



# 2017 Sustainable Impact Report



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In this report, "we", "us", "our", "company", "HP", and "HP Inc." refer to HP Inc. (formerly Hewlett-Packard Company) and its consolidated subsidiaries.



HP Inc.'s vision is to  
create technology that  
makes life better for  
everyone, everywhere.

# Letter from President and CEO Dion Weisler



At HP, we are on a journey to keep reinventing everything we do. Our aim is to make life better for everyone, everywhere. At the heart of our reinvention is the need to create a business that can have a lasting sustainable impact on the world. This is not just the right thing to do, it fuels our innovation, our growth, and creates a stronger and healthier company for the long term.

## Sustainable Impact fuels our innovation, our growth, and creates a stronger and healthier company for the long term.

Today, corporations are expected to do more than just generate profit; they're expected to use their resources to advance important societal causes, champion values and be a beacon of trust for industries, governments, and communities around the world. For many companies in technology, this is a new concept; for HP, these values are deeply rooted in our heritage and built into our operating model. Dave Packard, one of our founders, was almost laughed out of

a Stanford conference in 1942 for arguing that management was responsible not only to shareholders but also to employees, customers and to the community at large.

Our world is facing increasingly difficult challenges including inequality, climate change, inadequate access to quality education and healthcare, among others.

To overcome these challenges, we must raise the bar, challenge ourselves, and reinvent the industry standards for sustainable impact including driving lasting improvements to the planet, people and communities where we live, work and do business.

We are committed to developing and delivering an environmentally sustainable product portfolio, improving the sustainability of our own global operations, and partnering with our suppliers to reduce their environmental

impact. In 2017 we introduced HP's first photo printer made with recycled plastic from printers and other electronics, accelerated the shift from transactional product sales to service models, and invested in industrial 3D printing that is reinventing the way the world designs and manufactures to help drive a more sustainable Fourth Industrial Revolution.

We are reinventing the standard for diversity and inclusion. We are proud to have created one of the most diverse Board of Directors and executive leadership teams in technology, and this approach flows throughout our organization of more than 55,000 employees around the world. Everyone has a role to play in building a diverse and inclusive culture. Whether it is training our workforce on unconscious bias in hiring or partnering with organizations like Historically Black Colleges and Universities (HBCU), Hispanicize and The Female Quotient, we are committed to ensuring our employee base is reflective of the markets we serve.

In an increasingly digitized world, inclusive tech-enabled learning is critical. Our products and solutions, combined with social impact programs and partnerships, provide technology-enabled inclusive learning to

engage students, empower educators, and unlock opportunity. As an example, HP has partnered with the Clooney Foundation for Justice, working to support refugee education. We are committed to building vibrant, healthy communities.

We're proud of the progress we have made on our Sustainable Impact commitments but know there's still more work to do. You have my commitment to leverage our full scale and power of HP to create a lasting sustainable impact on our planet, people and communities.

After all it's not always what you do, but how you do it that counts.

**Dion Weisler**  
President and Chief Executive Officer, HP Inc.



2017 Sustainable Impact Report

# Executive summary

# Sustainable Impact

Sustainable Impact is at the heart of our reinvention journey—fueling our innovation and growth, and strengthening our business for the long term.



Our commitment to integrity enables our Sustainable Impact journey

## Sustainable Impact delivers:

### Business value

Sustainable Impact was a key differentiator for

**\$700+**  
million

in new revenue<sup>1</sup>

**↑38%**

Year-over-year increase in sales bids with sustainability requirements<sup>2</sup>

### Employee engagement

**87%**

of employees agree that HP is socially and environmentally responsible<sup>3</sup>

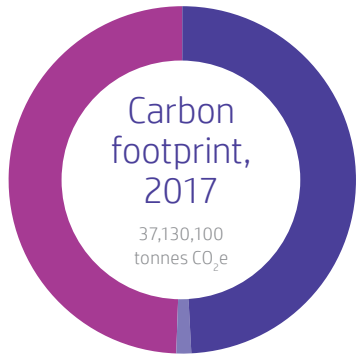
**73%**

of employees agreed that they see HP values being demonstrated in their everyday lives<sup>4</sup>

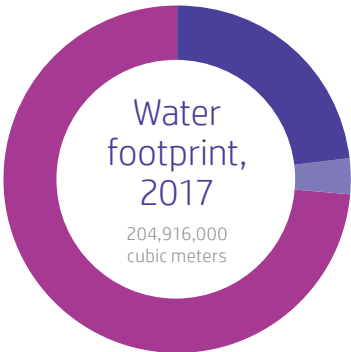
### Recognition

MEMBER OF  
**Dow Jones Sustainability Indices**  
In Collaboration with RobecoSAM





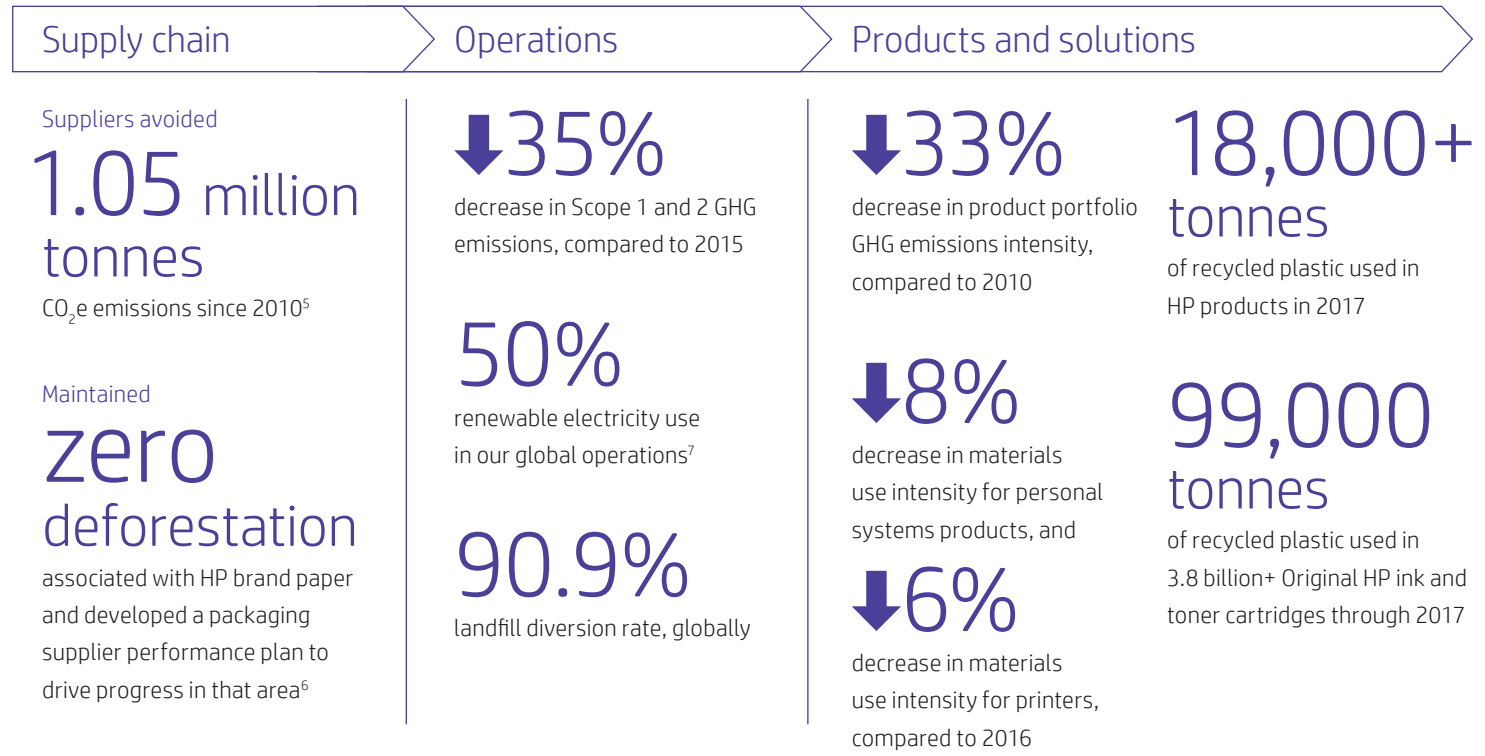
**↑2%**  
HP's carbon footprint in 2017 increased by 2% from 2016



**↓1%**  
HP's water footprint in 2017 decreased by 1% from 2016

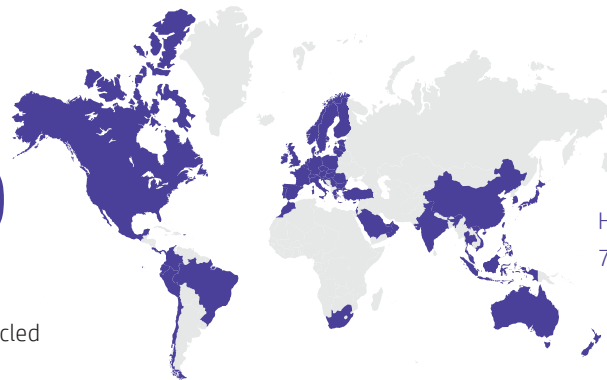
- Supply chain
- Operations
- Products and solutions

## We are contributing to a more efficient, circular, and low-carbon economy



## Ensuring materials are properly repurposed at end-of-service

**271,400 tonnes**  
of hardware and supplies recycled since the beginning of 2016



HP provides take-back programs in 74 countries and territories worldwide

## We work with our suppliers to protect and empower all workers in our supply chain

**↑8%**

increase in average supplier performance on Sustainability Scorecard, compared to 2016

Expanding supply chain transparency, published an

**industry first**

detailed list of our global recycling vendor sites in 2017

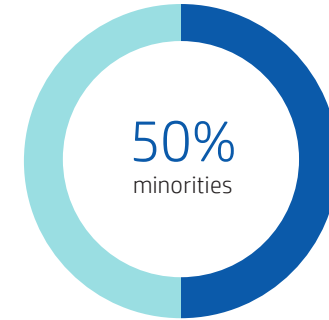
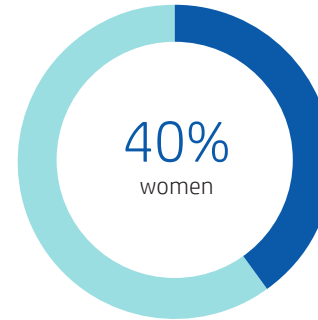
**243,600**  
supplier factory workers

participated in skill-building and well-being programs since the beginning of 2015

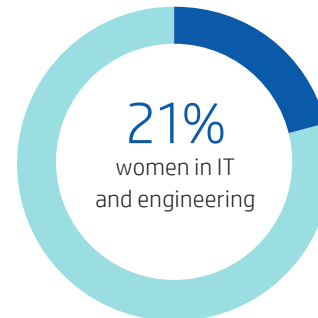


## We are reinventing the standard for diversity and inclusion in our industry

Board of Directors<sup>8</sup>



Technical roles<sup>9</sup>



Global functions<sup>10</sup>



**85%**  
of employees feel HP values diversity<sup>11</sup>

**\$647 million**  
spent with small companies in 2017

**\$230 million**  
spent with minority- and women-owned businesses in 2017<sup>12</sup>





## We partner to deliver quality technology-enabled learning for millions

### Our goal

Enable better learning outcomes for

# 100 million people

by 2025, since the beginning of 2015

Progress

# 14.5 million people

have benefited from HP's education programs through 2017

Photo credit ©InZone/Georg Schaumberger

To help us reach our 2025 goal:

## 80+ schools

have received HP Learning Studios, impacting 4,000 students in 2017

## 15+ million people

aimed to be reached by HP's World on Wheels program by 2022

## ~4,000 Syrian refugee students

expected to be reached in the first year of HP's partnership with the Clooney Foundation for Justice and UNICEF

## 1 million users

enrollment goal for HP LIFE, between 2016 and 2025<sup>13</sup>

## We invest in helping to build vibrant and resilient communities

HP giving:

# \$4.19 million

in cash and product donations in 2017<sup>14</sup>

# \$755,000

provided by the HP Foundation to assist with disaster preparedness, relief, and recovery efforts in 2017

Employee engagement:

# \$1.7 million

in cash donated by employees through our HP Inspires Giving program, 97.6% matched by the HP Foundation

## 5,600+ employees contributed

# 89,000+

hours to local volunteer efforts in 2017, with a value of \$3.5 million<sup>15</sup>

# Building a stronger circular economy

Partnerships help to close the loop and open up economic opportunities



## Building a supply chain for recycled plastic

Last year, HP introduced the first Original HP ink cartridges made with plastic bottles recycled in Haiti. Through March 2018, we sourced more than 170 tonnes of plastic (over 8.3 million plastic bottles) from Haiti—plastic that might otherwise have washed into the waterways and oceans.

Together with our partners in the First Mile Coalition, we have also provided 50 children with educational opportunities as well as food and medical assistance, while enabling local economic opportunity.

# 99,000+

tonnes

of recycled plastic used in HP ink and toner cartridges through 2017



## Electronics recycling with a social mission

As part of our commitment to build a strong, circular economy, HP partners with Los Angeles-based Homeboy Electronics Recycling to recover material from end-of-service devices for incorporation into our closed loop materials stream. By employing formerly incarcerated and otherwise hard-to-employ men and women and training them to repair and recycle electronic equipment, Homeboy is building a world in which our human and natural resources are valued.

## Expanding closed loop recycling to hardware

In 2016, we launched closed loop recycling for hardware in partnership with about 1,500 Best Buy stores. Through 2017, the program recovered 3,200 tonnes of recycled plastic resin from recycled electronics for use in new HP ENVY Photo 6200, 7100, and 7800 Printers. In 2018, we increased the amount of recycled plastic to more than 20% by weight.

# 271,400 tonnes

of hardware and supplies recycled since the beginning of 2016

# Designing and delivering our most environmentally sustainable portfolio



## Personal systems

### HP EliteOne

Our most serviceable all-in-one PC

### HP Elite displays

Increasing the use of postconsumer recycled plastic

### HP ENVY Photo Printers

HP's first printer made from recycled printers and other electronics—more than 10% by weight of plastic

## Printing

### HP Indigo

Enabling efficient on-demand printing<sup>16</sup>

### HP PageWide water-based inks

Digitally printed food-safe packaging

## 3D printing

### HP Multi Jet Fusion 3D printing technology

Driving a sustainable 4th Industrial Revolution

# Modeling Sustainable Impact

Reducing energy and water consumption across HP's global facilities

## Accelerating electric vehicle infrastructure

We are one of 10 founding members of EV100, a new Climate Group initiative to accelerate technological development of electric vehicles (EVs) worldwide. In support of this effort, we have committed to install EV infrastructure at all feasible sites worldwide by 2040.

## Sustainable landscaping

HP's sustainable landscaping project at our Boise, Idaho, United States, campus is expected to save approximately 82,500 cubic meters of water annually (equivalent to 33 Olympic-size swimming pools) and reduce landscaping costs by 50%, when fully mature in 2019.

## Engaging employees through the EcoChallenge

In 2017, nearly 300 HP employees from 12 sites in eight countries took part in the Northwest Earth Institute (NWEI) EcoChallenge. During the two-week challenge, HP participants used alternative forms of transportation, including walking, biking, and bus, helping to reduce greenhouse gas (GHG) emissions by about 3 tonnes.

## Zeroing waste across our operations

In 2017, our Palo Alto, California, United States, headquarters became the first corporate campus in the state to achieve The US Green Building Council's Gold TRUE Zero Waste certification in recognition of achieving a 95% landfill diversion rate at this location. Across our global operations, HP diverted 90.9% of our nonhazardous waste from landfill.

# Reinventing the standard for diversity and inclusion

HP is hiring, and talent is our only criteria



## Driving progress from the top

Our Board is one of the most diverse of any technology company in the United States. We've increased women in our executive levels by 6.5% since 2015. Today, women represent 27.9% of our company's vice presidents and 28.3% of our directors.<sup>17</sup>

**↑6.5%**

increase in women in leadership, from 21.7% in 2015 to 28.2% in 2017<sup>18</sup>

## Embedding diversity and inclusion across HP

We have Business Impact Networks (BINs) in all regions globally, representing nine constituencies: Black/African-American, disability, generations, Hispanic/Latino, LGBTQ+, multicultural, Pan-Asian, veterans, and women. Our active chapters have doubled in two years, numbering 84 across 19 countries at the end of 2017.

**85%**

of employees feel HP values diversity<sup>19</sup>

## Investing in future talent

HP launched the [HBCU \(Historically Black Colleges and Universities\) Business Challenge](#) in 2017 to attract more diverse students to a career in technology. More than 70 students from 17 HBCU schools worked in teams to develop business plans tackling real-world challenges that are core to HP's business.

**↑7.7%**

increase in minority hiring in the United States in the past year, from 26.8% in 2016 to 34.5% in 2017



# Ethical, sustainable, resilient supply chains

Innovating for sustainability, protecting and empowering all workers, and elevating best supply chain practices

## Our principles

We believe that every person deserves to be treated with dignity and respect.

We insist that workers in our supply chain have fair treatment, safe working conditions, and freely chosen employment.

Our commitment extends beyond the factory floor.

We engage extensively with workers to promote wellness and enhance their skills, empowering them to become leaders in their community.

We use our global reach to drive lasting improvements.

We are transparent about the challenges in our supply chain and we rally business and governments to build resilience and respect for human rights and the environment.

# 243,600 supplier factory workers

participated in skill-building and well-being programs since the beginning of 2015

Suppliers avoided

# 1.05 million tonnes of CO<sub>2</sub>e emissions

through 2017<sup>20</sup>





# Enabling better learning outcomes for 100 million people

Partnering to deliver technology-enabled and inclusive education

**Reinvent the Classroom:** More than 80 schools across North America, Europe, the Middle East, Australia, and New Zealand have received HP Learning Studios to support advanced blended learning and technology-enabled education.

**HP LIFE:** We enrolled 687,000 new users in free online core business and IT courses from 2012 through 2017. Together with our partners, we bring HP LIFE to underserved communities, helping would-be entrepreneurs unlock their potential.

**HP World on Wheels:** In India, HP is bringing self-contained, solar-powered, Internet-enabled mobile learning labs to rural areas of the country.

## 14.5 million students and adult learners

have benefited from HP's education programs since the beginning of 2015



© UNICEFUSA/1W0A1204/Berger

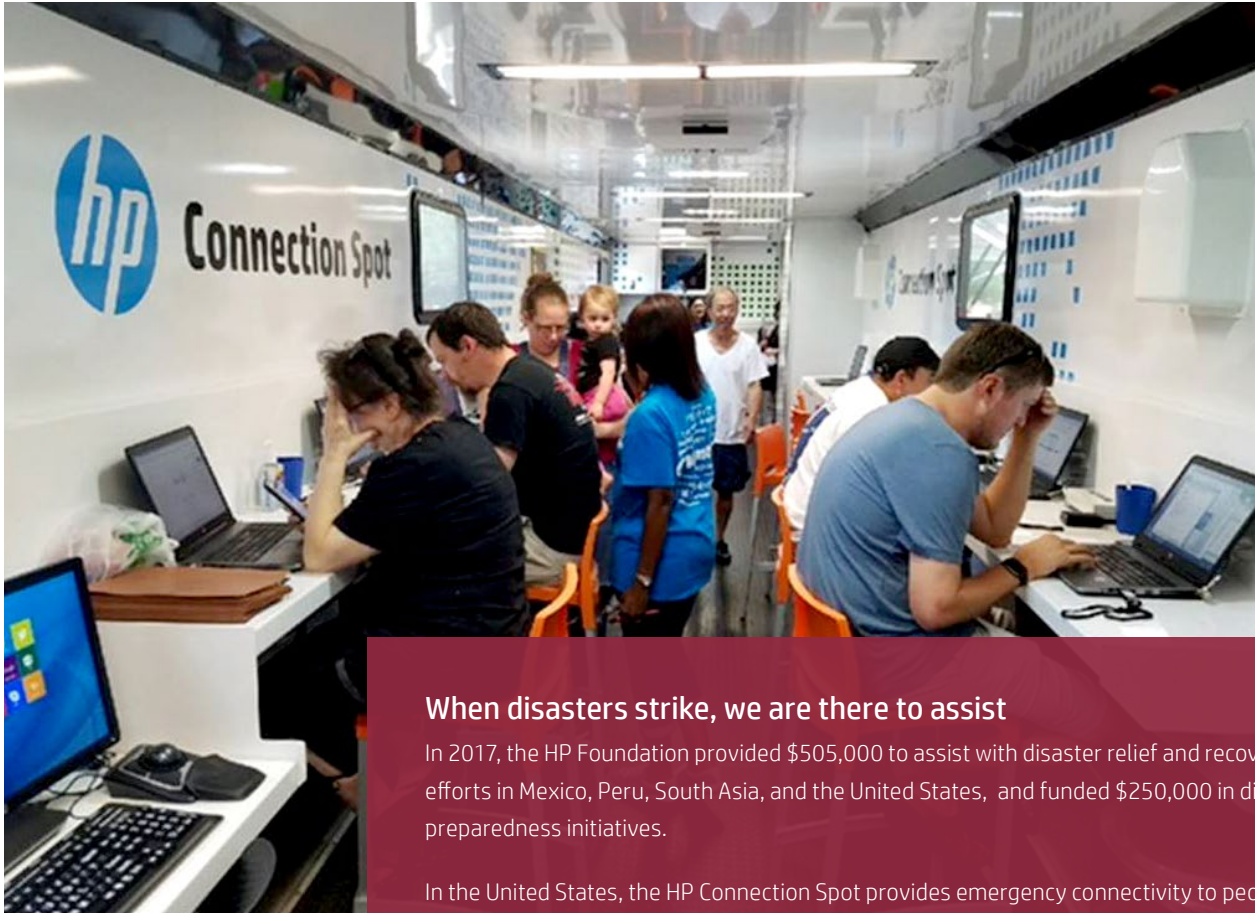
### Technology-enabled learning for refugees and displaced people

In collaboration with the Clooney Foundation for Justice and UNICEF, we are providing technology and training to Syrian refugees and Lebanese students as well as teachers at nine schools in Lebanon.

In 2017, we collaborated with the UN Refugee Agency and other partners to launch the first two of six HP Learning Studios in the Middle East.

# Creating positive local impact

We invest our time, skills, and resources to help build vibrant, healthy communities



## When disasters strike, we are there to assist

In 2017, the HP Foundation provided \$505,000 to assist with disaster relief and recovery efforts in Mexico, Peru, South Asia, and the United States, and funded \$250,000 in disaster preparedness initiatives.

In the United States, the HP Connection Spot provides emergency connectivity to people who are unable to communicate due to a natural disaster. Employee volunteers are vital to the program's success—80 HP volunteers staffed the Connection Spot when it was deployed in September 2017 following the devastating floods caused by Hurricane Harvey.

## Contributing to the communities where we live, work, and do business

More than 5,600 employees contributed over 89,000 hours to local volunteer efforts in 2017, with a value of \$3.5 million.<sup>21</sup> In addition to their time, employees also donated \$1.7 million in cash to qualifying organizations during 2017 through our HP Inspires Giving program. The HP Foundation contributed \$1.66 million in matching funds.

**\$7.69**  
million

in social investments contributed to our local communities in 2017<sup>22</sup>





## Committed to integrity

Integrity, fairness, transparency, and accountability are fundamental to an inclusive society and a thriving business

At HP, how we do things is as important as what we do. We work every day to earn the trust of our stakeholders and uphold our reputation for integrity and ethical leadership.

Guided by the Integrity at HP program, we apply strong ethics and anti-corruption principles within our operations, across our value chain, and in the communities where we live, work, and do business.

Through robust policies, protocols, and controls, we secure the privacy of our customers and employees. We promote equality and human rights

for all people across our value chain, guided by internal policies as well as external standards such as the United Nations Universal Declaration of Human Rights. To increase our impact across the industry and beyond, we advocate for public policies that drive progress and sustainable impact.

**99.62%**  
of employees

completed ethics training in 2017, achieving our goal of greater than 99%

# Forward-looking statements

This report contains forward-looking statements that involve risks, uncertainties, and assumptions. If the risks or uncertainties ever materialize or the assumptions prove incorrect, the results of HP and its consolidated subsidiaries may differ materially from those expressed or implied by such forward-looking statements and assumptions.

All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including but not limited to any projections of net revenue, margins, expenses, effective tax rates, net earnings, net earnings per share, cash flows, benefit plan funding, deferred taxes, share repurchases, foreign currency exchange rates, or other financial items; any projections of the amount, timing, or impact of cost savings or restructuring and other charges; any statements of the plans, strategies, and objectives of management for future operations, including, but not limited to, our sustainability goals, the execution of restructuring plans and any resulting cost savings, net revenue, or profitability improvements; any statements concerning the expected development, performance, market share, or competitive performance relating to products or services; any statements regarding current or future macroeconomic trends or events and the impact of those trends and events on HP and its financial performance; any statements

regarding pending investigations, claims, or disputes; any statements of expectation or belief, including with respect to the timing and expected benefits of acquisitions and other business combination and investment transactions; and any statements of assumptions underlying any of the foregoing.

Risks, uncertainties, and assumptions include the need to address the many challenges facing HP's businesses; the competitive pressures faced by HP's businesses; risks associated with executing HP's strategy; the impact of macroeconomic and geopolitical trends and events; the need to manage third-party suppliers and the distribution of HP's products and the delivery of HP's services effectively; the protection of HP's intellectual property assets, including intellectual property licensed from third parties; risks associated with HP's international operations; the development and transition of new products and services and the enhancement of existing products and services to meet customer needs and respond to emerging technological trends; the execution and performance of contracts by HP and its suppliers, customers, clients, and partners; the hiring and retention of key employees; integration and other risks associated with business combination and investment transactions; the results of the restructuring plans, including estimates and assumptions related to the cost (including any possible disruption of HP's business) and the anticipated benefits of the restructuring plans; the impact of

changes in tax laws, including uncertainties related to the interpretation and application of the Tax Cuts and Jobs Act of 2017 on HP's tax obligations and effective tax rate; the resolution of pending investigations, claims, and disputes; and other risks that are described in HP's Annual Report on Form 10-K for the fiscal year ended October 31, 2017, and HP's other filings with the Securities and Exchange Commission.

HP assumes no obligation and does not intend to update these forward-looking statements. HP's [Investor Relations](#) website contains a significant amount of information about HP, including financial and other information for investors. HP encourages investors to visit its website from time to time, as information is updated and new information is posted.

## Endnotes

Additional information about the data presented in this report is available upon request.

- <sup>1</sup> FY17 new revenue supported in which sustainability criteria was a known consideration.
- <sup>2</sup> Number of bids supported in which sustainability criteria was a known consideration.
- <sup>3</sup> Data refers to the percentage of HP 2017 Voice Insight Action (VIA) employee survey respondents who strongly agreed or agreed with each statement.
- <sup>4</sup> Ibid.
- <sup>5</sup> This continues a goal from before separation of Hewlett-Packard Company on November 1, 2015, extending the goal to 2025. Includes data from suppliers associated with HP Inc. and HP Inc. pre-separation business units.
- <sup>6</sup> HP's goal is for all HP brand paper and paper-based product packaging will be derived from certified and recycled sources by 2020, with a preference for virgin fiber from certified sources of the Forest Stewardship Council (FSC). Packaging is the box that comes with the product and all paper (including packaging and materials) inside the box.

<sup>7</sup> Renewable electricity purchased and generated on-site, combined with renewable electricity certificates and guarantees of origin, accounted for 50% of our total consumption.

<sup>8</sup> As of October 31, 2017.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Data refers to the percentage of HP 2017 Voice Insight Action (VIA) employee survey respondents who strongly agreed or agreed with each statement.

<sup>12</sup> Suppliers are categorized as minority-owned or women-owned, not both. These categories include all sizes of businesses.

<sup>13</sup> 108,000 users enrolled in HP LIFE since 2016.

<sup>14</sup> Product donations are valued at the Internet list price. This is the price a customer would have paid to purchase the equipment through the HP direct sales channel on the Internet at the time the grant was processed.

<sup>15</sup> Hourly rate based on type of volunteering: \$150/hour for board, service corp, pro bono, and skills based; \$24.14/hour for hands-on and undetermined, adjusted using World Bank data for purchasing power differences across countries.

<sup>16</sup> HP Indigo digital presses enable efficient, on-demand printing, with lower costs and environmental impacts compared with analog presses.

<sup>17</sup> As of October 31, 2017.

<sup>18</sup> Full-time employees only, director level and above.

<sup>19</sup> Data refers to the percentage of HP 2017 Voice Insight Action (VIA) employee survey respondents who strongly agreed or agreed with each statement.

<sup>20</sup> This continues a goal from before separation of Hewlett-Packard Company on November 1, 2015, extending the goal to 2025. Includes data from suppliers associated with HP Inc. and HP Inc. pre-separation business units.

<sup>21</sup> Hourly rate based on type of volunteering: \$150/hour for board, service corp, pro bono, and skills based; \$24.14/hour for hands-on and undetermined, adjusted using World Bank data for purchasing power differences across countries.

<sup>22</sup> Social investments include all grants made to nonprofit organizations from HP, plus the valuation of employee volunteer hours. Data excludes contributions to the HP Foundation and employee donations but includes HP's matching contributions and contributions from the HP Foundation to other organizations.

A photograph of two women in a professional setting, looking at a laptop screen. The woman on the left has dark curly hair and is wearing a green plaid shirt. The woman on the right is wearing a dark patterned sweater and has a small teal earring. They are both smiling and appear to be in a collaborative work environment. A purple rectangular box is overlaid on the left side of the image, containing text.

# About HP

HP Inc.'s vision is to create technology that makes life better for everyone, everywhere.

## HP business strategy

HP believes in the power of technology to enable people and communities to change the world for the better. We are driven to reinvent the future each day through our products and services so that our customers, partners, and communities can shape the future.

We pursue growth in adjacent markets, such as graphics solutions, A3 copiers and printers, and commercial services. On November 1, 2017, HP Inc. announced the completion of its acquisition of Samsung Electronics Co., Ltd.'s printer business. We are defining new market categories through 3D printing and immersive computing platforms that fuse together the physical and digital worlds. We deliver our products and services to individual consumers, small- and medium-sized businesses, and large enterprises,

including customers in the government, health, and education sectors.

In fiscal year 2017, we delivered on our full-year financial commitments, outperforming the markets where we operate, accelerating growth, and investing in our future—all with a goal to deliver sustainable, long-term growth and reliable returns. During the year, we generated \$52.1 billion in net revenue and \$3.3 billion in free cash flow, \$2.3 billion of which was returned to stockholders in the form of share repurchases and dividends. We have the strongest and most innovative portfolio in our history. See more about our financial performance at HP's Investor Relations website at [www.hp.com/investor/home](http://www.hp.com/investor/home).

## Key facts

- Fortune 100 company
- Dion Weisler, President and Chief Executive Officer, HP Inc.
- Chip Bergh, Chairman of the Board
- Incorporated in the State of Delaware, United States
- Ticker symbol HPQ on the New York Stock Exchange
- Corporate headquarters: Palo Alto, California, United States
- \$52.1 billion net revenue in fiscal year 2017
- 250,000+ channel partners
- 18,000+ patents<sup>1</sup>
- Approximately 49,000 employees globally<sup>1</sup>
- One of the most diverse boards of directors in the technology sector in the United States

## Our reinvention strategy is supported by three strategic pillars:

### Core

### Growth

### Future



#### Printing

- Revitalize consumer
- Drive commercial

- Disrupt copier market
- Accelerate graphics

- Lead 3D printing



#### Personal systems

- Lead commercial
- Grow premium

- Drive commercial transformation

- Create new immersive categories

## Services and solutions

# How we deliver value

As we drive progress on our business strategy, we remain committed to leveraging our breadth and scale to create powerful change and sustainable impact.

## Inputs in 2017

### Human

- Skills, expertise, competencies, and capabilities of HP's approximately 49,000 employees globally<sup>1</sup>
- 119,900 supplier factory workers engaged in skills-building and well-being programs

### Intellectual

- \$1.2 billion invested in R&D
- Market and customer insights

### Financial

- Total assets: \$32.9 billion<sup>2</sup>
- Long-term debt: \$6.7 billion<sup>3</sup>

### Manufactured

- HP manufacturing plants
- 100's of production suppliers

### Natural

- 706,476 MWh of electricity used in global operations, including 50% renewable electricity use<sup>4</sup>
- 945,000 tonnes of materials in our products and packaging<sup>5</sup>
- 18,000 tonnes of recycled plastic used in HP products

### Social and relationship

- Employee, supplier, and partner codes of conduct and engagement
- \$4.19 million in HP cash and product contributions<sup>6</sup>
- 89,000 employee volunteer hours

## Value created in 2017

### Human

- 85% of employees feel HP values diversity<sup>7</sup>
- 1.51 million training hours, an average of 30 hours per employee
- 74% of employees feel excited about the future of HP<sup>8</sup>

### Intellectual

- 18,000+ patents<sup>9</sup>

### Financial

- Net revenue: \$52.1 billion
- Net earnings: \$2.5 billion
- Free cash flow: \$3.3 billion
- Share re-purchases and dividends: \$2.3 billion

### Manufactured

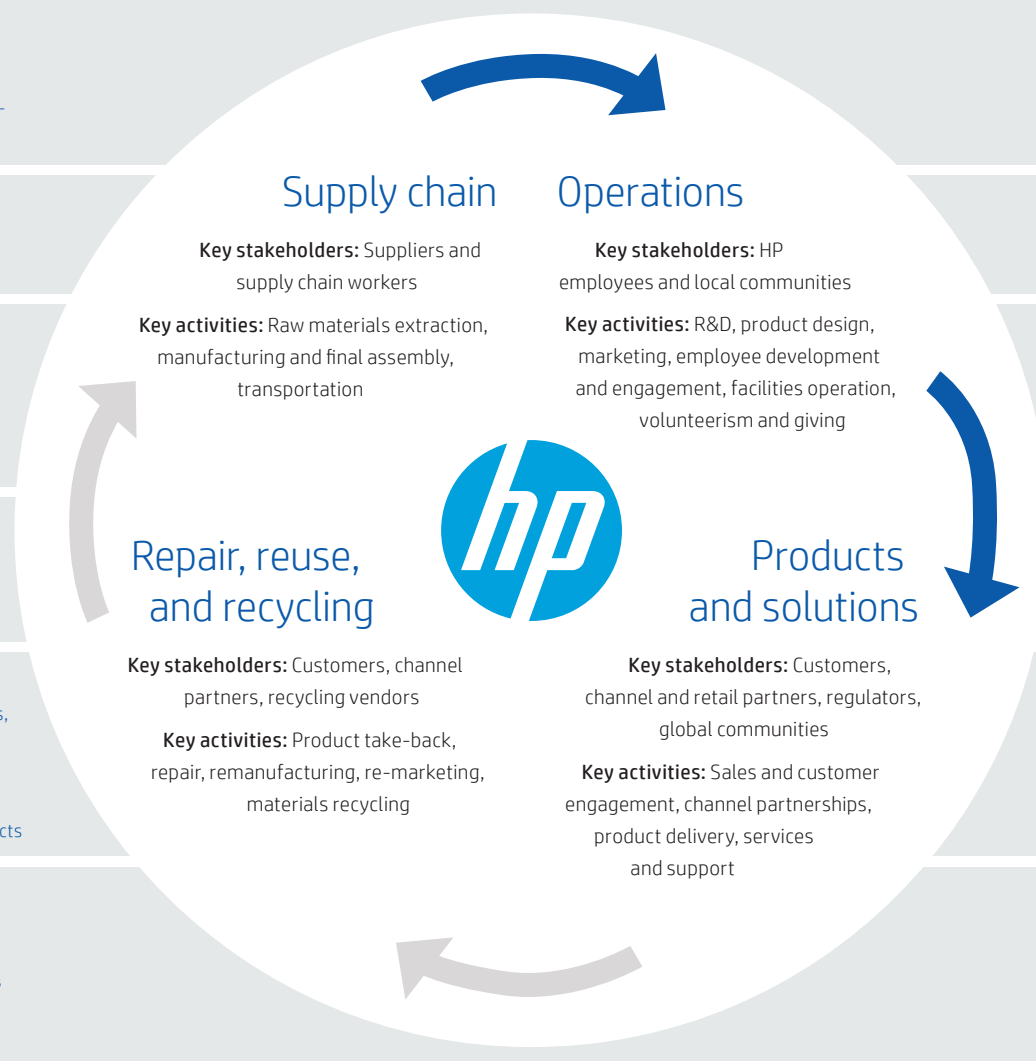
- 103 PCs, 76 printers, and 640 supplies delivered every minute to customers all over the world<sup>10</sup>
- Eco declarations covering 93% of revenue

### Natural

- 35% decrease in Scope 1 and 2 GHG emissions, since 2015
- Decrease in materials intensity of 8% for personal systems products and 6% for printers

### Social and relationship

- Customer, partner, and supplier retention and satisfaction
- Better learning outcomes for 14.5 million people through 2017
- Improved resilience in communities where we live, work, and do business



# Sustainable Impact strategy

Sustainable Impact is at the heart of our reinvention journey—fueling our innovation and growth, and strengthening our business for the long term.

Fjaðrárgljúfur Canyon in Iceland. Courtesy of Bob Vaughan.

# Sustainable Impact is at the heart of our reinvention journey



## Planet

Rising standards of living and population growth worldwide present market opportunities for HP and other companies, while putting tremendous pressure on natural resources and the environment. At HP, we seek to decouple growth from consumption and drive progress toward a more efficient, circular, and low-carbon economy. We aim to deliver the most environmentally sustainable product and services portfolio in the IT industry so that our partners and customers can achieve more, with less impact. We aim to reduce our footprint across our entire value chain, making our business more resilient for the future.



## People

Global inequality has the potential to stagnate economic growth and hold back innovation. From our supply chain, to our employees, to our partners and beyond, we stand for equality and human rights for all so that business and society can thrive. Our commitment to fostering diversity and inclusion is a core value and essential to delivering transformational business results. We aim to protect and empower all workers across our value chain and insist that they have fair treatment, safe working conditions, and freely chosen work. We use our global scope and scale to drive progress among our partners, raise standards across the industry, and promote a more inclusive society.



## Community

We embrace the opportunity and responsibility to positively impact the communities where we live, work, and do business. Through our products and solutions, global programs, and key strategic partnerships, we are working to deliver quality technology-enabled learning that engages students, empowers educators, and unlocks economic opportunity. Our global employees contribute their time, resources, and skills to help build vibrant, resilient, healthy communities. When disasters strike, we are there to assist—HP, our employees, and the HP Foundation along with our strategic partners provide support for affected communities.

Our commitment to integrity, fairness, transparency, and accountability enables our Sustainable Impact journey.

# HP Sustainable Impact goals

## Driving progress across our value chain

Setting bold, long-term goals for HP focuses our strategy where we can have the greatest impact. We measure success by how our actions and solutions help create a more sustainable future for our planet, people, and the communities where we live, work, and do business.

### Planet

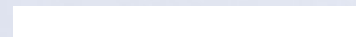
#### Climate change

Reduce Scope 1 and 2 GHG emissions by 25% by 2025



Progress: **Achieved**

Reduce supply chain GHG emissions intensity by 10% by 2025



Progress: **0% achieved—supply chain GHG emissions intensity increased by 4% since 2015**

Use 40% renewable electricity in global operations by 2020



Progress: **Achieved**

Reduce product portfolio GHG emissions intensity by 25% by 2020



Progress: **Achieved**

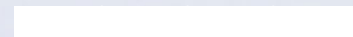
Help suppliers cut 2 million tonnes of CO<sub>2</sub> equivalent emissions by 2025



Progress: **53% achieved**

#### Natural resources

Reduce potable water consumption in global operations by 15% by 2025



Progress: **0% achieved—potable water consumption in operations increased by 4% since 2015**

Recycle 1.2 million tonnes of hardware and supplies by 2025



Progress: **22.5% achieved since 2016**

Zero deforestation<sup>1</sup> by 2020



Progress: **81% achieved**

### People

Develop skills and improve well-being of 500,000 factory workers by 2025



Progress: **49% achieved since 2015**

Double factory participation in sustainability programs by 2025



Progress: **6% achieved since 2015**

Maintain greater than 99% completion rate of Integrity at HP\* training



Progress: **Achieved**

\* Formerly Standards of Business Conduct.

### Community

Enable better learning outcomes for 100 million people by 2025



Progress: **14.5% achieved**



# HP Sustainable Impact goals (details)

## Planet

Goal	Progress in 2017	UN SDGs
<b>Climate change</b>		
Reduce Scope 1 and Scope 2 GHG emissions from global operations by 25% by 2025, compared to 2015. <sup>2</sup>	HP's global operations produced 260,100 tonnes of Scope 1 and Scope 2 CO <sub>2</sub> e emissions, 35% less than our 2015 baseline. <a href="#">Learn more.</a>	✓ 13
Use 100% renewable electricity in our global operations, with a goal of 40% by 2020.	Renewable electricity purchased and generated on-site, combined with renewable electricity certificates and guarantees of origin, accounted for 50% of our total consumption. <a href="#">Learn more.</a>	○ 7, 13
Reduce first-tier production supplier and product transportation-related GHG emissions intensity 10% by 2025, compared to 2015. <sup>3</sup>	Through December 2016 (the most recent year data is available), GHG emissions intensity increased by 4% compared to 2015. <a href="#">Learn more.</a>	✗ 13
Help suppliers cut 2 million tonnes of carbon dioxide equivalent (CO <sub>2</sub> e) emissions between 2010 and 2025. <sup>4</sup>	Through 2017, suppliers avoided 1.05 million tonnes of CO <sub>2</sub> e emissions. <a href="#">Learn more.</a>	○ 13
Reduce the GHG emissions intensity of HP's product portfolio by 25% by 2020, compared to 2010. <sup>5</sup>	Through the end of 2017, we achieved a 33% decrease. <a href="#">Learn more.</a>	✓ 7, 12, 13
<b>Natural resources</b>		
Achieve zero deforestation associated with HP brand paper and paper-based product packaging by 2020. <sup>6</sup>	Achieved for HP brand paper in 2016. Maintained that performance in 2017, and developed a packaging supplier performance plan to drive progress in that area. <a href="#">Learn more.</a>	○ 12, 13, 15
Reduce potable water consumption in global operations by 15% by 2025, compared to 2015. <sup>7</sup>	Potable water consumption equaled 2,660,000 cubic meters globally, 4% more than in 2015. <a href="#">Learn more.</a>	✗ 6
Recycle 1.2 million tonnes of hardware and supplies by 2025, since the beginning of 2016.	Reached 271,400 tonnes recycled, including 151,500 tonnes in 2017. <a href="#">Learn more.</a>	○ 12

## People

Goal	Progress in 2017	UN SDGs
Develop skills and improve well-being of 500,000 factory workers by 2025, since the beginning of 2015.	119,900 supplier factory workers participated in 15 programs at 124 factories in three countries in 2017, reaching 243,400 workers trained since the beginning of 2015. <sup>8</sup> <a href="#">Learn more.</a>	○ 8, 10
Double factory participation in our supply chain sustainability programs by 2025, compared to 2015.	Achieved a 6% increase in factory participation since 2015. <a href="#">Learn more.</a>	✗ 8, 10
Maintain greater than 99% completion rate of annual Integrity at HP (formerly Standards of Business Conduct) training among active HP employees and the Board of Directors.	99.62% of employees, including senior executives, completed Integrity at HP training, as well as all members of our Board of Directors. <a href="#">Learn more.</a>	✓

## Community

Goal	Progress in 2017	UN SDGs
Enable better learning outcomes for 100 million people by 2025, since the beginning of 2015.	14.5 million students and adult learners have benefited from HP's education programs that advance quality learning and digital literacy and enable better learning outcomes since the beginning of 2015. <a href="#">Learn more.</a>	○ 4, 5

✓ Achieved   ○ On target   ✗ Needs attention

# United Nations Sustainable Development Goals



HP supports the United Nations Sustainable Development Goals (SDGs), and remains committed to driving progress on select goals that are closely aligned to our Sustainable Impact strategy.

## Planet



## People



## Community



# United Nations Sustainable Development Goals (details)

## Planet

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**Goal 12  
Responsible consumption and production** HP is transforming how we design, produce, deliver, and reuse [products](#) to drive progress toward a more efficient, circular, and low-carbon economy. We aim to develop solutions that keep materials in use at their highest state of value for the longest possible time, grow the market for recycled content, and offer robust repair, reuse, and recycling programs for our products worldwide.

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**Goal 13  
Climate action** HP is driving progress toward our [goals](#) to reduce GHG emissions across our value chain through science-based emissions reduction targets for our supply chain and operations and a GHG emissions intensity reduction goal for our product portfolio. We continue to support coordinated global action to combat climate change, including through Paris Climate Accord commitments. We are investing in energy efficiency and shifting toward less GHG-intensive energy sources, including on- and off-site renewable power, with the goal of reaching 100% renewable electricity use in our global operations.

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## People

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**Goal 5  
Gender equality** HP's commitment to [gender equality](#) starts at the top—our Board of Directors comprises 40% women, and is one of the most diverse of any technology company in the United States. We work to grow the pipeline of diverse talent and to recruit and develop female and diverse talent across all levels of the company. We also use our scale to influence our suppliers and partners, encouraging them to prioritize diversity and inclusion within their own operations.

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**Goal 8  
Decent work and economic growth** HP believes that all [workers](#) deserve fair treatment, safe working conditions, and freely chosen employment. We forbid any forced, bonded, or indentured labor, involuntary prison labor, slavery, or trafficking of persons within our supply chain, and have adopted a broad approach to the topic of responsible minerals sourcing to help ensure there is no connection between the materials used in HP products and armed violence or human rights abuses.

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**Goal 10  
Reduced inequalities** HP strives to uphold [fundamental rights](#) and freedoms of all people. We promote a welcoming, diverse, and inclusive culture and do not tolerate discrimination of any kind. Through leading policies, programs, and partnerships, we aim to promote social and economic inclusion for all people across our supply chain and operations—regardless of race, ethnicity, gender, nationality, ability, military status, religion, generation, sexual orientation, or views.

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## Community

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**Goal 4  
Quality education** HP is building effective and innovative [education](#) solutions for millions of people worldwide, including women and girls, and underrepresented and marginalized groups. Our goal is to enable better learning outcomes for 100 million people by 2025, since the beginning of 2015, by deploying breakthrough technology solutions that support engaging, personalized educational experiences; partnering to develop scalable models for digital inclusion and lifelong learning; and delivering insights that help governments create effective education and human capital development policies and programs.

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**Goal 11  
Sustainable cities and communities** Through contributions from [the HP Foundation](#)<sup>9</sup> and our global employees, we aim to make a positive local impact on the communities where HP employees, customers, and suppliers live, work, and do business. We provide financial support for communities affected by natural disasters and emergencies, and work with expert partners to speed recovery and reconnect vital networks. HP employees also contribute their talents, passions, and resources to support inclusive, safe, resilient, and sustainable communities worldwide.

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# Recognition

HP is recognized as one of the world's most sustainable companies



One of only 25 companies named to both 2017 Climate and Water A Lists; achieved a spot on 2018 Supplier Engagement leader board



Recognized as the industry leader for commitment to address human trafficking and forced labor in the supply chain



Earned 14th spot on Gartner Supply Chain Top 25 list with perfect 10 for efforts in corporate social responsibility in 2018



With 2017 rankings, listed on the World Index for the 6th time in a row



Received Gold Medal Award for International Corporate Achievement in Sustainable Development



Named one of the 100 Most Sustainable Corporations in the World in 2017 and 2018



FTSE4Good

Included on the FTSE4Good Index since 2003



Received the U.S. Environmental Protection Agency SmartWay Excellence Award for 6th time



Received 100% on Corporate Equality Index every year since 2003



Rated among the top technology companies for corporate social responsibility efforts for 8th consecutive year



HP Brazil recognized for sustainability efforts in 2013, 2014, 2016, and 2017



Named one of Canada's Greenest Employers for 11th year in a row

# Materiality

We periodically conduct materiality assessments to review relevant environmental, social, and governance topics, reconfirm our long-standing areas of focus, and clarify and shape our Sustainable Impact strategy and investments. This enables us to focus on the areas where we can have the greatest positive impact, determine any gaps, and identify relevant trends and leadership opportunities for our business. We have set aggressive goals related to several of our most material topics, to manage performance and drive long-term progress.

Through our external consultant BSR, in 2017 we engaged experts and leaders from across HP as well as select external topic experts. The process took leading reporting frameworks into account, including the Global Reporting Initiative (GRI) Sustainability Reporting Standards and the Sustainability Accounting Standards Board (SASB) Technology and Communications Hardware Standard. We expanded the scope of the analysis by using data analytics to assess the importance of non-financial topics to industry peers and regulatory stakeholders.

The resulting matrix (below) maps topics by relative importance to sustainable development and to HP's business success. Items in the four upper-right-hand sections fall above the materiality threshold for the purpose of this report. Topics below the materiality threshold are not covered in as much detail, but remain important to HP.

Results from the 2017 assessment remain largely consistent with the results of our similar 2015 assessment, reflecting the enduring importance of several key topics. However, we have consolidated several topics and refined the [definitions](#) with the goal of improving clarity and accuracy. Products and solutions continue to be central to several key topics, and topics related to environmental impacts, governance, and supply chain responsibility remain among the most material. Health and safety, which now combines aspects of occupational health and safety and use of substances of concern in the manufacturing and use of our products, is the one topic that rose above the materiality threshold compared to the prior assessment.

The assessment uncovered four key themes:

- **Products and solutions drive shared value:** Our greatest opportunity to benefit customers and society is through our products and solutions and our innovative service models. Energy- and materials-efficient products, product-as-a-service offerings, technology-enabled education solutions, 3D printing, and other offerings open new ways to grow our business for the long term and create social and environmental value.
- **Stakeholders increasingly focus across the value chain:** Stakeholder awareness and expectations around transparency and accountability continue to rise. We collaborate with a range of stakeholders to ensure that our commitment to environmental and social responsibility, and our expectations around ethical business conduct, are applied across our value chain, from sourcing and manufacturing, to HP's own operations, to product use, repair, reuse, and recovery. We report these activities regularly, transparently, and in line with leading standards.

- **New business lines lead to new risks and opportunities:** As HP innovates new products, solutions, and business models, we are transforming how people live and work, presenting both risks and opportunities for the business, our customers, and society. We monitor and consider key trends such as the future of work, the impact of technology on education and employment, climate change, global resource constraints, increased concern around security and privacy, rapid urbanization, and demographic shifts.
- **Expectations of businesses are rising in times of policy uncertainty:** Stakeholders in civil society and certain regulatory bodies are increasingly looking to business for leadership on global sustainability issues. We believe that a clear commitment to sustainable impact is critical for our ongoing business success, and we work to play a leading role in key global conversations where we can make a significant and more sustainable impact.

See the relevant sections of this report for information about how HP manages risks and opportunities associated with these topics.

Information about the topics covered by our materiality matrix, including definitions, corresponding GRI Standards Topics, and the boundary of each Topic, can be found in the [Material issues](#) list, the [GRI index](#), and throughout this report.

## HP 2017 materiality assessment



# Stakeholder engagement

The success of our Sustainable Impact strategy relies on engagement with a wide range of stakeholders, including suppliers, customers, peer companies, public policy makers, industry bodies, nongovernmental organizations (NGOs), sector experts, and others. These interactions build our collective intelligence, help us prioritize critical issues, provide insights on emerging opportunities and risks, and inform our strategy.

Individual functions across the company drive our decentralized approach, engaging in ways that are most relevant to their objectives and operations. These include partnerships, sponsorships, collaboration on industry initiatives, customer and supplier education, supplier capability-building programs, supplier audits and assessments, conference participation, employee surveys, mentoring, and more. We identify appropriate stakeholders based on factors such as expertise, willingness to collaborate, reputation, location, and sphere of influence.

Examples of engagement on our material topics include:

- **Circular economy:** Through the Ellen MacArthur Foundation Circular Economy 100, we work with other top companies and innovators to drive progress toward a more materials- and energy-efficient future. See [Reinventing for a circular economy](#).
- **Energy and GHG emissions:** To extend our influence within and beyond our industry, we join leading companies in goal-setting efforts, including RE100 and WWF's Climate Savers. See [Footprint](#).
- **IT for sustainable development:** Working with partners such as the UN Women Global Innovation Coalition for Change, Black Girls Code, and Women Deliver, HP is committed to helping bridge the gender digital divide through technology-enabled learning opportunities for women and girls. See [Education programs](#).
- **Paper and printed material:** We work with WWF's Global Forest & Trade Network, Forest Stewardship Council, and our suppliers to ensure the fiber we use is responsibly sourced. See [Paper](#).
- **Privacy:** Our privacy and government relations teams work with policymakers to support robust and globally interoperable privacy and data protection regulations. See [Government relations](#). We launched an external Security Advisory Board in 2017 to provide insights that HP will use to reinforce our own security work related to our products. See [Product security and privacy](#).
- **Product energy efficiency:** We share our leading practices across the industry, including by contributing to standards development that impacts energy efficiency and other dimensions of product sustainability. HP serves on the [EPEAT® Advisory Council](#) and helped lead the working group to revise [IEEE 1680.1](#), the standard used by EPEAT for PCs and displays, which is due to take effect in 2018.
- **Supply chain responsibility:** As a founding member of [Responsible Business Alliance \(RBA\)](#), we are part of a consortium of companies driving improvements in global supply chains by collaborating, sharing tools, and promoting transparency and accountability. See [External collaboration](#).

Numerous additional examples are included throughout this report.

# Sustainable Impact governance

At all levels of the company, starting with our Board of Directors, we embed Sustainable Impact throughout our strategy, policies, programs, and value chain. The HP Board of Directors' [Nominating, Governance and Social Responsibility \(NGSR\) Committee](#) oversees the company's policies and programs relating to global citizenship and other legal, regulatory, and compliance matters relating to current and emerging political, environmental, global citizenship, and public policy trends. The Committee receives regular updates on key sustainability metrics and results. ([Listen](#) to NGSR Committee members talk about Sustainable Impact at HP.) Our executive leadership team, led by our CEO, retains overall responsibility for Sustainable Impact as part of our business strategy. A team of executives, led by our Global Head of Sustainability and Product Compliance, sets HP's Sustainable Impact strategy and drives progress company-wide. These leaders also provide updates to the NGSR Committee and other relevant executive committees.

# Footprint

33 Carbon

33 Water

35 Data





# Footprint

The manufacturing, delivery, and use of HP products and solutions requires a substantial amount of natural resources. As part of our commitment to protecting the planet, HP measures our environmental footprint across the value chain to prioritize areas for improvement. We were the first company in the IT industry to publish a full carbon footprint and one of the first to disclose a complete water footprint. These cover our entire global value chain, from hundreds of production suppliers and thousands of nonproduction suppliers to our operations, product transportation providers, and millions of customers worldwide. The insights we gain through this process help us to continually improve and create positive and sustainable impact on the planet, our people, and communities where we live, work, and do business.

For both our carbon and water footprints (see below), design innovation, product portfolio shifts, and improved data decreased reported emissions during the product use phase, while our business grew and the scope of the footprints expanded.

We have set ambitious [GHG emissions reduction goals](#) across the value chain to drive progress, and have worked with specialists from [WWF's Climate Savers](#) to develop a science-based target for our Scope 1 and Scope 2 GHG emissions and a supply chain GHG emissions intensity reduction goal for Scope 3 emissions. WWF has publicly supported those goals,<sup>1</sup> confirming the rigor of our goals-setting process. Together, our Scope 1, 2, and 3 goals were validated in June 2017 by the [Science Based Targets initiative \(SBTi\)](#).

We also provide incentives for suppliers to set and meet their own goals. In 2018, we

are updating our supplier environmental management criteria to include science-based GHG emissions reduction targets and third-party verification of GHG emissions. To extend our influence within and beyond our industry, we join leading companies in goal-setting efforts including [RE100](#) and [WWF's Climate Savers](#).

## Carbon

We strive to reduce the climate impact of our supply chain, operations, and products and solutions. HP's carbon footprint in 2017 equaled 37,130,100 tonnes of CO<sub>2</sub>e, 2% more than in 2016 (see details in graph on the next page). We anticipate this amount could increase in 2018, due to the acquisition of Samsung Electronics Co., Ltd.'s printer business. During the year, we worked to make progress toward our GHG emissions

reduction goals across the value chain. See a full list of our [goals and progress](#).

See our full [carbon footprint data](#) for 2015–2017 and details about our methodology in the [HP carbon accounting manual](#).

Learn more about how we reduce GHG emissions across our business in [Supply chain environmental impact](#), [Our facilities](#), and [Products and solutions](#).

## Water

Many parts of the world grapple with the availability and quality of water resources, and HP is committed to calculating, disclosing, and reducing water use across our global value chain. In 2017, our water footprint equaled 204,916,000 cubic meters, 1% less than 2016 (see details in graph).

See our full [water footprint data](#) for 2015–2017 and an explanation of the methodology in the [HP water accounting manual](#).

Learn more about how we reduce water use across our business in [Supply chain environmental impact](#), [Our facilities](#), and [Products and solutions](#).

# 1 of 65

We were one of the first 65 companies to have our GHG emissions reduction targets approved by the Science Based Targets initiative

# 1 of 7

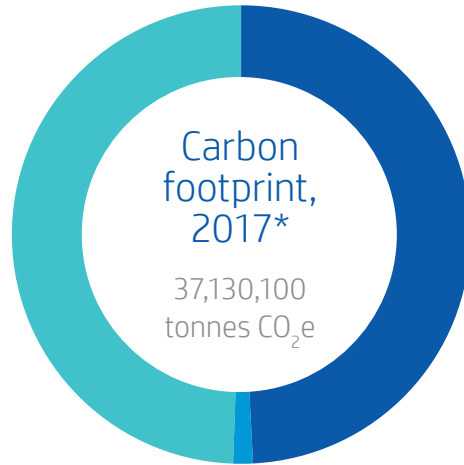
HP was one of only seven companies to earn a spot on the latest CDP Climate A List, Water A List, and Supplier Engagement leader board (based on 2017 surveys)



For the fourth consecutive year



For the second consecutive year



\* Supply chain includes Scope 3 categories 1, 2, 3, 4, and 9. Operations includes Scope 1 and Scope 2 (market-based method) and Scope 3 categories 5, 6, 7, 8, and 13. Products and solutions includes Scope 3 categories 10, 11, 12, 14, and 15. See additional notes on [page 36](#).

## Supply chain 49.3%

### Key drivers:

Raw materials use, manufacturing, transport

Business growth and demand shifts elevated production and shipping. This increased GHG emissions from purchased goods and services by 12% and from transportation by 15% compared to 2016, raising absolute supply chain emissions by 12%.

## Operations 1.4%

### Key drivers:

Energy use in facilities worldwide

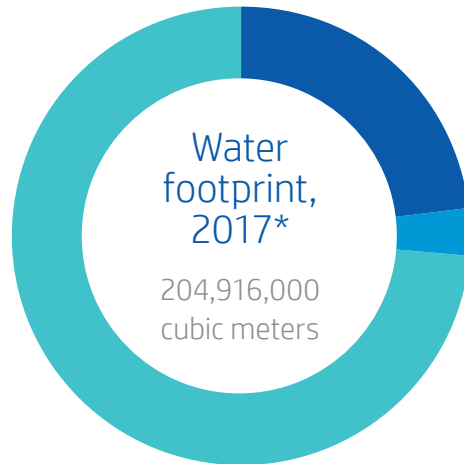
Increased energy efficiency as well as purchase of renewable energy and renewable energy certificates in the United States helped decrease this category by 18% year over year.

## Products and solutions 49.3%

### Key drivers:

Product energy use, paper use

GHG emissions from product use decreased by 6% compared to 2016 despite business growth, due to energy efficiency gains, improved LaserJet power usage data, increased LaserJet printing duplexing rates, and product mix shifts toward less GHG-emissions-intensive products.



\* Supply chain and Operations both include direct water consumption and indirect water consumption (related to electricity generation). Products and solutions includes indirect consumption associated with electricity for product use and indirect consumption associated with the manufacture of paper consumed during printer use. See additional notes on [pages 36](#) and [85](#).

## Supply chain 23.3%

### Key drivers:

Direct consumption, water associated with generation of electricity used

Business growth and demand shifts elevated production and shipping, increasing supplier water consumption by 7% in 2017.

## Operations 3.1%

### Key drivers:

Direct consumption, water associated with generation of electricity used

A slight decrease in direct water consumption combined with lower indirect consumption from reduced electricity use decreased total consumption in operations by 2% year over year.

## Products and solutions 73.6%

### Key drivers:

Water associated with product electricity use, paper manufacturing

Product energy efficiency gains, improved LaserJet power usage data, and increased LaserJet duplexing rates offset growth in water consumption associated with commercial and industrial graphics printing solutions to reduce consumption by 3% compared to 2016.

# Data

## Carbon footprint (Scopes 1-3)\*

	2015	2016	2017
<b>GHG emissions from operations**</b> [tonnes CO <sub>2</sub> e]	403,000	383,700	260,100
Americas	173,400	164,100	56,400
Europe, Middle East, and Africa	98,600	88,400	82,200
Asia Pacific and Japan	131,000	131,200	121,500
<b>GHG emissions intensity***</b> [tonnes CO <sub>2</sub> e/\$ million of net revenue]	7.8	8.0	5.0
<b>GHG emissions by scope</b> [tonnes CO <sub>2</sub> e]			
Scope 1			
Scope 1 emissions, by region	68,700	66,000	69,900
Americas	54,100	50,500	55,300
Europe, Middle East, and Africa	13,500	14,400	13,500
Asia Pacific and Japan	1,100	1,100	1,100
Scope 1 emissions, by type			
Natural gas	28,600	28,000	33,000
Americas	21,300	21,700	26,800
Europe, Middle East, and Africa	6,900	5,800	5,600
Asia Pacific and Japan	400	500	600
Diesel/gas/oil****	100	0	400
Americas	0	0	200
Europe, Middle East, and Africa	0	0	0
Asia Pacific and Japan	100	0	200
Transportation fleet†	32,700	31,000	31,400
Americas	26,400	23,400	23,700
Europe, Middle East, and Africa	6,000	7,300	7,400
Asia Pacific and Japan	300	300	300
Refrigerants (hydrofluorocarbons (HFCs))††	4,400	4,300	500
Americas	3,500	2,700	0
Europe, Middle East, and Africa	600	1,300	500

	2015	2016	2017
Asia Pacific and Japan	300	300	0
Perfluorocarbons (PFCs)	2,900	2,700	4,600
Americas	2,900	2,700	4,600
Europe, Middle East, and Africa	0	0	0
Asia Pacific and Japan	0	0	0
Scope 2 (market-based method)†††			
Scope 2 emissions, by region	334,300	317,700	190,200
Americas	119,300	113,600	1,100
Europe, Middle East, and Africa	85,100	74,000	68,700
Asia Pacific and Japan	129,900	130,100	120,400
Scope 2 emissions, by type	334,300	317,700	190,200
Purchased electricity for operations	334,300	317,700	190,200
Americas	119,300	113,600	1,100
Europe, Middle East, and Africa	85,100	74,000	68,700
Asia Pacific and Japan	129,900	130,100	120,400
District cooling and heating (purchased) for operations	0	0	0
Americas	0	0	0
Europe, Middle East, and Africa	0	0	0
Asia Pacific and Japan	0	0	0
Scope 2 (Location-Based Method)			
Scope 2 emissions, by region	372,900	352,400	301,600
Americas	143,700	128,700	98,700
Europe, Middle East, and Africa	99,300	93,600	88,500
Asia Pacific and Japan	129,900	130,100	114,400
Scope 2 emissions, by type	372,900	352,400	301,600
Purchased electricity for operations	372,900	352,400	301,600
Americas	143,700	128,700	98,700

	2015	2016	2017
Europe, Middle East, and Africa	99,300	93,600	88,500
Asia Pacific and Japan	129,900	130,100	114,400
District cooling and heating (purchased) for operations	0	0	0
Americas	0	0	0
Europe, Middle East, and Africa	0	0	0
Asia Pacific and Japan	0	0	0
Scope 3 [tonnes CO <sub>2</sub> e]	36,250,000	35,860,000	36,870,000
Materials extraction through manufacturing (category 1; also see Greenhouse gas emissions on <a href="#">page 50</a> )	15,300,000	14,700,000	16,500,000
Capital goods (category 2)	200,000	200,000	200,000
Upstream energy production (category 3) <sup>†</sup>	100,000	100,000	100,000
Transport (categories 4 and 9; also see Product transportation on <a href="#">page 51</a> ) <sup>**</sup>	1,300,000	1,300,000	1,500,000
Waste generated in operations (category 5)	De minimis <sup>***</sup>	De minimis	De minimis
Business travel (category 6) <sup>†</sup>	50,000	60,000	70,000
Employee commuting (category 7)	200,000	200,000	200,000
Upstream leased assets (category 8) <sup>††</sup>	De minimis	De minimis	De minimis
Processing of sold products (category 10)	De minimis	De minimis	De minimis
Product use (category 11) <sup>†††</sup>	19,100,000	19,300,000	18,100,000
Product end of service (category 12) <sup>††††</sup>	De minimis	De minimis	200,000
Buildings leased to others (category 13)	De minimis	De minimis	De minimis
Franchises (category 14)	Not applicable	Not applicable	Not applicable
Investments (category 15)	De minimis	De minimis	De minimis

\* To calculate Scope 1, Scope 2, and Scope 3 emissions, HP has followed the principles outlined in the Greenhouse Gas Protocol. Additional details on calculations and methodology can be found in the [HP carbon accounting manual](#). Taking into account the separation of Hewlett-Packard Company on November 1, 2015, calculation for all years relates to supply chain, operations, and products and solutions associated with the business units that are now a part of HP Inc.

\*\* Total includes HP's reported values for Scope 1 and Scope 2 market-based method emissions in table.

\*\*\* Emissions-intensity value was calculated using HP's annual revenue as characterized in financial reporting and Scope 1 and Scope 2 GHG emissions.

\*\*\*\* HP does not estimate or extrapolate diesel use for nonreporting sites.

† CO<sub>2</sub>e emissions associated with CH<sub>4</sub> and N<sub>2</sub>O account for less than 1% of total CO<sub>2</sub>e emissions in this category.

†† For 2015 and 2016, we calculated ozone-depleting substances emissions by tracking sites that reported refrigerant replacement due to leakage, and applied an intensity factor (based on those actual quantities) for nonreporting sites. For 2017, HP transitioned to a system that tracks all refrigerant invoices company-wide, directly accounting for facilities' refrigerant leakage and use and eliminating the need for extrapolation.

††† Data in this section uses the market-based method. The company did not obtain supplier-specific emission rates other than for its Palo Alto, California, United States, site, three sites in Costa Rica, and two sites in Singapore, due to the availability and feasibility of acquiring the data.

^ Scope 2 GHG emissions used to calculate this category were determined using the location-based method.

\*\* These figures are based on product life cycle assessment-based estimates. They use a combination of HP-specific and industry data, and include additional upstream and downstream transport related to our products, as well as retail and storage. This data may differ from data reported by product transportation suppliers that HP contracts to deliver our products, as presented on [pages 51 and 58](#).

\*\*\* De minimis values are less than 0.25% of total Scope 3 emissions.

† HP's global travel agency provides values which take into account the type of aircraft, passenger load, cabin class, and miles traveled for each ticketed trip. This data also includes rail travel carrier and distance traveled. Although these values fall below our quantitative reporting threshold of less than 0.25% of total Scope 3 emissions and could be reported as de minimis, we choose to report this category due to our ability to directly track this data, our level of influence over these emissions, and stakeholder expectations in this category.

†† All facilities accounted for in Scope 1 and 2.

††† In 2016, we added commercial and industrial graphics printing solutions, which use large amounts of paper, to our product use footprint calculations. Total GHG emissions from product use in 2017 differs by less than 1% from the value reported on [page 99](#), due to rounding.

†††† HP changed its calculation methodology beginning in 2017 to avoid netted emissions from product recycling.

## Water footprint\*

	2015	2016	2017
<b>Water consumed by HP suppliers in their operations**</b> [cubic meters]	13,900,000	12,600,000	13,400,000
<b>Water consumption associated with the generation of electricity used by HP suppliers</b> [cubic meters]	34,800,000	31,800,000	34,300,000
<b>Water consumption in HP operations</b> [cubic meters]	3,260,000	3,224,000	3,216,000
<b>Water consumption associated with the generation of electricity used in HP operations</b> [cubic meters]	3,400,000	3,200,000	3,100,000
<b>Water consumption associated with the generation of electricity used by HP products</b> [cubic meters]	106,900,000	103,300,000	96,400,000
<b>Water consumption associated with the manufacturing of paper used by HP customers with HP products</b> [cubic meters]	46,800,000	52,900,000 <sup>***</sup>	54,500,000

\* Taking into account the separation of Hewlett-Packard Company on November 1, 2015, calculation for all years relates to supply chain, operations, and products and solutions associated with the business units that are now a part of HP Inc. Additional details on calculations and methodology can be found in the [HP water accounting manual](#).

\*\* This metric reports the amount of water consumed by HP's multi-tier supply chain, and not the amount withdrawn by first-tier suppliers as reported in Supply chain environmental impact on [page 52](#). Because water withdrawn can also be returned, water consumption is inherently lower.

\*\*\* In 2016, we added commercial and industrial graphics printing solutions, which use large amounts of paper, to our footprint calculations.

# Supply chain

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# Our approach



Every minute of every day, HP delivers 103 PCs, 76 printers, and 640 supplies to customers all over the world.<sup>1</sup> To meet customers’ needs, we rely on one of the IT industry’s largest supply chains, composed

of hundreds of production suppliers<sup>2</sup>—those involved in the direct manufacturing of HP products—and thousands of nonproduction suppliers—who support HP through functions such as branding, IT,

and marketing. Our products represent the efforts of a global network of suppliers and workers who share our values related to planet, people, and communities.

Three core principles guide our management of social and environmental topics in the supply chain, driving us to protect and promote the well-being of the people who make our products, strengthen the communities where they live and work, and protect the planet by reducing negative environmental impacts. A sustainable and resilient supply chain protects our business and brand, strengthens customer relationships, and creates opportunities to innovate. In 2017, our supply chain responsibility program directly influenced \$2.5 billion in new and existing business. As technologies and consumer preferences evolve, our principles drive ongoing progress toward a more sustainable world.

HP’s supply chain engagement and transparency have been widely recognized. In 2017, we received the World Environment Center’s Gold Medal Award for Corporate Sustainability for our supply chain responsibility work. Our 2017 conflict minerals report ranked 6th overall, and 2nd in the computer hardware sector of more than 200 disclosures reviewed by the Responsible Sourcing Network; we maintained placement on the CDP Supplier Climate and Water A Lists and Supplier Engagement leader board; and we also received a top 1% score for all suppliers assessed by EcoVadis, leading to an 8th consecutive Gold CSR rating.

## Our principles

**We believe that every person deserves to be treated with dignity and respect.**

We insist that workers in our supply chain have fair treatment, safe working conditions, and freely chosen employment.

**Our commitment extends beyond the factory floor.**

We engage extensively with workers to promote wellness and enhance their skills, empowering them to become leaders in their community.

**We use our global reach to drive lasting improvements.**

We are transparent about the challenges in our supply chain and we rally business and governments to build resilience and respect for human rights and the environment.

Our suppliers are our partners and we are proud of our long-standing and collaborative relationships. Over the years we have worked together with many of our suppliers to help them evolve their practices, exceed compliance requirements, and integrate sustainability into their business models. Together, we set shared commitments to drive change and prioritize sustainability alongside other business imperatives.

Putting workers at the center of everything we do is fundamental to our supplier engagement. Our policies cover all workers whether full time, temporary, migrant, student, or contract. We provide a wide range of [capability-building](#) programs to increase workers' skills while fostering a safe workplace and healthy lifestyles.

We align our approach to managing social and environmental topics in the supply chain with the expectations of the UN Guiding Principles on Business and Human Rights for companies' due diligence, and comply with the UK Modern Slavery Act, the California Transparency in Supply Chains Act, and the Dodd–Frank Act.

Our procurement team plays a key part in monitoring and managing performance in this area. A range of policies, codes, and standards (see right) define expectations for companies at multiple levels. First-tier suppliers must communicate our Supplier Code of Conduct requirements to sub-tier suppliers and monitor their conformance.

Concerns related to supply chain management, labor rights, or environment should be reported to [humanrights@hp.com](mailto:humanrights@hp.com) for quick escalation by a team equipped to manage and address such issues.

## Transparency

Communicating openly and honestly about the opportunities and challenges that our business and suppliers face demonstrates integrity and builds trust, and we continue to share detailed supplier performance information and visibility into our supply chain management. HP has a long history of [industry-leading transparency](#) in this area. In 2004, we were a founding member of the [Responsible Business Alliance \(RBA\)](#), previously known as the Electronic Industry Citizenship Coalition, the world's largest coalition of companies working to advance supply chain responsibility. Through the RBA, we develop industry codes of conduct and advance transparency and accountability related to worker rights, supplier disclosure, carbon footprint, and other social and environmental issues.

We support our customers' progress against their own sustainable impact goals by providing tailored information regarding the performance of the suppliers who build their products, and we work collectively to meet the growing demand for transparency from consumers.

## Policies, codes, and standards

We expect our suppliers to commit to high social and environmental standards and support our Sustainable Impact commitments.

- [HP Supply Chain Social and Environmental Responsibility Policy](#)
- [HP Supplier Code of Conduct](#)
- [HP Student and Dispatch Worker Standard for Supplier Facilities in the People's Republic of China \(PRC\)](#)
- [HP Supply Chain Foreign Migrant Worker Standard](#)
- [HP Sustainability Policy](#)
- [HP General Specification for the Environment](#)
- [HP Hardware Reuse and Recycling Standards](#)

Our supply chain is complex, and we work to address a broad range of social and environmental topics.



# Mechanisms to sense and address risk

We monitor supply chain risks regularly through mechanisms such as audits that verify supplier conformance with our expectations around labor, health and safety, environment, and ethics. In 2017, we conducted 150 audits and assessments of final assembly, commodity, and sub-tier suppliers. We expect suppliers to act as responsible corporate citizens and take a proactive approach to promoting sustainable business practices, and foster open communication so we can address issues together. Beyond audits, we use a range of tools to drive social and environmental performance with key suppliers, creating an impact on and beyond the factory floor.

## Factory participation goal

Double factory participation<sup>3</sup> in our supply chain sustainability programs by 2025, compared to 2015

## Progress through 2017

**↑ 6%**

increase in participation since 2015

## Monitoring and performance improvement tools

	Description	2017 progress*
Audits <a href="#">See more detail.</a>	<ul style="list-style-type: none"> <li>Responsible Business Alliance (RBA) Validated Audit Program (VAP) uses independent external auditors and third-party quality control for added credibility.</li> <li>On-site audits measure conformance with the HP Supplier Code of Conduct and determine whether a supplier has systems to maintain and improve performance.</li> </ul>	<ul style="list-style-type: none"> <li>116 audits of production and nonproduction suppliers</li> <li>80% of production supplier audits were third-party certified RBA VAP</li> </ul>
Focused assessments	Focused assessments are conducted by HP supply chain sustainability experts on specific risks that require further attention.	34 focused assessments of production and product transportation suppliers, including: <ul style="list-style-type: none"> <li>3 student worker assessments in China</li> <li>2 foreign migrant worker assessments in Malaysia and 2 in Thailand</li> <li>20 health and safety assessments in China</li> <li>2 new suppliers onboarded in 2017</li> <li>5 trucking assessments</li> </ul>
Labor KPI program	<ul style="list-style-type: none"> <li>Weekly reporting of final assembly and key commodity suppliers that covers 46 risk indicators related to student workers, working hours, day of rest, and foreign migrant workers.</li> <li>Results shared with procurement managers monthly and executives quarterly.</li> </ul>	<ul style="list-style-type: none"> <li>Student worker conformance<sup>***</sup>: 100% (98% in 2016)</li> <li>Working hours conformance<sup>****</sup>: 92% (89% in 2016)</li> <li>Day of rest conformance<sup>*****</sup>: 98% (96% in 2016)</li> <li>Foreign migrant worker conformance<sup>*****</sup>: 93% (up from 60% at launch of metric in early 2017)</li> </ul>
Environmental engagement	<ul style="list-style-type: none"> <li>CDP Supply Chain program membership</li> <li>RBA Online environmental survey</li> </ul>	Data requested on environmental governance, risks, impacts, and mitigation from 98% of our first-tier production suppliers, by spend, and received from 95%. See <a href="#">detail</a> .
Sustainability Scorecard	<ul style="list-style-type: none"> <li>Final assembly and key commodity supplier performance scorecard sets expectations and measures performance on audit scores, product and material compliance, minerals sourcing, labor management, and environmental management.</li> <li>Influences suppliers' overall performance score, along with quality, supply, and cost. Poor sustainability performance can decrease a commodity supplier's overall score by up to 50%.</li> </ul>	Supplier sustainability scores increased by 41% on average since joining the program. In 2017, the average score increased by 8% compared to 2016. See <a href="#">detail</a> .

\* Metrics apply to participating suppliers for each program.

\*\* Suppliers in China with student workers representing 20% or less of total employees.

\*\*\* Suppliers' employees working fewer than 60 hours per week on average.

\*\*\*\* Suppliers' employees receiving at least one day of rest each seven-day workweek.

\*\*\*\*\* This metric is an average of conformance related to repatriation, employment contracts, working conditions, direct employment, document retention, and recruitment fees.

^ Based on production-line workers at final assembly and select commodity sites participating in the HP KPI program and audit results. We continue to expand the list of suppliers in the KPI program based on business risk, country risk, and identified nonconformances.

For more detail on how we manage social and environmental responsibility throughout our supply chain, see [Our approach for a sustainable supply chain](#).



# Capability building

We are committed to ensuring workers have a safe workplace, healthy lifestyles, and are gaining skills that they can use throughout their careers. Nongovernmental organizations are vital partners, supporting us with insights, helping us to facilitate effective training, and providing advice as we set and pursue our supply chain goals. We prioritize vulnerable groups that stand to benefit the most, such as foreign migrant workers, students, and women. Our programs also target factory energy efficiency and environmental responsibility. Our key initiatives in 2017 included the items listed at right.

## Capability-building goal

Develop skills and improve well-being of 500,000 factory workers by 2025, since the beginning of 2015

## Progress in 2017

# 119,900

supplier factory workers participated in 15 programs at 124 factories in three countries, bringing the total to 243,400 workers trained since the beginning of 2015

## Worker empowerment

- [Plan W](#), implemented in collaboration with Diageo, trains female factory workers in China on effective communication, time management, problem solving, and decision making.
- HP's [Women's Leadership Training Program](#), launched in Chongqing in January 2018, helps women to become advisors, peer educators, and support group leaders on worker-identified topics.
- [TenSquared](#), developed by Social Accountability International and The Rapid Results Institute and run on HP's behalf, is a 100-day challenge that has helped workers and managers in Brazil and China to address issues such as emergency preparedness and chemical safety through ambitious goals.
- The [Women in Factories](#) program, run by the Walmart Foundation, trains women as peer educators and mentors on subjects including personal and career development, reproductive health, and time management.

## Environmental leadership

- HP's [Energy Efficiency Program](#) helps our suppliers to reduce energy use through conservation and efficiency measures in their facilities.
- The Supplier Environmental Summit is a conference hosted periodically by HP with suppliers and representatives from government, WWF, and other organizations to accelerate plans in areas such as energy efficiency, renewable energy, and green manufacturing.
- HP's [zero waste to landfill](#) initiative helps suppliers assess current waste disposal approaches, and institute ways to divert over 95% of facility waste from landfill, with a focus on reuse and recycling.

## Baseline compliance

- HP's onboarding toolkit includes training and supporting materials to educate new suppliers about our social and environmental requirements.
- [Personal protective equipment training](#) is central to the occupational safety systems we require suppliers to implement, and includes content about why the equipment is important.
- [Foreign migrant worker workshops](#) support efforts to develop supplier understanding of proper labor practices.

## External collaboration

Electronics supply chains are global, workforces are highly mobile between industries and across geographies, and multiple companies often procure from common supplier facilities. As a result, collaboration among companies and with academics, nongovernmental organizations, and governments is essential to elevate supply chain best practices and tackle shared challenges. HP takes a leading role in advancing supply chain sustainable impact, including through the following organizations and initiatives.

### Industry associations

- [Responsible Business Alliance \(RBA\)](#): As a founding member, we are part of a consortium of companies driving improvements in global supply chains by collaborating, sharing tools, and promoting transparency and accountability. In 2017, we participated in every working group to improve the [RBA Code of Conduct](#) by incorporating and reinforcing topics such as regular worker training, effective grievance mechanisms, management systems to avoid excessive labor hours, and water management.

- [Responsible Labor Initiative \(RLI\)](#): HP's director of human rights and supply chain responsibility is the chair of the steering committee for RLI, an initiative of the RBA. The group conducted three trainings in Malaysia that enabled labor agents used within our members' supply chains to learn more about customer expectations related to ethical recruitment.
- [Leadership Group for Responsible Recruitment \(LGRR\)](#): We are a founding member of LGRR, through which we work to eliminate worker fees and promote the Employer Pays Principle.
- [Responsible Minerals Initiative \(RMI\)](#), [Responsible Cobalt Initiative](#), and [European Partnership for Responsible Minerals](#): Through these and other initiatives, we help develop resources and build capabilities for the responsible sourcing of minerals within and beyond the IT industry.
- [Clean Electronics Production Network \(CEPN\)](#): We are a founding member of CEPN's Green America program, which has a goal to move toward zero exposure of workers to toxic chemicals in the electronics manufacturing process.



### Nongovernmental organizations

- [Migrant Workers Rights Network \(MWRN\)](#), [China Labor Watch](#), [CEREAL \(Centro de Reflexión y Acción Laboral\)](#), and [Electronics Watch](#): These organizations provide important insights and input on worker issues.
- [CDP](#): We work with other brands and CDP to promote transparency and address climate change and water risks in the supply chain, with the goal of raising standards in the industry.
- [WWF Climate Savers](#): We are collaborating to advance ambitious, science-based GHG emissions reduction targets, both within and beyond the IT industry.



## Supply chain responsibility

HP works to ensure that our products are engineered and manufactured with integrity and respect for the people who help make them. We are committed to [protecting and empowering workers](#), [ensuring safe and healthy work environments](#), [sourcing minerals responsibly](#), supporting [diverse and inclusive suppliers](#), and driving continuous improvement across and beyond our supplier factories.

## Labor

All workers deserve fair treatment, safe working conditions, and freely chosen employment. Our commitments to respect human rights and to promote diversity, inclusion, and sustainability extend beyond our own workforce, to the tens of thousands of workers in our supply chain who create our products and support our operations.

To effectively address issues that arise we continually deepen our understanding of the social and economic factors that lead to labor concerns, and then focus on areas of risk where we can have the most influence. We collaborate with organizations and government agencies with local expertise to promote long-term, scalable solutions.

### Forced labor

Combating forced labor was a focus for HP even before we released our industry-first [HP Supply Chain Foreign Migrant Worker Standard](#) in 2014. The term “forced labor” refers to situations in which people are coerced to work against their will, either overtly through violence or intimidation, or by more subtle means such as accumulated debt, retention of identity papers, and threats of denunciation. HP

forbids any forced, bonded, or indentured labor, involuntary prison labor, slavery, or trafficking of persons within its supply chain.

Forced labor risks occur most frequently during the recruitment process when labor agencies recruit and place overseas workers in manufacturing centers. These agencies sometimes withhold personal documentation, charge worker placement fees, give deceptive information, and provide contracts that foreign workers cannot understand. These practices put workers at risk, violate our policies, and contradict our values. To increase visibility and accountability of the recruitment process, HP requires contracts and payments to be managed directly by the supplier.

In 2017, we conducted specialized assessments of conformance with our Foreign Migrant Worker Standard for

selected manufacturing suppliers in high-risk areas with migrant workers. We also look for forced labor risk during on-site audits, one of which identified two immediate priority findings. See [details](#).

At the end of 2017, we also investigated concerns about a subset of HP employees at an HP-owned facility who were foreign migrant workers. We focused on their employment terms and whether they had been charged recruiting fees by our external agencies. HP is remediating the identified impacts to the workers.

We conducted workshops in Thailand and Malaysia to train 118 supplier factory managers and 36 labor agents on our expectations for the recruitment and management of foreign migrant workers, student workers, and juvenile workers, as well as delivering training to 213 supplier workers in Malaysia. In China, approximately 3,000 workers subscribe to training modules about worker rights and effective communication in the workplace through the WeChat social media platform. HP also launched a new training program for relevant procurement staff that provides the context of forced labor and slavery, signs of forced labor conditions, a summary of HP’s policies and standards to combat modern slavery, who to contact for help, and how to report information.

We are founding members of the [Leadership Group for Responsible Recruitment \(LGRR\)](#), composed of global companies that have taken a leadership position to eliminate worker fees and support the “Employer Pays Principle.” We believe that our work to return fees and prevent deductions from worker pay stubs will increase money in workers’ pockets, including for migrants who often support extended families in their home countries. HP also belongs to the Responsible Labor Initiative steering committee.

HP’s statement on [Supply Chain Worker Wages and Benefits](#) outlines our expectation for suppliers and our belief that workers who make HP products should earn enough to support a decent standard of living. At our final assembly suppliers, workers on HP lines often receive benefits such as room and board, or stipends in lieu of those benefits, that we believe will elevate their total pay above the local minimum wage.

Our procurement teams, supplier managers, and other employees must be vigilant of and report instances of unsafe practices. To support these efforts, in 2017 we developed and launched the [Supplier On-site Survey app](#), which enables any HP employee at a supplier factory to report in real time potential indications of forced labor, as well as other possible violations of our Supplier Code of Conduct.

See our [UK Modern Slavery Act statement](#).

## Worker engagement and grievance mechanisms

To fully address social and environmental issues in our supply chain, we aim to communicate directly with workers to understand their questions, concerns, and priorities. In 2017, we conducted the following worker engagement, evaluation, and communications activities:

- **Researched the grievance mechanisms available to workers in our commodity and final assembly suppliers.** Based on this assessment, all of HP’s final assembly suppliers have accessible grievance mechanisms in place and have informed workers about how to access those systems. According to the recent RBA Code revision, these suppliers must now prove effectiveness of those mechanisms, including the percentage of grievances addressed and closed. In 2017, we surveyed worker voice service providers and assessed related tools offered for the industry. Moving forward, we plan to develop the ability to confirm that suppliers are meeting our expectations for critical requirements and improve our ability to monitor grievances and hear worker voice.
- **Piloted a “workplace of choice” program in Malaysia.** Nearly 1,900 foreign and local workers in two supplier factories were surveyed as part of a “workplace of choice” pilot conducted by an external monitoring firm. Key objectives were to evaluate worker experiences (including

hiring, working hours and wages, passport retention, and housing conditions), help shape worker trainings, and assess grievance systems. Thirty-eight percent of foreign workers had voiced concerns in the prior 12 months. Of those, 66% felt that their concern had been only partly addressed or not addressed at all. Nonetheless, 69% noted that they trusted the existing communications channels. Seventy-two percent of foreign workers and 67% of local workers reported happiness with their job overall, with the majority planning to renew their contracts. We believe that gaining more visibility and insight into existing grievance mechanisms will help us to enhance their effectiveness at remedying workers’ concerns.

- **Developed a training program for young foreign migrant workers and their supervisors in Malaysia.** Working with the Center for Child Rights and Corporate Social Responsibility, 11 training sessions were carried out for more than 280 workers in three factories between March and August 2017. Eighty percent of the participants reported an improvement in managing emotions and increased positivity about work and life, while more than 40% agreed they felt better able to communicate with others, manage conflicts, manage stress, and remain motivated at work. Supervisors expressed an improved ability to provide feedback to young workers and an increased awareness of their needs.

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## Working with U.S. truckers to fight human trafficking

Human trafficking has been reported in all 50 U.S. states, and the number of victims is estimated in the hundreds of thousands.<sup>1</sup> [Truckers Against Trafficking \(TAT\)](#) combats trafficking in the United States by educating and mobilizing members of the trucking and busing industries, and coordinating with law enforcement agencies.

TAT sees individual truckers as vital eyes and ears in the fight against human trafficking. More than 530,000 individuals are registered as having completed TAT training,<sup>2</sup> which teaches vigilance and actions that make it harder for traffickers to exploit the transportation system.

Beyond our own supply chain, we support innovative and effective initiatives such as TAT to combat forced labor wherever it exists. Most of HP’s U.S. trucking vendors have signed up to the TAT initiative, and several are [sponsors](#). We are one of the few shippers that participate directly, and are committed to ensuring that all carriers moving HP products in the United States take the training. In 2017, we added an addendum to our product transportation contract requiring carriers and sub-contractors to comply with TAT program principles and training.

## Women in factories

In China, women working in factories often face gender discrimination, poor access to services, significantly lower wages, and fewer promotion opportunities. Developed in partnership with Diageo, Plan W provides women in our supply chain training and practical skills including effective communication, time management, problem solving, and decision making. Women completing the program at the end of 2017 reported increased confidence, assertiveness, and effectiveness, helping them to develop their careers and become more equal in the workplace. Collectively, we enriched the lives of 20,000 women in our shared supply chain in 2017. In January 2018, we launched a similar program for a cohort of women at all of our major suppliers in Chongqing. These women will become advisors, peer educators, and support group leaders on topics developed by the workers.

Four of HP's suppliers won awards for outstanding sustainability performance in the [Women in Factories](#) program, an initiative sponsored by the Walmart Foundation to educate workers about communication, reproductive health, and time management. Almost 1,000 peer educators at 10 supplier factories were trained as leaders and mentors to aid in personal and career development.

Advancing this agenda beyond HP, we sponsored language within the RBA Code

of Conduct that addresses working conditions for pregnant and nursing women, including requiring adequate accommodation for nursing mothers.

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### Real-time reporting: SOS app

Our SOS (Supplier On-site Survey) app provides HP employees the ability to quickly report supply chain concerns—including issues such as fire safety, emergency preparedness, worker safety, and worker rights. Launched in 2017, the app is increasing our access to real-time information, including from supplier facilities that are not frequently audited. SOS is designed for employee use when visiting or stationed at supplier facilities.

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## Health and safety

Improving the lives and well-being of the workers who make and deliver our products is essential to a responsible supply chain. [Our policies](#) require suppliers to provide a clean, hygienic, and safe work environment, whether they are operating heavy machinery, handling chemicals, or conducting other tasks.

We analyze, identify, and address health and safety risks through supplier monitoring and worker and stakeholder engagement.

In 2017, we supplemented our audits with 20 health and safety assessments, 14 of which included sub-tier suppliers that we had not previously engaged. Corrective actions have been taken by all 14 sites for issues identified, including acquiring/ updating licenses and receiving follow-up inspections to confirm implementation of procedures and communication of worker protections. We also surveyed approximately 80 suppliers to understand the health and safety issues present in sub-tier suppliers, in particular their understanding of our standards related to fire safety, worker protection, and proper use and disposal of chemicals and waste.

## Process chemicals

HP aspires to a world where our products and operations use materials and chemicals that cause no harm. We take a science-based approach to assessing the potential human health and environmental impacts of substances used in making HP products. Our [Supplier Code of Conduct](#) requires suppliers to employ robust management systems to catalog and evaluate process chemicals, eliminate or manage hazardous substances, demonstrate that analyses of safer alternatives were conducted when a hazardous chemical is being used, and provide workers with essential personal protective equipment (PPE) and training.

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## 100-day challenges to improve safety with TenSquared: China

Improving occupational health and safety in our supply chain requires vigilance and sometimes tackling issues in innovative ways. Through the TenSquared program, managers and workers collaborate on 100-day challenges to tackle shared problems. This approach can enhance communication and yield strong results.

Working together with Social Accountability International we launched [TenSquared](#) in China in 2015, building on the success of the program in Brazil. The second 100-day challenge, which took place March–July 2017 at two facilities in China, focused on emergency preparedness and chemical safety. It included support for managers on effective collaboration with workers, risk identification, and goals-setting. Teams were also empowered to conduct a cost-benefit analysis to quantify the financial benefits of the program, beyond the core ergonomic and safety aims. One team estimated that by improving performance in twice-yearly evacuation drills by nine minutes, the company would save \$1,800 annually.

Suppliers are required to follow the manufacturing process chemical use restrictions outlined in the [HP General Specification for the Environment \(GSE\)](#). Where chemical substitutions are required, we help suppliers identify suitable alternatives through our alternative materials assessment program. See [Materials innovation](#).

During 2017, we launched a pilot to better understand suppliers' chemical use and conformance with our standards. Prioritizing final assembly sites with processes which may use GSE-restricted chemicals, we selected six facilities in China from 102 sites considered. Our team developed a supplier survey with input from third-party experts and conducted on-site interviews and assessments. We found GSE-restricted chemicals, but suppliers were using industry-standard ventilation and protective gear in compliance with local law and safety data sheets. Our industrial hygiene experts then worked with the suppliers to identify safer alternatives for those chemicals, which one supplier confirmed to have adopted already. We will continue to highlight our requirements and support our suppliers' work to shift to safer alternatives.

During the year, we also conducted specialized PPE training with 14 suppliers, engaging 2,600 workers on their rights and proper safety. The session included process chemicals and highlighted HP's new

GSE requirements in this area. We also ran process chemicals training in Chongqing with 55 suppliers, improving their knowledge of industrial hygiene.

To help advance progress across the industry, we are a founding member of the [Clean Electronics Production Network \(CEPN\) Green America program](#), which has a goal to move toward zero exposure of workers to toxic chemicals in the electronics manufacturing process. This collaborative effort is initially prioritizing challenges related to bonding and cleaning chemicals use in first- and second-tier suppliers in China and Mexico. During 2017, we implemented a self-assessment measuring worker exposures, piloted a standardized template to gather supplier data on process chemicals use, developed a case study for substituting a specific chemical, and adapted HP's [alternatives assessment procedure](#) with CEPN to help other brands find safer alternatives to process chemicals.

## Responsible minerals sourcing

Any connection between the materials used in HP products and armed violence or human rights abuses is unacceptable. To ensure our products are made responsibly, we have adopted industry-leading

policies and monitoring practices, and are broadening our vigilance beyond conflict minerals to a wider range of minerals and geographies. Through collaborative efforts, we aim to expand the market for responsibly sourced minerals.

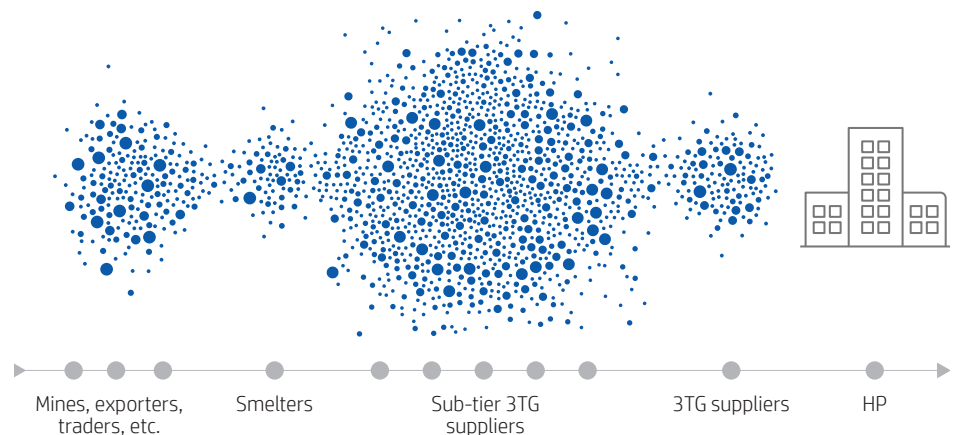
## Conflict minerals

"Conflict minerals" refers to the mineral precursors of the metals tantalum, tin, tungsten, and gold (3TG) as defined in the U.S. Securities and Exchange Commission (SEC) rule requiring a conflict minerals disclosure. Revenue from mining these minerals in the Democratic Republic of Congo (DRC) and adjoining countries has been widely linked to funding for groups engaged in extreme violence and human rights atrocities.

## A multi-actor supply chain

Across our complex, global, multi-actor supply chain, we have the most influence over our direct suppliers. However, in the case of trace and precious minerals we recognize that we must work to influence the practices of those much deeper in the supply chain. HP is an end user of 3TG metals and is typically four to 10 supply chain stages removed from the smelters that purchase and process the ore into metals. While conflict minerals are rarely used in large volumes in any one IT product or by one company, 3TG metals are found in relatively small amounts in virtually all electronic products. For this reason, it is important for HP to work with peers across the IT industry to collectively engage the entire supply chain in efforts to eradicate minerals that may have directly or indirectly supported armed groups.

Conceptualization of HP's 3TG supply chain



## Eliminating conflict-related risks from our supply chain

Smelters and their practices around ore purchasing present the greatest opportunity to mitigate minerals sourcing risks. Promoting best practices by smelters is the most direct way to address the risk of conflict minerals entering our supply chain that directly or indirectly supported armed groups. We expect our suppliers to source 3TG for HP products only from smelters that comply with the Responsible Minerals Initiative’s (RMI, formerly known as CFSI) Responsible Minerals Assurance Process (RMAP), which requires a third-party sourcing audit. However, our relatively small use of these metals decreases our influence, so we need all of industry to demand conflict-free 3TG. We will continue to work with our suppliers and across the industry to drive demand for conflict-free sourcing. We require our suppliers to work toward removing from our supply chain the smelters that do not participate in a conflict-free audit program.

We promote conflict-free minerals in our supply chain by:

- Encouraging smelters that purchase and process mineral ores to undergo third-party sourcing audits
- Urging our production suppliers of electronic goods containing 3TG (“3TG suppliers”) to require their smelters to undergo third-party sourcing audits

- Supporting multi-stakeholder collaboration to establish secure, conflict-free sources of 3TG ores from the DRC

### Suppliers

HP sets clear expectations of 3TG suppliers in our [Supply Chain Social and Environmental Responsibility Policy](#), [General Specification for the Environment](#), and [Supplier Code of Conduct](#). We assess these suppliers’ responses to the RMI’s Conflict Minerals Reporting Template, which gives companies a common format for sharing information about 3TG sources with business partners and suppliers across the supply chain. We request corrective action from suppliers where needed, and provide them training upon request. If any 3TG supplier reports sourcing from a smelter that triggers one of our potential risk indicators, we work with the supplier to establish whether unverified material is potentially used in HP products. When we identify a risk of this occurring, we request the supplier to remove the smelter from our supply chain.

### Smelters

To identify and disclose these smelters and refiners, between January and December 2017 HP surveyed suppliers which contributed material, components, or manufacturing for products containing 3TG. Each smelter or refiner reported was identified in at least one of the RMI Conflict Minerals Reporting Templates we received.

## Performance

In 2017, we received acceptable responses to RMI Conflict Minerals Reporting Templates from suppliers representing about 98% of our 3TG procurement spend, including both final assembly and commodity suppliers. These responses detailed 310 3TG facilities, 91% of which were compliant or in process to become compliant with an independent assessment program, and/or that we reasonably believe exclusively source conflict minerals from recycled or scrap sources or from outside of the Covered Countries (as of March 2018).

### U.S. Securities and Exchange Commission conflict minerals report

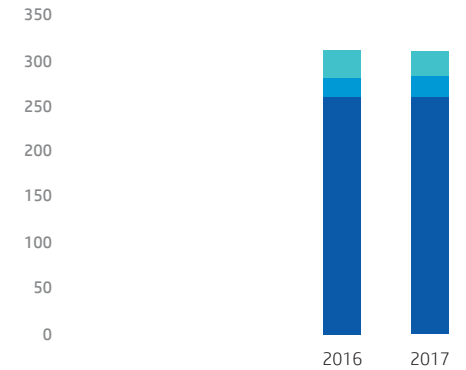
In May 2018, we filed our Form SD and Conflict Minerals Report with the U.S. SEC disclosing our due diligence efforts and results. See our [SEC Conflict Minerals Report](#).

## Other regions and minerals

Learning from our experience combating conflict minerals in the DRC and surrounding countries, we are expanding monitoring and supplier engagement activities to 3TG from all regions, as well as other minerals linked to social and human rights risks.

Our expanded approach is in response to growing awareness of minerals sourcing issues beyond the DRC and surrounding countries covered by the U.S. Dodd–Frank

Status of all supplier-reported 3TG facilities\*



Category	2016	2017
Unknown	31	28
Believed to source recycled/scrap or from outside the Covered Countries	20	22
Compliant or in process**	260	260

\* As of March 2018.

\*\* Smelters or refiners listed by RMI as currently RMAP compliant (including certification or accreditation by similar independent assessment programs cross-recognized by RMAP such as the Responsible Jewellery Council’s (RJC) Chain-of-Custody Certification Program, or the London Bullion Market Association’s (LBMA) Responsible Gold Programme) or in the process of becoming RMAP compliant.

### Progress toward DRC Conflict-Free, 2017

Type of facility	Total	Progress toward DRC Conflict-Free*	Percentage
Tantalum	40	40	100%
Tin	79	73	92%
Tungsten	46	43	93%
Gold	145	126	87%
<b>Total</b>	<b>310</b>	<b>282</b>	<b>91%</b>

\* Number of total 3TG facilities in HP Conflict Minerals Report 3TG facility list that were either RMAP compliant or in process to become compliant, and/or that we reasonably believe exclusively source conflict minerals from recycled or scrap sources or from outside of the Covered Countries (as of March 2018).

Act. Our customers expect HP to maintain leading practices in responsible minerals sourcing, and we are committed to doing so. For example, the new EU Conflict Minerals Regulation, which covers EU imports of 3TG minerals from all regions of the world, requires all large EU 3TG metal importers and smelters to become “responsible importers” consistent with the OECD Due Diligence Guidance. Although HP’s operations are not within the scope of the EU regulation, we are aligning our policy and approach to the extent practicable and preparing to support our customers’ requirements consistent with the regulation.

In 2016, we expanded minerals due diligence to also include cobalt, which has been linked to human rights abuses, labor issues, and exploitation. Through the [Responsible Cobalt Initiative](#), we are working to address child labor risks in the cobalt supply chain. See our [Report on Cobalt](#).

### Multi-stakeholder initiatives

Sourcing minerals responsibly requires global coordinated efforts across sectors and industries. We collaborate widely with businesses, nongovernmental organizations, government agencies, and our production suppliers to advance the use of responsibly sourced minerals.

Through [RMI](#), we help develop and share trainings, templates, and white papers to build the capabilities of the IT industry and beyond. We also collaborate through external forums, including:

- [Responsible Cobalt Initiative](#)
- [European Partnership for Responsible Minerals](#)
- [Kemet Partnership for Social and Economic Sustainability](#)
- [Public-Private Alliance for Responsible Minerals Trade](#)

## Supplier diversity

HP’s commitment to fostering opportunity and equality for our people extends to our relationships with our business partners and suppliers. As part of this commitment, we work to improve the representation of women and minorities within our supply chain through our purchasing decisions. As do our own [employees](#), diverse suppliers offer perspectives and experiences that drive innovation, fortify our business, and strengthen local communities and economies.

In 2017, we continued to develop our Global Supplier Diversity program in the United States and South Africa. The program provides existing and prospective small and diverse suppliers access to management training, company matchmaking, and community engagement events. Complementing these efforts, we also work with the [National Minority Supplier Development Council](#) and [Women’s Business Enterprise National Council](#).

We encourage small businesses and companies owned by women, minorities, veterans, service-disabled veterans, LGBTQ+ individuals, and aboriginal or indigenous individuals, to compete for our business. In 2017, we spent \$647 million with small companies in the United States and \$230 million with minority- and women-owned businesses. See additional [data](#).

To improve diversity in our suppliers’ workforces we run initiatives, such as those with our main advertising agencies and U.S. law firm partners. See [Diversity and inclusion](#).



# Supply chain environmental impact



Our supply chain accounted for about half of our [carbon footprint](#) and roughly a quarter of our [water footprint](#) in 2017, so our suppliers are essential partners in our work to minimize negative environmental impacts. With both our production and nonproduction suppliers, we are driving industry-leading practices that benefit our customers, global communities, and the planet. We believe that transparency is essential to advancing environmental sustainability across our industry, and request that our suppliers provide key environmental data and move to standardized reporting methodologies.

## Our priorities

### Reduce production suppliers' environmental footprint

- Measure, report, and motivate reduction of supplier environmental impacts
- Build supplier capabilities to reduce GHG emissions through energy management and renewable energy use
- Promote water stewardship and drive toward zero-waste manufacturing
- Drive supplier transparency and goal setting
- Elevate supply chain environmental standards through collaboration

### Decrease product transportation-related GHG emissions

- Enhance our logistics networks
- Prioritize transportation modes with lower GHG emissions
- Improve shipping densities through optimization programs and innovative packaging
- Advance standard GHG emissions calculation process across transportation industry

### Reduce nonproduction suppliers' environmental impacts

- Reduce environmental impacts through collaboration
- Support environmental reporting practices

## Engaging the supply chain to reduce impacts



Based on our 2017 submission, HP once again earned a spot on [CDP's Supplier Engagement leader board](#) – one of just 59 companies out of more than 3,300 assessed globally. This recognizes our work to forge an industry-leading approach to reduce GHG emissions and lower environmental risks in our supply chain. We also joined CDP's Supply Chain program during the year to encourage greater transparency across our supplier base and support CDP's efforts to help our suppliers measure and understand their environmental impact.

See [Footprint](#) for more on HP's recognition for environmental efforts across the value chain.

## Greenhouse gas emissions

We work with our first-tier production and nonproduction suppliers to reduce their carbon footprint and decrease emissions related to product transportation.

### GHG emissions intensity goal

Reduce first-tier production supplier and product transportation related GHG emissions intensity 10% by 2025, compared to 2015<sup>1</sup>

### Progress through 2016

**↑4%**

increase in GHG emissions intensity

### GHG emissions reduction goal

Help suppliers cut 2 million tonnes of carbon dioxide equivalent (CO<sub>2</sub>e) emissions between 2010 and 2025<sup>2</sup>

### Progress through 2017

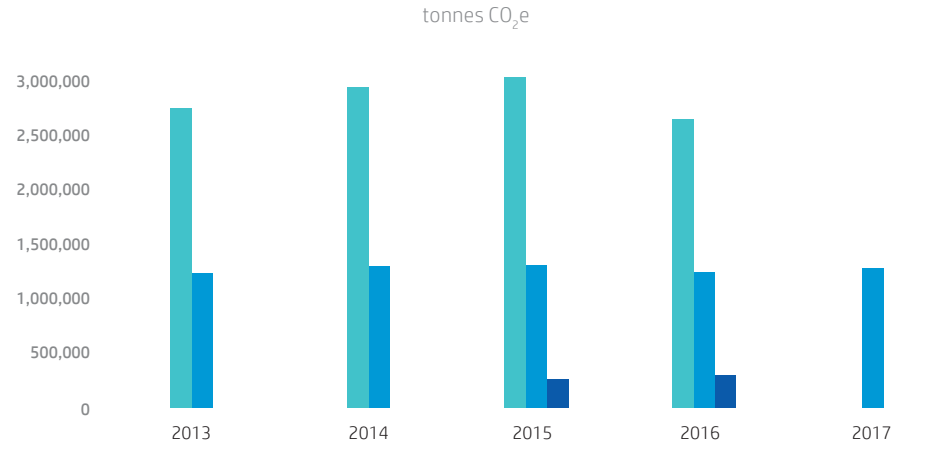
Suppliers avoided

**1.05 million tonnes**

of CO<sub>2</sub>e emissions

Through December 2016 (the most recent year data is available), first-tier production supplier- and product transportation-related GHG emissions intensity, calculated as a three-year rolling average, increased by 4%

## Supplier GHG emissions performance



■ Production supplier Scope 1 and Scope 2 emissions\*  
 ■ Product transportation  
 ■ Nonproduction supplier Scope 1 and Scope 2 emissions\*

\* 2016 is the most recent year data is available.

See additional [data](#) and HP's [2017 carbon footprint](#).

compared to 2015. However, between 2015 and 2016 one-year intensity decreased by 6%. As we continue engaging our suppliers to become more energy efficient and use energy from renewable sources, we expect to achieve our goal of a 10% intensity reduction by 2025. WWF has publicly supported this goal,<sup>3</sup> confirming the rigor of our goals-setting process. This goal is part of our suite of GHG emissions reduction goals that are components of our SBTi-validated science-based target.

We also advanced toward our goal of helping suppliers reduce their carbon footprint by cutting two million tonnes of CO<sub>2</sub>e emissions

between 2010 and 2025. As of December 2017, our suppliers had achieved 53% of this target through new and ongoing energy efficiency projects, energy management programs, and renewable energy use motivated by engagement with HP. Combined, these efforts have avoided more than 1.05 million tonnes of CO<sub>2</sub>e emissions through 2017, and saved our suppliers \$86 million in electricity costs alone.

## Production suppliers

In 2016, the most recent year that data is available, the suppliers that make HP products generated 2.6 million tonnes CO<sub>2</sub>e

of Scope 1 and 2 emissions attributable to HP, 13% less than in 2015. This reflects a general reduction in GHG emissions intensity by our suppliers, uptake of renewable energy by some of our largest suppliers, and a decrease in our overall production supplier spending.

We engaged 98% of our first-tier production suppliers, by spend, to help reduce their environmental impact. Overall, 94% reported having GHG emissions reduction-related goals. We also encourage suppliers to use renewable energy. Fifty-four percent, by spend, reported doing so in 2016, up from 47% in 2015. By the end of 2016, 38% had set renewable energy use goals.

We also request Scope 3 environmental data from suppliers to encourage awareness of the GHG emissions associated with their own supply chains and products. We will continue to help our suppliers enhance the accuracy and completeness of their energy and GHG emissions calculations and reporting.

### Engaging suppliers to reduce GHG emissions

Our Energy Efficiency Program (EEP) in China and Southeast Asia is an initiative for reducing production suppliers' utility costs and environmental footprint. Since 2010, more than 200 first-tier and sub-tier supplier sites have joined and benefited from EEP. Implemented in collaboration with NGOs such as BSR, the World Resources Institute,

and WWF, the program helps suppliers to build capabilities, improve energy efficiency, and explore the use of renewable energy.

In 2017, we continued our collaboration with [Natural Resources Defense Council](#), the [China National Institute of Standardization](#), local agencies, and suppliers in Suzhou, China, to pilot the Strategic Energy Management Program. This three-year trial program aims to enhance suppliers' operations, technology, and continuous improvement processes related to energy management and will establish best practices and national guidelines for facility energy management to benefit suppliers across China's IT sector. Since 2010, participants in our programs have saved a cumulative \$86 million in electricity costs alone.

Additionally, through our Sustainability Scorecard, we set requirements for our suppliers. We periodically raise our expectations to motivate ongoing improvement. In 2018, we are updating our supplier environmental management criteria to include science-based GHG emissions reduction targets and third-party verification of GHG emissions.

### Product transportation

On a typical day, our product transportation suppliers ship more than 1.5 million products between our manufacturing sites, distribution centers, and customers. Product transportation resulted in 1.25 million tonnes

of CO<sub>2</sub>e emissions in 2017, up 4% from the prior year, primarily due to air freight associated with increased notebook PC shipments.

To improve efficiency, cut costs, and reduce environmental impact, we work to optimize our logistics network by consolidating shipments, identifying new routes, and shipping directly to customers or local distribution centers.

Shifting from air to ocean freight also reduces our footprint. In 2017, we avoided 30,000 tonnes CO<sub>2</sub>e of emissions by shifting shipments from air to ocean between Asia and the Americas, Europe, and other countries within Asia. Reducing packaging size and weight also decreases emissions. See [Packaging](#).

We continue to use SmartWay® partners for 100% of our products shipped by truck in the United States and Canada. The U.S. Environmental Protection Agency (EPA) program improves road transportation efficiency and reduces GHG emissions. In 2017, for the sixth time and fourth consecutive year, we won the SmartWay large shipper Excellence Award.

We require our product transportation suppliers to use the [Global Logistics Emissions Framework](#), which we helped develop in 2016 with the Global Logistics Emissions Council, to standardize emission calculations.

To drive progress across the industry and beyond, we are working with the Clean Cargo Working Group, Green Freight Asia, the International Air Transport Association, the United Nations Climate & Clean Air Coalition, and the U.S. EPA SmartWay program.

### Nonproduction suppliers

We source a wide range of goods and services not related directly to product manufacturing such as staffing, telecommunications, and travel. We collaborate with nonproduction suppliers, based on size and sector, to provide training, improve reporting, and reduce environmental impact.

In 2016, the most recent year data is available, our nonproduction suppliers reported 270,000 tonnes of CO<sub>2</sub>e emissions attributable to HP. During that year, the percentage of HP nonproduction strategic suppliers that produced environmental reports increased to 65% from 52% the prior year. We believe this improvement in disclosure is partly due to our engagement with nonproduction suppliers through the CDP Supply Chain program.

## Water

Many of our suppliers operate in regions where water stress is a growing threat. We work with suppliers to improve water management in their operations and drive responsible withdrawal and discharge. In 2016, the most recent year data is available, production suppliers withdrew 31 million cubic meters of water associated with HP, 30% less than in 2015. This decrease reflects water withdrawal reductions among many of our suppliers, due to conservation projects ranging from awareness campaigns and improved maintenance to process efficiency improvements and water recycling. Stronger supplier water accounting practices also contributed to year-over-year variations in data. By the end of 2016, 80% of our suppliers, by spend, had set water withdrawal reduction goals.

To identify supplier sites in water-stressed areas, we use water risk assessment tools such as the [World Business Council for Sustainable Development's Global Water Tool](#) and the [World Resources Institute's Aqueduct Water Risk Atlas tool](#). For those sites as well as sites that manufacture water-intensive product types or report high water intensity, we also assess suppliers' water management strategies to identify how they can reduce impacts on local environments and communities. When appropriate, we work directly with

suppliers and encourage them to use the [Global Social Compliance Programme Environmental Reference Tools](#) to enhance water use practices and other aspects of environmental performance. To further drive improvements, in 2018 we are adding water stewardship criteria to our supplier Sustainability Scorecard.

See additional [data](#) and HP's [2017 water footprint](#).

## Waste

In 2016, the most recent year data is available, our suppliers generated 121,000 tonnes of nonhazardous waste associated with HP, no change from 2015, and they produced 51,000 tonnes of hazardous waste, a 6% increase compared to the prior year. The increase in hazardous waste volume is due to a major supplier including an additional stream of hazardous waste in its reporting, demonstrating better overall measurement and reporting. By the end of 2016, 62% of our production suppliers, by spend, had set waste-related goals.

Building on a successful [zero waste to landfill project in Brazil](#), we launched a similar pilot project in 2017 at a site of a major supplier in China, with the objective of diverting more than 95% of waste from

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## Supply chain transparency

HP has long been a champion of supply chain transparency. We were the first major IT company to publish aggregated supply chain GHG emissions data, and this year we added data about supplier energy consumption and renewable energy use. We belong to the CDP Supply Chain program to engage with our suppliers and promote openness and disclosure regarding climate and water risks, governance, and performance. We are a leader in the RBA Environmental Sustainability Working Group that in 2017 and 2018 revised its Environmental Survey to improve data sharing from IT suppliers. Through our Sustainability Scorecard, we require suppliers to provide environmental data, and in 2018 will add the expectation that their CDP responses be made publicly available. Our scorecard criteria also include that suppliers publish a Global Reporting Initiative-based sustainability report. In these ways, we improve suppliers' awareness of environmental impacts and their ability to track and improve performance.

The Corporate Information Transparency Index, developed by the Institute of Public and Environmental Affairs (IPE) and NRDC, evaluates the environmental practices of global brands' supply chains in China. In 2017, HP ranked seventh of 32 global IT companies and 18th overall, of 267 brands assessed.

To determine whether our suppliers met local laws relating to air, water pollution, and waste, in 2017 we cross-checked supplier sites representing 95% of our spend against IPE's public database of environmental violations, and collaborated with four first-tier manufacturing suppliers in China to determine whether their sub-tier suppliers complied with local environmental laws. This review of over 800 suppliers identified 21 sub-tier suppliers with violations. Through April 2018, 19 of those suppliers provided corrective and preventive action plans or monitoring reports to IPE demonstrating that the breaches were addressed. To resolve the remaining violations, we continue working with the relevant first-tier suppliers.

Pollutant release and transfer registers (PRTR) involve companies submitting to an authority inventories of substances released, which are then made publicly available. In 2017, HP collaborated with IPE to engage 12 final assembly sites in China, representing 87% of our final assembly supplier spend, to submit through IPE's PRTR system.

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landfill through reduction, reuse, and recycling. This supplier is pursuing third-party zero waste certification. We hope to

expand this program to additional suppliers in China.

See additional [data](#).

# Audit results



Supplier audits are an essential component of our risk assessment framework. Audits measure conformance with the [HP Supplier Code of Conduct](#) and help drive ongoing improvements in our suppliers' social and environmental performance. See a [full breakdown](#) of our audit results.

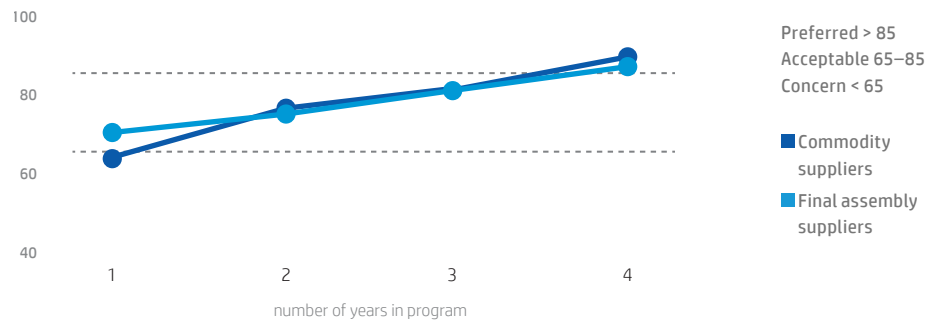
Every year, we evaluate a list of suppliers that make up 95% of HP's production supplier spend. We then look at geography, type of manufacturing, and external information sources such as news and NGO reports to determine which suppliers require an on-site audit. The audit format follows the [Validated Audit Process \(VAP\)](#), a collaborative approach that reduces the burden on our suppliers by avoiding multiple audits. The VAP meets the need for a high-quality, consistent, and cost-effective standard industry assessment of labor, health and safety, environmental, and ethics practices based on the Responsible

Business Alliance (RBA) Code of Conduct and relevant laws and regulations.

Audits are a core component of our supplier engagement and assessment, but they are not the only mechanism we use and do not solely drive suppliers to fix and prevent issues. Continuous improvement requires deeper engagement through coaching, specialized training, and ongoing data collection and conversations that help suppliers develop robust management systems to address the root causes of supply chain issues. See [monitoring and performance improvement tools](#) and [capability building](#). We summarize supplier performance across multiple dimensions (including audits) using our Sustainability Scorecard (see right).

Sustainability Scorecards are one of the key ways we incentivize suppliers and drive improved performance. This tool provides suppliers a score that encompasses audit performance (60% of total score), environmental reporting (13%), conflict minerals disclosure (6%), and other social and environmental topics (21%). Suppliers discuss this scorecard with HP as part of regular business performance evaluations that determine ongoing business. In 2017, the average score increased by 8% compared to 2016. Average scores since joining the program (see graph) increased by 40% for commodity suppliers and 24% for final assembly suppliers. This demonstrates the impact of embedding social and environmental metrics in broader performance evaluations and engaging HP and supplier executives in the process.

Average Sustainability Scorecard results

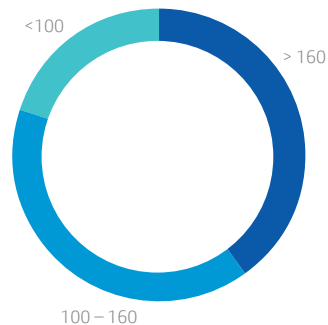


### Sustainability audits and other assessments, 2017\*

Initial audits	47
Follow-up audits	39
Full re-audits	30
Health and safety assessments	20
Onboarding assessments	2
Vulnerable worker group (student and foreign worker) assessments	7
Trucking assessments	5

\*Initial audits included 23 production supplier audits as well as 24 nonproduction supplier audits. The latter focused on the most significant risks in industries such as labor agencies, facilities management, and promotional products. Five trucking assessments addressed risks of forced labor among workers transporting shipping containers between the Port of Long Beach, California, United States, and distribution centers in Long Beach and Los Angeles.

### Audit score distribution, 2017\*



\*Data is from initial audits and full re-audits of production suppliers conducted in 2017. Due to our two-year audit cycle and changes to HP's supplier base, data typically does not represent the same supplier sites as the previous year.

## Performance

In 2017, we completed 150 audits and other assessments of production, nonproduction, and product transportation suppliers.

Supplier audits cover all provisions of our Supplier Code of Conduct in the areas of labor, health and safety, environmental, ethics, and management systems. They are scored on a scale of 0–200.

The RBA considers scores above 160 to be in near full conformance with the RBA code. In the newly developed RBA Factory LEAD Certification Program, suppliers with scores from 160 to 180 are eligible for a Silver certification, and scores above 180 for a Gold certification.

### Key drivers

Engaging with suppliers through the audit process provides extensive opportunities for ongoing improvement. We see a wide range of maturity levels in our audits, from companies that score under 100 (on a 0–200 scale) to companies that achieve perfect audit scores. Key factors influencing production supplier audit performance include the following.

**Length and level of engagement:** We see a strong correlation between length and level of engagement in our supply chain sustainability program and audit scores, including participation in our capability-building programs. This reflects the benefit of close collaboration between suppliers and HP on identifying and resolving nonconformances and improving underlying systems. Engaging workers supports performance on supplier audits in areas such as freedom of association, worker participation, and training. See [Capability building](#) for more information about our programs and progress.

**Supplier type:** Final assembly suppliers (which often have long-standing relationships with HP and robust sustainability programs) typically score highly in audits. These suppliers accounted for 75% of scores above 160 in 2017, although they represented just 15% of initial audits and full re-audits. The remaining audits were of commodity suppliers, which vary widely in sustainability maturity.

**Initial audits vs. full re-audits:** Companies usually score lower on initial audits than they do on full re-audits, demonstrating the benefit of engagement with HP. As a result, average audit scores tend to be lower when the proportion of initial audits to total audits is high and vice-versa. We continually bring new suppliers into our audit program, as they represent the most significant risks

of nonconformance and opportunities for improvement. In 2017, initial production supplier audits represented 43% of initial and full re-audits, but 59% of audit scores under 160.

**Raising the bar:** Over the life of our supply chain sustainability program, we have continued to increase our expectations of suppliers, including through enhancements to the HP Supplier Code of Conduct. For example, version 6.0 of the RBA Code of Conduct, ratified in 2017 and launched in 2018, includes significant changes related to worker voice and training, pregnant and nursing women, process chemicals, and water management. As a result, maintaining a consistent audit score over multiple years requires ongoing improvement.

Follow-up audits, which are designed to confirm resolution of nonconformances, are not included in the data in this section (other than the summary table). However, suppliers have demonstrated substantial improvements through these audits. In 2016, we added to our audit program a new category of commodity suppliers that make mechanical parts. Although those suppliers performed relatively poorly in audits that year, they implemented various improvements and corrective action plans, and their average score in follow-up audits increased by more than 50 points.

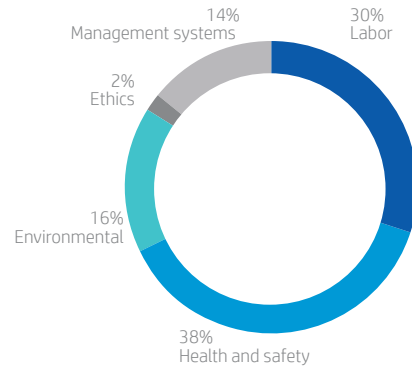
## Corrective action and remediation

HP requires suppliers to provide a detailed corrective action plan addressing all identified nonconformances within 30 days of receipt of the site audit report (except immediate priority findings, which are addressed expeditiously). We review these plans and request quarterly reports to monitor progress and subsequent closure of nonconformances. We also conduct follow-up audits to ensure all nonconformances are closed. When progress is inadequate, we intervene to help create a more effective plan.

This engagement between suppliers and our social and environmental experts provides opportunities for growth and ongoing improvement. For more details, see the [RBA VAP Operations Manual](#) and [Our approach for a sustainable supply chain](#).

Distribution of major nonconformances by section of HP Supplier Code of Conduct, 2017\*

percentage of total



\* Data is from initial audits and full re-audits of production suppliers conducted in 2017. Due to our two-year audit cycle and changes to HP's supplier base, data typically does not represent the same supplier sites as the previous year.

## Tackling nonconformance

Nonconformance rates vary widely for different sections and provisions of our Supplier Code of Conduct. Labor and Health and safety represented more than two-thirds of total nonconformances identified in 2017.

For audits conducted in 2017, suppliers were in full conformance (no nonconformances identified) in the following provisions: risk of child labor, business integrity, intellectual property, privacy, and worker feedback and participation.

Five provisions (see table on the next page) out of 46 total represented 50% of all nonconformances identified. We focus on these and other areas which have the greatest potential for improvement.

## Immediate priority findings

Immediate priority findings are the most serious type of supplier nonconformance and require immediate action. These include child labor, forced labor, severe forms of discrimination, health and safety issues posing immediate danger to life or risk of serious injury, and perceived violation of environmental laws posing serious and immediate harm to the community. We take such findings very seriously, and require suppliers to cease all related practices and report corrective actions taken within 30 days of the original audit. Recruitment fees must be reimbursed within 90 days from discovery and are verified by an on-site inspection within 180 days from discovery. We follow up closely to

ensure that all required corrective actions are completed, and visit sites to confirm resolution. Immediate priority findings do not necessarily involve termination of the supplier; we work with suppliers as appropriate to improve their performance and worker conditions in these areas.

In 2017, we identified two immediate priority findings related to forced labor risk at a final assembly site. In one instance, workers were charged without consent for a health check-up that should be included as a benefit of their work placement. In a priority closure audit, we confirmed that workers are no longer charged for health check-ups, and the workers identified in the original audit were returned their medical fees. Additionally, the administrative office of the supplier was holding passports. Our policy requires that workers have control of their personal documentation, so the office determined how to effectively contact individual workers when their documentation was needed. The facility installed personal pouches and lockers for worker use.

## Addressing the most common major nonconformances

Issue	% of audits with major nonconformance in 2017	HP response
Working hours	74%	<p>Excessive working hours remains the single largest labor challenge in our supply chain, especially around times of peak production and labor shortages. Workers often voluntarily work long hours to earn more money and suppliers may lack effective management systems in this area. However, among suppliers in our <a href="#">KPI program</a>, 92% met our requirements related to working hours in 2017, up from 89% in 2016. Suppliers have also implemented IT systems to better manage shifts, and some have dedicated lines for student and juvenile workers to facilitate conformance with overtime or night shift requirements. We provide training to student workers and their managers about our requirements and their rights.</p>
Emergency preparedness	60%	<p>Nonconformances in this area involve items such as blocked exit doors, missing or poorly lit exit signs, lack of fire exit instructions, and missing or defective emergency equipment. Most of these can be remedied with straightforward corrective actions. However, sometimes a change takes more time, for instance replacing all fire exit doors. We supplement our audits with specific health and safety assessments that help us evaluate and improve understanding of our policies and standards. See <a href="#">100-day challenges to improve safety with TenSquared: China</a></p>
Occupational safety	38%	<p>Major nonconformances in 2017 related primarily to presence of current safety permits and first aid response reporting. Suppliers are required to have a tracking mechanism and keep documentation of remediation and compensation provided to workers involved in an incident. A supplier with a nonconformance must also prove that training has been or will be conducted within 180 days.</p>
Wages and benefits	34%	<p>In countries without a set minimum wage, the industry prevailing wage applies. The most common issue in wages and benefits is suppliers not paying appropriate social insurance. More broadly, corrective actions in nonconformances related to wages and benefits include documentation of pay stubs, communication to workers, and records of employer contributions to worker insurance schemes.</p>
Hazardous substances	28%	<p>Suppliers must properly label and store all hazardous substances in their facilities. Corrective actions may include development of inventory management systems, a list of approved chemicals, auditor-verified vendors, and education on legal restrictions related to material use. See <a href="#">Process chemicals</a>.</p>



# Data

## Supply chain responsibility\*

	2016	2017
<b>Suppliers publishing sustainability reports using the GRI framework [% of production supplier spend]</b>	86%	82%
<b>Capability building</b>		
Number of capability-building programs	14	15
Workers reached through capability-building programs**	45,700	119,900
<b>Workers' rights</b>		
Suppliers' employees working fewer than 60 hours per week on average***	89%	92%
Suppliers' employees receiving at least one day of rest each seven-day workweek***	96%	98%
Suppliers in China with student workers representing 20% or less of total employees***	98%	100%
Suppliers conforming to HP requirements related to foreign migrant workers***	NA	93%
Immediate priority audit findings (immediate action required) related to the ILO Declaration on Fundamental Principles and Rights at Work: freedom of association; forced, bonded, or indentured labor; child labor; or discrimination†	2	2
Immediate priority audit findings (immediate action required) related to occupational safety, emergency preparedness, or industrial hygiene†	2	0
<b>Workers at sites audited**†† [total]</b>	96,400	162,300
<b>Sustainability audits and other assessments [total]</b>		
Initial audits	58	47
Follow-up audits	67	39
Full re-audits	30	30
Assessments	29	34

### Rates of conformance of sites audited, 2017 (see [page 59](#))

\* Data in this table is specific to production suppliers, except 24 initial audits of nonproduction suppliers and five assessments of product transportation suppliers included in SER audits and assessments conducted.

\*\* With the exception of train-the-trainer programs, HP only accounts for workers directly reached by our capability-building programs. Number of workers reached each year depends on the programs executed; some programs address issues broadly across suppliers and workers; other programs focus more narrowly on individual supplier sites or specific vulnerable worker groups.

\*\*\* Based on production-line workers at final assembly and select commodity sites participating in the HP KPI program. We continue to expand the list of suppliers in the KPI program based on business risk, country risk, and identified nonconformances.

† See [page 55](#) for detail.

†† These totals are the number of workers as of the date of the site visit according to production supplier initial audit and full re-audit reports. HP's UK Modern Slavery Act (MSA) Transparency Statement for 2017 reported that we had identified 199,432 workers based on audits conducted at many of our suppliers' sites. HP learned, after finalizing its UK MSA, that the reported data overstated the number of workers by inadvertently including audit reports from 2016 in addition to 2017. In 2017, there were 162,300 workers at the sites for which we are reporting audit performance information in this report.

## Supplier diversity

	2016	2017
<b>HP's spend with U.S. diverse suppliers* [\$ million]</b>		
Small businesses	\$1,065	\$647
Minority-owned businesses**	\$190	\$132
Women-owned businesses**	\$159	\$98
Veteran-owned businesses, service disabled veteran-owned businesses, HUBZone businesses, and others***	\$53	\$27

\* Data is for the 12 months ending September 30 of the year noted. Figures for 2016 are for purchases in the United States, Puerto Rico, Canada, Europe, and Asia, from U.S.-based businesses, and include one month of spending from before the separation of Hewlett-Packard Company on November 1, 2015. Figures for 2017 are for purchases in the United States and Puerto Rico from U.S.-based businesses.

\*\* Suppliers are categorized as minority-owned or women-owned, not both. These categories include all sizes of businesses.

\*\*\* These categories include all sizes of businesses.

## Supply chain environmental impact

	2013	2014	2015	2016	2017
<b>First-tier production supplier and product transportation-related GHG emissions intensity**</b> [tonnes CO <sub>2</sub> e/\$ million of HP net revenue]	70.1	71.8	75.9	78.8	
<b>Production supplier GHG emissions***</b> [tonnes CO <sub>2</sub> e]					
Scope 1 and Scope 2 emissions**	2,700,000	2,900,000	3,100,000****	2,600,000	
Scope 3 emissions**,*	15,800,000	14,600,000	9,800,000	11,500,000	
<b>Production suppliers with GHG emissions reduction-related goals</b> [% of spend]	68%	95%	93%	94%	
<b>Product transportation GHG emissions†</b> [tonnes CO <sub>2</sub> e]	1,200,000	1,260,000	1,280,000	1,200,000	1,250,000
Road (includes rail)	350,000	330,000	330,000	350,000	350,000
Ocean	250,000	230,000	200,000	150,000	160,000
Air	600,000	700,000	750,000	700,000	740,000
<b>Nonproduction supplier Scope 1 and Scope 2 emissions**</b> †† [tonnes CO <sub>2</sub> e]			240,000	270,000	
<b>Production supplier energy use</b> [MWh]				6,400,000	
<b>Production supplier renewable energy use</b> [% of total energy use]				26%	
<b>Production suppliers that reported using renewable energy**</b> [% of spend]	28%	10%	47%	54%	
<b>Production supplier water withdrawal for use**</b> ††† [cubic meters]	26,000,000	40,000,000	44,000,000	31,000,000	
<b>Production suppliers with water withdrawal-related goals</b> [% of spend]	59%	74%	80%	80%	
<b>Production supplier nonhazardous waste generation**</b> †††† [tonnes]	91,000	123,000	121,000****	121,000	
<b>Production supplier hazardous waste generation**</b> ††††† [tonnes]	31,000	45,000	48,000	51,000	
<b>Production suppliers with waste-related goals</b> [% of spend]	58%	59%	57%	62%	

\* Intensity is calculated as the portion of first-tier production and product transportation suppliers' reported GHG emissions attributable to HP divided by HP's annual revenue. This method normalizes performance based on business productivity. Intensity is reported as a three-year rolling average to decrease the impact of variance year over year and highlight longer-term trends. Production supplier GHG emissions include Scope 1 and Scope 2. Taking into account the separation of Hewlett-Packard Company on November 1, 2015, calculation for all years uses HP revenue and spend associated with the business units that are now a part of HP Inc. The year 2016 is the most recent for which data is available.

\*\* We believe that variation in this data reflects both changes in actual performance and inconsistency in reporting practices.

\*\*\* Emissions are estimated based on suppliers' emissions and their dollar volume of HP's business compared to their total revenue. Taking into account the separation of Hewlett-Packard Company on November 1, 2015, calculation for all years uses spend associated with the business units that are now a part of HP Inc. The majority of these companies report on a calendar-year basis. The year 2016 is the most recent for which data is available. Data reported here reflects extrapolation to 100% of first-tier production suppliers. Data collected represented 95% of HP spend. The World Resources Institute defines Scope 1, 2, and 3 GHG emissions in its [Greenhouse Gas Protocol](#). This data differs from the product life cycle assessment-based estimates for materials extraction through manufacturing presented on [page 36](#), which are based on a different calculation methodology and use a combination of HP-specific and industry data.

\*\*\*\* Data restated from amount reported last year due to corrected information from a large supplier.

\*\*\*\*\* Suppliers may not report all Scope 3 categories, although the number of categories reported by many suppliers has increased over the last few years.

† The figures for product transportation GHG emissions are based on data reported by product transportation suppliers that HP contracted to deliver products (for years prior to 2016, before the split of Hewlett-Packard Company, calculations are adjusted to reflect emissions attributable to HP's current business units). They may differ from the product life cycle assessment-based estimates presented on [page 36](#) which are based on a different calculation methodology, use a combination of HP-specific and industry data, and include additional upstream and downstream transportation related to the company's products, as well as retail and storage.

†† Emissions are estimated based on suppliers' emissions and their dollar volume of HP business compared to their total revenue. Accounting for the separation of Hewlett-Packard Company on November 1, 2015, the calculation uses spend associated with the business units that are now part of HP Inc. In cases where spend for 2015 cannot be disaggregated, 2016 spend is used as an estimate. The majority of these companies report on a calendar-year basis. The year 2016 is the most recent for which data is available. Data reported here reflects extrapolation to 100% of strategic nonproduction suppliers. Data collected for 2016 represented 39% of supplier spend.

††† This metric reports the amount of water withdrawn by suppliers, not the amount consumed by our multi-tier supply chain as reported in our water footprint on [page 36](#). Because water withdrawn can also be returned, this footprint is inherently larger. Refers to first-tier suppliers for manufacturing, materials, and components. Withdrawal is estimated based on suppliers' reported water withdrawal and their dollar volume of HP business compared to their total revenue. Taking into account the separation of Hewlett-Packard Company on November 1, 2015, calculation for all years uses spend associated with the business units that are now a part of HP Inc. The majority of these companies report on a calendar-year basis. The year 2016 is the most recent for which data is available. Data reported here reflects extrapolation to 100% of first-tier production suppliers. Data collected for 2016 represented 94% of supplier spend, compared to 72% the prior year.

†††† Waste data is estimated based on suppliers' waste data and their dollar volume of HP business compared to their total revenue. Taking into account the separation of Hewlett-Packard Company on November 1, 2015, calculation for all years uses spend associated with the business units that are now a part of HP Inc. The majority of these companies report on a calendar-year basis. The year 2016 is the most recent for which data is available. Data reported here reflects extrapolation to 100% of first-tier production suppliers. Data collected for 2016 represented 65% of supplier spend for nonhazardous waste and 55% for hazardous waste, compared to 60% and 50% the prior year.

## Rates of conformance of sites audited, 2017\*

■ Conformance  
■ Nonconformance



\* Data is from initial audits and full re-audits of production suppliers conducted in 2017. Due to our two-year audit cycle and changes to HP's supplier base, data typically does not represent the same supplier sites as the previous year.

\*\* Percentage of sites with no major nonconformances identified.

# Operations

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Billy the Blue Heron lives at Stewart Lake, used for storm runoff at HP's Corvallis, Oregon, United States, site. Courtesy of Mark Newsome.

# Our culture: The HP Way

The HP Way is our culture—what we value, how we work, and how we lead. Everyone at HP co-creates our culture every day as we work together to deliver on our vision and mission. It unites us in a shared purpose, while drawing on the diverse backgrounds, experiences, and views of HP employees worldwide. We look to the HP Way for guidance and inspiration, as it reflects who we are today as well as our aspiration for the company we want to become.





# Committed to integrity

Integrity, fairness, and accountability are fundamental to an inclusive society and a thriving business.

At HP, how we do things is as important as what we do. We work every day to earn the trust of our stakeholders and uphold our reputation for integrity and ethical leadership. As a result, our employees are proud to work at HP, and customers, partners, and suppliers want to do business with us. Beyond our operations, we use our scale and influence to support ethical conduct by our suppliers and partners, and across the IT industry.

Guided by our code of business conduct, known as [Integrity at HP](#) (formerly Standards of Business Conduct), we apply strong ethics and anti-corruption principles

within our operations, across our value chain, and in the communities where we live, work, and do business.

We combine strong internal governance with clear communication so that everyone at HP understands our principles and can put them into practice. Through robust policies, protocols, and controls, we secure the [privacy](#) of our customers and employees. We promote equality and [human rights](#) for all people across our value chain, guided by internal policies as well as external standards such as the United Nations Universal Declaration of Human Rights. To increase our impact across the industry and beyond, we advocate for [public policies](#) that drive progress and sustainable impact.

## Ethics and anti-corruption

Every day, we work to uphold our reputation for integrity and ethical leadership. As a result, our employees are proud to work at HP and our customers, partners, and suppliers are happy to do business with us.

We expect everyone at HP to meet the highest ethical standards and to treat others with integrity, respect, and fairness. Integrity at HP underpins our efforts, complemented by in-depth training and communication, targeted policies, and strong governance.

HP is committed to complying with all applicable laws and regulations everywhere we operate. We also use our scale and influence to encourage and support ethical

conduct by our suppliers, partners, and the broader IT industry. See [Supply chain](#) and [Human rights](#).

## Ethics

### Training and communication

Our annual Integrity at HP training covers key policies, procedures, and high-risk issues that employees might face, such as anti-corruption, conflicts of interest, and privacy. This year, we incorporated scenarios based on actual investigations, and provided frontline employees and select partners in higher-risk countries with online and in-person training. All members of HP's Board of Directors also complete annual Integrity at HP training. In 2017, we equipped managers with a new ethics toolkit, helping them respond to ethical issues on their teams. We also broadened communication of Integrity at HP through regular engagement including training, newsletters, and meetings.

#### Ethics training goal

Maintain greater than 99% completion rate of annual Integrity at HP training among active HP employees and the Board of Directors.

#### Progress in 2017

# 99.62%

of employees, including senior executives, completed Integrity at HP training, as well as all members of our Board of Directors

## Ethics and compliance governance at HP

### Board of Directors

The Board of Directors is responsible for overseeing ethics and compliance at HP. The board consists of 10 directors and Chip Bergh is the Chairman. All members are independent directors.



### Board of Directors Audit Committee

Provides nonexecutive input and guidance to the Ethics and Compliance Office.

### Ethics and Compliance Committee

Composed of HP executives, provides oversight and guidance on the design and implementation of our ethics and compliance program.

### Ethics and Compliance Office (within Global Legal Affairs)

Manages ethical issues across our global operations. Specific responsibilities include oversight of Integrity at HP, coordination of the company's Compliance Assessment Program, management of anti-corruption and privacy, and the design and management of processes that prevent, mitigate, and remediate all related business impacts.

See [Governance](#) for the board's composition, committees and charters, as well as our company bylaws and [Corporate Governance Guidelines](#).

In 2017, we launched a video series that improves awareness globally on compliance trends and how to handle ethical dilemmas. During the year, we recognized seven "Ethics Champions," employees who showed outstanding ethical leadership and modeled HP values.

### Reporting concerns

We make it easy for our employees and third parties to ask questions or report ethics concerns. Reporting avenues include email, an internal online form, a global 24-hour toll-free phone line with translation, mail, or in person. We offer anonymous reporting options where allowed by law. Employees

can also reach out to their supervisor or more senior managers, seek advice from internal ethics and compliance experts, or consult local Integrity at HP teams or Integrity at HP liaisons at any time. HP does not tolerate retaliation against anyone who raises a concern or question honestly and in good faith.

### Investigating concerns

Suspected violations of our code of conduct damage the trust of customers and other stakeholders. We take all alleged violations seriously, respond quickly, and take disciplinary or remedial actions when appropriate. Representatives from our legal, controllership, and human resources teams conduct local investigations. Escalated allegations are passed to our global legal affairs team.

In 2017, we launched a new investigation process, which improved our capability to perform investigation-related functions in-house and shortened investigation time. This approach creates new opportunities for employees to discuss concerns outside of formal investigations. Additionally, we enhanced our global case management processes to enable us to identify emerging trends in ethics violations and determine where additional controls may be needed.

### Anti-corruption

Corruption disrupts fair competition and is at odds with HP values. We do not tolerate

## Items reported to HP global Integrity at HP team or other compliance functions in 2017\*

percentage of total

Total number of reported items in 2017: 163

	2017
Misuse of assets	28%
Fraud	17%
Human resources	13%
Conflicts of interest	9%
Workplace security and theft	8%
Sales channel violations	7%
Anti-corruption**	6%
Confidentiality	5%
Financial and public reporting	4%
Competition	1%

\* Data doesn't add up to 100% due to rounding.

\*\* Includes allegations of commercial bribery, kickbacks, and Global Business Amenities Policy violations, as well as alleged corruption related to foreign public officials.

corrupt behavior of any kind, including bribery and kickbacks.

In 2017, we updated our [Anti-corruption Policy](#) to ensure consistency with related policies and processes. Our anti-corruption compliance program requires our employees, partners, and suppliers to comply with all applicable national laws and regulations including the U.S. Foreign Corrupt Practices Act and the UK Bribery Act.

## Risk assessment and audits

Anticipating potential corruption risks across our global operations helps us to operate safely and securely and protect our reputation. We use internal data and Transparency International's Corruption Perceptions Index to detect high-risk regions, assess risks related to third-party business partners, and then alert the relevant employees. We benchmark our approach against peer companies to identify best practices in areas including operational procedures, employee education, and supplier and partner training and monitoring.

HP conducts regular audits focused on potential corruption risks, including audits of our own operations. In 2017, we assessed corruption-related risks for the company. We also conducted risk-based reviews of third parties including sales intermediaries or "agents," suppliers, lobbyists, and channel reseller partners, focusing on organizations with high-risk profiles.

## Training and communications

We deliver comprehensive anti-corruption content to all employees through annual Integrity at HP training. We also communicate year-round to reinforce policies, controls, and training. In 2017, more than 13,600 employees in sensitive jobs completed targeted anti-corruption

training, complemented by 20 face-to-face and virtual sessions. We continued to enhance training and awareness for local teams, including nine site visits during the year to higher risk countries. More than 2,900 people also received training on the requirements of doing business with the U.S. government. During 2017, we also developed new face-to-face, scenario-based training that will be rolled out for select employees in 2018.

We communicate HP's anti-corruption standards and requirements to our business partners through contractual terms and conditions and the [Partner Code of Conduct](#).

## Human rights

Respecting equality and human rights is fundamental to the HP Way. It's a core value at our company, and shapes how we do business worldwide. HP works to ensure that our products are engineered and manufactured with integrity and respect for the people who help make them.

## Respecting human rights across the value chain

HP strives to uphold the relevant fundamental rights and freedoms of all people across our business, in line with the

[United Nations \(UN\) Universal Declaration of Human Rights \(UDHR\)](#), the [UN Guiding Principles on Business and Human Rights](#), and the [UN Global Compact](#). We embed human rights policies and practices across our business, guided by the [HP Sustainability Policy](#). We monitor emerging human rights expectations and best practices to continue to demonstrate leadership in this rapidly evolving area.

We work closely with our suppliers to help protect and empower their workers and improve labor standards (see [Supply chain responsibility](#)), with the goal that workers and communities in our supply chain can thrive. In our own operations, we promote a welcoming, diverse, and inclusive culture (see [Diversity and inclusion](#)) and do not tolerate discrimination of any kind. We consider privacy a human right, and prioritize protecting customer information (see [Privacy](#)).

In 2016, we evaluated all nine relevant corporate functions against the appropriate UN UDHR rights. We identified salient risks<sup>1</sup> in four of those functions: Supply Chain Responsibility, Global Indirect Procurement, Human Resources, and Technical Regulations. We found effective monitoring and grievance mechanisms in place in Human Resources and Technical Regulations, and remediation available.

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## Technology and human rights

Technology is reinventing how we live and work, and has the potential to improve the lives of people everywhere. However, such technology can also be used for unintended purposes or in contexts that may harm human rights. To avoid the misuse of our products and solutions, HP is committed to complying with all relevant sanctions, restrictions, and embargoes imposed by national governments or international organizations in its business operations worldwide. When we identify a potential risk of human rights impacts from our business relationships, we conduct thorough human rights due diligence. When others make allegations linking our business to adverse human rights consequences, we investigate the claims in line with our [HP Sustainability Policy](#). Wherever we can exert influence to mitigate alleged human rights impacts we do so.

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## Human rights risks and plans

Rights holders	Value chain phase	Salient risks	Risk mitigation tactics	Plans
Workers in supply chain	Supply chain (Supply chain responsibility, Global indirect procurement)	<b>Right to work:</b> Work that is not freely chosen <b>Right to life:</b> Unsafe working conditions	Evaluate relevant suppliers using a preliminary risk assessment.  Prioritize suppliers for assessment questionnaires, capability building, and on-site audits.	Develop the ability to confirm that suppliers are meeting our expectations for critical requirements and improve our ability to monitor grievances and hear worker voice.  See <a href="#">Supply chain</a> .
		<b>Right to life:</b> Conflict and forced labor associated with raw material extraction	Conduct due diligence; help increase demand for responsibly sourced minerals; maintain responsible sourcing programs; and participate in multi-stakeholder organizations that promote responsible sourcing.	Advance responsible cobalt sourcing through smelter audits.  Investigate HP's use and sourcing of mica.  See <a href="#">Responsible minerals sourcing</a> .
Employees	Operations (Human resources)	<b>Right to work:</b> Workforce reduction programs	Focus on business growth and providing employees support and severance when reduction programs are required.	
Customers	Products and solutions (Technical regulations)	<b>Right to life:</b> Unsafe or malfunctioning products	Continue to employ rigorous design standards, product testing, certification programs, and auditing.	Continue to evaluate and test all HP products to ensure that they meet our safety standards.  See <a href="#">Products and solutions</a> .

### Human Rights Council

In 2017, we established a company-wide Human Rights Council to strengthen our management of human rights risks across the company. It is chaired by the head of the Human Rights Office and includes senior management from Ethics and Investigations, Global Indirect Procurement, Human Resources, Privacy, and Supply Chain Responsibility. The group meets twice a year.

### Embedding human rights in our culture

We offer multiple channels for stakeholders to ask questions and report concerns

without fear of retaliation. We also publish information about HP's programs related to issues such as [combating forced labor](#) and human trafficking (see our [Modern Slavery Act Transparency Statement](#)).

We are launching a human rights video series for employees in 2018. The videos cover risks of forced labor in the supply chain, identifying and acting on suspicions of human trafficking, and our expectations of suppliers and partners. For some teams, such as procurement, relevant content will be required viewing.

### Collaborating to advance human rights

Our global reach provides us the opportunity to drive human rights progress worldwide. We promote human rights through engagement in public forums and multi-stakeholder partnerships, such as:

- Chairing the steering committee of the [Responsible Labor Initiative](#), a cross-industry collaboration of the [Responsible Business Alliance](#) focused on workers vulnerable to forced labor
- Participating in the steering committee of the [Leadership Group for Responsible](#)

[Recruitment](#), a group promoting sustainable hiring through labor agent training and certification

- Sitting on the Advisory Board of Social Accountability International, creator of the TenSquared program that improves [worker health and safety](#)

## 2nd

in the Development International 2016 ranking of corporate compliance with the California Transparency in Supply Chains Act

# Privacy

HP recognizes the fundamental importance of privacy, security, and data protection to our employees, customers, and partners worldwide. Not only is this commitment a critical pillar of brand trust, but in an era of accelerated innovation, global data proliferation, and fast changing regulatory frameworks, proactive leadership in privacy and security is increasingly a source of competitive advantage.

We strive to provide protections across all of our operations that exceed legal minimums and to deploy consistent, rigorous policies and procedures, giving people confidence when sharing information with us and using our products.

## Management and oversight

Our rigorous policies, standards, and approach aim to keep customer data safe:

- [Our Privacy Statement](#) describes our commitments in this area.
- The HP Privacy Accountability Framework outlines our approach for assessing and managing risks associated with collecting and handling personal data.
- Our executive-level Privacy and Data Protection Board provides oversight and leadership. In 2017, we formalized the role of Data Protection Officer.

Privacy training is part of our mandatory [Integrity at HP](#) annual refresher course, completed by 99.62% of HP employees in 2017. During the year, we also offer access to online courses that provide additional topic and role-based training opportunities.

We continue to strengthen privacy protections across our business to meet the requirements of changing regulations and evolving circumstances. This includes implementing enhanced internal policies and procedures to address our obligations as a data controller and processor and to ensure data subject rights are respected.

We are also implementing new privacy management and record-keeping tools in support of EU General Data Protection Regulation (GDPR) compliance. Although our privacy program is well-established, we are working to further strengthen several areas, such as due diligence of third parties, formalization of our privacy by design and data protection impact assessment processes, a focus on protecting commercial customer data, and overall program governance.

## Global compliance in privacy and data protection

HP complies with privacy laws and regulations worldwide. We track the number of substantiated complaints from third parties about customer privacy and data.

### Substantiated complaints regarding breaches of customer privacy and losses of customer data at HP\*

	2016	2017
Substantiated complaints from outside parties (including customers)	5	2
Substantiated complaints from regulatory or other official bodies	0	2

\* Breaches of customer privacy cover any noncompliance with existing legal regulations and voluntary standards regarding the protection of customer privacy related to data for which HP is the data controller. Substantiated complaints are written statements by regulatory or similar official bodies addressed to the organization that identify breaches of customer privacy, or complaints lodged with the organization that have been recognized as legitimate by the organization.

## Global standards and regulatory involvement

The secure movement of data is essential to our business, and our privacy and government relations teams work with governments worldwide to develop robust and globally interoperable privacy regulations. See [Government relations](#) for more detail.

## Privacy by Design

We reinforce data protection by design and by default in our operations, including the design and development of HP products and services. This includes deployment of a formal review process to ensure privacy as a default setting, data minimization and tailored purpose, technical and organizational safeguards, and transparency.

We are bringing our client services into alignment with the ISO 27001 certification standard, including the expansion of our certification's scope to include Managed Print Services and Device as a Service offerings.

See [Product security and privacy](#).

When developing and updating our privacy program, we consider global principles and frameworks including:

- [Asia-Pacific Economic Cooperation Privacy Framework](#)
- [EU Directive 95/46/EC](#)
- [EU General Data Protection Regulation](#)
- [Madrid Resolution on International Privacy Standards](#)

- [Organization for Economic Co-operation and Development Guidelines on the Protection of Privacy and Transborder Flows](#)

HP relies on lawful mechanisms for data transfer. HP remains among fewer than 100 companies worldwide<sup>2</sup> recognized by EU data protection authorities for our binding corporate rules, reflecting our high standard of data protection policies and procedures and enabling global data transfer within our company. HP is also self-certified under the EU/US Privacy Shield, and we comply with the Asia-Pacific Economic Cooperation's Cross-Border Privacy Rules.

## Cybersecurity

In our industry, hostile attempts to acquire personal and financial information are constant. HP's responsibility is to block these attempts, and we do so through robust internal controls and external partnerships.

Our Cybersecurity Organization provides and maintains the guidance, governance, processes, resources, and vendor relationships necessary to identify unwanted access, security threats, and cyberattacks, and shield our customer and employee information. HP's IT partners and vendors deliver the technology to protect customer and employee information.

Everyone at HP has a role in information security, and we are committed to working across all business groups and global

functions to ensure that each person is doing their part. In 2017, we updated our information security standards and incident response processes and playbooks to enable increased security rigor and applicability to a range of evolving industry threats. Our internal Cybersecurity Policy Suite provides a framework for the organization, governance, and implementation of information security across the company and informs employees about regulatory requirements, emerging threats, and new security practices, among other items.

When incidents do occur, the Cybersecurity Organization responds swiftly and regularly reports related activities to the relevant leadership. In 2017, we continued our on-going practice of understanding the techniques used by hostile actors, and improved existing security controls and measures. This included a formal initiative to revamp our Incident Response Plan and associated processes noted in the prior paragraph. A cybersecurity event requires disclosure if compelled by applicable laws or regulations. In 2017, HP did not experience any cybersecurity events that required disclosure.

## Government relations

HP advocates for public policies that enable our business to grow and unleash the potential of the 4th Industrial Revolution—

in ways that will create jobs, spur growth, and promote innovation and sustainable impact. We advance policies that encourage transformative technologies, such as additive manufacturing through 3D printing, which is expected to disrupt and redistribute \$4-6 trillion of the global economy in the next 10 years. For more detail, see our [white paper](#) on the transformative potential of 3D printing and our [policy framework](#) for the 4th Industrial Revolution.

## Policy priorities

Our global government relations team leads our engagement with policymakers, regulators, trade associations, and peer companies to advance public policies that align with HP's interests and values and shape a positive climate for technology innovation. Our policy priorities include:

### [Intellectual property rights](#)

Each year, HP invests significant resources to develop innovative technology products. We support strong protection of intellectual property rights in every market, and act on this through our leading anti-counterfeiting program. We encourage patent reform measures to protect against frivolous litigation, unwarranted product exclusion, and excessive licensing fees unrelated to patent value. HP also promotes the reform and phasing out of obsolete copyright levies systems and replacement by alternative compensation.

### [Market access](#)

Open international trade is essential to delivering on our vision to create technology that makes life better for everyone, everywhere. HP supports the opening of markets through trade agreements and other measures that reduce and eliminate duties and non-tariff barriers on IT products and services. We support implementation of the expanded World Trade Organization Information Technology Agreement and duty-free treatment for 3D printers and accessories. In 2017, we resolved several customs and regulatory issues affecting HP products in various markets.

### [Privacy and data protection](#)

Our [privacy](#) and government relations teams work with policymakers to support robust and globally interoperable privacy and data protection regulations. We advocate for accountability-based requirements for both the public and private sectors. We are engaged on implementation of the EU General Data Protection Regulation (GDPR) to ensure that requirements align to the daily realities of implementing a successful privacy and data protection program.

### [Public procurement](#)

We encourage adoption of new, forward-looking IT procurement models—shortening timelines to align to commercial cycles, prioritizing security, and emphasizing leading-edge and emerging technologies. In 2017, we advocated for passage of a new U.S. federal law to modernize government IT

procurement, and collaborated with HP sales teams to support multiple public sector wins at the U.S. state and local levels and around the world. We support basing procurement on objective criteria and including internationally recognized quality standards to ensure fair competition and access to the best global technologies. We also support our public sector customers to achieve their own sustainability goals, including lowering GHG emissions, reducing waste, and re-using and recycling end-of-service products when possible. We are committed to eliminating illegitimate printing supplies through best practices in public procurement, including educating officials on counterfeits and clones (new products manufactured by third parties that attempt to imitate HP original cartridges). Preferences related to remanufactured/ refilled cartridges should be based on scientific evidence, since they do not always offer the quality, total value, and overall life cycle sustainability of original cartridges.

### [Security](#)

Typical cybersecurity strategies often do not take into consideration the security of devices themselves. We encourage both the public and private sectors to consider device security as part of their overall cyber risk assessments. Efforts to share cyber threat information should encompass the latest intelligence on device security threats, such as firmware attacks.

### [Social responsibility](#)

In early 2017, we were among more than 120 companies that signed an amicus brief opposing a U.S. executive order on immigration. In doing so, we demonstrated support for the contributions of immigrants to the United States, and for all HP employees and their families as a force of innovation. We collaborate with governments, other companies, and nongovernmental organizations to protect the rights, health, and safety of workers everywhere. We are committed to addressing forced labor risks in our supply chain, and actively engage in efforts to combat human trafficking and modern slavery. As a leader in [ethical supply chain practices](#), we continue to support disclosures on conflict minerals, as established in U.S. and EU frameworks, and on worker conditions such as the UK Modern Slavery Act and the California Transparency in Supply Chains Act. We also support responsible management of process chemicals and a precautionary approach to replacing chemicals of concern.

### [Sustainability and product compliance](#)

HP supports national governments' commitments to the Paris Agreement and participation in the United Nations Framework Convention on Climate Change (UNFCCC). We are a proud signatory to [We Are Still In](#), and we continue to advocate for increased renewable energy and improved

energy efficiency standards to fulfil our commitments to combat [climate change](#). HP advocates for prioritizing energy efficiency in government procurement, promoting responsible and consistent materials and chemical use policies, and propelling the circular economy and responsible end-of-life electronics handling. We encourage voluntary industry measures, such as ENERGY STAR® and the Voluntary Agreement on Imaging Equipment in the EU, as alternatives to regulation to improve energy efficiency. We also support eco-labels that allow product differentiation based on a full life-cycle impact.

### [Taxation and economic incentives](#)

We advocate for tax policies and economic incentives that encourage innovation, growth, and job creation worldwide. In 2017, we engaged in the successful final passage of the tax reform law in the United States to make U.S. companies more competitive. To accelerate the adoption of 3D printing, we encourage creative public-private partnerships to provide incentives that create regional innovation clusters around this technology. We monitor and engage on tax policies that affect our operations at various sites worldwide.

## Political engagement

The HP Employee Political Action Committee (PAC) builds relationships with candidates and elected officials, and supports our U.S. policy priorities. We support candidates for elected office using established criteria, such as site representation and issue alignment, and make contributions in accordance with our [Political Contributions Policy](#). We post detailed lists of [HP Employee PAC](#) and [corporate contributions](#) twice annually. In 2017, HP was rated the top technology company, and tied for second place overall among S&P 500 companies, in the [CPA-Zicklin Index of Corporate Political Disclosure and Accountability](#).

We conduct all political engagements, including contributions to candidates, in a transparent, legal, and ethical manner and in accordance with HP's code of business conduct, Integrity at HP. Our U.S. Public Sector Code of Conduct guides ethical business interactions with federal, state, and local officials.



## Our employees

Every day, HP's approximately 49,000 employees<sup>1</sup> worldwide collaborate to shape our future and bring our vision to life. Our people power our innovation, contributing their unique perspectives and a growth mindset to create breakthrough technologies that improve the lives of everyone, everywhere. We are committed to fostering a diverse and inclusive workplace that attracts and retains exceptional talent. Through ongoing [talent development](#), [compensation and benefits](#), and a focus on [health and safety](#) and [wellbeing](#), we support our employees to succeed at all levels so they can deliver their best work, each day.

## Diversity and inclusion

Innovation at HP springs from teams of people collaborating and contributing varied perspectives, knowledge, and experience. Diverse teams create transformative solutions that better serve our customers and advance how the world works and lives. To find and keep the very best people, we embrace and celebrate difference, and take a stand for equity and belonging.

Diversity is part of everything we do, and our commitment extends beyond our own employees to our relationships with [suppliers](#), partners, and communities worldwide. We are proud of our progress and the [recognition](#) we have received. Together,

we are working toward a more inclusive society with opportunity for all.

See additional [data](#).

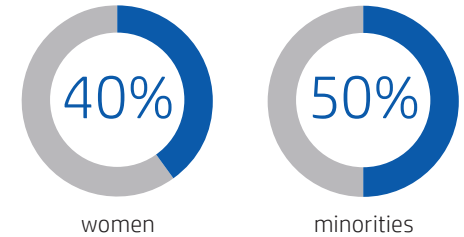
## Our commitment starts at the top

Our [board](#) is one of the most diverse of any technology company in the United States. Women in full-time positions represent 27.9% of the company's vice presidents, up from 18.3% in 2015 prior to the separation of Hewlett-Packard Company, and 28.3% of directors, compared to 22.7% in 2015.<sup>2</sup>

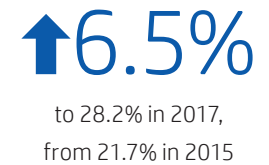
Our Global Diversity Advisory Board (GDAB) is composed of leaders from across our regions, functions, and businesses and helps influence and drive our strategy. In 2017,

### HP demographics\*

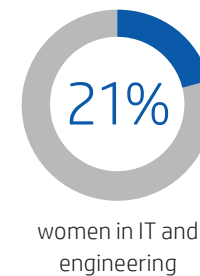
#### Board of Directors



#### Women in leadership\*\*



#### Technical roles



#### Global functions



\* As of October 31, 2017.

\*\* Full-time employees only, director level and above.

the GDAB engaged with stakeholders across business groups and regions to establish strategic priorities and build teams at the business and local levels to drive progress.

During the year, diversity and inclusion became an active part of leadership discussions, with established targets that include increasing representation of women overall, as well as in leadership and technical roles globally, and of minorities in the United States. We are also expanding our efforts related to representation of U.S. veterans and employees with disabilities worldwide. In 2018, diversity and inclusion will be a standard item in leadership quarterly business reviews.

## Embedding diversity and inclusion across HP

In 2017, we made a commitment to reinvent the standard for diversity at HP. The Belong, Innovate, and Grow (BIG) strategy, which we launched in 2016, is our umbrella program which embeds diversity and inclusion in talent acquisition and development, culture, mentoring, training, and events. This year, key achievements included the launch of business-level diversity oversight across the company.

We have Business Impact Networks (BINs) in all regions globally, representing nine constituencies: Black/African-American, disability, generations, Hispanic/Latino, LGBTQ+, multicultural, Pan-Asian, veterans,

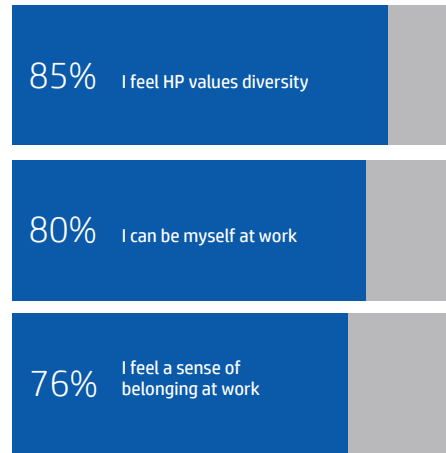
and women. Our active chapters have doubled in two years, numbering 84 across 19 countries at the end of 2017.

The networks lead many community outreach programs. In addition, they serve to promote diversity in pipeline development, local hiring, talent programs, and mentoring for various groups. They leverage our global diversity strategy to execute campaigns such as International Women’s Week and ALLIES@HP, a workshop for LGBTQ+ allies which launched as part of our HP Pride Month initiatives.



Employees in Fort Collins, Colorado, United States, celebrate Pride Month and the roll-out of our ALLIES@HP program.

### Employee survey results\* Diversity and inclusion



\* Data refers to the percentage of [HP 2017 Voice Insight Action \(VIA\) employee survey](#) respondents who strongly agreed or agreed with each statement.

### Overcoming unconscious bias

We want HP to be the employer of choice among talented women and underrepresented groups. Our ongoing [Reinvent Mindsets video series](#) shines a light on unconscious bias through the lens of women and underrepresented groups.

Since launching in 2016, more than 1,000 people have completed our new unconscious bias training program, including more than 300 VPs across 32 countries and 20 U.S. states. Next year, we will advance our unconscious bias training materials to move from awareness to action, focusing on disrupting bias in systems. We are working to reach all leaders, hiring managers, and recruiters. To complement our classroom session, we plan to launch a web version to provide employees worldwide easy access.

### Raising standards and practices across the industry

We use our scale to influence our suppliers and partners, encouraging them to prioritize diversity and inclusion within their own operations. In 2016, we challenged our top five marketing agencies to significantly increase the number of women and U.S. minorities in top creative and strategic planning roles on HP account teams. Since then, those agencies launched 15 programs to increase the pipeline for diverse talent. In 2017, all reported progress. Women increased to 61% of account team members at those agencies, exceeding the goal by 5%, and 51% of senior roles, surpassing the target by 4%. People of color represented 8% of account team growth year over year. Work remains to be done, however, as U.S. minority representation remained below

target for three of the five agencies. In 2018, agency partners will define specific underrepresented groups by country and set clear objectives, measurements, and plans to further increase diverse talent on HP business. See our [video](#).

In May 2017, we joined [Human Rights Campaign’s Business Coalition for the Equality Act for LGBTQ+ workplace rights](#), and in October 2017, signed the [United Nations Human Rights Office Standards of Conduct for Business](#).

Our legal team also launched a diversity initiative in 2017, focused on improving diversity among our U.S. law firm partners. The initiative allows HP to withhold up to 10% of all invoicing of our U.S. law firm service providers who fail to meet or exceed diverse minimal staffing on their work for us. Law firms were asked to staff at least one diverse relationship partner or one woman and one racially/ethnically diverse attorney, each performing at least 10% of the billable hours on HP business. Firms were required to track and share their data on a quarterly basis. Through November 2017, 73% of participating firms met the diversity requirements, the number of firms with a diverse relationship partner increased by

more than 20%, and the number of diverse attorneys working on HP matters increased each quarter.

## In our communities

We continue to engage with several leading industry organizations and conferences that promote women, minority, and LGBTQ+ representation and causes in technology, including the Professional Business Women of California, the Grace Hopper Celebration (United States and India), the Women’s International Networking Conference, Out & Equal, and others. Our people often take a leading role, running sessions, workshops, and addressing audiences.

Our newly launched [Women in Technology](#) website features employee stories that illustrate how our culture supports and inspires women in technical roles through the stages of their careers and lives. To inspire more girls and minority students to consider science, technology, engineering, and mathematics (STEM) careers, we also grew our participation in the [Hour of Code](#) initiative. During the annual event, 1,150 HP volunteers from 29 company sites taught more than 17,800 students in 170 locations about computer coding. We also maintained our partnerships with organizations such as the AnitaB.org, Black Women in Computing, and the YWCA.

In 2017, we launched the [HBCU \(Historically Black Colleges and Universities\) Business Challenge](#), a business school competition, with the National HBCU Business Deans Roundtable. Eighty-five schools were invited to participate, providing students the opportunity to develop solutions to real HP business problems while gaining hands-on industry experience, and a chance to win prizes including premium technology. HP congratulated teams from Delaware State University and Xavier University of Louisiana as the inaugural winners.

**67%**  
overall employee engagement in 2017, up 7 points year over year

## Employee engagement

HP’s [culture](#) is fueled by our people. We support our employees to develop lasting and fulfilling [careers](#) and to make meaningful contributions to their teams, to the company, and to their [communities](#).

We regularly collect feedback to better understand and improve the employee experience and identify opportunities to continually strengthen our culture. In 2017, 91% of employees participated in our annual Voice Insight Action (VIA) survey. Overall, employee engagement increased from 60% to 67% compared to 2016, reflecting improvements in all regions.

### Greatest Voice Insight Action survey improvements in 2017\*

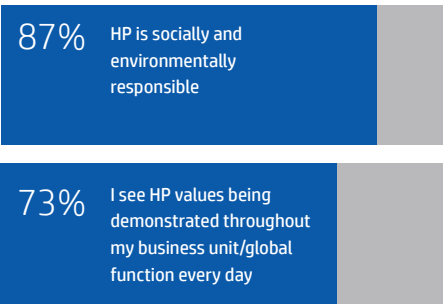
	Percent favorable		Improvement in percentage points
	2016	2017	
I am excited about the future of HP	54%	74%	+20
HP is making the changes necessary to compete effectively	45%	63%	+18
HP senior leaders provide clear direction for the future	57%	71%	+14
HP senior leaders are excellent role models of HP values	61%	72%	+11
HP has implemented processes that support our ability to be an innovative company	54%	65%	+11

\* Data refers to the percentage of HP 2017 VIA employee survey respondents who strongly agreed or agreed with each statement.

During the year, we continued to take an integrated approach and drive engagement in three focus areas:

- **Improving the way we work:** enhancing tools and processes to increase employee productivity and effectiveness.
- **Developing our people:** bolstering learning and development programs that maximize career growth opportunities.
- **Building our future:** driving innovation, agility, and employee alignment with HP's strategy and direction to help shape our culture, deliver on our mission, and achieve our vision.

### Employee survey results\* Sustainable Impact



\* Data refers to the percentage of HP 2017 VIA employee survey respondents who strongly agreed or agreed with each statement.

## Talent development

At HP, we recognize that our ongoing success depends on enabling our diverse workforce of skilled employees and maintaining strong leadership pipelines. We encourage a mindset of continuous learning and help employees to develop their careers. Employees have access to a wide range of development opportunities, including face-to-face and virtual, social, and collaborative learning, self-directed content, mentoring, coaching, and support for external academic programs. In 2017, employees participated in 1.48 million recorded learning sessions which totaled 1.51 million hours, an average of 30 hours per person.

We work to advance employees' skills through frequent, consistent, and engaging conversations between employees and managers. These conversations reinforce development plans that are worked on throughout the year and result in ongoing development experiences, stretch projects, and often new roles. We reinforce a culture of innovation by creating conditions that support risk-taking and failure. We learn from mistakes to drive breakthroughs and we focus as much on how employees work together as we do on what they accomplish. With support from human resources, leaders provide comprehensive performance summaries annually, without performance

## Growth mindset organization

HP is a company of high performers who are constantly learning, who show up prepared, and want the business and culture to excel. Through growth mindset thinking employees work on constantly improving, innovating, and creating a workplace that drives progress and growth. HP is making significant investments in the development of employees, leaders, and top talent, with a specific focus on:

- Developing a strong bench of innovative and inclusive leaders ready to step into senior-level roles
- Delivering diversity and inclusion programs to enable career advancement of women and individuals from underrepresented groups
- Building a high-performance culture through the development of leaders at all levels of the organization, focused on the application of HP leadership principles and practices
- Developing a growth mindset organization that delivers on strategic priorities, inspiring team performance, and enabling employees to innovate for the future
- Providing employees with cutting-edge learning that blends high-impact content with social learning platforms to create a highly-collaborative learning environment

ratings, and allocate differentiated rewards based on performance and available funds. In 2017, we gave performance input to 99% of eligible employees.

## Compensation and benefits

HP offers a comprehensive Total Rewards package that is both performance based and market competitive. Total Rewards include salaries, bonuses, incentive programs, and a range of benefits designed to meet

varying employee needs and enhance the wellbeing of employees and their families. HP recognizes that valuing and rewarding employees drives higher engagement and better performance. It also helps us attract and retain top talent. Compensation and benefits are reviewed annually for market competitiveness.

HP sponsors a [global wellness program](#) designed to enhance physical, financial, and emotional wellbeing for all our employees around the world. Other benefit programs offered in 2017 vary by country to reflect local market practice and unique employee



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## HP is committed to pay equity

At HP, we're committed to paying all employees fairly and equitably. We believe people should be paid for what they do and how they do it, regardless of their gender, race, or other personal characteristics. To deliver on that commitment, we benchmark and set pay ranges based on market data, and consider factors such as employees' roles, the location of their job, their experience, and their performance.

A recent nationwide review of HP U.S. employee compensation found no evidence of systemic pay inequity across the workforce. HP periodically performs such reviews, considering many legitimate factors under our compensation practices. We do so to ensure compensation practices are fair, equitable, and aligned with our principles.

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needs. Depending on location, these may include the following types of benefits:

- Retirement and savings plans
- Healthcare benefits
- Insurance protections (e.g., life and disability)
- Time-off programs (vacation, holidays, parental leaves, etc.)
- Discount programs
- Flexible work arrangements
- Stock purchase plan
- Other benefits

## Health and safety

We strive to keep our employees safe and healthy so they can do their best work. Worldwide, we maintained below-average accident and injury rates in 2017, with a lost workday case rate of 0.08 and a recordable incidence rate of 0.17. These compared to average rates of 0.2 and 0.7, respectively, in the U.S. Computer and Peripheral Equipment Manufacturing industry.

Our manufacturing facilities in Kiryat Gat, Israel; Rehovot, Israel; Penang, Malaysia; Singapore; Barcelona, Spain; and San Diego, California; Corvallis, Oregon; and Aguadilla, Puerto Rico, United States, continue to represent our most significant health and safety risks, due to higher potential exposure to chemicals and machinery-

related hazards. Managing and reducing risks at these plants remains a focus, and injury rates continue to be low.

We monitor injury trends regionally and worldwide, and our environmental, health, and safety (EHS) leadership team uses our global injury and illness reporting system to assess trends as a part of quarterly reviews. Supervisors of affected employees are required to complete injury and illness investigations for all reportable incidents, and work with EHS points of contact to assess serious or complex cases.

We regularly highlight national and international health advisories to our employees, including 21 in 2017.

See more information about our [environmental, health, and safety management system](#).

See [Data](#).

## Wellbeing

The physical health, financial wellbeing, and life balance of our people is vital to HP's success. In 2017, we launched Well Beyond, our new employee wellbeing program. It builds on the past success of our Winning with Wellness program and is designed to serve the new HP with our evolving workforce and

culture. As of October of that year, 62% of eligible employees in the United States, and 33% worldwide, had joined the program.

Year-round employee engagement, at the heart of Well Beyond, emphasizes ongoing actions that can help individuals build healthy behaviors into day-to-day life. Employees can track progress, challenge peers and spouses/domestic partners, and personalize the program by setting their own goals. Depending on location, employees and spouses/domestic partners can each receive rewards of up to \$550 a year for activities such as completing a wellness assessment or making a tobacco-free pledge.

Highlights from 2017 included:

- **Physical health:** We recorded 11.1 billion employee steps through our Well Beyond platform worldwide, equivalent to more than 4.4 million miles.
- **Financial wellness:** We ran a financial wellness month in the United States in August and introduced our Wheel of Finance game, which educated employees on key financial areas such as 401k savings, emergency funds, reducing debt, investments, and budgeting.
- **Life balance:** We offered meEquilibrium, a U.S. program that helps employees build general resiliency skills, including our monthly 'Calm-Cast'.

# Our facilities

HP is one of 10 founding members of EV100, a new Climate group Initiative to accelerate technological development of electric vehicles (EV) worldwide.

At our sites around the world, we are reducing greenhouse gas (GHG) emissions, energy and water consumption, and waste generation. While GHG emissions associated with HP's operations represent just 1.4% of our carbon footprint, it is the area where we have the greatest control. Modeling sustainable operations also helps us lead change in our industry and beyond.

## About our operational data

All environmental data reported in this section refers to HP operations through October 31, 2017. At that time, we owned or leased 191 sites in 60 countries, equaling 22.6 million square meters. HP used 2015 intensity factors for 2017 energy, water, and waste calculations, which are consistent with the factors used in the prior year. HP directly tracked data from invoices and other documents representing 81% of total

electricity use, 86% of total natural gas use, 85% of total water consumption, 62% of total nonhazardous waste, and 100% of total hazardous waste.

## Environmental, health, and safety management

HP owns and leases facilities around the world. Our [Environmental, Health, and Safety \(EHS\) Policy](#) and EHS management system help limit our environmental impact, improve worker safety, meet internal standards, and comply with all applicable laws and regulations. We investigate all allegations that our facilities failed to comply with applicable laws, and take corrective action when needed.

We conduct internal audits annually at complex locations, and the global EHS team audits high-risk locations at least once every three years, including 10 sites in 2017.

We pursue environmental management and green building certifications at HP owned and leased facilities worldwide when feasible. In 2017, 17 facilities continued to be part of our global ISO 14001 certificate, and we are currently transitioning to the latest version of the ISO 14001 standard. Additionally, 14 locations have LEED® certification and one has achieved Green Mark certification. Our future Houston, Texas, United States, site, under construction, is targeting LEED Gold.

To drive improvement in health and safety, our EHS management system aligns with the American National Standards Institute ANSI Z10 standard and the International Labour Organization ILO-OSH 2001 guidelines.

## EcoChallenge

In 2017, nearly 300 HP employees from 12 sites in eight countries took part in the [Northwest Earth Institute \(NWEI\) EcoChallenge](#)—a competition that brings together thousands of people to take small actions that create positive change. 'EcoChallengers' chose a personal sustainability challenge in an area such as food, water, energy, or waste.

During the two-week challenge, HP participants:

- Reduced GHG emissions by about 3 tonnes using alternative forms of transportation including walking, biking, and bus
- Saved more than 55 cubic meters of water
- Chose nearly 1,000 sustainable meals

Next year, we plan to expand these efforts, by recruiting 800 employees across 30 sites

All HP facilities have assigned technical EHS personnel, and our global EHS team provides guidance and oversight. We regularly talk to our employees about relevant policies, processes, and regulatory compliance. In 2017, more than 2,800 employees took

part in 37 instructor-led courses and nearly 14,400 enrolled in web-based EHS training.

## Greenhouse gas emissions<sup>1</sup>

Most of our GHG emissions from operations are related to the energy used to power our facilities. To save money, drive progress toward our goals, and reduce our climate impacts, we:

- Aggressively reduce energy consumption through optimization and efficiency projects
- Increase on-site generation of renewable power
- Procure off-site renewable power, including through renewable energy credits (RECs) and power purchase agreements (PPAs)

### Greenhouse gas emissions goal

Reduce Scope 1 and Scope 2 GHG emissions from global operations by 25% by 2025, compared to 2015

### Progress in 2017

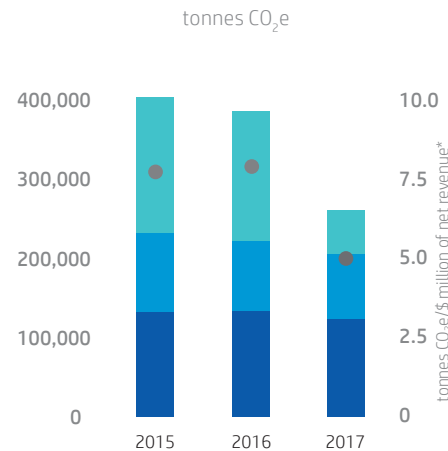
HP's global operations produced 260,100 tonnes of Scope 1 and Scope 2 CO<sub>2</sub>e emissions,

**↓35%**

less than our 2015 baseline

In 2017, we decreased Scope 1 and Scope 2 GHG emissions from global operations by 35% compared to 2015, exceeding our 2025 goal of a 25% reduction. The main drivers included increased energy efficiency as well as the purchase of [renewable energy and renewable energy certificates \(RECs\)](#) in the United States. Our global operations produced 260,100 tonnes of Scope 1 and Scope 2 carbon dioxide equivalent (CO<sub>2</sub>e) emissions during the year, equal to 5.0 tonnes of CO<sub>2</sub>e per \$ million of net revenue.

### Scope 1 and Scope 2 GHG emissions from operations



- Americas
- Europe, Middle East, and Africa
- Asia Pacific and Japan
- GHG emissions intensity (tonnes CO<sub>2</sub>e/\$ million of net revenue)\*

\* Historical emissions-intensity values were calculated using HP's annual revenue as characterized in financial reporting and Scope 1 and Scope 2 GHG emissions.

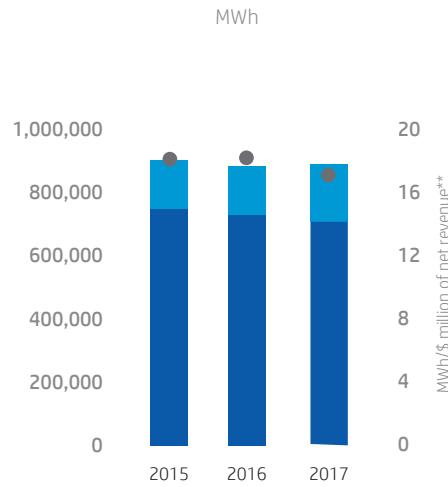
Learn more about how we reduce GHG emissions across our value chain in [Supply chain environmental impact](#) and [Products and solutions](#).

See our [full carbon footprint](#) for 2015–2017, [HP carbon accounting manual](#), and [CDP climate submissions](#).

## Energy efficiency

Energy use is a significant operating expense for HP and the main driver of our climate impact from operations. Our

### Energy use from operations



- Stationary combustion (natural gas and diesel)
- Electricity\*
- Energy intensity (MWh/\$ million of net revenue)\*\*

\* Includes purchased electricity and electricity generated on-site.

\*\* Historical energy-intensity values were calculated using HP's annual revenue as characterized in financial reporting and direct and indirect energy use.

operations consumed 890,958 MWh, 1% more than in 2016 due to an increase in natural gas consumption in the United States resulting from an unusually severe winter. Global electricity use decreased by 2% compared to 2016, despite a rise in electricity consumption at manufacturing sites related to increased production. Energy intensity equaled 17.1 MWh per \$ million of net revenue, 6% less than in 2016, due to energy savings from efficiency projects and increased revenue.

Globally, the main tactics we used to reduce energy use included retro-commissioning at our Palo Alto, California, United States, and Barcelona, Spain, sites, installing LED lighting upgrades, conducting American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) energy audits, implementing R22 refrigerant replacements, and following smart building principles for new construction and renovations.

In 2017, we implemented projects at seven locations that will save 4,100 MWh on an annual basis. We have identified further opportunities to save 18,000 MWh through audits at 11 other sites.

At our Palo Alto, California, United States, site, we neared completion of a major efficiency project during the year that included a building automation system upgrade, retro-commissioning, improvements to heating, ventilation, and air conditioning, new LED lighting, and digital lighting controls. These

improvements reduced electricity use by 8% at the site and saved \$155,000, which we expect to increase when the project is completed in 2018. We invested some of these funds in a new community garden where employees can spend time and host events.

## Renewable energy

By shifting toward renewable, carbon-neutral energy, we can reduce GHG emissions from operations. In 2017, we procured and generated 353,366 MWh of renewable electricity globally, 237% more than in 2016. This equaled 50% of our global total, exceeding our 2020 goal of 40%. Sources included RECs and guarantees of origin (79.5%), direct purchases (20.3%), and renewable energy generated on-site (0.2%). Through these purchases, we reached our objective to use 100% renewable electricity in the United States and helped to advance the global market for renewables.

### Renewable electricity goal

Use 100% renewable electricity in our global operations, with a goal of 40% by 2020

### Progress in 2017

Renewable electricity purchased and generated on-site, combined with renewable electricity certificates and guarantees of origin, accounted for

**50%**

of our total consumption

We are committed to using 100% renewable electricity to power our operations, and in 2016 joined [RE100](#) led by The Climate Group to support these efforts.

In 2015, we signed the [Corporate Renewable Energy Buyers' Principles](#).

## Business travel, commuting, and auto fleet

In 2017, employee business travel generated 72,900 tonnes of CO<sub>2</sub>e emissions, 22% more than in 2016. Commuting generated 200,000 tonnes of CO<sub>2</sub>e emissions, flat from the prior year. Our company fleet accounted for 31,400 tonnes of CO<sub>2</sub>e emissions, an increase of 1% compared to 2016.

To support HP's GHG emissions reduction goal from operations, we plan to reduce GHG emissions from HP owned or leased auto fleet vehicles by 10% by 2025, compared to 2015. Through 2017, we achieved a 4% decrease.

To reduce emissions, we provide low-impact travel choices for our employees through collaboration with our travel providers, planning tools, and initiatives such as the Zipcar vehicle share program at our headquarters in Palo Alto, California, United States.

In 2017, we were one of 10 founding members of EV100, a new Climate Group initiative to accelerate technological development of electric vehicles (EVs)

worldwide. In support of this effort, we have committed to install EV infrastructure at all feasible sites worldwide by 2040.

## Water

Water consumption associated with our operations makes up 3.1% of our total [footprint](#). This is about evenly split between direct consumption as described in this section (mainly for use in buildings, cooling, landscaping, and production of high-purity water for manufacturing) and indirect consumption associated with generation of the electricity we use in our facilities.

We work to reduce consumption and use the [World Resource Institute's Aqueduct Water Risk Atlas tool](#) to assess the risk of sites and prioritize water-stressed locations. In 2017, we consumed 3,216,000 cubic meters of water overall, a less than 1% decrease compared to 2016. Potable water use rose 4% compared to 2015, the baseline year of our goal, due to manufacturing growth in Penang, Malaysia; Kiryat Gat, Israel; Rehovot, Israel; and Corvallis, Oregon, United States; and the opening of a new site in Singapore. Additionally, manufacturing lines in Singapore that used wastewater shifted to Penang, Malaysia, where wastewater is not currently available. Water consumption intensity per \$ million of net revenue decreased by 7% between 2016 and 2017. HP recycled or reused 551,000 cubic meters

of water globally during 2017, including 534,000 cubic meters of NEWater, equivalent to 17% of total water consumption. The company also used 15,000 cubic meters of sewage treatment plant water.

### Water consumption goal

Reduce potable water consumption in global operations by 15% by 2025, compared to 2015

### Progress in 2017

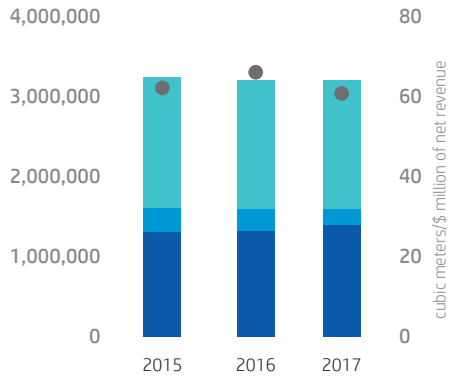
Potable water consumption equaled 2,660,000 cubic meters globally,

**↑4%**

more than in 2015

To reduce and recycle water used at our facilities, we employ smart building practices, sustainable landscaping, infrastructure upgrades, and greywater reuse. During 2017, we also convened an ideation session with participants from across HP, external industry water experts, and municipalities to develop creative approaches to addressing water challenges at the company. In 2018, we plan to host similar sessions at our largest water-using sites. During the year, we also intend to install smart meters at our sites in Boise, Idaho, and Corvallis, Oregon, United States, Singapore, and Beijing, China.

### Water consumption cubic meters

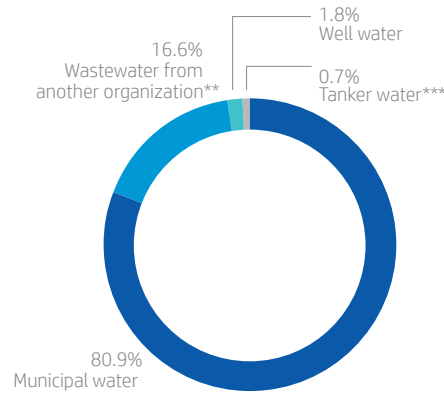


- Americas
- Europe, Middle East, and Africa
- Asia Pacific and Japan
- Water consumption intensity (cubic meters/\$ million of net revenue\*)

\* Historical consumption-intensity values were calculated using HP's annual revenue as characterized in financial reporting and water consumption.

### Water consumption by source, 2017\*

percentage of total



- \* Direct use of surface water is insignificant and not included in data reported. Rain water is about 0.1% of total so is not visible on the graph.
- \*\* NWater is ultra-purified wastewater used in manufacturing operations in Singapore.
- \*\*\* Tanker water is well water that is delivered to the site by tanker truck.

In 2017, HP introduced sustainable landscaping to our Boise, Idaho, United States, campus, replacing non-indigenous grass on campus with native grasses that require less maintenance and watering and attract local pollinators. When fully mature in 2019, the project is expected to save approximately 82,500 cubic meters of water annually (equivalent to 33 Olympic-size swimming pools) and reduce landscaping costs by 50%. The facility became the first corporate campus worldwide to be certified using the [USGBC Sustainable SITES Initiative v2 rating system](#). SITES is the most comprehensive program for designing, developing, and maintaining sustainable landscapes. In 2018, we plan to introduce a sustainable landscaping project at our Corvallis, Oregon, United States, campus and pursue USGBC Sustainable SITES certification.

See our [CDP water submissions](#).

We implement procedures to prevent unauthorized discharges of chemicals to our facility wastewater systems and ensure that these sites do not discharge wastewater directly to surface water or to groundwater.

## Waste

Although our facilities do not generate large amounts of waste, we employ a global policy of “reduce, reuse, and recycle” that supports our company-wide shift toward a circular economy. HP generated 29,500 tonnes of nonhazardous waste in 2017, up 6% compared to 2016, due primarily to increased manufacturing. We achieved a 90.9% landfill diversion rate globally, and only use disposal as a last resort.

We reuse electronic equipment when possible, or recycle it responsibly through the same programs we offer customers. As part of a recycling drive, in 2017 our Surya Park site in Bangalore, India, recycled more than 60 tonnes of electronic equipment. See [Product repair, reuse, and recycling](#).

In 2017, our Palo Alto, California, United States, headquarters became the first corporate campus in the state to achieve Gold [TRUE Zero Waste](#) certification, through Green Business Certification Inc. and the United States Green Building Council.

## Wastewater

Wastewater is not a significant environmental aspect of HP's operations. Our six imaging and printing product-manufacturing facilities generate process effluents that are pretreated, strictly monitored, and discharged under government-issued permits to municipal wastewater plants for further treatment.



Employees celebrating the sustainable landscape project at HP's Boise, Idaho, United States, site.

TRUE is a “whole systems approach aimed at changing how materials flow through society, resulting in no waste.” We plan to pursue certification at additional sites globally in 2018.

The main hazardous waste we generate is liquid from ink manufacturing facilities. These manufacturing sites prioritize waste management options with low environmental impacts and only use disposal as a last resort. Although ink manufacturing

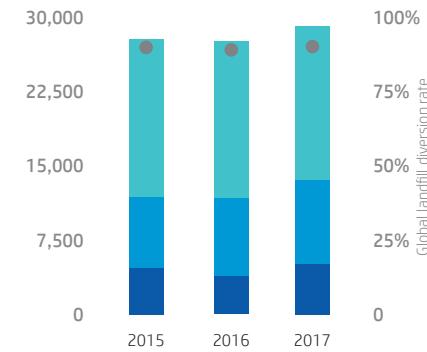
is a source of hazardous waste, HP ink cartridges used by customers and in our offices can be recycled, and are considered nonhazardous in many of our major markets.

We generated 5,410 tonnes of hazardous waste in 2017, a 3% decrease compared to the prior year. Reduced production in Europe and improved processes at our facilities in the Asia Pacific and Japan region more than offset increased waste in the Americas due to expanded production.



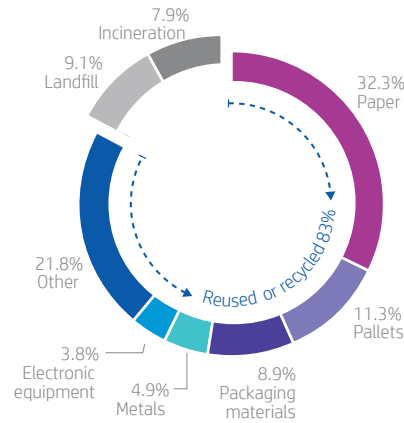
HP’s headquarters in Palo Alto, California, United States, is the first corporate campus in the state to achieve gold USGBC TRUE Zero Waste certification.

### Nonhazardous waste tonnes



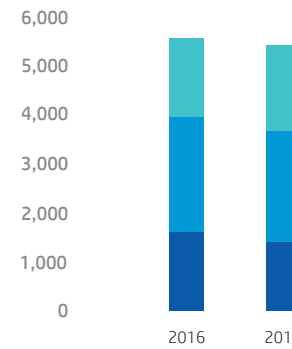
- Americas
- Europe, Middle East, and Africa
- Asia Pacific and Japan
- Global landfill diversion rate

### Nonhazardous waste composition, 2017\* percentage of total



\* HP sites report nonhazardous waste volumes and disposition based on information provided by our waste disposal vendors. For sites unable to directly track nonhazardous waste, we estimate volumes and disposition using intensity factors based on similar operations.

### Hazardous waste tonnes



- Americas
- Europe, Middle East, and Africa
- Asia Pacific and Japan



# Community engagement

Technology has the power to open doors to abundant opportunity. But for many, lack of access to technology and quality education, connectivity gaps, or the effects of natural disasters or other disruptions present significant barriers. Through contributions from HP's businesses, the HP Foundation,<sup>1</sup> and our employees globally, we aim to make a positive local impact on the communities where HP employees, customers, and suppliers live, work, and do business. We focus our efforts on supporting technology-related learning and lifelong [education programs](#), disaster relief and recovery efforts, and charitable giving and employee volunteerism so that people and communities worldwide can thrive.

## Our priorities

### Accelerate economic opportunities

- Enable people at all levels to build skills to improve their employability and participate in the digital economy
- Provide free, self-paced online business and technology skills courses
- Innovate ways of doing business to open new market opportunities and drive inclusion

### Enable better learning outcomes

- Create the classroom of the future to engage students, empower educators, and build vibrant communities
- Partner to deliver connected learning solutions that enable better outcomes for women and girls, and people in underserved communities
- Advise on national human capital development strategies enabled by technology

### Support our local communities

- Respond to disasters when they strike
- Share time and skills to build community resilience
- Apply resources to advance the causes our people care about most



HP is committed to enabling better learning outcomes for 100 million people by 2025, since the beginning of 2015, through application of our technology, training, R&D, and financial contributions. We invest in programs and provide technology solutions that meet learners where they are, and take them where they want to go. See how our [products](#) are enabling better learning outcomes.

**HP LIFE goal**

Enroll a million HP LIFE users between 2016 and 2025

**Progress through 2017**

**108,000**

enrolled since 2016

## HP LIFE:<sup>2</sup> Learning and employment opportunities for aspiring entrepreneurs

To bridge the “digital divide” and build skills for the future, the HP Foundation provides core business and IT skills training free of charge for startups, students, and small businesses through [HP LIFE \(Learning Initiative for Entrepreneurs\)](#). The program offers global access to 28 free online courses in seven languages, with a focus on providing highly accessible and usable content.

We have enrolled 687,000 users from 2012 through 2017, including more than 55,000 during the most recent year, with the greatest uptake in Brazil, Egypt, India, Morocco, Saudi Arabia, Tunisia, and the United States.

The United Nations Industrial Development Organization (UNIDO), HP, and the HP Foundation signed a memorandum of understanding in 2017 renewing our partnership to further foster entrepreneurship and employment opportunities in developing economies, including expanding our work into Africa. This was followed by the launch of HP LIFE in Nigeria, where the program educated 144 HP LIFE trainers, 2,000 entrepreneurs, and 500 students during the year.

Diversity and inclusion are embedded in all we do at HP, including our work in communities worldwide. HP LIFE strives to broaden participation in the workforce, and supports women’s entrepreneurship and small business development. HP is a founding member of the UN Women Global Innovation Coalition for Change, working with partners to leverage technology and innovation to improve outcomes for women and girls worldwide.

## BeChangeMaker (BCM): Inspiring young people

HP LIFE hosts an annual BCM program, in partnership with [WorldSkills International](#), which inspires young people aged 18 to 30 to tackle social issues, and increases their awareness of social entrepreneurship as a career option. In 2017, teams entered from around the world—including Colombia, Indonesia, Mexico, Nigeria, Russia, and South Africa. Seventeen HP employees served as team mentors and three HP employees joined the judging panel.

Teams used HP LIFE courses and webinars to generate social venture ideas, create a viable business model, and pitch their concept to the judges. The winning teams targeted science education, food scarcity, and living conditions, and are all enrolled in incubators to further their ideas.

## HP LIFE in Tunisia: Expanding opportunities for women



In Tunisia, HP LIFE is supporting female learners and small business owners. More than 50% of HP LIFE program participants in that country in 2017 were female, even though women represent only 31% of the formal workforce. Female entrepreneurs founded 42% of the 161 start-up businesses resulting from this program.

See HP LIFE [success stories](#).

The UN and government-backed Mashrou3i program (“my own business” in Arabic) is supported by HP LIFE and was extended in early 2017 with the goal of creating more than 6,000 jobs for young people in Tunisia in the next five years.



## HP Matter to a Million

In 2017, 17,000 HP employees made \$650,000 of loans to more than 50,000 small-scale entrepreneurs in 40 countries through the Matter to a Million program with our partner Kiva, using \$25 loan credits from the HP Foundation.

## Disaster recovery and resilience

HP, our employees, and the HP Foundation together provide financial support for communities affected by natural disasters and emergencies. We work with expert partners, including the [American Red Cross](#) and the [International Federation of Red Cross and Red Crescent Societies](#), to speed recovery and reconnect vital networks.

In 2017, the HP Foundation provided \$505,000 to assist with disaster relief and recovery efforts related to earthquakes, flooding, terrorist attacks, and other emergencies in Mexico, Peru, South Asia, and the United States. The Foundation also funded \$250,000 in disaster preparedness initiatives.

In October 2017, following Hurricane Maria, HP and its employees organized to ship urgently needed supplies to Puerto Rico. Leveraging our global logistics and shipping expertise and the coordination of our employees worldwide, a total of more than 110,000 items—including generators, food, batteries, personal hygiene and comfort products, and safety equipment—were donated and delivered to our employees in Puerto Rico. Contributions were also made through the HP Employee Relief Fund and to American Red Cross through the HP Foundation.

### HP Connection Spot: Mobile disaster relief

The HP Connection Spot provides emergency connectivity to people in the contiguous United States who are unable to communicate due to a natural disaster. The custom-built trailer is equipped with HP laptops, printers, and an Internet hot spot. Staffed by HP volunteers, the HP Connection Spot is also available for first responders and nonprofit personnel involved in disaster relief efforts.

In September 2017, we deployed the HP Connection Spot to the greater Houston area following the devastating floods caused by Hurricane Harvey. Eighty HP volunteers staffed the Connection Spot, which provided the community with critical emergency connectivity services enabling people to access and print Federal Emergency Management Agency relief and recovery applications, look for alternative living situations, and use the Internet.



HP employees volunteering with Educandário São João Batista in Brazil.

## Employee volunteerism

HP taps into the talents, passions, and entrepreneurial spirit of employees to make a difference in our communities. More than 5,600 employees contributed over 89,000 hours to local volunteer efforts in 2017, with a value of \$3.5 million.<sup>3</sup> This included nine employees during the year who participated in our Time Off Community Support Grant, which allows employees to apply for a week of paid volunteer time, in addition to the four hours of paid volunteer leave available to them monthly.

Our 40 Days of Doing Good campaign delivered more than 6,800 volunteering hours in 2017, complemented by HP Foundation grants worth \$345,000 to 40 organizations providing education and technology-related learning. In Brazil, a

team of 18 employees helped create an app enabling young people with speech and language impairments to communicate using pictures and symbols.

As part of the Hour of Code program, HP employees volunteer with two computer science organizations that reach underserved communities, particularly young women, and help HP identify future possible talent. In 2017, 1,150 HP volunteers from 29 company sites participated in Hour of Code in 170 schools and communities worldwide, teaching valuable computer science skills to more than 17,800 underserved school students.

In addition to their time, employees also donated \$1.7 million in cash to qualifying organizations during 2017 through our HP Inspires Giving program. The HP Foundation contributed \$1.66 million in matching funds.

# Data

## Our employees

	2017
<b>Women employees [% of total]</b>	
Americas	34.0%
Asia Pacific and Japan	39.2%
Europe, Middle East, and Africa	37.7%
Worldwide	36.8%
<b>Women managers [% of total]</b>	
Americas	30.4%
Asia Pacific and Japan	24.7%
Europe, Middle East, and Africa	28.2%
Worldwide	28.2%
<b>U.S. employees, by race* [% of total]</b>	
White	65.5%
All minorities	25.8%
Black	3.8%
Hispanic	8.0%
Asian	11.8%
Native American	0.5%
Hawaiian/Pacific Islander	0.1%
Two or more races	1.6%

	2017
<b>U.S. new hires, by race* [% of total]</b>	
White	58.4%
All minorities	34.5%
Black	5.8%
Hispanic	8.8%
Asian	14.7%
Native American	0.8%
Hawaiian/Pacific Islander	0.1%
Two or more races	4.3%
<b>Global new hires, by gender** [% of total]</b>	
Women	38.3%
Men	56.5%

\* Sum of "White" and "All minorities" does not equal 100% because some people do not declare. For the purpose of this table, those who did not declare were not included in the analysis nor placed into a default classification.

\*\* Sum of "Women" and "Men" does not equal 100% because the gender of some employees is uncategorized.

Employees (regular full time and part time) by region and gender, 2017*	Men	Women	Total
Americas	12,512	6,449	18,971
Asia Pacific and Japan	10,994	7,140	18,227
Europe, Middle East, and Africa	6,859	4,258	11,280
<b>Total</b>	<b>30,365</b>	<b>17,847</b>	<b>48,478</b>

\*In some cases, the total does not equal the sum of the segments because the gender of some employees is uncategorized. Further, the data does not include 100 employees of a certain majority-owned, consolidated subsidiary for which this human resource data was not available to HP.

Employees (regular full time and part time) by employment type and gender, 2017*	Women	%	Men	%	Total
<b>Full time</b>					
Executives	88	27.9%	227	72.1%	315
Directors	283	28.3%	714	71.5%	999
Managers	1,220	28.4%	3,072	71.5%	4,299
Professionals	11,672	35.9%	20,694	63.6%	32,545
Other	4,213	42.6%	5,607	56.6%	9,898
Subtotal	17,476	36.4%	30,314	63.1%	48,056
<b>Part time</b>					
Executives	0	0%	0	0%	0
Directors	4	100%	0	0%	4
Managers	11	91.7%	1	8.3%	12
Professionals	315	86.8%	48	13.2%	363
Other	41	95.3%	2	4.7%	43
Subtotal	371	87.9%	51	12.1%	422
<b>Total</b>	<b>17,847</b>	<b>36.8%</b>	<b>30,365</b>	<b>62.6%</b>	<b>48,478</b>

\*In some cases, the total does not equal the sum of the segments because the gender of some employees is uncategorized. Further, the data does not include 100 employees of a certain majority-owned, consolidated subsidiary for which this human resource data was not available to HP.

World workforce by age group, 2017*	% of total
<b>30 and under</b>	18.6%
<b>31-50</b>	63.0%
<b>51 and over</b>	17.0%

\*Sum of age groups does not equal 100% because the age of some employees is uncategorized

	2016	2017
<b>Lost workday case rate*</b>		
Global	0.16	0.08
Americas	0.12	0.11
Europe, Middle East, and Africa	0.36	0.13
Asia Pacific and Japan	0.06	0.03
<b>Leading causes of lost workdays [% of total]</b>		
Slips, trips, and falls	34%	32%
Automobile accidents	26%	10%
Struck by/against/cut by	22%	22%
Ergonomics—materials handling	11%	21%
Overexertion—not materials handling	3%	11%

	2016	2017
<b>Recordable incidence rate**</b>		
Global	0.22	0.17
Americas	0.23	0.30
Europe, Middle East, and Africa	0.43	0.18
Asia Pacific and Japan	0.07	0.06
<b>Leading causes of recordable incidents (with and without lost time) [% of total]</b>		
Struck by/against/cut by	35%	33%
Slips, trips, and falls	27%	33%
Automobile accidents	13%	7%
Ergonomics—materials handling	11%	12%
Ergonomics—office environment	6%	3%

\* Lost workday case rate is the number of work-related injuries that result in time away from work per 100 employees working a full year. Rates are calculated using Occupational Safety and Health Administration (OSHA) definitions for recordability around the world and using OSHA calculation methodologies. The figures are based on employees working an average of 2,000 hours during a full year. The U.S. average in 2016 for the Computer and Peripheral Equipment Manufacturing industry (NAICS #3341) was 0.2. Americas includes Argentina, Brazil, Canada, Colombia, Costa Rica, and the United States. Asia Pacific and Japan includes Australia, China, India, Japan, Malaysia, New Zealand, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. Europe, Middle East, and Africa includes Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Hungary, Ireland, Israel, Italy, Poland, Portugal, Spain, Switzerland, and the United Kingdom.

\*\* Recordable incidence rate is the number of all work-related lost-time and no-lost-time cases requiring more than first aid per 100 employees working a full year. Rates are calculated using OSHA definitions for recordability around the world and using OSHA calculation methodologies. The figures are based on employees working an average of 2,000 hours during a full year. The U.S. average in 2016 for the Computer and Peripheral Equipment Manufacturing industry (NAICS #3341) was 0.7. Americas includes Argentina, Brazil, Canada, Colombia, Costa Rica, and the United States. Asia Pacific and Japan includes Australia, China, India, Japan, Malaysia, New Zealand, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. Europe, Middle East, and Africa includes Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Hungary, Ireland, Israel, Italy, Poland, Portugal, Spain, Switzerland, and the United Kingdom.

Our facilities (also see [GHG emissions data](#))\*

	2015	2016	2017
<b>Energy use</b> [MWh]	931,000	879,000	890,958
<b>Energy intensity**</b> [MWh/\$ million of net revenue]	18.1	18.2	17.1
<b>Direct energy use in operations (corresponds to Scope 1 emissions)***</b> [MWh]	161,000	157,000	184,482
Natural gas	157,000	154,000	182,384
Americas	117,000	119,000	147,979
Europe, Middle East, and Africa	38,000	32,000	31,070
Asia Pacific and Japan	2,000	3,000	3,335
Renewable (generated on-site)	3,000	2,000	598
Diesel/gas/oil/LPG****	1,000	1,000	1,500
<b>Indirect energy use (corresponds to Scope 2 emissions)</b> [MWh]	770,000	722,000	706,476
Electricity (purchased)	770,000	722,000	706,476
Americas	352,000	316,000	306,012
Europe, Middle East, and Africa	198,000	187,000	187,568
Asia Pacific and Japan	220,000	219,000	212,895
Voluntary purchases of renewable energy†	93,000	75,000	332,437
Voluntary purchases of no/low-carbon energy	0	0	0
Supplier-specific renewable energy	33,000	28,000	20,331
District cooling and heating (purchased)	0	0	0
Americas	0	0	0
Europe, Middle East, and Africa	0	0	0
Asia Pacific and Japan	0	0	0
<b>Water consumption, by region</b> [cubic meters]	3,260,000	3,224,000	3,216,000
Americas	1,640,000	1,615,000	1,601,000
Europe, Middle East, and Africa	306,000	285,000	235,000
Asia Pacific and Japan	1,314,000	1,324,000	1,380,000
<b>Water consumption, by source††</b> [cubic meters]	3,260,000	3,224,000	3,216,000
Municipal water	2,548,000	2,473,000	2,602,000
Wastewater from another organization††† (NEWater)	703,000	747,000	534,000
Tanker water††††	9,000	0	21,000

	2015	2016	2017
Rain water	n/a	n/a	2,000
Well water	0	4,000	57,000
<b>Reused treated sewage treatment plant water†</b> [cubic meters]	20,000	75,000	15,000
<b>Nonhazardous waste</b> [tonnes]	28,100	27,800	29,500
Americas	16,000	15,900	15,800
Europe, Middle East, and Africa	7,400	8,000	8,500
Asia Pacific and Japan	4,700	3,900	5,200
<b>Nonhazardous waste by type</b> [tonnes]	28,100	27,900	29,500
Recycled	22,200	23,400	24,500
Landfilled	3,600	2,800	2,700
Incinerated	2,300	1,700	2,300
<b>Nonhazardous waste landfill diversion rate</b> [% of total produced]			
Global	90.9%	90.1%	90.9%
Americas	91.6%	91.2%	91.6%
Europe, Middle East, and Africa	85.5%	85.4%	87.4%
Asia Pacific and Japan	97.2%	95.1%	94.6%
<b>Hazardous waste**</b> [tonnes]		5,560	5,410
Americas		1,600	1,750
Europe, Middle East, and Africa		2,370	2,280
Asia Pacific and Japan		1,590	1,380
<b>Ozone depletion potential of estimated emissions***</b> [kg of CFC-11 equivalent]	194	128	10
Americas	120	16	0
Europe, Middle East, and Africa	0	33	10
Asia Pacific and Japan	73	80	0

\* HP used 2015 intensity factors for 2017 energy, water, and waste calculations, which are consistent with the factors used in the prior year. HP directly tracked data from invoices and other documents representing 81% of total electricity use, 86% of total natural gas use, 85% of total water consumption, 62% of total nonhazardous waste, and 100% of total hazardous waste. Some segments do not add up to total due to rounding.

\*\* Historical energy intensity values were calculated using HP's annual revenue as characterized in financial reporting and direct and indirect energy use.

\*\*\* Fuel consumption from HP's transportation fleet is not included in the Direct energy use in operations figures.

\*\*\*\* Diesel is mostly used at HP for testing generators. In limited cases, diesel is also used for long-term on-site energy generation.

† Renewable energy and renewable energy credits, excluding renewable energy provided by default in the power grid.

†† "Water consumption" includes municipal water, wastewater from another organization, tanker water, rain water (beginning in 2017), and well water. Direct use of surface water is insignificant and not included in data reported. Water consumption does not include reused treated sewage treatment plant water. Water consumption is referred to as "Direct consumption" in the Operations segment of HP's water footprint on [page 34](#).

††† NEWater is ultra-purified wastewater used in manufacturing operations in Singapore.

†††† Tanker water is well water that is delivered to the site by tanker truck.

† This water is used for landscaping and toilets.

‡ Accounting for the separation of Hewlett-Packard Company on November 1, 2015, it was not feasible to include hazardous waste data specific to HP Inc. for 2015.

‡‡ For 2015 and 2016, we calculated ozone-depleting substances emissions by tracking sites that reported refrigerant replacement due to leakage, and applied an intensity factor (based on those actual quantities) for nonreporting sites. For 2017, HP transitioned to a system that tracks all refrigerant invoices company-wide, directly accounting for facilities' refrigerant leakage and use and eliminating the need for extrapolation.

## Community engagement

	2016	2017
<b>Social investment* [\$ million]</b>	\$4.38	\$7.69
Cash	\$1.06	\$3.46
Products**	\$1.91	\$0.73
Services***	\$1.41	\$3.50
Social investment [% of net earnings]	0.2%	0.3%
<b>U.S. employee participation in Cash Matching Program [number of employees]</b>	2,800	4,300
<b>Contributions to Cash Matching Program [\$ million]</b>		
U.S. employee contributions to Cash Matching Program	\$1.13	\$1.70
HP Foundation contributions to Cash Matching Program	\$1.02	\$1.66

\* Social investments include all grants made to nonprofit organizations from HP, plus the valuation of employee volunteer hours. Data excludes contributions to the HP Foundation and employee donations but includes HP's matching contributions and contributions from the HP Foundation to other organizations.

\*\* Product donations are valued at the Internet list price. This is the price a customer would have paid to purchase the equipment through the HP direct sales channel on the Internet at the time the grant was processed.

\*\*\* Services includes the valuation of HP employee volunteer hours. Valuation rates are based on CECP standards.

# Products and solutions

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3D printing design courtesy of Invent Medical

# Reinventing for a circular economy

Rising standards of living in many countries, combined with population growth, are increasing the demand for goods and services worldwide. This presents a business opportunity for HP and other companies, while putting tremendous pressure on natural resources and the environment. The traditional, linear production model of “take, make, dispose” is no longer a viable option, and a fundamental shift is needed. This is a critical transition for all businesses. Companies that can grow without also increasing their consumption of raw materials will thrive in a resource-constrained future—and will be well-placed to help customers do the same.

Last year, HP introduced the first Original HP ink cartridges made with plastic bottles recycled in Haiti. Through March 2018, we have sourced more than 170 tonnes of plastic from Haiti.



Our commitment to transforming our business model for a more efficient, circular, and low-carbon economy spans across and beyond our value chain; from our sourcing practices and operational excellence to how we design, deliver, and recover our leading products and solutions. This transformation will redefine how we function as a business and how our customers work and live, through technology and solutions that enable entire industries to eliminate waste and drive efficient, circular value chains.

The shift toward circular principles calls for radical change rather than incremental or gradual evolution. Scalable, transformative

technologies, including our own [3D printing](#) platform, and new types of collaboration together with supply chain partners, customers, governments, and other multi-sector actors, are critical to enabling this disruptive change and ensuring that the 4th Industrial Revolution can also be a sustainability revolution.

Our focus on three key circular economy priorities will create tangible value for our business while protecting the planet, empowering people worldwide, and strengthening opportunities for communities globally.



## Our circular economy priorities

### Decoupling growth from consumption

- Developing solutions that keep products and materials in use at their highest state of value for the longest possible time.
- Reducing the resources required to make and use products.
- Ensuring the materials in products are properly repurposed at end of service.

### Disrupting industry business models

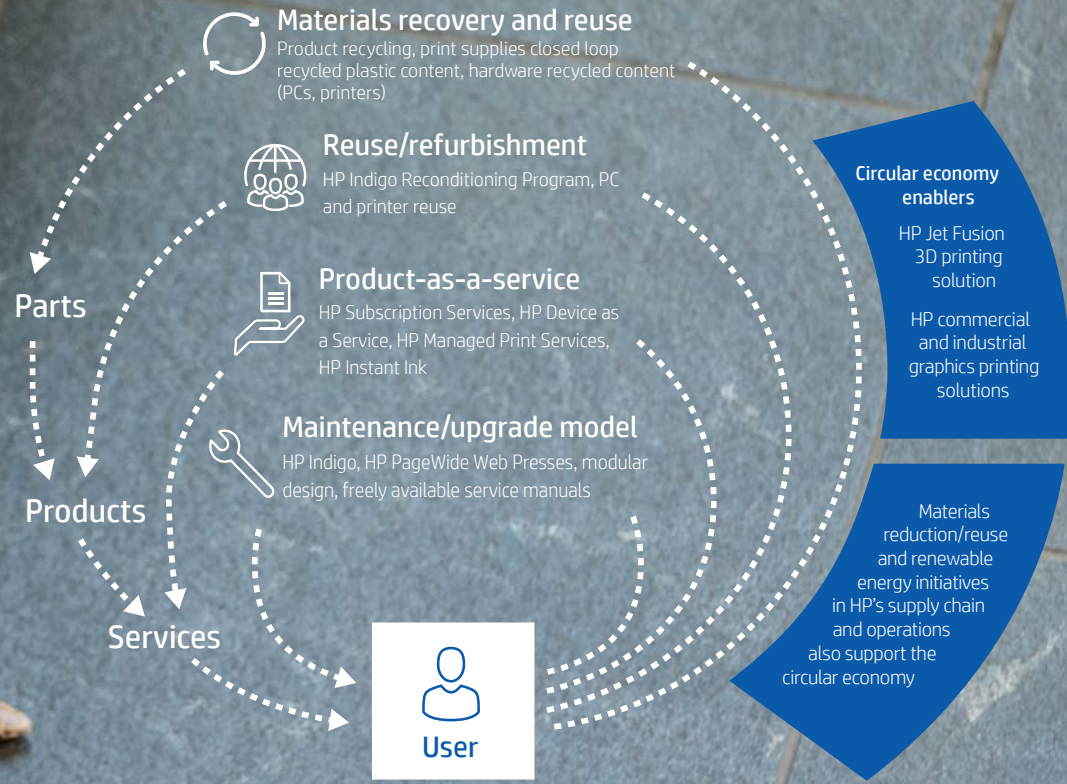
- Reinventing how solutions are designed and delivered, including shifting from transactional product sales to service models.
- Digitizing supply chains and production to provide added value to customers while reducing waste and costs.
- Extending product lifespans, and increasing reuse and recycling.

### Collaborating across industries and sectors

- Accelerating the shift toward circular business models by building new circular supply chains.
- Adopting leading standards for sustainable product design and delivery.
- Promoting supportive public policies.
- Educating customers on the benefits of a circular economy future.

# Circular economy in practice

Through innovative design, HP is transforming our product and services portfolio, reducing environmental footprint, increasing social impact, and providing customers increased value. The graphic below illustrates four “loops” that contribute to “circularity,” with the inner loops being the most resource effective. Numerous examples of HP offerings in each area are included.





## HP ENVY Photo Printers The world's first in-class printers made with closed loop recycled plastic

We are increasingly incorporating recycled plastic into our printers, with a focus on sourcing materials to create positive impacts for the environment and communities. In 2017, our HP ENVY Photo All-in-One

Printer series became the world's first in-class printer made with closed loop recycled plastic—more than 10% by weight.<sup>1</sup> See [Materials innovation](#) for detail about our closed loop programs and recycled plastic use in our HP printers, cartridges, and personal systems.



## HP original ink cartridges Closed loop plastic and positive social impact

In 2016, HP launched an initiative to source from Haiti some of the plastic bottles for our [closed loop recycling process](#) to create new Original HP ink cartridges. This effort, launched in collaboration with the [First Mile Coalition](#) (which includes ACOP, HP, Thread International,

Timberland, and Work) strives to create jobs, improve conditions for workers, and bring dignity to the collectors of recyclables in Haiti—all while creating sustainable ink cartridges. Furthermore, this initiative helps to combat the ever-growing problem of ocean pollution by collecting and upcycling plastic bottles that might otherwise have reached the Caribbean Sea. See [Desktop and enterprise printing](#) for detail.



## HP EliteOne Our most serviceable all-in-one PC

HP's EliteOne 1000 G1 is the first all-in-one with an upgradeable PC base and display. Our focus on durability and reparability in product design enables customers to re-deploy the HP EliteOne to suit changing needs, and helps to make it our most serviceable all-in-one.<sup>2</sup>

Our personal systems products have received high scores from iFixit, including a 10 out of 10 for the [EliteBook 800 G5 Business Notebook series](#) in 2018. The [HP Customer Self Repair Services Media Library](#) provides easy-to-access tutorials and instructions on how to repair our devices easily and keep them running optimally, and with [HP Parts Store](#), customers can replace and upgrade parts as required. See [Durability and reparability](#).

## HP Indigo Designed with sustainability in mind



HP Indigo digital presses enable efficient, on-demand printing, with lower costs and environmental impacts compared with analog presses. We design HP Indigo press parts and supplies for reuse and recycling, and the click-charge, cost-per-print business model enables us to provide supplies in a resource-efficient way. See [Commercial and industrial graphics printing solutions](#).

In early 2018, HP signed the [Capital Equipment Pledge](#) to accelerate progress toward a circular economy.



## 3D printing Driving a sustainable 4th Industrial Revolution

3D printing technology, also known as additive manufacturing, is set to transform supply chains and manufacturing by providing on-demand, more localized means of production. This offers enormous potential for the circular economy in terms of reducing waste and avoiding the impacts associated with transportation and inventory of raw materials and finished goods. We used our 3D printing technology in one of our HP Latex printer models, replacing an aluminum part with a redesigned 3D printed nylon part, resulting in a 93% decrease in weight and a 95% reduction in GHG emissions while cutting cost by 50%. HP's Multi Jet Fusion technology prints up to 10 times faster than current competitors<sup>3</sup> and produces fully functional parts with greater accuracy, resiliency, and strength while reducing cost, energy consumption, and waste. See [3D printing](#).



# Sustainable design

HP product materials, manufacturing, transport, and use account for 97% of our carbon footprint. Sustainable design across [our portfolio](#) is key to reducing these impacts, while improving product performance and benefiting people in communities worldwide.

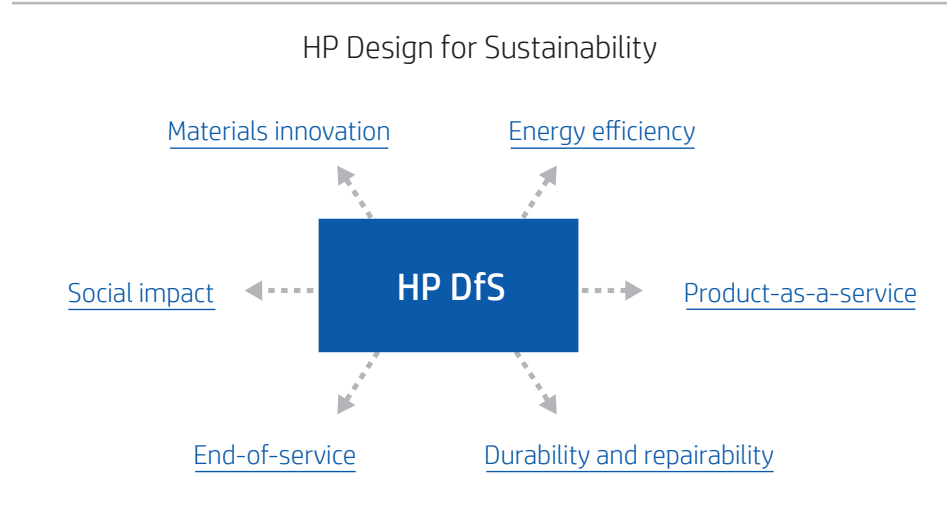
We developed our Design for Sustainability (DfS) program in 1992 (formerly Design for the Environment) to ensure that factors impacting environmental performance are considered in the product design phase. The program encompasses management systems, processes, and tools to support our teams in several key areas.

Design for Sustainability supports our circular economy strategy, and is an important driver of business value. In 2017, customers with sustainable purchasing criteria (including criteria related to eco-labels) represented

a total of approximately \$15.8 billion of existing and potential business revenue.

Product design and development operations for our HP LaserJet Enterprise Solutions, HP Inkjet Printing Systems, and Personal Systems product groups are

ISO 14001 certified. We conduct internal compliance audits and benchmark against industry best practices on an ongoing basis. Relevant products undergo a range of [external certifications](#).



## Life cycle assessment

HP is an industry leader in the use of life cycle assessment (LCA) and product carbon footprinting (PCF) to quantify the environmental characteristics and impacts of our products and solutions and inform our sustainability decision making. Using these tools, we identify the processes, components, and materials with the largest environmental impacts, compare them with possible alternatives, and target areas for improvement.

Increasingly, we are also applying LCA to service-based models such as [Instant Ink](#) or product maintenance for enterprise customers. For example, smart technology in HP LaserJet and PageWide printers which reports printer status directly to HP can improve the efficiency of field service technicians, reducing the need for routine maintenance calls and associated travel and GHG emissions. Long-life supplies also reduce waste and GHG emissions associated with changing smaller capacity cartridges more frequently.

We follow LCA standards ISO 14040/14044 and ISO 14025. For PCFs, we use International Electrotechnical Commission Technical Report 62921, a streamlined methodology for assessing the carbon footprint of computer and display products. We continually update our LCA and PCF tools to ensure that they provide current and accurate information.

In 2017, we:

- Completed an ISO-compliant, peer-reviewed [LCA for 3D printing](#), which compared HP's Jet Fusion process with injection molding
- Collaborated with EarthShift Global, LLC on a [sustainable return on investment study](#) about the potential positive and negative social impacts of HP Jet Fusion 3D
- Completed or updated 60 LCAs of [HP desktop, DesignJet, and enterprise printers](#), refreshed the LCAs of our closed loop recycling process for ink cartridges, and completed a peer-reviewed LCA of original compared to remanufactured laser cartridges

- Conducted PCFs of [all business HP desktops, notebooks, tablets, workstations, thin clients, all-in-one computers, digital signage, and displays](#) to better understand performance and inform ongoing design improvements

To promote LCA within and across the industry, HP has a seat on the Board of Directors of the American Center for Life Cycle Assessment.

## Product certifications and disclosures

Product certifications help drive sustainability performance across the industry by providing comprehensive

information that enables customers to make more sustainable product choices. We share extensive product safety and environmental information online.

- Eco-labels:** Third-party standards validate product environmental performance and are often critical to qualifying products for government procurement (see table). A large percentage of our products meet these voluntary standards across our [personal systems](#) and [printing portfolios](#).
- ECO declarations:** An industry standard for providing environmental information about products and product families. In 2017, HP provided ECO declarations for product groups representing 93% of revenue.

- HP Carbon Footprint Calculator:** A web-based tool our customers can use to calculate and compare energy use, GHG emissions, and costs for more than 10,000 products (from HP and other manufacturers), including PCs, displays, and printers.
- Safety data sheets:** Information on potential hazards associated with ink, toner, and batteries.
- Product compliance declarations and certifications:** To address legal requirements, we provide country-of-origin information with products, product-specific literature on safe use as relevant (in addition to safety data sheets), and [disassembly instructions](#) for most of our products.

## Eco-labels across our portfolio

% models, for products shipped in 2017\*

Products	EPEAT® identifies high-performance, environmentally preferable products				ENERGY STAR® 7.0 or 6.1 certified recognizes products with superior energy efficiency	China SEPA recognizes energy-saving and environmentally preferable models	TCO recognizes various ergonomic and environmental features related to visual displays	Blue Angel recognizes criteria in product design, energy consumption, chemical emissions, noise, recyclable design, and take-back programs
	EPEAT (all categories)	EPEAT Gold registered	EPEAT Silver registered	EPEAT Bronze registered				
Personal systems	90%	57%	33%	0%	82%	72%	44%	NA
Printers	68%	3%	50%	15%	93%	96%	NA	53%

\* EPEAT data for personal systems is for models registered worldwide and for printers is for models registered in the United States. ENERGY STAR data is worldwide. China SEPA data applies only to products registered in China. TCO data is for commercial desktops, notebooks, all-in-ones, and displays shipped in Europe. Blue Angel applies only to products registered in Germany. All data is for models shipped anytime during fiscal year 2017.

## Investing in R&D

In 2017, HP spent \$1.2 billion on ongoing product development and creating the transformative and disruptive technologies of the future. We invest in areas where we can make the greatest impact, and we integrate sustainability into our research agenda.

The vast majority of our R&D spending is focused on inventions and development for products that will be released in the next one to two years. The remaining amount is roughly split in two areas. The first part is dedicated to new business creation (including 3D printing and microfluidics). The rest is spread across HP Labs and the business units for developing technologies that will mature over the following three to seven years.

At HP Labs, we focus on new technologies that will either result in new business creation, fundamental breakthroughs in science, or new product categories. As of 2017, HP's worldwide patent portfolio included over 18,000 patents.<sup>1</sup>

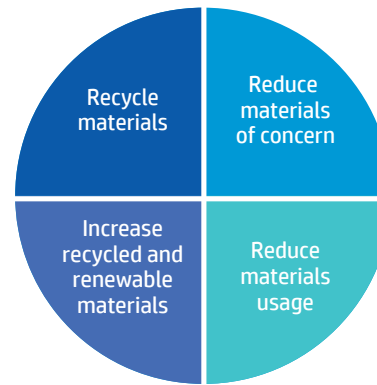
Examples of research with sustainability benefits in 2017 included:

- 3D printing of metal parts. Extending our 3D printing capabilities to metal has the potential to further decrease materials use and waste compared to traditional manufacturing methods, due to reduction of excess material and parts. See [3D printing](#).
- Microfluidics technology. Applying our world-leading expertise in printing, microfluidics<sup>2</sup> and MEMS (microelectromechanical systems), we are investing in dispensing technology with the potential to bring medical tests to remote locations using handheld devices, producing results on-site in just hours instead of shipping samples to centralized laboratories. [Learn more](#).
- Machine learning. Our investments in this area are broad, such as optimizing personal systems for secure machine learning; developing highly versatile computer vision algorithms; improving part yield for 3D printing; and minimizing service costs, trips, and associated GHG emissions by predicting printer failures before they occur using advanced diagnostics and deep learning algorithms. [Learn more](#).

See [Personal systems](#), [Desktop and enterprise printing](#), [Commercial and industrial graphics printing solutions](#), and [3D printing](#) for examples of innovation in each of our product groups.

## Materials innovation

In manufacturing HP products, we work to do more with less, getting maximum value from the materials we use. Following the [HP materials strategy](#), we are driving progress toward a circular economy and developing a materials cycle where plastics, metals, and other durable materials are used over and over without being “downcycled” into lower-grade uses, eventually becoming waste.



## Materials management

Materials management is a central focus of our product sustainability efforts. We follow a four-pronged strategy to reduce materials-related impacts across the value chain.

### Reduce materials of concern

HP aspires to a world where our products and operations use materials and chemicals

that cause no harm. For more than two decades, we have worked to move the electronics industry toward safer alternatives to chemicals of concern. See our [timeline of green chemistry milestones](#).

The [HP Materials And Chemical Management Policy](#) guides how we specify materials and chemicals for use in products, packaging, and manufacturing processes. This policy applies to all HP employees and businesses worldwide, and extends to our suppliers. Clean Production Action highlighted our policy as exemplary in its [2017 Chemical Footprint Project Annual Report](#).

Our approach includes:

- Proactively identifying and evaluating materials used in our products and throughout our supply chain, and publicly providing information on the [material content of typical HP personal systems and printers](#).
- Prioritizing materials for restriction by assessing published lists of substances of concern, customer preferences, new or upcoming legal requirements, and sound scientific analysis that reveals a potential impact on human health or the environment. See [HP's General Specification for the Environment \(GSE\)](#).
- Working with and guiding our suppliers on replacing substances of concern with environmentally preferable alternatives. Currently, 98.5% of the total mass of HP products (excluding commercial and

industrial graphics printing solutions products, as well as accessories and packaging for all HP products) consists of chemicals and materials that are considered benign or are safer alternatives to chemicals of concern.<sup>3</sup>

When exploring safer alternatives to materials currently in use, we follow the National Academies of Science publication “A Framework to Guide Selection of Chemical Alternatives” and incorporate the GreenScreen® for Safer Chemicals methodology. In 2017, we shared our alternatives assessment procedure with the Clean Electronics Production Network to help other companies find safer alternatives to process chemicals.

In 2017, we launched a long-term program to achieve full materials disclosure from our suppliers. This program will require suppliers to report an ingredients list and the amount of each material used, with provisions to protect suppliers' confidential business information.

HP contributes to standards, legislation, and improved approaches to materials use in the IT sector. During 2017, we were the only IT company to provide technical expertise regarding Sweden’s chemical tax, to help ensure the regulation achieves environmental benefit. We participate in [Green America’s Clean Electronics Production Network](#) and several projects under Clean Production Action, including the [Business-NGO Working Group \(BizNGO\)](#) and

the [Chemical Footprint Project](#). Also, HP was instrumental in proposing and developing two optional points in the materials section of the new EPEAT standard for personal systems, one relating to the selection of safer alternatives using GreenScreen and the other on eliminating the use of beryllium (typically used in connectors).

### Reduce materials usage

We work to continually reduce the volume of materials in new products to lower impacts associated with raw materials extraction and manufacturing. In 2017, we used approximately 945,000 tonnes<sup>4</sup> of materials in our products and packaging. Materials use intensity (tonnes/\$ millions of net revenue) decreased by 8% for personal systems, compared to 2016, due to an ongoing shift toward thinner and lighter notebooks (which account for the biggest portion of shipments) as well as a move toward ultra-small form factors for desktops and workstations. Materials use intensity in printers fell by 6% over the same period. The main contributing factor was a year-over-year shift in sales from one group of A4 printers to another group that weighs nearly 50% less on average.

### Increase recycled and renewable materials

We are both a supplier and user of recovered materials, incorporating increasing amounts of recycled and recyclable content into new HP products. This helps to accelerate the development of recovered materials

Estimated materials use intensity for HP high-volume personal systems and printers\* (tonnes/\$ millions of net revenue)

	Personal systems				Printers			
	2014	2015	2016	2017	2014	2015	2016	2017
Metal	4.5	3.6	3.0	2.6	14.7	15.4	17.6	17.0
Plastic	1.9	1.5	1.6	1.4	28.0	30.9	33.8	31.6
Wires/cables	0.8	0.6	0.6	0.5	0.4	0.4	0.5	0.4
PCAs	0.7	0.6	0.6	0.5	1.7	1.7	2.0	2.3
LCDs	1.4	1.2	1.8	1.3	0.0**	0.0**	0.0**	0.0**
Batteries	0.3	0.2	0.1	0.0**	0.0**	0.0**	0.0**	0.0**
<b>Total</b>	<b>9.4</b>	<b>7.7</b>	<b>7.7</b>	<b>7.1</b>	<b>45</b>	<b>48</b>	<b>54</b>	<b>51</b>

\* Personal systems and printer values are based on individual product data. Estimates for printer volumes do not include graphic arts, industrial, web press printers, scanners, or ink or toner cartridges. Product data is based on the calendar year for 2014 and 2015, and the fiscal year for 2016 and 2017. Net revenue data is based on HP’s fiscal year. In some cases, segments do not add up to total due to rounding.

\*\* This value is stated as 0.0 due to rounding.

markets around the world, which supports progress toward a circular economy.

### Ink and toner cartridges

We use a variety of plastics recycled from the [HP Planet Partners recycling program](#) to manufacture new HP ink and toner cartridges. [See how HP ink cartridges get recycled.](#)

Through 2017, we manufactured over 3.8 billion HP ink and toner cartridges using more than a cumulative 99,000 tonnes of recycled plastic. This has kept 784 million HP cartridges and an estimated 86 million apparel hangers and 4 billion postconsumer plastic bottles out of landfills, instead upcycling these materials for continued use. More than 80% of our Original HP ink

### Recycled plastic used in HP products, 2017

Product group	Tonnes
Personal systems	8,080
Printers	1,260
HP toner cartridges	2,921
HP ink cartridges	5,901
<b>Total</b>	<b>18,160*</b>

\* Total does not equal sum of segments due to rounding.

cartridges contain 45–70% postconsumer recycled content, and 100% of Original HP toner cartridges<sup>5</sup> contain 5%–38% post-consumer or post-industrial recycled content. Since 2016, we have helped to reduce likely ocean-bound plastic while benefiting local communities through our [sourcing initiative in Haiti](#).

### Hardware

We continue to use recycled content plastic in our [personal systems](#) and [printers](#)—more than 9,300 tonnes total in 2017.

During 2016, building on our expertise with cartridges, we launched closed loop recycling for hardware. Through the program, customers can return used electronic products to any one of about 1,500 Best Buy stores in the United States. Customers who return printers receive a 15% discount off a new HP inkjet printer. Best Buy recyclers process returned hardware and recover post consumer recycled plastic resin, for [HP to use in new HP ENVY Photo 6200, 7100, and 7800 Printers](#). Through 2017, the program:

- Recovered 3,200 tonnes of recycled plastic resin from recycled electronics for use in our printers
- Supported increased printer sales at participating Best Buy stores
- Reduced supply chain costs

Our closed loop hardware recycling program won the Boldest Environmental Leadership category in our HP Reinventor Awards 2017,

through which HP incentivizes employee innovation in sustainability.

In 2018, we plan to expand the program to increase recycled content in current products and include recycled plastic in additional HP products.

## Electronics recycling with a social mission



In 2017, HP began buying recycled plastic from Homeboy Industries, which provides certified electronics recycling with a social mission. Homeboy offers opportunities to people who face severe barriers to work, including formerly gang-involved and previously incarcerated men and women. By purchasing plastic material for our closed loop feed stream for new printers, we are creating social benefits while improving resource efficiency. Read about [HP ENVY Photo Printers](#) that incorporate recycled plastic.

See more details about our materials approach and progress in the [HP Materials Strategy](#).

Learn how we gain more value from materials through our [product repair, reuse, and recycling programs](#).

## Paper

We help customers print more sustainably by responsibly sourcing the paper we sell, facilitating more efficient paper use, and collaborating across the paper industry to encourage best practices. In our own operations, we apply these same principles through our [Environmentally Preferable Paper Policy](#), the first forestry policy published by an IT company.

### Paper goal

Achieve zero deforestation associated with HP brand paper and paper-based product packaging by 2020.<sup>6</sup>

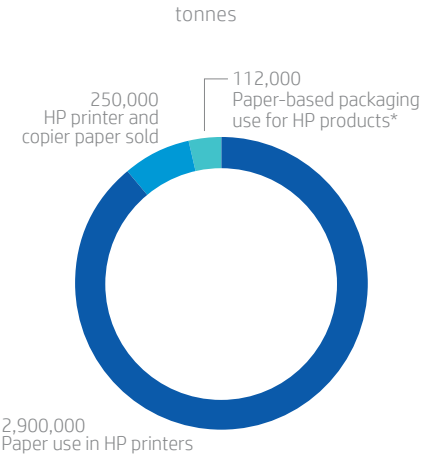
### Progress through 2017

100%

Achieved for HP brand paper in 2016. Maintained that performance in 2017, and developed a packaging supplier performance plan to drive progress in that area.

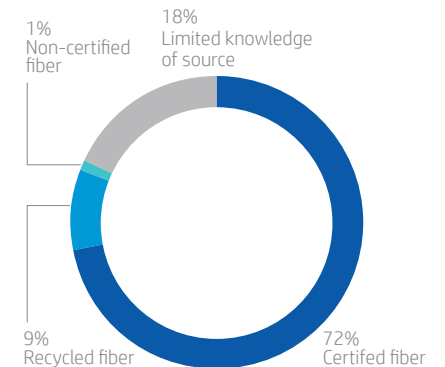
To achieve our zero deforestation goal, all HP brand paper and paper-based packaging must be derived from recycled and certified sources. We continue to give preference to Forest Stewardship Council® (FSC®)-certified

## HP paper impacts, 2017



\* Does not include packaging for commercial and industrial graphics printing solutions, or documentation for any products.

## HP brand paper and packaging fiber sourcing, 2017





fiber where available.<sup>6</sup> Programme for the Endorsement of Forest Certification (PEFC) certification or relevant national certification schemes can also be used if they comply with our paper policy. We work with [WWF's Global Forest & Trade Network \(GFTN\)](#), [FSC](#), and our suppliers to determine the source of virgin fiber and to increase the amount of certified fiber. HP reports progress annually to the WWF GFTN and CDP forests program.

HP brand paper represents 69% of HP fiber tonnage. Since 2016, we have met our zero deforestation goal for HP brand paper, as it is derived entirely from certified and recycled sources.<sup>7</sup> In 2017, the amount of FSC certified fiber in HP brand paper continued to exceed 55%, by weight.

Paper-based product packaging represents 31% of HP fiber tonnage, and we continue working toward our goal. In 2017, we worked with a third party to develop and implement a packaging supplier performance plan, with four components:

- Communicating expectations and requirements to suppliers, and training them to meet our goal
- Tracking progress and reporting results transparently
- Collaborating with suppliers to drive ongoing improvement and address nonconformance
- Working with policymakers, NGOs, and other stakeholders to address cross-market issues



We analyze our supply chain to understand areas of specific risk (due to weak regulation or biodiversity risks) and create specific strategies as needed.

The paper used by our customers in HP products represents about 16% of our carbon footprint and 27% of our water footprint. We help customers print more responsibly by designing printers and software to optimize paper use, defaulting many print fleets to auto-duplex printing, reducing paper waste through HP Managed Print Services, and improving the recyclability of paper by developing solutions for paper de-inking.

## Packaging

Our environmental packaging strategy focuses on using less material, optimizing shipping densities, and increasing recycled and recyclable content. This saves money and reduces GHG emissions, improving our footprint and helping our customers advance toward their sustainability goals.

We have committed to procuring all paper-based product packaging from certified and recycled sources by 2020. See [Paper](#) for progress. See pages 4 and 5 of the Packaging Requirements section of [HP's General Specification for the Environment \(GSE\)](#) for details about our recycled content requirements for plastic- and paper-based packaging.

We require HP packaging material to be recyclable, as defined by the U.S. Federal Trade Commission. While HP's packaging is recyclable, some materials may not be recycled in specific locations due to limited collection and processing infrastructure. To make packaging easier to recycle, in 2018 HP is moving select desktop PC products into packages with paper-based cushions. This will eliminate most of the plastic and foam from the package.

More than 20 packaging initiatives during 2017 used 16,700 tonnes of recycled content plastics and wood packaging, while saving 3,600 tonnes of packaging materials, avoiding 8,300 tonnes of CO<sub>2</sub>e emissions, and saving HP \$6.2 million.

### Ongoing programs

- **Recycled pallets:** With our North American suppliers, we avoided the use of 710,000 new pallets in 2017, saving 7.7 million board feet of lumber.
- **Non-heat-treated pallets:** We sourced more than 428,000 pallets in 2017 made of domestic, non-heat-treated timber for North American shipments, avoiding 382 tonnes of CO<sub>2</sub>e emissions.

## Energy efficiency

Since 2010, the energy consumption of our personal systems products dropped by 43%, on average, despite the general increase in software power demands during that period. This included average reductions of 49% in desktops, 32% in notebooks, and 36% in workstations.<sup>9</sup> During that timeframe, we have reduced energy consumption of our HP LaserJet portfolio by 56%, on average,<sup>10</sup> and the energy consumption of our HP inkjet portfolio by 20%, on average.<sup>11</sup>

The energy consumed by our products during use is one of the largest contributors to our carbon and water footprints, so we've established multiple metrics to assess progress.

2017 highlights in packaging innovation*				
Packaging innovation	Reduce material usage	Optimize shipping densities	Utilize recycled materials	Summary of benefits
<b>Notebooks:</b> Worked with our Chinese carton suppliers to import high-performance carton paper that is otherwise not available in China.	x			Carton weight reduced by 62 grams per box, saving over 2,300 tonnes material and more than 5,000 tonnes CO <sub>2</sub> e.
<b>HP LaserJet:</b> Delivered packaging efficiency gains.	x	x		2,900 tonnes CO <sub>2</sub> e avoided through eight packaging programs.
<b>HP LaserJet supplies:</b> Began the switch from multilayer plastic (MLP) film air cushions to readily recycled corrugated cushions.			x	Improved recyclability and eliminated demand for 130 tonnes of MLP film annually.
<b>HP Inkjet:</b> Reduced air pollution in China by using pallets made from straw that would have otherwise been burned as agricultural waste.	x		x	Sourced 36,000 pallets using straw technology, eliminating the pollution associated with burning 2,500 tonnes of straw waste.
<b>HP Inkjet:</b> Improved shipping density on HP Deskjet 5810 series by 33%.		x		Eliminated demand for over 90 ocean containers in 2017.
<b>HP Graphics Solutions Business:</b> Reduced package size of PageWide XL 5000 plotter by 9%.	x			Reduced package weight by 27 kg per unit, saving a projected 30 tonnes CO <sub>2</sub> e annually, starting in 2018.

\* Avoidance, reductions, and savings data is based on comparisons of current and prior generations of packaging, either for the same or comparable products. Savings and reductions may relate to the fabrication phase of the packaging life cycle (including materials extraction and processing) as well as product transportation. All savings are for fiscal year 2017 (November 2016–October 2017) unless stated otherwise. Some estimates of benefits were calculated using production forecast data.

### Product GHG emissions intensity<sup>12</sup>

Our goal is to reduce the GHG emissions intensity of our product portfolio by 25% by 2020, compared to 2010. Through the end of 2017, we reached a 33% decrease, building on a 19% reduction through the prior year. Key drivers in 2017 included:

- **Personal systems:** Ongoing design improvements contributed to continued reductions in typical energy consumption of our desktops, notebooks, and

workstations. See [Personal systems](#) for detail. These gains were complemented by an ongoing shift from desktops to notebooks, which consume significantly less energy.

- **Printing:** We continue to improve energy efficiency in our LaserJet products. Other factors in 2017 included higher LaserJet duplexing rates which decreased paper use, improved LaserJet power usage data, and shipping more PageWide web presses used for paper printing, which have high duplexing rates.

**Product GHG emissions intensity goal**  
Reduce the GHG emissions intensity of HP's product portfolio by 25% by 2020, compared to 2010.<sup>13</sup>

**Progress through 2017**



decrease achieved

### GHG emissions from product use tonnes CO<sub>2</sub>e

	2015	2016*	2017
Personal systems	9,100,000	8,200,000	8,300,000
Desktop and enterprise printers (energy)**	3,600,000	3,600,000	2,400,000
Commercial and industrial graphics printing solutions (energy)	Not available	250,000	350,000
3D printing solutions (energy)	Not applicable	Not applicable	180,000
Printing consumables for desktop and enterprise printers (paper and ink/toner cartridges)	6,400,000	6,500,000	5,500,000
Printing consumables for commercial and industrial graphics printing solutions (paper and other supplies)	Not available	790,000	1,300,000
Printing consumables for 3D printing solutions (resins)	Not applicable	Not applicable	170,000
<b>Total</b>	<b>19,100,000</b>	<b>19,300,000</b>	<b>18,200,000***</b>

\* Segments for 2016 do not add up to total due to rounding.

\*\* In 2017, our LaserJet power usage data more accurately reflects typical idle and print energy. This change, combined with energy efficiency gains, reduced energy use by about 30% and contributed to the large decrease in this category. These changes were not applied retroactively. Data for 2017 includes HP Sprocket.

\*\*\* Greenhouse gas emissions from product use differ by less than 1% from the value reported on [page 36](#), due to rounding.

## Product use carbon and water footprints

In 2017, 49.0% of our overall carbon footprint resulted from the energy, paper, and ink, toner, and resin supplies consumed during product use, of which 62% was due to electricity consumption.

Greenhouse gas emissions from product use decreased 6% compared to 2016 despite business growth and the inclusion of HP 3D

printing products, due to energy efficiency gains, improved LaserJet power usage data, increased LaserJet duplexing rates, and product mix shifts toward less GHG-emissions-intensive products. Year-over-year decreases in emissions related to inkjet and LaserJet product use exceeded emissions growth of our commercial and industrial graphics printing solutions products. Higher shipments of desktops, notebooks, and workstations offset emissions reductions of those products on a unit basis.

### Water consumption related to product use cubic meters

	2015	2016	2017*
Personal systems	76,400,000	70,000,000	71,000,000
Desktop and enterprise printers (energy)**	30,500,000	31,100,000	20,000,000
Commercial and industrial graphics printing solutions (energy)	Not available	2,200,000	3,000,000
3D printing solutions (energy)	Not applicable	Not applicable	1,600,000
Printing consumables for desktop and enterprise printers (paper)	46,800,000	45,800,000	43,000,000
Printing consumables for commercial and industrial graphics printing solutions (paper)	Not available	7,200,000	12,000,000
<b>Total</b>	<b>153,700,000</b>	<b>156,300,000***</b>	<b>151,000,000***</b>

\* Segments for 2017 do not add up to total due to rounding.

\*\* In 2017, our LaserJet power usage data more accurately reflects typical idle and print energy. These changes, combined with energy efficiency gains, reduced energy use by about 30% and contributed to the large decrease in this category. These changes were not applied retroactively. Data for 2017 includes HP Sprocket.

\*\*\* Total water consumption related to product use differs by less than 1% from the value reported on [page 36](#), due to rounding.

Product use represented 73.6% of our water footprint, due to the considerable amounts of cooling water required during electricity generation as well as water use related to paper production.

Product energy efficiency gains, improved LaserJet power usage data, and increased LaserJet duplexing rates offset growth in water consumption associated with our commercial and industrial graphics printing solutions to reduce water consumption by 3% compared to 2016. Increased shipments

of personal systems offset reductions in water consumption associated with electricity use on a unit basis.

## Product-as-a-service

Across our business, HP is expanding our service-based models, delivering better value to customers with reduced waste and cost.

Our product-as-a-service offerings provide convenience and performance benefits while reducing capital costs. Customers can access the latest and most efficient HP technology, optimized to their needs. HP manages maintenance of the technology fleet, freeing up valuable employee time and resources. This ongoing relationship strengthens our engagement with customers, providing valuable insights on user behavior and customer needs.

Service-based offerings can also reduce product environmental impacts, advance progress against our corporate sustainability goals, and support the transition toward a circular economy. Optimizing product fleets raises utilization rates and efficiency. Regular maintenance by service professionals increases product longevity and reduces waste. In addition, by decreasing individual product shipments and customer store visits, we reduce associated [transportation emissions](#). At the end of service life, we recapture as much value as possible through our [product repair, reuse, and recycling programs](#). Through our holistic approach, we derive greater value from natural resources at every stage of the product life cycle.

See examples of our product-as-a-service offerings in [Personal systems](#), [Desktop and enterprise printing](#), and [Commercial and industrial graphics printing solutions](#).

## Durability and repairability

HP builds durable products that are easier than ever to repair and upgrade, which extends their useful lives while keeping costs down.

We provide free service documentation for most products, supplemented with service options and warranties. [HP Care Pack Central](#) offers comprehensive options for extended warranties and repair services for PCs and printer products.

The [HP Customer Self Repair Services Media Library](#) provides easy-to-access tutorials and instructions on how to repair our devices easily and keep them running optimally. In 2016, the HP Elite x2 1012 G1 was the [first tablet to score 10/10](#) on iFixit's repairability scale. See [Personal systems](#) for additional examples.

With [HP Parts Store](#) customers can simply replace and upgrade missing or damaged PC and printer parts. Customers can access diagnosis and repair services from certified technicians through our worldwide database of authorized support providers.

For more on how we help customers make our products last longer, see [Personal systems](#), and [Desktop and enterprise printing](#), and [Commercial and industrial graphics printing solutions](#).

## End-of-service

The rapid pace of innovation in electronics and technology products is increasing the urgency to move toward a circular economy model in which products are repurposed and kept in use for as long as possible.

At HP, we work to design for sustainability at every stage of the product life cycle—from use, to servicing and maintenance, and end-of-service. Considerations include availability of spare parts, ease of disassembly, materials identification, and ability to separate materials for higher recycling yields.

When our products reach the end of their useful life, our [repair, reuse, and recycling programs](#) support responsible collection and processing to recover and re-use as much material as possible and reduce negative impacts on environments and communities. Through these activities, we are helping to grow the supply chain and market for recycled materials, and make progress toward a circular business model.

## Social impact

Through the sourcing, design, and delivery of our products and services, HP aims to benefit people while minimizing our environmental impact. Through innovative partnerships

and materials sourcing strategies, we are not only growing the supply of recycled materials but also improving livelihoods for people in communities from [Haiti](#) to [Los Angeles, California](#). We engage extensively with [workers in our supply chain](#) to ensure they have a safe workplace, healthy lifestyles, and skills that they can use throughout their careers.

Innovative design also benefits those who use our products. We follow [security and privacy by design principles](#) for all our products, providing customers the ability to effectively manage increasingly complex security risks. Products tailored to educational needs support personalized digital learning and [enable better learning outcomes](#) for millions of people around the world.

# Product responsibility



We are committed to the safety, security, and privacy of our customers when they use HP products. The company maintains high standards in these areas, and continues to innovate across our portfolio.

## Product safety

All HP products undergo evaluations and testing to ensure that they meet all HP safety standards. We share extensive product safety information online to support informed customer purchasing decisions.

[Safety Data Sheets](#) are available for HP formulated products, including inks, toners, and 3D powders and bonding agents, and provide safety information about materials such as physical, chemical,

and toxicological properties, regulatory information, and recommendations to ensure safe handling. Many HP products also qualify for [eco-labels and other certifications](#) that cover environmental as well as health and safety aspects.

All HP brand products, regardless of where they are sold, conform to international electrical safety and electromagnetic compatibility standards. View [Declarations of Conformity](#) for European Union requirements. Contact HP's product compliance customer support at [techregshelp@hp.com](mailto:techregshelp@hp.com) regarding declarations for other countries.

Focus areas in 2017 included:

- **Materials of concern:** We take a science-based approach to evaluating and

restricting chemicals and materials in HP's products and supply chain. See [Materials innovation](#).

- **Printing emissions testing:** In 2017, we commissioned an independent study that outlined several health and safety-related advantages of Original HP toner cartridges compared to clones.<sup>1</sup> See [Desktop and enterprise printing](#).
- **3D printing:** In a recent HP assessment, our Multi Jet Fusion technology performed in the top level in eight of nine dimensions related to health and environmental attributes, better overall than the three other 3D printing technologies<sup>2</sup> assessed. See [3D printing](#).

## Product security and privacy

As cyberattacks become increasingly prevalent and sophisticated, security breaches are a growing concern for our customers. In response, we are continually evolving HP products, solutions, and services to offer industry-leading resiliency capabilities that anticipate an ever-evolving attack and threat landscape.

We follow security and privacy by design principles for all of our products, from design through customer use, refurbishment, and recycling. We build protection, detection, and recovery into the device, not just the software, which provides customers with separate, auditable mechanisms for managing security risks. To protect against the malware of the future, PCs and printers must have hardware-level security that seamlessly integrates with the customers' broader IT network security infrastructure. This is the foundation of HP's strategy.

Our Security Management Review Committee, composed of business leaders from across the company, oversees and aligns our portfolio-wide approach to security and provides necessary resources to support HP's continued leadership. An external Security Advisory Board was launched in 2017 to provide insights that HP

will use to reinforce its own security work. All three initial members have unique first-hand expertise in the world of hacking and the latest developments in security technology and strategies.

We employ cybersecurity specialists and conduct cybersecurity architecture reviews, penetration testing, code reviews, and automated code scanning using industry-leading tools. When issues arise, we take appropriate actions to remediate reported security vulnerabilities.

Our supply chain security group ensures that HP products are built to resist attacks throughout the supply chain life cycle, from component sourcing through service. We build in supply chain controls and our HP Product Cybersecurity Standard for Suppliers, enforced through periodic audits, contractually holds all suppliers to requirements which mitigate the risks of counterfeits, malware, and tampering.

## Personal systems

HP's comprehensive set of security solutions for our commercial personal systems protect not only the device, but also the user's identity and data—making them the world's most secure and manageable PCs and workstations.<sup>3</sup>

## Security

Available on most of our commercial PCs, HP Multi-Factor Authenticate Gen2<sup>4</sup> integrates Intel's Authenticate technology with credentials such as a password, fingerprint, and facial recognition to make user login a million times more secure. In 2017, we announced HP Sure Click,<sup>5</sup> a hardware-enforced secure browsing solution. Each browsing tab is isolated, which changes the security paradigm by allowing malware to run harmlessly. New in 2018, HP Sure Click also protects PDF files and Microsoft Office<sup>Δ</sup> documents in read mode.

Our Basic Input/Output System (BIOS) security has protected HP PCs since 2006. Beginning in 2018, we build our Elite and Pro 600 lines of PCs with HP Sure Start Gen4,<sup>6</sup> which can detect and recover from an advanced persistent BIOS attack in less than a minute. HP Sure View Gen2,<sup>7</sup> the world's only PC integrated privacy screen,<sup>8</sup> makes it harder for unauthorized people to steal data by peering over the shoulders of unsuspecting users. Now in its second generation, HP Sure View enables a better visual experience in either bright or dark environments—from the plane to the café.

On our Elite PCs, beginning in 2018, HP Sure Run<sup>9</sup> extends the HP Endpoint Security Controller's self-healing protection into the

operating system. HP Sure Recover<sup>10</sup> offers secure, automated, network-based software image recovery using the HP Endpoint Security Controller and an Internet connection.

## Manageability

HP Manageability Integration Kit Gen2,<sup>11</sup> the world's first and only management toolkit certified for Microsoft System Center Configuration Manager<sup>Δ</sup>,<sup>12</sup> provides IT administrators the tools they need to enforce security policies. Previously, this was mostly a manual process.

## Printers

HP printers provide the industry's strongest security features.<sup>13</sup> HP's Enterprise LaserJet and PageWide Enterprise products automatically self-heal and recover from attacks, following four unique and automated steps:

- HP Sure Start validates the BIOS and, if compromised, recovers with a safe "golden copy."
- Whitelisting authenticates that the firmware is authentic and has not been tampered with before running it.
- Run-time intrusion detection continually monitors memory activity to detect and stop attacks, and then recover the device to a secure state.

- HP Connection Inspector analyzes outgoing network connections to stop suspicious traffic and recover the device to a secure state.

## HP Secure Managed Print Services

HP's JetAdvantage Security Manager is the industry's only policy-based printer compliance tool that assesses and remediates HP printer fleets. For security administrators in 2018, HP has expanded our position as the easiest print fleet to secure and manage with new McAfee SIEM integration to complement our certified integrations with Splunk, ArcSight, and SIEMonster tools.





# Products and solutions portfolio

Making products that improve people's lives has been our driving purpose since HP began.

From laptops and workstations, to gaming and VR devices, our [personal systems](#) products enable customers to achieve their goals sustainably while providing the security, durability, and energy and materials efficiency they expect and depend on. As the global leader in [desktop and enterprise printing](#), we continue to redefine the marketplace, delivering sustainable next generation solutions and service-based models to meet the needs of our customers globally. Our [commercial and industrial graphics printing solutions](#) are driving the analog-to-digital revolution, transforming our customers' supply chains, and better matching supply with demand across the 2D printing and publishing industries, as well as

other commercial and industrial sectors such as packaging and labeling. With the launch of [HP Multi Jet Fusion 3D printing technology](#) in 2016, HP is driving transformation across sectors, changing how whole industries design, make, and distribute products for a more sustainable 4th Industrial Revolution.

## Personal systems

From business desktop computers to our Premium Family of laptops, HP personal systems continue to deliver the breakthrough innovations in productivity, security, durability, upgradeability, and environmental performance that our commercial and home users demand. Through growth in key sectors, including [education](#) and healthcare, and through emerging product categories,

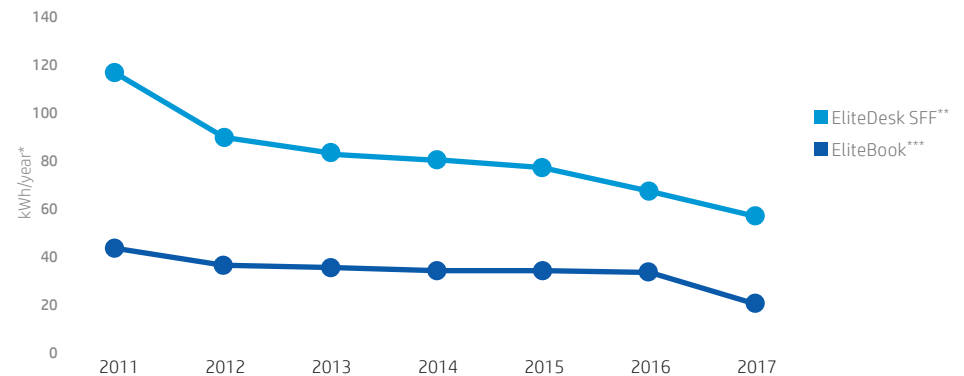
such as blended and virtual reality, we are expanding opportunities for end users to create, innovate, and inspire.

## Materials and energy-efficient design

We have continued to shift our portfolio toward more materials-efficient and energy-efficient products. This includes offering smaller, less materials-intensive products, and improving the energy performance of each new generation.

We are also working to increase the use of [postconsumer recycled \(PCR\) plastic](#) in our portfolio. In 2017, we launched a new set of HP Elite displays with approximately 85%<sup>1</sup> PCR plastic, and our HP ENVY Curved All-in-One Desktop (b010qe) includes 12% PCR plastic. In addition, HP's EliteOne All-in-One PCs and EliteDisplay monitors launched

Energy consumption of HP Elite product line



\* Annual energy consumption in kWh/year calculated according to the ENERGY STAR® 6.1 method.  
 \*\* SFF = Small form factor. Additionally, during this period EliteDesk SFF achieved a 30% decrease in materials use.  
 \*\*\* Additionally, during this period EliteBook achieved a 33% decrease in materials use.

in 2017 all contain more than 33% PCR plastic. For the first time, some HP consumer desktops launched in 2017 are also made with PCR: desktop towers contain at least 2% PCR and all-in-ones contain more than 10% PCR.

The ongoing transition to smaller personal systems products continues to reduce [energy use](#) and associated GHG emissions. Since 2010, the energy consumption of HP personal systems products dropped by 43%, on average.<sup>2</sup> Between 2011 and 2017, we reduced the annual energy consumption of HP EliteBooks by 52% and HP EliteDesk small form factor products by 51% (see graph on prior page). All HP notebooks launched in 2017 were ENERGY STAR certified, and eight Elite Displays made the ENERGY STAR most efficient list. During the year, all HP business desktops used high-efficiency (ECOVA 80+) internal power supplies.

We share our leading practices across the industry, including by contributing to standards development. HP helped revise [IEEE 1680.1](#), the standard used for EPEAT, for PCs and displays. The updated version is due to take effect in 2018. We are also supporting the development of a new TCO standard for business notebook and business desktop products. See a [summary of product certifications and disclosures](#).

## Durability and repairability

We design our products to be highly durable and easy to repair, and we extend the life of our personal systems through refurbishment programs. This benefits customers while capturing more value from natural resources and reducing environmental footprint. We test the quality and durability of our Pro and Elite business notebooks, Elite business desktops and all-in-ones, and select thin clients using the rigorous MIL-STD-810G standard. For further details, see our technical white paper, [Testing the business ruggedness and reliability of HP Business PCs](#).

Several HP products have received high scores from the iFixit product repair site:

- In 2016, the HP Elite x2 1012 G1 was the first tablet to score 10/10 on iFixit's repairability scale.
- In 2017, two new HP products (HP Pro x2 612 G2 and HP Elite x2 1012 G2) were designed for enhanced durability and received 9/10 iFixit scores. See how iFixit [disassembled the HP Elite G2](#).
- In early 2018, the EliteBook 800 G5 Business Notebook series received a [10/10 iFixit repairability score](#).

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## HP Elite x2 1012

### Ongoing commitment to durability and repairability



In the Greenpeace report, [How Repairable Is Your Mobile Device?](#), the HP Elite x2 1012 received the highest score of 15 tablets assessed (with maximum points on all criteria), and the HP Elitebook 840 G3 was noted a “clear leader” out of nine laptops assessed.

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## HP EliteOne 1000 G1

### First all-in-one with upgradeable PC base and display for flexible re-deployment, and our most serviceable AiO<sup>3</sup>



With HP's EliteOne All-in-One PC, users can easily change between four different displays (with different sizes, touch screen, and curvature options) without using tools. HP Elite displays meet TCO Edge certification standards for low emissions and other environmental criteria, and contain around 85% PCR plastic content.<sup>4</sup>

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## Device as a Service

Our expanding personal systems [Device as a Service](#) offerings provide customers the latest HP technology while improving cost predictability, enhancing productivity, and driving progress toward a circular economy. Business customers can upgrade their products every two to three years, to

the latest and most efficient models, while avoiding the up-front costs of purchasing. When customers are finished with their products, HP manages all hardware and software migration and decommissioning, which includes refurbishing, parts reuse, and responsible recycling.



## Product carbon footprints

We conduct [product carbon footprints \(PCFs\)](#), a subset of life cycle assessment, of all business HP desktops, notebooks, tablets, workstations, thin clients, all-in-one computers, digital signage, and displays to better understand performance. To assess and report our complete personal systems product carbon footprint, we extrapolate these results to cover 99% of overall personal systems product sales (by unit and by revenue) during the reporting year.

## Printing

With the industry's most complete portfolio of innovative solutions for the home, office, and commercial and industrial customers, HP printers can produce virtually every form of printed output, from documents and labels to packaging and building wraps. Supported by our supplies business, innovative partner solutions, managed services, and a commitment to sustainable impact, we are developing end-to-end systems designed to be better for our planet and the communities within it.

## Desktop and enterprise printing

For the home and office user, HP offers a powerful range of desktop and enterprise printing products and solutions. Across the

portfolio, we continue to deliver innovations to improve performance while advancing sustainability through reduced plastic and energy use. We help customers print more sustainably by responsibly sourcing the [paper](#) we sell and by designing printing and software to optimize paper use, including with duplexing technologies.

HP is a leader in [eco-label-certified desktop and enterprise printing products](#). Most of our printing products meet the requirements for national, regional, and global eco-labels including EPEAT®, ENERGY STAR®, China SEPA, and Blue Angel, offering customers ways to boost productivity, save energy, and cut waste. Continuous innovation ensures that each new generation of printers uses materials effectively and is more energy efficient than the last.

HP is making significant investments to increase recycled plastic resin use in our products. The company used more than 1,100 tonnes of recycled plastic in its desktop and enterprise printer fleet in 2017, more than triple the amount in the prior year. We plan to further increase recycled plastic use in 2018.

In 2017, we completed or updated 60 [life cycle assessments](#) of HP desktop, DesignJet, and enterprise printers. These help us to understand the environmental impacts of our products and solutions and inform our sustainable design decisions.

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## HP ENVY Photo Printers

The world's first in-class printers made with closed loop recycled plastic



In 2017, we unveiled HP ENVY Photo 6200, 7100, and 7800 Printers—the world's first in-class printers made with closed loop recycled plastic from recycled printers and other electronics plastic—comprising more than 10% by weight.<sup>5</sup> In 2018, we increased the amount of recycled plastic in HP Envy Photo Printers sold at Best Buy to more than 20% by weight. [Learn more.](#)

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## HP A3 PageWide

Best-in-class energy performance



HP PageWide offers best-in-class energy performance versus comparable laser printers.<sup>6</sup> In 2017, HP introduced A3 printers using this technology. These printers and multifunction printers (MFPs) use significantly less power than laser printing technology—in part, because they do not have a fuser element to heat. Many A3 PageWide products are EPEAT Gold registered and all contain at least 6% and up to 10% recycled plastic content.

During 2017, we commissioned independent cleanroom testing based on the ISO standard 14644-14:2016. The testing was designed to determine whether the printer contributes to particle contamination in environments with rigorous cleanliness standards. HP A3 PageWide printers meet at least the standard for ISO Class 7.0 cleanrooms, when operated with Original HP cartridges.

### Product-as-a-service

Our product-as-a-service printing solutions provide customers with the up-to-date technology they need, when they need it. At the same time, this business model helps keep products, components, and materials operating at a high level for as long as possible.

[HP Managed Print Services](#) (MPS) help clients of all sizes optimize, manage, and improve their printer fleets and digital workflows, by combining hardware, supplies, software, and consulting and management services. By effectively servicing and maintaining printer fleets, and refurbishing and re-deploying units as feasible, we keep printing equipment in use for longer. Preparation for remarketing includes auditing, testing, and secure data cleansing. Non-functional equipment is recycled responsibly in accordance with HP policies. Learn how [one customer](#) used MPS to reduce the number of printers by nearly 45%, with a corresponding reduction in real-estate footprint, power and management costs, and CO<sub>2</sub> emissions.

### HP supplies

HP's groundbreaking [closed loop recycling process](#) uses plastic from recycled Original HP cartridges plus recycled bottles and hangers to create new Original HP cartridges.<sup>7</sup> More than 80% of our Original HP ink cartridges contain 45–70% postconsumer recycled content, and 100% of Original HP toner cartridges<sup>8</sup> contain

5%–38% postconsumer or post-industrial recycled content. In 2017, we used more than 8,800 tonnes of recycled plastic in HP cartridges. At end of service, customers can easily return cartridges through our [HP Planet Partners recycling program](#).

In 2016, HP launched an initiative to source from Haiti some of the plastic bottles for our closed loop recycling process (see above) to create new Original HP ink cartridges. This effort, launched in collaboration with the [First Mile Coalition](#) (which includes ACOP, HP, Thread International, Timberland, and Work) strives to create jobs, improve conditions for workers, and bring dignity to the collectors of recyclables in Haiti—all while creating sustainable ink cartridges. Furthermore, this initiative helps prevent plastics from reaching the Caribbean Sea, combating the ever-growing problem of ocean pollution. It also aims to improve the lives of the children who collect recyclable materials by providing them with educational opportunities, including scholarships, as well as full access to medical care and health and safety trainings.

Through March 2018, we sourced more than 170 tonnes of likely ocean-bound plastic (over 8.3 million plastic bottles) from Haiti for use in Original HP ink cartridges. With our partners, we provided 50 children with educational opportunities as well as food and medical assistance, and created more than 420 income opportunities for adults.<sup>9</sup> This initiative won the Most Meaningful

Social Impact category in our HP Reinventor Awards 2017, recognizing the program's innovative approach to creating shared value and positive community impact.

[Learn more](#) about the project and how it has [benefited the local community](#).

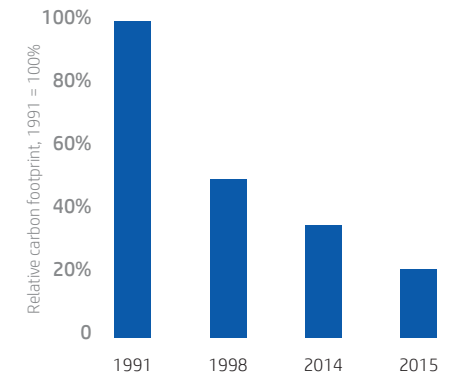


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### Carbon footprint reduction through design innovation

For more than 30 years, HP has developed Original HP ink cartridges and ink delivery systems to improve print quality while reducing environmental impact. Since 1991, we have decreased the carbon footprint of ink cartridges by 80% on a per printed page basis. Key innovations during that period include moving the printhead from the cartridge to the printer on some models in the late 1990s, using closed loop recycled PET plastic beginning in 2005 and PP plastic beginning in 2013, introducing PageWide array printers in 2014, and launching HP Smart Tank and HP Ink Tank printers with refillable ink tanks in 2015, as well as larger

Original HP ink cartridge carbon footprint, 1991–2015\*



\* The technology reflected in data for 2015 remains current, and is now included in supplies shipped worldwide.

capacity supplies. Due to these advances, cartridges currently contribute only about 2% of GHG emissions related to printing, down from 13% in 1991.

In 2017, HP updated its LCAs for the use of recycled PET plastic and recycled polypropylene in our Original HP ink cartridges. In both cases, performance improved since the prior studies conducted in 2014 due to design enhancements that we made based on the earlier findings. According to the updated analysis, using recycled PET plastic in Original HP ink cartridges, rather than virgin plastic, on average reduced carbon footprint by 42%, water use by 38%, and total energy use by 63%. Using recycled polypropylene had

an equivalent carbon footprint compared to virgin plastic, but on average reduced water use by 41% and total energy use by 52%.

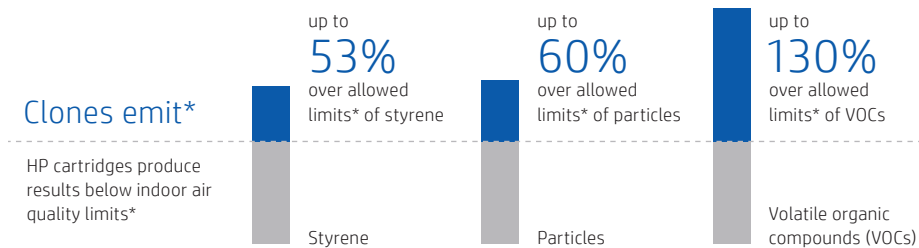
Innovation in product delivery also improves environmental performance. [HP Instant Ink](#) helps home users and microbusinesses in 18 countries around the world remain productive by ensuring that they never run out of ink.<sup>10</sup> The service anticipates when ink is running low and sends replenishments straight to our customers' doors. In addition to the benefit of convenience, our customers also save money—up to 50% on ink,<sup>11</sup> while decreasing the carbon footprint of ink purchase and disposal by 84%, reducing energy use by 86%, and lowering water usage by 89%.<sup>12</sup>

### Clone cartridges may cause

the HP printing system to fail Blue Angel specifications\*

### Unknown health and safety hazards

to employees or customers\*



\* 2018 WKI Blue Angel Indoor Air Quality compliance study, commissioned by HP. The study tested four New Build Compatible toner cartridge brands sold as substitutes for HP LaserJet Pro MFP M425dn with cartridge 280A. The tests were carried out in compliance with "Prüfverfahren für die Bestimmung von Emissionen aus Hardcopygeräten" for purposes of Blue Angel labeling of office equipment in accordance with RAL-UZ-205P. For details, see [h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-1981ENW](https://www2.hp.com/v2/GetDocument.aspx?docname=4AA7-1981ENW).

### Original HP toner cartridges: A more responsible choice than clones

Original HP toner cartridges provide environmental advantages over clone cartridges.<sup>13</sup> They meet EPEAT and Blue Angel guidelines on air emissions, delivering a safer indoor air environment as part of a certified printing system, while consuming less energy and producing less GHG emissions. We commissioned two independent studies in 2017 to measure these impacts:

- The first study outlined indoor air quality advantages of Original HP toner cartridges compared to clones (see graphic).<sup>14</sup>
- The second study determined that across all areas studied over the life of the cartridge, clones had a larger environmental impact than Original HP toner cartridges, including 40% more energy usage, 54% more fossil fuels consumed, and a 55% larger carbon footprint.<sup>15</sup>

[Learn more.](#)

## Commercial and industrial graphics printing solutions

For commercial and industrial customers, HP's printing technology is designed for sustainability, quality, workplace safety, and cost. The shift from analog to digital production in the printing, publishing, packaging, and labeling sectors presents opportunities to reduce waste due to the

elimination of plates, make readies, and intensive cleaning cycles associated with analog printing. Additionally, more agile and on-demand printing, with cost-efficient short runs, enables companies to engage with consumers in new and exciting ways, including through customized and quicker-to-market printed products.

### HP DesignJet



[Postconsumer recycled plastic](#) makes up more than 33% of the plastic used in our efficient and versatile large-format HP T1700, Z6, and Z9 DesignJet printer series.

We offer one of the most complete portfolios of commercial and industrial print and imaging technologies, supported by the industry's best security, workflow, mobility, and fleet management solutions. Our service-based offerings and comprehensive repair, reuse, recycling, and end-of-service solutions enable our customers to deliver more sustainable results and accelerate the transition toward a circular economy.

We design our presses and inks to qualify for a range of [eco-labels](#), including EPEAT, UL ECOLOGO®, Oeko-Tex ECO-PASSPORT, Intertek Green Leaf Mark, and GREENGUARD GOLD, depending on the product.

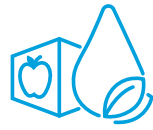
## HP PageWide Industrial



HP water-based inks, 100% free of UV-reactive chemistries, provide food-safe printing for corrugated packaging using our PageWide Web Press and Scitex C500 Press.

### Food packaging-safe printing

As a leader in printing solutions and inks, we enable customers that use our PageWide Industrial and Indigo Presses and Specialty Printing Systems products to produce food packaging with robust safety compliance. Our transparent and thorough regulatory documents<sup>16</sup> support customers' own compliance assessments. HP is a member of the European Printing Ink Association and has committed to [several principles](#) to safeguard the protection of food consumer safety within the areas under its control.



HP Food-Safe with Water-Based Ink

In 2017, we introduced PageWide true water-based inks for corrugated packaging applications, in compliance with leading food safety standards. These inks, 100% free of UV-reactive chemistries, provide food-safe printing for both primary and secondary corrugated packaging, requiring no additional barriers.<sup>17</sup> Our water-based inks contribute to a safer work environment with less risk to print workers,<sup>18</sup> and help customers meet increasingly stringent requirements for food, as well as other highly regulated packaging markets.

### HP Indigo

HP Indigo digital presses enable efficient on-demand printing for food and pharmaceutical applications, including labels and shrink sleeves (such as plastic sleeve labels for soda bottles), flexible packaging, and folding cartons, as well as commercial marketing and publishing.

Designed with sustainability in mind, HP Indigo presses lower customers' costs and environmental impacts compared with analog presses, especially for short production runs. Electricity consumption per printed page has decreased by 13% since 2014, saving money and GHG emissions. HP Indigo also offsets GHG emissions from the press manufacturing process.<sup>19</sup>

## HP Indigo



Lower customer costs, GHG emissions, and electricity and water consumption compared to analog presses.

HP Indigo uses recycled and recyclable materials when feasible, such as photo imaging plate capsules made from recycled plastic, recyclable plastic ink tubes, and molded-pulp ink tube packaging. In 2017, we launched a new, concentrated ink, reducing size and weight for transport. New software and technological features are backwards compatible, which enables customers to keep their presses up to date for longer.

HP Indigo's click-charge business model includes supplies and components used during printing, in a cost-per-print fee. This increases our incentive to develop supplies and components that are as resource efficient as possible, reducing waste and driving progress toward a circular economy. We design HP Indigo press parts and supplies for reuse and recycling, and provide free [take-back programs](#) for presses, parts, and supplies. Since 2012, more than 8,000

tonnes of parts were collected and reused. In 2017, we recovered more than 100,000 Indigo binary ink developers (approximately 160 tonnes) for refurbishment and resale. HP Indigo's regenerated imaging oil (RIO) system re-uses oil from the press, reducing the need for maintenance and the amount of oil waste by 20–50% on average.

In 2016, an HP-funded third-party life cycle assessment determined that printing a flexible package on the HP Indigo 20000 Digital Press produced 80% less GHG emissions than the rotogravure analog print process, and resulted in about 50% less total water consumption than the CI Flexo analog print process.<sup>20</sup>

## 3D printing

HP has been an industry leader in 2D printing for decades. We continue to expand our capabilities in [desktop and enterprise printing](#) as well as [commercial and industrial graphics printing solutions](#). With the launch of our Multi Jet Fusion technology in 2016, HP expanded to 3D printing with the first production-ready commercial 3D printer. 3D printing at production scale presents opportunities to transform how whole industries design, make, and distribute products, helping people turn ideas into finished products in a more efficient, economical, and environmentally conscious way.

We believe that HP's 3D printing technology can drive not only a 4th Industrial Revolution but also a sustainability revolution. Our 3D technology prints up to 10 times faster than current competitors<sup>21</sup> and produces fully functional parts with greater accuracy, resiliency, and strength while reducing cost, energy consumption, and waste. The HP Jet Fusion 3D Processing Station enables industry-leading surplus material reusability of 80%,<sup>22</sup> and the thermoplastic materials used in our printers offer the potential for recycling as the technology scales. Our Multi Jet Fusion technology also supports a cleaner, more comfortable workplace through an enclosed printing system and automatic material management, and the materials and agents are not classified as hazardous.<sup>23</sup> HP Jet Fusion 300/500 printers are more affordable options for small businesses and entrepreneurs who want to produce engineering-grade, functional parts in a fraction of the time of other methods.

We are achieving the same benefits within our own manufacturing, by incorporating 3D printed parts into HP products. We used our 3D printing technology in one of our HP Latex printer models, replacing an aluminum part with a redesigned 3D printed nylon part, resulting in a 93% decrease in weight and a 95% reduction in GHG emissions while cutting cost by 50%.

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## HP Jet Fusion 3D 4200 Printing Solution



Image of the whole HP Jet Fusion 3D 4200 Printing Solution, including the HP Jet Fusion 3D 4200 Printer, the HP Jet Fusion 3D Processing Station, and the HP Jet Fusion 3D Build Unit. The HP Jet Fusion 3D Build Unit is inside the HP Jet Fusion 3D Processing Station.

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## Assessing the impacts of 3D printing

As we refine and scale the adoption of this pioneering technology, we continue to evaluate the related environmental, health and safety, and social impacts of 3D printing.

In 2017, HP commissioned an independent, ISO-compliant, peer-reviewed life cycle assessment comparing the impacts of manufacturing a plastic auto part (a switch fastener) using HP Jet Fusion 3D versus injection molding. The study determined that Jet Fusion decreases GHG emissions and resource consumption at volumes of up to 1,500 parts for one type of plastic and up to 5,200 parts for another type. One factor is the ability of 3D printing to create lighter parts with

equivalent functionality, using a honeycomb-like structure that is more difficult to fabricate with injection molding. Energy consumption is the main driver of environmental impact using Jet Fusion, so continuing to improve energy efficiency is a priority.

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## The printer that prints itself

About half the custom plastic parts in the HP Jet Fusion 3D 4210/4200 Printing Solution were 3D printed.<sup>24</sup>

During the year, we also collaborated with EarthShift Global, LLC, to assess a range of possible social and environmental impacts of 3D printing. The study—which used the HP Jet Fusion 3D 4210/4200 Printing Solution as a reference point while also exploring 3D printing in general—assessed benefits such as improved amputee quality of life through custom prosthetic devices, enhanced heart surgery outcomes following use of 3D-printed training models, and longer lasting and lighter products. The study also assessed risks such as intellectual property infringement. We presented high-level findings at the International Symposium on Sustainable Systems and Technology 2017 conference, and will continue working to refine our understanding in this area.

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## 3D printed parts for NASA zero-G printer



The HP ENVY Zero-Gravity Printer was designed and engineered to meet NASA's exacting requirements for use on the International Space Station, including a specially designed tray to prevent ejected paper from floating in zero gravity. HP's own 3D printing technology provided the flexibility to manufacture the product in low volumes while maintaining the high durability NASA requires. 3D printing also enabled us to significantly reduce the number of parts to minimize potential points of failure. [Learn more.](#)

## Safer materials and a safer working environment

In a recent HP assessment, our Multi Jet Fusion technology performed in the top level in eight of nine dimensions related to health and environmental attributes, better overall than the three other 3D printing technologies<sup>25</sup> assessed. In each of the following areas, HP outperformed two of the other three technologies:

- The HP parts finishing process involves no materials that require hazard labels, while other technologies require detergent or solvent baths.
- None of the materials used by HP Multi Jet Fusion technology have specific restrictions related to transportation – potentially reducing operational cost and complexity.
- HP offers a take-back program that accepts used printheads, while cardboard packaging for supplies can be recycled locally.

## A sustainable 4th Industrial Revolution



We are on the cusp of a global manufacturing revolution that will fundamentally change how we conceive, design, produce, distribute, and consume nearly everything. The 4th Industrial Revolution is being driven by a suite of new and disruptive technologies, and chief among them is 3D printing. HP's 3D printing technology is poised to disrupt the \$12 trillion global manufacturing industry, supporting speed to market and creative flexibility in more sustainable and cost-effective ways.

The 4th Industrial Revolution holds significant opportunity to strengthen business as well as the planet, its people, and communities. Supported by 3D printing, supply chains of the future will be shorter, simpler, and more efficient, reducing waste, energy use, and GHG emissions compared to current practices. As a result, the way we work will change significantly. To ensure that everyone can benefit from the opportunities presented by the 4th Industrial Revolution, educational institutions at all levels must adapt curricula to ensure technological literacy and develop the skills needed to succeed in this new era of computer-assisted design and manufacturing. Lifelong learning, re-training, and continuous upskilling will be essential for workers to thrive in an environment of accelerated change.

For more detail, see our [white paper](#) on the transformative potential of 3D printing.



Our goal

# Enable better learning outcomes for 100 million people

Education opens doors to transformative opportunity and improves the lives of people and communities worldwide. HP builds innovative education solutions for millions of people, including underrepresented and marginalized populations across urban and rural communities. We are creating technologies that support engaging, personalized education experiences; partnering to develop scalable models that support digital inclusion; and delivering insights that help governments create effective human capital development policies. As a result, we are helping to bring quality education to learners wherever they are, and take them where they want to go.

Progress through 2017

14.5 million

students and adult learners have benefited from HP's education programs that advance quality learning and digital literacy, and enable better learning outcomes since the beginning of 2015

# Global education programs

## Classroom of the Future

The future of work and life are changing. Curriculum, pedagogy, and assessment must adapt to new expectations and ensure students are developing skills to help navigate a digital, global society. To guide research and development of new solutions, HP created the Classroom of the Future innovation framework, which imagines the future state of students, teachers, learning spaces, schools, and communities.

## Campus of the Future

HP Education has also designed the [HP Campus of the Future](#)—a vibrant and secure environment for teaching, learning, research, and collaboration. Working with higher education institutions around the world, we co-create next-generation academic environments where research, institutional instruction, and tech-forward facilities power student success and better learning outcomes. We work together with our higher education research partners to inspire and deliver sustainable impact through their operations and programming, to help their students and communities thrive.

## HP National Education Technology Assessment (NETA)

Through NETA, HP Education helps ensure that schools teach the skills that employers need. Using a combination of macroeconomic analysis, hyper-local insights and predictive analytics, HP supports governments and policymakers around the world to create education technology programs that generate meaningful outcomes. See how we are making a difference for education systems around the world with [NETA](#).



Greenburg Graham School in the New York City Metropolitan area. Photo credit T Brand Studio.

## HP Learning Studio Network

In partnership with Microsoft and nonprofit [Digital Promise](#), [Reinvent the Classroom](#) is a multimillion dollar worldwide effort to inspire instructional innovation and next generation learning experiences. Through Reinvent the Classroom, more than 80 schools across North America, Europe, the Middle East, Australia, and New Zealand have received [HP Learning Studios](#) to support advanced blended learning and technology-enabled education. Teacher-training resources, including content and curriculum, supplement the technology to develop students' inquiry, collaboration, and critical thinking skills. At the [Greenburg Graham School](#) in the New York City metropolitan area, for example, students and teachers are benefiting from advanced technology, including a Dremel 3D printer and innovative Sprout Pro by HP immersive workstation. HP, in turn, is studying the effects of technology interventions through a rigorous longitudinal study to track how student performance changes over time. HP has also created a global community for teachers to exchange best practices, lesson plans, and student work.

## HP LIFE

HP's longest standing e-learning program, [HP LIFE](#) (Learning Initiative for Entrepreneurs), aims to support lifelong learning to build the skills necessary for success in the global economy. Led by the HP Foundation, HP LIFE provides core business and IT skills free of charge for startups, students, and small businesses. The program offers global access to 28 free online courses in seven languages, with a focus on providing highly accessible and usable content. We have enrolled 687,000 users from 2012 through 2017, including more than 55,000 during the most recent year, with the greatest uptake in Brazil, Egypt, India, Morocco, Saudi Arabia, Tunisia, and the United States. See more detail in [Community engagement](#).



HP LIFE students in IMC Maharat Center, Turkey



# Local and regional education programs

## HP World on Wheels mobile learning labs

In rural India, HP World on Wheels (WOW) supports digital literacy, education, and entrepreneurship, aiming to reach 6,400 Indian villages and impact more than 15 million people by 2022. The program brings self-contained, solar-powered, Internet-enabled mobile learning labs to rural areas of the country. Each is equipped with HP printers and computers with e-learning tools, and has space for 20 people. In November 2016, we pledged to build and deploy 48 WOW buses over the next four years. Since the roll-out of the first 12 WOW buses in 2017, we have reached more than 4,000 people in over 100 villages.<sup>26</sup> In 2018, we plan to deploy an additional 12 buses. HP WOW complements other HP initiatives—including HP LIFE and HP Future Classroom—to apply our technology to overcome power, space, infrastructure, and equipment challenges in rural communities.

## HP Applied Research Network

In 2017, HP launched a major research program with more than 20 higher education institutions, including Harvard, MIT, and University of California San Diego, to investigate the application of immersive virtual and augmented reality technologies in the classroom. HP is providing technology grants to these education institutions to test use cases for blended reality in classrooms, exhibit halls, and research labs to push the frontiers of science, technology, engineering, and mathematics (STEM) and the humanities. This initiative builds on the success of HP’s applied research partnership with Yale University, which has explored [blended reality for next-generation classrooms](#).

## Digital Schools of Distinction and Digital School Awards

HP supports Digital Schools of Distinction in [Ireland](#) and the [UK](#) to promote, recognize, and encourage excellence in the use of technology in primary schools. Schools that successfully complete the 3-step program receive a nationally recognized Digital Schools Award. Digital Schools also receive ongoing practical support and resources.



Reinventing learning and digital literacy to meet learners where they are and take them where they want to go.

## Bridging the gender digital divide

Globally, while significant progress has been made, girls are still much less likely to ever set foot in a classroom than boys.<sup>27</sup> Additionally, jobs held by women are at much higher risk of being displaced by technology over the next decade.<sup>28</sup> For these reasons, access to quality lifelong learning opportunities backed by technology are critical to improving global gender equality.

Working with partners such as the [UN Women's Global Innovation Coalition for Change](#), [Black Girls Code](#), and [Women Deliver](#), HP is committed to helping bridge the gender digital divide through technology-enabled learning opportunities for women and girls. Addressing these disparities has the potential to help unleash tremendous potential and growth. The McKinsey Global Institute estimates that if women played the same role as men in labor markets, global GDP could increase by up to \$28 trillion (26%) yearly by 2025.<sup>29</sup>



Students at KiraKira Academy in California, United States, learning 3D design skills using the Sprout Pro by HP 3D.

## Technology-enabled learning for refugees and displaced people



Learners in Azraq refugee camp, Jordan. Photo credit ©InZone/Georg Schaumberger.

According to the UN Refugee Agency, just 23% of refugee adolescents are enrolled in school, compared to 84% of all adolescents globally.<sup>30</sup> HP believes that all people deserve the opportunity to learn. We deploy our technology through partners to scale learning opportunities for refugees and otherwise displaced people. In 2016, we responded to the call to action at the White House Refugee Leadership Summit and committed to contributing technology and resources to empowering these communities. During 2017, we collaborated with the UN Refugee Agency to launch the first two of three HP Learning Studios in Jordan, and are identifying locations and partners for three HP Learning Studios in Lebanon.

See how HP and its partners bring renewed hope to displaced families living in [Jordan's Azraq refugee camp](#).

We are also collaborating with the Clooney Foundation for Justice and UNICEF to provide technology and training to Syrian refugees and Lebanese students as well as teachers at nine schools in Lebanon. We expect to reach nearly 4,000 Syrian refugee students as well as thousands of Lebanese students and teachers in the first year of this program. This innovative "Second Shift Education" program exemplifies one way that HP is reinventing learning.



HP is committed to reducing the resources required to make and use [our products](#). Beyond design, this includes offering robust repair, reuse, and recycling programs, including [HP Planet Partners](#). These help to keep our products in use, and to recapture and reuse materials at end of life. We're an industry leader in [closed loop recycling](#), including HP ink and toner cartridges as well as products such as HP ENVY Photo Printers, the world's first in-class printers made with closed loop recycled plastic from recycled printers and other electronics—more than 10% by weight.<sup>1</sup>

Our products and services help our customers achieve their business and sustainability goals, alleviate the global strain on scarce natural resources, and

move toward a circular business model. To drive progress toward these objectives, we collaborate widely with governments and industry stakeholders to improve regulation and management of e-waste across the sector. See [Government relations](#).

**Product recycling goal**

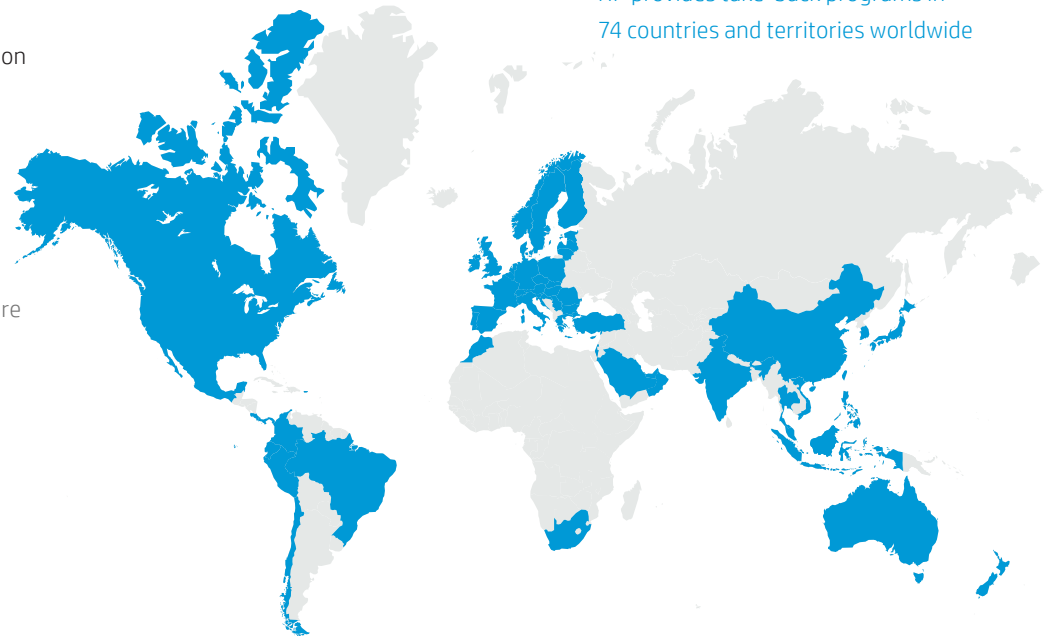
Recycle 1.2 million tonnes of hardware and supplies by 2025, since the beginning of 2016

**Progress through 2017**

Recycled

**271,400**  
tonnes




HP provides take-back programs in 74 countries and territories worldwide



# Customer take-back programs

HP provides take-back programs in 74 countries and territories worldwide<sup>2</sup> through a global network of [reuse and recycling vendors](#). These offerings vary by location.

## HP global take-back programs for customers\*

Program	Description	Progress in 2017	
<b>Hardware</b>			
 <p><b>Repair, remarketing, and reuse</b></p>	<p>Our remanufacturing programs help to extend hardware lifespan, reducing environmental impacts from disposal.</p> <p>We also provide customers guidance about how to repair their own HP product. See <a href="#">Durability and repairability</a>.</p>	<p>Our <a href="#">HP hardware reuse standard</a> outlines our requirements for vendors and subvendors who provide reuse, refurbishment, or remarketing services on behalf of HP.</p>	<p><b>4.6 million</b> units of hardware repaired</p> <p><b>1.27 million</b> units of hardware remarketed/reused</p>
 <p><b>Recycling</b></p> <p>Available in 64 countries and territories</p>	<p>HP recycles hardware that cannot be economically repaired or reused.</p> <p>Consumers and home office users have various recycling options for their used equipment, including free drop-off in many countries.</p> <ul style="list-style-type: none"> <li>Europe: HP recycling vendors provide take-back and recycling services for our products.</li> <li>United States: Customers can drop off hardware at Best Buy stores through our <a href="#">closed loop recycling program</a> as well as Staples locations. U.S. customers can also use the <a href="#">HP Consumer Buyback Program</a> to exchange equipment for money or purchase credits.</li> <li>Asia Pacific: HP participates in several producer responsibility organizations across the region.</li> </ul>	<p>HP Recycling Services offers custom recycling programs for commercial and enterprise customers.</p> <p>Watch our <a href="#">video</a> showing the recycling process.</p> <p>Recycling vendors must comply with the <a href="#">HP Standard for Hardware Recycling</a>.</p>	<p><b>135,200 tonnes</b> of hardware recycled</p> <p><b>3,200 tonnes</b> of plastic recovered for use in other HP products</p> <p><b>17%</b> overall recycling rate of relevant HP hardware sales worldwide**</p>
<b>Supplies, batteries, and packaging</b>			
 <p><b>Ink and toner cartridge recycling</b></p> <p>Available in 63 countries and territories</p>	<p>HP provides free and convenient ways to <a href="#">recycle</a> used HP and Samsung*** ink and toner cartridges.</p> <p>Home and commercial customers can return HP ink and toner cartridges for free to more than 16,500 authorized sites worldwide. Free pickup and mail-back options are available in most countries.</p>	<p>HP's groundbreaking <a href="#">closed loop recycling program</a> uses plastic from recycled Original HP cartridges plus recycled bottles and hangers to create new Original HP cartridges.</p> <p>See how we recycle <a href="#">ink cartridges</a> and <a href="#">toner cartridges</a>.</p> <p>Recycling vendors must comply with the <a href="#">HP Printing Supplies Recycling Policy</a>.</p>	<p>HP LaserJet toner cartridges</p> <p><b>14,800 tonnes</b> recycled</p> <p><b>84%</b> of materials recovered used in other products, and 0% went to landfill</p> <p>HP ink cartridges</p> <p><b>1,500 tonnes</b> recycled</p> <p><b>74%</b> of materials recovered used in other products, and 0% went to landfill</p>

We also offer responsible processing for [batteries](#) and recycling for [large-format media/supplies](#), [3D printing supplies](#), and [packaging](#).

\* Descriptions of offerings in this table are as of report publication. Performance data is as of October 31, 2017. Availability of offerings varies by location. View [full list](#) of reuse and recycling programs by country.

\*\* The recycling rate is based on the weight of hardware products returned for recycling compared to the weight of our product sales from seven years ago (the estimated average lifespan of our products). It is impractical for HP to report the recycling rate by product category, as materials are not typically sorted at collection points.

\*\*\* On November 1, 2017, HP Inc. announced the completion of its acquisition of Samsung Electronics Co., Ltd.'s printer business.

## Product reuse and recycling vendors

We work with a global network of vendors to provide product reuse and recycling services to customers around the world.

During 2017, to promote transparency and drive social and environmental standards in the electronics industry supply chain, we published a detailed [list](#) of our global recycling vendor sites, an industry first. This reflects our confidence in HP's vendor network and addresses customer and stakeholder expectations about disclosure. We hope that our leadership in this area will encourage other IT companies to do the same.

### Vendor audits

Our specialist reuse and recycling vendors are required to follow environmentally responsible processing techniques and comply fully with relevant regulations. Vendors must also attain third-party certification (R2, e-Stewards, or WEEELABEX), where applicable. We commission third-party audits to monitor vendor conformance with our high standards and ensure that returned items are processed appropriately. We contract with Environmental Resources Management (ERM) to audit vendors for conformance with the following policies and vendor standards:

- [Export of Electronic Waste to Developing Countries Policy](#)
- [HP Supplier Code of Conduct](#)
- [Reuse and Recycling Standards](#)

Audits assess vendors' environmental, health, and safety practices and performance, and ensure there is no "leakage" of materials to facilities outside our approved vendor network. Vendors with identified nonconformances must submit corrective action plans within 30 days and address those items within 90 days. In extreme cases, we will cease business with vendors that lack sufficient transparency or are unwilling to make the changes we require.

Through ERM, HP audited 32 vendor facilities in 15 countries during 2017. This included repeat audits of 23 vendor facilities to evaluate their efforts to improve performance. Because 60% of major nonconformances occurred at sites audited for the first time, HP's engagement brought best practices, enabling immediate performance improvements. HP has closed investigations of 86% of the major nonconformances identified in 2017, and we will continue to work closely with vendors to resolve the others as swiftly as possible. All sites with major nonconformances must be re-audited the following year to determine whether improvements are sustained.

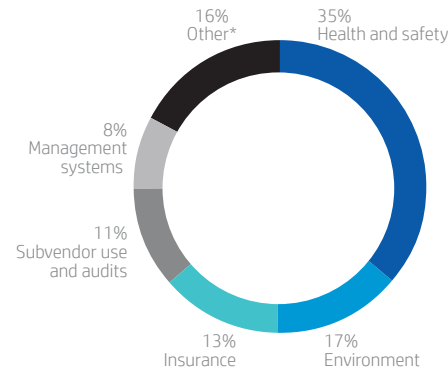
### Reuse and recycling vendor audits

	2016	2017
Initial audits	10	9
Repeat audits	33	23
Countries	23	15
Major nonconformances identified	125	45
Major nonconformances resolved*	100%	86%

\* As of March 2018.

### Categories of major nonconformance, 2017

percentage of total



\* Includes site security and controls, data destruction, and approved dispositions of processed materials. Findings related to data destruction were limited gaps in processes, not breaches of data security.

Read a [statement from ERM](#).

# Data

## Product and solutions

	2013	2014	2015	2016	2017
<b>Recycled plastic used in HP products [tonnes]</b>					18,160*
Personal systems	Not available	Not available	Not available	Not available	8,080
Printers	Not available	Not available	Not available	Not available	1,260
HP ink cartridges	5,208	6,286	6,282	5,517	5,901
HP toner cartridges	3,200	3,300	2,437	3,493	2,921
<b>Estimated materials use intensity for HP high-volume personal systems and printers**</b> [tonnes/\$ millions of net revenue]					
Personal systems					
Metal		4.5	3.6	3.0	2.6
Plastic		1.9	1.5	1.6	1.4
Wires/cables		0.8	0.6	0.6	0.5
PCAs		0.7	0.6	0.6	0.5
LCDs		1.4	1.2	1.8	1.3
Batteries		0.3	0.2	0.1	0.0***
Total		9.4	7.7	7.7	7.1
Printers					
Metal		14.7	15.4	17.6	17
Plastic		28.0	30.9	33.8	31.6
Wires/cables		0.4	0.4	0.5	0.4
PCAs		1.7	1.7	2.0	2.3
LCDs		0.0	0.0	0.0	0
Batteries		0.0	0.0	0.0	0
Total		45	48	54	51

	2015	2016	2017
<b>GHG emissions from product use**** [tonnes CO<sub>2</sub>e]</b>	19,100,000	19,300,000	18,200,000*****
Personal systems	9,100,000	8,200,000	8,300,000
Desktop and enterprise printers (energy)^	3,600,000	3,600,000	2,400,000
Commercial and industrial graphics printing solutions (energy)	Not available	250,000	350,000
3D printing solutions (energy)	Not applicable	Not applicable	180,000
Printing consumables for desktop and enterprise printers (paper and ink/toner cartridges)	6,400,000	6,500,000	5,500,000
Printing consumables for commercial and industrial graphics printing solutions (paper and other supplies)	Not available	790,000	1,300,000
Printing consumables for 3D printing solutions (resins)	Not applicable	Not applicable	170,000
<b>Water consumption related to product use** [cubic meters]</b>			
Personal systems	76,400,000	70,000,000	71,000,000
Desktop and enterprise printers (energy)****	30,500,000	31,100,000	20,000,000
Commercial and industrial graphics printing solutions (energy)	Not available	2,200,000	3,000,000
3D printing solutions (energy)	Not applicable	Not applicable	1,600,000
Printing consumables for desktop and enterprise printers (paper)	46,800,000	45,800,000	43,000,000
Printing consumables for commercial and industrial graphics printing solutions (paper)	Not available	7,200,000	12,000,000

\* Total does not equal sum of segments due to rounding.

\*\* Personal systems and printer values are based on individual product data. Estimates for printer volumes do not include graphic arts, industrial, web press printers, scanners, or ink or toner cartridges. Product data is based on calendar year for 2014 and 2015 and fiscal year for 2016 and 2017. Net revenue data is based on HP's fiscal year. In some cases, segments do not add up to total due to rounding.

\*\*\* This value is stated as 0.0 due to rounding.

\*\*\*\* Segments for 2016 do not add up to total due to rounding.

\*\*\*\*\*Greenhouse gas emissions from product use differ by less than 1% from the value reported on [page 36](#), due to rounding.

^In 2017, our LaserJet power usage data more accurately reflects typical idle and print energy. This change, combined with energy efficiency gains, reduced energy use by about 30% and contributed to the large decrease in this category. These changes were not applied retroactively. Data for 2017 includes HP Sprocket.

^^ Segments for 2017 do not add up to total due to rounding.

^^^ Total water consumption related to product use differs by less than 1% from the value reported on [page 36](#), due to rounding.

^^^^ In 2017, our LaserJet power usage data more accurately reflects typical idle and print energy. These changes, combined with energy efficiency gains, reduced energy use by about 30% and contributed to the large decrease in this category. These changes were not applied retroactively. Data for 2017 includes HP Sprocket.

## Product repair, reuse, and recycling\*

	2016	2017
<b>Total recycling of hardware and supplies</b> [tonnes, approximate]	119,900	151,500
<b>Electronic equipment repaired</b> [units]	5,050,000	4,600,000
<b>Electronic equipment returned before use and remarketed</b> [units]	1,250,000	1,270,000
<b>Number of countries and territories with HP return and recycling programs</b>	73	74
<b>Total recycling, by region</b> [tonnes]		
Americas	48,800	61,100
Europe, Middle East, and Africa	59,200	64,200
Asia Pacific and Japan	11,900	26,200
<b>Total recycling, by type</b> [tonnes]		
Hardware	102,800	135,200
HP toner cartridges**	15,400	14,800
HP ink cartridges**	1,700	1,500
<b>HP toner cartridge recycling</b>		
HP LaserJet market covered by program [%]	92%	92%
<b>Composition [%]</b>		
Materials recycled into new products	80.9%	83.9%
Materials used for energy recovery	16.8%	13.2%
Reuse of components	2.3%	2.9%
Material in storage—pending processing	0.0%	0.0%
Incineration	0.0%	0.0%
Landfill	0.0%	0.0%

	2016	2017
<b>HP ink cartridge recycling</b>		
HP ink market covered by program [%]	91%	87%
<b>Composition [%]</b>		
Materials recovered for recycling	77.9%	73.9%
Materials used for energy recovery	21.6%	23.7%
Reuse of components	0.0%	0.0%
Material in storage—pending processing	0.4%	0.5%
Incineration	0.0%	1.8%
Landfill	0.0%	0.0%

\* Totals include all hardware and supplies returned to HP for processing, with ultimate dispositions including recycling, energy recovery, and, where no suitable alternatives exist, responsible disposal. HP LaserJet toner and ink cartridge recycling data is for calendar year. The remaining data is based on the HP fiscal year. Although for HP supplies we report the composition of recovered materials, we cannot provide this data for hardware because we do not have operational control over all recycling processes and so do not have access to this information. Some segments do not add up to total due to rounding. Although we do not include data prior to 2016 in the Product repair, reuse, and recycling section, the vast majority of product hardware recycling data, and all toner and ink cartridge recycling data, reported in past years was associated with the business units that are now a part of HP Inc. Through 2015, Hewlett-Packard Company reported 1,497,500 tonnes of cumulative computer hardware and supplies recycling combined.

\*\* Includes cartridges returned by customers only.

# Appendix

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# About this report

HP has reported yearly on its social and environmental progress since 2001. We provide in-depth information to stakeholders including customers, industry analysts, socially responsible investors, nongovernmental organizations (NGOs), employees, sustainability specialists, governments, and others.

To guide our disclosure, we consider external standards and frameworks such as the [Global Reporting Initiative \(GRI\) Sustainability Reporting Standards](#), the [United Nations \(UN\) Global Compact](#), and the [UN Sustainable Development Goals](#), as well as global reporting trends and best practices. Our [sustainability website](#) and [customer brief](#) provide summary information, and all of our past reports are also available online.

## Reporting scope and measures

- This report includes HP’s performance data through FY2017 (which ended October 31, 2017), unless stated otherwise. It also describes HP’s sustainability policies, programs, and goals.
- The information in this report is current as of the date of its initial publication. The report has not been updated to reflect any changes since that date, including any changes to HP’s business or strategy. HP assumes no obligation and does not intend to update this report to reflect any such changes.
- The performance data in this report covers 100% of HP’s global business

operations and/or revenue, as of HP’s most recently completed fiscal year, unless stated otherwise.

- All references to years are to HP’s fiscal year, which ends October 31, 2017, unless stated otherwise.
- All references to dollars are to U.S. dollars.
- “Tonnes” refers to metric tons.

## Metrics and goals

The metrics in this report are HP data, unless stated otherwise. Collecting data from hundreds of global sites is complex, and the process can vary by issue, business unit, function, and geography. As a result, company-wide metrics can be difficult to define and implement. We continue to

standardize our measurement systems and metrics. Data is rounded to reflect the appropriate level of certainty.

Reporting performance beyond our immediate operations is also challenging. We must make assumptions when estimating Scope 3 greenhouse gas (GHG) emissions, product energy consumption and resulting GHG emissions, the percentage of HP products that are recycled, and other metrics. Where appropriate, we provide context for data to help readers understand limitations and draw appropriate conclusions.

Forward-looking content reflects approaches, goals, and priorities established by the HP teams responsible for implementing them. These were set in consultation with internal, and in some cases external, stakeholders and consider leading corporate practices.

## Your feedback

Your comments and suggestions are important to us. Please provide any feedback on this report, our performance, or our website using our [online form](#).

## Forward-looking statements

This report contains forward-looking statements that involve risks, uncertainties, and assumptions. If the risks or uncertainties ever materialize or the assumptions prove incorrect, the results of HP and its consolidated subsidiaries may differ materially from those expressed or implied by such forward-looking statements and assumptions.

All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including but not limited to any projections of net revenue, margins, expenses, effective tax rates, net earnings, net earnings per share, cash flows, benefit plan funding, deferred taxes, share repurchases, foreign currency exchange rates, or other financial items; any projections of the amount, timing, or impact of cost savings or restructuring and other charges; any statements of the plans, strategies, and objectives of management for future operations, including, but not limited to, our sustainability goals, the execution of restructuring plans and any resulting cost savings, net revenue, or profitability improvements; any statements concerning the expected development, performance, market share, or competitive performance relating to products or services; any statements regarding current or future

macroeconomic trends or events and the impact of those trends and events on HP and its financial performance; any statements regarding pending investigations, claims, or disputes; any statements of expectation or belief, including with respect to the timing and expected benefits of acquisitions and other business combination and investment transactions; and any statements of assumptions underlying any of the foregoing.

Risks, uncertainties, and assumptions include the need to address the many challenges facing HP's businesses; the competitive pressures faced by HP's businesses; risks associated with executing HP's strategy; the impact of macroeconomic and geopolitical trends and events; the need to manage third-party suppliers and the distribution of HP's products and the delivery of HP's services effectively; the protection of HP's intellectual property assets, including intellectual property licensed from third parties; risks associated with HP's international operations; the development and transition of new products and services and the enhancement of existing products and services to meet customer needs and respond to emerging technological trends; the execution and performance of contracts by HP and its suppliers, customers, clients, and partners; the hiring and retention of key employees; integration and other risks associated with business combination and investment transactions; the results of the

restructuring plans, including estimates and assumptions related to the cost (including any possible disruption of HP's business) and the anticipated benefits of the restructuring plans; the impact of changes in tax laws, including uncertainties related to the interpretation and application of the Tax Cuts and Jobs Act of 2017 on HP's tax obligations and effective tax rate; the resolution of pending investigations, claims, and disputes; and other risks that are described in HP's Annual Report on Form 10-K for the fiscal year ended October 31, 2017, and HP's other filings with the Securities and Exchange Commission.

HP assumes no obligation and does not intend to update these forward-looking statements. HP's [Investor Relations](#) website contains a significant amount of information about HP, including financial and other information for investors. HP encourages investors to visit its website from time to time, as information is updated and new information is posted.

## External verification

Assurance demonstrates that information in this report describes our performance accurately and completely.

In 2017, HP engaged Ernst & Young LLP (EY) to perform an independent review of selected key performance indicators in our 2017 *Sustainable Impact Report*. This process was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants.

For a full listing of the indicators within the scope of EY's review, please see the [Independent accountants' review report](#).

In addition, the following data received external assurance this year:

- **Product repair, reuse, and recycling:** Through ERM, HP audited 32 vendor facilities in 15 countries during 2017. This included repeat audits of 23 vendors to evaluate their efforts to improve performance. Learn more in [Vendor audits](#).
- **Supply chain:** HP participates in the Responsible Business Alliance (RBA) Validated Audit Program (VAP), which uses independent external auditors to audit our suppliers' social and environmental responsibility performance against HP Supplier Code of Conduct requirements. Learn more in [Supply chain](#).

# Policies and standards

## Sustainability

- [Sustainability Policy](#)

## Accessibility

- [Accessibility Policy](#)

## Corporate ethics

- [Anti-corruption Policy](#)
- [Contingent Worker Code of Conduct](#)
- [Corporate Governance Guidelines](#)
- [Global Business Amenities Policy](#)
- [Integrity at HP](#)
- [Partner Code of Conduct](#)
- [U.S. Public Sector Code of Conduct](#)

## Employees

- [Global Harassment-free Work Environment Policy](#)
- [Global Nondiscrimination Policy](#)
- [Open Door Policy](#)

## Environment

- [Climate Change Policy](#)
- [Environmental, Health, and Safety \(EHS\) Policy](#)
- [Environmentally Preferable Paper Policy](#)
- [Export of Electronic Waste to Developing Countries Policy](#)
- [General Specification for the Environment \(GSE\)](#)
- [Hardware Recycling Standard](#)
- [Hardware Reuse Standard](#)
- [Materials and Chemical Management Policy](#)
- [Printing Supplies Recycling Policy](#)

## Privacy

- [Privacy Statement](#)

## Supply chain

- [Student and Dispatch Worker Standard for Supplier Facilities in the People's Republic of China \(PRC\)](#)
- [Supplier Code of Conduct](#)
- [Supply Chain Foreign Migrant Worker Standard](#)
- [Supply Chain Social and Environmental Responsibility Policy](#)

# Independent accountants' review report

## To the Board of Directors and Stockholders of HP Inc.

We have reviewed the sustainability performance indicators (the "Subject Matter") included in Appendix A and as presented in the HP Inc. ("HP") 2017 Sustainable Impact Report (the "Report") for the year ended October 31, 2017, unless otherwise stated, in accordance with HP's criteria set forth in Appendix A (the "Criteria"). We did not review all information included in the Report. We did not review the narrative sections of the Report, except where they incorporated the Subject Matter. HP's management is responsible for the Subject Matter included in Appendix A and as also presented in the Report, in accordance with the Criteria. Our responsibility is to express a conclusion on the Subject Matter based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA) in AT-C section 105, Concepts Common to All Attestation Engagements and AT-C section 210, Review Engagements. Those standards require that we plan and perform our review to

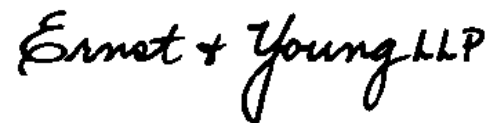
obtain limited assurance about whether any material modifications should be made to the Subject Matter in order for it to be in accordance with the Criteria. A review consists principally of applying analytical procedures, making inquiries of persons responsible for the subject matter, obtaining an understanding of the data management systems and processes used to generate, aggregate and report the Subject Matter and performing such other procedures as we considered necessary in the circumstances. A review is substantially less in scope than an examination, the objective of which is to obtain reasonable assurance about whether the Subject Matter, is in accordance with the Criteria, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. A review also does not provide assurance that we became aware of all significant matters that would be disclosed in an examination. We believe that our review provides a reasonable basis for our conclusion.

In performing our review, we have complied with the independence and other ethical requirements of the Code of Professional Conduct issued by the AICPA.

We applied the Statements on Quality Control Standards established by the AICPA and, accordingly, maintain a comprehensive system of quality control.

As described in Note A, the Subject Matter is subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

Based on our review, we are not aware of any material modifications that should be made to the sustainability performance indicators included in Appendix A for the year ended October 31, 2017, unless otherwise stated, in order for it to be in accordance with the relevant Criteria.



June 6, 2018  
San Jose, CA



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## Appendix A – HP Inc. (HP) schedule of Subject Matter and Criteria

Indicator Name	Scope	Unit	Reported Value <sup>1</sup>	Criteria
Scope 1 greenhouse gas (“GHG”) emissions	Global	Tonnes of carbon dioxide equivalents (tCO <sub>2</sub> e)	69,900	World Resources Institute (“WRI”) / World Business Council for Sustainable Development’s (“WBCSD”) The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, GRI Standard 305 and HP’s Carbon Accounting Manual <sup>2</sup>
Scope 2 GHG emissions (location-based-method)	Global	tCO <sub>2</sub> e	301,600	
Scope 2 GHG emissions (market-based-method)	Global	tCO <sub>2</sub> e	190,200	
Scope 3 GHG emissions	Global	tCO <sub>2</sub> e	36,870,000	WRI/WBCSD’s The Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, GRI Standard 305 and HP’s Carbon Accounting Manual <sup>2</sup>
Scope 1 energy consumption	Global	MWh	184,482	Global Reporting Initiative (“GRI”) Standard 302 and HP management definitions disclosed in the 2017 Sustainable Impact Report
Scope 2 energy consumption <sup>3</sup>	Global	MWh	706,476	GRI Standard 302 and HP management definitions disclosed in the 2017 Sustainable Impact Report
Voluntary purchases of renewable energy	Global	MWh	332,437	GRI Standard 302 and HP management definitions disclosed in the 2017 Sustainable Impact Report
Direct water consumption <sup>4</sup>	Global	Cubic meters	3,216,000	GRI Standard 303 and HP management definitions disclosed in the 2017 Sustainable Impact Report <sup>5</sup>
Conflict minerals disclosure <sup>6</sup>	Global	N/A - Qualitative assertion	To identify and disclose these smelters and refiners, between January and December 2017 HP surveyed suppliers which contributed material, components, or manufacturing for products containing 3TG. Each smelter or refiner reported was identified in at least one of the RMI Conflict Minerals Reporting Templates we received.	HP management definitions disclosed in the 2017 Sustainable Impact Report

**Note A:** Non-financial information is subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

<sup>1</sup> All indicators are reported for the year ended 31 October, 2017 except as otherwise indicated.

<sup>2</sup> Carbon Accounting Manual is available at <http://h20195.www2.hp.com/V2/getpdf.aspx/c05179524.pdf>

<sup>3</sup> Scope 1 Energy refers to direct energy consumption in HP’s operations including natural gas, renewable energy generated on-site and diesel/oil/gas/LPG. Transportation fleet, refrigerants and perfluorocarbons are excluded from Scope 1 Energy, although they are included in the Scope 1 GHG emissions boundary.

<sup>4</sup> Direct water consumption for HP operations.

<sup>5</sup> Note that Sewage Treatment Plant (STP) water is not included within the scope of water consumption.

<sup>6</sup> As noted in the disclosure, this indicator pertains to the calendar year 2017.

# Material issues

The following table summarizes issues determined to meet the materiality threshold for this report.

Issue	Description	GRI Standards topic(s)	Topic boundary	Location in report
High importance to sustainable development, high importance to HP's business success				
Circular economy	Managing product life cycles through design criteria and business models that promote product serviceability and longevity; enable usage as a service; increase recovery, reuse, recycling, recycled content, and closed material loops; and dematerialize processes and activities through digitization.	Materials	Supply chain HP operations Products and solutions	<a href="#">Reinventing for a circular economy</a> <a href="#">Sustainable design</a> <a href="#">Products and solutions portfolio</a> <a href="#">Product repair, reuse, and recycling</a>
Energy and GHG emissions	Improving energy efficiency, using renewable energy, and reducing the GHG emissions of HP's owned/leased operations and of its supply chain, related to facilities, transportation fleets, and product transportation and logistics.	Energy Emissions	Supply chain (first- and second-tier suppliers, Scope 3 emissions) HP operations	<a href="#">Footprint</a> <a href="#">Supply chain environmental impact: Greenhouse gas emissions</a> <a href="#">Our facilities: Greenhouse gas emissions</a>
IT for sustainable development	Designing and delivering IT solutions that advance progress toward the United Nations Sustainable Development Goals, related to health, education, decent work, the environment, and more inclusive, just, and sustainable outcomes for underserved and underrepresented individuals and communities everywhere.	Indirect Economic Impacts	Products and solutions	<a href="#">Community engagement</a> <a href="#">Sustainable design</a> <a href="#">Products and solutions portfolio</a> <a href="#">Education programs</a>
Paper and printed material	Enabling more sustainable printing through the sourcing, use, and recycling of paper and other printed materials by HP and its customers.	Materials	Supply chain Products and solutions	<a href="#">Paper</a>
Privacy	Collecting, analyzing, using, storing, transferring, and sharing information in ways that uphold the right to privacy and personal data protection in commercial, government, and law enforcement relationships, and in compliance with laws and standards.	Customer Privacy	HP operations (employees) Products and solutions (customers and partners)	<a href="#">Privacy</a>
Product energy efficiency	Increasing the energy efficiency of HP products and services, and enabling customers to reduce their energy use.	Energy	Products and solutions	<a href="#">Sustainable design: Energy efficiency</a>
Supply chain responsibility	Monitoring and strengthening social conditions throughout HP's supply chain (including working hours and conditions, wages and benefits, health and safety, humane treatment of workers, avoiding slavery and forced labor, and responsible minerals sourcing) through codes and standards, supplier and worker engagement, and transparency.	Nondiscrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Human Rights Assessment Supplier Environmental Assessment Supplier Social Assessment	Supply chain (first- and second-tier suppliers; sub-tier suppliers in high-risk areas such as the Democratic Republic of the Congo; there are multiple tiers between HP and smelters that trade with exporters).  We ask that first-tier suppliers communicate our HP Supplier Code of Conduct to their suppliers, thereby propagating the requirements to our sub-tier suppliers.	<a href="#">Supply chain</a> <a href="#">Human rights</a>
Medium importance to sustainable development, high importance to HP's business success				
Data and product security	Designing products and processes that protect the collection, analysis, use, storage, transfer, and sharing of information from unwanted parties, unauthorized access, and security threats, including cyberattacks.	No GRI-specific Topics	Supply chain HP operations Products and solutions	<a href="#">Product security and privacy</a>

Diversity and inclusion	Fostering diversity and inclusion within our workforce, supply chain, and communities worldwide.	Diversity and Equal Opportunity	Supply chain HP operations Products and solutions	<a href="#">Supplier diversity</a> <a href="#">Diversity and inclusion</a>
Ethics and anti-corruption	Promoting high ethical standards and combating corruption in all of HP's business interactions, including in joint ventures and with business partners, suppliers, and distributors.	Anti-competitive Behavior Anti-corruption	Supply chain (interactions with suppliers, business partners, and contractors) HP operations Products and solutions (interactions with business partners and customers)	<a href="#">Ethics and anti-corruption</a>
Health and safety	Working to create a healthy, safe, and secure working environment in our supply chain, operations, and for our customers, including managing the use of materials and substances of concern in the manufacturing and use of our products.	Occupational Health and Safety Customer Health and Safety	Supply chain HP operations Products and solutions	<a href="#">Supply chain responsibility: Health and safety</a> <a href="#">Our employees: Health and safety</a> <a href="#">Product safety</a>
Transparency, accountability, and reporting	Providing clear, comparable, and accessible business and sustainability information.	Overall report	Supply chain HP operations Products and solutions	<a href="#">GRI index</a>
High importance to sustainable development, medium importance to HP's business success				
Waste	Responsibly managing and disposing of nonhazardous and hazardous waste in HP's supply chain and owned/leased operations.	Effluents and Waste	Supply chain (first-tier suppliers) HP operations	<a href="#">Supply chain environmental impact: Waste</a> <a href="#">Our facilities: Waste</a>
Water	Conserving water in HP's supply chain and owned/leased operations.	Water	Supply chain (first-tier suppliers) HP operations	<a href="#">Footprint</a> <a href="#">Supply chain environmental impact: Water</a> <a href="#">Our facilities: Water</a>
Medium importance to sustainable development, medium importance to HP's business success				
Corporate governance	Maintaining the standards, structures, and processes to ensure the diversity and independence of the board of directors, and the effective governance of HP, including the company's Sustainable Impact strategy and programs.	No GRI-specific Topics	HP operations	<a href="#">Sustainable Impact governance</a> <a href="#">Ethics and anti-corruption</a> <a href="#">Governance</a> <a href="#">HP 2018 Proxy Statement</a>
Intellectual property protection	Ensuring appropriate protection of HP's intellectual property.	No GRI-specific Topics	Supply chain HP operations Products and solutions	<a href="#">Government relations</a> <a href="#">Investing in R&amp;D</a>
Packaging	Decreasing the environmental impact of HP packaging.	Materials	Supply chain Products and solutions	<a href="#">Packaging</a>
Product transportation	Decreasing the environmental impact of HP product transportation and logistics.	Emissions	Supply chain	<a href="#">Footprint</a> <a href="#">Product transportation</a>
Public policy	Influencing public policy development through direct engagement, involvement in multi-stakeholder associations or initiatives, and political contributions.	Public Policy	HP operations	<a href="#">Government relations</a>

# United Nations Global Compact index

HP is a signatory to the United Nations Global Compact, a set of voluntary commitments for companies to improve human rights, labor conditions, the environment, and anti-corruption controls. This table links to the sections of this report that address the Global Compact's 10 principles.

Principle	Information in report
<b>Human rights</b>	
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and	<a href="#">Supply chain</a> <a href="#">Human rights</a> <a href="#">Privacy</a> <a href="#">Our employees</a>
Principle 2: make sure that they are not complicit in human rights abuses.	<a href="#">Supply chain</a> <a href="#">Human rights</a>
<b>Labor standards</b>	
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	<a href="#">Supply chain</a> <a href="#">Human rights</a>
Principle 4: the elimination of all forms of forced and compulsory labor;	<a href="#">Supply chain</a> <a href="#">Human rights</a>
Principle 5: the effective abolition of child labor; and	<a href="#">Supply chain</a> <a href="#">Human rights</a>
Principle 6: the elimination of discrimination with respect to employment and occupation.	<a href="#">Supply chain</a> <a href="#">Human rights</a> <a href="#">Diversity and inclusion</a>

Principle	Information in report
<b>Environment</b>	
Principle 7: Businesses should support a precautionary approach to environmental challenges;	<a href="#">Sustainable design</a>
Principle 8: undertake initiatives to promote greater environmental responsibility; and	<a href="#">Footprint</a> <a href="#">Supply chain environmental impact</a> <a href="#">Our facilities</a> <a href="#">Products and solutions portfolio</a>
Principle 9: encourage the development and diffusion of environmentally friendly technologies.	<a href="#">Supply chain environmental impact</a> <a href="#">Our facilities</a> <a href="#">Products and solutions portfolio</a>
<b>Anti-corruption</b>	
Principle 10: Businesses should work against all forms of corruption, including extortion and bribery.	<a href="#">Supply chain</a> <a href="#">Ethics and anti-corruption</a>

"To promote higher standards across the areas of human rights, labor, environment, and anti-corruption, we endorse the United Nations Global Compact as a practical framework for the development, implementation, and disclosure of sustainability policies and practices."

**Dion Weisler, President and Chief Executive Officer, HP Inc.**



# Global Reporting Initiative index

HP considered the Global Reporting Initiative (GRI) 2016 Sustainability Reporting Standards in the development of this report.

This index includes links to information about relevant Disclosures.

Disclosure	Location
<b>GRI 102: General Disclosures</b>	
<b>Organizational profile</b>	
102-1 Name of the organization	<a href="#">About HP</a>
102-2 Activities, brands, products, and services	<a href="#">About HP</a> <a href="#">HP 2017 10-K</a>
102-3 Location of headquarters	<a href="#">About HP</a>
102-4 Location of operations	<a href="#">HP 2017 10-K</a> <a href="#">Map of HP supplier sites</a>
102-5 Ownership and legal form	<a href="#">About HP</a>
102-6 Markets served	<a href="#">HP 2017 10-K</a>
102-7 Scale of the organization	<a href="#">About HP</a> <a href="#">HP 2017 10-K</a>
102-8 Information on employees and other workers	<a href="#">Data: Our employees</a> A portion of the organization's work is performed by individuals other than HP employees or other workers supervised by HP, including workers employed or supervised by contractors.
102-9 Supply chain	<a href="#">Supply chain</a>
102-10 Significant changes to the organization and its supply chain	<a href="#">HP 2017 10-K</a>
102-11 Precautionary principle or approach	<a href="#">Materials innovation</a>
102-12 External initiatives	<a href="#">United Nations Sustainable Development Goals</a> , <a href="#">Footprint</a> , <a href="#">Supply chain: External collaboration</a> , <a href="#">Sustainable design</a> , <a href="#">Privacy</a> , <a href="#">Government relations</a> , <a href="#">United Nations Global Compact index</a>
102-13 Membership of associations	<a href="#">Affiliations and memberships</a>

Disclosure	Location
<b>Strategy</b>	
102-14 Statement from senior decision-maker	<a href="#">Letter from President and CEO Dion Weisler</a>
102-15 Key impacts, risks, and opportunities	<a href="#">About HP</a> <a href="#">Sustainable Impact strategy</a>
<b>Ethics and integrity</b>	
102-16 Values, principles, standards, and norms of behavior	<a href="#">Policies and standards</a>
102-17 Mechanisms for advice and concerns about ethics	<a href="#">Ethics and anti-corruption</a>
<b>Governance</b>	
102-18 Governance structure	<a href="#">Sustainable Impact strategy</a> <a href="#">Governance</a>
102-19 Delegating authority	<a href="#">Sustainable Impact strategy</a>
102-20 Executive-level responsibility for economic, environmental, and social topics	<a href="#">Sustainable Impact strategy</a>
102-22 Composition of the highest governance body and its committees	<a href="#">Governance</a>
102-23 Chair of the highest governance body	<a href="#">Governance</a>
102-24 Nominating and selecting the highest governance body	<a href="#">Corporate governance guidelines</a>
102-25 Conflicts of interest	<a href="#">Corporate governance guidelines</a>
102-26 Role of highest governance body in setting purpose, values, and strategy	<a href="#">Sustainable Impact governance</a> <a href="#">Nominating, Governance and Social Responsibility Committee charter</a>
102-31 Review of economic, environmental, and social topics	<a href="#">Sustainable Impact governance</a>
102-33 Communicating critical concerns	<a href="#">Contacting the board</a>
102-35 Remuneration policies	<a href="#">HP 2018 Proxy Statement</a>
102-36 Process for determining remuneration	<a href="#">HP 2018 Proxy Statement</a>
<b>Stakeholder engagement</b>	
102-40 List of stakeholder groups	<a href="#">Stakeholder engagement</a>

Disclosure	Location
102-41 Collective bargaining agreements	HP follows its <a href="#">Sustainability Policy</a> (which includes information related to human rights) and its code of conduct, <a href="#">Integrity at HP</a> . The percentage of employees covered by collective bargaining agreements is managed at a local level. HP considers this percentage on a consolidated level not relevant.
102-42 Identifying and selecting stakeholders	<a href="#">Stakeholder engagement</a>
102-43 Approach to stakeholder engagement	<a href="#">Stakeholder engagement</a>
102-44 Key topics and concerns raised	<a href="#">Stakeholder engagement</a>
Reporting practice	
102-45 Entities included in the consolidated financial statements	<a href="#">HP 2017 10-K</a>
102-46 Defining report content and topic Boundaries	<a href="#">Materiality</a> <a href="#">Material issues</a>
102-47 List of material topics	<a href="#">Materiality</a> <a href="#">Material issues</a>
102-48 Restatements of information	No significant changes
102-49 Changes in reporting	<a href="#">Materiality</a> <a href="#">Material issues</a>
102-50 Reporting period	<a href="#">About this report</a>
102-51 Date of most recent report	June 2017
102-52 Reporting cycle	Annual
102-53 Contact point for questions regarding the report	<a href="#">Feedback</a>
102-54 Claims of reporting in accordance with the GRI Standards	This report refers to the Global Reporting Initiative 2016 Sustainability Reporting Standards listed in this index.
102-55 GRI content index	<a href="#">GRI index</a>
102-56 External assurance	<a href="#">Independent accountants' review report</a>
Material Topics	
GRI 200 Economic Standards Series	
GRI 203: Indirect Economic Impacts	
Management approach	<a href="#">Community engagement</a> <a href="#">Education programs</a>

Disclosure	Location
203-2 Significant indirect economic impacts	<a href="#">Community engagement</a> <a href="#">Education programs</a>
GRI 205: Anti-corruption	
Management approach	<a href="#">Ethics and anti-corruption</a>
205-1 Operations assessed for risks related to corruption	<a href="#">Anti-corruption</a>
205-2 Communication and training about anti-corruption policies and procedures	<a href="#">Anti-corruption</a>
GRI 206: Anti-competitive Behavior	
Management approach	<a href="#">Ethics and anti-corruption</a> <a href="#">HP 2017 10-K</a> (Note 14: Litigation and Contingencies; this information is as of the end of FY17)
GRI 300 Environmental Standards Series	
GRI 301: Materials	
Management approach	<a href="#">Materials innovation</a> <a href="#">HP materials strategy</a>
301-1 Materials used by weight or volume	<a href="#">Materials innovation</a>
301-2 Recycled input materials used	<a href="#">Materials innovation</a>
301-3 Reclaimed products and their packaging materials	<a href="#">Product repair, reuse, and recycling</a>
GRI 302: Energy	
Management approach	<a href="#">Environmental, health, and safety management</a> <a href="#">Our facilities: Energy efficiency</a> <a href="#">Our facilities: Energy efficiency</a> <a href="#">Our facilities: Renewable energy</a> <a href="#">Data: Our facilities</a>
302-1 Energy consumption within the organization	<a href="#">Our facilities: Energy efficiency</a> <a href="#">Data: Our facilities</a>
302-3 Energy intensity	<a href="#">Our facilities: Energy efficiency</a> <a href="#">Data: Our facilities</a>
302-4 Reduction of energy consumption	<a href="#">Our facilities: Energy efficiency</a> <a href="#">Data: Our facilities</a>
302-5 Reductions in energy requirements of products and services	<a href="#">Sustainable design: Energy efficiency</a> <a href="#">Products and solutions portfolio</a>

Disclosure	Location
<b>GRI 303: Water</b>	
Management approach	<a href="#">Environmental, health, and safety management</a> <a href="#">Water</a> <a href="#">HP water accounting manual</a>
303-1 Water withdrawal by source	<a href="#">Footprint</a> <a href="#">Supply chain environmental impact: Water</a> <a href="#">Our facilities: Water</a>
303-3 Water recycled and reused	<a href="#">Our facilities: Water</a>
<b>GRI 305: Emissions</b>	
Management approach	<a href="#">Environmental, health, and safety management</a> <a href="#">Greenhouse gas emissions</a> <a href="#">HP carbon accounting manual</a>
305-1 Direct (Scope 1) GHG emissions	<a href="#">Footprint</a> <a href="#">Our facilities: Greenhouse gas emissions</a>
305-2 Energy indirect (Scope 2) GHG emissions	<a href="#">Footprint</a> <a href="#">Our facilities: Greenhouse gas emissions</a>
305-3 Other indirect (Scope 3) GHG emissions	<a href="#">Footprint</a> <a href="#">Supply chain environmental impact: Greenhouse gas emissions</a> <a href="#">Sustainable design: Energy efficiency</a>
305-4 GHG emissions intensity	<a href="#">Our facilities: Greenhouse gas emissions</a>
305-5 Reduction of GHG emissions	<a href="#">Our facilities: Greenhouse gas emissions</a>
305-6 Emissions of ozone-depleting substances (ODS)	<a href="#">Data: Our facilities</a>
<b>GRI 306: Effluents and Waste</b>	
Management approach	<a href="#">Environmental, health, and safety management</a> <a href="#">Our facilities: Waste</a>
306-2 Waste by type and disposal method	<a href="#">Supply chain environmental impact: Waste</a> <a href="#">Our facilities: Waste</a>

Disclosure	Location
306-3 Significant spills	We apply the risk-prevention and management procedures of our environmental, health, and safety management system to help prevent unplanned releases at our facilities. In 2017, we experienced no significant unplanned releases.
<b>GRI 308: Supplier Environmental Assessment</b>	
Management approach	<a href="#">Supply chain: Our approach</a> <a href="#">Supply chain environmental impact</a> <a href="#">Our approach for a sustainable supply chain</a>
308-1 New suppliers that were screened using environmental criteria	<a href="#">Our approach for a sustainable supply chain</a>
<b>GRI 400 Social Standards Series</b>	
<b>GRI 403: Occupational Health and Safety</b>	
Management approach	<a href="#">Environmental, health, and safety management</a> <a href="#">Health and safety</a>
403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism; and number of work-related fatalities	<a href="#">Supply chain: Health and safety</a> <a href="#">Our employees: Health and safety</a> <a href="#">Data: Health and safety</a>
<b>GRI 404: Training and Education*</b>	
Management approach	<a href="#">Talent development</a>
404-1 Average hours of training per year per employee	<a href="#">Talent development</a>
404-2 Programs for upgrading employee skills and transition assistance programs	<a href="#">Talent development</a>
404-3 Percentage of employees receiving regular performance and career development reviews	<a href="#">Talent development</a>
<b>GRI 405: Diversity and Equal Opportunity</b>	
Management approach	<a href="#">Diversity and inclusion</a>
405-1 Diversity of governance bodies and employees	<a href="#">Data: Our employees</a> <a href="#">HP board of directors</a>
405-2 Ratio of basic salary and remuneration of women to men	<a href="#">Compensation and benefits</a>

Disclosure	Location
<b>GRI 406: Non-discrimination</b>	
Management approach	<a href="#">Supply chain: Our approach</a> <a href="#">Our approach for a sustainable supply chain</a> <a href="#">Integrity at HP</a>
406-1 Incidents of discrimination and corrective actions taken	<a href="#">Rates of conformance of sites audited, 2017</a> HP discloses the rates of conformance in supplier sites audited, but not the absolute numbers. Presenting this information in this manner provides additional context for the reader.
<b>GRI 407: Freedom of Association and Collective Bargaining</b>	
Management approach	<a href="#">Supply chain: Our approach</a> <a href="#">Our approach for a sustainable supply chain</a>
407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<a href="#">Rates of conformance of sites audited, 2017</a> HP discloses the rates of conformance in supplier sites audited, but not the absolute numbers. Presenting this information in this manner provides additional context for the reader.
<b>GRI 408: Child Labor</b>	
Management approach	<a href="#">Supply chain: Our approach</a> <a href="#">Our approach for a sustainable supply chain</a>
408-1 Operations and suppliers at significant risk for incidents of child labor	<a href="#">Rates of conformance of sites audited, 2017</a> HP discloses the rates of conformance in supplier sites audited, but not the absolute numbers. Presenting this information in this manner provides additional context for the reader.
<b>GRI 409: Forced or Compulsory Labor</b>	
Management approach	<a href="#">Supply chain: Our approach</a> <a href="#">Our approach for a sustainable supply chain</a>
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	<a href="#">Rates of conformance of sites audited, 2017</a> HP discloses the rates of conformance in supplier sites audited, but not the absolute numbers. Presenting this information in this manner provides additional context for the reader.

Disclosure	Location
<b>GRI 412: Human Rights Assessment</b>	
Management approach	<a href="#">Human rights</a>
412-1 Operations that have been subject to human rights reviews or impact assessments	<a href="#">Human rights</a>
<b>GRI 414: Supplier Social Assessment</b>	
Management approach	<a href="#">Supply chain: Our approach</a> <a href="#">Our approach for a sustainable supply chain</a>
414-1 New suppliers that were screened using social criteria	<a href="#">Our approach for a sustainable supply chain</a>
<b>GRI 415: Public Policy</b>	
Management approach	<a href="#">Government relations</a> <a href="#">HP Political Contributions Policy</a> <a href="#">HP 2017 Corporate Political Contributions</a> <a href="#">HP 2017 Employee PAC Contributions</a> <a href="#">U.S. lobbying expenditures</a>
415-1 Political contributions	
<b>GRI 416: Customer Health and Safety</b>	
Management approach	<a href="#">Product responsibility</a>
416-1 Assessment of the health and safety impacts of product and service categories	<a href="#">Product safety</a>
<b>GRI 418: Customer Privacy</b>	
Management approach	<a href="#">Privacy</a>
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	<a href="#">Privacy</a>

\* Although this GRI Standards Topic was not determined to be material in HP's materiality assessment, we recognize that it is relevant to some stakeholders and we provide information about HP's programs and performance in this area.

# Endnotes

Additional information about the data presented in this report is available upon request.

## Introduction

### About HP

- <sup>1</sup> As of October 31, 2017.
- <sup>2</sup> Ibid.
- <sup>3</sup> Ibid.
- <sup>4</sup> Renewable electricity purchased and generated on-site, combined with renewable electricity certificates and guarantees of origin, accounted for 50% of our total consumption.
- <sup>5</sup> This number does not include commercial and industrial graphics printing solutions, packaging for those solutions, scanners, personal systems accessories sold separately, or documentation for any products.
- <sup>6</sup> Product donations are valued at the Internet list price. This is the price a customer would have paid to purchase the equipment through the HP direct sales channel on the Internet at the time the grant was processed.
- <sup>7</sup> Data refers to the percentage of HP 2017 Voice Insight Action (VIA) employee survey respondents who strongly agreed or agreed with each statement.
- <sup>8</sup> Ibid.
- <sup>9</sup> As of October 31, 2017.
- <sup>10</sup> As of April 2018.

### Sustainable Impact strategy

- <sup>1</sup> All HP brand paper and paper-based product packaging will be derived from certified and recycled sources by 2020, with a preference for virgin fiber from certified sources of the Forest Stewardship Council (FSC). Packaging is the box that comes with the product and all paper (including packaging and materials) inside the box.
- <sup>2</sup> Due to the acquisition of Samsung Electronics Co., Ltd.'s printer business, which closed on November 1, 2017, we are assessing the manner and timing of resetting our 2015 Scope 1 and Scope 2 GHG emissions and water consumption baselines.
- <sup>3</sup> Intensity is calculated as the portion of first-tier production and product transportation suppliers' reported GHG emissions attributable to HP divided by HP's annual revenue. This method normalizes performance based on business productivity. Intensity is reported as a three-year rolling average to decrease the impact of variance year over year and highlight longer-term trends. Production supplier GHG emissions include Scope 1 and Scope 2.
- <sup>4</sup> This continues a goal from before the separation of Hewlett-Packard Company on November 1, 2015, extending the goal to 2025. Includes data from suppliers associated with HP Inc. and HP Inc. pre-separation business units.
- <sup>5</sup> HP product GHG emissions intensity measures GHG emissions during product lifetime use per unit for personal systems and per printed page for printers based on anticipated lifetime usage. These values are then weighted by contribution of personal systems and printing products to overall revenue in the current year. These emissions represent more than 99% of HP product units shipped each year, including notebooks, tablets, desktops, mobile computing devices, workstations, displays and digital signage; and HP inkjet, LaserJet, DesignJet, Indigo, Scitex, and Jet Fusion 3D printers, and scanners.

- <sup>6</sup> All HP brand paper and paper-based product packaging will be derived from certified and recycled sources by 2020, with a preference for virgin fiber from certified sources of the Forest Stewardship Council (FSC). Packaging is the box that comes with the product and all paper (including packaging and materials) inside the box.
- <sup>7</sup> Due to the acquisition of Samsung Electronics Co., Ltd.'s printer business, which closed on November 1, 2017, we are assessing the manner and timing of resetting our 2015 Scope 1 and Scope 2 GHG emissions and water consumption baselines.
- <sup>8</sup> Progress through 2017 includes 77,800 factory workers in 2015, 45,700 in 2016, and 119,900 in 2017.
- <sup>9</sup> The HP Foundation is a nonprofit, 501(c)3 organization.

## Footprint

- <sup>1</sup> See [HP Announces Supply Chain Goals to Enhance Environmental and Social Impact](#) and [HP commits to reduce greenhouse gas emissions from its global operations another 25 percent](#).

## Supply chain

### Our approach

- <sup>1</sup> As of April 2018.
- <sup>2</sup> HP uses the terms "production suppliers," "product transportation suppliers," and "nonproduction suppliers" throughout this report. "Production suppliers" provide materials and components for our product manufacturing and also assemble HP products, and are the primary focus of our HP Supplier Code of Conduct audits, assessments, KPI program, Sustainability Scorecard, and capability-building initiatives. "Product transportation suppliers" provide services for the shipping and delivery of HP products. Learn more in [Supply chain environmental impact](#). "Nonproduction suppliers" provide goods and services that do not go into the production of HP products (such as staffing, telecommunications, and travel). These suppliers are a significant focus of our supplier diversity efforts.
- <sup>3</sup> Participation includes focused training, focused assessments, involvement in our KPI program, and supplier sustainability scorecards. This data does not include audits (which are part of our baseline program and a core requirement of full RBA membership) or participation in our capability-building programs (which are covered by a separate goal).

### Supply chain responsibility

- <sup>1</sup> According to <http://truckersagainstrafficking.org/>.
- <sup>2</sup> As of April 2018.

## Supply chain environmental impact

- <sup>1</sup> Intensity is calculated as the portion of first-tier production and product transportation suppliers' reported GHG emissions attributable to HP divided by HP's annual revenue. This method normalizes performance based on business productivity. Intensity is reported as a three-year rolling average to decrease the impact of variance year over year and highlight longer-term trends. Production supplier GHG emissions include Scope 1 and Scope 2.
- <sup>2</sup> This continues a goal from before the separation of Hewlett-Packard Company on November 1, 2015, extending the goal to 2025. Includes data from suppliers associated with HP Inc. and HP Inc. pre-separation business units.
- <sup>3</sup> See [HP Announces Supply Chain Goals to Enhance Environmental and Social Impact](#).

## Operations

### Committed to integrity

- <sup>1</sup> Salient risks are those which are severe in potential impact, reasonably likely to occur, and difficult to remediate.
- <sup>2</sup> As of March 2018.

### Our employees

- <sup>1</sup> As of October 31, 2017.
- <sup>2</sup> Ibid.

### Our facilities

- <sup>1</sup> About GHG emissions data:

This report includes Scope 1, 2, and 3 GHG emissions data from HP's operations, transportation fleet, and employee business travel, calculated according to the Greenhouse Gas Protocol of the World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI). See the [HP 2017 carbon footprint](#) for more details and an overview of emissions across the value chain.

- Scope 1 emissions include those from the direct use of natural gas, diesel fuel, refrigerants, and PFCs in operations and from fuel used by HP's transportation fleet.
- Scope 2 emissions are primarily from purchased electricity used in HP's operational real estate.
- Scope 3 emissions reported in this section result from employee business travel by commercial airlines and from commuting.

Data in this section for 2015–2017 uses the market-based method. In the data summary, we also include 2015–2017 data using the location-based method.

### Community engagement

- <sup>1</sup> The HP Foundation is a nonprofit, 501(c)3 organization.
- <sup>2</sup> <http://www.life-global.org/?q=node/128>
- <sup>3</sup> Hourly rate based on type of volunteering: \$150/hour for board, service corp, pro bono, and skills based; \$24.14/hour for hands-on and undetermined, adjusted using World Bank data for purchasing power differences across countries.

## Products and solutions

### Reinventing for a circular economy

- <sup>1</sup> Compared to majority in-class color desktop inkjet all-in-ones <\$199 USD. HP internal research survey of printer manufacturers' published specifications, sustainability reports and press releases as of August 1, 2017 and Buyers Laboratory Inc. 2017 study commissioned by HP; [keypointintelligence.com/products/samples/hp-envy/](http://keypointintelligence.com/products/samples/hp-envy/). Market share as reported by IDC CYQ1 2017 Hardcopy Peripherals Tracker. The HP ENVY 6200, 7100 and 7800 all-in-one printers contain more than 10% closed loop plastic from recycled printers and other electronics plastic by weight of the plastic.
- <sup>2</sup> Based on AiOs with self-serviceable hard drive, M.2 storage, webcam, and the ability to remove and service the display and PC individually as of September 1, 2017.
- <sup>3</sup> Based on internal testing and simulation, HP Jet Fusion 3D average printing time is up to 10 times faster than the average printing time of comparable fused deposition modeling (FDM) and selective laser sintering (SLS) printer solutions from \$100,000 USD to \$300,000 USD on market as of April, 2016. Testing variables: Part quantity: 1.4 full build chamber of parts from HP Jet Fusion 3D at 20% of packing density on fast print mode vs. same number of parts on above-mentioned competitive devices; part size: 30 grams; layer thickness: 0.08 mm/0.0031 inches.

### Sustainable design

- <sup>1</sup> As of October 31, 2017.
- <sup>2</sup> Microfluidics is the ability to precisely place and manipulate fluids at a very small scale.
- <sup>3</sup> Benign or safer alternatives are rated as GreenScreen® benchmark 2 or better. This data point is calculated based on the total mass of benign and safer alternatives divided by the total mass of products shipped. Commercial and industrial graphics printing solutions products, as well as accessories and packaging for all HP products are not included in this total.
- <sup>4</sup> This number does not include commercial and industrial graphics printing solutions, packaging for those solutions, scanners, personal systems accessories sold separately, or documentation for any products.
- <sup>5</sup> Does not include toner bottles.
- <sup>6</sup> All HP brand paper and paper-based product packaging will be derived from certified and recycled sources by 2020, with a preference for virgin fiber from certified sources of the Forest Stewardship Council (FSC). Packaging is the box that comes with the product and all paper (including packaging and materials) inside the box.
- <sup>7</sup> Less than 2% of paper by tonnage is not labeled as certified, but is made from certified fiber. Recycled fiber for paper products is included in the FSC-certified value.
- <sup>8</sup> All HP brand paper and paper-based product packaging will be derived from certified and recycled sources by 2020, with a preference for virgin fiber from certified sources of the Forest Stewardship Council (FSC). Packaging is the box that comes with the product and all paper (including packaging and materials) inside the box.
- <sup>9</sup> The average energy consumption of HP products was estimated annually between 2010 and 2017 using high-volume product lines representative of the overall shipped product volume. The high-volume personal systems product lines include notebook and desktop computers, tablets, all-in-ones, workstations, thin clients, and displays.
- <sup>10</sup> The average energy consumption (based on ENERGY STAR® program's Typical Electricity Consumption (TEC)) of HP products was estimated annually between 2010 and 2015 using high-volume product lines representative of the overall shipped product volume. The high-volume product lines include HP LaserJet.
- <sup>11</sup> The average energy consumption (based on sleep mode power) of newly introduced HP products was estimated annually between 2010 and 2015 using high-volume product lines representative of the overall shipped product volume. The high-volume product lines include HP inkjet printers. Excluding PageWide inkjet printers and large-format printers.

<sup>12</sup> Product GHG emissions intensity describes the performance of our portfolio, taking into account changes to product mix and business growth. This metric measures GHG emissions during product lifetime use, per unit for personal systems and per printed page for printers. These values are then weighted by contribution of personal systems and printing products to overall revenue.

<sup>13</sup> HP product GHG emissions intensity measures GHG emissions during product lifetime use per unit for personal systems and per printed page for printers based on anticipated lifetime usage. These values are then weighted by contribution of personal systems and printing products to overall revenue in the current year. These emissions represent more than 99% of HP product units shipped each year, including notebooks, tablets, desktops, mobile computing devices, workstations, displays and digital signage; and HP inkjet, LaserJet, DesignJet, Indigo, Scitex, and Jet Fusion 3D printers, and scanners.

## Product responsibility

<sup>1</sup> Clone cartridges are newly built cartridges that are manufactured to look like Original HP toner cartridges, but use non-HP parts and toner and may violate patent holders' intellectual property rights.

<sup>2</sup> In addition to HP Multi Jet Fusion, the assessment included digital light synthesis, fused deposition modeling, and selective laser sintering.

<sup>3</sup> "World's most secure and manageable PC" claim is based on HP's unique and comprehensive security capabilities at no additional cost and HP's Manageability Integration Kit's management of every aspect of a PC including hardware, BIOS and software management using Microsoft System Center Configuration Manager<sup>a</sup> among vendors with 1M annual unit sales as of November 2016 on HP Elite PCs with 7th generation and higher Intel<sup>®</sup> Processors, Intel<sup>®</sup> integrated graphics, and Intel<sup>®</sup> WLAN. "World's most secure and manageable Workstation" claim is based on HP's unique and comprehensive security capabilities at no additional cost and HP's Manageability Integration Kit's management of every aspect of a PC including hardware, BIOS and software management using Microsoft System Center Configuration Manager<sup>a</sup> among desktop workstation vendors as of June 2017 on HP Desktop Workstation with 7th generation Intel<sup>®</sup> Processors.

<sup>4</sup> HP Multi Factor Authenticate Gen2 requires 7th or 8th generation Intel<sup>®</sup> Core™ processor, Intel<sup>®</sup> integrated graphics, and Intel<sup>®</sup> WLAN. Microsoft System Center Configuration Manager<sup>a</sup> is required for deployment. Three authentication factors require an Intel<sup>®</sup> vPro™ processor.

<sup>5</sup> HP Sure Click is available on select HP platforms and supports Microsoft Internet Explorer<sup>a</sup>, Google Chrome, and Chromium™. Supported attachments include Microsoft Office<sup>a</sup> (Word<sup>a</sup>, Excel<sup>a</sup>, PowerPoint<sup>a</sup>) and PDF files in read only mode. Check <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW> for all compatible platforms as they become available.

<sup>6</sup> HP Sure Start Gen4 is available on HP Elite and HP Pro 600 products equipped with 8th generation Intel<sup>®</sup> or AMD processors.

<sup>7</sup> HP Sure View integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.

<sup>8</sup> Based on currently available, in-market PCs, as of August 1, 2016, having physically embedded, hardware-based privacy screen. Available on select HP EliteBooks only.

<sup>9</sup> HP Sure Run is available on HP Elite products equipped with 8th generation Intel<sup>®</sup> or AMD<sup>®</sup> processors.

<sup>10</sup> HP Sure Recover is available on HP Elite PCs with 8th generation Intel<sup>®</sup> or AMD processors and requires an open, wired network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.

<sup>11</sup> HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.

<sup>12</sup> As of December 5, 2017, see [https://partnercenter.microsoft.com/en-us/pcv/solution-providers/hp-inc\\_4299709950/1221645\\_1?k=hp](https://partnercenter.microsoft.com/en-us/pcv/solution-providers/hp-inc_4299709950/1221645_1?k=hp).

<sup>13</sup> HP's most advanced embedded security features are available on HP Enterprise-class devices with FutureSmart firmware 4.5 or above and are based on HP review of 2016–2017 published embedded security features of competitive in-class printers. Only HP offers a combination of security features for integrity checking down to the BIOS with self-healing capabilities. For a list of compatible products, visit: [hp.com/go/PrintersThatProtect](http://hp.com/go/PrintersThatProtect). For more information, visit: [www.hp.com/go/printersecurityclaims](http://www.hp.com/go/printersecurityclaims).

## Products and solutions portfolio

<sup>1</sup> As defined by TCO Edge plastic part definition.

<sup>2</sup> The average energy consumption of HP products was estimated annually between 2010 and 2017 using high-volume product lines representative of the overall shipped product volume. The high-volume personal systems product lines include notebook and desktop computers, tablets, all-in-ones, workstations, thin clients, and displays.

<sup>3</sup> Based on all-in-ones with self-serviceable hard drive, M.2 storage, webcam, and the ability to remove and service the display and PC individually as of September 1, 2017.

<sup>4</sup> As defined by TCO Edge plastic part definition.

<sup>5</sup> Compared to majority in-class color desktop inkjet all-in-ones <\$199 USD. HP internal research survey of printer manufacturers' published specifications, sustainability reports and press releases as of August 1, 2017 and Buyers Laboratory Inc. 2017 study commissioned by HP; [keypointintelligence.com/products/samples/hp-envy/](http://keypointintelligence.com/products/samples/hp-envy/). Market share as reported by IDC CYQ1 2017 Hardcopy Peripherals Tracker. The HP ENVY 6200, 7100 and 7800 all-in-one printers contain more than 10% closed loop plastic from recycled printers and other electronics plastic by weight of the plastic.

<sup>6</sup> Energy claim based on TEC data reported on [energystar.gov](http://energystar.gov) as of March 2018. Data normalized to determine energy efficiency of in-class color laser printers and MFPs with print speeds between 20 and 80ppm as of March 2018, excluding other HP PageWide products. Subject to device settings. Actual results may vary.

<sup>7</sup> HP ink cartridges contain recycled HP ink cartridges plus bottles or hangers. HP toner cartridges contain recycled HP toner cartridges.

<sup>8</sup> Does not include toner bottles.

<sup>9</sup> One income opportunity equals the ability for a person to earn a consistent income for one month.

<sup>10</sup> Based on plan usage, Internet connection to eligible HP printer, valid credit/debit card, email address, and delivery service in your geographic area. Number of countries is as of April 2018.

<sup>11</sup> Based on monthly subscription cost using only all pages in plan vs. cost per page of most color inkjet printers < \$399USD. Share from IDC CYQ1 2016. Standard cartridge CPP from gap intelligence AiO Weekly (IJP Weekly 5/15/16).

<sup>12</sup> Compared with non-subscription purchase of the same HP ink cartridges. Based on a 2017 life cycle assessment (LCA) performed by Four Elements Consulting and commissioned by HP. Analysis includes the CO<sub>2</sub> equivalent associated with customer trips to purchase ink cartridges at a retail store versus delivering directly to a customer's house, and it includes recycling empty ink cartridges versus throwing them away. Data and assumptions drawn from six years of customer data in the United States. Reductions in materials consumption, carbon footprint, energy use, and water usage are average values.

<sup>13</sup> Clone cartridges are newly built cartridges that are manufactured to look like Original HP toner cartridges, but use non-HP parts and toner and may violate patent holders' intellectual property rights.

<sup>14</sup> 2018 WKI Blue Angel Indoor Air Quality compliance study, commissioned by HP. The study tested four New Build Compatible toner cartridge brands sold as substitutes for HP LaserJet Pro MFP M425dn with cartridge 280A. The tests were carried out in compliance with “Prüfverfahren für die Bestimmung von Emissionen aus Hardcopygeräten” for purposes of Blue Angel labeling of office equipment in accordance with RAL-UZ-205P. For details, see [h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-1981ENW](http://www2.hp.com/v2/GetDocument.aspx?docname=4AA7-1981ENW).

<sup>15</sup> 2018 Four Elements Consulting LCA study, commissioned by HP, compared Original HP 80A and 83A monochrome toner cartridges with a sample of NBC alternatives across eight environmental impact categories. For more information, visit [hp.com/go/NA-LJLCA-NBC-2018](http://hp.com/go/NA-LJLCA-NBC-2018). The LCA leverages a SpencerLab 2016 study, commissioned by HP, comparing Original HP LaserJet toner cartridges with three brands of NBC toner cartridges sold in NA. For details, see [spencerlab.com/reports/HPReliability-NA-NBC2016NB.pdf](http://spencerlab.com/reports/HPReliability-NA-NBC2016NB.pdf).

<sup>16</sup> The following regulatory documents are available to HP customers upon request: HP Ink Statement of Composition, Worldwide Statement of Regulatory Listing for HP Inks, Environmental Attributes and Regulatory Summary, and General Statement of Migration and Organoleptic Assessment.

<sup>17</sup> Refers to A30 Water-Based inks (and P36 Priming Agent), and CV150 Water-Based inks. HP Statement of Composition, 3rd party (Intertek) World-Wide Statement of Regulatory Listing and 3rd party (Swiss Quality Testing Services) General Statement of Migration and Organoleptic Assessment based on Representative Use Cases which include E-Flute packaging printed on external side. U.S. terminology “packaging materials in direct contact with food” analogous to “primary packaging.” Contact HP for additional information.

<sup>18</sup> Compared to solvent-based printing chemistries.

<sup>19</sup> See [HP Indigo: Environmental Sustainability](#), page 5 for more detail.

<sup>20</sup> Environmental impact comparison of the printing stage between CI Flexo, Rotogravure, and HP Indigo 20000 press at job size of ~3,000m<sup>2</sup> of a coffee pouch made in Europe.

<sup>21</sup> Based on internal testing and simulation, HP Jet Fusion 3D average printing time is up to 10 times faster than the average printing time of comparable fused deposition modeling (FDM) and selective laser sintering (SLS) printer solutions from \$100,000 USD to \$300,000 USD on market as of April, 2016. Testing variables: Part quantity: 1.4 full build chamber of parts from HP Jet Fusion 3D at 20% of packing density on fast print mode vs. same number of parts on above-mentioned competitive devices; part size: 30 grams; layer thickness: 0.08 mm/0.0031 inches.

<sup>22</sup> HP Jet Fusion 3D printing solutions using HP 3D High Reusability PA 12 and HP 3D High Reusability PA 11 provide 80% postproduction surplus material reusability, producing functional parts batch after batch. For testing, material is aged in real printing conditions and tracked by generations (worst case for recyclability). Parts are then made from each generation and tested for mechanical properties and accuracy.

<sup>23</sup> Compared to manual print retrieval process used by other powder-based technologies. The term “cleaner” does not refer to any indoor air quality requirements and/or consider related air quality regulations or testing that may be applicable. The HP material and agents do not meet the criteria for classification as hazardous according to Regulation (EC) 1272/2008 as amended.

<sup>24</sup> As of product launch in 2017. About 80% of the 3D printed custom plastic parts referenced were printed using HP Multi Jet Fusion technology. These numbers may vary over time due to supply chain and manufacturing factors.

<sup>25</sup> In addition to HP Multi Jet Fusion, the assessment included digital light synthesis, fused deposition modeling, and selective laser sintering.

<sup>26</sup> As of April 2018.

<sup>27</sup> <http://uis.unesco.org/en/topic/gender-equality-education>

<sup>28</sup> <https://www.theguardian.com/inequality/2018/jan/21/technology-widen-pay-gap-hit-womens-jobs-hardest-davos-report>

<sup>29</sup> See McKinsey Global Institute (MGI) report, [The power of parity: How advancing women’s equality can add \\$12 trillion to global growth](#).

<sup>30</sup> <http://www.unhcr.org/en-us/education.html>

## Product repair, reuse, and recycling

<sup>1</sup> Compared to the majority of in-class color desktop inkjet all-in-ones <\$199 USD. HP internal research survey of printer manufacturers’ published specifications, sustainability reports and press releases as of August 1, 2017 and Buyers Laboratory Inc. 2017 study commissioned by HP; [keypointintelligence.com/products/samples/hp-envy/](http://keypointintelligence.com/products/samples/hp-envy/). Market share as reported by IDC CYQ1 2017 Hardcopy Peripherals Tracker. The HP ENVY 6200, 7100 and 7800 all-in-one printers contain more than 10% closed loop plastic from recycled printers and other electronics plastic by weight of the plastic.

<sup>2</sup> This is the number of countries or territories where HP offers hardware recycling and/or HP ink cartridge recycling and/or HP toner cartridge recycling.

<sup>A</sup> Microsoft, Office, Word, Excel, PowerPoint, System Center Configuration Manager, and Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.





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