERGs connect in a variety of ways, including these:

• **Mentorship programs** where experienced employees are paired with fellow ERG members to share knowledge, skills, and expertise
• **Focus groups** conducted in partnership with organizations like the United Nations Development Programme (UNDP) to raise awareness and address challenges faced by ERG members
• **Regular meetups** where individuals can share experiences and ambitions with one another in a supportive environment
• **Webcasts** available to our global workforce on topics such as International Women’s Day

In 2017, ERGs will be required to elect a business impact chair to strengthen their alignment with HPE business priorities. We will also encourage them to host one global event annually to bring together and engage like-minded peers across the company.

People with disabilities

Our Global People with Disabilities Program Office was established in 2015 to ensure that those with disabilities have the same opportunities as others to succeed in a career in the IT industry. This office is responsible for developing programs, initiatives, and processes to attract and retain individuals with disabilities. The office aims to achieve five objectives by 2018:

• **Relaunch** the Able@HPE program to improve self-identification rates and find key geographies to further focus activities
• **Establish** a new global governance model for our People with Disabilities ERG to fuel growth and participation
• **Grow** partnerships with external nonprofits in key geographies
• **Leverage** a data-driven approach to track metrics and benchmark activities
• **Influence** accessibility improvements in our facilities, IT systems, training, and collaboration tools

[Read more about ERGs and other activities.]

Dandelion Program

Those with autism deserve an equal chance at employment in the IT industry. However, these highly skilled individuals often have difficulty accessing and securing jobs. To address this issue, we established Dandelion, a program that helps individuals with autism find opportunities within HPE, including cybersecurity and data analytics roles. Since the program’s inception in 2015, we have employed nearly 60 individuals globally.

[90%]

HPE U.S. scored a 90% on the Disability Equality Index, and was recognized as a great place to work for people with disabilities, by the U.S. Business Leadership Network
Women in technology

We aim to be the number one technology company for women. We are focused on building a strong pipeline of female talent in positions such as coders, designers, engineers, and technology executives. In 2016, 31% of our workforce was female, while 19% of director-level and above positions were held by women.

There is still much progress to be made in this area and we remain committed to gender equality. Our ongoing programs include these:

- Partnering with external organizations such as the National Center for Women and Information Technology (NCWIT) Aspirations in Computing to enhance opportunities for women and provide support at every stage of their careers
- Sponsoring HPE women to attend technical conferences such as Grace Hopper, the leading conference for women in technology, which hosted 15,000 attendees from 87 countries in 2016, including nearly 200 female HPE employees
- Supporting the establishment of women’s ERGs across our regions
- Investing in STEM education

Leadership and accountability

Inclusion and diversity is supported and upheld by every employee at HPE. Our Chief Diversity Officer and Global Diversity and Inclusion board set our standards to which we hold one another accountable. Each department is required to set measurable goals in alignment with our Global Diversity and Inclusion Strategy and our diversity and inclusion policies.

Employee feedback on inclusion and diversity is provided annually through our Voice of the Workforce survey. This survey gauges whether employee experiences at HPE match their expectations for an inclusive workforce. Management uses the results to inform their approach to inclusion and diversity within their departments.

In 2017, we aim to create a greater degree of accountability for management to foster inclusion among their teams. Leaders will be evaluated based on demonstrated actions in this area such as sponsoring an ERG event or investing in women in technology programs. Read more about our inclusion and diversity leadership activities and strategic partners.

Every employee is accountable for upholding our standard of zero tolerance for discrimination or harassment. We encourage employees to report any concerns to their human resources department or by contacting the Ethics and Compliance office at corporate.compliance.hpe@hpe.com

Supplier diversity

A diverse supply chain provides innovative solutions and supports local economies. Our Supplier Diversity program gives small and diverse suppliers the opportunity to compete for our business. In turn, our inclusive supply chain meets the need of our customers and leads industry benchmarks.

We provide guidance to select minority- and woman-owned suppliers through our Mentor-Protégé program. In 2016, a number of these suppliers were recognized for their business achievements:

- For the 10th year, ICON Information Consultants ranked among the 50 fastest growing women-owned or -led companies by Women Presidents Org, a title that signifies the success and growth of women entrepreneurs in privately held multimillion-dollar companies.
- ITSourceTek, a certified Minority Business Enterprise, was named in the 2016 Top 10 Healthcare Compliance Solution Providers by Healthcare Tech Outlook magazine, recognizing this supplier’s ability to implement solutions to overcome industry challenges and fulfill customer needs.
- In September 2016, Pyramid Consulting Inc. was named to the National Minority Supplier Development Council’s Corporate Plus program, demonstrating Pyramid’s ability to execute national contracts for major corporations as a minority-owned supplier.

We continue to seek out diverse suppliers and improve our Supplier Diversity program by collaborating with peers and third-party organizations. In 2016, HPE participated in multiple events, including these:

- Push Tech 2020 Summit focused on expanding the diversity and inclusion of minorities in the technology industry. HPE brought a number of suppliers to join the event, and an HPE representative also spoke on the panel Breaking Down Barriers to Inclusive Sourcing.
- A customer’s Supplier Diversity summit, where two Mentor-Protégé suppliers joined HPE in presenting on combined capabilities and resources that can be used to support new business.

Read more about HPE’s 2016 supplier diversity data here.

HPE’s spend with U.S. diverse suppliers in 2016 was $768 million, representing 21% of our U.S. supply chain spend.
Ethical behavior and business partnerships

**Position**

HPE is committed to upholding the highest ethical standards. We set clear expectations for our employees and business partners to keep us strong and grounded, taking individual and collective responsibility for our actions. We value honesty, respect, and integrity. We build relationships with partners and suppliers that hold the same values as HPE, and we expect them to share our approach to business ethics and accountability. We never tolerate corruption, by anyone at any time. We believe in conducting business the right way, by building partnerships based on mutual trust and with a shared sense of integrity and ethical commitment.

**Policies**

- HPE Standards of Business Conduct
- HPE Supplier Code of Conduct
- HPE Partner Code of Conduct
- HPE Contingent Worker Code of Conduct
- HPE Supply Chain Social and Environmental Responsibility Policy
- HPE Anti-corruption Policy
- HPE Global Business Amenities Policy

**Programs**

- Anti-corruption program
- Ethics and compliance program
- Training, communication, and recognition
- Reporting concerns
Anti-corruption program

Supported by attorneys and other compliance professionals, our anti-corruption program provides guidelines and principles for all HPE employees so that, together, we uphold strong ethical standards.

We benchmark our efforts against those of other companies to help us identify improvements and to make sure we remain alert to potential risks. We identify countries at a high risk for corruption, using a combination of internal data and Transparency International’s Corruption Perceptions Index.

If issues arise, we tackle them quickly and with transparency. In 2014, Hewlett-Packard Company reached a settlement with the U.S. Department of Justice and the Securities & Exchange Commission over the isolated actions of a small number of employees at Hewlett-Packard Company subsidiaries in Russia, Poland, and Mexico. Hewlett-Packard Company cooperated fully with U.S. enforcement authorities, and our Ethics and Compliance team took action to prevent future corrupt conduct.

HPE provides anti-corruption policies, procedures, and tools to help employees identify and avoid potential issues. For example, to ensure that providing or receiving business amenities—including gifts, travel, and entertainment—is permissible, employees rely on HPE’s Global Business Amenities Policy guidelines and use our Amenities Approval Tool where required. In 2016, we tailored our Standards of Business Conduct training by adding three new anti-corruption modules developed for specific jobs and locations to target the particular risks those groups of employees face concerning bribery and books and records.

We require HPE employees to participate in robust training on ethics and compliance. Read more about our training programs here.

Ethics and compliance governance structure

The HPE Board of Directors holds ultimate responsibility for ethics and compliance, supported by the Audit Committee and Ethics and Compliance Committee. Read more about our governance processes.

HPE encourages a culture of transparency and ethics above all. We provide multiple reporting channels to encourage anyone with a concern or question about ethics or business conduct to speak up without fear.
of retaliation, and make it easy to get in touch. All reports are confidential and can be submitted anonymously where allowed by local law. We review every concern and respond promptly. If an investigation is required, we make sure the right people are involved, while respecting the need for confidentiality. We take all alleged violations of company policy seriously, carrying out disciplinary or remedial action when needed.

Our global case management system is a central record of all allegations of ethical violations. We use it to spot trends and identify any additional training or controls in particular regions or risk categories.

**Training, communication, and recognition**

Everyone at HPE shares responsibility for upholding our ethical standards. We expect individuals to be accountable for their own actions, and we offer support through a range of training and communications. These initiatives keep everyone at HPE up to date with requirements, and we celebrate individuals or teams that demonstrate strong ethical performance.

We are focused on keeping our training relevant, timely, and engaging. We pay special attention to likely challenges faced by different employees and tailor our training accordingly, enabling each person to work through real-life scenarios appropriate to their job role.

Our program of ethics training includes the following:

- Board members must take [Standards of Business Conduct](#) training every two years
- New hires complete a comprehensive SBC training course, including anti-corruption content, within 30 days of joining HPE
- Every year, all employees must complete the SBC refresher course, covering key policies, procedures, and high-risk issues

Our internal ethics and compliance social media platform—part of our internal social network Connect Now—enables our employees to ask questions, download resources, and participate in debates about ethics and anti-corruption issues.

Celebrating achievement in ethical conduct reinforces our values. Each year, we recognize individuals or teams that demonstrate ethical leadership through our Ethics Champions Recognition Program.

In 2016, we developed an Ethics Road Show to connect senior members of the Ethics and Compliance Office with key HPE business leaders in different regions. The Road Show gives senior leaders the opportunity to discuss the critical role managers play in establishing a culture of ethical conduct within their organizations. We expect to expand the program in 2017.

99.6% of active HPE employees participated in annual SBC training.
Transparency, accountability, and reporting

Position

Our commitment to transparency comes naturally at HPE. We rely on open, trusting relationships with our customers, partners, and communities to stimulate innovation and collaboration.

We seek feedback from internal and external stakeholders and openly disclose our performance on key issues. The insights from our stakeholder relationships help us to identify where we need to do more, and ensure that we are held accountable for our actions.

Programs

- Staying open and accountable
- Stakeholder partnerships and engagement
Staying open and accountable

Maintaining transparent channels of communication enables us to stay ahead of external trends, surpass expectations, and keep in touch with the world around us. We report externally to share our progress and performance, clarify our approach to key issues, and tell our story. Our sustainability reporting includes the following:

- **Living Progress Report**
- **CDP**
- **Dow Jones Sustainability Index**
- **EcoVadis**

Our leaders and employees work together to embed our culture and values across every business function worldwide. A robust governance structure ensures that we hold one another accountable for our behaviors and actions. Read more about our approach to corporate governance.

Stakeholder partnerships and engagement

Everything we do is built on partnerships—with customers, employees, leaders, suppliers, policy makers, industry bodies, nonprofits, and sector experts.

Clear communication, ongoing dialogue, and close collaboration strengthen these relationships. By connecting openly with our stakeholders, we:

- Understand external priorities
- Share expectations of conduct and performance
- Learn and innovate
- Contribute to industry-leading initiatives
- Hold ourselves and others accountable to the highest standards

We engage key stakeholders involved in our most material issues and seek feedback from them to identify trends, evaluate progress, and influence our strategy. We share updates on our progress and invite engagement on Twitter at @HPE_LivingProg and through our Inspiring Progress blog.

Since our first **Living Progress Exchange** (LPX) in 2014, we have regularly brought together sustainability, business, and opinion leaders to discuss the challenges and opportunities of using technology to address some of the world’s toughest social and environmental issues. These discussion forums have been held online and at local events around the world, to engage and inspire a global community to share ideas and best practices. In 2016, we hosted our first simultaneous online and in-person LPX at the Verge 2016 conference in California, where we explored whether and how the Internet of Things (IoT) can be a driver of sustainability. Read insights from this discussion in the LPX white paper.
Position

HPE has a valuable intellectual property (IP) portfolio. We’re committed to building and maintaining an IP portfolio that is strategically aligned with our products and services. Our IP portfolio not only assists in providing us the freedom of action to participate in the markets in which we choose to participate, but also differentiates our products and services from those of our competitors, and generates revenue to help fund future research and development activities.

Programs

- Advocating for intellectual property protection

Policies

- HPE Standards of Business Conduct
Advocating for intellectual property protection

We know firsthand the critical role patents play in the global economy and that strong patent rights are central to maintaining a competitive advantage. Effective frameworks that safeguard IP encourage creativity and innovation, generating value for our customers and businesses. We support the protection of intellectual property rights in every market. Our advocacy complies with all applicable national and international laws, as well as our own Standards of Business Conduct.

HPE engages directly with governments on counterfeiting, particularly in high-risk regions. We:

- Support the elimination of counterfeit products
- Encourage awareness campaigns about counterfeiting
- Advocate for the best practices in procurement to avoid counterfeit products

In the United States, we encourage all branches of the government to pass and interpret legislation that modernizes intellectual property frameworks and provides a proper incentive for companies like HPE to continue to invest in bringing innovative products and services to the market. We support reforms that:

- Strengthen the U.S. patent system
- Encourage technological innovation
- Improve patent quality
- Deter excessive patent litigation in the courts and at the International Trade Commission

Read more about our broader public policy engagement activities.
Public policy engagement

Position
HPE’s Corporate Affairs team drives the company’s strategic political engagement and global citizenship initiatives. Our engagement with government leaders and global audiences encourages public policies that promote innovation, provide access to technology, eliminate barriers to growth, and advance our business priorities.

As a technology innovator that fuels transformation, we share our business perspective and expertise with policy makers to shape policies for the digital age.

Policies
- HPE Political Contributions, Criteria, and Approvals Policy

Programs
- Policy priorities
- Political engagement
- U.S. political engagement
Policy priorities

We focus our public policy work on issues that grow and protect our business. Our engagement with government leaders and global audiences encourages policies that promote innovation, provide access to technology, eliminate barriers to growth, and advance our business priorities. Specifically, we:

- Advance policies to promote adoption of innovative new technologies such as the IoT and High-Performance Computing
- Encourage spectrum availability for increased connectivity
- Advocate for improved market access so our technologies can reach global customers
- Support competitive tax policies that encourage innovation, job creation, and economic growth
- Advise governments to consider sustainability as integral to technology decisions to meet the data needs of the future

Highlights in 2016 included:

- Leading HPE executive participation in the World Economic Forum (WEF) in Davos, Switzerland, and regional WEF events in Latin America, Africa, China, and the Association of Southeast Asian Nations (ASEAN)
- Influencing policies related to High-Performance Computing, IoT, autonomous vehicles, and spectrum availability
- Engaging on U.S. tax reform and shaping proposed regulations
- Resolving market access issues affecting our products and services
- Supporting multiple key public sector awards
- Hosting high-level government delegations in Palo Alto, California

Detailed information on our policy positions can be found on our Public Policy website.

Political engagement

Our Corporate Affairs team leads our public policy engagement with government officials around the world. We also work with industry associations on issues faced by multiple companies. We list our major memberships and coalitions on our Public Policy website.

Our engagement in the political process is ethical, legal, and transparent, and abides by the HPE Standards of Business Conduct.

U.S. political engagement

As part of our broader U.S. government relations strategy, we make corporate political contributions to U.S. state and local candidates, committees, and ballot measures, where allowed. These contributions are consistent with our political contributions policies, criteria, and approvals.

U.S. law prohibits corporate contributions to federal political candidates. Eligible employees can make individual donations to the Hewlett Packard Enterprise Political Action Committee (HPE PAC). The HPE PAC is a separate legal entity, and donations are voluntary. HPE PAC makes bipartisan contributions to campaigns and committees for congressional candidates who share our policy views.

HPE does not generally make political contributions outside the United States.

We disclose our political contributions as follows:

- Candidate, groups, and Section 527 organizations that received corporate contributions from HPE
- Candidates and groups that received Hewlett Packard Enterprise PAC contributions

HPE political contributions totaled nearly $914,000 in 2016.
Our customers

As the demands for connectivity continue to grow, our customers are empowered to expand their IT infrastructure while minimizing their environmental impacts. By responsibly managing our product lifecycle, our products can have lasting positive impacts.

As technology rapidly evolves, the risks for data privacy and security also increase in complexity. We invest in the expertise to anticipate cyberthreats and maintain a robust privacy program.

Groundbreaking research powered by the sun

Hikari isn’t just the world’s first solar-powered supercomputer. Hikari enables groundbreaking research into the Zika virus, and it will also be used by the University of Texas to investigate other diseases such as cancer.

This HPE Apollo 8000 System is a collaboration between the Texas Advanced Computing Center (TACC), the New Energy and Industrial Technology Development Organization (NEDO), a Japanese government agency, and NTT Facilities Inc.

Built as a demonstration project, Hikari combines highly efficient warm-water liquid cooling with high-voltage direct current (HVDC) power from a 250kW array of solar panels. Using HVDC is energy efficient because it eliminates the need for four of the power conversions that would traditionally be required in this type of system.

TACC estimates suggests that Hikari technology could deliver a 10–15% reduction in power utilization in the data centers of the future.

Watch more here.
Patient-centric healthcare delivered via the cloud

In the health sector, access to the right data at the right time can make the difference between life and death. Philips Healthcare manages 20 petabytes of data, more than 800 million clinical studies in 31 countries, and thousands of data centers. The company sees a future where patient-centric healthcare is the norm, and where data is an asset to be harnessed, not simply managed.

HPE worked with Philips to design a hybrid cloud infrastructure at the heart of the business, that when complete, will enable its huge information resource to span the traditional IT environment and private and public cloud efficiently. The company will have an IT infrastructure fit for the future, able to connect physicians, patients, and other healthcare stakeholders quickly with data that is relevant, accurate, and potentially life changing.

Watch more here.

“Hewlett Packard Enterprise understood the massive transformation, the hybrid environment that we were going to be living in for years to come. A strategic partner understands your business objectives, what challenges you're having getting there, what opportunities you may not even have thought of, and presents that to you very often without you even asking for it. And that's where Hewlett Packard Enterprise is with Philips.”

Stephen R. Olive
Philips Group Chief Information Officer, Corporate IT, Business Transformation

A petabyte is a measure of data storage capacity that is equal to 2 to the 50th power of bytes.

Photo: Philips
Delivering 3D animation for less

As digital animation techniques become more sophisticated, computing requirements increase in complexity. More data means escalating costs, processing time, and energy use.

Shanghai SingingRain Animation has long produced high-quality animation products, including the recent launch of a revolutionary 3D series, Nano Core. We worked with them to transfer their animation rendering process onto the HPE Moonshot System, ensuring quality while reducing cost.

The result was a 25% improvement in computing performance and a tenfold reduction in energy use. Nano Core is now produced faster: rendering a single episode takes less than a month, compared to one and a half to two months previously. IT maintenance time and workload have also been reduced.

Shanghai SingingRain Animation now produces its great animations faster, at lower cost, with less environmental impact.

Read more here.

"HPE Moonshot System has set many industry records, including the highest computing density, lowest energy consumption, and smallest footprint, allowing us to achieve a balance between cost control and quality assurance, which is also an important reason for us to choose HPE as our partner."

Lu Jun
producer of Nano Core of Shanghai SingingRain Animation Design Co., Ltd.
IT as an efficiency enabler

**Position**

HPE is the industry's leading provider of **hybrid IT**. Our systems are optimized to run the data centers of today, manage the multi-cloud environments of the future, and power the emerging Internet of Things. We design infrastructure to meet our customers' evolving computing needs, cutting their time to value while reducing costs and environmental impact.

**Programs**

- **IT efficiency**
- **Data centers for the modern enterprise**
- **Delivering efficiency benefits through HPE services**
- **Harnessing the power of cloud computing and the Internet of Things**
IT efficiency

Accelerating innovation, transformation, and value for customers requires analyzing an exponentially increasing amount of data. The computing power it will take to harness the insights from this data is not sustainable without significant shifts in the design and use of IT products and services.

HPE has been a leader in IT efficiency practices—including equipment, energy, and resource efficiency—for many years. We regularly share our knowledge and insight with customers, stakeholders, and governments across the globe.

Our research organization, Hewlett Packard Labs, develops disruptive technologies to enable the step changes in energy and material efficiency required to meet the challenges of the modern world. HPE recognizes that the world is going to run out of the energy required to facilitate evolving data needs without innovation in energy efficiency and sustainability. Once deployed at scale in HPE products, these innovations—which include the server on a chip architecture included in our Moonshot systems and several technologies in our current research project, known as The Machine—have the potential to revolutionize the IT systems of the future. Moving from general-purpose processors to task-specific, system-on-chip ecosystems can simultaneously achieve significant gains in computing performance and power efficiency.

Equipment efficiency

Through innovative product designs and solutions, we enable our customers to maximize the utilization level of the processing and storage capabilities of their IT infrastructure, achieving more work for less cost and lower environmental impact.

The most common equipment efficiency opportunity comes from customers using HPE products within their own infrastructure. For example, idle and underutilized servers are common in data centers, with customers often unaware of this inefficiency. HPE servers incorporate our industry-leading Integrated Lights Out (iLO) firmware, which monitors significant aspects of server health and performance, including utilization levels and power consumption. Using HPE OneView management software, customers can monitor historic and real-time data and make adjustments to increase server utilization and avoid wasted energy and cost.

Our software-defined servers are optimized for specific workloads. For example, HPE Moonshot systems contain server cartridges, each of which is optimized for a specific application or workload. Up to 45 of these cartridges are housed in a common chassis, which integrates management, power, cooling, networking, and storage. Moonshot’s innovative design ensures high performance for less equipment—using up to 90% less space than similar industry-standard configurations.\(^9\)

To maximize equipment efficiency, we developed HPE Synergy, combining computing power, infrastructure, and storage into a single platform. This maximizes efficiency while avoiding unnecessary costs, energy use, and space. It is the world’s first platform built for “Composable Infrastructure,” able to handle traditional IT and cloud computing with equal speed and agility.

Energy efficiency

Energy efficiency involves using the least amount of energy necessary to provide the best level of computing power, storage, or connectivity. We have been innovating in energy efficiency since 1992 through our Design for the Environment program.

Some of our energy efficiency innovations are as follows:

- Design changes in power conversion, processor performance, and cooling enable our generation 9 ProLiant servers to use up to 20% less energy than the previous generation servers.\(^10\)
- Power, cooling, and networking efficiencies in our Moonshot systems, combined with their software-defined server design, allows them to process workloads using up to 65% less power than traditional servers—reducing energy consumption and associated carbon emissions.\(^11\)
- The warm-water cooling design of our Apollo 8000 systems uses 28% less energy than air-cooled systems and eliminates the need for chillers.

\(^10\) HPE internal testing, compared to a traditional 2U/2P rack server. Numbers vary by Moonshot server cartridges and customer configuration based on HPE internal analysis. For example, the HPE Moonshot for NoSQL Databases and for Hadoop applications would utilize up to 90% less power, use 97% less space, and cost 78% less than a traditional server environment.

\(^11\) Based on HPE internal testing conducted July 2014.

\(^12\) HPE internal testing, compared to a traditional 2U/2P rack server. Numbers vary by Moonshot server cartridges and customer configuration based on HPE internal analysis. For example, the HPE Moonshot for NoSQL Databases and for Hadoop applications would utilize up to 90% less power, use 97% less space, and cost 78% less than a traditional server environment.

Performance will be measured per watt of electricity across high volume server products using industry-standard test methods. This performance will reduce the carbon emissions per operation by over 95%.
• Our energy efficiency efforts extend to our storage and networking products. For example, HPE StoreVirtual software, when combined with our G9 ProLiant servers, offers customers a 60% saving on energy costs and 50% reduction in use of physical space.

Our 2025 goal is to increase the energy performance of our product portfolio by 30 times, compared to 2015. When we meet this goal, we will have reduced carbon emissions per operation by over 95%.

Resource efficiency
We evaluate several aspects of resource use across our product portfolio, including the type and quantity of materials in the product, and the data center resources—such as space, power, and cooling—required to operate the product.

• HPE 3PAR StoreServ Storage reduces space, power, and cooling needs by up to seven times, compared to equivalent products.

• Our generation 9 ProLiant servers are designed to operate in warmer data center environments, reducing the amount of cooling required for optimal performance and allowing customers to take advantage of ambient air cooling, resulting in up to 20% energy savings.

Data centers for the modern enterprise
Data centers are essential tools for today's information-rich world, but traditional designs are large and energy intensive.

We work with our customers to design and build data centers equipped for the future. We optimize cooling and equipment configuration, alongside offering services such as energy analysis, lifecycle costing, and dynamic modelling.

Our data center services and solutions enable customers to handle evolving processing needs more efficiently, and often enable the achievement of external energy performance certifications such as LEED and ENERGY STAR®.

• HPE Modular Data Centers enable customers to match their data center to their individual needs. Scalable, flexible, modular, and repeatable blocks provide just the right amount of computing power, avoiding the use of unnecessary energy, space, and hardware.

• HPE Micro Datacenter is a self-contained, modular, software-defined data center designed for the IT environment of the future. It incorporates computing, networking, storage, and control automation into a very small but complete enterprise IT data center. HPE Micro Datacenter enables the flexibility to deploy computing wherever and whenever customers need, while maintaining the efficiency, security, and control of a corporate data center. This saves significantly on cost and energy use. It is ideal for use when building a data center, leasing space, or creating a computer room is impractical or cost prohibitive, including deployment in remote, potentially hazardous, or insecure environments.

We utilize the latest HPE technology for our own data centers—read more here.

14 Based on HPE internal comparative analysis of publicly available data from major competitors, June 2013.
15 A standard measure of IT energy efficiency.
16 Based on comparison of 12 PB usable 100% SSD array. 48 x Pure FA450 Dual controller (24 racks) verse 1 3PAR StoreServ 208x0 (3 racks).
17 As specified in ASHRAE A3/A4 environments.
Delivering efficiency benefits through HPE services

HPE offers a variety of efficiency services to help customers increase the IT efficiency of their own operations.

HPE Data Center Facilities Services

We provide a complete set of services to help customers design, implement, and more efficiently operate converged IT infrastructure and facilities. They include a range of data center services:

- **Strategy development**—strategic technology planning for business growth and change
- **Facilities design**—building in resilience, performance, and energy efficiency
- **Facilities implementation**—a full service to manage the entire data center solution from start to finish
- **Operational consulting and commissioning**—consulting services to verify and increase customers’ ability to meet immediate and long-term operational goals
- **Assessments and energy services**—enabling better use and management of infrastructure, energy, capacity, and costs
- **HPE Facility as a Service**—customers lease data center space on a pay-as-you-go basis, so they never use more energy or space than required

System tools and configuration

We collaborate with our customers on an ongoing basis to configure their systems for maximum efficiency, optimize the utilization of computing resources, and reduce the amount of support resources required.

We offer online tools that customers can use to predict power and thermal requirements for different server and storage configurations, as well as tools to help customers evaluate the total cost of ownership (TCO) and return on investment (ROI) of system upgrade options.

**HPE Power Advisor** is an online and downloadable tool that estimates power requirements for different server and storage combinations and configurations.

**HPE TCO and ROI calculators** are available for servers, storage, converged systems, and hosted configurations.

Harnessing the power of cloud computing and the Internet of Things

The ability to rapidly turn ideas into new products or services is essential for the modern business. IT systems must evolve to keep pace with the growth in big data and the emergence of new technologies.

The advent of cloud computing has changed the way information is handled. It enables huge sets of data from multiple sources to be stored and processed without being tied to a physical location.

We work with customers to make the transition from traditional place-based IT structures to hybrid-IT systems. **HPE Helion** provides a simple, secure, and fast solution to the cloud computing needs of the modern enterprise, enabling disruptive business models to create value and fulfill their potential.

The emerging IoT—a proliferation of interconnected devices able to collect, exchange, and analyze data—offers endless possibilities for smarter, more efficient systems and organizations. With more than 20 billion devices expected to join the IoT by 2020, the ability to extract value from the vast amounts of data created will provide a distinct competitive edge.

Our **Intelligent Edge** solutions enable our customers to harness this potential. HPE **Edgeline IoT Systems** combine computing, control, data acquisition, and server management systems into a single piece of compact, robust hardware. They are designed to extract insights and maximize control over IoT systems, without the need to move the data to a larger data center for processing and analysis.

Read more about how HPE products and services are enabling our **customers** and the wider **global community** to benefit from the power of technology.

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18 A hybrid system combines both on-premises traditional computing capabilities and private cloud capabilities.

19 Estimate from Gartner.
Product lifecycle management

Position

Our product portfolio is vast and varied—from servers, storage, and networking equipment, to highly efficient modular data centers and powerful systems designed to handle the emergent Internet of Things. For every product, each stage of the lifecycle offers opportunities for us to make a positive difference to people and the environment. From the design process through to end-of-life options, we work to understand and reduce the environmental and social impacts of HPE products and solutions.

For recycling services, visit www.hpe.com/recycle.

Policies

- HPE Export of Electronic Waste to Developing Countries Policy
- HPE Supplier Code of Conduct
- HPE Vendor Requirements for Hardware Recycling Standard
- HPE Vendor Requirements for Hardware Reuse Standard
- HPE General Specification for the Environment

Programs

- A lifecycle approach to design
- Supply Chain Responsibility (SCR) program
- Extending product life
- Responsible management and disposition of electronic waste
A lifecycle approach to design

**Product design**

In 2016, we contributed to a CDP report highlighting the benefits of the TCO approach, and took part in a related panel discussion at the Bloomberg Sustainable Business Summit.

To optimize the environmental performance of HPE products we first consider the nature and scale of impacts at each stage of the lifecycle. This includes how we source and utilize materials, the way in which products are manufactured and used, and what happens to them at the end of their working life.

Calculating product carbon footprints (PCF) enables us to quantify these impacts and identify opportunities for improvement. We collaborate with academics, peers, and others to further develop the Product Attribute to Impact Algorithm (PAIA)—a streamlined tool for calculating PCF that enables a consistent industry approach. The first version of the PAIA tool for servers was completed in December 2016, and will be applied to all new HPE servers. Our studies show that use of HPE products by our customers accounts for the largest portion of our PCF, followed by product manufacturing—see our overall carbon and water footprints here.

This detailed understanding of product impacts enables HPE product stewards and designers to work together to consider lifecycle impacts at the design stage and prioritize areas for improvement. They use our Design for the Environment (DfE) program—an engineering-based approach to product development that focuses on the specific environmental impacts of HPE products, processes, and facilities. The DfE program has three priorities:

- **Energy efficiency**—reduce the energy required to manufacture and use HPE products
- **Materials innovation**—use less raw material and choose materials with lower environmental impact
- **Design for recyclability**—design products that are easy to upgrade and recycle, aided by our Recyclability Assessment Tool (RAT)

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Eco-labels establish social and environmental standards that exceed regulatory requirements. In some markets, eco-label conformance is required to sell qualifying products into that market. HPE supports several eco-labels to meet our customer needs. We participate in the development of these leadership standards and use this information to inform our DfE program.

- Many of our products are ENERGY STAR® certified, and many of our power supply units are 80 Plus certified—both of these programs recognize products with superior energy efficiency.
- HPE is part of a stakeholder group working to develop the EPEAT server standard, scheduled for completion in early 2018. This voluntary standard will go beyond regulatory requirements to drive environmental leadership in server design and manufacturing.
- We produce industry-standard IT ECO Declarations for most new HPE products.

IT Eco Declarations provide accurate and verifiable environmental self-declarations for a specific product or product family in an industry-standard format. They take account of legal requirements, such as hazardous substances and product treatment information, and market requirements, such as design disassembly and product lifetime.

Read more about our eco-label activity in 2016 here.

Our RAT enables us to evaluate the percentage of different materials in typical HPE products and calculate overall recyclability. It enables us to identify priorities for increasing the amount of recycled content as well as improving the overall recyclability of our products. In 2016, we completed our first RAT calculations for a typical HPE server, storage unit, and networking device—read more here.

Read more about:

- Our work to reduce the halogen content of our products
- Our product energy use goal
- Our approach to ethical sourcing

IT Eco Declarations are not generated for individual parts and accessories. Does not include “proactive” declarations for company products that are acquired by HPE—IT Eco Declarations are retroactively created for such products.
Packaging design

We collaborate with suppliers to develop packaging innovations balancing a range of factors: effective product protection, environmental impact, customer expectations, cost, and evolving regulatory requirements. Detailed supplier guidelines promote the use of efficient packaging design and use of sustainable materials. We preferentially appoint suppliers with strong environmental performance and a commitment to sourcing from responsibly managed forests.

Global packaging initiatives in 2016

- **Reduce.** Reduced packaging material for HPE SATA DVD drive option kit by 17% and for HPE Blade Server BL 460c by 24% (by weight).
- **Reuse.** Partnered with a supplier in Singapore to reuse packaging material for the HPE C7000 chassis, preventing 225 tonnes of CO₂e emissions in 2016.
- **Recycle.** Replaced expanded polyethylene (EPE) foam packaging cushions with 100% recycled thermoform material for hard drives and HPE SATA DVD drive option kit, avoiding more than 100 tonnes of CO₂e emissions each year.

In 2016, HPE received two Singapore Packaging Agreement (SPA)
21 awards, which recognizes achievements in reducing packaging waste. This included a gold award for our sustained overall efforts in this area, and a merit award for specific packaging initiatives.

Extending product life

To power growth in a world of limited resources, we continue to develop services for our products to be repaired, upgraded, and taken back after use. Our transition toward circular economy approaches includes reusing or recycling parts and materials, and developing products that have longer, or many, lives.

We work with a global network of vendors providing customer recycling capabilities in 65 countries. All conform to our global reuse and recycling standards, which avoid irresponsible disposal of used electronic equipment. Our entire U.S. network of electronic hardware recyclers is certified to either R2 or eStewards standards. Our global recycler network has expanded R2 or eStewards certification in other countries as well, including Mexico, Brazil, and many Asia Pacific countries. HPE utilized recyclers in Europe are certified to similar standards such as WEEELabEx.

Our range of options enabling customers to extend use, reuse, and recycle products include these:

- **HPE Renew.** Our extensive portfolio of remanufactured HPE products offers customers as-new reliability and performance at a minimum 15% cost discount.
- **HPE Trade-In program.** Customers can trade in old equipment when buying new HPE hardware.
- **HPE Asset Recovery.** Globally, we offer customers a secure and legally compliant process for retiring and remarketing used data center and workplace equipment, managing this complex process through collection transport, auditing, data cleansing, and resale.
- **Hardware recycling processes.** We work with a network of recyclers who demonstrate a history of compliance and good practice. They utilize a combination of automated and manual methods to dismantle, shred, and separate materials. These services cover 65 countries, and we offer targeted recycling initiatives in a range of locations, including the Americas; Europe, the Middle East, and Africa; Asia Pacific; and Japan.

Responsible management and disposition of electronic waste

The responsible management of electronic waste requires collaboration and cooperation with recycling providers, customers, governments, and other stakeholders.

We audit our electronic hardware recyclers, including recycling output streams to final disposition. Our long-standing recycling vendor standards prohibit the disposal of electronics to landfill wherever there are viable alternatives.

The unauthorized dumping of electronic waste (e-waste) is not acceptable, and we actively support efforts to prevent this through our auditing programs and legislative advocacy. We are committed to meeting the requirements of the Basel Convention in the control of hazardous wastes and their disposal. Our global corporate policy bans the export of nonworking e-waste from OECD and EU2 countries to non-OECD countries outside the EU, either directly or through intermediaries. We look for opportunities to support local recycling by expanding our recycling network according to customer and operational needs.

Read more about our approach to waste and hazardous materials.

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21 A joint initiative with the Singapore government, industry, and NGOs to reduce packaging waste in Singapore.
22 Reduce, reuse, and recycle.
23 Available services differ among countries and regions.
24 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 processing or preparation.
26 European Union.
Data security

Position
Keeping personal information safe is a top priority for our company and our customers. As technology evolves rapidly, so does the potential for cyberthreats. We offer complete security solutions to anticipate threats and reduce the time and costs associated with attempted data breaches.

Protecting data is everyone's job, so we invest in maintaining a security-conscious workforce through regular training and security awareness campaigns.

Policies
- HPE Standards of Business Conduct
- HPE U.S. Public Sector Code of Conduct
- HPE Supplier Code of Conduct

Programs
- Anticipating evolving threats
- Helping our customers stay secure
Anticipating evolving threats

The rapid expansion of the cloud and big data offer new opportunities to connect, share, and rapidly analyze information and also presents an increasing challenge to cybersecurity.

In this shifting context, to remain safe, we need to be pragmatic and innovative. We work to stay ahead of potential security vulnerabilities, monitoring 23 billion security events each month and managing more than 1.5 million security devices through our ten Security Operations Centers worldwide.

We know how to anticipate threats because we understand how they're created. Our market-leading research predicts vulnerabilities and provides security intelligence, helping modern enterprises stay ahead of emerging risks.

By taking a proactive approach to security, we protect data—from personal information to intellectual property—and keep it out of the wrong hands. Customer and employee privacy are of the highest priority, and we regularly collaborate with employee representation to balance the values of cybersecurity and privacy.

Helping our customers stay secure

We help our customers anticipate threats where they are most likely to occur. HPE Security Solutions offers a systematic end-to-end approach to cybersecurity management, including:

- **Security Management.** Our advanced security analytics enable customers to identify and manage risks, while HPE ArcSight software provides real-time threat prioritization and early remediation. Encryption solutions such as HPE Enterprise Secure Key Manager secure servers, storage, and cloud-based activities against losses, mishandling, and administrative and operational attacks.

- **Threat and Vulnerability Defense.** We offer an integrated approach to security for applications, networks, and remote devices, keeping today's mobile workforces connected and safe.

- **Enterprise Security Services.** We facilitate the building and maintenance of robust security governance, risk, and compliance systems through our Information Security Management solution. Global Incident Response helps customers prevent reputational and financial damage by responding, containing, and eradicating cybersecurity incidents. Our Security Consulting and Data Center Transformation Services put the right controls, principles, architecture, and testing in place, enabling enterprises of any size to manage security proactively.

Protecting data relies on individual awareness and vigilance as much as tools and systems. To help HPE and our customers stay safe, we invest in training and behavioral change exercises for all employees. Activities such as phishing simulations and gamification courses keep HPE employees alert to the latest threats. Our HPE Cyber Security Yammer Group, Cyber Security Organization website, and Cybersecurity Central website all provide consistent sources of support and information.
Privacy and freedom of expression

Position

Ensuring privacy is a core value at HPE and is integral to the way we do business. HPE respects the privacy and right to freedom of expression of our customers, employees, and other stakeholders.

We take seriously our responsibility to ensure that data we hold is accurate, used appropriately, and kept secure by complying with internal privacy policies, applicable laws, and contractual commitments. Our approach covers the full data lifecycle including collection, processing, use, and disposal. We manage our own customer and employee data, process personal information on behalf of customers, and provide the means for our customers to collect and process personal data themselves. We are committed to accountability and seek to maintain a robust privacy program globally.

Policies

- HPE Global Master Privacy Policy
- HPE Privacy Statement
- HPE Global Human Rights Policy

Programs

- Privacy in a connected world
- IT products and services and human rights
Privacy in a connected world

As new technologies offer more ways to connect and collect personal data, the importance of an individual's right to privacy and freedom of expression remains strong. Leading companies like HPE need to maintain customer trust by continually adapting and changing their practices, to innovate in a privacy-protective way.

HPE is at the forefront of new technologies:

- **Big data**—new predictive analytic tools that challenge traditional privacy strategies
- **Cloud-based services**—internet-based services that offer step changes in data management frameworks
- **The Internet of Things**—numerous connected devices that provide multiple data collection opportunities, feeding into big data and the cloud

Existing privacy laws, many of which predate the internet, were not designed to address the complex privacy challenges innovations like the internet present. The traditional approach of seeking informed consent at the point of data collection is no longer workable in many cases. Companies must become more accountable for the collection, management, use, and disposal of personal data throughout its lifecycle.

As a leader in this new business environment, HPE is committed to being an accountable organization and evolving our policies and procedures to maintain a robust privacy management program in the face of rapid technological change. We foster relationships with regulators, think tanks, and industry groups to positively influence the development of new privacy law, policy, and practice. For example, we:

- Participate in the strengthening and modernization of privacy laws, including the EU General Data Protection Regulation and the Electronic Communications Privacy Act
- Provide trusted advice and industry perspective to countries and regions, including contributing to the creation of Binding Corporate Rules in Europe, and Asia-Pacific Economic Cooperation Cross Border Privacy Rules
- Assist in furthering privacy policies, practices, and regulatory guidance including through participation in think tanks such as the Information Accountability Foundation and the Center for Information Privacy Leadership.
Network resilience

Position

Businesses and individuals expect 24-hour connectivity. As technology evolves, our approach to IT systems remains consistent: we design and engineer resilient networks that enable our customers and employees to work securely and productively, wherever they are. We contribute to more sustainable enterprises by increasing network efficiency and eliminating downtime, avoiding the use of unnecessary energy and expense.

Programs

- Keeping our customers connected
- HPE networks
Keeping our customers connected

Every organization depends on its IT networks. From self-employed individuals to multinational companies, reliable connectivity is crucial to the ability to do business in the modern world.

In this wireless age, communication can happen at any time and in any place. Through our leading network services, we work with our customers to capitalize upon this opportunity, creating networks built for mobility and productivity. We take time to understand each customer’s risks and needs—balancing factors such as cost, availability, and quality. Our approach is based on continuous improvement, and we form long-term relationships with our customers to help them adapt and make the most of technological innovations.

Each time we design or transform a network, we look for opportunities to utilize energy, space, and materials more effectively—delivering economic and environmental gains, and avoiding wasted resources.

For complex networks supporting critical infrastructure, public goods, and financial institutions, downtime is not an option. These networks must support sustainable, 24-hour activity without disruption. In the face of threats from cyberattacks, extreme weather, and server outages, we develop systems that are fit for the future—building redundancy, resilience, and security into every network we help create.

We focus on three key areas:

- **Advise.** We work with our customers to plan efficient, flexible, and resilient systems that utilize resources efficiently.
- **Transform.** We facilitate the shift to mobile and wireless working without losing network reliability or security.
- **Manage.** We manage customers’ IT environments, providing industry-leading service levels, effective risk management, and work-anywhere productivity.

HPE networks

We take the same approach to our own networks as we do to those we design and build for our customers. At each HPE facility, we match our network to our needs by:

- Carrying out a risk assessment based on size, function, and location
- Monitoring evolving workplace trends
- Balancing technical requirements with cost

As our workforce becomes more mobile, we must ensure that employees have access to the information they need whenever and wherever they need it. We combine leading-edge hardware and software to maximize network flexibility and enable our people to do their best work.

We design our networks to withstand minor or major disruptions, so that we can maintain consistent levels of service and stay in close contact with our customers.
Our world

Today, while we are experiencing a rapid transformation in the way people live, society faces mounting challenges—meeting the energy and water needs of a growing population, preserving biodiversity, curing disease, and improving the quality of life for billions living in poverty. Rapid growth in connectivity and computing power has the potential to create solutions to large-scale issues like these, delivering sustainability at scale.

At HPE, we believe that we must work together with our customers and partners to unite people, ideas, and technology to solve the world’s toughest challenges.

Leading data-driven industrial transformation

GE partners with its customers to advance industrial productivity and efficiency across a wide range of sectors, including aviation, energy, healthcare, and transportation.

Together, HPE and GE are combining expertise to take this productivity to the next level. By bringing together our IoT knowledge and our Edgeline server technology, along with GE’s industrial knowledge, we can find new efficiencies in any industry.

Putting more sensors in more devices enables real-time operational data from multiple sources to be combined with changing demand data. Using GE’s edge and cloud-based Predix operating system, opportunities to avoid downtime and make the most of precious resources are quickly identified, then connected to people and machines in the field.

The partnership delivers cost savings to GE’s customers, and offers potentially large-scale efficiencies across multiple sectors. From freight trains to wind turbines, every opportunity identified saves energy and helps to reduce industry’s carbon footprint.

“The ability to partner together is absolutely essential, because nobody can do everything in the industrial internet. HPE has been a great partner. They bring unique expertise to us.”

Bill Ruh
CEO and Chief Digital Officer, GE Digital

Watch more here and read more here.
Advancing medical research to save lives

HudsonAlpha Institute for Biotechnology, a nonprofit research institute based in Huntsville, Alabama, has one of the first end-to-end genomic medicine programs for diagnosing rare diseases. Their research requires sequencing DNA data—a task that generates more than one petabyte of data a month. What’s a petabyte? It’s the equivalent of 500 billion pages of standard printed text.

HudsonAlpha is also growing rapidly, with more than 100 scientists and engineers processing complex genomics algorithms and applications.

To keep pace with the growing demands of data required for their lifesaving research, HudsonAlpha turned to HPE for a state-of-the-art solution. Our answer—HPE Synergy, the latest in “Composable Infrastructure”. As the first HPE Synergy beta customer, HudsonAlpha can process, store, and access massive amounts of data, while lowering total IT infrastructure costs, and providing flexibility as resource needs change.

HPE Synergy helps HudsonAlpha increase its ability to perform groundbreaking genetic research in areas such as autism, cancer, and diabetes. Together, HPE and HudsonAlpha are helping to improve the lives of people around the world.
The power of big data for international conservation

Successful conservation efforts cannot happen in isolation—they rely on the sharing of data between organizations, countries, and continents. HPE and Conservation International are leveraging cloud computing technology to transform how nature is measured, monitored, managed, and valued.

Launched in 2013, Earth Insights uses HPE big data technology and know-how to deliver near real-time analysis of species trends in tropical forests at 17 sites across 15 countries. The project serves as an early warning system for conservation efforts, enabling proactive responses to environmental threats. Data from a global network of camera traps is collected through the Tropical Ecology Assessment and Monitoring (TEAM) Network. Earth Insights has so far analyzed 2.8 million camera images, alongside more than 7.5 million climate measurements and broader environmental data.

Since the project’s inception, TEAM has observed population trends in more than 260 species, identified poaching risks, tracked threatened species, discovered new species, and even predicted earthquakes. The speed of data processing and analysis enables conservation priorities to be based on current data and real-time trends.

Earth Insights has the potential to be scaled further. Its cloud-based foundation will enable increasing volumes and sources of data to be combined, giving a fuller picture of the health of the natural world and improving the chance that precious ecosystems will be preserved.

The original launch occurred as a partnership between Hewlett-Packard Company and Conservation International. Photo: Conservation International
Social application of ICT and access to technology

Position

HPE technology is an integral part of the IT infrastructure that is changing the world. We harness the power of our products and solutions to meet society’s toughest social and environmental challenges.

We share a responsibility with other global organizations to utilize our influence and expertise to find innovative ways to benefit society. Through strategic partnerships with nonprofits, governments, and international agencies, we develop pioneering programs focused on global needs such as education, financial inclusion, and disaster relief.
Living Progress Challenge

In November 2015, HPE launched the Living Progress Challenge (“Challenge”) with one question: what software applications and digital services would you create to improve people’s lives? Through the Challenge, HPE supports the development of digitally enabled solutions, working toward HPE’s digital impact goal: to support and develop digital tools that improve the lives of one million people by 2020.

From world poverty to education to ecosystem degradation, the Challenge was open to a wide range of impact areas. We accepted ideas and proposals from anyone around the globe, regardless of affiliation—including individuals, nonprofits, companies, and employees.

By March 2016, we had received 400 ideas and more than 130 proposals from nearly 30 countries and selected 17 of the strongest ideas to be developed into prototypes. After a live demo event where teams showed the top 10 prototypes, a panel of HPE executives and industry experts selected four solutions to be developed and deployed. The winners were:

- **“Detect IT: Fish,” from the World Wildlife Fund (WWF).** A web-based tool enabling automated data collection, comparison, and analytical assessment to detect and tackle illegal trade of fisheries products. Fish are the most heavily traded global food commodity. By more effectively targeting illegal seafood trade, WWF can improve ocean conservation.

- **“MentorME,” from HPE employees Raul Elizondo and team.** An application that matches high school students with mentors and uses a gaming approach to track students’ progress. MentorME will help students in Mexico—which has among the highest high school dropout rates in the world —and beyond to complete school, train for good jobs, and achieve their potential.

- **“MyWORTH,” from Pact.** A simple, reliable digitized recordkeeping system for community-based savings groups, designed to meet the unique needs of poor and financially excluded women globally. This mobile application builds on the successful paper-and-pencil-based WORTH program in more than 15 countries around the world. MyWORTH will help women’s community savings groups increase their savings, formalize recordkeeping, and connect with global financial opportunities to enhance their wealth.

Transformative technology

Every day humanity creates 2.5 quintillion bytes of data, information that has the potential to transform lives for the better. Our customer partnerships and philanthropic programs leverage our expertise and technology to interpret big data and connect people with the information and support they need to solve global challenges.

- **Hacking innovation to bridge the gender gap.** In 2016, HPE sponsored a global hackathon series presented by AngelHack in 17 cities from New York to Nairobi. The series, “Lady Problems Hackathon,” focused on developing tools and tactics to use technology to increase female entrepreneurship.

Read more about how the innovative solutions from this year’s winners are set to change the world.
Global giving through the Hewlett Packard Enterprise Foundation

The HPE Gives global platform enables employees to support their favorite causes and multiply the power of their donations. The Hewlett Packard Enterprise Foundation ("Foundation") has provided more than $2.4 million in funding to match employee donations of time or money, supporting over 4,000 charities in 30 countries. Our ability to support our communities is also enhanced by HPE’s expanded volunteerism policy, which enables every employee to use 60 hours of paid time a year on volunteering activities. Learn more about employee engagement and volunteering [here](#).

Funding from the Foundation and our partnership with Kiva enables employees to contribute to local economic development in more than 80 countries. Through the Matter to a Million program, the Foundation provides every HPE employee with a $25 credit that they can lend to entrepreneurs selected through the Kiva online platform. Borrowers then use the funds to finance their microbusinesses and work to pay back the loan. The Kiva platform enables employees to learn about the entrepreneurs they support and share their stories. Over the last three years of the program, employees have funded nearly $13.5 million to Kiva entrepreneurs.

Major natural disasters such as floods and earthquakes can overwhelm communities or entire countries. To bring relief to people around the world, the Foundation supports the American Red Cross Annual Disaster Responder Program. This helps secure a reliable funding base that enables the Red Cross to provide relief services immediately when disaster strikes, both in the United States and around the world.

Read more about HPE’s social investments [here](#).
About this report

This Living Progress Report: 2016 Positions, Policies, and Programs is part of a suite of HPE Living Progress communications, which also includes the HPE Living Progress Report: 2016 Data Summary and the Living Progress Report: 2016 Standards Index. These documents provide an overview of positions and programs, data, and standards that are mapped to our most material issues.

All information in the Living Progress Report: 2016 Positions, Policies, and Programs is current as of the date of initial publication, and 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. Information within this report adheres to the following specifications:

- Contents cover all HPE operations but do not cover joint ventures.
- All references to dollars are to U.S. dollars.
- “Tonnes” refers to metric tons. One metric ton is equivalent to 2,205 pounds.
- Data are rounded to reflect the appropriate level of certainty.

This report covers HPE in FY16 (November 1, 2015—October 31, 2016) and includes information about our Enterprise Services business in addition to Enterprise Group, Software, and Financial Services. In early 2017, HPE refocused its portfolio, spinning off our Enterprise Services business to merge with CSC, forming the new and separate company, DXC Technology (NYSE: DXC).

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.

HPE is committed to transparent reporting, and seeking external assurance is an important part of our reporting process. We engaged external assurance provider Ernst & Young LLP (EY) to perform an independent review of a selected number of key performance indicators, included in the HPE Living Progress Report: 2016 Data Summary. This is in accordance with attestation standards established by the American Institute of Certified Public Accountants, including AT 101 Statements on Standards for Attestation Engagements.

We welcome feedback on our Living Progress Report and performance. Contact us here.
Defining our material issues

The following table summarizes and defines the material issues included in this report. Read more about how these were chosen.

Each definition takes input from internal and external stakeholders into account, as well as best practice guidelines from reporting organizations such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB).

A summary of our performance mapped against material aspects of the GRI guidelines can be found here.

<table>
<thead>
<tr>
<th>Key</th>
<th>Our company</th>
<th>Our customers</th>
<th>Our world</th>
</tr>
</thead>
</table>

### High importance to sustainable development, high importance to HPE’s business success

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical behavior and business partnerships</td>
<td>Promoting high standards of ethics in employee, business partner, joint venture, and customer relationships. Working against corruption, extortion, and bribery in employee, business partner, joint venture, and customer relationships.</td>
</tr>
<tr>
<td>IT as an efficiency enabler</td>
<td>Providing IT services, products, and solutions and engaging with customers to solve customer business challenges, alongside providing sustainability benefits. Increasing the energy efficiency of HPE products and enabling customers to reduce their energy use.</td>
</tr>
<tr>
<td>Data security</td>
<td>Working to protect information managed by HPE and customers from unwanted parties and unauthorized access, such as security threats and cyberattacks—including data collection, use, processing, storage, transfer, sharing, and end-of-life disposal.</td>
</tr>
<tr>
<td>Privacy and freedom of expression</td>
<td>Managing and processing personal data throughout its lifecycle in a manner that upholds the right to privacy and freedom of expression and is protected from unwanted parties. This includes commercial and government relationships.</td>
</tr>
</tbody>
</table>

### Medium importance to sustainable development, high importance to HPE’s business success

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee development and engagement</td>
<td>Promoting professional growth and matching employee skills to the needs of the business. Addressing the need to train and retrain at the pace required for the ever-evolving technology industry. Maintaining a connected workforce through open engagement and communication.</td>
</tr>
<tr>
<td>Inclusion and diversity</td>
<td>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.</td>
</tr>
<tr>
<td>Transparency, accountability, and reporting</td>
<td>Providing clear and comparable business and sustainability information on products, operations, and the supply chain in an accessible manner. Engaging and partnering with external stakeholders openly and transparently.</td>
</tr>
<tr>
<td>IT products and services and human rights</td>
<td>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.</td>
</tr>
</tbody>
</table>
### Issue Description

<table>
<thead>
<tr>
<th>High importance to sustainable development, medium importance to HPE's business success</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy use and GHG emissions in our operations and value chain</strong></td>
</tr>
<tr>
<td>Improving energy efficiency and reducing GHG emissions across the HPE value chain, including operations, data centers, and buildings, employee travel, and transportation logistics. Using renewable energy sources to reduce GHG emissions.</td>
</tr>
<tr>
<td><strong>Waste and hazardous materials in our operations and value chain</strong></td>
</tr>
<tr>
<td>Managing and disposing of hazardous and nonhazardous waste responsibly across the HPE value chain.</td>
</tr>
<tr>
<td><strong>Ethical sourcing practices in the supply chain</strong></td>
</tr>
<tr>
<td>Maintaining and elevating ethical standards in the supply chain, including services and manufacturing supply chains. Achieving fair and beneficial outcomes for supply chain participants, especially workers and communities. Implementing and enforcing codes and standards that set a baseline for supplier social and environmental responsibility, including labor, health and safety, environmental, and ethical standards.</td>
</tr>
<tr>
<td><strong>Human trafficking and forced labor in the supply chain</strong></td>
</tr>
<tr>
<td>Taking measures to avoid slavery and forced labor in the HPE supply chain.</td>
</tr>
<tr>
<td><strong>Substances of concern in products</strong></td>
</tr>
<tr>
<td>Designing and developing products and solutions that use alternatives to materials and substances of concern to human health and the environment.</td>
</tr>
<tr>
<td><strong>Product lifecycle management</strong></td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>Social application of ICT and access to technology</strong></td>
</tr>
<tr>
<td>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.</td>
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</table>

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<tr>
<td><strong>Corporate governance</strong></td>
</tr>
<tr>
<td>Ensuring independent oversight of the company, as led by the Board of Directors and Chief Executive Officer. Enabling effective governance of sustainability efforts. Improving the diversity of HPE's board structure. Ensuring appropriate executive compensation and the fulfillment of taxation responsibilities to the economies in which HPE operates.</td>
</tr>
<tr>
<td><strong>Water in our operations and value chain</strong></td>
</tr>
<tr>
<td>Taking measures to conserve water usage and implement water-saving measures across the HPE value chain.</td>
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<tr>
<td><strong>Intellectual property protection</strong></td>
</tr>
<tr>
<td>Managing patents and patent litigation to protect intellectual property without restricting competition.</td>
</tr>
<tr>
<td><strong>Public policy engagement</strong></td>
</tr>
<tr>
<td>Influencing public policy development through direct engagement and multi-stakeholder associations or initiatives.</td>
</tr>
<tr>
<td><strong>Network resilience</strong></td>
</tr>
<tr>
<td>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.</td>
</tr>
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### Additional fundamental issues covered in this report[^29]

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<tbody>
<tr>
<td><strong>Human rights</strong></td>
</tr>
<tr>
<td>Upholding the fundamental freedoms and standards of treatment to which all people are entitled, across the HPE value chain.</td>
</tr>
<tr>
<td><strong>Employee health, safety, and well-being</strong></td>
</tr>
<tr>
<td>Creating a healthy, safe, and secure working environment for all HPE employees.</td>
</tr>
</tbody>
</table>

[^29]: A hybrid system combines both on-premises traditional computing capabilities and private cloud capabilities.
Acronyms and definitions

3TG tin, tantalum, tungsten and gold—known as “conflict minerals”

CDP formerly Carbon Disclosure Project

CFSI Conflict-Free Sourcing Initiatives

CO₂e carbon dioxide equivalent. A tonne of CO₂e means one tonne of carbon dioxide or an amount of any of the other greenhouse gases with an equivalent global warming potential.

DfE Design for Environment program

DRC Democratic Republic of the Congo

DJSI Dow Jones Sustainability Index

EHS Environmental, Health and Safety

EICC Electronic Industry Citizenship Coalition

ENERGY STAR® A U.S. Environmental Protection Agency (EPA) voluntary program that helps businesses and individuals save money and protect the climate through superior energy efficiency.

ERGs Employee Resource Groups

EU European Union

GHG greenhouse gas

GRI Global Reporting Initiative

GSCP Global Social Compliance Programme

GSE General Specification for the Environment

Hewlett-Packard Company our legacy company, which separated into HPE and HP Inc. in November 2015

HPE Hewlett Packard Enterprise—one of two companies created from the separation of Hewlett-Packard Company in November 2015, alongside HP Inc.

HPE PAC Hewlett Packard Enterprise Political Action Committee

HP Inc. Also known as HP—one of two companies created from the separation of Hewlett-Packard Company in November 2015, alongside HPE

IoT Internet of Things

IP intellectual property

LGBT lesbian, gay, bisexual, and transgender

Living Progress our framework for building a sustainable business

LPX Living Progress Exchange—biannual online sessions bringing together creative thinkers and sustainability leaders to discover fresh ideas and solutions

NGO nongovernmental organization

OECD Organisation for Economic Co-operation and Development

PCF product carbon footprints

PRC People's Republic of China

PUE power usage effectiveness—the accepted measure of data center energy efficiency

PVC polyvinyl chloride

REACH an EU regulation concerning the registration, evaluation, authorization, and restriction of chemicals

RECs renewable energy credits

RoHS EU Restriction of Hazardous Substances Directive

SASB Sustainability Accounting Standards Board

SCR Supply Chain Responsibility program

SER social and environmental responsibility (with reference to HPE's SER scorecard for suppliers)

STEM science, technology, engineering, and math

VoW Voice of the Workforce survey
Resources

HPE reports and online content
- Living Progress Report: 2016 Data Summary
- Living Progress Report: 2016 Standards Index

HPE Annual 10-K Report
HPE Investor Relations
HPE 2016 Carbon Accounting Manual
HPE 2016 Water Accounting Manual

External ratings
Search for Hewlett-Packard for historical Hewlett-Packard Company submissions, and Hewlett Packard Enterprise for post-separation HPE submissions.
- CDP
- Dow Jones Sustainability Index (DJSI)

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

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