



2022

环境、社会及治理报告

Environmental, Social and Governance Report

JDL 京东物流

JD Logistics, Inc.
京东物流股份有限公司
(于开曼群岛注册成立的有限公司)
股份代号: 2618

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Report Profile

Reporting Scope

Organizational Scope: This report covers JD Logistics, Inc. and its subsidiaries and consolidated affiliated entities (including Deppon and Kuayue Express).

Reporting Period: From January 1st, 2022 to December 31st, 2022 (the "Reporting Period").

Release Cycle: JD Logistics, Inc. reports its Environmental, Social and Governance (hereinafter referred to as ESG) progress on an annual basis. This report is the second ESG report of the Company.

Reference and Principles

This report is prepared in compliance with the *ESG Reporting Guide* from the Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange" or "HKEX") and adheres to the four reporting principles of materiality, quantitative, balance and consistency stipulated in the guide.

Materiality: We attach great importance to the impact of ESG issues on stakeholders. In 2022, JD Logistics conducted materiality assessment to evaluate the impact of ESG issues on internal and external stakeholders, and received the confirmation from the board (the "Board") of the directors (the "Directors") of JD Logistics. This report also fully responded to the material issues by disclosing relevant contents.

Quantitative: To demonstrate the environmental and social performance of JD Logistics in 2022, we have presented key performance indicators in a measurable way.

Balance: In the process of preparing this report, we focus on presenting the Company's performance in an unbiased manner and avoiding any reporting format that may inappropriately influence readers' decisions or judgments.

Consistency: Unless otherwise stated, this report adopts the same statistical methods as in previous years to ensure that ESG data can be meaningfully compared in the future.

At the same time, this report also refers to the *GRI Sustainability Reporting Standards* (GRI Standards) issued by the Global Sustainability Standards Board (GSSB), the *Guidance on Climate Disclosures* issued by HKEX, and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Appellation Explanation

For the sake of expression and convenience, this report uses the following abbreviations:

"JDL", "JD Logistics", "the Company" or "We" refers to "JD Logistics, Inc. ";
 "JD", "JD.com" and "JD Group" all refer to "JD.com, Inc." and its subsidiaries;
 "JD Technology" refers to "Jingdong Technology Holding Co., Ltd.";
 "JD Property" refers to "JINGDONG Property, Inc.";
 "JD Health" refers to "JD Health International Inc.";
 "Kuayue Express" refers to "Kuayue Express Group Co., Ltd.";
 "Deppon" refers to "Deppon Logistics Co., Ltd."

Source of Information

The information and data in this report mainly come from the Company's internal data collection system, work reports, and public information materials, such as prospectuses, annual reports, and authoritative media releases. Unless otherwise stated, the currency unit in this report is RMB.

Release Form of the Report

This report is published in Simplified Chinese, Traditional Chinese, and English. In case of ambiguity or conflict among the three versions, the Simplified Chinese version shall take precedence. This report is released in both environmentally friendly printed paper and PDF electronic file formats. The PDF file supports online reading and can also be downloaded from the HKEX information release web page (<https://www.hkexnews.hk>), and the official website of JD Logistics, Inc. (<https://www.jdl.com>), in which stakeholders can click on the relevant documents to review this report.

Contact Us

We greatly appreciate suggestions and feedback from all stakeholders. If you have any comments regarding this ESG report, please feel free to contact us through the following channels:

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Message from CEO:

Rooted in Real Economy, Thriving for All

Looking back on 2022, the logistics industry faced significant challenges due to uncertainties and instabilities amid the complex international environment and the impact of the COVID-19 pandemic. However, continuous national policy support provided new opportunities for the logistics industry to maintain resilience and recovery. In this era of opportunities and challenges, JD Logistics is deeply aware of its mission and responsibility of a responsible supply chain enterprise. After more than a decade of hard work, we developed from an enterprise logistics business unit to a logistics enterprise. We adhere to our mission of "driving superior efficiency and sustainability for global supply chain through technology," and are committed to becoming the world's most trusted supply chain solutions and logistics services provider.

Rooted in the real economy, JD Logistics has always adhered to the concept of "long-termism," consistently pursuing challenging yet vital endeavors that create long-term value. To this end, we have prioritized high-quality corporate governance within our organization. In 2022, we established the ESG Management Committee, which I have the honor of leading. The committee is responsible for overseeing and making decisions on the Company's ESG matters, continuously evaluating risk management in our operations and enhancing the structure of our ESG goal framework. We view ESG as a vital tool for enhancing corporate governance and driving business growth. By upholding the principles of sustainable development, we will continue to provide real support to the real economy and integrate supply chain and networks of warehouse, cloud and goods, contributing to the high-quality development of the social economy, reaching China's achievement of carbon peaking and carbon neutrality targets, and the global 2030 Sustainable Development Goals.

As a logistics enterprise that continuously develops integrated supply chains, JD Logistics closely links the production and consumption ends. In 2022, the global supply chain was faced with the enormous pressure of circulation blockages and supply interruptions due to the combined impacts of climate change, public health, and other factors. JD Logistics has always been committed to building an integrated supply chain that is flexible, resilient and green, providing customers with more efficient, convenient, and greener service experiences. In 2022, our "Network Plan" achieved remarkable results. With the 35¹ Asia No.1 smart industrial parks and over 1,500 warehouses as the

core, we have built a highly synergized multi-level logistics infrastructure network, providing integrated supply chain solutions and logistics services for enterprises in a wide range of industries, and establishing deep trust between the industry end and the consumption end. Meanwhile, our customer service capabilities have improved, and JD Express continues to maintain the best-in-class customer satisfaction ratings in the industry.

As the ecological crisis brought on by global climate change continues to intensify, the international community is calling for more robust climate action from all nations. In response, numerous industries in China are further deploying and planning under the "1+N" climate policy framework. As the first logistics enterprise in China to establish goals under the Science-Based Target initiative (SBTi²), JD Logistics has been continuously promoting green and low-carbon logistics in various business scenarios and achieved positive results. JD Logistics' Xi'an Asia No.1 Smart Industrial Parks has earned the distinction of being China's first "carbon neutral" logistics park. We have implemented new-energy battery-switch vehicles on a grand scale nationwide and unveiled hydrogen energy transportation test routes, delivering "zero-carbon" transportation services to our clients. We have also introduced the industry's first original packaging standards, the DWOP (Delivered with Original Package) certification, which is expected to drive the industry to reduce disposable packaging by 10 billion pieces, equivalent to reducing the felling of about 20 million trees. Our strategic project "Green Stream Initiative" has been implemented for five years, and together

with our partners, we have achieved a monthly recycling of about 90,000 carton boxes in more than 100 cities. With clear carbon emission reduction goals and paths of our own, we have also joined the Global Sustainable Consumption Initiative, and took a leading role in the establishment of the Environmentally Conscious Supply Chain Professional Committee of the All-China Environmental Federation. We released the *Carbon Neutral Guide for Logistics Parks*, and launched the "Supply Chain Decarbonization Action" so as to continuously promote the active integration of ecological partners in the upstream and downstream of the supply chain into the industrial decarbonization cycle and build a green value chain.

For JD Logistics, our duty is to continuously create value for workers and society in the real economy. In 2022, we provided high-quality employment opportunities for more than 290,000 self-employed front-line delivery personnel. We actively responded to the rural revitalization strategy, serving more than 1,000 agricultural production regions and industry zones across the country, in line with JD.com's "Benfu Initiative"³ (March to Rich Initiative). Additionally, as the first main logistics service provider for 2022 international winter sports event, JD Logistics showcased our professional capabilities in servicing large-scale international sports events to the world through high-tech and intelligent supply chain capabilities.

Despite the ongoing fluctuations in the global pandemic situation, JD Logistics' frontline staff⁴ demonstrated their sense of responsibility and dedication to society by bravely stepping forward during pandemic



Yui Yu

Executive Director and CEO of JD Logistics

outbreak. Drawing upon our strengths in integrated supply chain, we safeguarded the transportation and distribution of special materials during the pandemic, providing consumers with a sense of security and ensuring that livelihood necessities were delivered to those in need.

Looking ahead to the new year, the safety, reliability, and resilience of the industrial chain and supply chain have become the core competitive strengths. JD Logistics is willing to work with all parties to jointly promote the green and integrated end-to-end supply chain, build a resource-sharing bridge for sustainable consumption and production, promote the green and sustainable development of the entire supply chain in all scenarios, stages, and life cycles, and create a symbiotic, shared, and win-win integrated supply chain ecosystem, so as to make significant contributions to global sustainable development and resilience of recovery.

¹ Starting from 2022, we updated and upgraded the criteria (the "New Criteria") of the Asia No. 1 smart industrial parks, including but not limited to the gross floor area, the investment scale, and the level of automation. Under the New Criteria, by the end of 2021, we operated 28 Asia No. 1 smart industrial parks instead of 43.

² SBTi, Science Based Target Initiative.

³ "Benfu Plan", is JD Group's plan for rural revitalization initiated since October of 2020.

⁴ Frontline staff refer to frontline sorters, couriers, customer service representatives, and drivers, etc.

About JD Logistics

JD Logistics was established in 2007 as the logistics department of JD.com. In April 2017, it officially became an independent business unit of JD.com and began to provide logistics services to external customers. In May 2021, JD Logistics was listed on the Main Board of the Hong Kong Stock Exchange, entering a new phase of development. As a leading technology-driven supply chain solution and logistics service provider in China, JD Logistics focuses on six major industries including fast-moving consumer goods, home appliances and home furniture, apparel, 3C⁵, automotive, and fresh produce. With integrated supply chain logistics services as our core competence, JD Logistics provides consumers with technology-driven integrated supply chain solutions and logistics services to help enterprises, industries, and the whole society reduce costs and boost efficiency.

JD Logistics has established six highly synergized logistics networks, including warehouse network, line-haul transportation network, last-mile delivery network, bulky item logistics network, cold chain logistics network, and cross-border logistics network. As of December 31, 2022, JD Logistics operated more than 1,500 warehouses, with an aggregate gross floor area (GFA) over 30 million square meters, including warehouse space managed under the Open Warehouse Platform.

JD Logistics has constantly attached great importance to the crucial role of technological innovation in corporate development. Leveraging core technologies such as 5G⁶, artificial intelligence, big data, cloud computing, and the Internet of Things (IoT), JD Logistics persistently expands its three-in-one supply chain technology advantages in software, hardware, and system integration. Through this effort, we've developed a comprehensive intelligent logistics system that automates our services, digitizes our operations, and enables intelligent decision-making. As of the end of 2022, JD Logistics has applied for nearly 9,000 patents and software licenses.

Meanwhile, JD Logistics has built a synergistic supply chain network, with partners from various industries in China and around the world. Through cooperation with international and local partners, JD Logistics has established international network with nearly 90 international direct distribution warehouses, bonded and overseas warehouses, covering a total managing scale of nearly 900,000 square meters.

As the first logistics company in China to set up carbon emission reduction goals under the Science-Based Target initiative (SBTi), JD Logistics is committed to promoting sustainable development for humanity in three aspects: environment (Planet), social responsibility (People), and economic development (Profits). To achieve this goal, we've launched the strategic project "Green Stream Initiative," which involves working collaboratively with our industry partners and society to promote sustainable development on a global scale.

⁵ 3C: Computer, Communication, Consumer Electronics Products.
⁶ 5G, which stands for the fifth generation of mobile communication technology.

We are also committed to increasing the use of clean energy, promoting and using more renewable energy and environmentally friendly materials, and practicing the principles of green and sustainable development.

JD Logistics adheres to the core development strategy of experience-oriented, technology-driven and efficiency-winning. With our extensive experience as a new type of enterprise that is firmly rooted in the real economy, and our longstanding investment in technology, we continually leverage our digital capabilities to support and serve the real economy, creating ongoing social value in the process.

Mission	Vision	Corporate Values	Core Strategy	Business Philosophy
Drive superior efficiency and sustainability for global supply chain through technology.	Become the world's most trusted supply chain solutions and logistics services provider.	Customer first, integrity, collaboration, gratitude, dedication, and ownership.	Experience-oriented, Technology-driven and Efficiency-winning.	Customer-oriented, constantly create value through trusted supply chain services.

JD Logistics has applied for nearly

9,000

patents and software licenses

1,500+

warehouses operated by JD Logistics

30 million square meters over

the aggregate gross floor area (GFA)



ESG Performance and Recognition in 2022

Highlights of ESG Responsibility Performance of JD Logistics in 2022

Economic Responsibility Performance

In 2022, JD Logistics achieved a total revenue of RMB **137.4** billion, representing a year-over-year growth of **31.2%** compared to 2021

JD Logistics' profitability continued to improve, with an adjusted Non-IFRS net profit of nearly RMB **870** million

Revenue from external customers reached RMB **89.1** billion in 2022, a year-over-year growth of **50.8%**, accounting for **65%** of the total revenue

By 2022, revenue from integrated supply chain customers reached RMB **77.4** billion, while the number of external integrated supply chain customers reached **79,928**, and the average revenue per external integrated supply chain customer was approximately RMB **365,000**

Revenue from other customers reached RMB **60** billion in 2022, a year-over-year growth of **78.3%**

Over **50%** of external integrated supply chain customers contribute no less than RMB 10 million each to annual revenue. **26** of them contribute over RMB 100 million each to annual revenue, with an average cooperation duration of over **4** years.

Serving **20,000** merchants on Douyin's platform as of December 31, 2022

In 2022, investment in R & D totaled RMB **3.12** billion with a year-over-year growth of 11.0%, more than 1,300 newly applied patents and over **200** newly applied trademarks

Self-operating over 1,500 warehouses nationwide, with a total GFA of over **30** million square meters, covering almost all counties (cities, districts) in China as of December 31, 2022

Nearly 90 direct distribution, bonded and overseas warehouses, with a total managing scale of nearly **900,000** square meters

Large scale of intelligent express delivery vehicles has been put into use, with a year-over-year increase of over **260%** in the number of deliveries compared to that of the previous year

JDL Airlines' normalized operation in 2022 effectively promoted cost reduction and efficiency improvement in the integrated supply chain.

Established highly automated production models of Beidou Smart Flowpicking Innovation Warehouses in Xi'an and Suqian in 2022

Social Responsibility Performance

By the end of 2022, JDL expanded its high-quality employment scale with over **390,000** employees, among those over **370,000** front-line personnel, over **290,000** in-house delivery personnel

In 2022, JD Logistics' frontline employee benefit expenses reached RMB **44.6** billion, accounting for **32.5%** of total revenue. Over the past three years, JD Logistics has spent RMB **106.5** billion on frontline employee benefit expenses

In 2022, JD Logistics hosted a supplier integrity and compliance conference with **5,800+** suppliers participated, where the CEO of JD Logistics conveyed the Company's unwavering commitment to a zero-tolerance attitude towards corruption to all attending suppliers

In 2022, JD Logistics developed nearly **4,000** talent development and training courses, and conducted nearly a thousand training sessions for different levels

In 2022, JD Express maintained **best-in-class** according to customer satisfaction ratings results published by the State Post Bureau of the People's Republic of China, and ranked **1st** in the **third** quarter

In 2022, JD Logistics provided supply chain services for over **1,000** agricultural production regions and industrial zones across the country, effectively promoting efficient connection between production and sales, and fully supporting rural revitalization

JD Logistics has built **1** autonomous region-level public logistics warehouse and distribution center, **2** municipal-level public logistics warehouse and distribution centers, and **8** logistics distribution stations in Tibet, with a total GFA of **35,000** square meters

In 2022, JD Express courier Song Xuewen was elected delegate of the 20th CPC National Congress

Over 10,000 JD Logistics in-house delivery personnel participated the Deployment of anti-pandemic and livelihood necessities transportation, supporting daily livelihood necessities in Beijing, Shanghai, Chongqing and other cities.

In 2022, JD Logistics employees volunteered for a total of **6,360** hours



Environmental Responsibility Performance

JD Logistics' Logistics Xi'an Asia No. 1 smart industrial parks became China's first "Carbon Neutral" logistics park, with photovoltaic power generation equipment installed on the roofs, with a total installed capacity of **9 MW**

In 2022, JD Logistics released **the industry's first** Delivered with Original Package (DWOP) certification standard, and collaborated with multiple partners to announce a new green packaging target: over **80%** of products sold through e-commerce channels use original packages for by 2030

By 2026, JD Logistics will invest RMB **1 billion** to enhance the green and low-carbon integrated supply chain construction and achieve a **35%** improvement in its carbon efficiency

Over the past five years more than **300,000** businesses and hundreds of millions of consumers have participated in "Green Stream Initiative" Project of JD Logistics, achieving a monthly recycling of about **90,000** boxes in over **100** cities, with over 10,000 product SKUs delivered in their original packaging

In 2022, the scale of JD Logistics' railway transportation reached over **1.8** million tons, operating on over **400** routes, through cooperation with partners and a self-owned fleet of **5,418⁷** new energy vehicles

During "618" grand promotion of 2022, JD Logistics reduced carbon emissions by **220,000** tons by means of green packaging, green warehousing, green cloud delivery, and intelligent equipment

JD Logistics released the **Carbon Neutral Guide for Logistics Parks** and initiated **Supply Chain Decarbonization Action**, taking the lead in proposing a complete solution for Carbon neutrality of logistics parks, and comprehensively analyzing the key technologies and implementation pathways for decarbonization in supply chains.

JD Logistics initiated the establishment of the **Environmentally Conscious Supply Chain Professional Committee of the All-China Environment Federation**, bringing together the wisdom and strength of all parties to jointly promote the green and sustainable development of the entire supply chain

⁷ 5,418 self-owned new energy vehicles, excluding Deppon and Kuayue Express.

JD Logistics Recognized for Annual ESG Responsibility Accreditation

- Ranked among the "Top 25 Brand Finance Logistics in 2022" by Brand Finance, a globally recognized brand valuation agency, and awarded the "Top 10 Strongest Global Logistics Brands in 2022".

In August 2022, Brand Finance released its report of "Top 25 Brand Finance Logistics in 2022", in which JD Logistics was successfully ranked among the top 25. JD Logistics was also awarded the "Top 10 Strongest Global Logistics Brands" based on comprehensive evaluations of marketing investment, stakeholder equity, and performance.

- Ranked among the "2022 Global IoT Top 500"

On August 5th, 2022, the "2022 Global IoT Top 500 Summit (China, Beijing)" released the "Global IoT Top 500 Rankings". The list was selected from tens of thousands of leading IoT technology and digital economy companies in over 100 countries worldwide. JD Logistics ranked fifth in the global logistics and warehousing industry sub-list of the Global IoT Top 500, representing the leading trend of global technology and digital economic development.



- Shortlisted for "Sustainable China Industry Best Practices" by APEC China Business Council

On November 3rd, 2022, the APEC China CEO Forum (China, Beijing) released its annual industrial report on "Sustainable China Industry Best Practices". JD Logistics was selected as one of the best practice in China along with several well-known domestic and international companies for actively undertaking social responsibility, continuously improving environmental performance, social welfare, corporate governance, and contributing to sustainable social development while deeply cultivating the core track of integrated supply chain logistics.



- Received the Z-Carbon Award for Global Zero-Carbon City Innovation Excellence, Enterprise Leader Award - Platinum Level

On December 10th, 2022, the 6th United Nations Industrial Development Organization Global Science and Technology Innovation Conference (held in Shanghai, China) announced the "2022 Global Zero-Carbon City Innovation Excellence Award" (Z-Carbon Award) initiated by the Green Building Digital Development Centre of the UN Global Innovation Network Project. JD Logistics won the 2022 Global Zero-Carbon City Innovation Excellence Award Enterprise Leader Award - Platinum Level.

- JD Express ranked first among the nine major express delivery brands in the third quarter express delivery service satisfaction survey released by the State Post Bureau of People's Republic of China

According to the quarterly public satisfaction survey on express delivery service carried by the State Post Bureau in 2022, JD Express has constantly maintained best-in-class customer satisfaction ratings of the whole industry. JD Express ranked No.1 among the nine major express delivery brands in the third quarter of 2022.

- Won the Champion Award in both the Rural Revitalization theme and the Resilient Value Chain theme in the 2022 "Golden Key - China Action for SDGs" award selection.

On December 16th, 2022, the "Golden Key - China Action for SDGs" release ceremony was held online. After multiple rounds of fierce competition, 14 actions stood out in their respective categories and won the Champion Award, becoming the annual model for sustainable development in China. JD Logistics' action of "Supply Chain Network Integration, Building a Bridge for Urban-Rural Resource Interconnection" won the Champion Award for the Rural Revitalization theme. Our practice of "Innovative Anti-pandemic Practice and Necessity Transportation in New Model, Creating a Responsible Supply Chain" won the Champion Award for the Resilient Value Chain theme. Last but not least, the "Green Stream Initiative" won the Excellence Award for the Dual Carbon Pioneer theme.



- Won the award for "Environmental Pioneer Practice" of Xinhua Credit Jinlan Cup

On January 5th, 2023, the Fourth China Urban Credit Construction Summit Forum - Carbon Road China ESG Practice and Development Theme Forum, hosted by Xinhua News Agency and Guangzhou Municipal Government, and organized by China Economic Information Society and others, under the guidance of the National Development and Reform Commission, was grandly held. The forum officially released the results of the "Xinhua Credit Jinlan Cup" ESG excellent practice selection. JD Logistics stood out among many applicants with the project of "Building a Green, Responsible, and Trustworthy Supply Chain with Sustainable Development Concept", and won the "Environmental Pioneer Practice" award of the Xinhua Credit Jinlan Cup.

- Won eight annual Employer Awards from Zhaopin, Maimai, Lagou and other recruitment platform

On January 7th, 2023, multiple recruitment platforms announced the results of 2022 Best Employer Selection, with JD Logistics winning the annual employer awards from eight platforms including zhaopin.com, maimai.cn, lagou.com, 51job.com, liepin.com, haitou.cc, zhipin.com. Among them, JD Logistics won the "Outstanding Employer of the Year" award in the Maimai MAX 2022 "Job Hunting" employer selection and the "Most Socially Responsible Employer" TOP award in the annual TOP employer list released by lagou.com.



- In 2022, JD Logistics received a total score of 47 in the S&P Global Corporate Sustainability Assessment, ranking among top companies in the global TRA Transportation and Transportation Infrastructure category.



01

Rooted in Real Economy with High-quality Management

As a logistics company rooted in the real economy, JD Logistics firmly believes that only by continuously improving the governance level from the top can effectively fulfill our corporate social responsibility and contribute to the stable and long-term development of China's real economy while promoting our own high-quality development. We regard ESG management as an important element for modern corporate governance, and lay a solid foundation of ESG governance improvement, implementation of the Board of Directors' supervision of ESG and regular communication with various stakeholders. We make more efforts in anti-corruption, compliance, information security to strengthen corporate operation security.



ESG Top-level Governance

Board Statement

The Board of Directors of JD Logistics assumes full responsibility for the development of ESG strategies and information disclosure of the Company. The Board of Directors and its ESG Management Committee implement ESG regulatory responsibilities through regular review of ESG management policies and strategies, ESG progress reports and board resolutions. The Board of Directors and its ESG Management Committee also take responsibility of evaluating, prioritizing, and managing substantive ESG issues (including risks), and conducting normalized supervision and management of key ESG performance targets and achievements.

The Board of Directors approved this report on April 25th, 2023, confirming that the report fully disclosed the key progress and achievements of ESG work of the Company during the Reporting Period that there was no false record, misleading statement or significant omission in the report, and approved its external release.



Building a Sound ESG Governance Structure

JD Logistics firmly believes that a sound ESG governance structure can help promote the comprehensive implementation of ESG-related strategies, strengthen internal management, and enhance communication with stakeholders. Therefore, in November 2022, JD Logistics upgraded its structure based on the Company's ESG taskforce and formally established the ESG Management Committee to improve the accountability mechanism of the Board of Directors and executives for ESG matters.

The ESG Management Committee of JD Logistics is headed by CEO Yui Yu, with heads and leaders from six business/functional departments, Kuayue Express and Deppon serving as members of the committee, reporting to the Committee head and jointly responsible for supervising and making

decisions on ESG issues, improving the Company's ESG risk management, supporting ESG trend analysis, and contributing to business decision-making and development. The ESG Management Committee reports on the progress of ESG management to the Board of Directors quarterly, which helps enhance the transparency and collaborative efficiency of internal ESG management. Meanwhile, the ESG taskforce, established under the Committee, is responsible for the implementation of ESG decision-making matters in daily work.



JD Logistics ESG governance structure⁸

Building a Comprehensive ESG Goal System

JD Logistics promotes the improvement of ESG management efficiency oriented by goal management. In 2022, based on the characteristics of the logistics business scenarios, the Company has set specific environmental goals across all business lines, such as warehousing, sorting, transportation, and distribution, divided the goal-setting spans into short-term, medium-term, and long-term, and clarified the ESG goal system the synergistic participation of all business lines by 2030. The ESG Management Committee is responsible for regularly monitoring the achievement of key goals, and timely communicating and dynamically adjusting with relevant

business departments to pragmatically promote the achievement of sustainable development goals. By setting long-term, scientific, and ambitious goals, JD Logistics is guided to effectively promote the green and sustainable development of its own and among all partners in value chain.

⁸ The names of institutions and departments in the governance structure are all as of December 31st, 2022.





ESG Key Issues

JD Logistics values communication and exchange with all stakeholders, and has established diverse communication channels with various stakeholders. We actively listen to the opinions of stakeholders and respond promptly to their expectations.




■ Transparent and Effective Stakeholder Communication

During the Reporting Period, JD Logistics re-evaluated the important concerns of its stakeholders based on changes of the external environment and the Company's development status. Ultimately, seven stakeholder groups were identified, including customers and consumers, governments and social organizations, shareholders, suppliers and other business partners, communities and the public, Directors and executives, and employees. The following outlines the main concentration of the major stakeholders and the communication methods established by JD Logistics.

Main concentration of stakeholders and communication channels

Stakeholders	Main Concentration	Communication Channels
 Customers and Consumers	<ul style="list-style-type: none"> • Safe, high-quality and fast service • Customer satisfaction and customer relationship management • Emergency guarantee and livelihood supply • Data security and privacy protection • Safety and health • Emissions and resource management 	<ul style="list-style-type: none"> • Express service satisfaction survey • Customer communication and complaint channels • Daily media communication • Social media communication
 Governments and Social Organizations	<ul style="list-style-type: none"> • Data security and privacy protection • Safe, high-quality, and fast service • Emergency support and people's livelihood supply guarantee • Welfare guarantee for delivery personnel • Customer satisfaction and customer relationship management • Rural revitalization and strategic philanthropy 	<ul style="list-style-type: none"> • Daily reporting and communication, and proposing policy recommendation • Industrial forums and conferences • On-site investigations and inspections • Signing cooperation agreements and establishing strategic partnerships • Responding to inquiries from regulatory agencies
 Shareholders	<ul style="list-style-type: none"> • Customer satisfaction and customer relationship management • Risk management • Business ethics and compliance • Digitalization and intelligent development of the supply chain • Supply chain coordination • Sound ESG governance • Climate change response and sustainable supply chain management 	<ul style="list-style-type: none"> • Telephone, face-to-face meetings, and company visits • Corporate annual reports, quarterly reports, and announcements • Roadshows • Daily reporting and communication on sustainable development and ESG-related issues
 Suppliers and Other Business Partners	<ul style="list-style-type: none"> • Customer satisfaction and customer relationship management • Emergency support and people's livelihood supply guarantee • Safe, high-quality, and fast service • Data security and privacy protection • Low carbon management of warehousing logistics 	<ul style="list-style-type: none"> • Supplier procurement, training, and evaluation • Industrial forums • Supplier conferences

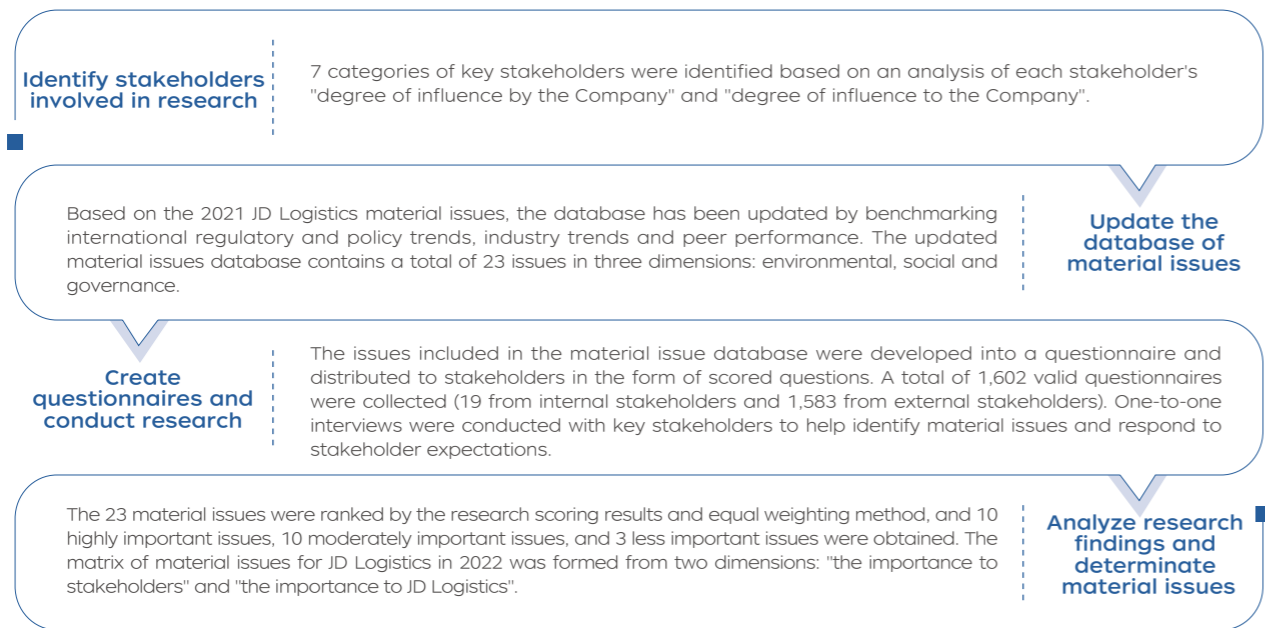


Stakeholders	Main Concentration	Communication Channels
 Community and the Public	<ul style="list-style-type: none"> • Safe, high-quality, and fast service • Customer satisfaction and customer relationship management • Safety and health • Business ethics and compliance • Data security and privacy protection • Rural revitalization and strategic philanthropy 	<ul style="list-style-type: none"> • Official platforms such as websites and WeChat public accounts • External publicity materials • Public welfare projects • Public welfare industrial forums and activities • Volunteer activities
 Directors and Executives	<ul style="list-style-type: none"> • Risk management • Business ethics and compliance • Safe, high-quality, and fast service • Diversifying the board • Data security and privacy protection • Sound ESG governance 	<ul style="list-style-type: none"> • Reporting to the Board of Directors • Communication across all levels • Daily communication with the ESG Management Committee
 Employees	<ul style="list-style-type: none"> • Safe, high-quality, and fast service • Customer satisfaction and customer relationship management • Data security and privacy protection • Emergency support and people's livelihood supply guarantee • Promotion of high-quality employment • Safety and health • Talent cultivation and development 	<ul style="list-style-type: none"> • Whole staff emails, communication meetings, employee forums, and workers' congresses • Training activities and appeal mechanisms • Online and offline employee surveys • Employee complaint mailbox • Employee Voice platform

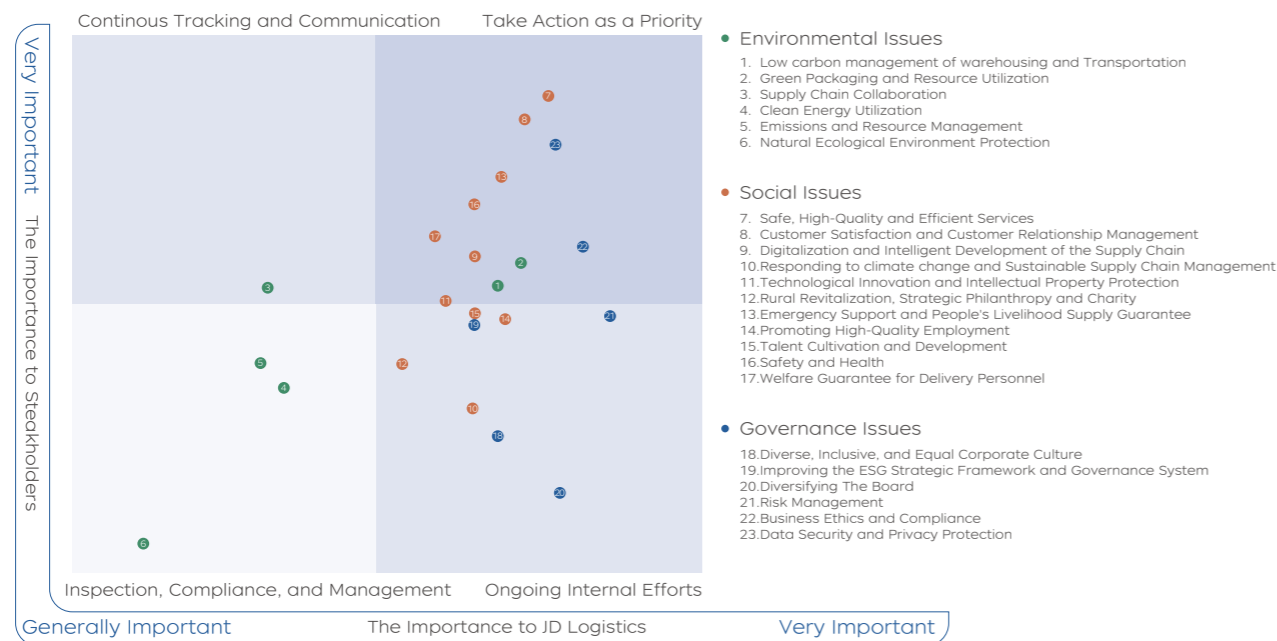
Scientific Research of Materiality

Evaluation Methods and Processes

In 2022, JD Logistics utilized a combination of quantitative and qualitative methods to update material issues based on megatrends. Through a combination of questionnaire surveys and interviews with stakeholders, we identified and assessed the material issues to be disclosed. Meanwhile, double materiality method was applied to address stakeholders' concentration in the Report.



Materiality issues assessment process⁹



⁹ The importance of issues is divided according to matrix and has no direct correlation with its serial number.

Alignment with the United Nations Sustainable Development Goals

JD Logistics takes action on highly important material issues, hoping to benefit the common sustainable development goals of humanity through the creation of corporate values. We aligned the highly important material issues of 2022 with the United Nations Sustainable Development Goals (SDGs) to guide us to better focus on the direction of sustainable development of enterprises.

United Nations Sustainable Development Goals and JD Logistics' actions

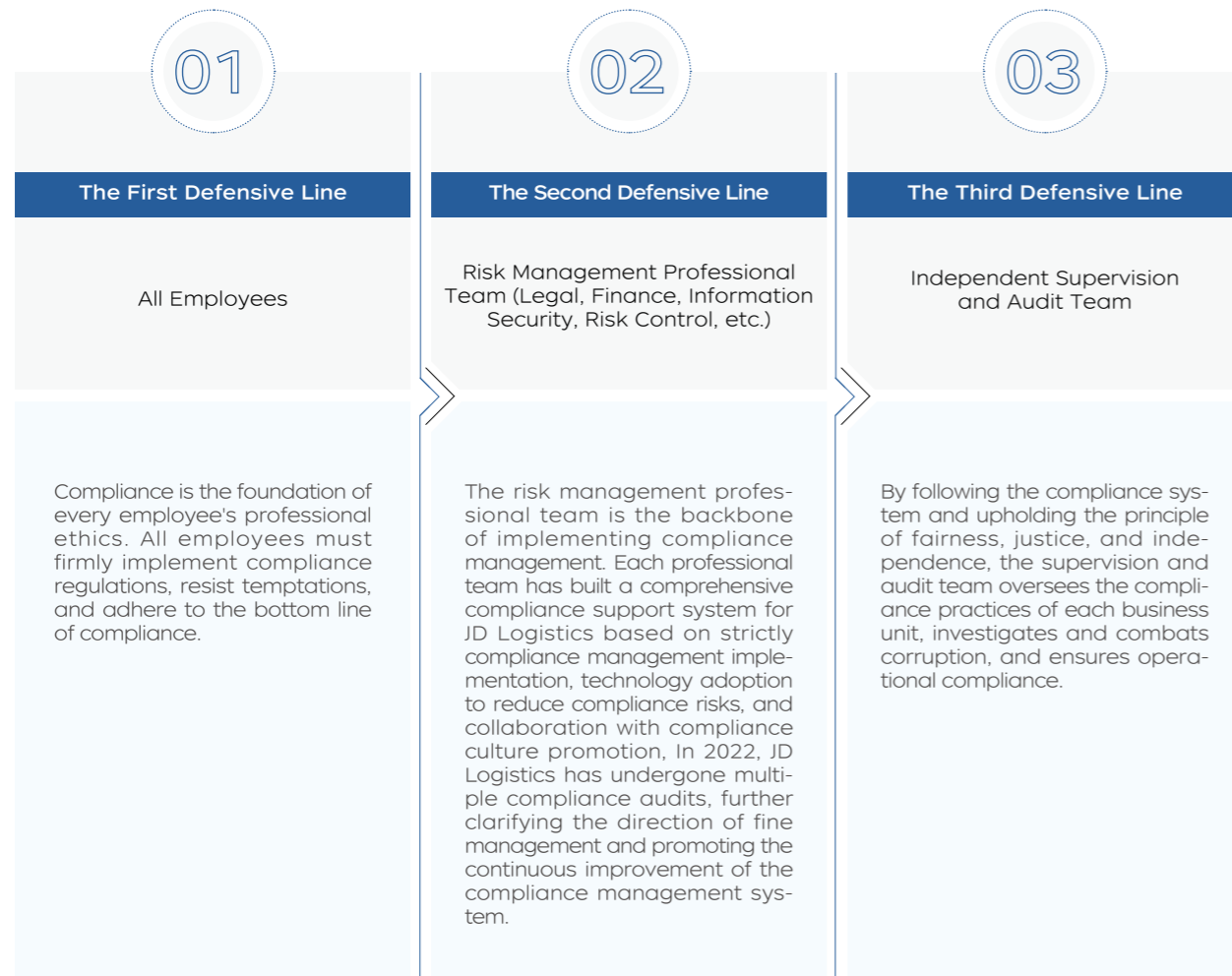
United Nations Sustainable Development Goals (SDGs)	JD Logistics' Action
	JD Logistics responds to the national strategy of rural revitalization and fully lays out its plans in digital empowerment, infrastructure improvement, and talent revitalization, systematically promoting rural revitalization. We insist on driving commercial flow with logistics. With the support of the integrated supply chain, traditional industries and merchants have all been revitalized, including noodles and white wines of Shaanxi Province, wolfberries of Ningxia Province, beef and mutton of Qinghai Province, and melons and fruits of Xinjiang Province. Based on solid infrastructure and innovative digital technology capabilities, JD Logistics has provided specialized solutions for the integrated supply chain services to more than 1,000 agricultural production regions and industrial zones across the country.
	JD Logistics fully leverages the advantages of integration of supply chain and the three networks (warehouse network, goods network, and cloud network) to support the entire society in responding to public health crisis, helping to stabilize the industry and supply chain, and more effectively ensuring timely delivery of daily necessities. During anti-pandemic, JD Logistics employees made great efforts to guarantee the health and livelihood of consumers. In 2022, JD Logistics actively participated in the anti-pandemic and livelihood necessities transportation and distribution. In many regions, ensuring the needs of residents for daily necessities.
	JD Logistics actively implements the key tasks proposed in the government work report, "stabilize employment and expand it further", and provides new paths for diversified and localized employment in local areas. JD Logistics supports the development of the real economy, creating a large number of job opportunities for front-line employees, and pays high attention to the protection and care of female employees. In addition, JD Logistics values the training and development of each employee, to effectively improve the quality of employment and achieve sustainable development of talent throughout the appeal of corporate culture and the comprehensive training system.
	JD Logistics utilizes the solid infrastructure network, efficient digitalized supply chain, and innovative technological service capabilities to fully leverage the advantages of a new type of real economy enterprise that "empowering real economy businesses", achieving efficient circulation and operation of resources. The six networks established by JD Logistics have the characteristics of being digitalized, extensive, and flexible, with service coverage that spans almost all regions, towns, and populations in China. Not only has it established a trustful relationship between Chinese e-commerce and consumers, but also through on time delivery service products such as "211" (same- and next-day delivery) and door-to-door services, redefining the logistics service standards and continued to maintain a leading position in customer experience in the industry.
	As the first logistics company in China to join the Science Based Target initiative (SBTi), JD Logistics takes the lead in proposing a decarbonization path of "shared carbon footprint in supply chain," and continues to deepen research on carbon peaking and carbon neutrality pathways. JD Logistics has also developed a scientific and detailed decarbonization plan for the future. In key business scenarios, including warehousing, transportation, and distribution, JD Logistics comprehensively combines various methods to achieve collaborative carbon reduction, including energy efficiency improvement, renewable energy adoption, and resources recycling according to different business scenarios.
	JD Logistics practices the concept of green development by combining resource conservation with the development of resource recycling and business characteristics. We take multiple measures to synergistically reduce carbon emissions and continuously improve water resource utilization efficiency, such as increasing the proportion of clean energy use, optimizing and improving operational efficiency, and promoting resource recycling and reuse across all categories. In our existing business operations and new business expansion, we continuously evaluate the potential impact on the ecological environment and natural resources, and reduce the impact on underwater organisms in the marine transportation scenario, as well as minimize the impact on terrestrial organisms in the highway and railway transportation scenarios.
	JD Logistics regards ESG management as an important element of modern corporate governance, and solidly improves ESG governance, implements the Board of Directors' supervision of ESG matters, to achieve normalized communication with all stakeholders, and improve anti-corruption compliance, information security, and data governance. Meanwhile, JD Logistics participates in the formulation of national, industrial and group standards. We are committed to building an symbiosis, collaborate, and win-win integrated ecosystem through actively leveraging the influence of leading enterprises and driving the digital and green transformation and development of the entire logistics industry.

Compliance Management

Compliance is the cornerstone of a company's survival and development. Guided by the concept of sound and successful business ethics, JD Logistics adheres to the bottom line of compliance operation, continuously improves its efficient and rigorous internal control and compliance management system, effectively prevents compliance and anti-corruption related risks, and lays a solid foundation for the Company's high-quality development. During the Reporting Period, we have complied with the relevant laws and regulations that have a significant impact on us relating to bribery, extortion, fraud and money laundering.

Compliance Management

Three Defensive Lines, Building Compliance Barriers



Rewards and punishment in place, strictly enforce compliance

Accountability linkage

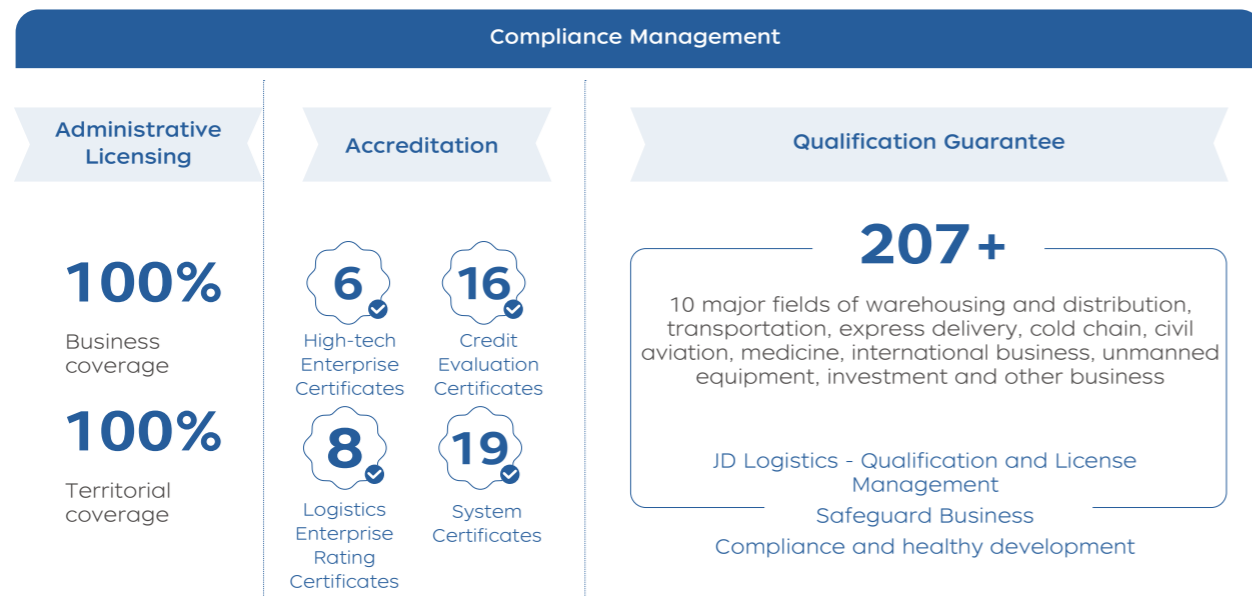
JD Logistics ensures that the compliance policy is deeply rooted in the consciousness of all employees through in-depth publicity and implementation. The system of "Accountability Basics and Control (ABC)" and collateral penalties are carried out in case of significant compliance issues.

Whistleblower rewards

JD Logistics offers special rewards to employees who excel in compliance and those who report behaviours of non-compliance, encouraging a culture of integrity and transparency.

Certification System

Qualification escorts business development, and certification affirms corporate effectiveness. JD Logistics has obtained multiple international and domestic leading standard certifications for its environmental management system, quality management system, occupational health and safety management system, information security management system, privacy information management system, enterprise intellectual property management system, and commodity after-sales service evaluation. As of the end of the Reporting Period, JD Logistics has obtained 6 high-tech certificates, 16 credit evaluation certificates, 8 logistics rating certificates, and 19 management certificates.



Anti-corruption Rules and Regulations

Anti-corruption has always been a top priority in JD Logistics' compliance management. JD Logistics has maintained a "zero tolerance" attitude towards corruption, strictly adhering to national laws and regulations such as the *Anti-Unfair Competition Law* and *Interim Provisions on Banning Commercial Bribery*, while also strictly implementing JD Group's internal management policies on anti-corruption, including the *JD.com Business Conduct and Ethics Code*, *JD.com Anti-Corruption Regulations*, *JD.com Whistle-blower Protection and Reward System*, *JD.com Integrity Reward Policy*, *JD.com Active Filing Reward Policy (for Trial Implementation)*, *JD.com Gifts Management Regulations*, *Vendor Paid Travel and Business Dinner Regulations*, and *JD Logistics Red Line Management Regulations*, etc.

We provide unimpeded channels for reporting anti-corruption behaviours, including hotlines, email, letters, etc., and strive to provide strict protection measures for units or individuals who report anonymously.

In addition, in accordance with the *JD Group's Clean Incentive Measures*, we reward individuals who refuse bribes or report corrupt behaviours, and establish a clean and upright atmosphere throughout the Company.



Cultivating a Culture of Anti-corruption and Integrity

We actively implement anti-corruption requirements to all levels of employees and business partners, and promote anti-corruption management internally and externally. All formal employees and contracted employees of JD Logistics are required to sign the *Employees' Commitment Letter on Compliance with 'JD Group Employee Handbook' and Anti-corruption Commitment* to ensure that they are aware and abide of the Company's requirements for integrity and anti-corruption. Meanwhile, all suppliers and other partners of JD Logistics have signed the *Anti-Commercial Bribery Agreement*.

Simultaneously, JD Logistics actively fosters a culture of integrity by providing anti-corruption awareness and capability training for employees at all levels and suppliers across the Company. In 2022, JD Logistics employed a combination of online and offline trainings for all employees and managers to deliver anti-corruption education. This training encompasses, but is not limited to, the Company's anti-corruption policies and requirements, reporting and supervision of corruption, and more. All employees are required to be familiar with these guidelines and adhere to them strictly.



¹⁰ The statistical scope is for JD Logistics employees, not including Deppon and Kuayue Express.

Information Security Management

As JD Logistics' digital supply chain business continues to develop, we are constantly building a comprehensive protection system for information security and intellectual property rights, providing solid technical support and protection for the Company's long-term operation, customer privacy, and core intellectual property rights. During the Reporting Period, we have complied with the relevant laws and regulations that have a significant impact on us relating to health and safety, advertising, labelling and privacy matters relating to products and services and methods of redress.

Information Security and Privacy Protection

Security Management Advancing with the Times

JD Logistics strictly adheres to JD.com's various information security management systems, including the *Information Security Management Policies*, *Information Security and Privacy Protection Specification*, *Data and Privacy Security Management Norms*, *All Life Circle for Application and Development Security Management Norms*, *Security Monitoring and Response Norms*, and *JD Supplier Security Management Specification*, and has compiled a collection of JD Logistics's information security management documents. In 2022, based on the GB/41479 *Information security technology—Network data processing security requirements* and the continuous strengthening of its own information security management, JD.com revised the *Data and Privacy Security Management Norms*, which JD Logistics firmly implements.

In 2022, JD Logistics' information security management measures continued to be strengthened:

 <p>Protection of Information Technology (IT) Assets</p> <p>JD Logistics has implemented comprehensive upgrades to security measures for IT assets, encompassing host security, application security, data security, account security, and application software (APP) privacy compliance.</p>	 <p>Information Security Drills and Inspections</p> <p>JD Logistics routinely conducts anti-phishing drills, red-blue attack and defense exercises, and network strategy approval inspections. In 2022, a total of 90,732 JD Logistics employees participated in anti-phishing drills, resulting in increased awareness and improved ability to respond to network attacks among the workforce.</p>	 <p>Security Risk Monitoring</p> <p>JD Logistics carries out ongoing risk assessments and addresses security risks related to basic networks, hosts, application systems, databases, middleware, and office systems. A comprehensive monitoring and early warning system is established to consistently monitor, prevent, and respond to network attacks, security vulnerabilities, and data leaks, ensuring a secure and reliable environment for all operations.</p>
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Strong Protection with Solid Underlying Technology

JD Logistics always insists on deepening the underlying technology of network information security, and establishes a comprehensive security barrier with solid technical foundation. JD Logistics' network configuration is protected at multiple levels, employing security measures such as intrusion detection systems and network firewalls to prevent unauthorized database


access. In the development of information systems, JD Logistics has established security infrastructure such as single sign-on, multi-factor authentication, and key management systems. Precise security protocols are used to communicate between mobile applications, websites, and plugins.

In 2022, JD Logistics actively responded to the announcement of the State Administration for Market Regulation and the Cyberspace Administration of China on carrying out the *data security management certification work*, and hired professional certification agencies to initiate data security management certification work. JD Logistics has obtained multiple authoritative information security system certifications at home and abroad:

Third-level certification of the Ministry of Public Security's protection level	ISO 27001 certification for information security management system	ISO 27701 certification for privacy information management system	DCMM4 certification for data management maturity level JD Logistics is the first logistics company in China to obtain this certification
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Case study ▶ JD Logistics wins DQMIS 2022 Data Quality Excellence Practice Award

Under the guidance of Peking University and the Global Energy Interconnection Research Institute of State Grid Corporation of China, the winners of the fourth DQMIS 2022 Data Quality Management Benchmark Awards have been announced. The awards, hosted by DQPro, China's leading social platform and resource think tank for data quality management, and Hua Ju Consulting, recognize outstanding achievements in the field. JD Logistics stood out as the only logistics company to receive the Data Quality Excellent Practice Award, showcasing its dedication to maintaining high data quality standards.



JD Logistics Won Excellent Practice Award in Data Governance

Safety Concept Deeply Rooted in Employees' Mind

Information security is the basic concept of compliance management firmly established by every JD Logistics employee. In 2022, JD Logistics conducted an online information security training and exam for all employees, reinforcing their understanding of information security. Additionally, 86 information security posters were distributed to all employees through official channels to continuously raise awareness of information security best practices.

86
information security posters were distributed to all employees

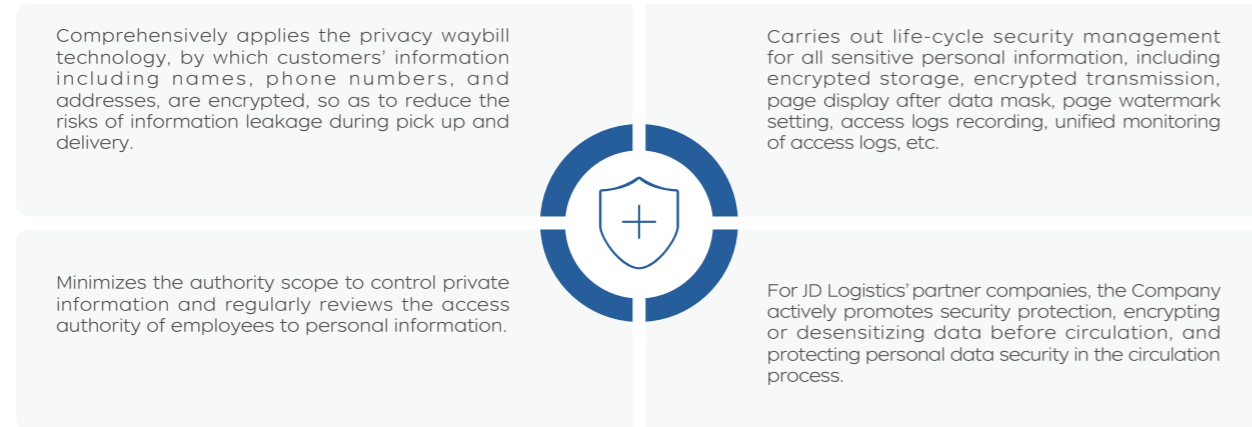
All employees	New employees	Product development personnel
must receive information security training and pass the exam annually;	must pass the information security course assessment as a prerequisite for successfully completing their probation period and becoming regular employees.	are required to undergo specialized training focused on information security skills and anti-phishing measures.

Safeguarding Customer Privacy with Reliability

JD Logistics follows the comprehensive consumer privacy protection system of JD.com, including the *Information Security and Privacy Management Code*, *Information Security and Privacy Protection Specification*, *Data and Privacy Security Management Norms*, *Privacy Impact Assessment Flow*, *User Subject Rights Response Process*, *User Privacy Data Storage Security Specification*, *User's Personal Information Security Management Norms*, *Privacy Impact Assessment Flow*, *Data Security Management Norms*, *User Subject Rights Response Process*, *User's*

Privacy Information Storage Security Regulations, *Protection requirements for Minors' Personal Information* and other regulations, which make clear requirements for the collection, processing, usage, and response process of consumer privacy data. Under the deployment of the JD.com's Security and Risk Control Committee, the Company has set up a dedicated security department responsible for implementing relevant norms, including business security officials and legal personnel.

For consumers' personal sensitive data, JD Logistics has taken a series of protective measures:



In 2022, JD Logistics

- Received zero complaints involving customer privacy violations certified by regulatory authorities



Intellectual Property Protection

JD Logistics implements the *JD Group Patent Incentive Measures*, *JD Group Trade Secret Management Measures (trial version)*, *Classification and Grading Examples of Trade Secrets*, and *Examples of Trade Secret Confidentiality Measures* in daily work to implement patent incentives, provide professional channels to protect intellectual property rights, and conduct trade secret management pilots in selected business departments.

Case study ▶ *Visual Recognition System and Classification Sorting System Adopted the Visual Recognition System won the 23rd China Patent Excellence Award in 2022*

As a national-level authoritative patent award in China, the China Patent Award is an important symbol reflecting the independent innovation ability and the efficiency of technology transfer. In 2022, JD Logistics' *Visual Recognition System and Classification Sorting System Adopted the Visual Recognition System* won the 23rd China Patent Excellence Award. The research addresses the pain point of limited usage of robotic arms in warehousing logistics scenario due to their recognition and positioning capabilities. By implementing a material recognition device and pre-determining the type of material in the box, visual recognition and positioning are achieved, creating a prerequisite for accurate, timely, and rapid completion of automated flexible picking by the robotic arm. This patented technology has been successfully implemented in numerous JD.com projects, which resulted in an average efficiency improvement of above 30%, demonstrating the true realization of a fully automated process.

30%
an average efficiency improvement of above



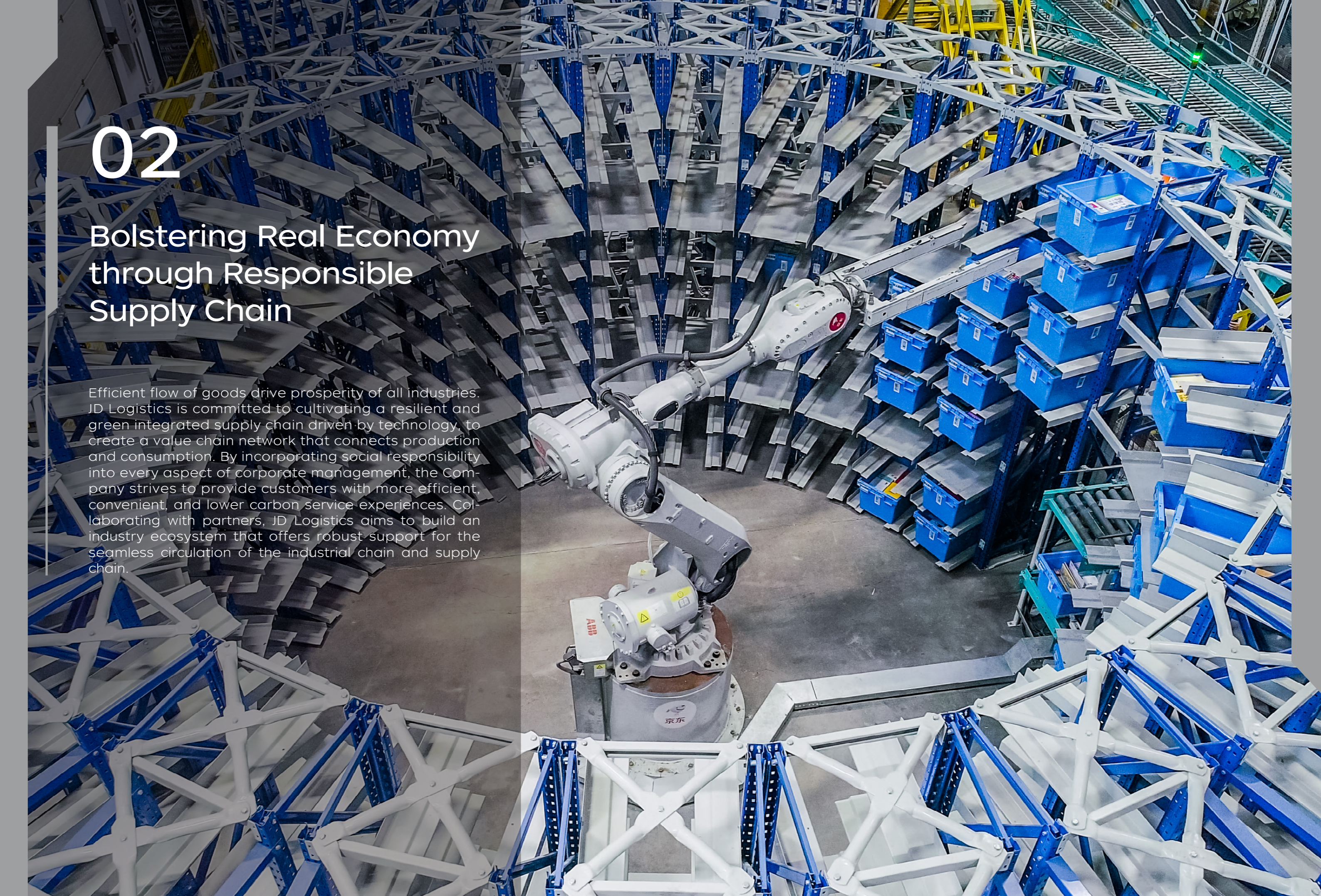
JD Logistics has established the position of dedicated intellectual property advisors, which closely collaborates with and supports various business departments in their intellectual property efforts. Through daily training, promotion, exploration, and discussions, the advisors help enhance intellectual property protection awareness across all departments. Simultaneously, we motivate employees to actively engage in technological innovation by offering patent and software copyright

bonuses. Coupled with an annual internal patent award selection, exceptional patents and their inventors are acknowledged, publicized, and rewarded. On the occasion of "World Intellectual Property Day" in April 26, we also organized various interactive activities to deepen employees' understanding of intellectual property and cultivate a cultural atmosphere that values innovation and actively safeguards intellectual property rights.

02

Bolstering Real Economy through Responsible Supply Chain

Efficient flow of goods drive prosperity of all industries. JD Logistics is committed to cultivating a resilient and green integrated supply chain driven by technology, to create a value chain network that connects production and consumption. By incorporating social responsibility into every aspect of corporate management, the Company strives to provide customers with more efficient, convenient, and lower carbon service experiences. Collaborating with partners, JD Logistics aims to build an industry ecosystem that offers robust support for the seamless circulation of the industrial chain and supply chain.



Deeply Cultivating the Industry through Integration of Supply Chain and Three Networks

As a leading supply chain solution and logistics service provider in China, JD Logistics consistently promotes "integration of supply chain and three networks" by continuously opening up its supply chain infrastructure and technology. This approach weaves networks of warehouses, goods and clouds together, achieving "three-network connectivity" through deep integration and decoupling. Simultaneously, JD Logistics leverages the value of new type of real economy enterprises to drive the transformation and upgrading of the upstream and downstream components of the industrial chain and supply chain. This strategy ultimately fosters the high-quality development of the real economy.

■ Cross-business and Global Service Capabilities

JD Logistics has established six highly synergistic networks, including warehouse network, line-haul transportation network, last-mile delivery network, bulky item logistics network, cold chain logistics network, and cross-border logistics network, which are intelligent, extensive, and flexible. The service scope covers almost all regions, towns, and populations in

China, not only establishing a trustworthy relationship between Chinese e-commerce industries and consumers but also redefining logistics service standards through on time delivery service products such as 211 express service and door-to-door service, leading in customer experience in the whole industry.

Warehouse Network

JD Logistics' warehouse network is one of the largest in China and serves as a core component of our integrated supply chain logistics service capabilities. As of the end of 2022, JD Logistics' storage network has almost covered all counties and districts in China, including over 1,500 self-operated warehouses and over 2,000 owner-operated cloud warehouses under JDL's Open Warehouse Platform. Our warehouse network has an aggregate GFA of more than 30 million square meters.

over **30** million square meters
an aggregate GFA of

Line-haul Transportation Network

JD Logistics adopts a synergistic approach to expand the coverage of its line-haul transportation network, cooperating with strategic partners such as land, marine, and multimodal transportation to expand our network coverage and increase flexibility. As of the end of 2022, JD Logistics' self-operated fleet includes over 40,000 trucks and other vehicles. In addition, we operate approximately 400 sorting centers in China, and over 1,000 air cargo routes through cooperation with partners and utilize over 400 railway routes.

over **40,000** vehicles
self-operated fleet consisting of

Last-mile Delivery Network

JD Logistics' last-mile delivery network consists of in-house delivery teams, delivery stations, service outlets and stations, and self-service lockers. By the end of 2022, we have over 290,000 in-house delivery personnel and operate over 18,000 delivery stations (the vast majority of which are self-operated). Through high-quality service and industry-leading operational efficiency, we meet the service needs of corporate and individual customers for safe, reliable, time-efficient, and professional services, ensuring a high-quality service experience.

over **290,000**
in-house delivery personnel

Case study ▶ JDL Airlines officially launched its operation

With the rapid growth of customer demand, establishing and cultivating an independent, controllable, safe, and reliable airline network is of great significance to effectively improve the timeliness and service experience of air express products. In June, 2022, Jiangsu JD Cargo Airlines Co., Ltd. (JDL Airlines) obtained the *Business Licensing for Public Air Transportation Enterprises* by the General Administration of Civil Aviation of China. In the same year, on August 31st, it obtained the *CCAR-121 Air Operator Certificate* issued by the Civil Aviation East China Regional Administration. JD Airlines officially commenced its operations. JDL Airlines collaborates with Asia No. 1 smart industrial parks central warehouses, satellite warehouses, and sorting centres to build a multi-faceted logistics warehouse and distribution network. As of the end of 2022, JD Logistics has covered over 1,000 air cargo routes through cooperation, providing fast and efficient high-quality services for high-end consumption, high-end manufacturing, and cold chain fresh products.



JDL Airlines aircraft

Bulky item logistics network

JD Logistics' bulky item network consists of multi-level warehouses, to-door delivery, value-added installation, and after-sales service capabilities, ensuring that we provide the ultimate user experience through one-stop delivery and installation services. As of the end of 2022, we have over 200 warehouses and over 200 sorting centers an aggregate GFA of over 4 million square meters.

over **4** million square meters
an aggregate GFA of

Cold chain logistics network

JD Logistics relies on the comprehensive cold chain service capacity of the "trinity" network of storage, transportation, and distribution, taking products as its foundation and science and technology as its core. Through the construction of a socialized cold chain collaborative network, JD Logistics has built a one-stop cold chain service platform of F2B2C¹¹ throughout the whole process and all scenarios, realizing the safe delivery to merchants and consumer terminals. By the end of 2022, JD Logistics has operated 100 temperature-controlled cold chain warehouses for fresh, frozen, and refrigerated, with an operating area exceeding 500,000 square meters. Additionally, the Company operates over 30 warehouses dedicated to drugs and medical instruments, with an operating area of over 200,000 square meters.

temperature-controlled cold chain warehouses over **500,000** square meters
warehouses dedicated to pharmaceuticals products and medical instruments over **200,000** square meters

Cross-border logistics network

By the end of 2022, JD Logistics has operated nearly 90 bonded warehouses, international direct distribution warehouses, and overseas warehouses, covering an aggregate GFA of nearly 900,000 square meters. JD Logistics continues to expand its end-to-end global transportation network, with warehousing network as the core, and further utilizes intercontinental air, railway, marine, and multimodal transportation to improve collaborative efficiency.

900,000 square meters
covering an aggregate GFA of nearly

¹¹ F2B2C, Factory-to-Business-to-Customer

■ Integrated Supply Chain Logistics Service Solution

JD Logistics is dedicated to providing professional, standardized, and modularized supply chain and logistics services. We pay high attention to the context and changes in the industry chain, particularly the characteristics and customized needs of key industries and clients. We offer flexible solutions for integrated supply chain logistics services, catering to the differentiated and customized needs of our clients. This has enabled us to help thousands of key clients in crucial industries to reduce costs, increase efficiency, and create significant and far-reaching social and economic value.



¹² B2B: Business-to-Business.
¹³ B2C: Business-to-Customer.
¹⁴ O2O: Online-to-Offline e-commerce model.

Case study ▶ JD Logistics provides one-stop distribution service for a dairy company

As consumers' demands for high quality dairy products and delivery services continue to grow, supply chain capabilities have become a critical determinant for competitiveness in this industry. To support its "customer-first, business-oriented" strategy, Yili requires an agile supply chain model that can respond quickly to changes in demand. JD Logistics' robust integrated supply chain capabilities offer Yili comprehensive services, from supply chain consultation to execution, helping Yili optimize its supply chain and meet its business objectives.

To support Yili's unique business scenarios and development goals, JD Logistics has customized a comprehensive "three-step, one-stop" distribution solution. The first step involves the consolidation of multiple channel sources into a single warehouse, enabling the consolidation of orders along the same route for efficient delivery. The second step involves the integration of multiple physical areas from different shippers, implementing a first-in, first-out system, and pooling the shelf life of different channels to enhance logistics efficiency and ensure a consistent customer experience across all channels. The third step focuses on achieving inventory sharing across different channels, maximizing resource efficiency. JD Logistics leverages its "JD Wisdom" digital strategy tool to support the fine management of multi-channel product grading, facilitate the distribution of shared inventory, and reduce inventory turnover. Through intelligent systems and refined management practices, JD Logistics has decreased in inventory turnover days, improved the freshness of Yili milk, and upgraded the overall consumer experience.

Case study ▶ JD Logistics provides exclusive solutions for the pre-made food industry

The pre-made food industry heavily relies on a complete cold chain logistics system, which includes pre-cooling, storage, packaging, transportation, and information services to achieve full-process preservation from production to consumption. JD Logistics provides pre-made food companies with full-process cold chain solutions that cover all aspects from product production and storage to packaging and delivery, from online business to offline scenarios.

JD Logistics cold chain offers temperature-layered packaging solutions (ranging from -22 °C to 15 °C) tailored to different environmental temperatures, using differentiated refrigerant injection standards to optimize costs and avoid product thawing. In terms of logistics transportation, JD Logistics cold chain provides a fully visualized temperature monitoring platform and an on-the-way management system for refrigerated trucks.

JD Logistics also actively participated in the formulation of standards for the pre-made food industry. It is the only logistics company involved in the preparation of the "2022 White Paper of Pre-made Food Industry" which is the first white paper published for the entire pre-made food industry chain. JD Logistics provided content for two parts of the white paper: pre-made food express delivery and transportation capabilities and pre-made food industrial park construction, contributing experience and wisdom to the standardization process of logistics transportation and industrial park construction in this industry.



JD Logistics Participated in the 2022 White Paper of Pre-made Food Industry

Case study ▶ JD Logistics creates a new supply chain model for live-streaming e-commerce

The emergence of the "live-streaming e-commerce" model has led to higher demands for stability, flexibility, and agility in the supply chain. In 2022, JD Logistics created a new model of live e-commerce supply chain, cooperating with the head of e-commerce, East Buy Holding Ltd., and has developed a new supply chain model for live-streaming e-commerce, which helps reduce supply chain costs, improve industry efficiency, and achieve high-speed growth. During periods of stable order volume, JD Logistics optimizes warehouse utilization by consolidating products from multiple warehouses into a single facility and distributing them nationwide, resulting in lower overall inventory levels and reduced management costs. During grand promotion periods, JD Logistics converts storage from production areas to sales areas based on sales forecasts, warehouse capacity, and historical order data. It quickly distributes products to East Buy's five national warehouses. With the help of JD Logistics' integrated supply chain solution and efficient logistics distribution network covering the entire country, East Buy achieved same-day or next-day delivery for self-operated products in the city, and cross-provincial orders can be delivered within 72 hours. These solutions effectively shorten the delivery time while providing customers with better service experiences.



Facilitating Small and Medium-sized Enterprises Reduce Costs and Increase Efficiency

As the trend of consumption upgrading, intelligent manufacturing, and all-scenario and all-channel businesses accelerating, small and medium-sized enterprises are facing increasingly complex challenges in supply chain management. In response, low-cost, high-efficiency, and agile standardized supply chain solutions have become a necessity for the high-quality development of these businesses. As a leading domestic supply chain solution and logistics service provider, JD Logistics is actively decoupling its experience and capabilities in serving top customers. This involves transforming customized solutions into smaller modules and different components, which can be combined to provide small and medium-sized enterprises with standardized solutions for integrated supply chain scenarios, using lower-cost and more efficient combinations.

Addressing directly the pain points of different industries, JD Logistics' standardized solutions can provide small and medium-sized enterprises with efficient and flexible multi-channel and Omni-channel sharing model, realizing the automation and intelligence of store shelf stocking, replenishment, allocation, and return processes, achieving full-process closed-loop decision-making management, and comprehensively enhancing customers' control capability over the logistics process. At the same time, JD Logistics has also accumulated multiple times of elasticity of production capacity during grand promotion periods by applying in-house automation equipment and years of experience in e-commerce promotion operations, providing customers with smooth and reliable delivery services during grand promotions.



JD Logistics automation equipments

Case study ▶ "Jinghui SCM" digital supply chain product provides cost-effective solutions for small and medium-sized merchants

In 2022, many small and medium-sized enterprises and merchants were confronted with the dual challenges of declining sales and increasing costs due to the impact of the pandemic. To support these businesses, JD Logistics provided cost-effective solutions to help them resume operations and production. Jinghui SCM, a digital supply chain management platform, based on extensive data analysis and scientific algorithm models, it provides intelligent decision-making products such as sales forecasting, inventory warning, inventory simulation, intelligent replenishment, and inventory marketing, helping customers to develop more accurate supply chain plans based on their actual sales situations.

To better serve merchants, Jinghui SCM underwent a comprehensive upgrade in 2022. By connecting JD's ecosystem with multiple mainstream external platforms, Jinghui SCM breaks down ecological barriers and facilitates multi-channel data linkage. For customers operating multiple platform stores, Jinghui SCM provides multi-channel and multi-store data integration analysis and visualization capabilities.

Leading Industry Innovation through Logistics Technology

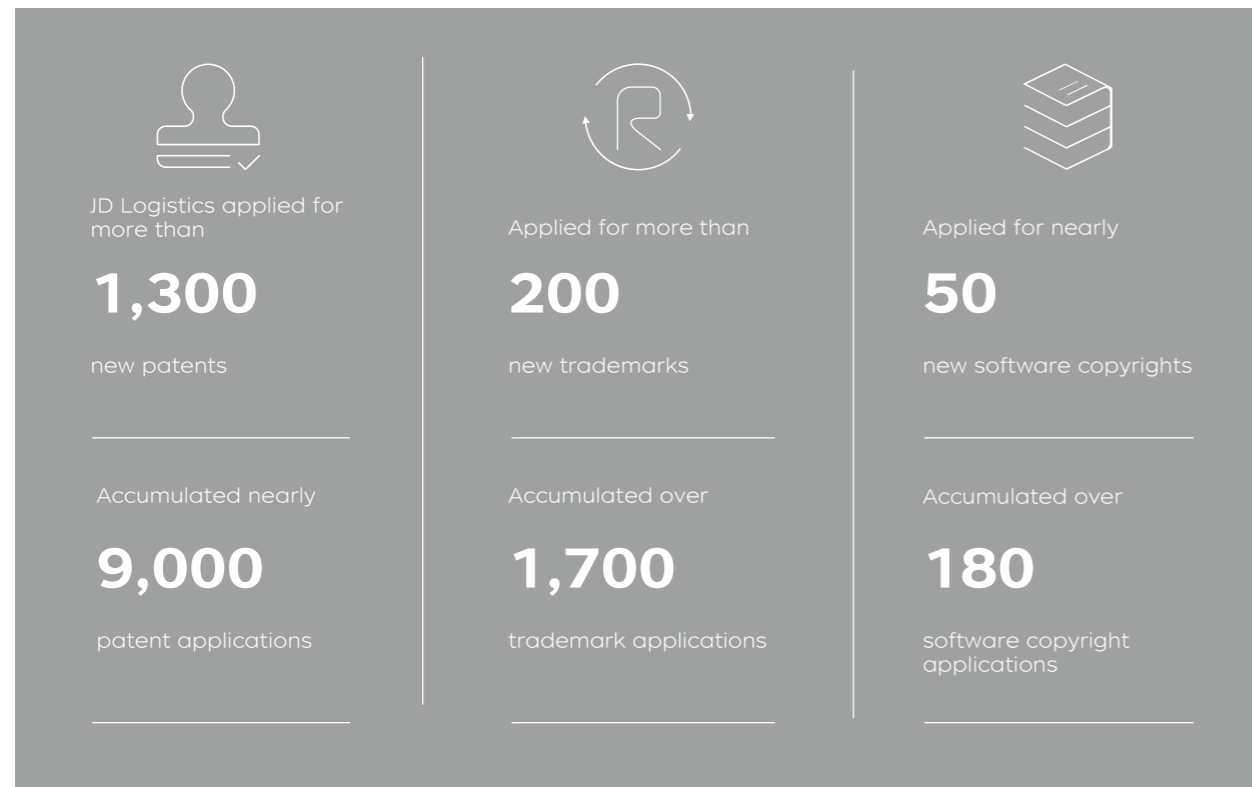
The wide application of 5G, Beidou, mobile IoT, big data, and artificial intelligence technologies leads the driving force for cultivating the transformation and upgrading of modern logistics by promoting the digital transformation of logistics infrastructure. JD Logistics has made a forward-looking layout of various new-generation intelligent technologies, leveraging them to empower supply chain and logistics services with technological means. By breaking through the bottleneck of industry development, JD Logistics contributes to the digital transformation of the supply chain and logistics industry.

■ Innovative Core & Increasing Upgrade

In 2022, JD Logistics invested a total of RMB 3.12 billion in research and development, representing a year-over-year increase of 11.0%. With 4,662 dedicated R&D personnel, JD Logistics is continuously deepening the construction of its technology value system in terms of data. Through long-term technological investment and innovation drive, JD Logistics' core competitiveness of software, hardware system, and integrated supply chain logistics technology continues to upgrade, and it has formed technology products and solutions covering various key links of the supply chain, such as industrial parks, warehousing, sorting, transportation, and distribution.



In 2022



Case study ▶ Fruitful research results in autonomous driving

JD Logistics has been at the forefront of deploying autonomous driving technology, and in 2022, the JD Logistics X Research Department made significant progress in both research and application. The team successfully won the bid for the Beijing Beidou Integration Innovation Application Demonstration Project, specifically the Beidou + Unmanned Distribution Application in Beijing, Tianjin and Hebei province, which earned high praise from the government. This achievement has laid a solid foundation for the company to explore new business models for intelligent express delivery development and create innovative commercial models for platform products.

By the end of 2022, JD Logistics had successfully deployed more than 700 unmanned vehicles in 30 cities across China. This impressive feat includes 600 autonomous delivery vehicles and over 100 indoor delivery robots, which offer end-to-end delivery services to consumers. The unmanned vehicles cover express delivery in communities and business districts, and they also connect with supermarket delivery systems such as Sam's Club and Seven Fresh to provide instant delivery services for supermarket orders. During JD 11.11 grand promotion in 2022, the number of orders delivered by intelligent express delivery vehicles surged by 300% within 24 hours compared to 2021.

Participated in drafting

6

industry technical standards relating to autonomous driving

Published

17

conference papers and white papers published relating to the autonomous driving industry

over

700

unmanned vehicles successfully deployed

within 24 hours of JD 11.11 compared to 2021

300 %

the number of orders delivered by intelligent express delivery vehicles surged by



JD Logistics autonomous delivery vehicle



JD Logistics indoor delivery robot

■ Innovative Applications & Industry Empowerment

JD Logistics continuously enhances its capabilities in automation, digitalization, and intelligent decision-making by utilizing underlying technologies such as 5G, artificial intelligence, big data, cloud computing, and the Internet of Things (IoT). This enables JD Logistics to achieve automation and digitalization in key supply chain processes for its customers. New equipment such as Automated Guided Vehicles (AGVs), intelligent delivery vehicles, and handling and sorting robots greatly improve logistics efficiency. The proprietary

Warehouse Management System (WMS) allows JD Logistics to manage the entire process of inventory, labor, and data transmission, thereby improving inventory visibility and operational efficiency. The proprietary Transportation Management System (TMS) can comprehensively manage the transportation process through real-time vehicle and product tracking, automated capacity selection, and cost settlement.

Case study ▶ JD Logistics achieves industry's first large-scale concurrent operation of over 100 5G "Ground Wolf" AGVs

During the 2022 JD 618 grand promotion, more than 100 "Ground Wolf" AGV intelligent sorting robots equipped with 5G technology were officially put into use at the JD Logistics Asia No. 1 smart industrial parks in Changsha, marking the industry's first large-scale concurrent operation of over 100 5G "Ground Wolf" AGVs. The "Ground Wolf" warehouse in Changsha Asia No.1, which has the largest cargo handling volume of all JD Logistics single warehouses, witnessing a significant increase in efficiency with the support of 5G technology. During the 2022 JD 618 grand promotion, the daily peak picking volume of the "Ground Wolf" warehouse alone exceeded 110,000 pieces.

JD Logistics has built intelligent control systems for supply chain logistics, digital production systems, and unmanned security systems for various intelligent logistics applications such as intelligent parks, intelligent warehousing, and intelligent transportation. This has supported to upgrade the digitalization of supply chain logistics and provided 5G-based solutions for industries such as pharmaceutical manufacturing, 3C circulation, and e-commerce logistics. JD Logistics has been selected as one of the first recommended 5G solution providers by the 5G Alliance for Industry Association (5GAIA)¹⁵.

the daily peak picking volume of the "Ground Wolf" warehouse alone exceeded

110,000 pieces.



"Ground Wolf" AGV intelligent picking robot

Case study ▶ Digital twin experiment platform

JD Logistics has developed an intelligent decision-making system that relies on digital twin and digital companion technologies to support simulation, optimization, and decision-making at the network level. This includes express delivery, express transportation, and other nodes such as sorting, warehousing, and stations. In the event of an emergency, the system can quickly respond and reorganize the entire logistics network's resources to stabilize service quality and improve supply chain resilience. The digital twin experimental platform has the ability to simulate twin models of hundreds of millions of orders in minutes and process millions of data in minutes, serving more than 50,000 merchants. This has resulted in an average reduction in customer logistics costs of more than 10% and an increase in inventory turnover of more than 15%.

serving more than
50,000
merchants



average decrease in customer logistics costs of more than

10 %



increase in inventory turnover of more than

15 %



¹⁵ 5GAIA, stands for 5G Application Industry Aviation, the authorized organization for 5G technology application designated by Ministry of Industry and Information Technology of China.

Case study ▶ "Jingdiao" smart capacity scheduling platform under integrated supply chain

JD Logistics leverages the vast amounts of logistics data to develop its "Jingdiao" smart capacity scheduling platform, which is built around an integrated supply chain model. This platform delivers a win-win outcome for all parties involved, including customers, carriers, and drivers, application of technology. The platform's core technology consists of three modules: integrated supply chain demand planning, integrated supply chain intelligent scheduling, and integrated supply chain capacity optimization. By utilizing these modules, customers can enjoy a comprehensive logistics experience that reduces costs, improves cargo turnover efficiency, and enhances performance timeliness. Additionally, this technology not only greatly improves transportation efficiency, but also contributes to a significant reduction in carbon emissions, earning the "Second Prize of Science and Technology Award of China Federation of Logistics and Purchasing in 2022".

Case study ▶ Deppon develops multi-layer stereoscopic automatic sorting system

Deppon has introduced a multi-layer, stereoscopic automatic sorting system that accommodates both large and small items. Utilizing 360° six-sided surrounding barcode recognition technology and a stacking separation system, it achieves the same sorting efficiency as small items while ensuring the safety of large and heavy goods. With the aid of this system, the fastest hourly peak sorting capacity has reached over 25,000 items, and the daily peak sorting capacity can reach more than 500,000 items. The time required for picking up and unloading goods has been reduced by 30.4%, and the sorting violation rate has decreased by over 40%. Compared to the original manual sorting method, work efficiency has increased more than threefold, setting a leading benchmark for sorting efficiency in the industry.

500,000 items

the daily peak sorting capacity can reach more than



threefold

compared to the original manual sorting method work efficiency has increased more than



Case study ▶ Kuayue express develops green code system for goods

In January 2022, Kuayue Express developed a "Green code system" for packages based on traditional package traceability systems. This system leverages big data to track and verify the disinfection treatment of goods passing through or originating from high-risk areas, thereby enhancing the visibility and transparency of safety measures during transportation. After delivery personnel complete their health information reports uploading, the data is consolidated into the employee health information platform. This platform is integrated with downstream business systems, enabling precise matching of drivers who fulfill customer requirements for factory pick-up and dispatch, improves the quality of marginal services at the factory level.



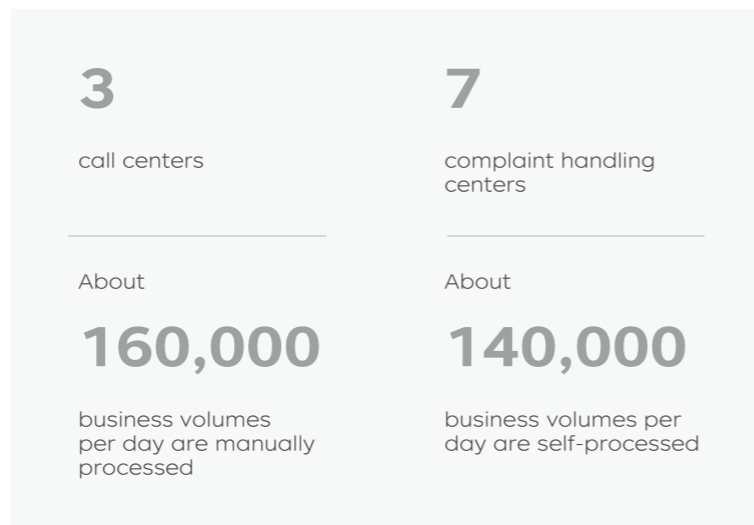
Kuayue Express "Green code system"

Prioritizing Values of Customer First and Experience Oriented

JD Logistics' customer service consistently adheres to the service philosophy of "customer first, professionalism, warmth, and creating surprises." We continuously optimize our after-sales service quality and diligently protect the service experiences of billions of consumers.

Building a Professional Customer Service Team

JD Logistics boasts a team of nearly 10,000 customer service personnel, supported by an intelligent customer service matrix that provides seamless and dependable services to address customer concerns and elevate their experiences. In 2022, JD Logistics concentrated on establishing a "super customer service" brand culture internally and continuously pursued organizational capacity-building for the customer service team, focusing on development, empowerment, and culture as their main themes. Technologically, JD Logistics has constructed a comprehensive self-service quality system. By employing a systematic intelligent product operation mechanism and leveraging technologies like artificial intelligence, they have driven the transformation of intelligent customer service product capabilities.



Case study ▶ JD Logistics becomes the first enterprise in the industry to pass the COPC¹⁶ customer experience standard certification

In 2022, JD Logistics successfully passed the COPC customer experience standard certification, an authoritative certification in the international customer service industry. This marks a new level of professionalism in JD Logistics' customer service and makes it the first enterprise in the supply chain logistics industry to pass this certification. Customer service, which connects consumers and business, is becoming an important part of differentiated services in the supply chain logistics industry. Each employee of JD Logistics adheres to the customer-first concept, embodying the role of a "super customer service" provider, consistently offering professional, warm, and delightfully surprising services to exceed customer expectations.



JD Logistics has obtained the COPC certification certificate

¹⁶ COPC is a globally recognized and leading certification standard for customer service and performance management, which covers the entire customer service operation system.

Listen to Customers' Feedback Mindfully

JD Logistics highly values customer feedback and actively expands channels for collecting customer opinions and expectations. By utilizing big data analysis, platform tool feedback, monitoring social media platforms, and conducting satisfaction surveys, JD Logistics emphasizes the interaction between customers and products. We carry out online surveys and offline interviews regarding logistics products across the full range of touchpoints, such as sales, acceptance, warehousing, collection, delivery, installation, settlement, and after-sales customer experiences. This enables JD Logistics to understand customer needs and listen to their comments more effectively.

We continue to conduct annual and monthly customer satisfaction surveys, and in 2022, the coverage and results of the research group have greatly improved compared to previous years. The customer satisfaction survey focuses on the customer's attention and core demands for logistics services from the customer's perspective, and explores the strengths and weaknesses of JD Logistics products and experience touchpoints. According to the Public satisfaction ratings of 2022 in the express service satisfaction survey results published by the State Post Bureau of the People's Republic of China, JD Express have constantly maintained best-in-class customer satisfaction ratings. In the third quarter, JD Express achieved the first place in the industry.

Through refined management and continuous process improvement, JD Logistics has achieved continuous improvement in customer satisfaction score, response rate, and resolution rate. Among them, the "4422" mechanism ensures efficient collaboration between customer service and operations in handling customer complaints, and "problem solved in front of me", where everyone is a guardian of the customer experience.

In August 2022, on the 5th "Express Industry Awards Ceremony" event hosted by China Post and Express News, JD Logistics won three awards including: "2021 Express Annual Contribution Award", "2021 Express Technology Innovation Award", and "2021 Express Social Responsibility Award". JD Logistics has been awarded for six consecutive years and its high-quality service and corporate responsibility were highly praised by the industry.



Coverage of **7** major regions in Mainland China

52,000+ effective questionnaires collected

A **15%** increase compared to that of the previous year

Annual customer satisfaction score increased to

82 points

Annual customer satisfaction increased by **5%** compared to that of the previous year

JD Logistics' overall satisfaction rate for postal complaints in 2022 is **98.6%**



An effective solution must be provided within 4 hours of the initial acceptance. If the issue is not resolved, it will be automatically escalated to the upper level.

If the issue cannot be resolved effectively after 4 hours, it will continue to be automatically escalated to the superior level.

If the issue is not resolved after 2 hours, it will be escalated to the regional head.

The regional head must provide an effective solution within 2 hours.



Response rate of complaints: **100%**

Complaint resolution rate: **98%**

Complaint handling satisfaction rate: **96%**

Case study ▶ Full protection new insurance service launched to create differentiated service advantages

In September 2022, JD Express took the lead within the industry in launching the full protection new insurance service, upgrading the insurance service from multiple dimensions such as claim rules, claim payment time, and operational support. Since its launch, the timely payment rate of full protection 24-hour claim has reached 99%, and the fastest payment time for a single order is only 13 minutes. Full protection is another highlighted upgrade for JD Logistics to create differentiated service advantages and continuously optimize the delivery experience.

99 %
the timely payment rate of full protection 24-hour claim has reached

13 minutes.
the fastest payment time for a single order

Case study ▶ JD Express launches two new services, appointment delivery and verification collection

During the 2022 JD 11.11 grand promotion period, JD Express officially launched two new service products appointment delivery and verification collection, providing consumers with more flexible, convenient, and secure express delivery experiences. "Appointment delivery" can achieve precise delivery within 2 hours upon appointment and provide evening delivery services. For high-value goods and special scenarios that require self-transaction and cargo safety, JD Express has launched a verification collection service. When the courier collects and delivers the goods, they can ensure the accuracy and correctness of the delivery through various verification methods such as SMS, ID card number, and custom verification methods provided by the merchant.



JD Express's thoughtful service

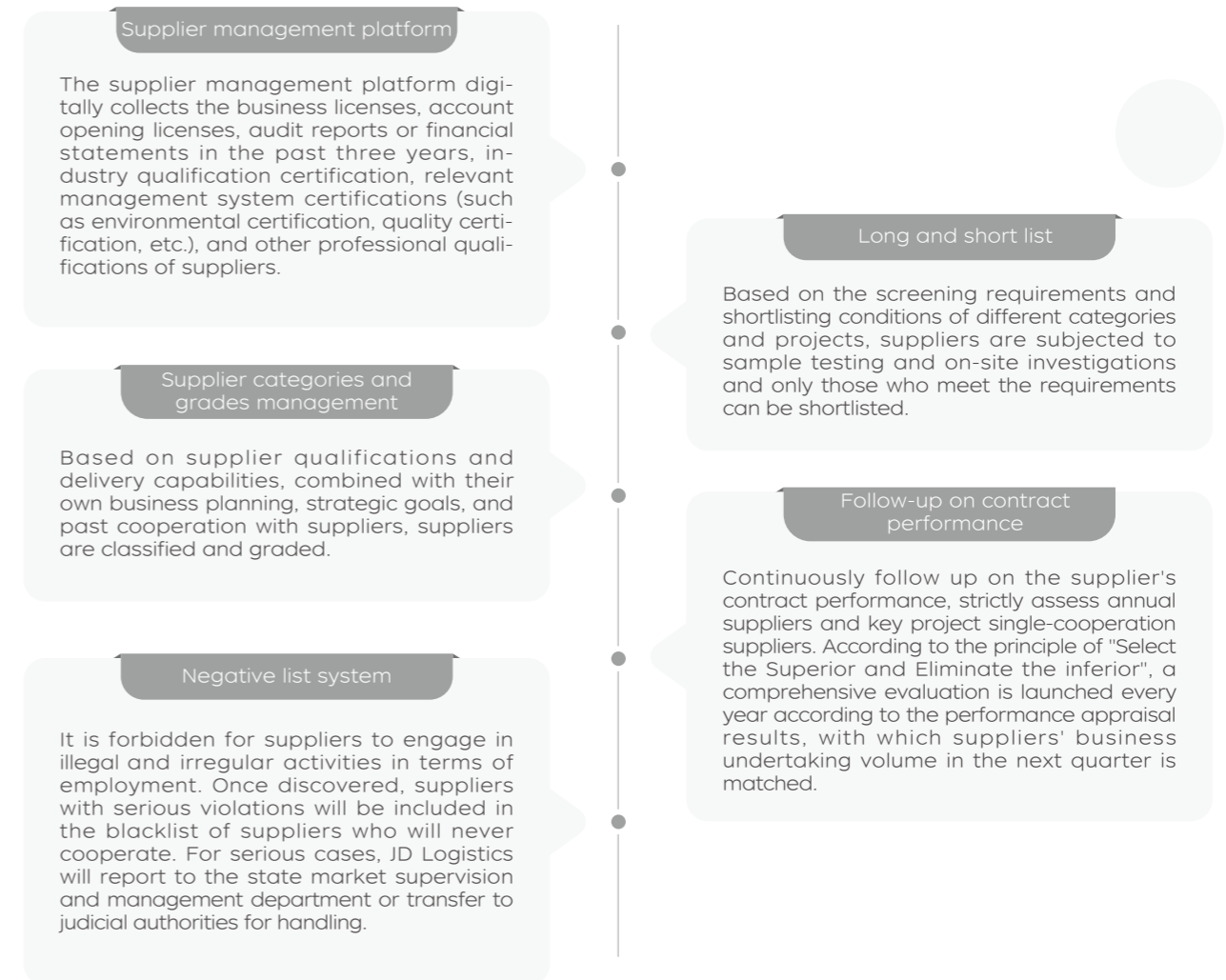
Achieving Flexible Resilient Supply Chain Management Target

Sustainable supply chain management lays an important prerequisite and necessary foundation for the sustainable development of JD Logistics. We implement strict supplier management systems, strengthen ESG risk identification and management in the supply chain, continuously promoting green procurement, and encourage suppliers to make carbon reduction commitments.

Strict Supplier Management

JD Logistics complies with laws and regulations such as the *Bidding Law of the People's Republic of China Regulation on the Implementation of the Bidding Law of the People's Republic of China* and *Measures for the Administration of Government Procurement by No-Bid Procurement Methods*. At the same time, we strictly implement JD Group's *Bidding and Procurement Business Process*, *Bidding and Procurement Business Management Measures*, *Tripartite Performance Appraisal Procedure*, *Non-operating Procurement Acceptance Process* and other full-process supplier management systems.

JD Logistics has established a series of complete supplier selection and bidding processes:





Green Procurement Policies and Measures

JD Logistics is steadily promoting the use of greener circular materials by supplier partners, promoting end-to-end green and environmental protection in the supply chain. In 2022, we promoted the green packaging product action, encouraged cooperative packaging suppliers apply more green product certifications. In addition to meeting basic technical standards, the packaging certified through "Green Certification of Packaging Products" will also have "resource attributes" that consume fewer resources, "environmental attributes" that are more environmentally friendly, and "energy attributes" that consume less energy. By the end of 2022, more than 20% of JD Logistics packaging suppliers have passed the green certification of packaging product.

JD Logistics encourages cooperative suppliers to implement carbon emission reduction actions and work together towards carbon neutrality goals. As of the end of 2022, four suppliers of JD Logistics have officially submitted SBTi plans and more than 20% of packaging suppliers have made carbon reduction commitments to JD Logistics.

Identification and Management of Environmental and Social Risks in the Supply Chain

JD Logistics' commitment to the environment and society runs through the entire supply chain. When conducting supplier selection and audits, we focus on the supplier's industry qualifications, and use our own system to access information to assess risks related to labor and human rights, as well as requiring production suppliers with significant environmental emissions to provide environmental impact assessment certifications or other permissions. In 2022, we have strengthened our identification and prevention measures for risks such as supply chain stability and safety risks, environmental cost increase risks, environmental protection policy risks, and international trade risks, and have established relevant risk confrontation strategies.

To enhance the agility and stability of the supply chain and effectively respond to emergencies and supplier risks, JD Logistics has developed systems such as the *Major Event Operational Support Mechanism*, *Supplier Exception Handling Process* and *Supplier Agreement Honouring Feedback and Handling Process* to ensure the stable implementation of key procurement requirements and timely delivery of operational support materials.

Cultivating Industry Ecosystem Link Together for Win-win Cooperation

JD Logistics participates in the formulation of multiple national standards, industry standards, and group standards, actively leveraging the core influence of leading enterprises to drive the digital and green transformation and development of the entire logistics industry, and is committed to creating a symbiotic, shared, and win-win integrated ecosystem.

Formulation and Research of Industry Standards

JD Logistics has initiated or participated in the formulation of dozens of national standards, industry standards, and group standards, driving the digital transformation and green sustainable development of the logistics industry, and actively promoting the construction of a modern commercial distribution system under the new pattern of development.

Green and sustainable standards: ...

- Evaluation Index of Enterprise Green Logistics*
- Guide for Mail and Express Packaging Recycling*
- Requirements for Post and Express Service and Environmental Protection Packaging of Agricultural Products*
- Requirements for Restricting Excessive Packaging of Postal and Express Items*
- Directives for Quantifying Greenhouse Gas Emission Reduction of Citizens' Green and Low-carbon behavior*
- Guidance on Corporate ESG Reporting*

Industry norms standards: ...

- Express Electronic Waybill* (National standard)
- City Distribution Graph Sign* (National Standard)
- E-retail Warehousing Operations Specification and Evaluation*
- the Norm for Warehousing Operation*
- Specification of Mail and Express Delivery Service by the Unmanned Vehicle*
- Specifications for Security Inspection Data Exchange of Express Items in Railway Transport*
- Inspection Operational Specifications of Real-name Sending and Receiving of Mail and Express Package*
- Technical Requirements of RFID Application for Postal and Express Packaging*
- Technical Requirements for Cold Chain Delivering Insulation Box*
- Classification and Codes for Express Package*

Case study ▶ JD Logistics leads the compilation of the industry's first *White Paper on Intelligent Networked Infrastructure for Unmanned Delivery in Community Parks*

In 2022, at the third working meeting of the Digital Technique of Intelligent Building and Residence Community of Standardization Administration of China, JD Logistics, together with the Digital Technique of Intelligent Building and Residence Community of Standardization Administration of China and the China Electric Vehicle Association, jointly released the *White Paper on Intelligent Networked Infrastructure for Unmanned Delivery in Community Parks*, which analyses the current status of unmanned delivery in Chinese community, interprets the unmanned delivery solutions based on the closed scenarios of community, and provides action guidance and development direction for the construction of unmanned delivery in community.



White Paper on Intelligent Networked Infrastructure for Unmanned Delivery in Community Parks Released

JD Logistics carried out in-depth research in the field of ESG, and cooperated with Capital University of Economics and Business, China Enterprise Reform and Development Society and other units to jointly compile and release the *Guidelines Corporate ESG Reporting*, which provides practical path for the implementation of ESG in China from the perspective of enterprises, proposes an important framework reference for enterprises to carry out ESG information disclosure.

Advocacy for Sustainable Development

JD Logistics actively establishes partnerships with various industry experts and outstanding enterprises, and shares the sustainable development experience of JD Logistics with public through forum meetings, industry advocacy, green publicity and other forms to promote the formation of sustainable development value in the whole society.

- ▶ In April 2022, JD Logistics Initiated the establishment of the Environmentally Conscious Supply Chain Professional Committee of the All-China Environment Federation

As the first rotating leader, JD Logistics initiated the establishment of the Environmentally Conscious Supply Chain Professional Committee of the All-China Environment Federation, linking more than 22 industry leading enterprises to join the committee, and invited 28 leading experts and scholars as special experts (including 4 chief special experts) to gather the wisdom of all parties and jointly promote the green and sustainable development of the supply chain in all scenarios, links and life cycles. Since its establishment, the Environmentally Conscious Supply Chain Professional Committee has steadily promoted various work around self-construction, membership services, industry promotion, brand building, and international cooperation. It organized 3 thematic forum activities, released 1 guideline and 1 initiative, carried out the preparation of 1 group standard, launched 1 green public welfare activity, promoted 10 green supply chain practice cases, provided special publicity for 13 member enterprises, and spoke for China's green supply chain in 10 international forums, and cohesion of green development synergy.



Group photo of the inaugural meeting of the Environmentally Conscious Supply Chain Professional Committee of the All-China Environmental Protection Federation

- ▶ In April 2022, JD Logistics joined the "China Enterprise Green Action (CCGA) 2030 Initiative" as one of the first enterprises

On April 26th 2022, China Culture Administration Association and the China Environment Federation jointly issued the *Practice of Natural and Cultural Diversity - China Enterprise Green Action (CCGA) 2030 Initiative*. JD Logistics and some other companies joined the initiative and express their intention of to resolutely implement the "dual carbon" strategy, actively practice the green concept, promote green culture, carry out green actions, and achieve high-quality corporate development.

- ▶ In June 2022, JD Logistics joined the National Carbon Inclusive Cooperation Network as one of the first enterprises

As one of the first batch of participants, JD Logistics participated in the "National Carbon Inclusive Cooperation Network" jointly established by the Centre for Environmental Education and Communications of Ministry of Ecology and Environment, the All-China Environment Federation, the China Internet Development Foundation, the International Cooperation Centre of the National Development and Reform Commission, and the China Ecological Civilization Research and Promotion Association. We worked with partners together to promote the application of diversified carbon inclusive mechanisms, inspire the whole society to carry out pollution and carbon reduction actions in a carbon inclusive way, and advocate green consumption.



- ▶ In June 2022, JD Logistics participated in the 2022 National Energy Conservation Publicity Week and Beijing Publicity Week

The National Development and Reform Commission (NDRC) and The People's Government of Beijing Municipality launched the 2022 National Energy Conservation Publicity Week and Beijing Energy Conservation Publicity Week online on CCTV. JD Logistics and a number of well-known e-commerce companies, express delivery and takeaway enterprises jointly launched a proposal of "Earnestly Fulfilling Social Responsibility and Actively Responding to Plastic Pollution Elimination".

- ▶ In July 2022, JD Logistics participated in the 26th Sino-Europe CSR Roundtable Forum

At the 26th Sino-Europe CSR Roundtable Forum, JD Logistics shared its experience in building a green integrated supply chain with the theme of "Green Integrated Supply Chain Construction in the Smart Carbon Era", providing reference for domestic and foreign enterprises to plan a feasible green development path.

- ▶ In July 2022, JD Logistics participated in the 2nd Global Sustainable Consumption Summit Forum

JD Logistics announced its participation in the Global Sustainable Consumption Initiative and pledged to always practice a "responsible supply chain", actively speak out, and advocate the transformation of consumption patterns to sustainable directions.

JD Logistics together with the Environmentally Conscious Supply Chain Professional Committee of the All-China Environment Federation jointly issued the *Supply Chain Decarbonization Action* to promote end-to-end greening of the supply chain and achieve joint carbon emission reduction in the upstream and downstream of the supply chain.



Initiation ceremony for new members of the Global Sustainable Consumption Initiative

- ▶ In November 2022, JD Logistics participated in the China Corner of the 27th United Nations Climate Change Conference (COP27)

At the 27th United Nations Climate Change Conference (COP27) China Corner — themed "Climate Action and Sustainable Consumption", JD Logistics shared its experiences with enterprises in multi-industries on the topic of "Sustainable Living Solutions in Different Fields", and showcased as the pioneer practice of green supply chain in China in front of the world.



JD Logistics participated in the 27th United Nations Climate Change Conference (COP27) China Corner - "Climate Action and Sustainable Consumption" and delivered a speech

03

Driving Climate Change Resilient Supply Chain through Digital and Industrial Integration

Climate resilient supply chain is a method that considers climate change, uses natural resources, improves the long-term productivity of the supply chain system and the income of relevant practitioners. It aims to improve the resilience of supply chain systems that are highly exposed and vulnerable to climate change. Climate resilient supply chain promotes sustainable economic, social and environmental development by addressing industrial chain stability and climate risks. The main pillars include sustainably improving supply chain efficiency and employees' income, building a climate adaptive supply chain ecosystem, and reducing greenhouse gas emissions.

With the increasingly significant impact of climate change on global ecological, environmental and economic development, green and low-carbon principles have become the inevitable trend of modern logistics development. The Plan for Modern Logistics Development during the "14th Five-Year Plan" Period emphasizes to embed the concept of environmental protection in the whole chain of modern logistics development, so as to improve the sustainable development of logistics. Since 2017, JD Logistics has continued to develop its green, low-carbon and eco-friendly supply chain technology and services, actively assumed corporate social responsibility in the national "dual carbon" work. We have achieved our own carbon efficiency improvement and built the smart low-carbon logistics park through the development of clean energy, the promotion of low-carbon technology, new energy equipment application as well as resource utilization and recycling. Furthermore, we have worked with upstream and downstream partners in the supply chain to promote end-to-end greening, low-carbon and energy-saving in all business scenarios of the supply chain, and drive the green development of the whole supply chain.



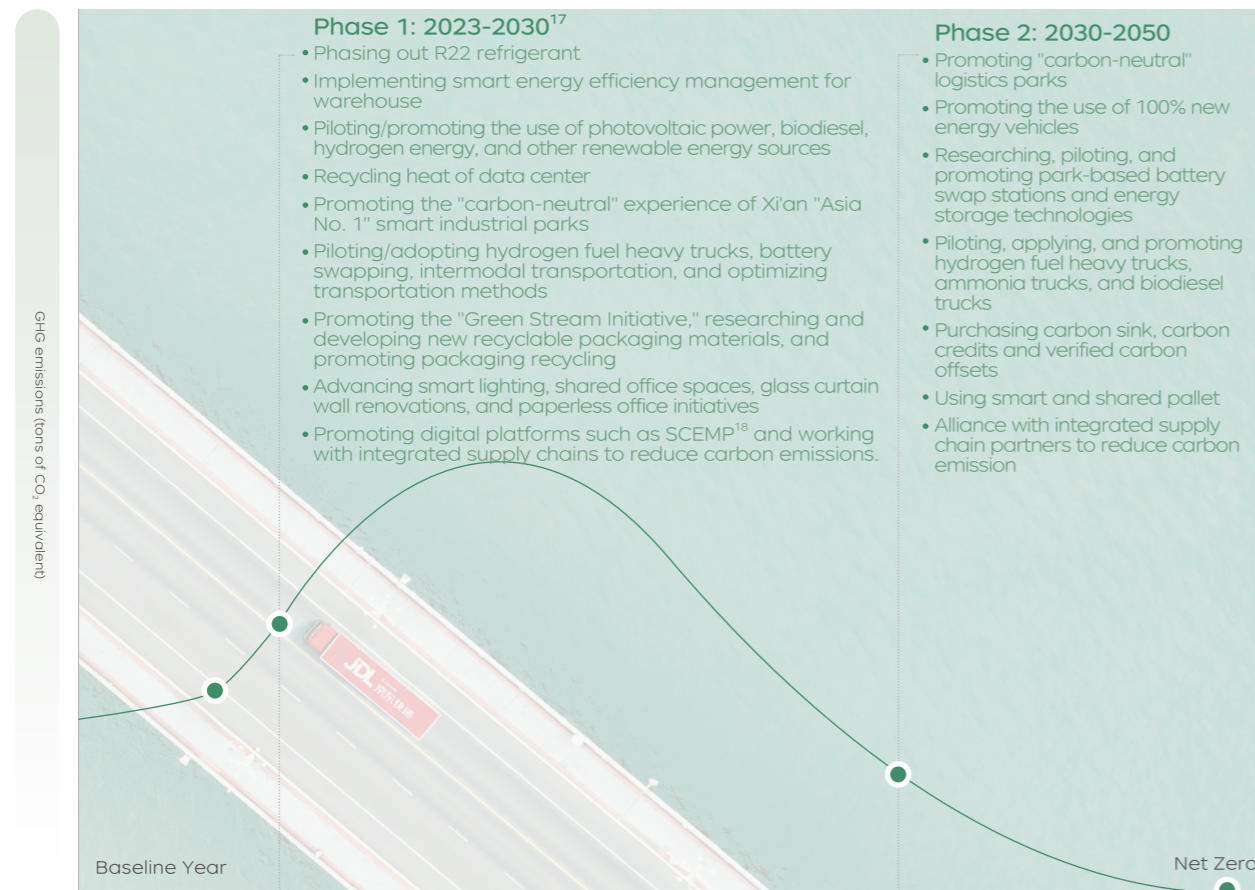
Aiming for a Net-zero Future

As the first logistics enterprise in China to join the Science Based Target initiative (SBTi), JD Logistics takes the lead in proposing a carbon reduction path of "supply chain sharing carbon emission reduction". We constantly deepen the research on carbon peaking and carbon neutrality paths and plan a more scientific and detailed carbon reduction roadmap for the future as an important reference for further actions.

Clarify the Action Path for Carbon Reduction

JD Logistics has incorporated low-carbon development as a crucial component of its developmental strategies. In scrutinizing the modifications in carbon emissions from 2019 to 2022, JD Logistics has conducted a comprehensive evaluation of the prevailing sources of emissions and devised a medium-to-long-term reduction plan spanning from 2023 to 2050. By implementing a various range of measures, JD Logistics facilitates the methodical realization of emission reduction objectives while also taking a proactive lead in advancing the industry towards attaining high-quality sustainable development.

JD Logistics' 2050 Net Zero Emissions Path



¹⁷ JD Logistics has successively acquired Kuayue Express and Deppon, the scope of its scientific carbon target accounting has undergone significant changes, and there may be possibilities of making corresponding adjustments based on the new scope in the future.
¹⁸ SCEMP: Supply Chain Emission Management Platform.

2023-2025 (This includes, but is not limited to the following measures)

Warehousing scenario

Green energy adoption

- Make full use of the roof of the warehouse to adopt photovoltaic power generation
- Promote the purchasing of national green electricity such as wind power and photovoltaics in all provinces of the country
- Fully consider natural lighting and use daylight to provide operational lighting in the warehouse, thereby reducing the use of artificial lighting equipment
- Consider using energy storage, hydrogen tanks, and other methods as backup power sources, to replace diesel generators in logistics parks
- Cold chain logistics parks prioritize the international first-class refrigeration equipment with advanced energy efficiency, and the refrigerant also recommends gradually using R32 rather than traditional R404, to reduce the greenhouse effect on the atmosphere from refrigerant

Management of smart energy efficiency

- Continue to promote the advanced experience from the "carbon neutral" logistics park of Xi'an "Asia No. 1" smart industrial parks in the country, and strengthen the management of energy and greenhouse gases (GHG)
- Gradually realize zone metering, establishing an energy management model for the industrial park, and improving energy efficiency and secondary energy utilization through grid management
- Conduct energy efficiency diagnosis and equipment retrofitting for old logistics parks, matching energy supply and demand relationships in a reasonable manner and avoiding the large-scale increase of energy-consuming facilities and equipment in a rush. We are gradually improving accurate metering of energy use, water use, and emissions data
- Improve gradually the accurate measurement of energy use, water use and emission data
- Prioritize the use of international first-class refrigeration equipment with advanced energy efficiency and gradually replace the traditional R404 refrigerant with R32 in cold chain logistics parks
- Adopt pallet equipped with intelligent management methods to strengthen smart digital management

Transportation and delivery scenario

- Optimization and distribution methods from an all-round perspective
- Promote the fixed-line of transfer transportation volume from highway to railway, guide the upstream customers to choose low carbon transportation
- Optimizing warehouse and network planning through operations research algorithms to optimize transportation routes, as well as improving assembly capacity.
- Increase the number of charging/swapping facilities in the logistics park and introducing green electricity as power source
- Cooperate with hydrogen provider to archive the objective of doubling the quantity of hydrogen-powered trucks by 2025
- Replace the R22 refrigerant with R32 and R407 in cold chain transportation at a rate of 10% per year and establish a refrigerant recovery system

Reusable packaging scenario

- Continue to promote the "Green Stream Initiative " to promote the reduction and recycling of packaging materials
- Promote the application of green and reusable packaging standards covering the value chain's upstream and downstream
- Conduct pilot research of reusable packaging materials adapted to different scenarios
- Promote the socialized sharing and recycling system of reusable packaging

Data centers scenario

- Increase the proportion of using natural cold sources
- Explore heat recovery and secondary utilization of equipment
- Improve energy and cold storage capacity
- Promote passive building and low energy consumption design
- Strengthen the operation and maintenance management platform

Office scenario

- Transform office spaces through building-integrated photovoltaics (BIPV)¹⁹, reducing the use of glass curtain walls and increasing the use of building insulation materials in northern regions
- Integrate office spaces and promote remote work, reducing the use of fixed locations and independent offices
- Improve the smart lighting system and implement precise positioning to control lighting on a time-based schedule
- Promote green office awareness actively and encourage the use of electronic contracts, electronic signatures, and online meetings to enhance employees' green and low-carbon awareness

Integrated supply chain collaborative carbon reduction scenario

- Facilitating the low-carbon transformation of the industry, collaborating both upstream and downstream to promote the use of the Supply Chain Emission Management Platform (SCEMP) in logistics transportation to assist upstream and downstream supply chain partners in achieving digital carbon emission management
- Promote the exploration and application of supply chain decarbonization technologies to upstream and downstream partners and developing industry standards based on the principle of "supply chain sharing carbon emission reduction"
- Require suppliers to conduct product carbon footprint assessments and encourage them to establish Science based targets

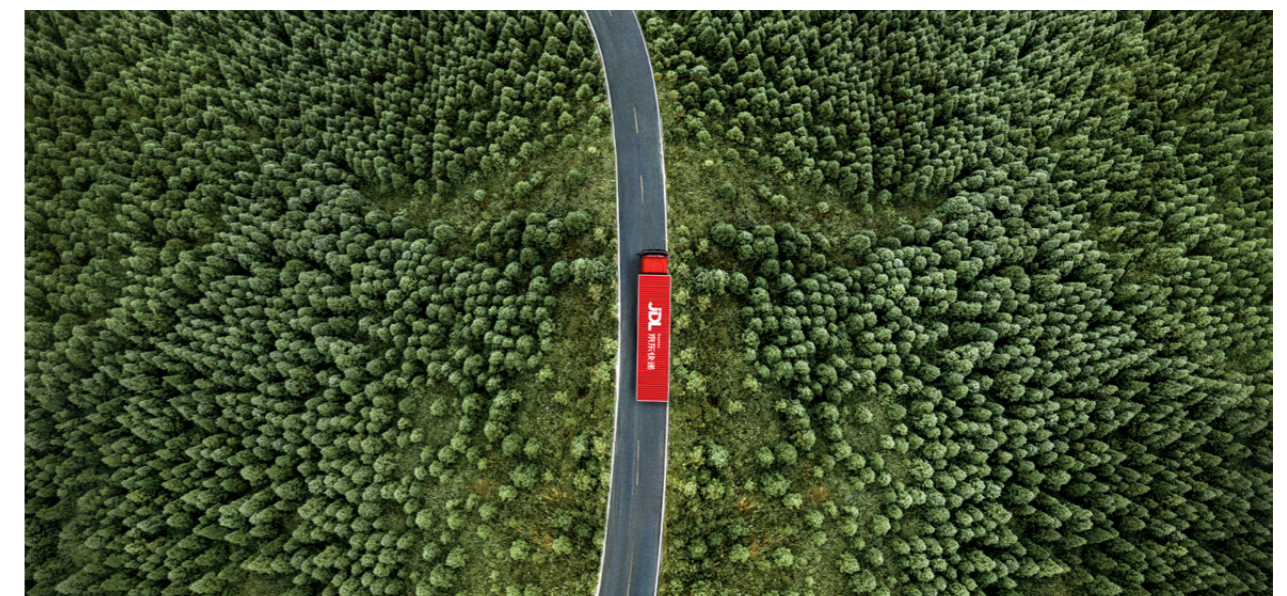
2026-2030

- Greatly increase the use ratio of green electricity nationwide, and reach 100% renewable electricity usage by 2030
- Integrate the digital management system platform for office, warehousing and transportation scenarios, and the number of "carbon neutral" logistics parks nationwide has been increased significantly
- Improve continuously the construction of new energy transportation tools and road network infrastructure, and strive to achieve 100% renewable energy vehicles adoption
- Collaborate with upstream suppliers on application of new technologies of renewable energy, such as combination of distributed photovoltaic hydrogen production and hydrogen energy heavy truck, biomass diesel development and utilization, wind, photovoltaic and biomass centralized power generation
- Develop carbon sinks and voluntary emission reduction projects actively, including VCU²⁰, GS VERs²¹ and CCER²², and develop carbon sequestration and voluntary emission reduction around afforestation, farm methane emission reduction, building energy efficiency improvement and other projects
- Extend to the upstream and downstream of the industry and reduce the total emissions through various ways, such as the carbon footprint of original packaging, the design and application of shared vehicles, and the recycling of packaging materials
- Deepen the promotion of collaborative smart carbon emission reduction in the upstream and downstream of the value chain in many aspects, such as technological innovation, standard setting and business cooperation

¹⁹ BIPV stands for Building Integrated Photovoltaic, which is a technology that integrates solar power generation (photovoltaic) products into buildings.
²⁰ VCU, namely Verified Carbon Units, is the certified emission reductions developed under international Verified Carbon Standard.
²¹ GS VERs, namely the Gold Standard Verified Emissions Reductions, is the carbon offset credits developed under the international Gold Standard (the Gold Standard).
²² CCER stands for Chinese Certified Emission Reduction, or National Certified Voluntary Emission Reduction.

Transportation constitutes a significant source of carbon emissions for JD Logistics. As a leading integrated supply chain logistics service provider in China, JD Logistics has been dedicated to mitigating greenhouse gas emissions and curbing air pollution stemming from road transportation. In line with the SBTi, JD Logistics will implement a diverse range of technological solutions to facilitate synergistic emissions reduction in road transportation.

Technical measures	Synergistic emission reduction effect	Policy measures
Promote the digital fleet	<ul style="list-style-type: none"> Digital management improves vehicle energy efficiency and monitors air pollutants on the traveling paths 	<i>Management Measures of National Transport Capacity Platform</i>
Standardize the fuel economy of vehicles	<ul style="list-style-type: none"> Optimize the truck with Gasoline Direct Injection system (GDI) to reduce GHG emissions Introduce urea monitoring technology for trucks to reduce air pollutants emissions 	Implement the "China VI" vehicle emission standards, strengthen vehicle exhaust monitoring
Promote new energy fleets	<ul style="list-style-type: none"> Promote electric trucks and hydrogen energy trucks to replace traditional vehicles 	Promotion of new energy vehicles matching with renewable energy
Promote the usage of biodiesel trucks in specific areas ²³	<ul style="list-style-type: none"> Introduce road freight of biodiesel fuel and air transportation of biomass aviation fuel to reduce GHG emissions and air pollutants 	Conduct pilot projects with relevant national ministries
Adjust the freight structure	<ul style="list-style-type: none"> Transfer transportation volume from highway to railway and waterway to reduce GHG emissions 	Fixed railway frequency, reduce the vacancy rate of railway return journey



²³ Specific areas: refer to biodiesel pilot areas, such as Shandong Province and Yunnan Province.

Since 2019, JD Logistics has implemented various initiatives such as promoting the use of renewable energy in transportation and optimizing routing and packing algorithms to reduce carbon emissions during transportation. Furthermore, to achieve global 1.5-degree Celsius temperature control target, JD Logistics has conducted further in-depth analysis on carbon reduction in transportation and has identified key reduction targets as shown in the table below.

Key objectives	Vehicle energy efficiency improvement	Application of new energy vehicles	Transportation structure optimization	Carbon pricing mechanism
Estimation of baseline scenario	<ul style="list-style-type: none"> The average single load weight of medium and heavy trucks is 9.5 tons²⁴ 	<ul style="list-style-type: none"> By 2030, heavy trucks will account for 40% of new energy vehicles By 2050, heavy trucks will account for 90% of new energy vehicles 	<ul style="list-style-type: none"> Road freight turnover accounts for 20% ~ 30% of freight transportation structure 	Establish fuel consumption standards and carbon credits system for fuel vehicles by 2030
Prediction of deep carbon reduction scenario	<ul style="list-style-type: none"> The average single load weight of medium and heavy trucks is 11.5 tons²⁵ By 2035, the fuel consumption of medium and heavy trucks will be reduced by 20% compared with 2020²⁶ 	<ul style="list-style-type: none"> By 2030, heavy trucks will account for 60% of new energy vehicles By 2050, heavy trucks will account for 100% of new energy vehicles 	<ul style="list-style-type: none"> Road freight turnover accounts for 20% ~ 30% of freight transportation structure Establish a network freight platform, car-free carrier and automotive transportation to improve the efficiency of road transportation 	Implement carbon credit system and carbon reduction targets for suppliers by 2030



²⁴ The conclusion comes from the inventory data of greenhouse gases from 2019 to 2022.
²⁵ The conclusion is derived from "Carbon Peak Plan before 2030" and "Development Plan of Modern Comprehensive Transportation System during the 14th Five-Year Plan".
²⁶ The conclusion comes from "Technical Route of Energy Saving and New Energy Vehicles".

Digital Carbon Management for Green Development

Based on the different characteristics of main business scenarios, JD Logistics has formulated refined management measures for energy conservation and emission reduction. We also actively promote carbon reduction of the whole supply chain, and promote the green transformation of the supply chain together with many partners in warehousing, transportation, distribution and packaging. The Company strictly abides by laws and regulations such as the *Environmental Protection Law of the People's Republic of China*, *Atmospheric Pollution Prevention and Control Law of the People's Republic of China*, *Water Pollution Prevention and Control Law of the People's Republic of China*, *Soil Pollution Prevention and Control Law of the People's Republic of China*, *Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes* and *Energy Conservation Law of the People's Republic of China*, striving to minimize the impact of business operations on the natural environment.

Green Warehousing

JD Logistics actively builds the green and low-carbon warehousing and logistics parks, promotes green operation on the basis of green infrastructure construction and carbon reduction technology innovation, striving to build an ecosystem with the largest installed capacity of rooftop photovoltaic in the supply chain field in 2030, providing green energy for 85% of JD Logistics smart industrial parks, so as to jointly achieve sustainable development goals and build the renewable energy base targets as well.



providing green energy for
85%
of JD Logistics smart industrial parks

SUSTAINABLE DEVELOPMENT GOALS

JD Logistics adheres to the trinity of carbon reduction, carbon management and carbon control in the operation of smart logistics parks. At the initial stage of park planning, we fully consider the use of energy, including electricity, water and natural gas, and accurately analyze and match with photovoltaic power generation.

After the completion of the park, we conduct real-time energy supervision and carbon emission management for distributed photovoltaic, charging piles, energy storage equipment and clean energy vehicles and other emission sources through the carbon emission management platform.

After the declaration of carbon neutrality in the parks, we follow PAS 2060 standard, continuously track the energy consumption data and carbon emission data to improve the ability of the park to control carbon emissions.

JD Logistics developed a carbon emission management platform for logistics parks and supply chain transportation, realizing for the first time the unified management from enterprise GHG emission accounting to park carbon neutralization target within the park boundary, and promoting the closed-loop management of supply chain carbon footprint and the refinement of park carbon calculation.

Case study ▶ Xi'an "Asia No. 1" smart industrial parks became the first "Carbon Neutral" logistics park in China

In 2022, JD Logistics' Xi'an "Asia No. 1" smart industrial parks obtained the dual certificates of carbon neutrality certification issued by Beijing Green Exchange and Centre Testing International Group CO., Ltd (CTI), and became the first "Carbon Neutral" logistics park in China. The roofs in the park are equipped with photovoltaic power generation equipment. Roofs equipped with photovoltaic power generation equipment occupy more than one third of the total area of the park, 100,000 square meters in total. The total installed capacity reaches 9 MW. The generated green power can be used for office lighting in the park during the day, and charging for the new energy vehicles and trucks at night through the pilot project of "vehicles + carport + charging pile + photovoltaic". Statistics shows that the total electricity generated by the distributed photovoltaic components throughout the year of 2022 was 9.857 million KWh. Based on the 2022 electricity consumption data released by the National Energy Administration, this amount is equal to meet the annual electricity demand of approximately 10,400 residents. Meanwhile, compared to thermal power generation, it can save nearly 1,210 tons of standard coal. According to the carbon trading methodology, it can generate approximately 4,343.98 tons of carbon emission reduction credits (CCER) as calculated by the carbon trading methodology.²⁷



dual certificates of carbon neutralization

Case study ▶ Release of the *Carbon Neutral Guide for Logistics Parks*

In June 2022, JD Logistics, together with JD Property, Schneider Electric and Unilever, jointly released the *Carbon Neutral Guide for Logistics Parks* which became the first guide on the dual carbon path of logistics park of supply chain logistics industry in China, and explained the realization path of carbon neutralization for logistics park from top-level design to a solution system.

JD Logistics and JD Property jointly launched the carbon neutral logistics park solution project since 2019, taking the park as the carbon emission management unit, verifying emission sources in accordance with international standards, guiding the logistics park to set carbon targets, and carrying out energy conservation and emission reduction through scientific and digital methods. Our concept and practice of carbon neutrality ran through the industrial chain and spread to all types of enterprises in the chain. The project won the 2022 Award for Green Management of Green Dot China Annual Case.



Carbon Neutral Guide for Logistics Parks

²⁷ Emission reduction calculated according to the *Baseline Emission Factors of China's Regional Power Grid in 2019 Emission Reduction Projects* by the Ministry of Ecology and Environment.

Green Transportation

JD Logistics is proactively promoting a range of eco-friendly transportation methods, including the selection of vehicles with lower carbon emissions based on carbon targets. Additionally, we are actively advocating for the use of new energy vehicles and implementing robust fuel usage and emissions management practices to further develop a greener transportation network.

In 2022, the scale of JD Logistics' railway transportation reached over 1.8 million tons, operating on over 400 routes. The Company has a total scale of 5,418 self-operated new energy vehicles, covering seven major regions across the country. In comparison to 2021, JD Logistics has increased the number of new energy charging vehicles by 357, rapid battery replacement new energy vehicles by 120, and liquefied natural gas (LNG) vehicles by 24. JD Logistics continues to promote the integration of various goods with multiple modes of transportation through carbon reduction technology in its warehouse network operation planning. This approach helps improve transportation efficiency and reduce energy consumption and carbon emissions. During the Winter Sports Events in 2022, JD Logistics utilized electric logistics vehicles for both distribution and in-venue services. The Company's large-scale new energy fleet has been deployed in a variety of business scenarios, demonstrating its versatility and commitment to sustainability.

We released the *JD Logistics Fourth Edition Fuel Management Regulation* in 2022 to strengthen the management of fuel usage, updated the fuel consumption control indicators, formulated fuel consumption standards for different models, working conditions, vehicle age, environmental conditions and other comprehensive factors. Besides, we also invested in all-aluminum hanging boxes, plastic steel plates to reduce vehicle weight, introduced car networking technology to reduce comprehensive fuel consumption by about 3%, so as to reduce fossil fuel use and carbon emissions in transportation networks.

Case study ▶ JD Logistics joined hands with Amway to put into operation the first batch of hydrogen energy logistics trucks

As we work towards "dual-carbon goals", policies in the hydrogen fuel cell industry are focused on promoting upstream technological breakthroughs, driving downstream applications and infrastructure development. This targeted approach effectively directs resources and accelerates the low-carbon development process of both upstream and downstream industries. On October 17, 2022, JD Logistics successfully launched its first batch of hydrogen energy logistics trucks at the Guangzhou production base of Amway (China) Commodity Co., Ltd. The trucks, which are 9.6 meters in length and have a single carrying capacity of 18 tons, can complete hydrogen fuel filling within 3 minutes and cover a range of 450 kilometres per once hydrogen fuel cell. As an integral part of JD Logistics' "zero-carbon transportation" solution, these hydrogen energy logistics trucks are able to provide "zero-carbon" emissions for parts of supply chain transportation for customers, reducing carbon emissions by approximately 7.53 tons per month compared to traditional oil trucks, and significantly reducing fuel costs.



JD Logistics' hydrogen energy logistics truck coming online in 2022

Case study ▶ JD Logistics has become the first logistics enterprise in China to scale up battery swapping for new energy trucks

JD Logistics is committed to exploring energy-saving and emission-reduction methods that integrate "efficient fleet operation and comprehensive emission reduction". In August 2022, the Company made significant progress towards this goal by launching its first batch of new energy vehicles with battery swapping. JD Logistics has adopted a battery swap mode for its intracity distribution vehicles, which all use standardized battery packs that are common to all vehicle models. These batteries can be easily upgraded to cleaner energy sources, and can be fully utilized in a hierarchical manner to maximize the value of energy savings and emission reduction. By adopting this solution, JD Logistics is expected to increase the energy storage power consumption ratio of its logistics park by more than 25%, reduce the number of vehicles launched by more than 20%, increase the carbon emission reduction per vehicle by more than 15%, and achieve a comprehensive carbon emission reduction rate of more than 35%. By the end of 2022, JD Logistics had launched 120 new energy vehicles with battery swapping through out China.

Green Delivery

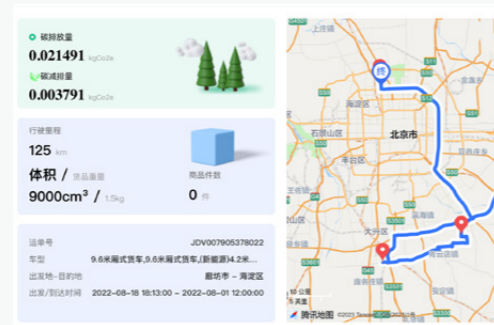
JD Logistics continues to introduce mechanized and intelligent equipment in the "last mile" delivery to reduce energy consumption, promote the use of eco-friendly materials, and extend green to every kilometer of the process of whole chain. At the same time, we also use digital means and cloud platform calculations to make each order have its own "carbon record", so that the "carbon" of mobile emission sources can be seen and reduced.

In 2022, JD Logistics Picking Warehouse will introduce 1,056 new sets of goods sensing equipment, which will automatically stop when the picking equipment is out of stock to save electricity, and it is estimated that it will save 3% on electricity costs throughout the year. At the same time, we replaced wooden pallets with 100,000 pieces of polyvinyl chloride (PVC) and replaced disposable woven bags with 7.5 million recycled woven bags, increasing the investment in recycled packaging bags by 25% month-over-month compared with 2021, with 240 million cycles throughout the year, saving 82.47 million disposable woven bags.

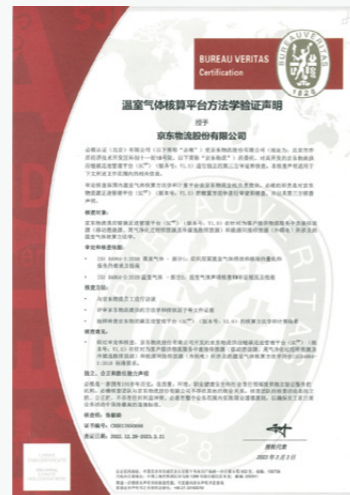
Case study ▶ SCEMP-The first global transportation mobile carbon emission source management platform has been verified by ISO14064-1

JD Logistics has been committed to solving the carbon emission calculation of the supply chain and the exploration of decarbonization paths. Guided by the principle of "customer first", the Company actively addresses the essentials of carbon emissions management for its customers. As an initial customer of JD Logistics, Decathlon faces the difficulties in monitoring and calculation of mobile emission sources within Scope 3 GHG emissions (i.e. GHG emissions upstream and downstream of the value chain) in China. JD Logistics has taken the initiative to develop the first-phase logistics and transportation carbon management platform SCEMP, which establishes a carbon account for Decathlon and address the calculation of decarbonization pathways of GHG (CO₂, CH₄, N₂O, urea, etc.) in Decathlon's B2B e-commerce scenario. The platform was officially launched on November 15, 2022 and within one month, it successfully completed the calculation of over 200,000 waybills for a single scenario of Decathlon's customers. It not only accurately calculated the carbon footprint of each order for customers, but also the verifiable GHG emission reduction for customers according to the CMS-053-V01 (AMS-III.S.), which can fully meet the carbon footprint calculation accuracy, granularity and visualization required by customers, SCEMP has been verified by Bureau Vertias (BV) according to the ISO 14064-1 standard.

As pioneers of green and low-carbon initiatives in their respective fields, Decathlon and JD Logistics have made contributions in the areas of environmental protection and decarbonization. In this cooperation JD Logistics has leveraged its experience and operational capabilities in green supply chain management to empower Decathlon China in low-carbon transportation and carbon footprint management.



Single order carbon footprint record from SCEMP



BV's verification certificate

Green Office Operation

JD Logistics actively practices the green office operation scenario by utilizing eco-friendly elements to improve and enhance the physical and mental well-being of employees. By immersing employees in low-carbon and sustainable office environments, the company aims to increase their creativity and satisfaction. JD Logistics is located in Building 2 of JD Group's headquarters, which has obtained 3-star green building certification in 2021.

JD Logistics is gradually optimizing its existing network architecture to create a completely wireless office environment. We have implemented nearly 6,000 wireless routers, and the area covered by wireless networks in the office workspace is over 500,000 square meters, which has reduced the number and cost of comprehensive wiring and switches. The computing and storage resources of IDC are continuously optimized.

We have launched paperless offices in multiple business scenarios, such as electronic contracts, electronic file archiving, and electronic invoicing, which not only greatly reduces tree felling and carbon emissions but also improves information management efficiency, reduces office costs, and facilitates daily work for employees. HR documents of JD Logistics are all electronically signed, such as employee onboarding, departure, and renewal of labor contracts, Anju Loan agreements, and welfare housing lease agreements. By the end of 2022, JD Logistics' employees had signed 0.16 million electronically. Electronic signing of labor contracts is not only beneficial for the environment but also improves the efficiency of internal HR management and employee services. JD Logistics reduced the printing of paper certificates with electronic file archiving around 3 million sheets in 2022, which is equivalent to saving 335 adult trees from being felled, and reducing carbon emissions by approximately 16 tons. As one of the first batch of national pilot units for electronic invoicing, JD Logistics has fully implemented the issuance of electronic invoices. According to statistics, JD Logistics issued over 6.629 million electronic invoices in 2022, saving approximately 40 tons of paper and reducing carbon emissions by 37.5 tons.

Since the outbreak of pandemic, JD Logistics has actively explored a green and low-carbon office model. We have created an IT system environment suitable for employees to work from home, and gradually improved the availability of the system, covering online conference system, security credit system, remote user assistance and other solutions, saving the time and space costs of travel and travel of participants, and reducing greenhouse gas emissions. In 2022, JD Logistics employees logged in to the office remotely through VPN 278,620 times, organized 1,369,716 online meetings through Joymeeting and Dongdong voice/video, with a cumulative number of 26,620,358 participants and a cumulative time of 1,935,613 hours of online meetings. At the same time, we encourage employees to travel green, and strategically cooperate with Didi and CaoCao to reduce the carbon footprint of employee travel through the use of ride-sharing and new energy vehicles. In 2022, the number of carpooling orders reached 139,000 (2-3 people carpooling), covering 7,860 employees and a total mileage of 1.833 million kilometres, greatly improving the utilization rate of employees' vehicle resources, not only alleviating traffic congestion, energy saving and emission reduction, but also achieving the goal of traffic pollution reduction and carbon reduction synergy. In 2022, JD Logistics employees had 94,025 trips for business via new energy vehicles, covering 13,050 employees, covering 1.492 million kilometres, accounting for 44.8% of the total mileage, and reducing carbon emissions by about 115.9 tons.

3 million
Electronic files archived
around in 2022

6.629 million
Electronic invoices issued
over in 2022

1.492 million kilometres
Mileage driven by new energy
vehicles on business trip in 2022

139 thousand
Low carbon carpooling
orders in 2022

1.37 million
Low carbon on-line
conferences held

169.4 tons
Carbon emission reduction from
green office operation around in
2022

Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis

In promoting climate-resilient supply chains, we first advocate for the sharing of sustainable development knowledge and advanced technologies. In 2022, JD Logistics has launched the "Supply Chain Decarbonization Action" and continues to promote and support upstream and downstream enterprises in fulfilling their obligations of green supply chains, low-carbon technologies, SBTi and other obligations, aiming to raise the awareness of upstream customers and downstream service providers on global warming, and take immediate and active measures such as adopting the mode of digital control to reduce carbon emissions.

■ Sharing of Sustainable Development Knowledge and Technology

In the era of knowledge economy, green supply chain serves as a bridge that links interdisciplinary and application. The impact of a single enterprise's carbon reduction on climate change is limited, and it is necessary to unify the recognition of upstream and downstream partners through the supply chain to jointly carry out decarbonization, promote the sustainable development of industry circles, industrial chains, and ecological circles. Therefore, the interchange, sharing, dissemination, and absorption of knowledge and technology for sustainable development are particularly important. As of December 31, 2022, JD Logistics has facilitated specialized sustainable development technology exchanges with more than 20 enterprises and professional institutions including Volkswagen Group, Volvo, Decathlon, Amway, Unilever. To further enhance its customer service and support digitalization and intelligent decision-making, JD Logistics has introduced the trial calculation service of the digital supply chain carbon management platform SCEMP. The platform's monthly calculation of logistics transportation carbon footprint has surpassed 0.35 million waybills, with total greenhouse gas emissions calculated in the single warehouse and distribution transportation scenario exceeding 450,000 kg CO₂e, and the GHG reduction is 37 kg CO₂e.

Under the background of attaching great importance to the construction of green ecological civilization, the process of circular economy construction in China has been accelerated. JD Logistics actively practices the concept of green development, responding to the call of the state. It integrates resource conservation, resource circulation, and its own business characteristics to achieve sustainable growth while simultaneously adhering to the principles of economic development, resource conservation, and environmental protection. The Company strictly abides by relevant national laws and regulations, implements a range of internal management systems to coordinate and standardize the resource recycling in its operations. Additionally, JD Logistics accelerates carbon emission reduction and promotes sustainability through source reduction, improved recycling rates, optimized waste management and other measures.



monthly calculation of logistics transportation carbon footprint surpassed

0.35 million

waybills

■ Resource Utilization & Waste Management

JD Logistics actively responds to State call for resource recycling, and internally implements the *JD Logistics Reusable Bags Use Management Norms*, which clearly defines the scope of the use of reusable bags, and strictly stipulates the procurement, use, scrapping, recycling and other related process. We also established a daily monitoring and accountability mechanism for pursuing compensation and penalties, aiming at comprehensively establishing a unified and standardized logistics green packaging standard system for express delivery in support of sustainable development.

JD Logistics primarily sources water from municipal tap water. We recognize the critical importance of water resources and strives to prioritize their conservation and management in daily operations. We are committed to the "International Decade for Action on Water for Sustainable Development" (2018-2028) launched by the United Nations Water Mechanism, aiming to minimize water consumption and maximize water use efficiency. JD Logistics will continue to further establish a water recycling mechanism and coordinate efforts to address water-related challenges, achieving SDG Goal 6 (Clean Water and Sanitation). During the Reporting Period, JD Logistics did not involve in any large withdrawal of water resources from areas with water stress.

In addition, in terms of reverse warehouses water management, JD Logistics requires internal sale for drinkable products which meet selling standards. For bottled water, mineral water and other products that are not drinkable due to damaged packaging, JD Logistics recycles them as clean water in the park after being returned to reverse warehouses to reduce water waste. In terms of waste management, the types of hazardous waste generated by JD Logistics in operation are mainly waste lamps, waste ink cartridges, toner cartridges and waste lead batteries, and the types of non-hazardous waste are mainly domestic waste, packaging waste and kitchen waste. We entrust a third-party company with waste treatment service qualifications to carry out a unified closed-loop treatment of hazardous waste that meets the standards of end-of-life destruction to avoid negative impacts on the ecological environment.

JD Logistics always pays attention to and strictly controls the impact of enterprise operations on the ecological environment. We continuously evaluate the impact that our business scenarios and logistics process that may have on the ecological environment and natural resources in the process of existing business operations and new business expansion. Besides, we are also committed to minimize the negative impact of enterprise operations on the environment and protect the ecological environment to the greatest extent. In the marine business scenario, we also try to reduce the impact of ships on marine organisms.



Green and Reusable Packaging

JD Logistics is committed to gradually realizing the process of logistics green packaging from multiple perspectives, such as original packaging, reduction of packaging materials and promotion of reusable packaging. As of 2022, the cumulative number of JD Logistics reusable packaging has exceeded 220 million.

Reusable cooler boxes and reusable Green Stream Box are two types of 2C reusable packaging for regular use of JD Logistics. Relying on JD Logistics' forward and reverse integrated logistics network, the reusable packaging is recycled at the end and returned to logistics parks or warehouses for repeated use.

In 2017, JD Logistics initiated the green supply chain project, "Green Stream Initiative", in collaboration with nine world's top 500 brands, aiming to explore low-carbon and eco-friendly, energy-saving and consumption-reducing practices in packaging, warehousing, transportation, and other aspects of the supply chain. As of 2022, we have worked with partners to carry out public welfare activities such as recycling boxes, old clothes, toys and books in over 100 cities of China. Additionally, we launched the "5th Anniversary of Green Stream Initiative", through public welfare activities such as "Ten Cities Joint Run, All Flow to Green Stream", "Public Welfare Plogging Environmental Protection Activities", "Boxes as Pet Homes", "Super Box" to promote the environmental protection concept of the "Green Stream Initiative" and attract more public participation in environmental public welfare.



reusable packaging exceeded

220 million

Reusable Cooler Boxes



JD Logistics' reusable cooler boxes is the earliest pilot in China to apply the 2C reusable packaging model, and is also one of the most successful reusable packaging cases in China. The reusable cooler box is made of special insulation material VIP vacuum plate and canvas material, combined with reusable ice packs, replacing the traditional EPS white foam box and disposable ice pack. The reusable cooler box is used in the B2C fresh produce of JD Logistics, and is currently being put into large-scale use in 18 cities, with 700,000 normalized launches, which has been put in more than 200 million times and reduced the use of foam boxes by 200 million.

Reusable Green Stream Box



Recyclable Green Stream Box is made of PP hollow board material, adopts the second-generation stackable structure, eliminates the use of disposable seals or tape, and only relies on logistics sheets to achieve sealing, convenient operation and easy stacking storage. In case the Green Stream Box is damaged, it is unified recycled by the manufacturer, and the plates are remade into boxes after fragmentation. At present, 200,000 circulating green stream box have been put into regular use in 30 cities, and a total of 20 million times have been put into operation.

Exploration of New Eco-friendly Packaging Material



JD Logistics successfully implemented the use of biodegradable packaging bags made of PBAT²⁸ and PLA²⁹ in Hainan and Beijing in 2022, which ensures compost degradation of the bags. In addition, the company has also carried out pilot experiments on all-paper express packaging bags and ink-free express envelopes, aiming to promote technological innovation towards plastic reduction and restriction, ultimately contributing towards achieving zero packaging waste.

In 2022, reported by JD Logistics and other 6 enterprises to the State Post Bureau, the National Development and Reform Commission, and the Ministry of Commerce, the *Pilot Work Plan for the Large-scale Application of Reusable Logistics Packaging* was officially approved. As a key enterprise participating in the pilot program among the first batch nationwide, JD Logistics actively promoted the pilot project work of reusable logistics packaging, combined with the actual situation of the e-commerce express industry, comprehensively expanded the scale of recyclable express packaging application, firmly established the awareness of green development, and thoroughly comb through the concept of resource saving and intensive recycling.

Case study Proposed the industry's first Delivered with Original Package certification

After the first concept of original packaging was proposed and promoted in the industry in by JD Logistics, June 5th, 2022 (the 5th anniversary of the Green Stream Initiative), JD Logistics proposed the industry's first Delivered with Original Package certification, and worked with a range of partners to release a new green packaging goal: more than 80% of the products sold in e-commerce channels support original packaging delivery by 2030. Over the past five years, JD Logistics has collaborated with upstream and downstream partners to implement the eco-friendly packaging model of original packaging. Tens of thousands of commodity SKUs³⁰ have been shipped directly from the factory in original packaging, which is expected to drive the industry to reduce disposable packaging by 10 billion, equivalent to saving approximately 20 million trees from being cut down.



JD Logistics Released Delivered with Original Package certification

Case study Reusable crates of Deppon

This year, Deppon purchased the reusable crate with the top cover and bottom pallet of the crate made of HDPE material, and the surrounding panels made of PP hollow board. It can be folded when empty, and the top load capacity can reach over 1 ton. The material is non-toxic, high-performance, durable, foldable and space-saving, easy to serve and relatively lightweight, allowing for maximum recycling.

The protective effect against damage of the container is close to zero, supporting up to 1,000 cycles of use. It is mainly used in fragile industries such as daily necessities and medicine. While promoting green recycling, it maximally guarantees the safety of goods and actively responds to the green environmental protection concept of the national express delivery industry.



Introduction to Deppon's reusable crates

JD Logistics actively promoted the pilot work of reusable packaging, aiming to establishing a replicable, scalable and sustainable reusable packaging application model. In the future, pilot work will continue to be carried out in multiple directions, such as standardization of reusable packaging, multi-scenario application, and promoting the participation of consumers and social resources. It is expected that JD Logistics will deploy a total of 2 million units of reusable packaging across the country by the end of 2023.

²⁸ PBAT is a thermoplastic biodegradable plastic that is a copolymer of butylene adipate and butylene terephthalate.

²⁹ PLA, referred to as polylactic acid, is a kind of polymer polymerized by the polymerization of L-lactic acid, a fermentation product of microorganisms.

³⁰ SKU, namely Stock Keeping Unit, is the unit of measurement of e-commerce inventory into the factory.

04

Promoting Industrial Development and Creating Sustainable Social Values, Elevating Towards Real Economy

From real economy to the society, JD Logistics is committed to creating sustainable value for real economy and broader society group through reliable supply chain services. We leverage our integrated supply chain capabilities to practice the responsibilities of a new type of entity enterprise, while actively responding to national priorities, such as the employment priority and rural revitalization strategies. We focus on promoting high-quality employment opportunities for workers, comprehensive protection of employee rights and interests, supporting for all-round talent development, and contributing to the development of local communities and industries, which reflect our commitment to sustainability. By working closely with stakeholders, we aim to create long-term value and deliver our ESG commitments.



Stable Employment and Talent Development

Employment has a vital bearing on the people's livelihood. JD Logistics actively implements the key priorities of stabilizing and expanding employment as outlined in the government work report. JD Logistics supports the development of the real economy, especially by creating a significant number of employment opportunities for front-line employees. In addition, JD Logistics attaches great importance to every talent's growth, effectively improves the quality of employment, and achieves the sustainable development of talents through the inspiration of corporate culture and comprehensive training system.



■ Protection of Labor Rights and Interests

JD Logistics strictly abides by laws and regulations that have a significant impact on us relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, other benefits and welfare, and the prevention of child and forced labor, such as the *Labor Law of the People's Republic of China*, *Labor Contract Law of the People's Republic of China*, *Employment Promotion Law of the People's Republic of China*, *Law of the People's Republic of China on the Protection of Women's Rights and Interests*, *Special Rules on the Labor Protection of Female Employee*, *Law of the People's Republic of China on the Protection of Disabled Persons*, *Regulation on Paid Annual Leave for Employee* and *Trade Union Law of the People's Republic of China*. We abide by the spirit of relevant international human rights instruments, including the Universal Declaration of Human Rights and the international labor conventions ratified by the national government of the People's Republic of China, actively respond to the normative requirements of the Guiding Opinions on Protecting the Labor Rights and Interests of Workers Employed in New Forms, and resolutely oppose the occurrence of child labor and forced labor. JD Logistics adheres to the principles of openness, fairness, impartiality and equal recruitment, signs labor contracts in accordance with the law, forbids any forms of discrimination, treats employees of different countries, nationalities, genders, religious beliefs and cultural backgrounds equally, actively provides employment opportunities for the disabled groups, guarantees the rights of female employees, ensures the men and women employee to enjoy the equal pay for equal work, strictly implements the maternity leave regulations for female employees, and prohibits the use of child labor and forced labor.

We are committed to promoting sustainable development by adhering to internal regulations such as the *JD Logistics Employee Handbook* and *JD Logistics Collective Contract*, which provides clear guidance on employment conditions, the reporting process, and holiday entitlements. We strictly prohibit the employment of individuals under the age of 16 and the use of forced labor. In an effort to safeguard the rights of female employees, we have implemented labor protection measures for women, and our labor contracts now include provisions to protect female employees during menstruation, pregnancy, childbirth, and breastfeeding. In addition, the *JD Logistics Collective Contract* outlines specific provisions related to the practical rights and interests of our front-line employees, such as labor remuneration, labor safety, and welfare benefits.

Based on the front-line operation scenarios, JD Logistics has set up a combination of online and offline employee communication channels. We listen to employees' voices, solve employee problems, and protect employees' rights and interests in the first time using employee forums, big-eat mailboxes, and 400 employee service hotlines.

In November 2022, with the joint promotion and three-level guidance of the All-China Federation of Trade Unions, the Beijing Municipal Federation of Trade Unions and the Economic and Technological Development Zone Federation of Trade Unions, JD Logistics actively participated in the Second Session of the First Employee Representative Conference of JD Group. During the conference, extensive feedback was solicited from all employees regarding rules and regulations related to their interests, and revisions and improvements were made in accordance with the opinions and suggestions received. This ongoing process ensures the protection of the labor rights and interests of the newly employed group.

■ Leading Corporate Culture

Corporate culture empowers high-quality development. JD Logistics is committed to uniting employees with a strong corporate culture and bringing a continuous sense of value and purpose to their work and life. We adhere to the corporate values of "Customers First, Integrity, Collaboration, Gratitude, Dedication, and Ownership", review the development process of the enterprise with employees through the study of *JD's domestic discipline*, enhance employees' sense of belonging to the enterprise, and create a closer and harmonious employee relationship.

Case Study ▶ Warming up the new employment group, the integration of "union, station and home" has achieved fruitful results

In order to thoroughly implement the important instructions of the General Secretary and the CPC Central Committee on safeguarding the rights and interests of couriers, as well as to fully respond to the requirements of the All-China Federation of Trade Unions and the China National Defense Posts and Telecommunications Union on strengthening in care for new employment groups such as couriers. In 2022, JD Logistics continued to promote the integration of "union, station and home" in most delivery stations in Beijing.

The three functions of "union, station and home" are integrated as a whole, combining the functions of employee study, staff activity and staff management. Leveraging this physical presence, JD Logistics has actively initiated activities such as front-line personnel study, staff training, union member development,

reception and research, skills competitions, etc. By the end of 2022, a total of 98 express delivery stations functioning as "union, station and home" had been successfully established, and the union membership rate of tens of thousands of express delivery employees in Beijing reached 100%. With the support of the integrated platform of "union, station and home", a series of employee care and condolence activities were carried out, enabling more front-line personnel to feel the care and warmth from corporate leadership, organizations at all levels, and the union. The sense of achievement, happiness, and security of couriers and other front-line personnel has been enhanced, which has further strengthened their confidence and determination to create, serve and work together for a better life.

JD Logistics attaches great importance to employee care and retention. 2022 is the 7th year that JD Logistics has established the "519 Veteran Employee Day" and the "428 Front-line Employee Day". By the end of the Reporting Period, JD Logistics had 38,699 five-year veteran employees (employed by JD Logistics for over 5 years but less than 10 years), 4,314 ten-year veteran employees (employed by JD Logistics for over 10 years). 277,502 employees were covered by the "428 Front-line Employee Day", in 2022 including various employee groups such as couriers, sorters, packers, drivers, customer service, and maintenance staff.

Under the inspiration of JD Logistics' corporate culture, JD Logistics' employees have won many awards and become the best spokespersons for corporate responsibility.

JD Logistics had

38,699

five-year veteran employees

5 years

4,314

10-year veteran employees

10 years

Responsible staff, award winning

Song Xuewen,
JD Express Courier

Winner of the National May 1 Labor Medal, the honorary title of "Most Beautiful Courier", the honorary title of "National Model Worker", and the title of "National Excellent Communist Party Member". As a representative of the newly employed group, he participated in the 20th CPC National Congress in 2022.



Qin Haijun,
Driver of Xindu transmission station, Sichuan road short-haul transport capacity group

Member of the Blue Sky Rescue Team and the Longcaogou Mountain Flood Rescue Team in Longmenshan Town, Pengzhou City, Sichuan Province.

Ren Baoqiang,
Shanghai Fengxian Area Courier

Winner of the title of "2022 Shanghai's Most Beautiful Courier" for running 40 km round trip to purchase milk powder for customers across the region during the Shanghai pandemic period.

Luan Yushuai,
Operation Supportive staff of Beijing Haidian

Winner of the "Capital Labor Medal", torchbearer of the 2022 Beijing Winter Olympics and Paralympics, non-professional marathon runner, known as the "fastest front-line courier".

Jin Lijun,
Driver and coach of Deppon North China Team Safety Division

He has driven more than 3 million kilometers safely in 15 years and became the first employee of Deppon to win the "National May Day Labor Medal" in 2022.

Case study ▶ Express Couriers of JD Logistics conveys the spirit of a new era of workers by poetry performance

On April 22nd, 2022, at the launch ceremony of the 6th "Reading Classic Books and Striving to be Craftsmen of the Times" on the occasion of National Congress and Building a New Era" National Staff Theme Reading Activity organized by the All-China Federation of Trade Unions, Zhao Hongchao, an express courier of JD Logistics, as a representative of the express delivery industry, read the poem *Sorting Female Workers* written by Wang Erdong, a young poet and employee of JD Logistics. The event highlighted the positive spirit of the couriers of JD Logistics and provided spiritual nourishment to enrich the spiritual and cultural life of couriers.



All-round Development of Talent

Talent development is the source of strength for corporate development. JD Logistics encourages employees to leverage their strengths and provides diversified talent training for employees with different positions, work experience, and needs in three aspects: building general and professional skills, cultivating leadership skills for managers, and creating a knowledge management system for JD Logistics. In 2022, we developed nearly 4,000 training courses for talent development and provided nearly a thousand training sessions for employees at different levels, including onboarding, reserve, new hires, and in-service training, through various forms such as online and offline.

JD Logistics has launched frontline leadership training

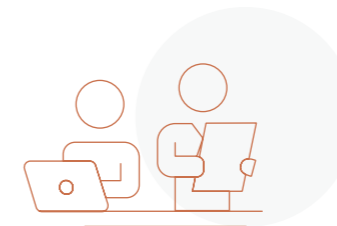
in various regions and multiple business lines. Based on the Starlight Plan-Front-line Manager Training Program, we have carried out systematic talent development, covering three growth stages: reserve, new hires, and in-service training. In 2022, we conducted 14 specialized training and sharing sessions, with the highest number of participants reaching 1,261 in a single session. In addition, we have strengthened the development of training resources in the project, integrating front-line experiences to form a comprehensive business manual for four major business lines: warehousing, picking and sorting, pick up and delivery and transportation. Currently, we have developed a total of 236 sets of courses according to the three dimensions of specialty, generalization, and management.

6,218

The number of reserve front-line managers nationwide

21%

Promotion rate



1,750

Number of new appointments

96%

Reserve appointment rate

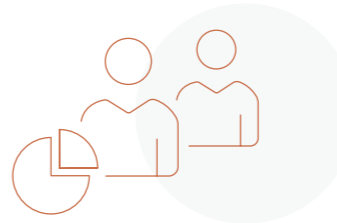


100%

New appointment completion rate

95%

New appointment competency rate



10,586

Number of people covered by in-service training

98%

In-service training coverage



Caring for Employees' Well-Being

JD Logistics firmly believes that employees are the internal driving force for the company's development, and front-line employees are the backbone of the real economy. We adhere to the principle of "people-oriented and caring for employees" and provide comprehensive protection for all levels of work groups.

Occupational Health and Safety

The four-in-one principle of "caring for work, life, health and development" is a principle that JD Logistics has always adhered to. We have developed a number of employee protection measures and occupational regulation systems based on the assessment of the different risks faced by various groups of employees from different logistics business scenarios, to fully protect the health and safety of employees.

Combining Logistics Business Scenarios to Protect the Health and Safety of Different Groups

Safety of Couriers and Drivers

We identify potential safety risks in logistics transportation and terminal distribution scenarios and develop appropriate measures to protect employees.

Code of conduct for safety systems	Equipment protection	Safety awareness and skills development
<p>Launch of the <i>Safety Management Standard for Operating Vehicles</i>, <i>Terminal Safety Management Standard</i> and other regulations require couriers and drivers to hold driving licenses issued by the traffic management department, to conduct safety checks before leaving the vehicle, to confirm the fault-free of vehicles before driving, to strictly abide by traffic regulations during the journey, to forbid running red lights and exceeding speed limitation. We regularly hold safety meetings for all staff to establish a transport risk identification and prevention mechanism, analyze safety risk factors such as drivers, motor vehicles, roads, environment and climate, and formulate preventive measures.</p>	<p>All couriers are equipped with safety helmets, reflective uniforms and other protective equipment. We equip all logistics vehicles with the Advanced Driver Assistance System (ADAS). Meanwhile, there is a dedicated safety management team providing timely warning and correction of bad driving behavior to prevent traffic accidents to the greatest extent. The installation rate of ADAS equipment in our own vehicles has reached 100%.</p>	<p>We insist on daily safety tips and accident prevention lessons before work and enhance drivers' safe driving skills through special training and certification on defensive driving. In response to the complex road conditions at the terminal, special activities are carried out for the Operation Safety Month, and the safety awareness of couriers is constantly enhanced through daily quizzes and safety breakthrough learning to prevent and deal with traffic accidents.</p>



Safety of warehousing personnel

We have developed a number of measures to protect the health and safety of warehousing personnel in storage scenarios where there are many potential risks such as falling objects from height and mechanical collisions.

Production equipment protection

We implement a dual prevention mechanism for safety production, risk identification of work sites, formulation of countermeasures and management measures, and posting safety warning signs at prominent locations to remind employees of dangerous areas. A full set of safety equipment is provided for the use of forklifts and conveyor belts, the separation of pedestrian and vehicle traffic in the logistics parks, and vehicle loading and unloading operations, to maximum ensure employees' safety.

Safety awareness and skills development


Each operation unit insists on holding daily safety morning meetings to promote safety precautions and insists on conducting monthly safety special training and quarterly emergency drills for all staff. Each operation unit organizes various forms of safety education activities on a regular basis to enhance the safety awareness and skills of all staff.

Personal safety protection

We provide high-visibility and reflective workwear to our employees and equip operational staff in various job positions with corresponding personal protective equipment, ensuring the protection of employee health and safety.

Management measures for carrier driver

JD Logistics also concerns about the safety of carriers' drivers and has formulated management measures related to safety operations, such as the *Road Transport Carrier Operation Management Measures* and *Carrier Operation Training Standards*. In the process of communication, interviews and training with carriers, regional safety management analysis is identified as one of the important topics. We hold monthly safety analysis meetings for the heads of carriers with more safety abnormalities.



All-round Health Care for Employees

JD Logistics provides all employees with an annual health check-up, offering different health check-up packages based on employee age and job position, to help employees identify potential health problems and receive timely medical reminders. In 2022, the health check-up coverage rate for JD Logistics employees reached 100%.

JD Logistics also attach great importance to our employees' mental health. We have established an

internal online professional psychological counselling platform and opened an offline counselling room simultaneously. We have engaged third-party professional psychological counselling institutions to provide psychological counselling to JD Logistics employees. During the pandemic period, we provided multi-dimensional psychological assistance to our employees in Shanghai by providing communication and counselling service to help manage employees' emotions.

Safety Incident Reporting Process and Handling Norms

JD Logistics strictly abides by relevant laws and regulations that have a significant impact on us relating to providing a safe working environment and protecting employees from occupational hazards, such as the *Work Safety Law of the People's Republic of China*, *Fire Protection Law of the People's Republic of China*, *Special Equipment Safety Law of the People's Republic of China*, *Provisions on the Administration of Fire Control Safety of State Organs, Organizations, Enterprises and Institutions*, and has developed the *JD Logistics Safety Management Manual* and *JD Logistics Production Safety Accident Management Code*. By defining and classifying accidents, improving the timely reporting mechanism, and promptly responding to and handling accident scenes, we have minimized the impact on customer experience, employee safety, and property damage caused by accidents.

JD Logistics regularly produces reports on occupational injuries and fatalities, including the overall number of incidents, the determination of occupational injuries and fatalities, the types of incidents, analysis of key positions where occupational injuries and fatalities occur, and trends. Based on this, we conduct a comprehensive analysis of the main causes of occupational injuries and fatalities, collaborate with business departments and safety and loss prevention departments to propose management recommendations and improvement measures, report to the JD Logistics Safety Production Management Committee, and supervise and prompt responsible departments.

Welfare & Benefits

JD Logistics continuously improves its internal remuneration and welfare system, and establishes various incentive mechanisms to match the responsibilities and contributions of employees, achieving a reasonable distribution of remuneration, and motivating employees to create excellence and efficiency.

JD Logistics strictly complies with the laws and regulations in China regarding employee labor contracts, salaries, and benefits, and has established a comprehensive set of internal policies and systems to protect the rights and interests of its employees. In 2022, JD Logistics reviewed and updated a number of employee welfare policies to provide employees with a rich and diverse workplace life. During the Reporting Period, JD Logistics spent RMB 44.6 billion on front-line employee benefits expenses, accounting for 32.5% of the total revenue. Over the past three years, JD Logistics has spent RMB 106.5 billion on employee benefits expenses for front-line employees.

RMB **44.6** billion

Front-line employee benefits expenses in 2022

RMB **106.5** billion

Front-line employee benefits expenses in 2020-2022

Remuneration System

JD Logistics is committed to providing its employees with competitive compensation and comprehensive benefits, continuously improving its compensation and incentive policies, and implementing relevant national requirements to improve the income and rights protection of employees. JD Logistics plans to launch a two-year salary increase plan starting from July 2021. As of July 2022, the annual salary system for employees has been increased from 14 months to 15.5 months, and it is expected to be increased to 16 months in July 2023.

In the management and professional staff remuneration model, JD Logistics follows a "contributor-oriented" value return mechanism and provides employees with competitive compensation, while strengthening a compound incentive model mainly based on performance incentives. For the remuneration model of front-line employees, JD Logistics strengthens the efficiency-based remuneration model based on industry characteristics and personnel attributes, with a focus on piecework wages to encourage employees to get more pay for more work done.

Welfare and Allowances

In terms of welfare subsidies, JD Logistics strictly complies with the relevant provisions of the *Labor Law of the People's Republic of China* and pays basic endowment insurance, basic medical insurance, unemployment insurance, work injury insurance, maternity insurance, and housing provident fund for full-time employees. Meanwhile, based on the employees' job positions and service time, we provide a range of caring measures, including seniority salary, meal allowance, communication allowance, transportation allowance, cold & heat protection allowance, night shift allowance, etc.

In addition, JD Logistics provides front-line employees with additional protections. In 2022, we provided supplementary accident insurance and critical illness insurance for employees in distribution, warehousing, and transportation positions. What's more, we have created an employee relief fund to assist families in need and provides interest-free loans to eligible

families for home purchases. During major festivals, we also offer thoughtful and exclusive benefits to our front-line personnel.

For female employees, we customized medical check-up services based on age groups, as well as specialized care during pregnancy and childbirth. This includes the provision of a mother and baby room and other exclusive workplace convenience services. Moreover, we have established a childcare center at our headquarters and a kindergarten program in partnership with a renowned kindergarten brand, benefiting thousands of employee families. Additionally, we have designated special parking spaces and work cords for pregnant women. By wearing the special work cords, expectant mothers can enjoy priority access to employee town halls, shuttle bus love seats, restaurants, supermarkets, parking spaces, and other amenities.

Vacation System for Employees

JD Logistics strictly abides by relevant national and local laws and regulations, and provides reasonable vacations for employees, taking into account the actual situation of the company, to protect the rights and interests of employees and help them balance work and life. The main types of vacations provided by JD Logistics include statutory holidays, sick leave, annual leave, marriage leave, maternity examination leave, maternity leave, nursing leave, breastfeeding leave, funeral leave, work-related injury leave, personal leave, parental leave, and other vacations stipulated by the Company. JD Logistics also provides overtime pay to employees for overtime work in accordance with different working hours rules.



Supporting Rural Revitalization Strategy via Logistics Network

The key to rural revitalization lies in industrial revitalization, and the improvement of the rural industry and supply chain is fundamental for promoting rural revitalization. JD Logistics actively responds to the national strategy of rural revitalization and fully leverages its own advantages by strategically positioning itself in digital empowerment, improving infrastructure, and talent development. It systematically promotes rural revitalization, continuously improves rural industrial development, builds a rural logistics system, increases rural entrepreneurship and innovation, and enhances new driving forces for rural industrial development.

We adhere to the principle of using logistics to drive commerce. With the support of the integrated supply chain, many traditional industries and businesses have gained new vitality, such as noodles and white wines of Shaanxi Province, wolfberries of Ningxia Province, beef and mutton of Qinghai Province, and melons and fruits of Xinjiang Province. JD Logistics, with its solid infrastructure and innovative digital technology capabilities, has provided specialized integrated supply chain solutions for over 1,000 agricultural production regions and industrial zones across the country.

Case study ▶ Tibet autonomous region integrated demonstration of e-commerce into rural areas

The prosperous development of the Tibet Autonomous Region holds significant importance in China's modernization process. JD Logistics actively responds to the rural revitalization strategy and regards Tibet as an important base for promoting modern logistics and e-commerce systems. We fully leverage the pivotal role of logistics in promoting the development of the real economy and social progress, and create new driving forces for the prosperous development of Tibet.

Building a modern distribution system

JD Logistics continues to make every effort to promote the development of distribution infrastructure in Tibet, facilitating the circulation of local goods and promoting the integration of external resources and the export of Tibetan products. In 2022, JD Logistics completed the construction of one autonomous region-level public logistics warehousing and distribution centre in Lhasa, two prefecture-level public logistics warehousing and distribution centres in Changdu and Shannan, and eight logistics distribution sites in Tibet. This has resulted in a total of nearly 60,000 items in stock and a dynamic inventory of 450,000 pieces. Especially during the pandemic period, the public logistics warehousing and distribution centres played an important role in

safeguarding livelihood necessities and enhancing the resilience of the supply chain in the Tibetan region.

Warehouse is the skeleton, while transportation is the bloodline. JD Logistics continues to invest in various types of vehicles in key areas of Tibet to achieve short, medium and long haul capacity coverage in order to strengthen the transportation capacity between cities in Tibet, while improving the quality of end-delivery services and customer satisfaction. By the end of 2022, JD Logistics has invested in 186 vehicles of various types in Tibet, including 42 feeder and 144 terminal vehicles.



Last-mile delivery vehicles

Smart logistics system is the nerve centre of modern logistics. JD Logistics has created a series of digital systems for Tibet, including order processing system, warehousing management system, cloud sorting management system, distribution management system, order settlement system, customer service management system and visualization system. This aims to empower the efficient, intelligent and intensive development of logistics business in Tibet, which has been successfully applied to the logistics services of healthy low-fluoride tea in Tibet Autonomous Region.

Building an e-commerce system

JD Logistics has supported the construction of the agricultural product supply chain system in Tibet, strengthening the upstream capabilities of agricultural products. We continuously improved the e-commerce system for Tibetan specialty products, from e-commerce quality management standards to the construction of IoT bases and product branding. JD Logistics focuses on the main agricultural industry clusters of ophiocordyceps sinensis and barley products, yak meat, and other major agricultural products in Tibet. We have established 29 standards and completed the installation of JD Farm's intelligent monitoring stations in six major growing bases, achieving traceability for ophiocordyceps sinensis products. We have also completed the design of the brand identification for ophiocordyceps sinensis products in Naqu and initiated the patent application process.

Promoting local employment and national unity

In 2022, JD Logistics continued to expand its local employment scale, with the number of employees in Tibet increasing to 380, with an increase of 25% compared to 2021, with ethnic minority employees accounting for 36% of the total. Meanwhile, JD Logistics has also conducted e-commerce systematized training, actively promoting new employment and entrepreneurship in the local area, with a total of over 20,100 people trained and a job conversion rate exceeding 10% of the trained individuals.

Publicizing the Tibetan story

JD Logistics actively leverages its platform advantages with partners to enhance the social influence of e-commerce logistics and characteristic products in Tibet. In 2022, JD Logistics participated in the production and broadcasting of the documentary Journey, the only logistics industry and private enterprise to participate in this program produced by the China Media Group. The documentary recorded JD Logistics' completion of the construction of Tibet's e-commerce logistics network, the tricholoma matsutake Agriculture Digital Base in Gongbujiangda County, the Gastrodia Elata Artificial Planting Digital Base in Bomi County, and the marketing system of Yigong Organic Tea Factory, in collaboration with the Autonomous Region Commerce Department and various levels of government guidance on high-tech logistics technology. The documentary highlights the profound theme of "unprecedented difficulties, remarkable achievements, and united struggle for the future." The documentary premiered on September 27, 2022, on CCTV Comprehensive Channel ("CCTV 1") and was also launched on CCTV's online platforms, generating positive and extensive social impact.



The Journey documentary broadcast on CCTV 1

Developing Rural Industries and Digitally Empowering Rural Business

Driven by technology, digitalization and intelligence have greatly helped upgrade the efficiency and quality of agricultural products on the market. JD Logistics has taken steps to build a modern agricultural product distribution system by focusing on creating new logistics infrastructure, developing digital agriculture, and building digital rural areas. This has helped to promote the positive circulation of high-quality agricultural products. JD Logistics continuously integrates intelligent logistics technologies to support farmers to increase their income and become prosperous.

Case study ▶ JD Logistics builds a smart farm for Gan'an oranges

Under the "Huichang's unique digital village construction" project by the county government of Huichang, Ganzhou City, Jiangxi Province, JD Logistics has established the JD farms demonstration park project in Xiaomi Country of Huichang. Through the IoT and intelligent managing system, we have achieved digital management of the base. On the JD Farm's "Grain Rain" system, farmers can access data such as insect infestations, soil moisture, and other information. They can use the system for data analysis and early warning tips, improving the orchard management and reducing production costs. Relying on the data traceability system, consumers can scan the QR code to oversee the production procedure of oranges, promoting transparency and visualization of data during the process of orange planting.

Case study ▶ JD's first Agricultural Science and Technology Demonstration Park in Suqian, helping rural revitalization to move forward with "digital" power

The digitalization of agriculture has become an essential path for rural development and revitalization. In 2022, JD's first Agricultural Science and Technology Demonstration Park was officially completed in Suyu District, Suqian City, Jiangsu Province. As the first demonstration project of JD national rural revitalization demonstration base, JD Agricultural Science and Technology Demonstration Park is jointly constructed and operated by Yu Nong, Greenport and JD, relying on JD's technological advantages in modern digitalization, 5G and artificial intelligence to create a whole process of modernized facility agriculture that integrates "seedling breeding, planting, processing and sales". It will become a model base of "technology-led, linked sharing, combined breeding and production, leisure and tourism", which is of positive demonstration significance for building a new model of rural revitalization, generating new momentum for industrial development and creating a new model of agricultural tourism integration.

Case study ▶ Deppon combines multiple transportation methods to help Baifeng peaches of Lanzhou upstreaming for sale

In August 2022, the impact of the pandemic in Lanzhou caused difficulties for upstreaming of Baifeng peaches. Due to the large number of shipping destinations and the sudden reduction of flights during the pandemic, Deppon adopted a comprehensive transportation channels. They utilized data analysis to assess the real-time efficiency of various transportation methods and focused on multiple perspectives, such as internal transit processes, market communication, and external route arrangements, to provide a one-stop service for goods of different destinations. To ensure timely delivery of white peaches to the city consumers, Deppon adopted air-rail combined transportation, so as to ensure timely delivery of Baifeng peaches from field to city consumers.



Deppon couriers help Baifeng peaches upstreaming

Implementing Rural Construction and Strengthening Logistics Infrastructure

JD Logistics is using modern agriculture and logistics supply chain infrastructure as the basis for its integrated supply chain service capabilities. As a result, the company has developed the "JD Logistics Helps Rural Revitalization Model", which is based on localized and efficient operations, and promotes the construction of infrastructure for rural logistics systems.

Case study ▶ JD Logistics signed a contract with Baixiang, Hebei, using the "1+2+N" model to promote integration of supply chain and three networks

In August 2022, relying on the "JD Farm Baixiang Honey Potato Integrated Supply Chain Project", JD Logistics and Hebei Baixiang Government signed the "JD Logistics (Baixiang) Agricultural Products Intelligent Origin Open Warehouse Project" and the "JD Farm Mack Six Zero Base Project" to realize the "1+2+N" model, which includes one open warehouse and two demonstration bases of special industries of JD Farm.

In the future, JD Logistics and Hebei Baixiang Government plan to collaborate on building cold chain logistics infrastructure and smart origin warehouses. These facilities will provide services such as cleaning, processing, pre-cooling, drying, grading and packaging, as well as warehousing and distribution for agricultural products. By addressing the challenge of "first-mile" transportation for agricultural products sold to the outside world, the initiative aims to promote farmers' income and the integrated development of the first, second, and third industries in Baixiang. JD Logistics is committed to contributing to the development of rural revitalization and the high-quality development of the regional economy.

Case study ▶ Innovative lychee "origin pre-processing + one piece dispatch" model

In May 2022, JD Logistics launched the "origin pre-processing + one piece dispatch" model in Guangzhou and Maoming to support farmers and promote the freshness of lychees. JD Logistics has built a large number of origin warehouses in Guangdong and developed a series of small stations in the field that offer pre-cooling, storage and preservation, processing and packaging, live e-commerce, and market distribution services. By bringing the supply chain closer to the origin, the model aims to shorten the time required to collect goods and create better conditions for faster lychee delivery.

Promoting Rural Employment and Cultivating Modern Supply Chain Talents

Based on the processes of industrial revitalization and logistics layout, JD Logistics has not only fully addressed local employment needs and continuously developed modern supply chain talent, but has also provided assistance to local logistics development through talent transfer. JD Logistics plays a crucial role in providing stable employment and creating new opportunities for diverse and localized employment. This also allows migrant workers who choose to return to their hometowns to increase their income locally.

Case study ▶ JD Logistics released digital rural talent program

Through its talent training mechanism, JD Logistics has established new agricultural talent training and education bases in several industrial zones. These bases are designed to train local management talents in the digital era, in line with the "teach people to fish" approach. In May 2022, JD Logistics Education officially launched the Digital Countryside Talent Program and signed cooperation agreements with seven vocational colleges and universities. By leveraging rural e-commerce resources, digital technology resources, and brand operation resources, JD Logistics Education works

with its partners to build a digital rural talent industry-education integration base and train high-quality digital rural talents.

JD Logistics Education will provide five services, including technical skill talent training, college teacher level improvement, internship employment and entrepreneurship incubation, digital rural talent certification, and high-quality product intellectual property mining. These services aim to foster and train more rural e-commerce talents and new technical professional farmers.

Social Contribution for Joint Progress

JD Logistics firmly believes that only by shouldering its corporate social responsibility can it truly achieve the harmonious integration of business values and social values. In 2022, JD Logistics continued to invest in public welfare activities, focusing on hot topics such as green recycling and socially vulnerable groups. JD Logistics conducted a diverse range of social welfare projects and volunteer service activities, and actively collaborated with more forces to exert more influence and continuously expand the depth and breadth of public welfare undertakings, to jointly give back to society.

Case study ▶ "Boxes as Pet Homes"

As an important part of the "Green Stream Initiative", JD Logistics and JD Pet jointly launched the "Boxes for Pet Homes" special public welfare activities, constantly trying to combine low-carbon environmental protection with civilized pet ownership. On December 1, JD Logistics distributed 100,000 express boxes that can be transformed into pet nests in East China and delivered them to pet owners. During the campaign period, the "Boxes for Pet Homes" also launched a call for public welfare activities, inviting users to use discarded express boxes for secondary transformation into pet nests and drifting nationwide we advocated the concept of green and sustainable development to all sectors of society.



A photo of the "Boxes for Pet Homes" event

Case study ▶ "Super Box"

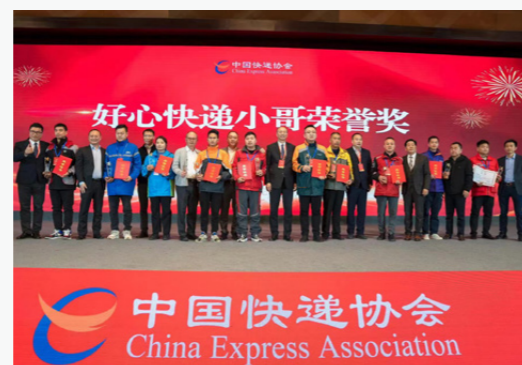
To better promote green and sustainable consumption practices, the "Super Box" project toured five cities, including Hangzhou, Shanghai, and Nanjing, from October to December 2022. The project aimed to encourage consumers of all ages to reuse their old items, such as delivery boxes, through interactive environmental activities. Consumers who brought their reusable boxes to designated stores for recycling and complete the corresponding registration process, received a complimentary cup of environmentally friendly milk tea of Cha Bai Dao. The event contributed to environmental protection by providing tens of thousands of cups of milk tea and issuing more than two million grams of green carbon reduction energy. All express boxes used during the project were reused in last-mile delivery stations around JD Logistics' peripheral branches.



The picture of Super Box

Case study ▶ Couriers of JD Logistics won the "Goodwill Courier Boy Honor Award"

Peng Dongfang and five other employees, couriers of JD Logistics, were awarded the "Good Heart Courier Boy Honor Award" by the China Express Association in 2022. In the past four years, Peng Dongfang has been practicing couriers' service spirit and responsibility in his ordinary position. During the pandemic, he insisted on delivering the much-needed supplies for community residents in the cold wind and became the "most trusted person" of the community residents.



Peng Dongfang and five other employees were awarded the "Good Heart Courier Boy Honor Award" by China Express Association in 2022

Protecting the Vulnerable Groups

JD Logistics has always cared about front-line workers and service personnel from all walks of life, regarding social difficulties and disadvantaged groups as our key focus areas, and delivers warmth to thousands of households.

Case study ▶ "JD Logistics Cares for You and Delivers Love to Your Home"

In 2022, JD Logistics launched its fifth "JD Logistics Cares for You and Delivers Love to Your Home" Spring Festival public welfare campaign. The initiative collaborated with local government and JD supermarket brands to offer Chinese New Year lucky bags and two-way free courier services to individuals who stayed at work during the holiday period. Additionally, tens of thousands of free anti-pandemic bags were distributed to workers returning home at crowded locations, such as airports and railroad hubs.

Case study ▶ Summer Cool-off Public Welfare Activity

On July 22, 2022, JD Logistics jointly launched Summer Cool-off Public Welfare Activity in collaboration with Uni-President Green Tea, Labor Daily, JD Convenience Stores, and JD Home Appliance Offline Stores. The campaign aimed to provide summer relief to front-line workers who worked outdoors in high temperatures. Different types of outdoor workers who worked in high temperatures (JD Logistics couriers, medical staff, traffic police, sanitation workers, etc.) were visited and provided with relief, covering over 400,000 people.



Gifts of Summer Cool-off Public Welfare Activity

Case study ▶ The "Missing Child Document Cover" program

On September 9, 2022, Kuayue Express and the "Baby Come Home" platform jointly launched the "Missing Child Document Cover" Program. Kuayue Express printed missing children's information on the express delivery documents and leveraged its strong logistics capabilities and dissemination effect to spread missing children's information across the country. Kuayue Express aimed to assist in searching for missing children through logistics information channels, helping more families come to reunion.



Kuayue Express's "Miss Child Document Cover"

Feature 1

Integrated Supply Chain Guaranteeing Livelihood Necessities Transportation during Pandemic

For a nation to thrive, it is crucial to invest in the well-being and development of its people, as they form the foundation for its peace and prosperity. The COVID-19 pandemic in 2022 presented a major challenge for logistics operations across the country, as ensuring the smooth flow of goods became critical for pandemic prevention and control. JD Logistics leveraged its capabilities of integration of supply chain and three networks to innovate its supply chain service model, effectively stabilizing the industrial chain and supply chain, thereby opening up the "main artery" of logistics to ensure the supply of daily necessities for residents and ensuring timely delivery of essential goods, while facilitating smooth circulation. During the 2022 pandemic, JD Logistics actively engaged in relief efforts, ensuring the availability of essential goods and materials for communities across the country.

Resilient Supply Chain Network to Protect People's Livelihood

The COVID-19 pandemic caused severe shortages in various essential goods, putting the livelihoods of many communities at risk. In response, JD Logistics leveraged its resilient, integrated supply chain to promptly dispatch essential supplies such as food and medicine, ensuring the basic needs of the general public were met. By prioritizing the well-being of communities, JD Logistics demonstrated its commitment to responsible and sustainable supply chain practices, even in times of crisis.

Case study JD Logistics leveraged its strengths of integrated supply chain and cold chain to ensure the reliable delivery of essential materials nationwide

On April 5, 2022, in order to relieve the pressure of securing living materials for residents during the pandemic prevention and control period, JD Logistics cold chain logistics helped transport 10 tons of mutton prepared in coordination with the city of Karamay to Shanghai upon urgent call. The transport truck went from the origin to Karamay, loaded the cargo to Shanghai and then returned to Xi'an, covering a transportation distance of 10,000 kilometers.



Via **8** provinces and cities

Spanning more than **10,000** kilometers

10 tons of Xinjiang mutton to Baoshan of Shanghai

During the pandemic, JD Logistics and JD Health strictly complied with pandemic prevention measures in affected areas and actively promoted the "Medicine Help Registration Platform" service. More than 100,000 pieces of various medical supplies and pandemic prevention materials were transported to Shanghai through special vehicles. Additionally, JD Logistics provided assistance in the transportation and delivery of emergency drugs multiple times and collaborated with various sectors to ensure sufficient supply of medical materials during the pandemic.

JD Logistics responded to the pandemic crisis by swiftly providing emergency allocation nationwide on April 8th 2022. Over 80,000 essential maternal and infant supplies, such as infant milk powder, were delivered to Shanghai in specially designated vehicles. This swift and efficient action greatly alleviated the challenges faced by the vulnerable group of mothers and infants affected by the pandemic.



JD Logistics' medical supplies for Shanghai were assembled and ready

Emergency Assistance & Transportation Support

Since the outbreak of the pandemic, the logistics sector has faced numerous challenges due to community lockdowns and the quarantine of many couriers. Despite this, JD Logistics demonstrated its unwavering commitment to supporting pandemic areas by assembling JDs from multiple provinces. In April 2022, JD Logistics swiftly recruited 3,246 frontline employees, forming 14 logistics teams to assist Shanghai. These efforts ensured the smooth transportation of supplies and normal distribution in the city. Additionally, to alleviate the logistical standstill and express backlog in Beijing, JD Logistics urgently mobilized over 1,000 express delivery personnel from across the country on the afternoon of December 14th. These targeted reinforcements provided essential support for express delivery and other logistics operations in Beijing.



A photo of last orders of volunteering couriers in Shanghai from JD Logistics nationwide

Case study ▶ JD Logistics successfully replicated its "Jiuxianqiao Model" for maintaining supply during lockdowns in multiple locations across the country through sealed control areas.

Amidst the pandemic's pressures, the "last-mile" delivery has emerged as a critical node in safeguarding people's livelihoods. In response, JD Logistics proactively explored innovative service models for end-to-end eco-system. In Beijing, JD Logistics introduced the "Jiuxianqiao Model" in collaboration with local communities to ensure the smooth delivery of essential supplies, covering the "last 100 meters" through a combination of "short-range connection" and volunteer services. During the COVID-19 pandemic in 2022, "Jiuxianqiao Model" was successfully replicated in numerous communities across Beijing, and was implemented in other regions such as Jinan, Shandong Province, Qinghai, Xinjiang, and some other regions, to ensure the welfare of people.



Beijing Jianwai Steet Office presented a banner to the team of JD Logistics volunteers for their contributions during the lockdown period due to pandemic in Guanghuili Community of Beijing.

Technology-enabled, Safe and Efficient

JD Logistics offered intelligent technical support for pandemic prevention and control through the deployment of contactless preservation stations, contactless distribution courier vehicles, double-sided intelligent courier cabinets, among other solutions. These measures effectively eased personnel distribution pressure, minimized contact between personnel and goods, and ensured safe and secure pandemic prevention measures.

▶ **1,620** contactless community preservation stations

▶ More than **100** smart-courier-vehicles

Case study ▶ Automatic distribution wall system dramatically improved fresh product preservation capabilities

In recent years, the surge in online business for traditional fresh food supermarkets, influenced by various uncertainties such as the pandemic, has heightened the need for higher fulfillment capabilities to meet the specific demands of fresh products, which includes the risk of sorting errors and the requirement for fast delivery. In response, JD Logistics has deployed its latest self-researched and self-produced Automatic Distribution Wall System for its customer Seven Fresh Product Supermarkets, replacing the traditional manual sorting operations with automated sorting, thereby greatly enhancing the efficiency and effectiveness of the picking process. The system has improved peak volume handling capacity and overall production capacity for Seven Fresh Product Supermarkets, achieving a 200% increase in picking efficiency, a 40% reduction in operating costs, and a 99.99% accuracy rate. Furthermore, this initiative played a pivotal role in safeguarding the supply of vital goods during the pandemic, aligning with DHL's commitment to sustainable development. The Distribution Wall project team was also featured on the CCTV Finance Channel, garnering recognition and appreciation from professional media for its important role in ensuring the supply of essential goods during the pandemic.

200 %

increase in picking efficiency

40 %

reduction in operating costs

99.99 %

accuracy rate



Case study ▶ Leveraging digital traceability to strengthen pandemic prevention and protection

Following the normalized pandemic prevention and control situation, ensuring the safety and supervision of cold chain parks in the food industry was of utmost importance. With the aim of upgrading Shou Nong Food Group's cold chain park in terms of "platform, digitalization, and scale," JD Logistics successfully developed a full-chain supervision system solution that combined pandemic safety regulations and JD Logistics' cold chain park management capabilities.

The solution focused on human, vehicle, cargo, field, and warehouse management, and was built on a closed-loop park digital management system that incorporated unified planning and pandemic prevention measures, real-time monitoring and dispatching, and data analysis and problem diagnosis. This comprehensive approach not only met the requirements of pandemic prevention and control, but also enhanced business operation efficiency, and realized a comprehensive improvement of management efficiency by opening up the entire supply chain.

Feature 2

Digital and Intelligent Supply Chain Supporting Winter Sports Events

To address the logistics complexities of large-scale international winter sports events, JD Logistics began investing in event preparations capabilities since 2017, accumulating extensive experience in specialized event services. In 2022, through strategic deployment and coordination, JD Logistics delivered exceptional services that seamlessly integrated high efficiency, convenience, sustainability, and cutting-edge technology, in support of the 2022 international winter sports events.



Thank-you note from 2022 Large International Winter Sports Event Organizing Committee to JD Logistics

Customized Baggage Transportation for Service of Event Guarantee

As the logistics service provider for the 2022 international Winter Sports Events, JD Logistics not only provided transportation services for logistics vehicles, but also offered multi-faceted and comprehensive services, which ranged from logistics planning management to ground implementation for the professional main distribution centre and other designated venues. Given the massive volume of luggage and intricate transportation flow, JD Logistics assisted the Organizing Committee to provide customized luggage transportation services for the officials and athletes of each delegation, successfully transporting over 20,000 pieces of luggage, including approximately 4,000 pieces of over-regulated and overweight luggage. Following the event, the vehicles were restored to their original functions and repurposed to meet other logistics and transportation needs, contributing to resource conservation and recycling.

Logistics Technology to Help Precise pandemic Prevention

In 2022, the logistics operation for International Winter Sports Events held in Beijing presented numerous challenges, including multiple flow points, extensive coverage, and high volume. Against the backdrop of the COVID-19 pandemic, JD Logistics invested significantly in scientific and technological distribution products while ensuring the smooth logistics operations of these events. Over a dozen indoor and outdoor autonomous delivery vehicles, as well as more than twenty sets of double-sided intelligent distribution cabinets, were deployed at several venues, significantly mitigating the potential risk of pandemic transmission resulting from human-to-human contact during deliveries through unmanned delivery services.



The unmanned delivery vehicle of JD Logistics

JD Logistics has implemented sustainable practices in the warehouse operations by introducing intelligent warehouse management facilities. This helped automatic management and sorting of high-risk materials, thus reduced the chances of workers coming into contact with such materials. Additionally, JD Logistics customized the Master Delivery Schedule ("MDS") system service for managing imported materials in warehouses during the pandemic period. The customized MDS system service enabled JD Logistics to manage the material flow of the main logistics centre and more than 40 event venues in real-time, while also intelligently scheduled logistics vehicles entering the venues. Furthermore, JD Logistics achieved a technical breakthrough by implementing a paperless verification of MDS information and real-time transmission of vehicle positioning information, while also enabling dual authentication on mobile phones and web pages, which dynamically optimized the vehicle distribution path, leading to an improvement in vehicle operational efficiency. Such measures helped JD Logistics effectively cope with the pressure of pandemic prevention in the warehouse management of imported materials, and contribute to sustainable practices in logistics operations.

Recycling and Low-Carbon Energy

In accordance with the principles of "green, sharing, open, and clean" for the 2022 International Sports Events, JD Logistics established a green and intensive integrated supply chain system in partnership with the Organizing Committee. This system utilized JD Logistics' own green supply chain products and intelligent supply chain technology to enhance the efficiency and quality of the event's material supply and also achieve environmentally-friendly and sustainable logistics services.

During the Winter Sports Events, JD Logistics prioritized environmental sustainability by promoting green packaging and recycling. To achieve this, JD Logistics utilized recyclable boxes, slimming tapes, and paperless operations on a large scale. We also established recycling corners of packaging materials and comprehensively incorporated green recycled Green Stream Boxes into the material unpacking process, resulting in a highly sustainable and eco-friendly approach to event logistics.

JD Logistics prioritized green transportation in the Winter Sports Events by utilizing 100% electric logistics vehicles for urban distribution and internal logistics services within the tournament area. Additionally, the company ran Hydrogen-powered vehicles in logistics on a trial basis in the Zhangjiakou tournament area. Overall, JD Logistics reserved more than 50 electric logistics vehicles for the event logistics service, ensuring that 100% of the event logistics vehicles meet the National VI-b emission standard. These efforts resulted in a significant reduction of carbon emissions by approximately 112 tons.



Green Stream Boxes of JD Logistics placed in the venues of the 2022 Winter Sports Events

TCFD Report on Climate-Related Financial Information Disclosure

In recent years, climate change has led to frequent occurrences of extreme weather events, posing potential risks to global social and economic progress, and threatening business stability and asset security. Simultaneously, nations have pledged to actively address climate change. Following China's ongoing commitment to its "double-carbon" objectives, the efforts made by logistics enterprises and leading corporations to reduce carbon emissions will assist China in achieving a comprehensive and profound transition towards a low-carbon future, which will drive the logistics industry towards a phase of high-quality transformation, upgrading, and green low-carbon development.

JD Logistics actively implements the concept and requirements of "accelerating the green transformation of the development mode and steadily promoting the carbon-neutralization of the carbon peak". This approach entails incorporating the principles of green and low-carbon environmental conservation into every aspect of storage, transportation, delivering, packaging, and integrated supply chain ecological collaboration. In doing so, JD Logistics is collaborating with its upstream and downstream partners to establish a green and low-carbon integrated supply chain ecosystem.

- In 2017** We launched the "Green Stream Initiative" to help achieve low carbon emission reductions along the whole chain of the integrated supply chain
- In 2018** We launched the reusable packaging project: by providing solutions such as carton recycling and cloud boxes to improve the reuse rate of resources
- In 2019** We collaborated with the China Packaging Research and Testing Centre, Procter & Gamble Co., Johnson & Johnson, Unilever and other institutions and enterprises to jointly initiate the establishment of Chinese E-commerce Logistics Industry Packaging Standards Alliance (CELPSA), for the development, application and promotion of packaging standards in the e-commerce industry with the Chinese
- In 2020** We completed the establishment of the SBTi and became the first logistics company in China to set up an SBT
- In 2021** We announced the new five-year goal of the "Green Stream Initiative": continue to invest RMB 1 billion in green and low-carbon integrated supply chain construction, and to improve self-carbon efficiency by 35%
- In 2022** We initiated the "JD Logistics Carbon Verification Project" to clarify the specific path and the roadmap of carbon reduction action in multiple scenarios

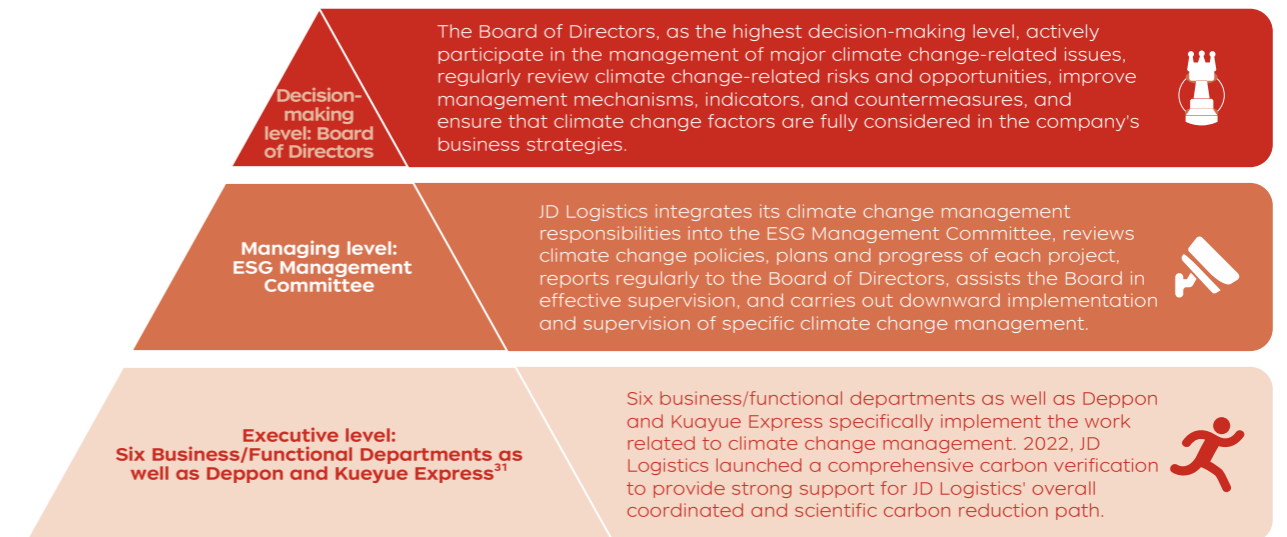
JD Logistics recognizes the potential risks and opportunities that climate change presents to enterprises. In response, we have considered the recommendations provided by the Task Force on Climate-related Financial Disclosure (TCFD) to enhance our identification, analysis, and management of climate change-related risks and opportunities. During this reporting period, we have disclosed JD

Logistics' progress and significant actions in the areas of climate change governance structure, strategy, risk and opportunity identification, risk management, metrics and targets. We have undertaken extensive policy research, benchmarking against our peers, and consulted with experts to develop a comprehensive understanding of these issues.



(1) Governance

To effectively address the impacts and challenges brought by climate change, JD Logistics has incorporated climate management-related functions into our ESG governance structure. We have established a climate change management system with the Board of Directors as the highest decision-making level. The system clarifies the responsibilities of the Board of Directors and management in overseeing climate-related issues and regularly monitoring climate change-related matters. In doing so, JD Logistics ensures that we can make early predictions, effective decisions, and take proactive action to address climate change.



(2) Strategy

In order to better understand the potential impact of climate change on the enterprise, JD Logistics has developed a rigorous scenario with strong contrast to the business-as-usual scenario in accordance with the HKEX 's *Guidelines on Climate Disclosure*, and selected the scenario model and related parameters published by the United Nations Intergovernmental Panel on Climate Change (IPCC) for analysis. The specific scenarios are selected as follows.

Scenarios	IPCC Scenario Model Selection	Situational Applications
<p>Low Emission Scenario:</p> <p>Low emission scenario under strict climate change policy interventions</p>	<p>-Representative concentration scenario critical path: RCP 2.6</p> <p>-Shared socioeconomic scenario critical path: SSP 1</p>	<p>This scenario has the most stringent policy regulation, and the transition risk reaches the greatest degree of impact on the company, so the transition risk analysis is conducted in this scenario</p>
<p>High Emission Scenario:</p> <p>Business-as-usual high-emission scenario without climate change policy intervention</p>	<p>-Representative concentration scenario high emission pathway: RCP 8.5</p> <p>-Shared socioeconomic scenario high emission pathway: SSP 5</p>	<p>The policy regulation is the most relaxed in this scenario, and the physical risk to the firm is the largest, so the physical risk analysis is performed in this scenario</p>

³¹ Departmental structure as of December 31st, 2022.

In 2022, JD Logistics carried out comprehensive research and data collection based on different elemental conditions of low emission scenario and high emission scenario. We conducted in-depth research on the latest trends in the macro environment and industrial policies, as well as climate change-related analysis in conjunction with the current business situation of each business line. We ranked the potential climate change risks and opportunities in terms of the time and potential financial impact of climate change on our business operations. In this year, JD Logistics identified eight major climate change risks and opportunities, including two physical risks, four transition risks and two climate change opportunities, and formulated more targeted response plans based on them.

Type	Impact Cycle ³²	Financial Impact	Analysis of Impact	Response	
Physical Risk	Floods	Short, medium and long term	Medium	<p>JD Logistics has many self-operated warehouses and a nationwide transportation network and uses a variety of transportation methods such as road, rail, air and marine. When flooding events increase in frequency or last longer, they can damage the warehousing and transportation network of JD Logistics, resulting in damage to the logistics infrastructure, which in turn affects the performance of logistics business and logistics supply, resulting in lower business volume, higher equipment maintenance costs and lower business revenue.</p>	<p>Combining historical disaster data from different locations, flood disaster warning and emergency plans are gradually established and refined for areas susceptible to flooding, such as the construction of catchment management and the implementation of flood prevention measures.</p>
	Extreme high temperature	Short, medium and long term	Medium	<p>JD Logistics has a large number of employees working outdoors, such as sorters, transporters and delivery personnel. The increase of extreme high temperature weather will reduce the efficiency of JD Logistics employees, endanger their health and safety, and increase high temperature allowance, medical care and other high temperature welfare expenses.</p> <p>In addition, JD Logistics has cold chain warehouses and cold chain transport vehicles, which will increase the use of environmentally friendly refrigerants when extreme high temperature weather occurs, and the cost of cold chain business will continue to rise. Extreme high temperature weather will also increase the battery risk of transportation vehicles, cargo planes and other transportation equipment, increasing maintenance costs.</p>	<p>JD Logistics engage professional engineering and climate impact assessors to conduct vulnerability assessments of infrastructure and fixed assets, focusing on urban areas, ports and other areas with urban heat island effects. Based on the results of research and analysis, we gradually establish a monitoring and forecasting system for extreme high temperatures, and incorporate the factors affecting extreme high temperatures into the Company's health and safety management considerations to strengthen relevant preventive measures.</p>

³² This thematic report defines less than 2 years as short-term; 2-5 years is defined as medium; more than 5 years is defined as long-term.

Type	Impact Cycle ³²	Financial Impact	Analysis of Impact	Response	
Transition Risk	Enhanced requirements for carbon emissions disclosure	Short term	High	<p>To promote the achievement of the double carbon target, the Chinese government will continue to step up its policies related to carbon emission management, including the continuous improvement of the double control degree of energy consumption and the implementation of the Action Plan for CO2 Emission Peaking by 2030. In the capital market, the Hong Kong Stock Exchange and other regulatory bodies have also put forward clear requirements for climate change information disclosure by listed companies, requiring mandatory disclosure of TCFD reports by 2025.</p> <p>JD Logistics, driven by both policy and regulation, has adopted a more proactive climate strategy by committing to Science Based Targets initiative(SBTi) and disclosing a TCFD report annually from 2021. In the future, JD Logistics will need to continuously invest in data management and information disclosure, and hire professionals to optimize carbon emission data management and information disclosure, leading to an increase in corporate management costs.</p>	<p>JD Logistics conducts enterprise carbon inventory and carbon verification, product carbon footprint tracking, and master the greenhouse gas emissions of JD Logistics itself, which continuously improves the intelligent carbon information management system in order to reduce the cost of manual input.</p>
	Increasing environmental standards for companies	Short term	High	<p>The Chinese government is deeply promoting the prevention and control of environmental pollution, which has put forward new requirements for environmental remediation, soil pollution prevention and control, water resources and water ecosystems. In 2022, policies relating to green and low-carbon park construction standards, green and low-carbon circular economy construction and modern circulation system construction were launched gradually, the relevant regulations of which had a profound impact on JD Logistics' core business of warehousing and transportation.</p> <p>JD Logistics may incur costs of the replacement or low-carbon transformation of transportation vehicles and warehousing equipment to meet the ever-improving environmental standards. Meanwhile, as JD Logistics continues to expand its international business, it is required to comply with local environmental standards in different countries, resulting in higher legal compliance costs.</p>	<p>We carry out "Carbon Emission Environmental Impact Assessment" to grasp the local environmental impact of our logistics infrastructure, in order to optimize environmental and resource management. Also, JD Logistics further promotes the construction of "Asia No. 1 smart industrial parks" to reduce carbon emissions at the park level. It's essential to actively explore cost-effective carbon reduction technologies, equipment, and measures to reduce the cost of low-carbon transformation of enterprises.</p>
	Low carbon technology R&D and transition costs	Medium and long term	Medium	<p>Driven by both policy and market, the research and development of new energy technology and carbon reduction technology in various application scenarios is receiving more and more attention, and the trend of low-carbon transformation of enterprises is becoming more and more obvious, and external requirements will gradually become obvious and deepen. As a leading enterprise in the logistics industry, JD Logistics has actively invested in the research and development of low-carbon technologies, including the research and development of green recycling low-carbon packaging, increasing the use of green flow boxes and the reduction of non-degradable consumables in packaging; the research and development of hydrogen vehicles in vehicle transportation, and the investment in fast-changing vehicles. In the early stage, this kind of technology has a large investment in research and development. If the R&D fails, it might be difficult to recover the cost, but also will face the long-term impact of being surpassed by competitors in the low-carbon track.</p>	<p>JD Logistics strengthen the linkage between industry, academia and research, and highlight the product transformation of research achievements. We actively follow up the latest R&D progress in the industry and consider using various forms such as through acquisition to promote the application of new technologies and strengthen the protection of intellectual property rights.</p>

Type	Impact Cycle ³¹	Financial Impact	Analysis of Impact	Response
Climate Transition Risks	Increased stakeholder attention	Medium and long term	<p>Under the guidance of national policies, the whole society is gradually forming a green, low-carbon, recycling social and cultural atmosphere. Ministry of Transport of the People's Republic of China issued the "14th Five-Year Plan for Green Transportation Development", proposing specific objectives on further reduction in energy consumption and carbon emission intensity of operating vehicles and ships, and a significant increasing in the proportion of new energy and clean energy applications. The General Office of the State Council of the People's Republic of China issued the "14th Five-Year Plan for the Development of Modern Logistics" in 2022, pointing out that "further promoting energy conservation and emission reduction in logistics" is the driving force to accelerate the cultivation of new momentum for the transformation and upgrading of modern logistics.</p> <p>As JD Logistics is included in more ESG index ratings, low carbon performance will become one of the most important factors for investors to evaluate the investment value of JD Logistics. In the long run, if the performance related to JD Logistics is poor, it might affect investors' investment willingness.</p>	<p>JD Logistics strengthens the level of ESG disclosure, improve the sustainable development governance, and actively respond to ESG rating agencies and regulators.</p>
			<p>As a leader in green low-carbon logistics, JD Logistics has been actively carrying out actions with many brands, and green low-carbon logistics services have become an advantage that distinguishes JD Logistics from other competitors. JD Logistics has released the first industry certification standard for original factory-direct packaging and promoted the use of new energy models such as hydrogen transport vehicles to reduce carbon emissions during road transport and product distribution.</p> <p>As clients pay more and more attention to green and low-carbon logistics, green and low-carbon logistics services will become a new market competitiveness and business growth point for the logistics industry, helping JD Logistics to increase its market share and business revenue.</p>	<p>We cooperate with more brands to open up green value supply chains, actively participate in the construction of standards and policy advocacy of low-carbon supply chains and become a leader in the industry.</p>
Climate Opportunities	More climate-resilient supply chains	Medium and long term	<p>JD Logistics has proposed that they will invest RMB 1 billion to increase the construction of a green and low-carbon integrated supply chain. We will realize our own carbon efficiency improvement through the development of clean energy, promotion of low-carbon technology and new energy equipment applications, resource utilization and recycling. Moreover, by building a smart low-carbon logistics park and joining hands with upstream and downstream supply chain partners, we are on the path to achieve joint carbon reduction.</p>	<p>JD Logistics establishes early warning systems, response measures and contingency plans for climate disasters with high impact. We actively link up with upstream and downstream partners in the supply chain to jointly strengthen the creation of a climate resilient supply chain.</p>
			<p>With the deepening of the concept of sustainable development and the continuous tilting of funds and resources, it is expected that under extreme weather conditions or disasters, JD Logistics will be better able to cope with unexpected situations and show a more stable advantage of supply chain resilience to climate, reducing the risks and losses of natural disasters on raw materials, material processing, manufacturing, logistics and transportation as one of the core competencies of market competition. In the medium to long term, this will have a positive impact on increasing JD Logistics' market share and improving its business revenue.</p>	

(3) Risk Management

To improve the management of climate change-related risks and opportunities, we have improved our climate change risk management process based on the TCFD framework and further integrated climate risk into the Company's risk management.



■ (4) Metrics and Targets

Tier 1 Indicators	Tier 2 Indicators	Description of Indicators	Goals Setting
Governance goals	Improve the climate governance structure	To strengthen the supervision responsibilities of the Board of Directors of JD Logistics on the adjustment of climate-related strategies, risk determination and follow-up of targets; To continuously improve the functions of the ESG Management Committee on the management of climate-related risks and targets and the management of greenhouse gas emissions.	Starting from 2023, the Board of Directors will consider the achievement of significant climate-related risks and carbon emission targets annually.
	Build a cross-sectoral synergy mechanism of climate governance	To establish cross-sectoral synergies on climate governance with key business units for promoting carbon emissions targets based on carbon emissions goals	No later than 2023, the construction of the climate-related management index system will be completed. No later than 2024, the performance assessment indicators will be established based on the indicator system.
Strategic goals	Deepen quantitative research on climate risk of business operations	To gradually integrate the financial strain analysis of climate risks on the business, based on the ranking of climate risks	No later than 2024, a feasibility study on financial analysis related to climate risk will be conducted.
Risk management goals	Conduct annual assessments of climate risk	To conduct an annual assessment and analysis of climate-related physical and transition risks, and form a heat map of climate risks for the current year, and gradually integrate it into the Company's risk management system	Starting from 2023, the assessment of climate risks will be carried out annually, resulting in a climate risk assessment analysis report.
Emission reduction goals	Follow the requirements of the Science-Based Targets initiative (SBTi)	Scope 1. ·In transportation, to continuously increase the proportion of new energy vehicles, adopt new energy heavy trucks in the case of gradually dense highway exchange stations, and reach 100% of new energy vehicles by 2030. ·To explore the application of hydrogen and even green hydrogen in more areas and on more routes. ·In the cold chain fugitive link, to eliminate more usage of more environmentally-friendly R22 refrigerant no later than 2025.	
		Scope 2. ·In warehousing, to further improve energy efficiency through intelligent control, digital twin technology and other advanced digital means, to increase cargo turnover rate, and to optimize cargo storage and transfer path, based on the foundation of "Asia No. 1 smart industrial parks". ·To improve the efficiency of electricity and heat usage in various scenarios such as offices and parks, and to gradually implement green power procurement in the provinces where each region is located, in line with the national energy transition. ·To increase the proportion of data centers using natural cooling sources and clean energy usage, to install distributed photovoltaic power generation systems on a large scale, to enhance energy storage and cooling capacity, and improve building layout and low energy consumption design, and to strengthen the operation and maintenance management platform. ·To fully investigate new energy electric vehicles, examine the light storage charging (swapping) integrated technology, and to promote the adoption of green power for new energy vehicles.	

Tier 1 Indicators	Tier 2 Indicators	Description of Indicators	Goals Setting
Emission reduction goals	By 2030, carbon emissions in scope one, two, and three will be reduced by 50%, and the proportion of renewable energy use will reach 100%.	Scope 3. ·In packaging, continuously promote the "Green Stream Initiative", and encourage the environmental certification of the original packaging of products while implementing reduced and recycled packaging materials, and to effectively promote the green and low-carbon upstream packaging process. ·To inspire suppliers' participation in setting and implementing carbon reduction targets through practical actions. ·To encourage third-party outsourced transportation suppliers to increase the percentage of use of new energy vehicles, strengthen the ledger recording of energy consumption, mileage and other data. ·To build a low-carbon logistics and transportation system adopted our self-developed logistics and transportation mobile carbon emission management platform (SCEMP), which has obtained ISO 14064-1 certification, collaborating with our suppliers and partners. ·To promote employees' awareness of green life and encourage them to choose transportation modes with lower carbon emissions to travel. ·To cultivate the concept of green consumption and recycling in society and advocate for carbon reduction actions at the consumption end.	
		Enhance the management and disclosure of greenhouse gas emission data	To actively carry out a more completed carbon inventory and extend the coverage to Deppon and Kuayue Express, so as to form a unified GHG emission data management and quantification standard.
Information disclosure goals	Disclose TCFD reporting annually	To improve TCFD report disclosure year by year and publish TCFD report annually.	Starting from 2021, the TCFD report will be published annually, and will be perfected, enriched and deepened year by year.

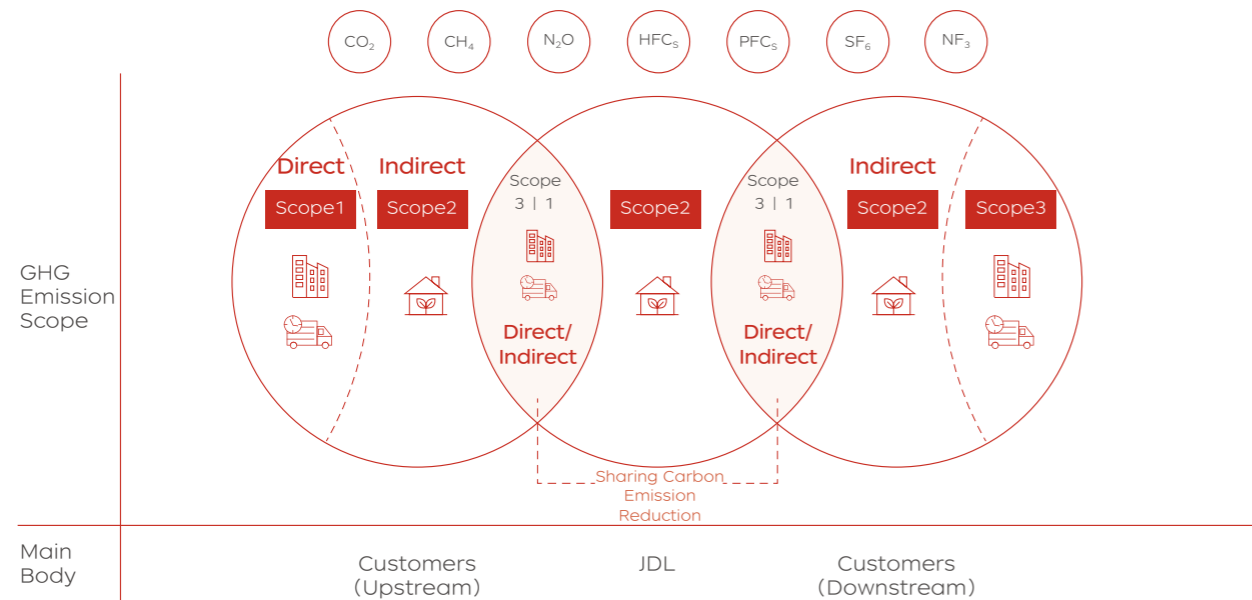
APPENDIX

Sustainability Performance Table³³

Greenhouse Gas Emissions

Indicator	Data in 2022	Units
Direct (Scope I) GHG Emissions ³⁴	148.6	10,000 tons of CO ₂ equivalent
Energy Indirect (Scope II) GHG Emissions ³⁵	79.2	10,000 tons of CO ₂ equivalent
Other Indirect (Scope III) GHG Emissions ³⁶	348.4	10,000 tons of CO ₂ equivalent
Total GHG Emission	576.2	10,000 tons of CO₂ equivalent
GHG Intensity	41.9	tons of CO₂ equivalent/million revenue

Principles of Supply Chain "Shared Carbon Emission Reduction" Allocation



The Relationship between JD Logistics and Greenhouse Gas Emissions Sources of Stakeholders

³³ The time scope of the environmental key performance table is the whole year of 2022 (including data of Deppon and Kuayue Express from January 1st to December 31st, 2022).
³⁴ Scope 1 emissions include the Scope 1 emissions data of Deppon and Kuayue Express, and the calculation path mainly refers to the Hong Kong Stock Exchange's *Guidelines on Reporting of Environmental Key Performance Indicators* and the National Development and Reform Commission's *Methodology and Reporting Guidelines for Greenhouse Gas Emissions from Land-based Transportation Enterprises*.

Air Pollutant Emissions³⁷

Indicator	Data in 2022	Units
Total emission of air pollution emissions	10,288	tons

Energy Consumption³⁸

Indicator	Data in 2022	Units
Gasoline consumption	8,617.2	10,000 liter
Diesel fuel consumption	48,486.7	10,000 liter
Aviation kerosene consumption	1,116.5	tons
Natural gas consumption	238.2	10,000 m ³
Total direct energy consumption	562.6	10,000 MWh
Direct energy consumption intensity	40.9	MWh/million revenue
Outsourced electricity	1,331,341	MWh
Outsourced heat	10,390	MWh
Total indirect energy consumption	134.2	10,000 MWh
Indirect energy consumption intensity	9.8	MWh/million revenue
Total energy consumption	696.7	10,000 MWh
Energy consumption intensity	50.7	MWh/million revenue

³⁵ Scope 2 emissions include the Scope 2 emissions data of Deppon and Kuayue Express, and the calculation path mainly refers to the *Environmental Key Performance Indicators Reporting Guidelines* of the Hong Kong Stock Exchange, in which the electricity emission factor is 0.5703 tCO₂/MWh, which is taken from the *Notice on the Management of Greenhouse Gas Emissions Reporting by Enterprises in the Power Generation Industry for 2023-2025* issued by the Ministry of Ecology and Environment of China in February 2023.

³⁶ Scope 3 emissions do not include the Scope 3 emissions data of Deppon and Kuayue Express because Scope 3 data are not yet available as Deppon and Kuayue Express did not conduct a comprehensive carbon verification in 2022. The calculation path mainly refers to the Hong Kong Stock Exchange's *Guidelines on Reporting of Environmental Key Performance Indicators* and the State Post Bureau's *Methodology for Measuring Greenhouse Gas Emissions in the Express Industry*. The increase in Scope 3 emissions data compared with the data disclosed in the 2021 ESG report is mainly due to the gradual improvement in the construction of JD Logistics' internal data system and the expansion of the scope of environmental data that can be accurately collected.

³⁷ In this year, the total emission of air pollution is nitrogen oxides, sulfur oxides and particulate matter, which are mainly from the use of gasoline and diesel vehicles of the Company in 2022. The pollutant emission calculation formula and emission factors refer to the Hong Kong Stock Exchange's *Guidelines on Reporting of Environmental Key Performance Indicators* and the National Development and Reform Commission's *Greenhouse Gas Emission Accounting Methods and Reporting Guidelines for Land Transportation Enterprises (for Trial Implementation)*.

³⁸ In this year, the scope of energy use data has been further expanded and included Deppon and Kuayue Express.

Resource Consumption

Indicator	Data in 2022	Units
Total water consumption ³⁹	315.6	10,000 tons
Density of water consumption	22.9	tons/million revenue
Total amount of packaging used for finished products ⁴⁰	55.6	10,000 tons
Density of packaging used for finished products	93.2	grams/piece

Waste Emissions

Indicator	Data in 2022	Units
Total hazardous waste ⁴¹	20.1	tons
Total non-hazardous waste ⁴²	10.1	10,000 tons
Non-hazardous waste density	0.7	tons/million revenue

Employment

Indicator	Data in 2022	Units
Total number of employees	390,029	persons
By Gender	Male	319,731 persons
	Female	70,298 persons

³⁹ In 2022, the water consumption calculation method is that the average daily domestic water consumption quota standard per person per shift in office buildings under the sitting shift system office is converted according to the *Building Water Supply and Drainage Design Code (GB50015-2019)*, and the total number of employees is calculated for the official employees of JD Logistics.

⁴⁰ Finished packaging mainly contains courier envelopes, plastic film bags, plastic filling, courier boxes, transparent tape, foam boxes, winding film, woven bags.

⁴¹ The hazardous waste of JD Logistics is mainly about waste lead-acid batteries, waste light tubes, waste toner drums and ink cartridges.

⁴² The non-hazardous waste of JD Logistics is mainly operation waste.

	Indicator	Data in 2022	Units
By Age	<30	142,281	persons
	30-45	229,321	persons
	>45	18,427	persons
By Employment Type	Regular workers ⁴³	387,854	persons
	Preserve the disabled ⁴⁴	2,175	persons
By Region	Mainland China	374,723	persons
	Hong Kong, Macau, Taiwan and Overseas	15,306	persons

Employee Turnover Rate⁴⁵

	Indicator	Data in 2022	Unit
	Total turnover rate	18.7	%
By Gender	Male	18.0	%
	Female	22.0	%
By Age	<30	25.2	%
	30-45	13.5	%
	>51	5.6	%
By Region	Mainland China	18.7	%
	Hong Kong, Macau, Taiwan and Overseas	18.2	%

⁴³ It refers to the sum of the labor contract staff of JD Logistics and related entities (including Deppon and Kuayue Express) and the labor dispatch staff enjoying labor contract treatment.

⁴⁴ It means that JD Logistics and related entities (including Deppon and Kuayue Express) arrange the employment of the prescribed proportion of disabled people in compliance with the national requirements.

⁴⁵ The formula for this calculation for the current year is employee turnover ratio for each category = The number of regular workers who quit voluntarily / (total number of employees in that category who left in 2022 + total number of employees in that category at the end of 2022) * 100.

Development & Training

Indicator	Data in 2022	Unit
Percentage of training by gender ⁴⁶	Male	81 %
	Female	19 %
Percentage of training by employee category ⁴⁷	Management level	6 %
	General Staff	54 %
Average number of hours by gender	Couriers (except management)	40 %
	Male	15 hours
	Female	19 hours
Average hours by employee category ⁴⁸	Management level	37 hours
	General Staff	24 hours
	Couriers (besides management)	6 hours

Health & Safety⁴⁹

Year	Number of work-related fatalities	Units	Work-related death rate
2022	35	persons	0.0090% ⁵⁰
2021	32	persons	0.0098% ⁵¹
2020	30	persons	/

⁴⁶ In this Year, the calculation was optimized by following the reporting guidelines for social key performance indicators in Appendix III of the SEHK Environmental, Social and Governance Guidelines, where the percentage of training by gender = number of employees trained by that gender / total number of employees trained * 100.

⁴⁷ In this Year, this calculation was optimized by following the reporting guidelines for social key performance indicators in Appendix III of the SEHK Environmental, Social and Governance Guidelines, where the percentage of employees trained by employee category = the number of employees trained in that category/total number of employees trained * 100.

⁴⁸ This calculation for the year is based on the average number of hours by employee category in the Social Key Performance Indicator Reporting Guidelines in Appendix III of the SEHK Environmental, Social and Governance Guidelines = total number of hours of training for that employee category / total number of employees in that employee category.

⁴⁹ In this Year, the statistical scope covers the whole year data of JD Logistics and Kuayue Express, data from 2022/7/26-12/31 of Deppon, and go back to the data of the past three years, so the overall data has increased.

⁵⁰ The rate of work-related deaths in 2022 is calculated as the number of work-related deaths in 2022 / the total number of employees.

⁵¹ The rate of work-related deaths in 2021 is calculated as the number of work-related deaths in 2021 / (full-time employees + part-time employees).

Indicator	Data in 2022	Unit
Lost days due to work injury ⁵²	51,586	days
JDL's lost days due to work injury	44,511	days
Deppon's lost days due to work injury ⁵³	6,308	days
Kuayue Express' lost days due to work injury	767	days

Women Empowerment Training⁵⁴

Indicator	Data in 2022	Unit
Total hours of professional empowerment and leadership development training for women	2,931,104	hours
The percentage of employees receiving professional empowerment and leadership development training for women	84	%

Employee Rights and Interests⁵⁵

Indicator	Data in 2022	Unit
Percentage of employees covered by collective bargaining agreement	100	%

⁵² The statistical scope of lost workdays data due to work-related injuries was further expanded, included into the full-year data of Kuayue Express and Deppon from July 26 to December 31, 2022.

⁵³ This data only covers Deppon's consolidated financial data.

⁵⁴ The statistical scope of the data only covers JD Logistics.

⁵⁵ The statistical scope of the data only covers JD Logistics.

Health and Safety Training⁵⁶

Indicator	Data in 2022	Unit
Number of employees in Environment, Health, and Safety (EHS) training	Online training participants	988,814 person-times
	Offline training participants	619,013 person-times
Total hours of EHS training	Online training duration	375,727 hours
	Offline training duration	100,685 hours
Frequency of Safety Drills	3,542	times
Percentage of employees covered by Safety Drills	99	%

The Percentage of Senior Female Managers⁵⁷

Indicator	Data in 2022	Unit
The percentage of senior female managers	13	%

Number of Supplier⁵⁸

Indicator	Data in 2022	Unit
Number of supplier	15,517	suppliers
By Region	Mainland China	15,486 suppliers
	Other Regions	31 suppliers
The percentage of suppliers implementing the supplier compliance management system	100	%

⁵⁶The data's statistical scope of Number of employees in Environment, Health and Safety (EHS) training, total hours, frequency of Safety Drills and percentage of employees covered by Safety Drills only covers JD Logistics.

⁵⁷The statistical scope of this data only includes JD Logistics (the reason is that JD Logistics, Kuayue Express and Deppon have different position rank sequences, so the statistical calibre cannot be unified).

⁵⁸The statistical scope of supplier data has been further expanded to include Deppon and Kuayue Express.

Product Responsibility

Indicator	Data in 2022	Unit
Number of complaints about products and services ⁵⁹	11,378 ⁶⁰	cases
Response rate of complaints ⁶¹	100	%
Complaint handling satisfaction	96	%
Complaint resolution rate	98	%

Anti-Corruption

Indicator	Data in 2022	Unit
The number and outcome of corruption cases brought and concluded against the Company or its staff ⁶²	15	cases
Number of cases in which employees were fired or disciplined for corruption	178	cases
The concluded corruption cases involved in the Company	0	cases

Community Investment

Indicator	Data in 2022	Unit
Contributed money	500,000	RMB
Employee volunteer hours	6,360	hours

⁵⁹The data covers the full-year data of JD Logistics, the full-year data of Kuayue Express in 2022, and the data after financial consolidation from 2022/7/26-12/31 of Deppon.

⁶⁰In this Year, the data of complaints about products and services were obtained from the number of valid complaints on the complaint service platform of the State Post Bureau, including JD Logistics, Deppon and Kuayue Express.

⁶¹The data of response rate of complaints, complaint handling satisfaction and complaint resolution rate only covers JD Logistics.

⁶²The number of corruption cases of year 2022 listed are the cases filed for investigation in 2020 and 2021, and the cases concluded by the judicial authorities in 2022. The statistical scope includes the annual data of JD Logistics, Kuayue Express for the entire year and of Deppon from July 26th to December 31st, 2022.

Awards & Ranking

- National Commerce Logistics Initial Connection Enterprise (Ministry of Commerce)
- 2022 National Supply Chain Innovation Demonstration Cases (Ministry of Commerce)
- 2022 New Information Consumption Demonstration Project (Ministry of Industry and Information Technology)
- 2022 Typical Application Practice of Blockchain Technology (Ministry of Industry and Information Technology)
- National Vocational Education Teachers' Enterprise Practice Base (Ministry of Education, Ministry of Industry and Information Technology, State-owned Assets Supervision and Administration Commission of the State Council)
- The "Pilot Project for Large-scale Application of Recyclable Express Packaging" has been approved by the three departments of the State Post Bureau of The People's Republic of China, National Development and Reform Commission and Ministry of Commerce of The People's Republic of China
- Front-line employees of JD Logistics were awarded the 2022 Youth Science and Technology Talent Award for Transportation and Logistics, the Capital Labor Medal, and the Labor Day Award of Shanxi Province (Ministry of Transport of the People's Republic of China, Beijing Municipal Government, Shanxi Municipal Government)
- 2022 23rd China Patent Award for Excellence (China National Intellectual Property Administration)
- JD Logistics' Intelligent Express Delivery Vehicle was recognized as a new technology/new product (service) by the Beijing Municipal Government (Beijing Municipal Science & Technology Commission, Beijing Municipal Bureau of Economy and Information Technology, State Administration for Market Regulation)
- Awarded the National Model Worker (All-China Federation of Trade Unions)
- Leading enterprise in Beijing industrial chain (Beijing Municipal Bureau of Economy and Information Technology)
- Approved as the 4th Batch of Application Scenario Projects in Beijing (Beijing Municipal Science & Technology Commission)
- 2022 Top 50 Logistics Enterprises in China (Ranked 6th) (China Federation of Logistics & Purchasing)
- 2022 Top 50 Private Logistics Enterprises in China (Ranked 2nd) (China Federation of Logistics & Purchasing)
- Received the DQMIS 2022 Data Quality Excellence Practice Award
- China's Top 100 Cold Chain Logistics Enterprises (China Federation of Logistics & Purchasing)
- 2022 Annual Award for Science and Technology Innovation (China Federation of Logistics & Purchasing)
- JD Logistics' three initiatives won the "Champion Award" for Rural Revitalization and Resilient Value Chain and the "Excellence Award" for Dual-Carbon Pioneers in "Golden Key- China Action for SDGs". (Ministry of Commerce, Sustainable Development Economy Herald)
- Received three awards from China Post Express & Logistics Co., Ltd: the "2021 Express Annual Contribution Award," the "2021 Express Technology Innovation Award" , and the "2021 Express Social Responsibility Award". (China Post Express Newspaper)
- Awarded the "Excellent Logistics Service Provider of Beijing Winter Olympics and Winter Paralympics" (Beijing Logistics and Supply Chain Management Association)
- JD Logistics' Xi'an Asia "No. 1 smart industrial parks" was awarded the Carbon Neutrality Certification Double Certificate by Beijing Green Exchange and China Testing Certification (CTI).
- Awarded eight annual employer awards from Zhaopin Limited, Maimai, Lagou, and other platforms
- Received the 'Xinhua Credit Golden Blue Cup - ESG Environmental Practice Pioneer Case' Award
- Ranked among the "Top 25 Brand Finance Logistics in 2022" by Brand Finance, a globally recognized brand valuation agency
- Shortlisted for the "Top 10 Global Strongest Logistics Brands of 2022" by Brand Finance, a globally recognized brand valuation agency
- Shortlisted for the "2022 World IoT Top 500"
- Shortlisted for "Sustainable China Industry Best Practices" by APEC China Business Council
- Received the Platinum Award for Global Zero-Carbon City Innovation Exemplar - Business Leader Award
- Received a score of 47 from S&P CSA and ranked among the top in the global transportation industry as of October 21, 2022



■ HKEX ESG Content Index

A. Environmental

General Disclosure and KPI	Description	Related Chapters
Aspect A1: Emissions		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Driving Climate Change Resilient Supply Chain through Digital and Industrial Integration Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis
	A1.1 The types of emissions and respective emissions data.	Sustainability Performance Table
KPI	A1.2 Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Sustainability Performance Table
	A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Sustainability Performance Table
	A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Sustainability Performance Table
	A1.5 Description of emissions target(s) set and steps taken to achieve them.	Aiming for a Net-zero Future Digital Carbon Management for Green Development Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis
	A1.6 Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis

Aspect A2: Use of Resources

General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis
KPI	A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Sustainability Performance Table
	A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Sustainability Performance Table
	A2.3 Description of energy use efficiency target(s) set and steps taken to achieve them.	Aiming for a Net-zero Future Digital Carbon Management for Green Development
	A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis
	A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Sustainability Performance Table

Aspect A3: The Environment and Natural Resources

General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis
KPI	A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis

Aspect A4: Climate Change

General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Digital Carbon Management for Green Development
KPI	A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	TCFD Report on Climate-Related Financial Information Disclosure

B. Social

Aspect B1: Employment

General Disclosure		Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Stable Employment and Talent Development
KPI	B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	Sustainability Performance Table
	B1.2	Employee turnover rate by gender, age group and geographical region.	Sustainability Performance Table

Aspect B2: Health and Safety

General Disclosure		Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Caring for Employees' Well-Being
KPI	B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Sustainability Performance Table
	B2.2	Lost days due to work injury.	Sustainability Performance Table
	B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Caring for Employees' Well-Being

Aspect B3: Development and Training

General Disclosure		Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Caring for Employees' Well-Being
KPI	B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Sustainability Performance Table
	B3.2	The average training hours completed per employee by gender and employee category.	Sustainability Performance Table

Aspect B4: Labour Standards

General Disclosure		Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Stable Employment and Talent Development
KPI	B4.1	Description of measures to review employment practices to avoid child and forced labour.	Stable Employment and Talent Development
	B4.2	Description of steps taken to eliminate such practices when discovered.	Stable Employment and Talent Development

Aspect B5: Supply Chain Management

General Disclosure		Policies on managing environmental and social risks of the supply chain.	Achieving Flexible Resilient Supply Chain Management Target
KPI	B5.1	Number of suppliers by geographical region.	Sustainability Performance Table
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Achieving Flexible Resilient Supply Chain Management Target
	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Achieving Flexible Resilient Supply Chain Management Target

KPI	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Achieving Flexible Resilient Supply Chain Management Target
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Aspect B6: Product Responsibility

General Disclosure		Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Information Security Management
KPI	B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not Applicable ⁶³
	B6.2	Number of products and service related complaints received and how they are dealt with.	Sustainability Performance Table
	B6.3	Description of practices relating to observing and protecting intellectual property rights.	Information Security Management
	B6.4	Description of quality assurance process and recall procedures.	Not Applicable ⁶⁴
	B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Information Security Management

Aspect B7: Anti-corruption

General Disclosure		Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Compliance Management
KPI	B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Compliance Management
	B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	Compliance Management
	B7.3	Description of anti-corruption training provided to directors and staff.	Compliance Management

Aspect B8: Community Investment

General Disclosure		Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Supporting Rural Revitalization Strategy via Logistics Network Social Contribution for Joint Progress Integrated Supply Chain Guaranteeing Livelihood Necessities Transportation during Pandemic
KPI	B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Supporting Rural Revitalization Strategy via Logistics Network Social Contribution for Joint Progress Integrated Supply Chain Guaranteeing Livelihood Necessities Transportation during Pandemic
	B8.2	Resources contributed (e.g. money or time) to the focus area.	Sustainability Performance Table

⁶³JD Logistics is a logistics service operator, so it does not involve issues related to products sold or shipped.

⁶⁴JD Logistics is a logistics service operator, so it does not involve issues related to quality assurance process and recall procedures.


GRI Content Index⁶⁵

Number	Category	ReportingSection
GRI 1	Foundation	Report Profile
GRI 2	General Disclosures	Report Profile ESG Top-level Governance ESG Key Issues Assurance Report
GRI 3	Material Topics	ESG Key Issues
GRI 201	Economic Performance	ESG Performance and Recognition in 2022 Deeply Cultivating the Industry through Integration of Supply Chain and Three Networks Leading Industry Innovation through Logistics Technology
GRI 202	Market Presence	ESG Performance and Recognition in 2022 Deeply Cultivating the Industry through Integration of Supply Chain and Three Networks Leading Industry Innovation through Logistics Technology
GRI 203	Indirect Economic Impacts	ESG Performance and Recognition in 2022 Deeply Cultivating the Industry through Integration of Supply Chain and Three Networks Leading Industry Innovation through Logistics Technology
GRI 204	Procurement Practices	About JD Logistics Achieving Flexible Resilient Supply Chain Management Target
GRI 205	Anti-corruption	Compliance Management Sustainability Performance Table
GRI 206	Anti-competitive Behavior	Compliance Management
GRI 207	Tax	Compliance Management
GRI 301	Materials	Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis Sustainability Performance Table
GRI 302	Energy	Aiming for a Net-zero Future Digital Carbon Management for Green Development Sustainability Performance Table

Number	Category	Reporting Section
GRI 303	Water and Effluents	Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis Sustainability Performance Table
GRI 304	Biodiversity	Digital Carbon Management for Green Development
GRI 305	Emissions	Aiming for a Net-zero Future Digital Carbon Management for Green Development Sustainability Performance Table
GRI 306	Waste	Collaborative Cooperation in Supply Chain to Achieve Circular Symbiosis Sustainability Performance Table
GRI 308	Supplier Environmental Assessment	Achieving Flexible Resilient Supply Chain Management Target Sustainability Performance Table
GRI 401	Employment	Stable Employment and Talent Development Caring for Employees' Well-Being Sustainability Performance Table
GRI 402	Labor/Management Relations	Stable Employment and Talent Development
GRI 403	Occupational Health and Safety	Caring for Employees' Well-Being Sustainability Performance Table
GRI 404	Training and Education	Caring for Employees' Well-Being Sustainability Performance Table
GRI 405	Diversity and Equal Opportunity	Stable Employment and Talent Development Sustainability Performance Table
GRI 406	Non-discrimination	Stable Employment and Talent Development
GRI 407	Freedom of Association and Collective Bargaining	Stable Employment and Talent Development
GRI 408	Child Labor	Stable Employment and Talent Development
GRI 409	Forced or Compulsory Labor	Stable Employment and Talent Development
GRI 410	Security Practices	Stable Employment and Talent Development
GRI 411	Rights of Indigenous Peoples	Supporting Rural Revitalization Strategy via Logistics Network Social Contribution for Joint Progress Sustainability Performance Table
GRI 413	Local Communities	Supporting Rural Revitalization Strategy via Logistics Network Social Contribution for Joint Progress Sustainability Performance Table
GRI 414	Supplier Social Assessment	Achieving Flexible Resilient Supply Chain Management Target Sustainability Performance Table
GRI 415	Public Policy	Supporting Rural Revitalization Strategy via Logistics Network
GRI 416	Customer Health and Safety	Prioritizing Values of Customer First and Experience Oriented
GRI 417	Marketing and Labelling	Prioritizing Values of Customer First and Experience Oriented
GRI 418	Customer Privacy	Prioritizing Values of Customer First and Experience Oriented

⁶⁵ This guideline adopts the updated GRI standards as of June 2022. The original GRI 307 Environmental Compliance and GRI 419 Socioeconomic Compliance have been revised and included in GRI 2 General Disclosures in this version of the standard. The content related to human rights assessment in the original GRI 412 has been integrated into GRI 402 Labor/Management Relations. Therefore, the numbers of GRI 307, GRI 412, and GRI 419 are not included in this guideline.

Independent Assurance Report



Independent Assurance Statement

Introduction and objectives of work

Bureau Veritas has been engaged by JD Logistics, Inc. ("JDL") to conduct an independent assurance of its 2022 Environmental, Social and Governance Report (the "Report"). This assurance statement applies to the related information included within the scope of work described below.

This information and its presentation in the Report are the sole responsibility of the management of JDL. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on the accuracy and reliability of information included, and on the underlying systems and processes used to collect, analyse and review it.

Scope of work


JDL requested Bureau Veritas to verify the accuracy and reliability of the following:

- Data and information included in the Report for the reporting period from 2022.1.1 to 2022.12.31 regarding JDL's corporate governance activities;
- Appropriateness and robustness of underlying reporting systems and processes, used to collect, analyse and review the information reported;
- The verification site is the headquarters of JD Logistics Co., Ltd., located in Block B, Building 2, JD Headquarters, 20 Kechuang 11th Street, Yizhuang Economic and Technological Development Zone, Beijing; Other sampling sites include: Beijing "Asia No.1" Intelligent Logistics Park, located in the Jingdongya No. 1 Warehouse, Yard 6, Qingfeng South Road, Daxing District, Beijing; Deppon Beijing Transfer Center, located at No. 23, Jingsheng South 2nd Street, Majuqiao Town, Beijing, and the Jingdong Logistics Tongzhou Sorting Center, located at Liandong Heavy Industry Co., Ltd., Xinfang Road, Tongzhou District, Beijing; Jingdong Express Beijing Xingmao Business Department, located at the west gate of Beijing Hengri Business Park, Majuqiao Town, Tongzhou District, Beijing. Bureau Veritas obtained the information related to JDL required for the verification.
- Excluded from the scope of our work is any assurance of information relating to:
 - Activities outside the defined assurance period;
 - Positional statements (expressions of opinion, belief, aim or future intention by JDL) and statements of future commitment;
 - Operating financial data in the Report, which were separately audited by an external auditor and therefore excluded from the scope of work.

Methodology

Bureau Veritas undertook the following activities:

- Site Visit of JDL head office and sampled branches;
- Interviews with relevant personnel of JDL;



- Review of documentary evidence produced by JDL;
- Evaluation of information against GRI standard principles i.e. objectivity, materiality and completeness;
- Verify sampled performance data
- Review of JDL systems for data and information collection, aggregation, analysis and review

Our work was conducted against Bureau Veritas' standard procedures and guidelines for external assurance of ESG reports, based on current best practice in independent assurance. For this assignment, we have used the International Standard on Assurance Engagements AA1000&ISAE3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information of the International Auditing and Assurance Standards Board and the Global Reporting Initiative Standards (GRI Standards) issued by the Global Sustainability Standards Board.

- The work was planned and carried out to provide reasonable, rather than absolute assurance and we believe it provides a reasonable basis for our conclusion.

Our findings

On the basis of our methodology and the activities described above, it is our opinion that:

- The information and data included in the scope of our assurance are accurate, reliable and free from material mistake or misstatement;
- The information is presented in a clear, understandable and accessible manner;
- The Report provides a fair and balanced representation of activities during the assurance period described in the scope of work;
- JDL has established appropriate systems for the collection, aggregation and analysis of relevant information.

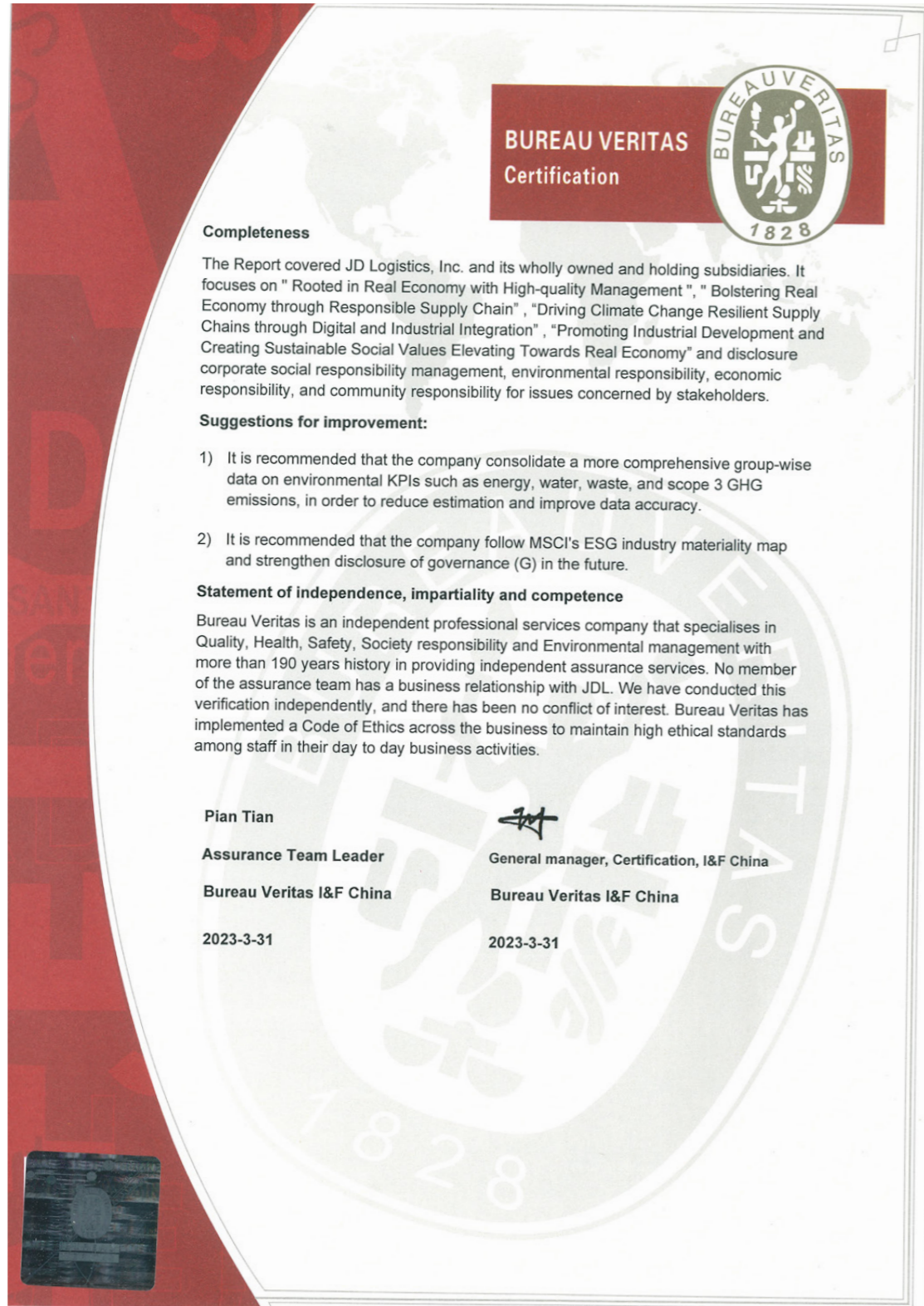
Additional commentary

Objectivity

- JDL uses information systems to collect operation, HR, safety and environmental data. Through on-site verification, the evidence provided by JDL is reliable and traceable.

Materiality

- JDL identified and disclosed key ESG issues and relative information according to the GRI Standards, the ESG Reporting Guide 2.0 issued by NASDAQ, the Environmental, Social and Governance Reporting Guide issued by Hong Kong Exchanges and Clearing Limited, and the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations issued by the TCFD.



BUREAU VERITAS
Certification



Completeness


The Report covered JD Logistics, Inc. and its wholly owned and holding subsidiaries. It focuses on "Rooted in Real Economy with High-quality Management", "Bolstering Real Economy through Responsible Supply Chain", "Driving Climate Change Resilient Supply Chains through Digital and Industrial Integration", "Promoting Industrial Development and Creating Sustainable Social Values Elevating Towards Real Economy" and disclosure corporate social responsibility management, environmental responsibility, economic responsibility, and community responsibility for issues concerned by stakeholders.

Suggestions for improvement:

- 1) It is recommended that the company consolidate a more comprehensive group-wise data on environmental KPIs such as energy, water, waste, and scope 3 GHG emissions, in order to reduce estimation and improve data accuracy.
- 2) It is recommended that the company follow MSCI's ESG industry materiality map and strengthen disclosure of governance (G) in the future.

Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, Society responsibility and Environmental management with more than 190 years history in providing independent assurance services. No member of the assurance team has a business relationship with JDL. We have conducted this verification independently, and there has been no conflict of interest. Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities.

Pian Tian

Assurance Team Leader General manager, Certification, I&F China
Bureau Veritas I&F China Bureau Veritas I&F China
2023-3-31 2023-3-31

