



Environmental, Social, and Governance Report *2023*



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Our mission
**To make it easy to do business
 anywhere.**

Our vision
**We aspire to be a good company
 that will last for 102 years.**

Company Introduction

Our mission: To make it easy to do business anywhere. Our founders started our company to champion small businesses, in the belief that the Internet would level the playing field by enabling small enterprises to leverage innovation and technology to grow and compete more effectively in domestic and global economies. We believe that concentrating on customer needs and solving their problems - whether those customers are consumers, merchants, or enterprises - ultimately will lead to the best outcome for our business. In the digital era, we are staying true to our mission by helping our customers and business partners harness the power of digital technology. We have developed an ecosystem powered by technology infrastructure that enables participants to create and share value on our platforms. Our decisions are guided by how they serve our mission over the long term, not by the pursuit of short-term gains.

Our vision: We aspire to be a good company that will last for 102 years. For a company that was founded in 1999, lasting for 102 years means we will have spanned three centuries. Our culture, business models, and systems are built to last so that we can achieve sustainability in the long run. As we continue to expand our businesses, Alibaba has evolved into an ecosystem that is unique, energetic, and innovative.

Action Is More Important Than Consensus

Letter from our Chairman and CEO

We hope to foster more “good companies” and leaders in sustainable development by effectively implementing our ESG strategy.

I am pleased to share Alibaba Group’s annual Environmental, Social and Governance (ESG) Report. Last summer, we released Alibaba Group’s first comprehensive ESG report and outlined seven long-term strategic directions, named “Alibaba’s seven-petal ESG flower.” We were humbled by the widespread recognition and support for the report and our strategy from different stakeholders across the community.

Fiscal year 2023 was the first year we systematically implemented our complete ESG strategy. Despite challenges in the macro environment, geopolitical uncertainties in the post-pandemic era, and new trade-offs between sustainable development and economic growth, we achieved notable progress in our ESG initiatives.

We are committed to environmental protection. Over the past year, we have worked to deliver high-quality achievement of our established carbon neutrality goals. By transitioning to renewable energy, encouraging technological innovation and building a participant ecosystem, we achieved our goal of “double reduction,” where we reduced carbon emissions from our own operations and carbon intensity across our value chain. In our first year of driving ecosystem carbon reduction, where we had to design and implement everything from scratch, we reduced our carbon emissions by 22.907 million tons. We have focused on three main areas to transform the value chain and ecosystem of our cloud computing infrastructure so that we are part of a green, low-carbon circular economy, which are: (1) building a clean cloud, (2) replacing traditional IT with cloud computing to boost efficiency, and (3) empowering intelligent transformations. Our self-built data centers’ power utilization efficiency (PUE) level continued to improve and reached 1.215, maintaining its leadership in Asia. We continued to successfully increase our transition to clean energy, which reached 53.9% of total energy consumption.



As a commerce and technology platform connecting billions of consumers and nearly ten million enterprise customers, we pioneered the “Scope 3+” concept to encourage decarbonization across our platform ecosystems last year. We hope to build consensus with partners on carbon reduction standards and promote sustainable progress of more enterprises. We are incredibly honored by the World Business Council for Sustainable Development’s invitation to join as the first Internet company from Asia. We have started collaborating with them on the Scope 3+ emission reduction standard and leveraging this opportunity to introduce innovative carbon reduction solutions to the world.

We are delivering on our social responsibilities using our unique capacities and ways.

We believe that a diverse and healthy working environment not only helps to attract and retain the best talent, but also stimulates the enthusiasm and creativity of our employees. This past year, we continued to focus on our employee welfare and protection programs, fostering a fair, diverse and inclusive culture, and creating an open and transparent work environment. We are also actively giving back to the broader community, supporting various areas such as education, aging, accessibility, and rural revitalization. Over this past year, the Alibaba ecosystem has directly or indirectly facilitated over 70 million job opportunities. Taobao and Tmall Group has served over 320,000 visually impaired users. Amap's wheelchair navigation feature has been used for travel planning more than 900,000 times. The "Cloud for Youth" Program has deployed "cloud computing rooms" to 102 schools, serving over 60,000 teachers and students. We are partnering with the UNESCO Chair on Artificial Intelligence in Education to bring more cutting-edge computing resources to students in China's rural areas. Over the last few years, we have dispatched 27 rural revitalization commissioners and over 220 rural revitalization technology officers to rural areas across China. We were humbled by the recognition of these collective activities and initiatives by the "2023 Philanthropic Enterprise of the Year" award and inclusion in the "Forbes' Best Employers in the World 2022" ranking.

We continued to improve our corporate governance. On March 28th, Alibaba Group announced a new "1+6+N" organizational and governance structure, the most important and far-reaching transformation since our establishment. The new governance structure empowers our businesses to become more agile, enhance decision making and therefore, better positioned to capture future growth opportunities. In the future, based on the ESG goals of Alibaba Group, each major business group and various businesses will also define their own ESG goals and priorities according to their development status and situations.

Some things will never change, which is our commitment to ESG. ESG will continue to be one of Alibaba Group's cornerstone strategies and the goal of creating value beyond business through ESG remains unchanged. Alibaba's three-tiered ESG governance structure remains unchanged, and each business group will continue exploring ESG action strategies according to its characteristics. ESG will become a governance mechanism and value linkage between Alibaba Group and the major business groups and various businesses, helping Alibaba to continue to be a "good company" and a leader in sustainable development. Alibaba Group's board level compensation

committee has elevated governance mechanisms by incorporating ESG targets to business and compliance targets in the performance measurement of the CEOs of the major business groups and various businesses, and linking it to compensation. We hope to foster more "good companies" and leaders in sustainable development by effectively implementing our ESG strategy.

We are pleased that sustainable development has become a mainstream goal in this era. In less than 20 years, ESG has become a global initiative and reality, increasingly compulsory instead of optional. More than 70 stock exchanges have introduced ESG disclosure requirements, and more and more companies are starting to publish their own ESG reports voluntarily. We hope that more and more peers will explore the future of sustainable development together, create value beyond business, and jointly build a healthy, comprehensive, and mutually prosperous sustainable ecosystem.

Alibaba is a company that fundamentally believes in truth, kindness, and excellence. From our birth to the present day and well into the future, we want to share our innovations in business and technology and our approach to engaging with the world. If our annual financial report reflects Alibaba's business operations and performance, then through the annual ESG report - which is essentially a yearly survey conducted reflecting the actions of over 230,000 Alibaba employees - we hope to help more people understand and appreciate our business philosophies, values and behavior principles, thoughts and plans for the future, and ambitions for social responsibility. Some of these philosophies and principles have been in place since the company's birth. Many were forged during our development. And many more will emerge as we move and dance with the times and society.

We believe this report reflects on the past and gives our commitments to the future. We know that actions speak louder than words, and that action is more important than consensus. Only through concrete, step-by-step action can we fulfill our responsibilities and truly create lasting, far-reaching, and meaningful value for our customers, employees, shareholders, and stakeholders.

Daniel Zhang

Alibaba Group Chairman and Chief Executive Officer
Cloud Intelligence Group Chairman and Chief Executive Officer

July 2023

Report Instruction

In this report, "Alibaba" "we" "the Group" and "the company" all refer to "Alibaba Group Holding Limited". This report mainly covers the environmental, social, and governance (hereinafter referred to as "ESG") progress of the business directly operated and controlled by the Group from April 1, 2022, to March 31, 2023. Some parts of the report also cover prior years as well as give forward-looking statements. Unless specified, the monetary amounts shown in this report are all presented in RMB. The report is prepared in accordance with the ESG Reporting Guide from the Hong Kong Stock Exchange. It also refers to selected guidelines from the United Nations 2030 Sustainable Development Goals (SDGs), the Global Reporting Initiative (GRI) Standards, the standards issued by the Sustainability Accounting Standards Board (SASB), and the framework suggested by the Task Force on Climate-related Financial Disclosures (TCFD).

Additional disclosures can be found in our appendices.

- Appendix 1: ESG Key Performance Metrics Table
- Appendix 2: List of ESG Related Ratings and Awards
- Appendix 3: ESG Data Verification Statement
- Appendix 4: Greenhouse Gas Inventory and Carbon Methodology
- Appendix 5: Climate-related Risks and Opportunities Assessment Report
- Appendix 6: Stakeholder Engagement and Materiality Assessment
- Appendix 7: Progress of United Nations Global Compact
- Appendix 8: Report Indicator Index
- Appendix 9: Important Legal Information

This report is presented in electronic versions in the ESG section of the Group's official website (<https://www.alibabagroup.com/en-US/esg>). A Chinese version, an English version, and printer-friendly versions are available. In case of conflicts between the two languages, the Chinese version shall take precedence.

We value any feedback and opinions, which can be e-mailed to us at ESG@alibaba-inc.com.



**ESG is the bridge
to the future**

Our corporate responsibilities and opportunities in an era of global challenges

Since the United Nations adopted the historic Transforming Our World: The 2030 Agenda for Sustainable Development in 2015, addressing shared challenges such as climate change and inequality has become a consensus for humanity, but we remain far away from realizing these goals. Under the combined impact of the COVID-19 pandemic, geopolitical conflicts, and climate change, the past year has seen a systemic setback in global development. The Human Development Index (HDI) declined for two consecutive years for the first time in over three decades, and inequalities have been widening both among and within countries and regions (UNDP, 2022). This situation is further complicated by global ecological degradation that shows no clear sign of easing, greenhouse gas emissions still on the rise, and the pace of emission reductions lagging significantly behind the Paris Agreement targets.

These grim realities highlight that a wide array of stakeholders need to be involved in sustainable development challenges, with their demands for different sustainable development goals intertwined. To truly alleviate such challenges, in addition to clear policy guidance, effort should be made to give full play to scientific and technological innovation. This should be done in close conjunction with market mechanisms which all parties are willing to participate in and benefit from. This defines the social responsibility that Alibaba, as a digital technology and platform company, should undertake.

We believe that clearly defining and prioritizing social responsibilities, leveraging technological innovation, and promoting our stakeholder ecosystem serve as the indispensable building blocks for mitigating these challenges at scale. By giving full play to these three pillars, businesses can pool the strengths of many parties to explore collaborative solutions that are systematic, scalable, and aligned with the public interest. From this, we will see opportunities to overcome the cyclical impacts of these challenges and to create greater value for business and beyond. Alibaba is well positioned to synergize these three building blocks to create commercial and lifestyle ecosystems that are driven by cutting-edge technologies and responsible to society.



ESG strategic positioning and planning at Alibaba

Alibaba was born with the mission to "make it easy to do business anywhere". Our growth has come from addressing social challenges, and this ethos is etched in our DNA. Alibaba's history of development has been forged by constant technological innovations and new forms of business created along with our numerous stakeholders. We have tens of millions of MSMEs (micro, small, and medium-sized enterprises) active in our business ecosystem, serving consumers worldwide to help them enjoy a better life. This ecosystem also serves as the most fertile soil for us to jointly practice our social responsibility.

At the end of 2021, ESG was formally established as one of our cornerstone strategies - dedicated to being a good company, and a high-tech business committed long-term to improving human well-being and protecting the planet we live on, so that man and nature can develop together in harmony. To ensure the implementation of the ESG strategy, we have put in place a three-tier sustainability governance structure, comprising the Sustainability Committee at the Board level, the Sustainability Steering Committee at the Group management level, and the ESG Working Group that connects all business units.

In FY2022, we conducted extensive communication with various stakeholders including consumers, employees, shareholders and investors, governments, partners, and communities. After considering the most pressing social challenges, and our own strengths and capabilities, especially in fully leveraging the unique advantages of a platform company, we identified seven long-term strategic directions for core social responsibilities. These are represented in the Alibaba's seven-petal ESG flower. They are closely aligned with the UN's 17 Sustainable Development Goals (SDGs) and closely fit within China's goals for its modernization.

Restoring Our Green Planet

Addressing major environmental issues such as climate change.



Building Trust

Building corporate trust by establishing an effective, transparent, and sound governance system; building social trust with ethical technology, and protecting user privacy and data security



Facilitating Participatory Philanthropy

Fostering a culture of participatory philanthropy by integrating community resources with creative platform innovations.



Supporting Our People

Building a people-first culture that offers an equal, inclusive, and dignified environment in which every employee can grow and develop.



Enabling a Sustainable Digital life

Leveraging the power of technology to bring a better and more responsible digital lifestyle for everyone.



Fueling Small Businesses

Creating more growth opportunities for micro, small, and medium enterprises (MSMEs) and entrepreneurs through technology and business innovations



Enhancing Community Inclusion and Resilience

Sharing dividends of development with disadvantaged groups and underserved regions, and thus building more inclusive and resilient communities



We are moving to plan, implement, and deepen our ESG strategic goals via a five-step approach, which includes determining positioning and targets, integrating sustainable development into business design, actively promoting the coordinated transformation of the business ecosystem, amplifying impact through platform technology, and implementing public welfare and charity programs that complement sustainable development, with FY2023 being the first year that we systematically implemented this approach.



1. Positioning and targeting

With the Seven-Petal framework orienting our core ESG strategy, we continually identify the most critical issues in our own operations, value chain, and platform ecosystem through diverse communication and information gathering. We set specific and ambitious strategic goals towards high-priority issues, considering the realities of technology and business. We have been extending the scope and depth of our ESG strategic focus and ambitions, from proposing emission reduction targets for our own operations, the value chain, and the platform ecosystem in 2021, to vigorously facilitating diversity and independence in the composition of our Board of Directors in 2022.

2. Integrating sustainable development into business design

For the past year, based on our strategic positioning and organizational commitments, we kept striving to integrate sustainable development into business design: we used multiple channels to help our employees worldwide understand our ESG strategy and actions so that each of them can be an ESG embracer and practitioner. Our management team has integrated ESG into their Objectives and Key Results (OKRs), so that high-standard ESG objectives are prioritized in core business units with the proper assessments; established an ESG data management system to measure and manage progress towards relevant objectives; closely integrated core issues such as the achievement of emission reduction targets, privacy protection and data security, and technology ethics into our business, seeking to make our ESG strategy a new driver of Alibaba’s business development; respected the distinctive characteristics and developmental stages of the different business units and industries in our complex and diverse business ecosystem, and define ESG priorities for their actions accordingly; established cross-departmental working groups for collaborative assessment and planning for high-priority integrated issues (such as climate risks and opportunities).

3. Promoting coordinated transformation of the related business ecosystem

We team up with partners across the value chain to promote sustainable innovation and transformation of the business ecosystem. We introduce higher sustainability standards into our business, from greener, safer, and more trusted cloud computing, AI, and logistics services to more diverse, inclusive, and reliable consumer experiences, providing more sustainable options for customers and partners. We also continued to promote the implementation of the

Alibaba Supplier ESG Code of Conduct and to encourage more suppliers to join us in sustainable practices.

4. Amplifying impact through platform technology

Digital platforms stand out with their distinct capability to reach and connect a vast array of diverse stakeholders. We can use the power of technology to help all stakeholders in fulfilling their own social responsibilities, thereby promoting the systematic transformations essential to social progress. Given our capabilities, it is both our indispensable responsibility and a key opportunity to strive to be a sustainable business leader. Through building our inclusive and efficient platforms, we help create and support tens of millions of jobs. We also drive hundreds of millions of consumers and MSMEs towards emission reduction and build a green and circular economy by establishing measures and goals through platform-based solutions such as Scope 3+. We share our experiences and innovations with diverse stakeholders across industries and regions to initiate collective actions such as standards setting and policy initiatives, to drive sustainable transformation across the world.

5. Implementing charity for sustainability

Establishing broad and mutual goodwill, among people and between people and nature, is the foundational basis of sustainable development. We strive to harness the power of technology and platforms to connect a broad ecosystem of participants, and evolve along the way into an integral part of rural revitalization and our sustainability goals from earlier focus on environmental protection to poverty alleviation and beyond. We incorporate philanthropy into business design to shoulder social responsibility beyond business.

Progress and highlights of core ESG issues in FY2023

The past year saw our efforts lead to blooms and fruits on all the seven petals of the ESG flower. Below is a summary of progress and highlights on some core issues.

1. Advancing in the high-quality delivery of carbon neutrality targets

In 2021, Alibaba set ambitious targets of achieving carbon neutrality in our own operations and halving the energy intensity across our value chain by 2030 and driving emission reduction of 1.5 gigatons over 15 years in our platform ecosystem. Over the past year, not only have we made solid progress towards meeting these emissions reduction targets, but even more important has been the quality methods used to achieve this progress. We strived to apply our strengths in technological innovation, energy transformation, and a participatory ecosystem to all aspects of sustainability, from energy efficiency and clean energy to recycling and recovery. We further extended our focus from emissions reduction to the preservation of the entire ecosystem, represented by water conservation, plastic reduction, and waste elimination, so as to facilitate transforming China's largest consumer ecosystem and its supporting businesses into a truly digital circular economy.

Emission reduction in our own operations (Scopes 1 and 2)

We have taken measures such as smart energy management, clean energy sourcing, and solar panel deployment. Net emissions totaled 4.681 million MtCO₂e in FY2023, a year-over-year decrease of 12.9%. Annual operational emission reduction reached 1.419 million MtCO₂e, a prominent increase of 128.9% over emission reduction of 0.62 million MtCO₂e in the previous fiscal year.

Emission reduction throughout our value chain (Scope 3)

We worked on initiatives including efficiency improvements across our supply chain, electrification of ground transport, use of clean energy, and encouraging low-carbon business travel among our employees, with a total of emission reduction of 0.40 million MtCO₂e throughout the value chain. In addition, coupled with carbon removal and avoidance projects, our value chain carbon intensity¹ reduced from 9.2 MtCO₂e per million RMB in FY2022 to 8.7 MtCO₂e per million RMB. Based on these steps, we are achieving success towards our goals in terms of both reducing emissions from our own operations and decreasing carbon intensity across our value chain.

Driving emission reduction in the ecosystem (Scope 3+)

We made significant progress in the following three areas,

First, in terms of science-based measurement, we cooperated with multiple professional institutions to publicly announce an analytical framework for scientific measurement of emission reduction under the Scope 3+ methodology, and defined two implementation paths, i.e., Engaged Carbon Abatement (digitalization to drive emission reduction) and Embedded Carbon Abatement (leveraging platforms to engage more stakeholders in decarbonization).

Second, regarding actual reduction practices, with



no prior standard for the Scope 3+ concept, we have now developed emission reduction methodologies for specific scenarios while implementing practical carbon abatement actions. During this first year of implementing Scope 3+ emission reductions, we accomplished emission reductions of 22.907 million MtCO₂e, and determined a preliminary road map towards achieving long-term emission reduction goals. **Finally and meaningfully,** through our Carbon88 ledger platform and Low-carbon Friendly Products Program, we had 409 brands, 1.91 million products and 187 million consumers participating in emission reduction. This is one realization of our original intention of giving full play to the power of the platform ecosystem and driving the transition to a digital circular economy for both suppliers and consumers.

¹ Value chain carbon intensity is defined as the net value chain emissions per million RMB of revenue.

2. Creating a clean cloud

Cloud computing serves as a vital and fundamental infrastructure for the growth of the digital economy. We focus our work on three directions, namely building our own clean cloud, replacing traditional IT to boost efficiency and reduce emissions, and empowering the green and intelligent transformation, all striving to realize the value of these green foundational capabilities in the transition to a digital circular economy. As a global cloud industry leader, we are motivated to pioneer green and low-carbon cloud computing.



Creating a clean cloud

Since we set our goal in 2021 to achieve carbon neutrality in our cloud operations and value chain (Scope 1, 2, and 3) by no later than 2030, we have been working to define and build our own green and low-carbon cloud computing across our operations and value chain, by means of extensive self-initiated technology innovation, steady transition to clean energy, and proactive decarbonization of the supply chain. Over the past year, we have made encouraging progress both in intensity and quality of emission reductions.

Energy conservation and efficiency improvement using data intelligence

We have continued to focus on our hardware and software co-design model, energy-saving server architecture, and liquid-cooled server technology to continuously improve computing utilization and energy efficiency; improving resource utilization efficiency through intelligent O&M (Operation and Maintenance), power management optimization, digital use and management of resources, and other means. In FY2023, overall average PUE (power utilization efficiency, the lower the better) of our self-built data centers continued to decline from 1.247 in FY2022 to 1.215, maintaining a leading level in Asia.

Enhancing resource efficiency

We have continuously intensified the purchase and trading of clean energy and deployment of solar panels in eligible sites, making a breakthrough increase in the proportion of clean energy



consumption in overall energy consumption in our self-built data centers from 21.6% in FY2022 to 53.9%, a year-over-year rise of 1.5 times and taking a leading position in the industry in China. During the same period, we extended the life of warranty servers amounting to 25.73 million cores and recycled 49,747 servers for continued service.

Green transformation of the value chain

We have actively promoted the decarbonization of our suppliers through periodic assessments and evaluations of their low-carbon practices; meanwhile, we share our standards and technologies, and coordinate clean energy resources, to help operators of our leased data centers boost their efficiency and cut emissions. In FY2023, suppliers collectively reduced carbon by 0.363 million MtCO₂e through clean energy and RECs.

Replacing traditional IT with cloud computing to boost efficiency and reduce emissions

According to the Carbon Trust's report, Alibaba Cloud's Carbon Benefits, Alibaba Cloud users in China can avoid 85.5% of emissions by switching from the traditional mode of locally deployed data centers and servers. Based on our methodology, our cloud computing for client empowerment reduced 6.863 million MtCO₂e of emissions in FY2023.

Empowering the green and intelligent transformation

We combine the digital and intelligent capabilities powered by our green cloud computing to boost the digital circular economy transformations of MSMEs across many industries.

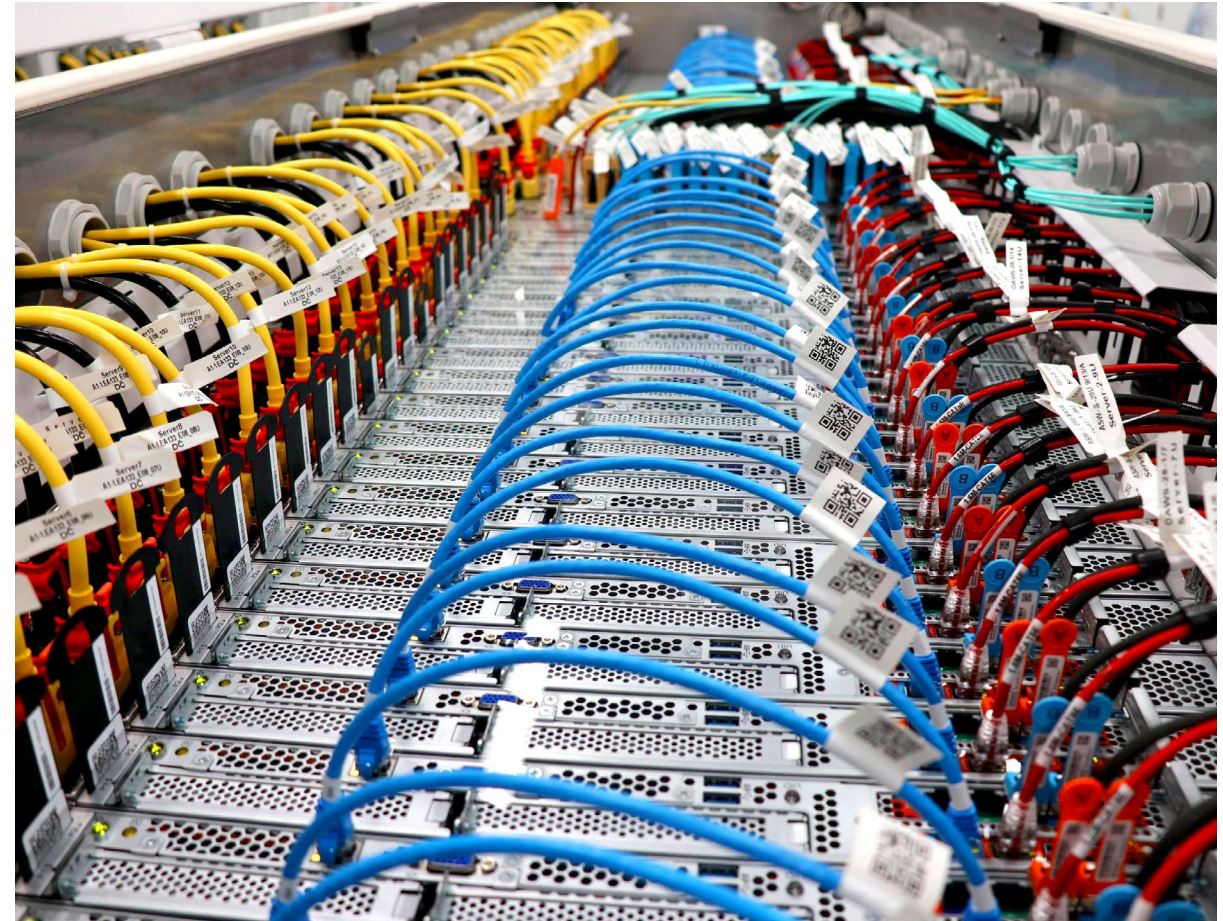
Partnering with the power industry

The construction of new power systems, connection of renewable sources to the grid, coordination of power sources, loads, grids, and storage, and the building of a unified market all pose great challenges to the industry. In February 2023, Alibaba Cloud signed a memorandum of understanding (MoU) with China Southern Power Grid to deepen cooperation on an AI-enabled Cloud in power dispatching, jointly working towards the goal of safe, reliable, and green development in this space. In March 2023, Alibaba advanced our comprehensive strategic partnership with the State Power Investment Corporation Limited, joining our complementary capabilities to give the electricity users like Alibaba access to more and cleaner power ("New Energy+") and to help the power industry become smarter and more efficient ("Green Digital Intelligence+").

Empowering export-oriented MSMEs

Energy Expert, launched by Alibaba Cloud, is an energy consumption and carbon management platform to assist enterprise clients in saving energy and improving efficiency. Energy Expert can intelligently generate carbon footprint inspection and analysis reports for products, which can be uploaded to authoritative certification

bodies for one-stop certification and carbon labeling. This helps these enterprises, especially export-oriented MSMEs, to maintain low-carbon competitiveness at home and abroad. As of March 31, 2023, Energy Expert had served 2,580 enterprises worldwide.



3. Supporting our employees

We uphold the concept of "supporting employees in bettering themselves", and make effort to create an environment that supports the mutual growth of employees and the company. Over the past year, under a challenging macroeconomic environment, we strived to embrace change. First, we continued to build and improve upon a diverse, fair, and inclusive culture, enhance our compensation and benefits systems, and create a great working environment to be a company that employees like working for. Beyond these, we provide employees with abundant learning and development opportunities, maintained an open channel for their information and communication, and work together with employees to jointly address diverse challenges and ensure growth.



Building Diversity, Equity and Inclusion (DEI) culture and system

Our employees come from more than 60 countries and regions. Women account for 49.1% of all employees. Women make up 41.9% of our management, 25% of our executive management and 30% of the board of directors of the Group.

Establishing fair and competitive remuneration and "heart-warming" benefits

We create an open and transparent working atmosphere, establish a fair and equitable performance evaluation system, and inspire employee enthusiasm and creativity. Provide "heart-warming" benefits to every employee, including protections such as health insurance to employees and their families for peace of mind, and enable employees to enjoy a variety of holidays and leave such as companionship leave. In FY2023, a total of 62,138 employees enjoyed companionship leave, in addition to their annual leaves.

Alibaba was awarded "Forbes 2022 Global Best Employer," ranking among the Top 5 Chinese enterprises, and awarded "MostIn Global Attractive Employer" by LinkedIn China.

Provide extensive learning and development opportunities

Adhering to the concept of "supporting employees to better themselves", we have provided diverse learning

opportunities and resources for employees at different career and life development stages to assist them in achieving personal growth and career development. In FY2023, a total of 62,383 training sessions have been performed, and the training hours per employee are 51 hours. A total 33,437 new learning materials have been added for employees, especially diverse professional knowledge lectures and training on ESG.

Promoting employee health and vitality

Giving top priority to the health and safety of every Alibaba employee, we spare no efforts in creating a healthy, safe, dynamic, and caring work environment. In FY2023, we initiated a systematic review and system of occupational health and safety management. On the basis of improving the existing emergency management system, we have performed systematic review with reference to ISO14001 and ISO45001 standards, and established the EHS (Environment, Health, and Safety) Committee of Xixi Headquarter Campus on a pilot basis. There are a total of 5,723 emergency responders in all campuses across China, and a total of 138 automatic external defibrillators (AEDs) are equipped. The Cloud Valley, Alibaba's Cloud Campus in Hangzhou opened in September 2022, has been certified by ISO14001 and ISO45001 standards, with its experience to be steadily extended to other campuses.

In FY2023, satisfaction with the office environment has passed 91% for 4 consecutive quarters.

4. Promoting inclusive, trustworthy, and responsible consumption

Based on the United Nations' Sustainable Development Goals, we promote sustainable consumption in four dimensions of being diverse, inclusive, trustworthy, and responsible. Some highlights of our progress are as follows.

Inclusive consumption

We pay special attention to accessibility and age-friendly issues. As of March 31, 2023, all of Alibaba's major APPs have completed accessibility and age-friendly upgrades. Taobao, Ele.me, Idle Fish, Amap, and Youku have been rated and recognized in the first batch of "Excellent cases of age-friendliness and accessibility in online applications" by the China Academy of Information and Communications Technology. We have also released 11 free patents to the public that cover accessibility and age-friendly features to promote the sharing of information about accessibility and age-friendly technologies.

Accessibility: We make every effort to understand and remove the barriers of the disabled community in using digital technology, so they too can enjoy the benefits of digital technology.

Barrier-free consumption: The Taobao and Tmall APPs convert text into speech via optical character recognition (OCR) technology. In FY2023, we helped more than 320,000 visually impaired people to shop with voice-overs that describe items photographed. Visually impaired users are able to order food on Ele.me APP and shop on the Freshippo APP by using a screen-reading guide. Alibaba Health has released medicine box supporting Braille-Chinese conversion, enabling the visually impaired to use medicines safely and conveniently.

Barrier-free travel: In "Wheelchair Navigation" mode, Amap automatically navigates around potential obstacles such as underground passages or pedestrian bridges that are not accessible to wheelchair users. As of March 31, 2023, "Wheelchair Navigation" was available in 6 cities, providing accessible navigation for over 900,000 times.

Barrier-free communication: DingTalk has rolled out a barrier-free work platform to support the hearing-impaired from over 80 cities across the China Association of the Deaf with Hearing Disabilities system in their study and work through such functions as speech-to-text conversion and real-time AI captioning.

Barrier-free cultural entertainment: Youku has been processing audiovisual works using barrier-free supporting technologies, by narrating cinematic scenes without dialogue to assist visually impaired people in understanding the content. In December 2022, Youku Barrier-free Theater added a visually impaired authentication function, and we have seen more than 330,000 content views from its launch to March 31, 2023.

Age-friendly: We make continuous efforts to provide well-designed, convenient, and efficient digital services for senior consumers.

In online communities, we strive to build an age-friendly community under the Special Action Plan for Aging and Barrier-free Transformation

of Internet Applications; Our major APPs have all introduced a "Senior Mode" to be more age-friendly and bridge the digital divide.

In offline retail, we have steadily laid out and retrofitted our physical sites in an age-friendly manner, and we are progressively increasing the "Senior Service Ambassadors" in Freshippo stores to help senior shoppers find what they want, check out, carry items, and provide after-sales services. Amap strives to help seniors solve their travel difficulties through a number of age-friendly initiatives. As of March 31, 2023, Amap has built more than 3,300 WeCare stations for the elderly in 33 cities across China, with a year-over-year increase of more than 2,000 WeCare stations.



Trustworthy consumption

Consumer privacy protection and data security are the bedrock for consumers to enjoy a better life. We integrate the three principles of "minimized data collection", "ensured user awareness and choices" and "enhanced user data protection" into every part of our products and services, and make full use of privacy technology and secure computing to ensure that consumer privacy and data security is fully protected, so they can shop with trust.

We provide users with privacy management features to fully respect and protect their rights to make informed decisions on their data and privacy.

Users can check what personal data is being collected by APPs via the "Settings->Privacy" menu, and choose to deauthorize any private data. For ads and search recommendations, users can disable the use of personal data for certain functions as appropriate. In terms of recommendation optimization, a user feedback mechanism has been established to ensure users' decision-making power over algorithm-based results.

Protect consumer information through full-link encryption and consumer privacy number protection while continuously improving security capabilities.

Taobao has encouraged third-party partners to upgrade their privacy protection systems to better protect the sensitive information of tens of millions of vendors and billions of users. As of the reporting date, the virtual phone number service adopted by Taobao has covered 100% of active consumers on the platform.

Responsible consumption

During the past year, we worked on two fronts to promote responsible consumption to minimize the impact of consumption on the environment and society.

Guiding and facilitating green consumption transition:

The Carbon88 ledger platform covers various consumption scenarios including online shopping, travel, food delivery, and second-hand transactions. The system uses carbon points to

make consumers aware of behavior that is low-carbon, encouraging and guiding consumers to adopt green consumption habits. In FY2023, a total of 187 million users practiced low-carbon actions through the Carbon88 ledger platform.

Shaping a healthy consumption climate:

Provide positive guidance away from harmful searches² to minimize their risks to society. As of March 31, 2023, around 80 million potentially harmful searches have been automatically guided to educational content.



² Harmful searches cover keywords related to wildlife, suicidal searches for harmful products, gaming addiction, and even crimes, which may bring harm and risks to society.

5. Fueling small businesses for growth and employment

In the context of digital transformation, MSMEs face three major challenges, namely access to technology, market opportunities, and business competitiveness. As a technology platform company, Alibaba recognizes its responsibility to integrate digital technology with the real economy to provide more capabilities for MSMEs to achieve sustainable development in the digital transformation. In this process, we also contribute to large-scaled and high-quality employment across the society.

Making technology more available

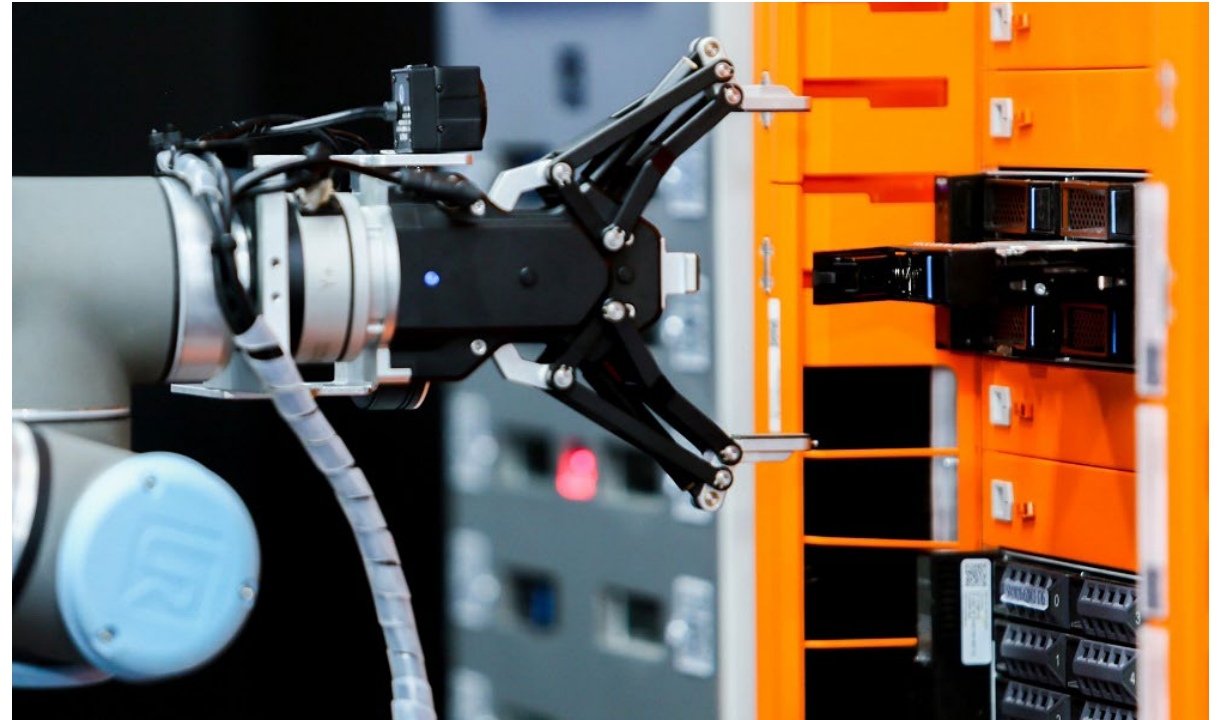
Access to cutting-edge technologies is the foundation of MSMEs' development. While steadily developing leading technologies, we lead in promoting the integration of technology and business by enhancing technology's accessibility and affordability. We also strive to build an open technology ecosystem, so that MSMEs can better benefit from the dividends of innovation.

Technological innovation is inherently inclusive. Over the past decade, through technical innovation and large-scale deployment, we have delivered an 80% reduction in the cost of cloud computing power and a nearly 90% reduction in the cost of cloud storage, thus enabling more MSMEs and developers to access affordable computing power.

The integration of technology and business has also made technical applications more accessible. Tens of millions of micro, small, and medium merchants on our e-commerce platforms, such as those on Taobao and Tmall have already been operating their businesses on our efficient cloud computing. This integration of the latest cutting-edge technology and the business of MSMEs is a defining feature of the fusion of digital technology with the real economy made possible by our digital platforms. In addition, we are providing cloud computing services to over 4 million clients worldwide.

Alibaba has been a firm believer and advocate of open-source technology and open ecosystems. We directly build and support the largest open-source community in China. In 2022, we remained first among Chinese enterprises in both the OpenRank impact and project activity, and were awarded the "Outstanding Open-Source Innovation Company" in the 2022 China Open-Source Cloud League (COSCL) Awards. We were

especially excited to launch the AI model community "ModelScope" in FY2023 to meet the needs of model customization, which has often been difficult for MSMEs due to high development thresholds. ModelScope released over 300 models in its first batch, among which over one-third were Chinese models, and covering major AI fields like vision, speech, natural language processing, and multi-modality.



Boosting MSMEs with growth opportunities and digital competitiveness

Our platform is a shared ecosystem jointly built by millions of MSMEs and over one billion consumers. On the one hand, we power marketplaces that bring users and growth opportunities to MSMEs; on the other, we continuously deliver and upgrade an array of tools for business operations, decision-making, collaboration, and management based on the integration of cloud, data, and intelligence, so that digital business capabilities can be accessible enough to help MSMEs truly grow and compete.

Digital business operation: On Taobao and Tmall, we have built a one-stop platform called Qianniu for merchants, providing a full suite of digital business services together with third-party service providers. In FY2023, more than 10 million merchants managed their stores through Qianniu.

Data-driven intelligent decision-making: Intelligent decision-making is becoming an increasingly critical capability for MSMEs to compete in digital business. We have comprehensively upgraded Business Advisor, a data tool used by approximately 6.5 million merchants by the end of March 31, 2023, to make core data clearer and structurally simpler, improving the level of understanding of the consumers. To serve a wider range of enterprises on our platforms and beyond, we established Lingyang in FY2023, a service brand focusing on data intelligence services for enterprises to assist them in making data applicable, relying on data, and making decisions based on data.

Smart collaboration and management: As of March 31, 2023, there were more than 600 million users, in more than 23 million mostly MSME businesses and organizations on DingTalk. DingTalk was recognized by the General Office of China's Ministry of Industry and Information Technology as the 2022 National Model Platform for SME Public Services. DingTalk builds a digital ecosystem for merchants and developers with a "PaaS (Platform as a Service) platform + low-code development toolkit" as its base. It provides rich API connectors and

a professional low-code development toolkit that supports external developers and in-house employees to build various applications such as ERP, project management, and collaborative office in a lower-cost and higher-efficiency way, dramatically facilitating the digital transformation of MSMEs while spurring innovation and entrepreneurship in software development. As of March 31, 2023, there are over 5 million low-code applications and over 3.8 million developers on DingTalk. With the boom in AI technologies, as the leading business services platform in China, DingTalk is in the process of building its intelligence functionality. We are in the process of integrating Tongyi Qianwen, Alibaba's

latest AI language model, to further enhance the intelligence of instant message (IM), documents, low-code design, video and audio, thus helping countless MSMEs realize their digital and smart transformation as soon as possible.

Digital business skills training: To achieve digital transformation, MSMEs need not only access to but also mastery of the new digital tools. In FY2023, we provided free e-commerce introductory courses for MSMEs, with more than 17 million class attendances, and we developed the online learning system Cloud Classroom for corporate clients, with over 6 million learners.



Creating and promoting large-scale, high-quality employment

The empowerment of MSMEs with technology naturally yields opportunities for large-scale and high-quality employment.

As a digital platform, our contribution to employment can be measured by what we call the "three rings." The first ring consists of staff we directly employ; the second ring is jobs arising directly from the platform ecosystem, including entrepreneurial employment in MSMEs and new employment forms; the third ring includes more indirect jobs arising across the supply chains and service providers. According to the latest estimate by a research team from Renmin University of China, the Alibaba ecosystem created or supported, directly or indirectly, a total of more than 70 million jobs in 2022.

The growth of the digital economy can bring about a rise in job opportunities and incomes, and stimulate more workers to start their own businesses or choose new forms of employment. As of March 31, 2023, the number of digital occupations marked in China has reached 97, including knowledge-intensive jobs such as artificial intelligence trainers and blockchain application operators. We have targeted the building of training platforms to help more people find high-quality employment opportunities in the digital transformation. In March 2020, DingTalk and the China Employment Training Technical Guidance Center of the Ministry of Human Resources and Social Security jointly launched the new career online learning platform, focusing on new career digital resource training. As of March 31, 2023, the learning platform training has helped 2.3 million person-times obtain digital manager certification.



6. Propelling inclusive rural development through digitalization

The urban-rural gap remains a great inequality challenge in China. Alibaba has persistently worked in four directions to help bridge the urban-rural gap and promote rural revitalization. We help by boosting the rural economy through inclusive digital platforms, upgrading the rural value chain, nurturing rural talent development, and facilitating vibrant rural communities.

Expanding rural e-commerce markets

We continue to expand e-commerce to less developed rural areas in China to boost local economies. In FY2023, the sales of 832 counties previously categorized as impoverished in China have exceeded RMB130 billion on Alibaba's platforms, and the total sales of 160 key counties for rural revitalization in China exceeded RMB4.3 billion.

Upgrading the rural value chains

We assist rural villages in building fundamental business capabilities in direct procurements, logistics, and digitalization to make agriculture more professional and digital. These efforts are coupled with brand building and developing tertiary service industries, to upgrade the entire rural value chain.



Freshippo has facilitated the upgrade of agricultural production and business models and incomes through the direct purchase model, buying from rural sellers. It plans to establish 1,000 "Freshippo Villages" in ten years. As of March 31, 2023, more than 140 Freshippo villages/counties have been established in 25 provincial-level regions across China.

In rural logistics, Cainiao has set up more than 1,460 county-level shared distribution centers across China. It has also built nearly 50,000 posts in villages and towns to improve distribution efficiency³ and enable consumers in rural areas to more conveniently enjoy e-commerce. Moreover, Cainiao launched accessible supply chain projects⁴ for agricultural products in 264 counties across 28 provinces in China.

In rural branding and cultural tourism development, Alibaba designers have crafted distinctive branding solutions for 13 villages; Fliggy launched a program called "Digital Strategy of Discovering Beauty with Philanthropy" which has been selected into the Cultural Tourism Marketing Boutique Promotion Case Industry List of the China Association of Travel Services.

³ The projects refer to promoting the efficiency of express delivery in rural areas.

⁴ The projects utilize the logistic technology and the supply chain capacities to sell agricultural products from rural areas across China.

Nurturing rural talents development and facilitating energetic rural communities

We introduce talents to rural areas to spur rural development, while also making an effort to attract back and retain people in their rural hometowns by providing favorable job opportunities and training. On top of that, we contribute in such areas as elementary education, culture, medical care, and public health to build more dynamic and resilient rural communities.

Bringing digital talent to the rural area

We have dispatched a total of 27 rural commissioners and over 220 rural technology officers. We run programs that promote digital education, cultivate rural talent, create local jobs, and improve schools and healthcare facilities. Our team of rural commissioners was awarded the honor of Outstanding Team for Contributions to "Sannong" (Agriculture, Rural areas, and Farmers) in 2022 by the General Office of the Ministry of Agriculture and Rural Affairs and the Policy and Regulations Department of the National Rural Revitalization Administration.

Providing training on digital skills for rural residents

As of March 31, 2023, we had built 77 regional digital talent training bases jointly with regional governments, enterprises, and specialized industrial parks, offering over 1,200 classes attended by over 190,000 attendances.

Strengthening and broadening rural primary education

As of March 31, 2023, through the "Cloud for Youth" Program, we have deployed cloud computer rooms to 102 schools, serving over 60,000 teachers and students. Recently, we have partnered with the UNESCO Chair on Artificial Intelligence in Education to explore the AI learning space in the future and leverage on the experience in China, to contribute to developing a pathway for globally minded AI education.



7. Facilitating participatory and sustainable philanthropy

We connect with a wide philanthropic ecosystem through the advantages of platforms in aggregating people and organizations and leverage the power of technology to address diverse social challenges. Starting with our employees, we extend to those across our entire ecosystem through smart mechanisms, aiming to promote extensive social involvement and "make it easy to do good, anywhere". In FY2023, Alibaba was honored with the 2023 Philanthropic Enterprise of the Year Award in the 7TH China Annual Conference on Philanthropy held by China Philanthropy Times.

Building a culture of participatory philanthropy

We inspire and empower employees to engage in philanthropic actions. In FY2023, the volunteering hours of employees totaled 250,144 hours. More than 110 company Hugs and Help groups were active in over 1,000 philanthropic activities, covering topics of environmental protection, animal protection, and education.

Empowering philanthropy with technology

We help improve operational efficiency and establish better solutions to social challenges by leveraging our expertise and technology. We further share our technical solutions with philanthropic organizations and volunteers to boost the development of philanthropy across society. In FY2023, we joined hands with the Beijing Illness Challenge Foundation to release the first-ever "Rare Disease Map" in China, providing more comprehensive and professional information to improve the convenience and accuracy of care for patients. DAMO Academy's self-developed smart screening tool for Alzheimer's disease with AI technology has helped screen 118,746 seniors with over 600 volunteers. Our Green Code platform has attracted more than 370 philanthropic organizations and supported the digitalization of over 100 of them.

Shaping the philanthropic ecosystem

We are building an extensive philanthropic ecosystem backed by our platform, engaging more people in the participatory philanthropy more efficiently and conveniently. In FY2023, Alibaba Group donated a total of RMB399 million to the Alibaba Foundation, mainly to philanthropic programs for COVID-19 relief, education, and environmental protection. More than 2.04 million merchants and 470 million consumers took part in philanthropy on our Taobao and Tmall platforms in programs such as Goods for Good, whose funds have helped more than 9 million person-times in projects assisting those in need cumulatively.



8. Building secure and ethical digital trust

As digital technology brings unprecedented breadth and depth of collaboration, and transforms both work and life at an accelerating pace, trust remains the cornerstone of business development and a prerequisite for Alibaba to fulfill our social responsibilities. In this light, we focus on building secure and ethical digital trust in two ways: 1) ensuring privacy protection and data security and 2) science and technology ethics. We do so with regards to our positioning, governance mechanism, and technology, while continuously improving our corporate governance mechanism. This is the only way to truly harness technology for good. Our goal is not only to pursue advances in technology, but also to strive to be a leader in safe and ethical data intelligence trust.



Privacy protection and data security

In terms of orientation, we prioritize the privacy and security protection of user data as foundational. Alibaba Cloud advocates and follows three principles of data security: "you own your data; you manage your data; your data is protected".

In terms of governance mechanisms, Alibaba Group has established a structure for data security management at the group level, led by our Risk Management Committee. This effort is replicated within each business unit with a dedicated Personal Information Protection Officer (PIPO), reporting directly to the president of each business line. Alibaba has so far formulated and released over 10 institutional norms on data security and privacy protection. Guided by the Data Security Standards (General Outline), they cover the entire lifecycle of data and personal information, including data collection, flow, storage, use, and destruction. Employees are required to participate in data security training and obtain related certifications. In FY2023, the total coverage of "Security Red Line Certification" is 100%.

In terms of technological capabilities, we keep strengthening our privacy protection and data security capabilities to the highest standard. Following the three top-notch technical routes of multi-party secure computing, federated learning, and trusted execution environment, we are able to deliver business results with the absence of sensitive information, striking the balance between data flow efficiency and data security. The Dataphin privacy computing technology of Lingyang currently holds 19 patents on cryptography algorithms, and has been certified with ISO27001/27018, and awarded the Leading Technology Achievement of the Year at the 3rd China Digital Economy Technology Conference.

Science and technology ethics

The rise of applications represented by generative AI technologies has presented both new opportunities for business and social development. Meanwhile it also faces numerous challenges in security, trust, and ethical risks.

In terms of orientation, the parallel development of AI technologies and science and technology ethics are the twin engines driving the sustainable development of technologies.

In FY2023, we established and released six basic principles to define ethical technology: people-oriented, inclusiveness and integrity, privacy protection, security and reliability, trustworthiness, and openness and co-governance. We are implementing these principles in specific business practices.

In terms of governance mechanisms, in January 2023, we formally released the Technology Ethics Review Management Norms, as guidance for how technology ethics review should be implemented in business.

In terms of practical actions, we have focused on the establishment of a risk management process and technology.

To take algorithm governance as an example, we actively respond to the Regulations on Administration of Algorithm Recommendation in the Internet Information Services (IISARM) by developing a series of management specifications, focusing on promoting algorithmic fairness and transparency to build an information flow recommendation system that serves multiple parties.

In terms of exploring technology solutions: In response to the emerging threats of attacks against AI, we have developed a testing and defense system to enhance the robustness of technical models, and we open-sourced the industry-first robust learning framework for visual models, so as to expedite the development of robust technologies by others in the industry.

ESG Performance Summary

Chapter 1 Restoring our green planet

12.9 %

Net emissions from our own operations (Scopes 1 & 2) were 4.681 million MtCO₂e, a year-over-year decrease of 12.9%.

1.419 million MtCO₂e

Emission reductions throughout our own operations were 1.419 million MtCO₂e, a year-over-year increase of 128.9%.

5.7 %

The value chain carbon intensity was 8.7 MtCO₂e/million RMB, a year-over-year decrease of 5.7%.

22.907 million MtCO₂e

Enabling and engaging the platform ecosystem (Scope 3+) to reduce 22.907 million MtCO₂e of emissions in total.

1.215

Our self-built data centers achieved a decrease of PUE to 1.215.

Chapter 2 Supporting our people

over 60

Employees hail from more than 60 countries and regions.

49.1 %

Women account for 49.1% of Alibaba's total employees.

41.9 %

Women account for 41.9% of Alibaba's management.

51 hours

Average training duration of 51 hours per person.

Top 5

Among Top 5 Chinese enterprises in the "Forbes 2022 Global Best Employers."

Chapter 3 Enabling a sustainable digital life

100 %

Taobao's number protection strategy has covered 100% of active users.

Around 80 million times

The "GreenNet Program" automatically guided a total of around 80 million potentially harmful searches to educational content.

GFSI China Technologies Food Safety Case Studies

"The case of social co-governance of network catering" of Ele.me was awarded the Contribution Award of GFSI China Technologies Food Safety Case Studies

Over 900,000 times

Amap provided accessible navigation over 900,000 times.

Over 320,000

The Taobao and Tmall APPs have served over 320,000 visually impaired users

Chapter 4 Fueling small businesses

Over 70 million

Alibaba ecosystem created or supported, directly or indirectly, a total of over 70 million jobs in 2022.

Over 47 million

On Alibaba.com, over 0.2 million sellers across 190 countries and regions sourced business opportunities from or completed transactions with over 47 million buyers.

No.1

We continue to be ranked first in open-source activity and influence among Chinese enterprises.

2022 National Public Service Demonstration Platform for Small and Medium Enterprises

DingTalk was awarded the "2022 National Public Service Demonstration Platform for Small and Medium Enterprises."

Over 17,000

We hold more than 17,000 global patents, and the year-over-year growth was over 20%

**Alibaba
ESG**



ESG Performance Summary

Chapter 5 Enhancing community inclusion and resilience

Over **RMB130 billion**

Counties previously categorized as impoverished under China's national standards increased sales on our platforms to more than RMB130 billion.

Over **1,460**

Cainiao has enhanced rural logistics efficiency and built over 1,460 country-level smart logistics centers, along with nearly 50,000 posts in villages or towns.

102 schools

The "Cloud for Youth" program has implemented in 102 schools serving over 60,000 teachers and students.

14,002 doctors

Rural medical expertise learning platform has provided trainings for a total of 14,002 local doctors.

Global logistics partner

Cainiao inked a global logistics cooperation agreement with the United Nations World Food Programme (WFP), becoming a global logistics partner of WFP.

Chapter 6 Facilitating participatory philanthropy

250,144 hours

The total number of employee voluntary service hours is 250,144.

**The first rare
disease access map**

Alibaba Health released the first rare disease access map in China.

118,746 seniors

Alibaba's self-developed smart screening tool for Alzheimer's disease using AI technology has helped screen 118,746 seniors.

11,722 people

The "Daily Positive Energy" program, with ten years of devotion, has given positive recognition and encouragement to 11,722 people.

**2023 Philanthropic
Enterprise**

Alibaba was awarded the "2023 Philanthropic Enterprise."

Chapter 7 Building trust

60%

The percentage of independent directors has increased to 60%.

30%

The percentage of female directors has reached 30% from 20%.

100%

The exams on the Alibaba Group Code of Business Conduct, the compliance and risk awareness examination, and the "Safety Red Line Certification" launched with 100% employee coverage.

**Titanium Award for
Digital and Trustworthy
Cloud**

Alibaba Cloud won the highest Titanium Award for Digital and Trustworthy Cloud, awarded by the British Standards Institution.

The six basic principles

Six basic principles for science and technology ethics governance of the Group - people-oriented, inclusion and integrity, privacy protection, security and reliability, trustworthiness, openness and co-governance.

Cainiao won the Gold Award for Innovation in **Transportation and Logistics in the Asia-Pacific Stevie® Awards.**



Fortune China
Listed in China ESG Influence Ranking

Amap's "Green Travel Carbon Inclusion Project" was selected by the Ministry of Ecology and Environment of China and the Office of National Spiritual Civilization in the "Beautiful China, I am a practiser" 2023 Action Plan to raise citizens' awareness of ecological civilization.

Top 10 Public Participation Cases

Internet platform enterprise in the China Corporate Social Responsibility Development Index, awarded by the China Social Responsibility 100 Forum.

1st

Among the Gartner Supply Chain for 2023.

Top 25



The green and low-carbon practice of Alibaba data centers was selected by the China Energy Research Society and the Organizing Committee of the CREC2022.

Top 10 Typical Carbon Neutrality Cases in China in 2022

Caijing Dual Carbon Leadership Ranking of Public Companies.

1st

Alibaba's rural commissioner team was awarded honor.
Outstanding Team for Contributions to "Sannong" (Agriculture, Rural areas and Farmers) in 2022



Forbes 2022 Global Best Employers.
Top 5 Chinese Enterprises

Fresh start

The nature of our social responsibilities is ever changing. Since the past year, the global post-pandemic economic recovery still lacks stability, while new opportunities and challenges face the new high-quality growth model that is needed to emerge. We see both the accelerated deployment of renewable energy around the world potentially heralding the "beginning of the end of the fossil energy era" (Ember, 2023), and also the governance challenges posed by breakthroughs in generative AI technologies. These changes are continuing to reshape the social aspirations and demands of all of society, and we are constantly aligning our strategic goals with the ever-changing environment as well as the shifting needs of our key stakeholders.

We believe that however the world may change, clearly defining our social responsibility around our stakeholders' interests, leveraging the power of technology, and engaging the stakeholder ecosystem will always be the three pillars of our ESG framework. This is the social responsibility that a technology platform-based enterprise should assume, as well as an opportunity. Our goal is to keep innovating technologies and practicing social responsibilities for the social good.

On March 28, 2023, Alibaba announced a new organizational and governance structure, with six major business groups consisting of the Cloud Intelligence Group, Taobao and Tmall Group, Local Services Group, Alibaba International Digital Commerce Group, Cainiao Smart

Logistics Network Limited, and Digital Media and Entertainment Group, in addition to a number of other business companies.

Importantly, the restructuring will not change our ESG strategy or commitments. Instead, it will enable Alibaba to better leverage the strengths of our diverse advantages, to become more agile in reacting to external changes and seizing opportunities, both at the market and industry levels. We will build on our existing ESG commitments and experiences, further integrate social objectives into our business strategy and business design, especially for continuously exploring the connotation, objectives and realization of social responsibility with the characteristics of platform enterprises. We will engage more stakeholders in tackling critical social challenges in a nimbler way. Joining hands with our partners, we aspire to build a sustainable future.

**We are just
beginning this new journey.**



Restoring our green planet

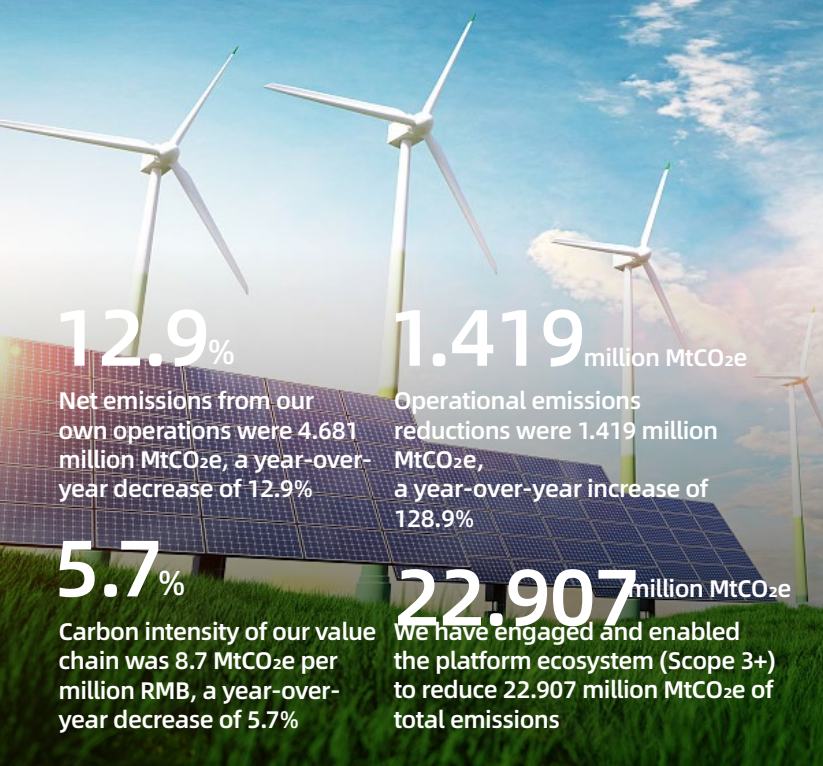
The world's continued ecological degradation starkly represented by ongoing climate change and biodiversity loss poses an increasingly severe threat to humanity. To flip around this trend and preserve a secure "operating system" for humans, we need both targeted technological innovations and the involvement of all stakeholders. The digital circular economy brings new possibility to this resolution. Together with our ecosystem partners, we seek to practice digital circular business and do our utmost to aid in restoring our green planet.

Our environmental actions focus on:

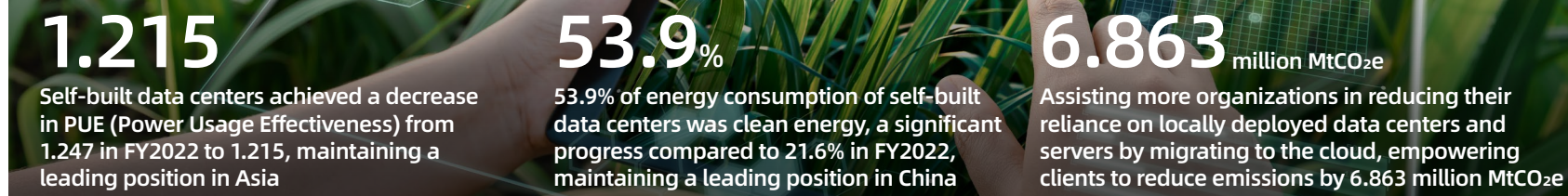
- Solidly promoting carbon neutrality P30
- Conserving and restoring nature P53



Overall progress in carbon neutrality



Creating a green and low-carbon cloud



Restoring our green planet



Conserving and restoring nature

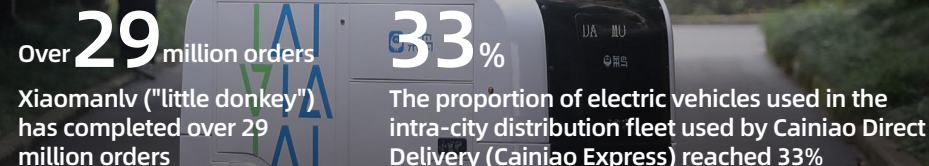
Business Biodiversity Conservation Cases

"Digital Platform Assists in Biodiversity Protection" program was selected into the Business Biodiversity Conservation Cases at the 2022 UN Biodiversity Conference (COP 15)



Building circular logistics

- Making innovation in low-carbon transportation



28,771.7 MtCO_{2e}
We worked to achieve intelligent optimization of the ordering and transportation routes for direct retail sales, effectively reducing over 28,771.7 MtCO_{2e} of emissions

- Working towards circularity in packaging

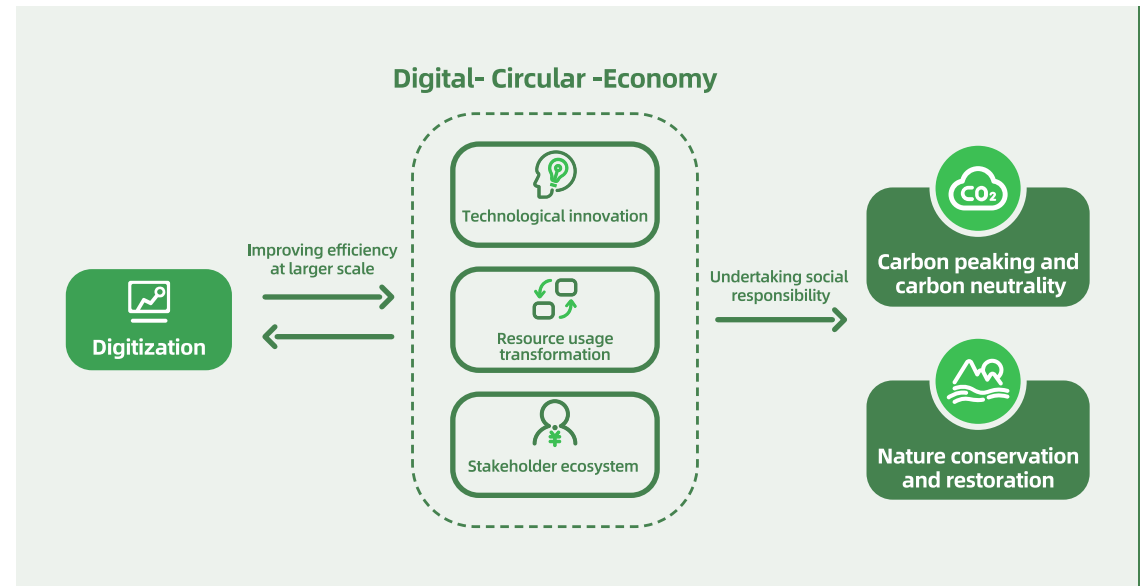
23.82 million
Over 23.82 million cartons were recycled and reused in Cainiao Posts

Environmental strategy and governance

When we apply Alibaba's three pillars of "Technology, Social responsibility, and Stakeholder ecosystem" to our environmental responsibilities, we arrive at our capacity to bring about a "Digital-Circular-Economy". Following this principle, we have continuously deepened efforts in environmental fields. We have defined four ESG issues related to the environment on top of our explicit carbon targets proposed in 2021, namely reducing packaging, water conservation, reducing and recycling waste, and protecting ecosystems. To develop an effective governance mechanism that secures our strategic ESG objectives, we have set up the sustainability committee at the

board level, the sustainability steering committee and the ESG Strategy and Operation Department at the Group level, and the ESG working group that connect all business units, with a Group-wide ESG indicator management system in place.

We present our recent developments in two domains: solidly promoting carbon neutrality and conserving and restoring nature.



Solidly promoting carbon neutrality

In FY2023, we followed the “Digital-Circular-Economy” principle to explore opportunities of cutting carbon pollution while still promoting economic growth. In addition to energy transformation, we have adopted a variety of efficiency-enhancing and emission-reducing methods. Particularly, we have been making solid progress towards emission reduction via innovations in digital technologies and platform mechanisms.

Progress in carbon
neutrality

Greening our operations
and value chain

Engaging and enabling
decarbonization through our
platform ecosystem



Progress in carbon neutrality

In 2021, we made three pledges as follows:

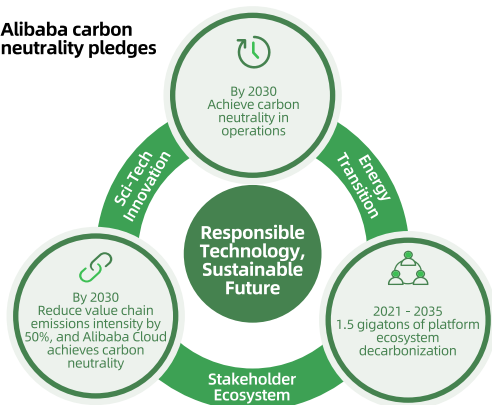
Decarbonize Alibaba (Scopes 1 and 2): By 2030, we will achieve carbon neutrality in our own operations.

Green the value chain (Scope 3): By 2030, we will collaborate with our upstream and downstream value chain partners to cut emission intensity by 50% from the base year of 2020. Alibaba Cloud will achieve Scope 3 carbon neutrality during the same period.

Enable a low-carbon circular digital ecosystem (Scope 3+): Beyond our own operations and direct value chain, Alibaba pledges to leverage our digital platforms to encourage even broader participation by stakeholders that our efforts can reach. By 2035, we will facilitate 1.5 gigatons of GHG (greenhouse gas) emission reduction over 15 years across Alibaba's digital ecosystem.

In FY2023, we took substantial steps toward meeting our three pledges, based on the principle of "direct carbon reduction takes precedence over carbon removal, and carbon removal takes precedence over offsets."

Alibaba carbon neutrality pledges

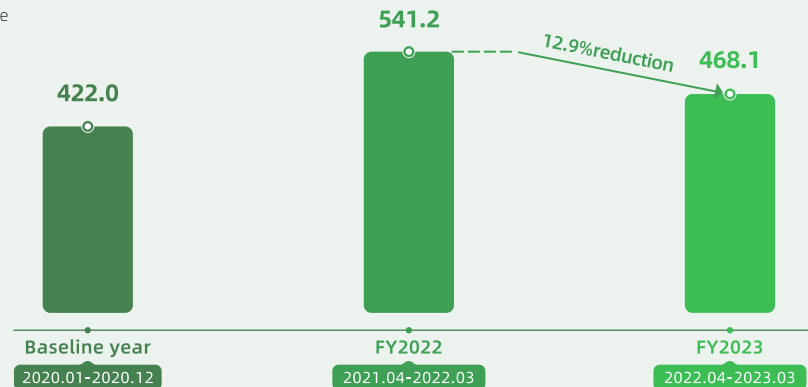


Net emissions in operations and related emission reduction

In FY2023, direct net GHG emissions (i.e., Scope 1) from Alibaba accounted for 0.926 million MtCO_{2e}, including stationary combustion (such as the use of natural gas), direct fugitive emissions (such as refrigerant leakage), and mobile combustion (company-owned transportation in our retail operations). Indirect net GHG emissions (i.e., Scope 2) from purchased electricity and heat were 3.755 million MtCO_{2e}, mainly used for operating cloud computing data centers, retail stores, offices, and warehouses. Net emissions from our own operation (the sum of Scope 1 and 2) were 4.681 million MtCO_{2e}, a decrease of 0.691 million MtCO_{2e}, or 12.9% year-over-year. The inspection was completed by the China Environmental United Certification Center (CEC) and audited by Bureau Veritas. Through intelligent optimization for energy conservation and higher efficiency, clean energy sourcing, and distributed PV, we achieved reductions of 1.419 million MtCO_{2e} in our operations (Scope 1 and 2) in FY2023, a year-over-year increase of 128.9%.

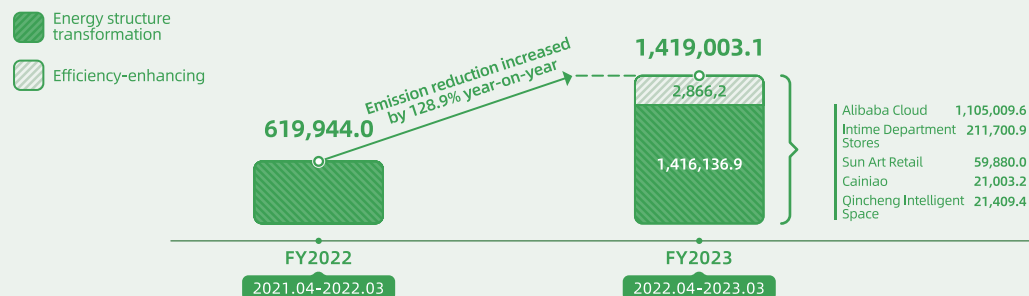
Net emissions from our own operation (Scope 1&2)

Unit: 10,000 MtCO_{2e}



Operational emission reduction (Scope 1&2)

Unit: MtCO_{2e}



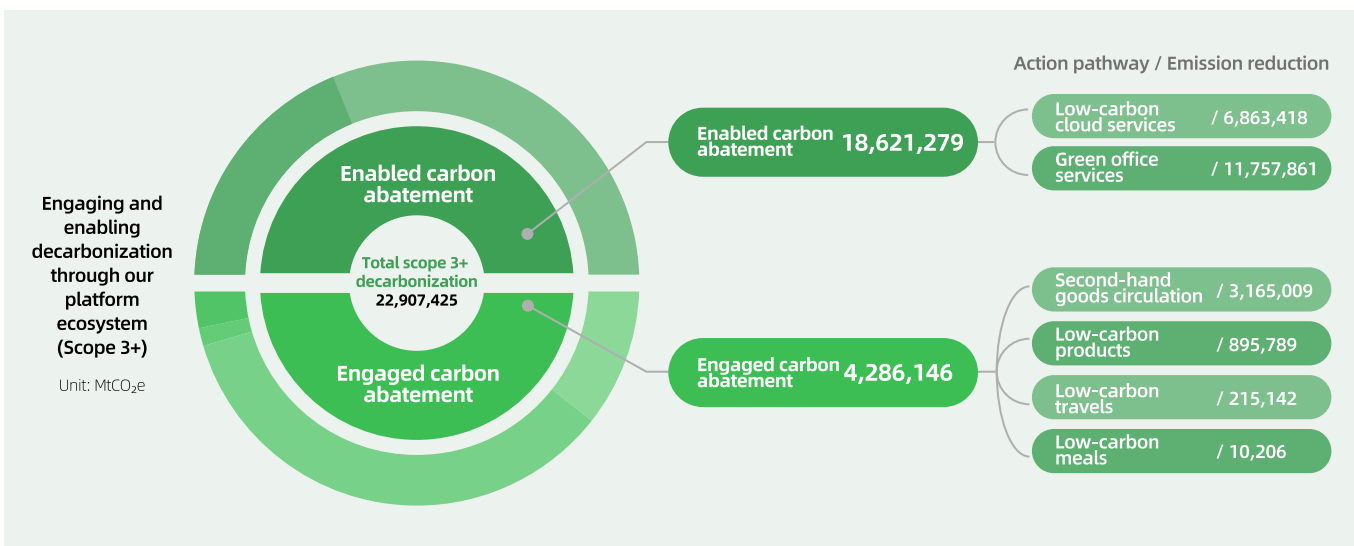
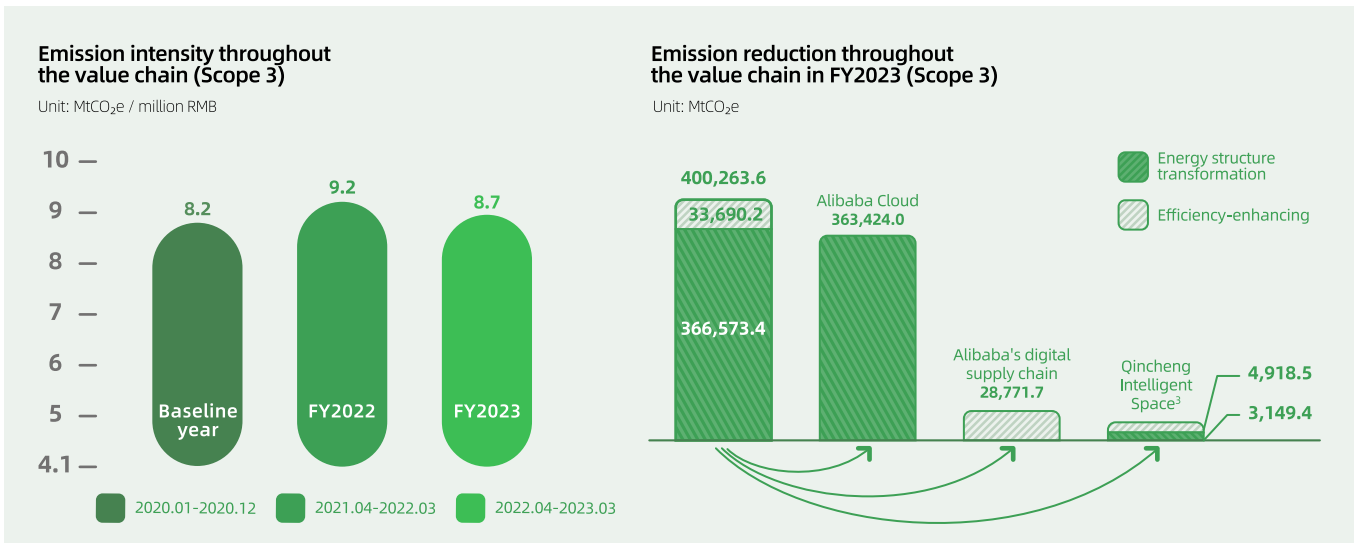
Carbon intensity along value chain and low-carbon efforts (Scope 3)

In FY2023, indirect GHG emissions intensity within Alibaba's value chain (i.e., Scope 3), which was calculated based on the carbon inventory principle of accuracy and accessibility, were lowered from 9.2 MtCO₂e per million RMB in FY2022 to 8.7 MtCO₂e per million RMB. We have achieved a reduction of 400,000 MtCO₂e in our value chain through promoting digital optimization and energy transition in our logistics services, enhancing energy efficiency and utilizing clean energy in our leased data centers, and encouraging employees to adopt low-carbon business travel behaviors. Combining these efforts with our projects on carbon removal and carbon offsets, we have achieved a year-over-year decrease of 5.7%¹ of our carbon intensity throughout the value chain.

So far, we have made solid progress in FY2023 in maintaining business growth while marching towards our operational and value chain carbon neutrality goals. Further cutting carbon pollution while promoting business growth will be a persistent long-term challenge. We will continue to accumulate experience during this process, including exploring relevant cutting-edge investments² from the beginning of 2022 to the present, combining short- to long-term planning, and incorporating carbon reduction targets and methods into business design, to promote the high-quality achievement of our ultimate goals.

Engaging and enabling decarbonization through our platform ecosystem (Scope 3+)

FY2023 marks the first, groundbreaking year of our Scope 3+ target of reducing 1.5 gigatons of carbon emissions in 15 years in our ecosystem. Unlike with Scope 1, 2, and 3, advancing Scope 3+ requires establishing new scientific, and credible standards while advancing carbon reduction goals. We focused on three directions. First, we published our Scope 3+ methodology, which clarifies definitions and measurements. Second, we prioritized our low-carbon actions in eight areas, i.e., low-carbon travel, low-carbon dining, low-carbon products, reuse of idle items, low-carbon cloud, low-carbon offices, low-carbon logistics and low-carbon production, achieving an emission reduction of 22.907 million MtCO₂e in Scope 3+, along with an emission reduction path to accomplish our long-term goals mapped out. Third, and more significantly, in terms of involving stakeholders, our Carbon88 ledger platform and Low-carbon Friendly Products Program have amplified decarbonization through bringing 409 brands, 1.91 million products, and 187 million users to participate in emission reductions. In this way we achieve our initial goal of giving full play to the power of the platform ecosystem to drive the transformation to a digital circular economy from the supply and consumption sides.



¹ The year-over-year decrease in this case is calculated based on actual data, rather than equal to the decrease between 8.7 and 9.2. ² From the beginning of 2022 to the present, we have continued to invest in low-carbon in two areas, namely green technology and digital energy management. For green technology, investment projects include Zhejiang Noah Fluorochemical Co., Ltd. which focuses on the research, development, and manufacturing of immersion cooling fluids applied in low-carbon data centers and efficient and environment-friendly fire extinguishing agents. For digital energy management, investment projects include EQuota Energy, an AI and big data driven company that provides energy and carbon-related products and services. These offerings empower enterprises, industrial parks and the government to effectively manage GHG emissions, set emission reduction objectives and forecast emission trends, hence promoting sustainable development.

Greening our operations and value chain

To attain operational carbon neutrality and halve the carbon intensity of the value chain, we have integrated carbon goals and technological innovations into our business processes, and shaped four high priority emission reduction scenarios by applying digital intelligence for lower energy consumption and higher efficiency, transforming the way we use resources, and influencing the stakeholder ecosystem. These four scenarios are sustainable campuses, green and low-carbon cloud, smart circular logistics, and sustainable retail stores. Based on these, we have extended our influence from ourselves to the larger value chain.

Sustainable office campuses

Green and low-carbon cloud

Digital and intelligent circular logistics

Sustainable retail stores

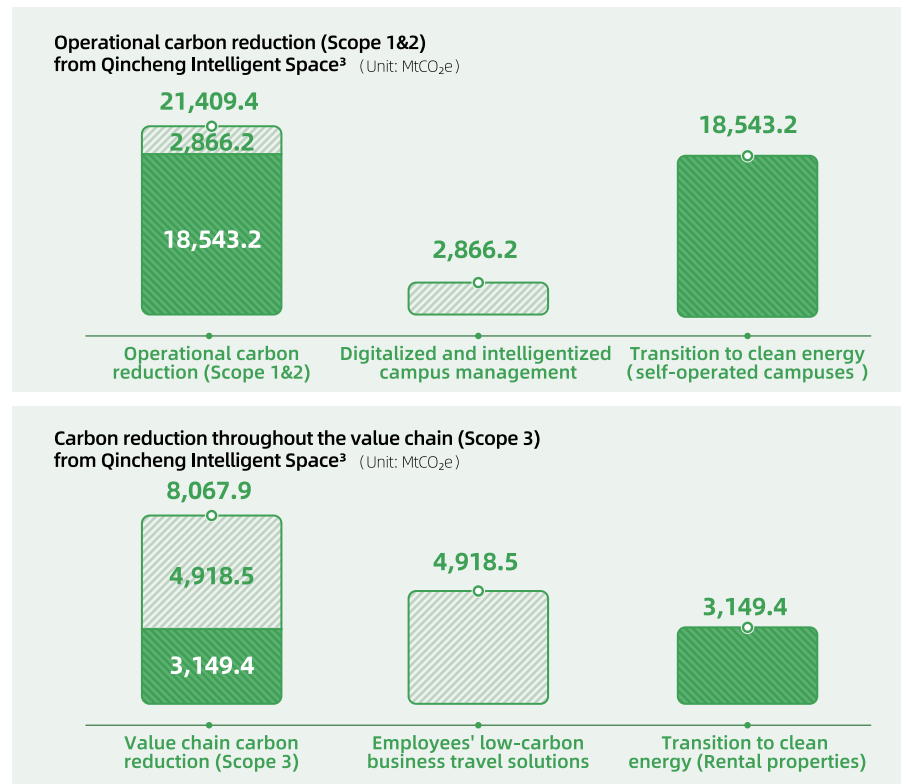
Decarbonizing the value chain

Sustainable office campuses

Our low-carbon efforts start from our own operations and work spaces. We provide a green, healthy, safe, and vibrant work environment for our employees while promoting a green and low-carbon mode of working.

We have developed systematic principles of sustainable campus construction. During the early construction of a campus, we adopt more eco-friendly and sustainable designs, as well as low-carbon construction and renovations. During regular operations, we continuously explore digital intelligence to save energy and boost efficiency, thus effectively promoting energy transformation and

the recycling of various resources. Meanwhile, we continue to engage our employees and suppliers in low-carbon practices. Overall, we achieved 21,409.4 MtCO₂e reduction throughout the operation (Scope 1 and 2) of our campuses and 8,067.9 reduction throughout the value chain (Scope 3).



³ *QinCheng Intelligent Space* is a brand that provides smart campus services for various business groups/companies/units of Alibaba Group.

Sustainable design

Design for low-carbon commuting: We encourage employees to use public transit for daily commutes and set up metro station shuttle buses in some campuses in China. At the same time, we widely deploy charging stations in our self-operated campuses so as to encourage employees' use of EVs for low-carbon commutes.

Design for biodiversity: Respecting the environmental attributes of each campus, we actively preserve and plant native vegetation, regularly monitor and maintain ecological spaces, and make use of roof spaces that can be used for roof greening to increase biological habitat space.

Design against extreme weather: We follow the "sponge city" concept to ensure drainage and prevent flooding in our campuses. We enable fire prevention, seismic resistance, evacuation design for civil defense and UPS (uninterruptible power supply) under special circumstances.

Design for water conservation: We design rainwater collection and purification facilities in our campuses to maximize the recycling of rainwater, and reuse it for garden irrigation and other purposes. Meanwhile, we install water-saving devices, tap water systems and wastewater recycling devices, among others, to save water.

Green construction and low-carbon renovation

Green construction: All the new campuses built from 2022 onwards are benchmarked to LEED Gold standards, with various low-carbon considerations in the use of materials, construction, and other aspects. As of March 31, 2023, a total of 131,000 square meters of our campuses had been certified as LEED Gold.



Low-carbon renovation: We cut emissions from renovations through the extensive use of assembled components. Taking Gaoqiao Campus as an example, standardized construction parts such as implanted assembled walls, assembled bathrooms, and modular conference rooms reduce construction solid waste by over 80% compared with conventional renovations, equivalent to a 28% reduction in life-cycle emissions. Moreover, over 60% of these materials are recyclable.

Sustainable and participatory operation

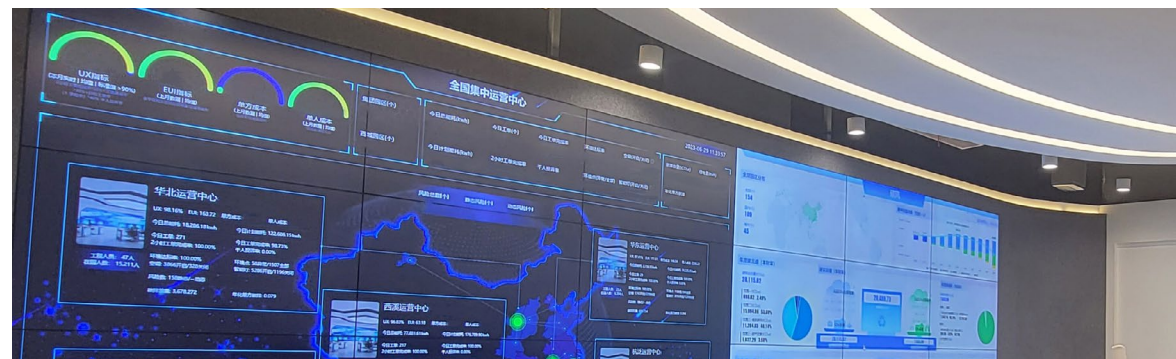
Through IoT (Internet of Things) and digital technology, comprehensive digitization of campus infrastructure has been achieved, and an intelligent decision-making engine for campus facilities and equipment has been implemented by combining pedestrian flow, weather, and environmental parameters to achieve intelligent management of campus facilities and equipment. This has optimized energy use in campuses, with a reduction of 2,866.2 MtCO₂e in Zones A and B of Xixi Campus in FY2023. We have also gone paperless in the office, replacing paper signing with electronic signing of legal contracts, making the process efficient, secure, and low-carbon. In FY2023, the number of electronic contracts signed accounted for 93.9% of the total number of signed contracts.

To accelerate the energy transition, we deploy distributed solar panels on rooftops and source clean energy. In FY2023, the clean energy consumption of self-operated campus totaled 27.858 million kWh and reduced 18,543.2 MtCO₂e of emissions. Our

clean energy sourcing also covers properties for external rental. Our properties for external rental in Zhejiang Province, as the first pilot, consumed over 4.477 million kWh of clean energy in FY2023, resulting in 3,149.4 MtCO₂e reduction.

To recycle assets, office furniture and other assets are managed online, and we optimize the processes of moving, transferring, scrapping, and disposing of assets. A total of 62,000 pieces of furniture were put back to use in FY2023.

To engage employees in low-carbon practices, we have developed a digital management platform that covers 18 types of low-carbon office behaviors³, and encourages more employees to participate in low-carbon practices. In FY2023, over 110,000 employees completed 3 million instances of low-carbon office behaviors. Besides, over 70,000 employees completed 1.18 million instances of four types of low-carbon business travel behaviors⁴, resulting in 4,918.5 MtCO₂e reduction.



³ 18 types of low-carbon office behaviors: turning off the air conditioner timely, switching off the lights timely by scanning QR codes, packaging food without using cutlery, recycling plastic bottles, packaging food without using plastic bag, Clean Your Plate Campaign, recycling cardboard boxes, climbing stairs, bringing your own water cup, using centralized office when work in campus at weekend, making the best use of notebook materials, low-carbon relocation, Hitchhiking, applying for mini business cards, turning off the lights timely, turning off the TV timely, double-sided printing, picking up express delivery for colleagues.

⁴ 4 types of low-carbon business travel behaviors: taking the train instead of the plane, carpooling with multiple people, taking the company bus, and taking the subway.

Green and low-carbon cloud

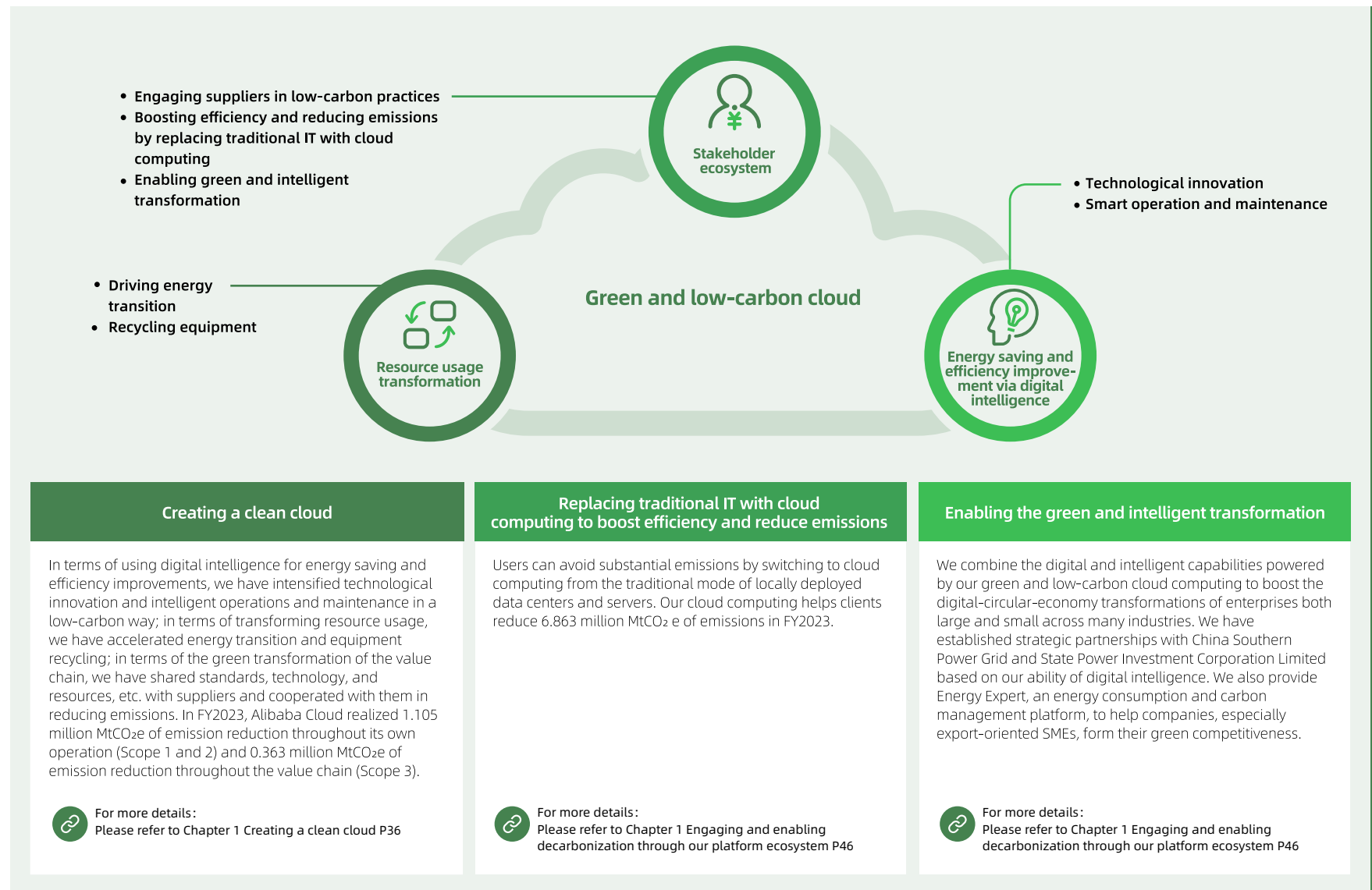
Cloud computing serves as a vital and fundamental basic facility for the development of the digital economy. Ensuring computing power becomes more efficient and low-carbon has grown even more important today as the AI revolution speeds up. As the world-leading cloud computing service provider, we strive to be a leader in low-carbon cloud computing. To achieve this, we need not only to build our clean cloud, but also to enable other organizations to meet their data processing and storage needs by transitioning to the cloud with less reliance on local data centers and servers. In addition, we provide cloud-based digital tools for other enterprises to achieve both digital transformation and emission reduction. In this way, we can truly leverage these green fundamental capabilities to boost the digital and circular economy transformation.



1.105 million MtCO₂e
Alibaba Cloud's self-built data centers emission reuction from clean energy transition



0.363 million MtCO₂e
Alibaba Cloud's leased data centers emission reuction from promoting consuming clean energy and trading RECs



Creating a clean cloud

Energy conservation and efficiency improvement via digital intelligence

We have further reduced PUE through scientific and technological innovation and intelligent operation and maintenance in a low-carbon way. In FY2023, our self-built data centers witnessed a decrease in PUE from 1.247 in FY2022 to 1.215, continuing to maintain a leading position in Asia.

In terms of scientific and technological innovation, we focus on exploring and developing efficient software and hardware collaboration modes, energy-saving servers, liquid-cooling server technology, high-performance power supplies, digital resource management platforms, and other cutting-edge technologies for the purpose of energy conservation and efficiency improvement in all aspects of operations. In terms of intelligent operations and maintenance, our multi-disciplinary teams with expertise in electrical engineering, HVAC, and automation have developed a digital O&M strategy management platform, which designs 20 kinds of standard strategies, enabling real-time management of the data centers across China. In addition, we have optimized O&M strategies with intelligent algorithms, and built coupled system models grounded on water cooling systems and physical cores of each device, while continuing to study massive historical data to improve models and fine-tune O&M. As of March 31, 2023, after deploying intelligent algorithm O&M strategies in our seven large-scale data centers, the energy consumption of cooling systems had reduced by 5-11%.

Resource usage transformation

We pledge that clean energy will account for 100% of the total energy supply for cloud computing as of 2030. In FY2023, we continued to increase the use of clean energy and lead the industry, significantly increasing the proportion of clean energy in total energy consumption in our self-built data centers from 21.6% in FY2022 to 53.9%. This resulted in emission reduction of 1.105 million MtCO_{2e}, leading the industry. Specifically, our self-built data centers in Guangdong Province have taken the lead in achieving carbon neutrality, with clean energy accounting for 100% of the total energy consumption and a small amount of carbon removal and offsets. We also conducted the collaborative scheduling of our data center and the electric power system for the common goal of promoting new energy consumption in FY2023 for the first time in the industry. We have steadily improved the equipment recycling and circulation, and built our own recycling centers for testing, refurbishment, dismantling, and maintenance of servers and spare parts, with an aim to extend the lifecycle of servers. In FY2023, we had 25.73 million cores of warranty-extended servers, piloted a five-to-six-year warranty for servers, and made cyclic utilization of 49,747 servers through refurbishment.



1.215

PUE of self-built data centers



53.9%

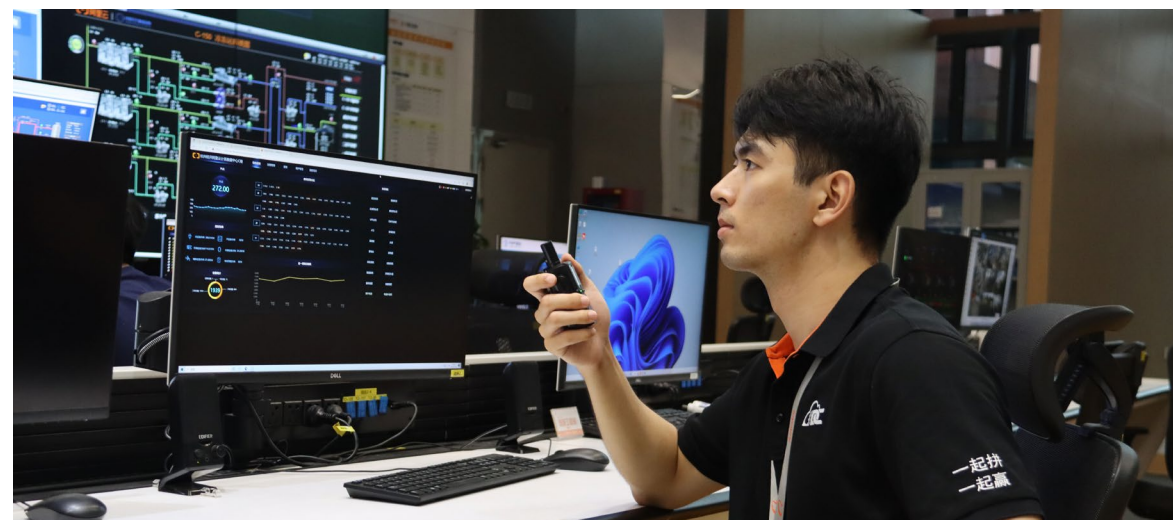
Self-built data center's percentage of clean energy consumption in total energy consumption

Promoting new energy consumption by collaborative scheduling use of electric power and computing power

We have become an industry leader in promoting new energy consumption through collaborative scheduling of computing power and electric power. In June 2022, Alibaba Cloud's data centers cooperated with North China Electric Power University to jointly undertake the research project based on flexible load scheduling. We conducted validation experiments in Alibaba's data centers in Zhangbei and Nantong, achieving the first co-scheduling of data centers and electric power systems⁵ for the common goal of promoting new energy consumption. This is regarded as the first step towards cross-regional scheduling optimization validation experiments in China.

Promoting green transformation of the supply chain

By enhancing the monitoring, measurement, and analysis capabilities of energy consumption and emissions of leased data centers, we motivate more suppliers to continually step up their green efforts, with an assessment mechanism in place to regularly evaluate their low-carbon performance. Meanwhile, we provide resources our suppliers need, share standards and technologies of our self-built data centers to help them optimize the PUE of leased data centers, and impel them to consume clean energy and trade RECs. In FY2023, the emission reduction brought by the latter was 0.363 million MtCO_{2e}. Six of our leased data centers in Guangdong achieved a clean energy consumption rate of 100%.



⁵ The essence of collaboration of computing power and electricity power refers to the flexible adjustment of the spatiotemporal distribution of electricity load in data centers in the power grid by optimizing and scheduling massive computing tasks and resources in the computing power network. This technology can reduce the energy cost and GHG emissions of data centers, enhance the renewable energy consumption capacity of the power system, support the sustainable development of digital networks and the safe, economical, and low-carbon operation of the power system, and assist in achieving carbon neutrality goals.

Creating a clean cloud

Green and low-carbon scientific and technological innovation in data centers

Software and hardware collaboration

Collaborative innovation of software and hardware on computing, storage, and interconnecting components has further improved data processing performance and efficiency. We developed the proprietary Yitian 710 chip and the M series of Panjiu servers, which have enhanced the overall cost-effectiveness of cloud computing in such core scenarios as database, data intelligence, video codec, and web server by over 30%, while reducing the energy consumption per terabyte of data by 14%. The cloud-native service of AURORA heterogeneous computing platform enables cross-location and cross-chip operation, and improves computing energy utilization and energy efficiency by 30%.

Energy-saving servers

Our dominant server architecture is designed based on the principles of modularity and standardization to achieve flexible configuration, high density, and high compatibility. Compared with traditional architectures, it improves system cooling by 10% while reducing energy consumption by more than 30%. Meanwhile, it supplies power as per actual server loads, allowing power sources to keep working at the optimal efficiency, which in turn lowers energy consumption and emissions.

Digital resource management platform

Our dominant digital resource management platform, Faraday, efficiently manages resources used in data centers around the world, providing core functions such as digital inspection of GHG emissions, energy management, and planning for carbon neutrality. In FY2023, we consolidated the integrated management of water, electricity, and diesel into the Faraday platform, enabling full coverage of on-site Operations and Maintenance (O&M) data. With this, we are able to provide our clients with accurate GHG emission bills for our cloud products and services.

Liquid-cooling server technology

Our dominant immersive liquid-cooling architecture with consolidated infrastructure and IT equipment abandons mechanical cooling elements such as fans and air conditioners, enabling an average annual PUE of less than 1.09 and energy savings of 36% compared to the industry average. The real-time precise temperature control across all scenarios enabled by the liquid cooling technology unleashes the computing potential of chips to better serve the demand for higher-performance computing in the future.



Liquid-cooling server technology

High-performance power supply

Our dominant high-performance Panama power solution, featuring improved power efficiency from a shortened power supply path and uninterrupted DC, has been fully deployed in our new self-built data centers. As of March 31, 2023, 366 sets have been applied nationwide in China, with a capacity of over 800 MW. In July 2022, the Panama Power Industry Standard (YD/T 4006-2022), DC Uninterruptible Power Supply System with 10kV AC Input for Information Communication, was officially released and implemented and opened to the world at large.

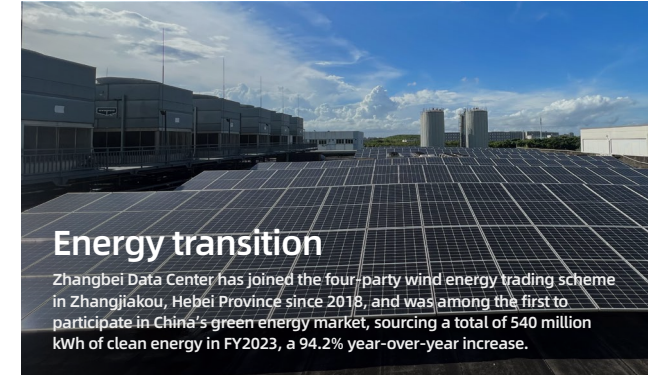


Panama power solution



Low-carbon model: Alibaba Cloud's self-built data center in Zhangbei

Since its establishment in 2016, Alibaba Cloud Zhangbei Data Center has contributed to local high-quality sustainable development.



Energy transition

Zhangbei Data Center has joined the four-party wind energy trading scheme in Zhangjiakou, Hebei Province since 2018, and was among the first to participate in China's green energy market, sourcing a total of 540 million kWh of clean energy in FY2023, a 94.2% year-over-year increase.



To facilitate smart energy conservation and efficiency improvement

Zhangbei Data Center has continued to implement an efficient energy-saving strategy and fully utilized advanced energy-saving technology, with its PUE decreasing to 1.19 as of March 31, 2023.



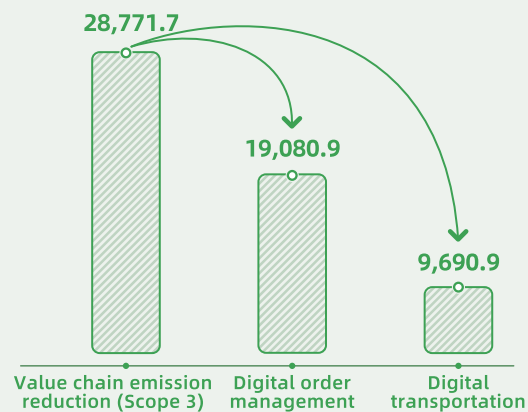
To facilitate waste heat recovery and water conservation & purification

Zhangbei Data Center recovered waste heat from its servers to supply heat to the production and living areas in parks, as well as to empower green agriculture, with a cumulative supply of 15,250 GJ in FY2023. Zhangbei also recycles and purifies its wastewater for reuse, having cumulatively treated 12,482 tons of wastewater in FY2023, of which 6,234 tons were reused.

Digital and intelligent circular logistics

Logistics is a vital driver for social and economic operations, but also a key challenge for global emission reduction, especially for emerging and developing economies. Through long-term efforts and capacity building, we aspire to become a builder and leader in digital and intelligent circular logistics. Together with our consumers and suppliers, we are exploring five major links in the logistics chain - order, packaging, transport, warehousing, and recycling - to promote planned emission reductions and system transformation in logistics through digital optimization, energy transition, and packaging improvement. According to auditing, by deploying solar panels on rooftops and sourcing clean energy, Cainiao reduced emissions by a total of 21,003.2 MtCO_{2e}. By intelligent optimization of the ordering and transportation processes, Alibaba's digital supply chain team has helped reduce emissions throughout the value chain by 28,771.7 MtCO_{2e}.

Value chain emission reduction by Alibaba's digital supply chain team (Unit: MtCO_{2e})



Order

We have started intelligent optimization of three typical measures, such as multi-order consolidation, replenishment of perishable foods, and reducing reverse logistics. In the order fulfillment process represented by direct retail sale, these measures effectively decreased 19,080.9 MtCO_{2e} of emissions in FY2023.

Multi-order consolidation: Multiple product orders with the same address and placed at similar times will be merged in the direct retail backend to reduce the overall transportation volume, thereby decreasing unnecessary emissions during the packaging and transportation processes.

Replenishment of perishable foods: The conventional mode relies on manual judgment to decide replenishment. But we have upgraded this judgment process to effectively reduce losses and waste of perishable foods by using intelligent algorithms, thereby decreasing unnecessary emissions.

Reducing reverse logistics: We adopt intelligent algorithms to identify and locate orders that are more likely to be cancelled, and methods are taken to retain them in the direct retail backend for a short period to prevent them from entering the actual order fulfillment process quickly, thereby decreasing unnecessary emissions in subsequent warehouse operations and reverse logistics.



Packaging

We continuously explore the various aspects of packaging reduction, packaging optimization and packaging recycling, and inspire the value chain and platform ecosystem partners to work towards the same goal.

We have developed simple packaging solutions tailored to specific industries, continuously increased the use of original boxes during shipment, and used reusable delivery bins in both warehouses and transport.

For more details:
Please refer to Chapter 1 Minimizing packaging materials P55



Transport

We achieve decarbonization in transport through two aspects: intelligent optimization and energy transition, with the former focusing on optimizing transport routes and the latter on energy transition in ground and air transportation.

We have optimized all links of the supply chain of our direct retail segment through intelligent algorithms, mainly involving warehouse site selection, product warehouse deployment, inventory dispatch and so on, effectively decreasing 9,690.9 MtCO₂e of unnecessary emissions in FY2023.

Warehouse site selection: We deploy micro fulfillment warehouses with suitable volumes at locations closer to consumers, so as to maximize trunk logistics transportation of higher efficiency, thereby reducing the relatively inefficient last-mile transportation distance and ultimately decreasing emissions per unit of logistics distance.

Product warehouse deployment: Traditional fulfillment is often sent in China from one fixed warehouse. By virtue of intelligent algorithms, we can identify and locate more

reasonable matching relations between products and warehouses in terms of industries and categories, deploy products in warehouses closer to consumers, and put highly correlated products in the same warehouse, so as to shorten the shipping distance and decrease unnecessary emissions during transportation.

Inventory dispatch: In traditional mode, suppliers used to transport products directly to fulfillment warehouses via small lorries. We have optimized the routes with intelligent algorithms to transport products to distribution warehouse using small lorries first, and then to fulfillment warehouses using larger ones, which makes the product transportation much more efficient and decreases unnecessary emissions during transport.

We have developed low-carbon transportation innovations for different transportation scenarios ranging from near to far distances.

To facilitate the use of electric vehicles during the offline fulfillment of online orders, we have built a battery swap platform and introduced excellent charging/battery swap service providers, so that riders can find the most

convenient charging/battery swap stations on their mobile phones.

For short-haul express delivery, we are vigorously promoting electrification. As of March 31, 2023, electric vehicles for urban distribution accounted for 33% of total vehicles used by Cainiao Direct Delivery (Cainiao Express)⁶. For the last-mile logistics, we are promoting the intelligent electric unmanned delivery vehicle Xiaomanlv ("little donkey"), which has completed delivery for more than 29 million orders as of March 31, 2023. This marked a new record for unmanned last-mile delivery in China. In the meantime, we encourage couriers of logistic service providers to run electric.

For long-haul and cross-border deliveries, we endeavor to explore innovative solutions. In FY2023 we completed the maiden international flight of a commercial cargo flight using sustainable aviation fuels, the first of its kind from the Chinese Mainland: In December 2022, a 12-hour-long flight from Hangzhou Airport to Belgium was flown using sustainable aviation fuels for Cainiao deliveries. Sustainable aviation fuels can reduce life-cycle emissions by over 50% compared to traditional fuels.

Warehousing

We continue to drive energy transition in warehousing, primarily via deploying distributed solar panels on the rooftops of logistic warehouses. As of March 31, 2023, we have installed 30.0 MW of distributed solar panels on these roofs, up from 24.9 MW on March 31, 2022, or a year-over-year increase of 20.5%. Combined with sourcing clean energy, we achieved emission reduction of 21,003.2 MtCO₂e in FY2023.

Recycling

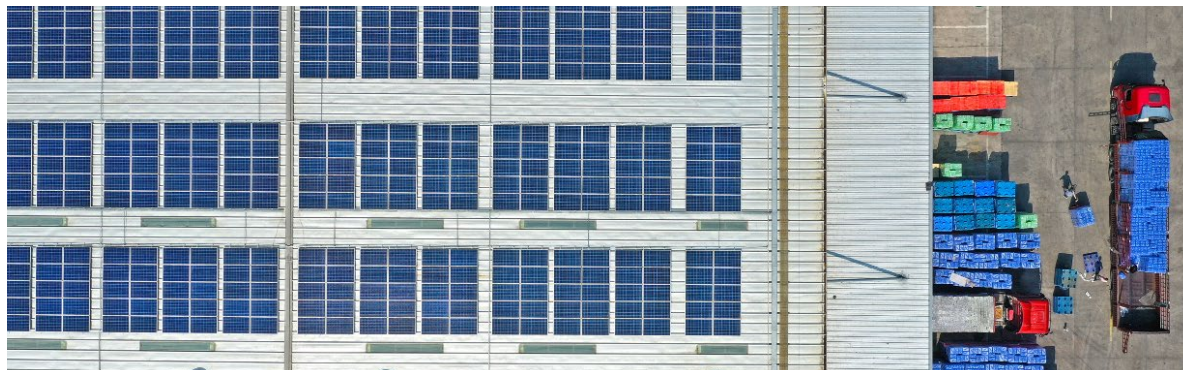
Cainiao Posts continues to encourage the recycling of express packages. We encourage consumers to leave their cartons at Cainiao Posts when they pick up their parcels for the secondary use. For those who want to ship parcels, we encourage them to choose the "sending in recycled boxes" option to encourage their engagement in the circular economy.



Cainiao new energy lorry



Xiaomanlv used in campus




Rooftop photovoltaics of Cainiao Wuhan Jiangxia Campus


⁶ In June 2023, Cainiao upgraded Cainiao Direct Delivery and unveiled an express delivery service called Cainiao Express.

Sustainable retail stores

As the operator of multiple brick-and-mortar retailers across China, we are fully committed to complying with relevant environmental laws and regulations in the places where we operate. We are transforming the way we use resources in each link throughout our own operations and across the value chain, while continuously enhancing our digital energy management. We aim to become the core offline carrier of low-carbon consumption. According to auditing, in FY2023, by deploying solar panels on rooftops and engaging in clean energy sourcing, Sun Art Retail reduced emissions by a total of 59,880.0 MtCO_{2e}. By actively engaging in clean energy sourcing, Intime Department Store reduced emissions by 211,701.0 MtCO_{2e}. Intime Department Hangzhou Wulin Store has taken the lead in achieving carbon neutrality.



59,880.0 MtCO_{2e}
Sun Art emission reduction from clean energy transition



211,701.0 MtCO_{2e}
Intime emission reduction from clean energy transition



Sun Art Retail

Enhancing digital energy management:

In FY2023, we upgraded our digital energy management platform and added a DingTalk alarm function for refrigeration equipment, enabling regional monitoring centers to keep real-time monitoring over abnormal conditions in store refrigeration systems, identify abnormal energy consumption, and conduct remote verification and initiate remote checking or on-site checking as needed.

 For more details:
Please refer to Chapter 1 Minimizing packaging materials P54

Resource usage transformation:

We are actively exploring ways to use and recycle resources and improve efficiency throughout our operations, including switching to environment-friendly refrigerants, investing in low-carbon transport, deploying distributed solar panels, sourcing clean energy, and adopting packaging recycling.

Switching to environment-friendly refrigerants: We continue to evaluate and switch to environment-friendly refrigerants, with 59 stores having upgraded to refrigerants (R448A models) with lower Global Warming Potential (GWP) as of March 31, 2023.

Investing in low-carbon transport: Medium and heavy cargo transport represents a difficult-to-decarbonize activity. We are experimenting with new-energy trucks for warehouse-to-store deliveries, with a pilot underway in metropolitan Suzhou city and surrounding areas, covering the delivery routes of RT-Mart stores. We plan to further expand it to other regions based on results.

Energy Transition: We continue to deploy distributed solar panels on store rooftops and parking lots and sourcing clean energy. Five new stores installed distributed solar panels, achieving a reduction of 9,131.1 MtCO₂e in FY2023, with a year-over-year

increase of 20.4%. Meanwhile, Sun Art Retail sourced 83,642 MWH of clean energy, reduced 50,748.8 MtCO₂e. Both of the emission reduction ups to 59,880.0 MtCO₂e.

Adopting recycled packaging: We work on packaging reduction, packaging replacement, and packaging recycling to achieve emission reduction in the value chain. We have introduced reusable delivery bins for product distribution, adopted biodegradable shopping bags in multiple scenarios, recycled cartons from more standard products, and encourage suppliers to increase the recycling and reuse of cartons.



Rooftop photovoltaics of Sun Art



Intime Department Stores


Resource usage transformation: Intime is actively pursuing green transformation via investing in energy-saving renovations, sourcing clean energy, and recycling packaging, with 37 Intime department stores having been recognized as green shopping malls by the Ministry of Commerce as of March 31, 2023.

Energy-saving renovations: 12 more stores completed energy-saving renovations in multiple areas from management and process to technical applications in FY2023, with each saving roughly 5.88 million kWh of electricity annually after the transformation.

Sourcing clean energy: We continue to invest heavily in clean energy sourcing and have been an industry leader in energy transformation. In FY2023, Intime consumed 300 million kWh of clean energy,

achieving carbon reduction of 211,701.0 MtCO_{2e}. Stores in Zhejiang Province, eligible for independent energy sourcing, have been transitioning to clean energy consumption. Coupled with a small amount of carbon removal and offsets, Intime's Hangzhou Wulin Department Store has taken the lead in achieving carbon neutrality.

Packaging recycling: Efforts are made in using environment-friendly packaging materials and optimizing packaging to achieve emission reduction throughout the value chain. We replace plastic materials with biodegradable materials for making express bags and use more environment-friendly glue-free cartons.

 For more details: Please refer to Chapter 1 Minimizing packaging materials P54

Freshippo

Upgrading digital energy management: We have gradually optimized digital energy management in stores so that we can monitor the operational status of stoves with infrared sensors, and enable automatic vent control for cooking fumes. We have also widely enabled monthly reporting of abnormalities and remote inspection with smart meters to facilitate intelligent identification of energy management loopholes in night-time air conditioning, lighting, and the cold chain to achieve refined energy conservation and management.


Transforming resource usage: We are actively exploring energy-saving renovations, cold chain optimization, and packaging recycling.

Energy-saving renovation: We completed the overall energy-saving renovation of five Shanghai stores, covering a wide range of areas such as

the cold chain, lighting, and exhaust fume fans in FY2023.

Cold chain optimization: We consolidated low-stock cold warehouses and reduced refrigeration loads by capping the cold warehouses' horizontal freezers to save energy and reduce emissions.

Packaging recycling: We work on packaging reduction, packaging replacement, and packaging recycling to achieve carbon reduction in the value chain. Specifically, we reduce packages for delivery orders and private-label products, actively participate in the development of standards for degradable packaging, use reusable delivery bins in warehouses and stores, and recycle and reuse distribution baskets in processing centers.

 For more details: Please refer to Chapter 1 Minimizing packaging materials P54



Creating a green and low-carbon place

Decarbonizing the value chain

Suppliers are our most vital partners in effectively reducing GHG emissions and other environmental footprints. Our goal of halving the carbon intensity of the value chain (Scope 3) by 2030 can only be accomplished with the full consensus of and joint actions with the majority of our suppliers. In this regard, we ranked the GHG emitters throughout the value chain in descending order (including energy consumption in the value chain, cross-border freight, ground transportation, procurement of packaging materials and employee travel), and mapped out specific tailored emission reduction measures, in order to engage our value chain in joint action. Through our efforts, we achieved 0.40 million MtCO₂e Scope 3 emission reduction, combining with our carbon removal and offset projects, resulting in a carbon intensity of 8.7 MtCO₂e per million RMB throughout the value chain, a year-over-year decrease of 5.7%.

Emission reductions from energy consumption

The largest energy consumers along our value chain are upstream leased data centers for cloud computing and downstream properties rented. We worked to facilitate their energy use management and energy transition in FY2023.

To reduce emissions from upstream leased data centers, we encourage these suppliers to step up their efforts on decarbonization year by year. By improving our monitoring, measurement and analysis of their energy consumption and emissions, with an assessment mechanism in place to periodically evaluate their low-carbon performance. Meanwhile, by sharing standards and technologies of our self-built data centers, we help suppliers optimize the PUE of our leased data centers

and promote consuming clean energy and trading RECs. With these optimizations, a reduction of 0.363 million MtCO₂e was achieved in FY2023.

To reduce downstream emissions from external rental properties, we launched clean energy procurement for them in Zhejiang Province. Combined with deploying distributed solar panels, we consumed over 4.477 million kWh of clean energy in FY2023, resulting in a reduction of 3,149.4 MtCO₂e.

Emission reductions from cross-border freight

The logistics-related segments, such as air and sea transportation services to send parcels overseas, are the main emitters in the value chain. As the cross-border freight business grows, its emissions will continue to increase substantially, especially for air transport

services, which are difficult to decarbonize.

In FY2023, we initiated our exploration of low-carbon cross-border air transportation and completed the maiden international flight of a commercial cargo flight using sustainable aviation fuels, the first-of-its-kind from the Chinese Mainland. In December 2022, a cargo plane flew a 12-hour-long flight from Hangzhou Airport to Belgium using sustainable aviation fuels for Cainiao deliveries.

Emission reductions from land transportation

Emissions from value chain ground transportation are mainly generated during offline fulfillment of online orders, short-haul express deliveries, and outsourced ground transportation services. In FY2023, we reduced these emissions by advancing electrification and intelligent optimization of transportation routes.

Ele.me has built a battery swap platform and introduced excellent charging/battery swap service providers, so that delivery riders can find the most convenient stations through a mobile app, promoting the widespread use of clean energy vehicles. Cainiao encourages couriers of transport service providers to replace gasoline vehicles with electric ones. In our direct retail business, we have optimized warehouse site selection, product warehouse deployment, and truck dispatch with intelligent algorithms, as well as optimizing order fulfillment, including multi-order consolidation, replenishment of perishable foods, and reducing reverse logistics, to shorten the overall distance for product fulfillment and vastly improve the transport efficiency, reducing emissions by 28,771.7 MtCO₂e in FY2023.



Emission reductions from packaging materials

Emissions from packaging materials in the value chain take place in multiple parts of our own operations and the platform ecosystem. We take the negative impact of these packaging materials on the environment very seriously, with a number of actions taken in FY2023, including packaging reduction, material replacement, packaging optimization, and packaging recycling.

 For more details:
Please refer to Chapter 1 Minimizing packaging materials P54

Emission reductions from business travels

Our employees around the world generate emissions from services they use during business travel. We focus on four major low-carbon business travel behaviors, namely encouraging rail instead of air transport, carpooling, corporate buses, and public transit, with credit rewards provided in our travel service booking system so as to motivate employees toward low-carbon travels. In FY2023, over 70,000 employees engaged in over 1.18 million low-carbon business travel behaviors, reducing emissions by 4,918.5 MtCO₂e.

Carbon removal and offsets

Network supplier partners need to face practical challenges in decarbonization in a period of time. Therefore, on the basis of direct emission reduction throughout the value chain, we actively take carbon removal and other initiatives, and will continue to follow the principle of "direct carbon reduction takes precedence over carbon removal, and carbon removal takes precedence over offsets" that we outlined in 2021. In FY2023, we established screening criteria for carbon removal-related projects and came up with a combination scheme

based on carbon removal and supplemented by carbon offsets; invested in high-quality carbon removal projects related to afforestation and forest management projects, as well as high-quality carbon offset projects in animal husbandry to avoid methane production and so on. This portfolio of projects that primarily comply with the international VCS standards help us decrease the emissions of the value chain by 115,394.0 MtCO₂e.



One of our projects in FY2023 carbon removal solution: Afforestation project in Sanchazi, Baishan City, Jilin Province.

Engaging and enabling decarbonization through our platform ecosystem

The key to cutting carbon pollution while promoting economic growth is to inspire and promote innovation, and design measurable incentives and mechanisms, to collaboratively engage the widest range of stakeholders to move society towards green, low-carbon, and circular development.

We firmly believe that the digital platform is the rich soil for building a digital and circular business ecosystem. Our goal is, firstly, to promote and enable enterprises, especially SMEs, to green and low-carbon production while maintaining growth, and secondly, to promote the broadest possible consumer shift towards more sustainable consumption. Moreover, we work to shape a positive feedback loop between consumption and production, to better motivate partners to run green.

With this in mind, we pioneered the concept of "Scope 3+" which strives to measure the emissions generated in our ecosystem beyond Scopes 1, 2, and 3. As part of this effort, we have set a platform decarbonization target of "facilitating 1.5 gigatons of GHG emission reduction over 15 years across the ecosystem" in the Alibaba Group Carbon Neutrality Action Report in December 2021. We view this as a broader responsibility in decarbonization that a platform operator should take on.

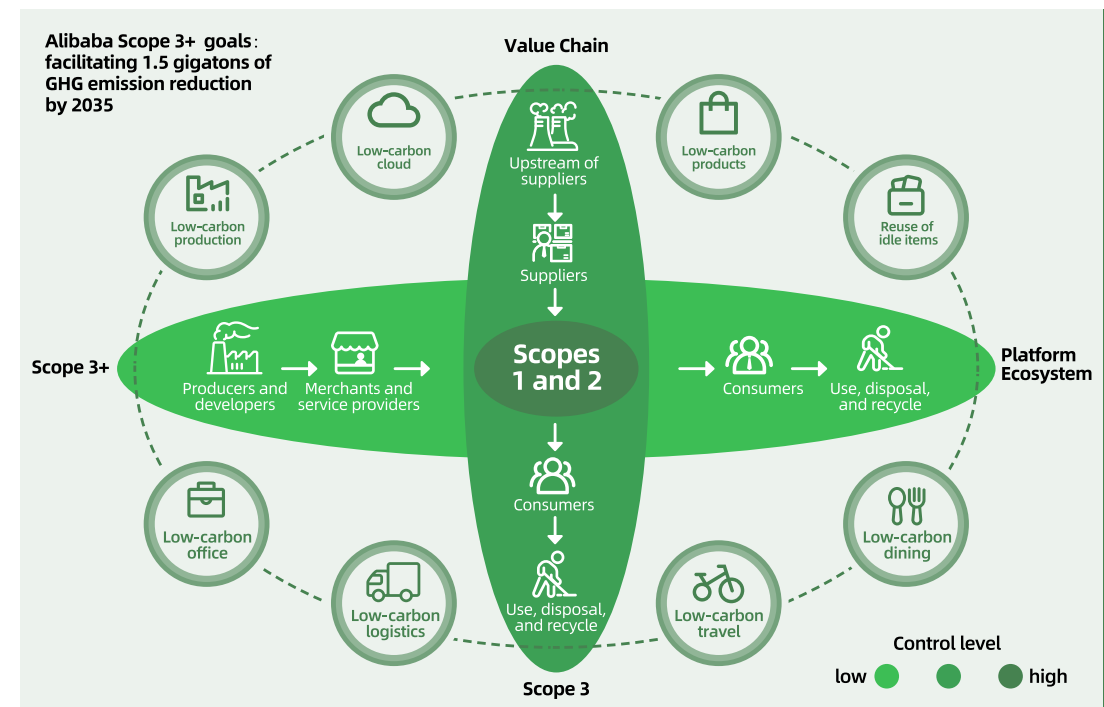
As there has been no established standard for "Scope 3+", we have had to establish transparent and measurable scientific standards as we promote

emission reduction. It has been an iterative process of exploration and progress. In FY2023, on the basis of releasing the Scope 3+ Emission Reduction: A New Methodology for Corporate Climate Actions Beyond Value Chain, we reduced a total of 22.907 million MtCO_{2e} of emissions following our published Scope 3+ methodology. We moved on to map out the preliminary pathway for further low-carbon efforts, laying the foundation for the ultimate achievement of our Scope 3+ goals.

Below is a detailed introduction to the measurement standards for Scope 3+ emission reductions, as well as the achievements of our efforts in engaging and enabling decarbonization among enterprises and consumers.

Roadmap and measurement infrastructure for Scope 3+ emission reduction

Key scenarios and emission reduction progress of Scope 3+





Roadmap and measurement infrastructure for Scope 3+ emission reduction

FY2023 marks the groundbreaking year for the 15-year target of Scope 3+. Together with authoritative institutions, we first published the "Scope 3+ Emission Reduction: A New Methodology for Corporate Climate Actions Beyond the Value Chain", specifying the two

major emission reduction categories, engaging and enabling decarbonization, through the platform ecosystem and built corresponding infrastructure based on this methodology.



Roadmap for Scope 3+ emission reduction

In FY2023, guided by the two major emission reduction categories - "engaged carbon abatement" and "enabled carbon abatement", we drew up eight specific action routes for emission reduction.

For engaged carbon abatement, we actively leverage the platform mechanism to drive and motivate individuals and enterprises to actively reduce emissions at both behavioral and product levels to establish a low-carbon lifestyle and consumption arena. We focus on four key areas: low-carbon travel, low-carbon dining, recycling and reuse, and low-carbon products. These behaviors contribute to emission abatement via the principle of "Reduce, Replace, Recycle", and are amplified by proactive measures taken by the platform.

For enabled carbon abatement, we continue to tap the potential of digital technologies to reduce emissions and increase efficiency so as to empower corporations and industries to go green. Currently, our efforts cover four major areas: low-carbon cloud services, low-carbon office services, low-carbon logistic solutions for corporations, and low-carbon production solutions. Compared with the social baseline⁷, these solutions and products have notable low-carbon attributes that directly fortify the client's ability to reduce emissions.

Systematic standards for emission reduction

Climate Actions Beyond the Value Chain, we joined with China Association for Standardization and China Environmental United Certification Center and applied for the group standard Corporate Scope 3+ Emission Reduction Accounting and Reporting Principles, a key step from the conceptualization of Scope 3+ to standard establishment.

We jointly developed corresponding measurement methodologies for 102 scenarios around the above eight routes together with professional third parties. We also gradually and systematically developed these methodologies of the scenario into official standards⁸. As of March 31, 2023, we have led or participated in 28 national and group standard projects in China.

Recently, we have teamed up with the World Business Council for Sustainable Development (WBCSD), the World Resources Institute (WRI), and the World Economic Forum (WEF), among other international organizations, to discuss the promotion of Scope 3+ emission reduction as a standard widely recognized and practiced worldwide.

⁷ Social baseline is the average emission of the society and industry. ⁸ Official standards include group standards, local standards, industry standards and national standards.

From standard innovation to business innovation

We combine innovative business practices with systematic standards of emission reduction, in order to promote the extensive application of these standards in more scenarios and communities via our platform mechanism and stakeholder ecosystem.

"Carbon88", a carbon ledger platform for consumers:

Taking advantage of the rich business scenarios in Alibaba's ecosystem, our Carbon88 ledger platform as Alibaba's carbon ledger platform unveils a decarbonization lifestyle for consumers across various scenarios, from catering, travel, working, and shopping, to recycling. Based on the progressing decarbonization measurement standard, we measure the decarbonization actions of consumers in Alibaba's ecosystem platforms. In addition, Carbon88 ledger platform is driven by the value of protecting the earth, with an aim to encourage users to develop low-carbon habits through incentives and low-carbon themed activities. In FY2023, a total of 187 million users participated in emission reduction actions through the Carbon88 ledger platform.

Low-carbon Friendly Products Program:

In October 2022, we launched Low-carbon Friendly Products Program. By establishing a certification system and a measurement standard system for product emission reduction and applying it to the Taobao and Tmall platforms, we have continuously enriched the supply of Low-carbon Friendly products. By March 31, 2023, there are a total of 1.91 million Low-carbon Friendly products of 41 first-class categories⁹ from 409 brands and we are driving more and more merchants to engage in low-carbon practices throughout the lifecycle.

Active participation in government-led innovative model of voluntary emission reduction:

In accordance with the Guangdong Carbon Inclusive Trading Management Measures and the Guangdong Carbon Reduction Accounting Rules for Energy-saving Air Conditioners, we have pooled and declared voluntary reductions for energy-saving air conditioners. Amap actively engages the public in low-carbon travel by participating in the construction of Beijing Transportation Green Travel Integration Service Platform (Beijing MaaS¹⁰ Platform). In June 2023, Amap's "Green Travel Carbon Inclusion Project" was selected by the Ministry of Ecology and Environment and the Office of National Spiritual Civilization as one of the top 10 public participation cases in the "Beautiful China, I am a practicer" 2023 Action Plan to raise public awareness of ecological civilization.

Contributing to the development of low-carbon products through the establishment of Low-carbon Friendly Products Program and product decarbonization standards

Jointly with authoritative independent institutions such as China Quality Certification Centre and China National Institute of Standardization, we contribute to the development of low-carbon products through the establishment of a certification system and a decarbonization standard system. Focusing on the product lifecycle, we established "Independent Certification System" and launched Alibaba Low-carbon Friendly Products Program, covering key process and measurements in sub-product decarbonization, such as carbon neutral products, low-carbon raw materials, low-carbon packaging, low-carbon logistics, energy conservation and energy-saving use. Currently, 29 decarbonization related certifications and labels are adopted. Meanwhile, according to the decarbonization measurement standards for different product categories, we have developed group standards such as General Technical Requirements for Evaluating CO₂ Emission Reductions of Energy-efficient End-use Products and Technical Requirements for Evaluating Emission Reductions of Products Packaging.

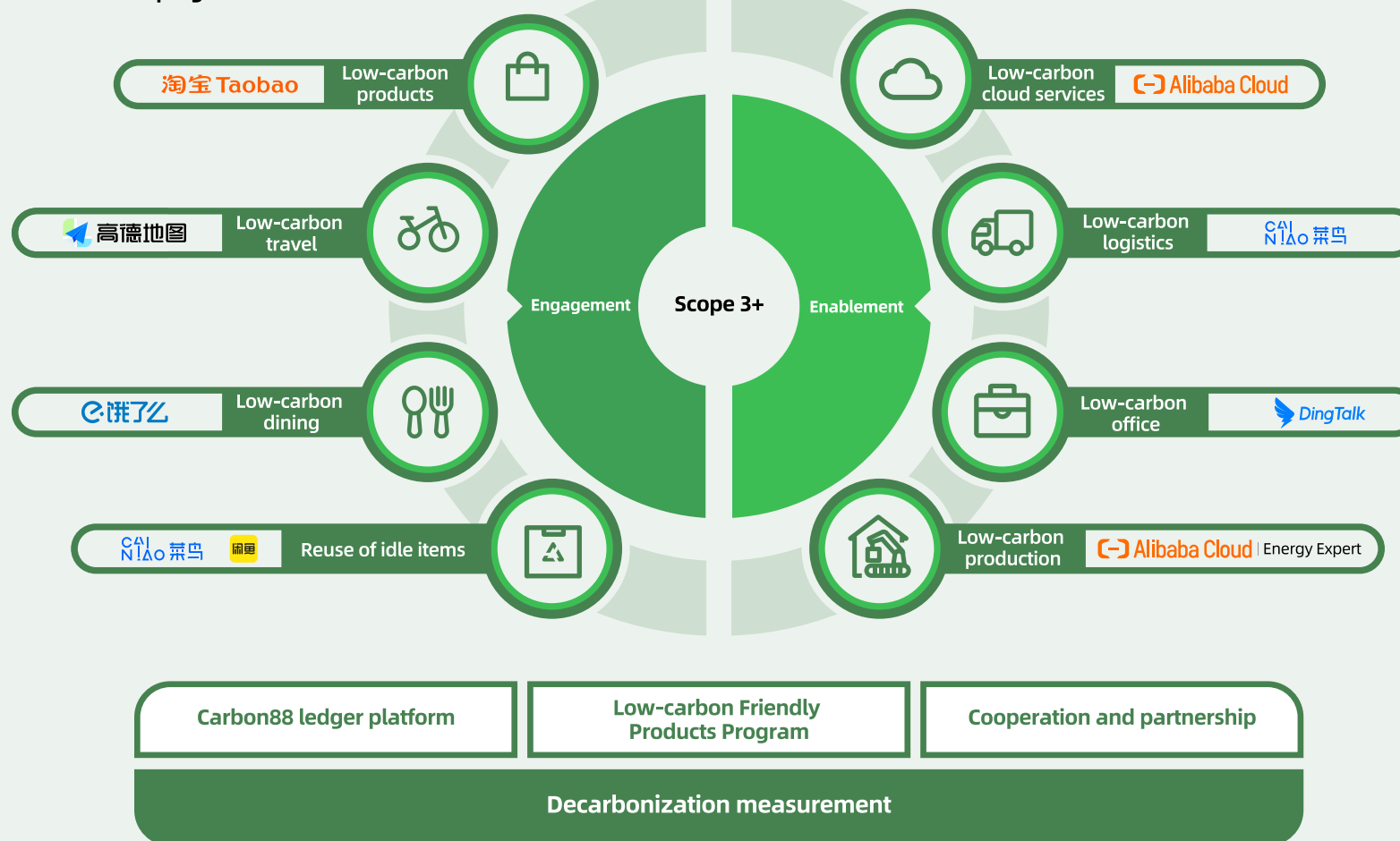


⁹ First-class category is the primary classification of products on Taobao and Tmall platforms.
¹⁰ MaaS, Mobility as a Service.

Key scenarios and emission reduction progress of Scope 3+

We are promoting the implementation of our Scope 3+ commitments, centering on “engaged carbon abatement” and “enabled carbon abatement” from both the user side and the corporate side in our specific business operations. On the user side, we drive consumers to lead low-carbon lifestyles through the platform mechanism, which in turn boosts low-carbon production among suppliers; on the corporate side, we empower enterprises to improve their efficiency in production and distribution via digital capabilities, thus enabling the synergistic development of green industrial chains. Meanwhile, on the basis of measurable low-carbon actions, we are dedicated to establishing sustainable market mechanisms to continuously penetrate into more consumers and businesses, encouraging more frequent low-carbon actions.

Categories and scenarios of Scope 3+ emission reduction progress





Leading consumers towards green low-carbon lifestyles by leveraging platform mechanism

We mobilize the large collective power of many users to protect the planet through small changes and incentives, and to lead green lifestyles through a consumer carbon ledger scheme that covers multiple scenarios and goals.

The "Green Travel"

Amap provides low-carbon travel options, such as "walking, cycling, bus, and subway" for users. As of March 31, 2023, it has covered 16 cities, including Beijing, Shanghai, Guangzhou, Shenzhen, Wuhan, Chengdu, and Chongqing, driving more than 30 million users to practice low-carbon travel. In FY2023, emissions reduced by low-carbon travel reached 0.215 million MtCO_{2e}.

Low-carbon catering

The Ele.me provides a "cutlery-free" option to reduce the consumption of single-use items and emissions. Every time when consumers choose "cutlery-free", they can obtain corresponding emission reduction

and carbon points through Carbon88 ledger platform, which can be exchanged for various benefits. As of March 31, 2023, the number of "cutlery-free" orders on the Ele.me platform has exceeded 1.4 billion.

Reuse of idle items

We advocate for consumers to use idle items without compromising the quality of life. On the re-commerce platform Idle Fish, we have measured emission reduction and provided consumer incentives for 22 categories of idle items and six categories of recycled items, including cell phones and digital services, beauty and personal care product, and

maternal products and children's toys. In FY2023, the reduction from the reuse of idle items reached 3.142 million MtCO_{2e}. We encourage consumers to leave their cartons at Cainiao Posts when they pick up their parcels for the secondary use. For those who want to send parcels, we encourage them to choose the "sending in used boxes" option to facilitate their engagement in the circular economy. In FY2023, according to digital record from Cainiao Posts, the number of recycled cardboard boxes recorded in a digital form reached 23.82 million. To encourage consumer participation, Cainiao has given them a total of 2 million eggs, tissues, rice, and so on as free incentives.



Green Travel



Low-carbon catering



Reuse of idle items

Low-carbon Friendly products

We add carbon reduction logos to the pages of Low-carbon Friendly products to clearly guide consumers to buy such products. As of March 31, 2023, more than 100 million users have consumed Low-carbon Friendly products on Taobao platform, covering categories of home appliances, FMCG (Fast-Moving Consumer Good), foods, and more. In FY2023, the emission reduction from the consumption of Low-carbon Friendly products reached 0.896 million MtCO_{2e}. Besides, through the Carbon88 ledger platform, we offer consumers a convenient experience to access a wide variety of Low-carbon Friendly products supply and benefits wherever possible.



Low-carbon Friendly products

Emission reduction in life

The key to making emission reduction sustainable is through users' mindset building and conceptual change. Thus, we continue to explore and identify the emission reduction scenarios and methods in daily life, making it easy for consumers to adopt low-carbon and environment-friendly practices. Through the Carbon88 ledger platform, we advocate and incentivize users to start small from their surroundings to develop low-carbon habits such as turning off lights, bringing their own cups, and reducing food waste. Through small changes and incentives, we create significant value in protecting the Earth.

From "Decarbonization-friendly Actions" to "88 Decarbonization Day"

Utilizing the platform advantages, we accelerate green, low-carbon and circulate products and business models through facilitating consumers to choose low-carbon lifestyle and low-carbon consumption.

In July 2022, Alibaba launched the "Decarbonization-friendly Actions". As of March 31, 2023, we have worked with 23 brand companies in China and abroad, covering FMCG, household appliances, and food to promote this program.

In November 2022, Alibaba further launched the "88 Decarbonization Day", covering brand building, consumer education and low-carbon consumption. Together with brand groups, we are building low-carbon consumption awareness and creating new exclusive scenarios for low-carbon consumption. At present, Alibaba has carried out "88 Decarbonization Day" with Shiseido and Yili respectively.



Enabling enterprises in achieving carbon neutrality targets with digital capabilities

The green transformation of SMEs and the industry as a whole relies not only on breakthroughs and applications of low-carbon technologies, but also requires significant breakthroughs and applications of efficiency-enhancing management technologies. Research shows that digital technologies possess distinct multiplier effects in reducing emissions. While digitalization systems themselves might increase emissions by 2%, this will be more than offset by an expected 20% in emissions reduction from using digitalization, thereby providing a scientific basis and motivation for us to deliver targeted digital low-carbon applications.

Low-carbon cloud services

According to the Carbon Trust's report in 2022, Alibaba Cloud's Carbon Benefits, users in China can avoid 85.5% of emissions by switching to Alibaba Cloud from locally deployed data centers and servers. Our cloud computing has empowered clients to reduce 6.863 million MtCO_{2e} of emissions.

Low-carbon logistic solutions

Cainiao takes advantage of its digital technologies and logistics platform to provide full-link digital recycling capabilities for its ecosystem partners. In July 2022, Yili and Cainiao signed a green strategic cooperation agreement to jointly establish a green recycling chain for used packaging based on the full-chain emissions reduction digital system, which covers the entire process from consumer engagement, transfer, recycling, and reproduction and predictive modeling. In September 2022, Cainiao teamed up with Nike to conduct door-to-door worn shoe recycling and achieved on-site recycling at 30 campus stations in China. Meanwhile, with the support of the postal administrations of Zhejiang, Anhui, Hunan, and Guangxi provinces, Cainiao has carried out a pilot digital carbon asset management system for the postal express industry to promote scientific emissions reduction in the industry. The first pilot system has been launched in Anhui.

Low-carbon office services

By enabling online collaboration for employees, DingTalk has significantly reduced the need for many offline meetings, thereby reducing emissions. DingTalk has launched an inclusive product DingTalk Emissions Reduction for corporate employees, which visualizes and quantifies their low-carbon office behaviors with "low-carbon energy" points. In FY2023, DingTalk digital office services empowered clients to reduce emissions by 1,175.8 MtCO_{2e}.

Low-carbon production solutions

An energy consumption and carbon management platform, Energy Expert, facilitates enterprises, especially export-oriented SMEs, to reduce emissions at the production end and build green competitiveness. Compared with traditional carbon footprint inspection tools, Energy Expert can save about 75% of time and 90% of cost. As of March 31, 2023, Energy Expert has served 2,580 companies worldwide.

Another example in low-carbon solution is our partnership in the power industry. In February 2023, we signed a Memorandum of Understanding on AI-enabled power dispatching with the China Southern Power Grid, to jointly promote the R&D and application of cloud computing, data intelligence and AI technology in power dispatching, towards the goal of safe, reliable and green development. In March 2023, Alibaba advanced our comprehensive strategic partnership with the State Power Investment Corporation Limited, joining our complementary capabilities to give the electricity users like Alibaba access to more and cleaner power ("New Energy+") and to help the power industry become smarter and more efficient ("Green Digital Intelligence+").



Conserving and restoring nature

Besides the global climate crisis, we are confronted with a series of interlinked environmental crises, from water scarcity and degradation, marine and soil pollution resulting from the proliferation of plastics and other solid wastes, to biodiversity loss and ecological degradation. The natural environment, which humanity relies upon, is currently under significant threat. To address these pressing issues, we work closely with environmental organizations, the public, and other stakeholders. By leveraging technology and fostering innovative business models, we aim to collectively address and overcome these challenges.

| **Minimizing packaging materials** | **Conserving and purifying water resources** | **Reducing and recycling waste** | **Ecosystem protection** |



Conserving and restoring nature

Minimizing packaging materials

According to the United Nations Environment Program, under the transition to a sustainable and low-carbon circular economy, it is anticipated that the volume of plastic entering the oceans will be reduced by more than 80% by 2040, alongside a 55% decrease in the production of virgin plastic¹¹. Alibaba is actively engaged in resource recycling efforts and employs various approaches to minimize packaging materials. First, we focus on reducing packaging at its source. Second, in scenarios when plastics usage is necessary, we actively invest in the research and application of environment-friendly materials, i.e., replacing traditional packaging material with more sustainable alternatives. Third, we strive to enhance the efficiency of packaging material utilization through packaging optimization. Last, we collect and recycle packaging materials after they have served their purpose. These measures are not only implemented within our own operations, but also in our collaboration with our partners throughout the value chain and platform ecosystem to drive collective action and innovation.

Reducing packaging materials in our operations and across our value chain

Facilitating the reduction of packaging material usage across our ecosystem

Reducing packaging materials in our operations and across our value chain

We have implemented measures across the mentioned four dimensions within our retail spaces, including Sun Art Retail, Intime, and Freshippo, in our commitment to reduce the use of packaging materials, with a specific focus on plastics.



Sun Art Retail

Packaging Reduction

To minimize the use of packaging materials from the source, we have introduced recyclable boxes, baskets, and pallets in multiple processes such as distribution, sub-package, and transportation. For food-related products, we have adopted food-grade folding turnover boxes and insulation boxes. We reduced the thickness of wrapping film while maintaining its effectiveness, therefore reduce the overall amount of packaging materials used.

Packaging Material Replacement

We are actively replacing non-biodegradable shopping bags with biodegradable alternatives.

Packaging Recycling

We recycle cartons from the sub-package process of standard products, and we encourage suppliers to enhance carton recycling and reuse practices. In the FY2023, Sun Art Retail and Mengniu Dairy initiated a pilot program involving reusing turnover boxes. After receiving Mengniu Dairy's products, stores send back the turnover boxes to the warehouse for freshly produced food through returning logistics trucks. Mengniu Dairy then collects these boxes for reuse.



Intime Department Store

Packaging Reduction

We have optimized the design of mailing cartons and successfully upgraded from traditional zipper boxes to more eco-friendly friction-adhesive boxes. These friction-adhesive boxes utilize mortise and tenon fitting technology at the seal, not only ensuring the boxes are suitable for normal transportation, but also reduce paper usage by approximately 10%. In FY2023, our efforts in packaging optimization led to a decrease in paper material usage by around 316 tons and a reduction in the use of glue by about 60%.

Packaging Material Replacement

We have introduced fully biodegradable "green mailing bags" made from environment-friendly materials in all of our stores in China. Additionally, we have replaced plastic materials with paper or biodegradable alternatives for the fillers inside delivery parcels. This transition had been implemented across all Intime department stores during FY2023, resulting in an annual reduction of approximately 31.4 tons of plastic packaging materials in total.



Freshippo

Packaging Reduction

To avoid excessive packaging of our self-owned products, we have implemented an internal audit mechanism. In FY2023, we achieved weight reduction of approximately 5-13% per box in some major PET packaging boxes.

Packaging Material Replacement

In FY2023, Freshippo took a pioneering role as the first and only supermarket company participating in the development of national standards for the identification of biodegradable products (GB/T 41010) and home composting specifications (GB/T 40553); Freshippo gradually replaced disposable plastic tableware with paper and biodegradable tableware in stores in China to reduce the use of single-use plastic tableware. Meanwhile, Freshippo actively replaced single-use items with recyclable folding baskets, and insulation boxes in our warehouses and stores.

Packaging Recycling

At Freshippo, we utilize waste plastic turnover baskets as raw materials in our processing centers. Through a reprocessing process, we transform these used baskets into new ones for internal recycling.

Facilitating the reduction of packaging material usage across our ecosystem

In addition to our internal efforts, we are actively engaging the ecosystem surrounding our logistics, international e-commerce businesses and so on to drive actions and innovations aimed at reducing plastic and minimizing packaging material usage. This involves encouraging participation and collaboration from platform consumers and retailers alike.

Cainiao actively drives the industry and consumers to participate in reducing packaging materials

Packaging reduction

We develop simple packaging schemes according to industry characteristics to reduce the use of cartons from the source; we actively promote shipments with original boxes and used packages. In FY2023, the consumption of packaging materials was reduced by 0.184 million tons.

Packaging Optimization

We work on packaging planning and algorithm optimization for different industries, warehouses, and product categories, and continuously improve the full box rate and reduce the overall use of cartons.

Packaging circulation

We actively use reusable delivery bins instead of disposable cartons in warehouse operation and transportation to reduce the use of cartons. For example, in Tmall Supermarket, couriers will use these reusable rigid-shelled bins and simple packaging instead of single-use cartons.

Packaging recycling

We continuously invest energy, time, and resources in packaging recycling at Cainiao Posts, and encourage consumers to leave cartons at Cainiao Posts for secondary use when picking up parcels, we also provide consumers with the "used box" delivery option to encourage them to actively participate in the circular economy. In FY2023, the number of cartons recycled in Cainiao Posts recorded digitally reached 23.82 million.

Lazada releases the Sustainable Packaging Handbook

In Vietnam, Lazada is committed to actively collaborating with platform retailers to reduce plastic waste and promote environment-friendly packaging practices. In February 2023, Lazada took a significant step by releasing the Sustainable Packaging Handbook. This comprehensive resource provides platform retailers with practical tips and guidelines to minimize

their negative environmental impact. The Handbook also provides technical support to the Ministry of Industry and Trade of Vietnam when establishing the Code of Conduct for Responsible Business Practices in E-Commerce.



Packaging recycling at Cainiao Post

Conserving and purifying water resource

Water is the essence of life, but its distribution is highly uneven globally. The impacts of climate change often exacerbate water stress and degradation of water quality. In China, the water issue is particularly complex, with per capita water resources only amounting to one-fourth of the global average¹². Alibaba has a longstanding commitment to addressing water issues, emphasizing the prudent use of water resources within our own operations and substantial investing in developing innovative technologies for efficient water utilization. Furthermore, we maintain a steadfast focus and continuous support on China's water challenges, promote water security and ecological protection in China by actively collaborating with a diverse network of partners.

Water conservation in own operations

Water protection throughout our ecosystem

Water conservation in own operations

We are dedicated to integrating the principles of resource recycling into our own operations, particularly in the management and utilization of water resources. Alibaba Cloud pursues low water usage. We tried to reduce water usage from the source by technological innovation. We developed a high-efficiency dry cooler, which enables WUE (Water Use Efficiency) to drop below 0.1 liters/kWh. In operations, we promoted digital water resource management, constructed a national platform for water use data management, and achieved visible, measurable, and analyzable WUE in FY2023. Additionally, we have piloted intensified water recycling

within our self-built data center base in Zhangbei, resulting in the recycling of 6,234 tons of wastewater in FY2023.

Furthermore, we leverage technology to continuously enhance water efficiency within Alibaba's campuses. Our approach involves incorporating water conservation and recycling concepts into the design and layout of new campuses. Starting in 2022, all new campuses adopted Tier 1 sanitary ware, enabling a 40% reduction in water consumption compared to traditional ones. We are also increasing the utilization of reclaimed

water, such as in our Beijing campus, where the reclaimed water covers 100% water usage across campus irrigation and toilet flushing. Moreover, we promote the adoption of "sponge city" designs, which facilitates rainwater recycling within our campus. For existing campuses, we conduct reviews and implement technical modifications to existing equipment. This includes the recycling of wastewater from drinking fountains, controlling water flow in pantries, recycling landscape water and so on. These efforts were estimated to result in the recycling of over 33,000 tons of water in FY2023.



Water management

¹² Data source: https://www.gov.cn/zhengce/202305/content_6876215.htm.

Water protection throughout our ecosystem

We leverage a wide array of technology and philanthropic innovation to collaborate with wide stakeholders such as environmental protection organizations, governments, public, and other stakeholders to support and participate in China's water quality improvement and water ecosystem protection in the long-term, and to explore innovative solutions.

Long committed to environmental governance centered on water environment protection, Alibaba Foundation has launched a series of public welfare projects for water resource protection.

Qiandao Lake Project Phase II

In April 2022, Alibaba Foundation launched the second phase of the Qiandao Lake Water Fund project, a long-term initiative supported by the Alibaba Foundation. This phase focused on establishing a demonstration base for preventing non-point source pollution and soil erosion in key agricultural crop areas within the basin. Additionally, in February 2023, we initiated the "Weiping Xiaowudu Source Watershed Restoration" project. In FY2023, the project was awarded the model case of "Innovative Financial Mechanisms for Water Resources Protection by the Asian Development Bank" and the "Ecological Civilization Education Base" in Hangzhou City.

River Watchman project team nominated for the "Green China People of the Year"

Alibaba Foundation supports the development of the mini-app "Interesting River", which empowers river watchmen to patrol rivers, identify problems, and solve issues. It has successfully established a network comprising both official and volunteer river wardens, and the general public, fostering a systematic approach to public participation in river conservation. As of March 31, 2023, the "Interesting River" project had recruited 1,482 teams and launched 131,750 individuals to complete 715,951 effective river reviews. The River Watchman project team was honored with a nomination for the prestigious "Green China People of the Year" award by the Ministry of Ecology and Environment in November 2022.



Alibaba Cloud contributes to digital water management in Ningxia

By virtue of digital technology, Alibaba Cloud offers advanced, reliable, and secure support for water management. Our strategic collaboration with Tsinghua University and the Ningxia Water Resources Department has led to the establishment of an innovative digital water management mechanism known as "Research Institute + Pilot Zone + Industrial Park". The implementation of the "Internet + urban and rural water supply" initiative in Pengyang County, Guyuan City assists to create the "same source, same quality, same price and same supply network" rural drinking water model, offering rural residents the same water supply service as urban residents.



Reducing and recycling waste

Proper waste management is crucial for mitigating negative environmental impacts caused by the improper disposal of solid waste. In many low-income countries, a significant percentage of waste, exceeding 90%, is either openly dumped or incinerated¹³. This not only leads to air pollution and respiratory diseases but also contributes to the emissions of greenhouse gases. At Alibaba, we are fully committed to responsible waste management throughout our operation and have implemented efficient practices and innovative solutions focused on four key dimensions: source reduction, efficient management, compliant disposal, and recycling.

Alibaba Cloud promotes waste management from recycling and compliance

Raising the recycling level of equipment and accessories: Alibaba Cloud's data centers extend the warranty for old servers so that they can be re-put into operation after being affirmed to be qualified. Retired servers will be dismantled, upgraded and refitted for secondary use, and available accessories will be recycled.

Compliant treatment of hazardous waste: Based on the hazardous waste generation timeline, Alibaba Cloud's data centers have entered a contract with qualified suppliers specializing in hazardous waste disposal, and have treated hazardous waste strictly in accordance with regulations.

Sun Art Retail is continuously enhancing its management of food loss and waste

Sun Art Retail has implemented loss control management practices across the entire food chain, starting from procurement, storage, processing, and selling, to the introduction of new products. To prevent food waste, Sun Art Retail adjusts its daily food production quantity in offline stores based on customer and sales volume. Additionally, Sun Art Retail actively promotes the Empty-plate Campaign to resident caterers and employees, fostering a culture of food conservation. In online sales, Sun Art Retail takes measures to avoid food loss and waste through pre-sales strategies. Moreover, Sun Art Retail strictly adheres to the management principle of separating wet and dry food waste and has established a standardized workflow for waste disposal. As a result of these initiatives, Sun Art Retail achieved a 7.4% year-over-year decrease in food waste during FY2023.

Management and disposal of waste in our own campuses

The management and disposal of waste in our own campuses is a top priority for us. We implemented a data-driven system for waste disposal within the campuses intending to monitor and track the collection, classification, transportation, and disposition in the entire waste chain. We advocated source reduction and an increased recycling rate of waste to reduce landfill and incineration. We also initiated pilot projects for local disposal of food and beverage waste in our core campuses, such as biological fermentation technology that converts food waste to organic fertilizer and other reusable resources. We have also developed and issued regulations for waste management and recycling in new campuses, and around 75% of construction waste in new campuses has been reused.



Interesting display of waste classification

¹³ Data source: World Bank, <https://www.shihang.org/zh/news/immersive-story/2018/09/20/what-a-waste-an-updated-look-into-the-future-of-solid-waste-management>.

Ecosystem protection

In 2022, the 15th Conference of Parties to the UN Convention on Biological Diversity (UNCBD COP15) established a significant milestone known as the "30 by 30" target. This target aims to conserve 30 percent of the planet's terrestrial and marine habitats by 2030, to safeguard and restore populations of natural and wild species that have experienced continuous degradation over recent decades¹⁴. At Alibaba, we firmly believe in the interconnectedness of people and nature, and that we share a goal for a future together. To contribute to this vital goal, we are harnessing the power of our platform and digital technology capabilities, and creating and protecting biodiversity in our own business operations, while collaborating with multiple parties in sharing and co-governance.

In December 2022, Alibaba's "Digital Platform for Biodiversity Conservation" project was recognized as one of 23 "Biodiversity Positive Practices and Actions Around the World" cases by the UNCBD COP15. Our project provides experience reference to other companies that actively engage in and contribute to the crucial cause of biodiversity conservation.

Building and protecting biodiversity in own business operations

Collaborating with multiple parties in sharing and co-governance

Building and protecting biodiversity in our own business operations

In view of the nature of our business, our assessment of the impact of our own business operations on biodiversity is relatively limited, including the impact of building and running campuses on the ecosystem as well as the potential impact of platform-based illegal wildlife trading on the ecosystem. Based on the analysis, we will make constant efforts to protect the authenticity and integrity of the ecosystem from these two aspects.

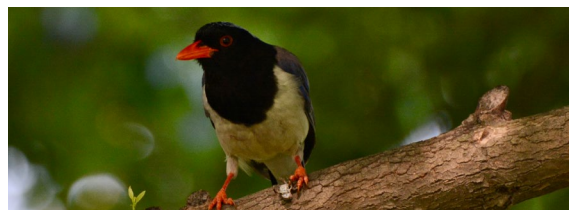
Biodiversity conservation in own campuses

We recognize the significant influence that the construction and operation of our campuses can have on the surrounding ecosystems. Our objective is to transform self-operated campuses into thriving biodiversity hotspots within the urban landscape, fostering a harmonious relationship between people and nature.

We conduct thorough environmental impact assessments to ensure the optimal integration of our campuses with the surrounding ecology, while considering indicators such as vegetation richness and sponge city infrastructures. We actively preserve and utilize native species, cultivate diverse vegetation structures, and create an inviting habitat for numerous bird species throughout the year. An excellent example is our global headquarters, Hangzhou Xixi Campus, which neighbors the Xixi National Wetland Park. In our plan, we have preserved the wetlands within the campus and carefully considered the river that runs through it, allowing our office buildings to coexist seamlessly with the natural environment. In the soon-to-be-completed Xixi Phase V Campus, we have also designed various sponge city type design facilities such as bioretention ponds and rain gardens to provide food and habitat for insects and birds, while storing and purifying rainwater. Our focus lies in protecting and restoring the native ecosystem.



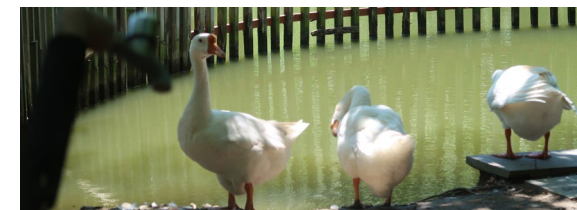
Xixi Campus



Birds on campus:: Red-billed Blue Magpie



Plant labels on campus



Geese on campus

¹⁴ Data source: United Nation, <https://news.un.org/zh/story/2023/06/1118977>.

Employee engagement in biodiversity education and conservation

In today's urban landscape, many residents experience a sense of disconnection from nature, leading to what is commonly known as "nature deficiency disorder". Recognizing our responsibility as a company, we are dedicated to finding ways to foster a healthier and more vibrant environment for our employees, communities, and residents. We aim to establish a closer bond between people and nature, cultivating a sense of empathy towards the natural world. By nurturing this connection, we believe that employees will be inspired to unlock their creativity and embrace a greater appreciation for life, and share knowledge and the concept of green living with a broader audience.

Alibaba's plant experts for the Nature Academy Happiness Tour

In March 2013, a group of nature-loving Alibaba employees established the "Nature Academy Happiness Tour", with a focus on museums and natural sciences.

In FY2023, we proudly expanded our team with 40 new members through comprehensive training programs. These newly certified plant experts have taken on the role of

conducting weekly guided plant appreciation activities, with more than 1,000 participants engaging in natural science education.



One hour plant appreciation per week



Removal of invasive species like Canada goldenrod to protect the local ecosystem



One or two weekend nature activities per month for families and children



Making campus plant labels



Take biodiversity surveys in Xixi wetland, farm and mountain areas

Wildlife conservation through digital platforms

Illegal hunting and trading of wildlife pose significant threats to biodiversity. As the world's leading e-commerce platform, Alibaba leverages its digital capabilities to actively support wildlife conservation in various ways. We proactively identify and report instances of illegal wildlife trade, collaborating closely with law enforcement agencies to clamp down on these activities. Additionally, we undertake initiatives to raise awareness among our users about the importance of wildlife conservation, encouraging the public to actively participate in conservation efforts.

Leveraging technology for a comprehensive crackdown on illegal trade

We have been actively combating the illegal wildlife trade on our platform by implementing robust measures from the supply side. Our commitment is to utilize cutting-edge technologies, such as AI algorithms, which enable us to effectively monitor various forms of content, including texts, images, videos, and live streams. Through these advanced tools, we can intelligently identify indicators of illegal activities, such as hunting tools and key personnel, enabling us to take immediate action against violations and contribute to the dismantling of illegal wildlife trade networks. As a result of our efforts, we have successfully played a role in cracking down on numerous cases involving wildlife hunting, collection, and illegal trade. Notably, Alibaba's involvement has garnered recognition in a high-profile illegal hunting case in Xianju County, Taizhou City, Zhejiang Province. In December 2022, this case was recognized as a "typical case of biodiversity protection by a procuratorate institute of Zhejiang Province."

Promoting conservation awareness and participation through consumer education

We launched the "GreenNet Program" across various APPs such as Taobao, Idle Fish, and Youku. As of March 31, 2023, we have successfully transformed 8.52 million user search results related to the wildlife trade into science education and advocacy pages, contributing to disseminating important conservation messages. Within the GreenNet Program, we introduced the "Philanthropic Guardian Action" on Taobao and other applications, aiming to raise public awareness regarding endangered wildlife. We have partnered with reputable organizations such as the China Wildlife Protection Association and the International Wildlife Trade Research Organization to build a comprehensive knowledge base focused on scientific education. As of March 31, 2023, 240,000 individuals have participated in the "Philanthropic Guardian Action". We are proud to share that the GreenNet Program received recognition for its outstanding online law dissemination practices by the Cyberspace Administration of China in FY2023.



Digital platform model supports biodiversity conservation

Aggregating the platform's resources for biodiversity conservation

We leverage the power of our platform to gather resources and support biodiversity conservation initiatives. One of our notable initiatives is the "Goods for Good" program, which provides a platform for retailers to actively participate in public welfare. Through this program, sellers can designate certain products as Goods for Good and choose a philanthropic project to support by setting a donation amount or proportion. When buyers purchase these designated goods on Taobao, the platform ensures that the specified amount set by the seller is donated to the designated charitable organization or project.



For more details:
Please refer to Chapter 6 Promoting multi-party participation through leveraging platform power P185

In FY2023, the "Goods for Good" program supported over 10 projects in environmental and animal protection, with a total donation amount exceeding RMB10 million. These projects encompass various areas, including biodiversity, green and low-carbon initiatives, and environmental protection.

In collaboration with pet retailers on Taobao, Alibaba Foundation has launched a biodiversity conservation program to support the rescue and protection

of domestic endangered wildlife such as finless porpoises, black bears, and Asian elephants. As of March 31, 2023, this program has raised over RMB3 million for wildlife conservation through donations generated from the sale of Goods for Good offered by pet product retailers.

Since 2019, we have initiated the "Save the Smile of Yangtze River" charity project within the Goods for Good program. As of March 31, 2023, the

project has received support from over 163 million participants and directly funded eight demonstration sites to bolster the patrol system. This support has contributed to a total of 98 assisted patrollers covering 495,000 kilometers of patrol, assisting the fisheries administration in cracking down on illegal fishing 380 times, and cleaning up illegal / abandoned fishing nets weighing over 46 tons.



Collaborating with multiple parties in sharing and co-governance

Supporting local natural conservation

We firmly believe that successful nature conservation relies on the active involvement of local communities. We have forged long-term partnerships with local organizations and extended our support to frontline communities, enabling effective local nature conservation efforts.

Conducting scientific investigations, raising public awareness, and supporting biodiversity conservation in the Yeyahu Wetland

Alibaba Foundation is proud to support the One Planet Foundation, Beijing Forestry and Park Planning and Resource Monitoring Center, and Beijing Yanqing District Nature Reserve Management Office in their joint efforts to establish a biodiversity restoration standardized demonstration area within the pilot area of Beijing Yeyahu (Wild Duck Lake) Wetland Reserve. In FY2023, we embarked on a comprehensive initiative encompassing biodiversity surveys, patrols, and monitoring activities within the reserve, established a 110-acre wetland restoration demonstration area, and outlined strategies for restoration and preservation.



Beijing Yeyahu (Wild Duck Lake) Wetland Reserve

Long-term cooperation with institutions to build an environmental information network

We have established long-term partnerships with professional organizations to build a comprehensive and transparent environmental information-sharing network. By fully mining and leveraging

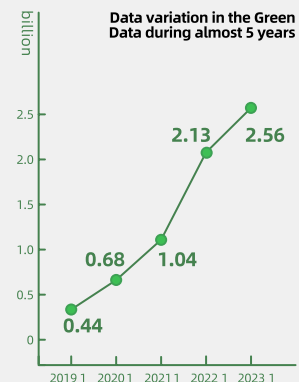
environmental data, we seek to build a robust environmental information network to facilitate law enforcement and supervision, promote accountability and transparency among enterprises,

empower individuals and communities to participate in environmental initiatives, and advocate for policy advancements that drive sustainable practices.

Promoting environmental protection through information technology: establishing Guangzhou Green Data

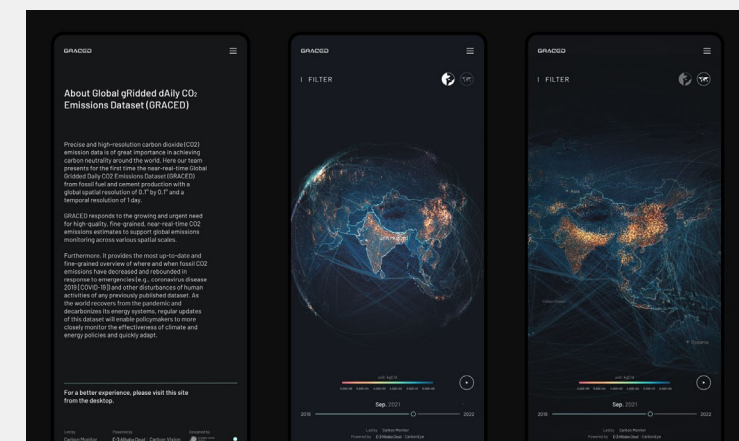
Alibaba Foundation has been actively supporting the Guangzhou Green Data Environmental Service Center (Guangzhou Green Data) since its establishment in 2015. Through resource support and professional empowerment, we have helped Guangzhou Green Data to establish a platform that covers a wide range of environmental information, including national environmental assessment, pollution sources, environmental quality, and ecology, reduce data intelligence barriers and professional knowledge costs.

As of March 31, 2023, we have successfully facilitated the application and cooperation of Guangzhou Green Data environmental data in various Alibaba products, such as AMap and DingTalk. From 2019, Guangzhou Green Data has expanded from 440 million to over 2,680 million, involving more than 5.3 million enterprises and other environmental subjects. Moreover, the average monthly external data calls have exceeded 20 million times.



Carbon map data platform powered by Alibaba Cloud

The collaboration between Alibaba Cloud and Tsinghua University's Carbon Monitor team has led to the development of a cutting-edge global carbon map data platform called GRACED (Global gRidded dAily CO₂ Emissions Dataset). This platform offers a comprehensive and visually immersive representation of high-precision human emission data, serving as a vital tool for academic research and data dissemination related to carbon neutrality efforts. GRACED has recorded global emission changes since January 1, 2019. Reports and citations of the platform's research findings have been acknowledged by prominent entities such as the United Nations Environment Programme (UNEP), the Global Meteorological Organization (WMO), and the Global Carbon Project (GCP).



Global Carbon Map

Engaging and inspiring the public to become actively involved in nature conservation

Through Alibaba's digital platform, we encourage the public to develop a greater awareness of the natural world around them and take meaningful actions to address pressing ecological and environmental challenges, such as emission reduction and climate change response. Through our Three-hour Voluntary Service Platform, we collaborate with nature institutions and environmental protection agencies to leverage the power of the Internet in educating the public about nature.

Alibaba co-hosted the China Nature Education Congress

In September 2022, Alibaba Foundation had the privilege of co-hosting the prestigious China Nature Education Congress in collaboration with esteemed organizations including the Chinese Society of Forestry, the Center for Environmental Education and Communications of the Ministry of Natural Resources, and the Beijing Municipal Forestry and Parks Bureau, under the guidance of the State Forestry and Grassland Administration and the Beijing Municipal People's Government. This event brought together hundreds of nature education experts and representatives from various sectors, both from China and abroad, fostering discussions on the sustainable development of nature education in China. As a result, the Beijing Declaration was released. Additionally, the National Medium- and Long-term Development Plan for Nature Education was jointly compiled. The proceedings were shared online, reaching and inspiring 10 million follows.



China Nature Education Congress

Encouraging public engagement in nature conservation during environmental protection festivals

April 22, World Earth Day

From April 18 to April 24, 2022, the Alibaba Foundation, in collaboration with the Center for Environmental Education and Communications of the Ministry of Natural Resources and the Hangzhou Municipal Ecology and Environmental Bureau, launched the "Leave Love, Leave No Trace -

Nature Education Week" campaign, attracting more than 500,000 participants. The campaign was recognized as the "Outstanding Communication Project of Natural Resources Theme Day Campaign" by the Center for Environmental Education and Communications of the Ministry of Natural Resources.



"Co-Build a Clean and Beautiful World, Leave Love, Leave No Trace" campaign

June 5, World Environment Day

Alibaba Foundation cooperated with Hangzhou Municipal Ecology and Environment Bureau, Hangzhou Civilization Office, Xiaoshan District Government, and China Environmental Protection Foundation to launch the "Co-Build a Clean and Beautiful World, Leave Love, Leave No Trace" campaign. Through the Three-hour Voluntary Service Platform, we harnessed the power of the internet to engage with millions of internet users, encouraging their active participation in environmental protection exchanges and advocacy. The online component of the campaign is an engaging "Nature Carnival" in Xiaoshan District, Hangzhou. The event showcased youth environmental protection works, highlighted the achievements of "Waste-free Schools," and provided opportunities for volunteer service related to ecology and environmental protection. The Nature Carnival attracted 2,000 attendees.



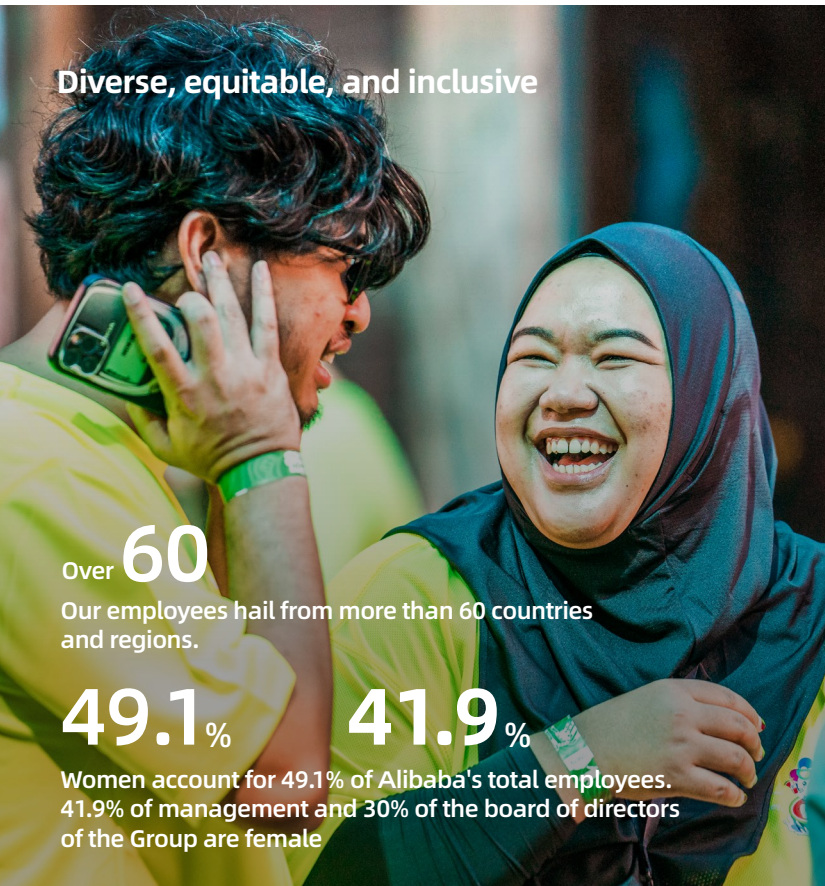
Supporting Our People

At Alibaba, we believe the growth of our people's talents is the key for our businesses to thrive. We "support employees to better themselves" and strive to enable every employee to learn and grow in a diverse, equal, and inclusive culture and work environment, maintain enthusiasm, create value, and get support and care. Despite the external challenges in the past year, we believe that how we treat our employees and support their growth will affect how we serve our customers and communities, and determine how sustainably we can develop as a company.

Unremitting efforts have been made in the following four aspects:

- Establishing a diverse, equitable, and inclusive culture and system P67
- Offering fair, competitive pay, and warm benefits P73
- Offering abundant learning and development opportunities P77
- Creating a work environment conducive to improving employees' health and vitality P82





Diverse, equitable, and inclusive

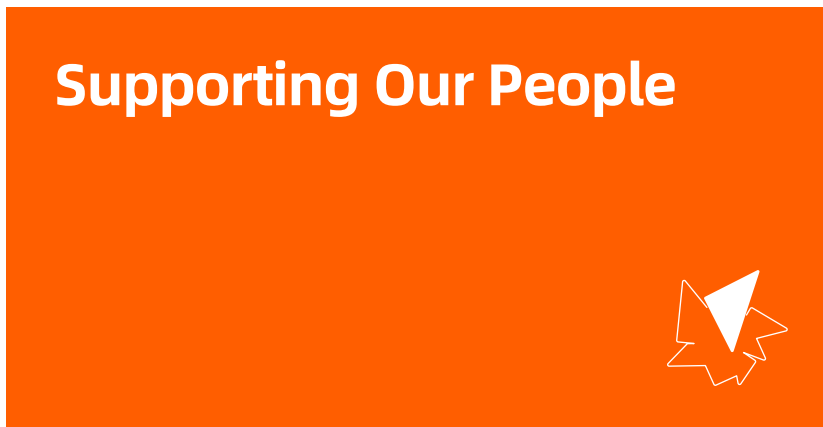
Over **60**
Our employees hail from more than 60 countries and regions.

49.1% **41.9%**
Women account for 49.1% of Alibaba's total employees. 41.9% of management and 30% of the board of directors of the Group are female



Learning and development opportunities

51 hours per person
Alibaba has conducted a total of 62,383 training sessions, with an average training duration of 51 hours per person

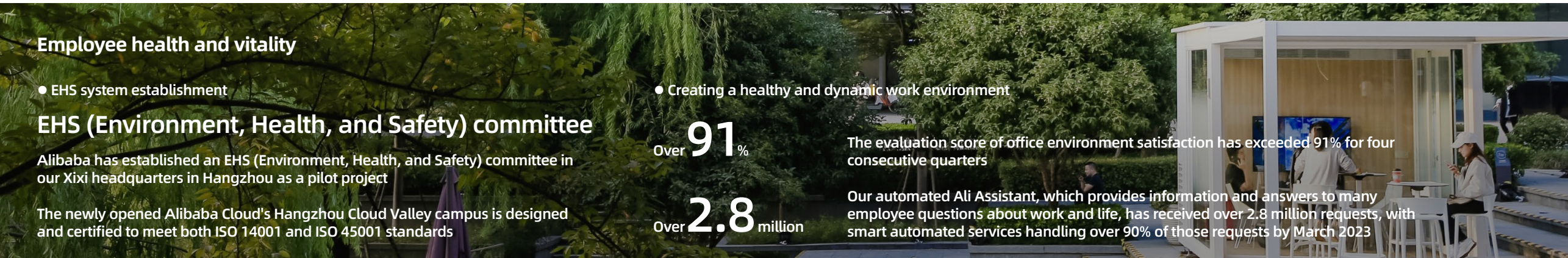


Supporting Our People



Best Employer

Among the Top 5 Chinese enterprises in the "Forbes 2022 Global Best Employers"
LinkedIn China 2022 "MostIn Global Attractive Employers"



Employee health and vitality

- EHS system establishment

EHS (Environment, Health, and Safety) committee

Alibaba has established an EHS (Environment, Health, and Safety) committee in our Xixi headquarters in Hangzhou as a pilot project

The newly opened Alibaba Cloud's Hangzhou Cloud Valley campus is designed and certified to meet both ISO 14001 and ISO 45001 standards

- Creating a healthy and dynamic work environment

over **91%**

The evaluation score of office environment satisfaction has exceeded 91% for four consecutive quarters

Over **2.8** million

Our automated Ali Assistant, which provides information and answers to many employee questions about work and life, has received over 2.8 million requests, with smart automated services handling over 90% of those requests by March 2023

Establishing a diverse, equitable, and inclusive culture and system

As a global technology-driven platform company, we have expanded our business ecosystem across multiple industries and regions. The diverse backgrounds of our employees have contributed to the diversified roles and cultures of different business groups. We are dedicated to creating long-term and sustainable business and social values. We hope to build and improve upon a culture and work environment that values diversity, equity, and inclusion (DEI), and grows Alibaba into a leading platform for talent exchange, collaborative

innovation, and common growth of diverse people as the basis for our long-term and sustainable growth.

Through continuous DEI efforts, we hope to establish an inclusive workplace culture that attracts and retains our diverse talents, and provides them with an equal system where all Alibaba employees, regardless of differences in role, gender, race, and age, feel respected and realize their values, thereby better unleashing their potential and realizing more possibilities.

Respecting and embracing diversity

Building a equitable and respectful work environment

Openness, cooperation and inclusion for employee engagement



Establishing a diverse, equal, and inclusive culture and system

Respecting and embracing diversity

We recognize, accept, and value the differences between individuals, whether gender, race, or age, and strive to ensure that belief, values, and life experiences, are respected and equally treated at Alibaba. We enable employees to leverage their strengths through innovation and creation. We believe that the diversified perspectives and styles of employees enhance the creativity, empathy, and sense of responsibility of our team, and thus help improve our products and services for customers.

We fully respect employees of different ages, races, genders, nationalities, and physical conditions by creating and managing an employee diversity database through an internal system. We adhere to the principles of fairness and impartiality in aspects of recruitment, remuneration, incentives, training, and promotion, and explicitly prohibit any form of discrimination for any reason. We protect the legitimate rights and interests of female employees, resist all forms of child labor and forced labor, and for qualified persons with disabilities, will try our best to create appropriate working conditions in accordance with applicable laws. We actively embrace diverse opinions, views, and ways of thinking to establish a free and open work atmosphere and create conditions for teams with different characteristics to mutually respect and fully collaborate with each other.

As of March 31, 2023, we have 235,216 employees working across more than 60 countries and regions, including 1,451 employees with physical disabilities. Women account for 49.1% of Alibaba's total employees. Women's innovation and leadership are playing an increasingly important role in company development. Women account for 41.9% of management, 25% of executive management, and 30% of the board of directors of the Group.



Building a equitable and respectful work environment

We firmly believe that only when all employees are treated fairly can it be possible for them to unleash their potential. In this regard, we are committed to creating a fair work environment highlighting respect and trust while adhering to the principle of fair recruitment and talent development. On the one hand, we continuously identify and eliminate obstacles that result in inequality by promoting top-down and bottom-up institutional innovations. On the other hand, we continue to seek new approaches for creating a fair work environment and provide equitable resources for all employees to ensure equal opportunities for success.

We have launched the "zero tolerance" policy for violence, bullying, or sexual harassment in any work-related environment. According to the Labor Law of the People's Republic of China, we have formulated the systems and rules such as the Alibaba Group Code of Business Conduct, the Alibaba Group Code of Conduct against Sexual Harassment, and clarified the principle of "zero tolerance" for sexual harassment at the workplace. These rules and

regulations are designed to safeguard the legitimate rights and interests of employees. In 2021, the Alibaba Group's Work Environment Committee was established. As the decision-making organization for handling matters related to the work environment, this committee is responsible for formulating relevant institutional processes, establishing prevention and guarantee mechanisms, conducting professional training, and advocating activities.

We ensure adequate guarantees through our systems and promote advocacy through publicity. Our aim is to encourage employees to value and respect each other and become builders of a positive workplace environment. We have established a reporting mechanism in accordance with the Alibaba Group Code of Conduct against Sexual Harassment to ensure all employees readily access reporting channels. We commit to a prompt and appropriate investigation, while protecting the privacy of victims and informants and providing psychological counseling and legal assistance services for employees in need, safeguarding their rights at work.



Bianjie ("Boundaries"), a public service announcement video on preventing workplace sexual harassment

On March 8, 2023, we internally released Bianjie, a public service announcement video on preventing workplace sexual harassment, to encourage our employees to foster a favorable workplace environment that cares for women.



International Women's Day

We have started to hold "Her Power" Award Ceremony on International Women's Day (March 8th) since 2022, at which our Responsibility Award, Bravery Award, Sturdiness Award, Vitality Award, and other individual awards as well as Women's Civilization Post Team Award are awarded to review and commend the achievements of female employees.

This year, the China Digital Business Mechanism and Rules Team, with a 73% proportion of female employees, is awarded the Women's Civilization Post Team Award. Adhering to the essence of "customer first", these female employees consistently maintain a proactive approach and implement fair and reasonable mechanisms with a business-oriented perspective to safeguard the platform's commercial interests.

Furthermore, we prepare customized and self-designed gifts for five consecutive years to symbolize our respect for Alibaba's female employees.



Women's Civilization Post Team Award

Women Science and Technology Professionals Forum

In November 2022, we, in collaboration with the Hangzhou Association of Women Science and Technology Workers, hosted the "Her Power" in Science and Technology Innovation "2022 Apsara Conference Women Science and Technology Professionals Forum", marking the first specialized forum at the grand Apsara Conference with a focus on the growth of female science and technology talents as well as the transformation of their technological achievements.



2022 Apsara Conference Women Science and Technology Professionals Forum

Openness, cooperation and inclusion for employee engagement

We fully understand and respect the differences between our employees, and aim to create a corporate culture that makes all employees feel valued and have a sense of belonging and integration. We firmly believe that an inclusive and diverse workplace environment can attract high-quality talent, maximize the potential of employees, and spur cooperation and innovation. We have also established a mechanism for transparent communication in addition to establishing management systems, building governance

structures, and implementing diversified practices for promoting employees' sense of belonging and integration.

To hear the voices of our employees, we have built multi-dimensional communication channels with the aim of creating an unrestricted and open community for our employees across the world. The number of active employees on our intranet reached 133,193 in FY2023¹.

We encourage employees to seek help from experienced colleagues by "posting" their questions and issues at work on the intranet. In FY2023, a total of 39 topics were discussed on the intranet, with 2,683 high-quality positive suggestions proposed. Experience π, which was launched in August 2022, is a new section on the intranet, where employees can post and comment on cases, customer feedback, and business suggestions. Through the intranet, we gather valuable experiences to increase sharing and cooperation regarding product and service

quality improvement. As of March 31, 2023, a total of 950 employees have shared their experiences and insights on Experience π, attracting nearly 68,000 visits.



¹ The scope of the employees counted here is employees directly managed by Alibaba. Active employees on the intranet are defined as those who have logged in and visited the intranet at least once in FY2022.



We ensure that senior management is readily accessible to all employees. "Juice with Daniel" is a face-to-face discussion regularly held by Daniel Zhang, Chairman and CEO of Alibaba Group, to interact with employees. Nineteen sessions have been held from July 2020 to March 31, 2023. Similarly, the CEOs of Taobao, Tmall, Cainiao, Lazada, and other business groups also promote communication

with employees through regular lunch meetings, afternoon teas, or video chats, among other means. These lines of communication allow employees to openly and transparently discuss topics related to their personal development and the company's progress, as well as express their opinions and suggestions. At Alibaba, we have also promoted two-way communications between managers

and employees via the Booking system, where all Alibaba managers can make appointments available, allowing employees to book a time and communicate directly with managers over a coffee, a light meal, or even an outdoor hike. In FY2023, a total of 1,113 managers released 5,209 appointment invitations on Booking, and accommodated a total of 5,946 participants. Employees may also directly

provide feedback through the OPEN mailbox. We ensure that all feedback provided in the OPEN mailbox will be responded to within 48 hours and the personal information of employees will be kept confidential.



Communication via the Booking system is a two-way communication mechanism, rather than a top-down one-way communication. I can receive a lot of real voices and feedback, which are very important inputs for business judgment.

— Manager feedback



Why not have a free chat with outstanding persons? This allows me to understand the business in a larger picture, which is extremely helpful to newcomers, and will guide my long-term work and direction.

— Employee feedback





Establishing fair and competitive remuneration with heartwarming benefits

Employees are core to realizing Alibaba's potential. As such, we have devoted ourselves to providing comprehensive support and benefits for employee growth and development. In line with this commitment, we consistently share the benefits of our growth with employees. Furthermore, we have also established a comprehensive system to protect the legitimate rights and interests of

employees, and have been innovating and improving measures to protect employee benefits. Through this, employees can enjoy a remuneration incentive mechanism that integrates both internal fairness and external competitiveness. While caring for employees with "benefits with warmth", we have extended our heart-warming care and comprehensive rights protection to our employees' families.

Talent recruitment and retention

Fair and competitive remuneration and incentives

Benefits with warmth



Establishing fair and competitive compensation with heartwarming benefits



Talent recruitment and retention

We observe relevant laws, regulations, and international standards during our recruitment and employment process, and respect and protect the rights and interests of employees to ensure compliance and fairness. Through the establishment of a variety of talent recruitment channels to attract talents widely, and upgrade the talent pool in an intelligent manner, we improve the matching efficiency between positions and talents.

Alibaba follows international conventions and local laws and regulations on labor and employee rights such as the Universal Declaration of Human Rights, the International Labor Organization Convention, and the Labor Law of the People's Republic of China, and signs labor contracts with employees

according to the law. We adhere to the principle of equal employment, recruitment, promotion, and remuneration of employees without discrimination. Alibaba fairly and justly treats employees of different nationalities, races, ages, genders, physical conditions, religious beliefs, and cultural backgrounds. We adopt and follow the Alibaba Recruitment Convention, and release internal management guidelines such as the Alibaba Group Code of Business Conduct, Alibaba Group Employee Disciplinary System, Alibaba Group Employee Leave Policy, and Alibaba Group Employee Performance Management System, so that all candidates have equal access to information and resources. Alibaba enables employees to equally enjoy legal rights such as obtaining labor remuneration, rest and vacation,

occupational safety and health protection, and enjoy social insurance and other legal benefits. In February 2021, Alibaba became a party to the United Nations Global Compact, endorsing and supporting the Ten Principles initiative and integrating them into corporate principles and daily operations.

We have established a dual-track system for employees' career development, featuring a "professional" and a "management" track, and employees can achieve long-term development in a professional and profound manner based on their interests and advantages. To create more internal opportunities for talents, we ensure and encourage mobility of talents internally through the Alibaba Group Employee Internal Transfer Policy and internal

transfer platforms as well as intranet recruitment square which have provided them with open and transparent internal transfer opportunities. We ensure and encourage the internal flow of talents, and promote a broader development space for talents internally.

In FY2023, Alibaba took further steps to improve the internal job transfer process, allowing employees to submit a transfer application after passing the interview, and informing their supervisor and human resources manager, protecting employee privacy to the greatest extent. In FY2023, 3,311 employees voluntarily applied for and successfully transferred internally.



"Forbes 2022 Global Best Employers,"
one of the Top 5 among Chinese enterprises



LinkedIn China 2022
"Most In Global Attractive Employers"



Focusing on the growth of talents

Fair and competitive remuneration and incentives

We adhere to the principles of fairness and justice, abide by local laws and regulations, and practice equal pay for equal work. We also provide employees with competitive incentives linked to performance. As one of the first major technology enterprises in China to offer an Employee Stock Ownership Plan (ESOP), we have continued to reward employees who grow together with the Company through equity incentives to share the Company's achievements with them.

A fair and equitable performance appraisal system constitutes the cornerstone for motivating employees. Managers and employees set out goals at the kick-off of each period and offer them with communication and coaching. In their performance appraisals, employees first conduct self-performance appraisals and then invite related partners and colleagues to review their performance as well (known as "peer review"). Managers then make their evaluations based on the employee's self-appraisal and feedback from partners. This facilitates a more comprehensive and objective feedback system. In the case of a dispute of performance appraisals by an employee, they can apply for a re-review by a specialized review team via the review appeal channel. Meanwhile, Alibaba also offers performance improvement coaching channels to ensure fair performance appraisal in all aspects.

With an increasing organizational scale and business structure complexity, improving agility in our operations and management is pivotal. We therefore introduced the Objectives and Key Results (OKR) system in FY2023 to enhance managers' holistic thinking regarding business objectives, strategy, and implementation. At the same time, adapting the OKR system also helps our employee to better understand the goals and directions of both the team and the organization, while trying to unleash their potential. The three-in-one system, consisting of the OKR, performance appraisal, and peer review systems, covers all our core business units and enables a more transparent, cohesive, and agile information-sharing mechanism.

“ The biggest benefit of OKR is openness and transparency, by which employee can know each other's tasks and responsibilities, enabling us to collaborate and communicate more easily.

All process management has been digitally recorded, providing solid evidence for performance appraisals.

— Feedback from Alibaba employee ”



"Juice with Daniel": OKR communication

Benefits with warmth

We are committed to providing "benefits with warmth" for every employee. We hope to provide a secure living guarantee for Alibaba employees and their families to alleviate their worries and enhance their sense of happiness. In FY2023, we established a welfare portal to display an array of available benefits by category, helping employees to learn about their diverse benefit options in one place.

Healthcare

Alibaba provides employees with various healthcare benefits including basic medical insurance, supplementary commercial insurance, additional "RMB million+" medical insurance coverage, annual physical examination, physical and mental health consultations, medical assistance, and healthcare knowledge education and outreach.

Caring for the family

Alibaba provides free physical examinations annually for employees' parents as well. As of March 31, 2023, the number of designated institutions for medical examinations reached 282, covering 174 cities in China. We have arranged over 64,000 parental physical exams. Alibaba provides various healthcare benefits for children of employees including free medical insurance,



commercial supplementary medical insurance, and professional medical consultation, and provides help and guidance on children's enrollment. We have over 33,000 employees' children enrolled in commercial insurance coverage.

Work-life balance

Alibaba provides employees with flexible working hours, annual leave, companionship leave, parental leave, long-term service leave, travel leave, marriage leave, personal leave, maternity-related leave, and other abundant holidays and encourages relevant teams to arrange flexible work for one day a week. In FY2023, the number of employees using companionship leave reached 62,138, and the number using parental leave reached 14,118.

Alibaba invites experts in obstetrics and gynecology, as well as psychological counseling, to share healthcare topics related to pregnancy and childbirth with pregnant and postpartum employees and their families. In October 2022, we established a maternity school and created a community for new and expectant parents. Through our programs, we seek to assist new parents in navigating this significant phase of their lives with convenient and professional support.



Benefits with Alibaba characteristics

Alibaba prepares festive gifts and work anniversary gifts for employees, and sends a "Letter Home" to employees' families every year.

Through the iHelp dandelion mutual assistance program, employees and their families who participate can apply for assistance when encountering major illnesses or unexpected events.

Through the iHope rainbow program, employees and their families who encounter significant difficulties in their lives can apply for the company's Rainbow Program's "Special Difficulty Aid Fund".

Through the iHome property purchase program, Alibaba aims to alleviate the pressure of down payment on their first home purchase. In FY2023, 1,281 employees were helped by iHome with disbursed loans.



Offering abundant learning and development opportunities

Adhering to the concept that "all employees can better themselves at Alibaba", we provide high-quality learning and growth opportunities so that employees can explore their potential. We also offer diverse learning opportunities

and resources to employees through digital systems at different stages of their career and life development, advancing their personal growth and professional development.

Talent learning and
development

Construction of digital
learning platform



Offering abundant learning and development opportunities



Talent learning and development

"Passing on the flames of knowledge, promoting mutual learning and teaching" is a distinctive aspect of Alibaba's culture. As of March 31, 2023, over 3,000 part-time lecturers have taken their own time to share their experiences and reflections on organizational culture, business management, professional fields, etc. in over 8,000 courses. These lectures have assisted new employees in settling into the workplace, and both employees and managers in upskilling. Furthermore, we suggest that managers should give 6 hours worth of lectures every year. We've established a full-link internal lecturer system covering registration, certification, and training, ensuring the implementation of Alibaba's culture.

To better serve the diversified learning demands of employees, we have established a training system that regards the talent cultivation project system at the core and integrates online and offline development. In FY2023, Alibaba conducted a total of 62,383 training sessions, adding 33,437 new learning materials for employees, with a participation rate of 96.9% and an average training duration of 51 hours per person².

51 hours
An average training duration of 51 hours per person

62,383
Number of training sessions

Intern training

We highly value the recruitment and onboarding experience of interns and university recruits, ensuring they can fit themselves into Alibaba smoothly. In FY2023, we established the Intern Management Department that designs tools and organizes activities to optimize the internship experience, which covered approximately 3,000 interns. The mini program, known as "Let's Go Interns", helps the interns adapt quickly to their positions. At our "Speak Up Interns" event, interns can receive advice from experienced employees and managers. "The Summer of Interns" event helps boost communications among interns. We have also made available to interns some carefully-selected learning materials otherwise only accessible to employees.

Newcomers' development

To help new employees quickly integrate into the Alibaba family and adapt to the environment of Alibaba, Alibaba provides 5-day of onboarding training to help them understand the Company's history, businesses, and culture. With the support of senior managers and guidance from more veteran staff, we help new employees quickly adapt to the work environment. Through elective courses such as general skills and mindfulness, we help new employees learn and improve.

Cainiao established the "Newcomer Classroom", with a focus on the ties linking business, organization, and people. It consists of four modules, namely "Sailing Start" "Actual Training" "Experience Sharing" and "Personal Belonging", and provides a set of induction training schemes for all new employees so they can quickly understand Cainiao and effectively adapt to Cainiao's work culture, and smoothly

transition into their career at Cainiao.

Lazada has launched the Lazada Experience Program for new employees, which enables them to interact extensively with colleagues from different departments of the Company. They can interview sellers for business experience, communicate with and learn from colleagues from different departments, and gain firsthand experience of operations by visiting logistics warehouses. These opportunities facilitate a deeper understanding of Lazada's mission, vision, and culture, familiarization with operations, and establishment of a wider communication network. In FY2023, Lazada held 22 sessions of the Lazada Experience Program.



² The scope of training-related data statistics is for full-time employees directly managed by Alibaba.



Leadership development

Alibaba encourages those in management positions towards continuous learning. We have not only introduced high-quality external resources for sharing, learning, exchanges, and discussion among all employees, but have also organized internal sharing sessions and collaborative discussions to create a mechanism and environment for continuous learning among managers. Through this, we assist employees in broadening their horizons, breaking boundaries, and updating their knowledge and skills regularly so that they can apply this knowledge and skill to business development efforts.

We have launched an online learning system for managers called "Management Handbook", with the aim to develop their general management capabilities and help them master the working philosophy and principles, key processes, tools and methods based on representative management scenarios throughout the year. In the past year, "Management Handbook" has upgraded the fourteen scenarios from webpage materials to an interactive course learning mode, with an annual coverage of over 80,000 trainings. We have also set up various training camps for managers at different stages - including managers transitioned from individual contributors, successors of key business positions, and newly promoted managers - to provide them with different learning materials and training plans that aim to help them transition smoothly and grow in their new positions.



Global development

Our global development training program now covers managers and new employees from countries and regions in Asia, Europe, and the Americas and centers on cultural identity, communications and collaboration enhancement, and management capabilities improvement. In response to a series of changes in the organization, we have optimized the teaching and interaction forms through online research, coaching feedback, guest speakers, video micro classes, and other means, establishing a communication bridge between the organization and overseas individual employees, and enabling overseas employees to understand and actively embrace organizational changes effectively. To assist in diversified business and talent development, we have also conducted targeted training projects for foreign overseas business managers and Chinese expatriate managers (such as the Golden Bridge leadership project for overseas cross-border e-commerce and Cainiao's Eagle Plan leadership program), thereby enhancing the ability of managers to lead diverse teams and build high-performance teams in cross-cultural scenarios, and providing organizational and talent capability support for the implementation of the globalization strategy.



Professional development

We establish professional committees in fields including technology, data, design, marketing, risk management, customer experience, organizational and talent development, and ESG, promoting employees to learn and exchange professional knowledge easily and improve skills.

Professional Training on Customer Experience

Adhering to the "customer first" principle, Alibaba always strives to provide customers with a higher quality experience. In FY2023, we organized a total of 17 training sessions covering industry information, professional methodologies, experience and practices, and general knowledge for employees who specialize in customer experience. These training sessions focus on the value of customer experience, travel service design experience, instant messaging service experience, consumer healthcare industry experience, online payment, and other best practices in service and experience. The training aims to help employees in customer experience improve their professional competence and create a better customer experience.



Cainiao Professional Training on Customer Experience

ESG professional training

For the effective implementation of our ESG strategy, employee consciousness and alignment is indispensable. We have organized multi-layered ESG training activities in the previous year. We have invited different external lecturers to regularly speak on ESG topics such as climate risk, biodiversity, supply chain ESG management, DEI, and anti-sexual harassment via lectures, management meetings, new employee training, and ESG interpretation meetings. Through this, managers and employees can better understand different ESG topics and how they relate to their daily work. Such content has also been organized and included on the internal learning platforms for the reference of employees.



ESG training



Construction of digital learning platform

We strive to construct a digital learning platform and knowledge-sharing community represented by "Alibaba Learning" and the "Alibaba Technology Association (ATA)" and offer a vehicle for knowledge accumulation, exchanges, and sharing for employees.

ATA is a technical exchange platform for the Alibaba technical worker community, where engineers can communicate and collaborate with each other, bridge internal and external technical capabilities and perspectives, and form valuable and systematic deposits of knowledge.

Alibaba Learning, as an internal online learning platform for all Alibaba employees, has pooled high-quality learning resources and training content in culture, management, professional skills, business, and general skills, and so on, and supports mobile and PC learning anytime and anywhere. In FY2023, Alibaba Learning attracted the participation of 144,789 active employees.

144,789
Number of active employees of Alibaba Learning

In FY2023, to further enrich the learning content and improve the learning experience, we upgraded "Alibaba Learning" in three areas:

Developing interactive courses

We have independently designed and developed a total of 53 online interactive courses, such as "My Performance", "OKR Objective Management", and "An Introduction to Management" to provide employees with an immersive, interactive, and game-based learning experience. In FY2023, a total of 19,630 employees participated in learning.

Introducing high-quality external courses

Focusing on the differentiated requirements for employees' abilities and development, we have introduced 425 high-quality external courses and constructed 482 personalized learning paths. These courses and pathways integrate high-quality internal and external learning content to provide employees with extensive, targeted, and guided learning resources.

Upgrading hybrid training

During the COVID-19 pandemic, we worked to improve the training system through dynamic student group selections, as well as online sign-ups, activities, and group assignments. We also established a credit system for studies.



Enrich the learning content and improve the learning experience

Creating a work environment conducive to improving employees' health and vitality

Our commitment is to provide all employees at Alibaba with a safe and healthy work environment. In this regard, we have endeavored to improve our capabilities to handle emergencies, prevent and reduce the occurrence of emergencies, and reduce damages and harm to the extent possible. By establishing an efficient safety system and improving the response process for

emergencies, we effectively protect the safety of employees and the operations of the Group. We have endeavored to create a healthy, safe, beautiful, comfortable, intelligent and digital office environment, aiming to assist all employees in maintaining healthy physical and sound psychological conditions at work through offering comprehensive and professional health services and diverse club activities.

Safeguarding
occupational health and
safety

Enhancing the physical
and mental health of
employees

Creating a healthy
and vibrant work
environment



Aiming to assist each employee in maintaining healthy physical and psychological conditions at work

Safeguarding occupational health and safety

The health and safety of all Alibaba employees is our paramount concern. In FY2023, we started to build our occupational health and safety management system. In accordance with the ISO 14001 and ISO 45001 standards, we systematically optimize and upgrade the existing safety management. We uphold the concept of safety first and form a characteristic health and safety culture through organizational construction, health and safety awareness-raising, and health and safety system construction during business development.

All of our self-built office buildings are equipped with comprehensive accessible infrastructure, providing convenience for employees and visitors with disabilities. We provide specialized services for groups in need, including mother and infant rooms, sleeping rooms for pregnant women, and prioritized care to pregnant women in terms of transportation, dining, and other needs. We also provide exclusive meal delivery services for employees with difficulties.



5,732
First-aid responders



138
Automatic external defibrillators (AEDs)

Build occupational health and safety management system

- In terms of organizational construction, we have established the EHS (Environment, Health, and Safety) Committee at Xixi Headquarter Campus as a pilot program to promote the implementation of the EHS system and culture in each campus.
- In terms of system certification, the Hangzhou Cloud Valley Campus, which was put into operation in September 2022, is our first headquarter campus awarded the certification of ISO 14001 and ISO 45001. Meanwhile, we are working on the certification of the Xixi campus. The experience will be steadily applied to other campuses across China.
- In terms of cultural development, we gradually form a characteristic EHS culture through emergency management, EHS training, and resource guarantees on the basis of risk management. We have established a campus risk distribution map to systematically identify, assess and manage risks in all campuses.
- In terms of emergency management, we formulated the Alibaba Group Administrative Emergency Operations Manual in accordance with the Emergency Response Law of the

People's Republic of China to determine the organizational structure and responsibilities. Following the principle of "overall coordinated management by the decision-making body, specific leadership by the emergency teams, and concrete treatment at the regional level", we have clearly defined the risk types, levels, response and treatment processes, and drill methods, and enhanced the emergency response ability of our frontline employees by conducting red-blue confrontation drills on a regular basis.

- In terms of EHS training, we have carried out regular healthcare training and lectures and launched safety classes in the internal system "Tenzo Pass Code" to raise awareness.
- In terms of organizational resource guarantee, we have established and improved emergency facilities and teams to address employee safety threats arising from unexpected events. We have established and continuously expanded the first-aid responder project team, with employees as main members and including "Alibaba First-aid Responder Volunteer Service Team" (currently the 9th volunteer service team of the Red Cross of Yuhang District), "Alibaba First-aid

Responder Party Member Vanguard Team" and "Alibaba Administrative Safety First-aid Responder Emergency Response Team", to ensure efficient handling of emergencies in our campuses. Alibaba's first-aid responder project team was recommended as the "Model Team for Emergency Rescue Work of First-Aid Responders" by the Zhejiang Branch of the Red Cross Society of China (RCSC) in 2022; the "13520 Emergency Rescue Volunteer Service Project" was recommended as the winning project of the "2022 Volunteer Service Competition of Zhejiang province" organized by the Publicity Department of the Provincial Party Committee of Zhejiang Province. As of March 31, 2023, Alibaba has 5,732 first-aid responders, with an increase of 4,130. A total of 74 training sessions and 518 hours have been conducted for first-aid responders. We have designed and built an emergency rescue response support management system that covers various offices. These offices are equipped with 138 automatic external defibrillators (AEDs) to minimize the health risks of employees.



Alibaba First-aid Responder Volunteer Service Team

Enhancing the physical and mental health of employees

We attach great importance to the physical health of our employees, providing free physical exams every year. We also invite experts and doctors from medical institutions to provide our employees with one-on-one onsite or virtual consultations following the exams. For chronic and serious medical conditions, we provide employees with professional health consultations, medical guidance, expert recommendation, and other services. In addition, we regularly carry out employee health education and awareness activities every year, such as women's wellness, expert consultations for navigating tertiary hospitals, health lectures, and free medical diagnosis.

We regard the psychological health of employees as equally vital. Following the concept of "CARE&LOVE", we provide employees with various services such as psychological counseling, lectures, psychological assessments, and education on psychological health.

Psychological counseling

We maintain a 7x24 psychological counseling hotline, which includes topics such as family emotions, parent-child education, self-growth, and interpersonal communication. In FY2023, we provided over 400 counseling services for our employees. During the outbreak of the pandemic in Shanghai from April to July, 2022, we additionally maintained a psychological counseling hotline for the employees' families and offered nearly 200 free counseling services for employees' families.

Psychological assessment

To assist employees in better understanding themselves and exploring their personal psychological state, we launched a mental health test in May 2022. Twelve mental health questionnaires were selected based on four dimensions, namely psychological health, emotions, personality type and workplace relationship, by which employees can acquire personal evaluation reports and personalized feedback for suggested next steps. As of March 31, 2023, a total of 3,944 participants took these assessments and obtained personal evaluation reports as well as related feedback.

Psychological lectures

In FY2023, mental health lectures were primarily held in the form of monthly livestreaming, covering topics including female personal development, emotion regulation, positive attitude and coping with pregnancy. During the outbreak of the pandemic in December 2022, we launched "positive mental attitude construction in the post-pandemic era", a course to assist employees in adjusting to changing situations.

Positive Psychology Club

As one of the ten Alibaba Fun Clubs, the positive psychology club is a member of the Alibaba "Hugs and Help" groups. It regularly organizes training sessions on positive psychology, and concentrates on companionship and guidance from the perspectives of workplace, life, family, and personal growth to foster motivation. The club also organizes members to actively participate in philanthropy, aiming to aid more people in need and boost one's sense of well-being.

In FY2023, we collaborated with the Positive Psychology Alumni Association of Tsinghua University to implement the corporate happiness project. Through 4 professional online learning and community interactions, we have achieved a total of over 8,000 views; we have collaborated with relevant institutions and organized an online COVID-19 mutual assistance and companionship camp in April 2022, as well as a workplace empowerment and growth camp in June 2022.

We aim to transform our daily actions and behaviors through acquiring professional knowledge and fostering a sense

of proactive assistance toward others. Doing so, we strive to reshape our understanding of personal well-being and happiness.



Alibaba positive psychology club

Traditional Chinese Medicine (TCM) Festivals

We have held the Traditional Chinese Medicine (TCM) Festivals for 11 consecutive years, where TCM experts from various provinces and cities in China are invited to deliver free TCM diagnoses, health education, therapeutic massages, and other health activities in our offices across the country, and organize special sessions for family members. We hold at least 25 TCM activities every year, with an average of nearly 2,000 employees and their family members participating in the cities with the highest participation.



Creating a healthy and vibrant work environment

A healthy and vibrant work environment is crucial for productivity and creativity. We endeavor to create a green, healthy, safe, and comfortable office and living environment across Alibaba campuses, address employee problems, and improve their experiences via smart tools. We also encourage and support employees to establish activity groups and build an extensive and diverse cultural and sports atmosphere across Alibaba campuses.



131,000

Campus area that held LEED Gold Certification



Over 91%

Overall office environment satisfaction rate



Over 2.8 million

The consulting service volume of Ali Assistant



Over 90%

intelligent services

Work environment

We have fully integrated principles of sustainable development, humanistic care, office culture, and professional efficiency for a bright and convenient office environment, convenient and healthy living facilities, comprehensive and effective safety protection, and warm, professional and efficient end services. Through this, we aim to continue innovating physical and digital workspaces, create a pleasant work environment for employees, and inspire innovation.

We are committed to creating a green and healthy campus environment. In addition to pursuing green and low-carbon offices, we operate office spaces following the principle of "people first". Since 2022, we have aimed to achieve LEED Gold certification for all the Alibaba campuses. As of March 31, 2023, a total of 131,000 square meters of campuses have passed the LEED Gold certification. Our Hangzhou Xixi Campus is WELL Gold certified.

We focus on the healthy diet principle, and provide a wide range of catering options for employees.

In conjunction with culture and food, we have launched seasonal dishes based on 24 solar terms to encourage employees to adapt diets according to the season. Furthermore, we have introduced a new catering format, i.e., light food options and buffets, that provides employees with healthy and nutritious meal options.

Furthermore, we have also equipped a series of campus facilities, including gyms, physical therapy rooms, and health centers, providing employees with health services such as exercises, stress relief, and counseling.

We attach great importance to the office experience of our employees and the health of the office environment. We perform a quarterly office experience satisfaction survey sent to all employees for areas of improvement. In FY2023, the overall office environment satisfaction rate of Alibaba's offices in China's campuses has exceeded 91% for four consecutive quarters.

We adhere to the principle of "responding to and solving all problems", provide employees with smart life services in the campuses via the combination of

artificial and smart tools, and address their various life and work demands in the campuses to improve their service experience and wellbeing. For example, we have completed digital upgrades based on the technology of Artificial Intelligence of Things (AIoT) in major campuses across China, and have developed dozens of digital products on this basis, providing comprehensive and high-quality services while maintaining high-frequency interactions with employees.

To address employees' concerns in both their work and personal lives, we have comprehensively upgraded the service system from manual assistance to chatbot support and finally to proactive and comprehensive intelligent services. This has led to the establishment of an online service system with a "30-minute response and 2-hour resolution" commitment. Employees can find corresponding consulting services through our 1818 hotline and Ali Assistant. Through March 2023, the consulting service volume of Ali Assistant had exceeded 2.8 million times, with intelligent services accounting for over 90%.



Outdoor meeting spaces



Dining hall



Campus culture

Every May 10th we designate as "AliDay". On this day, we express gratitude to families and friends for their company and support through various exciting activities. This year's "AliDay" is the first "AliDay" after organizational governance reform. We organized activities with each business group as the main body, extending the spirit of bravery, firmness, warmth, and love embedded in "AliDay", adhering to our original aspirations and running towards dreams.

At Alibaba Cloud, more than 2,000 employee's relatives and friends came to Hangzhou Cloud Valley Campus to visit our "happy workplace". Daniel Zhang, Chairman and CEO of Alibaba Group, met with families and friends face to face, talked about

Alibaba Cloud's development and responded to their concerns. In Alibaba International Digital Commercial Group, employees from all over the world spent the day in different ways, gathering with families and friends through diversified activities such as multi-country style shows, lawn concerts, and daytrips to water parks and theme parks. At Local Life, the first "Spring Frisbee Competition" was held, with 16 teams from Shanghai and Hangzhou participating in the competition. At the same time, "AliDay" was regarded as the awarding day of Ele.me's annual honor, the "Fireworks Award", and the award-winning employees and outstanding projects were announced and commended in the way of a sofa concert.

"Alibaba Fun Clubs" - the largest civic organization at Alibaba - are interest clubs established and independently managed by employees. Alibaba Fun Clubs include a total of 43 recognized clubs. We have sports clubs such as basketball, squash, and kendo clubs; arts societies such as photography, calligraphy, and painting societies; as well as personal development clubs such as reading, English, and meditation, and even a singles club that organizes fun group activities. In FY2023, a number of events such as board game competitions, Passersby Wang X Alibaba Basketball Summer Tournament, Alibaba Cat Petting Competition, and Alibaba King of Glory League were held. Alibaba Fun Clubs are open to all full-time employees, who come together for their interests to live seriously and work happily.

We bring a fresh and joyful atmosphere to the workplace by integrating cultural activities and festivals. On certain festivals such as International Women's Day and Mid-Autumn Festival, we prepare gifts for employees; at the turning of each season, we launch and deploy seasonal cultural activities in the campuses across China, including flower appreciation and bookmarker making in the spring, skateboarding parties in the summer, Osmanthus appreciation and moon cakes tasting in the autumn, and market visits to learn about intangible cultural heritage handicrafts in the winter. Our aim with these events is to enrich the cultural life of our employees.





Our classic cultural and sports activities in four seasons

Spring sports season

We hold a variety of sports activities every spring, including basketball matches organized by various business departments as well as football leagues, badminton leagues, and kendo leagues, etc. organized by employees, to make employees happier and healthier with sports. At the same time, we launch a lot of activities to care about the physical and mental health of employees, so that everyone can welcome the new year of work and life with a positive attitude.

Summer music season

During the summer, we ignite our passion for music. In the summer of 2022, major campuses held concerts and song competitions. We operate a "music convenience store" on Xixi Campus, where employees can engage in team building and sing together. A total of over 3,400 people participated in these activities and ordered nearly 5,000 songs. During last year's music season, these events attracted 126,000 participants on the intranet, and over 750 employees formed music groups.

Autumn tug-of-war season

The tug of war competition is an iconic team event of Alibaba every autumn season set to celebrate the anniversary of Alibaba. We held our third year of the competition this past autumn. Forty-one departments and organizations across the Group established 18 teams, and 18 customers were specially invited on site to cheer on and celebrate the anniversary of Alibaba and fight for our team spirit.

Winter thanksgiving season

The Alibaba thanksgiving season marks the end of the year with an atmosphere and spirit of recognizing and thanking each other. In the winter of 2022, we built a house of blessings where employees could make audio postcards via the Voice Post Office, prepare lanterns and write the Chinese character Fu ("happiness") to express appreciation. Employees could also write New Year's wishes on the prayer signs and hang them on the prayer wall for their wishes for 2023.



Spring Sports Season



Summer Music Season



Autumn Tug-of-War Season



Winter Thanksgiving Season



Enabling a sustainable digital life

The United Nations Sustainable Development Goals (SDGs) have defined the essence of sustainable consumption. Currently, digitalization is accelerating the reshaping of global consumption patterns and lifestyles, improving the well-being of consumers, and enabling sustainable development with regards to consumption. We aim to help our customers live a better digital life and make their consumption more sustainable.

To this regard, we believe that a sustainable lifestyle should satisfy the following:

- Diverse consumption P90
- Trustworthy consumption P95
- Inclusive consumption P102
- Responsible consumption P105



Being trustworthy

GFSI China Food Safety Technology Application Case

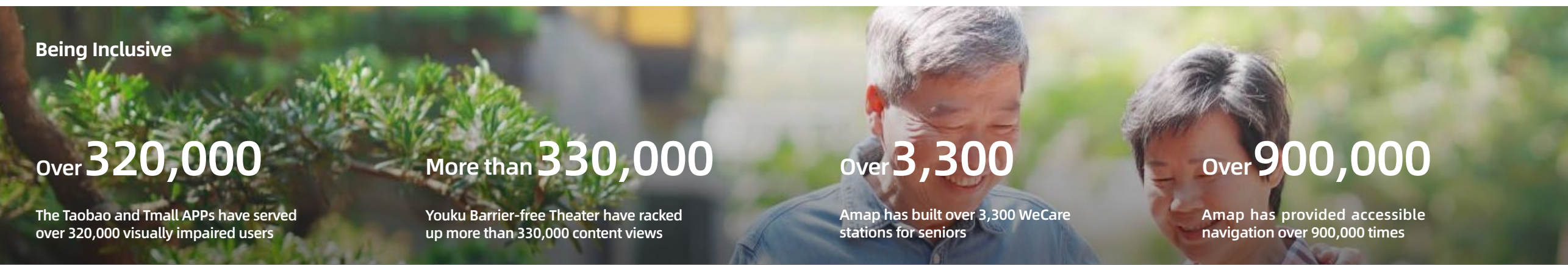
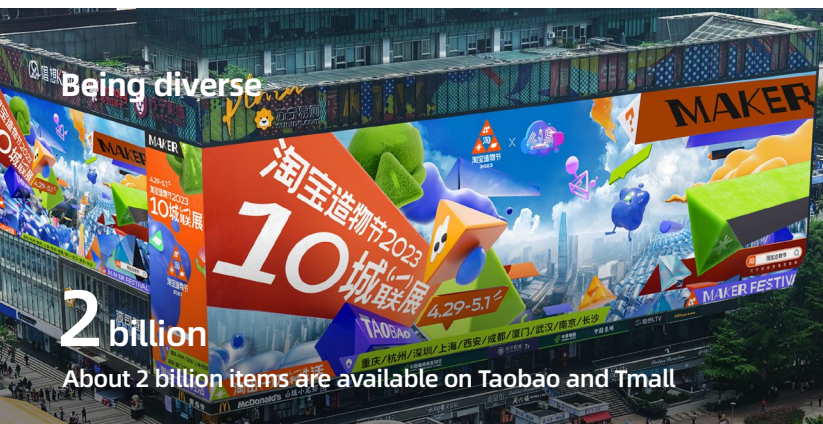
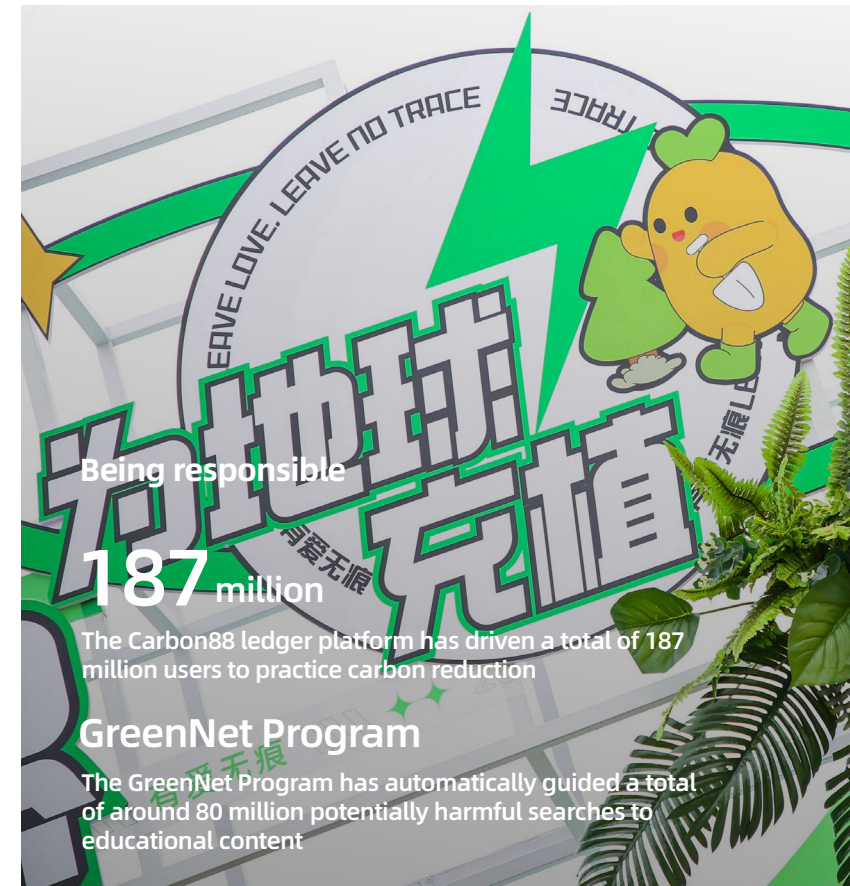
"The case of social co-governance of network catering" of Ele.me was awarded the "Contribution Award of GFSI China Food Safety Technology Application Case"

Over **74%**

Over 74% of Cainiao Posts offer direct doorstep parcel delivery service

100%

Taobao's virtual phone number service has covered 100% of active users





Diverse consumption

Diverse consumption can effectively satisfy the demands of different populations and make it possible for a better life. We actively construct a digital platform business ecosystem to provide consumers with a variety of options of high-quality and cost-effective products and services in a timely manner.

Our matrix of services

Providing high-quality products and services

Giving consumers better value for money

Instant consumption experience





Our matrix of services

We serve all aspects of lifestyle and consumption, including clothing, food, housing, transportation, entertainment, and health. We provide consumers with a wide range of products, differentiated lifestyle services, and multi-dimensional digital consumption experiences.

Diverse supply of products

Multi-faceted digital life services

Diverse supply of products

To satisfy the diverse demands of consumers, ranging from basic necessities to leisure and entertainment, we have consistently upgraded our digital and supply chain capabilities to provide consumers with more options and make it easier for them to identify the specific products and services that meet their demands. Our retail platforms cover a full range of products, including imported products, popular China-Chic brands, direct products from manufacturers and farms, characteristic and charming products from emerging niche brands, customized products, and handicrafts. As of March 31, 2023, about 2 billion items are available on Taobao and Tmall.



About 2 billion Number of items available on Taobao and Tmall

Taobao supports intangible cultural heritage projects, bringing the charm of Chinese traditional culture into ordinary households

Alibaba's retail platforms are assisting an increasing number of intangible cultural heritage projects (hereinafter referred to as "ICH") transition from "craft workshops" and "personal hobbies" to popularized and commercialized models. An example is cloisonné, an over 600-year-old art form that evolved from ancient jewelry cloisonné enamel. Lin Xiaojie, a Taobao store owner, has elevated the presentation of this heritage, transposing cloisonné from traditional decorative paintings and vases into daily supplies, such as phone cases, tea trays, and makeup mirrors, enabling consumers to experience traditional Chinese culture throughout their daily lives.

Tmall Supermarket has launched overseas direct sourcing, meeting the increasing demand for upgraded consumption among Chinese households

In November 2022, Tmall Supermarket launched the overseas direct sourcing program, covering 9 countries and 15 production regions worldwide. This program establishes direct connections among Tmall and various origin sites. Chinese consumers can achieve one-stop global shopping at Tmall Supermarket.

"Milk produced on an overseas farm on Monday can reach the dining table of Chinese consumers on Wednesday by airplane." - Roy Van Den Hurk, General R&D Manager at Theland Global.

Tmall introduces more art institutions, satisfying consumers' art pursuit

In March 2023, the Centre Pompidou in France, a world-renowned art museum, launched its official flagship store on Tmall, offering five major product categories, including trendy artworks, home furnishings, fashion accessories, outdoor camping supplies, and pet toys. As of March 31, 2023, a total of 15 globally renowned art institutions have opened stores on Tmall, with products integrating various modern and contemporary art elements, relaying the concept of "accessing modern and contemporary art and enjoying the beauty of daily design" to consumers.

Taobao Maker Festival provides consumers with trendy lifestyles

Launched in 2016, Taobao Maker Festival is a leading expo to showcase numerous trendy shops and items from Taobao as well as thousands of unique lifestyles. The 2023 Taobao Maker Festival, headlined as "Uncovering Infinite Lifestyle Possibilities on Taobao," held three themed exhibitions in Hangzhou, Shenzhen, and Chongqing. Consumers can immerse themselves in innovation and inspiration through the novel products brought by creative merchants, opening up a Taobao lifestyle that is vibrant, and imaginative.



Diverse supply of products



Multi-faceted digital life services

With the improvement in life quality, the demand of consumers for lifestyle services such as travel, entertainment, and health are also gradually increasing. Focusing on every detail, we strive to provide consumers with more convenient digital life services from multiple perspectives.

In travel, Amap provides consumers with one-stop access to services such as navigation, route planning, ride-hailing, public transit, and bike sharing, while Fliggy provides consumers with comprehensive travel solutions.

In entertainment, Youku and Alibaba Pictures continue to provide consumers with a high-quality product portfolio, including movies, drama series, variety shows, cultural shows, documentaries, children's shows, animations, and sports, satisfying the diverse entertainment and cultural needs of our consumers.

In health, Alibaba Health continues to efficiently provide consumers with timely medical and health products with safe and reliable processes, and provides integrated medical services for patients through its technological advantages and abundant medical resources.

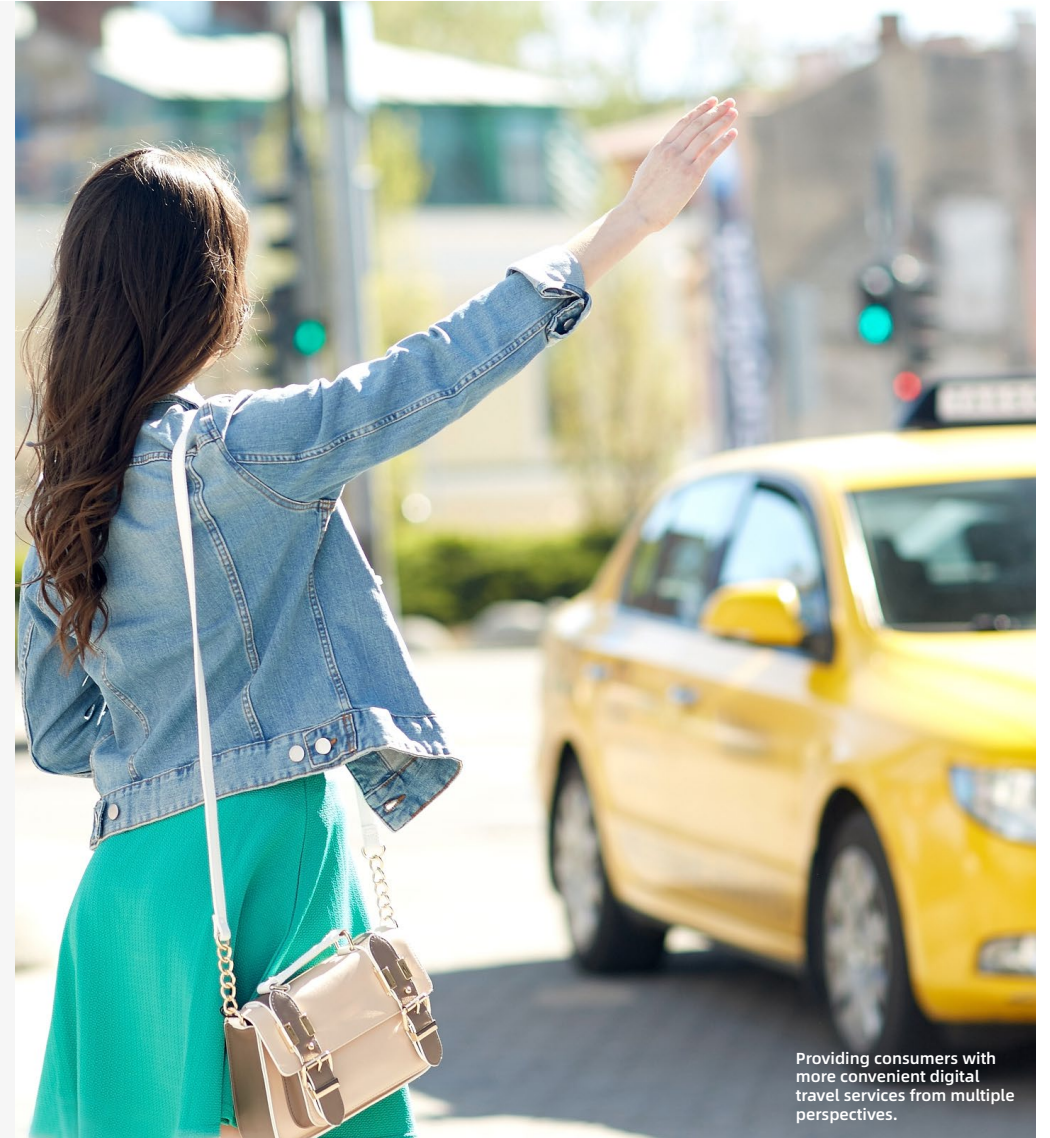
Amap upgrades new features for various travel scenarios, building more heartwarming navigation

- Night riding and walking mode: Amap enables intelligent identification of street lamp coverage and complex road sections to assist night riding and walking. As of March 31, 2023, the mode has covered 20 cities and served more than 100 million users in total.
- Traffic light countdown: Amap provides users with real-time and reliable traffic light countdown in both visual and auditory forms, which minimizes the uncertainties of urban travel. As of March 31, 2023, the function has been applied to more than 80,000 traffic light intersections in China.
- Tree shade navigation: On the basis of ensuring the rationality of navigation, Amap recommends routes with more shade coverage for users riding or walking on hot summer days. As of March 31, 2023, the function has covered 67 cities, serving more than 100 million users.

Alibaba Health utilizes digital management of patients, providing an inclusive and accessible disease management approach for patients with chronic diseases

According to the Healthy China Initiative (2019-2030), chronic diseases account for over 70% of the total disease burden in China. Patients with chronic diseases suffer significant mental and economic burden due to long-term, sometimes lifelong, need for medical consultations and medication.

We have constantly explored solutions consistent with science to help patients cope with these diseases. As of March 31, 2023, Alibaba Health has built corresponding digital patient management models in 17 disease fields, such as epilepsy, asthma, and diabetes, to assist patients in single-handedly managing their healthcare and achieving significant improvement in medication adherence and quality of life. The number of patients with chronic diseases we have served amounts to nearly 9 million, a year-over-year increase of 35%.



Providing consumers with more convenient digital travel services from multiple perspectives.



Providing high-quality products and services

Whether it is daily necessities or entertainment and leisure, people have higher expectations for product and service quality. We strive to bring higher quality to consumers while ensuring diverse and rich product and service offerings.

Freshippo creates a supply chain of organic products, supplying high-quality food for consumers

In FY2023, Freshippo officially launched its organic strategy to build a one-stop shopping platform for organic fresh food, providing affordable organic products for consumers. Freshippo prioritizes establishing partnerships with suppliers who are trustworthy and have at least three years of experience in the organic food industry. It has also dived into supply chain management and strengthened cooperation with partners in planting, breeding, and processing to provide consumers with cost-effective organic produce with sustainable planting and farming. In FY2023, Freshippo launched more than 1,700 SKUs of organic products.



Freshippo's Organic Vegetables

Tmall Global launches "Global Exploration" with cross-border delivery, efficiently satisfying consumer demand for high-quality overseas products

To better meet consumer demand for specialty and niche products, we have launched our new brand "Global Exploration" in November 2022, with the aim to quickly and efficiently locate countless trendy and niche products across the world and bring them into the Chinese market through direct cross-border delivery. As of March 31, 2023, over 20,000 overseas brands from more than 90 countries and regions have been brought to consumers through Tmall Global.



"Global Exploration" of Tmall Global

The high-definition restoration technology independently developed by Youku is applied to the restoration of classic film and television works, delivering users a higher-quality viewing experience

Since 2017, the technical team at Youku has been dedicated to restoring classic works to an ultra-high-definition level, leveraging super-high resolution video enhancement and AI machine learning. In FY2023, Youku completed the restoration of a total of more than 30,000 episodes of over 1,000 classic film and television works, bringing users a higher-quality viewing experience.



The high-definition restoration technology by Youku



Giving consumers better value for money

An important mission of our business is to help consumers attain the best value for their money while ensuring quality. We give full play to the advantages of digital platforms and the supply chain to provide consumers with cost-effective products and services. We have continually launched new online shopping functions, making prices more transparent and enabling consumers to enjoy price protection and make price comparisons in a more accessible manner.

AliExpress launched a new service channel "AliExpress Choice", providing global consumers with cost-effective products and services

In March 2023, AliExpress officially launched a new service channel "AliExpress Choice", which focuses on cost-effective products sold as low as 3 items for \$1. When placing orders on Choice, consumers in certain countries can enjoy a series of services, including free shipping, free returns, and delivery quality assurance.

Taobao launches the "Price Protection Center" and "Price Comparison" functions, enabling shopping around in a convenient manner

To minimize the impact of product price fluctuations on the shopping experience of consumers, Taobao launched the "Price Protection Center" function on its APP in April 2022. If the user purchases the product with the price protection function, a price difference refund could be applied through the "Price Protection Center" interface once the price of the product is lowered during the price protection period.

To make the price comparison easy for customers, Taobao APP activated the "Price Comparison" function in March 2023. When searching for a certain category of products, consumers are shown similar products for sale with their sales volume and price. The product with the lowest price will be placed at the top of the search results for customers' references.

"Taobao Sales Channel" was officially launched on the Taobao homepage, providing consumers with "products that are cost-effective and of good quality"

To further assist consumers in searching for "products that are cost-effective and of good quality", the "Taobao Sales Channel" feature was officially launched on the homepage of the Taobao APP in May 2023. Occupying the center position of the three main tabs, "Taobao Sales Channel" enables users to place orders quickly on a large number of cost-effective products.

Instant consumption experience

Digitalization facilitates satisfaction of instant shopping experience demand, enhancing quality of life. Through continuous innovation in digital technology and logistics, we have seamlessly linked our logistics networks with factories, agricultural bases, and merchants, providing comprehensive, high-quality, timely and cost-effective logistics services and delivering an expedited consumption experience to people with different income levels from different regions.

Ele.me is constantly improving its instant logistics fulfillment capabilities, delivering a wider range of products to more consumers even faster. As of March 31, 2023, Ele.me has launched 24-hour delivery services in 113 cities and 3,680 business districts across China.

Taocaicai and Taoxianda were merged in May 2023 and renamed as Taobao Maicai. The service provides users with two forms of fresh food purchases, "delivery in one hour" and "self-pickup next day", in more than 200 cities across China.

Cainiao has constantly improved the efficiency of logistics and transportation and joined hands with Tmall Supermarket to prepare for half-day delivery since the end of 2022, so as to create a new "1212" logistics mode, which means an order placed before 12pm will arrive before 9pm on the same day; and an order placed before midnight (12am) will arrive before 12pm on the next day. This new model has already been launched in Hangzhou City.



Providing high-quality, timely and cost-effective logistics services



Trustworthy consumption

Creating a trustworthy environment for consumption is vital for achieving a better life. We are committed to improving product quality, optimizing consumer service experience, and safeguarding the privacy and data security of users so that consumers can rest assured with their purchases on our platforms.

Improving full-link product quality and safety

Improving the customer service experience

Protecting user privacy and data security



Consumers can rest assured with their purchases on our platforms



Improving full-link product quality and safety

Guided by the principle of creating a win-win cooperation and co-governance mechanism with the merchants on our platform, we are committed to offering products with better quality and safety to our customers by regularly reviewing our platform policies and enhancing digital governance capabilities with our merchants. In accordance with applicable national laws, Taobao and Tmall platform has published over 300 regulations and policies covering key topics including entry policy, product quality, advertisement regulations, and quality check^{1,2}.

We have established a full-link digital product quality management system, creating a trustworthy consumption environment for consumers from three aspects - prevention, identification, and treatment.



Over **300**

Number of regulations and policies



Prevention

By establishing a comprehensive merchant and product access system, organizing product quality training, and providing digital tools for quality improvement, we have journeyed to prevent the sales of any harmful and non-compliant products on our platforms. We have taken the approach of "technology + manual efforts" to strictly review the qualifications of merchants from industries such as food, medical devices, and cosmetics.



Identification

For products sold online, we have implemented a product quality inspection approach that primarily relies on algorithm models with supplementary human governance and case-by-case handling to identify harmful and non-compliant products. We also select high-risk products from massive labels for sample inspection according to the algorithmic model and industry governance experience. Furthermore, we have linked the unqualified products identified in sampling inspections with merchant evaluation. In FY2023, we invested more than RMB100 million into sampling inspections.

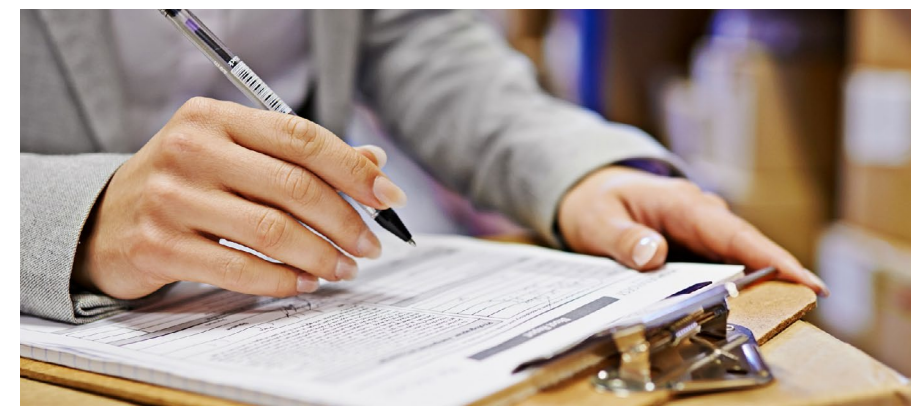


Treatment

We have taken targeted measures against products identified as either harmful or non-compliant, including deletion from our online platforms, removal from shelves, assisting manufacturers in recalling them, and other corresponding punishment measures depending on the severity of violations, such as requesting merchants to rectify and pay liquidated damages. Furthermore, we assist manufacturers in recalling defective products to prevent them from being further sold on our platforms. This assistance includes notifying related merchants for self-inspection through digital information channels and asking them to cease the sales of defective products and recall such products independently or under our assistance.

"Product Quality Center" helps merchants to improve their quality

Through marking and categorizing various feedback such as consumer assessments and consultations, we enable merchants to quickly identify their product quality problems and provide corresponding rectification suggestions, thus improving their digital operational efficiency. As of March 31, 2023, we had more than 1,360 quality labels in total, covering 99% of physical products on Taobao and Tmall. This governance based on quality labels has improved the impression of consumers of both Taobao and Tmall over the quality of similar products on a year-over-year basis.



Creating a trustworthy consumption environment

¹ Please see the link for all Taobao platform regulations: <https://rule.taobao.com/#/rules>

² Please see the link for all Tmall platform regulations: <https://rulechannel.tmall.com/#/>



Ele.me has established a comprehensive food safety system, implementing the "trustworthy ordering" multidimensional strategy

Food not only satisfies basic human needs but also plays a significant role in consumers' pursuit of a higher quality of life. Digital platforms have created significant changes within the catering industry while the rapid growth of take-out ordering has also brought opportunities and challenges for platforms in terms of taking more social responsibilities.

In 2022, Ele.me proposed a development strategy for the next decade - "trustworthy ordering, on-time delivery". On this basis, Ele.me formulates the ESG strategy of "Trust (trustworthy consumption), Joy (enjoyable experience) and Kindness (heartwarming assistance) to create a better life". In addition to delivering a satisfactory experience to consumers, we emphasize the importance of providing consumers with "trustworthy food", including adhering to the food safety baseline and striving to provide consumers with healthy and nutritious choices. In March 2023, Ele.me's "Cases of Social Co-governance of Online Catering" was awarded the "Contribution Award of GFSI China Food Safety Technology Application Cases" in the 5th Consumer Goods Forum.

Continuously improving a scientific management system for food safety

In accordance with the Food Safety Law of the People's Republic of China and other relevant laws and regulations, we have developed a food safety system. For details on this food safety system, please refer to the Rules Center of Ele.me³.

In terms of the management structure, we have established a food safety management department, which is responsible for building the organizational structure of food safety, top-level strategic planning and design, overall planning of related institutional systems and rules, and implementation of platform governance.

We approach management measures from three key angles, including pre-sales management and control of merchant operation, in-sales delivery management, and after-sales protection of consumer rights and interests. We are also gradually building a comprehensive emergency response and training system.

• Management and control of merchant operation
We have formulated the Standards and Procedures for Reviewing Applications for Opening Online Stores in accordance with related laws and regulations, and established a professional team to review the compliance of applicants prior to their opening of online stores. We objectively evaluate the food safety performance of merchants by means of field checks and offline spot checks.

• Delivery management
We have established hygiene management standards for logistics stations, and adopted innovative measures such as personnel health tags, vehicle disinfection tags, food safety sealing tags, and smart food pickup cabinets to reduce food safety risks during the delivery process. Ele.me's smart food pickup cabinets are primarily made of "food contact safe" materials, becoming the first batch of smart cabinets in the industry that meet national food safety standards in China.



Transparent kitchen

• Protection of consumer rights and interests
In case of any doubts about the qualifications of merchants and the quality and safety of food, consumers can consult, report, and complain to Ele.me through multiple channels such as APP, online customer service, and a 24/7 customer service hotline. Customers are also entitled to claim "one-click refund" and "one-click claim". Currently, the platform is able to resolve food safety-related refund requests within 30 minutes and process compensations within 24 hours.

• Emergency response system
We have established an emergency response system for food safety, continuously strengthened emergency capabilities and systems, clarified and defined measures such as risk warning and monitoring, risk grading, handling processes, and emergency support, and cooperated with related authorities such as market regulation administrations in line with current laws in handling specific emergencies.

• Building a training system
We have established a food safety training system for our catering and retail merchants, and expanded the "Worry-free E-food" training program nationwide in China. As of March 31, 2023, we have completed and launched a total of over 20 video courses covering catering and retail issues, as well as over 100 targeted special courses on food safety. Furthermore, we have requested employees working in food safety management to pass related tests, with a pass rate of 100% in FY2023.



Food safety sealing tags



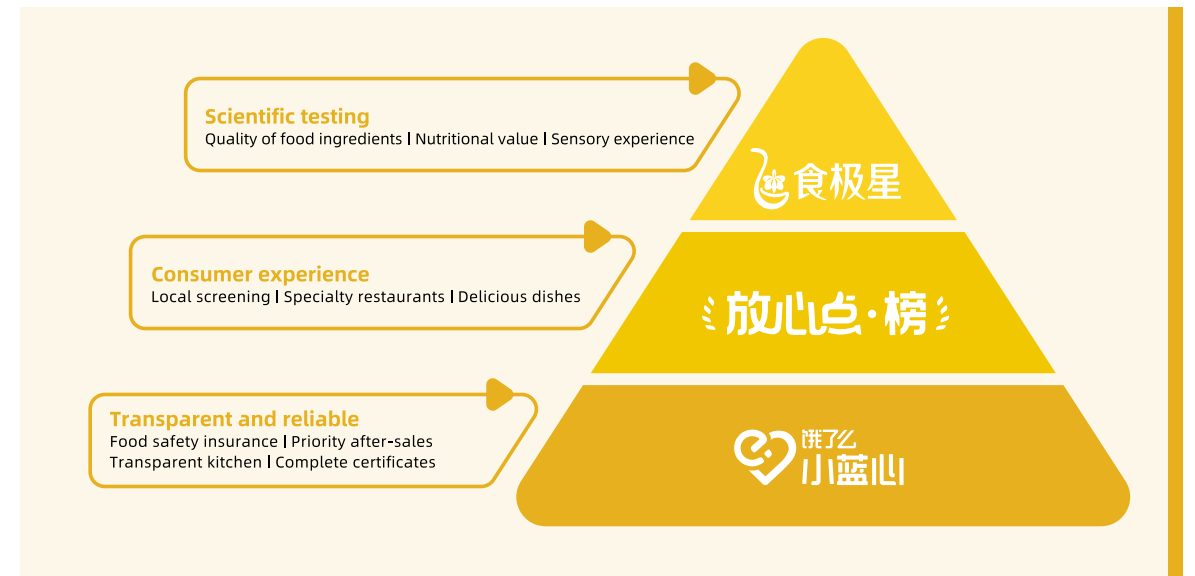
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Assisting merchants in the continuous improvement of their quality level

Building a new quality management model of co-governance by continuously leveraging digital capabilities

By leveraging digital technology and data, we integrate multidimensional data such as merchant behaviors, consumer feedbacks and reviews, and the platform's offline samplings to assist merchants in the continuous improvement of their quality. The Ele.me APP has launched its independently developed AI food safety management tool that can analyze various types of data and automatically assess and grade risks through its built-in algorithmic model. This tool greatly assists merchants in improving the efficiency of food safety management and reducing the cost of food safety operation to a great extent. Moreover, we have launched three programs - "Little Blue Heart", "Trustworthy Ordering List" and "Star-Food Rating", which aim to establish platform and industry standards from three aspects - food safety operations, consumer experience, and scientific testing, to ensure the delivery of trustworthy food for consumers.

- The "Little Blue Heart" program marks the evaluation of merchants on food safety. Only clean and hygienic stores can be awarded and labeled with a "Little Blue Heart" mark in APP.
- The "Trustworthy Ordering List" is a high-quality takeout food guide. On the basis of data from "Little Blue Heart", good comments from customers and recommendations of experts, it shows users "stores with high re-order rate", which is rated by local consumers on a monthly basis.
- The "Star-Food Rating" program focuses on the testing and certification of dishes of merchants for nutritional value and quality of food ingredients. Dishes certified will be marked with "Star-Food Rating" in the Ele.me APP.






Improving the customer service experience

Creating a trustworthy consumption environment depends not only on the improvement of product quality, but also on the services provided. By constantly cooperating with merchants, Alibaba guarantees a full-cycle consumption experience for customers by optimizing the service process.

In terms of platform services, Alibaba has established a full cycle service system covering pre-sales, in-sales, and after-sales services of products, and is committed to providing consumers with guaranteed one-stop service.

 **Over 74%**
Percentage of Cainiao Posts offered doorstep delivery service

 **0.018%**
The complaint rate on Taobao and Tmall platforms

Pre-sales

Alibaba has continuously improved the accessibility, authenticity, and accuracy of product information, enabling consumers to find crucial product information in a more convenient and transparent manner.

Accessibility: We improved the product details page by rearranging the information displayed that may affect purchase decisions by customers, making key information such as product images and key parameters more accessible;

Authenticity and accuracy: we have standardized the product advertisements published by merchants to prevent them from providing false or misleading content, ensuring the authenticity and accuracy of product information. We have established systematic advertising governance measures and strengthened advertising information governance from three aspects - developing a merchant self-inspection tool, implementing the platform inspection mechanism, and strictly controlling paid advertisement.

- We have developed a self-inspection tool for merchants to assist in the identification of non-compliant materials in advance of the release of product information.
- We have strictly implemented a platform inspection mechanism. Following the release of any product information, the mechanism will recognize and comprehensively detect potential violations of relevant laws and regulations through image and text recognition. Misleading information such as the use of superlative adjectives and descriptors proscribed by the Advertising Law of the People's Republic of China, claims on healthcare benefits of dietary supplements, special makeup effects of cosmetics, and medical effects of non-medical devices would be intercepted and corresponding merchants would be notified to take necessary rectification measures.
- We have strict rules for paid advertising. By integrating expert experience with data intelligence analytics capabilities, there is a 1-minute response to reported risks and violations and effective resolution within 5 to 10 minutes. In terms of guiding marketing rules for advertisers, Alibaba makes risk profiles according to historical violation data, automatically sets and applies customized rules, and provides specialized training sessions for advertisers. In FY2023, Alibaba held more than 100 training sessions on marketing rules for advertisers.

In-sales

Alibaba has optimized the shipping and delivery modes to enable consumers to receive products in a more convenient manner.

In terms of the delivery time, Tmall takes the initiative to give compensation to buyers in case of delayed delivery depending on the circumstances.

In terms of delivery mode, upon the arrival of the parcels from Taobao and Tmall at Cainiao Posts, consumer can select direct doorstep delivery on the shipping details page or set "doorstep delivery" as the default preference through the Cainiao APP. As of March 31, 2023, except those in rural areas and universities, over 74% of Cainiao Posts⁴ offered doorstep delivery service to consumers. In addition, our self-operated high-quality delivery team, Cainiao Direct Delivery (Cainiao Express), provides doorstep delivery services for Tmall Supermarket in over 300 cities across China, with a commitment to "compensation for non-doorstep delivery, compensation for late delivery, and compensation for damaged products". During the 2022 11.11 Global Shopping Festival, Cainiao delivered over 200 million doorstep parcels. The level of overall consumer satisfaction towards Cainiao in FY2023 achieved a year-over-year increase.



⁴ Except those in rural areas and universities.



After-sales

After-sales service is an important part of trustworthy consumption. Alibaba strives to build convenient after-sales consultation, rights protection, and refund channels to alleviate consumer worries.

In terms of after-sales services, Alibaba removes barriers on transferring to human customer services, making it easier for consumers to talk to a customer service agent. In order to bring a better experience to consumers, Alibaba simplifies the process of initiating consumer disputes and testifying through the establishment of dispute and complaint channels, and shortens the handling time. In addition, Alibaba allows multiple complaints for different reasons, and secondary complaints after initial withdrawal. In FY2023, the complaint rate on Taobao and Tmall platforms was 0.018%.

Alibaba is constantly simplifying the process for returns and refunds to bring a better experience to consumers. If any products with returns requested have already shipped, we prioritize efforts to intercept these packages to reduce the risk of unreasonable "refusal to refund" from merchants. In FY2023, the overall refund rejection rate decreased by 27.2% on a year-over-year basis. For any products that have not yet been shipped, convenient refund services have been launched, including instant refunds and fast refunds. As of March 31, 2023, convenient refund services have been available to most consumers.

In case of a dispute between consumers and merchants and the liability cannot be determined, Alibaba takes the initiative to assist them in addressing this dispute through the Consumer Experience Protection Fund.

Establishing a governance mechanism for long-term prepaid transactions to deal with the "prepayment trap"

Alibaba has developed a transaction model adapted to services with long-term prepayment and subscription scenarios such as beauty and hairdressing and housekeeping services on Taobao and Tmall, and have taken a series of measures in this regard. When a merchant reaches an online deal with a consumer, Alibaba pays the transaction amount to the merchant in installments according to the actual fulfillment status, while the remaining amount will be supervised by the platform throughout the entire service cycle. In case of disputes such as service suspension caused by the merchant, the platform will refund the remaining amount to the consumer.

Tmall's after-sales service specifications were awarded the title of "Leader" in enterprise standards

In February 2023, Tmall's Q/Ali000477-2023 Specifications for E-commerce After-sales Services were awarded the title of "Leader" by the 2022 Enterprise Standards for E-commerce After-sales Services⁵.



⁵ The "Leader" system of enterprise standards is a standardized incentive policy approved by the State Council and jointly implemented by eight ministries and commissions, including the State Administration for Market Regulation, the National Development and Reform Commission, and the Ministry of Science and Technology.



Protecting user privacy and data security

In the digital era, consumer privacy protection and data security are bedrocks for trustworthy consumption. Data security does not imply a "freeze" on activities. Committed to comprehensively protect consumer rights and interests, Alibaba endeavors to promote the efficient circulation and use of data and provide consumers with personalized and high-quality services.

Three principles and specific measures for consumer privacy protection:

By fully utilizing privacy computing technology and security computing capabilities, Alibaba has developed sound data security and personal information protection principles and established corresponding standards and management mechanisms covering the entire lifecycle of data, with an aim to protect consumer privacy while maximizing the value of data.

 <p>Minimizing data collection</p>	<ul style="list-style-type: none"> We make users aware of the scope of data collection and its intended uses through clear prompts, pop-ups, and forms, and let them know that the data acquired is only used for the scenarios and purposes that they agree to. Once data is collected, we strictly protect the basic rights of users in areas such as access, inquiry, withdrawal, modification, and deletion.
 <p>Ensuring the right of users to know and make decisions</p>	<ul style="list-style-type: none"> The right of users to know how their data is used: In terms of algorithm recommendation, Alibaba has established 1) an algorithm management system that is transparent to supervision, and fulfills our legal obligations; and 2) an algorithm operations mechanism that is transparent and interpretable, ensuring users' right to know. Consumers can learn about privacy policies and system permissions and view the authorization status of privacy data in the "Settings - Privacy" section of our APPs. The right of users to make decisions: Alibaba provides a convenient way for consumers to revoke the authorization to use their data for the purpose of ensuring user's right to make decisions on their own data usage. Users are able to turn off personalized advertising, search recommendations, and other functions for use of personal data according to their preferences. In terms of recommendation optimization, Alibaba has established a feedback mechanism for users to ensure that they have the right to offer their opinions on the results of algorithmic decisions.
 <p>Enhancing user data protection in our products and services</p>	<ul style="list-style-type: none"> Security capability upgrading: Actions have been taken to enhance security protection during sensitive data transmission and a series of security specifications and requirements have been implemented for the data layer, application layer, network layer, and system layer to improve the security level of the ecosystem. Alibaba has released the Application Security Specifications for Taobao Partners as well as the Security Capability Standards for Developers. Full-link encryption: Alibaba promotes the order encryption and decryption solutions, and the platform no longer directly provides sensitive data of consumers, such as names, phone numbers, and addresses. These data would only be available and decrypted at required links. Virtual phone number service: For any users having subscribed to this service, their actual phone numbers in the order information will be replaced by virtual numbers in the service fulfillment process to avoid harassment and phone fraud, safeguarding consumers' shopping safety.

Protecting consumer privacy through the full-link encryption capability and virtual phone number service

In FY2023, through the full-link privacy protection system, Alibaba motivated third-party ecosystem partners to complete the upgrading of their privacy protection systems, covering the overall process of order placing, order processing, warehousing, express delivery, customer services, and membership management by merchants. On the consumer side, Alibaba launched the virtual phone number service for consumers. For users having subscribed to this service, their actual phone numbers in the order information will be replaced by virtual numbers in the service fulfillment process to avoid harassment and phone fraud, safeguarding consumers' shopping safety. As of the reporting date, the virtual phone number service on Taobao APP has covered 100% of active users on the platform.



100%

Coverage of the virtual phone number service on Taobao APP

Secure Data Hub

By utilizing multiple privacy-enhancing computation technologies, Alibaba has launched the Secure Data Hub (SDH), a marketing privacy computing platform. This platform is committed to providing advertising engines, advertisers, as well as third-party testing companies with the solutions of data fusion, privacy computing, and joint modeling in a privacy security environment and achieving secure and compliant use of privacy data throughout the advertising process. In December 2022, SDH passed the seventh "Trusted Privacy Computing" evaluation by China Academy of Information and Communications Technology (CAICT), and was awarded the special evaluation certificates of Secure Multi-Party Computation (SMPC) and basic federated learning capability.



Inclusive consumption

With a desire to enable a sustainable and better life, Alibaba’s ultimate goal is to provide a wealth of products and services for consumers to meet their demands. However, there are still many marginalized groups who fail to enjoy the benefits of the digital economy and digital life, especially people living in underdeveloped countries and regions as well as senior citizens and people living with disabilities. Through technological innovation and the platform economy, Alibaba assists in improving this situation, closing gaps and bringing a better consumer life to everyone.

There are over 85 million people with disabilities and 260 million seniors aged 60 and above in China, with the number of seniors still rapidly growing. Alibaba is promoting constant and systematic technological improvement and innovation to lower barriers of using digital tools for people with disabilities and seniors.

In 2019, the Alibaba Information Accessibility Committee was established to help with the planning and promotion of accessibility and age-friendly improvements to our digital products.

Alibaba has developed the Guidelines for Information Accessibility Developers to enhance developers’ understanding of accessibility and permeating information accessibility throughout the life cycle of products and services development. As of March 31, 2023, all major APPs under Alibaba have undergone accessibility and age-friendly upgrades and adaptation, covering a wealth of digital life and working scenarios such as consumption, travel, entertainment, and communication. The Taobao, Ele.me, Idle Fish, Amap, Youku APPs have all been awarded

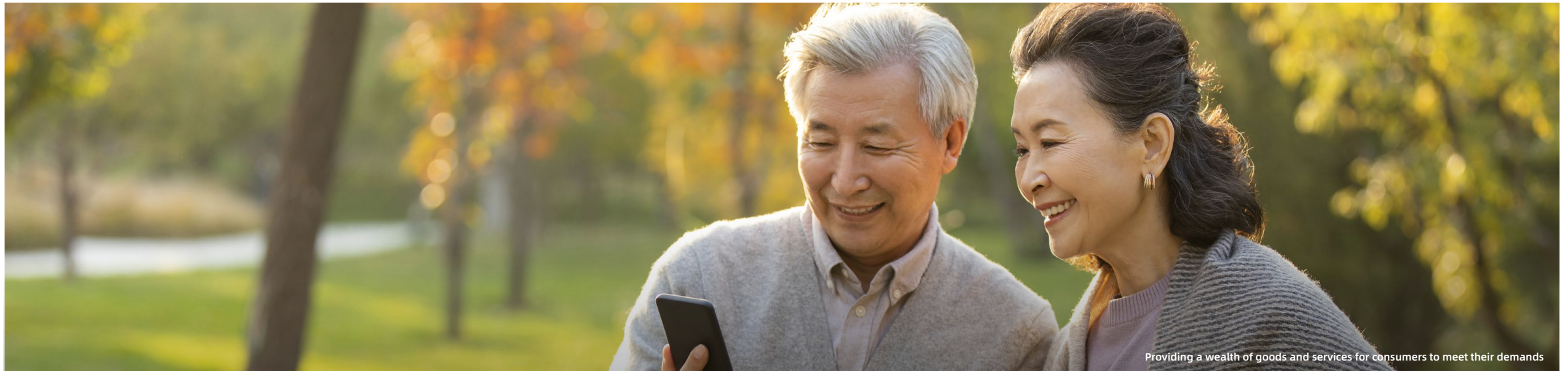
as Excellent Cases for Senior-friendly and Accessibility Improvement of Internet Applications issued by the China Academy of Information and Communications Technology (CAICT). Alibaba has made publicly accessible 11 patents related to accessibility upgrades and age-friendly adaptation, promoting the sharing of information accessibility and age-friendly adaptation technology among industry peers.



For more details: Please refer to Chapter 5 Building a bridge between rural and urban economies and markets P149

Enabling barrier-free digital consumption

Ensuring a rich digital life for senior citizens



Providing a wealth of goods and services for consumers to meet their demands



Enabling barrier-free digital consumption

Alibaba strives to gain a thorough understanding of the challenges that people with disabilities encounter when using digital technology, aiming to assist them in overcoming these barriers across various scenarios of life and work. With this understanding, Alibaba can provide them with equal access to the benefits and opportunities that digital technology offers.

 Over **320,000**
Transparent kitchen

 Over **900,000**
Number of navigation services by the "Wheelchair navigation"

 Over **330,000**
Content views of Youku Barrier-free Theater

Comprehensive barrier-free digital life

Barrier-free consumption:

- Shopping: We apply optical character recognition (OCR) technology to render text information on product details in the Taobao APP into speech to assist visually impaired individuals to realize "shopping by listening to images". In FY2023, the Taobao and Tmall APPs served over 320,000 visually impaired users.
- Food orders: Ele.me provides a screen reading function for visually impaired users, allowing them to easily purchase delicious foods without the need to see the screen.
- Vegetable purchase: Visually impaired users can purchase vegetables by sliding the screen reading guide on the Freshippo APP.
- Medicine purchase: In June 2023, Alibaba Health released a Braille medicine box to assist visually impaired people in addressing medication safety issues. Furthermore, in June, 2023, Alibaba Health released the world's first customized font with a "Braille-Chinese" conversion function and text phonetic notation function, helping to improve the accessibility of Braille in several aspects including products packaging design and artistic creations.

"Compared to the hundreds of millions of users, a few thousand or a few hundred may seem like a small fraction. However, does a small number mean it is not significant? The development of product features is not solely determined by commercial efficiency. While performance result matters, so does accountability."

—Yuhang Yu, Engineer of Freshippo APP

Barrier-free communication:

- DingTalk launched a barrier-free work platform to help the hearing-impaired use technologies such as voice-to-text and AI real-time subtitles to conduct video conferences, live broadcasts, online learning and other activities. As of March 31, 2023, the barrier-free work platform has covered 31 provinces in the system of the Chinese National Association of the Deaf, and more than 80 urban hearing-impaired learning and working scenarios.

Barrier-free travel:

- Since 2017, Amap has successively included navigation information such as accessible restrooms and elevators. In November 2022, Amap introduced the "wheelchair navigation" feature, which offers dedicated travel navigation services for wheelchair users. This function enables automatic route planning that avoids areas such as underground passages without elevators and pedestrian overpasses that are inaccessible to wheelchairs, enabling wheelchair users to easily navigate their journey. As of March 31, 2023, the "wheelchair navigation" feature has provided over 900,000 navigation services in six cities, including Beijing, Shanghai, Hangzhou, Chengdu, Shenzhen, and Guangzhou.

"It's worthwhile to have one tenth of the company's staff dedicated to serving a small subset of users to bring special value to them! I hope that digital technology can facilitate everyone's life and our "Digital Braille" pathways will be further broadened."

— Lei Jiang, Engineer of Ele.me APP

Barrier-free entertainment:

- Barrier-free theatre: Youku processes audiovisual works in a barrier-free way to eliminate the viewing barriers for visually impaired people. In December 2022, Youku Barrier-free Theater launched an identity authentication function for visually impaired people. From the launch of the program to March 31, 2023, the content in Youku Barrier-free Theater has been played more than 330,000 times cumulatively.
- Braille-to-Chinese Translation Program: In FY2023, Alibaba continued the collaboration with China Braille Library and Zhejiang University by jointly launching the "Braille-to-Chinese Translation 2.0", for which Alibaba Cloud provides free storage and computing resources to help host the library's audiobooks, e-books, barrier-free movies as well as other cultural resources to the cloud platform to facilitate online use by visually impaired people anytime and anywhere. For visually impaired users in the Chinese Mainland, China Braille Library can assist them in borrowing, distributing, and returning books through the free home delivery service of Cainiao.



Youku Barrier-free Theater



Ensuring a rich digital life for senior citizens

We strive to provide considerate, convenient, and efficient intelligent services for senior citizens based on their actual needs. We have actively built an age-friendly community where all our main APPs have launched a "senior mode" through age-friendly innovation. Furthermore, we seek to transform and optimize the layout of retail premises based on the needs of seniors, aiming to provide them with more professional and considerate services.



Over **3,300**

Number of WeCare taxi assistance stations

The senior mode of Taobao APP enabling senior citizens to shop online

At the technical level, to help seniors shop with Taobao, the font size has been enlarged and page design has been simplified, so that they can quickly understand page functions. Furthermore, a voice search function is added to avoid typing for search and clears the barrier for senior citizens to use the APP.

At the service level, the APP has also introduced a function that allows seniors to get direct communication with customer service personnel. Upon approval, Alibaba customer service personnel can help them solve problems in a timely manner through remote assistance. In case of a refund request rejection for a senior mode user, Alibaba will actively contact the user to assist in processing the refund, bringing a better after-sales experience to them, and solving the problem of senior users who cannot find the customer service for returns.

Senior Mode of Ele.me highlighting frequency demands and offers considerate, reassuring, and heartwarming services.

The Ele.me APP places commonly used scenarios by seniors, such as food ordering, food purchase, supermarket, and medicine buying, in a prominent area at the top section of its APP, which ensures easy access to convenient services for seniors. The "Ordering Takeout" channel provides a wide range of selected take-out food and beverages to satisfy their daily demands for nutritious meals; the "Buying Vegetables" channel provides various foods and ingredients to satisfy demand in multiple food choices and categories such as meat, poultry, eggs and milk; the "Shopping in Supermarket" channel provides a convenient and tailored daily shopping experience based on the actual demands of seniors; and the featured "Buying Medicines" channel provides fully qualified and strictly managed drug purchasing services to satisfy the demands for drugs urgently needed and commonly used.

Age-friendly adaption of Freshippo for better online and offline shopping experience

By continuously optimizing the online and offline service processes, Freshippo strives to remove barriers for the elderly to select products and pay money. The Freshippo APP has explored the innovative "1+8" age-friendly online shopping system, designed "1" senior exclusive shopping channel named "assistant for seniors", and optimized "8" detailed experiences on age-friendly shopping such as the voice search function. In offline stores, Freshippo staff guide seniors through the digital payment function of the Freshippo APP. Freshippo makes a cash payment option available for seniors to clear payment barriers. Furthermore, we have specially assigned "service ambassadors for seniors" in some stores, providing shopping guidance, checkout, pick up and after-sales services.

Amap's WeCare plan, facilitating the seniors in travelling

Amap has launched various features such as specialized taxi functions for seniors, the construction of nationwide WeCare taxi assistance stations, the issuance of subsidies to assist seniors to seek medical care, and a volunteer service that helps seniors address their travel difficulties. As of March 31, 2023, Amap has built over 3,300 WeCare taxi assistance stations in 33 cities nationwide in China, with an increase of more than 2,000 stations, and has granted over RMB5 million of subsidies in total.



Making food ordering, food purchasing, supermarket, and medicine buying more personalized, reassuring, and heartfelt



Responsible consumption

Consumption promotes a better life, yet it is crucial to reduce and eliminate the negative environmental and social impacts brought about by the consumption process. Therefore, Alibaba has intensified investment to remove the barrier for consumers in practicing responsible consumption and guide them in establishing responsible consumption habits.

Guiding and assisting users in transitioning towards a green and low-carbon lifestyle

Contributing to the creation of a healthy social consumption environment



Guiding consumers to build responsible consumption habits



Guiding and assisting users in transitioning towards a green and low-carbon lifestyle

Digital platforms are radically reshaping the way that consumers access information, products, and services. It is possible to educate, motivate, inform, and support consumers in making sustainable choices on a large scale in innovative ways while making efforts to win the trust and understanding of consumers. Alibaba has built a carbon ledger platform covering multiple consumption scenarios, which enables consumers to get access to information related to low-carbon products, facilitates them in discovering and selecting more sustainable products and services on the platform, and guides them in transitioning towards green and low-carbon consumption behaviors.

Taking advantage of the rich business scenarios in Alibaba's ecosystem, the Carbon88 ledger platform has unveiled a decarbonization lifestyle for consumers across various scenarios, from catering, travel, working and shopping, to recycling. Based on the progressing decarbonization measurement standard, we measure the decarbonization actions of consumers in Alibaba's ecosystem platforms. In addition, the Carbon88 ledger platform is driven by the value of protecting the Earth, with an aim to encourage users to develop low-carbon habits through incentives and low-carbon themed activities. In FY2023, the Carbon88 ledger platform drove a total of 187 million users to practice emission reduction.

For more details: Please refer to Chapter 1 Engaging and enabling decarbonization through our platform ecosystem P46

187 million
Number of users to practice emission reduction

Idle Fish contributing to a digital circular economy

Every use of an idle item means reducing the consumption of new resources. Consumers can earn "carbon credits" and gain equity incentives from Carbon88 ledger platform through trading or recycling idle items on the Idle Fish platform.

Alibaba developed 88 Carbon Reduction Day and promoted consumers to reduce carbon emissions

In November 2022, Alibaba launched the 88 Carbon Reduction Day, covering brand building, consumer education and low-carbon consumption. Together with brand groups, we are building low-carbon consumption awareness and creating new exclusive scenarios for low-carbon consumption. Currently, we have co-hosted the 88 Carbon Reduction Day with Shiseido and Yili respectively.



Assisting to circular economy



Contributing to the creation of a healthy social consumption environment

Search is an important tool for consumers to acquire information, but it may be abused to spread illegal and harmful information. As an e-commerce platform, we have a special obligation to ensure our platforms are not used in abusive ways. In recent years, we have gone from "blocking" to "educating", to keep platform users safe from harm⁶.

In November 2020, we worked with partners to launch the public welfare GreenNet Program. As of March 31, 2023, the GreenNet Program covered multiple APPs including Taobao, Idle Fish, and Youku. In FY2023, around 80 million harmful searches have been automatically guided to educational pages. The program has covered five major areas, including safeguarding life and health, protection of wildlife, protection of minors, personal and public safety, and personal information security.



around 80 million

Around 80 million harmful searches have been automatically guided to educational pages

In August 2022, the GreenNet Program was further upgraded. After a minor registers an account with real name authentication, the minor online shopping mode is activated. In this mode, when a minor searches through the Taobao APP for harmful content such as gaming account leasing and recharge, live streaming recharge, adult products, pesticides and veterinary drugs, alcohol products, Taobao will purposely activate a layered protection mode in the product display and sales process by applying the "no active recommendation", "invisible after search", or "visible but not available" modes. Furthermore, the search and details pages of such products will be automatically guided to educational pages to motivate minors to establish consumption habits beneficial to their physical and mental health and personal information security.



From "blocking" to "teaching", keeping platform users safe from harm

6 According to statistics, the number of abnormal searches flooding into Internet platforms reaches up to tens of billions every year. The keywords of these abnormal searches include wild animals and plants, suicide products, game addiction, and criminality, which have the possibility of bringing high risks and negative impacts to society.



Fueling small businesses

Micro, small, and medium-sized enterprises (MSMEs) are responsible for the majority of employment in society. They are often the most dynamic economic actors, but also a group that is relatively vulnerable. As the world undergoes the dual digital and green transformations, MSMEs are facing unique challenges in maintaining competitiveness in technology, talents, market opportunities, and so on. As a platform technology enterprise, Alibaba is committed to integrating digital technology and the real economy to drive a more secure, efficient, and extensive digital transformation of industries, providing more capabilities to MSMEs and enabling them to achieve their own sustainable development in the new digital era. In this process, we can contribute to the creation of large-scale and high-quality employment in society. While excelling in our own role, we also strive to leverage the power of our digital platform to drive and help MSMEs as much as possible to achieve sustainable development.

We provide continuous supports in the following four aspects:

- Developing responsible technologies P110
- Building markets, business capabilities and business ecology for MSMEs P117
- Creating and enabling inclusive employment P132
- Promoting responsible production P140





Building markets, business capabilities and business ecology for MSMEs

Over **47 million**

On Alibaba.com, over 0.2 million sellers across 190 countries and regions have sourced business opportunities from or completed transactions with over 47 million buyers

Over **5 million**

The digital ecosystem of DingTalk hosts a community of over 3.8 million developers who have collectively developed over 5 million pieces of "low code" software

2022 National Public Service Demonstration Platform for Small and Medium Enterprises

DingTalk was awarded in the "2022 National Public Service Demonstration Platform for Small and Medium Enterprises."




Enabling inclusive employment

Over **70 million**

Alibaba's ecosystem has facilitated, directly or indirectly, more than 70 million jobs.

Over **2.3 million**

DingTalk has helped 2.3 million person-times of trainees obtain digital manager certification



Fueling small businesses



Promoting responsible production

Over **14,000**

More than 14,000 suppliers have signed the Alibaba Supplier ESG Code of Conduct with a year-over-year growth of 10%

Over **1.91 million**

Taobao and Tmall have covered a total of 1.91 million Low-carbon Friendly products from 409 brands



Developing responsible technologies

Over **17,000**

We hold more than 17,000 global patents, a year-over-year growth of over 20%

6.863 million MtCO_{2e}

We have effectively enabled our clients to reduce 6.863 million MtCO_{2e} of total emissions

First

We continue to be ranked first in open-source impact and activity among Chinese enterprises

Highest

We are one of the cloud service providers with the highest level of security and compliance in the Asia-Pacific region

Developing responsible technologies

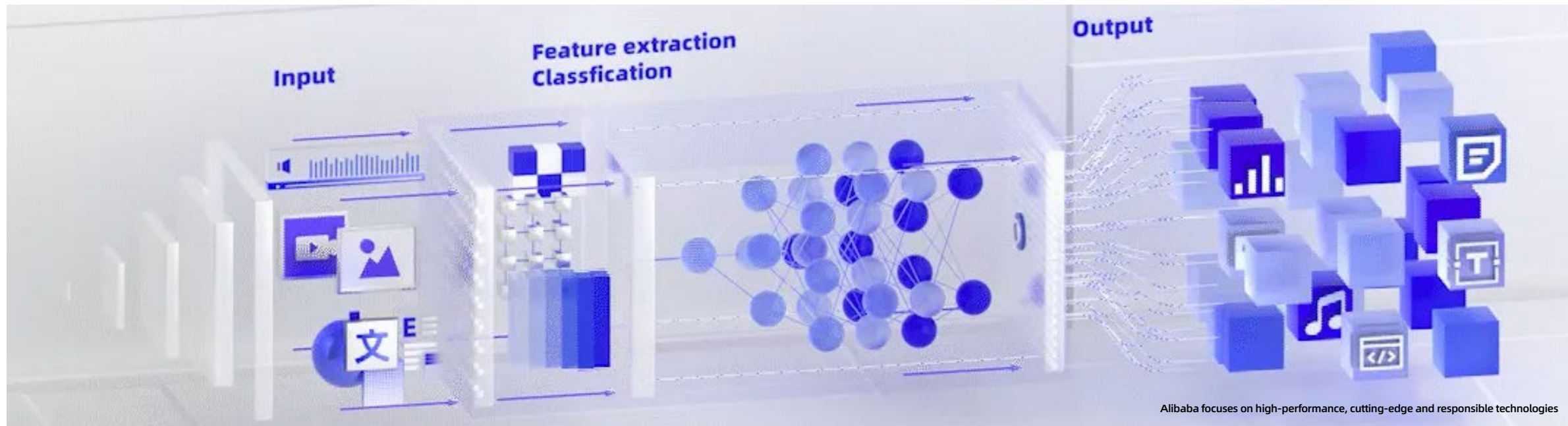
Technology has been the bedrock for Alibaba to get where we are today and also guides us to a promising future. We greatly value technology and innovation, and our pursuit of technological advancement has never changed. We firmly believe that advances in technology mean shouldering a greater responsibility and creating greater values. Given this, we believe that responsible technology should satisfy the following characteristics.

High-performance and
cutting-edge technologies

Environmentally-
friendly technologies

Inclusive and open
technologies

Safe and trustworthy
technologies



Alibaba focuses on high-performance, cutting-edge and responsible technologies



High-performance and cutting-edge technologies

Products that use high-performance and cutting-edge technologies feature lower resource use and are inherently environmentally-friendly. Pushing the development of efficient and advanced technology is fundamental for fulfilling our social responsibility and creating wider social values. To achieve this goal, we continue to intensify investment and research in two major areas that lead the industry forward: self-developed technologies and cutting-edge technologies.

Self-developed technologies

Cutting-edge technologies



over **17,000**

Number of global patents



over **10,000**

Global invention patents granted in key fields that include cloud computing, artificial intelligence, big data technologies, and other digital strategic technologies.

Self-developed technologies

We are advancing our focus from software innovation to collaborative innovations of software and hardware, primarily in continuous improvement in overall performance across multiple dimensions such as cloud products, system architecture, underlying hardware, and artificial intelligence.

As of March 31, 2023, Alibaba has held more than 17,000 global patents with a year-over-year growth of over 20%. We have over 10,000 global invention patents granted in key fields that include cloud computing, artificial intelligence, big data technologies, and other digital strategic technologies.

• In terms of our cloud service, we provide a variety of high-performance cloud products, including cloud computing, databases, and data intelligence solutions, catering to our users around the world. Our elastic computing capability covers millions of nodes, with the ability to support 500,000 cores for elastic scheduling within 3 minutes. Our distributed cloud-native database, PolarDB, offers computing capabilities that can scale up to over 1,000 cores with a storage capacity of up to 100TB. Alibaba Cloud has been recognized as a Magic Quadrant leader in cloud database management systems by Gartner for three consecutive years. Our integrated data intelligence computing platform, ODPS, supports parallel computing across over 100,000 servers. It can handle a maximum daily data processing scale of 2.79EB. The ODPS large-scale batch computing engine, MaxCompute, has topped the international TPCx-BB benchmark list for six consecutive years.

• In terms of system architecture, at the 2022 Apsara Conference, we released the CIPU, which is a dedicated

processor specifically designed and optimized for our self-developed operating system "Apsara". With a new architecture, the processor, which is the core of CIPU, speeds up computing, storage, and network resources, resulting in an increase of over 20% in terms of overall performance over the industry average.

• In terms of the underlying hardware, leveraging software and hardware co-design in cloud computing, we have designed our own cloud computing chip, "Yitian 710", which has been deployed on a large scale in Alibaba Cloud's data centers, resulting in a more than 30% improvement in computing power cost-effectiveness and a 60% reduction in power consumption per unit of computing power.

• The milestone in artificial intelligence is that in September 2022, Alibaba DAMO Academy introduced the "Tongyi" series of large language models (LLMs), creating the industry's first unified AI infrastructure. At the 2022 Apsara Conference, Alibaba Cloud pioneered the concept of "Model as a Service" (MaaS), aiming to lower the barriers to AI development and application by transforming AI models into readily available services.



CIPU system

Major technical awards received by Alibaba Cloud in FY2023

Forrester released the Q4 2022 Report¹, in which Alibaba Cloud was rated as a leader among 11 public cloud service providers in China and awarded the highest score in terms of current product offerings and strategies.

Gartner released the 2022 Magic Quadrant for Global Cloud Database Management Systems report. Alibaba Cloud was selected in the "LEADERS" quadrant for three consecutive years.

The China Academy of Information and Communications Technology (CAICT) performed a serverless service capability evaluation, in which Alibaba Cloud's PolarDB for MySQL and RDS MySQL were rated as "advanced" transactional databases with the highest serverless service capability.

¹ The Forrester Wave™ Public Cloud Development and Infrastructure Platforms in China, Q4 2022.



Timeline of Alibaba's "Tongyi Qianwen" Large Model

We officially launched our "Tongyi Qianwen" large language model in April 2023. This was the result of years of in-depth research in artificial intelligence. With the development of Tongyi Qianwen, we are seeing improvements in efficiency that consistently reduce the environmental costs of the model.

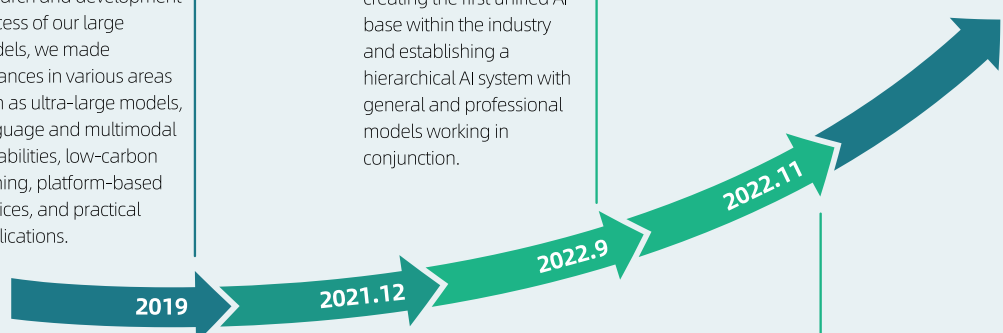


In 2019, during the research and development process of our large models, we made advances in various areas such as ultra-large models, language and multimodal capabilities, low-carbon training, platform-based services, and practical applications.

In September 2022, we released the "Tongyi" large model series, creating the first unified AI base within the industry and establishing a hierarchical AI system with general and professional models working in conjunction.

In December 2021, our large model parameters surpass one trillion, making it the largest AI pre-training model in China at that time. Through innovative technologies such as more granular CPU offloading and shared-unlocked algorithms, we have significantly reduced the energy consumption per unit.

In November 2022, we took the lead in the industry to introduce the concept of MaaS and launched the open-source AI community ModelScope. As of March 31, 2023, the ModelScope community has accumulated nearly 800 models and served over 1 million users, significantly lowering the barriers to AI development.



Cutting-edge technologies

We have continued to invest in the research of basic sciences and innovative technologies. In the previous year, we published a number of original research papers and received several notable awards and recognitions.

Major awards in research of cutting-edge technologies

- In May 2022, Alibaba DAMO Academy's paper "Learning to Generalize to More: Continuous Semantic Augmentation for Neural Machine Translation" was awarded the Distinguished Paper Award at the top international AI conference ACL2022.
- In June 2022, AMiner announced the AI 2000 Most Influential List, in which Alibaba was ranked the world's top ten most influential network research institutions in terms of computer networks.
- In August 2022, the top global conference in data science, KDD 2022, awarded Alibaba DAMO Academy with the Best Paper Award in the field of applied science for its paper "FederatedScope-GNN: Towards a Unified, Comprehensive and Efficient Package for Federated Graph Learning".
- In December 2022, the Decision Intelligence Lab of Alibaba DAMO Academy won the championship in the international competition for virtual power plants at the NeurIPS 2022 (Annual Conference on Neural Information Processing Systems). The proposed AI solution for power dispatching, which innovatively integrates prediction technology, optimization technology, and reinforcement learning, enabled the experimental project to reduce carbon emissions by 13.6% and electricity bills by 28.2% without any change in electricity consumption.
- In May 2023, Apache Flink, a key focus of Alibaba Cloud, received the SIGMOD 2023 System Award. Additionally, the research paper "Detecting Logic Bugs of Join Optimizations in DBMS" co-authored by Alibaba Cloud and Zhejiang University won the Best Paper Award at SIGMOD 2023. This achievement marks the first research team from the Chinese Mainland which has received the Best Paper Award at SIGMOD since the conference's inception in 1975.





Environmentally-friendly technologies

Clean computing is crucial for the cloud to contribute positively to society, as well as an important pillar for further growth in computing power and digital development. Global data centers have already grown to a considerable scale and are still expanding, making more pressing the need for continued reductions in energy use and carbon emissions. We firmly believe that, by incorporating environmentally-friendly design and technologies at this stage, we can obtain a greener development as well as build an effective system to assist our clients in achieving their green growth. In FY2023, our self-owned data centers saw a PUE reduction to 1.215, which remained the leading level in Asia. Alibaba Cloud clients have applied our cloud solutions in replacing traditional locally deployed data centers, effectively helping clients reduce 6.863 million MtCO2e of emissions.

We have also extended green computing into the field of digital intelligence and invested heavily in green AI and data intelligence to contribute to society's green transformation and efficient governance.



For details, please refer to Chapter 1 Greening our operations and value chain P33

Inclusive and Open technologies

The availability and inclusion of cutting-edge technologies are the basis for the development of MSMEs today. We continuously lower the technological threshold, promote the integration of technology and business, and build an open technology ecosystem to share technological dividends with MSMEs.

Technological development can be inherently inclusive

Commercialization improves the availability and affordability of technology

Enabling open access to technology, data, and business scenarios to facilitate inclusive development and cutting-edge research of science and technology

Technological development can be inherently inclusive

In the past ten years, owing to our efforts in technological innovation and growth in scale, Alibaba Cloud has witnessed an 80% decrease in computing power costs and nearly 90% decrease in storage costs, capable to provide accessible computing power for more MSMEs and developers.

Commercialization improves the availability and affordability of technology

Tens of millions of MSMEs on e-commerce platforms such as Taobao and Tmall have already been utilizing the efficient capabilities of our cloud computing for their businesses. It can be said that the integration of cutting-edge technologies with the businesses carried out by MSMEs on digital platforms is a major feature of the fusion between digital and real economies. In addition to our merchants, we have provided cloud computing services to more than 4 million clients worldwide. In the past year, we supported the better development of MSMEs via multiple methods such as discounts, free trials, and providing platform-based industry opportunities and financial resources.

Alibaba Cloud provides digital services for MSMEs

Alibaba Cloud has been continuously launching a series of empowering services to support the growth of MSMEs. In September 2022, proactively responding to the call of MIIT, Alibaba Cloud collaborated with over 100 ecosystem partners in launching an "MSME Digital Service Festival", providing over 200 high-quality services and holding over 50 offline and online activities to support MSMEs for cloud-based innovation. In April 2023, we introduced the "Feitian Free Trial Program" to help developers learn and grow

- Technological empowerment: "Feitian Free Trial Program" provides free trials for 50 cloud products, including ECS, PolarDB database, and Machine Learning PAI, for up to three months. It supports various application types such as online, big data, AI, and serverless development modes.
- Innovation and entrepreneurship platform: Alibaba Cloud serves as an all-in-one innovation and entrepreneurship platform for MSMEs and their entrepreneurs. It facilitates learning, growth, and networking opportunities while connecting them with innovative resources from Alibaba Cloud and its ecosystem partners so that MSMEs can seamlessly build and develop their businesses on the cloud.
- Facilitating channels and capital: we use platform empowerment to integrate digital and real economies. Leveraging the advantages of our platform and enterprise channels, we offer brand promotion and training services to help MSMEs expand their markets. We also address the digital financing needs of MSMEs by organizing online and offline roadshows, facilitating connections with financial institutions.



Enabling open access to technology, data, and business scenarios to facilitate inclusive development and cutting-edge research of science and technology

Development of open-source technology

We have consistently believed in, promoted, and contributed to open-source technology and open technology ecosystem. According to the China Open Source 2022 Annual Report, we continue to rank first among Chinese enterprises in open source impact and activity.

Our four major areas of focus in open source include cloud native software, AI big data, databases, and operating systems. In FY2023, we launched several major open-source projects, including Kocoordinator, a specialized solution for application orchestration; Lowcode-engine, a low-code framework; ModelScope, an open-source large model platform; HavenAsk, a key product of Alibaba Search; and PolarDB-for-PostgreSQL, a cloud native database. We have also continuously invested in existing advantage projects such as Apache Flink, Apache Dubbo, Apache RocketMQ, and Nacos. We hold the top position among Chinese enterprises in terms of projects contributed to the Apache Software Foundation. As of March 31, 2023, our self-developed open-source programs have accumulated a total of over 1 million Stars on GitHub.



Awards in the field of open-source technology

2022.5

In May 2022, Alibaba was certified by CAICT as one of the first formal members of the "Trusted Open-Source Compliance Program".

2022.9

In September 2022, Alibaba was awarded the title of "CAICT - OSCAR Pinnacle Open-Source Enterprise (Open-Source Operation and Ecological Construction)".

2022.12

In December 2022, in the 2022 China Open-Source Cloud League (COSCL) Award program, Alibaba was awarded the title of "Excellent Enterprise for Open-Source Innovation".

2023.1

Including Flink, Dubbo, Anolis OS, Seata, and Nacos, passed the maturity assessment of the China Electronics Standardization Institute, MIIT with high ratings of "excellent".

AI-model open-source community - ModelScope

The application of AI in industry has been challenging due to the high development threshold, high customization requirements, and numerous models. To address these challenges in 2022, we proposed the concept of Model as a Service (MaaS) and collaborated with the CCF Opensource Development Committee (CCF ODC) in launching the AI-model community ModelScope. We have made concentrated efforts with the first batch of partners, including Langboat, Zhipu AI (Beijing Knowledge Atlas), DP Technology, and other research institutions, in structuring the first universal model exchange platform in China.

The first batch of models on ModelScope covers the major AI fields such as vision, voice, natural language processing, and multimodal models. Of these, over one-third of them are Chinese-language models, including Tongyi large model series, Langboat's Mengzi series, and Zhipu AI's multi-language pre-training model.

ModelScope has also provided a readily usable model usage platform, thereby reducing the time from code download,

installation, and deployment to usage to a few hours or even minutes, as opposed to several days in the past, as well as enabling online experience of model effects with zero code, model-based reasoning with one-line code, as well as model optimization and customization with ten-line code.

ModelScope adheres to the principle of neutrality and openness, with its models compatible with mainstream AI frameworks, supporting multiple training and service deployment methods, and available for independent selection by users. With an aim of promoting large-scale AI applications instead of making profit, ModelScope is open to all developers and is governed by its executive committee.

As of March 31, 2023, the ModelScope community has accumulated nearly 800 models, serving over one million users. The cumulative number of model downloads has exceeded 16 million, showing significant progress in its mission of reducing the barriers to wider AI development.

Apache Flink becomes the mainstream open-source framework and distributed processing engine in real-time computing

Apache Flink is a mainstream open-source big data processing engine and a project of the Apache Software Foundation. In 2019, Alibaba acquired Veriverica, the original company behind Flink, and became the biggest contributor to the Flink community. With its "streaming-batch integration" technology, Apache Flink has been increasingly adopted by enterprises for various business scenarios, including underlying platform construction, real-time data warehousing, real-time recommendations, real-time analysis,

real-time dashboards, risk control, and data lakes. Utilizing Apache Flink to address real-time computing needs has become the mainstream open-source framework and distributed processing engine in real-time computing. Through continuous collaboration, over 100 companies have contributed to the codebase, and Apache Flink has maintained its position as the most active project within the Apache Software Foundation for three consecutive years.



Supporting open academic research

To support academic research and contribute to building an ecosystem for basic science research, we have cooperated with top research institutions at home and abroad to fund young scholars who are engaged in cutting-edge exploration. We also launch and sponsor scientific activities to stimulate public interest in scientific research and improve the scientific literacy of the general public.

- We have established the Alibaba Innovative Research (AIR) Program to further research collaboration with leading universities. The AIR aims to promote the production of world-class academic achievements by granting university researchers open access to Alibaba's own real-

world business cases, technical issues, and data as well as assigning technical personnel to support the collaborative research. In FY2023, we launched multiple AIR scientific research collaborative projects with universities at home and abroad, supported universities to work on technological breakthroughs in cutting-edge technologies such as carbon neutrality, large models, virtualization, and databases, and published our world-class scientific research achievements.

- In terms of encouraging young scholars in their cutting-edge explorations, we have established the DAMO Academy Young Fellows to identify and support young Chinese scholars aged 35

and below. In 2022, we received nearly 500 valid applications from 135 colleges and universities across China. These participating young scholars were recommended by nearly 200 academicians, 19 university presidents, and 2 Nobel laureates. Finally, 15 "DAMO Academy Young Fellows" were shortlisted. They hail from fields including theoretical mathematics, quantum physics, biomedicine, chemical materials, software security, End-Edge-Cloud (EEC) collaborative intelligence, and third-generation semiconductors, and are engaged in multiple major researches ranging all the way from the macro universe to microscopic worlds.

- In terms of promoting and advocating public participation, we have established a global mathematics competition. This competition aims to bolster respect and love for basic sciences in society. Since the first competition in 2018, more than 180,000 competitors from six continents worldwide have registered to participate, and the level of public participation and internationalization sees consistent improvement. In 2022, a total of 55,028 participants from over 60 countries worldwide registered for participation, hitting a record high. The competition steering committee consists of a total of 15 top experts from seven countries in Asia, Europe, and North America. Among the finalists, overseas competitors accounted for 26%.



2022 "DAMO Academy Young Fellows"



Alibaba global mathematics competition

Safe and trustworthy technologies

In order to help the development of society, technology must first be trusted and supported by all parties. We are committed to creating safe and trustworthy technologies from three perspectives - privacy protection and data security, science and technology ethics, and reliable client service.

Privacy protection and data security

Safeguarding science and technology ethics

Optimizing and improving client service

Privacy protection and data security

Alibaba Cloud is committed to strengthening its compliance system in the global business landscape. As one of the cloud service providers at the highest level of security and compliance in the Asia-Pacific region, we continuously strive to enhance the performance of our cloud platform, earning over 130 global security and compliance certifications. With this effort, we enable our cloud clients and organizations to efficiently meet the security and compliance requirements of their respective regions and industries. Furthermore, our overall security capabilities have been highly recognized by international authoritative analysis firms such as Gartner, Forrester, and IDC.

As of the reporting date, Alibaba Cloud has been recognized with the highest tier of cybersecurity certification Cyber Trust Mark (lately developed by the Cyber Security Agency of Singapore), verified with the second-tier certification of EU Cloud Code of Conduct (in compliance with GDPR requirements) by Summit for Clinical Trials Operations Executives Europe (SCOPE Europe), granted the highest Titanium Award for Digital and Trustworthy Cloud (by the British Standards Institution), and certified by international privacy protection standards, including ISO/IEC27701:2019, ISO/IEC29151:2017, ISO/IEC 27018:2019, ISO/IEC27799:2016, BS10012:2017 and TRUSTe.



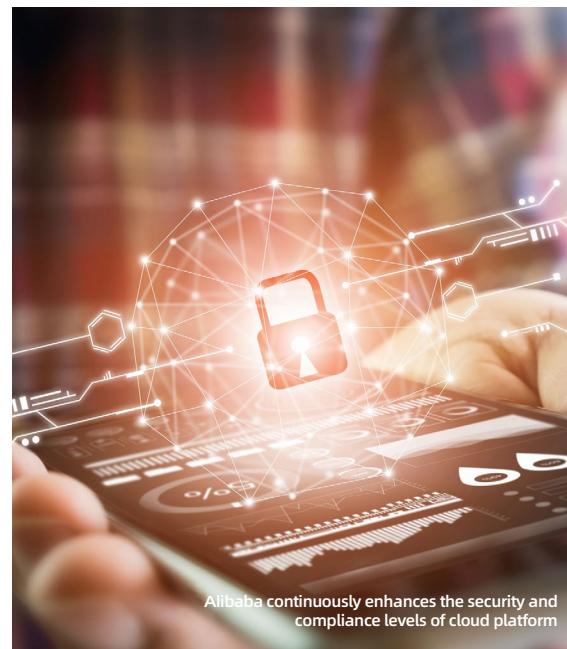
For more details, please refer to Chapter 7 Privacy protection and data security P200

Safeguarding science and technology ethics

Technology needs to be responsible and accountable in order to gain the trust of society. In FY2023, we established the Alibaba Science and Technology Ethics Governance Committee, and formulated six basic principles - people-orientation, inclusion and integrity, privacy protection, security and reliability, credibility and controllability, and openness and co-governance, marking a further upgrade in our governance of science and technology ethics.



For more details, please refer to Chapter 7 Science and technology ethics P204



Alibaba continuously enhances the security and compliance levels of cloud platform

Optimizing and improving client service

We have established the Chief Client Office to ensure an excellent client experience and assist clients in realizing business values through professional and standardized service. As of March 31, 2023, we have served more than 4 million clients from over 200 countries. We provide clients with pre-sales consultations and 24/7 after-sales services by multiple means including phone calls, online service, work orders, and DingTalk. We have made efforts to optimize our response speed and ensure service quality through our professional service system and platform. We have also built proactive service capabilities through intelligent monitoring and risk warnings to alert clients, facilitating client understanding of risk mitigation strategies and optimization recommendations. Notably, we attach great importance to protecting clients' rights and interests and have established a reporting center and complaint portal on our website to receive client complaints, track service progress, and promote product and user experience optimization.



Building markets, business capabilities and business ecology for MSMEs

Through multiple forms of digital platforms, we have pooled and served tens of millions of MSMEs. In particular, Taobao and Tmall are the leading e-commerce platforms in the world, while DingTalk is a leading organizational collaborative office and application development platform for MSMEs. By means of technological innovation and inclusive services,

we have provided development opportunities, enabled basic digital business capabilities, and established a supportive digital business environment for MSMEs, with the mission to “make it easy to do business anywhere” .

Bringing development opportunities to MSMEs by connecting them to various markets

Enhancing digital business capabilities for MSMEs

Creating a favorable digital business environment with MSMEs



Building markets, business capabilities and business ecology for MSMEs



Bringing development opportunities to MSMEs by connecting them to various markets

Our platforms feature extensive connectivity. We help connect MSMEs to various consumer markets so that they can leverage their capabilities and seize more opportunities for growth and development.

Connecting the domestic large market

Promoting interconnection of the global market

Connecting the domestic large market

Our digital platforms, including Taobao, 1688, and Ele.me, have founded a business and lifestyle ecosystem for millions of MSMEs and billions of consumers. This ecosystem makes small merchants and their niche products visible to the market, creating growth opportunities for countless MSMEs.

Our merchants have diverse backgrounds, including those carrying on traditional culture, and recent graduates seeking to build their novel business ideas. In 2022, the number of handicraft shops on Taobao exceeded 30,000, with over a half operated by women². The number of recent college graduates who have opened stores on Taobao has stood at 510,000, including 71.4% from rural areas³.



Bringing development opportunities to MSMEs by connecting them to various markets

² Data source: 2022 Intangible Cultural Heritage Consumption Innovation Report.
³ Data source: 2022 Research Report on College Student Employment and Entrepreneurship in E-commerce Platforms. Recent college graduates refer to college students who have graduated for less than two years.



E-commerce assists in high-quality development of "intangible cultural heritage"

Intangible cultural heritage (hereinafter referred to as "ICH") carries the weight of our human civilization and reflects the diversity of world cultures. Protecting and fostering ICH has profound significance for sustainable development. At the end of 2019, leveraging the many advantages of e-commerce platforms, we launched the Taobao Craftsmen Program, hoping to assist handicraft merchants represented by ICH inheritors and craftsmen in improving their online business capabilities, enhancing their exposure in the consumer market, and achieving faster development and growth.

By cooperating with local governments and ICH protection centers, we have continued to provide e-commerce operation training for ICH inheritors. Over the past three years, we have organized nearly 400 online craftsmen marketing events to improve the exposure of and attract the right traffic to their Taobao stores. In addition to setting up ICH and craftsmen zones at the annual Taobao Maker Festival, we have also hosted offline fairs and exhibitions for Taobao craftsmen in multiple cities, so that more consumers can get to know and understand these craftsmen, their art, and the culture behind it.



Intangible cultural heritage: Black pottery pot

Taobao store owners join hands with embroidery craftswomen to revive "Miao Embroidery"

In 2014, Danqing Wang, a craftswoman born in the 1980s, founded the "Wang's handcrafts" studio and a Taobao store, specializing in original embroidery products and aiming to revive traditional craftsmanship. Propelled by Taobao's large network and amplification, she soon faced challenges to meet rapidly rising orders, with the initial business model relying on single craftsmen for the design, embroidery, and order-based production. In 2015, she decided to establish handicraft bases in provinces such as Guizhou, Yunnan, and Sichuan, so that craftsmen living in

remote areas can earn money and support their families through their craftsmanship while carrying on time-honored traditional crafts. As of March 31, 2023, the number of Miao minority embroidery craftswomen has increased from just over 20 to about 5,000 across China. A large number of folk master-hands have become "product and technology partners", thereby inheriting the ancient craftsmanship and creating modern urban trends.



Wang Danqing directs artisan in Kaili Tangzhai village to produce handicrafts



Promoting interconnection of the global market

We strive to assist enterprises in achieving interconnection of global markets from three aspects: helping global merchants do business worldwide, assisting China's MSMEs in going global, and bringing local opportunities to MSMEs around the world.

Assisting in global cross-border e-commerce

Alibaba.com, a B2B digital trading services platform, was the first business sector of Alibaba Group. It is committed to making it easier to connect commerce around the world, thereby assisting more MSMEs to face the challenging global market much easier, safer, and steadier with new technologies and enabling digital business to go global and develop in a higher standard.

In FY2023, on Alibaba.com, over 0.2 million sellers across 190 countries and regions sourced business opportunities from or completed transactions with over 47 million buyers.

Uzbekistan-based enterprises sell products worldwide through digital trade

In July 2021, Alibaba.com partnered with the Agency for the Promotion of Export of the Ministry of Investment and Foreign Trade of Uzbekistan (MIFT) to provide the "Global Gold Suppliers" service and assist Uzbekistan enterprises on our platforms in expanding to the global online market. As of March 31, 2023, 78 enterprises from Uzbekistan have opened stores on Alibaba.com, covering many categories such as textiles, furniture, clothing, children's toys, and agricultural products.

We launched the electronic World Trade Platform (eWTP) initiative in 2016, with the aim of promoting more convenient, innovative, and inclusive global trade through digital technology and cross-border cooperation. eWTP has collaborated with participating countries and local governments in actively promoting development and exploring new rules for digital trade via new business practices. eWTP has also joined hands with a number of key global partners in promoting digital commerce, improving digital logistics networks, building public service platforms, and cultivating digital talent. As of March 31, 2023, eWTP has accomplished 10 cooperation pilot programs in 7 countries.

Four major action orientations of eWTP

Promoting the development of digital commerce

Our multiple e-commerce platforms provide different e-commerce solutions to MSMEs to help more enterprises in China go global and help MSMEs in developing countries sell products worldwide.

Optimizing digital logistics networks

We strive to promote the building of digital logistics networks to provide services focused on MSMEs, reduce costs, and increase efficiencies. As of March 31, 2023, we have collaborated with partners in building logistics hubs for Asia, Africa, and Europe, with specific locations in Hong Kong, Malaysia, Thailand, Belgium, and so on. These hubs are intended to assist their regions in improving the efficiency of e-commerce logistics.

Building a public service platform

We promote the establishment of a digital platform integrating government and business services, assisting in connecting domestic and foreign customs and taxation. This platform provides one-stop digital solutions that include logistics, finance, customs, taxation, and remittances for merchants, maximizing trade convenience and reducing compliance costs.

Cultivating digital talents

We provide a number of capacity-building programs for the digital economy for public institutions, entrepreneurs, and universities in partner countries and regions. Our aim is to share best practices in the digital economy from Alibaba and our home market of China, assist emerging markets in establishing and enhancing their understanding of digital technologies, cultivate local talent in the digital economy, and promote inclusive trade.

Strengthening trade cooperation in Africa to help MSMEs sell globally

At the end of 2019, the Ethiopian government signed an overall framework agreement with Alibaba for cooperation on eWTP. In 2021, the first batch of three local coffee brands from Ethiopia debuted on Tmall Global. In mid-August 2022, we expanded the cooperation to cover upstream players. We roasted coffee beans from specific regions in Ethiopia according to the taste preferences of Chinese consumers and directly launched them in X Membership Stores of Freshippo. This cooperation not only enabled consumers to enjoy fresh and high-quality coffee beans at a price about 30% cheaper than the market average, but also increased the income of coffee farmers by 30% with the reduction of middlemen. In December 2022, Tmall Global also launched three customized Ethiopian coffee products to further expand its exports. In March 2023, under the eWTP partnership with Rwanda, Alibaba.com and the Rwanda Development Board (RDB) officially signed a contract to support MSMEs in Rwanda (mainly in the coffee and tea industries) to export globally. Alibaba.com will provide comprehensive e-commerce operation guidance to help MSMEs in Rwanda set up online stores, identify suitable products, and optimize store operations.



Thailand's first digital free trade hub improves the cross-border e-commerce efficiency

On December 8, 2022, the first digital free trade hub (eWTP Thailand Duty-Free Zone) jointly built by eWTP and Thailand was launched for trial operation. By leveraging digital means such as real-time positioning of electronic locks and fully paperless processes, the eWTP public

service platform in Thailand further supports real-time supervision over the entire process in Thai Customs, ensuring the traceability, integrity, and safety of goods. The cross-border e-commerce fulfillment time between the two countries falls from 10 days to 3 days.



Assisting Chinese MSMEs in "going global" via digital means

We have been committed to helping MSMEs sell products overseas and making it easier for them to access the vast global market. Alibaba.com helps accurately match the business demands of cross-border buyers and sellers and provides digital marketing, transaction, financial, and supply chain services.

In FY2023, Alibaba.com upgraded its comprehensive digital service solution covering the full-link foreign trade from transaction to delivery and after-sales services, with a focus on improving and upgrading key areas of foreign trade services such as cross-border logistics, cross-border payment, and foreign trade working desk, further assisting merchants in reducing costs and increasing efficiency.

Alibaba.com Logistics, a digital cross-border B2B logistics service provider, integrates previously dispersed transportation capacities into a one-stop visualized logistics solution and makes it available for use by the entire industry. It has integrated more than 26,000 dedicated transportation lines to provide

efficient multimodal transportation choices for China's MSMEs engaged in foreign trade.

Alibaba.com Pay, a cross-border financial services tool, ensures safe and convenient payment of cross-border funds using digital technology. Known as a "magic weapon" for cross-border payment among merchants, it provides cross-border trade merchants with one-click online registration, allowing them to enjoy the service of receiving funds on the same day of registration and completing transfers to their account within 4 hours for cash-out in RMB.

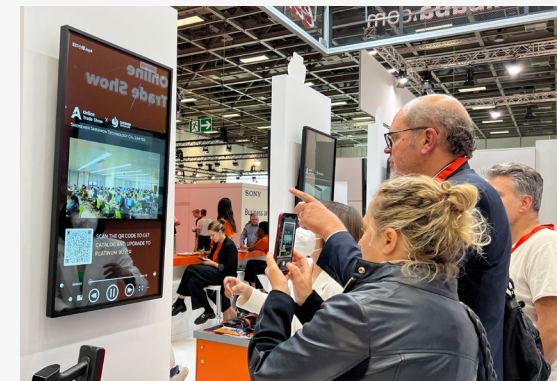
OKKI, the intelligent workspace for foreign trade businesses, not only helps merchants acquire customers but also leverages intelligent technology to assist businesses in scientific management, including customer management and data analysis. It aims to simplify the management of foreign trade business and make it more efficient.



Alibaba assists Chinese MSMEs in "going global" via digital means

Alibaba.com launches a special initiative, Digital Trade Show

At the end of 2022, Alibaba.com launched a special initiative, the "Digital Trade Show". This is launched to assist foreign trade enterprises in efficiently extending their footprints to overseas markets such as the US, Germany, the UK, Japan, Australia, Turkey, India, Brazil, and Dubai in a low-cost manner through the linkage of physical and online digital exhibitions. As of March 31, 2023, Alibaba.com has launched a total of 11 Digital Trade Shows, attracting 20,000 small and medium sized foreign trade merchants.



Alibaba.com launches a special action - Digital Trade Show

We have also provided merchants with a variety of basic tools, services, and training to assist MSMEs in addressing problems such as difficulty in comprehending complex rules for international trade and lack of trade talents.

eWTP public service platform assists MSMEs in compliance and risk management

Alibaba's eWTP public service platform, as a digital public service platform for bilateral and multilateral trade, features an important function of providing MSMEs with cross-border trade services (e.g., digital customs clearance, smart tax rules, digital compliance, digital classification) and legal risk consultation through various trading links. In FY2023, a series of tools and services in this regard were launched.

- On July 8, 2022, an RCEP (Regional Comprehensive Economic Partnership) tariff query tool was launched to allow MSMEs to inquire online about tariff rates, most favorable tax rates, and regulations of China and other RCEP member countries, thereby providing references for commodity exports and effectively improving the ability and efficiency of MSMEs in policy interpretations.
- On October 18, 2022, a compliance query tool was launched to enable enterprises to independently inquire about regulatory requirements, detailed standards, and recommendations of compliance service providers related to export commodities, thereby reducing the compliance cost and risk for MSMEs in cross-border trade.
- In January 2023, Alibaba integrated high-quality legal resources based on compliance platforms to provide inclusive services for MSMEs to help them respond to overseas litigation in the complex international trade environment.



Boosting local prosperity of global MSMEs

China continues to lead in the digital economy development in terms of scale and business model innovations, providing extensive experience for other regions around the world, particularly emerging and developing economies in digitalizing their economies, including e-commerce development.

In 2017, Alibaba launched the Alibaba Global Initiatives (AGI). The program aims to inspire entrepreneurs, youth, and women worldwide by sharing experiences and practical examples from China's digital economy development, fostering digital talents, and promoting inclusive trade. Most of the registrants are founders of MSMEs from fields including e-commerce, e-payment, logistics, online

gaming, health, agriculture and so on. Since 2017, AGI has trained over 140 public officials and nearly 4,000 entrepreneurs from over 60 countries and regions in Asia, Africa, Latin America, and Europe. It also covers over 2,000 teachers from overseas universities and more than 40,000 young students from 16 countries, such as Rwanda, Ethiopia, and Pakistan.

In FY2023, we further launched the Cross-Border Brand Manager Qualification Certification and Cross-Border E-commerce Talent Training Courses to cultivate talents for the globalization of MSMEs, thus contributing to a more inclusive globalization of the digital economy.



Alibaba Global Initiatives (AGI)

Lazada promotes the development of local manufacturers

To restore the community economy and raise the awareness of Singaporean consumers over local manufacturers, Lazada's online supermarket RedMart has collaborated with 19 local food manufacturers and farmers in Singapore to produce and sell a variety of local agricultural products and delicacies. Nearly 30% of private brand products on RedMart are sourced locally, and all of these locally manufactured products are free from preservatives. These collaborations, which prioritize local products, help develop local economies by matching more demand in a region with local manufacturers.



Lazada collaborated with local food manufacturers in Singapore

Lazada supports novice sellers with the assistance of experienced sellers

In terms of operations, merchants are exposed to various challenges from technology issues to marketing, which are particularly pronounced for new merchants. In this regard, Lazada launched the "Buddy Mentorship Program", which matches new and inexperienced sellers with professional and experienced sellers for peer-to-peer learning. As of March 31, 2023, the program has covered over 10,000 seller communities and has successfully supported over 1,000 selected sellers. With the help of more than 200 volunteer mentors from Indonesia, Vietnam, and Thailand, sellers involved in this program have achieved a GMV growth of over 60% and order growth of up to 50%.



Lazada supports novice sellers with the assistance of experienced sellers



"Taobao Villages" in Malaysia

In 2019, Eddie Mok, who engaged in the logistics and packaging business in Malaysia, launched a "digital village" program to bring the "Taobao Village" model to rural areas in Malaysia after attending the "Alibaba Entrepreneurs Support Program" in Hangzhou City, China.

As an initial step, Eddie Mok established a company named Parcel365, deploying intelligent parcel lockers in local villages and cooperating with the local government to develop delivery services to nine states in Malaysia, instructing rural residents to purchase through e-commerce, and cultivating strong consumer demand. Later, Mok established Shopla365 and collaborated with Lazada and other platforms to sell rural agricultural products to Malaysian cities and even overseas. To cultivate more rural e-commerce talents, Mok launched Edu365 to deliver e-commerce knowledge to local farmers.

In the previous year, Eddie Mok continued his efforts in rural revitalization in Malaysia. Through a partnership with ConnectMe Now,

a WiFi hotspot service offered by Measat Global and Alibaba Fulfillment Service, Mok has been providing essential infrastructure services such as electricity, internet, and logistics to remote rural areas in Malaysia, enabling residents in these areas to access goods and services similar to those in urban areas. Currently, the services cover a total of 489 rural villages, benefiting over 120,000 people.

In January 2023, Parcel365 partnered with Measat Global, a Malaysian satellite communications operator, in launching a "Digital Village 365" program, to enrich digital economic activities in rural areas and low-income households through access to high-speed bandwidth. Parcel365 and Shopla365 also provide logistics and e-commerce platform services as well as training courses at locations designated by Measat Global, to help rural residents overcome the unavailability of suitable parcel pick-up addresses in remote villages and unleash the potential of the rural digital economy.



“ More than 90% of all what I do in Malaysia today is duplicated from the Taobao Village model of China. - Eddie Mok ”

Eddie Mok brings the digital economy to rural areas in Malaysia



Enhancing digital business capabilities for MSMEs

While creating market opportunities for MSMEs, Alibaba also provides a series of digital tools and services to assist MSMEs in their operations and development. Alibaba provides training and learning opportunities needed for digital business to facilitate the digital transformation of MSMEs into the fast lane.

Digital business operations

Digital intelligence business decision-making

Digital intelligence collaboration and management

Digital business skills training

Digital business operations

Focusing on the operational needs of enterprises, Alibaba endeavors to assist MSMEs in enhancing their comprehensive capabilities of operating digital business in three major areas: digital business tools, digital supply chain capabilities, and localized services.



Improving digital business tools

On Taobao and Tmall platforms, Alibaba has joined hands with third-party ecosystem partners to provide MSMEs with a number of enterprise services on digital intelligence including software, content, and supply chains. With the Qianniu digital management platform, Alibaba provides merchants with a one-stop platform that enables them to leverage a series of digital business tools, including product

and sales management, anytime and anywhere. In FY2023, over 10 million active merchants managed their stores through Qianniu. Alibaba continuously upgrades business tools and services for merchants, strengthening the building of mobile business capabilities and making the merchant experience better and easier.

List of merchant experience improvement projects

In FY2023, Alibaba launched a series of merchant experience improvement projects to assist them in developing digital business on platforms more smoothly.

Faster store opening	Automatic review to shorten the wait time for merchants.
Easier for products to hit the shelves	Intelligent recognition of images to streamline filling in product information.
Enhanced order assurance	Enhanced data security to improve consumer privacy protection and management efficiency.
More timely risk reporting	Rapid review of logistics issues during the COVID-19 pandemic.
More efficient customer services	Improving customer service efficiency by full-featured customer service handling and conversion tools.
More convenient invoicing	Providing accessible and convenient invoicing tools to assist merchants in financial management.
Better marketing preparation	Assisting merchants in improving marketing capabilities and activity participation efficiency.
More intelligent problem analysis	Automatic output of evaluation and analysis reports to assist merchants in improving products and services.
More explicit data usage	The data dashboard for customer service, for both human and automated handling, provides a clear display of key business metrics for store operations.
More convenient merchant assistance	41 intelligent tools to provide instant response and one-to-one human customer services to resolve merchant complaints within 24 hours.



Enhancing digital supply chain capabilities

MSMEs are often in need of improved supply chain capabilities to address problems such as limited access to high-quality goods and lack of guarantee in supply chain service. In FY2023, the Qianniu merchant platform progressively provided MSMEs with free access to its "Select Product Sources" service, which allows merchants to quickly identify capable suppliers and get the goods onto their own shelves with one click.

Through the digital platform 1688.com, Alibaba launched the "drop-shipping" model to assist

MSMEs on Taobao, Douyin, and Kuaishou in direct connection to manufacturers with ample supplies. This model can help MSMEs get access to high-quality products, start a business easily, and reduce the unit item shelf time from one hour to just a few seconds, greatly improving business efficiency. As of March 31, 2023, a total of more than 200,000 suppliers have been able to provide the "drop-shipping" service to deliver goods within 48 hours and accept 7-day returns for no reason, receiving over 110 million transaction orders.

"Drop-shipping focuses on small sellers and new start-up sellers, who lack financial or product selection skills. Through distribution, we help more small sellers reduce the risk of such entrepreneurship."

—Yong Zhang, General Manager of Shenzhen Skymoi Technology Co., Ltd.

Merchants are in need of providing customized and flexible supply chain services to meet the increasingly personalized consumer demand. In 2022, 1688.com launched the "Flash Customization" service to allow MSMEs to enjoy fast and convenient custom services without changing production molds and processing systems in factories. The platform enables recordable customization needs

and provides online typesetting tools, making customization requirements more intuitive. The "Flash Customization" service has achieved customized production within one hour and shipment within seven days. As of March 31, 2023, 420,000 factories have participated in providing customized services, covering multiple industries, and achieving nearly 10 million orders in FY2023.

Improving localized services to promote digital transformation of industrial belts

For the vast number of MSMEs, e-commerce operations are a foreign and extremely challenging area. Therefore, we have established an industrial service team to provide on-site services to assist in discovering e-commerce opportunities.

As of March 31, 2023, 1688.com has collaborated with third-party service partners totaling 15,000 on-site service personnel, to provide personalized services to MSMEs.

On-site people to help in the digital transformation of industrial belts

Supporting factories in selection combinations

Providing factories with insights and judgments on market demands, product mix, SKU management, as well as other suggestions.

Assisting factories in online growth strategies

Providing factories with guidance for online marketing strategies such as logo design, product descriptions, detailed page display, and pricing strategy.

Suggestions for production process optimization

Based on in-depth research on the product manufacturing process, production processes, and material combination in respective industries, forming accurate product costs analysis capabilities, and providing factories with suggestions for improving production processes.



Alibaba helps the digital transformation of industrial belts

Digital intelligence business decision-making

In the development of the digital economy, data intelligence, as a new factor of production, has emerged on a larger scale and is being increasingly, efficiently, and intelligently applied to socioeconomic activities, making the level of digital intelligence in decision-making ever so crucial for MSMEs participating in the digital business market.

In 2014, Alibaba launched the e-commerce analytics package Business Advisor to provide merchants with smart analysis of business, market, and competitive landscape as well as online tutoring and training, so that merchants can more effectively manage their stores based on data. As of March 31, 2023, Alibaba performed a comprehensive optimization of the Business Advisor package, which has been utilized by around 6.5 million merchants, to make core data clearer and structures simpler, to make the tool easier to understand while increasing its speed, resulting in an increase in merchant satisfaction with Business Advisor compare to the previous year. Alibaba has also introduced a data insight service "Intelligent Diagnosis" for MSMEs, so that they can automatically transform complex data analytics into easy-to-understand interpretations and suggestions, for use as a basis for business decision-making. In FY2023, nearly 3 million merchants have used the Intelligent Diagnosis service.

Alibaba launched free training courses on "Business Advisor". As of March 31, 2023, a total of over 66,000 participants have obtained the skills certification of "Business Advisor" through online training and examinations.



By taking the Business Advisor examination, I have acquired a new understanding of how to run a qualified and profitable store and realized that my previous operation path is too inflexible and I was far away from a qualified or excellent operator.

— Tmall Home Furnishing Category Seller
Langsheng Home Furnishing Franchise Store



In order to provide intelligent business services to a wider range of businesses, in FY2023, we officially launched our digital intelligence brand "Lingyang", which has introduced and upgraded the DAAS system (Data+Analytics+Applications+Success). Lingyang's product matrix includes digital intelligent database construction and governance product named Dataphin, data visualization and analytics tools Quick BI, Business Advisory services, consumer operation and growth tool Quick Audience, enterprise resource management with Lingyang ERP, and omnichannel intelligent service software Quick Service. These products cover the entire business operation cycle from pre-sales to after-sales, aiming to empower businesses with easier data utilization, data-driven insights, and data-based decision-making.



Quick BI empowers businesses with efficient decision-making analysis

Data analysis serves as a crucial foundation for business management decisions, and Quick BI helps businesses quickly build analytical systems through intelligent data analysis and visualization capabilities. It enables seamless data flow within the organization and maximizes the value of data. Quick BI has been selected into the Gartner Analytics and Business Intelligence (Gartner ABI) Magic Quadrant for four consecutive years and has jumped to the Challengers quadrant in 2023.

"The task of developing report views that used to take two weeks can now be completed in just one day."
- Guojin Huang, Head of the Zibuyu Data Team at a cross-border E-commerce Company.

Business consultant facilitates enterprise development in multi-platform and multi-channel operations

With the development of e-commerce, merchants are not restricted to a mono-platform way of operating. Instead, cross-platform, multi-channel, and multi-shop data analysis become essential in business. On the basis of Business Advisor, Lingyang has launched an omnichannel business analysis product - Business Consultant, which is an intelligent one-stop strategic analysis, decision-making, and action data platform for multi-channel merchants, facilitating the increase of all-channel operation efficiency.

Alaniz, focusing on the tableware business, says Business Consultant is much more accurate than manual labor in terms of the data crawling dimension, which saves a lot of time and brings great help in data integration.



Digital intelligence collaboration and management

Digital technology profoundly changes the economic and social landscape, driving the deepening and solidification of digital industrialization and the rapid advancement of industrial digitization. MSMEs often face challenges in terms of talents, funding, technology, and management, and are exposed to various difficulties and pain points in digital operations. Alibaba is always striving to find new ways to assist MSMEs in improving operational efficiency on a large scale while at lower costs.

Alibaba has been continuously innovating technological and commercial solutions through cloud and DingTalk. DingTalk has established a globally leading digital ecosystem based on "PaaS (Platform as a Service) platform, SaaS (Software as a Service) ecosystem, and low-code tools". As of March 31, 2023, it has offered over 1,500 SaaS applications, with over 3.8 million developers and over 5 million pieces of "low code" software developed based on DingTalk. Based on this digital ecosystem, DingTalk is capable

of assisting MSMEs in developing business systems such as collaborative office, intelligent HR, ERP, equipment management, project management, and procurement management in a more cost-effective and flexible way by virtue of rich API, open interfaces, and system integration connectors, significantly reducing the technical and financial thresholds of enterprise digital transformation.

DingTalk is currently undergoing intelligentization upgrades, and it will integrate large-scale models such as "Tongyi Qianwen" to achieve comprehensive intelligence in instant messaging (IM), document management, low-code development, audio-video communication, and more, aiming to assist various industries in achieving rapid digital intelligence upgrade. As of March 31, 2023, DingTalk has attracted a total of 600 million users, including more than 23 million enterprise users. Most of the enterprise users are MSMEs. DingTalk and its ecosystem partners have extended services to a broad range of 20 nationally recognized industries, such as government affairs, education, manufacturing, healthcare, Internet, retail sales, and logistics, in 135 cities. DingTalk is awarded the "2022 National Public Service Demonstration Platform for Small and Medium Enterprises," approved by the General Office of MIIT.

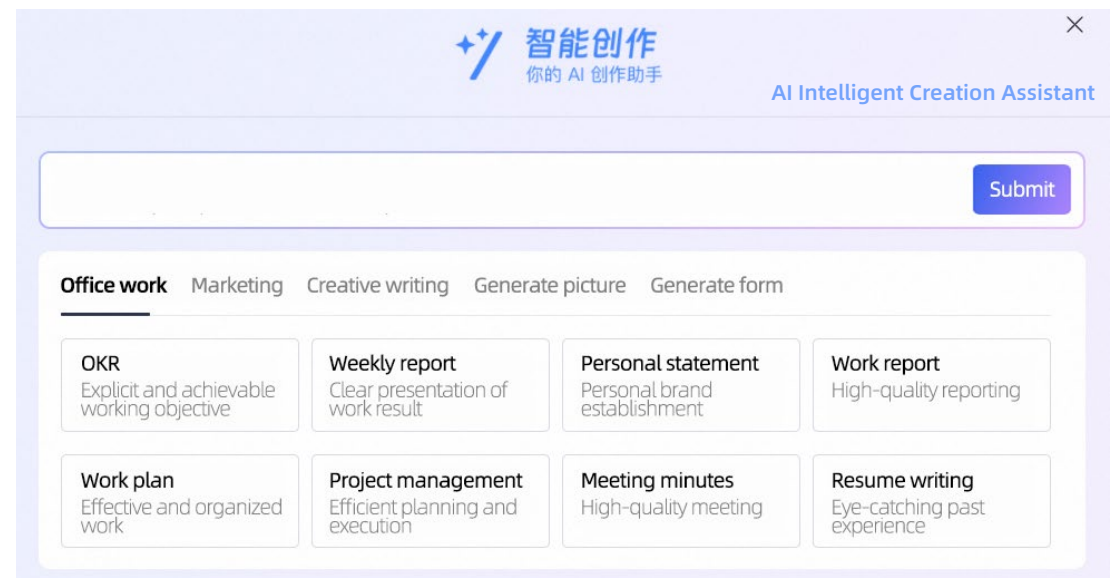
Safety and reliability are essential to guarantee digital transformation. DingTalk attaches great importance to the information security of the enterprises on its platform and continues to invest in security technologies and mechanism design. DingTalk has obtained over 15 security compliance qualifications, including Level III network security protection certification from the Ministry of Public Security, certification by the ISO 20000 information service management system, certification by the ISO 27001 information security management system, and enterprise-level SaaS certification of trusted cloud, making it one of the most authoritative and compliant enterprise

office collaboration products in China. DingTalk has also obtained the security audit reports of SOC2 TYPE II and SOC3, with a focus on security, confidentiality, and privacy, issued by PricewaterhouseCoopers International Limited (PwC). In November 2022, DingTalk obtained the Excellence Level Security Certificate for Office Instant Communication Software of the "Foundation Program" of CAICT.

Over **3.8 million**
Number of developers in DingTalk ecosystem

Over **5 million**
"Low Code" software developed by DingTalk

NaNational Public Service Demonstration Platform for Small and Medium Enterprises
National Public Service Demonstration Platform
DingTalk is awarded the "2022 National Public Service Demonstration Platform for Small and Medium Enterprises"



Ding Talk launches AI Intelligent Creation Assistant

KAKA Intelligent Manufacturing - a "small, fast, light and accurate" solution

DingTalk, in collaboration with its ecosystem partner Anekaka, has launched a solution called Kaka Intelligent Manufacturing based on the DingTalk low-code platform Yida for manufacturing enterprises. With the help of DingTalk's application Intelligent Manufacturing Ding, KAKA Intelligent Manufacturing focuses on core functions such as orders, scheduling, materials, production, quality inspection, and equipment in manufacturing factories while solving problems such as difficulty in data statistics, opaque processes, and data silos in manufacturing management and production processes. With an aim to achieve visualized and transparent data, KAKA Intelligent Manufacturing has assisted factories in shortening production cycles by 35%, reducing defective rates and costs by 25%, improving employee productivity by over 20%, and tripling the efficiency of production data aggregation and analysis.



Digital business skills training

For their digital transformation, MSMEs require not only tools but also workers who can make the best use of digital tools and entrepreneurs with a digital management mindset. In addition to providing free e-commerce courses for our e-commerce platform-settled MSMEs, Alibaba has established a "Cloud Class" to provide more enterprises with a learning platform for internal digitization and solve the problem of talent development under digital operations and management. For MSMEs in underdeveloped areas and regions worldwide, Alibaba also offers specialized offline courses to support innovations and entrepreneurship.



Digital business skills training for MSMEs



Improving digital skills for e-commerce practitioners

Alibaba provides free official courses for MSMEs to get started and grow in e-commerce, covering business demands such as store opening, operations, logistics, content, and marketing. We have launched a total of over 1,000 three-minute short-video courses. In FY2023, these courses attracted 17 million learners.



A digital learning platform for enterprises

Our online learning system Cloud Class has attracted approximately 1.27 million enterprises and organizations, from all trades and professions such as e-commerce, supermarkets, logistics, and autos, as well as various organizations including schools, hospitals, and social welfare institutions. In FY2023, more than 6 million people learned through "Cloud Class".

live streaming course training

Creating a favorable digital business environment with MSMEs

Alibaba's first step to serve MSMEs is to provide market opportunities and basic digital capabilities. However, the ability to assist MSMEs in achieving long-term healthy development also depends on proper governance of the digital business ecosystem. In FY2023, Alibaba continued to reduce the operating costs of digital business while intensifying efforts to protect intellectual property rights and promote innovations in the platform ecosystem.

Reducing the operating costs of digital business

Intellectual property protection

Reducing the operating costs of digital business

We maintain a long-term approach and understand that platform operations can have a direct impact on the overall business ecosystem, thereby influencing various stakeholders within the ecosystem. Particularly in FY2023, when the macroeconomic environment presents significant challenges, we prioritize supporting cost reduction and efficiency improvement for MSMEs, taking measures covering areas like commodities, orders,

delivery, marketing, and data. During the COVID-19 pandemic, Alibaba took proactive exemptions from liabilities and zero-threshold reporting for logistics abnormalities and shortened the review time for proactive reporting by merchants from an average of 24 hours to instant approval. In FY2023, Alibaba provided exemption-from-liability protection for over 2.7 billion orders.

Alibaba pays attention to business challenges that affect new merchants on our platforms. In FY2023, by taking measures such as optimizing algorithms, enhancing service-oriented products including specialized support stations, and implementing special support plans, Alibaba provided new merchants with services more in line with their needs, lowering the relevant business thresholds.

Directly adopting cost reduction measures to reduce the operating cost of MSMEs

Entrepreneurship

A new form of paying deposits during the accounting period has been introduced to enable new sellers to sell products without paying deposits first. After a transaction is concluded, the system will dynamically evaluate how much deposits the seller needs to pay to properly protect consumer rights and interests.

Logistics

Reduce freight insurance prices. Since May 2021, Taobao has promoted a reduction in freight insurance prices for 7 million stores including a large number of individual businesses.

Marketing

Since June 2022, Taobao has made multiple marketing tools available to merchants for free, provided over 200 creative video templates, and allowed open access to multi-domain data asset insight products.

Operations

In terms of product management, order processing, and promotion setting, Alibaba has collaborated with 20 third-party tools commonly used by merchants. Alibaba has also allowed merchants to get free access to platform-based value-added tools such as "Three Treasures and One Voucher" and "Business Advisor" and implemented inclusive measures for cost reduction. In particular, "Business Advisor" has benefited over 3.4 million merchants.

Taobao launches a new phase of the "Million New Merchants Plan"

Taobao launches a new phase of the "Million New Merchants Plan" for merchants that settled on its platform between March 1 and March 31, 2023. In addition to exempting new merchants from paying deposits when opening stores, this plan grants newcomer traffic vouchers to assist them in jumpstarting their first transaction. Cainiao Guoguo also provides convenient door-to-door pickup services for merchants for their first transaction. For new merchants with no experience, this plan provides "butler-style" guidance services, such as 30-day business guidance by Xiaoe and a simplified version of the Qianniu workbench. For new merchants with certain business capabilities, this plan provides 90-day free access to service market tools. With the growth of their business, this plan provides different incentive benefits for merchants at different stages, including a free trial of the intelligent decision-making tool "Business Advisor" and live streaming traffic vouchers to assist them in continuing growth.



Taobao guides new merchants to smoothly start operating new stores



Intellectual property protection

Protecting intellectual property (IP) is critical to protect innovations. In FY2023, Alibaba continued to upgrade our IP protection framework, made use of digital technology to assist MSMEs in cultivating IP protection and compliance awareness, and collaborated with colleges and universities to educate new generation IP talents.

Continuously upgrading the IP protection framework

Alibaba is committed to protecting its own IP rights and the rights of MSMEs on Alibaba platforms. Alibaba acts on this commitment by building and continuously optimizing the soundest complaint system within the industry, and subdividing and improving multiple mechanisms, including the Alibaba Intellectual Property Protection Platform (IPP platform), based on the personalized demands of complainants. As of March 31, 2023, there have been over 650,000 IP rights holders registered on the IPP platform. With the increasing number of IP rights holders, Alibaba has continued to improve protection efficiency. In FY2023, over 98% of IP complaints were processed within 24 hours. In 2020, Alibaba launched the online IP right safeguarding program, Simp'Ali, which has witnessed more than 700 online accounts from MSMEs as of March 31, 2023. This plan not only provides simplified IP protection tools for MSMEs but also offers a quick and convenient approach to solicit suggestions from MSMEs. When MSMEs encounter IP protection issues, Alibaba will provide timely and considerate services through multiple forms such as outbound calls and emails.



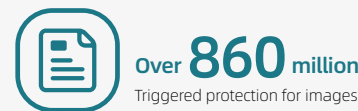
Protecting business innovations through technological innovations

To cope with more complex and emerging infringement scenarios, Alibaba continues to enhance capabilities in our fraud identification technologies. In FY2023, Alibaba achieved significant progress in technologies such as original image recognition, accurate photo matching, and image and short video watermarking. Through algorithmic learning of manual authentication experiences on trademark certificates, enterprise business licenses, and authorization letters and in conjunction with the imaging property of certificates and the abnormal trace features introduced by image forgery, Alibaba originated voucher authentication technologies to identify fraudulent behaviors such as voucher tampering and certificate forgery.



Alibaba Original Designs Protection Platform

Alibaba Original Designs Protection Platform⁴ provided a full-chain solution, including filing, right safeguarding, and authorizing, for original images, short videos, and creative designs launched by merchants. Using AI technology, the ODP platform indexed massive product contents across Alibaba platforms to facilitate efficient and accurate detection and quick removal of infringing content. Applying image and short video watermarking technology, Alibaba affixed watermarks on original images and short videos, allowing one-click right safeguarding in case of infringement. As of March 31, 2023, the ODP platform has triggered protection for over 860 million images and over 610,000 design manuscripts.



4 For details, please refer to <https://yc.alibaba.com/#/>



Enhancing IP protection capabilities and compliance awareness of merchants

Training and coaching represent another important preventive approach for IPR protection. By means of picture and text cases, short videos, live streaming, and other forms, Alibaba conveys the concept of legal and compliant business to merchants, cultivates an innovative atmosphere and guides merchants to fulfill their social responsibility of respecting and protecting IPR. In FY2023, Alibaba completed 95 pieces of knowledge products, involving geographical indications, similar trademarks, patent interpretations, Asian Games, World Cup, common cases, etc. Over 1.2 million merchants have watched and improved their understanding of IP protection through channels such as our compliant live-streaming platforms and rule columns.

In the previous year, Alibaba piloted an IP support program for original brand merchants in the women's apparel industry to provide participating merchants with customized IP right safeguarding solutions, one-on-one coaching for IP right safeguarding, as well as professional guidance on IP protection and brand knowledge systematization.

 Over **1,100**
Number of brands that joined AACA

 Over **180**
Protected GI-certified trademarks

Multi-party governance and talent cultivation

Alibaba Anti-Counterfeiting Alliance (AACA), which has been established for six years, is the world's first anti-counterfeiting alliance built upon an e-commerce platform. It provides a new model of multi-party governance to address the problems of counterfeits and infringements and has established extensive industry influence. As of March 31, 2023, more than 1,100 brands from 21 countries and regions have joined AACA.

The Alibaba Special Protection Plan for Geographical Indications has been initiated with the aim to work with industry associations and government departments in various regions to optimize the market environment for GI-certified products. As of March 31, 2023, Alibaba has protected over 180 GI-certified trademarks and handled over 5,000 GI-infringing commodities. Attaching great importance to the cultivation of young IP talents, Alibaba engages in various forms of cooperation with colleges and universities.

IP Young Scholars Program

On World Intellectual Property Day on April 26, 2022, Alibaba joined hands with the Law School of Renmin University of China to launch the "IP Young Scholars Program". Fudan University, China University of Political Science and Law, Zhejiang University, and other well-known colleges and universities are the first batch of members.

Furthermore, Alibaba has collaborated with Tsinghua University to establish an IP talent scholarship program and jointly launch the first "Network Economy and Intellectual Property Research" call-for-papers. Alibaba has also joined hands with the Law School of Fudan University to design and develop a "Practical Course for Intellectual Property Protection on E-commerce Platforms", with an aim to encourage college students to study and research IP issues in the digital economy.

Assisting in imparting new knowledge	Assisting in scholarly research	Assisting in practice
Inviting senior IP experts to deliver practical courses on campus, so that students can better understand cutting-edge issues in the IP field and combine theoretical knowledge with practical situations	Sharing typical hot issues, difficulties, and trends in the IP field with academia, and supporting research and theoretical construction in the IP field	By leveraging platform-based advantages, we aim to expand social practice channels for IP talents and help industries cultivate more versatile and innovative young IP talents



Since 2017, Levi Strauss & Co. (Levi's) has been an active member of the AACA. AACA has always been a critical organization central in bringing together rights holders, IP enforcement agencies, and key IP governmental stakeholders, with the common goal of developing solutions and innovative collaborations to combat counterfeiting and IP infringements across all Alibaba platforms globally. We are grateful for the continued cooperation and ongoing support provided by the Alibaba Group in helping us combat these illicit goods that impact our brands. We look forward to our continued cooperation and close partnership with both Alibaba and the AACA as we work collectively to combat counterfeit activities while advocating to ensure respect for intellectual property rights.

-Zach Toczyński, Sr. Director of Global Brand Protection at Levi Strauss & Co.





Creating and enabling inclusive employment

MSMEs are the main drivers of jobs, leading to the large-scale creation of more employment opportunities in society. In this era of digital transformation, Alibaba strongly supports the regularization and standardization of new forms of employment, as we strive to help

generate high-quality job opportunities, and actively foster inclusive employment as a way to fulfill our social responsibility and build the human capital foundation for a more sustainable digital transformation.

Enabling large-scale employment opportunities

Improving safety and security for flexible employment

Creating and promoting high-quality employment

Promoting inclusive employment

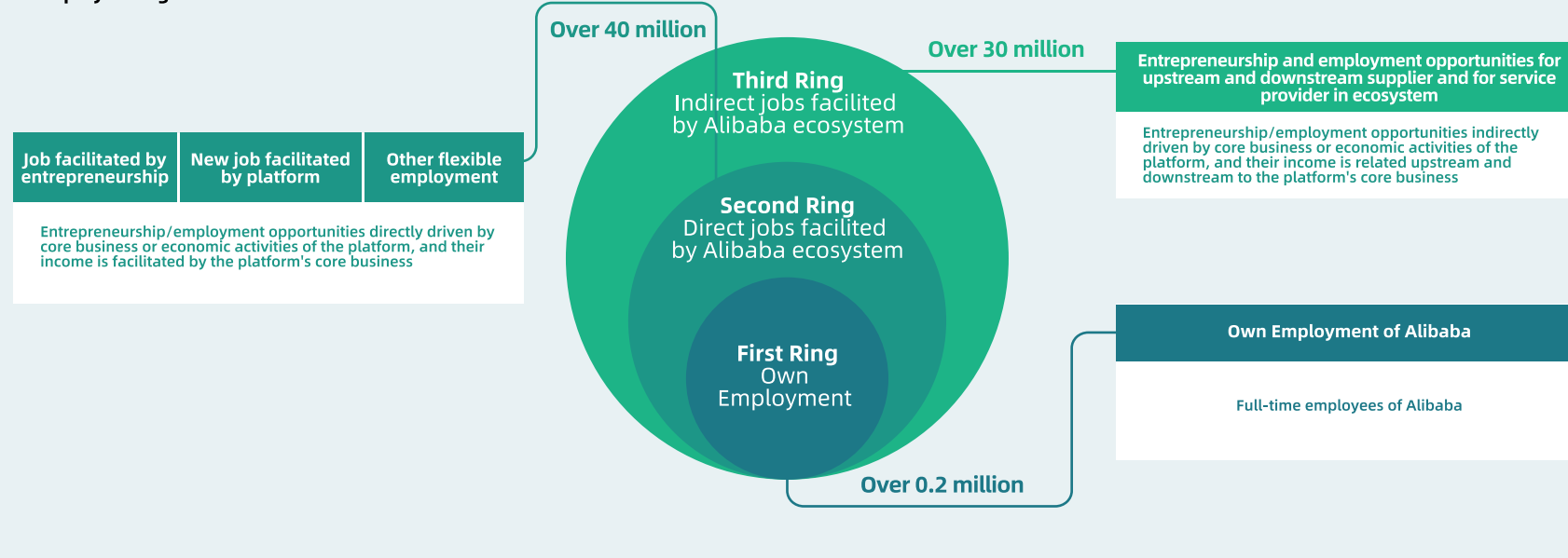


Enabling large-scale employment opportunities

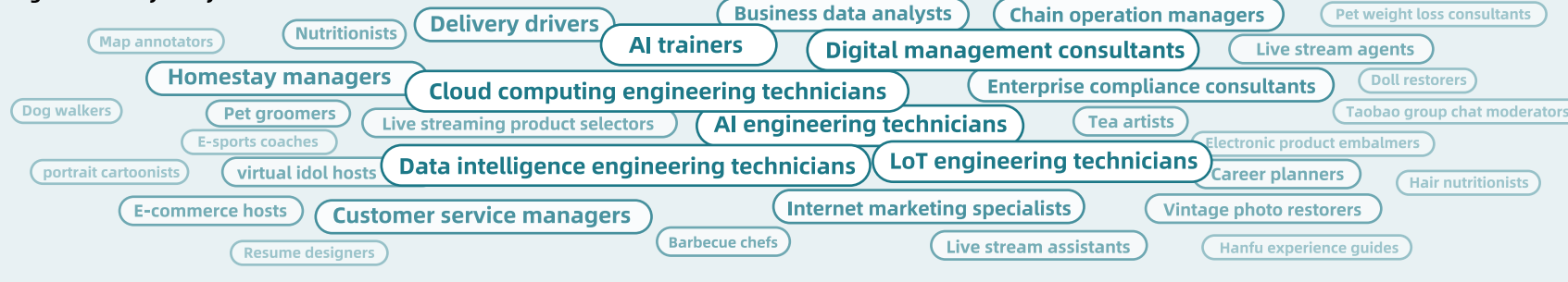
As for employment assistance, our digital economy ecosystem can be represented by a "three-ring" model. The first ring represents the direct jobs that we create. The second ring represents the entrepreneurship and employment opportunities that directly emerge from our platform's main businesses or economic activities, whose income is generated through activities on our platforms. Typical examples include direct job opportunities created by MSME merchants selling goods or services on our platforms as well as jobs in new forms of employment that emerge from the platform economy such as delivery riders, ride-hailing drivers, and livestream hosts. The third ring encompasses entrepreneurship and jobs indirectly driven by the platform's core businesses or economic activities, where income is derived from the upstream or downstream relationships vis-à-vis the platform's main business. For instance, job opportunities from upstream and downstream suppliers of our core platform businesses and from suppliers serving new forms of employment.

According to the latest estimations by the School of Labor and Human Resources at Renmin University of China, in 2022, our entire ecosystem facilitated over 70 million employment opportunities, with over 40 million within the 2nd ring that are jobs directly connected to our platforms⁵.

Alibaba "three-ring" model of employment generated



New employment forms in Alibaba's digital economy ecosystem



⁵ From Driving Employment to Improving Employment Quality—Report on the Employment Value of Digital Platforms in the Wave of Digital and Real Integration
《从带动就业到推高就业质量——数实融合浪潮中的数字平台就业价值报告》



Improving safety and security for flexible employment

The digital platform economy has generated more flexible forms of employment, reduced the barriers to entry for many jobs, and served as a labor reservoir that helps to stabilize the labor market. This platform ecosystem has created various forms of flexible employment, with delivery riders being the largest group. In FY2023, the number of active delivery riders on the Ele.me platform totaled 3.307 million, most of whom are so-called "crowdsourced delivery riders" who are flexibly employed, while a small number of whom were "full-time delivery riders" contracted with logistics service providers. We took steps to comprehensively enhance employment security in three perspectives - labor rights and interests, occupational safety, and providing care and development.

Labor rights and interests

Labor safety

Career care and development

Labor rights and interests

To protect labor rights and interests, Alibaba provides comprehensive protection based on systems and insurance.

In terms of systems, Alibaba has launched the Rider Rights and Interests Protection System for crowdsourced delivery riders and developed the Delivery Services Specifications of Logistics Service Providers for logistics service providers who employ and manage full-time delivery riders to develop an improved and transparent salary system, clarify the rules for subsidies for special scenarios, and stipulate the minimum wage. Additionally, this system requires providing crowdsourced delivery riders with an

hourly wage higher than the minimum hourly wage for local part-time labor and requires all logistics service providers to provide full-time delivery riders with a wage no lower than the local minimum wage standard.

In terms of insurance, Alibaba has collaborated with commercial insurance companies to develop an insurance scheme suitable for delivery riders, improving third-party liability insurance and other guarantees. As of March 31, 2023, the required enrollment rate for business insurance is 100% for delivery riders. In FY2023, Alibaba continued to improve and extend the commercial insurance and

claims settlement process to more risk scenarios, piloted occupational injury protection for workers engaged in new employment forms in seven provinces and cities, including Beijing and Shanghai, and successfully launched dual insurance including both occupational injury protection and commercial insurance in the pilot areas.



Ele.me conducts safety training for riders regularly

Labor safety

For occupational safety, Alibaba has optimized the systems, training, hardware equipment, and intelligent scheduling to raise safety awareness and prevent risks.

In terms of systems, Alibaba has implemented related party responsibilities.

Platform: Alibaba has signed a work safety responsibility document with all internal employees.

Logistics service providers: Alibaba has signed a safety management agreement with all logistics service providers and organized them to establish a safety officer system for unified coordination and supervision of safety management.

Riders: Alibaba has signed a safety notice and commitment document with all delivery riders, established a comprehensive compliance and safety evaluation mechanism for delivery riders, and digitizes and displays the personal safety risk level of delivery riders on the rider APP to urge them to fulfill their personal safety responsibilities.

In terms of training, Alibaba has established a safety training system to promote a culture of safety. A safety training system for delivery riders throughout the entire lifecycle of their services has been established, covering legal and safety knowledge including fire protection, transportation, public security regulations, and food safety. Alibaba advocates a culture of safety across our ecosystem, combining National Safe Production Month, Fire Protection Month, and National Transportation Day with our "March for Safety" year-round campaign.

In terms of scheduling optimization, we always pay attention to the delivery conditions. We adopt strategies, such as coping with severe weather, pausing orders after risk estimation, managing timelines, and warning anomalies, to avoid delivery difficulties caused by severe weather, complex terrain, and worry of overtime. We also implement fatigue prevention strategies to guarantee the right to rest of delivery riders.

- **Coping with severe weather:** We will send a prompt for bad weather, appropriately extend the delivery time, and adjust penalty rules to impose no penalty for missing the delivery window or order cancellation in case of bad weather.
- **Pausing orders after risk estimation:** We will comprehensively assess the delivery safety factor under the current conditions with reference to historical road traffic accidents, historical meteorological conditions, recent fatigue level of delivery riders, as well as data such as real-time weather, working hours of delivery riders, and riding speed, and trigger safety protection such as pausing the receipt of orders when the safety factor is lower than the threshold value.
- **Managing timeline:** Under the conditions of short distances, complex terrain, or special traffic condition, the requirement of shortest delivery time upon delivery riders will not be applied, so as to avoid safety hazards caused by excessive pursuit of speed.
- **Warning anomalies:** We automatically match flexible delivery time for delivery riders in complex delivery scenarios, such as rainstorms, sandstorms,

temporary road control, slow food supply of merchants, and failure to contact customers. Our system automatically trigger a protection scheme that extends the delivery time to ensure the safety of delivery riders when the scheduling system senses excessive pressure on local transportation capacities.

- **Guaranteeing rest time of delivery riders:** Ele.me strictly manages and supervises the order-taking (working) time of delivery riders. The system will give a fatigue prompt when delivery riders have worked continuously for more than 4 hours to fully guarantee their rest time.



Smart helmet protect delivery riders' safety



Career care and development

In terms of career care and development, we focus on the practical demands for delivery riders at work, actively communicate with them, provide them with care and guarantee, and assist them in achieving growth and a sense of worth by various means.

Communication mechanism

Public notice and feedback mechanism: In March 2023, we officially launched the Rider Agreement Rules Center, which consists of four modules - rider agreement, platform rules, delivery service rules, and public notice, which effectively protects the rights of riders to be informed of the rules.

within the APP. For specific issues, riders can also submit work order in the APP. Regarding reports from riders on issues such as unpaid wages, traffic accidents, and public security incidents, we require a response and resolution within 48 hours, and such incidents are factors in the performance evaluation of management personnel.

24/7 service hotline: We have established a dedicated "24/7" telephone service hotline for delivery riders. Delivery riders can directly call the national service hotline to provide feedback. Additionally, the rider dispatching APP has an online consultation feature where riders can contact customer service

Hosting rider roundtable meetings: To better hear from delivery riders, in FY2023, Ele.me organized 187 rider roundtable meetings to solicit feedbacks from riders on the performance assessment system, incentive and accountability mechanisms, benefits, and career development.



Ele.me hosts Rider Roundtable Meetings to hear from delivery riders



In FY2023, as commended by ACFTU, Shanghai Orstarcity Station was awarded the "National Worker Pioneer", and rider Wenqiang Zhang was awarded the "National May 1 Labor Medal". Our delivery riders have also been awarded 17 provincial honors and over 10 city-level honors.

Career care

1-square meter care station: All-China Federation of Trade Unions (ACFTU) has signed a contract with Ele.me to build 1-square meter care stations to meet the needs of outdoor workers for rest, replenishment, restrooms, etc. As of March 31, 2023, more than 100,000 stations across China have been open to Ele.me delivery riders.

Emergency protection kits: In 2022, during the COVID-19 pandemic, Ele.me distributed more than 200,000 emergency protection kits to delivery riders across China, containing antigen test kits, masks, disinfectants and other pandemic prevention and control supplies, and we continuously upgrade our "contactless delivery" service to help protect both riders and customers.

Blue Knight Fund: With the Blue Knight Fund (Blue Knight refers to Ele.me delivery riders), we extend care to rider's families, providing up to RMB50,000 for critical illness assistance as well as an aid program for the education of rider's family members. As of March 31, 2023, we have helped 293 families in coping with critical illnesses, assisted 22 rider's family members in successfully completing their education, with relief funds provided totaling RMB 11.29 million.

Career identity and advancement

To cultivate the professional identity of delivery riders, the Ele.me platform launched an award system on September 30, 2022, involving three categories of exhibitions - career achievements, social recognition, and historical record. As of March 31, 2023, a total of 758,682 delivery riders have been recognized with awards.

Women's Committee: In September 2022, Alibaba established the Ele.me (Beijing) Women's Committee to better serve female delivery riders. The Women's Committee actively cooperates with the Chinese Red Cross Foundation, local women's federations, as well as other organizations to safeguard welfare for female delivery riders, including distributing hygiene, health, and food resources to female delivery riders in Beijing and providing professional advice on issues including children's education.

In FY2023, we held rider skills competitions and provided promotion and development training, providing delivery riders with opportunities to be promoted to station managers or team heads. We also opened positions on training, merchant expansion, etc. to provide transfer channels for delivery riders.



Creating and promoting high-quality employment

The digital economy is conducive to employment expansion and income increase and inspires more laborers to independently start businesses and select jobs through new employment forms. As of March 31, 2023, the number of labeled digital professions in China has reached 97, including AI trainers, blockchain application operators, and other knowledge-intensive positions.

In order to further improve the quality and quantity of digital talents, we are actively developing training platforms with targeted initiatives, aiming to assist more students in finding high-quality employment opportunities in the digital era.



2.3 million

Number of digital manager certifications obtained on learning platform



Over 15,000

Number of students who got certification of data analyst provided by LingYang



56,000

Number of certificates provided by "Orange Calss"

DingTalk supports the career development of digital managers

DingTalk has significantly reduced the cost of digital transformation for MSMEs based on its "PaaS platform + low code" capabilities. This has in turn created burgeoning demand for digital managers. This role has emerged as a critical new profession and was officially included in the list of nationally recognized new professions in 2019. In March 2020, the China Employment Training Technical Instruction Centre (CETTIC) under the Ministry of Human Resources and Social Security (MHRSS) joined hands with DingTalk in launching an online learning platform for new professions, focusing on digital resource training. In 2021, the National Standards for Vocational and Technical Skills of Digital Managers (2021 Edition) co-authored by DingTalk were released. In 2022, the new 3.0 version of the online learning platform was launched with online training visualized. As of March 31, 2023, the learning platform has registered 2.3 million digital management certificates obtained (person-times).

Shan Jiang, digital manager

In 2019, during her junior year at Zhejiang Business Vocational and Technical College, Shan Jiang obtained the Digital Management certification (intermediate). After graduating in 2020, she became a digital deployment expert and a certified instructor in low-code development. She is responsible for enterprise organizational structure building, data decision analysis, and online linkage to connect upstream and downstream operations. To date, she has served hundreds of companies in their digital transformation. Within three years, her monthly income has quadrupled from RMB5,000 to RMB20,000.

"I have turned a job into a career, and I look forward to the future with DingTalk, making progress happen."

-Shan Jiang

Lingyang focuses on talent cultivation in the field of data intelligence

Lingyang is a drafting unit of the national standard for "Business Data Analysts" as well as a pioneer of the national standard for "AI Trainers". Founded in 2015, Lingyang School (formerly known as "Data School") focuses on building talents in the field of data intelligence and assists enterprises in cultivating inter-disciplinary talents that are "proficient in data, technology, and business" through the training program of "linking theory with practice" and the platform of "integrating learning, practice and evaluation". In FY2023, Lingyang provided certification service of data analyst for over 15,000 students.

In FY2023, Lingyang School, along with the National Rural Revitalization Administration, the Ministry of Education, the Ministry of Human Resources and Social Security and other ministries, jointly launched the "Dewdrop Project+"⁶ to provide customized digital ability training services. The project has been undertaken in Hebei, Sichuan and Anhui provinces, and initiated cooperation with Hong Kong Vocational Training Council to train data talents and promote high-quality employment in the Guangdong-Hong Kong-Macao Greater Bay Area.

"Data analytics capability will become increasingly important in the future, and, just like the basic ability to use Office software, will become a worker's basic skillset."

-Hanlin Si, Lingyang data analyst student

"Orange Class"— an inclusive platform for vocational skills education

"Orange Class" platform, which mainly serves students in vocational schools, aims to improve their vocational skills and assist in high-quality employment. Orange Class platform offers more than 200 courses to the public for free. We also collaborate with Hangzhou Science and Technology Vocational and Technical College and Lishui Vocational and Technical College to build industry colleges. We are trying to explore the "Zhejiang Model" of digital talent training through school-enterprise cooperation.

As of March 31, 2023, the platform has benefited a total of 86,000 trainees, assisted 56,000 trainees in obtaining certificates, and received a total of 33,000 resumes. To better assist students who have completed training in obtaining employment, we have held 105 online "mutual choice" sessions, attracting 599 participating colleges and universities.

"As a teacher from a vocational school, I have witnessed over 200 of my students using Orange Class. The courses have not only helped me raise my own teaching level, but also enabled my students to get cutting-edge knowledge in the industry."

-Jing Tian, Director of the E-commerce Teaching and Research Office, Henan Technician Institution

⁶ "Dewdrop Project+" is an employment promotion initiative, aiming at providing educational training and employment assistance to graduates from families which have just shaken off poverty or may fall back into poverty.

Promoting inclusive employment

The lower barriers and wider reach of digital technology applications have significantly promoted inclusive employment and also made more job opportunities readily accessible, and this can be seen in terms of gender, educational background, and geography. In 2022, the number of women employed through digital platforms in China exceeded 38 million⁷. For example, 80%⁸ of Taobao live streamers are female .

People with disabilities account for 16%⁹ of the world population. In China alone, there are 85 million¹⁰ people with disabilities. Alibaba has continuously worked hard on accessibility and inclusive employment for people with disabilities. In addition to directly employing 1,450 people with disabilities as full-time employees, Alibaba's various platforms and digital employment bases have supported hundreds of thousands of people with disabilities to start businesses, or become e-commerce practitioners, customer service specialists, delivery riders, station managers, data annotators, etc. Notably, nearly 80% of Taobao merchants with disabilities come from rural areas¹¹.

"Grasping the lifeline with just two fingers, I aspire to become the pillar of the family"

Tao Wang, a man suffering from brain dysfunction, finds it difficult to get a suitable job. He signed up for participating in the "Cloud Customer Service Green Channel for the Disabled" co-launched by Alibaba and China Disabled Persons' Federation (CDPF). Following the training, he has become a qualified cloud customer service specialist and secured a stable source of income.



Alibaba cloud customer service specialist: Wang Tao

"In a world without sound, my focus lies on the food itself"

Nwua Li, a girl from Shanxi province with hearing impairment, is a baker at Freshippo. By virtue of her sensitive sense of smell and taste, she has constantly refined the pastry-making process, bringing sweetness and love to the world through pastries.



Li Nwua

Enabling autistic youths to work as delivery couriers

Meirong Chen, a 50-year-old mother from Quanzhou, along with an employment tutor from the Beidouxing Autism Children's Training Center, runs a Cainiao Post with 15 youths with autism. Through hands-on guidance in sorting, registration, and warehousing, these youths at the station gradually acquire the ability to independently deliver packages. They accurately deliver packages by matching the door numbers, taking photos, and greeting recipients with a cheerful "Hello, here's your package".

After over a year of operation, the post has witnessed changes and growth of the autistic youths. Xiao Hui, who used to be unwilling to communicate and required someone to accompany him everywhere, is now capable of commuting to work independently. He has become more outgoing and has learned to respond to others' questions.

While Chen and the youths work diligently at the Cainiao Post, they also take the opportunity to raise awareness about autism in the community. The initial curiosity and judgment from community residents have gradually transformed into acceptance and inclusion. Chen, together with the autistic youths, is moving towards a better life.

"I have never aimed to earn money. What I pursue is acceptance and inclusion. I will continue to manage the post well and involve more autistic youths in social activities, helping them find a path to self-reliance."

- Meirong Chen



Chen Meirong and the youths from the "Star Youth" Cainiao post

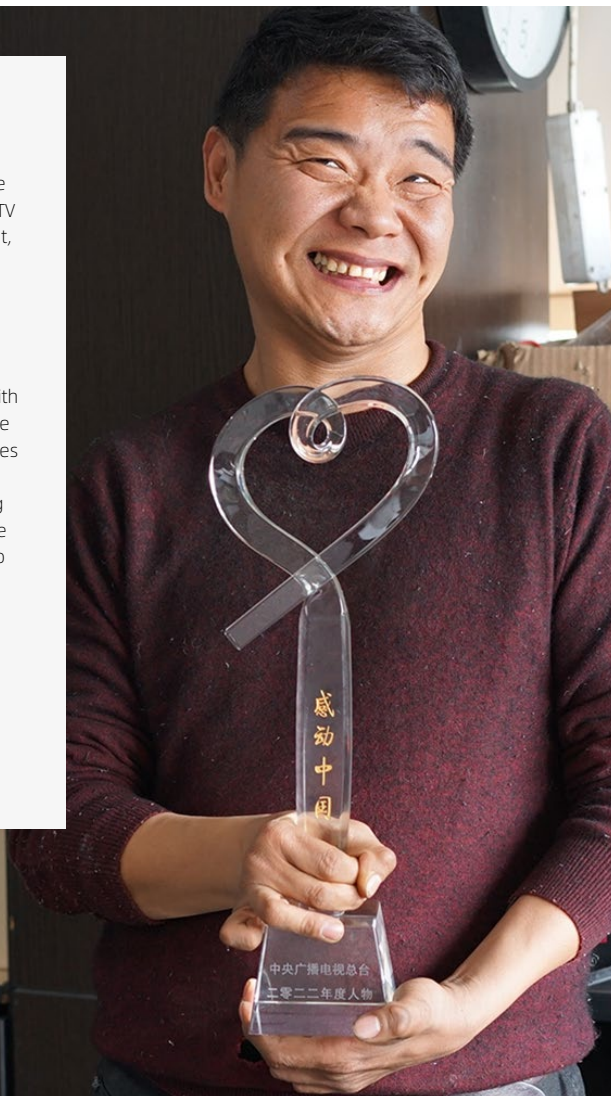


Touching China Award winner Hong Lu and his life with Taobao

In 2022, Hong Lu, a man suffering from cerebellar nerve dysfunction, was awarded the Person of the Year of CCTV Touching China. After repeated setbacks in employment, he spotted Taobao in 2007. By intensively studying photography and Photoshop skills, he opened the first store engaging in making electronic wedding photo albums on Taobao. His business grew by leaps and bounds and in 2017, he opened his own photo album factory. Well aware of the difficulties faced by people with disabilities in the job market, he has been striving to hire more people with disabilities and has hired 35 employees with disabilities among a total of 48 employees. In the past two years, Lu has also been working on upgrading production equipment in his factory to make them more accessible for workers with disabilities. Through Taobao and Tmall, he sells to customers worldwide.

"Others treat me as a businessman first instead of seeing my disability when communicating online. Taobao has changed my destiny and helped me realize my value."

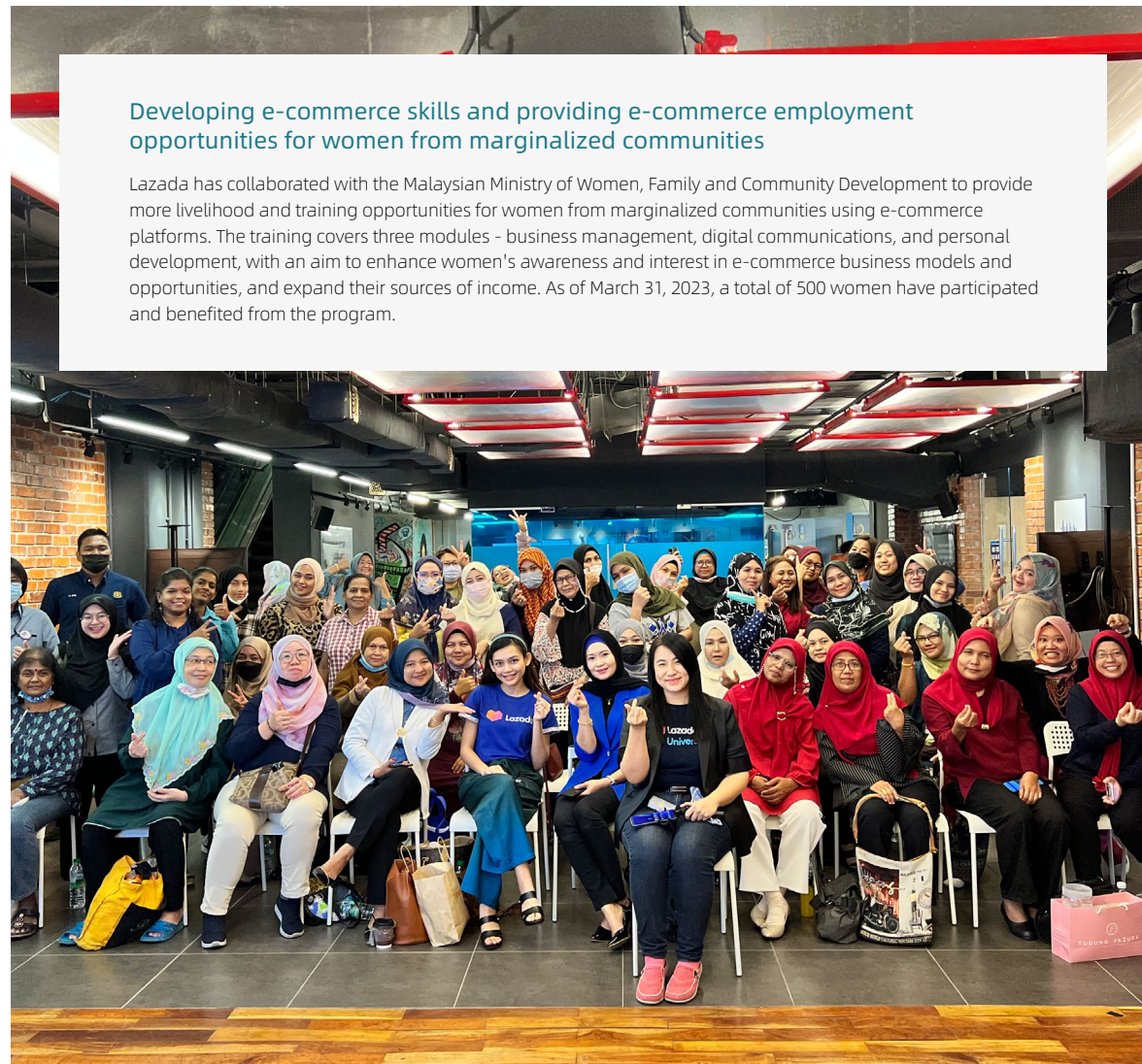
- Lu Hong



Touching China award winner Lu Hong and his Life with Taobao

Developing e-commerce skills and providing e-commerce employment opportunities for women from marginalized communities

Lazada has collaborated with the Malaysian Ministry of Women, Family and Community Development to provide more livelihood and training opportunities for women from marginalized communities using e-commerce platforms. The training covers three modules - business management, digital communications, and personal development, with an aim to enhance women's awareness and interest in e-commerce business models and opportunities, and expand their sources of income. As of March 31, 2023, a total of 500 women have participated and benefited from the program.



Lazada provides e-commerce business employment training for women from marginalized communities

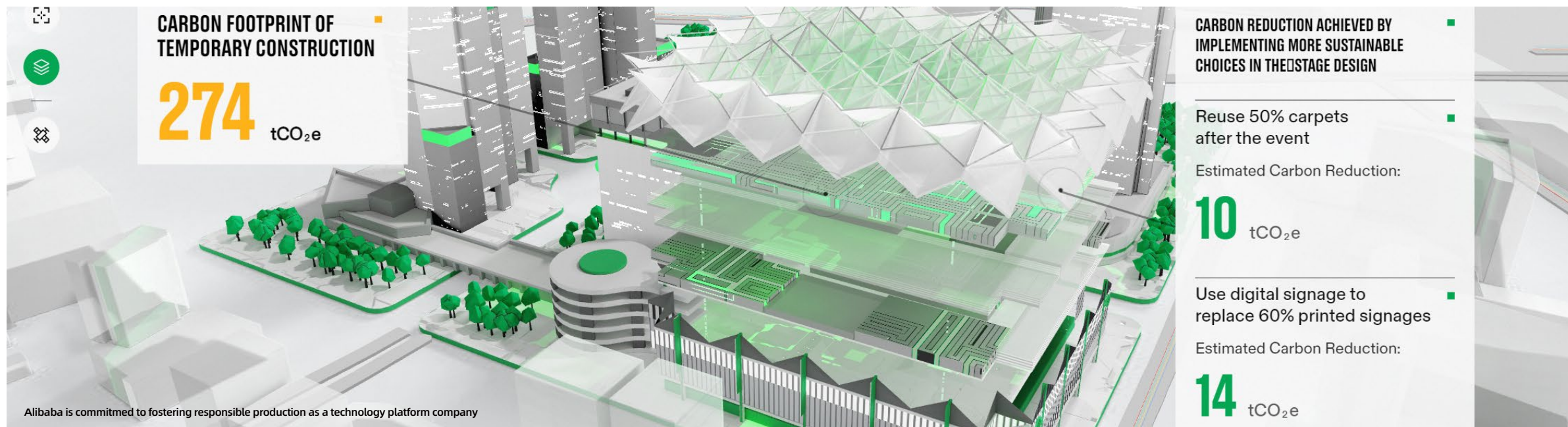


Promoting responsible production

As a platform company, Alibaba believes that our commitment to fostering responsible production hinges on two crucial factors. First, Alibaba should promote suppliers to fulfill their social responsibilities in managing their supply chain. Second, as a digital technology-driven platform company, we can drive a wider range of MSMEs to engage in responsible production through technology products, platform mechanisms, and services solutions.

Upgrading ESG management of suppliers

Platform driving enterprises to practice responsible production





Upgrading ESG management of suppliers

Integrity, honesty, and fostering a sustainable and healthy business environment have always been at the core of our supply chain management. This aligns with the principles of ESG development. After formally adopting ESG as a cornerstone strategy, in FY2022, we issued the Alibaba Supplier ESG Code of Conduct. Moving forward in FY2023, we are gradually integrating ESG concepts into our supply chain management to promote common sustainable development.

Creating and maintaining a transparent, fair, honest, and sustainable business environment

Facilitating a comprehensive, closed-loop, and two-way supplier ESG management system

Creating and maintaining a transparent, fair, honest, and sustainable business environment

Based on the principles of fairness and transparency, Alibaba engages in supply chain management and cooperates with suppliers to build and maintain a healthy business environment that is transparent,

fair, honest, and sustainable. We have developed systematic supplier management standards covering the entire lifecycle of suppliers, including certification, recommendation and allocation,

performance, evaluation, grading and accountability, and dismissal and replacement, and established a corresponding auditing mechanism to continuously optimize the management system.

Establishing systems and rules

We have issued and implemented a series of supplier management policies to guide our suppliers.

Alibaba has always adhered to an attitude of zero tolerance for integrity violations and has established a mature management system and mode. In the process of supplier selection and admittance, in order to avoid conflicts of interest, we have established clear standards on "the relationship between suppliers and Alibaba employees" and "relationships between suppliers," covering the types of relationships, determination criteria, and operational requirements. On the supplier side, we require vendors to sign the Honesty and Integrity Agreement and make commitments on relevant compliance, ethical, and other behavioral requirements in the certification and admission process. On the employee side, we require employees to comply with the Alibaba Group Code of Business Conduct when conducting business with external partners, not to solicit or accept bribes, not to solicit or receive gifts, not to solicit or accept entertainment and hospitality, not to borrow money from external partners, etc. Alibaba has publicized a dedicated hotline to accept reports on any illegal, non-compliant, or fraudulent issues, or suspicious behaviors of Alibaba employees.



Alibaba endeavors to build fair and transparent systems and rules



Integrating the principles of fairness and transparency into operations

Internally, Alibaba has established a digital system for supplier management to make the overall process visible and traceable. Adhering to the principles of fairness and transparency, we have unified standards to manage and evaluate suppliers, ensuring that they have equal access to business opportunities. In the process of establishing cooperation, we follow the supplier certification requirements as well as the bidding selection criteria. During the engagement period, we emphasize fair distribution and positive guidance. Upon the completion of projects, Alibaba scores supplier performance based on the supplier evaluation criteria and keep all records in the system. The submitted performance records will serve as an important index for supplier grading as well as realizing a tiered management system for suppliers. High-star suppliers will have the opportunity to be promoted to strategic suppliers.

Externally, we use a unified supplier portal and mobile version to show suppliers the engagement status of the entire chain, including selection, quotations, orders, and payment. We also promptly release announcements on business cooperation, management requirements, and integrity and compliance. Alibaba will also collect continuous and timely feedback on various aspects of business cooperation management, cooperation efficiency, and other areas through dedicated Q&A hotlines, annual supplier surveys, and direct emails to senior management.

Establishing a supervision and control mechanism

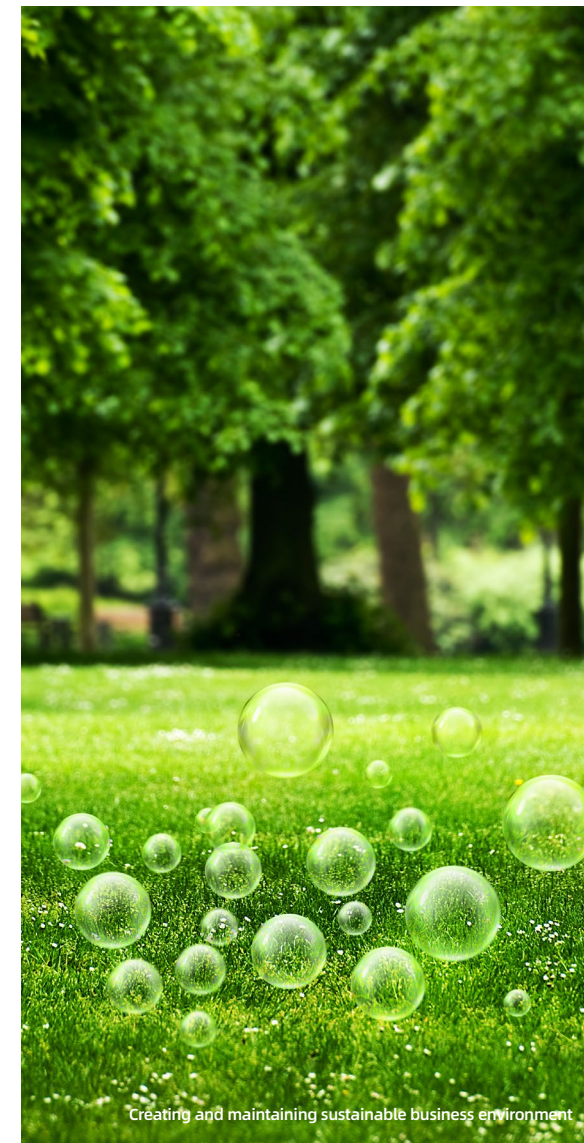
Alibaba established a control mechanism on pre-project prevention and control, in-process supervision, and post inspection, so as to reduce compliance risks and eliminate potential for actual asset losses. We perform risk identification and audits throughout the procurement process, including risk audits of supplier certifications, risk scanning during sourcing, performance evaluation, and periodic unannounced inspections and audits. In FY2023, the pass rate of special unannounced inspections for suppliers reached 94%. For suppliers failing to pass audits, Alibaba offers clear rectification suggestions and a resolution plan. Alibaba has also provided training to suppliers on typical issues identified in the unannounced inspections.

Non-compliance regulations

Alibaba has established the system of Common Supplier Breaches of Contracts & Rules and Their Level Determination, stipulating unified and clear standards on the breaches of contracts and rules as well as their level determination and specifying standardized disposal measures, such as "freezing" and "removal". Any scenario where an integrity incident occurs will be seriously dealt with in accordance to the Blacklist Management Requirements for Suppliers of Alibaba Group Procurement Platform.

List of Supplier Policies

- Rules and Regulations for Supplier Management of Alibaba Group Procurement Guidelines
- Supplier Certification and Evaluation Schematic Diagram
- Operational Guidelines for Supplier Operation, Qualification and Performance Compliance Risk Management of Group Procurement Department
- Supplier Subcontracting Management Specifications of Alibaba Group Procurement Department
- Operational Guide for Blacklist Supplier Handling of Alibaba Group Procurement Platform
- Star Suppliers Selection and Strategic Supplier Pilot Plan of Alibaba Group Procurement Department
- Supplier Label Management Specifications of Alibaba Group Procurement Department
- Honesty and Integrity Agreement
- Common Supplier Breach and Violation Behaviors and Level Determination Policy



Creating and maintaining sustainable business environment

Facilitating a comprehensive, closed-loop, and two-way supplier ESG management system

In 2022, Alibaba released the Alibaba Supplier ESG Code of Conduct (hereinafter referred to as the Code). Alibaba has deepened and widened the ESG management of suppliers in FY2023. As of March 31, 2023, over 14,000 suppliers have signed the Code and the proportion of contracted suppliers increased by 10% year-over-year. Meanwhile, Alibaba has gradually promoted the identification of material issues in different business scenarios, and motivated supplier partners to participate in and practice sustainable development together through promotion, establishing standards and positive guidance.

Improving the ESG risk identification and management rules for the supply chain

We have established a special management committee for ESG optimization of our supply chain, whose responsibilities are to set management strategies and annual goals, evaluate and determine material issues and priorities in each supply chain scenario. In FY2023, we first formulated and issued detailed rules for certain scenarios, such as the Standards for Prohibited Use of High Hazard Products and Processes in Engineering Procurement and the Executive Standards and Penalty Mechanism for Suppliers in Flexible Employment.

Guiding and supporting supplier ESG work

We take ESG contributions of our suppliers as an important factor in strategic suppliers' selection, and give preference in engagement share, scope, and length to encourage those with outstanding performance. We have also piloted the declaration, review, and audit of supplier ESG behaviors. In FY2023, Alibaba's audit covered 28% of our suppliers¹². We promptly notify suppliers to rectify any issues identified to be further optimized and improved. In terms of supplier environment management, Alibaba has gradually promoted green labeling of goods by establishing standards and encouraging supplier report. In addition, we have refined the requirements for procurement of green goods and green engineering products and materials. Based on national industry standards, materials and products with high environmental hazards are completely prohibited.

In addition, to raise awareness of supplier ESG management and to collectively promote ESG practices, we have established a website for the Alibaba Supplier ESG Cooperation Program to raise suppliers' awareness of ESG management. On this website, suppliers can inquire about ESG management rules, the application for the Code and the feedbacks of the evaluation results, the periodical tracking of the rectification status, the access to best practices and training materials, and much more.

Flexible Employee Management

Alibaba firmly believes that whether in our own operations or our supply chain ecosystem, people are the most valuable assets.

In terms of flexible employment, Alibaba requires suppliers to strictly comply with the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, as well as other laws and regulations, and to resolutely implement our labor standards and employment standards, including Alibaba Group Flexible Employment Safety Management and Code of Conduct and Alibaba Group Flexible Employment Workplace Safety Management Standards. Alibaba manages and supervises suppliers with flexible employment through the following three ways:

- Performing regular audits to suppliers with flexible employment, covering contract signing and subcontracting, social insurance coverage, salary payment, etc., ensuring compliant execution of employment standards;
- Establishing a digital communication platform for flexible employees to deliver key information to them, ensuring that Alibaba's employment standards are readily accessible to all of them, and launching a regulatory channel to receive feedbacks on non-compliant employment;
- Inviting an independent third-party company for annual inspections of suppliers' workplaces and ensuring the health and safety of flexible employees.

In FY2023, Alibaba extended coverage of the employee and supplier rights auditing program, and explicitly required suppliers failing flexible employee management to make rectification.



Supply chain employees providing customer service for Alibaba

¹² Audit coverage ratio is calculated based on procurement amount.



Platform driving enterprises to practice responsible production

As a platform technology enterprise, Alibaba has a responsibility to empower more MSMEs, helping them achieve sustainability and responsible production in the digital wave. In FY2023, we promoted the implementation of this practice from three aspects: platform services, platform mechanisms, and digital technology products.

Providing compliance services and training for merchants

Guiding and promoting merchants towards green production

Assisting green development of industries with digital technology products

Providing compliance services and training for merchants

As a platform operator, we strive to be the "frontline" in raising the awareness of laws and regulations as well as promoting compliant operations to millions of market entities. We provide training and services to reinforce compliance management.

In FY2023, we innovated in online training and dissemination model. Through inviting experts from various fields such as the regulatory department and the industry to educate merchants on Taobao and Tmall, Alibaba aims to promote the business philosophy of sustainable development and raise compliance awareness.

With continuous efforts, we have been awarded the title of "Rule of Law Publicity and Education Demonstration Base" from Zhejiang Administration for Market Regulation at the end of 2022.

For more details, please refer to Chapter 3 Improving full-link product quality and safety P96, Chapter 4 Assisting Chinese MSMEs in "going global" via digital means P121

Innovative compliance training and dissemination

Alibaba's compliance training program Compliance Frontline focuses on national policies, industry trends, and current events related to people's livelihoods around the theme "helping merchants understand policies and regulations and engage in compliant operations", with contents covering multiple fields of e-commerce operations such as data security (personal information protection), product compliance (food and drug safety/product quality, etc.), IP rights (patent/trademark rights, etc.), content compliance (advertising law and live-streamer compliance, etc.), and anti-fraud publicity. As of March 31, 2023, the number of views has exceeded 10 million in total.




Guiding and promoting merchants towards green production


Low-carbon goods are still at the initial stage of development, lacking unified standards. We advocate and motivate users to build a low-carbon consumption awareness. At the same time, we aid the development of low-carbon goods and facilitate the green transformation of businesses by developing Low-carbon Friendly Products Program and product emission reduction standards.

- In June 2022, Alibaba launched a carbon ledger platform to assist consumers to understand, choose and purchase low-carbon products and services, guiding the formation of green living. [For details, please refer to Chapter 1.3 Engaging and enabling decarbonization through our platform ecosystem]

- In July 2022, Alibaba partnered with consumer brands to launch "low carbon actions". As of March 31, 2023, Alibaba has continuously promoted this program with 23 brands, covering multiple industries such as fast-moving consumer goods (FMCG), home appliances, beauty, and food. Through the driving effect of these leading brands, this program aims to dive into carbon reduction scenarios in the consumer world, cultivate consumers' awareness of carbon reduction, and provide references for more consumer brands to carry out carbon reduction actions.

- In October 2022, Alibaba launched a Low-carbon Friendly Products Program. As of March 31, 2023, Taobao and Tmall have already had 409 brands totaling 1.91 million products that include 41 first-class categories of Low-carbon Friendly products¹³.

 For more details, please refer to Chapter 1 Engaging and enabling decarbonization through our platform ecosystem P46

 **1.91 million**
low-carbon friendly products

 **2,580**
Number of customers of Energy Expert worldwide

Assisting green development of industries with digital technology products

We use "Energy Expert," an energy use and carbon emission optimization and measurement platform, to help enterprises monitor and manage their power consumption and carbon emissions in real-time. Based on Alibaba Cloud's AI technology and smart energy-saving algorithms, Energy Expert

can assist MSMEs in optimizing energy use in HVAC (Heating, Ventilation, and Air Conditioning) systems, reducing the consumption of resources. As of March 31, 2023, a total of 2,580 companies have started to use Energy Expert for more responsible production worldwide.

TÜV and Alibaba Cloud sign a strategic cooperation agreement

On March 9, 2023, TÜV Rheinland Group, an independent international third-party testing, inspection, and certification agency, signed a strategic cooperation agreement with Alibaba Cloud in Cologne, Germany. Under the agreement, TÜV Rheinland recognizes the accounting results of enterprise clients for carbon emissions, provided by Alibaba Cloud's Energy Expert platform, in terms of third-party testing and certification services

related to carbon emissions and energy provided by TÜV Rheinland. This brand-new service has been launched in March, with the aim to comprehensively assist enterprise clients in monitoring energy consumption, analyze carbon footprints and provide energy consumption suggestions, thus helping MSMEs achieve the goal of energy conservation and carbon reduction.



¹³ First-level category, the basic classification of commodities on the Taobao Tmall platform

Enhancing community inclusion and resilience

The urban-rural socioeconomic divide remains one of the most pressing development challenges across the world, including in China. Development will also not be sustainable if people across society see years of hard-won gains wiped away by natural disasters and other crises. Accordingly, we will strive to enhance both community inclusion and resilience, and will continuously deploy resources to support progress in these two intertwined challenges. We will also seize opportunities for technological innovations, expansion of commerce, and long-term development.

We encourage enhancement in the following two aspects:

- Rural revitalization through digital development P148
- Community resilience through digital technology P166





Expanding rural e-commerce market

Over **RMB 130 billion**

Sales of 832 counties previously categorized as impoverished nationwide exceeded RMB130 billion on our platforms.



Assisting in rural talent development

27 over **220**

Alibaba has introduced talents into rural areas, sending 27 "rural revitalization commissioners" and over 220 "rural technology officers."

Outstanding Team for Contributions to "Sannong" in 2022

Alibaba's rural commissioner team was awarded the honor of Outstanding Team for Contributions to "Sannong" (Agriculture, Rural areas, and Farmers) in 2022



Supporting rural value chain upgrade

Over **1,460**

Cainiao has enhanced rural logistics efficiency and built over 1,460 county-level smart logistics warehouses, along with nearly 50,000 posts in villages and towns

Over **140**

Freshippo has promoted its agricultural direct purchase model and built more than 140 Freshippo villages and counties



Enhancing community inclusion and resilience



Promoting rural vitality

102 **14,002**

The "Cloud for Youth" program has been implemented in 102 schools serving over 60,000 teachers and students

Rural medical expertise learning platform has provided training for 14,002 local doctors



Community resilience

Gold Stevie® Award in Transportation & Logistics

Cainiao won the Gold Stevie® Award in the Asia-Pacific for Innovative Achievement in Transportation & Logistics

Global logistics partner

Cainiao inked a global logistics cooperation agreement with the United Nations World Food Programme (WFP), becoming a global logistics partner of WFP



Rural revitalization through digital development

For Alibaba, our solution to the urban-rural social economic divide through our three pillars of "Technology, Social responsibility, and Stakeholder ecosystem" can be translated into digitalization, urban-rural connections, and economic development. Along these lines, we have been continually committed to building

the digital economy in urban and rural areas by connecting markets, upgrading value chains, cultivating talents and promoting rural vitality. We aim to contribute to building the digital urban-rural economy, alleviating inequality, and achieving rural revitalization.

Building a bridge between rural and urban economies and markets

Forming robust rural value chains by linking the digital and real economies

Building talent and capacity for long-term rural development

Energetic rural residents and communities



Rural revitalization through digital development



Building a bridge between rural and urban economies and markets

We have long been committed to expanding China's digital consumer market to rural areas, making the pursuit of a better life by urban residents a core driver of rural development. This enables products from rural areas to reach a wider market, promotes the development of rural industries with unique features, and provides affordable and high-quality goods for rural residents. Recently, we have been further promoting these Chinese products and experiences to "go global".

In FY2023, we continued to incubate agricultural product brands to spur the rural economy. Sales of 832 counties previously categorized as impoverished nationwide exceeded RMB130 billion on our platforms, and total sales of 160 national key counties for rural revitalization exceeded RMB4.3 billion.

Promoting agricultural products via live streaming

Bringing "Taobao Village" to the world



Over RMB 130 billion

Sales of 832 counties previously categorized as impoverished nationwide on our platform



Over RMB 4.3 billion

Sales of 160 national key counties for rural revitalization

Promoting agricultural products via live streaming

The comparative lack of access to capital and to marketing resources by agricultural and rural businesses are key challenges in expanding the reach of agricultural products to larger markets. To tackle this, we have continued to iterate rural e-commerce models, helping products from rural areas gain more market recognition and consumers.

Taobao Live provides a display platform for agricultural products

We actively leverage the power of our Taobao Live platform, and have launched a visual agricultural products zone, "Fresh Agricultural Products Hall" and other online product display platforms to boost sales of agricultural products. We do this by giving the products more exposure and providing more opportunities for our engaging rural live-streamers, hence achieving stable income growth for farmers. As of March 31, 2023, "The Village Broadcasting Plan" of Taobao Live has driven over 130 million orders for over 8 million products in over 3 million live-streaming sessions.

During the "11.11 Global Shopping Festival" in 2022, we launched the "One More Agricultural Product" initiative to all live-streamers on Taobao, aiming to bring agricultural products to the forefront by adding three minutes for their spotlight to boost rural incomes. During the event, 16.64 million users placed orders for agricultural products on Taobao, a total of 35.49 million agricultural products were sold via live streaming, and over RMB5 billion in e-commerce sales was achieved for 832 counties previously categorized as impoverished nationwide.



"One More Agricultural Product" initiative provides an exhibition platform for agricultural products

Bringing excellent rural specialties to consumers

We are focusing on industries that leverage rural specialties and promote them with branding. We also help merchants to identify and promote rural products with competitive advantages through multiple channels and marketing integration, bringing more rural specialties to a wider market.

In Yuanyang County, Yunnan Province, taking advantage of the Hong River Hani Rice Terraces, a world cultural site, we have promoted local agricultural specialties to consumers across China through livestreaming, Alibaba self-operated stores, and cooperation with third-party e-commerce entities, aiming to create industry value around core products like red rice and Orah mandarins, and boost incomes for local households.



Live-streaming brings agricultural products to the forefront of the market

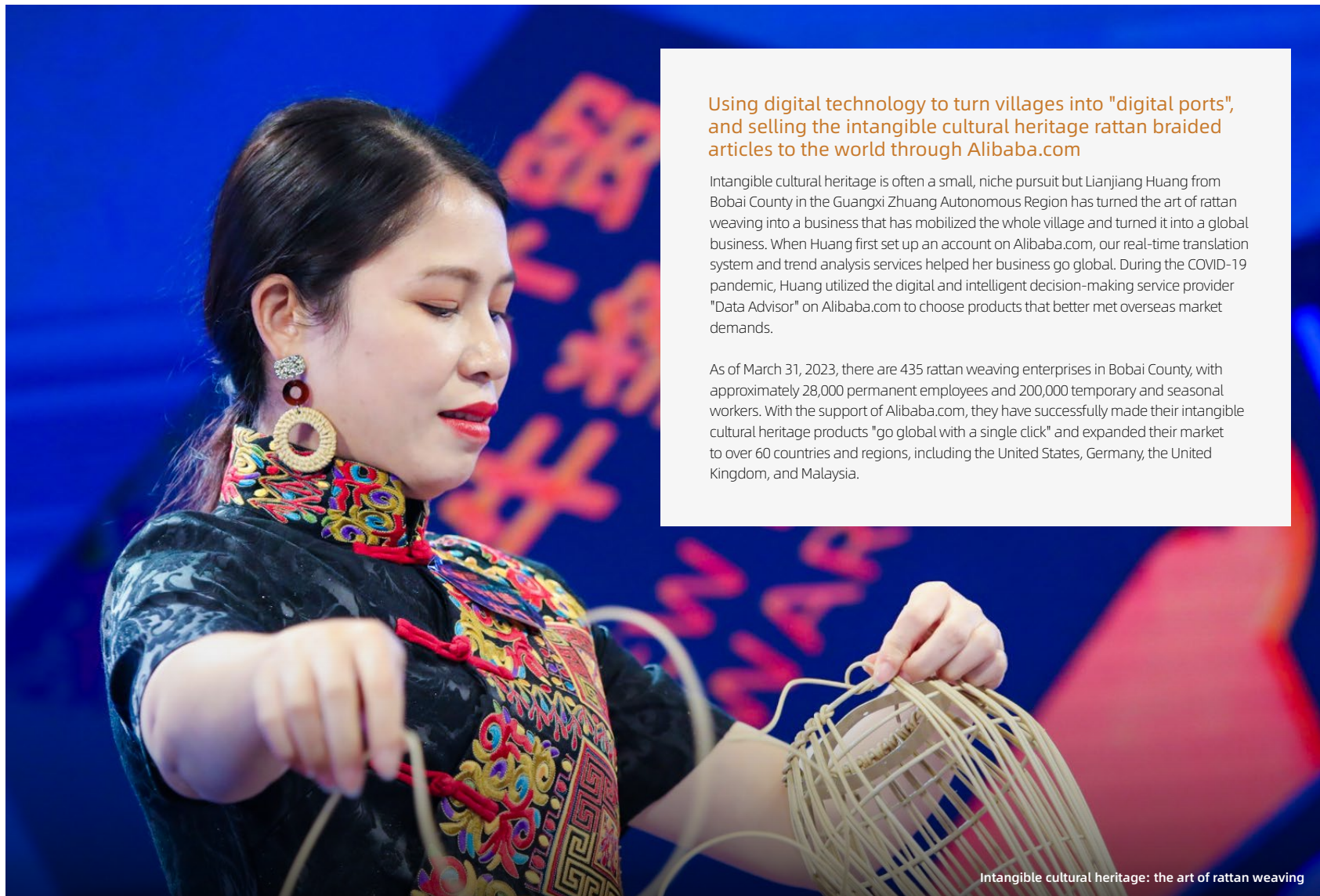


Bringing "Taobao Village" to the world

In the digital age, the platform market is global. To help rural entrepreneurs to benefit from global markets, we help more and more MSMEs, young people, and women entrepreneurs in rural communities participate in global trade and bring the Taobao Village model to more emerging and developing economies, empowering local rural entrepreneurs to share the growth dividends of globalization.

Reducing poverty in developing countries in Africa via digitalization

In July 2022, Alibaba Group and the United Nations International Trade Center (ITC) signed a memorandum of understanding to commit their respective strengths to jointly support MSMEs in developing countries to participate in global digital trade and help reduce poverty. Alibaba and ITC are working together in multiple areas, including digital upgrading to support local industries in developing countries, training for MSMEs, experience sharing in digital rural revitalization, and facilitating exchanges between governments and enterprises. In FY2023, we held a special training themed "The Evolving Chinese Market," with the goal of enabling over 50 African MSMEs to have a deeper understanding of e-commerce and the market in China. We have also initiated a symposium of ambassadors and officials from eight African countries and invited them to attend the China International Import Exhibition (CIIE) sub-forum, "Opening and Governance of Digital Economy," to promote cooperation and exchanges.



Using digital technology to turn villages into "digital ports", and selling the intangible cultural heritage rattan braided articles to the world through Alibaba.com

Intangible cultural heritage is often a small, niche pursuit but Lianjiang Huang from Bobai County in the Guangxi Zhuang Autonomous Region has turned the art of rattan weaving into a business that has mobilized the whole village and turned it into a global business. When Huang first set up an account on Alibaba.com, our real-time translation system and trend analysis services helped her business go global. During the COVID-19 pandemic, Huang utilized the digital and intelligent decision-making service provider "Data Advisor" on Alibaba.com to choose products that better met overseas market demands.

As of March 31, 2023, there are 435 rattan weaving enterprises in Bobai County, with approximately 28,000 permanent employees and 200,000 temporary and seasonal workers. With the support of Alibaba.com, they have successfully made their intangible cultural heritage products "go global with a single click" and expanded their market to over 60 countries and regions, including the United States, Germany, the United Kingdom, and Malaysia.

Intangible cultural heritage: the art of rattan weaving



Forming robust rural value chains by linking the digital and real economies

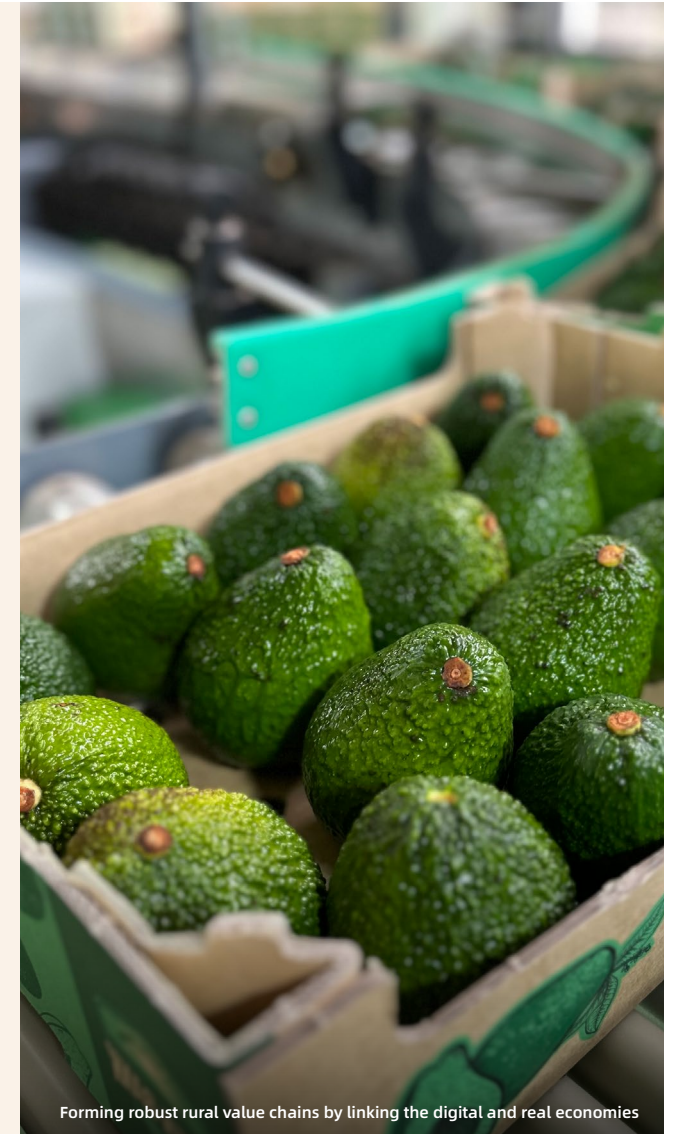
To fundamentally redesign and expand the reach of the rural economy and create market opportunities, it is necessary to continue to extend the value chain for agricultural products, improve the rate of return in agriculture, and diversify rural economic activities. By leveraging digital technology and platform strengths, we can empower rural value chains in three dimensions: production, supply, and sales. We have helped rural areas meet the growing external demand for green products, ecotourism, and cultural-based products, established pillar industries across rural counties, and strengthened the economic foundation of rural revitalization.

Building foundational capabilities for rural agricultural e-commerce ecosystem

Enhancing the development of smart agriculture

Shaping brands in rural agriculture

Promoting rural tourism and cultural charms



Forming robust rural value chains by linking the digital and real economies



Building foundational capabilities for rural agricultural e-commerce ecosystem

The traditional agriculture sector has long faced structural problems such as environmental uncertainty, scattered sub-scale production, non-standard quality control, long distribution chains, and thin profit margins for agricultural products. We have been working diligently to address these challenges, so as to assist rural communities in establishing their commercial ecosystem and infrastructure.

Agricultural direct purchase model

Small farmers often struggle to get reliable and up-to-date information on the market demand and supply of agricultural products facing market fluctuations, and they are reluctant to try different crops or produce high-quality products with more added value. We use the platform's large scale to offer direct contracts to farmers and give them more certainty, improving and allowing for better efficiency of resource allocation, and helping them upgrade their agricultural production methods and raise their incomes.

"Freshippo Village" promotes the new model of "order-based farming" to facilitate the production of agricultural products upon demand

Freshippo uses digital technology to connect the upstream and downstream industrial chains of agriculture and is developing a new "Freshippo Village" model of "order-based farming" to promote high-quality agricultural development. The model covers the entire chain of agricultural production, processing, transportation, and sales matched to consumer demand, and helps villages and counties to establish a stable supply relationship with Freshippo. We plan to establish 1,000 Freshippo Villages over the next 10 years and continue to explore innovative models to facilitate the modernization and high-quality development of China's agricultural sector. As of March 31, 2023, Freshippo has already established over 140 Freshippo Villages/Counties in 25 provinces across China.

Using "order-based farming", Freshippo also provides the organic vegetable bases with access to a stable and reliable market, helps to upgrade the planting standards for organic vegetables, establishes processing centers for fruits, vegetables, and ready-made dishes, and creates high-quality and environmentally-friendly supply for the consumer market. The organic supply chain, which connects directly from "farm to table", optimizes the procurement costs for businesses and enhances supply stability. We have managed to reduce the prices of organic vegetables sold by Freshippo by 30-40% compared to market prices, achieving a mutual promotion of green development and common prosperity. In FY2023, Freshippo expanded organic products from vegetables to other categories, including fresh meats and poultry. As of March 31, 2023, Freshippo has built more than 100 organic vegetable bases and over 30 organic Freshippo Villages across China.



The largest organic vegetable Freshippo Village: Yunnan Yunling organic agriculture base

In Yunling, Freshippo has 10,000 mu (60,000 acres) of certified organic land, creating jobs for more than 500 local farmers, mostly young people, generating income of over RMB27 million for the locality and doubling their previous income.

Organic Freshippo Villages in Yunnan



Over 140

The number of Freshippo Villages/Counties built



Over 100

The number of organic vegetable bases built



Over 30

The number of organic Freshippo Villages built



Rural logistics

Quality control throughout the supply chain serves as an important means to guarantee the economic benefits of agricultural products. We have actively built efficient, convenient, and smooth rural logistics networks across counties and villages, as well as digital and smart warehouses to provide system solutions for the processing and distribution of agricultural products, thus improving rural logistics efficiency and boosting rural industrial development.

Cainiao continues to build logistics networks applicable for counties and villages to promote the efficiency of express delivery in downstream¹ and the upstream circulation of agricultural products².

To improve the efficiency of delivery in rural areas, we have built smart co-distribution centers in counties, integrated county-to-town logistics paths, and promoted resource reuse and integration to transition from "single brand, multiple stations" to "multiple brands, one station". As of March 31, 2023, in China, Cainiao has established over 1,460 smart distribution centers in counties and nearly 50,000 posts in villages and towns. In Qingtian County, Zhejiang Province, smart distribution centers have contributed to integrating 5 mainstream express delivery services and renovating 61 tertiary stations in counties and villages, with a processing capacity of approximately 70,000 packages per day and coverage of 360 administrative villages.

To expedite the upstream circulation of agricultural products, we have promoted the establishment of warehouses in places of origin, circulation centers, and processing centers and connected them with distribution centers. This has facilitated the low-cost distribution of agricultural products. We have also provided comprehensive digital automated solutions to assist small express delivery stations in counties to improve their operational efficiency. As of March 31, 2023, Cainiao has launched agricultural product supply chain programs in 28 provinces and 264 counties across China, helping county-level small-scale express stations achieve efficient and accurate sorting of local specialty products.



Over **1,460**

The number of smart distribution centers in counties



Over **50,000**

The number of posts built in villages and towns



28

The number of provinces that have launched agricultural product supply chain programs



Delivery in rural areas



Agricultural products sold from rural areas to all over the country

¹ Express delivery in downstream refers to express delivery in downstream rural areas.

² Upstream circulation agricultural products refers to selling products from rural production sites across China through logistics technology and the ability of supply chain.



Establishing agricultural digital service platforms

Digitalization plays a key role in upgrading the agricultural value chains. We have established a digital service platform to assist farmers in acquiring and analyzing information on raw materials, production, logistics, and distribution management, etc. to make better business decisions. For example, we have established large-scale digital warehouses in major fruit production areas and joined hands with ecosystem partners to establish cooperative warehouses covering core agricultural production areas in China. Through these actions, we have formed a digital warehousing matrix and distribution networks together with online and offline retail channels across China such as warehouses in places of sales, Taobao, Tmall, and Freshippo.

Helping Yongshun County connect digital links and promote the leap of specialty industries in poverty alleviation areas

Alibaba has assisted Yongshun County in Hunan Province in establishing a digital smart agriculture demonstration base, enabling the integrated development of a digital economy with rural revitalization.

In terms of agricultural production and sales, we have assisted Yongshun County in uploading, collecting, and accumulating agricultural production data and perfecting the management of planting bases in agricultural industrial parks. We are assisting in the constructing warehouses in Yongshun County, giving access to the "first mile" of the agricultural product supply chain. Additionally, we are facilitating the flow of online sales channels for specialty agricultural products through live-streaming consumption support.

In terms of rural services, we have completed the deployment of the Agricultural Information Service Platform, Agricultural Technology Training Platform, and Digital Service Center Platform for industrial parks. We have also assisted in aggregating county-level specialty industries and resources, and analyzed and monitored resource utilization through cloud computing, to provide a quantitative basis for planning and decision-making in industrial management.



Empowering Xuwen County to strengthen and extend the pineapple industry chain via digitalization

Since 2021, Alibaba has supported the digital upgrade of the pineapple industry in Xuwen County in Guangdong Province through a series of innovative measures including formulating standards, jointly building supply chains, expanding channels, and upgrading brands. This has helped to unlock sales channels for agricultural products and achieve high-quality development of industries. Such efforts have also attracted many new farmers to return to or move to Xuwen to plant pineapples. In 2022, Xuwen set a new record in terms of the yield, output value, and average prices of its pineapples. The local warehouses have shipped pineapples, lemons, and other products for over 10,000 orders. Farmers in Xuwen control the quality from the origin as Xuwen has taken the lead in Guangdong Province in giving access to the "first mile" for agricultural products. Directly delivering pineapples from the origin reduces the supply chain cost by more than 25%.

Pineapple industry in Xuwen county



Enhancing the development of smart agriculture

Improving science and technology in agriculture is one of the key links to enhance the efficiency and industrialization of the sector, and achieve the rural revitalization of value chains. While building out logistics, sales, branding, and market capabilities, we

are also investing dedicated funds and technologies in exploring ways that digital tools can apply science and technology to promote the development and application of agriculture technology.

Shaping brands in rural agriculture

The lack of differentiated recognition and brand effect remains one of the key bottlenecks for agricultural economies in most regions. Based on the agricultural products, as well as the unique local history, culture, and specialties, we provide targeted help in establishing a series of rural brands, creating high-quality product offerings, and bolstering

marketing planning and execution. Furthermore, Alibaba's intellectual property protection platform provides a one-stop brand protection service, to improve the recognition and economic values of rural brands in multi-dimensional ways, and to preserve rural folk customs and traditions.

Alibaba Cloud contributing to the technological innovation of seed

Smart plant breeding is a certain trend in agricultural modernization. In collaboration with the Chinese Academy of Agricultural Sciences (CAAS), we are innovating plant breeding technology for rice, corn, and other crops by using the power of cloud computing. In FY2023, we launched a smart breeding platform that covers the entire plant breeding process, completed the design of various experimental methods, and completed whole genomic selection and precise phenotype prediction of high-generation progenies.



Alibaba Cloud contributing to the technological innovation of seed

"Seeking Beauty in Rural Areas" and revealing beautiful villages to more consumers

Many counties boast beautiful scenery and high-quality agricultural products, but lack the skills in shaping brands. In this regard, Alibaba has launched the program, Seeking Beauty in Rural Areas, aiming to reveal beautiful villages to more consumers through professional's assistance in providing free brand design solutions for underdeveloped counties. Focusing on agricultural products and tourism in underdeveloped counties, we have constructed a complete set of visual assets for county brands and established a sustainable brand system for subsequent publicity, industrial development, and marketing of agricultural brands. Furthermore, based on our research and judgment of agricultural product trends, we have explored local specialties, and designed county product packages adapted to current e-commerce platforms. In 2022, the Seeking Beauty in Rural Areas program was granted the IF Design Award, and the design work "A Taste of Villages" was awarded the gold prize of the world's top packaging design competition Pentawards. As of March 31, 2023, we have completed investigation visits and rural brand designs for a total of 13 counties.

We have delivered a set of regional public brand solutions for Ping'an District, Haidong City, Qinghai Province, which strongly demonstrates the unique cultural characteristics and history, natural landscape, local customs, Hehuang folk customs, and selenium-rich product industry of Ping'an. This brand design has now been applied in over 10 scenarios in Ping'an District such as city image, pandemic prevention and control, brand packaging, and infrastructure. "Pingping" and "An'an" have become well-known mascots among local people.



The design work "A Taste of Villages"



Promoting rural tourism and cultural charms

Revitalization of the rural economy requires both primary and tertiary industries to work together. The coordinated development of culture and tourism along with agriculture can better showcase the charm of rural culture and further speed up rural revitalization. We have been actively applying digital capabilities to support various scenarios such as agricultural leisure, education, and healthcare, so as to contribute to the integration of ecological agriculture, leisure agriculture, and rural tourism.

Amap contributing to rural tourism development

Rural tourism serves as an important engine for promoting rural revitalization. To connect tourists with underdeveloped areas with interesting attractions, since 2018, Amap has been creating "online maps for poverty alleviation through tourism", expanding to cover more counties, and enhancing the authentic ecological tourism experience. The latest projects include:

- **Smart county portals and tourism ranking lists:** enabling tourists to quickly obtain county overview, popular tourist destinations, tour assistants as well as other information via an app;
- **One-click tour to scenic spots:** taking Amap as the entry point, providing one-stop services for tourists, including food, accommodation, transportation, entertainment, and shopping, all via a single app;
- **Virtual tour of scenic areas:** enabling tourists to listen to a brief introduction of scenic spots when driving within 15 to 30 km of such spots while not affecting normal navigation.

As of March 31, 2023, Amap has helped multiple counties and regions, including Ganzi County in Sichuan Province, Pingshun County in Shanxi Province, and Foping County in Shaanxi Province, in marking tourist attractions and interesting points of their distinctive villages, and assisted Foping County and Yijun County in Shaanxi Province, Zhangbei County and Fuping County in Hebei Province, and Xunwu County in Jiangxi Province in providing the virtual tour service for their main scenic areas.

Fliggy launching the "Seeking Beauty Together" program to promote rural tourism

In FY2023, Fliggy launched a rural tourism promotion program "Seeking Beauty Together", aiming to bring tourists and digital development experience to rural areas.

Fliggy has customized a "Digital Tutorial for Seeking Beauty Together", which features distinctive tourism routes that showcase the unique culture, nature, agriculture, and industry of each place. Tourists receive one-stop access to maps, trip planning, immersive guides or virtual reality experiences, tour and activity reservations, and other services by scanning a QR code. In January 2023, the Digital Tutorial has been selected for the "China Association of Travel Services List of Model Promotion Cases for Cultural and Tourism Marketing".

Shaanxi's Foping County hosts the highest concentration of wild giant pandas. Fliggy has tailored a digital tutorial integrating "script games" with travel scenarios for Foping in combination with local protection of wild giant pandas, local agricultural products such as dogberry honey, and local agricultural, cultural, and tourism resources, to showcase Foping's biodiversity and tourism resources in an innovative form.

Fliggy has also been focusing on training cultural and tourism talent in rural areas. As of March 31, 2023, Fliggy has registered 1,720 attendances for the training programs in 13 counties including Pingshun County, etc. Fliggy has launched the Primary Certification Camp for Internet Rural Tourism Talents on the Orange Class platform, with 32 courses and 57 lessons currently available and a total of participants of 1,636.

Taking on the problem, presented by the insufficient supply of differentiated rural offerings in tourism, Fliggy has launched a rural tourism design officer

program to design new products for counties where Alibaba rural commissioners are stationed. We are helping market and sell localities through an official live-streaming account "Hangout with Fliggy" and tourism KOLs.



Fliggy "Digital Tutorial for Seeking Beauty" for Foping County



Building talent and capacity for long-term rural development

Diverse, high-quality, and abundant talents can be one of the important driving forces for rapid rural development, as well as the guarantee for the sustainable development of rural areas. We have systematically considered the demand for talent in rural revitalization and have provided targeted support for rural talent revitalization.

We have mobilized talents from Alibaba, as well as others from across urban China, to join in rural revitalization. By leveraging the opportunities afforded by development of industry, we have invested in rural elementary and vocational education, created job opportunities, and provided training to attract more talents to participate in rural development. We have also engaged in constructing digital villages to create jobs and help villages retain local talents.

Bringing digital talents to rural areas

Cultivating talents for rural economic development

Expanding rural employment

Bringing digital talents to rural areas

Rural revitalization commissioners

We select and provide talents to counties and villages in a targeted manner to help meet their specific needs. In 2019, Alibaba launched the "Rural Revitalization Commissioner" program, dispatching experienced employees to underdeveloped counties to more effectively align Alibaba's resources with local conditions. In July 2022, Alibaba released the "Hometown Initiative 2022", announcing that it will continue to appoint experienced employees as rural revitalization commissioners to support local rural revitalization through industry, talents, and technology. The "Rural Revitalization Commissioner system" has become the core and golden card of Alibaba's rural revitalization model.

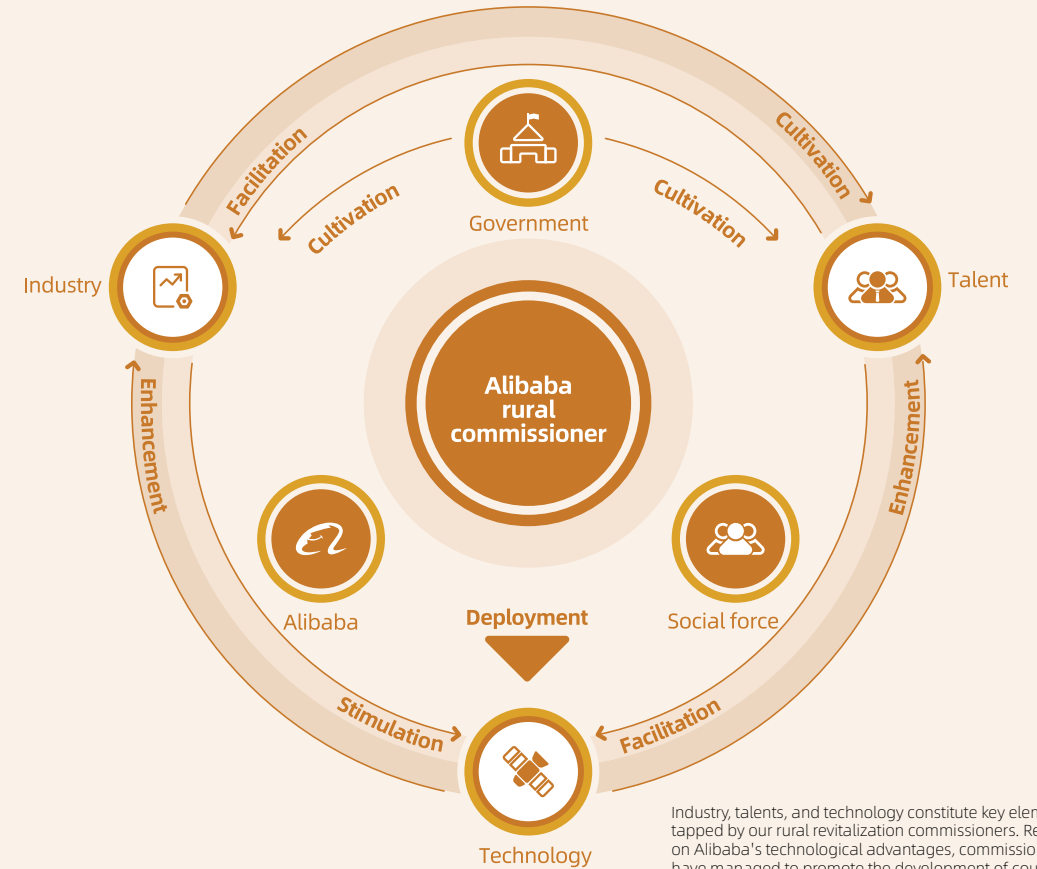
As of March 31, 2023, Alibaba has dispatched 27 "rural revitalization commissioners" to 25 counties across China to empower poverty alleviation and rural revitalization. This program has not only boosted the development of industries in counties, but also assisted in cultivating talents and improving their levels of digital and public services.



27

Dispatched "rural revitalization commissioners"

Alibaba's rural revitalization commissioner model



Industry, talents, and technology constitute key elements tapped by our rural revitalization commissioners. Relying on Alibaba's technological advantages, commissioners have managed to promote the development of counties by empowering industries and talents with technology and inspiring further development of technology through cultivating industries and talents, thereby promoting positive interactions among the three elements.



Alibaba's rural revitalization commissioner team was awarded the honor of Outstanding Team for Contributions to "Sannong" (Agriculture, Rural areas, and Farmers) in 2022 by the General Office of the Ministry of Agriculture and Rural Affairs and the Policy and Regulations Department of the National Rural Revitalization Administration. Two female rural revitalization commissioners, Yunfei Liu and Donghong Lin, were awarded the honorary title of "National Women's Model for Making Great Contributions" by the All-China Women's Federation.

Succession of "rural revitalization commissioners"

The year 2022 marked the first year of the succession of "Rural Revitalization Commissioners".

Before leaving his post, Yahui Liu, the first commissioner in Yijun County, Shaanxi Province, presented four gifts to his successor, including his assignment countdown card, which he hopes to be passed down; a dialect dictionary recording the dialects used for daily communications with the villagers and building trust; a list of villagers recording their names, contact information, family information, and special skills; and an evaluation card recording the advantages and disadvantages of different agricultural products and the support that is needed.

Born in 1990, Shangnian Wang, who took over as the second commissioner in Yijun, is the youngest in the program. He has modified the countdown card given to him by Liu to a "count up" card as he hopes to mark and cherish every day in Yijun. Wang expressed that his current job is a complete break from his work before, with no clear KPIs or template, and requires him to create a unique path.

The baton of rural revitalization is being passed down from generation to generation.



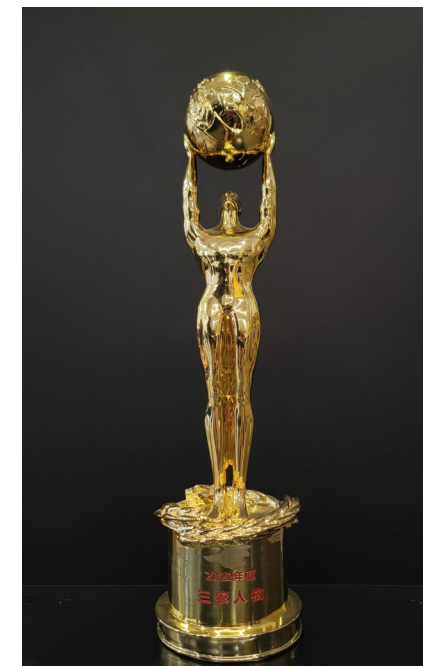
Part of "Rural revitalization commissioners" team



Donghong Lin



Yunfei Liu



Alibaba's rural revitalization commissioner team was awarded the honor of Outstanding Team for Contributions to "Sannong" (Agriculture, Rural areas, and Farmers) in 2022



Rural technology officers

The lack of tech capabilities has been a bottleneck for the development of rural counties and villages. We launched the "Rural Technology Officer" program in 2021 to assist here. Shouldering greater responsibilities with further advanced technologies, we have dispatched rural technology officers to deliver technical support, training, and digitized volunteer services covering the protection of cultural relics, smart planting and breeding, and inclusive education, leveraging technology for better solutions to practical problems in rural development.

As of March 31, 2023, over 220 technology officers have been dispatched to 12 underdeveloped counties in 8 provinces including Shanxi, Sichuan, Hebei, Qinghai, Hunan, Shaanxi, Yunnan, and Jiangxi, to carry out digital volunteer services. These services cover various fields including smart farming and animal breeding, smart rural tourism, rural digital governance, and inclusive technical education.



Over **220**
Rural technology officers



Chestnuts in Qinglong County, Hebei Province

"Rural technology officer" turning century-old chestnut trees into "money spinners"

Chestnuts are a mainstay industry in Qinglong County, Hebei Province, with over 2,000 ancient chestnut trees over 100 years old. Chestnuts are delicate, soft, sticky, fragrant, sweet, and very nutritious. However, in recent years, many ancient trees in this county lack effective protection.

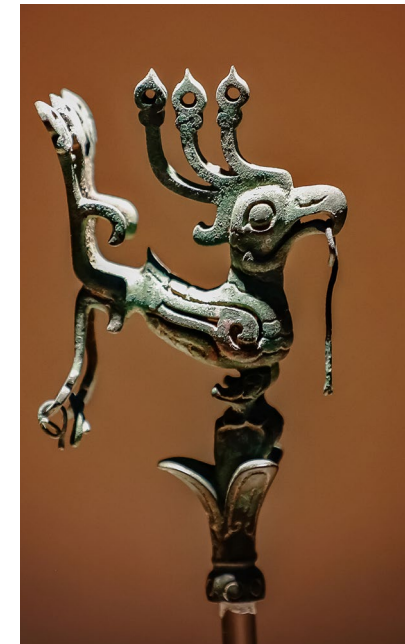
Upon arrival at Qinglong County, Alibaba rural technology officer, Lihui Hao, led his team to plan the "Century-old Trees Adoption Project", which enables consumers to adopt the "century-old golden chestnut" via a mini-app on Alipay and get to know the history of the ancient trees as well as the processes such as trimming, fertilization, and de-insectization. When chestnuts ripen in the autumn, those who adopted trees can receive not only chestnuts and other local agricultural products, but also tickets for local travel spots and hot springs. This program has contributed to expanding sales of chestnuts while driving the development of tertiary industries such as tourism. Furthermore, the team plans to launch an online shopping mall in the mini-app for Qinglong, aiming to present more local agricultural products to consumers.

Voluntary design officers

Successful brand building requires design-oriented thinking and professional skills, which are not readily available in many underdeveloped counties. We have launched the "Voluntary Design Officer" program to bring together internal and external designers and enable them to contribute to rural revitalization. In FY2023, based on "Seeking Beauty in Rural Areas", voluntary design officers initiated the "Preserving Beauty in Rural Areas" program, providing targeted support for cultural protection and development in rural counties.



For more details:
Please refer to Chapter 5 Shaping brands in rural agriculture P155



Digital collectibles³ contributing to preserving ancient rural cultures

Preserving the historic cultural inheritance has been a great challenge for many counties and villages. These areas often have limited funds each year to sustain basic needs such as exploration, restoration, and maintenance, and often lack effective means to promote their long history and splendid culture, which erodes their appeal over time. By leveraging national policies and their own expertise, Alibaba's voluntary design officers have restored, reproduced, and protected historical cultural relics through digital collectibles.

Julu County in Hebei Province features one of the best-preserved ancient sites of the Song Dynasty. The voluntary design officer, He Huang, led a team to the local cultural bureau and museums with the task of selecting cultural relics that were exquisite, collectible, and likely to resonate with users. They chose 4 pieces of Song dynasty porcelain for the initial batch of digital collectibles. When restoring and reproducing one of the cultural relics, White Glaze Plum Vase with Black Dragon Pattern, to integrally reproduce the dragon pattern, the designers put in a lot of effort to search for historical records of the Song porcelain, and also conducted thorough searches with the locals, in order to more fully understand the dragon pattern and supplement its details when building the collection.

In September 2022, the digital collectibles of 4 pieces of Julu Song dynasty porcelains jointly reproduced by Alibaba Philanthropy and Taobao debuted on Taobao 88VIP. Consumers can redeem one piece of digital collectible with their credits and donate RMB10 to support the preservation of intangible cultural heritage, wild animal protection, and other related efforts in the relevant county. We have also replicated the Julu digital collectible model in more counties. As of March 31, 2023, we have designed and launched digital collectibles for Julu County in Hebei Province, Pingshun County in Shanxi Province, and Foping County in Shaanxi Province.

³ Digital collectibles are unique digital assets built on blockchain technology that provide proof of ownership and enable the secure and transparent exchange, purchase, and collection of digital items.



Cultivating talents for rural economic development

We have supported rural residents to learn skills related to the digital economy by means of online training and offline incubation, helping them to earn stable income while staying in their hometown.

Online, as of March 31, 2023, our rural talent training product "Digital Training" has provided content in e-commerce, livestreaming, short videos and expanded to 151 counties across China, with over 700,000 participants. We have further developed offline public service centers in some counties to help local e-commerce industries form agglomeration effect.

We have also built a digital economic regional talent training base. As of March 31, 2023, there has been 77 bases built with regional partners and 1,200 classes held, covering 190,000 participants.

"Rural Live-streaming Program" developing talents for rural revitalization

The "Rural Live-streaming Program", launched in 2019, features integrated high-quality resources in e-commerce and aims to guide farmers to income through live-streaming on their mobile phones.

In July 2022, the "Rural Live-streaming Program" officially launched the Farmers Competition and cooperated with multiple parties to launch live-streaming training for marketing agricultural products and live-streamer competitions. The event covered over 1,000 counties across China and attracted and trained 13,000 farmer live-streamers. Furthermore, the platform launched "Screening Talents for Agriculture" and "Nurturing Talents for Agriculture", to more fully apply the promotional role of the platform economy to rural revitalization.

As of March 31, 2023, the platform has 110,000 farmer live-streamers registered from more than 2,000 counties across China. Live-streaming has helped increase their monthly income two to three-fold. The "Rural Live-streaming Program" has on average enabled each live-streamer to create two jobs, empowering a combined 200,000 people to become better off through employment.

Contributing to the construction of talent training bases

We have established a batch of e-commerce talent training bases in rural areas, training talent for rural revitalization.

In January 2022, we collaborated with Xinyi City, Guangxi Zhuang Autonomous Region in establishing a local talent training base, which is planned to cultivate 3,000 talents on an annual basis in positions such as live streaming, e-commerce, and marketing. As of March 31, 2023, the base has delivered 20 courses for 2,500 participants.

In September 2022, we cooperated with Zhaotong City, Yunnan Province to establish a live-streaming talent training base, which is expected to provide comprehensive e-commerce live-streaming courses for local governments, enterprises, and entrepreneurs and develop one qualified live-streamer for each of the 1,402 villages in Zhaotong City. As of March 31, 2023, the base has delivered 20 courses for 2,500 participants.

In 2022, we established rural revitalization schools in Longnan City of Gansu Province and Cangxi County of Sichuan Province. Both schools have delivered one-month training courses on new media, assisting local vocational students in improving skills for short videos, live streaming, and e-commerce. As of the end of March 31, 2023, the colleges have trained a total of 235 students.



Alibaba farmer live-streaming



Expanding rural employment

Alibaba has provided job training and opportunities for rural residents that work with the supply and demand situation of rural talents. In particular, more specialized training services have been provided for women in FY2023, assisting them to earn stable incomes locally or helping them gain new skills to work in cities.



"Star Plan" creating digital job opportunities for rural young people

"Star Plan" is one of Alibaba's signature initiatives in creating local digital job opportunities by integrating e-commerce business scenarios and local talents. As of March 31, 2023, "Star Plan" has extended its footprint to 44 districts and counties in 14 provinces and provided 16,368 direct job opportunities, thereby enabling rural young people to enjoy a good job and a better life in their hometowns.

"Customer Service County" is one of the models under "Star Plan" to assist counties in driving production and consumption and boosting development vitality. To facilitate the return of talent to their hometowns and attract labor-intensive industries, this model sets up customer experience centers in districts and counties, which provides digital service talent cultivation and working opportunities.

"Wig industry" enabling women to work at home

AliExpress has organized domestic wig manufacturers to establish community plants in economically underdeveloped areas. This initiative aims to create "internal circulation" within the wig industry value chain, stabilize business production and operations, and address worker recruitment challenges. At the same time, it actively expands employment opportunities and income channels for rural women by providing local job opportunities. As of March 31, 2023, wig community plants have established their presence in 4 counties, including Zhangbei County of Hebei Province, Yijun County of Shaanxi Province, Qingjian County of Shaanxi Province, and Ping'an District of Qinghai Province, and has recruited and trained a total of 469 female workers. In particular, Zhangbei County has signed cooperation agreements with enterprises in the main production areas of hair products across China to help women look for job opportunities that allow them to work at home.



Female workers in wig community plants producing wigs

"Caring Maternity Matron" empowering women with new skills

In July 2022, with the support of Alibaba Philanthropy and maternal and infant product merchants on Tmall, the "Caring Maternity Matron" program under the China Foundation for Rural Development (CFRD) has provided vocational skills training, employment guidance, and continuing education for rural women, empowering women with new skills. All "Caring Maternity Matrons" trained by the program took and passed the national vocational qualification examinations, gaining the respect and trust of employers with their highly professional and considerate services.



"Caring Maternity Matron" training



Energetic rural residents and communities

To promote rural social development and jointly build vibrant, inviting, and beautiful rural communities, efforts have been made in multiple dimensions, including elementary education, rural culture, healthcare, and community governance.

Strengthening and expanding rural elementary education

Promoting the protection of rural culture

Improving rural healthcare

Modernization of rural governance and service systems

Strengthening and expanding rural elementary education

In an era of rapid digitalization and quality education becoming critical, underdeveloped areas have the urgent need of improving school infrastructure. Alibaba has introduced technology resources and capabilities to rural areas, and is actively exploring innovative solutions to strengthen and expand rural education and help rural areas narrow the education gap.

"Cloud for Youth" program - making AI more lovable

Since October 2021, Alibaba has launched the "Cloud for Youth" program, boosting inclusive education through fair tools to inspire children's digital creativity at an earlier stage. During the program, we have cooperated closely with non-profit organizations such as China Education Development Foundation as well as local educational departments, realizing the construction of an exclusive cloud learning classroom with high-speed network in 15 days, even in rural areas. As of March 31, 2023, the program has been implemented in 102 schools in China, allowing more than 60,000 rural primary and secondary school teachers and students to use exclusive cloud computers with elastic computing and AI capabilities.

In the cloud teaching space, teachers and students in rural areas are both beneficiaries and creators. It combines AI to music, art, craft, robotics and other specialties across disciplines. Courses can be shared between schools via the Internet, even if they are thousands of miles away. Currently, 43 school-level special courses have been included in the cloud teaching space. The "Cloud for Youth" program has been focused on by the UNESCO Chair on Artificial Intelligence in Education. UNESCO and Alibaba would, base on the experience in China to explore the equalization of global AI education, enabling more children to gain a more advanced computing ability.

Teaching programming in remote areas - little technology officers with big technology dreams

To contribute to building a high-quality education system, boost educational equity, and promote balanced development of compulsory education and urban-rural integration, Alibaba has launched the "Little Technology Officers with Big Technology Dreams" program. With the full support and cooperation of the Ministry of Education of Lancang Lahu Autonomous County and the principal of Donghui Town Central Primary School in Yunnan Province, the program has successfully brought intelligent programming courses and four-wheel drive activities into this school in the remote mountains. The low-code programming platform developed by Alibaba has enabled children to engage in hands-on practice in a manner that is educational and fun.

Rural aesthetic education program "Hello My Classmates"

The Alibaba Design Philanthropy Committee has launched the rural aesthetic education program, "Hello My Classmates", which enables Alibaba designers to gather talented college students across China majoring in design to guide rural children to observe beauty in life and enlighten their aesthetic cognition and cultivate their creativity, imagination, and perception.

In 2022, the program launched an art education course design competition for college students, engaging more than 500 teams consisting of college students with compassion and design skills from over 120 colleges and universities in China, and selected 16 art education courses customized for rural children. As of March 31, 2023, the program has introduced art education courses to 889 classes in rural schools across China, bringing aesthetic enlightenment to rural children.



Bring aesthetic enlightenment to rural children



Promoting the protection of rural culture

The protection and inheritance of local traditional culture are crucial for the maintenance of rural vitality. In addition to "Seeking Beauty in Rural Areas" and "Preserving Beauty in Rural Areas", Alibaba has brought new opportunities for the protection of intangible cultural heritages to more regions through our platforms.

Alibaba Philanthropy has promoted intangible cultural heritage merchants on Taobao to establish order-based cooperation with Liangshan Prefecture

of Sichuan Province on Yi Embroidery, Ping'an District of Qinghai Province on Qing Embroidery, and Pingshun County of Shanxi Province on Wood Carvings. Alibaba has continued to bring orders, technical training, and other supports to assist over 100 intangible cultural heritage craftsmen in earning stable incomes while carrying on old handicraft traditions.



The Inheritance and innovation of intangible cultural heritage: Qing Embroidery

Qinghai traditional folk embroidery ("Qing Embroidery"), an old embroidery style in Qinghai Province, is a handicraft skill passed down through generations among women from all ethnicities with a long history, rich variety, and meticulous techniques. Many Qing Embroidery works have been selected for the national and provincial intangible cultural heritage list. Alibaba and local embroiderers fuse traditional Qing Embroidery with creative cultural products. With the establishment of the Qinghai Qing Embroidery Digital Headquarters in Haidong City, the Qing Embroidery cultural industry has reached a new large scale and multi-party state, enabling Qingxiu to move from offline to online and from Qinghai to the world.



Qing Embroidery



Improving rural healthcare

To boost and ensure rural vitality, well-functioning primary health care services are essential. On the one hand, we provide direct assistance to rural areas with our own medical and health care capabilities while working to improve the local medical equipment base and medical talents capabilities.

"Xiao Lu Lantern" was jointly initiated by Alibaba Philanthropy with Alibaba Health and other authoritative charity organizations to provide assistance with medical expenses and medical support in underdeveloped regions. As of 31 March 2023, "Xiao Lu Lantern" projects have invested RMB17 million to conduct 37 free medical consultation sessions covering 31 counties in 15 provinces across

the underdeveloped regions of China. Some 886 qualified children have entered into the aid program. In FY2023, "Xiao Lu Lantern" continued to expand on the existing "Active Assistance" mode. For genetic predisposition illness, the project provides precise medical services. In addition, "Xiao Lu Lantern" has conducted four rounds of preventative health screening for schools in rural counties supported by the local education bureau, and has provided specialist screening of county boarding school students for risk of congenital disorders, and offered assistance for screened children.

To facilitate the capability development of rural medical expertise, Alibaba Philanthropy jointly

created a learning platform with Alibaba Health, providing quality medical training content, online communication with experts, and remote consultation. As of March 31, 2023, a total of 14,002 local doctors have gone through training, including 3,744 who specialize in cardiovascular intervention. In March 2023, Alibaba Philanthropy and Alibaba Health worked with the China Association of County Hospital President Collaboration Alliance to hold the first county hospital president training classes. These leaders play an essential role in the development of county hospitals. The classes have covered hospital operations, specialty capacity building, hospital development planning, and organizational culture.

Moreover, Alibaba Philanthropy and the Amity Foundation have teamed up to launch the "Alibaba Rural Health Plan" to improve the standard of care in rural regions, with villagers as the core, village doctors as carriers, and communities as the foundation. The program builds village clinics, provides medical devices, and trains rural doctors to improve the three levels in the rural healthcare system, hence raising the level of basic medical care and boosting sustainable development of rural healthcare.



"Xiao Lu Lantern" project



County hospital president training class

"Alibaba Rural Health Plan" providing medical devices for village clinics, empowering the improvement of basic medical services

Located in the northwest of Fuping County, Hebei Province and 50 km from the county seat, Shitandi Village, Wuwangkou Town is a village in remote mountain areas, where most villagers are the left-behind elderly. For quite some time, the shortage and aging of the medical devices have prevented local doctors from further diagnosis and screening of patients and are prone to inaccuracies, negatively impacting patient evaluations and treatment.

In 2022, during Phase II of the "Alibaba Rural Health Plan", we donated a series of medical devices to 13 village clinics in Fuping County, including Shitandi Village Clinic, and we also renovated 76 village clinics in Fuping County. Sphygmomanometers, portable electrocardiographs, and other donated devices have helped local doctors get accurate data, better understand the causes of diseases, and provide more effective and timely medical services for the elderly. The devices donated feature improved portability to facilitate follow-up visits and home visit diagnostic services to ensure better healthcare for local villagers.



Modernization of rural governance and service systems

The modernization of rural governance is a necessary means for rural revitalization. With the rapid social and economic development and continued urbanization, the rural social structure has witnessed profound changes, and the demands of rural residents have become further diversified, necessitating more innovative and modern rural governance.

Using DingTalk's advantages in digital organizational management and coordination, we have established a "To All People" feature in DingTalk that consists of "Resident Contact List" "Collaborative Emergency Response" "Public Feedback" and other tools to achieve online, specific, and timely public services for the people. We use digital means to overcome four major difficulties in rural governance, including better management of people served, raising motivation, the low cohesion of village collectives, and the "last mile" issue in government services. As of March 31, 2023, the program has covered more than 10 counties.

"Easy to Handle" (JuHaoBan) contributing to building a digital county

In December 2020, DingTalk and the People's Government of Julu County, Hebei Province reached cooperation on the smart platform "Digital Julu". It has made the county digital and able to provide better public services to the people. The digital platform "Easy to Handle" (JuHaoBan) solves problems from "top to bottom", which makes online public sector management among towns, departments, and residents in Digital Julu a reality.

In 2022, we kept improving the technology and functionality of our platform. We upgraded and optimized Collaborative Governance and Resident Services, and added or enhanced 27 applications. As of the end of 2022, the platform has resolved over 470,000 public appeals, closing cases in 3 to 5 days on average, with an average completion rate of 96.53%. Furthermore, the activity of public service users and the utilization rate of residents have been significantly increased.

The platform has been selected as one of the fourth batch of representative rural governance cases by the Ministry of Agriculture and Rural Affairs, with which Julu has been awarded honors such as the Top10 digital ecosystem counties of Hubei Province and IT innovative cases of rural Party building "Advancing Towards a New Journey and Contributing to a New Era".

Dunhuang City's "Three-in-One" platform promoting the development of rural digital economy

Relying on the DingTalk system and empowering production, supply and marketing, credit system construction and other links by digital means, Alibaba has supported Dunhuang City, Gansu Province to build a "Three-in-One" digital platform integrating 21 service resources in 7 categories, including agricultural production, agricultural materials supply and marketing, education and medical care, e-commerce, and agricultural information, and actively guided more than 53,000 people (over one quarter of the permanent population) to register and activate the application digital platform, with an average daily active user rate of more than 17,000, thus promoting the development of rural digital economy in Dunhuang City.



2022 Apsara Conference: Sanxingdui VR Show



Modernization of rural governance and service systems



Community resilience through digital technology

In the post-pandemic era, while economic growth is recovering, society continues to face new challenges. The impact of climate change has been increasingly significant, and extreme weather events such as flooding, droughts, heat waves, and fire hazards have become a "new normal". Building high resilience and strong risk management capabilities is an ever more pressing need for society.

Alibaba's three pillars of "Technology, Social responsibility, and Stakeholder ecosystem" can be implemented by ensuring the "Digital-Circular-Economy". We fully leverage our digital capabilities and platform ecological advantages to enhance social resilience in three dimensions to better respond to the uncertainties brought about by major risks of public health crises and natural disasters, and

to gain opportunities for longer-term sustainable development. First, we ensure the resilience of our core systems in times of crisis, so that we can support the normal operation of the digital business ecosystem, which relies on our services, and to better support society after shocks from public health and natural disaster crises.

Second, we actively coordinate our platform ecosystem and resources to aid in disasters.

Third, we work with stakeholders to develop joint solutions and enhance broader, durable societal resilience, developing a host of relevant technologies and sharing them widely.

Operations and platform resilience

Responding systematically to public health crises and natural disasters



Community resilience through digital technology



Operations and platform resilience

We insist on the establishment and improvement of the large-scale commercial infrastructure system in the digital era and carry out technological innovations and applications in response to extreme events, ensuring the stable operation, rapid response, and effective recovery of cloud computing and digital logistics systems in emergencies or crises, and securing the normal operation of the business ecosystem and social economy.

Rooting resilience in the fundamental capabilities of cloud computing

Logistics Resilience

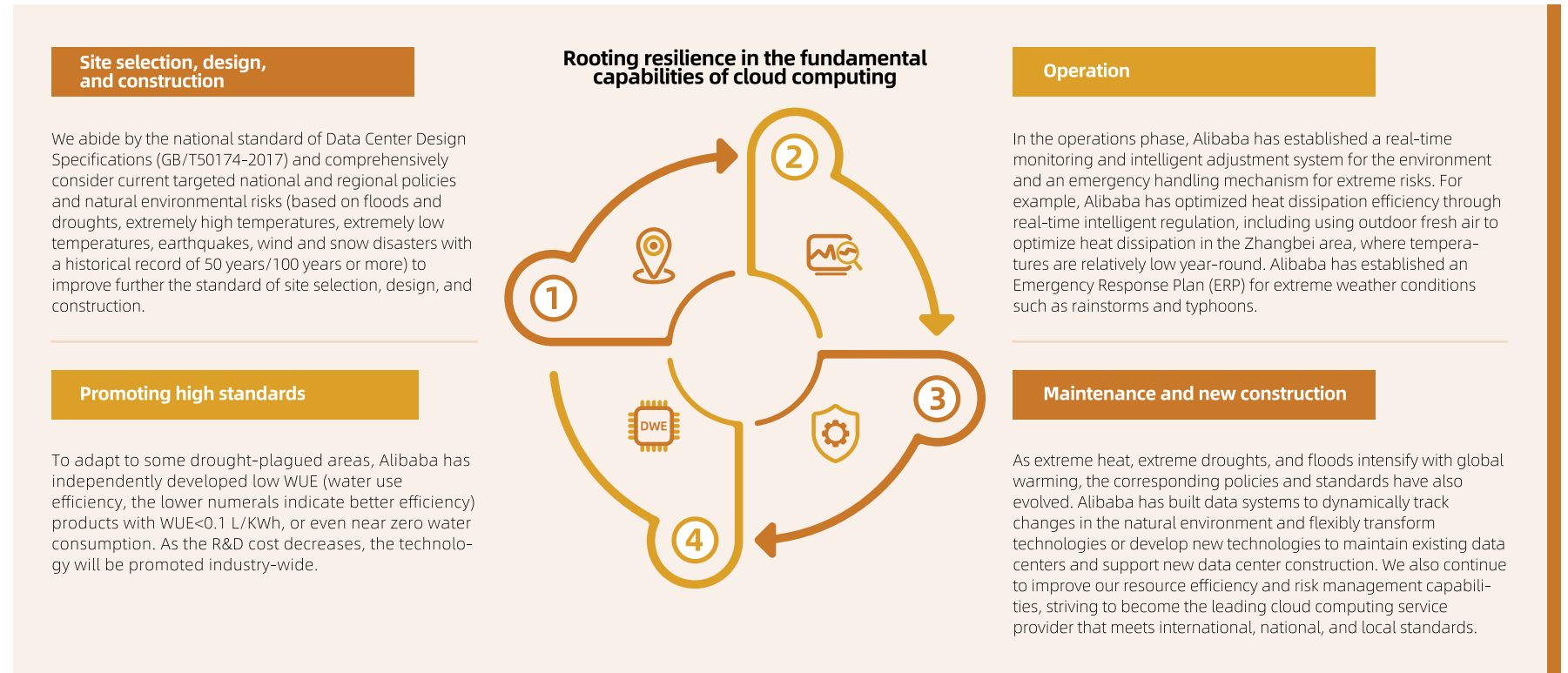
Rooting resilience in the fundamental capabilities of cloud computing

Only by maintaining our own business resilience can it be possible to help society when needed. We aim to achieve high stability and resilience in cloud services through a comprehensive process of site selection, design, construction, operation, maintenance, and new construction, aiming to achieve high stability

and resilience in cloud services. We also continuously promote the application of high standards and specifications in the industry.

In FY2023, to comprehensively enhance operational stability, we upgraded risk management, conducted

global risk identification and emergency drills, and constructed a digital management dashboard to quantitatively manage risks and continuously enhance operational stability across all areas.





Logistics resilience

Alibaba has integrated digital technology advantages and supply chain capabilities to build a comprehensive emergency logistics system, including disaster preparedness management, emergency transportation and transfer allocation. We collaborate with all parties to respond to sudden disaster events.



Improving the resilience of our operation

Both natural disasters and pandemics can impact the operation of personnel-intensive logistics centers, which, in turn, affects the efficiency of goods circulation within society and poses risks to economic production and residents' livelihoods. We have made preparations for various risks in the construction, operations, and personnel training of the logistics system. While ensuring our own operations, we strive to maintain the efficient flow of goods. Cainiao has formed a comprehensive end-to-end logistics capability.

In our daily operations, Alibaba establishes an emergency management system according to the level of various natural disasters (such as earthquakes, typhoons, and rainstorms). Through employee training, Alibaba teams strive to protect employee safety in emergencies and aid the community and society.

In the domestic supply chain business, Cainiao provides end-to-end supply chain services in accordance with various service standards for merchants with domestic sales and contract-fulfilling needs. The domestic warehouse area exceeds 10 million square meters, bonded warehouse area exceeds one million square meters, and more than 70 Cainiao warehouses in places of origin have been established in more than 30 industrial zones.

In the international supply chain business, Cainiao focuses on merchants with overseas sales and fulfillment needs, providing essential supply chain

solutions and international freight services, focusing on air freight, sea freight, first-haul trailers, overseas warehouses, and end-to-end supply chain. Cainiao has collaborated with over 60 ports worldwide to establish intelligent customs clearance systems. Its container collection trailers cover seven core ports and terminals across China. Cainiao accelerates the construction of overseas local capacity building to provide end-delivery service for cross-border parcels. As of 31 March 2023, the number of overseas distribution centers has reached 15.



70

Cainiao warehouses in places of origin



15

The number of overseas distribution centers

Improving the resilience of our platform

Together with our partners, Alibaba is working to build a logistics network with global coverage. On this basis, we strive to connect logistics in more countries and regions through digital intelligence technology, which not only enhances our resilience as a company, but also enhances societal resilience in response to unpredictable disasters. In FY2023, Alibaba built the Aoxiang ecological supply chain platform, linking the merchant management system and the warehouse allocation capacity, and realized the digitalization of Taobao and Tmall merchants' billion-level orders and ten-million-level product

pools. With the help of Alibaba Cloud's online storage and big data computing engine, the Aoxiang platform has achieved the capability to update the inventory and basic information of millions of goods per second.

Based on objective data, the Aoxiang platform calculates the estimated delivery time from the inventory side to the consumer side and transmits the reliable fulfillment time to the consumer side at each node of the consumer's shopping decision, such as searching, shopping guides, product details, order pages, etc. The Aoxiang platform detects real-time abnormal conditions that lead to delivery failures, and unreachable routes, providing an early warning to consumers before and after they place orders based on real-time socialized logistics data, improving the consumers' experience in terms of certainty of shopping timeliness. During the pandemic, the Aoxiang platform collaborated with merchants on timeliness services to inform consumers that delivery time may be delayed and parcels may be returned due to the pandemic in a timely manner, reducing the return rate and giving consumers peace of mind when buying and receiving goods and ensuring the certainty of platform performance under pandemic conditions, hence enhancing the logistics resilience of the platform.



Improving our logistics resilience

Cainiao has integrated its own advantages and capabilities to build an emergency logistics system, including disaster preparedness management, emergency transportation, transfer and allocation, and collaborated with all parties to respond to unexpected disaster events. Cainiao has adopted the mode of "free transportation in emergencies and cost price transportation in normal times" and has reached key cooperation with many charity organizations and government agencies. Cainiao has also undertaken many tasks such as international transfer of COVID-19 vaccines, pandemic prevention goods and daily necessities distribution. As of March 31, 2023, Cainiao has delivered more than 300 million pieces of medical and other supplies to more than 150 countries and regions worldwide. In the 2023 Asia-Pacific Stevie Awards, Cainiao won the Gold Award for Innovation in Transportation and Logistics and the Silver Award for Innovative Achievement in Corporate Social Responsibility based on its innovative achievements in digital intelligence technology and ESG initiatives. Cainiao is the only Chinese logistics company to win this year's Stevie Awards.



Cainiao is building the first domestic full-link digital management system for charity supplies

When an emergency occurs, many charity organizations face the challenge of transporting relief supplies from all over China to the frontline in a timely, safe, and efficient manner, and distributing them to the citizens in need in an orderly manner. Through its mature supply chain capabilities, Cainiao has built an emergency logistics system with charity organizations and launched the first digital whole-process tracking system to carry out charity logistics services, realizing the integrated services of donated materials from manufacturers' collection, sorting in warehouses, cross-provincial transfer, multi-point distribution and end sign-up, with the whole process visualized and tracked online, which has helped charity organizations' digital upgrade and helped them tackle challenges in transportation and distribution. In addition, Cainiao has also assisted One Foundation and other charity organizations to open special lines for helping the elderly and other underserved communities and has provided diversified distribution of "the last mile" in emergencies through Cainiao Direct Delivery (Cainiao Express), Cainiao Posts, and its autonomous delivery vehicles.

As of March 31, 2023, Cainiao has deeply cooperated with 28 public welfare and charity organizations and institutions, including China Rural Development Foundation, Shenzhen One Foundation for Public Welfare, and Amity Foundation, building an emergency logistics system together.



28

Deeply cooperated with public welfare and charity organizations and institutions

Cainiao and United Nations World Food Programme (WFP) signing cooperation

In March 2023, Cainiao and the United Nations World Food Programme (WFP) signed a global logistics cooperation agreement in Rome, Italy. The two parties have agreed to develop a strategic cooperation for 3 years in the areas of global humanitarian emergency operations and improving supply chain capacity. This is the first time a Chinese logistics company has become a global logistics partner of the WFP. Cainiao will leverage its global logistics network to help the WFP shorten response time in emergencies and improve the efficiency of its global supply chain to deliver aid to more people in need. Cainiao will also support humanitarian and emergency aid around the world through its 15 large sorting centers covering the world, logistics hubs in Europe and Southeast Asia, and logistics capabilities in Brazil, North America, and the Middle East.



Global logistics partner

Become a global logistics partner of the WFP



Responding systematically to public health crises and natural disasters

Digital platforms are important drivers and anchors of a well-functioning economy, from responding to the COVID-19 pandemic to reducing disaster risks, helping disadvantaged individuals, and empowering and connecting social organizations across the spectrum. We are constantly exploring innovative and sustainable solutions with our partners to enhance social well-being on a broader scale.

Deploying digital technology for pandemic relief

Deploying digital technology to enhance social capability in disaster mitigation and relief

Deploying digital technology for pandemic relief

Alibaba has always focused on meeting the needs of people's livelihoods and supporting the economic recovery from pandemic prevention and controls. On the one hand, we leverage the advantages of digital technology and our platforms to keep society and the economy running smoothly. On the other hand, Alibaba sees the comprehensive digital transformation of the economy and society as an opportunity to help MSMEs to overcome challenges while stimulating new demand and creating new supply.

Consultation and medical supplies guarantee

In FY2023, we made full use of our digitalization, material allocation, and logistics capabilities to help those in need in an organized and smooth way to tide over the pandemic. In rural areas where the overall level of medical development is especially low, Alibaba actively provides medical supplies and medical consultation services for rural residents and offers training services for rural doctors.

Alibaba Health offering free pandemic medical training for rural doctors

To help county hospital doctors and rural medical personnel improve the diagnosis and treatment of COVID-19 infections, Alibaba Philanthropy and Alibaba Health teamed up with experts from the respiratory departments of Beijing Ditan Hospital Capital Medical University, the First Affiliated Hospital of Harbin Medical University, Renmin Hospital of Wuhan University to record videos of professional instructions on notes for antigen testing, self-health testing during fever, and protection, medication and rehabilitation guidance for special groups (the elderly, pregnant women, children). They were released through Alibaba Health's training platform for rural doctors. In addition, Alibaba also joined hands with authoritative institutions and experts across China to provide free online training on clinical diagnosis and emergency management skills for county-town-village rural doctors and medical personnel.

Alibaba Health launching a 24-hour free medical consultation platform for COVID-19

In December 2022, to leverage the advantages of Internet medical services, Alibaba Health launched the "Peace of Mind Action" and joined hands with Alibaba Foundation to set up a platform on Taobao for free medical consultation for COVID-19. The platform caters to seniors, children, pregnant women, and adults and offers 24-hour online COVID-related consulting services provided by doctors from public hospitals. The Alibaba Foundation has covered all consultation costs and provided all the necessary resources for all doctors involved, relieving the pressure on rural medical services.

Amap launching the online "Drug Public Welfare Mutual Aid" platform and "Nucleic Acid Test Map"

In order to alleviate local shortages of anti-pandemic drugs and supplies, Amap and Alibaba Foundation released the new "Drug Public Welfare Mutual Aid" platform and the "Drug Purchase Mutual Aid" function, which aggregates the mutual aid information of users on the map and puts the information of pandemic supplies from pharmacies on the map in real time to resolve the demand for drugs through mutual help between people.

To serve the nucleic acid testing work in various cities and facilitate users to check the distribution of nucleic acid sampling stations nearby with navigation, Amap released the function of "Nucleic Acid Test Map", where users can enter this product interface by searching "Nucleic Acid Test Map" on the homepage.





Cainiao providing international supply chain and professional pharmaceutical cold chain with stability and safety

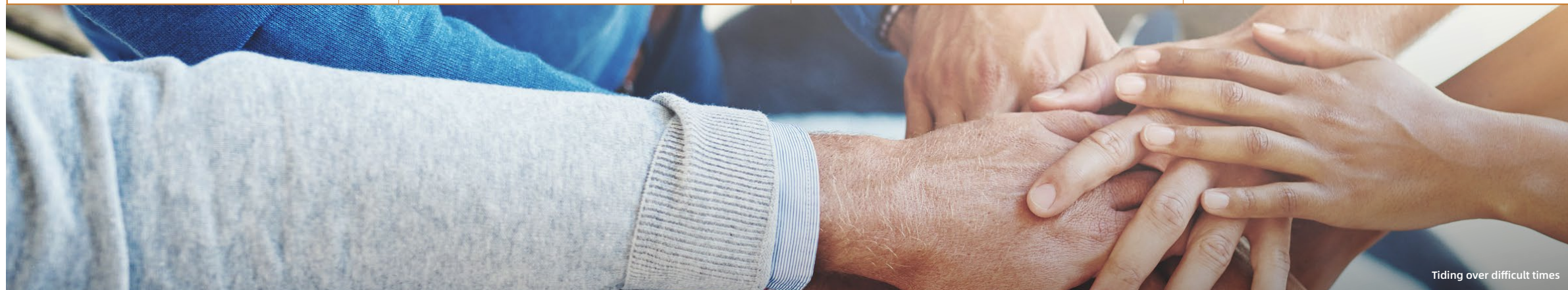
Cainiao leveraged over 50 global logistic service providers to serve more than 150 countries and regions globally in the distribution of pandemic relief aid. Besides, Cainiao shipped more than one million doses of Chinese COVID-19 vaccines through our professional pharmaceutical cold chain capability to El Salvador, Trinidad and Tobago, Kuwait, Suriname, and other countries in Asia, Africa, and Latin America.



Ensuring necessities

Alibaba’s digital business covers a wide range of areas that are resilient, which enables our capability to ensure rapid access to life’s necessities in multiple areas.

			
<ul style="list-style-type: none"> Initiating "City Guardian Support Program" and supporting merchants' business operations and riders' delivery during the pandemic with subsidies, bonuses, and supplies; Launching instant e-commerce services to ensure community needs including "Emergency Special Needs", "All-in-One Supermarket" and "Community Group Purchase" services. 	<ul style="list-style-type: none"> Providing 150 Cainiao warehouses and 300 urban distribution systems to ensure the smooth flow of lifeline and supply of livelihood materials in Hong Kong, Shanghai, Changchun, etc., and support Tmall Supermarket and offline supermarkets to provide 24-hour services; Increasing inter-provincial distributions, opening up a new mode of grid-based sales and group delivery to communities; transforming Cainiao Post managers into supply guards to ensure each community's daily necessary supplies; Starting "delivery services for seniors" and "warehouses for seniors" to ensure their daily necessary supplies. 	<ul style="list-style-type: none"> Through various methods, ensuring the supply of daily necessities in a stable and orderly manner without extensive inflation; Introducing a variety of flexible service methods such as guaranteed supply package, collective sales and distribution, community-direct delivery and protecting the health of delivery riders to ensure the delivery service. 	<ul style="list-style-type: none"> "No business shut-down, no raising price, and no supply cut-off", initiating staff sharing model to ensure network and people operations; Improving the efficiency of supply through innovative initiatives such as mobile supermarkets with direct distribution from large warehouses to communities, group delivery in store, establishment of regional supply and distribution centers, and cooperation with special bus delivery lines for food; Starting an emergency special channel to prioritize the demands of doctors and medical personnel, volunteer groups and special groups, as well as delivering supplies for the elderly for free.



Tiding over difficult times



Helping MSMEs to tide over difficult times

One key focus of Alibaba is to help MSMEs operate effectively amid the pandemic, promote domestic economic recovery, and help cross-border enterprises to go global. DingTalk provides technical support for remote work in enterprises and schools

to help society maintain effective operations, while Fliggy and Alibaba.com support merchants to improve their operations by providing guaranteed initiatives.

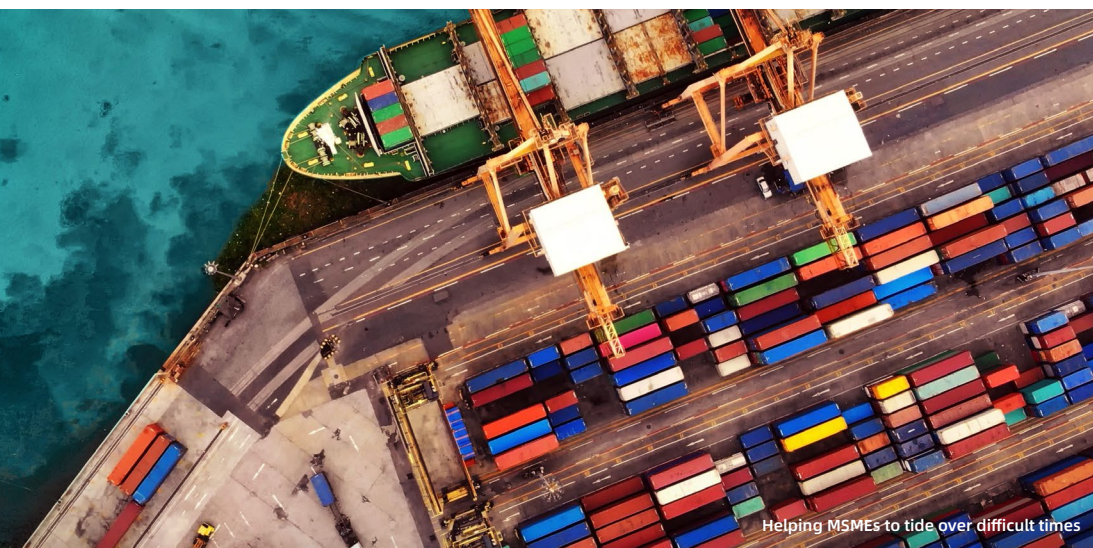


Fliggy unveiling “Hi, Tomorrow” project to revitalize tourism industry

On December 12, 2022, Fliggy launched the "Hi, Tomorrow" project with 17 measures to support tourism revitalization, which includes: Launching graded business cooperation methods according to the different needs of different types of merchants in development stages, supporting them to revive their business on the platform in ways such as retailing, purchasing and selling, and supplying and selling, especially to reduce the operational difficulties for new, small, and medium-sized businesses; Continuing and expanding a series of fee-waiving measures and investing resources free of charge to support merchants to improve their business conditions; Helping destinations to explore cultural tourism consumption highlights and boost consumer confidence.

Alibaba.com launching ten relief measures to help foreign trade merchants receive and complete orders

In order to help small and medium-sized foreign trade merchants cope with the phase challenges brought by the global pandemic, in March 2022, Alibaba.com officially launched ten relief measures to overcome the difficulties in international trade, including securing business opportunities, logistics, financial protection, service protection, and talent protection, which covers all key aspects of international e-commerce, and helps foreign trade merchants to better address risks.



Helping MSMEs to tide over difficult times



Deploying digital technology to enhance social capability in disaster mitigation and relief

Alibaba utilizes diversified digital products and services to facilitate smooth communication in disaster management, and secures supplies in the process of disaster mitigation and relief.

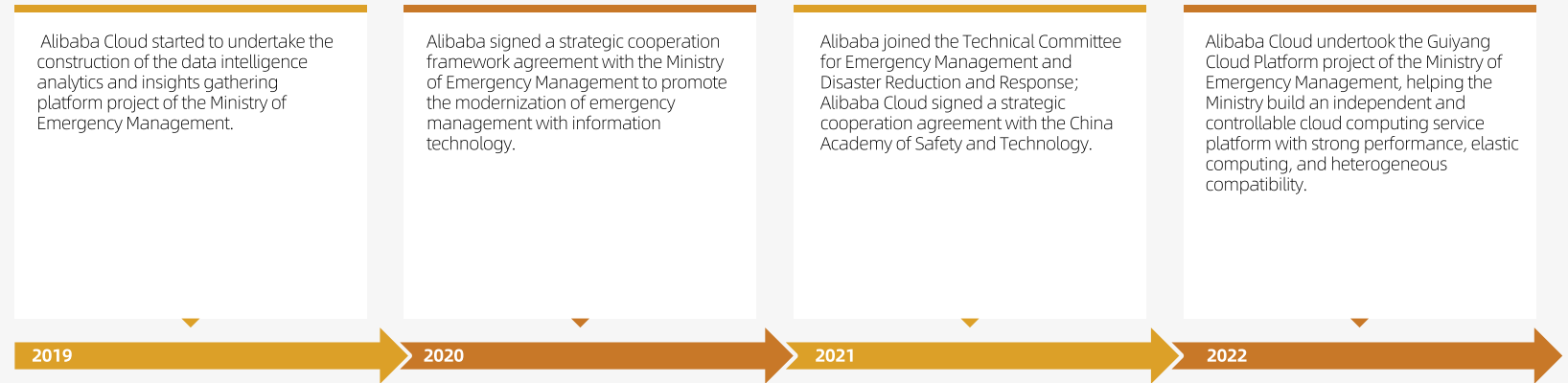
Alibaba deeply engages in the research and development of emergency disaster mitigation technologies and actively participates in national basic capacity building. In recent years, products and services of Alibaba have been widely used in major natural disasters, and have played an important role in gathering resources and maintaining smooth information communications.



Deploying digital technology to enhance social capability in disaster mitigation and relief

Leveraging digital technology advantages to actively build "Smart Emergency Response"

Cooperating with the Ministry of Emergency Management, we closely integrate the development needs of national emergency management modernization with our digital technology advantages to promote data intelligence analytics and insights gathering, and transformation in emergency management. Since 2019, Alibaba Cloud has been actively involved in the digital upgrade of the Ministry of Emergency Management. The following graph shows our annual progress.



In FY2023, Alibaba Cloud took advantage of digital technologies to facilitate the Ministry of Emergency Management in conducting natural disaster rescue operations. In the Lushan and Luding County earthquakes, the related system of emergency management data intelligence platform, jointly developed by Alibaba Cloud, helped the Ministry of Emergency Management in disaster analysis and decision-making.

Additionally, Guiyang Cloud Platform constructed for the Ministry of Emergency Management by Alibaba Cloud provided support for the 4th Emergency Management Public Law Knowledge Contest held online.

Co-building a digital rescue platform with the Red Cross

Alibaba Cloud supports the Chinese Red Cross Foundation to build the "Digital Rescue Platform for Social Emergency". Using Alibaba Cloud's packaged R&D mode of capabilities tool platform, Yun Qiao, enterprise collaborative services, and DingTalk's digital management technology, it has transformed rescue team organizational and daily management into an online mode, thus achieving the visualization of the lifecycle of emergency relief missions, improving the professional capacity of the community rescue team and compliance operations, effectively supporting rescue operations, and improving rescue efficiency and quality.



Facilitating participatory philanthropy

The foundation of sustainable development is establishing and spreading virtuous intention between people, and harmony between people and nature. As a builder of a sustainable community, we strive to unleash the power of technology to bring people together to tackle our common challenges. We seek to foster a participatory philanthropy that starts with our own employees and penetrates into the design of each of our businesses to "make it easy to do good anywhere" within and beyond the confines of our business.

We facilitate philanthropies through three aspects:

- Philanthropic participation of all employees P176
- Technological innovations for social challenges P180
- Connecting ecological forces to empower charities P183



Technological innovations for social challenges

First rare disease treatment map

Alibaba Health has released the first rare disease treatment map in China

118,746

Self-developed smart screening tool for Alzheimer's disease using AI technology has helped screen 118,746 seniors

Over 100

The "Green Code" platform builds a bridge between charitable organizations and developers, supporting the digitalization of more than 100 charitable organizations

Employee philanthropy

250,144

 hours

The total number of employee voluntary service hours is 250,144

2023 阿里巴巴公益榜

Over 110

More than 110 active "Hugs and Help" groups have initiated more than 1,000 activities, and motivated more than 30,000 employees to participate in philanthropic activities

Facilitating Participatory Philanthropy



Platform philanthropy

RMB 399

 million

Alibaba has donated RMB399 million to the Alibaba Foundation

2.04

 million

In FY2023, "Goods for Good" project attracted 2.04 million merchants and 470 million users to participate

11,722

The "Daily Positive Energy" program, with ten years of devotion, has given positive recognition and encouragement to 11,722 people

2023 Philanthropic Enterprise

Alibaba was awarded the "2023 Philanthropic Enterprise"



Philanthropic participation of all employees

With a strong sense of empathy and social responsibility, we strive to create a corporate culture that encourages everyone to participate in philanthropy. By designing innovative mechanisms and providing diverse resources and options, we seek to inspire and help our employees

to participate in, and to make the best use of their knowledge, skills, and creative thinking in tackling social challenges beyond commerce.

Creating a corporate culture of philanthropy

Supporting employees to lead our philanthropy



Philanthropic participation of all employees



“ For me, philanthropy means constantly building up capabilities to help others throughout one’s whole life... It may sound like a cliché, but if I really do commit to it for a lifetime, a great sense of ease will come to me when I get older. ”

- Xiaofeng Shao, Alibaba Partner



Creating a corporate culture of philanthropy

Since our founding, Alibaba has been committed to building a company that brings warmth to those in need. By marshalling the contributions of each individual, we create larger value for society. Philanthropy is a cornerstone of Alibaba and a vital bond that links all employees.

On September 10, 2015, we launched the "Three Hours for a Better World" initiative, inspiring every Alibaba employee to turn the pursuit and aspiration of philanthropy to actions. We encourage employees to organize "Hugs and Help" groups, and undertake philanthropic activities in a systematic manner.

In FY2023, more than 110 active "Hugs and Help" groups¹ launched over 1,000 activities, in which over 30,000 employees participated. These "Hugs and Help" projects mainly focus on areas of nature and environmental protection, animal protection, education, and care for the disadvantaged.

In FY2023, our total voluntary service hours among the formal employees² amounted to 250,144 hours.³

250,144 hours
Total voluntary service hours among the formal employees

Over 110
Active "Hugs and Help" groups

Two-hour-a-day, turning charity into a 'super sideline'

Jun Liu from Cainiao clocked in with the most voluntary services among all Alibaba employees in FY2023. He devoted 687.7 hours of services, around an average of 2 hours every day.

Since 2019, Liu has provided guidance and consultation services for the elderly and children through medical assistance activities. For two years, he regularly provides breakfast service to seniors over 70 and to sanitation workers.

In April 2022, Liu launched the Orange Heart Medical Assistance "Hugs and Help" group, and attracted more Alibaba employees to join in voluntary services, providing help for the elderly and the medical professionals through medical assistance, community services, and PCR and antigen tests for COVID-19 pandemic. As of March 31, 2023, the group has organized more than 150 events and helped 1.26 million person-times.



Jun Liu is providing medical assistance



Carpooling "Hugs and Help" Group Petra Stockelmayerova

Carpooling "Hugs and Help" Group

On February 14, 2014, a group of considerate Alibaba car owners - with the help of Alibaba technology volunteers - established a Carpooling "Hugs and Help" group which could decrease carbon emissions in commuting. Carpooling establishes closer ties between colleagues from different departments and create a new form of charity. Alibaba campuses support the initiative by reserving more than 400 parking spaces for carpooling, and some campuses have set up "Care Stations" for carpoolers. To encourage carpooling, every time car owners complete a carpool ride with colleagues, they receive coupons which give greater preferences in our periodic parking space lotteries. Over the past nine years, tens of thousands of Alibaba car owners have provided free carpooling for more than 500,000 colleagues. In FY2023, over 8,000 car owners provided over 118,000 rides, bringing a green and caring commuting experience.

Overseas employees contributing to their community voluntary services

Petra Stockelmayerova is our charity professional in Alibaba's London office. On two weekends each month, she oversees a food collection point outside a local supermarket - where people donate food such as pasta, rice, canned foods, and toiletries - for distribution to people in need. She also encourages and guides colleagues in our London office to engage in community voluntary services, to reduce food waste and raise awareness.

As an enthusiastic member of the GoodGym community, Petra is a passionate believer in their motto "Do Good, Get Fit". She encourages fellow fitness enthusiasts to carry out exercise activities in local communities while providing help to seniors in those communities. The senior citizens are called "coaches", as they motivate our employees to exercise while sharing their own experiences and lessons.



Petra Stockelmayerova (left) is collecting food donated by people

¹ The "Hugs and Help" groups that facilitated employees to participate in philanthropic activities in FY2023.

² The scope of the statistics includes the full-time employees in the businesses directly managed by Alibaba Group.

³ Voluntary service hours include hours employees declared in areas such as environmental protection, children's education, senior care, community service, poverty alleviation, technical services, blood donation and other voluntary services.



Alibaba insists on fully recognizing and rewarding philanthropic activities, providing long-term support and encouragement for the philanthropic endeavors pursued by our employees. In 2017, the "Alibaba Charity List" was set up to recognize and reward outstanding internal teams, individuals, and projects that have made significant contributions to the public good. This is one of the most prestigious of our annual employee awards.

The 2023 Alibaba Charity List

The 2023 Alibaba Charity List was unveiled on March 3, where 10 "Most Socially Insightful" "Most Socially Influential" and "Most Technologically Innovative" projects were selected by more than 1,600 employees, external stakeholders, and professional judges. In addition, 14 Alibaba employees, alumni⁴, and partners were awarded "Charity Stars" of the year. Intime and Alibaba Health were awarded as the "Outstanding Charity Groups" of the year.



“ March 3 each year is not the end point but a new starting point for Alibaba employees to participate in philanthropy. With environmental, social and governance (ESG) being an important social responsibility strategy of Alibaba, and employees' participation in philanthropy constituting an important part of ESG, Alibaba's philanthropy undertakings enhance the overall development of Alibaba as a company. ”

- Daniel Zhang, Chairman and CEO of Alibaba Group

The 2023 Alibaba Philanthropy Award Gala

4 Former Alibaba employees.



Supporting employees to lead our philanthropy

Alibaba welcomes employees to take on more responsibility in our philanthropic efforts, contributing their valuable insights on how to best leverage our technology and businesses to catalyze positive social changes. Alibaba's unique philanthropy committee, established in 2012, elects new 'Alibaba philanthropic partners' every three years. These partners act as representatives for all Alibaba employees and actively collect feedbacks and suggestions from employees for discussions on the direction of Alibaba's philanthropic efforts.

In September, 2021, after nominations, roadshows, discussions, practices, and voting, 14 employees formed the fourth committee. In the time since, the

new committee has been able to go from planning to implementation of philanthropic projects, brought Alibaba employees to more actively participate in philanthropic projects, operated the philanthropy committee fund, planned and initiated the 'Good Things Happen' program, and sponsored charity events led by caring and innovative Alibaba employees.

In FY2023, the fourth philanthropy committee organized 162 activities related to children's education, social emergency support, care for the disadvantaged, environmental protection, and technology philanthropy, in which 4,110 Alibaba employees participated.



The fourth philanthropy committee

Peihong Chi, philanthropy committee representative

Initiator and leader of the Alibaba Emergency Pioneer "Hugs and Help" group, Peihong Chi is devoted to bringing more people to become "emergency pioneers". She has established a comprehensive first-aid training system for Alibaba employees to ensure the professionalism and long-term consistency of first-aid training. By actively organizing parent-child, community, and campus training, she has contributed to broadening participation across society.

In FY2023, the Alibaba Emergency Pioneer "Hugs and Help" group provided professional training for 15,431 people in more than 20 cities. With the help of the training, thousands of participants have obtained first-aid certifications such as the

Certificate for Red Cross First Aid and Heartsaver Instructor from the American Heart Association (AHA).

Led by Chi, the Alibaba Emergency Pioneer "Hugs and Help" group has participated in large-scale activities to provide first-aid support, including the Hangzhou Marathon, the Hangzhou Dream Town Half Marathon, and the 17th Xuanzang Road Gobi Challenge. In 2023, the group was awarded the Best Charity Star of the Year on the "Alibaba Charity List".

Philanthropy committee members launching the 120 emergency response volunteer team

When COVID-19 pandemic peaked at the end of 2022, emergency consultation calls surged in Hangzhou. Pressure and Risks rose for patients and their families as the public emergency hotline capacity failed to meet soaring demands.



Peihong Chi

To help with the situation, the philanthropy committee members and Alibaba Philanthropy immediately initiated cooperation with the First Aid Station of Hangzhou to recruit emergency response volunteers in Alibaba. After comprehensive training, committee members Peihong Chi and Yi Wang, and former member Jing Guo, as well as over 300 Alibaba employees, became volunteer dispatchers for the 120 emergency hotline, and participated in emergency coordination service shifts. They carefully responded to emergencies through answering calls, calling back disconnected calls, providing preliminary symptom diagnoses, and offering emotional comfort to ensure the hotline was accessible 24 hours a day. In 2023, the 120 emergency response volunteer group won the Best Charity Star on the "Alibaba Charity List".



For more details: Please refer to Chapter 1 Employee participation in biodiversity education and conservation P60, Chapter 5 Shaping brand development in rural agriculture P155, Bringing digital talents to rural areas P157, and Strengthening and expanding rural elementary education P162



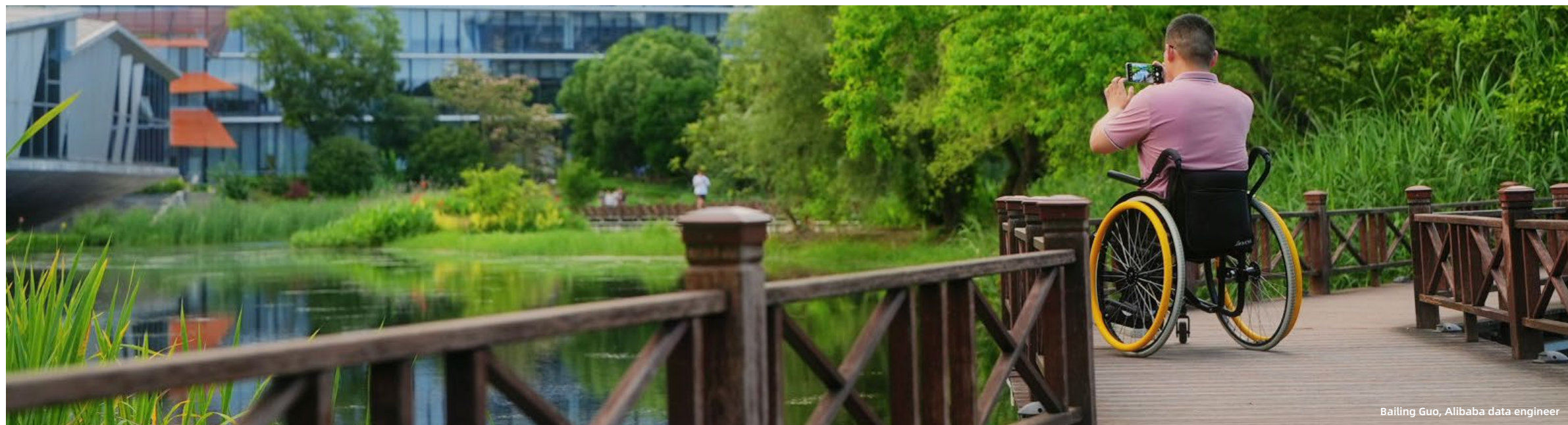
Technological innovations for social challenges

Technology and professional skills are now essential for innovative and effective philanthropy. Through the full support of finance and resources, we create a conducive environment for employees

to apply their talents in philanthropy, leveraging their expertise to find the best solutions for social challenges.

Tackling social problems with technology

Empowering charities with technology



Bailing Guo, Alibaba data engineer



Tackling social problems with technology

Many social challenges remain unaddressed not only because of a lack of material resources, but also because of a lack of access to information, especially for disadvantaged groups. Alibaba is committed to enhancing environmental protection and solving social challenges with technology. By sharing our expertise and skills in areas such as data processing and visualization, we improve the circulation of information and coordinate resources to better solve problems.



For more details: Please refer to Chapter 3 Inclusive consumption P102, Chapter 5 Rural technology officers P159, Strengthening and expanding rural elementary education P162 Consultation and medical supplies guarantee P170 Deploying digital technology to enhance social capability in disaster mitigation and relief P173

Amap's wheelchair navigation assisting barrier-free travel for disadvantaged groups

Cities in China can be complex and diverse in topography and traffic conditions. The overall level of accessible facilities is relatively low, creating barriers for many people, including those with disabilities, the elderly, the sick, the injured, and parents with infants. A 30-centimeter-high step may be a large barrier that affects their accessibility and even safety. Since 2017, Amap has focused on facilitating barrier-free travel for those with disabilities. In FY2023, Amap established a wheelchair navigation charitable project team, and recruited technical volunteers in Alibaba to develop a system to help. Participants include Bailing Guo, a data engineer from Taobao and Tmall, who lost his ability to walk after suffering poliomyelitis as a child. He shared his firsthand experiences, so that the developers could better understand the obstacles that people with disabilities face in real life. The wheelchair navigation feature was launched on November 25, 2022, just before International Disability Day.

Rare disease treatment map easing the difficulties of diagnosis and treatment for patients

Jointly with the Beijing Illness Challenge Foundation, Alibaba Health released China's first "Rare Disease Treatment Map" in February 2023, seeking to enhance access to medical information for patients with rare diseases. This map performs a matching search of disease guidelines and synonyms for the 121 rare diseases featured in the National Health Commission's Directory of Rare Diseases with 324 hospitals registered in the National Network to Collaborate on the Diagnosis and Treatment of Rare Diseases in China. Combining Alibaba Health's technical capability of geographic location recommendations, the map provides users with comprehensive and professional information on doctors and institutions across China that specialize in rare disease treatment, shortens the medical consultation process, and improves the convenience and diagnosis accuracy for patients.



Using the "rare disease treatment map"

Screening and intervention for Alzheimer's disease

Dementia brings immense challenges to the elderly and their families. The most common form of dementia is Alzheimer's disease (AD), yet medical solutions for AD are limited. Early screening and intervention are effective measures; however, screening of cognitive functions is highly technical and time-consuming. Most cities in China lack appropriate resources, so the process of dementia screening is far from ideal. Volunteers in the AD Screening Program at Alibaba's DAMO Academy have developed a smart tool that uses AI technology to screen for cognitive risks, as easily as checking blood pressure. It achieves the same reliability and validity as traditional manual screenings, but only takes one-third of time. The project team has partnered with various government and social organizations to raise awareness of AD. As of March 31, 2023, it has helped 118,746 seniors get screened, in collaboration with several medical experts, hospitals, nursing homes, and nearly 600 volunteers.



Volunteers go into the community to screen seniors with AI screening tools

"Wheelchair navigation enables barrier-free travel for people with disabilities, not only making travel more convenient, but also giving people with disabilities confidence in travel. We hope our wheelchair navigation will cover more cities in the future, helping more people with disabilities."

— Bailing Guo, data engineer at Alibaba



Empowering charities with technology

Alibaba recognizes the critical role of non-profits and social entrepreneurs in driving wider and positive societal change. We are committed to augmenting their capabilities by supporting their development and projects, and we offer them platform and technology solutions to support their philanthropic work and help them grow.



For more details: Please refer to Chapter 1 Water protection throughout our ecosystem P58, Supporting local natural conservation P63, Long-term cooperation with institutions to build an environmental information network P63, Chapter 5 Improving our logistics resilience P169

Launching the "Green Code" platform

The level of digitalization of charity organizations in China is generally low. We launched the "Green Code" platform to bridge the technical needs of charity organizations and developers who can help. The organizations can join the free platform and outline their technical requirements. Developers can view these requests and then volunteer to help organizations based on their abilities and interests. The "Green Code" platform provides resource coordination, process collaboration, technical communication, and technology empowerment.

The volunteers have also created a number of templates for common scenarios faced by charity organizations.

As of March 31, 2023, 370 charity organizations and 6,800 volunteers have registered on "Green Code", and the platform has supported the digitalization of more than 100 charity organizations.

"Green Code has connected a lot of lovable technology volunteers for us. They have developed Mantianxing Public Welfare program with data management system through low-code platform, which brings great convenience for us to count the reading resources acquired by schools and the participation in reading activities, so that we could promote reading in a more customized manner and make better use of reading resources."

— Haiguang Liang, Founder of Mantianxing Teenagers Public Welfare Development Center in Haizhu District, Guangzhou City



Technology creators share the "Green Code" Project



Connecting ecological forces to empower charities

Alibaba has unique strengths in philanthropy in our ability to leverage the platform's power to build a broad ecosystem, enabling more people

to participate in philanthropic activities efficiently and conveniently.

Social emergency assistance

Promoting multi-party participation through leveraging platform power

Spreading positive energy and encouraging the public to do righteous deeds



Expanding social influence through our platforms, empowering charities with technology



Social emergency assistance

By investing in and integrating our diverse resources and capabilities, we support initiatives to tackle public crises, including earthquake relief, environmental protection, and public health.

In FY2023, the Alibaba Group donated RMB399 million to the Alibaba Foundation, mainly towards public welfare projects in areas such as pandemic relief, education, and environmental protection. At the 7th China Annual Conference on Philanthropy, hosted by China Philanthropy Times, Alibaba was awarded the "2023 Philanthropic Enterprise". Meanwhile, the Alibaba Daily Positive Energy program as well as the Ai You Foundation's medical assistance project for critically ill children and the China Foundation for Rural Development's Child Companion Plan supported by our "XIN 100" program were awarded the Philanthropy Projects of the Year.

 **RMB 399 million**
Alibaba Group donated RMB399 million to the Alibaba Foundation

 **2023 Philanthropic Enterprise**

Providing relief after the Luding earthquake

In September 2022, a 6.8-magnitude earthquake struck Luding County in Ganzi Tibetan Autonomous Prefecture, Sichuan Province. Alibaba rapidly launched a disaster relief plan through the Alibaba Foundation, and donated RMB5 million for earthquake relief and reconstruction in coordination with the arrangements of the government. Through our rural revitalization commissioner in Ganzi, we devoted considerable efforts to allocating resources to support frontline disaster relief.

In addition, the Alibaba Philanthropy platform has collaborated with organizations such as the Chinese Red Cross Foundation, the China Social Assistance Foundation, the One Foundation, and the Amity Foundation to launch a fundraising initiative during Alibaba's Philanthropy Week.

Providing cross-sector emergency relief for the Turkey-Syria earthquake

In February 2023, a 7.8-magnitude earthquake hit Turkey and Syria. Alibaba quickly established a Cross-sector Disaster Relief team, led by our International Business Department. Fully leveraging the strengths of our platform to combine resources, we completed relief supply procurement and cross-border delivery within 48 hours, and all materials were delivered to disaster-hit areas in Turkey.


On receiving an emergency relief request from the Turkish embassy in China, Cainiao immediately established a special team to handle and deliver materials to Turkey. A special transportation channel ensured the quick delivery of urgently needed tents, sleeping bags, and blankets to the earthquake area in Adana and other regions. Cainiao delivered a total of more than 200 tons of materials to Turkey.

Meanwhile, the Alibaba Foundation immediately contacted the Zhejiang Rescue Team of Ramunion, an experienced civilian rescue team. Upon approval by the Ministry of Civil Affairs and the Council, the foundation donated RMB500,000 to Ramunion to fund their rescue.

Contributing to pandemic prevention and control in rural areas

To purchase two fingertip pulse oximeters for each of the over 600,000 village clinics across China, Alibaba donated RMB125 million through the Alibaba Foundation in January 2023. This purchase - under the guidance of the Ministry of Agriculture and Rural Affairs, the Ministry of Industry and Information Technology, and the National Health Commission - covered almost all of China's administrative villages. In just 4 days, Cainiao delivered more than 1 million oximeters to bolster pandemic care in rural areas.

Cainiao also established rural healthcare emergency warehouses in six major cities - Tianjin, Xi'an, Wuhan, Guangzhou, Chengdu, and Jiaxing - to enhance the logistics capacity in adjoining rural areas. In February 2023 - guided by the Ministry of Agriculture and Rural Affairs, the All-China Federation of Industry and Commerce, the Ministry of Industry and Information Technology, and the National Health Commission - Cainiao sent over 22,000 oxygenators to primary healthcare institutions in 386 locations, including Xinjiang Uygur Autonomous Region, Gansu province and Guangxi Zhuang Autonomous Region to improve the quality primary medical care.

 For more details:
Please refer to Chapter 5 Responding systematically to public health crises and natural disaster P170



Donate finger-clip oximeters to village clinics



Promoting multi-party participation through leveraging platform power

We have leveraged the power of technology, business experience, and platform resources, to encourage and inspire broader society to participate in philanthropic activities. This ranges from small actions in everyday shopping, to responding to and volunteering in charity initiatives. We want to engage everyone to participate in philanthropy, and better integrate philanthropy into social life. At the same time, we have always maintained a cooperative relationship with the public welfare ecosystem, exerting the appropriate social value of every good deed.

In terms of driving the public, we have launched "Alibaba Charity Platform" and "Three Hours for a Better World" welfare platforms including "Goods for Good", enabling more people and enterprises who desire to do "good deeds" efficiently to participate in public welfare. Taobao merchants can designate their "goods on sale" to "Goods for Good" voluntarily, donating a portion of the transaction amount from such sales to specified public welfare projects. After consumers purchase products labeled as "Goods for Good" on Taobao, the platform donates the amount set by the merchant to the corresponding charity organization or project.

We consolidate philanthropy into small transactions between consumers and merchants. Low in cost but large in scale, the program conveniently and efficiently pools resources in a real-time manner to build the "e-commerce + philanthropy" value chain, helping to boost a positive cycle of long-term support for philanthropy among the public and

realize the aspiration of continuously supporting philanthropy. In FY2023, the "Goods for Good" project attracted 2.04 million merchants and 470 million consumers to participate, benefiting over 9 million people. The "Goods for Good" project mainly focuses on areas such as care for disadvantaged groups, education, environmental protection, and animal protection.

Alibaba's "Three Hours for a Better World" platform links billions of consumers with organizations that need support and volunteers, promoting public philanthropic participation.

In terms of connecting charity organizations, we have launched public welfare programs such as "XIN 100". This plan aims to support public welfare projects that align with Alibaba's ESG and public welfare philosophy. This plan collaborates with excellent charity organizations annually to incubate and create at least 100 benchmark projects, promotes innovation in public welfare models, jointly build reliable digital infrastructure in the industry, and assists in the sustainable development of public welfare undertakings. In FY2023, "XIN 100" supported a total of 102 excellent public welfare projects from 64 public welfare organizations. The main areas that the "Goods for Good" and "XIN 100" focus on are caring for the disabled, education development, environmental protection and animal protection, and elderly care.

Linkage with merchant ecosystem to assist the "Smiling Children" project

In response to the hunger faced by children in some impoverished areas of developing countries, the China Foundation for Rural Development has launched the International Smiling Children Feeding Program, helping children grow and develop healthily by providing meals or distributing food. In 2022, the International Smiling Children Program became a partner of Alibaba's "XIN 100" program. At the same year, we received support through the "Goods for Good" project from 82 million orders from 340,000 heartfelt merchants, raised RMB4.44 million in donations, and carried out projects in Ethiopia, Nepal, and Myanmar, benefiting a total of 6,936 students.



Digital platforms sparking a wave of philanthropy during Alibaba Philanthropy Week

On 2022 China Charity Day, Alibaba - under the guidance of the Ministry of Civil Affairs, driven by philanthropy intention, commercial methods, and technical power - mobilized business departments, merchants, institutions, and the public to participate in philanthropic activities. By fully leveraging our digital advantages through online and offline channels, we made China Charity Day a resounding success and achieved unprecedented targets.

During the Alibaba Philanthropy Week:

- 2.84 billion media exposures through new media and social media, with 8.77 million public interactions;
- 34 business units of Alibaba were mobilized to provide resources, attracting 260 million participants to engage in the Alibaba Philanthropy Week;
- 42 charity organizations initiated 118 projects, raising RMB33.41 million, and 41 charity organizations established 780 caring teams;
- 31.77 million participations were engaged in philanthropy through platforms such as Taobao and Alipay, and 200 million "love beans" - charity credits - were distributed.



For more details:

Please refer to Chapter 1 Wildlife conservation through digital platforms P61, Engaging and inspiring the public to become actively involved in nature conservation P64, Chapter 5 Shaping brands in rural agriculture P155, Promoting rural tourism and cultural charms P156



Spreading positive energy and encouraging the public to do righteous deeds

We believe that the ultimate form of philanthropy is a lifestyle, which needs to facilitate participatory philanthropy to step further into the mainstream social values and bring more philanthropy actions. Therefore, in addition to our own corporate philanthropic activities, it is necessary to spread the concept and amplify the positive energy.

“Daily Positive Energy benefits virtuous and kind individuals. People with good deeds are rewarded with public recognition and rewards. Such an initiative is an innovation in the public welfare mechanism. Alibaba moves from "making it easy to do business anywhere" to "making it easy to do good anywhere". In the past decade, Alibaba has given RMB100 million to support the program, which is really a great achievement.

— Zhenyao Wang, Dean of the China Philanthropy Research Institute at Beijing Normal University

”

“'Daily Positive Energy', without preaching, sensation, or artificiality, encourages the media to discover and tell touching positive energy stories. Such stories are then amplified and promoted through rewards. In this unique, subtle and invisible manner, more people will be inspired to do more good deeds, spontaneously and unconsciously.

— Di Shu, Editor in Chief of Charity Weekly of CPPCC DAILY

”



Gathering influential media philanthropists for the new media workshop

Alibaba hosted the "China new media philanthropic workshop" themed "consolidating forces for goodness and assisting rural revitalization" in February 2023, with representatives from 39 media. We hope to consolidate the power of outstanding and influential media philanthropists to practice and share good deeds, facilitating the development of philanthropy in China by making participatory philanthropy a lifestyle. The workshop focused on social challenges including the employment of older migrant workers, the education of rural children, the promotion of Mandarin among children in remote ethnic minority areas, drug safety for rural children, and the mental health of adolescents. The workshop also carried out the "venture philanthropy group roadshow" and provided philanthropy venture support for outstanding projects.

"Daily Positive Energy" encouraging the public to do righteous deeds⁵

Alibaba joined forces with mainstream media across China to launch the "Daily Positive Energy" program in 2013. In the 10 years since, the program has searched for, shared, and provided recognition for righteous deeds done by ordinary people. As of March 31, 2023, we have given positive recognition and encouragement to 11,722 people, awarded more than RMB100 million, and organized more than 1,800 activities. With a mature model of "rewards for positive energy" and "incubation of innovative public welfare activities", a comprehensive social advocacy and nationwide volunteer service system have been established in China.

Over the past decade, classic cases have been widely shared and more than 10 winners of the "Daily Positive Energy" program have been recognized with national honors such as "Touching China Role Model" and "National Ethical Role Models". An additional 300 winners have been commended by local governments, becoming role models for the society.

Prominent examples include truck driver Baomin Li, from Shandong province, who volunteered his services thousands of miles away in Hubei province during the COVID-19 pandemic. As Li said, while chewing Shandong pancakes, "I have no money, but I can contribute my labor." Meanwhile, labor contractor Wuxian Chen, from Henan province, insisted on repaying money for 15 years to keep his promise.

It is the mission of "Daily Positive Energy" to find and encourage these upstanding people. We believe that highlighting the righteous deeds of these individuals inspires others to follow, forming a positive cycle and culture in which everyone contributes to the greater good.



⁵ For more details of "Daily Positive Energy" program, please refer to the Ten-year Evaluation Report on Daily Positive Energy Program (http://www.bnu1.org/show_2798.html, released by the China Philanthropy Research Institute of Beijing Normal University)



Building Trust

To build the trust of our corporate partners and society, firstly, we observe ethical business practices and comply with all applicable regulations, overseen by an effective, transparent, and diverse corporate governance structure; and secondly, we are dedicated to advancing privacy protection and data security capabilities, and practices of technology ethics. Our goal is to gain and maintain public trust in our business ecosystem and digital technology, striving to ensure our business and technology ultimately benefit society at large.

We achieve those goals by,

- Building corporate trust P190
- Building social trust P199

Building Corporate Trust

60 % **30 %**

The percentage of independent directors has increased to 60%, and the percentage of the directors who are women has reached 30% from 20%

100 %

Both the Code of Business Conduct exam and the Compliance and Risk Awareness exam were launched with 100% of employees covered

Science and Technology Ethics Governance

Management Norms for Science and Technology Ethics Review

Release of Management Norms for Science and Technology Ethics Review

Six basic principles

Six basic principles for science and technology ethics governance of the Group - people-oriented, inclusion and integrity, privacy protection, security and reliability, trustworthiness, openness and co-governance

Building Corporate Trust



The Second Prize of the 2022 Wu Wen Jun AI Science & Technology Award

One of the multi-partnership research results "Key Technologies and Applications for Efficient Content Governance in Complex Internet Environments" has been awarded the Second Prize of the 2022 Wu Wen Jun AI Science & Technology Award

Privacy Protection and Data Security

The Highest

Alibaba Cloud, as one of the cloud service providers with the highest level of security and compliance in the Asia-Pacific region, continues to improve the security compliance level of the cloud platform with strict requirements and rigid implementation of over 130 global security compliance standards

Strong Performers

Alibaba Cloud was the only company in China to be positioned as the "Strong Performers" in the The Forrester Wave™ : Infrastructure-As-A-Service Platform Native Security (IPNS) report

Titanium Award for Digital and Trustworthy Cloud

Alibaba Cloud won the highest-level Titanium Award for Digital and Trustworthy Cloud, granted by the British Standards Institution

100 %

The "Safety Red Line Certification" exam has been launched with 100% employee coverage

Building corporate trust

We gain the trust of our corporate partners by building an effective and professional corporate governance system; reducing risks and improving the stability of our business development through a sound risk management system; and building goodwill and promoting business partnerships by adhering to ethical business principles. Together, these elements form the cornerstone of our corporate trust.

On March 28, 2023, we announced a new organizational and governance structure to empower all our businesses to become more agile, enhance decision making, enable faster responses to market changes and promote innovation to capture opportunities, thereby unlocking shareholder value. Under our new structure, Alibaba Group is the holding company of the six major business groups and various other businesses. Each of the six major

business groups is independently managed by its own chief executive officer and board of directors (or equivalent governing body). The director and CEO candidates of these major business groups are subject to the approval and appointment of Alibaba Group's board of directors.

As the ESG report for FY2023, this report focuses on the structure and actions prior to the organizational and governance restructuring while also incorporating some key changes under the new organizational and governance structure.

Maintaining an effective and professional corporate governance system

Risk management system

Ethical business conduct





Maintaining an effective and professional corporate governance system

A first-class corporate governance system enables the corporation to continuously innovate and create first-class products and services for clients and the society. A good governance system requires a compliant, professional, and efficient decision-making mechanism, which can safeguard the long-term interests of all stakeholders.

Independence and diversity of the board of directors

Board governance structure

Sustainability governance structure

60%
Percentage of independent directors

30%
Percentage of women directors

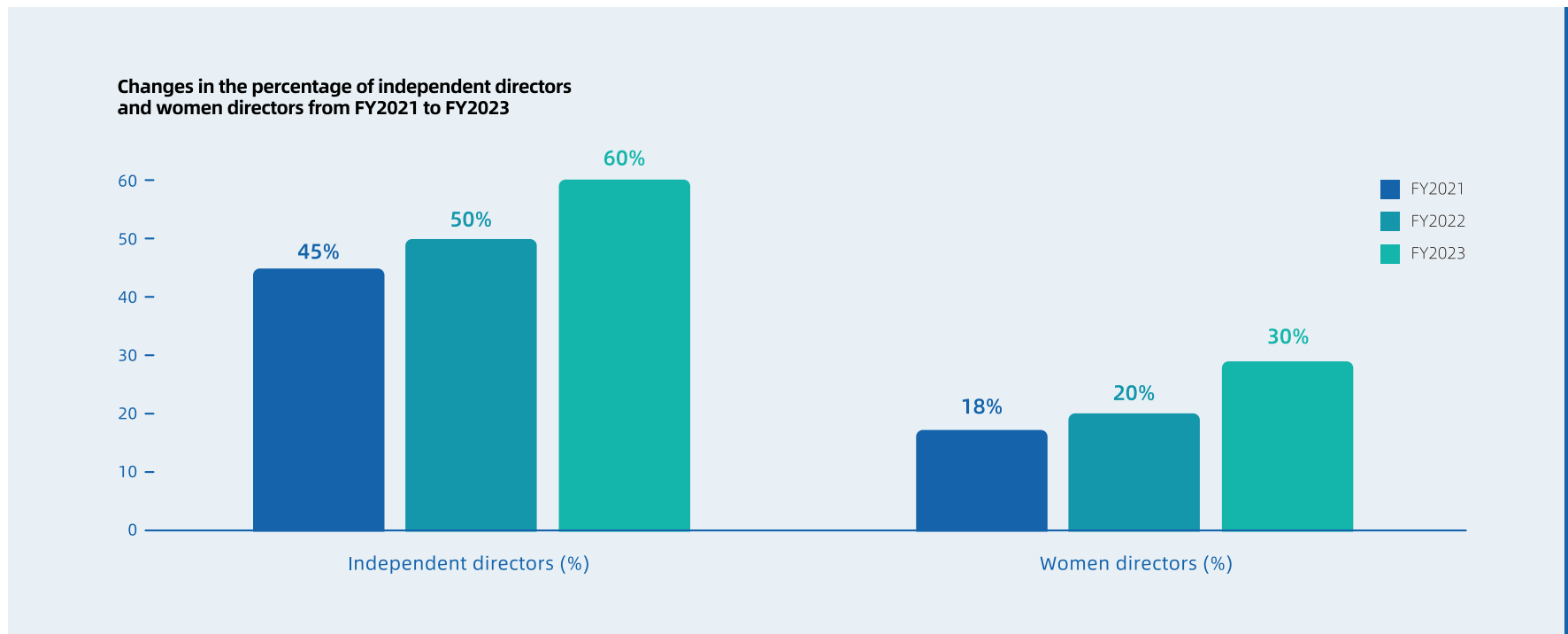
Independence and Diversity of the Board of Directors.

We endeavor to promote diversity in gender, culture, professional expertise, and other dimensions in the board of directors to align with the ongoing business diversification. It has been stated clearly that age, gender, cultural background and cooperation ability should be considered comprehensively during the nomination of the Board in the Nomination and

Corporate Governance Committee of the Board of Directors Charter.

As of March 31, 2023, the board of directors of Alibaba Group has a total of 10 members, including six independent directors and three directors who are women, the percentage of women directors has increased from 20%

to 30% during the last fiscal year. Our board members feature rich professional backgrounds and industry experiences in fields such as retail, computer science, electrical engineering, economics, finance, law, business, and real estate.



Board governance structure












In terms of the board of directors, Alibaba's overriding goal is to maintain its effectiveness, independence, diversity, and professionalism. Driven by this goal, as of the reporting date, Alibaba Group's board of directors maintains six committees, including the audit committee, compensation committee, nomination and corporate governance committee, sustainability committee, compliance and risk management committee, and capital management committee, of which the compliance and risk committee and the capital management

committee were newly established upon approval by the board of directors in May 2023.

According to Alibaba Group Holding Limited Corporate Governance Guidelines¹, the Board, acting through the Nominating and Corporate Governance Committee, should conduct a self-evaluation at least annually to determine whether it and its committees are functioning effectively.

In addition, each committee of the board should conduct a self-evaluation at least annually and report the self-evaluation results to the Board, acting through the nominating and corporate governance committee. Each committee's evaluation must compare the work of the committee with the requirements of its written charter. In evaluating the work of the board and each committee, the board, acting through the nominating and corporate governance committee, considers factors such as: skills and backgrounds of board and committee

members, sufficiency and effectiveness of board and committee meetings, and attendance and participation of directors at board and committee meetings².

Audit committee	Compensation committee	Nomination and corporate governance committee	Sustainability committee	Compliance and risk management committee	Capital management committee
 Chaired by an independent director  100% of the committee members being independent directors with general expertise in financial management	 Chaired by an independent director  100% the proportion of independent directors in the committee increased from 67% to 100% compared to the previous financial year	 Chaired by an independent director  67% of committee members being independent directors	 Chaired by an independent director  33% of the committee members being independent directors	 Chaired by an independent director  60% of the committee members being independent directors	 Chaired by Mr. Daniel Zhang, Chairman and Chief Executive Officer
Responsible for managing and overseeing auditing and financial reporting processes by both internal and external teams, as well as approving related party transactions.	Responsible for evaluating compensation policies, reviewing the performance of directors and executives, approving executive compensation, and administering our equity incentive plan.	Responsible for nominating directors other than those nominated by the Alibaba Partnership, and reviewing the composition of the board of directors. The committee is also responsible for corporate governance and compliance matters.	Responsible for overseeing Alibaba Group's ESG work, which includes identifying and assessing ESG opportunities and risks, ensuring robust formation and implementation of ESG strategic goals, and reviewing ESG-related disclosures.	Responsible for overseeing Alibaba Group's overall regulatory compliance and risks management, including risks such as network and data security, regulatory compliance, etc. Responsible for ensuring the overall compliance and risk management requirements of the Group, issuing compliance and risk management framework; assessing the scope and extent of key risk exposures and supervising the implementation of corresponding policies and procedures; evaluating the performance of the compliance and risk management system.	Responsible for undertaking a comprehensive capital management and distribution plan to enhance shareholder value, reviewing and deciding important matters relating to Alibaba Group's activities as a holding company, including capital market transactions, shareholder return initiatives, investment and acquisition, subsidiary equity incentive plans, fundraisings, initial public offerings and spin-offs.

¹ Code of Corporate Governance <https://data.alibabagroup.com/ecms-files/1452422558/835c8407-03b6-4505-bde1-50b26d129074.pdf>.

² For more detailed information on board governance, please refer to Directors, Senior Management and Employees in Item 6 of FY2023 Annual Report of Alibaba Group.

Sustainability governance structure

In FY2023, Alibaba's sustainability governance structure consists of three layers, namely, the Board sustainability committee, the sustainability steering committee (SSC), and the ESG working group.

In order to ensure the steady improvement and implementation of the sustainable development strategy, under the leadership of the Board sustainability committee, SSC held four coordination meetings on a quarterly basis to review the implementation progress of ESG goals and the promotion strategies of key issues. At the level of the ESG working group, ESG strategy and operation department together with main business units has streamlined main ESG issues, formulated ESG plan, and promoted them to build their own ESG corporate structure. Alibaba Group's ESG strategy and operation department has cooperated with the ESG working groups of each business unit to establish a cross-departmental working group to carry out the implementation of the ESG strategy, including carbon neutrality goals, climate adaptation and change, etc. Meanwhile, we have developed the Group's ESG data management system and carbon emission management system as digital tools for our daily ESG management.

The new organizational and governance restructure will not change the ESG strategy and current commitments. Meanwhile, the three-layer governance structure will continue to be maintained. The holding group, business groups, and companies will make concerted efforts to achieve overall

ESG goals and carbon neutrality commitments. Meanwhile flexible and appropriate ESG strategies will be adopted according to the development stages of different business groups and companies. To further integrate sustainable development goals into various strategies and designs of business groups and companies, Alibaba has decided to incorporate ESG goals and other business and compliance goals into the performance and remuneration appraisal system of business groups and companies.



Board sustainability committee

In 2021, our board of directors established a sustainability committee, chaired by Jerry Yang. On behalf of the board of directors, the sustainability committee is responsible for supervising ESG efforts across Alibaba Group, including identifying and assessing ESG opportunities and risks, ensuring ESG strategic goals and implementations are monitored with forceful internal controls, assessing implementations of ESG actions and plans, and also reviewing ESG-related disclosures.



Sustainability steering committee (SSC)

Under the leadership of the board sustainability committee, the SSC has been established which is responsible for planning and executing goals. Moreover, we have established an ESG strategy and operations department that coordinates directly with the designated ESG teams of business units and departments. They are the driving force to implement the strategies and projects set by the SSC and to establish and maintain monitoring systems to measure our progress.



ESG working group

The ESG working group, composed of representatives of various business units, works in collaboration with the ESG strategy and operation department led by SSC to ensure the effective completion of ESG strategic objectives and to establish and maintain an ESG measurement and management system.



ESG goals are linked to the CEOs' performance and salary assessment



Risk management system

In FY2023, we continued to improve our existing risk management structure and systems, and implement them in actions, covering management mechanisms, supervision and inspection, evaluation and assessment, and risk awareness training, etc.

Organizational structure

Institutional system and actions



100%

Coverage of employees in Compliance and Risk Awareness exams

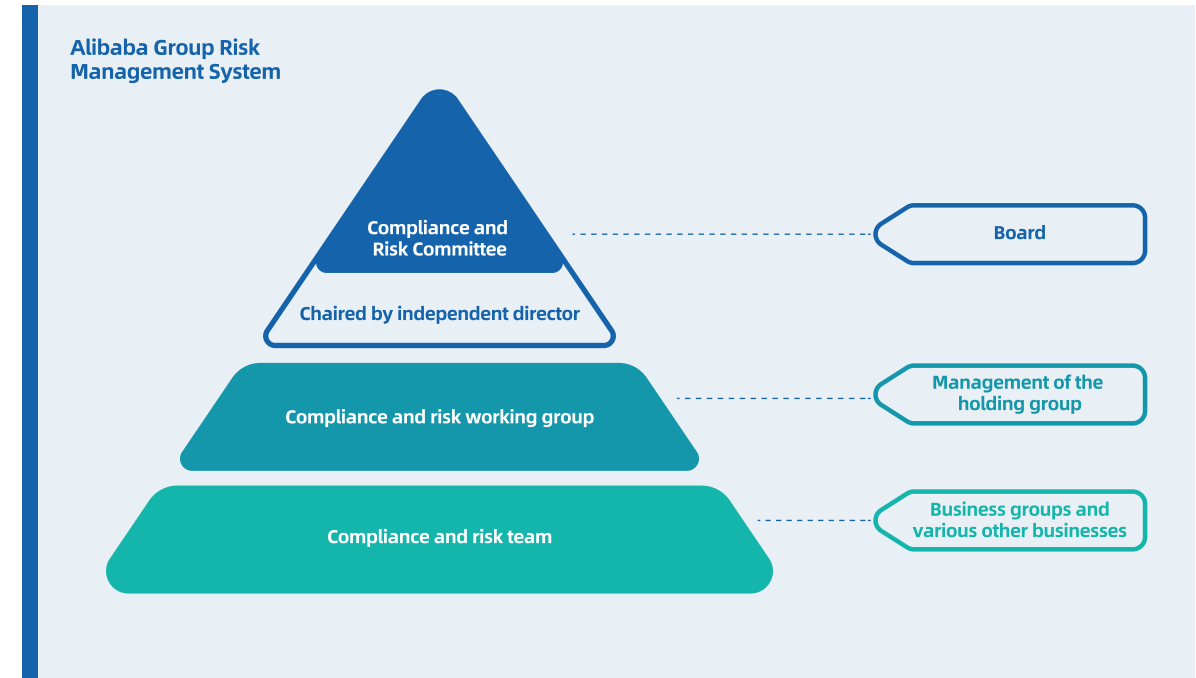
Organizational structure

In FY2023, Alibaba’s risk management structure consisted of the Alibaba Group risk management committee (hereinafter "risk management committee"), the management office of the Alibaba Group risk management committee, related departments of Group Risk Management, and Business Unit Risk Management teams. Under the direct leadership of Alibaba Group’s CEO, risk management committee serves as the highest supervisory and decision-making body of Alibaba’s risk management system. The risk management committee is chaired by the Group Chief Risk Officer (CRO), with the Group Chief Legal Officer serving as the vice chairman.

The main responsibilities of the risk management committee are to formulate the group's risk management strategy, improve the risk management system, and identify the major risks of Alibaba Group. Furthermore, the committee develops corresponding risk management strategies, establishes evaluation and assessment mechanisms, and supervises the implementation of risk management measures.

Upon the launch of the new organizational and governance restructure, Alibaba has established a new compliance and risk management committee at the Board level, further responsible for overseeing Alibaba Group's overall compliance and risk management system, including risks such as network and data security, regulatory compliance, etc. The compliance and risk management committee, which is directly chaired by an independent director and the majority of its

members are independent directors, is the highest control and decision-making body of the compliance and risk management organization system. The compliance and risk management committee, the compliance and risk working group under the management of the holding group, and the compliance and risk team of each business group or company constitute the upgraded three-tier risk management system.



Alibaba Group Risk Management System after the organizational and governance restructure



Institutional system and actions

In terms of institutional system and actions, we will report and present the actual situation before the changes in the organizational structure.

Under the “three-layer” mechanism for risk control and management³, in FY2023, Alibaba made unremitting efforts in improving the existing risk management system and took measures to refine the management mechanism, supervision and inspection, performance appraisal, etc. Meanwhile, to popularize and enhance the awareness of risk management, we have also reinforced the all-hands awareness training on risk management.

In terms of the underlying system, Alibaba has released the Alibaba Group Risk Management Outline, which defines basic principles, organizational structure, working mechanism and responsibilities for risk management. In terms of the management mechanism, Alibaba has continuously improved the mechanisms for ex-ante prevention, emergency handling during the event and ex-post review and improvement through the risk list management mechanism and the emergency management system of major risk events.

Meanwhile, Alibaba has built a comprehensive compliance governance system and has improved the design of related management mechanisms for compliance risk prevention, identification, and response.

Alibaba Group has developed a supervision and inspection mechanism to ensure the effectiveness implementing the risk management mechanism, which has been implemented across the Group on a pilot basis since August 2022. To standardize the implementation of risk management, Alibaba has developed a standardized operations manual and inspection items, and has performed an automatic supervision of risk management personnel’s compliance with the operations manual through the digital system. In FY2023, Alibaba linked the results of compliance and risk management to business performance, including business presidents’ annual performance appraisals, thereby further guaranteeing the implementation of the risk management system. We conducted Compliance and Risk Awareness training and exams for our employees with 100% coverage.



³ "Three-layer" mechanism for risk control and management: The first layer is operations and management, composed of the first level organization and risk management teams and functional departments of each group business, responsible for daily operations and management; the second layer is risk management, consisting of the Group risk management team, which uniformly plans and carries out the construction and work of risk management and internal monitoring systems; the third layer is independent audit and integrity investigation, composed of internal audit and integrity and compliance departments, responsible for providing independent evaluations of the effectiveness of risk management.

Ethical business conduct

Upholding a high level of business ethics is Alibaba's requirement for every employee. We are committed to conducting our work with compliance, integrity, and good faith, committing to ethical practices that maintain fairness, trust, and openness in all our businesses to build a sustainable business environment. Alibaba strictly abides by the civil and commercial laws, anti-unfair competition laws, criminal laws and other laws and regulations of China, and has formulated the Alibaba Group Code of Business Conduct (hereinafter the "Code of Business Conduct") to regulate the behavior of every employee, including basic requirements such as preventing bribery and corruption and safeguarding fair competition.

Anti-corruption

Maintaining fair competition

Anti-corruption

Aligning with a "zero tolerance" attitude against corruption, Alibaba has continuously refined its existing anti-corruption system by building corresponding organizational structures and management systems to ensure their effectiveness. At the same time, to maintain and continuously improve the ability of anti-corruption investigation management and risk prevention, Alibaba regularly carries out evaluation, auditing, and training.



100%
Coverage of employees in The Alibaba Code of Business Conduct exam



337
Integrity Training Sessions

System construction

Since 2009, Alibaba has successively developed a comprehensive system of policies and regulations to guide employee conduct and enforce the company's integrity culture. Alibaba has continuously updated the system in accordance with regulatory laws and corporate requirements to consolidate and improve the corporate culture of anti-corruption.

In addition to preventing bribery and corruption set forth in the Code of Business Conduct, Alibaba has also released the Alibaba Group Anti-Bribery and Anti-Corruption Policy that applies to all Alibaba directors, executives and employees, including full-time, part-time and temporary employees. Furthermore, Alibaba has formulated supporting rules such as the Alibaba Group Conflict of Interest Guidelines and Interpretations, the Alibaba Group Gifts Handling Guidelines, and the Alibaba Group Government Affairs Regulations.

Management system

As the joint management and execution body of anti-corruption, the Integrity and Compliance Department and the Legal Department jointly report to the CEO. Functionally, the Legal Department is responsible for revising, interpreting, and implementing of anti-corruption-related policies while the Integrity and Compliance Department is responsible for corruption investigation, prevention and promotion of integrity culture which has the authority to hold all employees accountable on an equal and uncapped basis. The Integrity and Compliance Department is independent from all business lines and maintains functional independence from other risk control departments, such as the Internal Audit and Internal Control Departments, thereby forming a mechanism of coordination among multiple layers. Meanwhile, the Integrity and Compliance Department reports the progress of anti-corruption efforts to the board of directors regularly.



Investigation actions

Alibaba obtains indications of business fraud and corruption through collecting internal and external reporting and conducting regular assessments. We maintain accessible and independent reporting channels, including an official website, emails, hotlines and the Integrity and Compliance reporting portal on the intranet. Alibaba encourages all employees, business partners, and the public to report corruption and fraud practices involving Alibaba employees. Alibaba has established nearly 50 online reporting portals and more than 80 offline reporting sites. At the same time, in compliance with legal and regulatory requirements, a "whistleblower protection" clause has been formulated in the Integrity Reporting System, which strictly protects the personal information and reporting content of whistleblowers.

For clues involving corruption issues, the Integrity and Compliance Department or the managers of the department to which the suspected misconduct employees belong to will conduct a detailed investigation and make a judgment concerning any violations, according to their respective responsibilities. For employees who have committed violations, their business department and the Human Resources Department will make disciplinary decisions in accordance with the Employee Disciplinary Rules within five working days.

Alibaba dismisses, demerits, issues warnings, or applies other reprimands to an employee involved in violations. Except for minor infractions subject to reprimands, non-compliant behaviors are linked to

compensation. Alibaba incorporates the integrity of business teams into the performance appraisal of their respective business managers, and stresses their accountability for fraudulent incidents of the business teams in the Code of Business Conduct, making fighting corruption and fraud one of the core indicators of all business management.

Alibaba exerts efforts to maintain an atmosphere of outstanding integrity. Based on the survey involving all employees in the past three years, 99% of the respondents have an in-depth understanding of the Alibaba Group Code of Business Conduct, and more than 85% of the respondents believe that integrity across the Group can reach a score of 4 or above (out of 5 points).

Alibaba Integrity Reporting Email:

lianzheng@alibaba-inc.com

Alibaba Integrity Reporting Website:

<https://lianzheng.alibaba-inc.com>

Audit mechanism

Every quarter, the Integrity and Compliance Department discloses fraud cases to external auditors, and responds to questions from external auditors. In addition, the Integrity and Compliance Department reports to the audit committee quarterly on fraud cases and its management of other major risks. In FY2023, we had a total of 45 cases of employee corruption that have been transferred to the judicial processing, of which two cases were initiated and concluded, and the people involved were all sentenced according to the laws.

Integrity training

Strengthening daily education and training is the best way to manage risks. Alibaba provides all employees with training on the Alibaba Group Code of Business Conduct as well as the supporting rules thereof in the form of new employee orientation training, various special training, annual examination (including pre-exam online training), etc. As of the reporting date, 2023, the examination on the Alibaba Group Code of Business Conduct has covered 100% of the employees. We have also launched 377 integrity training sessions, involving 46,883 participants in total. Meanwhile, Alibaba has also launched training sessions on integrity for external third parties (suppliers, contractors, partners, etc.).

Risk evaluation

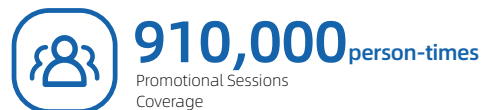
The Integrity and Compliance Department regularly evaluates the risk levels of different positions in the business departments, strengthens anti-fraud and anti-corruption education for those in high-risk positions, and promotes regular job rotations and separation of powers and responsibilities to reduce the risk of fraud and corruption. The Legal Compliance Team annually conducts anti-corruption risk evaluation across the Group to determine the level of corruption risk and formulates corresponding measures.





Maintaining fair competition

Alibaba has attached great importance to building and maintaining a favorable market environment for fair competition and improve the long-term mechanism of compliance management. Based on the regulations, different businesses have also formulated management regulations, such as Taobao Regulations on Competition Behavior Management. Meanwhile, we have released related employee manual to regulate the business behaviors of our employees.



Measures of fair competition

Our e-commerce business has always been upholding the value of continuously optimizing platform rules and standardizing resource allocation while respecting the independent management rights of merchants to guarantee a fair and orderly business environment in our platforms. In FY2023, our main management measures were as follows:

Continuously sorting out and reviewing the provisions in the existing rules, strictly implementing the procedures for publicity and opinion collection, and timely revising and optimizing the rules to ensure standardized procedures and transparent content.

Improving the resource allocation rules for marketing activities, clarifying the processes for entry, reporting and approval of marketing activities, guaranteeing rights of merchants, strengthening internal control management and avoiding improper human intervention;

Continuously promoting the construction of a competition compliance system, clarifying the compliant competition management system, processes, and standards, and establishing a work mechanism for risk sorting, identification, reporting, and treatment management across all business departments;

To strengthen the management of competition compliance risks, we have conducted competition compliance risk monitoring in key areas such as contracts, platform rules, data disclosure, resource allocation, and product designs by identifying risks using a dynamic risk monitoring

model and reviewing risk with compliance experts. For suspected risk information, Alibaba gives timely alerts through the digital system.

Furthermore, Alibaba publicly discloses our business compliance commitments and reporting e-mails to society and users, thus establishing an external supervision mechanism involving the platform merchants and consumers.

Training on fair competition

To further establish the awareness of fair and compliant competition, we have formulated the employee compliance training system. Different businesses specify responsibilities for different job functions and conducts compliance training on a regular basis. In order to enhance the professional abilities of compliance management personnel, we have designed a series of courses such as Enhancing Capabilities in Competition Compliance in related businesses, and launched competition compliance promotional materials in comics. In FY2023, a total of 35 promotional sessions covered 910,000 person-times. In addition, all employees in Alibaba shall pass the compliance and risk awareness exam, which includes the content of competition compliance, with a coverage rate of 100%.

A Series of Competition Compliance Tips - Be Vigilant against Anti-monopoly Risks from Improper Publicity



Alibaba Anti-Unfair Competition Reporting Email:
competition-compliance@alibaba-inc.com

Building social trust

Alibaba firmly believes that technological progress is essential for achieving sustainable development goals, however, digital changes pose unprecedented challenges and risks. Therefore, while constantly improving the corporate governance mechanism, Alibaba focuses on privacy protection and data security, as well as technology ethics, to build secure and ethical digital trust. Alibaba and our

business ecosystem are formed based on public trust. Alibaba pursues not only scientific and technological progress, but also seeks to become the leader of digital trust.

| Privacy protection and data security

| Science and technology ethics |



Not only pursue advanced technology, but also strive to lead the way in digital intelligence trust

Privacy protection and data security

Privacy protection and data security constitute a foundation for trust in the digital era, and are among the most important concerns of Alibaba users, customers and other stakeholders. Alibaba is committed to protecting the privacy and data security of our users. On this basis, Alibaba makes unremitting efforts to build governance mechanisms throughout the data lifecycle, build cutting-edge privacy protection and data security technologies and apply them to our products and services.

Management principles

Governance structure

Management system

Safety technologies and capabilities

Recognition and Compliance

R&D, innovation and transformation

Management principles

For corporate customers, Alibaba launched China's first Data Protection Initiative in July 2015, advocating for various cloud service providers, including Alibaba Cloud, to adopt and follow three principles to protect privacy and data security:

You own your data,
You manage your data,
and your data is protected.

For consumers, Alibaba adheres to the following three principles of "minimum data collection", "ensured user awareness and choice", and "enhanced user data protection capabilities".



For more details:
Please refer to Chapter 3 Improving full-link product quality and safety P96

Governance structure

In FY2023, Alibaba's data security management structure consisted of the risk management committee, the data security decision-making group, and the data security working group.

As the highest risk management body, the risk management committee is responsible for reviewing and monitoring related data security strategies, planning, objectives and execution in data security. The data security decision-making group of the risk management committees responsible for developing data security strategies and plans. The data security working group is responsible for implementing the data security management strategies.

In terms of implementation, Alibaba has designated the "Personal Information Protection Officer (PIPO)" for each business unit in accordance with the requirements

in the Personal Information Protection Law of the People's Republic of China. The PIPOs are responsible for supervising personal information processing activities and taking corresponding protection measures, to implement the privacy and data security in their entire life cycle. PIPOs report to the business presidents, who is the primary responsible person in data security and personal information protection of the respective business unit, and the data security decision-making group.

Management system

Alibaba strictly complies with the privacy protection and data security laws and regulations of the operating countries, and makes unremitting efforts to develop and update related management system. As of March 31, 2023, led by Alibaba Group Data Security Outline, Alibaba has formulated and released more than ten regulations for privacy protection and data security in the data life cycle, including collection, flow, storage, use and destruction. Alibaba has also built a transparent Alibaba Group Privacy Platform⁵ to make public the privacy protection policies for main applications, and specify personal information processing rules in a comprehensive and detailed manner.

When data sharing and disclosure is necessary, Alibaba follows the basic principles of data sharing and disclosure and regulations such as the External Data Disclosure Standards and the API Data Management Standards. This includes protecting personal data and trade secrets, applying them for agreed purposes and uses, and prohibiting the sharing of high confidentiality level data in principle.

Alibaba evaluates the demands of different positions and develops personal training programs for privacy protection and data security. Alibaba provides

professional training for employees in data security positions, including PIPOs. For general employees, Alibaba provides multi-level and comprehensive security "red line" training and certification exams yearly. In FY2023, all employees were required to participate in the Code of Business Conduct Certification and Security Red Line Certification, which included privacy protection and data security training content and exams. The total coverage of "Security Red Line Certification" is 100%. Furthermore, Alibaba has established a collection of specifications to support emergency response mechanisms for privacy and data security incidents. The Alibaba Group Emergency Response Management Outline provides general constraints on business continuity, emergency response and incident response processes; the Infrastructure Security Regulations is applicable to cybersecurity; the Basic Security Emergency Response Regulations specify requirements for the organizational structure and responsibilities of emergency response, and provides guidance on the classification and grading, handling principles, handling processes of incidents, etc. Furthermore, we organize at least one emergency drill for different fields of different frequencies every year.



100%

Coverage of employees in Security Red Line Certification

⁵ For more information, please refer to: <https://privacy.alibabagroup.com/#/home>.

Safety technologies and capabilities

Alibaba Cloud has built a sophisticated interconnection protection system from physical devices and facilities to IaaS (Infrastructure as a Service), PaaS (Platform as a Service) to SaaS (Software as a Service) to ensure privacy protection and data security from all aspects. Throughout the whole lifecycle of data, Alibaba has launched different products and tools, and built a complete set of management specifications and operational requirements for each stage, and meanwhile has launched different products and tools, which is the technical cornerstone of privacy protection and data security, as well as the basis for sound risk management of data.

Data collection

Alibaba carries out classification and grading management of data in accordance with related laws and standards. Sensitive data can be automatically selected from data sources, and data can be then classified and graded by leveraging algorithms such as sample scanning, feature extraction, file clustering, and technologies such as OCR technology, deep neural network, and machine learning. Furthermore, customers of Alibaba Cloud can select and manage their own data through the system.

Data storage

To ensure the integrity of stored data, Alibaba has adopted a strategy of integrating local and offsite data backups. While the network data are backed up to the local storage space in a real-time

manner, important network data are backed up to the offsite storage space regularly. Alibaba has applied automatic recovery, encryption, and other measures to ensure data writing stability, storage media management, and redundant data backup protection. Furthermore, Alibaba has established a complete cloud data redundancy mechanism to prevent the loss of customer data, ensuring data resilience in case of incidents or malicious attacks.

Data transmission

To effectively guard against attackers or eavesdroppers, Alibaba has encrypted data during cloud transmission. Alibaba customers enjoy strong encryption capability in support of high-security cryptographic algorithms (SM4/AES) and cryptographic protocols (IPSEC, SSL/TLS). In conjunction with a strict authentication and authorization mechanism, the probability of cracking is basically eliminated. With this technology, Alibaba Cloud has provided sound protection for more than 2,800 content delivery nodes worldwide in FY2023.

Data usage

Data desensitization is the foundation. On top of this, another security mechanism Alibaba has implemented is a trusted computing environment from hardware to software. As the earliest cloud vendor in the Asia-Pacific region to deploy trusted computing and confidential computing, Alibaba has built a fully isolated and highly trusted computing environment based on the X-Dragon security chip, protecting the data from being tampered with on

the hardware. Based on the trusted environment, Alibaba has further upgraded the software and hardware encryption computing capabilities to guarantee data security.

Data destruction

Customers can delete and modify their business data and user data at their own discretion. If a customer no longer uses Alibaba services, Alibaba will promptly delete or return the data assets of such customers in accordance with related standards. In

terms of the hardware, Alibaba strictly performs multiple data wipers to complete the destruction or perform physical destruction through physical shredding. Alibaba maintains records for data destruction and physical destruction that are traceable to the sole hardware device for audit evidence collection.



The complex interconnection protection system guarantees privacy and data security in all directions and from multiple angles

Recognition and Compliance

Alibaba has established strict internal and external audit mechanisms in terms of data security. According to the Alibaba Group Data Security Master Plan and Data Security Audit Standards, we conduct at least one data security internal control audit every year. In FY2023, we internally conducted two data security audits; externally, PricewaterhouseCoopers (PWC) has conducted annual external audits of Alibaba Group and issued annual reports, including IT audits of user-data-related company systems.

Alibaba Cloud strives to enforce the compliance system construction for its global business planning. As one of the cloud service providers with the highest level of security and compliance in the Asia-Pacific region, Alibaba Cloud strictly complies with and implements more than 130 global security compliance qualifications and constantly improves the level of security compliance of the cloud platform, hence supporting its customers and organizations to effectively meet the security compliance requirements of their regions and related industries. Many credible international analyst firms have also recognized Alibaba Cloud's overall security capabilities (Gartner/Forrester/IDC).

As of the reporting date, Alibaba Cloud has been recognized with the highest tier of cybersecurity certification Cyber Trust Mark (recently developed by the Cyber Security Agency of Singapore), verified with the second-tier certification of EU Cloud Code of Conduct (in compliance with GDPR requirements) by the Summit for Clinical Trials Operations Executives

Europe (SCOPE Europe), granted the highest Titanium Award for Digital and Trustworthy Cloud by the British Standards Institution, and certified by international privacy protection standards, including ISO/IEC27701:2019, ISO/IEC29151:2017, ISO/IEC 27018:2019, ISO/IEC27799:2016, BS10012:2017 and TRUSTe.

The major awards obtained by Alibaba Cloud in the security field in FY2023.

- Alibaba Cloud's "Network Firewall" product was again be shortlisted in the "Challenger" quadrant of Gartner's Magic Quadrant for Firewalls⁷.
- Alibaba Cloud was ranked leading position, in the China Public Cloud Network Edge Security-as-a-Service (NESaaS) Vendor Assessment Report released by IDC⁸.
- Alibaba Cloud was the only company in China to be positioned as the "Strong Performers" in the Forrester Wave™ : Infrastructure-As-A-Service Platform Native Security (IPNS) report⁹.

One of the most complete security compliance cloud service providers in Asia-Pacific

The Chinese Mainland		Global	Hong Kong, Macao and Taiwan regions of China and overseas regions and industries	
Cyberspace Administration of China	Cloud computing service security assessment: E-Government Cloud (Enhanced) Financial Cloud (Enhanced)	ISO 9001 ISO 27001 ISO 27017 ISO 27018 ISO 27701 ISO 29151 ISO 20000 ISO 22301 ISO 27799 BS 10012 CSA STAR PCI DSS/PCI 3DS TRUSTe SOC1/SOC2/SOC3 CyberGRX	Europe GDPR EU Cloud CoC USA NIST 800-53/CSF SEC Rule 17a-4(f) EU-US Privacy Shield Germany C5 Trusted Cloud TISAX AIC4 UAE NESA/ISR Thailand PDPA	Singapore MTCS Cyber Trust Mark PDPA OSPAR DPTM CBPR/PRP Australia APRA TPN Hong Kong, China HKMA HKIA SFC SRAA PDPO Macao, China PDPA
Ministry of Public Security	Network security level-based protection: Financial Cloud (Level 4) Public Cloud (IaaS/PaaS/SaaS, Level 3) E-Government Cloud (Level 3) Safety product sales license			
Ministry of Industry and Information Technology	China Academy of Information and Communications Technology: Trusted cloud security assessment Big data security assessment			
Trusted cloud security assessment	China Cyber Security Review Technology and Certification Center: Safety product certification Safety service certification			
State Cryptography Administration	Cryptographic Application Security Capability Assessment: Public cloud products and services Proprietary cloud (Tier 3)			

R&D, innovation and transformation

Privacy protection and data security are the keys to ensuring efficient data flow and promoting effective data sharing and integration to generate value. Alibaba spares no effort in exploring the application of secure computing technologies in real business scenarios to a larger market, providing leading technologies, products and services in the effective protection, legal utilization and orderly flow of data to improve the data security capabilities in various industries and fields and assist in consolidating foundation for the development of the digital economy.

Based on its rich experience in data governance and data security circulation technology application, Lingyang has output the practical results of Alibaba's internal real business scenarios and has provided Dataphin, a privacy computing product. Dataphin relies on cloud-based distributed computing capabilities to support secure computations at a scale of billions. It protects the privacy and security of data assets through the three technical routes of "secure multi-party computation, federated learning, and trusted execution environment", helping data realize secure circulation featuring "usable but invisible". The industry research team of Lingyang holds more than 19 patents for cryptographic algorithms and has led and participated in formulating various international, national, and industrial standards, including the Standards for Grading and Evaluation of the Effect of Personal Information De-identification. With the mature data security protection system, Dataphin

takes the lead in balancing data security and data circulation efficiency. Dataphin has been certified by the ISO27001/27018 and has been used in many industries, including finance, power, and government affairs. It has won the Annual Leading Technology Achievement Award at the Third China Digital Economy Technology Conference.

In the process of R&D, innovation and practical application, Lingyang is committed to developing "responsible digital intelligence", focusing on the four principles of security and compliance, clarity and transparency, fairness and diversity, and high quality and efficiency to solve various key problems in industrial practices in the digital economy, considering compliance, security, interpretability, and fairness issues in the full-link from data collection to data application and promoting high-quality and sustainable development of the digital intelligence industry.



over 19

The number of patents for cryptographic algorithms that Lingyang holds



Dataphin has won the "Annual Leading Technology Achievement Award" at the Third China Digital Economy Technology Conference.

Science and technology ethics

Technology needs to be ethical and responsible to earn the public's trust. Science and technology ethics, serving as values and norms to be followed during the development and application of technology, constitute an important guarantee to promote the healthy development of scientific and technological innovation.

In FY2023, Alibaba established the Alibaba Group Science and Technology Ethics Governance Committee, a systematic upgrade in the science and technology ethics governance of Alibaba Group. Alibaba has also formulated six basic principles for science and technology ethics governance. Such principles are derived from Alibaba's business practices and are the upgrade, continuation and inheritance of the responsible science and technology strategy.

Basic rules

Governance structure

Management system

R&D and innovation

Openness and co-governance

Basic rules

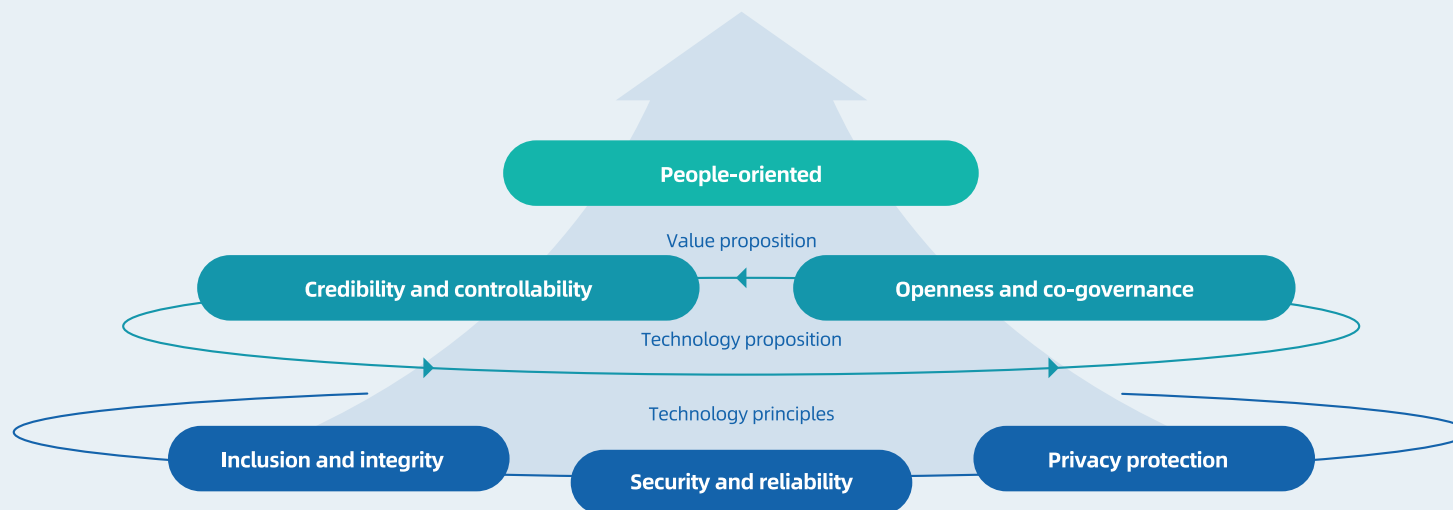
Based on long-term practice and thinking in technology R&D and commercial application, Alibaba has formulated six basic principles for science and technology ethics governance in FY2023: people first, inclusion and integrity, privacy protection, security and reliability, trustworthiness, openness and co-governance, with the aim of motivating every Alibaba technician to practice responsible technology, promoting the upgrading of

the science and technology innovation governance system, and facilitating the implementation of the ESG strategy.

First of all, we adhere to the people-first value orientation. Science and technology should be developed by following common values and ethics of humanity, respecting human rights and fundamental human interests, and highlighting

empathy. Technology and AI development must assist humanity, accept guidance and control from humanity, as well as enrich and enhance the creativity of humanity, and these concepts are the underlying values we must always uphold in the science and technology ethics. Then under the people-first value orientation, we actively practice the principles of inclusion and integrity, privacy protection, security and reliability.

The six basic principles for science and technology ethics governance of the Group





Inclusion and integrity:

On the one hand, technological development should be more inclusive and accessible to relatively disadvantaged groups. For instance, technology and business should truly serve the progress of the entire society, rather than delivering negative effects such as widening the digital divide. On the other hand, the technological development requires integrity and honesty, upholding the bottom line of abstaining from vices when facing conflicts between innovation and ethics.

Privacy protection

Privacy is a fundamental human right in the digital era. Alibaba recognizes the integration of privacy design principles into our products and services.

Security and reliability

As the required attributes for increasingly robust technologies and the fundamental capacity of Alibaba's business ecosystem to serve billions of consumers and tens of millions of MSMEs, Alibaba carries out technological R&D and tests based on the principle of security.

At last, we develop technology in a credible, controllable, open and co-governing manner.

Trustworthiness

Alibaba firmly believes that new technologies, especially digital technologies represented by artificial intelligence (AI), need to be more credible and controllable. AI systems should feature proper moral and ethical concepts by their designers and developers, making AI more transparent

and understandable, fair and unbiased. Alibaba leverages AI in scenarios with social values, and spares no effort in limiting potentially harmful or abusive situations to guarantee the sustainable development of AI.

Openness and co-governance

The problematic nature of science and technology ethics governance dictates that it is a complicated issue requiring interdisciplinary, multi-perspective and intelligence-intensive efforts, making it impossible to be tackled by one enterprise, one university or one institution alone. Therefore, this requires an open and co-governing framework participated in by multiple stakeholders, with multi-disciplinary, multi-field, and multi-national cooperation.

Based on the aforementioned basic rules, upholding a responsible attitude towards users, our industry, and society, Alibaba is confident in integrating science and technology ethics into the lifecycle of commercial products and services, balancing innovations and ethical risks in a delicate manner, and delivering positive guidelines for science and technology innovations through a truly effective mechanism, so that the technology can better serve the high-quality development and high-level security of the digital economy.

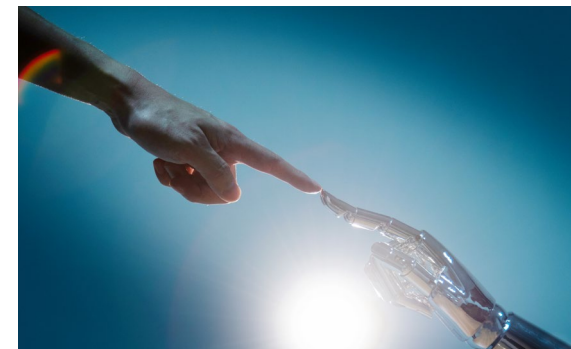
Governance structure

The primary responsibility of the science and technology ethics governance committee (hereinafter referred to as "the committee") is to establish and continuously improve Alibaba's science and technology ethics governance system, including core guidelines, ethical norms, review and evaluation mechanism, etc., promoting responsible innovative technologies and applications actively, and raising ethical awareness of technicians. Furthermore, we make great efforts to promote the sustainable development of technology in an available, reliable, credible, and controllable system. The committee has established four working groups:

- Ethics working group, responsible for research on theories and policies related to science and technology ethics;
- Governance working group, responsible for assessing and governing key fields related to science and technology ethics, and making use of systems and tools to engage science and technology ethics governance in daily scientific research activities;
- Science and technology working group, responsible for technology research, product development and tool building related to science and technology ethics;
- Communication working group, responsible for putting into place the principles, culture and awareness of science and technology ethics across the Company, so that every engineer can acquire a proper understanding and apply it to work.

Management system

In FY2023, the committee was engaged in the formulation of policies, and officially released the Science and Technology Ethics Review Management Regulation in January 2023 in order to steer approaches to implementing science and technology ethics investigations in business operations. Meanwhile, a science and technology ethics risk declaration system was launched to receive declarations from employees. Through such methods as classification and grading management, expert research and judgment of cases, reference governance of similar cases as well as continuous verification and iteration, the committee enables more participants to join in the science and technology ethics governance, identifying risks and conducting effective management and control promptly. For specific projects requiring ethical review, the governance working group of the committee takes the initiative in establishing the related project review team to conduct reviews and form a resolution; and high-risk projects are reported to the committees for decision-making.



R&D and Innovation

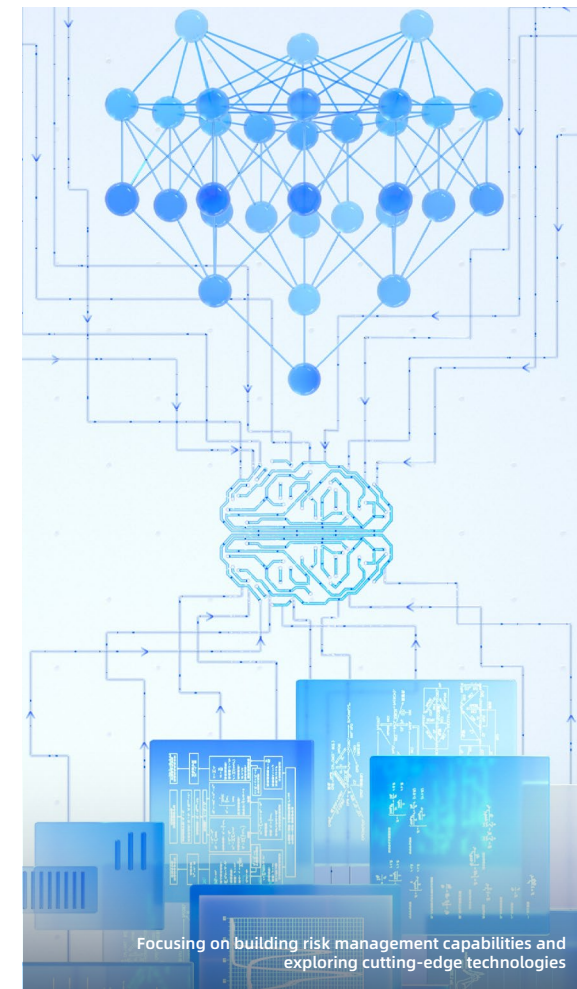
The science and technology ethics governance involves a long-term process to be optimized in practices to adapt to technological development and changes in the external environment. Alibaba has attempted to apply technological innovations related to science and technology ethics to business practices. Abundant business scenarios in the Alibaba ecosystem also create many possibilities for providing ethical technologies. On the one hand, we have made active efforts to carry out technological and institutional innovations, enabling technologies to be accessible. On the other hand, Alibaba has incorporated ethical values into the design of AI products and services while improving efficiency, and makes unremitting efforts to build digital innovations that benefit multiple parties.

In FY2023, Alibaba focused on building governance capacities in both risks and technologies. Specifically, in terms of risk, there is an emphasis on the lifecycle risk management processes, including algorithmic evaluation, intervention mechanisms, risk detection, etc., as well as corresponding reviews and governance tools. In terms of technology, Alibaba has made efforts to improve the layout and exploration of cutting-edge technologies in the fields of privacy protection, security and reliability, and trustworthiness.

Taking algorithmic governance as an example, Alibaba, in active response to the Regulations on the Management of Internet Information Service Recommendation, has formulated a collection of management guidelines, actively promoting algorithm fairness and transparency to establish an information flow recommendation system benefiting all parties.

On the user side, Alibaba has rearranged and broken down the recommendation sequences to eliminate homogeneous ones to improve the experience of each consumer group using personalized recommended products. Furthermore, Alibaba has strictly complied with the Personal Information Protection Law of the People's Republic of China as well as other laws and regulations to provide users with an off switch for recommendation systems. On the merchant side, Alibaba has made the recommendation system more diversified and novel by building discovery recommendation links. Alibaba has assisted in small and middle-sized merchant growth, promoted rural revitalization by activating new product categories and always exploring new potential products, thereby mitigating the Matthew effect of accumulated advantage on platforms. Alibaba has also made great efforts to ensure fair distribution of traffic and related resources to create a fairer e-commerce environment by adopting a variety of anti-cheating technologies to prevent malicious acts.

We have also been exploring the field of cutting-edge technology. As early as 2019, Alibaba has initiated great efforts in the research of self-supervised pre-training technology and made achievements in both unimodal and multimodal foundation models. Alibaba has successfully developed an Object-Oriented Deep Network (OODN) code framework optimized for self-supervised training, and has applied it to internal risk control business scenarios. Meanwhile, Alibaba has made active efforts to promote technology research and development for the "adversarial example" problem that may pose a major threat to artificial intelligence. Furthermore, Alibaba has built an ARES system for defending against the adversarial examples. We have worked together with Tsinghua University to launch a more comprehensive and fairer ARES Benchmark platform, and open-sourced the first ARES learning framework for visual models, assisting industry partners in the rapid deployment of robustness technologies.



Focusing on building risk management capabilities and exploring cutting-edge technologies

Openness and co-governance

As promoted by the committee, Alibaba has engaged in internal promotion (for education) of science and technology ethics governance and motivated the technicians in attaching more importance to technologies and risks related to science and technology ethics through the interpretation of typical industry cases, exchanges of cutting-edge technologies and governance trends, sharing of internal practice cases, internal and external expert seminars, etc., thereby raising the science and technology ethics awareness and capabilities of all staff.

Alibaba has established the Alibaba science and technology ethics governance advisory board, introducing external perspectives and supervision by bringing on seven experts from the fields of science and technology, law, public administration, philosophy, etc. to establish an independent advisory board to jointly analyze and assess the difficulties we encounter. In FY2023, Alibaba held external committee meetings to promote the exchanges among internal and external members on technology and governance strategies related to science and technology ethics. The Alibaba group also helped in achieving the integration of self-discipline and heteronomy through such a multi-collaborative governance mechanism.

Furthermore, Alibaba jointly released the Artificial Intelligence Governance and Sustainable Development Practice White Paper with the China Academy of Information and Communications

Technology (CIACT), which systematically introduces Alibaba's initiatives and practices in data security and privacy protection, consumer rights and fairness, deep synthesis governance, among others from the aspects of data, technology, management and co-governance. By introducing external viewpoints to jointly assess and monitor the efforts of Alibaba Group, we hope our governance experiences can provide insights for the governance of other companies.

Awards for multi-party collaborative content governance technology

In May 2023, the "Key Technologies and Applications of Content Governance in Complex Internet Environment" project, a research achievement made by Alibaba in collaboration with the University of Chinese Academy of Sciences, the Institute of Computing Technology of Chinese Academy of Sciences, Zhejiang Lab and China Jiliang University, was awarded the Second Prize of 2022 Wu Wenjun AI Science and Technology Progress Award. Focusing on cyberspace content governance, the Project centers around such challenges as complex data forms, fierce attack and defense, and the massive resource consumption to conducting systematic research on intelligent content governance technologies, upon which the project has proposed a series of technologies and methods for intelligent governance in complex scenarios. In particular, the technologies for complex data forms, and fierce attacks and defenses have reached the international advanced level. The project team has led the formulation of 3 standards, obtained 55 invention patents upon approval, and published 50 academic papers.





Appendix 1 ESG Key Performance Metrics Table

Environment - GHG emissions							
Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023	Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023
Total GHG emissions (Scope 1, 2, and 3) ^{1,2}	MtCO ₂ e	13,249,439	12,362,994	Carbon Offset	MtCO ₂ e	0	119,352
Scope 1 emissions	MtCO ₂ e	926,779	928,939	Scope 1 carbon offset	MtCO ₂ e		2,670
Scope 2 emissions	MtCO ₂ e			Scope 2 carbon offset	MtCO ₂ e		1,288
-market-based	MtCO ₂ e	4,445,238	3,756,085	Scope 3 carbon offset	MtCO ₂ e		115,394
-location-based	MtCO ₂ e	/	5,141,880				
Scope 3 emissions ³	MtCO ₂ e	7,877,422	7,677,970				

1. We apply the principle of operational control to define the boundaries of this GHG inventory. It covers those GHG emissions categories in Scopes 1, 2, and 3 that are both significant for Alibaba in the year ended March 31st 2023 (FY2023) and measurable. The GHG categories covered in this inventory include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF₃), and sulfur hexafluoride (SF₆). In the results of the inventory, five greenhouse gases, CO₂, N₂O, CH₄, HFCs, and SF₆, were found in this reporting period. Please refer to Appendix 4 for detailed Scope 3 emission inventory categories.

2. Total GHG emissions are the sum of Scope 1, Scope 2 (market-based) and Scope 3.

3. GHG emissions are calculated on market-based caliber



Appendix 1 ESG Key Performance Metrics Table

Environment - GHG emissions							
Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023	Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023
Net GHG emissions ⁴ (after applying offset) (Scope 1, 2, and 3)	MtCO ₂ e		12,243,642	Total GHG emissions reduction	MtCO ₂ e	619,944	1,819,267
Scope 1 net emissions	MtCO ₂ e		926,269	Scope 1 emissions reduction	MtCO ₂ e		272
Scope 2 net emissions	MtCO ₂ e		3,754,797	Scope 2 emissions reduction	MtCO ₂ e	619,944	1,418,731
Scope 3 net emissions	MtCO ₂ e		7,562,576	Scope 3 emissions reduction	MtCO ₂ e		400,264
GHG emissions intensity (Total GHG emissions per unit of revenue) (After applying offsets)	MtCO ₂ e / million RMB	15.5	14.1	Scope 3+ emissions reduction	MtCO ₂ e		22,907,425
Scope 1 emissions intensity	MtCO ₂ e / million RMB	1.1	1.1				
Scope 2 emissions intensity	MtCO ₂ e / million RMB	5.2	4.3				
Scope 3 emissions intensity	MtCO ₂ e / million RMB	9.2	8.7				

4. Net GHG emissions equal to GHG emissions minus carbon offsets.



Appendix 1 ESG Key Performance Metrics Table

Environment - Energy consumption							
Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023	Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023
Total energy consumption	MWh	8,786,584	8,899,025	Indirect energy consumption	MWh	7,065,101	7,137,858
Direct energy consumption	MWh	1,721,483	1,761,167	Indirect energy consumption intensity: (indirect energy consumption per unit of revenue)	MWh/million RMB	8.3	8.2
Natural gas	thousands m ³	12,482	12,426	Renewable energy consumption	MWh	464,049	1,101,705
Liquefied petroleum gas	tonnes	2.4	2.1	Average PUE of data centers ⁶	/	1,247	1,215
Diesel ⁵	tonnes	131,687	134,589	The clean energy percentage of data centers ⁷	%	21.6	53.9
Gasoline	tonnes	254	639				
Direct energy consumption intensity (Direct energy consumption per unit of revenue)	MWh/million RMB	2.0	2.0				

5. The usage of diesel consumed by logistics vehicles are estimated values. In the future, we will further improve the accounting and reporting of diesel usage by our own logistics vehicles

6. PUE is a ratio of the total energy consumption of a data center to the energy consumption of IT equipment. In this report, it is calculated for data centers within our operational control during FY2023.

7. The clean energy percentage is a ratio of the clean energy consumption of a data center to total energy consumption. In this report, it is calculated for data centers within our operational control during FY2023.

Appendix 1

ESG Key Performance Metrics Table

Employment - Employee numbers ⁸							
Indicator	Unit	As of March 31, 2022	As of March 31, 2023	Indicator	Unit	As of March 31, 2022	As of March 31, 2023
Total number of employees	/	254,941	235,216	Percentage of employees by work location			
Percentage of employees by gender				The Chinese Mainland	%	92.7	91.7
Male	%	50.5	50.9	Hong Kong, Macao, and Taiwan	%	0.4	0.5
Female	%	49.5	49.1	Other countries and regions	%	6.8	7.8
Percentage of employees by age				Number of employees with physical disabilities	/	2,007	1,451
<=35	%	50.7	54.0	Percentage of women in management			
36-50	%	44.2	41.6	Management ⁹	%	/	41.9
>50	%	5.1	4.4	Executive management	%	50.0	25.0

8. The scope of employees data includes full-time employees of all the consolidated entities of Alibaba Group.

9. Management refers to employees who are responsible for managing and leading other full-time employees.



Appendix 1 ESG Key Performance Metrics Table

Employee turnover rate ¹⁰							
Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023	Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023
Turnover rate	%		24.6	Percentage of employees turnover by work location			
Percentage of employees turnover by gender				The Chinese Mainland	%		24.3
Male	%		25.9	Hong Kong, Macao, and Taiwan	%		24.6
Female	%		23.3	Other countries and regions	%		29.1
Percentage of employees turnover by age							
<=35	%		30.0				
36-50	%		18.2				
>50	%		20.4				

¹⁰ The scope of employee turnover rate includes full-time employees of all the consolidated entities of Alibaba Group.

Appendix 1 ESG Key Performance Metrics Table

Training and Education ¹¹							
Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023	Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023
Average hours of training per employee	hours	49.0	51.0	Percentage of employees trained	%		96.9
Average hours of training per employee by gender				Average hours of training per employee by gender			
Male	hours		54.0	Male	%		96.9
Female	hours		45.5	Female	%		96.8
Average hours of training per employee by level				Percentage of employees trained by level			
Management	hours		63.9	Management	%		97.9
Non-management	hours		48.5	Non-management	%		96.7

11. The scope of training and health and safety data statistics includes the full-time employees in the businesses directly managed by Alibaba Group.

Appendix 1

ESG Key Performance Metrics Table

Employee health and safety ^{11,12}			
Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023
Number of work-related fatalities	/	0	1
Work-related fatality rate ¹³	%	0	0.0009%
Number of work-related injuries	/	25	20
Number of workdays lost due to work-related injuries	/	839	429
Work-related injury rate ¹⁴	%	0.11	0.09

Suppliers management ¹⁵			
Indicator	Unit	Year ended March 31, 2022	Year ended March 31, 2023
Total amount of suppliers	thousand	53.3	44.8
The Chinese Mainland	thousand	36.1	31.0
Other countries and regions	thousand	17.2	13.8

11. The scope of training and health and safety data statistics includes the full-time employees in the businesses directly managed by Alibaba Group.

12. The data come from work-related injuries and deaths recorded by Alibaba's human resources team and have been verified by local authorities.

13. The work-related fatality rate = (Number of work-related fatalities / Total number of employees) * 100%.

14. The work-related injury rate = (Number of recorded work-related injuries / Total number of hours worked) * 1,000,000.

15. The suppliers here refer to those in the categories of media, events, service, engineering, office IT, and logistics who have completed registration in Alibaba's procurement platform. The regional information is related to the location of the company registration filled in the supplier database, rather than the location where the supplier does business with Alibaba.

Appendix 2

List of ESG Related Ratings and Awards

ESG General ESG awards

1. Top 1 Internet Platform Enterprise in the China Corporate Social Responsibility Development Index, by the China Social Responsibility 100 Forum.
2. Among ESG Excellent Practice Cases of Public Companies, the China Association for Public Companies.
3. Awards of Excellence in ESG - Honorable Mention, by the Chamber of Hong Kong Listed Companies (CHKLC).
4. Among China ESG Influence Ranking, by Fortune China.
5. Among List of Most Admired Chinese Enterprises, by Fortune China.
6. Sun Art Retail was selected as the Best Progressive Enterprise in the food and daily necessities retail industry by the S&P Global Corporate Sustainability Assessment.
7. Master-Insight 2023 ESG Enterprise Exemplary Award, by Hong Kong Financial Media Master-Insight.
8. Economic Digest ESG Awards 2022-Outstanding ESG Enterprise.
9. Infzm Annual Outstanding Responsible Enterprise.

ESG General ESG awards

1. Level B in climate change in CDP.
2. Rated as BBB in MSCI.
3. WBA-DIB (Digital Inclusion Benchmark) Overall Score: 41/100.

Chapter 1 Restoring our green planet

1. Top 1 in Caijing Dual Carbon Leadership Ranking of Public Companies
2. Annual Green Development Enterprise Award in the fifth Dingge Award Digital Transformation Pioneer List
3. Alibaba Cloud was Top 1 in technology sector in BloombergNEF's Clean Energy Buyers Ranking in China
4. Alibaba's data centers' green low-carbon practice case was recognized for its contribution to both digitalization and environmental sustainability in 2022, by the Cyberspace Administration of China.
5. Alibaba Zhejiang Renhe data center was selected as one of the Typical Cases of China New Data Centers in 2022, by the Ministry of Industry and Information Technology of China.
6. Amap's "Green Travel Carbon Project" was selected by the Ministry of Ecology and Environment as one of the top ten public participation cases in the "Beautiful China, I am an Actor" 2023 Action Plan to raise Citizens' awareness of ecological civilization.
7. "Digital Platform for Biodiversity Conservation" project was recognized as one of "23 Biodiversity Positive Practices and Actions Around the World", by UN CBD COP15.
8. The green and low-carbon practice of Alibaba data centers was selected as one of the Top 10 Typical Carbon Neutrality Cases in China in 2022, by the China Energy Research Society and the Organizing Committee of the CREC2022.
9. The Single-phase Fully Immersed Liquid Cooling technology of Alibaba Cloud won the 2022 Data Center Technology Achievement Award, grant by China Association for Engineering Construction Standardization.

Chapter 2 Supporting our people

1. Among Top 5 Chinese enterprises in the Forbes 2022 Global Best Employers.
2. Among LinkedIn China 2022 MostIn Global Attractive Employers.
3. Ranking first, second, third and third respectively in Universum 2023 as the "Most Desired Employer for Chinese Business/ Science/Humanities and Social Sciences/Engineering School Students".

Chapter 3 Enabling a sustainable digital life

1. The Case of Social Co-governance of Network Catering of Ele.me was awarded the Contribution Award of GFSI China Technologies Food Safety Case Studies.
2. APPs of Taobao, Ele.me, Idle Fish, Amap, Youku have been awarded with Excellent Cases for Senior-friendly and Accessibility Improvement of Internet Applications issued by the China Academy of Information and Communications Technology (CAICT).
3. Tmall's Q/Ali000477-2023 Specification for E-commerce After-sales Services was awarded the title of "Leader" by the 2022 Enterprise Standards for E-commerce After-sales Services.
4. Carbon88 ledger platform was award the Social Action Leading Excellent Case in the Ernst&Young Sustainability Excellence Awards 2022
5. Carbon88 ledger platform was award the BEYOND Impact Awards 2022.
6. GreenNet Program received recognition for its outstanding online law dissemination practices by the Cyberspace Administration of China in FY2023.

Appendix 2

List of ESG Related Ratings and Awards

Fueling Small Businesses

1. Forrester released the Q4 2022 Report, [adding a footnote: the Forrester Wave™ Public Cloud Development and Infrastructure Platforms in China,Q4 2022],in which Alibaba Cloud was rated as a leader among 11 public cloud service providers in China and awarded the highest score in terms of current offerings and strategies.
2. The "2023Philanthropic Enterprise",by China Philanthropy Times.
3. AMiner announced the AI 2000 Most Influential List, in which Alibaba was ranked the world's top ten most influential network research institutions in terms of computer networks.
4. Alibaba was certified by CAICT as one of the first formal members of the "Trusted Open-Source Compliance Program."
5. Ding Talk was awarded the "National Public Service Demonstration Platform for Small and Medium Enterprises", approved by the General Office of Ministry of Industry and Information Technology
6. Ding Talk obtained the Excellence Level Security Certificate for Office Instant Communication Software of the "Foundation Program" of CAICT.
7. Ele.me Shanghai Orstarcity Station was awarded the "National Worker Pioneer", and Rider Zhang Wenqiang was awarded the "National May 1 Labor Medal."

Facilitating Participatory Philanthropy

1. The Philanthropic Award, by China Social Responsibility 100 Forum.
2. The "2023 Philanthropic Enterprise" by China Philanthropy Times.
3. The Alibaba Daily Positive Energy program as well as the Ai You Foundation's medical assistance project for critically ill children and the China Foundation for Rural Development's Child Companion Plan supported by Alibaba were awarded the Philanthropy Projects of the Year, by China Philanthropy Times.

Enhancing Community Inclusion and Resilience

1. The exploration and practice of promoting industrial revitalization in Pingshun County of Shanxi Province was selected as the "Best Poverty Reduction Case in the Third Global Poverty Reduction Case Collection."
2. The National Rural Revitalization Administration the first batch of Typical Cases of Social Assistance Assisting in Consolidating and Expanding the Achievements of Poverty Alleviation and Effectively Linking with Rural Revitalization.
3. In the Asia-Pacific Stevie Awards, Cainiao won the Gold Award for Innovation in Transportation and Logistics and the Silver Award for Innovative Achievement in Corporate Social Responsibility.
4. Alibaba's rural commissioner team was awarded honor of Outstanding Team for Contributions to "Sannong" (Agriculture, Rural areas and Farmers) in 2022.
5. Rural commissioners, Yunfei Liu and Donghong Lin, were awarded the honorary title of "National Women's Model for Making Great Contributions", by the All-China Women's Federation

Building Trust

1. The 8th and 9th Investor Relations Awards,
2. Alibaba Cloud's "Network Firewall" product once again be shortlisted in the "Challenger" quadrant of Gartner's Magic Quadrant for Firewalls.
3. In the China Public Cloud Network Edge Security-as-a-Service (NESaaS) Vendor Assessment Report released by IDC. Alibaba Cloud was ranked leading position
4. Alibaba Cloud was the only company in China to be positioned as the "Strong Performers" in the Forrester Wave™: Infrastructure-As-A-Service Platform Native Security (IPNS) report.
5. The Key Technologies and Applications of Content Governance in Complex Internet Environment, the research achievement made by Alibaba in collaboration, was awarded the Second Prize of 2022 Wu Wenjun Artificial Intelligence Science and Technology Progress Award.

Appendix 3 ESG Data Verification Statement

BUREAU VERITAS
Certification

ESG ENVIRONMENTAL DATA VERIFICATION STATEMENT

is awarded to

Alibaba Group Holding Limited

Bureau Veritas Certification (Beijing) Co., Ltd (BVC China) was engaged to conduct an independent verification of the environmental data in ESG report of Alibaba Group Holding Limited (Alibaba Group) registered in Offices of Trident Trust Company (Cayman) Limited, Fourth Floor, One Capital Place, P.O. Box 847, George Town, Grand Cayman, Cayman Islands for the period stated below. This Verification Statement applies to the related information included within the scope of work described below.

The determination of the environmental data is responsibility of Alibaba Group. BVC China's responsibility was to provide independent verification on the accuracy of those data reported, and the underlying systems and processes used to collect, analyze, and review the information.

Boundaries of the reporting company covered by the verification:

- Operational Control
- Headquarter and Branches, Worldwide

Period covered by this verification:

- April 1, 2022 to March 31, 2023

Level of Assurance:

- Reasonable

(Except scope 3+ GHG emission reduction which is a limited assurance level)

Verification Methodology:

- Interviews with relevant personnel of Alibaba Group
- Review of documentary evidence produced by Alibaba Group
- Review of Alibaba Group data and information systems and methodology for data collection, aggregation, and analysis; review of information used to determine those environmental data at Alibaba Group Hangzhou Headquarters, and
- Audit of sample of data used by Alibaba Group to determine those environmental data

Assurance Opinion:
Based on the process and procedures conducted, in our opinion, that Alibaba Group has established appropriate systems for the collection, aggregation and analysis of quantitative data for determination of those environmental data for the stated period and boundaries. The data are reliable.

Statement of independence, impartiality, and competence:
The Bureau Veritas Group is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 190 years history in providing independent assurance services. No member of the verification team has a business relationship with Alibaba Group, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest. The Bureau Veritas Group has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

Lead Verifier: Max Zhang

Authorized Signatory
July 20, 2023

BUREAU VERITAS
Certification

Verified Environmental Data List of Alibaba Group ESG Report (GHG emission related data)

Environmental data	Value	Unit	Verification criteria
Total GHG emission^[1] where:	12,362,994		
Scope 1 GHG emission	928,939		
Scope 2 GHG emission (Market-based)	3,756,065		
Scope 2 GHG emission (Location-based ^[2])	5,141,880		
Scope 3 GHG emission ^[3]	7,677,970		
Total GHG offset^[4] where:	119,352	tonCO ₂ e	
Scope 1 GHG offset	2,670		
Scope 2 GHG offset	1,288		
Scope 3 GHG offset	115,394		
Total net GHG emission^[5] where:	12,243,642		
Scope 1 net GHG emission	926,269		
Scope 2 net GHG emission ^[6]	3,754,797		
Scope 3 net GHG emission	7,562,576		
Total net GHG emission intensity^[7] where:	14.1	tonCO ₂ e/ million RMB revenue	
Scope 1 net GHG emission intensity	1.1		
Scope 2 net GHG emission intensity	4.3		
Scope 3 net GHG emission intensity	8.7		
Total GHG reduction^[8] where:	1,819,267	tonCO ₂ e	
Scope 1 GHG reduction	272		
Scope 2 GHG reduction	1,418,731		
Scope 3 GHG reduction	400,264		
Scope 3+ GHG reduction^[9]	22,907,425		

Note:

[1] Data and information supporting the Scope 1, Scope 2, and Scope 3 GHG emission assertions were historical and, in some cases, estimated in nature.

[2] Scope 2 emission with location-based is for reference and is not included in the total GHG emission, while the scope 2 emission with market-based is included in the total GHG emission.

[3] Scope 3 emission category includes: Purchased Goods & Services (the statistical outlier of electricity use in purchased services is market-based), Upstream Transportation and Distribution, Business Travel, Employee Commuting, Upstream Leased Assets, Downstream Leased Assets (the statistical outlier of electricity use in downstream leased assets is market-based), Franchise and Investments.

[4] The GHG offset comes from the VCDs under VCS programme and the CERs under CDM programme both purchased by Alibaba Group.

[5] Net GHG emission is calculated by GHG emission minus GHG offset.

[6] Scope 2 net emission is market based.

[7] The revenue data from Alibaba Hong Kong Stock Announcement (Stock code: 9988) "March 2023 Quarter and 2023 Fiscal Year Results".

[8] Scope 1, 2, 3 GHG emission reduction comes from the efficiency gains in digital intelligent management and energy transition, and the former involves carbon reduction scenarios including digital intelligent management of the campus, low-carbon business travel solutions for employees, and digital supply chain management. Please refer to the "GHG Reduction Verification Statement" for details.

[9] Scope 3+ GHG emission reduction is divided into two categories: engaged emission abatement (leveraging platforms to engage more stakeholders in de-carbonization) and enabled emission abatement (digitalization to drive emission reduction). Please refer to the "GHG reduction Scope 3+ Verification Statement" for details.

BUREAU VERITAS
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Verified Environmental Data List of Alibaba Group ESG Report (Energy consumption related data)

Environmental data	Value	Unit	Verification criteria
Total energy consumption Where:	8,899,025	MWh	
Direct energy consumption	1,761,167	MWh	
Natural gas consumption	12,426	Km ³	
Liquefied petroleum gas consumption	2.1		
Diesel consumption ^[1]	134,589	ton	
Gasoline consumption	639		
Direct energy consumption intensity ^[2]	2.0	MWh/million RMB revenue	
Indirect energy consumption: Electricity	7,137,858	MWh	
Indirect energy consumption intensity: Electricity ^[2]	8.2	MWh/million RMB revenue	
Renewable energy consumption	1,101,705	MWh	
Data centers' average power usage effectiveness (PUE)^[3]	1.215	\	
The proportion of clean energy in data centers^[4]	53.9	%	

Note:

[1] Diesel consumption for some logistics is estimated.

[2] The revenue data from Alibaba Hong Kong Stock Announcement (Stock code: 9988) "March 2023 Quarter and 2023 Fiscal Year Results".

[3] PUE is the ratio of the total electricity consumption of the data center to the electricity consumption of the IT equipment, which is the average power usage effectiveness of all the data centers within the operational control of Alibaba Group in fiscal year 2023.

[4] This value is the ratio of clean energy usage to total electricity consumption of data centers within the operational control of Alibaba Group in fiscal year 2023.

Appendix 3 ESG Data Verification Statement

BUREAU VERITAS
Certification

GHG REDUCTION VERIFICATION STATEMENT

is awarded to

Alibaba Group Holding Limited

Bureau Veritas Certification (Beijing) Co., Ltd (BVC China) was engaged to conduct an independent verification of the GHG reduction related data in ESG report of Alibaba Group Holding Limited (Alibaba Group) registered in Offices of Trident Trust Company (Cayman) Limited, Fourth Floor, One Capital Place, P.O. Box 847, George Town, Grand Cayman, Cayman Islands for the period stated below. This Verification Statement applies to the related information included within the scope of work described below.

The determination of the GHG reduction is responsibility of Alibaba Group. BVC China's responsibility was to provide independent verification on the accuracy of those data reported, and the underlying systems and processes used to collect, analyze, and review the information.

Period covered by this verification:

- April 1, 2022 to March 31, 2023

Level of Assurance:

- Reasonable

Verification Methodology:

- Interviews with relevant personnel of Alibaba Group
- Review of documentary evidence produced by Alibaba Group
- Review of Alibaba Group data and information systems and methodology for data collection, aggregation, and analysis; and
- Audit of sample of data used by Alibaba Group to determine related data

Assurance Opinion:
Based on the process and procedures conducted, in our opinion, that Alibaba Group has established appropriate systems for the collection, aggregation and analysis of quantitative data for determination of related data for the stated period and boundaries. The data are reliable.

Statement of independence, impartiality, and competence:
The Bureau Veritas Group is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 190 years history in providing independent assurance services. No member of the verification team has a business relationship with Alibaba Group, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest. The Bureau Veritas Group has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

Lead Verifier: Dan Deng

Authorized Signatory
July 20, 2023

BUREAU VERITAS
Certification

Verified GHG Reduction List

GHG Reduction Scenarios	Boundary of Scope ^[1]	Value	Unit	Verification criteria	
Subtotal GHG reduction from scope 1&2		1,419,003.1		<ul style="list-style-type: none"> ISO 14064:2:2019 Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements The GHG Protocol for Project Accounting ISO 14064:3:2019 Specification with guidance for the verification and validation of greenhouse gas statements Methodologies: <ul style="list-style-type: none"> Digital intelligent management of the campuses^[2] Reduces the building operation energy waste by optimizing the operation of electrical appliances through algorithms Low-carbon business travel solutions for employees: Replace high-carbon transportation by low-carbon transportation through algorithms, motivating low-carbon business travel Replenishment of perishable food: Optimize the replenishment mechanism through the algorithms to avoid the loss of fresh food Reducing reverse logistics: Optimize the management of order returning through algorithms Multi-order consolidation: Merge orders through algorithms to reduce the overall transportation volume Inventory dispatch: Centralized transportation of commodities through algorithms to improve transportation efficiency Product warehouse deployment: Optimize commodity deployment management through algorithms Warehouse site selection: Site selection of new warehouses through the algorithms to optimize the transportation efficiency 	
Carbon Reduction Strategy					
Efficiency gains in digital intelligent management	Digital intelligent management of the campuses ^[2]	2,866.2			
Energy transition	Clean electricity use	1,416,136.9			
Alibaba Group Business Units					
Alibaba Cloud	Clean electricity use	1,105,009.6			
Intime Department Store	Clean electricity use	211,700.9			
Sun Art Retail	Clean electricity use	59,880.0			
Cainiao	Clean electricity use	21,003.2			
Qincheng Intelligent Space ^[3]	Digital intelligent management of the campuses ^[2] and Clean electricity use	21,409.4			
Subtotal GHG reduction from scope 3		400,283.8			
Carbon Reduction Strategy					
Efficiency gains in digital intelligent management	Low-carbon business travel solutions for employees ^[4] and Digital supply chain management ^[5]	33,690.2	ton CO ₂ e		
Energy transition	Clean electricity use	366,573.4			
Alibaba Group Business Units					
Alibaba Cloud	Clean electricity use	363,424.0			
Alibaba Digital Supply Chain ^[6]	Alibaba Group continuously improves efficiency and optimization through digital management capabilities in the order link of three scenarios, including replenishment of perishable food ^[7] , reducing reverse logistics ^[8] , and multi-order consolidation ^[9] , and in the transportation link of three scenarios, including inventory dispatch ^[10] , product warehouse deployment ^[11] and warehouse site selection ^[12]	28,771.7			
Qincheng Intelligent Space ^[3]	Low-carbon business travel solutions for employees ^[4] and Clean electricity use	8,067.9			
Total GHG reduction from scope 1&2&3		1,819,286.7			

Note:

[1] The above scenario's boundaries are only in the Chinese Mainland under the control of Alibaba Group (except Alibaba Cloud).

[2] The digital intelligent management of the campuses in the carbon reduction data statistics here only includes the air conditioning system, lighting system and future equipment management of Alibaba Headquarters (for Companies).

[3] "Qincheng Intelligent Space" is a brand that provides smart campus services for various business groups/compartments of Alibaba Group.

[4] Low-carbon business travel services for employees is referred to as "business", and the GHG reduction scenarios of encouraging or encouraging in favor of air transport, carpooling, corporate buses, and public transit.

[5] Alibaba Digital Supply Chain is responsible for supporting Alibaba Group's direct retail businesses and providing products and services for digital supply chain management.

[6] The replenishment of perishable food excluded the data during April and May 2022 in Shanghai due to the lockdown of the pandemic.

[7] The replenishment of perishable food is an umbrella calculation of Alibaba's scenarios.

[8] The reduction of this scenario is calculated with the data of the period of Nov 1-11, 2022.

[9] The GHG reduction of this scenario is calculated with the data of the period of Nov 1-11, 2022.

Appendix 3 ESG Data Verification Statement

BUREAU VERITAS
Certification

GHG REDUCTION SCOPE 3+ VERIFICATION STATEMENT

is awarded to
Alibaba Group Holding Limited

Bureau Veritas Certification (Beijing) Co., Ltd (BVC China) was engaged to conduct an independent verification of the GHG scope 3+ reduction related data in ESG report of Alibaba Group Holding Limited (Alibaba Group) registered in Offices of Trident Trust Company (Cayman) Limited, Fourth Floor, One Capital Place, P.O. Box 847, George Town, Grand Cayman, Cayman Islands for the period stated below. This Verification Statement applies to the related information included within the scope of work described below.

The determination of the GHG reduction data is responsibility of Alibaba Group. BVC China's responsibility was to provide independent verification on the accuracy of those data reported, and the underlying systems and processes used to collect, analyze, and review the information.

Period covered by this verification:

- April 1, 2022 to March 31, 2023

Level of Assurance:

- Limited

Verification Methodology:

- Interviews with relevant personnel of Alibaba Group
- Review of documentary evidence produced by Alibaba Group
- Review of Alibaba Group data and information systems and methodology for data collection, aggregation, and analysis; and
- Audit of sample of data used by Alibaba Group to determine related data

Assurance Opinion:

- Alibaba Group has established effective systems for the collection, aggregation and analysis of quantitative data;
- This verification activity is on the base of the limited, rather than absolute assurance, nothing has come to our attention to indicate that the methodology and GHG reduction data are systematically or materially wrong.

Statement of independence, impartiality, and competence:
The Bureau Veritas Group is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 150 years history in providing independent assurance services.
No member of the verification team has a business relationship with Alibaba Group, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest.
The Bureau Veritas Group has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

Lead Verifier: Dan Deng

Authorized Signatory
July 20, 2023

BUREAU VERITAS
Certification


Verified GHG Scope 3+ Reduction List

GHG Reduction Scenarios ^[1]	Value	Unit	Verification criteria	
Total GHG Scope 3+ Reduction	22,907,425	tonCO₂e	<ul style="list-style-type: none"> ISO 14064-2:2019 Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements The GHG Protocol for Project Accounting ISO 14064-3:2019 Specification with guidance for the verification and validation of greenhouse gas statements Scope 3+ Emission Reduction - Corporate Climate Action Methodology Beyond the Value Chain Research report on the calculation methodology and model of carbon reduction account for DingTalk Calculation logic of boosting efficiency and reducing emissions by cloud computing service Research report on quantitative methodology of emission reduction on Idle Fish General technical requirements for evaluating emission reductions of energy-efficient end-use products Technical requirements for evaluating emission reductions of energy-efficient end-use products - Room air conditioners Methodology of emission reduction for low-carbon travel in Beijing Research report on the emission reduction effect of reusable delivery bins adopted by post stations Research report on the calculation model of emission reduction by cutlery-free option on Ele.me And so forth. 	
Carbon reduction strategy				
Enabled emission abatement^[2]	18,821,279	tonCO₂e		
Low-carbon Cloud services	6,863,418			
Low-carbon Office services	11,757,861			
Engaged emission abatement^[3]	4,285,146			
Low-carbon travel	215,142			
Low-carbon catering	10,206			
Reuse of idle goods	3,165,009			
Low-carbon products	895,789			
Alibaba Group Business Units				
DingTalk	11,757,861			
Alibaba Cloud	6,863,418			
Idle Fish	3,142,383			
Taobao and Tmall	895,789			
Amap	215,142			
Cainiao	22,626			
Ele.me	10,206			

Note:
[1] The above scenarios' boundaries are only in the Chinese Mainland under the control of Alibaba Group except Alibaba Cloud.
[2] Enabled emission abatement includes the low-carbon cloud services of Alibaba Cloud and low-carbon office services of DingTalk.
[3] Engaged emission abatement includes the second-hand trading scenario on Idle Fish, the carbon recycling scenario of Cainiao, the low-carbon travel scene of Amap, the scenario of cutlery-free option and small dishes option on Ele.me, and the scenario of Low-carbon Friendly products sales driven on Taobao and Tmall.



Appendix 3 ESG Data Verification Statement



Ernst & Young Hua Ming LLP
Level 27, Ernst & Young Tower
Central Finance 1, East Chang An Avenue
Beijing, China 100738

安永华明会计师事务所(特殊普通合伙)
中国北京市东城区东长安街1号
永安大厦27层
邮政编码: 100738

Tel: +86 10 5815 3000
Fax: +86 10 8518 8298
ey.com

Independent Accountant's Assurance Report
Ernst & Young Huaming (2023) Zhuan Zi No. 61271659_B01
Alibaba Group Holding Limited

To the Board of Directors of Alibaba Group Holding Limited:


Scope
We have been engaged by Alibaba Group Holding Limited (the "Company") to perform a limited assurance engagement, as defined by International Standards on Assurance Engagements, here after referred to as the engagement, to report on ESG Key Performance of the Company as listed below (the "Subject Matter") and included in the Alibaba's Environmental, Social and Governance Report (the "ESG Report") for the period from 1 April 2022 to 31 March 2023 (the "Period").

The Subject Matter

Employment and Labor Practices
The following policies adopted by the Company:
<ul style="list-style-type: none"> Alibaba Group Code of Business Conduct; Alibaba Group Code of Conduct against Sexual Harassment; Alibaba Recruitment Convention; Alibaba Group Employee Disciplinary System; Alibaba Group Employee Leave Policy; and Alibaba Group Employee Performance Management System.
As at 31 March 2023 and for the Period:
<ul style="list-style-type: none"> Total workforce by gender, employment type (i.e. full-time or part-time), age group and geographical region; and Employee turnover ratio by gender, age group and geographical region.
Health and Safety
The following policies adopted by the Company:
<ul style="list-style-type: none"> Alibaba Group Administrative Emergency Operations Manual.
The following practices and programs implemented by the Company:
<ul style="list-style-type: none"> EHS (Environment, Health and Safety) Committee; Certification of ISO 14001 and ISO 45001 of the Hangzhou Cloud Valley Campus; Campus risk distribution map; Health care training and lectures, and launch of safety classes in the "Tenzo Pass Code" system; First-aid responder project team; Annual physical examinations; Employee health education and awareness activities; and Psychological counseling and lectures.
For the Period:
<ul style="list-style-type: none"> Number and rate of work-related fatalities occurred; and Number of lost days due to work injury.

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Independent Accountant's Assurance Report (continued)
Ernst & Young Huaming (2023) Zhuan Zi No. 61271659_B01
Alibaba Group Holding Limited


Scope (continued)

The Subject Matter (continued)

Development and Training
The following activities conducted by the Company:
<ul style="list-style-type: none"> "Passing on the flames of knowledge, promoting mutual learning and teaching"; "Giving 8 hours" worth of lectures every year; "Let's Go Interns"; "Speak Up Interns"; "The Summer of Interns"; "Newcomer Classroom"; Lazada Experience Program; "What Managers Must Know"; ESG training activities; Alibaba Learning; and Alibaba Technology Association (ATA).
Supply Chain Management
The following policies adopted by the Company:
<ul style="list-style-type: none"> Alibaba Supplier ESG Code of Conduct; Rules and Regulations for Supplier Management of Alibaba Group Procurement Guidelines; Supplier Certification and Evaluation Schematic Diagram; Operational Guidelines for Supplier Operations, Qualification and Performance Compliance Risk Management of Group Procurement Department; Supplier Subcontracting Management Specifications of Alibaba Group Procurement Department; Operational Guide for Blacklist supplier handling of Alibaba Group Procurement Platform; Star Suppliers Selection and Strategic Supplier Pilot Plan of Alibaba Group Procurement Department; Supplier Label Management Specifications of Alibaba Group Procurement Department; Honesty and Integrity Agreement; and Common Supplier Breach and Violation Behaviors and Level Determination Policy.
The following practices and programs implemented by the Company:
<ul style="list-style-type: none"> the "Control mechanism on pre-project prevention and control, in-process supervision, and post inspection"; the "Risk identification and audits throughout the procurement process"; the "Special management committee for ESG optimization of the supply chain"; and the "Green labeling of goods".

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Independent Accountant's Assurance Report (continued)
Ernst & Young Huaming (2023) Zhuan Zi No. 61271659_B01
Alibaba Group Holding Limited


Scope (continued)

The Subject Matter (continued)

Supply Chain Management (continued)
As at 31 March 2023:
<ul style="list-style-type: none"> Number of suppliers of the Company by geographical region.
Product Responsibility
The following policies adopted by the Company:
<ul style="list-style-type: none"> the "Publication of regulations and policies"; and the "Food safety system".
The following practices and programs implemented by the Company:
<ul style="list-style-type: none"> Alibaba Intellectual Property Protection Platform; Simp Ai; the "IP support program for original brand merchants in women's apparel industry"; Alibaba Anti-Counterfeiting Alliance; Alibaba Special Protection Plan for Geographical Indications; IP Young Scholars Program; the "Full-link digital product quality management system"; and the "Three principles and specific measures for consumer privacy protection".
For the Period:
<ul style="list-style-type: none"> Number of complaints received on Taobao and Tmall platforms and how they were dealt with.

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Independent Accountant's Assurance Report (continued)
Ernst & Young Huaming (2023) Zhuan Zi No. 61271659_B01
Alibaba Group Holding Limited

Scope (continued)

The Subject Matter (continued)

Anti-corruption
The following policies adopted by the Company:
<ul style="list-style-type: none"> Alibaba Group Code of Business Conduct; Alibaba Group Anti-Bribery and Anti-Corruption Policy; Alibaba Group Conflict of Interest Guidelines and Interpretations; Alibaba Group Gifts Handling Guidelines; and Alibaba Group Government Affairs Regulations.
The following measures adopted and implemented by the Company:
<ul style="list-style-type: none"> the "Internal and external reporting"; and the staff training on Alibaba Group Code of Business Conduct.
For the Period:
<ul style="list-style-type: none"> Number of concluded legal cases regarding corrupt practices brought against the Company or its employees and outcomes of such cases.
Community Investment
The following program implemented by the Company:
<ul style="list-style-type: none"> "Three Hours for a Better World".
For the Period:
<ul style="list-style-type: none"> Total employee voluntary service hours; and Amount of donation made to Alibaba Foundation.

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Appendix 3 ESG Data Verification Statement



Independent Accountant's Assurance Report (continued)

Ernst & Young Huaming (2023) Zhuan Zi No. 61271659_B01
Alibaba Group Holding Limited

Scope (continued)

Other than as described in the preceding paragraph, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.

Criteria applied by the Company

In preparing the Subject Matter, the Company applied "B. Social of Subject Areas, Aspects, General Disclosures and KPIs" in Appendix 27 - Environmental, Social and Governance Reporting Guide issued by the Stock Exchange of Hong Kong Limited and criteria as defined and disclosed in the ESG Report (the "Criteria").

The Company's responsibilities

The Company's management is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Subject Matter, such that it is free from material misstatement, whether due to fraud or error.

EY's responsibilities

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our engagement in accordance with the *International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* ("ISAE 3000"), and the terms of reference for this engagement as agreed with the Company on 19 June 2023. Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter in order for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.



Independent Accountant's Assurance Report (continued)

Ernst & Young Huaming (2023) Zhuan Zi No. 61271659_B01
Alibaba Group Holding Limited

Our Independence and Quality Control

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and have the required competencies and experience to conduct this assurance engagement.

EY also applies International Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and applying analytical and other appropriate procedures.

Our procedures included:

- 1) Conducting interviews with personnel to understand the business and reporting process;
- 2) Interviewing with key personnel to understand the process of collecting, collating and reporting on the Subject Matter during the Period;
- 3) Checking that the calculation criteria have been correctly applied in accordance with the methodologies outlined in the Criteria;
- 4) Undertaking analytical review procedures of the quantitative disclosures in the Subject Matter to support the rationality of the data;
- 5) Verifying the existence of policies, practices and programs in the Subject Matter; and
- 6) Testing, on a sample basis, underlying source information to check the accuracy of the data.



Independent Accountant's Assurance Report (continued)

Ernst & Young Huaming (2023) Zhuan Zi No. 61271659_B01
Alibaba Group Holding Limited

Description of procedures performed (continued)

We also performed such other procedures as we considered necessary in the circumstances.

Conclusion

Based on our procedures and the evidence obtained, we are not aware of any material modifications that should be made to the Subject Matter for the period from 1 April 2022 to 31 March 2023, in order for it to be in accordance with the Criteria.

Restricted use

Our responsibility in performing our procedures and reporting thereon is to the Company only and in accordance with terms of reference for this engagement as agreed with them. The report may not be suitable for another purpose. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any reliance of any such third party may place on the report is entirely at its own risk.



Appendix 4 Greenhouse Gas Inventory and Carbon Methodology

This inventory covers Scopes 1, 2, and partial Scope 3 GHG emissions of Alibaba Group in FY2023 within the organizational and reporting boundaries. The types of GHGs involved in this inventory include: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF₃) and sulfur hexafluoride (SF₆). Through the inventory, five types of GHG emissions including CO₂, N₂O, CH₄, HFCs and SF₆ are involved during the reporting period.

In accordance with 1) ISO 14064-1: 2018 Specification With Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals, 2) Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard, 3) Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard, 4) ISO 14064-3: 2019 Specification with Guidance for the Inventory and Validation of Greenhouse Gas Statements and other applicable laws, regulations, and related standards, we conducted an inventory of Alibaba's GHG emissions and removals during the inventory period (FY2023). GHG emission activity data strictly meet the quality requirements of relevant primary and secondary activity data. The emission factors come from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories published by Intergovernmental Panel on Climate Change (IPCC) in 2006 and 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories published in 2019, 2019 China Energy Statistical Yearbook and other authoritative references. All processes follow CEC's internal GHG emission inventory quality control procedures, and strictly meet the requirements of the ISO14064-3 standard.

The inventory is based on ISO14064, IPCC guidelines and other applicable laws and regulations. The details are shown below:

- ISO 14064-1: 2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals
- ISO 14064-3: 2019 Specification with Guidance for the Inventory and Validation of Greenhouse Gas Statements
- Guidelines for Accounting and Reporting Greenhouse Gas Emissions - China Public Building Operation Units (Enterprises) (Trial)
- Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard (Revised Edition)
- Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard
- 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- Other applicable laws, regulations and related standards

Appendix 4 Greenhouse Gas Inventory and Carbon Methodology

Scope	Emission Category	Emission Category	Scope	Emission Category	Emission Category
Scope 1: direct emissions from company-owned and controlled resources	Stationary Emissions	Emissions from the use of natural gas of boilers and cookware, and diesel for diesel generators	Scope 3: all other indirect emissions	Purchased Goods and Services	Packaging materials (plastic products), logistics services (warehouse, distribution), data center operations and maintenance services, data center cloud computing, receipt, poster, etc.
	Mobile Emissions	Emissions from diesel used in owned vehicles		Upstream Transportation and Distribution	Purchased transportation services
	Fugitive Emissions	Emissions from leaking fire extinguishers		Business Travel	Emissions from employee travel
		Refrigerant leakage		Employee Commuting	Emissions from employee commuting
Leakage of SF6		Upstream Leased Assets		Warehouse and leased IDC	
Scope 2: indirect emissions from consumption of purchased electricity, heat, and steam	Purchased Electricity	Production equipment and auxiliary facilities / Indirect emissions from electricity used in daily use equipment		Downstream Leased Assets	Self-built office campus and shopping malls for lease, and ticket machine
	Purchased Heat	Production equipment and auxiliary facilities / Indirect emissions from heat used in daily use equipment		Franchises	Cainiao stations and Tmall campus stores
	Purchased Cooling	Production equipment and auxiliary facilities / Indirect emissions from cooling for daily use equipment		Investments	Investments in TV plays and shows

Appendix 5 Climate-related Risks and Opportunities Assessment Report

Combating climate change challenges and achieving carbon neutrality is among Alibaba's top ESG topics. Fully aware of the significant impact of climate change on human society and economy, Alibaba brings together technological innovation and stakeholder ecosystem to tackle the climate challenges, actively responding to China's Carbon Peak and Carbon Neutrality Policy as well as the long-term global climate change goals and agenda based on the Paris Agreement. In 2021, Alibaba announced our commitment to carbon neutrality.

The Task Force on Climate-related Financial Disclosures (TCFD) provides a comprehensive framework for companies to respond to the future climate risks strategically and help achieve the long-term sustainability of business. Disclosing climate-related information systematically using the TCFD framework is an important step to strengthen our ESG governance and strategy as well as participate in global actions to tackle climate change. We actively identify, assess and manage climate-related risks and opportunities, including forward-looking climate scenario analysis, and undertake the integration of climate risks into our enterprise risk management system. We will continue to improve transparency in our disclosures, strengthen climate resilience, and pursue potential opportunities to make new progress.



The four core pillars of the TCFD framework

Governance

Alibaba establishes climate change governance system with reference to the TCFD framework within our three-layer ESG governance system.

Board oversight

The sustainability committee leads and oversees the strategies, policies and measures of Alibaba's core sustainability issues on behalf of the Board, including overseeing the development of climate strategies, the identification, assessment, management and reporting of related risks and opportunities, and carbon neutrality planning and implementation.

For more details on the responsibility of the sustainability committee and the governance approach under the new organizational structure, please refer to Chapter 7 Sustainability governance structure P193

Management oversight


The sustainability steering committee (SSC), under the leadership of the Board-level sustainability committee, is responsible for coordinating carbon neutrality planning and implementation, as well as the assessment and management of climate risks and opportunities. Under the guidance of the SSC, a cross-departmental climate change working group, led by the ESG strategy and operation department, is established to coordinate the TCFD-based analysis and assessment of climate risks and opportunities.

Embedding in our businesses

The business groups and companies, as well as functional departments, are responsible for implementing the identification, assessment, management and reporting of climate risks and opportunities, especially the development of GHG emissions inventory system since 2021, the key foundation for Alibaba's overall carbon neutrality planning and implementation.

Appendix 5 Climate-related Risks and Opportunities Assessment Report

We are well aware that addressing climate change and achieving carbon neutrality requires broader participation. As such, we are actively involved in advocating for climate solutions, especially in promoting technological innovation and stakeholder ecosystem to achieve carbon reduction and climate resilience. We actively organize and participate in international and domestic alliances, promoting collaboration, and work with authoritative institutions for setting and promoting standards.

 **For more details: please refer to Chapter 1 Engaging and enabling decarbonization through our platform ecosystem (Scope 3+) P32**

Daniel Zhang, our Chairman and CEO, co-chaired the board of the Consumer Goods Forum (CGF) from 2021-2023, which aims to drive positive changes in the global consumer goods industry. In FY2023, we worked with CGF community in China to focus on driving innovation and practices in reducing both GHG emissions and plastic pollution in the consumer goods industry.

We play a positive role in major conferences and organizations with international reach. In FY2023, we co-hosted the Digital Economy and Low-carbon Innovation Forum at the inaugural China Green Low-carbon Innovation Conference, as well as promoting advocacy and collaboration on technology and platform innovation at the United Nations Climate Change Conference (COP27). Alibaba's internal experts serve in a number of international and domestic professional organizations, such as the Science Committee of the United Nations World Adaptation Science Program (WASP), and the Technical Committee on Carbon Peaking and Carbon Neutrality of the Chinese Society for Environmental Sciences (CSES).

Strategy

With thorough understanding on the importance and urgency of climate change from global to regional scales, we first developed the basic strategy to achieve Alibaba's carbon neutrality pledges, by adhering to the principles that direct carbon reduction takes precedence over carbon removal, and carbon removal takes precedence over offsets. This strategy is aligned with international standards to substantially reduce the atmospheric GHG concentrations and is consistent with the basic principles of the goals of the Paris Agreement. Our carbon neutrality strategies are built upon three pillars "energy transition, technological innovation and stakeholder ecosystem". We also see potential opportunities to accomplish new and greater business and social value that comes from actively tackling climate change. For instance, we coined the Scope 3+ concept and set a Scope 3+ goal to proactively lead carbon reduction activities within a wider scope and deal with significant transition risks, such as political and economic change, and shifting consumer needs.

Integrating climate change into our business strategy and decisions is crucial for us to understand, mitigate and adapt to, and manage its direct impact to our business, as well as grasp the opportunities in sustainability transition. To understand the potential impact of climate risks and opportunities to Alibaba's strategy, business modes, financial planning and resilience, the climate change working group coordinated the climate scenario analysis for the Group systematically.

In accordance with the recommendations of TCFD, we adopted two scenarios, a high emissions scenario and a mid-low emissions scenario, to test the resilience of our business under physical risk pressures by 2060. Also, a combination of net-zero scenarios in comparison with baseline policy scenarios were used to identify risks and opportunities from policy and market changes that Alibaba would face by 2050 under a society-wide green transition scenario.

The RCP 8.5 (a high emission pathway) and the RCP 4.5 (an intermediate-emission pathway) from the Intergovernmental Panel on Climate Change (IPCC). And the Shared Socioeconomic Pathways (SSPs) scenarios, from the International Institute for Applied Systems Analysis (IIASA), is applied to specific physical risks.

Two transition scenarios to a green and sustainable future are the Net Zero 2050 from the Network for Greening the Financial System (NGFS) and the Sustainable Development Scenario (SDS) from the International Energy Agency (IEA). And the baseline scenarios are the Current Policies and the Stated Policy Scenario (STEPS) from NGFS and IEA, respectively.

Appendix 5 Climate-related Risks and Opportunities Assessment Report

We identified a range of climate risks and opportunities related to Alibaba by integrating findings from industry research and internal communication and analyses, with expert support. We conducted an initial round of impact assessment on Alibaba's business model and financial situation under different scenarios. Ten material climate risks and opportunities are included in this report. The following tables provide detailed descriptions of the material impacts, impact periods, and selected measures to manage risks and capture opportunities for the identified climate risks and opportunities

Physical risks				
Risk	Category	Potential impacts	Impact periods ¹⁶	Selected responses, strategies and approaches
Floods and tropical cyclones	acute	<p>Increase in the frequency and intensity of extreme precipitation and flooding events may affect the stability of operating facilities (such as office buildings, logistics centers, data centers, retail stores, etc.), potentially resulting in asset loss, disruption of logistics and direct sales operations, and may threaten employees' safety.</p> <p>Increasingly frequent and intense tropical cyclones may cause strong winds and heavy precipitation, which may affect logistics business, causing flight delays or cancellations. This will lead to delayed deliveries or supply chain disruptions, and eventually a decline in revenue.</p>	M	<p>Alibaba campuses adopt a sustainable design based on the concept of "sponge city" to prevent the risks of flooding and heavy precipitation.</p> <p>For more details: Please refer to Chapter 1 Greening our operations and value chain P33</p> <p>Alibaba Cloud has considered natural disaster risks and extreme weather impacts during stages of site selection, design, construction, operation and maintenance. Cainiao has established an emergency management system for various natural disasters in its daily operations, and carried out emergency training for employees.</p> <p>For more details: Please refer to Chapter 5 Operations and platform resilience P167</p>
Extreme low and high temperatures	acute	<p>Extreme weather events including extreme coldness, can affect the physical safety and security of our retail stores' employees and consumers, and may disrupt the operation of stores and supply chain, thereby resulting in revenues decrease and cost increase.</p> <p>Heatwaves will have a negative effect on the performance of our employees in our platform ecosystem, and even cause health safety issues such as heat stroke.</p>	S, M	<p>Our retail business tracks weather forecasts and extreme weather warnings, and develops contingency plans to respond to extreme weather events. Sun Art Retail upgrades its emergency response and strengthens key precautions to protect the shops' indoor and outdoor areas from coldness¹⁷. Ele.me provides advanced reminders according to local weather warnings, as well as delivery protections. In hot days, Ele.me sends rest reminders and sheltering guide and provides online safety courses including self-rescue from heatstroke. Additionally, Ele.me continuously improves its resting mechanism. Riders who need to take a break can stop order dispatching after reporting online. In 2022, Ele.me released a summer version of smart helmets, with lighter weight and better ventilation.</p>
Mean temperature rise and drought	chronic	<p>Global mean temperature rise will lead to higher cooling demands of data centers, requiring increased use or higher efficiency of cooling equipment, which causes additional operational costs, to keep our data centers operating stably at safe operating temperatures.</p> <p>Water scarcity is likely to impact Alibaba's key segments' locations, especially for data centers, which could drive the costs associated with water procurement.</p>	M, L	<p>Alibaba Cloud's data centers adopt the technology of liquid-cooled server, and intelligently adjust cooling through real-time environmental monitoring (such as using outdoor fresh air to optimize heat dissipation efficiency), which largely reduces electricity consumption.</p> <p>For more details: Please refer to Chapter 1 Green and low-carbon cloud P35</p>



16. The impact period: S is for short term (0-3 years); M is for medium term (3-10 years), L is for long term (more than 10 years). The impact period is estimated based on the temporal variation of the parameters' value under the selected climate scenarios.

17. For more details, please refer to 2022/2023 Environmental, Social and Governance Report of Sun Art Retail Group Limited, Chapter 3 Environmental-friendly operation and Green Development.

Appendix 5 Climate-related Risks and Opportunities Assessment Report

Transition risks				
Risk	Category	Risk Impact Description	Impact periods	Selected responses, strategies and approaches
Regulations on energy and resource efficiency	Legal	China has increasingly tightened the requirements for energy production, energy and material efficiency in a wide range of industries. A series of new data center energy efficiency standards since 2021 require Alibaba Cloud to constantly invest in the research and development as well as the maintenance of high efficiency data centers. Packaging standards, such as restrictions on plastic and other packaging materials, may result in increased compliance costs for our businesses including logistics, retail and local consumer service.	M	Our cloud computing continuously lowers PUE and energy consumption by transforming resource usage, developing digitalized and intelligent energy saving/efficiency improving solutions, and promoting a greener supply chain. For more details: Please refer to Chapter 1 Greening our operations and value chain P33 Our logistics and retail businesses strive to minimize packaging by reducing packaging at its source, applying eco-friendly materials, optimizing packing, and recycling. For more details: Please refer to Chapter 1 Minimizing packaging materials P54
Carbon pricing	Policy and legal	GHG emissions control policies and the development of Carbon Emissions Trading System (ETS) will increase Alibaba's direct operating costs and compliance costs, while higher potential costs (indirect costs) may pass through the supply chains. Additionally, the rising prices of carbon allowances and offsets resulting from tightening carbon emission policies will cause additional costs for Alibaba to fulfill its commitment to achieving carbon neutrality in own operations by 2030.	M	We regularly track carbon emission related policies and assess their impact on Alibaba. Meanwhile, we reduce energy consumption and carbon emissions by developing digitalized and intelligent energy saving/efficiency improving solutions, energy transforming, resource recycling and encouraging employees' green practices. For more details: Please refer to Chapter 1 Greening our operations and value chain P33
Energy price fluctuation	Market	The demand for renewable energy will increase under the global and national carbon neutrality goals and policies. However, the discrepancies of renewable energy supply and demand growth among different geographical locations vary significantly, which may cause significant fluctuation of energy price that brings additional costs to logistics, clouds and other businesses.	S, M	We pay close attention to the renewable energy market, timely adjust our procurement strategies, and actively deploy PV in suitable areas. For more details: Please refer to Chapter 1 Solidly promoting carbon neutrality P30
Stakeholders' expectations	Reputation	Alibaba Group has proposed ambitious carbon neutrality targets. The external expectation about the progress and effectiveness of our decarbonization actions is high. Therefore, more efforts on emission reduction, disclosure and communication are required to improve consumer loyalty and our financing capabilities.	S, M, L	We adopt the internationally accepted TCFD framework to disclose the impacts of climate change on Alibaba's businesses and our countermeasures, and actively respond to stakeholders' enquiries. Also, we disclose carbon emissions and overall progress towards carbon neutrality in our annual ESG reports. For more details: Please refer to Chapter 1 Solidly promoting carbon neutrality P30

Appendix 5 Climate-related Risks and Opportunities Assessment Report

Climate-related Opportunities				
Opportunity	Category	Opportunity Impact Description	Impact Periods	Our Responses to Opportunities
Transition to low-emission energy sources	Energy Source	In our GHG reduction strategy, we attach importance to the energy transition. That includes actively seeking renewable energy, applying it to our operations, and reducing the emission costs or potential costs through owning, purchasing and making investments in renewable energy.	M	<p>We pay close attention to the renewable energy market, timely adjust our procurement strategies, and actively deploy PV in suitable areas.</p> <p> For more details: Please refer to Chapter 1 Solidly promoting carbon neutrality P30</p>
Efficient equipment technology and digital carbon reduction solutions	Products and Services	Alibaba Cloud is in the leading role in energy-saving and water-saving technologies, which may save considerable energy/water costs and help increase market share. Our cloud computing business is developing solutions for customers to manage, reduce and avoid carbon emissions and improve energy efficiency. In addition, the IaaS infrastructure of Alibaba Cloud ranks the first among the world's top cloud providers in the four core assessments of compute, storage, networking, and security, demonstrating its competitiveness in providing cloud services to the energy industry.	S, M, L	<p>Alibaba Cloud integrates green cloud computing principles in its digital and intelligent capabilities to help large, medium, small and micro enterprises in multiple industries transition to a digital circular economy.</p> <p> For more details: Please refer to Chapter 1 Green and low-carbon cloud, Conserving and purifying water resource P35</p>
A good reputation for environmental protection to attract investment	Market	Alibaba has proposed ambitious carbon neutrality goals and implemented a series of climate change strategies, measures and actions. We are establishing a climate risk and opportunity management system, helping the whole society achieve positive outcomes in addressing climate challenges while in the meantime, maintaining a good reputation in the capital market. This further enhances the evaluation of our ESG performance, attracts investment and reduces financing costs.	S, M, L	<p>In 2021, Alibaba Group established a sustainable finance framework and issued nearly US\$1 billion in sustainability bonds, becoming the first internet company in Asia to issue green bonds. Proceeds have been used in areas such as energy efficiency, green buildings, renewable energy, and circular economy & design. Alibaba continues to promote a more low-carbon and climate-resilient ecosystem for participants, and communicates regularly with stakeholders, including investors, rating agencies, and policymakers.</p>

Appendix 5 Climate-related Risks and Opportunities Assessment Report

Case: Enhancing the resilience of cloud infrastructure to physical risk

Alibaba's businesses may be adversely affected by natural disasters such as earthquakes¹⁸, blizzards, storm surges, floods, droughts, fires, etc. Cloud computing is Alibaba's core business. We have identified and assessed the impact of physical climate risks, such as floods and extreme heat, for cloud infrastructures including data centers and servers, and improved the management system for combating physical risks in the full operating life cycle of site selection, design, construction, operation and maintenance, aiming to provide more climate-resilient cloud computing services.

Climate Risks	Risk Strategies and Approaches			
	Site selection	Design and construction	Operation	Maintenance and new construction
Floods	We synthetically consider regional policies and regulations on data center investment and construction, as well as historical records of typhoons, heavy precipitation, extreme high temperatures and other extreme weather events to avoid construction in high-risk areas.	Elevating floors of data center buildings: following the national standard Code for Design of Data Center (GB/T50174-2017), the building's first floor is over 1.0 meter above the high-water mark of 100-year flood event in the region, and is at least 0.6 meter above the outdoor ground. In areas with insufficient hydrological records, we deployed hydrological simulation models to obtain necessary information. Drainage design for extreme precipitation: the total drainage capacity of the building's roof was designed no less than the largest rainfall runoff with the 50-year return period.	A flood Emergency Response Plan (ERP) has been established, and no off-design situation has occurred by 31 March, 2023.	—
Blizzard		Adaptation to extreme blizzard risks: the blizzard pressure resistance of the computer clusters were designed to sustain 50-year blizzard events.	A typhoon Emergency Response Plan (ERP) has been established, and no off-design situation has occurred by 31 March, 2023.	—
Temperature		Design for power brownouts/outages conditions under extreme temperatures: backup diesel generator sets and uninterruptible power supply (UPS) for emergencies were installed to ensure the steady operations of the data center under extreme working conditions, such as poor external power supply and power outage. Design for outdoor cooling: following the 2017 ASHRAE Handbook - Fundamentals (SI), cooling facilities were selected based on extreme summer dry/wet bulb temperature with a 20-year return period.	We have implemented real-time environment monitoring and intelligent adjustment to optimize heat dissipation in selected data centers. In areas with low room temperature all year round, like Ulanqab and Zhangbei, we use outdoor fresh air to achieve cooling with low energy consumption.	Adjust the cooling architecture according to extreme hot weather.
Water scarcity		Water-saving design: The liquid cooling data center adopted dry cooler refrigeration architecture and applied our self-developed dry cooler, which can achieve WUE less than 0.1Liters/kWh. Compared with conventional open air-cooling towers, a single server room building can save water consumption of about 250,000 tons a year. Air cooling design: Our air-cooled data center in north China adopted direct outdoor fresh air cooling technology, which greatly reduces cooling processes, with WUE is less than 0.45 liters/kWh, saving more than 80% of water consumption compared with traditional cooling tower solutions. Water recycle and reuse: Our campuses feature the design of rainwater and wastewater recycling, and we consider the reuse of various water sources, such as grey water, in other cases.	We have employed products with low WUE architecture to save water, of which the WUE is less than 0.1L/kwh, or even near 0.	As the cost of the water saving technology decreases, data center with "near-zero" or "no" water consumption will be promoted.

¹⁸. During site selection, we comprehensively consider the local policies of data center investment and construction, and historical records of earthquakes to avoid construction in high-risk areas. In the design and construction process, we adopt the key fortification category (Class B) in data center design, and raise the structural seismic level to the first-class seismic standard. An Emergency Response Plan (ERP) has been established and no off-design situation had occurred by 31 March, 2023.

Appendix 5 Climate-related Risks and Opportunities Assessment Report

Risk management

Alibaba regularly identifies, assesses and manages potential climate risks and integrates them into the Group's risk management system. In FY2023, we conducted a comprehensive climate change risk and opportunity assessment to identify potential transition and physical risks and opportunities in the future, and worked with risk management and business teams to analyze the potential climate risks and opportunities, assess their impacts, and develop strategies for risk mitigation and adaptation.

We identified and managed climate change risks and opportunities based on the following processes:

1. Define business context - Through meetings with the Group's climate-related departments and business units, we built internal consensus on the impacts of climate change, sorted out typical business models and value creation paths of each business, and brainstormed and discussed potential climate risks and opportunities for the Group and each business.

4. Form a systematic management system - We are exploring and improving our climate risk management system. We released the Alibaba Group Risk Management General Outline, which defines basic principles, organizational structure, working mechanism and responsibilities for risk management, so as to improve the Group's overall risk management capability and ensure the Group's safe operation and sustainable development. The climate change working group and the group-level Risk Management Committee have cooperated to integrate the identified climate risks into the Group's risk catalog system and to incorporate climate opportunity planning into our ESG strategy. We have systematically developed response measures to climate risks and opportunities in some of our businesses, and will expand and deepen this work and regularly update our assessment of the impact of climate risks and opportunities and the effectiveness of our countermeasures.



2. Identify a list of climate-related risks and opportunities - Based on the results of interviews with the Group's climate-related departments and business units, combined with industry research, we further identified and explored the external drivers and internal core impacts of climate risks and opportunities, and produced a list of climate risks and opportunities.

3. Conduct scenario analysis - We selected appropriate climate scenarios, specified the time horizon for analysis, and conducted scenario analysis for the list of climate risks and opportunities using climate scenario parameters that were highly compatible with the climate scenarios. We considered and assessed the potential impacts of climate risks and opportunities in terms of time horizon, likelihood of occurrence, financial materiality and other factors to identify and prioritize key climate risks and opportunities of greater significance that could have a material financial impact on Alibaba.

Appendix 5 Climate-related Risks and Opportunities Assessment Report

Metrics and targets

In 2021, we released the Alibaba Group Carbon Neutrality Action Report, putting forward the three goals of "achieving operational carbon neutrality, halving the carbon intensity of the value chain, and facilitating ecosystem carbon reductions of 1.5 gigatons", and committed to joining the Science-based Targets Initiative (SBTi). We actively engage upstream and downstream value chains, as well as consumers and companies on our platform to jointly promote the achievement of our targets, and actively facilitate business groups and companies to carry out their own climate risk and opportunity analysis and set and publish relevant targets. As of March 31, 2023, Alibaba Cloud and Sun Art Retail have taken the lead in publishing their carbon neutrality targets (see table below); as the new organizational and governance structure is completed, the climate change working group will also coordinate more business groups and companies to embark on the relevant work, including target setting and progress tracking.

We believe that transparency of our GHG emissions data and our progress is key to achieving carbon neutrality. We continuously track our progress towards our goals and disclose our progress in our ESG reports, including performances in carbon emissions, energy use, energy efficiency, etc., as shown in:

[Appendix 1 ESG Key Performance Metrics Table P208](#)

In addition, we provide detailed information on our climate strategy and performance to CDP, a global disclosure platform. We responded to the CDP Climate Change questionnaire for the first time in 2022, receiving a B score in climate information disclosure.

	Scope 1&2	Scope 3	Scope 3+
	By 2030, achieve carbon neutrality in its own operations.	By 2030, collaborate with its upstream and downstream value chain partners to cut emission intensity by 50% from the base year of 2020.	Beyond its own operations and direct value chain, pledge to leverage our digital platforms to encourage even broader participation by stakeholders that can be reached. By 2035, facilitate 1.5 gigatons of GHG emission reduction over 15 years across Alibaba's digital ecosystem.
	By 2030, achieve carbon neutrality in its own operations and clean energy will account for 100% of total power supply for cloud computing since 2030.	By 2030, achieve carbon neutrality in Scope 3.	
	By 2030, achieve carbon neutrality in operations of Scope 1 and 2, with 100% carbon neutrality in the power required for its own operation, and in gasoline and diesel consumption of its own fleet.		

Appendix 6 Stakeholder Engagement and Materiality Assessment

Alibaba actively communicates and works with our various stakeholders, responds to their expectations, and continuously strives to create sustainable value for all. This is the cornerstone of Alibaba's long-term business and ESG agenda. We fully consider the wide range of interrelationships and influence of our businesses and platforms on stakeholders, including consumers, employees, shareholders and investors, and government regulators, as well as business partners, communities, the environment, and other stakeholders. We communicate with them in diverse ways, respond to their concerns and expectations timely, and continuously improve our business and ESG strategies and actions. We maintain open communication channels and healthy relationships with our stakeholders, who provide an invaluable reference for Alibaba to identify the most relevant and important sustainable development opportunities, strengthen our capacities and actions, and improve the quality of information disclosure.

Stakeholder groups	Communication channels	Stakeholder groups	Communication channels	Stakeholder groups	Communication channels
Consumers	Media and social media communications	Employees	Emails to all staff	Communities	Long-term public welfare projects
	7x24 customer service hotline		Communication meetings		Daily media communications
	Online and offline surveys, questionnaires, and interviews		Staff intranet posts		Social media
Merchants	Media and social media communication		Communication mechanism within business units		Non-profit sector forums and events
	7x24 customer service hotline		Training activities and grievance mechanisms		Volunteer activities
	Online and offline surveys, questionnaires, and interviews		Phone calls, face-to-face meetings, and company visits		Value chain and platform partners
Government and regulators	Regular communications	Corporate annual reports, quarterly reports, and announcements	Industry-specific forums and communication channels		
	Special topic discussions and meetings	Daily reporting and communication on ESG-related issues	Supplier conferences		
		Shareholders and investors	Investor research		

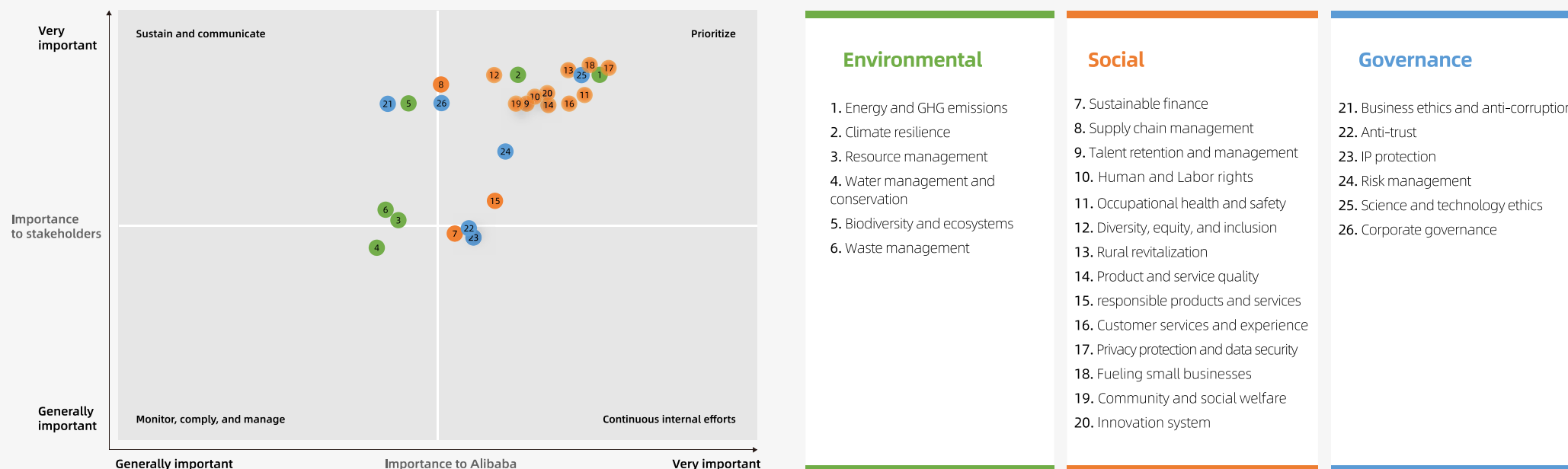
Appendix 6 Stakeholder Engagement and Materiality Assessment

Materiality Assessment

Our material issues encompass what matters most to our business, ESG goals, and stakeholders. Maintaining awareness of these issues is critical for identifying and managing our risks and opportunities and effectively responding to stakeholder expectations.

In FY2023, on the one hand, we continued to make reference to relevant sustainability frameworks (including GRI and SASB), requirements by stock exchanges (including Hong Kong Stock Exchange, HKEX), recommendations from rating agencies, domestic and international policies (including SDGs) and peers best performance to benchmark our material issues. On the other hand, under the supervision of the Alibaba Group's sustainability steering committee, we carried out in-depth study on domestic and international macroeconomic policies, reviewed and analyzed ESG issues based on industry trends and business development perspectives, etc. At the same time, we also extensively communicated with government departments, industry associations, investors and other stakeholders for their feedback and suggestions.

Based on the Alibaba seven-petal ESG flower, we eventually constructed the following ESG materiality matrix.



Appendix 7 Progress of United Nations Global Compact

Alibaba became a party to the UN Global Compact in February 2021. Our Chairman and CEO, Daniel Zhang, continues to support UNGC and its principles. We take a responsible, principles-based, and integrated approach and are committed to the UN's development goals, conducting business in a responsible manner, and becoming a strong, long-term partner of the UN to fulfill its commitments to society.

Fields	Principles	Corresponding chapters
Human rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.	Supporting our people - Establishing a diverse, equal, and inclusive culture and system
	Principle 2: Make sure that they are not complicit in human rights abuses.	
Labour	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Supporting our people - Establishing a diverse, equal, and inclusive culture and system
	Principle 4: Eliminate all forms of forced and compulsory labour.	
	Principle 5: The effective abolition of child labour.	
	Principle 6: Eliminate discrimination in respect of employment and occupation.	
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges.	Restoring our green planet
	Principle 8: Undertake initiatives to promote greater environmental responsibility.	
	Principle 9: Encourage the development and diffusion of environmentally friendly technologies.	
Anti-corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	Building trust - Building corporate trust

Appendix 8 Report Indicator Index

Chapter	HKEx ESG Indexing	SASB	GRI	TCFD	SDGs
Chapter 1 Restoring our green planet					
Environmental strategy and governance					
Solidly promoting carbon neutrality	A1, A1.2, A1.5; A2.3; A4, A4.1; B5, B5.2, B5.3, B5.4	CG-EC-130a.3; CG-EC-410a.2; CG-EC-000.C	302-4; 305-1, 305-2, 305-3, 305-5; 308-1	Strategy -(a), (b) and (c)	
Conserving and restoring nature	A1, A1.6; A2, A2.4, A2.5; A3, A3.1		303-1; 304-1, 304-3; 306-2, 306-4	Strategy -(a), (b) and (c)	
Chapter 2 Supporting our people					
Establishing a diverse, equal, and inclusive culture and system	B1, B1.1; B4, B4.1		405-1; 408-1; 409-1		
Establishing fair and competitive remuneration with heartwarming benefits	B1		401-1, 401-2, 401-3; 408-1; 409-1		
Offering abundant learning and development opportunities	B3, B3.1, B3.2		404-1, 404-2		
Creating a work environment conducive to improving employees' health and vitality	B2, B2.3		403-1, 403-3, 403-4, 403-5, 403-6, 403-7		

Appendix 8 Report Indicator Index

Chapter	HKEx ESG Indexing	SASB	GRI	TCFD	SDGs
Chapter 3: Enabling a sustainable digital life					
Diverse consumption					
Trustworthy consumption	B6; B6.2; B6.4, B6.5	CG-EC-230a.1	418-1		
Inclusive consumption					
Responsible consumption		CG-EC-410a.2	417-1		
Chapter 4: Fueling small businesses					
Developing responsible technologies		CG-EC-000.B			
Building markets, business capabilities and business ecology for MSMEs	B6.3	CG-EC-000.A			
Creating and enabling inclusive employment					
Promoting responsible production	B5, B5.2, B5.3, B5.4				

Appendix 8 Report Indicator Index

Chapter	HKEx ESG Indexing	SASB	GRI	TCFD	SDGs
Chapter 5 Enhancing community inclusion and resilience					
Rural revitalization through digital developmen	B8.1		203-1, 203-2; 413-1		
Community resilience through digital technology	A4.1; B8.1, B8.2	CG-EC-130a.3;			
Chapter 6 Facilitating participatory					
Philanthropic participation of all employees	B8, B8.1, B8.2				
Technological innovations for social challenges	B8.1		413-1		
Connecting ecological forces to empower	B8.1, B8.2		413-1		
Chapter 7 Building trust					
Building corporate trust	B7; B7.1; B7.2, B7.3		205-1, 205-2, 205-3; 405-1	Governance-(b); Risk management-(b)	
Building social trust	B6.5	CG-EC-220a.2; CG-EC-230a.1			



Appendix 8 Report Indicator Index

Chapter	HKEx ESG Indexing	SASB	GRI	TCFD	SDGs
Appendices					
Appendix 1 ESG Key Performance Metrics Table	A1.2; A2.1; A2.4; B1.1, B1.2; B2.1; B2.2; B5.1	CG-EC-130a.1;CG-EC-130a.2; CG-EC-330a.3	204-1; 302-1, 302-3; 305-1, 305-2, 305-3,305-4; 403-9; 403-10	Metrics and Targets -(b)	
Appendix 5 Climate-related risks and opportunities assessment report				Governance -(a) and (b); Strategy -(a), (b) and (c); Risk Management -(a), (b) and (c); Metrics and Targets -(a) and (c)	

Appendix 9 Important Legal Information

This report contains forward-looking statements. These statements are made under the "safe harbor" provision under Section 21E of the U.S. Exchange Act, and as defined in the Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words or phrases such as "may" "will" "expect" "anticipate" "future" "aim" "estimate" "intend" "seek" "plan" "believe" "potential" "continue" "ongoing" "target" "goal" "is/are likely to" or other similar expressions. These statements include, among other things, those about our ESG strategies and the effectiveness of our ESG strategies and initiatives, and those about our new organizational and governance structure.

Forward-looking statements involve inherent risks and uncertainties. A number of factors, including those described in Alibaba's annual reports and other filings with the U.S. Securities and Exchange Commission and announcements on the website of the Hong Kong Stock Exchange, could cause actual results to differ materially from those contained in any forward-looking statement.

The forward-looking statements made in this report relate only to events or information as of the date on which the statements are made in this report and are based on current expectations, assumptions, estimates and projections. Alibaba undertakes no obligation to update any forward-looking statements to reflect events or circumstances after the date on which the statements are made or to reflect the occurrence of unanticipated events, except as required under applicable law.

Information referenced in this report, including other Internet sites and third-party reports and publications, is not incorporated into this report. For the reader's convenience only, this document may provide the addresses of, or contain hyperlinks to, third-party websites. Alibaba has not reviewed such hyperlinks and takes no responsibility for the content therein.

The inclusion of information in this report should not be construed as a characterization regarding the materiality or financial impact (or potential impact) of that information. For more comprehensive information about our results and operations, including risks that could adversely affect our results of operations and financial condition, please refer to our annual reports and other filings with the U.S. Securities and Exchange Commission and announcements on the website of the Hong Kong Stock Exchange.

**Working together to
give our children a
sustainable future.**



Alibaba's
employee's child

Xiaoman
(7 years old)



Alibaba Group Holding Limited