



# Making a Difference



# Contents

|            |   |
|------------|---|
| <b>4</b>   | <b>1.0 EXECUTIVE LETTERS</b>  |
| <b>6</b>   | A Message from Yang Yuanqing, Our Chairman and CEO  |
| <b>8</b>   | A Message from John Cerretani, Our Chief Sustainability Executive                                 |
| <b>10</b>  | <b>2.0 INTEGRATING SUSTAINABILITY</b>   |
| <b>12</b>  | Report Parameters   |
| <b>13</b>  | Materiality and Stakeholder Engagement  |
| <b>16</b>  | Lenovo and the U.N. Sustainable Development Goals   |
| <b>18</b>  | <b>3.0 PRACTICING ETHICAL BUSINESS</b>  |
| <b>20</b>  | Corporate Governance  |
| <b>23</b>  | Business Conduct  |
| <b>28</b>  | <b>4.0 PRODUCT RESPONSIBILITY</b>   |
| <b>30</b>  | Sustainable Quality   |
| <b>32</b>  | Safety and Ergonomics   |
| <b>33</b>  | Accessibility   |
| <b>34</b>  | Compliance  |
| <b>34</b>  | Lenovo Innovation Making a Difference   |
| <b>38</b>  | <b>5.0 MANUFACTURING AND SUPPLY CHAIN OPERATIONS</b>  |
| <b>40</b>  | In-house Manufacturing Operations   |
| <b>44</b>  | Supply Chain Operations   |
| <b>54</b>  | <b>6.0 PEOPLE</b>   |
| <b>56</b>  | Lenovo Employees  |
| <b>63</b>  | Social Investments  |
| <b>68</b>  | <b>7.0 PLANET</b>   |
| <b>70</b>  | Lenovo's Environmental Commitment   |
| <b>73</b>  | Environmental Impact of Lenovo Operations   |
| <b>87</b>  | Environmentally Conscious Products  |
| <b>96</b>  | Product End-of-Life Management (PELM)   |
| <b>100</b> | <b>8.0 CONSOLIDATED METRICS, OBJECTIVES AND TARGETS</b>   |
| <b>102</b> | FY 2017/18 Consolidated Metrics   |
| <b>109</b> | FY 2017/18 Performance  |
| <b>113</b> | FY 2018/19 Objectives and Targets   |
| <b>118</b> | <b>9.0 APPENDIX</b>   |
| <b>120</b> | Lenovo Reference Documentation  |
| <b>121</b> | Material Topic Boundaries   |
| <b>122</b> | GRI Content Index   |
| <b>134</b> | The U.N. Global Compact   |
| <b>135</b> | Hong Kong Stock Exchange Environmental, Social and Governance (ESG) Reporting Guide Content Index |

10



# EXECUTIVE LETTERS

- 6 Message from Yang Yuanqing, Our Chairman and CEO
- 8 Message from John Cerretani, Our Chief Sustainability Executive

**A MESSAGE FROM  
YANG YUANQING,  
OUR CHAIRMAN  
AND CEO**



This is our 12th annual sustainability report at Lenovo. This year more than ever, it's clear to me how deeply we're committed to sustainability and how integrated this commitment is within our business. It informs everything we do at Lenovo, from sourcing our materials, to manufacturing and distribution, to maintaining the safest and most diverse workplaces around the world.

When we report on sustainability, we're not only reporting on Lenovo itself but also on the critical issues we know to be important to our customers around the world. In pursuing our social and environmental goals, we're guided by the same level of commitment and accountability as we are in achieving our business goals. At Lenovo, excellence in sustainability and excellence in business go hand in hand.

Our company has key advantages in the marketplace that separate us from our competitors, and that super charge our ability to be a leader in sustainability. Most importantly, we directly control the majority of our manufacturing. Unlike other companies that outsource their materials supply and assembly, over 60% of our manufacturing is being conducted in Lenovo-owned and run factories.

We're a fully-integrated service and product provider too. All the building blocks of Intelligent Transformation — beginning with data storage in the cloud, through networking and infrastructure, to manufacturing a wide portfolio of consumer devices — reside fully within our company, and are unified under a single roof. Because of this, our sustainability goals are truly organic to the firm, built into every aspect of all of our products and business solutions.

And then there are Lenovo's people, 54,000 of us working in 60+ countries. Our company is a true global citizen, with dual headquarters in Asia and North America, and R&D and manufacturing facilities located around the world. The diversity of our people, and our depth of cross-cultural awareness, enable us to be closely attuned to sustainability in all its forms, sensitive and receptive to social and environmental needs wherever we operate.

This year, Lenovo advanced sustainability in many ways.

- We've increased our supply chain metrics across the board by approximately five percent, committing to continuous improvement in the caliber of our suppliers' performance on issues such as social and environmental responsibility, anti-corruption and business integrity.

- We've expanded our activities to support governmental and non-governmental bodies in managing the complex issues around conflict minerals, beginning a formal Cobalt due diligence effort within our supply chain. Our overall conflict-free status, as measured by supplier spending, improved from 80 percent to 82 percent.
- We've continued to innovate across every part of our sustainability efforts — from new bio-based product packaging to introducing closed-loop post-consumer recycled content plastic into our products
- Our company was recognized on three continents for excellence in employee wellness: Lenovo Brazil received the "Safety Protection Magazine Award" in July 2017; Lenovo offices in four Chinese cities (Chengdu, Shanghai, Shenzhen and Wuhan) received occupational health and safety awards from their respective local governments; and Lenovo offices in two U.S. cities (Morrisville, N.C. and Whitsett, N.C.) were honored by the State of North Carolina for low safety incident rates.

Looking ahead we're preparing a new supplier initiative for launch in 2018/2019, expanding our supplier diversity efforts to now include our large Tier 1/prime suppliers. Additionally, we will be building on the recently launched Lenovo Foundation — our charitable and philanthropic arm with a mission to empower minority populations with access to science, technology, engineering and math education by engaging employees to make a difference in their communities.

Our dedication to performance, our fostering of innovation, our celebration of diversity, and our commitment to citizenship are shared values across the enterprise. Through the strength of these shared foundational values, we're able to approach sustainability as a unifying principle throughout the company and continually advance what we do. In these pages you'll find powerful evidence that this is so.

### **Yang Yuanqing**

*Chairman and Chief Executive Officer*

**A MESSAGE FROM  
JOHN CERRETANI, OUR  
CHIEF SUSTAINABILITY  
EXECUTIVE**



At Lenovo, we believe in doing what we say and owning what we do. Our annual Sustainability Report offers our stakeholders transparency into our business and tracks our progress year-over-year by publicly reporting on both our successes and areas for improvement. It is an important part of achieving our goals to operate with integrity, meet compliance standards and exceed the expectations of our stakeholders.

Our sustainability strategy reflects our business priorities, impacts and challenges, and importantly, it supports the United Nations Sustainable Development Goals. We organize our approach and sustainability initiatives around four key areas: supply chain, environmental footprint, sustainable products and manufacturing, and community investments. In FY2017/2018, we made progress across all of these areas.

**Enhancing Supply Chain Transparency.** We take our responsibility as a global corporate citizen seriously. We balance priorities on both the global and local levels and diligently work to ensure we are compliant with the laws and regulations in every country where we ship our products and/or operate our business. We demand the same level of commitment from our supply chain partners. Lenovo supports the United Nations Declaration on Human Rights and through our contracts we require suppliers to comply with our own Supplier Code of Conduct. We also use and comply with the Responsible Business Alliance's Code of Conduct. Lenovo has formally joined the Responsible Minerals Initiative and supports the Responsible Minerals Assurance Process, through which we have increased our overall conflict-mineral free status to 82 percent.

**Reducing Our Footprint.** As part of our commitment to a healthier planet, Lenovo has placed a significant emphasis on combating climate change. We are working to mitigate our impact and reduce our global carbon footprint, as well as holding our suppliers accountable for their contributions. We have reduced our global Scope 1 and 2 Greenhouse Gas emissions by 32 percent since 2010. Following our achieving ISO 50001 Energy Management System (EnMS) certification at all 36 Lenovo locations in the European Union, we recently expanded our EnMS to our Beijing headquarters.

**Leading Sustainable Manufacturing.** By continuing to innovate on the sustainable use of materials, we remain a leader in using recycled content plastic in our products. During the last fiscal year, we launched a closed-loop recycled plastic program that incorporated recycled plastic from end-of-life IT and electronics products in our V410z All-in-One desktop and ThinkVision T22v-10 monitor. We are also incorporating approximately 10 to 17 percent post-consumer recycled content plastic in Lenovo high-end server products. Innovative, bio-based packaging materials — like bamboo and

sugar cane — are driving down packaging weight to reduce waste, carbon emissions and shipping costs.

**Living the Lenovo Way.** Our people are our greatest asset in bringing our sustainability commitments to life. In FY 2017/2018, we launched our inaugural Global Week of Service and created the Lenovo Foundation, both of which will amplify our social investment and volunteer initiatives going forward. We look forward to the Lenovo Foundation expanding the impacts of science, technology, engineering and math education and access to technology programs.

Lenovo continues to be recognized as a sustainability leader around the world. In addition to receiving the Hong Kong Institute of Certified Public Accountants "Best Corporate Governance" award in the H-Share Companies and Other Mainland Enterprises Category multiple years in a row, in FY 2017/2018, Lenovo:

- Earned an A- 2017 Climate Score from CDP (formerly Carbon Disclosure Project) and the CDP Award of Entrepreneurship on Responding to Climate Change;
- Achieved an AA rating on the 2017 Hang Seng Corporate Sustainability Index;
- Was the highest ranked company in our industry class on the Corporate Knights Global 100 Most Sustainable Corporations in the World Index; and
- Received a 70/100 CSR Gold rating from EcoVadis, a leader in business sustainability ratings for global supply chains, and ranking in the top one percent of all suppliers in all categories assessed by EcoVadis.

We are encouraged by our successes and progress but recognize we can do more. As we look ahead to FY 2018/2019 and beyond, we are intent on driving improvements in our environmental sustainability and corporate social responsibility performance both within our operations and our supply chain.

Our commitment to sustainability is unwavering — the following report details how we are making a difference.



**John Cerretani**  
Chief Sustainability Executive  
Executive Director, Legal Department

20



# INTEGRATING SUSTAINABILITY

- 12 Report Parameters
- 13 Materiality and Stakeholder Engagement
- 16 Lenovo and the U.N. Sustainable Development Goals

# INTEGRATING SUSTAINABILITY

## REPORT PARAMETERS

### ABOUT THIS REPORT

This is Lenovo's 12th annual sustainability report. It covers the Fiscal Year 2017/18 (April 1, 2017 through March 31, 2018). The most recent report prior to this was published in September 2017 for the Fiscal Year 2016/17. This and previous reports are available at: [www.lenovo.com/sustainability](http://www.lenovo.com/sustainability).

This report is considered a companion document to Lenovo's annual and interim reports. Those can be viewed at: [http://static.lenovo.com/ww/lenovo/annual\\_interim\\_report.html](http://static.lenovo.com/ww/lenovo/annual_interim_report.html). The [FY 2017/18 Annual Report](#) contains a CSR/sustainability overview on pages 123-136.

### SCOPE OF THE REPORT

- All references, unless otherwise noted, are to Lenovo's fiscal year, which ends March 31st.
- This report covers Lenovo's global operations, including previously reported joint ventures and acquisitions, except where noted.
- Our operations:

Corporate headquarters in Hong Kong

Primary operational hubs in Beijing, China; Singapore, Republic of Singapore; and Morrisville, N.C., USA

Major development and manufacturing facilities are described on page 71

Call centers in North America, South America, Europe, Asia and Australia

### REPORT CONTENT

The content of this report is informed by the Environmental, Social and Governance (ESG) Reporting Guide set out in the rules governing the listing of securities on The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange"), the Global Reporting Initiative (GRI) Standards and the needs of Lenovo's stakeholders. Lenovo has complied with all "comply or explain" provisions as set out in the Hong Kong Stock Exchange's ESG Guide. This report has been prepared in accordance with the GRI Standards: Core option. More information about Lenovo's material topics can be found on pages 13-14 and 121.

### NOTES

Notes in the Consolidated Metrics, FY 2017/18 Performance and FY 2018/19 Objectives and Targets sections apply to all places throughout the document where that data is used.

### EXTERNAL ASSURANCE

Accredited third parties have provided verification services for certain energy, greenhouse gas (GHG) emissions, waste and water data in this report. Please see the [Planet](#) chapter for more details.

## BASIS OF CALCULATIONS

- All financial data is denoted in U.S. dollars.
- Lenovo may in some instances face various challenges when measuring its performance. If there are contingencies associated with the data provided, those contingencies will be noted in the documentation.
- Lenovo continues to strive for excellence in measuring and improving its performance by adding new indicators. When new indicators are added, it may take time to deliver

trending information. Therefore, we may not always provide information publicly until we are certain that this data can be delivered in a high-quality and consistent manner.

## CONTACT INFORMATION FOR THIS REPORT AND FEEDBACK

For questions or other information about this report or to offer feedback, please contact:

Mark Thomsen, Sustainability Project Manager,  
7001 Development Drive Morrisville, N.C. 27560  
Email: [environment@lenovo.com](mailto:environment@lenovo.com)

# MATERIALITY AND STAKEHOLDER ENGAGEMENT

## MATERIALITY

Lenovo's integration of sustainability impact concerns into its strategy, planning, implementation and reporting activities begins with an assessment of materiality. We believe identification of material concerns related to sustainability is integral to achieving our business goals of minimizing risk and maximizing growth and returns on capital while fulfilling our commitment to outstanding corporate citizenship.

Lenovo regularly conducts assessments to identify and categorize all material concerns through its Enterprise Risk Management (ERM) framework, including sustainability related issues. Material concerns are further clarified and addressed through company management systems. Lenovo's environmental management system (EMS), for example, provides a framework for assessment of significant environmental aspects (SEA), regularly scheduled audits, measurement of key performance indicators and continuous improvement. This SEA evaluation process and the ERM process provide valuable input into Lenovo's overall sustainability materiality assessment process. Other benefits of the EMS include monitoring our progress on

previously identified material concerns and more quickly spotting emerging issues. In addition to these corporate level risk management programs, individual business units such as the Global Supply Chain organization manage their own risk management processes that feed into the corporate level programs and disclosure.

The scope of this Sustainability Report was determined by our Sustainability Materiality Assessment, a process where we evaluate and determine Lenovo's significant, or material, environmental and social responsibility aspects. We carried out this assessment in late 2017 and early 2018.

Lenovo acknowledges that a variety of external perspectives are relevant to identifying material issues. We regularly engage with a variety of stakeholders and consider their feedback as we affirm what is material to our business, develop our sustainability strategy, set our goals and report on our progress.

## SUSTAINABILITY MATERIALITY ASSESSMENT: MATERIAL TOPICS

- Business Ethics
- Climate Change (emissions)
- Community Outreach
- Corporate Governance
- Digital Inclusion
- Diversity and Equal Opportunity
- Economic Performance
- Energy Use
- Environmental Management System
- Human Rights
- Labor Standards and Practices
- Packaging
- Philanthropy/Disaster Relief
- Privacy
- Procurement Practices
- Product End-of-Life Management
- Product Energy Use
- Product Materials
- Product Responsibility
- Supply Chain Environmental Performance
- Supply Chain Labor Practices
- Talent Management
- Transportation
- Waste
- Water Use

## STAKEHOLDER ENGAGEMENT

Lenovo actively manages its relationships with employees, customers, suppliers, shareholders and investors, regulators, members of the communities in which we operate, industry groups, nongovernmental organizations (NGO) and other stakeholders whose actions can affect the company's performance and value. Examples of mechanisms for engaging with stakeholders on sustainability issues include:

- Direct customer interaction via in-person briefings, calls, customer surveys, social media engagement and other means
- Employee/management meetings and communications for employee performance management

- Employee surveys such as the "Lenovo Listens" survey, commuting surveys and others
- General meetings with investors
- Supplier conferences and quarterly business reviews
- Ongoing interactions and initiatives with local communities
- Responding to investor analyst and NGO surveys and inquiries
- Meetings and communications with industry peers, regulators and standards organizations to address issues of industry importance
- Opportunities for comment and feedback from employees, customers, investors and other stakeholders based on sustainability communications issued by Lenovo, such as this report

Each section of this report contains numerous other examples of Lenovo's engagement with stakeholders.

The results of the Sustainability Materiality Assessment also guide us in evaluating and prioritizing stakeholder inputs. Our environmental, quality and other management systems have defined processes for obtaining and analyzing stakeholder input to help improve our performance as well as manage risk. Lenovo's network of geographic, environmental and sustainability focal points engage with local sales teams and customers on a regular basis. This is done through detailed responses to customer questions and meetings at customer locations or at Lenovo's briefing centers. These meetings allow Lenovo to get direct feedback on our environmental programs. Examples of feedback include information on ecolabel preferences, requests for packaging optimization and requests for further information for internal customer education.

We are also heavily engaged with our suppliers to drive enhanced transparency and compliance, and we promote the use of reporting tools such as Lenovo's full materials disclosure declarations and Responsible Business Alliance (RBA) reporting requirements. This is done via regular interactions with our suppliers, including communications, regular reviews and report cards.

Local stakeholder engagement at the site level is primarily done through Lenovo's community relations (see the [Social Investments](#) section) and communications teams, who work with Lenovo's global organization on sustainability issues.

Key sustainability issues addressed through Lenovo's engagement with stakeholders in the past fiscal year include concerns about conflict minerals, protecting human rights in the supply

chain, climate change mitigation and impact, recycling, and product certifications. Lenovo's responses to these concerns included:

- Implementing a Cobalt Policy (see the [Supply Chain Operations](#) section)
- Publishing a list of our suppliers
- Reporting carbon emissions data and strategies to CDP (formerly Carbon Disclosure Project) (see the [Environmental Impact of Lenovo Operations](#) section). In 2017, Lenovo scored an A- and Leadership Level on its CDP carbon emissions-related reporting
- Providing free consumer recycling options in many geographies (see the [Recovery and Recycling Trends](#) section)
- Expanding our use of innovative forms of post-consumer recycled content by using closed-loop materials sourced from end-of-life electronics (see the [Product Materials](#) section)

# LENOVO AND THE U.N. SUSTAINABLE DEVELOPMENT GOALS

Lenovo supports the United Nations Sustainable Development Goals (SDGs), which were officially adopted by the U.N. in September 2015 and came into force in January 2016. The SDGs include 169 targets and are to be carried out between 2016 and 2030.

Lenovo has well-established programs to ensure we operate sustainably and responsibly, following our long-standing commitment to ethical corporate citizenship and promoting sustainability in all our activities. We became a Global Compact signatory in 2009. There are aspects of our business, projects, programs and activities that we can readily identify as contributing toward achieving SDGs. Examples include:

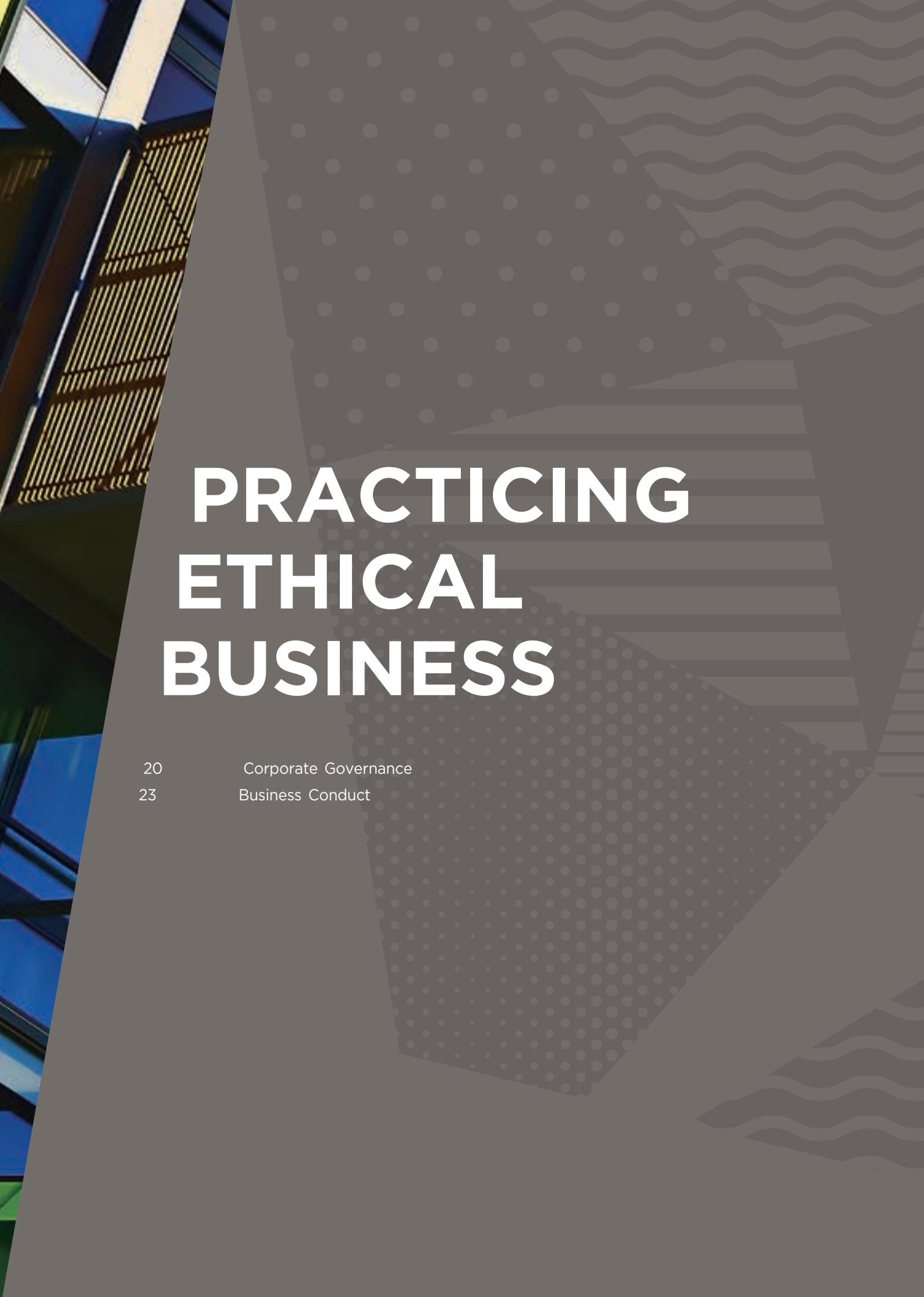


- Goal 4 — Education and digital inclusion are key components to Lenovo's social investment strategy. See the [Social Investments](#) section to read about our global activities in these areas in FY 2017/18.
- Goal 5 — Lenovo is seeing results from its programs to increase the hiring of women and develop female senior executive talent. See the [Diversity](#) section for more information.
- Goal 8 — Lenovo has been recognized for its commitment to providing safe and healthy workspaces, and our contracts with suppliers flow down safe and healthy workspace requirements through our supply chain tiers. See the [Manufacturing and Supply Chain Operations](#) chapter for more information.
- Goal 9 — Lenovo relentlessly pursues innovation that reaps sustainability benefits. Read about our warm-water cooled servers on pages 34-35.
- Goal 12 — Lenovo's Environmentally Conscious Products program is continually raising the bar on reducing the resources required to manufacture and use our products. For example, see page 87 for information about Lenovo's use of closed-loop materials.
- Goal 13 — Lenovo has pledged to achieve a 40 percent reduction in greenhouse emissions by FY 2020/21, relative to FY 2009/10. See the [Environmental Impact of Lenovo Operations](#) section for more information about out FY 2017/18 achievements.



30





# PRACTICING ETHICAL BUSINESS

20  
23

Corporate Governance  
Business Conduct

# PRACTICING ETHICAL BUSINESS

## CORPORATE GOVERNANCE

Responsible and ethical governance is the foundation of a sustainable company. The core governance structure of Lenovo is an effective board of directors (the “Board”), led by the Chairman with the support of senior management with the goal to attain and uphold a high standard of corporate governance and to maintain sound and well-established corporate governance practices in the interest of shareholders and other stakeholders. The Company also regularly reviews its corporate governance structure to ensure it is in line with international and local best practices.

Throughout the year ending March 31, 2018, the Company has complied with the code provisions of the Corporate Governance Code and the Corporate Governance Report (the “CG Code”) set out in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and, where appropriate, met the recommended best practices in the CG Code except for the deviation as explained on page 49 of the [Annual Report](#).

More details on Lenovo’s corporate governance structure and practices, as well as risk management and internal control, can be found on pages 48-101 of the [Annual Report](#). For quick reference, in particular on our sustainability governance structure and management approach, the following overview is provided.

### BOARD STRUCTURE

The Board is the highest governing body in the organization and is responsible for overseeing the overall strategy of the Company and directing and supervising its affairs in a responsible and effective manner. As of March 31, 2018, there were eleven Board members consisting of one executive director, namely Mr. Yang Yuanqing; two non-executive directors, namely Mr. Zhu Linan and Mr. Zhao John Huan; and eight independent non-executive directors, namely Dr. Tian Suning, Mr. Nicholas C. Allen, Mr. Nobuyuki Idei, Mr. William O. Grabe, Mr. William Tudor Brown, Ms. Ma Xuezheng, Mr. Yang Chih-Yuan Jerry and Mr. Gordon Robert Halyburton Orr. The Board diversity mix is set out on page 52 of the [Annual Report](#), while the detailed biographies and a snapshot of the Board’s experience are set out on pages 142-145 of the [Annual Report](#).

The Company has adopted a Board Diversity Policy which ensures Board members have an appropriate balance of skill, experience, knowledge and independence. Currently, the Board, comprising a vast majority of independent non-executive directors, brings varied experience and expertise to the Company and also enhances the independence, diversity and perspective of the Board. In line with international corporate governance practices, a Lead Independent Director has been appointed. Details of the nomination and appointment process of directors and the Board Diversity Policy can be found in the Corporate Governance Report section of the [Annual Report](#).

The Company has preserved three Board Committees—the Audit Committee, the Compensation Committee and the Nomination and Governance Committee—to enhance the effectiveness of Board functioning and operation. Each Board Committee has defined terms of reference, which are available on both the

websites of the Company ([www.lenovo.com/hk/publication](http://www.lenovo.com/hk/publication)) and Hong Kong Exchanges and Clearing Limited ([http://www.hkex.com.hk/?sc\\_lang=en](http://www.hkex.com.hk/?sc_lang=en)). Further details on the composition, responsibilities and main activities in FY 2017/18 of these Board Committees are included in the [Annual Report](#) on pages 72-76.



## BOARD RESPONSIBILITIES

The Board has a coherent framework with clearly defined responsibilities and accountabilities designed to safeguard and enhance long-term shareholder value and provide a robust platform to realize the Company's strategy. A summary of leadership responsibilities of the Company and those of the Lead Independent Director is set out in the [Annual Report](#) on page 51.

The Company has a formal schedule of matters specifically reserved to the Board and those delegated to management. The Board has given clear directions to management regarding matters that must be approved by the Board before management makes decisions or enters into any commitments on behalf of the Company. Further details on the responsibilities and delegation of the Board are set out in the [Annual Report](#) on page 65.

Finally, to address potential conflicts of interest at the Board level, it is expressly provided in the Company's articles of association that, unless otherwise permissible in the articles of association, a director shall not vote on any resolution of the Board approving any transaction, arrangement or contract or other proposal in which he or any of his associates is to his knowledge materially interested, and if he shall do so his vote shall not be counted (nor shall he be counted in the quorum for that resolution).



## SUSTAINABILITY MANAGEMENT

The Board has overall responsibility for the Company's sustainability strategy, and evaluates and determines Lenovo's sustainability related risks to ensure that appropriate and effective risk management and internal control systems are in place. To achieve our goals and commitments in sustainability, Lenovo has developed a sustainability governance structure both at the Board and executive level to ensure that Lenovo's values and commitment to sustainability are embedded in the organization and throughout the business.

At the executive level, sustainability is led by the Chief Sustainability Executive, who reports directly to the Chief Legal Officer. The Board meets with the Chief Sustainability Executive at least twice a year to review and discuss global ESG risk and compliance, sustainability highlights, plans for achieving key performance objectives and targets, and sustainability policies and initiatives requiring Board review and approval. The Chief Sustainability Executive also submits Lenovo's annual Sustainability Report to the Board for review and approval.

## COMMUNICATION WITH SHAREHOLDERS AND OTHER STAKEHOLDERS

The Company is committed to safeguarding our shareholders' interests and believes that effective communication with shareholders and stakeholders is essential for enhancing investor relations and investor understanding of our business performance and strategies. To achieve this, the Company has established the Shareholders' Communication Policy, which sets out various formal channels of communication



with shareholders and other stakeholders to ensure fair disclosure and comprehensive and transparent reporting of the Company's performance and activities. Shareholders are provided with sufficient notices of the Company's general meetings and are encouraged to attend and to actively participate in such meetings. All resolutions at the general meetings are conducted by way of poll voting. Results of the polls are published on the Company's website ([www.lenovo.com/hk/publication](http://www.lenovo.com/hk/publication)) and Hong Kong Exchanges and Clearing Limited's website ([www.hkex.com.hk](http://www.hkex.com.hk)).

Lenovo has also established an investor relations team to promote open, transparent, efficient and consistent communications with shareholders, investors and equity analysts. The team commits to proactively providing the investment community all necessary information, data and services in a timely manner in order to promote a solid understanding of the Company's strategy, operations and new developments. During the FY 2017/18, the Company's senior management team presented its annual and quarterly earnings results through webcasts and physical meetings to communicate with shareholders, investors and analysts. Through various investor relations activities such as analyst briefings, conference calls and global investor roadshows, the senior management team presented and communicated with investors and analysts on the Company's strategies and developments.

Further information about Lenovo's 2017 general meetings and investor relations activities is available in the [Annual Report](#) on pages 89-96.

## BUSINESS CONDUCT

Lenovo has a global ethics and compliance program, which is guided by our [Code of Conduct](#). The Company's Ethics and Compliance Office oversees ethics and compliance across the organization, working in partnership with our business units to see that we achieve our business goals while meeting the letter and spirit of the legal and regulatory framework in which we operate. Our ethics and compliance program promotes an organizational culture that encourages the highest ethical standards of business conduct and a commitment to compliance with the law.

The Ethics and Compliance Office is committed to raising awareness about the importance of ethics and compliance in the workplace and plays a critical role in providing employees with the guidance, resources and information they need to make informed and appropriate choices and decisions. With these systems in place, we describe clear expectations for employees and hold them accountable for their behavior.

Our Code of Conduct helps to ensure that employees understand the Company's expectations. The Code applies to all employees worldwide and is an integral part of our ethics and compliance program. The Code also demonstrates Lenovo's commitment to a culture of uncompromising integrity and assists employees in making well-informed decisions. In addition, the Code helps employees determine when to seek advice and where to obtain it. Each newly hired Lenovo employee receives training and information about our ethics and compliance program, and all employees are required to participate in subsequent mandatory training sessions held on a regular basis to reinforce the Company's commitment to compliance and to conducting business with integrity. Additional information about ethics and compliance is provided through the Company's intranet and other periodic communications.



All new hires at Lenovo undergo training on Lenovo's Code of Conduct

## BUSINESS PRACTICES

Lenovo's Code of Conduct and policies strongly support ethical and responsible business practices:

### Anti-Bribery and Anti-Corruption

In keeping with best practices, Lenovo has developed and implemented an Anti-Bribery and Anti-Corruption Policy, which reinforces provisions in the Code of Conduct and provides additional specific guidance regarding compliance with rules and laws related to bribery and corruption.

### Anti-Competitive Practices and Fair Competition

Lenovo competes fiercely for business, but always fairly. Its Code of Conduct forbids employees from entering into an agreement or discussion that would result in setting prices, limiting the availability of goods or services on the market or agreeing to boycott a customer or supplier.

### Intellectual Property

Lenovo respects the intellectual property rights of others. It is the Company's policy to avoid any infringement of copyright or other intellectual property rights of other companies and individuals in the conduct of its business. Employees are expected to obtain and abide by licenses or other permissions as appropriate and as required.

### AUDITS

Lenovo conducts internal audits and advisory projects each year to ensure that its ethical business policies and practices are being followed. On average, Lenovo's internal audit team conducts about 40-45 advisory projects annually.

## RAISING QUESTIONS OR CONCERNS

Lenovo provides guidance to its employees regarding how to raise questions or concerns about any aspect of their work at Lenovo and has established clear processes and reporting channels. Employees are directed to report to their managers or other resources, including but not limited to human resources, the Ethics and Compliance Office, internal audit, corporate security or the Lenovo legal department, any information pertaining to:

- Fraud by or against Lenovo
- Unethical business conduct
- Violation of legal or regulatory requirements
- Substantial and specific danger to health and safety
- Violation of Lenovo's corporate policies and guidelines, particularly our Code of Conduct

In addition, Lenovo provides formal, confidential ways to report when potential violations of law, company policy or the Code of Conduct occur. These include postal mail, email and our LenovoLine, which is a confidential reporting system that is accessible 24 hours a day, seven days a week by secure website or toll-free telephone with translators available. Where allowed by law, employees may report concerns about business practices anonymously if they choose. The LenovoLine and other resources are also available to help counsel employees who may have questions or concerns.

Reports of inappropriate behavior, policy violations or alleged retaliation will, to the extent permitted by law and consistent with an effective investigation, be kept anonymous and confidential. Lenovo regards any suspected violation of law, policy or the Code as a serious matter and is committed to following up on all reported concerns, which are addressed and tracked to resolution.

Lenovo has a clear nonretaliation policy, which is part of our Code of Conduct, and the company will not tolerate harassment, retaliation, discrimination or other adverse action against an employee who:

- Makes an internal report in good faith
- Provides information or assists in an investigation regarding such a report

Managers are required to report and help resolve any suspected violation of the nonretaliation policy. Complaints of alleged retaliation will be promptly addressed and investigated.

Questions about anything relating to ethics and compliance may be sent by email to Lenovo's Ethics and Compliance Office at [ethics@lenovo.com](mailto:ethics@lenovo.com). Lenovo also provides detailed information about its internal controls framework and enterprise risk management, including ethics and compliance, on pages 81-87 of its Corporate Governance Report in the [Annual Report](#).

## PUBLIC POLICY

Lenovo maintains good relationships with local governments around the world and seeks to be a responsible corporate citizen in the countries in which it operates. Lenovo requires its employees to be truthful and accurate in all communication with all government authorities. The Company strives to adhere to the highest standards of integrity and accountability when dealing with government rules and regulations. From time to time, Lenovo engages in lobbying, as appropriate and usually through industry trade association groups, to ensure that its voice is heard on matters of importance to the Company and its stakeholders.

## TAX APPROACH

Lenovo is committed to conducting business legally, ethically and with integrity, and this commitment extends to our approach on tax strategy, operations and compliance.

Information about Lenovo's FY 2017/18 tax position can be found in our [Annual Report](#) in the "Notes to the Financial Statements" on pages 215-217.

## PRIVACY

Lenovo recognizes that privacy is of great importance to individuals everywhere: our customers, website visitors, product users, employees—*everyone*. This is why we have established the responsible use and protection of personal and other information under our care as core Lenovo values.

To give effect to our privacy policies, principles and processes, Lenovo maintains a global Privacy Program, led by the Legal Department, and a cross-functional Privacy Working Group comprised of key partners of the Privacy Program, including Information Security, Product Security, Product Development, Marketing, E-Commerce, Service and Repair, Human Resources and other groups.

Key projects of the Privacy Program include:

- Frontline engagement with Lenovo's business teams on privacy due diligence and application of key privacy principles
- Development and governance of internal and external privacy policies

- Prelaunch privacy review processes for products, software, websites, marketing programs, internal applications and vendor relationships
- Privacy awareness and training initiatives, including the *Lenovo Privacy Basics* course, which is required training for Lenovo's global nonmanufacturing workforce
- Contractual support
- Tracking and application of legal requirements and industry best practices
  - Specialized compliance projects targeting new requirements such as the European Union's (EU) General Data Protection Regulation (GDPR)
- Privacy audit and assessment
- Incident response planning and processes

If you have any further questions or concerns, please feel free to reach us at [privacy@lenovo.com](mailto:privacy@lenovo.com).

Lenovo's website and product privacy statements are located at <https://www.lenovo.com/us/en/privacy/>.





4.0

# PRODUCT RESPONSIBILITY

|    |                                       |
|----|---------------------------------------|
| 30 | Sustainable Quality                   |
| 32 | Safety and Ergonomics                 |
| 33 | Accessibility                         |
| 34 | Compliance                            |
| 34 | Lenovo Innovation Making a Difference |

# PRODUCT RESPONSIBILITY

## SUSTAINABLE QUALITY

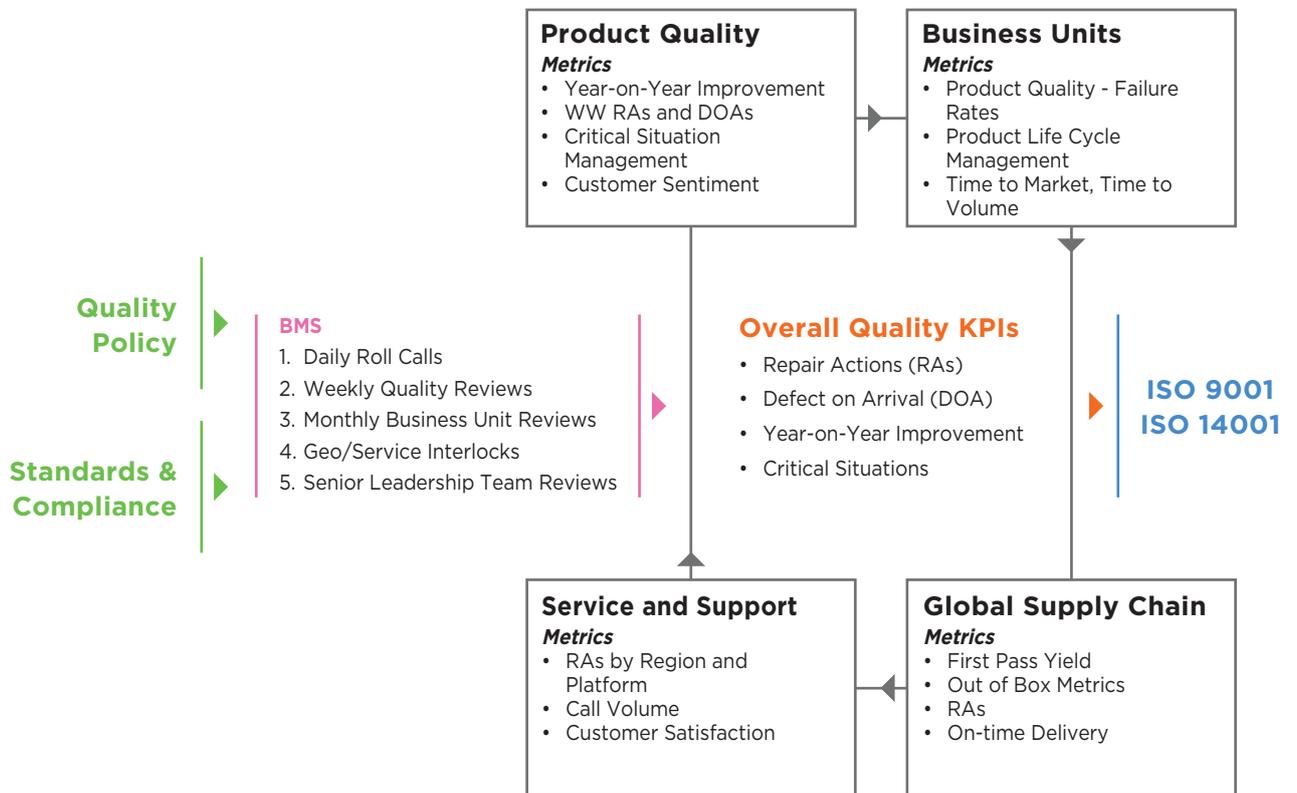
### QUALITY MANAGEMENT

Lenovo delivers superior quality products and is committed to ensuring that its products are safe throughout their life cycle. Product Life Cycle Assessment principles guide Lenovo in ensuring that every stage of the product's life is taken into consideration, including manufacturing, transportation, installation, use, service and recycling. This enables Lenovo to gain deep insight into opportunities for risk and cost minimization as well as uncover new opportunities for enhancing and increasing product marketability to meet the preferences of an informed public.

Corporate strategies, policies and guidelines have been designed to support Lenovo's commitment to product safety. Lenovo strives to ensure that our products meet all applicable legal requirements as well as voluntary safety and ergonomics practices to which Lenovo subscribes, wherever our products are sold.

Lenovo's global Quality Management System, which has earned ISO 9001 (International Organization for Standardization) certification, ensures the continual delivery of design improvements into current and future products. Lenovo strongly embraces the ISO 9001 commitment to an effective quality management system and is dedicated to exceeding industry standards for product quality and reliability.

## CROSS-ORGANIZATIONAL QUALITY ASSURANCE



To maintain this quality level, Lenovo employs an active closed-loop process with various feedback mechanisms. These feedback mechanisms provide quick resolution of customer issues. When product issues are discovered, we perform root cause analysis and feed the results back into manufacturing, development and test organizations ensuring that similar issues do not arise with current or future products.

Because Lenovo products fail less often and have a longer lifespan, fewer resources are required for their upkeep and end-of-life management. Lenovo's comprehensive product development process includes prototype development, product testing and focus groups to ensure the Company meets the diverse needs of global customers. For example, Lenovo proactively elicits input on design and product features from customers and partners. Prototypes are extensively evaluated, and final products undergo rigorous testing to ensure

they meet stringent standards specific to their application and use before they are cleared for shipment.

Lenovo's Technical Evaluation Center provides information and recommendations to Lenovo engineering, and Lenovo's Lessons Learned feedback loop contributes to the refinement and maturation of our processes and elimination of recurring problems. As a result, Lenovo's product repair action rates are among the lowest in the industry.

Lenovo leaders are responsible for establishing objectives and measuring results to drive continual improvement in quality and customer satisfaction. All Lenovo employees are expected to contribute to this continual improvement as an integral part of our quality management system.

Lenovo's corporate Quality Policy is available at: [www.lenovo.com/us/en/lenovo/about/quality](http://www.lenovo.com/us/en/lenovo/about/quality).

## CUSTOMER-FOCUSED TESTING

Once the product development phase is completed, Lenovo products undergo a series of customer-driven tests prior to production. Testing includes ongoing customer simulation evaluations and customer simulation audits to evaluate product quality by removing systems from the box and setting them up in typical customer configurations. Additionally, extended customer simulation tests are conducted on a sample basis with various configurations of product options and software. The last evaluation simulates the performance of the product through various standard customer applications.

Lenovo has continued to enhance our customer-focused program by sending technical teams to support on-site installations for customers.

During and after the installation, there is ongoing dialogue between the customer and Lenovo to ensure timely feedback on installation progress. This allows corrections to be quickly put in place, and for the team to preempt potential issues. This has proven to be highly advantageous during new product releases, as potential issues can be promptly addressed to minimize the impact on all customers.

## SAFETY AND ERGONOMICS

Lenovo is committed to ensuring that our products are safe throughout their life cycle, including manufacturing, transportation, installation, use, service and disposal. Corporate strategies, policies and guidelines have been designed to support this commitment to product safety. Each employee bears a personal responsibility to advance the following objectives:

- Meet all applicable legal requirements, as well as voluntary safety and ergonomics practices to which Lenovo subscribes, wherever we sell products.
- Select suppliers that demonstrate a similar commitment to safety.
- Provide customers with adequate information to enable them to safely use Lenovo's products.

- Foster employee involvement and provide appropriate resources to develop and implement successful product safety initiatives.
- Continually improve product safety initiatives.
- Investigate product safety incidents and take prompt remedial actions to protect Lenovo's customers and employees.
- Report safety initiatives and incidents to senior executive management.

The following table shows the product life cycle stages in which the health and safety impacts of products are assessed for improvement. All significant Lenovo products are subject to these assessments.

### HARDWARE SAFETY ASSESSMENT REQUIREMENTS AT LIFE CYCLE POINTS

| Point in Product Life Cycle     | Hardware Safety Assessed? |
|---------------------------------|---------------------------|
| Development of product concept  | No <sup>1</sup>           |
| R&D                             | Yes                       |
| Certification                   | Yes                       |
| Manufacturing and production    | Yes                       |
| Marketing and promotion         | No <sup>2</sup>           |
| Storage distribution and supply | Yes                       |
| Use and service                 | Yes                       |
| Disposal, reuse or recycling    | Yes                       |

<sup>1</sup> Too early at this stage

<sup>2</sup> Not relevant at this stage

With a focused emphasis on product safety and quality, Lenovo is achieving high customer satisfaction and delivering quality products, solutions and services.

Lenovo promptly investigates and responds to any potential safety or quality issue associated with our products. In FY 2017/18, Lenovo issued one recall for a limited number of ThinkPad X1 Carbon 5th Generation laptop computers due to a limited number of unfastened screws that may have been left inside certain ThinkPad X1 Carbon (5th Gen) systems. Specifically, if an unfastened screw is positioned in or near the battery compartment, the screw could lead to systems or battery damage. When these system or batteries fail, they may overheat and could result in localized smoking and melting.

Prior to issuing the recall, three customers reported overheating and smoke with a ThinkPad X1 Carbon (5th Gen) system. Lenovo received

no reports of injury and no reports of property damage outside the affected unit itself.

After investigating the root cause, Lenovo—out of an abundance of caution—voluntarily contacted the U.S. Consumer Product Safety Commission (CPSC) and initiated a “Fast Track” recall to quickly communicate and remedy the potential issue. Lenovo took similar action with other consumer safety authorities across the globe. Affected laptops were either repaired or replaced at no cost to the customer. Lenovo implemented numerous corrective actions to address the root cause of this issue in both the manufacture of this product and in future design.

More information about past Lenovo product recalls can be found [here](#).

[Click here](#) to view Lenovo’s Product Safety and Ergonomics Policy.

## ACCESSIBILITY

Lenovo is committed to providing people with disabilities greater access to information and technology. We are widely recognized for our focus on human factors and ergonomics and have a long-standing commitment to deliver world-class products and services that can be used by everyone. Smart design and intuitive functionality benefit everyone who uses technology, including those with disabilities. Lenovo products are developed to ensure compliance with best practices and are tested with a variety of Assistive Technologies (AT), including screen readers, screen magnifiers and speech recognition software spanning different price ranges.

Lenovo has established and maintains an accessibility policy for our products and services that includes a closed-loop process to ensure compliance. Lenovo considers accessibility throughout the design cycle and consults with persons with disabilities for further input on our products.

For more detailed information on how Lenovo provides assistance to users who have hearing, vision and mobility limitations and helps them get the most out of their computer experience, please visit [www.lenovo.com/accessibility](http://www.lenovo.com/accessibility).

## COMPLIANCE

Lenovo has established compliance systems to ensure our products comply with the laws and regulations in each country to which we ship. Lenovo products are designed, tested and approved to meet worldwide standards for product safety, electromagnetic compatibility, ergonomics and other regulatory requirements when used for their intended purpose. More information on compliance as well as product compliance documents can be found at [www.lenovo.com/compliance](http://www.lenovo.com/compliance).

## LENOVO INNOVATION MAKING A DIFFERENCE

### SAVING ELECTRICITY WITH WARM-WATER COOLING

Growth in supercomputer computing performance generally has meant performing more computations in less space. As you know from using your own laptop computer, computation converts electrical energy into heat. Your laptop uses a fan to remove heat — the fan uses electricity, and electricity use costs money and can result in greenhouse gas emissions. For supercomputers to meet performance and cost expectations, heat needs to be removed quickly and cost effectively. Over the past decade this enormous technical conundrum has spawned an innovation that continues to develop.

In 2012, the Leibniz Supercomputing Centre (Leibniz-Rechenzentrum, or LRZ) in Munich, Germany presented high-performance computing (HPC) manufacturers a difficult challenge: build a supercomputer that consumes a dramatically lower amount of electricity without sacrificing computing power. The System x team delivered the 9,200 node “SuperMUC,” the fastest supercomputer in

Europe when it entered operation, which featured a new form of cooling: warm (unchilled) water piped directly to the CPU, memory and other high-power consuming components. A warm-water cooled supercomputer was born.



The LRZ SuperMUC Supercomputer

In addition to realizing lower electricity consumption, LRZ found additional benefits to SuperMUC's ultra-efficient direct water cooling. Since the CPUs were kept much cooler there was less energy loss within the processor, saving as much as five percent more than a comparable air-cooled processor. The CPUs could run in "turbo mode" constantly if needed, which boosted computing performance up to an additional 10-15 percent. Operations were close to silent because the systems had no fans except small ones on the power supplies, and hot water produced from the data center was piped into the building for use as a heat source. According to LRZ, SuperMUC achieved overall energy savings of nearly 40 percent.

Lenovo acquired System x in 2014 and the Lenovo ThinkSystem team is continuing to innovate and evolve liquid-cooled servers. In February 2018 Lenovo introduced the ThinkSystem SD650 high-density server, developed in partnership with Intel and LRZ. Nearly 6,500 ThinkSystem SD650s will be deployed at LRZ to become the SuperMUC-NG supercomputer. The direct-water cooled design enables 85-90 percent heat recovery. Because liquid cannot be used to cool everything in a data center, LRZ and Lenovo are in the process of expanding alternative cooling by converting the hot water "waste" into cold water that can be reused to cool the rest of the data center. This process utilizes "adsorption chillers," which take the hot water from 100 compute racks and passes it over sheets of a special silica gel that evaporate the water, cooling it. From there, the evaporated water is condensed back into a liquid, which is then either piped back into the compute racks, or into a rear-door heat exchanger for racks of storage and networking gear, which are not water cooled. This approach to data center design is made possible because the water delivered to the chillers is hot enough to make the process run efficiently.



Lenovo's ThinkSystem SD650

In the summer of 2018 Lenovo will introduce "Neptune," a holistic view of liquid cooling for all data centers, not just the SuperMUC's of the world. Neptune incorporates three different technologies in its "trident." First is direct-to-node (DTN) cooling such as the ThinkSystem SD650. Next is rear-door heat exchangers (RDHX) which act like a car radiator absorbing the heat expelled from traditional air-cooled systems. Finally, hybrid cooling, which blends air and liquid cooling, will be used in our new thermal transfer module (TTM) for the air-cooled ThinkSystem SD530. The TTM is a heat sink that uses liquid to move heat from one part of the system to another where air cooling is more efficient, saving power, money and potentially greenhouse gas emissions, and allowing the customer to run processors with greater computational power.

Despite additional required infrastructure, liquid cooled systems are competitive economically, and not just where there are high density requirements due to space constraints or where electricity is particularly expensive. Lenovo estimates that a rack of ThinkSystem SD650's is approximately seven percent more expensive than a rack of comparable air-cooled systems. But, that expense is recovered in approximately one year through lower power consumption, depending on electricity costs. An important potential added benefit is the environmental win of lower greenhouse gas emissions.

## Low-temperature Solder Update

A breakthrough for sustainability in electronics manufacturing was described in [Lenovo's 2016/17 Sustainability Report](#): the invention of low-temperature solder (LTS). To recap, when lead-based solder was phased out in the early 2000s, the electronics industry had to switch to a tin-based solder that required high heat during manufacturing. In February 2017, Lenovo announced it had invented a solder that could be used at 180 degrees Celsius, much lower than the conventional solder temperature of 250 degrees Celsius.

Lenovo spent much of FY 2017/18 testing LTS in different facilities and process lines, and modifying quality management to fit LTS requirements. Total CO<sub>2</sub> emissions saved by LTS at the end of FY 2017/18 was approximately 59 metric tons. As LTS is more widely rolled out in Lenovo during 2018, the CO<sub>2</sub> emissions reduction potential rises as well.

As part of the process for sharing the invention across the industry, Lenovo plans to release a technical paper on LTS in the fall of 2018. Lenovo is working with the International Electronics Manufacturing Initiative, or iNEMI, on dissemination. According to iNEMI's current roadmap, LTS will be validated in 2018 and deployment in the industry will begin in 2019.



50





# MANUFACTURING AND SUPPLY CHAIN OPERATIONS

40

In-house Manufacturing Operations

44

Supply Chain Operations

# MANUFACTURING AND SUPPLY CHAIN OPERATIONS

Unique among major technology companies, Lenovo's end-to-end business model for vertical integration equally balances owned manufacturing capabilities and outsourced manufacturing suppliers. This model enables us to bring innovation to market more efficiently while directly controlling our sustainability footprint. The in-house manufacturing and supply chain teams fully support all corporate environmental and sustainability program efforts, including green

and efficient products, corporate greenhouse gas emissions reductions, avoidance of hazardous substances, reporting transparency, post-consumer content use and policy development. Since 2006, Lenovo has been an active and ongoing member of the Responsible Business Alliance (or RBA, which was formerly the Electronic Industry Citizenship Coalition (EICC)).

## IN-HOUSE MANUFACTURING OPERATIONS

All Lenovo global manufacturing locations are ISO 9001 (quality), ISO 14001 (environmental) and OHSAS 18001 (health and safety) certified. See Lenovo's Environmental Commitment for more information about our ISO 14001 certification, and the Occupational Health and Safety section below for information about our OHSAS 18001 certification.

As required by these globally accepted standards, aggressive objectives and targets are being implemented at each Lenovo manufacturing facility to ensure continual improvement and a safe and healthy work environment for our employees.

Over half of Lenovo's production is manufactured in-house where we have direct control over all sustainability efforts.

### OCCUPATIONAL HEALTH AND SAFETY

At Lenovo, the safety and wellbeing of our workforce is an integral part of our long-term success. We believe everyone has the fundamental right to a healthy and safe work environment, and we strive to provide and continually improve company health and safety programs and processes throughout our global manufacturing locations.

Keeping our employees safe is everyone's job. Our corporate policy — [Responsibility for Employee Health and Safety](#) — is the foundation for ensuring a safe and healthy work environment for all of our people worldwide. Each employee and contractor is expected to do their part by following the policy and reporting any health or safety concerns to management.



Material Handling Training — Huiyang, China

Lenovo's proven Occupational Safety and Health Management System ensures detailed planning, hazard prevention, established controls, monitoring and a commitment to continual improvement. As we expand our global footprint, new facilities are fully integrated and measured to meet this high standard of expectation. All global manufacturing locations are OHSAS 18001 certified by Bureau Veritas, a leading independent certification body. In addition, all China manufacturing locations have been certified to the nation's Work Safety Standardization regulation.

### Health and Safety Performance

Each year, Lenovo's incident rates are amongst the lowest in the industry. Our health and safety programs meet or exceed regulatory requirements and provide the framework for ensuring continued excellence.

A key to our success has been standardizing the company's occupational health and safety (OHS) organization and ongoing training. This action has effectively resulted in a significant improvement of OHS performance and manufacturing operational excellence. OHS internal audits were also effectively implemented to identify opportunities and risks that could impact business activities from a safety, environmental and social responsibility perspective. These audits certified our overall compliance with ISO 14001:2015 Environmental Management System, OHSAS 18001:2015 Occupational Health and Safety Management

System and all other applicable requirements. After each audit, our leadership is engaged at each site to develop and implement action plans to address audit findings. In addition, the RBA "Code of Conduct" has been implemented across our global manufacturing locations. In FY 2017/18 we continued to perform rigorous occupational, health and safety self-assessments at all global manufacturing locations to validate and maintain a high level of compliance with regulatory and external management system requirements and began annual external verification of our RBA compliance status. We understand the challenges our industry faces with implementing RBA and other corporate social responsibility programs, and through RBA join hands with our peers to effect change.

### Communication and Employee Engagement

Lenovo's OHS success begins with training. We ensure our employees receive health and safety training and detailed, site-specific safety information. All manufacturing personnel engage in an annual safety awareness training that is compliant with local governmental regulations. At our field locations, employees receive health and safety tips as well as information that covers emergency response, detailed work safety requirements, hazards/risks and corresponding precautionary measures. We welcome our contractors and partners to participate in field location training programs.

Employee engagement campaigns promote safety both in the work environment and at home. We routinely conduct health, safety and wellbeing events. One example is our annual Safety Awareness Month, during which numerous activities are scheduled around fire safety, safety at work and useful tips for household safety. Safety is an all-hands-on-deck effort and we encourage all employees to participate in our Safety Suggestions Program.



Work at Height Training — Monterrey, Mexico

Safety Committees are another level of employee involvement to ensure a healthy and safe work environment for our employees. Manufacturing and select field locations maintain Safety Committees where members meet regularly and cover a range of health and safety topics with the opportunity for employees to engage and be part of the corrective action solutions.

## Employee Wellness

Lenovo's most important asset is our employees. To promote disease prevention and wellness matters, Lenovo makes information and health resources easily available to employees. A few examples include medical screenings, immunization clinics, eye, ear and dental examinations, healthy diet and nutrition recommendations, and exercise and smoking cessation programs.



Breast Cancer Awareness Event

At each field location, Lenovo's Business Continuity Plans support comprehensive procedures to limit the potential impact of emerging health or safety-related epidemics.

## OHS Recognition and Awards

Our performance and commitment to OHS is widely recognized at our field locations. In FY 2017/18 some of the accolades we received included:

- Lenovo Brazil, received the “*Safety Protection Magazine Award*” in July 2017 and was a feature story in the publication.
- Lenovo Chengdu, China received the “*Occupational Health Demonstration Enterprise Award*” in December 2017 from the local government.
- Lenovo Shanghai, China received the “*Pudong District Safety and Health Cup Excellence Award*” in December 2017 from the local government.
- Lenovo Shenzhen, China received the “*Occupational Health Demonstration Enterprise Award*” in December 2017 from the local government.
- Lenovo Wuhan, China received the “*Top Ten Safety Enterprise Award*” in December 2017 from the local government.
- Lenovo Morrisville Headquarters, N.C., received for the 13th consecutive year the “*Gold Award*” from the North Carolina Department of Labor in June 2018 for low incident rates reported in 2017.
- Lenovo United States Fulfillment Center (USFC) in Whitsett, N.C., received in April 2018 the “*Outstanding Health and Safety Gold Award*” from the North Carolina Department of Labor for completing ten consecutive years of low incident rates reported.
- Lenovo Morrisville Development Drive, N.C., received for the fourth consecutive year the “*Gold Award*” from the North Carolina Department of Labor in June 2018 for low incident rates reported in 2017.

## ENVIRONMENTAL PERFORMANCE

Please see the [Environmental Impact of Lenovo Operations](#) section for information about environmental performance at Lenovo operations.

## AUDIT COMPLIANCE

In FY 2017/18 Lenovo conducted regular site and corporate self-assessment questionnaires (SAQs) using RBA formal templates and online reporting. Based on RBA SAQ risk criteria and the assessment results, Lenovo's manufacturing facilities were categorized as having a low-risk profile.

Lenovo also conducted several new audits according to RBA's Validated Audit Program (VAP) and used RBA-approved independent third-party auditors.

| Facility Name                 | Score (%) | Risk Rating |
|-------------------------------|-----------|-------------|
| Lenovo Corporate              | 94.4      | Low         |
| LCFC (Hefei, China)           | 86.8      | Low         |
| Wuhan Plant                   | 90.4      | Low         |
| Beijing Plant                 | 93.6      | Low         |
| Chengdu Plant                 | 95        | Low         |
| Huiyang Plant                 | 94.1      | Low         |
| Shanghai Plant                | 93.7      | Low         |
| LIPC (Shenzhen, China)        | 94.1      | Low         |
| LSTC (Shenzhen, China)        | 94        | Low         |
| USFC (Whitsett, N.C., U.S.A.) | 85.1      | Low         |
| Monterrey, Mexico             | 88.2      | Low         |
| Pondicherry, India            | 91.4      | Low         |
| Indaiatuba, Brazil            | 89.2      | Low         |
| NEC (Yonezawa, Japan)         | 90.8      | Low         |

## SUPPLY CHAIN OPERATIONS

Lenovo is committed to corporate social responsibility and sustainability across the end-to-end supply chain process. We have systems in place to help ensure compliance with all applicable labor, environmental, health and safety, and ethics standards. It is our policy and practice to continually improve our efforts to meet and exceed marketplace expectations. We recognize there is no end to this journey and there are many opportunities for improvement.

In support of these goals, Lenovo has strong supplier contractual requirements, a comprehensive supplier code of conduct and extensive supplier validation programs. This includes rigorous implementation of the RBA Code of Conduct, respect for human rights and maintaining robust environmental and conflict minerals programs. On several aspects we require direct and independent validation of supplier compliance. Overall supplier sustainability performance is tracked and reported via an extensive report card program. Finally, education and capability building practices are in place.

We take great effort to eliminate sustainability risk in our supply chain through responsible partners and program coverage. Following are some key metrics:

- 98 percent of our procurement spend is with fewer than 100 large suppliers who typically have robust sustainability programs.
- 75 percent of our suppliers issue formal public sustainability reports.
- Lenovo has long-term relationships with suppliers, many measured in decades, engendering stability in the communities in which we operate. About 30 percent of our procurement spend is with suppliers who have been working with Lenovo for more than 20 years.
- 65 percent of our suppliers are formal RBA members.
- 80 percent of our suppliers have ISO 9001 and 14001 certifications.
- 44 percent of our suppliers are in countries with mature regulatory requirements regarding social and environmental responsibility, specifically the U.S. and Europe (based on supplier headquarters location).
- Our program efforts touch deeply into Tier 2 and Tier 3 suppliers.
- Lenovo's Supplier Code of Conduct, contracts and semi-annual supplier communications explicitly address anti-corruption, anti-bribery concerns and business integrity.
- All key procurement personnel are trained semi-annually on sustainability concerns.

Note: Above percentages are the percent of our total production procurement spend

## CONTRACTUAL STIPULATIONS

Lenovo's standard purchase order (PO) terms and conditions stipulate supplier compliance with environmental specifications, hazardous material avoidance, ozone-depleting substance elimination, product safety, liability insurance and full compliance with all applicable laws, including export and import and product safety. Suppliers must also implement and maintain documented quality and environmental management systems. Finally, the PO requires compliance to our comprehensive Lenovo Supplier Code of Conduct.

Our standard legal contract executed for suppliers also stipulates the Lenovo Supplier Code of Conduct and further expands the standard PO terms, including all standard legal protections and responsibility assignments for Lenovo and the supplier. It stipulates that the supplier cannot discriminate against employees based on race, color, gender, religion, age, nationality, social or ethnic origin or any other legally protected class. Any deviation to the terms requires approval from our legal department and in high-risk cases requires senior procurement and business unit management approvals.

In FY 2017/18, we refined the Lenovo Supplier Code of Conduct with updated conflicts of interest and business integrity provisions. It is available at [www.lenovo.com/supplier\\_code\\_of\\_conduct](http://www.lenovo.com/supplier_code_of_conduct).

## RBA COMPLIANCE

We contractually require a full RBA program with our suppliers and directly validate compliance with formal assessment reporting and independent audits. In addition, as a formal member of the RBA, Lenovo exceeds the membership requirements in this regard. Following are key contract requirements and our implementation scope.

### Supplier Contract Requirements to Comply with the RBA Code of Conduct

- Self-assess annually and report formally using the RBA questionnaire and on-line reporting tools.

- Receive in-depth audits biennially with independent, third-party RBA-approved auditors.
- Provide audit reports, corrective action plans in all cases and hard evidence of closure whenever possible.
- Require their own suppliers to comply with the RBA Code of Conduct.

### Lenovo Implementation and RBA Membership Requirements

Lenovo exceeds membership requirements in breadth of implementation and depth of compliance. RBA membership requires annual self-assessments of 80 percent of Tier 1 suppliers by spending and annual audits covering only 25 percent of any identified high-risk facilities. Three types of audits are allowed: customer driven, auditee driven and RBA driven, also known as Validated Audit Program (VAP) audits. Thus, only Tier 1 suppliers identified as high-risk receive audits, are covered only on a four-year cycle, and there is flexibility on the rigor of the audit type. Lenovo practice and key statistics are as follows:

- 95 percent coverage of suppliers by spending are in the program.
- All must conduct self-assessments annually.
- All must conduct audits every 24 months regardless of whether their self-assessment was rated low risk or high risk.
- We drive for the most rigorous VAP audits — about 55 percent of our supplier audits are VAP audits.

- Suppliers acting in Tier 2 and Tier 3 roles are also covered in our programs. About 60 percent of suppliers by spending may act in a Tier 2 role and are in our program. About 30 percent of our suppliers may act in a Tier 3 role and are in our program.
- Program status (open assessments, audits, action plans, and action items) is comprehensively reported monthly as formal key performance indicators.
- Overall compliance performance of audit scores and supplier details is reported quarterly.
- Outsourced development and contract manufacturers were OHSAS 18001 certified and 70 percent of the overall suppliers were similarly certified.

### Working Hours/Time Off

Like many companies doing business in China, we recognize that excessive working hours and insufficient time off are critical workplace issues. When there are audit findings, we ensure closure of supplier action plans and we track suppliers for two subsequent quarters to verify sustained improvement and compliance. We request that suppliers use the formal RBA working hours template to demonstrate their compliance. Furthermore, we conduct quarterly deep-dives and internal reporting on these issues.

Some of the key challenges regarding full compliance are demand planning and excessive inventory liability impacts. Forecast accuracy is a very difficult and complex issue. Moreover, in a low profit margin business with high-value technology components and an always-present risk of obsolescence, excess inventory is damaging to business viability. Lenovo mitigates these impacts with strategic and tactical demand and supply planning with suppliers. The 12-month demand horizon is assessed monthly, and the 13-week horizon is assessed weekly.

The solution with the greatest impact is a dynamic part-time workforce, but this is constrained by an RBA requirement that companies minimize the

number of part-time employees. The challenges are great, but Lenovo recognizes that continual improvement is the path to a sustained solution.

### Audit Compliance Results

Our overall performance is noted below (audit scores are based on a weighted 200-point system where priority and major findings have significant weighting). In one key statistic from 2014, about eight percent of tested items received some sort of audit finding (priority, major, minor) and in 2017 about five percent of the items received a finding (out of up to 128 tested items per audit). Our goal is to achieve audit scores greater than 180 and zero priority findings in every audit.

| Section                   | CY2014 | CY2015 | CY2016 | CY2017* |
|---------------------------|--------|--------|--------|---------|
| Labor                     | 141    | 144    | 157    | 162     |
| Ethics                    | 178    | 183    | 190    | 194     |
| Health & Safety           | 143    | 150    | 168    | 166     |
| Environment               | 168    | 175    | 182    | 182     |
| Mgmt. System              | 168    | 175    | 184    | 188     |
| Overall Performance       | 112    | 129    | 153    | 152     |
| Avg. Priority Items/Audit | 1.4    | 0.8    | 0.6    | 0.5     |
| Avg. Major Items/Audit    | 9.8    | 8.6    | 5.1    | 4.6     |

\* Some new supplier 1st-time audit scores were excluded

### HUMAN RIGHTS IN LENOVO'S SUPPLY CHAIN

Lenovo respects human rights in all its activities, including those involving its supply chain. We manage all operations consistent with the spirit and intent of the U.N. Universal Declaration of Human Rights and the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work. We also have been a signatory to the U.N. Global Compact since 2009. As a signatory, we support and respect the protection of internationally proclaimed human rights and ensure that our business practices are not complicit in human rights abuses.

We strive to uphold these standards and to demonstrate our commitment to them with our supply chain social responsibility programs. As previously noted, we conduct a full RBA Code of Conduct implementation within our supply chain where the code covers extensive human rights and labor concerns. Furthermore, our comprehensive Lenovo Supplier Code of Conduct upholds our values and includes provisions prohibiting corruption, bribery, human trafficking, discrimination and retaliation to worker complaints. Lenovo requires its suppliers to have formal grievance mechanisms. We actively support procurement diversity (see the [Supplier Diversity](#) section).

## CONFLICT MINERALS

Lenovo recognizes the importance regarding the sourcing of tin, tantalum, tungsten and gold (3T/G) and other minerals. When sourced from regions experiencing political and social conflict, which may include the Democratic Republic of the Congo (DRC) or surrounding countries, these materials are generally referred to as “conflict minerals.” We fully support the efforts of the RBA, governmental and non-governmental bodies to solve this complex issue. We have demonstrated our support with our direct participation in RBA Responsible Minerals Initiative (RMI) programs since 2012.

This year we commenced a formal Cobalt due diligence effort with the use of the RMI Cobalt Reporting Template (CRT) within our supply chain to enhance our understanding of the chain of cobalt custody and to identify smelters. As part of this effort we introduced Lenovo’s new [Cobalt mineral policy](#).

Lenovo believes in responsible sourcing and not participating in boycotts in the DRC or other areas as the RMI and other entities drive new efforts. Some companies have engaged in boycotts, but boycotts do not improve the situation on the ground.

In FY 2017/18, we continued our due diligence program to understand conflict minerals in our supply chain. This program included compliance with the requirements of the U.S. Securities and Exchange Commission’s Dodd-Frank ruling and the OECD guidance.

### Program Components

- Having a comprehensive public conflict minerals policy.
- Engaging suppliers through formal contracts and directly validating their due diligence efforts via independent third-party RBA audits where conflict minerals are part of the code.

- Holding regular education sessions for internal employees, publishing monthly newsletters and providing supplier training as needed.
- Utilizing the RBA Conflict Minerals Reporting Template (CMRT) for Reasonable Country of Origin Inquiry (RCOI) efforts across 95 percent of our procurement spend and supply chain.
- Participating in the RMI Smelter Engagement Team (SET) to identify smelters and their status.
- Auditing smelters using the RBA Responsible Minerals Assurance Process (RMAP).
- Reporting the program status to Lenovo’s Chief Sustainability Officer.
- Publicly reporting both a formal Conflict Minerals Report (CMR) and a list of the smelters in our supply chain.

### FY 2017/18 Program Status

- Overall conflict-free status improved from 80 percent to 82 percent of suppliers by spending.
- Tantalum achieved 100 percent conflict-free status.
- Tin and tungsten each achieved slightly under 90 percent conflict-free status.
- Gold achieved about 72 percent conflict-free status.
- Overall, about 85 percent of Lenovo’s supply chain is conflict-free compliant or formally active to become conflict-free.
- New suppliers and compliant smelters who become non-compliant were key challenges during the year.

While Lenovo is a non-U.S. company with many non-U.S. suppliers and is not legally required to file reports to the U.S. Securities and Exchange Commission or covered by the Dodd-Frank law, we achieved the following:

- Supplier CMRT response rates were 100 percent.
- The vast majority of our suppliers have public policies, require their suppliers to be conflict-free, use the CMRT reporting and use the RBA Responsible Minerals Assessment Program (RMAP) for audits.
- About 67 percent of our procurement spend was with RMI members.

Full details and statistics on our reasonable country of origin inquiry, due diligences and smelters can be found in our most recent [Conflict Minerals Update report](#).

## GREENHOUSE GAS EMISSIONS, WATER USAGE AND WASTE GENERATION

Lenovo continues to drive for accurate reporting and reduction of greenhouse gas emissions, water usage and waste generation across our supply chain. We ask our suppliers every year to formally report their environmental impact data via the RBA or the [CDP](#) (formerly Carbon Disclosure Project) reporting methodologies and platforms. CDP is a global organization with a much more comprehensive framework and reporting regimen for GHG emissions. Typically, suppliers representing 95 percent of our procurement spend report total Scope 1 and 2 emissions, water and waste.

Our greatest challenge regarding reducing absolute supplier emissions and environmental impact is not individual supplier performance, but the growth in our business and procurement spend which has increased 180 percent since 2010. This is due to two factors — procurement increased spending with our current suppliers, and major acquisitions and new suppliers where GHG focus has been less than robust.

## Key Program Statistics

- 31 percent reduction in supplier emissions intensity since 2010
- 88 percent have public GHG reduction goals
- 83 percent have formal third-party verification of their emissions reporting
- Suppliers must have greater than 3 percent annual GHG reduction goals to be rated “green” in our supplier report cards and is the key improvement target.
- 80 percent have public water and waste reduction goals
- 80 percent are ISO 14001 certified
- 80 percent formally report to CDP (by spending)
- 37 percent are ISO 50001 certified (by spending)
- Lenovo’s supplier GHG emissions data has been verified by the independent verification body Bureau Veritas to a limited level of assurance.

With respect to water usage and waste generation reporting, while this marks our third year of reporting, many suppliers are still improving their ability to fully measure usage and amounts. We know from the early reporting years of GHG emissions that capturing 100 percent of supplier operational activity across multiple facilities and measuring it precisely is a challenge. However, we are confident that we now have a much better baseline upon which to track overall environmental impact of water usage and waste generation and drive reductions of the footprint.

Our key goals going forward are to further reduce supplier emissions intensity 25 percent by 2025 relative to 2015, and to better drive suppliers to achieve decreases in absolute emissions.

## ENVIRONMENTAL RISK MANAGEMENT

As required by the Lenovo Corporate Environmental Standards policy governing supplier relationships, the procurement team identifies areas of overall environmental risk based on specific criteria and then conducts prescribed actions to ensure risk is mitigated. Specifically, suppliers are classified by a risk category that drives the needed actions below.

- Category 1 suppliers are those from whom Lenovo purchases off-the-shelf goods, or uses processes or services produced or offered commercially that are consistent with the supplier's normal business activities. In other words, Lenovo does not increase environmental impact due to special requirements. Most Lenovo suppliers are in this category.
- Category 2 suppliers are those contracted by Lenovo to handle materials or processes that are outside of their usual business activities. In these cases, a comprehensive and focused environmental audit may be required. Category 2 suppliers typically are few and receive environmental audits via RBA program audits.
- Category 3 suppliers are those who handle hazardous waste, special waste and product end-of-life management services. In these cases, approval of the Corporate Environmental Compliance organization and environmental on-site audits are required. These suppliers are subject to additional contractual terms and conditions and semiannual activity reporting.

In FY 2017/18, all required environmental audits for Category 1 and 2 suppliers were conducted on time and as required, and no events of noncompliance were noted. For Category 3 suppliers, there were seven suppliers whose audits were postponed from the fourth quarter of the fiscal year to the following fiscal year due to staffing changes and delays onboarding new auditors. No events of noncompliance were noted.



RBA Training

## SUPPLIER PERFORMANCE EVALUATION AND BUSINESS REVIEWS

Lenovo's goals regarding supplier evaluation are to measure performance to specific criteria, provide regular scorecard feedback and engage suppliers in business reviews and conferences. These activities serve as the foundation for mutual discussions on improving business relationships, standards compliance and future business volume increases or decreases.

- Supplier performance is assessed against over 25 metrics across the following categories: quality, delivery, technology, cost and service. We report our program status to senior management regularly and generally conduct 175 report cards quarterly. These report cards cover over 95 percent of our suppliers by spending. The key goals are to increase our business with suppliers who perform the best and improve areas of weakness with underperforming suppliers. In the event a supplier does not adequately meet our expectations, business activity is discontinued.
- Then, supplier performance in our sustainability programs is applied as an overall penalty/credit multiplier in the calculations. For our top 100 suppliers, we measure up to 24 key indicators across RBA, environmental impact, conflict minerals and sustainability reporting factors.
- We also engage suppliers at several events and meetings. First is a significant annual supplier conference where top executives from suppliers and Lenovo meet to build relationships and discuss overall performance and key initiatives for the next year. Second is a semiannual Lenovo Supplier Advisory Council meeting where Lenovo brings together executives from the top 20 suppliers. Lenovo executive participation in both events includes our CEO, business unit executives and senior vice presidents from supply chain, research and technology, and development organizations. Finally, top strategic and key suppliers participate in quarterly in-person meetings.

Lenovo recognizes that stable supplier relationships support stable communities in which our supply chain operates and provides the foundation for compliance to social, ethical and environmental requirements. We work tirelessly to develop and maintain these relationships.

## TRAINING AND CAPABILITY BUILDING

We conduct several education and communication activities throughout the year with all global supply chain personnel and suppliers as noted below. Education packages and subject matter experts are available on-demand.

### Internal Training and Awareness

- Monthly newsletters
- Semi-annual sustainability training
- Semi-annual training on supplier report card penalties and credits
- Annual environmental impact training
- Annual conflict minerals training
- Annual employee communications on ethical, anti-bribery, anti-corruption expectations

### External Capability Training

As noted above, a substantial portion of our suppliers are large national and international suppliers with existing and substantial corporate social responsibility programs, so the need for direct capability training is minimal. Our efforts are aligned with capability attainment via communication of objectives and tracking the attainment. Furthermore, the RBA has a readily available and comprehensive Learning Academy with modules on all programs, guidance and tools. We do however provide:

- Ad-hoc education as necessary
- Semi-annual communications on the RBA, environmental impact, conflict minerals, and Supplier Code of Conduct expectations

## SUPPLIER DIVERSITY

Lenovo is dedicated to diversity and inclusion and believes in providing equal opportunity for all suppliers while developing and advocating a diversified supplier base. We seek to provide each diverse supplier with practical opportunities to provide goods and services while also creating a sustainable, mutually beneficial relationship. To that end, Lenovo is committed to maximizing the inclusion of Minority-, Women-, Veteran-, Service Disabled Veteran-, Disabled- and Lesbian, Gay, Bisexual and Transgender (LGBT)-owned businesses as well as businesses located in Historically Underutilized Business Zones (HUBZones) and Small Businesses within our procurement activities.

To facilitate supplier identification and program development, Lenovo partners with a variety of national and regional organizations such as the National Minority Supplier Development Council (NMSDC) and the Women's Business Enterprise National Council (WBENC). Lenovo is also active in local and regional events aimed at promoting and creating opportunities for and celebrating diverse suppliers. Lenovo currently conducts more than \$120 million USD in business annually with small and/or certified diverse suppliers. This represents all Lenovo operations in the U.S. (including ThinkSystem and Motorola).

Lenovo recognizes the importance of supplier diversity and is committed to ensuring that it is an integral part of our strategic sourcing and procurement processes. We believe the success of the organization and society depends on enabling Diverse Business Enterprises to share in the nation's economic growth. Our commitment is to maximize Diverse Business Enterprises' participation through the development of mutually beneficial business relationships with these firms.

In FY 2018/19, Lenovo's Supplier Diversity team will launch a Tier 2 program which will expand our supplier diversity efforts to our large Tier 1/prime suppliers. Through the creation of the Tier 2 program, we will be requesting our large, prime suppliers to report their diversity spend to us. In doing so, the Tier 2 program provide additional opportunities to diverse suppliers, strengthen our supply chain and capture millions of dollars of diverse purchases each year.

For more information, please visit our [Supplier Diversity webpage](#).







60





# PEOPLE

|    |                    |
|----|--------------------|
| 56 | Lenovo Employees   |
| 63 | Social Investments |

# PEOPLE

## LENOVO EMPLOYEES

Lenovo redefines what it is to be a global company, beginning with our leadership team. The top 12 leaders include three women and represent six different countries, and we have 17 nationalities represented in the top 100 executives. Our more than 50,000 employees and contractors speak more than 40 languages and live in more than 60 countries around the world. That diversity of background, language and perspective adds up to a competitive advantage.

Diversity allows us to seize emerging global trends early and focus on the right things to win in local markets. Our *We Are Lenovo* culture unites us in a shared sense of commitment, ownership and pioneer initiative. Our cohesive global culture and shared values help drive the speed, efficiency, innovation and execution that separate us from the competition.

### OUR CULTURE AND PEOPLE

Our culture plays a critical part as we execute our vision of 'Device + Cloud,' with teamwork and entrepreneurship helping us keep the customer at the center of everything we do. We are so committed to serving customers that every employee's performance assessment includes a customer experience component.

We have built our diverse and inclusive culture around people first, with fair labor practices, pay for performance, wellness programs and other benefits that support every employee. The combination of our unique culture and our support systems helps us continue delivering breakthrough innovations and designs to our growing customer base.

### LABOR PRACTICES AND HUMAN RIGHTS

Lenovo's Human Rights policy communicates our respect for human rights in all that we do and how we extend those rights to our employees and business partners. Lenovo operates in accordance with the universal human rights identified in the U.N. Declaration on Human Rights and the U.N. Global Compact. Lenovo does not permit the use of child labor, forced labor or coercion, including physical punishment, in any Lenovo operation.

Since 2009, Lenovo has been a signatory and active participant in the U.N. Global Compact, a public-private strategic policy initiative for businesses committed to aligning operations and strategies with 10 universally accepted principles of human rights, labor, the environment and anticorruption. As a signatory, we support and respect the protection of internationally proclaimed human rights, including the right to freedom of association and collective bargaining, and ensure that our business practices are not complicit in human rights abuses.

Lenovo manages all operations consistent with the spirit and intent of the U.N. Universal Declaration of Human Rights and the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work. We perform due diligence across the value chain to identify risks and avoid complicity in human rights violations. We provide access to grievance mechanisms, investigate allegations and escalate known cases of human rights abuse to senior leadership. We also incorporate training and accountability for respecting human rights across the business and the supply chain. Lenovo's continuous improvement process engages internal and external stakeholders to address common challenges and advance human rights practices. For more information on how Lenovo protects human rights in its supply chain, please see the section [Human Rights in Lenovo's Supply Chain](#).

## DIVERSITY AND INCLUSION

Lenovo believes that when our employees bring their whole self to the workplace, it allows their

emotional and intellectual abilities to thrive, equipping them to best meet the needs of our customers.

Lenovo's Code of Conduct states we believe in treating each other with respect and dignity — that is the core of our commitment. We judge all applicants and employees by their qualifications, demonstrated skills and achievements without regard to race, color, religion, gender, gender identity or expression, national origin, ethnicity, sexual orientation, sex, age, disability, veteran status, marital status or any other characteristic protected by local law. When necessary, Lenovo provides reasonable accommodations for employees with disabilities or those with special religious requirements.

Each year the Office of Diversity & Inclusion (D&I) reports progress on its D&I Roadmap. The Office of D&I implements a variety of programs and initiatives intended to support building a more diverse and inclusive Lenovo.

| Program                           | *Women | Race | *Ethnicity/<br>Immigrants | * Sexual<br>Orientation | *Disability | Veteran | Parental<br>Status |
|-----------------------------------|--------|------|---------------------------|-------------------------|-------------|---------|--------------------|
| Targeted Recruiting efforts       | √      | √    | √                         | √                       | √           | √       |                    |
| Executive Goals                   | √      | √    | √                         |                         |             |         |                    |
| Executive Development<br>Programs | √      | √    | √                         | √                       | √           | √       |                    |
| Employee Resource Groups          | √      | √    | √                         | √                       | √           |         | √                  |
| Sponsorship Program               | √      | √    | √                         |                         |             |         |                    |
| Training & Development            | √      | √    | √                         | √                       | √           | √       | √                  |

\* indicates global programs

In addition to these initiatives, Lenovo leverages several different global learning mechanisms to advance inclusive leadership behaviors. Our on-line platform provides various tools and courses in eight different languages. Solutions include topics

on leading diverse teams, managing diversity and inclusion, emotional intelligence and managing different generations. Beginning in late FY 2017/18 Lenovo began testing a program that includes an experiential learning case study on unconscious bias and its impact on the employee lifecycle.

The Office of D&I drives accountability by meeting annually with Lenovo's top 18 executives and providing a status of diversity and inclusion in their respective organizations. The conversation includes gap identification, recommended solutions and quarterly monitoring results. These conversations, along with support for D&I initiatives, have led to significant movement in executive representation. Based on promotions announced at the fiscal year end, our global female executive representation increased by 1.8 percent from the previous fiscal year and U.S. Black and Hispanic executive representation increased by 2.1 percent.



Women's Leadership Development Program Event in China

Lenovo's efforts are being recognized. In FY 2017/18 we were included in the 100 Best Companies for Working Mothers list and received a second perfect score from the Human Rights Campaign Foundation's Corporate Equality Index, which measures inclusive policies, practices, and procedures for LGBTQ employees. Lenovo's Diversitas ERG based in Bratislava, Slovakia won Europe's 2017 Employee Network of the Year.

## COMPENSATION, PERFORMANCE AND RECOGNITION

Our employees are our most valuable strategic resource, and we focus on recognizing their talents and contributions frequently and rewarding them fairly. Engaging our workforce in an inclusive environment allows employees to contribute fully to the business. We measure employment success across five key elements: compensation and benefits; work-life balance; performance and recognition; development and career opportunities; and retention. Collectively, these five elements are

critical to attract, motivate and retain our most valuable strategic resource: our people.

Lenovo's culture guides us to pay for performance. We believe that exceptional performance will support and drive exceptional business performance which results in exceptional pay for individuals. All "Key Performance Indicators" throughout the organization are linked to the business strategy.

We carefully monitor and evaluate market trends and industry practices in each of our geographic locations to ensure that we remain competitive and we react quickly when we see trends changing.

In addition to maintaining competitive wages, our global 3X3 performance management program comprises three defined business stages and three core business synergy levels. This gives us a more flexible incentive framework that supports our business at different stages of the life cycle. It accounts for competitive pressures, empowers business units to adapt their plans to meet business objectives and is closely aligned with *We are Lenovo*, the touchstone of our company culture that focuses us on delivering on our commitments and taking ownership in everything we do.

The 3x3 performance management program allows all Lenovo employees worldwide to set their goals for the year, receive feedback on their performance and development needs, be evaluated on their performance and, if eligible, receive a performance bonus. Sales employees are assessed annually and non-sales employees are assessed semiannually. In addition to the annual assessment, sales employees receive quarterly reviews. While formal assessments occur once or twice a year for all employees, managers are expected to provide ongoing feedback to their employees throughout the year.

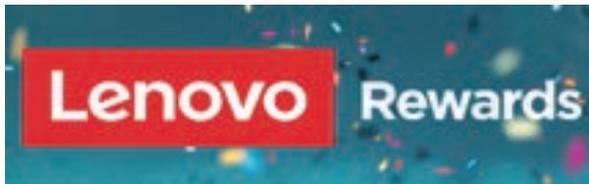
We track completion of employee performance reviews at the end of the performance review cycle to make sure every employee receives feedback.

We recognize the value of reward and recognition, and encourage every business unit leader to develop supplemental programs based on broad global guidelines and recognize team and individual contributions. We design competitive compensation programs to attract, motivate and retain talent. Our programs include a mix of:

- Base pay—reflects the value of the job in the marketplace, performance and the value of an individual's contribution to the Company

- Short-term incentive plans (including sales compensation)—rewards employees on overall corporate, business group or team performance, while recognizing individual performance as well
- Long-term incentive plans—targets executives, critical non-executives, top performers and high-potential employees

### Recognizing Amazing Work



At Lenovo, “we do what we say, we own what we do and we wow our customers” because of our talented employees. We work hard to celebrate employee contributions, whether they are big or small. We recently realized the need to establish a consistently powerful message to our employees across the globe that connects the various reward and recognition programs run by our different business units.

Our solution is **Lenovo Rewards** — a platform that celebrates, affirms, and inspires amazing work. Employees across teams, regions and functions can easily send recognition to peers anywhere in the world and receive recognition in return. This enables our employees to recognize behaviors that are integral to building our *We are Lenovo* culture and provides a single location for everyone to celebrate service milestones and other life events. The Lenovo Rewards platform enables our businesses to run their programs and share best practices, helping all of Lenovo build a culture of recognition.

### Retention

Lenovo employs a number of strategies to retain employees. For example, Lenovo:

- Conducts a global employee engagement survey (Lenovo Listens) to help identify retention opportunities
- Leverages compensation programs such as long-term incentive stock-based awards and recognition
- Ensures pay (base and incentive) is differentiated so top performers are paid on par with peers in the marketplace
- Takes specific “critical save” actions to retain certain key, critical employees when they find opportunities outside Lenovo

## EMPLOYEE BENEFITS

To ensure we can attract and retain high-quality talent in the competitive technology marketplace, we offer a variety of benefits for employees and their families. Benefits packages follow these strategic guidelines:

- Position Lenovo competitively within the local marketplace
- Align with and support Lenovo business and cultural strategy
- Emphasize Lenovo's commitment to wellness

To achieve these goals, Lenovo must be flexible and consider varying customs, practices, legal requirements and employee expectations around the world to design impactful benefits programs.

### Health and Wellness Benefits

In many countries, we offer private health benefits such as medical, dental and vision care to supplement government-provided healthcare. These arrangements often permit employees to provide coverage for dependents, including spouses, domestic partners, children or other family members. Employees may share in the cost of these benefits, especially when coverage for dependents is available. However, Lenovo covers most of these costs as a wellness investment in the well-being of employees. Lenovo believes a successful wellness program can result in long-term benefits beyond the financial measure of reduced medical costs, including more productive and engaged employees.



Lenovo Wellness Wednesday

Lenovo currently offers a variety of wellness programs around the world, including fitness facility discounts, employee assistance programs, health coaching, stress and lifestyle management programs, medical consulting and screening services and access to health educational material. Globally, we assist employees with wellness matters and disease prevention. To ensure our business operations can continue during a pandemic, we have plans and procedures to limit the potential impact of health-related concerns. As dictated by these procedures, we share health and safety information/requirements with employees and nonemployees as needed.

### Income Protection

In the event an employee cannot work due to illness or injury, Lenovo provides income protection in many countries. These benefits may take the form of salary continuation for a period of time and generally supplement government-provided benefits. For longer periods of illness or injury, Lenovo commonly provides additional disability benefits.

### Retirement or Post-Employment Savings

To supplement the income of employees and survivors after retirement or separation from Lenovo, we offer a variety of savings programs. These programs may be mandatory or voluntary depending on legal and marketplace considerations. Often there is an employee and employer contribution component, with the latter signifying Lenovo's willingness to make a current investment to provide future security for employees and their families.

Lenovo continually reviews and improves its benefits to ensure that they are competitive and meet the needs of our employees.

## TRAINING AND DEVELOPMENT

Lenovo is committed to investing in talent development and has a robust and systematic approach to employee, manager and executive development. Lenovo's development agenda is targeted at building the capabilities of our people and our organization through three primary ways:

- 1) Experiences on the job — learning while doing. This is how 70 percent of all learning occurs.
- 2) Colleague relationships at Lenovo — mentors, guides, coaches, managers. Employees learn through their successes, failures, guidance and advice. This is how 20 percent of learning occurs.
- 3) Education — formal training in the classroom or online that teaches key principles and skills. This is how 10 percent of learning occurs.

Our systematic approach combines all three methods to maximize learning. It includes formal employee and leadership education programs, targeted people planning and international rotations, Women in Lenovo Leadership Forums, mentoring circles, executive coaching, structured feedback and a variety of additional assessment and development tools.

Lenovo's training includes regular mandatory online training courses for all global employees on Code of Conduct, Information Security, and Privacy Basics. All Lenovo employees receive ongoing training in areas such as culture, compliance and performance management. All employees have career discussions at least annually. Employees received on average 4.5 hours of training in FY 2017/18.

Grow@Lenovo is the learning management system for the organization. It currently hosts almost 3,000 different online and instructor-led training courses. The content is a combination of internally developed training and off-the-shelf eLearning that varies in topics from business skills, professional skills, leadership videos and IT desktop courses. The primary focus of internally developed Lenovo content is sales, product or process training. Training content has been curated to help employees find what they need faster. For example, individual contributors can find professional development content sorted by topic or career stage. Managers can find eLearning content to support their progressive instructor-led leadership development track. The self-service and automation of the system has enabled Lenovo to deploy training to 30,000 system users with a small oversight team.

### Succession Planning

Through Lenovo's annual Organization for Human Resources Planning process, we ensure ensures that we have the right structure in place to deliver on our strategy; identify the talent needed now and in the future; invest in attracting, retaining and developing top talent; and continue raising the bar on internal and external talent.



Lenovo's Ready to Manage Program

## EMPLOYEE COMMUNICATIONS

Lenovo actively fosters open communication among employees, as well as communication between employees and the company.

### Meetings

To ensure our employees are effective and informed “brand ambassadors,” Lenovo holds regular employee (All Hands) meetings in each of its business units and functions, typically on a quarterly basis. Employees attend in person when possible, with remote participation enabled through a combination of web stream and conference calls. These meetings feature ample opportunities for employees to ask questions, interact with each other and their senior leaders and hear the latest on Lenovo’s strategy and mission. Guest speakers help employees deepen their knowledge about other areas of the company. Meetings may be recorded for later playback to ensure employees can review anything they may have missed. Lenovo’s goal is to ensure that our employees are fully informed on the strategic direction of the company and that they have firsthand access to our senior leaders.

### “Lenovo Listens” Employee Engagement Survey

Lenovo seeks the insights of its employees worldwide through its Lenovo Listens employee engagement survey. This survey is designed to gain insight on how Lenovo employees view their jobs, their management, their teams, their rewards and the company as a whole. Lenovo Listens is an important measure of employees’ pride, motivation and commitment to staying at Lenovo. Research shows that measures of employee engagement can be used to predict the amount of effort that employees are willing to invest in their jobs as well as employee retention. In addition, employee engagement can be tied to important measures of organizational performance, including financial results, customer satisfaction and operational efficiency.

Lenovo analyzes the data from the survey and encourages meaningful action planning to address any areas of concern. Post-survey focus groups are also conducted to better understand employee input and drive action planning at the management and corporate level for continuous improvement.

Starting in July 2018, Lenovo Listens will be conducted annually to enable an agile, continual listen-respond mechanism.

## OPERATIONAL CHANGES

Lenovo provides advance notice of significant operational changes in accordance with local requirements and collective bargaining agreements in the locations in which we operate. We meet regularly with employees and provide information on business changes. In cases where operational changes are required, we take steps to mitigate negative impacts.

Lenovo has regular employees, supplemental employees and contract workers. From time to time, the company decides to move work from one country or region to another in support of the business strategy and objectives. We take great care when these decisions are made to notify affected employees and non-employees as required by local and/or country laws and provide severance and career and training assistance where possible and as required by local/country laws.

## SOCIAL INVESTMENTS

### COMMITMENT

Lenovo's philanthropic and social investments are focused on STEM (science, technology, engineering, math) education and empowering diverse and under-resourced populations, themes that are integral to the success of our business. In FY 2017/18, the Motorola Mobility Foundation was transitioned to Lenovo Foundation to better represent the charitable non-profit arm's global reach and employee engagement.

The Lenovo philanthropy team is focused on collaborating across business units and geographies to maximize the impact of Lenovo's giving, exemplified through our first Global Week of Service in 2017. Teams amplified each other's partnerships in different geographies, combined employee volunteer talent across business units and scaled our focus on STEM education and empowering diverse populations to offices around the world. By focusing on the social investment objectives below, Lenovo meets the diverse needs of the communities where Lenovo employees and consumers live and work.

### LENOVO'S SOCIAL INVESTMENT OBJECTIVES

- Partner with charitable organizations, educational institutions and civic organizations to amplify the impact of Lenovo's social investments around STEM education and empowering diverse and under-resourced populations.
- Connect employee expertise and talent with students and community members who will benefit from exposure to tech talent.
- Provide resources to increase digital inclusion while enhancing STEM education for diverse and under-resourced populations.

### GLOBAL DISASTER ASSISTANCE

The fall of 2017 was met with an unprecedented series of disasters in North America. Hurricanes Harvey, Irma and Maria ravaged the U.S. and Caribbean, followed by two devastating earthquakes in Mexico. Like so many of our corporate peers, Lenovo was compelled to respond. Through a \$2 million USD commitment (\$1 million each to hurricanes and earthquakes), Lenovo provided immediate funding and recovery-phase product donations. We are deeply grateful for our partners at the American Red Cross, Americares, Boys & Girls Clubs of Puerto Rico, Cruz Roja Mexico, Save the Children, Techo Para Amis and Yecolti for helping Lenovo fulfill our obligation as a corporate citizen during natural disasters.



Lenovo's disaster relief support in Puerto Rico included donated laptops

## SOCIAL INVESTMENT PROGRAMS AND VOLUNTEERING

### North America

Lenovo aims to increase access to technology for diverse populations through partnerships with organizations such as the Boys & Girls Clubs of America, the Smithsonian Center for Learning and Digital Access and NAF (National Academy Foundation), the nonprofit that leads the Lenovo Scholar Network. Now in its fourth year, the Lenovo Scholar Network offers more than 5,000 students at 118 public high schools across the U.S. the opportunity to learn to develop mobile applications. Lenovo and NAF created the annual Mobile App Development Competition in 2014 to engage underserved high school students in STEM, while also providing entrepreneurial and technology skills needed to pursue careers in computer science, programming and engineering. In the 2017-18 school year, more than 80 percent of schools that joined the competition are offering mobile app development to students for the very first time.



In addition to its philanthropic initiatives, Lenovo empowers employees to give back to their communities through volunteerism. The company grants employees in North America 32 hours of annual paid time off for volunteerism, and offers a 50 percent match for their charitable donations. Since 2005, North America employees have volunteered over 100,000 hours and Lenovo and its employees have contributed almost \$20 million USD to charitable causes.

In 2017, Lenovo's Mobile Business Group leaders provided 50,000 devices (fair market value of \$7 million USD) to under-resourced high school students across the U.S. as part of their business partnership with Sprint, a U.S.-based telecommunications company. Devices empowered the Sprint 1Million project, an initiative to increase students' academic performance by providing home internet access through the Sprint network and device hotspots.

### Asia Pacific

Lenovo invested over \$300,000 USD in the Asia Pacific region through ongoing partnerships, compliance with the Companies Act in India and Global Week of Service efforts. Notable partnerships included an initiative to provide family coding classes in Japan, as well as numerous digital inclusion and education partnerships in India. Lenovo's philanthropy supports programs to educate India's poorest communities and provide better income generation through skills training. Projects such as the X Billion Skill Lab, the Medha Project and the Vimukti Project in India have provided access to hardware technology and job skill training to over 1,000 individuals.



Lenovo's Asia Pacific offices participated in the first Global Week of Service, engaging employees in projects to create audio libraries to promote child literacy (India), provide assistance and supplies for the homeless (Australia), support people with vision loss (Singapore) and create greater access to cutting edge technology and education (Japan).

## Europe, Middle East and Africa (EMEA)

Lenovo's annual support for the Women's Forum, United Way Europe and Global Week of Service strengthened social investments in EMEA in FY 2017/18. Since 2006, Lenovo has been the technology sponsor for the Women's Forum for the Economy and Society, an annual event to elevate the voices and perspectives of women. Lenovo's support for United Way Europe provided formal partnerships in France, Israel, Poland, Romania, Spain and the United Kingdom, including facilitation of Global Week of Service projects in the region.



Global Week of Service projects in Scotland, England and South Africa enriched education through much needed facility improvements at schools. Lenovo employees in Slovakia, France and Spain provided direct access to technology and career education through service projects benefitting senior citizens and youth in their communities, while additional projects in Slovakia, United Arab Emirates and Germany provided education and enrichment activities for those with mental and physical disabilities.

## Latin America

In FY 2017/18, Lenovo invested over \$1 million USD in the Latin America region for disaster response efforts, ongoing partnerships, and Global Week of Service projects. After the devastating September 2017 earthquakes in the state of Chiapas and Mexico City, Lenovo assisted with recovery efforts by providing donations of hardware to Cruz Roja Mexico, Save the Children, Yecolti, and Techo para mi pais. Lenovo maintained community partnerships in the region, providing access to education to individuals across Argentina, Brazil, Chile, Colombia, and Peru. Most notably, Lenovo provided hardware for Laboratoria, an organization that trains women as information technologists.



Global Week of Service projects in Latin America helped provide housing for the homeless through a partnership with Techo para mi pais in Colombia, Argentina, Peru and Chile. Projects in Brazil and Mexico focused on providing access to education for under-resourced populations and those with disabilities.

## China

Lenovo's "Sunshine Running" campaign launch ceremony was held in September 2017 in the Olympic Forest Park of Beijing, marking the beginning of a three-year program to support of visually impaired runners. Co-sponsored by Lenovo Image (a printer and printing service subsidiary) and the He Yajun runner's club for the visually impaired, "Sunshine Running" brings volunteers to the side of visually impaired runners to encourage them to walk outdoors for their physical and mental health.



A disturbing child abuse incident occurred in a kindergarten in Shenzhen in the fall of 2017. In response to the incident, Lenovo launched a charity donation campaign entitled "Let Me Take Care of Your Kids," pledging to provide Lenovo's intelligent video-camera product, Snowman, free of charge to kindergartens and nurseries across the country. Over 540 institutions were impacted by the donation, covering over 230 cities in 28 provinces, autonomous regions and municipalities and reaching as far as Shawan County in Xinjiang. In addition to free equipment, Lenovo provided a range of supporting services, including installation, adjustment and maintenance.

Global Week of Service projects were held simultaneously in four Chinese cities: Beijing, Shanghai, Chengdu and Shenzhen. With a focus on migrant children and disadvantaged groups, the projects were designed to enhance child learning and raise environmental awareness.

In addition to Global Week of Service activities, employees from Lenovo China gave back to their communities through ongoing volunteerism. In September and December 2017, Lenovo volunteers traveled to Ulanqab City twice to teach in local primary schools and middle schools. Under the Firefly Classroom Teaching Program, they taught local children computer skills, helped them identify different kinds of animals and plants, practice street dance and acquire basketball and football skills. The aim of these activities is to help children discover and explore their interests and hobbies and develop their potential.

### Lenovo Foundation

The Lenovo Foundation is committed to uniting Lenovo's global workforce around the focus areas of access to STEM education and empowering diverse and under-resourced populations. By uniting teams around the world through these common themes, Lenovo Foundation provides tangible evidence of Lenovo's commitment to the "different is better" culture. Lenovo Foundation is based in Chicago, Illinois, USA and is governed by a board of directors comprised of global Lenovo executives. For more information about the Lenovo Foundation, visit [www.lenovofoundation.com](http://www.lenovofoundation.com).



70





# PLANET

- 70      Lenovo's Environmental Commitment
- 73      Environmental Impact of Lenovo Operations
- 87      Environmentally Conscious Products
- 96      Product End-of-Life Management (PELM)

# PLANET

## LENOVO'S ENVIRONMENTAL COMMITMENT

### LENOVO'S ENVIRONMENTAL MANAGEMENT SYSTEM

Lenovo manages the environmental elements of its operations through a global environmental management system (EMS) that covers Lenovo's worldwide product development and manufacturing operations for personal computer, workstation, server, storage, monitor, accessory and mobile device hardware.

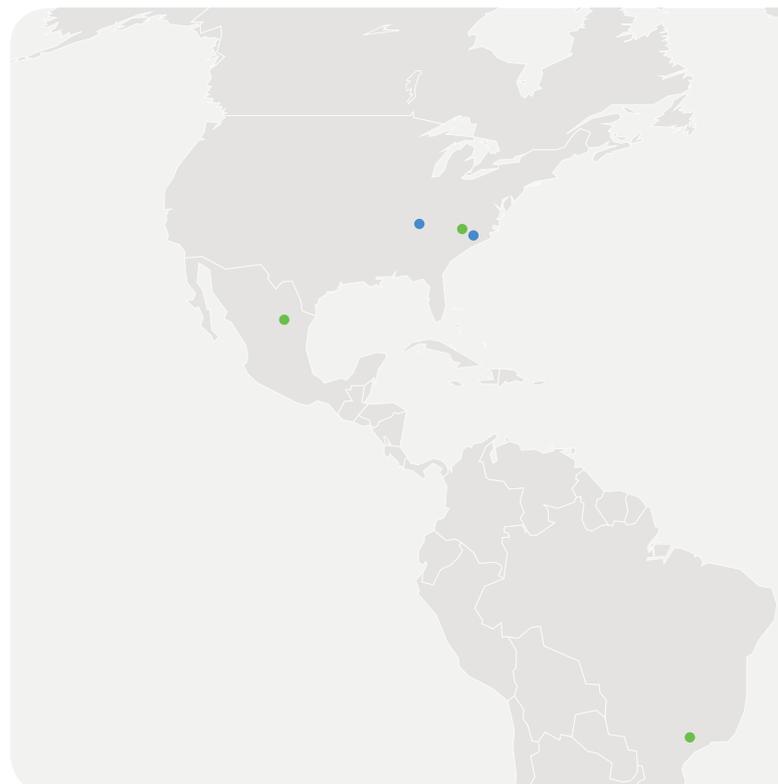
All Lenovo sites in the EMS scope are ISO 14001:2015 certified.

[Click here](#) to view Lenovo's Global ISO 14001 registration certificates.



In 2017 Lenovo India received the ELCINA-EFY 2nd Prize award for Excellence in Environmental Management

| Location  | ISO 14001 Registrar                                |
|---|--|
| China, Taiwan R&D sites                                     | China Electronics Standardization Institute (CESI) |
| Chicago, U.S.A product development site                     | DEKRA  |
| Hefei, China Lenovo LCFC manufacturing site                 | China Quality Certification Center (CQC)           |
| Other non-China manufacturing and product development sites | Bureau Veritas (BV)                                |



## ISO 14001 Registered Manufacturing & Development Facilities

The below sites might have multiple functions but are listed by the primary function.

### Development

- No. 6 Shangdi West Road, Beijing, China
- 696 Songtao Road, Shanghai, China
- 7A, 9A, 10A, 11A, Zhangjiang Building, No. 289 Chunxiao Road, Zhangjiang Technology Zone, Shanghai, China
- 16 Nanyi Road, Shenzhen, China
- No. 999 Qishan North 2nd Road, Xiamen, China
- 3-6-1 Minatomirai, Nishi-ku, Yokohama, Japan
- Am Zehnthof 77, Essen, Germany, 45307
- 4F, 5F, 8F, No. 66, San Chong Road, Nan Gang District, Taipei City, Taiwan
- 222 W Merchandise Mart Plaza, Chicago, IL, U.S.
- 7001 Development Drive, Morrisville, N.C., U.S.

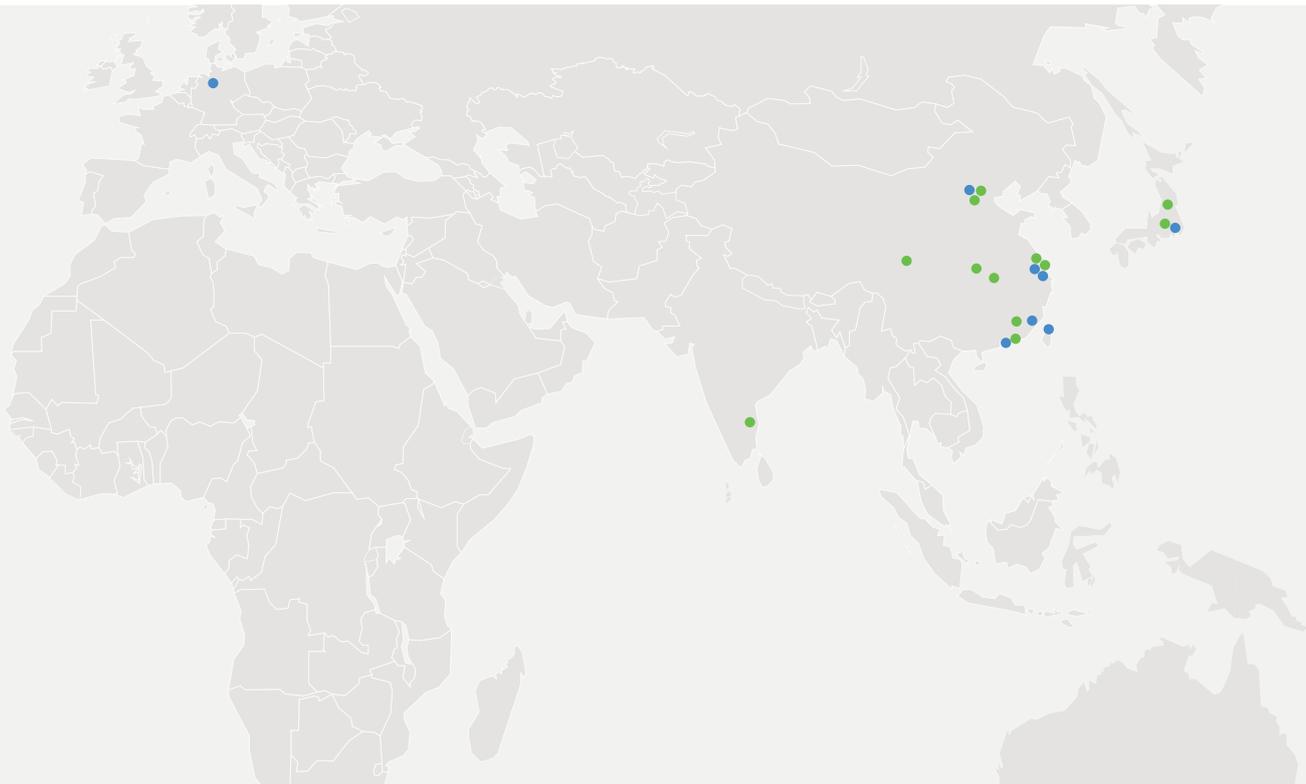
### Manufacturing and Fulfillment Center

- 6540 Franz Warner Parkway, Whitsett, N.C., U.S.

### Manufacturing

- Restrada Municipal IDT 334 Estrada Dos Leites, Sapezal, N° 200, Modulos 5 A 10, Indaiatuba, Brazil
- No. 6 Chuangye Road, Beijing, China
- No. 2 Building, No. 8 Chuangye Road, Beijing, China<sup>1</sup>
- No. 88 Tianjian Road, Chengdu, China
- No. 3188-1 Yungu Road, Hefei, Anhui Province, China
- Lenovo Science & Technology Park, Huiyang, China
- No. 68 Building, 199 Fenju Road, Shanghai, China
- No. 2 Building, 955 Shangfeng Road, Shanghai, China
- No. 30 Tao Hua Road, Shenzhen, China
- No. 19 Gaoxin 4th Road, Wuhan, Hubei, China
- No. 316 Boulevard Escobedo, Apodaca, NL, Mexico
- RS No. 19/1A & 2A Cuddalore Main Rd., Edayar Palayam Village, Pondicherry, India
- 32 Nishiyajima-cho, Ohta-shi, Gunma, Japan
- 6-80, Shimohanazawa 2-Chome, Yonezawa, Japan

<sup>1</sup> Manufacturing — Administration



Lenovo remains a leading PC company and continues its push into the server, mobile device and cloud service markets. With our customers' interest as a significant driver, Lenovo is maintaining its focus on our key commitments to ensure compliance, prevent pollution and reduce our environmental impact, develop products with industry-leading environmental attributes and continually improve our global environmental performance.

Within the framework of our EMS, Lenovo annually identifies and evaluates the aspects of our operations that have actual or potential significant impacts on the environment. Metrics and controls are established for these significant environmental aspects. Performance relative to these metrics is tracked and reported on an ongoing basis. Performance improvement targets are established for select environmental aspects annually, taking into consideration performance relative to the environmental metrics, the Environmental Policy, regulatory requirements, customer requirements, stakeholder input, environmental and financial impact, and management directives.

During FY 2017/18 our significant global environmental aspects included:

- Product materials — including use of recycled plastics and environmentally preferable materials
- Product packaging
- Product energy use
- Product end-of-life management
- Site air emissions
- Site energy consumption
- Supplier environmental performance
- Product transportation
- Waste management
- Water management

See the [FY 2017/18 Performance](#) section to see Lenovo's FY 2017/18 global environmental performance against its objectives and targets.

## ENGAGING WITH STAKEHOLDERS ON COMPLIANCE

Lenovo's commitment to environmental stewardship begins with a commitment to compliance. This includes compliance with both regulatory requirements and voluntary standards set forth by associations and standards organizations to which Lenovo subscribes

in support of managing and minimizing the environmental impact of our operations and products. We verify our compliance through regular, periodic internal and third-party audits of our facilities and operations.

Lenovo actively engages with a wide variety of stakeholders as part of its processes for managing environmental risk, ensuring compliance and meeting customer expectations. Examples include:

### Associations

- [DIGITALEUROPE](#)
- [Responsible Business Alliance](#) (RBA, formerly Electronic Industry Citizenship Coalition (EICC))
- [Information Technology Industry Council](#) (ITI)
- [Consumer Technology Association](#) (CTA)

### Green Programs (Eco-Labels)

- [IEEE 1680.1](#) Standard for Environmental Assessment of Personal Computer Products
- [ENERGY STAR](#)®
- [GreenGuard](#)
- [TCO Certified](#)
- [TCO Certified Edge](#)
- [TÜV Rheinland Green Product Mark](#)
- [UL Environment's Sustainable Products Certification](#)

### Programs, Workgroups and Initiatives

- [Call2Recycle](#)
- [CDP](#) (formerly Carbon Disclosure Project)
- [ECMA-370 — The Eco Declaration Standard](#)
- [EcoVadis](#)
- [Electronic Product Stewardship Canada](#)
- [Global Reporting Initiative](#) (GRI)
- [Green Freight Asia](#) (GFA)

### **International Standards**

- [ISO 14001, Environmental Management Systems](#)
- [ISO 50001, Energy Management Systems](#)
- [Leadership in Energy and Environmental Design \(LEED\)](#)
- Product Attribute to Impact Algorithm (PAIA) Project
- [R2](#)
- [United Nations Global Compact](#)
- [World Resources Institute \(WRI\)](#)
- [World Business Council for Sustainable Development \(WBCSD\)](#)

Lenovo recognizes the importance of environmental leadership in China and has

participated in numerous environmental initiatives in the country, including:

- China Energy Conservation Program (CECP)
- China Environmental Labeling Product (CELP)
- PC+ China Energy Label (CEL)
- Energy Saving Work Association of the Chinese Institute of Electronics
- China RoHS Standard Working Group
- China WEEE Working Group
- China MIIT EPR (extended producer responsibility) Recycling Pilot Project
- China ePCF Project
- China MIIT Eco-Design Pilot Enterprises Program

## ENVIRONMENTAL IMPACT OF LENOVO OPERATIONS

### **ENERGY AND CLIMATE CHANGE**

Lenovo recognizes that human activities are contributing to climate change and concurs with the findings of the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) — “Climate Change 2014.” Lenovo also recognizes that if left unchecked, current trends in climate change present serious economic and societal risks and agrees that specific actions are needed to stabilize atmospheric greenhouse gas levels and hold global average temperatures to acceptable increases. Lenovo supports proposed actions, including:

- Reducing global emissions from 40 to 70 percent between 2010 and 2050

- Aligning with the global scientific community’s generally accepted recommendations for maintaining global warming below two degrees Celsius over the 21st century, relative to pre-industrial levels

We are working both internally and externally to minimize and mitigate climate risks. Lenovo is committed to continually reducing the global carbon footprint of all of its business activities. Lenovo has demonstrated its commitment by:

- Developing a corporate Climate and Energy Policy
- Implementing a long-term comprehensive Climate Change Strategy

- Setting aggressive corporatewide objectives and targets which support the Policy and Strategy
- Showing continual year-to-year progress in achieving those objectives and targets

To drive climate actions external to Lenovo's operations, we monitor, support and in some cases participate in the development of voluntary carbon reduction programs, climate change regulations, renewable energy portfolio standards and product carbon footprint and labeling requirements both globally and regionally.

Reducing energy consumption and associated carbon emissions is the primary focus of our climate change programs and strategy. Management of energy and carbon emissions reduction activities and programs is carried out within the scope of Lenovo's global EMS. Lenovo is achieving its energy and carbon management goals through improvements in operational and logistical energy efficiency, reductions in energy consumption, switching to renewable energy sources where practicable, supporting an increase in renewable energy available via the grid and purchasing renewable energy credits and carbon offsets.

Over the past several years, Lenovo has experienced organic growth in conjunction with operational consolidation. In addition, significant structural changes and external market factors have presented unique challenges for staying on course to achieve our climate change goals. We overcame these challenges by engaging internal teams and external partners to identify opportunities to reduce energy consumption and carbon emissions. The identified opportunities were then subjected to a project approval hierarchy that favors energy efficiency first, use of renewable energy second, and finally the purchase of renewable energy credits or carbon offsets. This process continues the identification and implementation of projects that support Lenovo's goal of maintaining a sustainable balance among social, economic and environmental impacts.

Visit [www.lenovo.com/climate](http://www.lenovo.com/climate) for more information on Lenovo's Climate and Energy Policy, strategy, objectives and targets.

## OPERATIONAL ENERGY EFFICIENCY

Given that one of Lenovo's most significant environmental aspects is emissions associated with energy consumption, Lenovo's goal is to continually improve the energy efficiency of its operations. Lenovo initiatives for energy reduction include activities such as installation of low-energy lighting and related electrical equipment, energy-efficiency improvements to HVAC systems, eliminating or improving usage of transformers and air compressors, manufacturing area optimization, manufacturing-line optimization, improving computer server room energy efficiency, consolidation of operations and employee education.

For more information on our performance relative to energy efficiency, please see the [Energy Reductions in Operations](#) section.

## RENEWABLE ENERGY

### *Photovoltaic Solar Panels*

Lenovo is committed to installing local renewable energy generation sources where feasible. In support of this commitment, we continue to expand our use of on-site solar energy.

Lenovo's renewable energy installations include solar hot water generation facilities in Beijing and Huiyang and solar electric generation plants in Shanghai and Hefei. The current solar capacity of all these projects is over five MW with emission reduction potential of over 5,000 metric tons of carbon emissions annually.



Solar panels in Hefei, China

Our next project is a solar electricity installation at the Development Drive R&D center in Morrisville, N.C., U.S., a solar electricity installation in Hefei, China (Phase 2) and a proposed project for Lenovo's site in Wuhan, China. These three projects, all in various phases of development, represent almost 15 MW of potential solar electric generation capacity.

Lenovo has a target of achieving 30 MW of owned or leased renewable energy generation capacity globally by 2020.

In 2017, Lenovo was again recognized by the U.S. Environmental Protection Agency (EPA) as a Top 30 Tech & Telecom Green Power Partner for its purchase of renewable energy. Please click here for more information: <https://www.epa.gov/greenpower/green-power-partnership-top-30-tech-telecom>.

## RENEWABLE ENERGY CREDITS AND CARBON OFFSETS

Where actual direct energy reductions or use of renewable energy sources are not technically or economically feasible, Lenovo chooses to purchase Renewable Energy Credits (REC), International Renewable Energy Credits (I-REC), Guarantees of Origin (GO) and carbon offsets.

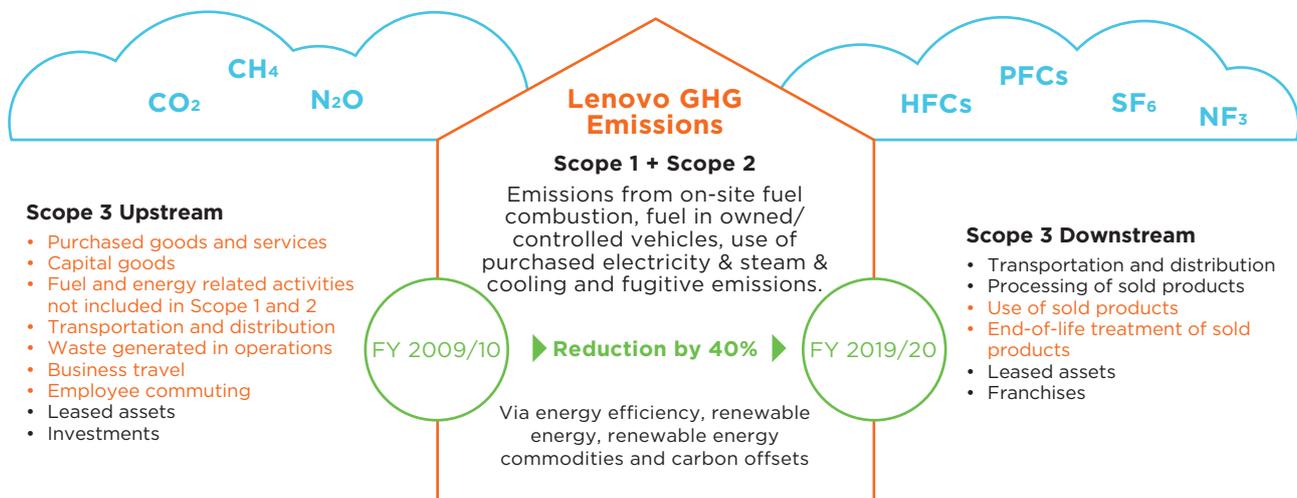
In FY 2017/18, Lenovo partnered with ClimeCo and purchased 10,000 MT CO<sub>2</sub>e of carbon offsets, 35,000 MWh of Green-e Energy certified RECs, 45,000 MWh of I-RECs and 6,500 MWh of GOs, which supported 100 percent renewable energy projects in China (wind), Europe (wind) and the U.S. (wind). These renewable commodities were in addition to local purchases by Lenovo's sites.

To view the certificate for RECs, I-RECs, GOs and carbon offsets retired by Lenovo in 2018, visit [www.lenovo.com/climate](http://www.lenovo.com/climate) and follow the links from there.

## CLIMATE CHANGE RISK/OPPORTUNITIES MANAGEMENT

Climate change risks and opportunities are identified and evaluated as part of two processes within Lenovo's business management systems: our global annual risk registration process and our annual environmental significant aspect evaluation. These two processes are connected, meaning that if climate change risks are identified in the global risk registration, they are considered in the environmental aspects analysis — and vice versa.

1. Among other sustainability factors, Lenovo's formal risk management process includes: environmental risk categories such as environmental incidents, catastrophic weather conditions, supply chain disruptions and other elements. Each business unit is required to identify risks and assess their impacts on Lenovo's strategy execution, then develop mitigation plans for select identified risks. This process is managed by Lenovo's Enterprise Risk Management team.
2. We also evaluate climate change risks; the results of this evaluation are considered in the annual risk registration process described above. Energy consumption, the associated greenhouse gas emissions and climate change are identified as significant environmental aspects and impacts for Lenovo. As such, associated risks and opportunities are evaluated and prioritized annually based on Lenovo's significant aspect methodology in accordance with the requirements of our environmental management system. Per these requirements, climate change is evaluated relative to its actual and potential influence on the environment and the business. This process is managed by Lenovo's Global Environmental Affairs team.



Notes: Scope 3 categories in orange are tracked and evaluated and in some cases actions are being taken to drive emissions reductions  
Scope 3 categories in black are not relevant to Lenovo

As a demonstration of Lenovo's long-term approach to risk management in this area, in May 2014, Lenovo's Board of Directors (BOD) and Executive Committee (LEC) acted to increase Lenovo's GHG emissions reduction commitment from 20 percent to 40 percent by FY 2019/20, relative to FY 2009/10 (see graphic above). We will meet this commitment through investment in on-site renewable generation, energy efficiency and renewable energy credits or offsets.

We are preparing to identify and develop our third-generation targets after 2020. We are reviewing and evaluating Science Based Targets Initiative's methodology to determine the best approach for Lenovo that will align with the science based reduction pathways for limiting global temperature rise.

Lenovo's commitment to addressing climate change extends to supporting global initiatives such as [We Mean Business](#), a coalition of businesses and investors supporting a transition to a low carbon economy.

## MINIMIZING THE ENVIRONMENTAL IMPACT OF LENOVO'S LOGISTICS

Lenovo strives to optimize our logistics programs and ship products in the most environmentally responsible manner possible. Our accomplishments in FY 2017/18 include:

- Collecting and submitting calculated CO<sub>2</sub> emission numbers for transportation volumes and data. The scope included all international air, ocean and rail transportation globally, as well as domestic transportation in China.
- Engaging with key carriers to ensure they have effective sustainability programs in place.
- Promoting environmentally friendly modes of transportation as a key decision driver across global logistics.
  - i. The Global Logistics team proactively favored rail transportation for shipments from China to Europe, and shipped over 400 containers per quarter in FY 2017/18 to Europe by rail, which is about a 91 percent increase compared to the previous year.

- ii. For domestic shipping in China, the team shifted more volumes from truck and air to rail, resulting in a 32 percent increase year on year. In total, approximately 88,000 cubic meters were shipped by rail, which is eight percent of the total China transportation volume.

With the goal of reducing carbon emissions, the Global Logistics team continues to explore ocean transport consolidation opportunities to reduce the number of containers shipped out of China manufacturing sites.

Lenovo also participates in regional initiatives that seek to disseminate best practices in transportation. In Asia Pacific, Lenovo is a founding member of Green Freight Asia (GFA). GFA's goal is to promote and improve fuel-efficient freight transport and decrease air pollution in Asia for both shippers and carriers. Lenovo is also an approved U.S. EPA SmartWay partner.

## FY 2017/18 ENVIRONMENTAL PERFORMANCE

### ENERGY REDUCTIONS IN OPERATIONS

Improving operational energy efficiency is a fundamental element of Lenovo's strategy to meet its GHG reduction targets. Since establishing climate change objectives and targets, Lenovo has implemented more than 160 operational energy-efficiency projects worldwide. All sites strive to identify and implement energy-efficiency projects and evaluate the opportunity to employ the use of renewable energy. Throughout the organization, these activities are driven by site energy champions who lead energy teams that help implement energy reduction projects.

During FY 2017/18, Lenovo approved approximately 10 new energy-efficiency projects. Some of the projects implemented during the year include:

- Solar photovoltaic power generation installation in Hefei, China (Phase 2)
- Optimization of server system in Shanghai, China
- Installation of energy efficient light systems in Shanghai, Huiyang, Shenzhen and Hefei, China and Bangalore Ferns, India
- Improvements in HVAC efficiency in Huiyang and Beijing, China

In FY 2017/18, we also expanded our Energy Management System (EnMS) to our headquarters in Beijing, China and gained ISO 50001 certification.

## ENERGY CONSUMPTION

Lenovo's direct and indirect energy consumption by primary energy source for FY 2017/18 is detailed below.

### Energy Consumption by Primary Energy Source

| Energy Type  | GJ               |
|--------------|------------------|
| Fuel         | 125,041          |
| Electricity  | 955,624          |
| Steam        | 108,649          |
| Cooling      | 8,599            |
| <b>TOTAL</b> | <b>1,197,913</b> |

### Direct Energy Consumption by Source (Fuel Detail)

| Fuel  | GJ             |
|---|----------------|
| Gas/diesel oil (stationary combustion)                | 5,461          |
| Natural gas (stationary combustion)                   | 113,470        |
| Liquefied petroleum gas (LPG) (stationary combustion) | 3,087          |
| On road diesel fuel (mobile combustion)               | 948            |
| Gasoline/petrol (mobile combustion)                   | 1,835          |
| Liquefied petroleum gas (LPG) (mobile combustion)     | 240            |
| <b>TOTAL</b>  | <b>125,041</b> |

## GHG EMISSIONS PERFORMANCE

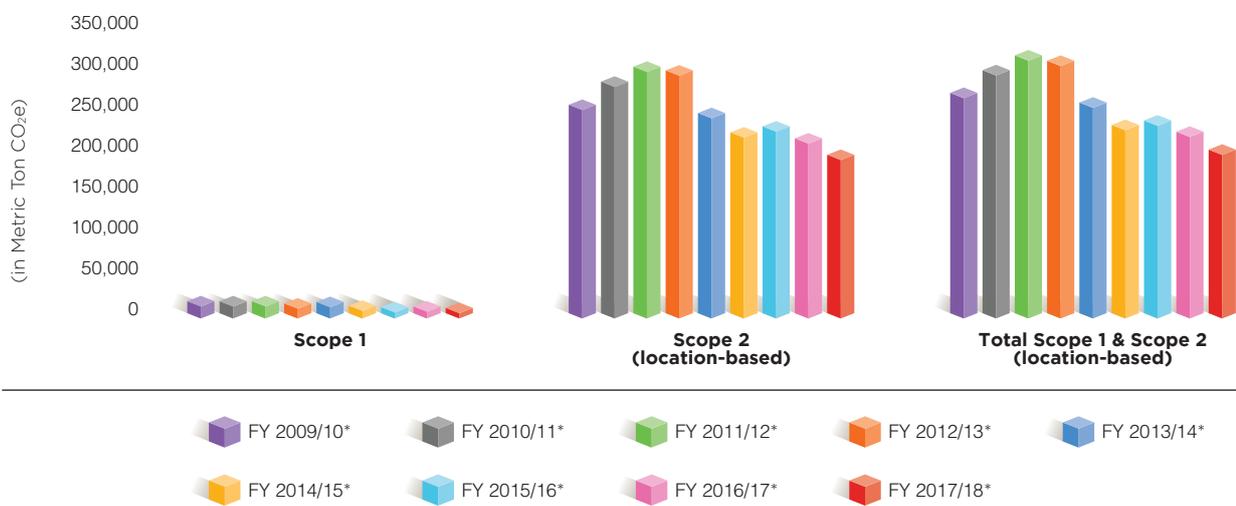
Lenovo reports GHG emissions and tracks performance relative to our fiscal year, which runs from April 1 through March 31. Lenovo's GHG objectives and targets are set and tracked relative to a base year of FY 2009/10.

## A. Lenovo's Global Scope 1, 2, 3 GHG Emissions

Lenovo's Scope 1 and 2 (location-based) CO<sub>2</sub>e Emissions Inventory from our base year is detailed below, along with Lenovo's Scope 3 CO<sub>2</sub>e Emissions Inventory from our last nine fiscal years. The table in the Consolidated Metrics section of this report includes Scope 1, 2 (location- and market-based) and 3 emissions for Lenovo's global operations.

Note: Lenovo started to report location- and market-based Scope 2 from FY 2015/16 to comply with the GHG Protocol Scope 2 Guidance.

### Lenovo's GHG Emissions - Scope 1 & 2 (location-based)<sup>1</sup>

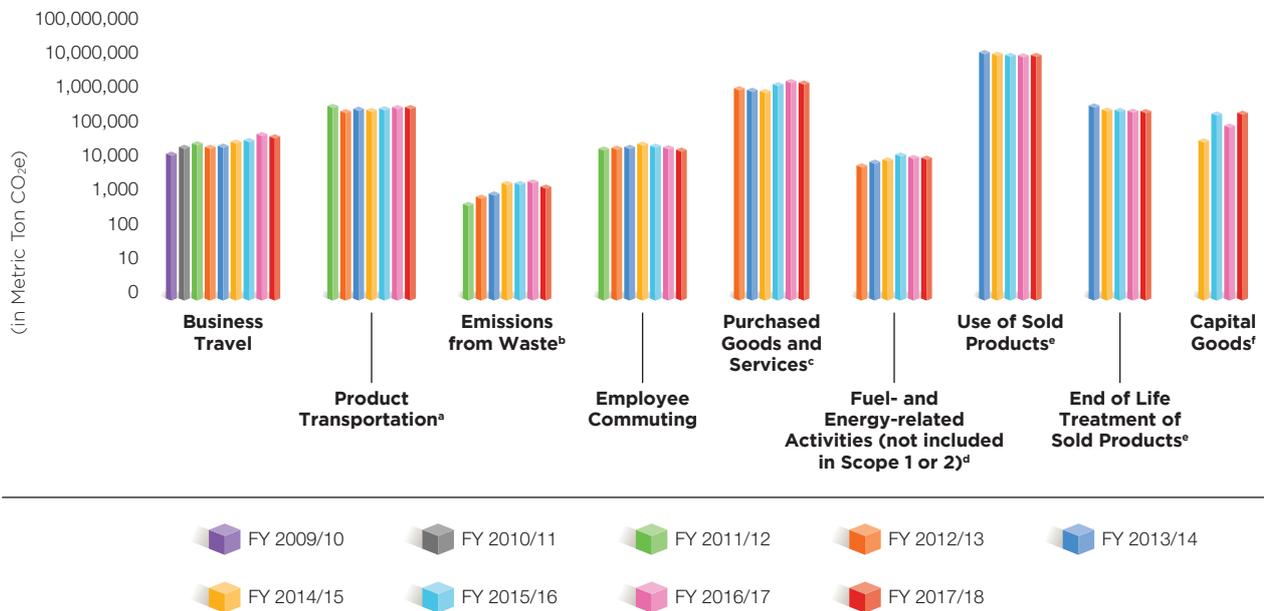


<sup>1</sup> Scope 1 GHG emissions are calculated based on the purchased quantity of commercial fuel and added refrigerants and using published emission factors from DEFRA, U.S. EIA, EPA and 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The guidance from worksheets of World Resources Institute's GHG Protocol Tool for Mobile Combustion and the GHG Protocol Tool for Stationary Combustion were used for making the calculations. The tools and guidance were developed by World Resources Institute (WRI) and copyrighted. They are available at [www.ghgprotocol.org](http://www.ghgprotocol.org).

Scope 2 GHG emissions are associated with the purchase of electricity from the grid, steam and cooling. Information on emissions from all Lenovo facilities worldwide is included in this report. For facilities solely owned or operated by Lenovo, emissions were calculated using actual quantities of purchased electricity, steam and cooling and the international emission factors for the relevant country or region (provinces in China, states in the U.S.). Lenovo emissions from shared facilities were calculated using the floor area occupied by Lenovo and international electricity emission factors for the relevant country. World Resources Institute's GHG Protocol Tool for Stationary Combustion was used as guidance for calculating emissions associated with purchased electricity. The Similar Building/Facility Estimation Method was used for facilities that are partially occupied by Lenovo operations.

\* At the end of FY 2012/13, Lenovo adjusted its historical CO<sub>2</sub>e emissions data to account for the acquisition of Medion in Germany and our joint venture with NEC in Japan. At the end of FY 2015/16, Lenovo adjusted historical CO<sub>2</sub>e emissions data to account for acquiring System x and Motorola Mobility.

## Lenovo's GHG Emissions – Scope 3<sup>2</sup>



<sup>2</sup> Scope 3 GHG emissions are estimated based on the guidance of the Greenhouse Gas Protocol's Value Chain (Scope 3) Accounting and Reporting Standard and its supplement named the Greenhouse Gas Protocol: Technical Guidance for Calculating Scope 3 Emissions (version 1.0).

- <sup>a</sup> Product transportation emissions include key upstream suppliers representing a majority of global logistics spend. Note: Upon examining the GHG Protocol standard, we decided to recategorize this to upstream from downstream transportation (from FY 2016/17, previous years were adjusted accordingly).
- <sup>b</sup> Emissions from waste include nonhazardous waste, hazardous waste and wastewater from all manufacturing, R&D locations and some large/small offices. No product waste is included.
- <sup>c</sup> Emissions from purchased goods and services include suppliers covering 90 percent of direct global suppliers spend.
- <sup>d</sup> Emissions from fuel-and-energy related activities include transmission and distribution losses from worldwide used electricity and natural gas.
- <sup>e</sup> Lenovo used the current Product Attribute to Impact Algorithm (PAIA) notebook, desktop, monitor, tablet, all-in-one, thin client and server tool for calculating emissions of Lenovo's typical notebook, desktop, monitor, tablet, all-in-one, thin client and server. The calculated results show emissions distribution by different parts and also for use, packaging, transportation and end-of-life treatment categories. The emissions associated with use and end-of-life treatment of sold products were estimated on a "narrow" baseline for the typical notebook, desktop, monitor, tablet, all-in-one, thin client and server multiplied by sold/shipped product volumes.
- <sup>f</sup> Emissions from capital goods were estimated based on capital goods purchased in a given year. All capital goods were converted to the common currency unit and categorized to align with industry codes. Emission factors for different types of capital goods were taken from *2012 Guidelines to Defra GHG Conversion Factors for Company Reporting*, Annex 13, adjusted for inflation rate and exchange rate.

## Lenovo's GHG Emissions Inventory Specifics

| Base Year               | FY 2009/10                             | April 1, 2009 – March 31, 2010  |
|-------------------------|--|---|
| <b>Boundary</b>         | Organizational                         | Operational control approach  |
|                         | Operational                            | Scope 1, 2 and 3 in worldwide manufacturing, research and development sites and office locations  |
| <b>Scope</b>            | Scope 1 (direct GHG emissions)         | On-site fuel combusted, operation of controlled vehicles and fugitive emissions   |
|                         | Scope 2 (indirect GHG emissions)       | Purchased electricity, steam and cooling  |
|                         | Scope 3 (other indirect GHG emissions) | Business travel, product transportation, employee commuting, emissions from waste, purchased goods and services, fuel- and energy-related activities, use of sold products, end-of-life treatment of sold products and emissions from capital goods |
| <b>Greenhouse Gases</b> | All GHG covered by the Kyoto Protocol  | CO <sub>2</sub> , SF <sub>6</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs and NF <sub>3</sub>  |

[Click here](#) to see more of Lenovo's global environmental data.

Lenovo's Scope 1 and 2 absolute emissions during FY 2017/18 decreased. Lenovo emissions inventory, normalized by total revenue, employee population, floor area and unit of production, decreased in comparison with the previous year.

Overall, Scope 3 emissions increased slightly. Lenovo's reporting categories included: business

travel, emissions associated with product transportation, site waste, employee commuting, purchased goods and services, fuel- and energy-related activities not included in Scope 1 or 2, emissions from use of products, emissions from end-of-life of products and emissions from capital goods. Please see section [E. Additional GHG Emissions Performance and Related Initiatives](#) for information on Lenovo's actions to drive down supplier and transportation emissions.

### B. Lenovo's Global Scope 1 and 2 (location-based) GHG Emissions<sup>3</sup>

|               | Total Scope 1 | Total Scope 2<br>(location-based) |
|---------------|---------------|-----------------------------------|
| Brazil        | 13.14         | 2,089.96                          |
| China         | 3,765.29      | 153,233.45                        |
| Germany       | 667.35        | 1,684.90                          |
| India         | 54.06         | 3,435.42                          |
| Japan         | 322.30        | 5,298.89                          |
| Mexico        | 73.39         | 3,273.10                          |
| Taiwan        | 0.00          | 2,167.49                          |
| United States | 1,129.80      | 18,297.63                         |
| Rest of World | 345.54        | 4,279.26                          |

<sup>3</sup> Brazil, China, Germany, India, Japan, Mexico, Taiwan and United States represent manufacturing and R&D sites. "Rest of World" represents all sites managed by Lenovo's Real Estate organization (nonmanufacturing) across the world (small and large – except those in regions listed above).

### C. Lenovo's GHG Emissions Objectives and Targets

During FY 2017/18, Lenovo achieved a 32 percent emissions reduction relative to FY 2009/10. The Scope 1 and Scope 2 reductions were accomplished by implementing energy efficiency projects (approximately 10 new projects such as installing low energy lighting, improving the efficiency of air conditioning systems and optimizing server systems); consolidating operations between existing and newly acquired sites; using solar sources at sites (solar panels in Shanghai and Hefei, China); and purchasing renewable energy certificates from renewable projects in the U.S., international renewable energy certificates from renewable projects in China and Guarantees of Origin in Europe.

Energy and GHG emissions data for all nine years included in our reporting (beginning with the baseline year FY 2009/10) was third-party verified. Visit [www.lenovo.com/climate](http://www.lenovo.com/climate) and follow the link to see the FY 2017/218 GHG and Energy Verification Statements.

Lenovo began disclosing GHG emissions, climate change strategies and climate change risks and opportunities assessments through the voluntary public reporting system CDP (formerly Carbon Disclosure Project) in 2009. According to the results of the 2017 CDP Climate Change questionnaire, Lenovo was rated as Leadership Level with a score of A- and was honored with the 2017 CDP Award of Entrepreneurship on Responding to Climate Change at the October 2017 CDP China report launch event. Additionally, we received a score of A- on the 2017 CDP Supply Chain survey along with recognition of being a 2017 Leading Supplier for Corporate Action on Climate Change in China. Lenovo's annual GHG disclosures are publicly available at [www.cdp.net/reports](http://www.cdp.net/reports).

### D. Emission Trading System

Lenovo was selected for a pilot emission trading system in China. It was determined by the Beijing Municipal authority in 2013 that Lenovo Beijing is a significant energy consumption enterprise since we consumed more than 5,000 MT coal-equivalent electricity (CO<sub>2</sub> emissions over 10,000 MT/year) and as such must meet an emissions trading requirement and emissions reduction of two percent year over year for our Beijing sites. Our server plant in Shenzhen is also listed as a significant carbon emission enterprise, but released emissions do not exceed allocated allowance so reductions are not required. Lenovo is closely monitoring other provinces where this pilot program has been imposed since our sites in Shanghai, Huiyang, Xiamen, Chengdu and Wuhan could be impacted in the future.

The newly implemented China national ETS covers high energy consumption industries such as power, cement and steel. Because Lenovo is classified as an IT industry, the China national ETS requirements have not been imposed on our sites in China at this time.

Lenovo has a climate and energy policy and strategy in place and works on meeting the regulatory requirements of reducing emissions two percent year over year for our Beijing sites. The main activities include: establishing a comprehensive energy/carbon system for Beijing sites including energy efficiency and renewable project identification and implementation (e.g., optimizing equipment controls on our production lines, installing energy-efficient lighting systems, installing solar hot water systems), implementing energy verification and energy management audit and purchasing carbon offsets. This is the fourth year Lenovo has been a part of this scheme. Since our business is developing constantly, we are expecting a need to purchase allowances. The above-implemented energy efficiency projects will help us meet the emissions reductions requirements. Additionally, Lenovo partnered with China Reach Academy of Environmental Sciences on the "Cleaning Production Program" that took place in all locations in Beijing during

2016 and focused on identifying energy savings opportunities and eliminating waste generated in our manufacturing/assembling operations.

### **E. Additional GHG Emissions Performance and Related Initiatives**

#### End-of-Life:

We estimated<sup>4</sup> that Lenovo avoided more than 62,000 MT CO<sub>2</sub>e thanks to recycling end-of-life electronic products in FY 2017/18.

#### Suppliers:

Lenovo continues to fully implement the Responsible Business Alliance's (RBA) Environmental Reporting Initiative or the CDP reporting tool for top Tier 1 suppliers. Based on our suppliers' Scope 1 and 2 GHG emissions reported for 2016, we estimated that the emissions allocated to Lenovo from 90 percent of our direct spend (59 key suppliers) was approximately 1,855,000 MT CO<sub>2</sub>e. During the current reporting period, 88 percent of our procurement spend had specific GHG reduction targets/goals, which were achieved via implementing energy efficiency projects and/or renewable projects. Lenovo's overall supplier emissions decreased due to strengthening suppliers' emissions and environmental controls.

#### Transportation:

During FY 2017/18, Lenovo continued collecting and calculating product transportation emissions data via DHL's carbon data dashboard. Emissions from air, ocean, road and rail from international transport and multiple local carriers in China were estimated based on the shipment data received from key Lenovo carriers, which represent the majority of worldwide global logistics spend. Plans for future work in this area include: expanding emissions data collection to additional key suppliers, assessing the correlation of costs and emissions and setting up quantitative emission reduction targets.

#### Fuel- and Energy-Related Activities:

Lenovo included transmission and distribution (T&D) losses from electricity and natural gas used worldwide in the category "Fuel- and energy-related activities (not included in Scope 1 or 2)." T&D loss rates for electricity by country listed in the World Bank database and natural gas loss mentioned in the ENERGY STAR® Performance Rating document were used for final emissions calculations.

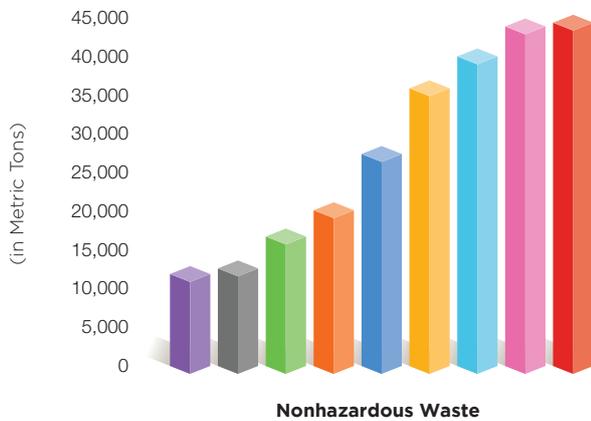
4 The U.S. Environmental Protection Agency Waste Reduction Model (WARM, March 2016) emission factor of 2.50 MT CO<sub>2</sub>e per short ton was used for the estimate — [https://www.epa.gov/warm/versions-waste-reduction-model-warm#WARM\\_Tool\\_V14](https://www.epa.gov/warm/versions-waste-reduction-model-warm#WARM_Tool_V14)

**OPERATIONAL WASTE MANAGEMENT**

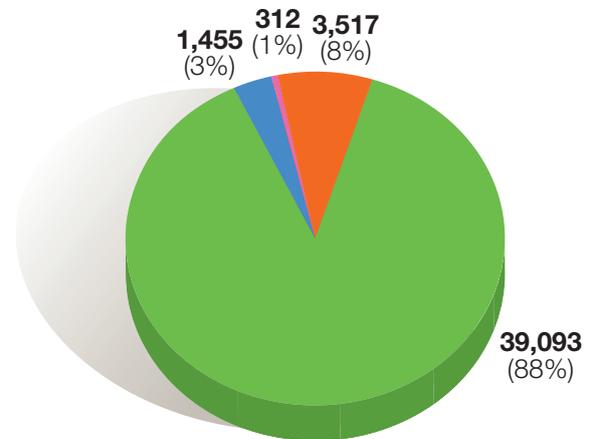
**MANAGING NONHAZARDOUS SOLID WASTE**

One of Lenovo’s primary environmental objectives for operational facilities involves minimizing solid waste and maximizing recycling and reuse. Lenovo manufacturing and R&D facilities as well as some large office locations worldwide achieved a reuse/recycling rate of 91.4 percent during FY 2017/18. Detailed below is the generation of solid waste during the last nine fiscal years and disposition of solid waste in FY 2017/18 from these facilities.

**Nonhazardous Waste**



**Nonhazardous Waste Disposition (Metric Tons)**



- FY 2009/10
- FY 2010/11
- FY 2011/12
- FY 2012/13
- FY 2013/14
- FY 2014/15
- FY 2015/16
- FY 2016/17
- FY 2017/18

- Incineration
- Energy recovery
- Landfill
- Recycled/Reused/Resold

## MANAGING HAZARDOUS WASTE

Lenovo operations generate minimal quantities of hazardous waste. Hazardous waste generated at operational facilities includes oils, coolants, organic solvents, batteries, fluorescent light bulbs and ballasts. All are disposed of in accordance with local environmental regulations with reputable vendors that are approved through a stringent Lenovo audit process. During FY 2017/18, Lenovo neither imported nor exported any hazardous waste. During this reporting year, there were no significant spills. The spike in hazardous waste volume in FY 2014/15 was due to a one-time disposal event associated with the closure of facilities in Brazil.

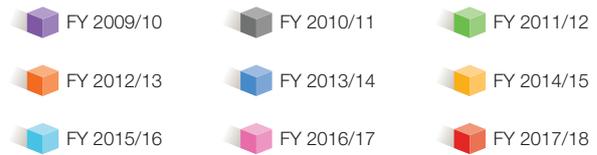
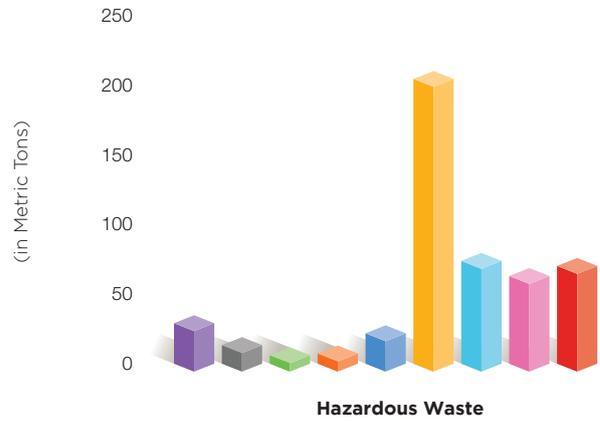
Visit [www.lenovo.com/waterandwaste](http://www.lenovo.com/waterandwaste) and follow the link to see the FY 2017/18 Waste Verification Statement.

## OTHER ENVIRONMENTAL ASPECTS

### WATER RESOURCES

Lenovo’s manufacturing and product development operations do not have any wet processes. Since Lenovo withdraws water only from municipal sources and only for human support, we have minimal impact on local water resources. As a result, there are minimal opportunities to reuse and recycle water, but this metric is tracked. We do, however, identify and implement opportunities

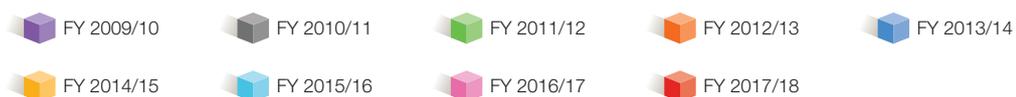
## Hazardous Waste



to reduce and recycle the amount of water we consume. Detailed in the chart below is water withdrawal at Lenovo’s manufacturing and R&D facilities and select large office locations over the past nine years.

Lenovo does not engage in any intentional discharge of wastewater other than into municipal wastewater disposal systems. There were no significant accidental releases of wastewater, fuel, chemicals or other potentially harmful substances at Lenovo facilities during the fiscal year.

## Water Withdrawal and Discharge



During FY 2017/18, there were two incidents of water leakage (Dubai, UAE and Singapore, (Singapore), both due to damaged water pipe lines. Both incidents were found and repaired.

Visit [www.lenovo.com/waterandwaste](http://www.lenovo.com/waterandwaste) and follow the link to see the FY 2017/18 Water Verification Statement.

### **OTHER AIR EMISSIONS**

Lenovo prohibits the use of ozone-depleting substances in our products and manufacturing processes except in HVAC and fire-suppression equipment as permitted by law. Ozone-depleting substances used in HVAC and fire-suppression equipment are managed in accordance with local regulations, and intentional releases are prohibited. Lenovo requires the reporting of releases of

chemical substances as an environmental incident, including unintentional releases. During FY 2017/18, there was one incident of refrigerant release in Whitsett, N.C., which involved the release of approximately 10 pounds of R-22. This incident was due to a leaking HVAC unit. The leak was found and repaired. In other locations, we added refrigerants to equipment only during maintenance services. Lenovo does not have significant direct air emissions such as NO<sub>x</sub> and SO<sub>x</sub>. In addition, Lenovo has no wet chemical or industrial processes that use volatile organic compounds (VOC) and thus has no point sources of VOC. Household and cleaning products that contain small quantities of VOC are used at some of our facilities but associated fugitive emissions are minimal and are not quantified.

## ENVIRONMENTALLY CONSCIOUS PRODUCTS

Lenovo has long been committed to designing and building durable, energy-efficient products that are environmentally benign. Our comprehensive Environmentally Conscious Products Program, launched in 2005, ensures Lenovo remains a green product leader year after year. Supported by Lenovo's Global Environmental Affairs team, the program is implemented by a network of Environmentally Conscious Product engineers and green product teams within each business unit.

### PRODUCT MATERIALS

Lenovo's product development process is focused on integrating environmentally preferred materials into our products. Incorporating post-industrial recycled content (PIC) plastics, post-consumer recycled content (PCC) plastics and closed loop post-consumer recycled plastics (CL PCR)

continues to be instrumental to our development strategy.

### Use of Recycled Plastics

Starting in 2007, as new grades of recycled plastics with PCC became available, Lenovo's product development teams began to use these environmentally preferred materials to satisfy corporate environmental objectives and targets and meet new customer requirements. Using these engineered plastics not only saves the natural resources and energy that would have gone into manufacturing new plastics, but also diverts both PCC and PIC from landfills. We achieve these environmental benefits while still creating a product that meets Lenovo's high-performance standards.

### Usage of PCC in Products Released in FY 2017/18

| 1-10% PCC                                    | >10% PCC                   | > 25% PCC         | > 50% PCC              |
|--|----------------------------|-------------------|------------------------|
| Select Notebooks, Desktops, AIO, Accessories | ThinkPad S5 2nd Generation | ThinkCentre M910z | TIO22Gen3<br>TIO24Gen3 |

### Incorporating Closed Loop Recycled Plastic

In early 2017, Lenovo investigated the feasibility of using closed loop post-consumer recycled (CL PCR) content plastic in its products. For an electronics manufacturer such as Lenovo, "closed-loop" recycled content plastic means plastic derived from recycled electronics. We worked with vendors to identify supply sources and the Lenovo R&D team provided testing support. The team demonstrated that CL PCR content plastic could pass the same stringent performance tests that are applied to other plastics used in our products.

In the summer of 2017 we launched the V410Z All-in-One desktop, which contained 12 percent net (by weight) CL PCR. In October, we launched the ThinkVision T22v-10 monitor comprised of 45 percent net (by weight) CL PCR. Based on these successes, Lenovo plans to expand CL PCR use.

Lenovo continues to expand its emphasis on green design with the ThinkPad L Series. The LCD cover, palm rests and top and bottom cases of ThinkPad L notebooks use up to 30 percent PCC from sources such as used office water jugs and IT equipment. ThinkPad has also succeeded in using PCC in the very thin walls of battery packs. The ThinkPad Ultra Dock, ThinkPad Pro Dock and ThinkPad Basic Dock use PCC as well.

To overcome the continuing challenges of using recycled content in the design and manufacture of smart connected devices — especially notebooks, tablets and smartphones — Lenovo's team of engineers works closely with our PCC suppliers to develop and qualify new grades of plastic resins previously unavailable to the IT industry. Using PCC in IT products presents significant challenges due to the unique structural, performance and cosmetic requirements associated with these applications. Depending on the final application requirements, the plastic resins contain between 10 and 85 percent PCC, with some plastic resins

also containing up to 20 percent PIC. These materials receive environmental and performance qualifications prior to their approval and use in Lenovo product applications.

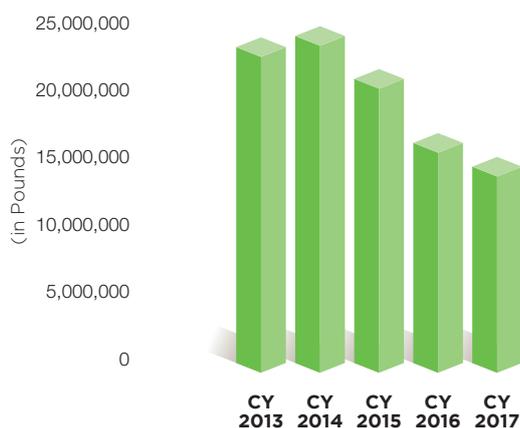
### Recycled Content Usage to Date

Since early 2005, Lenovo has used over 200 million pounds (gross) of plastic materials containing PCC and/or PIC in its products, with net PCC of over 99 million pounds and net PIC of more than 1 million pounds. In 2017, Lenovo used nearly 14 million pounds (gross) of recycled plastics with net PCC of over 9 million pounds.

Please see [Objectives and Targets](#) for Lenovo's recycled content usage targets for FY 2018/19.

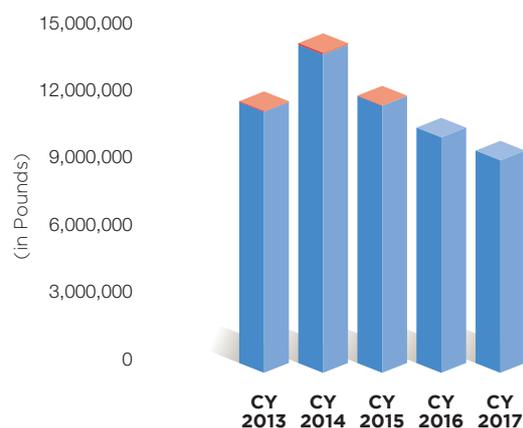
The graph below shows Lenovo's annualized use of PCC and PIC plastics over the past five years. The decline reflects a decreasing use of plastics overall, which is the result of successful efforts to make products thinner and lighter.

### Use of Plastics Containing Recycled Content



 Plastics Containing Recycled Content (PCRC)

### Use of Recycled Plastics in Products



 Net Post-Industrial Recycled Content (PIC)

 Net Post-Consumer Recycled Content (PCC)

## OTHER MATERIALS OF INTEREST

### Supporting a Precautionary Approach

Lenovo's corporatewide environmental standards and specifications require the designers of all Lenovo IT products to consider certain environmentally conscious design practices to facilitate and encourage recycling and minimize resource consumption. Our priority is to use environmentally preferable materials whenever applicable. In adhering to this precautionary approach, Lenovo supports restricting the intentional addition of materials that are potentially concerning when economically and technically viable alternatives exist. These restrictions may also include implementing concentration limits for incidental occurrences.

For materials where economically and technically viable alternatives do not exist, Lenovo collects data on usage above the defined concentration limit. This data can then be reported to customers or other stakeholders. Lenovo continues to actively search for environmentally preferable materials that can be used as substitutes. We also expect our partners and suppliers to demonstrate the same commitment to environmentally sound practices. Our supplier specifications are available at: [https://www.lenovo.com/us/en/global\\_procurement/Guidelines/Restrictions\\_and\\_Packaging.html](https://www.lenovo.com/us/en/global_procurement/Guidelines/Restrictions_and_Packaging.html).

Lenovo restricts the use of environmentally sensitive materials in our products. This includes the prohibition of ozone-depleting substances in all applications, restriction on the use of persistent organic pollutants (POPs) under the Stockholm Convention, and the elimination of materials covered under European Union (EU) Restriction on Hazardous Substances (RoHS) and Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), even beyond those jurisdictions where regulatory requirements exist. Lenovo's implementation strategy and requirements are consistent with the requirements specified in the EU's RoHS Directive and REACH Regulation.

Lenovo supports phasing out<sup>1</sup> brominated flame retardants (BFRs) and PVC, and is committed to driving its supply chain toward this goal. Lenovo has made significant progress toward the elimination of BFR and PVC from our systems. We continue to focus on eliminating halogen from our top-selling products and across as many commodities as possible. Each product group completes a low halogen scorecard for each new product developed. The product groups have committed to improve the generation-to-generation low halogen score for at least one mainstream high-volume product released during FY 2018/19.<sup>2</sup>

Among our achievements:

- Elimination of most BFR and PVC from ThinkPad notebooks. BFRs are used in power cords, cables, AC adapters, planar ASMs, subcards, connectors and some modular parts. PVC is only used in power cords and cables. In addition, all ThinkPad notebooks have low halogen printed circuit boards.
- Many Lenovo commercial monitors meet the iNEMI definition of low halogen exception for their PCBA and external cables.
- Lenovo ThinkCentre desktops have low halogen chassis and CPUs.

<sup>1</sup> Lenovo supports the definition of "BFR/PVC free" as defined in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics (BFR/CFR/PVC-Free)."

<sup>2</sup> To support this activity, all BUs shall include a requirement for the evaluation of low halogen components (including raw card PCBs) in the development marketing requirements document and RFI/RFQs. Qualified low halogen parts available at cost parity shall be used.

Lenovo has completely phased out the use of BFR/PVC in all mechanical plastic parts (such as external covers, housings, etc.) across all Lenovo product lines. Lenovo currently prohibits the following from intentional addition to any Lenovo parts:

- Polybrominated Biphenyls (PBBs)
- Polybrominated Diphenyl Ethers (PBDEs)
- Deca-Brominated Diphenyl Ethers

Lenovo has also made significant progress in phasing out halogen in many commodities across several product lines, including all plastic enclosures, most components and connectors (with the exception of printed board laminates), all mechanical plastic parts such as product covers, housings and bezels, and many hard disk drives, optical disk drives, solid state drives, LCD screens, memory, CPUs, chipsets, communication cards and other commodities with offerings that meet the iNEMI definition of low halogen.

Lenovo plans to use additional BFR-and PVC-free parts and materials across the Think and Idea family of products as acceptable alternative materials become available, working toward the goal to phase out the use of these materials across all newly introduced products. We continue to work with our suppliers to pilot new BFR-and PVC-free applications. Lenovo recognizes that the phase-out of these materials is dependent upon the availability of suitable alternatives that meet Lenovo's technological, quality, environmental, health and safety requirements.

Lenovo has identified a list of materials and substances of environmental interest. These substances may be candidates for further restrictions in the future. Lenovo holds suppliers accountable for reporting the use of these materials through Supplier Material Declarations. An industry standard IPC 1752A XML Full Material Disclosure (FMD) form, submitted via the Green Data Exchange (GDX), is the preferred format for confirmation of compliance to the restrictions and for reporting when substances in question are above the specified concentration levels.

## Big Data Set for Materials and Substances

As of the end of FY 2017/18, Lenovo's FMD system has accumulated more than 50,000 parts of full material information, forming a big data set for materials and substances. This big data set is a tool that can aid structural design and optimization, analyzing materials and mechanical properties and improving product reliability.

Only 2.8 percent of component suppliers do not provide full material disclosure, usually for security or intellectual property reasons. Lenovo does not exempt any supplier, and we will continue progressing on full material disclosure. Those who do not provide full material disclosure are requested to ensure their components' compliance with its own format of material disclosure, IEC 62474 declaration, test report or self-declaration.

Each product has detailed data of 200-300 pieces of similar parts. This is an important basis for Lenovo's design and R&D work, especially for the analysis of material environmental health and safety. In FY 2017/18, Lenovo kicked off a global eco-design program to reduce POPs for personal computer products, including notebooks, desktops, all-in-ones and monitors. The program includes conducting joint research with institutions and industry associations — our materials and substances big data set will be an important tool for them.

We inform our customers about the environmental attributes of our products and compliance with applicable laws and regulations through an industry standard IT Eco Declaration form. Declarations for newly released products are posted on Lenovo's environmental website at: [www.lenovo.com/ecodeclaration](http://www.lenovo.com/ecodeclaration).

Consistent with our precautionary approach, we continuously analyze the regulatory environment and consider input from our customers, nongovernmental organizations (NGOs) and other stakeholders in evaluating the potential health and environmental impacts of our products. We weigh these inputs to determine the restricted substances, as well as the substances of interest to be tracked for reporting and for consideration of future restrictions.

## PRODUCT ENERGY EFFICIENCY

Product energy efficiency remains a core focus for Lenovo. Through collaboration with other OEMs, as well as industry stakeholder work groups, existing and proposed global IT product energy efficiency policies, regulations and requirements are vetted against current and future technology. We leverage these results to develop leading edge products with much improved operating and overall efficiencies. Ongoing activities include updates to the ENERGY STAR® program specifications, U.S. DOE Appliance and Equipment standards, California Appliance Efficiency Program requirements, China CEC standards, EU Ecodesign (ErP) requirements and many other emerging protocols and regulations.

To further improve product energy efficiency for desktops, workstations and servers, Lenovo certifies internal power supplies to CLEAResult Plug Load Solutions' 80 Plus program for power supply efficiency. 80 Plus certified power supplies are independently tested and verified to the program's rated efficiency criteria; i.e., Bronze, Silver, Gold and Platinum. Lenovo desktop, workstation and server products equipped with 80 Plus power supplies are significantly more energy efficient than systems equipped with typical power supplies.

The energy consumption and performance of Lenovo products meet the efficiency requirements of China, Japan, the U.S., Europe and other jurisdictions. Many Lenovo notebook, desktop, server and monitor products satisfy and even exceed the current ENERGY STAR® requirements. The ENERGY STAR® qualified models are listed at [www.energystar.gov](http://www.energystar.gov). For more information about Lenovo's energy-efficient products, visit: [www.lenovo.com/energy](http://www.lenovo.com/energy).

### Product Energy Management Features

Lenovo offers innovative tools for taking control of PC and server power consumption, determining energy savings and reporting on the energy performance of building management, equipment and IT devices.

| PC Tool                          | Benefit  |
|----------------------------------|--|
| "Lenovo Settings" app in Windows | Provides power management features for the user (i.e., Connected Standby)  |
| Adaptive Thermal Management      | Adjusts system power and fan speeds based on ambient levels  |
| Active Directory and LANDesk®    | Supports remote deployment of power schemes and global settings to allow administrators the ability to control and enforce ThinkPad® energy savings company-wide |
| Lenovo EasyResume                | Gives quick recovery from computer lid close, balancing low power state by suppressing CPU usage at lid close  |
| Intelligent Cooling              | Balances thermal performance to adjust settings to provide a cooler surface for comfort while optimizing product energy performance                              |

| Server Tool  | Benefit   |
|--|---|
| The “New Customer WebUI” app [ThinkServer management model]                                    | Provides power management features for the user   |
| Supports remote deployment of power schemes and global settings [ThinkServer management model] | Allows administrators the ability to control and enforce ThinkPad energy savings company-wide   |
| Power Manager™ [other operating systems]   | Helps optimize energy used by a running machine and saves up to 30 percent on energy consumption  |
| Lenovo ASHRAE Management   | Adjusts processor and fan speeds based on ambient levels  |
| Rack Planner   | Helps users better plan for rack efficiency by increasing rack density and calculating power consumption based on specific configurations   |
| Smart Grid   | Helps users monitor and manage the power consumption and temperature of ThinkServers with Intel Node Manager. Smart Grid can save power, increase rack density and avoid data center hotspots   |
| PSU smart-on   | When the system detects that the power loading is low in redundant PSU configuration, it can transfer the loading from 2 PSU to 1 PSU to get higher power efficiency and save power   |
| Diagnostics  | Capabilities and Easy OS installation (LEPT) embedded   |
| 80 PLUS Titanium™ server power supplies or PSUs [available for select System x servers]        | By improving the efficiency of the server PSUs, energy efficiency improvements can be cascaded up through the data center for both power and cooling  |
| Liquid cooling solutions   | Can reduce the facility demands for data center chillers, resulting in facility infrastructure savings  |
| Lenovo Efficiency Mode™ (LEM)  | Works in cooperation with the operating system to fine tune the operating efficiency of the server. LEM can boost performance per watt efficiency by up to 11 percent compared to a server that is not using LEM  |
| Intelligently managing power consumption   | Unused devices embedded in System x servers are either powered down or placed into very low power state automatically during boot time and/or dynamically at run time. Devices include CPU cores, memory channels and DIMMs, PCI express ports, QPI links, SATA and SAS storage controllers, network controllers, serial ports, USB controllers and voltage regulatory devices (VRDs) |

## PRODUCT CARBON FOOTPRINT

Lenovo engages members of the information and communication technology (ICT) industry and academia in the development of a tool to simplify and expedite determination of the Product Carbon Footprint (PCF) for ICT products through the Product Attribute Impact Algorithm (PAIA) project. Lenovo's product development groups currently use the PAIA notebook, desktop, monitor, all-in-one, tablet, thin clients, servers and network switch products PCF calculation tools, and are engaged in development of a tool for storage and an online platform.

Lenovo, along with RBA (formerly EICC), the Massachusetts Institute of Technology, HP Inc., Seagate and Cisco, has been working on development of product-specific allocation methods that link facility-wide carbon data to the specific product types manufactured within that facility.

To download PCF sheets for specific Lenovo products, visit [www.lenovo.com/ecodeclaration](http://www.lenovo.com/ecodeclaration). These information sheets are generated using the streamlined PAIA life cycle analysis and include manufacturing, transportation, use and end-of-life. For more information about Lenovo's work on calculating product carbon footprints, visit [www.lenovo.com/climate](http://www.lenovo.com/climate).

## DURABLE PRODUCTS ARE ENVIRONMENTALLY RESPONSIBLE

The longer a product lasts, the longer it stays out of the waste stream. Lenovo designs its products to maximize their product lifecycle, and offers three-year standard warranties and five years of replacement parts availability on many of our top selling commercial products. Three-year warranties are offered as the base warranty on many top-selling Think-branded products, including all commercial monitors, notebooks, desktops and others. In addition, customers can purchase warranty upgrades to extend the base warranty by one or two years for many products. Base warranties for Lenovo consumer (Idea) products vary by product type and geography, but typically

start at one to two years, with the option for many products to purchase an extended warranty. For more details on Lenovo's warranties, please visit <https://www.lenovo.com/us/en/services-warranty/>.

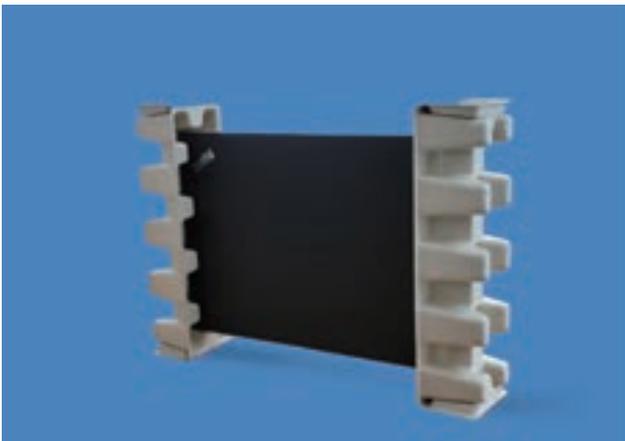
Lenovo is continuously designing innovative features for our products to help extend their useful life. For example, Lenovo Battery Longevity Technology extends notebook battery cycle life through key technologies, including:

- **Increased use of lithium polymer cells:** Used in notebooks and tablets with embedded batteries, these cells typically provide longer life cycles than lithium ion cylindrical cells.
- **Longer lifespan batteries:** Many Lenovo embedded batteries are designed to last two to three times longer than standard batteries. Lenovo Services offers three-year warranty upgrades on many embedded batteries. The longer lifespan is made possible due to carefully designed cells and charge algorithms.
- **Dual mode charging algorithms:** These technologies are used on most notebook batteries and adjust charge voltage and current over time to prolong the battery's lifespan. The feature is implemented in the hardware and as part of the battery firmware, so it is not operating system or application dependent and works with any software load.
- **Field updateable battery firmware:** Customers can download a firmware update utility which allows them to apply firmware fixes to batteries in service, eliminating the need to replace batteries due to firmware problems. This program allows customers to apply fixes quickly and at no cost, even on batteries outside of the warranty.

## PRODUCT PACKAGING

Lenovo is committed to offering environmentally preferable packaging for its products. Over the past several years, Lenovo has had a strong focus on increasing the use of recycled and recyclable materials in packaging, reducing the size of packaging and expanding the use of bulk and reusable packaging solutions.

In FY 2017/18, Lenovo began implementing the use of an innovative bio-based packaging made from bamboo and sugar cane fiber. The material is not only 100 percent biodegradable, it is lighter than previous packaging and its strength characteristics enable design improvements that reduce overall package size. We used this packaging to ship memory and one of our ThinkPad models, gaining positive results. Weight reduction in the packaging material, combined with package weight reductions from design improvements, resulted in a 6.7 percent efficiency improvement in transportation CO<sub>2</sub> emissions. Lenovo plans to implement wider use of this packaging material going forward.



New bamboo and sugar cane fiber packaging is 100 percent biodegradable and lighter than previous packaging materials

Lenovo discourages the use of polystyrene packaging wherever possible, and encourages the use of molded pulp, fiber and low-density polyethylene (LDPE). For more information about the process for making and recycling LDPE thermoformed cushions, visit [www.lenovo.com/packaging](http://www.lenovo.com/packaging) and follow the link from there.

Lenovo continues to drive increases in the use of recycled content materials in product packaging. For example, all Think product primary carton boxes are certified to contain a minimum of 50 percent post-consumer fiber content and are required to use the maximum available post-consumer material where adequate supplies exist without compromising required packaging performance characteristics. The use of recycled content in Lenovo corrugated box packaging averages more than 70 percent. Lenovo has also transitioned 95 percent of ThinkPad products to recycled cushioning materials with the ThinkPad Edge using 100 percent recycled cushioning materials. Printing on boxes is done via flexography with water-based, non-toxic, RoHS-compliant inks.

Lenovo has a strong focus on reducing the size of our packaging to minimize the amount of materials used while maintaining adequate protection for our products. Smaller packages also contribute to increased pallet density, enabling Lenovo to increase pallet density by over 33 percent in many cases. Lenovo uses reusable bulk packaging in our own internal operations for the transportation of chassis to manufacturing locations. In addition, bulk packaging and reusable bulk packaging may be available for many of Lenovo's products for customers in select regions.

Since 2008, Lenovo has eliminated 2,750 tons of packaging consumption by weight. In FY 2017/18 alone, the Packaging Team reduced packaging consumption by 250 tons.

To see how Lenovo performed against its FY 2017/18 packaging targets, please see page [109](#).

### Reuse

Lenovo provides the end customer an optional returnable packaging service, in which packaging materials can be sent back to Lenovo after receiving the products and reused for new shipments by Lenovo. Lenovo is also devoted to the reuse of incoming component packaging, especially returning chassis packaging.

## Packaging Specifications

Lenovo communicates environmental requirements for packaging to suppliers via a series of packaging specifications. These specifications include requirements for minimum amounts of recycled content, marking for proper recycling, banned materials and other elements. All corrugated container (box) packaging should use a minimum of 50 percent post-consumer recycled fiber, and all paperboard packaging should contain a minimum of 45 percent post-consumer recycled fiber and 100 percent recovered fiber. In addition to meeting these specifications, many Lenovo packaging suppliers provide Forest Stewardship Council (FSC)-certified products for Lenovo packaging. Lenovo is currently in the process of assessing the global availability of FSC-certified packaging to support manufacturing facilities in all geographies.

## PRODUCT END-OF-LIFE MANAGEMENT (PELM)

At Lenovo, PELM includes the reuse, refurbishing, de-manufacturing, dismantling, reclamation, shredding, recycling, treatment and disposal of products, parts and peripherals when they are taken out of service, reach end-of-life and/or are scrapped. This includes the recovery and reuse of products, parts subassemblies and components, including scrap electronic and electrical components such as disk drives, printed wiring boards, power supplies, and cables and cords. Lenovo-branded and non-branded products owned or accepted by Lenovo (including customer returns or take back) are included in this definition.

As a part of our efforts to improve Lenovo's supplier base around the globe, we have made available our "[Lenovo Environmental Electronics End of Life Standard](#)." This document details what is required to become a Lenovo end-of-life partner. We continue to require (where available) and encourage our global supplier base to become R2 or e-Stewards certified.

### KEY ELEMENTS OF PELM

Lenovo supports efforts to reduce the volume of end-of-life electronic products being disposed of in landfills, as well as efforts to reduce the need for new raw materials by increasing the beneficial reuse of products and parts, or recycling of materials.

- We support legislation assigning financial responsibility for end-of-life management to the individual producers.
- We advocate legislative initiatives that allow at least the option for manufacturers to recover their own brand products, using the information gained from recycling their own brands to be fed back into the product design process. This practice optimizes the cost not only for the manufacturer, but the consumer as well.

- We encourage our customers to reuse or recycle products at the end of their life cycle by offering consumers and/or commercial clients a range of recycling options for disposing of products, batteries and product packaging worldwide through voluntary programs and/or country, province or state mandated programs.

If you are interested in learning more about these programs, please visit: [www.lenovo.com/recycling](http://www.lenovo.com/recycling).

### PRODUCT TAKE-BACK PROGRAMS

As a global company, Lenovo offers end-of-life recycling and management programs for both consumer and business customers in many countries around the world. Offerings are tailored to the specific location and business need and include programs for recycling products as well as packaging and batteries in many geographies.

In many European countries, Lenovo offers customers free-of-charge waste electrical and electronic equipment (WEEE), battery, and packaging recycling options through local recycling systems. With support of our Europe/Middle East/Africa (EMEA) compliance partner 1cc, Lenovo managed over 50 direct take-back programs for WEEE, batteries and packaging in more than 20 countries. In FY 2017/18, we managed more than 30,800 tons of equipment.

With this engagement, Lenovo financed takeback activities in Europe totaling more than six million Euros in FY 2017/18. Lenovo will continue to play an active role in the EMEA recycling landscape and plans to extend coverage of Lenovo take-back systems to regions in Eastern Europe and other countries outside of the EU.

Customers can obtain information about Lenovo's recycling programs and details on offerings by country at: [www.lenovo.com/recycling](http://www.lenovo.com/recycling).

For our business customers, Lenovo offers Asset Recovery Services (ARS) in more than 40 countries. Customer-access information for these programs in the Americas, Asia Pacific and EMEA can also be obtained at: [www.lenovo.com/recycling](http://www.lenovo.com/recycling).

## MANAGEMENT OF LENOVO'S PELM SUPPLIERS

Lenovo maintains an extensive program for ensuring that remarketed products and parts and the refurbishing, remanufacturing, recycling and disposal of end-of-life products owned by Lenovo or returned by customers are accomplished in an environmentally conscious and legally compliant manner. This program includes Lenovo onsite environmental evaluations and approvals in accordance with Lenovo's stringent auditing protocol. Some of the critical evaluation requirements include:

- Supplier completion of Lenovo's initial supplier evaluation form declaring their processing capabilities and controls, environmental, health and safety management systems, and legal compliance.
- Supplier full downstream disclosure of facilities involved with receiving equipment or waste; reusing equipment as a product, part or material; and disposing of waste and ensuring all facilities maintain compliance.
- Successful Lenovo onsite environmental and services audit of all facilities and processes prior to their use, and documentation of audit findings and recommendations in a final report.

- Review of all audit documentation and recommendations by Lenovo's Product End-of-Life Management Program Manager, and final approval by Lenovo's Director of Global Environmental Affairs.
- Maintain Lenovo Corporate Approved Supplier Facility listing by geography and approved services for use by all Lenovo organizations, sites and programs worldwide in Lenovo's internal database.
- Establishment of a Lenovo contract with each approved supplier with specific environmental terms and conditions related to expected environmental performance and reporting.

Suppliers include surplus buyers, end-of-lease, asset recovery services, legal and voluntary product take-back providers, field services, dismantlers, recyclers and disposal vendors. All recovered products and parts are required to be data wiped, refurbished, tested for function, labeled as refurbished and resold where they will be used as originally intended without further refurbishing before use. Suppliers are required to use Lenovo-approved recyclers for the disposition of non-working products and parts and waste generated from their refurbishing processes. Lenovo prohibits the shipment of hazardous waste to non-OECD countries.

Additionally, Lenovo incorporates specific environmental terms and conditions into contracts and agreements with all PELM suppliers. Approved and contracted facilities are required to submit regular environmental reports documenting the total quantities of equipment and e-waste collected and processed on behalf of Lenovo and Lenovo customers, including the identification of methods of disposition and their percentages. Periodic follow-up audits are also completed to ensure continued compliance to legal and Lenovo environmental requirements.

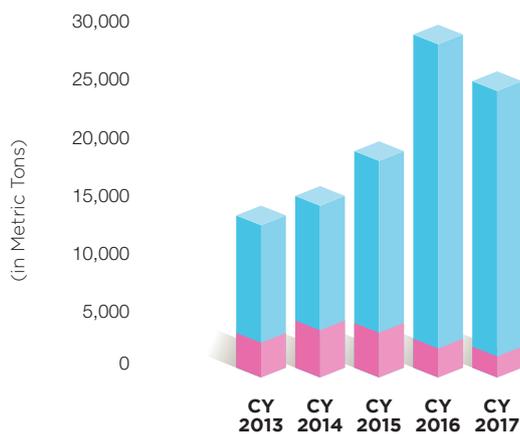
## RECOVERY AND RECYCLING TRENDS

During the 2017 calendar year, Lenovo financed or managed the processing of 24,872 metric tons, equivalent to more than 54.8 million pounds, of Lenovo-owned and customer-returned computer equipment. Of this total, 2.5 percent was reused as products or parts, 91.7 percent was recycled as materials, 3.3 percent was incinerated with waste-to-energy recovery, 1.1 percent was incinerated as disposal treatment, and 1.4 percent was disposed of by landfill. As part of Lenovo's continual

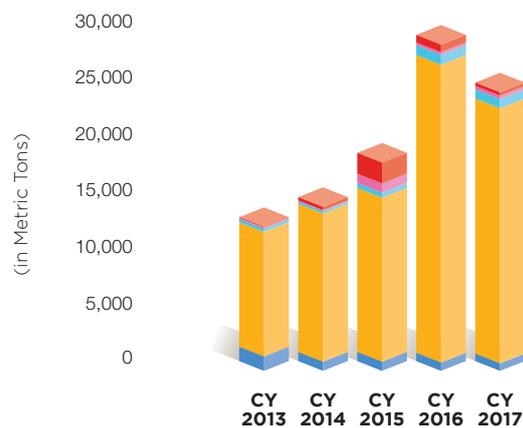
improvement activities, we look for opportunities to reduce the use of incineration and landfills, and maximize reuse and recycling.

Since its launch as a global company in May 2005, Lenovo has processed more than 207,000 metric tons, or more than 457 million pounds, of computer equipment through our contracted service providers. Trends for the most recent five calendar years are illustrated below:

### Recovery and Recycling Trends (PELM)



### Product End-of-Life Management (PELM) Disposition



Other PELM

Product Take Back (PTB)

Reused

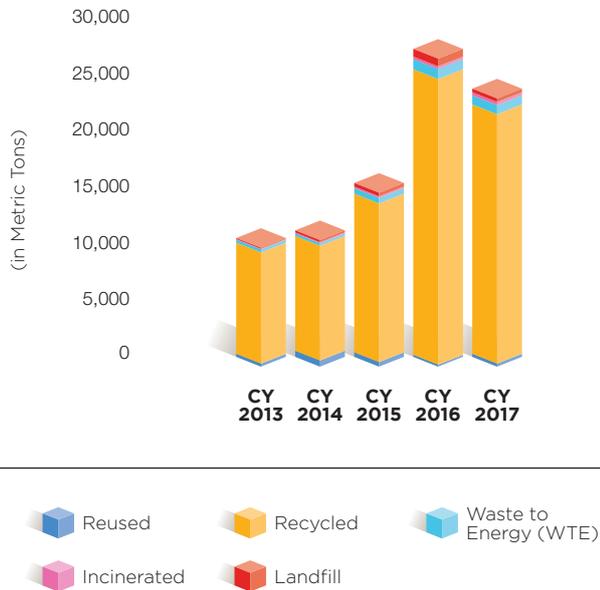
Incinerate

Recycled

Landfill

Waste to Energy (WTE)

## Product Take-Back (PTB) Disposition



Our customers have shown considerable interest in our recycling programs. In 2017, customer returns constituted more than 23,800 metric tons, or more than 52 million pounds. Our 2017 performance includes data from Lenovo's Asset Recovery Services offered to large enterprises, along with data from Lenovo's other voluntary and legally required product take-back programs for consumers and businesses.

80



# CONSOLIDATED METRICS, OBJECTIVES AND TARGETS

|     |                                   |
|-----|-----------------------------------|
| 102 | FY 2017/18 Consolidated Metrics   |
| 109 | FY 2017/18 Performance            |
| 113 | FY 2018/19 Objectives and Targets |

# CONSOLIDATED METRICS, OBJECTIVES AND TARGETS

## FY 2017/18 CONSOLIDATED METRICS

### General Data

|   | FY 2013/14        | FY 2014/15        | FY 2015/16        | FY 2016/17        | FY 2017/18        |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Revenue</b> (Millions USD)                         | \$38,707          | \$46,296          | \$44,911          | \$43,035          | \$45,350          |
| <b>Revenue Analysis by Geography</b>                  | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| Americas  | 21%               | 26%               | 30%               | 30%               | 31%               |
| EMEA (Europe, Middle East, Africa)                    | 25%               | 28%               | 26%               | 26%               | 28%               |
| Asia Pacific (excluding China)                        | 16%               | 14%               | 16%               | 16%               | 16%               |
| China   | 38%               | 32%               | 28%               | 28%               | 25%               |
| <b>Revenue Analysis by Business Group<sup>1</sup></b> | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| PC  | 82%               | 72%               | 69%               | 70%               | 71%               |
| Mobile Internet/Digital Home (MIDH)                   | 14%               | 20%               | 19%               | 18%               | 16%               |
| Enterprise  | 1%                | 6%                | 10%               | 9%                | 10%               |
| Others  | 3%                | 2%                | 2%                | 3%                | 3%                |
| <b>Research and Development</b>                       | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| Expenditures/Sales                                    | 1.89%             | 2.64%             | 3.32%             | 3.16%             | 2.94%             |

**Employees, Health and Safety**

| <b>Number of Employees<sup>2</sup></b>              | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Total</b>  | 54,372            | 50,348            | 48,975            | 46,163            | 45,754            |
| <b>Percentage of Employees by Region</b>            |                   |                   |                   |                   |                   |
| Americas  | 23%               | 25%               | 15%               | 15%               | 16%               |
| Asia Pacific (excluding China)                      | 7%                | 8%                | 8%                | 9%                | 9%                |
| China   | 63%               | 59%               | 69%               | 66%               | 66%               |
| EMEA (Europe, Middle East, Africa)                  | 7%                | 8%                | 8%                | 9%                | 8%                |
| <b>Percentage of Employees by Gender</b>            |                   |                   |                   |                   |                   |
| Males   | 60%               | 64%               | 66%               | 65%               | 65%               |
| Females   | 40%               | 36%               | 34%               | 35%               | 35%               |
| <b>Hours of training per manufacturing employee</b> |                   |                   |                   |                   |                   |
| (including part-time employees)                     | 35                | 35                | 35                | 35                | 35                |
| <b>Incident Rates</b>                               |                   |                   |                   |                   |                   |
| Recordable Rate                                     | 0.19              | 0.13              | 0.1               | 0.07              | 0.09              |
| Lost-Time Rate                                      | 2.27              | 2.20              | 2.69              | 0.5               | 1.5               |
| Number of employee fatalities (work-related)        | 0                 | 0                 | 0                 | 0                 | 0                 |
| Number of contractor fatalities (work-related)      | 0                 | 0                 | 0                 | 0                 | 0                 |
| <b>Number of OHSAS 18001 registered facilities</b>  |                   |                   |                   |                   |                   |
|   | 9                 | 10                | 10                | 10                | 10                |

**Communities and Philanthropy<sup>3</sup>**

|  | FY 2013/14 | FY 2014/15 | FY 2015/16 | FY 2016/17 | FY 2017/18  |
|--|------------|------------|------------|------------|-------------|
| <b>Corporate Cash and Product Donations</b>                              |            |            |            |            |             |
| Lenovo Foundation and Donor Advised Funds <sup>4</sup>                   | \$417,500  | \$590,000  | \$404,000  | \$75,000   | \$819,000   |
| China  | \$358,000  | \$176,000  | \$311,000  | —          | \$48,000    |
| North America <sup>5</sup>   | \$156,500  | \$411,450  | \$692,000  | \$906,000  | \$325,000   |
| Lenovo Match of North America Employee Donations                         | \$214,988  | \$259,431  | \$281,778  | \$352,654  | \$339,000   |
| EMEA (Europe, Middle East, Africa)                                       | —          | \$105,000  | \$169,000  | \$64,000   | \$86,000    |
| Asia Pacific (excluding China)   | —          | \$10,880   | \$82,000   | \$59,000   | \$195,000   |
| <b>Regional Product and Other In-Kind Donations</b>                      |            |            |            |            |             |
| Latin America <sup>6</sup>   | \$262,086  | —          | \$319,000  | \$15,000   | \$111,000   |
| China  | \$542,000  | \$113,000  | \$100,000  | \$300,000  | \$330,516   |
| North America  | \$366,409  | \$280,766  | \$388,000  | \$946,000  | \$1,050,000 |
| EMEA (Europe, Middle East, Africa)                                       | —          | \$60,000   | \$36,000   | \$50,000   | \$21,000    |
| Asia Pacific (excluding China) <sup>7</sup>                              | —          | \$155,928  | \$140,000  | \$67,000   | \$375,709   |
| Disaster Response in U.S. and Mexico (reported at cost)                  |            |            |            |            | \$1,714,000 |
| <b>Employee Volunteering Hours (through efforts sponsored by Lenovo)</b> |            |            |            |            |             |
| North America  | 7,500      | 16,000     | 19,000     | 26,205     | 19,296      |
| Rest of World  | >5,000     | >5,000     | >5,000     | 1,266      | 10,704      |
| <b>Estimated Value of Employee Volunteer Hours<sup>8</sup></b>           |            |            |            |            | \$1,300,000 |
| <b>Total Contribution to Communities</b>                                 |            |            |            |            | \$6,714,225 |

*\$7M USD device contribution from Lenovo's Mobile Business Group to the Sprint 1Million Project not included in "Total Contribution to Communities" — please see page 64 for more information.*

**Environmental Data**

|  | FY 2013/14        | FY 2014/15        | FY 2015/16        | FY 2016/17        | FY 2017/18        |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>GHG Emissions<sup>9</sup></b><br>(metric tons CO <sub>2</sub> equivalent – MT CO <sub>2</sub> e)                                    |                   |                   |                   |                   |                   |
| Scope 1  | 13,507            | 8,996             | 7,068             | 8,294             | 6,371             |
| Scope 2 (location-based)   | 244,372           | 221,406           | 228,493           | 213,637           | 193,760           |
| Total Scope 1 & Scope 2 (location-based)   | 257,879           | 230,402           | 235,561           | 221,931           | 200,131           |
| Scope 2 (market-based)   | 244,372           | 221,406           | 203,041           | 185,400           | 176,800           |
| <b>Scope 3</b>   | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| Business Travel  | 26,844            | 34,600            | 39,000            | 58,000            | 49,000            |
| Product Transportation   | 316,594           | 293,102           | 326,840           | 351,100           | 359,000           |
| Emissions from Waste   | 1,058             | 2,138             | 2,149             | 2,390             | 1,700             |
| Employee Commuting   | 24,720            | 30,700            | 26,300            | 23,800            | 20,100            |
| Purchased Goods and Services   | 1,117,052         | 1,054,683         | 1,646,141         | 2,054,900         | 1,855,000         |
| Fuel- and Energy-Related Activities<br>(not included in Scope 1 or 2)  | 8,936             | 10,737            | 14,664            | 12,300            | 11,900            |
| Use of Sold Products   | 14,300,000        | 12,800,000        | 12,000,000        | 11,600,000        | 11,847,000        |
| End-of-Life Treatment of Sold Products   | 400,000           | 300,000           | 290,000           | 280,000           | 271,000           |
| Capital Goods  | N/A               | 37,700            | 227,700           | 101,000           | 246,000           |
| <b>Emissions Intensity: GHG Emissions – Scope 1 &amp; Scope 2 (location-based)<sup>9</sup></b><br>(metric tons per \$ million revenue) | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
|  | 6.66              | 4.98              | 5.25              | 5.16              | 4.41              |
| <b>Operational Energy Intensity Use – Scope 1 &amp; Scope 2 (location-based)<sup>9</sup></b><br>(MWh per \$ million revenue)           | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| Fuel Combustion  | 0.54              | 0.72              | 0.74              | 0.94              | 0.77              |
| Purchased Energy<br>(electricity, steam, cooling)  | 4.14              | 4.66              | 6.97              | 6.74              | 6.57              |
| <b>Operational Energy Use – Scope 1 &amp; Scope 2 (location-based)<sup>9</sup></b><br>(MWh)  | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| Fuel Combustion  | 20,953.29         | 33,201.65         | 33,363.16         | 40,257.94         | 34,733.55         |
| Purchased Energy<br>(electricity, steam, cooling)  | 160,298.07        | 215,753.86        | 313,027.41        | 290,112.63        | 298,019.77        |

## Environmental Data

|  | FY 2013/14        | FY 2014/15        | FY 2015/16        | FY 2016/17        | FY 2017/18        |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Voluntary Purchases of Renewable Energy<sup>9</sup></b>                   | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| Solar Energy (MWh)   | 332               | 201               | 221               | 1,607             | 3,713             |
| Renewable Energy Credits (MWh) <sup>10</sup>                                 | 12,621            | 15,000            | 26,400            | 16,250            | 500               |
| International Renewable Energy Credits (MWh) <sup>10</sup>                   | N/A               | N/A               | N/A               | 22,000            | 13,200            |
| Guarantees of Origin (MWh) <sup>10</sup>                                     | N/A               | 10                | 4,500             | 7,300             | 8,600             |
| Carbon Offsets (MT CO <sub>2</sub> e)  | 45,765            | 80,000            | 54,000            | 55,000            | 10,000            |
| <b>Renewable Energy Generation Capacity (MW)<sup>11</sup></b>                | 0.3               | 0.3               | 0.3               | 5.5               | 5.5               |
| <b>Water<sup>12</sup></b><br>(in Cubic Meters)                               | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| Water Withdrawal   | 874,742           | 1,202,689         | 1,366,829         | 1,429,610         | 1,385,080         |
| Waste Water Discharge Values   | 811,807           | 1,127,164         | 1,298,427         | 1,351,405         | 1,260,986         |
| Wastewater Exceedances   | 0                 | 0                 | 0                 | 0                 | 0                 |
| <b>Waste<sup>13</sup></b><br>(in Metric Tons)                                | <b>FY 2013/14</b> | <b>FY 2014/15</b> | <b>FY 2015/16</b> | <b>FY 2016/17</b> | <b>FY 2017/18</b> |
| Nonhazardous Waste   | 27,316.95         | 35,944.75         | 40,041.55         | 44,032.69         | 44,377.44         |
| Hazardous Waste  | 26.57             | 210.29            | 78.90             | 67.65             | 75.27             |
| <b>Recovery and Recycling Trends</b><br>(in Metric Tons)                     | <b>CY 2013</b>    | <b>CY 2014</b>    | <b>CY 2015</b>    | <b>CY 2016</b>    | <b>CY 2017</b>    |
| Product End-of-Life Management (PELM) <sup>14</sup>                          | 12,806            | 14,587            | 18,600            | 29,075            | 24,872            |
| Product Take Back (PTB) <sup>14</sup>  | 10,578            | 11,252            | 15,487            | 27,392            | 23,868            |
| <b>Product End-of-Life Management (PELM) Disposition</b><br>(in Metric Tons) | <b>CY 2013</b>    | <b>CY 2014</b>    | <b>CY 2015</b>    | <b>CY 2016</b>    | <b>CY 2017</b>    |
| Reused   | 1,239             | 788               | 778               | 710               | 619               |
| Recycled   | 11,130            | 13,209            | 14,620            | 26,569            | 22,808            |
| Waste to Energy (WTE)  | 264               | 251               | 507               | 907               | 826               |
| Incinerate   | 46                | 78                | 804               | 233               | 284               |
| Landfill   | 127               | 256               | 1,891             | 656               | 336               |
| Total  | 12,806            | 14,587            | 18,600            | 29,075            | 24,872            |

**Environmental Data**

|   | FY 2013/14     | FY 2014/15     | FY 2015/16     | FY 2016/17     | FY 2017/18     |
|---|----------------|----------------|----------------|----------------|----------------|
| <b>Product Take Back (PTB) Disposition</b>  | <b>CY 2013</b> | <b>CY 2014</b> | <b>CY 2015</b> | <b>CY 2016</b> | <b>CY 2017</b> |
| (in Metric Tons)                            |                |                |                |                |                |
| Reused                                      | 266            | 534            | 375            | 164            | 261            |
| Recycled                                    | 9,895          | 10,205         | 14,128         | 25,445         | 22,194         |
| Waste to Energy (WTE)                       | 261            | 251            | 502            | 906            | 826            |
| Incinerated                                 | 45             | 78             | 134            | 233            | 270            |
| Landfill                                    | 111            | 184            | 348            | 644            | 318            |
| Total                                       | 10,578         | 11,252         | 15,487         | 27,392         | 23,868         |
| <b>Use of Recycled Plastics in Products</b> | <b>CY 2013</b> | <b>CY 2014</b> | <b>CY 2015</b> | <b>CY 2016</b> | <b>CY 2017</b> |
| (in Pounds)                                 |                |                |                |                |                |
| Plastics Containing Recycled Content (PCRC) | 22,988,393     | 23,850,027     | 20,597,606     | 15,802,979     | 13,994,678     |
| Net Post Consumer Recycled Content (PCC)    | 11,338,718     | 13,883,806     | 11,622,364     | 10,204,469     | 9,112,367      |
| Net Post Industrial Recycled Content (PIC)  | 8,818          | 18,739         | 6,724          | 0              | 0              |
| <b>ENERGY STAR® Certified Products</b>      |                |                |                |                |                |
| <b>Availability</b>                         |                |                |                |                |                |
| (% of product)                              |                |                |                |                |                |
| Notebook Platforms                          | 100%           | 98%            | 100%           | 98%            | 100%           |
| Desktop Platforms                           | 73%            | 82%            | 90%            | 94%            | 99%            |
| Workstation Platforms                       | 73%            | 71%            | 76%            | 78%            | 78%            |
| Server Platforms                            | 83%            | 94%            | 92%            | 91%            | 91%            |
| Monitors                                    | 97%            | 97%            | 97%            | 98%            | 100%           |

**FOOTNOTES:**

1. A change in organization structure in FY 2016/17 led to a restatement of revenue analysis data for previous years according to the new structure.
2. Number of Employees — Total includes Lenovo employees (regular and supplemental) only. Contractors are not included as they are not Lenovo employees.
3. In FY 2017/18 Lenovo reorganized its philanthropy efforts, including transitioning the Motorola Mobility Foundation to the Lenovo Foundation.
4. The increase in FY 2017/18 is attributed to the Lenovo Foundation being fully integrated into Lenovo's giving reporting.
5. The decrease in FY 2017/18 is attributed to re-classifying some donations as disaster-related regional giving.
6. The increase in FY 2017/18 is attributed to contributions made through the first Global Week of Service and the launch of formal partnerships in the region.
7. The increase in FY 2017/18 is attributed to re-classifying India Companies Act giving as in-region.
8. Estimated value of volunteer hours based on an average value of hourly wage in North America, adjusted to a lower hourly wage for rest of world. Total value is likely underreported.

9. Lenovo's GHG Emissions and Energy Inventory Specifics:  
 Lenovo started to verify energy and GHG emissions data in FY 2009/2010.  
 At the end of FY 2012/13 Lenovo adjusted its historical Scope 1 and 2 CO<sub>2</sub>e emissions data to account for acquiring Medion in Germany and creating joint venture with NEC in Japan. At the end of FY 2015/16 Lenovo adjusted historical Scope 1 and 2 CO<sub>2</sub>e emissions data to account for acquiring System x and Motorola Mobility.  
 Lenovo started to report location-and market-based Scope 2 from FY 2015/16. Base year's and consecutive years' Scope 2 totals are the same for location and market-based method as product and supplier-specific market-based data were not available in the base year and consecutive years so the location-based results has been used as a proxy for the market-based method.  
 Beginning in FY 2015/16, System x and Motorola Mobility data are included in energy and Scope 3 emissions data. Approximately 1% of purchased energy (electricity) is estimated based upon energy use at similar Lenovo facilities with metered usage.  
 Product transportation emissions include key upstream suppliers representing majority of global logistics spend. Note: Upon looking into GHG Protocol standard we decided to re-categorize this to upstream from downstream transportation (from FY 2016/17, previous years were adjusted accordingly).  
 Emissions from waste include nonhazardous waste, hazardous waste and waste water from all manufacturing, R&D locations and some large offices. No product waste is included.  
 Purchased goods and services include suppliers covering 90% of direct global suppliers spend. The RBA Carbon and Water Reporting Tool was used for collection of supplier data. Data was allocated based on revenue.  
 Fuel-and energy-related activities (not included in Scope 1 or 2) include transmission & distribution (T&D) losses from Lenovo's worldwide purchased electricity and natural gas. A World Bank database and Energy Star Performance Rating document were used for determining T&D loss rates.  
 Lenovo used the current Product Attribute Impact Algorithm (PAIA) notebook, desktop, monitor, tablet, all-in-one, ThinClient and server tool for calculating emissions of Lenovo's typical notebook, desktop, monitor, tablet, all-in-one, ThinClient and server. The calculated results show emissions distribution by different parts and also for use, packaging, transportation, and end-of-life treatment categories. The emissions associated with use and end-of-life treatment of sold products were estimated on a "narrow" baseline for the typical notebook, desktop, monitor, tablet, all-in-one, ThinClient and server multiplied by sold/shipped product volumes.  
 Emissions from capital goods are based on purchased capital goods in a given year. The 2012 Guidelines to Defra GHG Conversion Factors for Company Reporting, Annex 13 was used for emission factors for different type of capital goods adjusted for inflation rate and exchange rate.  
 Solar energy is measured in MWh.  
 Renewable Energy Credit, International Renewable Energy Credit and Renewable Energy Guarantees of Origin represent 1 MWh and carbon offset represents 1 MT CO<sub>2</sub>e. These are reported and calculated separately and taken into consideration internally when evaluating progress toward emissions targets.  
 Renewable energy generation capacity includes electric solar panels in Shanghai and Hefei, China and hot water solar panels in Beijing, China.
10. FY 2017/18 number is amount Lenovo used, however Lenovo purchased a greater amount.
11. See the [Renewable Energy](#) section in the Planet chapter for more information.
12. Water data includes manufacturing, research & development sites and some large offices.  
 Lenovo started to verify waste and water data in FY 2011/12.  
 Beginning in FY 2015/16, System x and Motorola Mobility data are included in water data.  
 In FY 2017/18, the term "water use" was replaced with "water withdrawal," however, what is being measured is unchanged.
13. Waste data includes site waste from manufacturing, research & development sites and some large offices.  
 Waste data includes processes and operations waste; product waste is reported separately.  
 Lenovo started to verify waste and water data in FY 2011/12.  
 Beginning in FY 2015/16, System x and Motorola Mobility data are included in waste data.
14. Lenovo's Product End-of-Life Management (PELM) includes product take back (PTB) from customers and Lenovo-owned country returns, manufacturing and R&D scrap, and employee equipment from real estate sites.

## FY 2017/18 PERFORMANCE

### Product Aspects

| Target Type  | Objective   | Key Performance Indicator(s)                        | Target(s)   | Status                |
|--|---|---|---|-----------------------|
| Packaging  | Minimize packaging material consumption while driving the use of environmentally sustainable materials. | Availability of bulk packaging                      | Support bulk packaging for DCG products and/or options.   | Target met.           |
|  |   | Availability of reusable packaging design           | Support development of reusable rack crate design for servers.  | Target met.           |
|  |   | Amount of PCC used                                  | Increase use of 100% PCC by 10% based on shipping volumes relative to previous year.  | Target partially met. |
|  |   | Weight or volume reduction                          | Achieve 5% reduction in weight or volume for at least 1 product.  | Target partially met. |
| Product Energy   | Drive reduction in product energy use.  | Energy efficiency                                   | New products must show improved energy efficiency relative to the previous generation of the product. <sup>1</sup>                | Target met.           |
|  |   | Regulatory and voluntary energy standard compliance | Ensure all products are compliant with regulatory requirements and select products are compliant with preferred energy standards. | Target met.           |
|  |   | PCF (kg CO <sub>2</sub> e)                          | Continue to support external development of PCF methodologies and standards.  | Target met.           |
| Quantify lifecycle CO <sub>2</sub> e emissions associated with the use of Lenovo products. | Ensure product carbon footprint is published for all new Lenovo products. <sup>2</sup>                  |   | Target met.   |                       |
|  |   |   | Begin calculating PCF for representative sample of newly released servers by January 31, 2018.                                    | Target met.           |

| Target Type                             | Objective   | Key Performance Indicator(s)                                | Target(s)   | Status  |
|---|---|---|---|---|
| Product<br>Materials <sup>1,3,4,5</sup> | All products across all business units shall contain some Post-Consumer Recycled Content (PCC). | % PCC in product/external enclosure                         | All newly released DT, AIO, workstation, notebook, tablet and visual products shall contain a minimum of 2% PCC in product.   | Target not met.   |
|   |   |   | All newly released server products shall contain minimum of 10% PCC in external enclosure.  | Target met.   |
|   |   | % products containing closed-loop ABS PCC/<br>Packaging PCC | Develop and approve closed-loop ABS PCC and packaging PCC supplier and material.  | Target met.   |
|   |   |   | Investigate opportunities for use of closed-loop ABS PCC and packaging PCC in select products.  | Target not met.   |
|   |   | Low-halogen parts   | Sustain technological advances and maintain portfolio relative to low-halogen products. Monitor and respond to market requirements in this area.  | Make available specific low halogen parts as needed to support local geo customer requirements. |
| <b>Location Aspects</b>                 |   |   |   |   |
| Site Air<br>Emissions                   | Absolute reduction in CO <sub>2</sub> e emissions from Lenovo operations worldwide.             | Metric tons CO <sub>2</sub> e                               | Reduce Lenovo's global Scope 1 + Scope 2 GHG emissions by 40% by March 31, 2020, relative to FY 2009/10. <sup>6</sup>   | Target on track.  |
|   |   |   | LME, GRE, LCRE and GEA will establish global action plans to reduce combined Scope 1 and Scope 2 GHG emissions by 40% by March 31, 2020, relative to FY 2009/10. The plan will be reviewed and updated annually, at a minimum. <sup>6</sup> | Target met.   |
|   |   |   | Achieve a 4% reduction in global CO <sub>2</sub> e emissions by the end of FY 2017/18 relative to previous fiscal year. <sup>6</sup>  | Target met.   |

| Target Type                        | Objective   | Key Performance Indicator(s)                                | Target(s)  | Status   |
|------------------------------------|---|---|--|--|
| Site Energy Consumption            | Maximize energy efficiency and minimize CO <sub>2</sub> e emissions associated with the development, manufacture and delivery of Lenovo products. | Renewable energy generation capacity (MWh)                  | Achieve 30MW of Lenovo-owned or leased renewable energy generation capacity globally by 2020.  | Progress being made but significant challenges exist to achieve 2020 target. |
|                                    |   | % total energy from RE sources                              | Achieve a YTY increase in energy purchased from renewable generation sources globally, relative to the previous FY. <sup>7</sup>                                       | Target met.  |
| Waste Management                   | Minimize environmental impacts associated with solid waste generated from Lenovo operations and products.   | % nonhazardous solid waste recycled                         | Maintain a global nonhazardous waste recycling rate > 90% (+/-5%). <sup>8</sup>  | Target met.  |
| Water Management                   | Minimize environmental impacts associated with water use and water discharge from Lenovo operations and products.                                 | m <sup>3</sup> water  | Total global water use will be +/-5% of FY 2016/17.  | Target met.  |
|                                    |   | m <sup>3</sup> wastewater                                   | Total global wastewater generation will be +/-5% of FY 2016/17.  | Target met.  |
|                                    |   | Water risk map  | Develop Lenovo's operations water risk map. <sup>9</sup>   | Target met.  |
| <b>Supply Chain Aspects</b>        |   |   |  |  |
| Product End-of-Life Management     | Increase number of R2-and e-Stewards-certified recyclers and Asset Recovery Service suppliers on Lenovo's approved supplier list.                 | R2 or e-Stewards certification                              | In identified countries, ensure 100% of Lenovo approved recyclers and asset recovery services suppliers are R2 and/or e-Stewards certified by 3/31/2018. <sup>10</sup> | Target not met.  |
| Supplier Environmental Performance | Monitor and drive environmental impact reductions in the Lenovo supply chain.   | Climate change reduction targets                            | Require climate change reduction targets for at least 75% of Lenovo direct suppliers.  | Target met.  |
|                                    |   | Environmental criteria in supplier sustainability scorecard | Strengthen environmental criteria in Lenovo's sustainability scorecard for our suppliers year to year.   | Target met.  |
|                                    | Minimize potential environmental impact of Lenovo's suppliers.  | % audits  | Complete RBA audits of 90% of identified suppliers per Lenovo requirements.  | Target met.  |
|                                    |   | Completion on time  | Complete Cat 1, 2 and 3 environmental audits per Lenovo requirements.  | Target met for Cat 1 and 2.<br>Target not met for Cat 3.                     |

| Target Type    | Objective  | Key Performance Indicator(s)     | Target(s)  | Status      |
|----------------|--|----------------------------------|--|-------------|
| Transportation | Drive reductions in Lenovo international product transport carbon emissions. | Climate change reduction targets | Engage with global transportation carriers to ensure they have climate change reduction targets and/or programs. | Target met. |
|                |  | GHG emissions assessment         | Conduct transportation GHG emissions assessment against the Global Logistics Emissions Council (GLEC) framework. | Target met. |

### FOOTNOTES:

- 1: An exemption from targets in this area may be requested where the BU can clearly demonstrate achieving the target places the Lenovo product at a large price disadvantage against its competition.
- 2: For products for which a PAIA tool exists.
- 3: Availability of PCC plastics can be determined through consultation with Lenovo's Global Environmental Affairs and/or suppliers on the Lenovo Approved PCC Supplier list.
- 4: To drive increased usage of PCC, all BUs shall include a requirement for the identification of applications for the use of PCC in MRD and RFI/RFQ. PCC shall be used when technical specifications and cost parity are met.
- 5: PCC percentage is calculated using EPEAT methodology (i.e., net amount of post-consumer recycled content as percentage of total weight of plastic in product).
- 6: This goal may be accomplished through energy efficiency, installation of onsite renewable generation, entry into power purchase agreements (PPA) with power providers, and/or the purchase of renewable energy credits and carbon offsets.
- 7: This goal may be accomplished through, installation of onsite renewable energy generation, entry into power purchase agreements (PPA) with power providers and/or the purchase of renewable energy credits.
- 8: Percent of nonhazardous solid waste disposed of through reuse, recycle or incineration with energy recovery.
- 9: Lenovo's owned and managed EMS sites (manufacturing, R&D) are in scope.
- 10: The identified countries are based on EPEAT requirements. In countries where the government or other authorities select and approve the end-of-life program processors and in which the manufacturer does not control the selection of initial service providers, this target is N/A.

# FY 2018/19 OBJECTIVES AND TARGETS

## Product Aspects

| Target Type           | Objective   | Target(s)  |
|-----------------------|---|--|
| <b>Packaging</b>      | Minimize packaging material consumption while driving the use of environmentally sustainable materials. | Support bulk packaging for DCG products and/or options.  |
|                       |   | Support development of reusable rack crate design for servers.   |
|                       |   | Increase use of 100% PCC by 10% based on shipping volumes relative to previous year.   |
|                       |   | Achieve 5% reduction in weight or volume for at least 1 product.   |
|                       |   | Identify one new Lenovo product for which to implement use of 100% biodegradable/compostable packaging.  |
|                       |   | Packaging box material recycled content must be at least 60% or greater for all new phone products released in FY 2018/19.   |
| <b>Product Energy</b> | Drive reduction in product energy use.  | New products must show improved energy efficiency relative to the previous generation of the product. <sup>1</sup>   |
|                       |   | Enable industry best practices to reduce energy waste and improve efficiency on new MBG products where technically and financially feasible.                                       |
|                       |   | Identify at least one energy efficiency improvement metric for product category by September 30, 2018 in support of development of science-based targets.                          |
|                       |   | Ensure all products are compliant with regulatory requirements and select products are compliant with preferred energy standards.  |
|                       |   | For products requiring IEEE 1680.1 registration, ensure applicable product meets Lowest Power Mode limits per the requirements and exceptions allowed in the IEEE 1680.1 standard. |
| <b>Product Energy</b> | Quantify lifecycle CO <sub>2</sub> e emissions associated with the use of Lenovo products.              | Continue to support external development of PCF methodologies and standards through membership and participation in key organizations.   |
|                       |   | Ensure product carbon footprint is published for all new Lenovo products. <sup>2</sup>   |
|                       |   | Begin calculating PCF for representative sample of newly released servers by January 31, 2018.   |
|                       |   | Perform LCA (life-cycle assessment) for one Lenovo selected product by March 31, 2019.   |

| Target Type                                 | Objective   | Target(s)   |
|---|---|---|
| <b>Product Materials</b> <sup>1,3,4,5</sup> | All products across all business units shall contain some Post-Consumer Recycled Content (PCC) Plastic.   | All newly released DT, AIO, workstation, notebook, tablet, visual and accessory products shall contain a minimum of 2% PCC in product.  |
|   |   | Explore opportunities for PCC usage for MBG products.   |
|   |   | All newly released server products shall contain minimum of 10% PCC in external enclosure. <sup>6</sup>   |
|   |   | Develop and approve PC+ABS closed-loop PCC supplier and material.   |
|   |   | Explore opportunities for closed-loop usage for desktop all-in-one, workstation, notebook, tablet, visual and accessory products  |
| <b>Location Aspects</b>                     | Sustain technological advances and maintain portfolio relative to low-halogen products. Monitor and respond to market requirements in this area.  | For products requiring IEEE 1680.1 registration, ensure each plastic part in the product exceeding 25 g shall not contain greater than 1000 ppm chlorine or greater than 1000 ppm bromine at the homogeneous level per the requirements and exceptions allowed in the IEEE 1680.1 standard. |
|   |   | For notebook and desktop products requiring IEEE 1680.1 registration, assess flame retardants and plasticizers in plastic parts > 25 g to GreenScreen Benchmark per the requirements and exceptions allowed in the IEEE 1680.1 standard.  |
|   |   | Upon customer request make available external PVC-free cable.   |
|   |   |   |
| <b>Site Air Emissions</b>                   | Absolute reduction in CO <sub>2</sub> e emissions from Lenovo operations worldwide.   | Reduce Lenovo's global Scope 1 + Scope 2 GHG emissions by 40% by March 31, 2020, relative to FY 2009/10. <sup>7</sup>   |
|   |   | LME, GRE, LCRE and GEA will establish global action plans to reduce combined Scope 1 and Scope 2 GHG emissions by 40% by March 31, 2020, relative to FY 2009/10. The plan will be reviewed and updated annually, at a minimum. <sup>7</sup>   |
|   |   | Evaluate Lenovo's readiness to establish science-based targets for GHG emissions reduction targets after 2020.  |
| <b>Site Energy Consumption</b>              | Maximize energy efficiency and minimize CO <sub>2</sub> e emissions associated with the development, manufacture and delivery of Lenovo products. | Achieve 30MW of Lenovo-owned or leased renewable energy generation capacity globally by 2020.   |
|   |   | Achieve a YTY increase in energy purchased from renewable generation sources globally, relative to the previous FY. <sup>8</sup>  |
|   |   | Achieve YTY improved energy intensity <sup>9</sup> index at manufacturing sites globally, relative to the previous FY.  |
|   |   | Achieve YTY improved electricity intensity <sup>10</sup> at R&D and office sites globally, relative to the previous FY.   |

| Target Type                               | Objective  | Target(s)  |
|---|--|--|
| <b>Waste Management</b>                   | Minimize environmental impacts associated with solid waste generated from Lenovo operations and products.                                      | Maintain a global nonhazardous waste recycling rate > 90% (+/-5%). <sup>11</sup>   |
| <b>Water Management</b>                   | Minimize environmental impacts associated with water use and water discharge from Lenovo operations and products.                              | Total global water withdrawal will be +/-5% of FY 2017/18.<br>Total global wastewater generation will be +/-5% of FY 2017/18.  |
| <b>Supply Chain Aspects</b>               |  |  |
| <b>Product End-of-Life Management</b>     | Provide product recycling programs and recycling related information that meets or exceeds local legal requirements wherever we do business.   | For geos requiring IEEE 1680.1 product registrations, ensure requirements for end-of-life processing are met with required documentation in place by end of FY 2018/19.<br>Develop and implement standardized reporting format for identification of materials and components requiring selective treatment for products covered under IEEE 1680.1.  |
| <b>Supplier Environmental Performance</b> | Monitor and drive environmental impact reductions in the Lenovo supply chain.  | Require climate change reduction targets for at least 85% of Lenovo direct suppliers based on procurement spend.<br>Reduce the supplier emission intensity 25% by 2025 relative to a 2015 base year.<br>Strengthen environmental criteria in Lenovo's sustainability scorecard for our suppliers year to year.   |
| <b>Transportation</b>                     | Minimize potential environmental impact of Lenovo's suppliers.<br>Drive reductions in Lenovo international product transport carbon emissions. | Complete RBA audits of 90% of identified suppliers on time per Lenovo requirements.<br>Complete Cat 1, 2 and 3 environmental audits per Lenovo requirements.<br>Continue DHL Carbon Dashboard reporting for RoW carriers and share results across GSC to influence MoT decisions, and start collecting and reporting for domestic China deliveries.<br>Drive Tier 1 carriers to reduce carbon emissions by establishing carbon emission reporting process and mechanism (incl. baseline, reduction target, initiatives, actions and tracking mechanism, etc.). |

**FOOTNOTES:**

1. An exemption from targets in this area may be requested where the BU can clearly demonstrate achieving the target places the Lenovo product at a large price disadvantage against its competition or is not technically feasible.
2. For products for which a PAIA tool exists.
3. Availability of PCC plastics can be determined through consultation with Lenovo's Global Environmental Affairs and/or suppliers on the Lenovo Approved PCC Supplier list.
4. To drive increased usage of PCC, all BUs shall include a requirement for the identification of applications for the use of PCC in MRD and RFI/RFQ. PCC shall be used when technical specifications and cost parity are met.
5. PCC percentage is calculated using EPEAT methodology.
6. If product not being registered to EPEAT, PM2 is N/A. If product is being registered to EPEAT, exemptions allowed per EPEAT requirements.
7. These goals may be accomplished through energy efficiency, installation of onsite renewable generation, entry into power purchase agreements (PPA) with power providers, and/or the purchase of renewable energy credits and carbon offsets.
8. This goal may be accomplished through, installation of onsite renewable energy generation, entry into power purchase agreements (PPA) with power providers and/or the purchase of renewable energy credits.
9. Energy intensity index is energy consumption in kWh per million US\$ revenue.
10. Electricity intensity is electricity consumption in kWh per employee.
11. Percent of nonhazardous solid waste disposed of through reuse, recycle or incineration with energy recovery.



910



# APPENDIX

|     |  |
|-----|--|
| 120 | Lenovo Reference Documentation   |
| 121 | Material Topic Boundaries  |
| 122 | GRI Content Index  |
| 134 | The U.N. Global Compact  |
| 135 | Hong Kong Stock Exchange Environmental, Social and Governance (ESG)<br>Reporting Guide Content Index |

# APPENDIX

## LENOVO REFERENCE DOCUMENTATION

Lenovo has posted extensive sustainability information on its website. Below are hyperlinks to some of those pages. If you are reading this as a printed document, you may get to these links by opening this Sustainability Report on Lenovo's website at [www.lenovo.com/sustainability](http://www.lenovo.com/sustainability). Lenovo maintains current copies of many of the policies, certifications, verification statements and other documents mentioned in this report online. Please visit [https://www.lenovo.com/us/en/social\\_responsibility/social\\_responsibility\\_resources/](https://www.lenovo.com/us/en/social_responsibility/social_responsibility_resources/) to access these resources.

### Lenovo Sustainability Web Pages

- Product: [www.lenovo.com/us/en/social\\_responsibility/product/](http://www.lenovo.com/us/en/social_responsibility/product/)
  - › Think Green Products — Energy: [www.lenovo.com/energy](http://www.lenovo.com/energy)
  - › Think Green Products — Materials: [www.lenovo.com/materials](http://www.lenovo.com/materials)
  - › Think Green Products — Packaging: [www.lenovo.com/packaging](http://www.lenovo.com/packaging)
  - › Think Green Products — Recycling: [www.lenovo.com/recycling](http://www.lenovo.com/recycling)
  - › Compliance Information: [www.lenovo.com/compliance](http://www.lenovo.com/compliance)
  - › Accessibility Information: [www.lenovo.com/accessibility](http://www.lenovo.com/accessibility)

---

- Environment:
  - [www.lenovo.com/environment](http://www.lenovo.com/environment)
  - › Think Green — Climate: [www.lenovo.com/climate](http://www.lenovo.com/climate)
  - › Think Green — Waste and Water: [www.lenovo.com/waterandwaste](http://www.lenovo.com/waterandwaste)
- Social: [www.lenovo.com/csr](http://www.lenovo.com/csr)
- Global Supply Chain: [www.lenovo.com/supply\\_chain](http://www.lenovo.com/supply_chain)
- Sustainability Reports: [www.lenovo.com/sustainability](http://www.lenovo.com/sustainability)

# MATERIAL TOPIC BOUNDARIES

Note: This Material Topic Boundaries table includes references to [Lenovo's FY 2017/18 Annual Report](#)

| Materiality Topic                      | Why Topic Is Material  | Stakeholders Especially Impacted (see stakeholder list on page 14)                           | Lenovo Relationship to Impact |
|--|--|--|-------------------------------|
| Business Ethics                        | Lenovo FY 2017/18 Annual Report: p 124   | Employees, shareholders and investors, customers, communities in which we operate, suppliers | Direct and indirect           |
| Climate Change (emissions)             | <a href="http://www.lenovo.com/climate">www.lenovo.com/climate</a>                       | All  | Direct                        |
| Community Outreach                     | <a href="http://www.lenovo.com/social_investments">www.lenovo.com/social_investments</a> | Communities in which we operate  | Direct                        |
| Corporate Governance                   | Lenovo FY 2017/18 Annual Report: pp 49, 123  | Shareholders and investors   | Direct                        |
| Digital Inclusion                      | <a href="http://www.lenovo.com/social_investments">www.lenovo.com/social_investments</a> | Communities in which we operate, customers   | Indirect                      |
| Diversity and Equal Opportunity        | p 57   | Employees  | Direct                        |
| Economic Performance                   | Lenovo FY 2017/18 Annual Report: p 123   | Employees, shareholders and investors, suppliers   | Direct                        |
| Energy Use                             | pp 73-76   | Communities in which we operate  | Direct                        |
| Environmental Management System        | <a href="http://www.lenovo.com/environment">www.lenovo.com/environment</a>               | Communities in which we operate, customers   | Direct                        |
| Human Rights                           | pp 47, 56-57   | Employees, suppliers   | Direct                        |
| Labor Standards and Practices          | pp 56-57   | Employees  | Direct                        |
| Packaging                              | p 94   | Communities in which we operate, customers   | Direct                        |
| Philanthropy/Disaster Relief           | <a href="http://www.lenovo.com/social_investments">www.lenovo.com/social_investments</a> | Communities in which we operate  | Indirect                      |
| Privacy                                | p 26   | Customers, employees   | Direct                        |
| Procurement Practices                  | pp 44-46   | Suppliers  | Direct                        |
| Product End-of-Life Management         | p 96   | Customers, communities in which we operate   | Direct                        |
| Product Energy Use                     | p 91   | Customers, communities in which we operate   | Direct                        |
| Product Materials                      | <a href="http://www.lenovo.com/materials">www.lenovo.com/materials</a>                   | Customers, communities in which we operate   | Direct                        |
| Product Responsibility                 | pp 30-34   | Customers  | Direct                        |
| Supply Chain Environmental Performance | <a href="http://www.lenovo.com/supply_chain">www.lenovo.com/supply_chain</a>             | Communities in which we operate  | Indirect                      |
| Supply Chain Labor Practices           | <a href="http://www.lenovo.com/supply_chain">www.lenovo.com/supply_chain</a>             | Communities in which we operate  | Indirect                      |
| Talent Management                      | Lenovo FY 2017/18 Annual Report: pp 33-34  | Employees  | Direct                        |
| Transportation                         | pp 76-77   | Customers, communities in which we operate   | Direct                        |
| Waste                                  | <a href="http://www.lenovo.com/waterandwaste">www.lenovo.com/waterandwaste</a>           | Communities in which we operate  | Direct                        |
| Water Use                              | <a href="http://www.lenovo.com/waterandwaste">www.lenovo.com/waterandwaste</a>           | Communities in which we operate  | Direct                        |

# GRI CONTENT INDEX

Note: Our GRI Content Index below includes references to [Lenovo's FY 2017/18 Annual Report](#).

| General Disclosures   |  |                     |
|---|--|---------------------|
| Disclosure  | Response   | Reason for Omission |
| <b>GRI 102: General Disclosures 2016</b>                            |  |                     |
| <b>Organizational profile</b>                                       |  |                     |
| 102-1 Name of the organization                                      | Lenovo Group Limited   |                     |
| 102-2 Activities, brands, products, and services                    | Lenovo, Motorola, Medion, System x, NEC-PC, Stoneware, LenovoEMC |                     |
| 102-3 Location of headquarters                                      | p 12   |                     |
| 102-4 Location of operations  | p 12   |                     |
| 102-5 Ownership and legal form                                      | Lenovo FY17/18 Annual Report: p 173                              |                     |
| 102-6 Markets served  | Lenovo FY17/18 Annual Report: pp 5, 16-23                        |                     |
| 102-7 Scale of the organization                                     | pp 102-103   |                     |
| 102-8 Information on employees and other workers                    | p 103  |                     |
| 102-9 Supply chain  | pp 44-52   |                     |
| 102-10 Significant changes to the organization and its supply chain | No significant changes during the reporting period.              |                     |
| 102-11 Precautionary Principle or approach                          | pp 89-90   |                     |
| 102-12 External initiatives   | pp 16, 40, 72-73, 76, 121  |                     |
| 102-13 Membership of associations                                   | p 72   |                     |
| <b>Strategy</b>   |  |                     |
| 102-14 Statement from senior decision-maker                         | p 7  |                     |
| <b>Ethics and integrity</b>   |  |                     |
| 102-16 Values, principles, standards, and norms of behavior         | pp 23-24, 56-57  |                     |
| 102-17 Mechanisms for advice and concerns about ethics              | p 25   |                     |

| General Disclosures  |   |                     |
|--|---|---------------------|
| Disclosure   | Response  | Reason for Omission |
| <b>Governance</b>  |   |                     |
| 102-18 Governance structure  | pp 20-21, Lenovo FY17/18 Annual Report: pp 49-50        |                     |
| 102-19 Delegating authority  | p 22  |                     |
| 102-20 Executive-level responsibility for economic, environmental, and social topics | p 22  |                     |
| 102-21 Consulting stakeholders on economic, environmental, and social topics         | pp 22-23  |                     |
| 102-22 Composition of the highest governance body and its committees                 | pp 20-21, Lenovo FY17/18 Annual Report: pp 51-53, 72-73 |                     |
| 102-23 Chair of the highest governance body  | p 7   |                     |
| 102-24 Nominating and selecting the highest governance body                          | Lenovo FY17/18 Annual Report: pp 54-55                  |                     |
| 102-25 Conflicts of interest   | p 22, Lenovo FY17/18 Annual Report: p 58                |                     |
| 102-26 Role of highest governance body in setting purpose, values, and strategy      | p 22  |                     |
| 102-27 Collective knowledge of highest governance body                               | Lenovo FY17/18 Annual Report: pp 60-61                  |                     |
| 102-28 Evaluating the highest governance body's performance                          | Lenovo FY17/18 Annual Report: p 78                      |                     |
| 102-29 Identifying and managing economic, environmental, and social impacts          | p 22  |                     |
| 102-30 Effectiveness of risk management processes                                    | Lenovo FY17/18 Annual Report: pp 81-82                  |                     |
| 102-31 Review of economic, environmental, and social topics                          | p 22  |                     |
| 102-32 Highest governance body's role in sustainability reporting                    | p 22  |                     |
| 102-33 Communicating critical concerns   | p 23, Lenovo FY17/18 Annual Report: p 67-68             |                     |
| 102-35 Remuneration policies   | Lenovo FY17/18 Annual Report pp 110-122                 |                     |

| General Disclosures   |               |                     |
|---|---------------|---------------------|
| Disclosure  | Response      | Reason for Omission |
| <b>Stakeholder engagement</b>                                     |               |                     |
| 102-40 List of stakeholder groups                                 | pp 14-15      |                     |
| 102-41 Collective bargaining agreements                           | p 56          |                     |
| 102-42 Identifying and selecting stakeholders                     | pp 14-15      |                     |
| 102-43 Approach to stakeholder engagement                         | pp 14-15      |                     |
| 102-44 Key topics and concerns raised                             | pp 14-15      |                     |
| <b>Reporting practice</b>   |               |                     |
| 102-45 Entities included in the consolidated financial statements | p 12          |                     |
| 102-46 Defining report content and topic Boundaries               | pp 12-13      |                     |
| 102-47 List of material topics                                    | p 14          |                     |
| 102-48 Restatements of information                                | p 107         |                     |
| 102-49 Changes in reporting                                       | p 13          |                     |
| 102-50 Reporting period   | p 12          |                     |
| 102-51 Date of most recent report                                 | p 12          |                     |
| 102-52 Reporting cycle  | p 12          |                     |
| 102-53 Contact point for questions regarding the report           | p 13          |                     |
| 102-54 Claims of reporting in accordance with the GRI Standards   | p 12          |                     |
| 102-55 GRI content index  | pp 122-129    |                     |
| 102-56 External assurance   | pp 82, 85, 86 |                     |



| Material Topic Disclosures   |   |                     |
|--|---|---------------------|
| Disclosure   | Response  | Reason for Omission |
| <b>GRI 201: Economic Performance 2016</b>  |   |                     |
| <b>GRI 103: Management Approach 2016</b>   |   |                     |
| 103-1 Explanation of the material topic and its Boundary                             | p 121   |                     |
| 103-2 The management approach and its components                                     | Lenovo FY17/18 Annual Report: pp 16-34              |                     |
| 103-3 Evaluation of the management approach  | Lenovo FY17/18 Annual Report: pp 16-34              |                     |
| 201-1 Direct economic value generated and distributed                                | p 102, Lenovo FY17/18 Annual Report: pp 4, 215, 218 |                     |
| 201-2 Financial implications and other risks and opportunities due to climate change | pp 75-76  |                     |
| <b>GRI 203: Indirect Economic Impacts 2016</b>                                       |   |                     |
| <b>GRI 103: Management Approach 2016</b>   |   |                     |
| 103-1 Explanation of the material topic and its Boundary                             | p 121   |                     |
| 103-2 The management approach and its components                                     | p 63  |                     |
| 103-3 Evaluation of the management approach  | p 63  |                     |
| 203-2 Significant indirect economic impacts  | pp 64-66, 104                                       |                     |
| <b>GRI 204: Procurement Practices 2016</b>   |   |                     |
| <b>GRI 103: Management Approach 2016</b>   |   |                     |
| 103-1 Explanation of the material topic and its Boundary                             | p 121   |                     |
| 103-2 The management approach and its components                                     | p 52  |                     |
| 103-3 Evaluation of the management approach  | p 52  |                     |
| 204-1 Proportion of spending on local suppliers                                      | p 52  |                     |
| <b>GRI 205: Anti-corruption 2016</b>   |   |                     |
| <b>GRI 103: Management Approach 2016</b>   |   |                     |
| 103-1 Explanation of the material topic and its Boundary                             | p 121   |                     |
| 103-2 The management approach and its components                                     | p 24  |                     |
| 103-3 Evaluation of the management approach  | p 24  |                     |
| 205-1 Operations assessed for risks related to corruption                            | p 24  |                     |



| Material Topic Disclosures  |          |   |
|---|----------|---|
| Disclosure  | Response | Reason for Omission   |
| <b>GRI 206: Anti-competitive Behavior 2016</b>  |          |   |
| <b>GRI 103: Management Approach 2016</b>  |          |   |
| 103-1 Explanation of the material topic and its Boundary                              | p 121    |   |
| 103-2 The management approach and its components                                      | p 24     |   |
| 103-3 Evaluation of the management approach   | p 24     |   |
| 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices | p 24     |   |
| <b>GRI 301: Materials 2016</b>  |          |   |
| <b>GRI 103: Management Approach 2016</b>  |          |   |
| 103-1 Explanation of the material topic and its Boundary                              | p 121    |   |
| 103-2 The management approach and its components                                      | pp 87-90 |   |
| 103-3 Evaluation of the management approach   | pp 87-90 |   |
| 301-1 Materials used by weight or volume  |          | Confidentiality Constraints — Lenovo chooses not to disclose materials used by weight or volume due to concerns about confidentiality related to our manufacturing and development processes. |
| 301-2 Recycled input materials used   |          | Confidentiality Constraints — Lenovo chooses not to disclose materials used by weight or volume due to concerns about confidentiality related to our manufacturing and development processes. |



### Material Topic Disclosures

| Disclosure  | Response         | Reason for Omission |
|---|------------------|---------------------|
| <b>GRI 302: Energy 2016</b>                                       |                  |                     |
| <b>GRI 103: Management Approach 2016</b>                          |                  |                     |
| 103-1 Explanation of the material topic and its Boundary          | p 121            |                     |
| 103-2 The management approach and its components                  | pp 70-76         |                     |
| 103-3 Evaluation of the management approach                       | pp 70-76         |                     |
| 302-1 Energy consumption within the organization                  | p 78             |                     |
| 302-4 Reduction of energy consumption                             | pp 76-77, 87, 94 |                     |
| <b>GRI 303: Water 2016</b>  |                  |                     |
| <b>GRI 103: Management Approach 2016</b>                          |                  |                     |
| 103-1 Explanation of the material topic and its Boundary          | p 121            |                     |
| 103-2 The management approach and its components                  | pp 70-72, 85     |                     |
| 103-3 Evaluation of the management approach                       | pp 70-72, 85     |                     |
| 303-1 Water withdrawal by source                                  | p 85             |                     |
| 303-2 Water sources significantly affected by withdrawal of water | p 85             |                     |



### Material Topic Disclosures

| Disclosure  | Response         | Reason for Omission  |
|---|------------------|--|
| <b>GRI 305: Emissions 2016</b>  |                  |  |
| <b>GRI 103: Management Approach 2016</b>  |                  |  |
| 103-1 Explanation of the material topic and its Boundary                              | p 121            |  |
| 103-2 The management approach and its components                                      | pp 70-76         |  |
| 103-3 Evaluation of the management approach   | pp 70-76         |  |
| 305-1 Direct (Scope 1) GHG emissions  | pp 79, 105       |  |
| 305-2 Energy indirect (Scope 2) GHG emissions   | pp 79, 105       |  |
| 305-3 Other indirect (Scope 3) GHG emissions  | pp 80, 105       |  |
| 305-4 GHG emissions intensity   | p 105            |  |
| 305-5 Reduction of GHG emissions  | pp 76-77, 87, 94 |  |
| 305-6 Emissions of ozone-depleting substances (ODS)                                   |                  | Not Applicable — Lenovo does not manufacture, import or export ozone-depleting substances. Lenovo prohibits the use of ozone-depleting substances in our products and manufacturing processes except in HVAC and fire-suppression equipment as permitted by law.                                 |
| 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions |                  | Not Applicable — With the exception of CO <sub>2</sub> e related to energy use, Lenovo does not have any significant discharges or emissions to air or water. Lenovo has no wet chemical or industrial processes that use volatile organic compounds (VOC) and thus has no point sources of VOC. |



### Material Topic Disclosures

| Disclosure   | Response                           | Reason for Omission |
|--|------------------------------------|---------------------|
| <b>GRI 306: Effluents and Waste 2016</b>                                   |                                    |                     |
| <b>GRI 103: Management Approach 2016</b>                                   |                                    |                     |
| 103-1 Explanation of the material topic and its Boundary                   | p 121                              |                     |
| 103-2 The management approach and its components                           | pp 70-72, 84-86                    |                     |
| 103-3 Evaluation of the management approach                                | pp 70-72                           |                     |
| 306-1 Water discharge by quality and destination                           | p 85                               |                     |
| 306-2 Waste by type and disposal method                                    | pp 84-85                           |                     |
| 306-3 Significant spills   | pp 85-86                           |                     |
| 306-4 Transport of hazardous waste   | p 85                               |                     |
| 306-5 Water bodies affected by water discharges and/or runoff              | p 85                               |                     |
| <b>GRI 307: Environmental Compliance 2016</b>                              |                                    |                     |
| <b>GRI 103: Management Approach 2016</b>                                   |                                    |                     |
| 103-1 Explanation of the material topic and its Boundary                   | p 121                              |                     |
| 103-2 The management approach and its components                           | pp 70-72                           |                     |
| 103-3 Evaluation of the management approach                                | pp 70-72                           |                     |
| 307-1 Non-compliance with environmental laws and regulations               | Lenovo FY17/18 Annual Report: p 32 |                     |
| <b>GRI 308: Supplier Environmental Assessment 2016</b>                     |                                    |                     |
| <b>GRI 103: Management Approach 2016</b>                                   |                                    |                     |
| 103-1 Explanation of the material topic and its Boundary                   | p 121                              |                     |
| 103-2 The management approach and its components                           | pp 49-50                           |                     |
| 103-3 Evaluation of the management approach                                | pp 50-51                           |                     |
| 308-1 New suppliers that were screened using environmental criteria        | p 49                               |                     |
| 308-2 Negative environmental impacts in the supply chain and actions taken | pp 50-51                           |                     |



| Material Topic Disclosures  |              |                     |
|---|--------------|---------------------|
| Disclosure  | Response     | Reason for Omission |
| <b>GRI 401: Employment 2016</b>   |              |                     |
| <b>GRI 103: Management Approach 2016</b>  |              |                     |
| 103-1 Explanation of the material topic and its Boundary  | p 121        |                     |
| 103-2 The management approach and its components  | pp 56-61     |                     |
| 103-3 Evaluation of the management approach   | pp 58-61     |                     |
| 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees                            | pp 58-61     |                     |
| <b>GRI 403: Occupational Health and Safety 2016</b>   |              |                     |
| <b>GRI 103: Management Approach 2016</b>  |              |                     |
| 103-1 Explanation of the material topic and its Boundary  | p 121        |                     |
| 103-2 The management approach and its components  | pp 40-42     |                     |
| 103-3 Evaluation of the management approach   | pp 40-43     |                     |
| 403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities | p 103        |                     |
| 403-3 Workers with high incidence or high risk of diseases related to their occupation  | pp 40-42     |                     |
| <b>GRI 404: Training and Education 2016</b>   |              |                     |
| <b>GRI 103: Management Approach 2016</b>  |              |                     |
| 103-1 Explanation of the material topic and its Boundary  | p 121        |                     |
| 103-2 The management approach and its components  | pp 41-42, 61 |                     |
| 103-3 Evaluation of the management approach   | pp 41-42, 61 |                     |
| 404-1 Average hours of training per year per employee   | p 61         |                     |
| 404-2 Programs for upgrading employee skills and transition assistance programs   | p 61         |                     |
| 404-3 Percentage of employees receiving regular performance and career development reviews  | p 58         |                     |



### Material Topic Disclosures

| Disclosure   | Response                           | Reason for Omission |
|--|------------------------------------|---------------------|
| <b>GRI 405: Diversity and Equal Opportunity 2016</b>   |                                    |                     |
| <b>GRI 103: Management Approach 2016</b>   |                                    |                     |
| 103-1 Explanation of the material topic and its Boundary                                       | p 121                              |                     |
| 103-2 The management approach and its components   | pp 52, 57                          |                     |
| 103-3 Evaluation of the management approach  | pp 52, 57                          |                     |
| 405-1 Diversity of governance bodies and employees   | Lenovo FY17/18 Annual Report: p 52 |                     |
| <b>GRI 408: Child Labor 2016</b>   |                                    |                     |
| <b>GRI 103: Management Approach 2016</b>   |                                    |                     |
| 103-1 Explanation of the material topic and its Boundary                                       | p 121                              |                     |
| 103-2 The management approach and its components   | pp 24, 47-48, 56-57                |                     |
| 103-3 Evaluation of the management approach  | pp 50-51                           |                     |
| 408-1 Operations and suppliers at significant risk for incidents of child labor                | pp 59-63                           |                     |
| <b>GRI 409: Forced or Compulsory Labor 2016</b>  |                                    |                     |
| <b>GRI 103: Management Approach 2016</b>   |                                    |                     |
| 103-1 Explanation of the material topic and its Boundary                                       | p 121                              |                     |
| 103-2 The management approach and its components   | pp 24, 47-48, 56-57                |                     |
| 103-3 Evaluation of the management approach  | pp 50-51                           |                     |
| 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor | pp 59-63                           |                     |



### Material Topic Disclosures

| Disclosure   | Response  | Reason for Omission |
|--|-----------|---------------------|
| <b>GRI 412: Human Rights Assessment 2016</b>   |           |                     |
| <b>GRI 103: Management Approach 2016</b>   |           |                     |
| 103-1 Explanation of the material topic and its Boundary   | p 121     |                     |
| 103-2 The management approach and its components   | pp 24, 57 |                     |
| 103-3 Evaluation of the management approach  | pp 24, 57 |                     |
| 412-2 Employee training on human rights policies or procedures   | p 24      |                     |
| 412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening | p 45      |                     |
| <b>GRI 414: Supplier Social Assessment 2016</b>  |           |                     |
| <b>GRI 103: Management Approach 2016</b>   |           |                     |
| 103-1 Explanation of the material topic and its Boundary   | p 121     |                     |
| 103-2 The management approach and its components   | pp 44-48  |                     |
| 103-3 Evaluation of the management approach  | pp 44-48  |                     |
| 414-1 New suppliers that were screened using social criteria   | pp 50-51  |                     |
| <b>GRI 416: Customer Health and Safety 2016</b>  |           |                     |
| <b>GRI 103: Management Approach 2016</b>   |           |                     |
| 103-1 Explanation of the material topic and its Boundary   | p 121     |                     |
| 103-2 The management approach and its components   | pp 32-33  |                     |
| 103-3 Evaluation of the management approach  | pp 32-33  |                     |
| 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services                              | p 33      |                     |



### Material Topic Disclosures

| Disclosure   | Response  | Reason for Omission |
|--|---|---------------------|
| <b>GRI 417: Marketing and Labeling 2016</b>  |   |                     |
| <b>GRI 103: Management Approach 2016</b>   |   |                     |
| 103-1 Explanation of the material topic and its Boundary   | p 121   |                     |
| 103-2 The management approach and its components   | pp 24, 34, 70-72  |                     |
| 103-3 Evaluation of the management approach  | pp 24, 34, 70-72  |                     |
| 417-1 Requirements for product and service information and labeling                                | pp 34, 70-72  |                     |
| <b>GRI 418: Customer Privacy 2016</b>  |   |                     |
| <b>GRI 103: Management Approach 2016</b>   |   |                     |
| 103-1 Explanation of the material topic and its Boundary   | p 121   |                     |
| 103-2 The management approach and its components   | p 26  |                     |
| 103-3 Evaluation of the management approach  | p 26  |                     |
| 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data | Lenovo is vigilant about investigating possible leaks, thefts, or losses of customer data. During FY 2017/18, no customer data incident rose to the level of notification to individuals or authorities |                     |

## THE U.N. GLOBAL COMPACT

The U.N. Global Compact is a public-private strategic policy initiative for businesses committed to aligning operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. Lenovo became a signatory to the U.N. Global Compact in 2009 and our Chairman and CEO, Yang Yuanqing, continues to fully endorse and support its principles.

This report serves as Lenovo's 2017/18 Communication on Progress.

### HUMAN RIGHTS

- **Principle 1:** Businesses should support and respect the protection of internationally proclaimed human rights [see pages 23-25, 44-52, 56-57]; and
- **Principle 2:** make sure that they are not complicit in human rights abuses [see pages 24-25, 44-52, 56-57].

### LABOR

- **Principle 3:** Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining [see pages 56-57];
- **Principle 4:** the elimination of all forms of forced and compulsory labor [see pages 24-25, 44-52, 56-57];
- **Principle 5:** the effective abolition of child labor [see pages 23-25, 44-52, 56-57]; and
- **Principle 6:** the elimination of discrimination in respect of employment and occupation [see pages 52, 57-58].

### ENVIRONMENT

- **Principle 7:** Businesses should support a precautionary approach to environmental challenges [see pages 89-90];
- **Principle 8:** undertake initiatives to promote greater environmental responsibility [see pages 70-99, 109-116]; and
- **Principle 9:** encourage the development and diffusion of environmentally friendly technologies [see pages 34-36, 74-75, 87-88, 91-94].

### ANTI-CORRUPTION

- **Principle 10:** Businesses should work against corruption in all its forms, including extortion and bribery [see pages 23-25, 44-47, 50-51].

Click here to see Lenovo's UN Global Compact Participant Information:

<https://www.unglobalcompact.org/what-is-gc/participants/6103-Lenovo>

# HONG KONG STOCK EXCHANGE ESG REPORTING GUIDE CONTENT INDEX

| General Disclosures and KPIs       |   | Page Numbers                             | Comments/Explanation If Not Reported  |
|------------------------------------|---|--|---|
| <b>Environmental</b>               |   |  |   |
| <b>Aspect A1: Emissions</b>        |   |  |   |
| General Disclosure                 | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and nonhazardous waste | 70-86                                    | See also:<br><a href="https://www.lenovo.com/us/en/social-responsibility/climate_policy/">https://www.lenovo.com/us/en/social-responsibility/climate_policy/</a><br><a href="https://www.lenovo.com/us/en/social-responsibility/environmental_policy/">https://www.lenovo.com/us/en/social-responsibility/environmental_policy/</a>   |
| KPI A1.1                           | The types of emissions and respective emissions data  | 79-80,<br>84-86,<br>105-106              |   |
| KPI A1.2                           | Greenhouse gas emissions in total and, where appropriate, intensity   | 79-80, 105                               |   |
| KPI A1.3                           | Total hazardous waste produced and, where appropriate, intensity  | 85, 106                                  |   |
| KPI A1.4                           | Total nonhazardous waste produced and, where appropriate, intensity   | 84, 106                                  |   |
| KPI A1.5                           | Description of measures to mitigate emissions and results achieved  | 36, 49,<br>73-86,<br>110-112,<br>114-115 |   |
| KPI A1.6                           | Description of how hazardous and nonhazardous wastes are handled, reduction initiatives and results achieved  | 84-85,<br>111, 115                       |   |
| <b>Aspect A2: Use of Resources</b> |   |  |   |
| General disclosure                 | Policies on the efficient use of resources, including energy, water and other raw materials   | 70-75,<br>85, 87-88,<br>91-92, 94        | See also:<br><a href="https://www.lenovo.com/us/en/social-responsibility/environmental_policy/">https://www.lenovo.com/us/en/social-responsibility/environmental_policy/</a>  |
| KPI A2.1                           | Direct and/or indirect energy consumption by type in total and intensity  | 78, 105-106                              |   |
| KPI A2.2                           | Water consumption in total and intensity  | 85, 106                                  |   |
| KPI A2.3                           | Description of energy use efficiency initiatives and results achieved   | 74-77,<br>91-93, 109,<br>111-115,        |   |
| KPI A2.4                           | Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved  | 85                                       |   |
| KPI A2.5                           | Total packaging material used for finished products and, if applicable, with reference to per unit produced   | 94-95                                    | Lenovo does not report total packaging materials used for finished products, rather Lenovo tracks packaging on a per product basis and reports examples of accomplishments. Tracking on a per product basis allows Lenovo to drive improvements in generation-to-generation product packaging designs resulting in quantifiable environmental benefits. The amount of total packaging used would be mainly dependent on sales volumes, so it is not the most appropriate metric for Lenovo to use to drive real improvements in packaging design. By setting our packaging improvement goals at the product level, we are able to drive and measure improvements in design that are not dependent on overall product sales volumes. |

| General Disclosures and KPIs                            |  | Page Numbers            | Comments/Explanation If Not Reported  |
|---|--|-------------------------|---|
| <b>Aspect A3: The Environment and Natural Resources</b> |  |                         |   |
| General disclosure                                      | Policies on minimising the issuer's significant impact on the environment and natural resources  | 70-72                   | See also: <a href="https://www.lenovo.com/us/en/social-responsibility/environmental_policy/">https://www.lenovo.com/us/en/social-responsibility/environmental_policy/</a> |
| KPI A3.1  | Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them   | 73-86                   |   |
| <b>Social</b>   |  |                         |   |
| Employment and Labour Practices                         |  |                         |   |
| <b>Aspect B1: Employment</b>                            |  |                         |   |
| General Disclosure                                      | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare | 56-62                   |   |
| KPI B1.1  | Total workforce by gender, employment type, age group and geographical region  | 103                     |   |
| KPI B1.2  | Employee turnover rate by gender, age group and geographical region  |                         | Lenovo does not report this information.  |
| <b>Aspect B2: Health and Safety</b>                     |  |                         |   |
| General Disclosure                                      | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards   | 40-43, 60               | See also: <a href="https://www.lenovo.com/us/en/Lenovo-Health-and-Safety-Policy.pdf">https://www.lenovo.com/us/en/Lenovo-Health-and-Safety-Policy.pdf</a>                 |
| KPI B2.1  | Number and rate of work-related fatalities   | 103                     |   |
| KPI B2.2  | Lost days due to work injury   | 103                     |   |
| KPI B2.3  | Description of occupational health and safety measures adopted, how they are implemented and monitored   | 40-43                   |   |
| <b>Aspect B3: Development and Training</b>              |  |                         |   |
| General disclosure                                      | Policies on improving employees' knowledge and skills for discharging duties at work; description of training activities   | 41-42, 61               |   |
| KPI B3.1  | The percentage of employees trained by gender and employee category  |                         | Lenovo does not roll up gender and employee category training data on a global level.   |
| KPI B3.2  | The average training hours completed per employee by gender and employee category  | 61                      | Lenovo does not roll up gender and employee category training data on a global level.   |
| <b>Aspect B4: Labour Standards</b>                      |  |                         |   |
| General disclosure                                      | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour  | 23-25, 40, 44-49, 56-57 |   |
| KPI B4.1  | Description of measures to review employment practices to avoid child and forced labour  | 23-25, 39-44, 44-49, 51 |   |
| KPI B4.2  | Description of steps taken to eliminate such practices when discovered.  | 24, 45-47, 50-51, 56-57 |   |

| General Disclosures and KPIs              |  | Page Numbers    | Comments/Explanation If Not Reported   |
|---|--|-----------------|--|
| <b>Operating Practices</b>                |  |                 |  |
| <b>Aspect B5: Supply Chain Management</b> |  |                 |  |
| General Disclosure                        | Policies on managing environmental and social risks of the supply chain  | 44-52           |  |
| KPI B5.1                                  | Number of suppliers by geographical region   |                 | See: <a href="https://www.lenovo.com/us/en/social-responsibility/supplier-list.pdf">https://www.lenovo.com/us/en/social-responsibility/supplier-list.pdf</a> |
| KPI B5.2                                  | Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored   | 44-52           |  |
| <b>Aspect B6: Product Responsibility</b>  |  |                 |  |
| General Disclosure                        | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress | 23-25,<br>30-34 |  |
| KPI B6.1                                  | Percentage of total products sold or shipped subject to recalls for safety and health reasons  | 33              |  |
| KPI B6.2                                  | Number of products and service related complaints received and how they are dealt with   | 32-33           | Lenovo does not roll up product- and service-related complaints on a global level.   |
| KPI B6.3                                  | Description of practices relating to observing and protecting intellectual property rights   | 24              |  |
| KPI B6.4                                  | Description of quality assurance process and recall procedures   | 30-32           |  |
| KPI B6.5                                  | Description of consumer data protection and privacy policies, how they are implemented and monitored   | 26              |  |
| <b>Aspect B7: Anti-corruption</b>         |  |                 |  |
| General Disclosure                        | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering  | 24              |  |
| KPI B7.1                                  | Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases  |                 | Lenovo does not report this information.   |
| KPI B7.2                                  | Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored  | 25              |  |
| <b>Community</b>                          |  |                 |  |
| <b>Aspect B8: Community Investment</b>    |  |                 |  |
| General Disclosure                        | Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests  | 63              |  |
| KPI B8.1                                  | Focus areas of contribution  | 63-66           |  |
| KPI B8.2                                  | Resources contribute to the focus area   | 104             |  |

