# Responsible Printing for a Better Planet

HP's Forest Positive Strategy



Print confidently with HP knowing that we invest more in forests than we take from them.

> Metric Tons<sup>3</sup>

The amount of paper that goes

through HP printers in one year

4.3M



With HP pull-printing, increased efficiency in paper consumption by up to **30%**. <sup>12</sup>

#### Responsibly Sourcing HP Paper and Packaging

In one year, transitioned **5 million** printers to recycled paper-based packaging.<sup>1</sup>

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### Protecting, Managing, and Restoring Forests

Partnering with NGOs to improve management and conservation of **more than one million acres** of forests.<sup>2</sup>

### Supporting Development of Science-Based Targets for Forests

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First company to pilot science-based targets for forests.<sup>1</sup>

#### Influencing Industry Partners to Inspire Forest Positive Action

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Founded the **Sustainable Forest Collaborative** in 2020, a **consortium of 12 members**, made up of paper companies and NGO partner advisors working together to inspire forest positive action across the print industry.

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### NEGATIVE NEUTRAL POSITIVE COD Forest Positive Strategy

The amount of paper addressed through HP responsible forest management in one year

Metric

## **Executive Summary**

Forests are one of the world's most valuable natural resources. Not only do forests house tremendous biodiversity, they are a source of vitality for 1.6 billion people worldwide.<sup>4</sup> And when it comes to fighting the effects of climate change, forests are also tremendous assets. Restoring habitats, managing resources like water, and other nature-based solutions hold extraordinary promise in the quest to stabilize global temperatures and weather patterns. Research shows that nearly one third of the climate mitigation needed to meet the Paris Agreement's objectives can be achieved through strategies like these.<sup>5</sup> However, forests are in trouble. In 2021, the planet lost 27.4 million acres of tree cover.<sup>6</sup>

Consistently ranked as one of the world's most responsible companies<sup>7</sup>, HP is committed to reducing the impact the company has on forests from printing as well as the paper-based packaging of its products. Since our earliest days as a company, HP has been a place where innovation drives extraordinary contributions to humanity. Guided by our longstanding pledge to people, planet and communities - HP

is educating consumers about their options to print responsibly and encouraging other businesses to join us in creating the future we want to see.

HP's forest positive strategy includes efforts across five distinct pillars, each with a clear goal and partnerships with leading nongovernmental organizations (NGOs) to:

- 1. Engineer for Efficient Paper Consumption to reduce the amount of paper needed for effective printing
- 2. **Responsibly Source HP Paper and Packaging** ensuring HP brand paper and paper-based packaging is responsibly and ethically sourced
- 3. **Protect, Manage, and Restore Forests** focus on the resiliency and survival of healthy forest ecosystems
- 4. Support the Development of Science-Based Targets for Forests - to quantify and address printing's impact on forests



Restoring biodiversity and enhancing human wellbeing in Brazil's Atlantic Forest.

Photo Credit: © WWF-Brazil / Adriano Gambarini

5. Influence Industry Partners to Inspire Forest Positive Action – looking beyond our work to encourage the paper industry and other businesses to join in our efforts

Details of these five pillars are outlined in the following pages. While the pillars represent a complex undertaking for HP and its partners, the result is simple:

### People can print confidently with HP knowing that we invest more in forests than we take from them.

With HP's forest positive strategy and latest printing solutions, we protect and restore forests for every page printed.<sup>8</sup> HP is on track to address 40 million metric tons of paper used in both consumer and commercial HP printers by 2030 in collaboration with our NGO partners.<sup>9</sup>

## Engineer for Efficient Paper Consumption

In every stage of life, printed materials make a difference. People of all ages and walks of life benefit from printed materials that they can touch, pick up, and share. Our customers use their printers to learn, grow, and perform: Job applicants print resumes and cover letters. Entrepreneurs print business cards and proposals. School-age children print homework assignments and study guides–particularly important today, as studies in the United States show that print-based learning helps families collaborate,<sup>10</sup> and parents and educators are working hard to address learning loss from the pandemic. <sup>11</sup>

With such demand for printing, HP is committed to creating technology that enables thoughtful paper consumption. Here are just a few examples:

**Double-sided printing.** We've invested in printer mechanics for flipping pages and formulating ink that doesn't bleed through to the next page. As a result, most of HP's Home and Office printers have auto-duplex printing capabilities. Additionally, we encourage users to set double-sided printing as their default—this option is highlighted in the HP Smart app so users can select it more readily.

**Pull-printing features.** We've revamped how our office printers complete print jobs. With pull-printing, the user must be present for their print job to be released. In office settings, this means that the user must enter an ID number or scan their badge at the printer in order to retrieve their print job. The result is a reduction in unclaimed print jobs and misprints by 10% to 30% with pull-printing solutions that enable users to claim jobs stored on networked printers.<sup>12</sup>

**Instant Ink.** Through our ink delivery program, users pay for the pages they print, not the ink they use. This subscription program anticipates when a user's ink or toner cartridge is running low and sends replenishments as well as new recycling envelopes (for ink cartridges) or recycling labels and information (for toner cartridges) automatically.<sup>13</sup> We also use larger ink cartridges, meaning less frequent shipments– and, in turn, less paper packaging.

**Instant Ink's Paper Add-On.** Under this new program, users can add HP-branded paper to their Instant Ink subscription. Our printers count the number of sheets used and automatically ship new reams of paper before our customers run out. That provides two immediate benefits to customers: assurances that they always have the paper they need—and that that paper is sourced from responsibly managed forests and is Forest Steward Council<sup>®</sup> (FSC<sup>®</sup>)-certified.<sup>14</sup>

**Scanning with the HP Smart mobile app.** Our HP Smart app helps customers print, scan, and share files from anywhere. By scanning and sharing, users are able to digitize and store paper records—helping them save paper for projects they truly need in hard copy.

**Print quality.** Original HP Ink and Toner Cartridges have a track record of quality—one that means fewer pages are misprinted and, in turn, wasted. In a sample tested by the Spencer Lab Digital Color Laboratory, HP cartridges produced 99.2% high-quality pages for external use, compared to 34.6% for non-HP brand cartridges.<sup>15</sup>

## Responsibly Sourced HP Paper and Packaging

Using paper more efficiently is just the beginning. It is just as important that the paper originates in a healthy, thriving forest—as certified by organizations like the Forest Stewardship Council (FSC<sup>®</sup>), which is regarded at the gold standard, and Programme for the Endorsement of Forest Certification (PEFC), which promotes responsible management of these important landscapes.

HP's commitment to sustainable sourcing began in 2008, when we led the technology industry in establishing a policy for sustainable sourcing and production choices throughout the entire paper supply chain.<sup>16</sup> The landmark <u>HP Sustainable Paper and Wood</u> <u>Policy</u> codified principles for sourcing paper, packaging, and wood to minimize waste.<sup>17</sup>

The policy set forth a preference for suppliers that demonstrate environmental values and a commitment to responsible sourcing. Specifically, it required our suppliers to ensure that their wood and paper fiber would not come from unwanted sources, like land that



WWF and HP are helping protect, manage and restore 1 million acres of forests.

Photo Credit: © WWF-China / Xiaomin Zhu

had been converted to agriculture. The policy also pledged to avoid sourcing from high conservation value forests—ones that are globally or regionally significant, home to endangered ecosystems, or important to meeting the needs of local communities. And it cemented our longstanding commitment to ensuring that the wood-based materials we use do not contribute to human and community rights violations.

In the years since, we've worked in close partnership with experts in conservation to ensure that we operate under these standards. That includes working toward FSC<sup>®</sup> and PEFC certification—and meeting their strict standards for forest management and paper traceability.

That level of transparency is a promise that nearly all HP-branded paper originated in a forest that is being managed responsibly today.

In addition, we've revamped the way we package our products. As we're working to eliminate single-use plastic, foam, and other hard-torecycle materials from our packaging, we're making sure that our paper-based packaging comes from recycled or certified sources, just like our paper. That encompasses packaging for home and office printers and supplies, PCs, and displays.

### Protect, Manage, and Restore Forests

We are partnering closely with NGOs like World Wildlife Fund (WWF), Conservation International, and the Arbor Day Foundation on projects around the globe that help forests. These projects encompass forest protection, diverse approaches to stop deforestation through policymaking and market-driven mechanisms;<sup>18</sup> forest management, implementing better forest management practices for specific functions like conserving biodiversity and ecosystems;<sup>19</sup> and forest restoration, which involves working with local communities to regain the ecological functionality of forests and enhance human well-being through returning trees to places they once stood, and address forest degradation.<sup>20</sup>

Such collaboration is not new to us. For decades, we've partnered with seasoned leaders in forest management and conservation, including NGOs with a track record of deep, productive engagement with local leaders and communities. In other words, we combine our resources as a leading tech company with the expertise and local connections with NGOs around the world to make sure we're making a difference for people and the planet.

Here's how we're advancing our goals with three such partners today:

#### World Wildlife Fund

World Wildlife Fund (WWF) has long been one of the leading conservation groups on the planet, and we've been proud to support their work on a wide range of initiatives over the past decade—from participating in WWF's Global Forest and Trade Network since 2009 to help us achieve our sustainable fiber sourcing goals, to protecting Indonesian rainforests and the elephants and Sumatran tigers that call them home to promoting responsible forestry through the feature film The Lorax. Today, we continue to work with WWF, a recognized expert organization in identifying the most ecologically important and threatened forests around the world, and determine how, together, we can help them thrive.



In 2019-2020, we pledged \$12 million toward the restoration, protection, and conservation of over 200,000 acres of forest, an area equal to approximately the size of New York City.<sup>21</sup> That includes Brazil's Atlantic Forest region, one of the world's most biodiverse forested regions (second only to the Amazon), where just 12 percent of original forest remains.<sup>22</sup> We engaged more than 50 local institutions, bringing together

landowners, local restoration organizations, and other stakeholders to restore forests in this region. These groups work together to restore forests through techniques like natural regeneration, where seeds fall and germinate on the forest floor, and planting native seedlings, where seeds are germinated in a nursery and then planted in the forest.

And in China, a major producer and consumer of paper products that relies on imports from countries with high deforestation risk, HP is supporting efforts to improve plantation and forest management across nine provinces to ensure sustainable domestic supply of wood products to reduce pressure on threatened and high-value forests. With HP's support, WWF and its partners in China are working to implement better forest management practices on nearly 220,000 acres of forest and plantations, and support these forests to achieve FSC<sup>®</sup>-certification. They are collaborating closely with state forest management agencies and making sure that forest workers get the training and technical support they need to carry out these responsible forest management practices.<sup>23</sup>

WWF remains a key partner in HP's efforts to address the impact to forests of paper that runs through HP products and services. In 2021, we pledged an additional \$80 million to expand our partnership with WWF. This commitment will address the forest impacts from 17 million metric tons of paper used in both consumer and commercial HP printers for 10 years—for all paper, not just HP-branded paper—the equivalent of restoring and protecting nearly one million acres of forest.<sup>24</sup> We're one of the first in the industry to address these impacts beyond our own supply chain, and WWF's expertise and partnership make it possible. This \$80 million investment will also accelerate forest preservation and restoration efforts in key landscapes including Brazil's Atlantic Forest, Madre de Dios in Peru, and the forests of Eastern Australia and other critical forest ecosystems to be announced.<sup>25</sup>

#### **Conservation International**

Conservation International applies cutting-edge science to protect forest areas for the health and prosperity of people. The organization has an outstanding record of working alongside those it serves, including Indigenous communities in the Amazon and farming communities whose crops are threatened by deforestation and climate change. Their nuanced understanding of local populations makes them a key partner in advancing our forest-positive approach.

For example, in the Alto Mayo region of Peru, Conservation International works with local leaders to not only restore forests but create sustainable livelihoods. The project covers the territory of the Awajún communities, which Conservation International has engaged with establishing community conservation agreements. They are designed to reduce deforestation near areas that have been converted to agriculture. The project works closely with 22 local families to install 50 acres of cocoa in agroforestry systems.<sup>26</sup>

Many of their projects implement ancestral Awajún practices, rescuing the traditions used by the elders as a way of adding value and pride to their heritage by working in partnership with the local Indigenous leaders. Together, they have built a training center and developed specialized materials in the Awajún language to pass on this knowledge. Since the start of this project, with the help of other groups and organizations including CI and HP, deforestation in the Alto Mayo Protected Forest has declined 59 percent as of 2020.<sup>27</sup>

HP has significantly expanded its partnership with Conservation International, which also includes larger-scale efforts aimed at accelerating our goal of counteracting deforestation by 2030. The first of these incremental projects will take place in Brazil and Peru, with projects in other key areas to come.

#### **Arbor Day Foundation**

The fight against climate change can feel like an overwhelmingly large problem. That's why the Arbor Day Foundation focuses on one simple, powerful, and proven solution: planting trees. Over its 50-year history, the foundation has planted and distributed nearly 500 million trees in more than 50 countries around the world.<sup>28</sup>

As of January 2023, 3.8 million of those trees have been planted in partnership with HP. These trees have been part of major worldwide efforts like 1t.org, the World Economic Forum's pledge to conserve, restore, and grow one trillion trees by 2030. We set a goal to work with the Arbor Day Foundation to plant one million trees by the end of 2020–and exceeded it, with diverse projects in the United States and around the world. HP also partnered with the Foundation to plant one tree

for each of HP's 55,000 employees around the world—which our employees voted to plant in California, Ireland, Brazil, Indonesia, and Texas.<sup>29</sup>







These plantings have focused on landscapes in great need of preservation and restoration. In California, HP and the Arbor Day Foundation planted 177,000 trees in areas scarred by the devastating Camp and Carr Fires of 2018–trees that will help reverse the fire-related challenges presented by mudslides, soil degradation, and reduced air and water quality. In Oaxaca and Chiapas, Mexico, where forest degradation and deforestation exist alongside deep poverty, 1,500 trees are providing income and food for communities in need. The 5,000 trees planted in the Mantiqueira Mountains in the Atlantic Forest of Brazil will help support the surrounding ecosystem, improve animal habitat, and sequester carbon dioxide. And in Florida, HP and the Foundation partnered to plant 200,000 trees in Lake Talquin State Forest as part of a broader restoration project that aims to help preserve and restore the native longleaf pine tree population.



The Arbor Day Foundation and HP helped restore nearly 1,000 acres, planting more than 600,000 trees, at the Econfina Creek and Chipola River watersheds in Florida following damage from Hurricane Michael.

Photo Credit: Matthew Coughlin

### Support the Development of Science-Based Targets for Forests

To maximize the impact of these diverse projects, we need a comprehensive strategy–both rooted in the best scientific data available today and looking forward to solve the scientific questions of tomorrow. HP has placed specific emphasis on the development of the science that permits greater strides in sustainability not just for HP, but for all companies that impact and rely on forests.

For HP, our quest to help forests started with understanding how our print business was affecting those forests—and what we needed to do to address those impacts. We sought out the expertise of WWF to help us do just that: support the development of science-based targets and pilot an approach to address the impacts on forests of paper used in HP printers around the world. It is a uniquely thorough approach that recognizes that while planting trees can be important, helping forests is much more than simply planting trees.

First, WWF developed an innovative methodology to calculate the impact of paper used in HP printers. HP had volume data of HP-brand paper, of course, but less information on other types of paper used in our printers. Since the origin of the non-HP brand paper used in HP printers is typically not known, it is difficult to determine how the paper was produced. However, we have information on the volume of paper that passes through HP printers, based on printer analytics data. We also know the geographies where HP printers are placed on the market. So WWF used data on where HP printers are sold and how much paper is used to estimate the forest area required to produce these volumes around the world.

From there, WWF estimated the land impacts that result from these printing volumes to explain not only the forest area required to produce this paper, but the impacts of that production on the quality of land and forests. This approach goes far beyond quantifying the number of trees that have been cut down or acreage of areas experiencing deforestation. It enables HP better to understand the regionalized impacts of printing on forest ecosystems and take the most effective steps to address them.

Around 60 percent of forests worldwide are designated for production,<sup>30</sup> which includes production for wood and paper products. How a forest is managed significantly impacts the health of that forest. Below are a handful of indicators of forest health that are affected by forest management practices.

**Forest canopy.** The size, shape, and number of leaves at the treetops tell us not just about the health of the trees, but the health of all the organisms around it. That's because the forest canopy performs important functions in the ecosystem, such as providing shade, moderating temperature, and protecting other organisms from wind and rain.<sup>31</sup> Some forestry harvest practices, such as clear cut logging, can lead to detrimental reductions in forest canopy.

Sedimentation. The free flow of freshwater in forests supports a stunning diversity of living organisms-and one key measure of water quality

is the amount of sedimentation. Too much pollution and sediment can prevent light and air from reaching organisms in stream beds, leading to declines in fish populations and other species, and impacts the quality of drinking water for communities.<sup>32</sup> Increases in sedimentation often indicate that human activities are disrupting the free flow of water. How a forest is managed–for example deforestation, site preparations, harvesting techniques, equipment used, and proximity to rivers–can directly impact sedimentation concentrations.

**Biodiversity.** Measuring biodiversity in a specific forest or region is complex. It must account for staggering numbers of living things, both visible and invisible to the human eye, such as animals, plants, fungi, and even bacteria.<sup>33</sup> Since 1970, WWF's Living Planet Report (LPR) has synthesized trends among thousands of species to chart the average rate of change in animal population sizes and establish a comprehensive measure of the state of the world's biological diversity. The most recent LPR examined nearly 32,000 populations, data that we use to pinpoint which forest-dwelling



HP and Conservation International restored 40 acres of native tree species in Ecuador. The project utilized an ancestral indigenous production system, called "Aja" to preserve ancestral practices that support restoration and conservation.

Photo Credit: © Cl Ecuador / Esteban Barrera

species are in distress, which allows us to design interventions that would assist them and their habitats.<sup>34</sup>

**Ecological connectivity.** A forest's living organisms need space–uninterrupted expanses where they can feed, find mates, and more.<sup>35</sup> When human activities encroach on these spaces and disconnect one part of a forest from another, it's called fragmentation, and it can have a catastrophic effect on the area's ecosystem as well as public health.<sup>36 37</sup> Whether cutting off mammals from food sources or making it harder for pollinators to help plants reproduce, the effects of reduced connectivity can be perilous. So we look to measures of connectivity between protected areas, which helps us identify the locations most in need of restoration or protection.

Indicators and metrics like these inform the process of setting science-based targets for forests. Another NGO partner deeply engaged in establishing these targets is the Forest Stewardship Council<sup>®</sup> (FSC<sup>®</sup>), whose certification is the gold standard of sustainable operations. Based on decades of careful target setting, certification is an independent verification for companies that forests are managed to the highest standards–which means preserving habitats so that plant and animal species can flourish. Today, all HP North American papers rise to this standard. <sup>38</sup> FSC<sup>®</sup> has developed metrics they use in their own certification processes–like soil health and carbon sequestration–that give a fuller picture of how business operations are affecting forest health.

## Influence Industry Partners to Inspire Forest Positive Action

Another important part of HP's forest-positive approach is reaching out to paper manufacturers. We believe that if we can encourage others to set and achieve sustainability goals of their own, then together, we can achieve far more than we ever could on our own.

HP founded the Sustainable Forests Collaborative (SFC) in 2020 to bring companies like Domtar, Sylvamo, Boise Paper, and New Leaf Paper together in a single consortium to share research, support one another's efforts, and report progress. Each SFC company has pledged to demonstrate its commitment to responsible sourcing and supply chains and share data on the volume of sustainable materials in their operations.

In addition to paper manufacturers, the SFC also includes three NGO partners–WWF, the Arbor Day Foundation, and Conservation International–that provide data, expertise, and guidance on every aspect of forest-positive printing. Just as these organizations are essential to setting science-based targets and carrying out conservation and restoration projects on the ground, they are also key players in industry-wide efforts to source paper more sustainably.

At the first SFC symposium in November 2021, members convened to discuss common challenges, with each company sharing its unique perspective. Members created shared goals related to serving communities, restoring forest health, and stabilizing the earth's climate. Representatives from the paper companies and NGOs also coalesced around the need to educate consumers about the benefits of sustainably sourced paper.

From this forum, SFC members planted the seeds of their first project as a group—one that would directly support communities in need and communicate the importance of sustainable sourcing and printing to a wider audience. The SFC found a natural partner in 1 Million Teachers (1MT), an organization committed to better equipping teachers to provide quality education—which includes equipping them with tools like paper and printers.

In the years to come, the SFC looks forward to developing more partnerships like this one that educate new audiences on the benefits of sustainable printing. It is also committed to recruiting more paper companies to its ranks, helping them to examine and improve sustainability through every stage of their supply chains, and raising the bar for our industry as a whole.

As HP strengthens this pillar of our forest-positive approach, we build a stronger foundation for all the important work ahead for our company and our industry. We continue to develop the partnerships that make it possible for us, together, to pursue ambitious, impactful projects across the globe. These united efforts have already helped to heal forests and lift up the communities that depend on them, and we look forward to greater collaboration in the work to protect forests.

#### Notes

- 1 See 2021 Sustainable Impact Report, pg. 81 https://www8.hp.com/h20195/v2/GetPDF.aspx/c08228880.pdf
- 2 Pursuant to agreement with World Wildlife Fund and Conservation International
- 3 For details on calculations, refer to the methodology in the HP Forest Positive Accounting Manual https://h20195.www2.hp.com/v2/GetDocument. aspx?docname=c08229913
- 4 See WWF report, "The Vitality of Forests," p. 27 https://www.worldwildlife.org/publications/the-vitality-of-forests-illustrating-the-evidence-connecting-forests-and-human-health
- 5 See WWF, "What are Nature-Based Solutions, and How Can They Help us Address the Climate Crisis?" https://www.worldwildlife.org/stories/what-arenature-based-solutions-and-how-can-they-help-us-address-the-climate-crisis
- 6 See "Four Lessons from a Journey to be Forest Positive," https://www.greenbiz.com/article/four-lessons-journey-be-forest-positive
- 7 Since 2020, when Newsweek established its ranking, HP has been named America's Most Responsible Company.
  2020: America's Most Responsible Companies 2020 (newsweek.com)
  2021: America's Most Responsible Companies 2021 (newsweek.com)
  2022: America's Most Responsible Companies 2022 (newsweek.com)
  2023: America's Most Responsible Companies 2023 (newsweek.com)
  2023: America's Most Responsible Companies 2023 (newsweek.com)
  2023: America's Most Responsible Companies 2023 (newsweek.com)
  HP was named in Corporate Knights' 100 most sustainable companies ranking: The 100 most sustainable companies are still outperforming in tumultuous times | Corporate Knights
- 8 Forest First: With HP+, every print–regardless of paper brand–is addressed through HP's Forest Positive Framework to counteract risks of deforestation. HP brand paper is sourced only from certified responsibly managed forests or from recycled content. For other brands of paper, HP invests in restoration, protection, or working forest-recovery projects in key regions, for instance Brazil, sufficient to balance any paper used by HP+ customers that may not have been responsibly sourced. Read more about projects and our partners at hp.com/forestfirst.
- 9 Pursuant to agreement with World Wildlife Fund and Conservation International, January 1, 2022.
- 10 A 2022 HP survey found that 79 percent of parents say that printed educational resources make it easier for them to collaborate with their child on homework assignments. See https://press.hp.com/us/en/blogs/2022/back-to-basics-parents-turning-to-print.html
- 11 According to the National Assessment of Educational Progress, average scores for nine-year-old students in 2022 declined 5 points in reading and 7 points in mathematics compared to 2020. See https://www.nationsreportcard.gov/highlights/ltt/2022/
- 12 Typical of those reported by leading industry analysts and HP client engagements. Estimated energy and paper savings based on analysis of select HP Managed Print Services customers' imaging and printing operations using data gathered on devices and paper consumption and comparing with post-MPS actuals or projections. Results depend on unique business environments, the way HP products and services are used, and other factors. Overall printing costs are unique to each company and should not be relied on for savings you may achieve.
- 13 Program availability varies due to local postal or environmental regulations. For details, see www.hp.com/hprecycle
- 14 Forest Stewardship Council: HP's policy is to use fiber from responsibly managed forests, and HP has a preference for offering Forest Steward Council<sup>®</sup> (FSC<sup>®</sup>)-certified papers. HP trademark license code FSC<sup>®</sup>-C017543, see fsc.org. Not all FSC<sup>®</sup>-certified products are available in all regions, look for logo on pack.
- 15 See full Spencer Lab report, http://www.spencerlab.com/reports/HPReliability-NA-nonHP-2022.pdf
- 16 See press release, "HP Makes it Easy to Make Smart Environmental Choices with Unrivaled Portfolio of Printing Solutions," https://www.hp.com/hpinfo/ newsroom/press/2008/080522xa.html
- 17 See HP's Sustainable Paper and Wood Policy, https://h20195.www2.hp.com/V2/getpdf.aspx/c05352448.pdf
- 18 See Science Direct, https://www.sciencedirect.com/topics/earth-and-planetary-sciences/forest-protection
- 19 See Science Direct, https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/forest-management
- 20 See United Nations Decade on Ecosystem Restoration, https://www.decadeonrestoration.org/types-ecosystem-restoration/forests
- 21 See press release, "HP Partners with World Wildlife Fund on Forest Protection, Restoration and Management," https://press.hp.com/us/en/pressreleases/2019/hp-partners-with-world-wildlife-fund-on-forest-protection.html

- 22 See "Restoring Brazil's Atlantic Forest," https://www.worldwildlife.org/magazine/issues/summer-2021/articles/restoring-brazil-s-atlantic-forest
- 23 See project description, "Improving forest management and building consumer awareness of FSC® in China," https://explorer.land/p/project/hp-china/ about
- 24 See press release, "HP and WWF Announce Bold Partnership Expansion to Conserve and Restore Forests," https://press.hp.com/us/en/pressreleases/2021/hp-and-wwf-announce-bold-partnership.html
- 25 See WWF blog post, "Expanding Forest Conservation Efforts to Protect Vital Forests Around the Globe,"https://www.worldwildlife.org/blogs/sustainabilityworks/posts/expanding-conservation-efforts-to-protect-vital-forests-across-the-globe
- 26 See Conservation International Facebook, https://www.facebook.com/ciperu/photos/a.409293881154/10160850564336155/
- 27 See "Protecting Forests and Climate in Alto Mayo," https://www.conservation.org/stories/protecting-forests-and-climate-in-alto-mayo
- 28 See press release, "Arbor Day Foundation Commits to Plant 500 Million Trees in 5 Years with Focus on Neighborhoods, Forests of Greatest Need,"
- 29 See press release, "HP Inc. and the Arbor Day Foundation Team Up to Plant One Million Trees by the End of 2020," https://press.hp.com/us/en/pressreleases/2020/hp-arbor-day-foundation-team-up-to-plant-one-million-trees-2020.html
- 30 See "Forest Sector Transformation and Valuation," https://forestsolutions.panda.org/approach/forest-sector-transformation-and-valuation
- 31 See "The Importance of Forest Canopy Cover," https://cid-inc.com/blog/the-forest-canopy-structure-roles-measurement/
- 32 See "Soil Erosion and Degradation," https://www.worldwildlife.org/threats/soil-erosion-and-degradation
- 33 See "What is biodiversity?", https://www.worldwildlife.org/pages/what-is-biodiversity
- 34 See "Living Planet Index 2022," https://livingplanet.panda.org/en-US/
- 35 See 2022 Living Planet Report, p. 24 https://wwflpr.awsassets.panda.org/downloads/lpr\_2022\_full\_report.pdf
- 36 See "Habitat Fragmentation and its Lasting Impact on Earth's Ecosystems," https://www.science.org/doi/10.1126/sciadv.1500052
- 37 See "Vitality of Forests," https://www.worldwildlife.org/publications/the-vitality-of-forests-illustrating-the-evidence-connecting-forests-and-human-health
- 38 See "Rewrite the Story with HP Papers," https://hppaper.com/na/sustainability/

