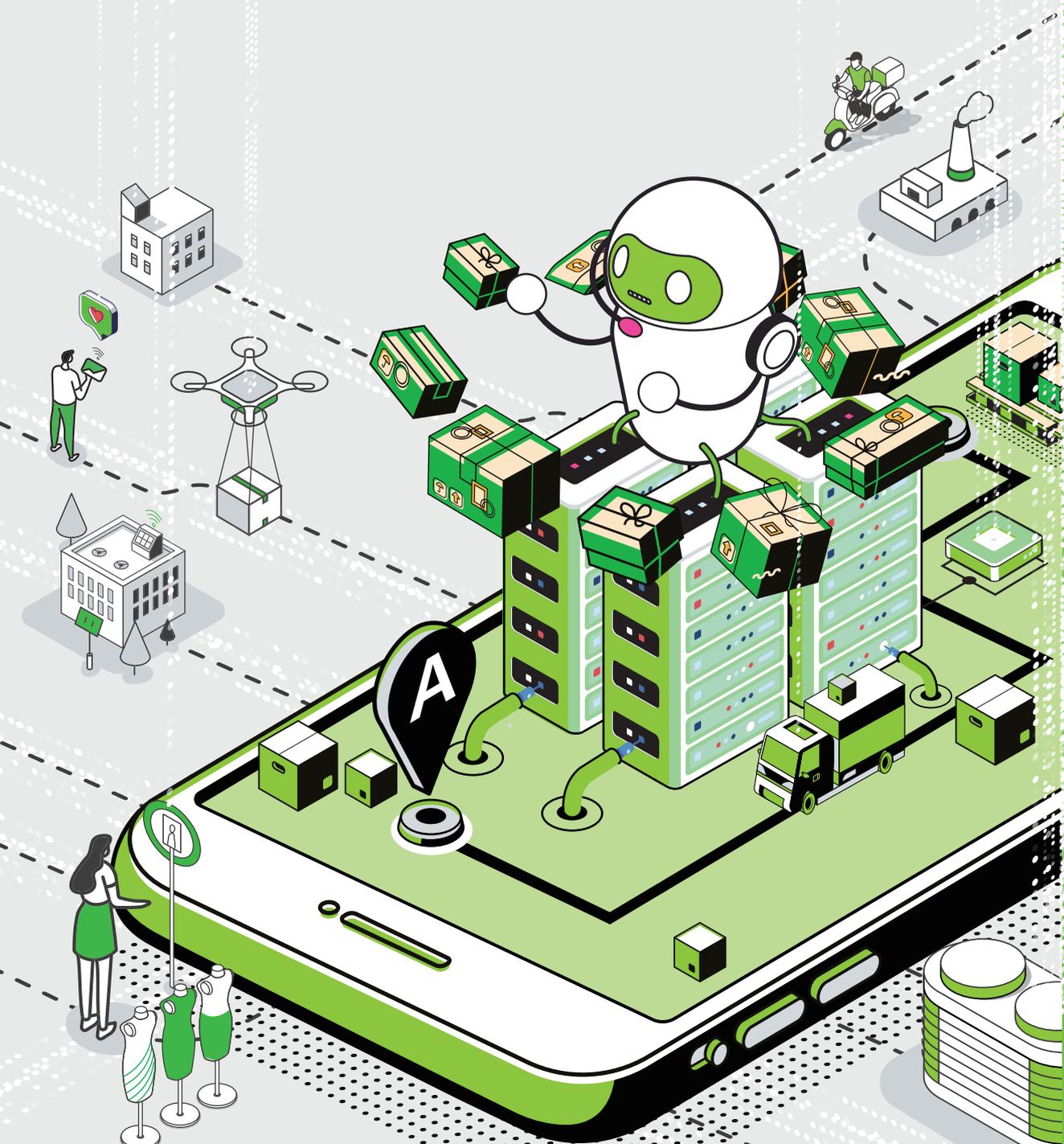


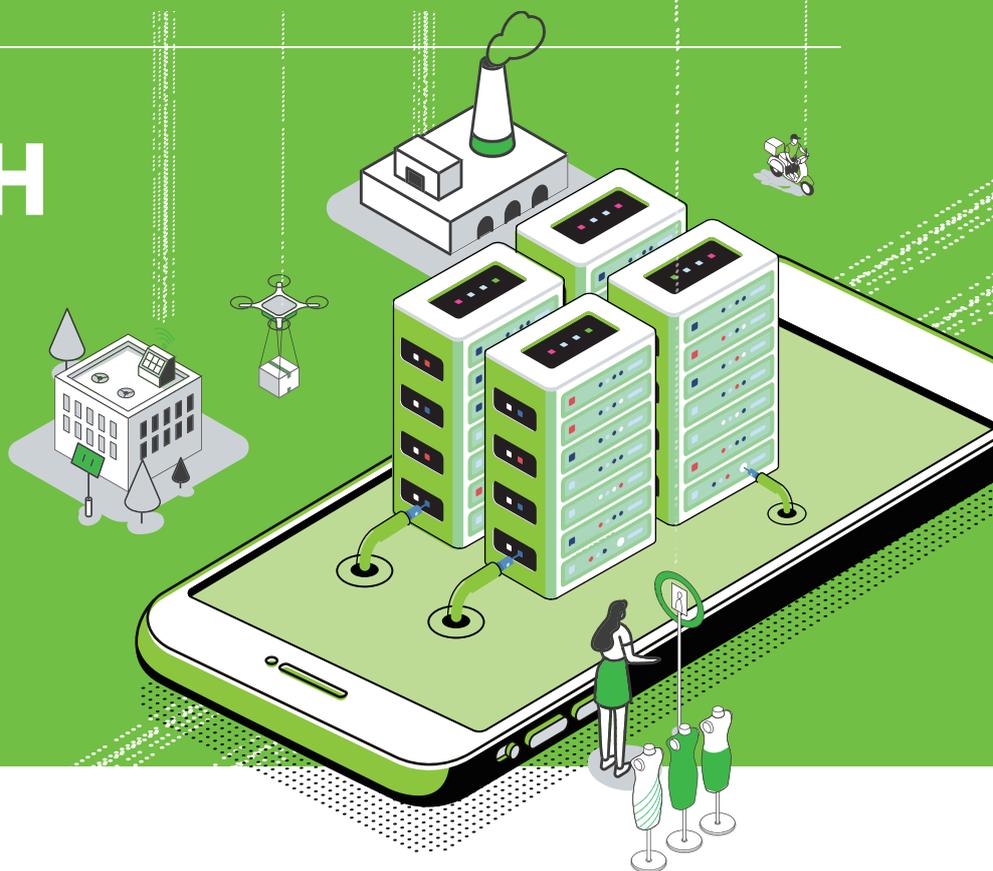
China's E-commerce Platform Companies' Current Status on Climate Responsiveness (2021)



GREENPEACE 绿色和平



RESEARCH BRIEFING



BEIJING, 6 January, 2021 –Analyzing climate responses from Alibaba, JD.com, Pinduoduo, Vipshop, Suning.com, NetEase, and Xiaomi, Greenpeace East Asia's latest ranking of China's e-commerce companies showed major shortcomings in the industry's uneven response to what has become a major playing field for companies to be judged.

"China's net-zero pledge turned climate commitments into one of the major lenses for these companies' social impact to be judged. At the same time, capital markets require stronger information disclosure on climate-related risks. The result is greater scrutiny. Still, not even industry leaders like Alibaba and JD.com actually cover their value chains when they make climate commitments. Emissions in the value chain are actually greater than emissions

in the company's corporate operations," said Tang Damin, project leader in Greenpeace East Asia's Beijing office.

This research briefing includes:

1. Company overviews
2. Recommendations
3. Analysis of climate and environment commitments
4. Analysis of actions in response to climate and environmental issues
5. Analysis of information disclosure
6. Analysis of platform management

RANKING OF THE COMPANIES SURVEYED

Company	Commitments (30)	Actions(35)	Information Disclosure (20)	Platform Management (15)	Score(100)
 Alibaba Group 阿里巴巴集团	19	23	12	11	65
 JD.COM	10.5	24.5	17	9	61
 唯品会 vip.com	0	20.5	12	0	32.5
 苏宁易购 suning.com	2	18.5	3	6	29.5
 网易 NETEASE	0	14	11	0	25
 MI	0	10	11	1	22
 拼多多	0	1.5	0	2	3.5



COMPANY OVERVIEWS

Alibaba's relatively high score comes from the company's December 2021 commitment to achieve carbon neutrality in its operations by 2030, while collaborating with upstream and downstream sectors to half the intensity of scope 3¹ emissions by 2030, as compared to 2020 emissions. Alibaba also committed to reduce carbon emission by participants of its e-commerce platforms, namely third-party sellers and consumers, by 1.5 billion tons over the next 15 years. **Alibaba needs to establish a clear path to achieve carbon neutrality in scope 3 emissions, and overall decrease emissions in its business ecosystem.**

JD.com's relatively high score comes from subsidiary JD logistics' commitment to achieve 50% absolute emissions reduction in scope 1, 2 and 3 emissions by 2030. **JD.com overall has limited and incomplete climate commitments** and could become a leader in the industry by setting up clear commitments for low-carbon transformation of its operations.

Pinduoduo is growing rapidly and continues to see rapid rise in business and in the number of users, but has extremely few initiatives, commitments, or actions when it comes to climate and environmental protection. **Pinduoduo's information disclosure is particularly poor, and overall Pinduoduo company lags far behind its competitors.**

Vipshop is the only company to report sourcing 45% or more renewable energy, and

its information disclosure and environmental actions so far are relatively strong, but the company lacks any relevant targets or commitments².

Suning.com's environmental actions thus far are relatively comprehensive, but it still lags behind due to lack of any commitments and poor information disclosure. Since recent policy trends in capital markets are moving towards better information disclosure, the company has good reason to improve its performance in this area.

NetEase and **Xiaomi** are leading internet technology companies, and both have seen rapid growth in e-commerce portfolios, i.e., NetEase Yanxuan and Xioami Youpin. In both cases, there is relatively weak action or commitment on climate or environment.

Overall, performance is relatively poor and uneven, with two major trends:

1. Climate action has become a key playing field in the competition between China's two biggest e-commerce companies, and the biggest hurdles is how to address emissions in the value chain (scope 3) and business in the company's ecosystem.
2. Environmental information disclosure has rapidly improved in recent years, with capital markets' focus on financial risk associated with climate change playing a major role. This means that companies will face more scrutiny on whether or not they are taking climate and environment issues seriously.

¹ Greenhouse Gas Protocol. *Scope 3 Calculation Guidance*. <https://ghgprotocol.org/scope-3-technical-calculation-guidance>

² The 45% figure is derived by comparing Vipshop's solar power generation in 2020 to the company's total electricity consumption in that year.

RECOMMENDATIONS

E-commerce reshaped China's landscape and completely changed the consumer behavior of hundreds of millions of people. E-commerce companies are responsible for issues related to their operations as well as the impact of their business ecosystems. In this report, Greenpeace demands that Alibaba, JD.com, Pinduoduo, Vipshop, Suning.com, NetEase, and Xiaomi do the following:

1. Establish comprehensive climate and environmental commitments as soon as possible and take proactive actions to:
 - a. Set carbon neutrality targets for the entire value chain (scope 1, 2 and 3) and define a clear path and timeline for reducing emissions;
 2. For carbon emission in scope 1 and 2, focus on achieving 100% renewable energy use in operations and electric vehicle adoption by 2030;
 3. For carbon emission in scope 3, focus on quantifiable packaging reduction targets, as well as emission reduction management targets among suppliers.
2. Enhance environmental information disclosure and communicate with the public, investors, policy makers and other stakeholders on the progress of corporate environmental management on a regular basis;
3. Put in place a code of conducts for third-party sellers to regulate their operations with regard to climate and the environment, while increasing consumers' exposure to green options.

ANALYSIS OF CLIMATE AND ENVIRONMENT COMMITMENTS

There are three major gaps:

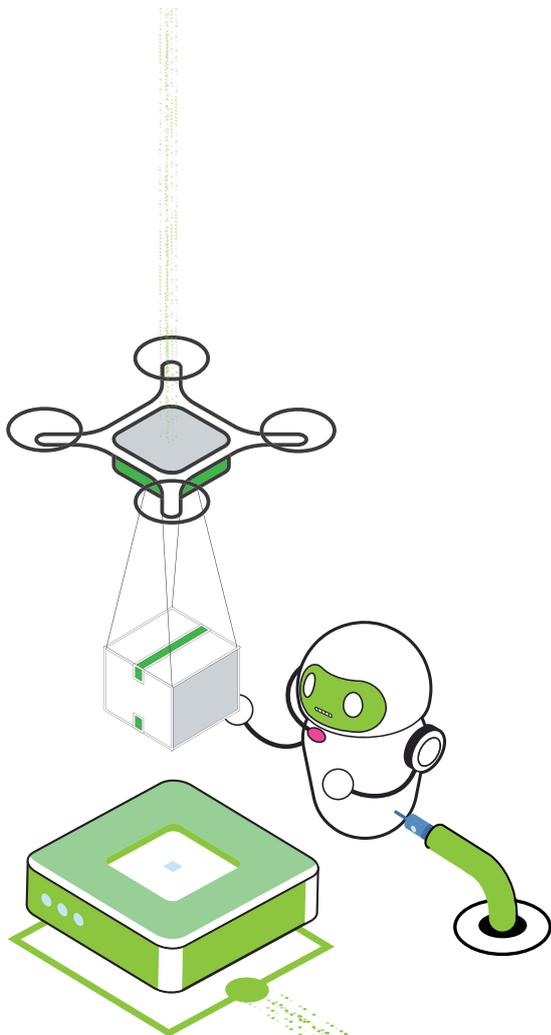
1. For **commitments spanning corporate operations**, only Alibaba has set a timeline for carbon neutrality (in scope 1 and 2), and for the use of 100% clean energy in cloud services.
2. No company has made any public commitment to achieve **in the entire value chain (across scope 1 to 3)**.
3. **Green packaging, green logistics, and green supply chain** are necessary for low-carbon operations in e-commerce, but only Alibaba, JD.com, and Suning.com have set any relevant targets whatsoever.

Progress includes:

1. Both Alibaba and JD.com have proposed targets for greenhouse gas emissions reductions. They vary in both scope and intensity.
2. Alibaba is the only company that proposed to achieve carbon neutrality in its group-wide operations (scope 1 and 2) by 2030. Alibaba also proposed to collaborate with the upstream and downstream of the ecology (scope 3) to achieve a reduction in carbon emissions intensity by half compared to 2020. In addition, Alibaba's cloud computing service will achieve carbon neutrality in scope 1, 2 and 3, and realize 100% clean electricity supply from 2030.
3. JD Logistics, a subsidiary of JD Group, set a carbon reduction target of 50% for scope 1, 2 and 3 by 2030, and pledged to use 100%

renewable energy by 2030. JD Logistics is also the first logistics company in Mainland China to join the Science-based Target initiative.

4. Alibaba has explicitly set a goal of replacing 100% of its own operating vehicles with electric vehicles by 2030, while JD and Suning.com are the only two among the other six companies that have set targets for fuel vehicle phase-out.
5. JD set a packaging reduction target in 2017.



ANALYSIS OF ACTIONS IN RESPONSE TO CLIMATE AND ENVIRONMENTAL ISSUES

There have been no major breakthroughs in the application of renewable energy. Some of the major gaps are:

1. Only Alibaba and Vipshop have disclosed that more than 30 million kWh (kilowatt hours) of electricity was sourced from renewable energy in 2020, according to incomplete disclosures from these companies. Only Vipshop reportedly uses 45% renewable energy sources for electricity use. Given that Alibaba did not specify the use of the electricity it purchased from renewable sources, it is not clear how much of the brand's renewable electricity consumption was attributed to its retail businesses, and there is no specified commitment for increasing renewable energy use in retail.
2. JD.com's renewable energy consumption in 2019 was less than 1% of total energy consumption, at 1,479.99 MWh (megawatt hours).
3. Phasing out fuel vehicles has not become a mainstream emissions reduction pathway. Only Alibaba, JD.com, Vipshop, and Suning.com have made any efforts here.
4. Among the seven companies, only JD.com has developed environmental management regulations for refrigerants used in data centers.

Progress includes:

1. Most mainstream e-commerce companies practice low-carbon management of transport, packaging, or suppliers in various ways and to varying degrees.
2. Six companies have achieved some form of emissions reductions at the logistics and transport level through intelligent algorithms that optimize the path planning of their own transport systems, with the exception of Xiaomi, for which no public information is available.
3. Six companies have adopted various green packaging measures such as source reduction and/or end-of-life recycling to varying degrees, except Pinduoduo, for which no public information is available.
4. JD.com, Vipshop and Suning.com have established reusable express packaging systems.
5. Retail e-commerce companies have begun to explore the potential of using renewable energy to drive low-carbon transformation, including the use of rooftop photovoltaics in office buildings and warehouses, as well as market-based procurement of renewable energy.

ANALYSIS OF INFORMATION DISCLOSURE**There are two major gaps:**

1. Pinduoduo and Suning.com have yet to disclose relevant environmental performance through official channels, despite their large market share.
2. Disclosure on either the supply chain or the use of electric vehicles in operations is particularly lacking across the platforms evaluated. With regard to supply chain, only Alibaba, JD and NetEase have disclosed carbon emission information in some categories in scope 3. Only Vipshop has disclosed the use of electric vehicles in logistics, in 2019.

Progress includes:

1. In 2020, JD.com, Vipshop, NetEase, and Xiaomi all disclosed information on electricity consumption, carbon emissions, and packaging materials and waste in official corporate reports, following disclosure guidelines for the Hong Kong Stock Exchange, Global Reporting Initiative, or Task Force on Climate-Related Financial Disclosures.
2. With the exception of Pinduoduo, for which no public information is available, all the other six companies have established environmental and sustainability governance structures for the boards of directors.
3. Along with the above, Alibaba also established an environmental sustainability management department, which concerns itself with target setting, strategy design and project implementation for carbon neutrality and environmental issues.

ANALYSIS OF PLATFORM MANAGEMENT

There is a major gap:

1. No retail e-commerce company has yet set up standards for or audited the environmental performance of online stores that operate on their platforms.

Progress includes:

1. Some e-commerce platforms have started to put forward sustainable business guidance for online stores as well as sustainable consumer guidance.
2. The three largest platforms – Alibaba, JD.com, and Pinduoduo, have all leveraged their platforms to stop the sale of or warn against buying or selling goods that damage the environment, or have worked to raise awareness among retailers.
3. For consumer advocacy, JD.com, Alibaba, Xiaomi, and Suning.com have all opened green or sustainable shopping options on the platform. Alibaba and JD.com also host marketplaces for second-hand goods.

NOTES ON LIMITATIONS OF THE METHODOLOGY

The report does not cover the full range of environmental issues related to e-commerce businesses, nor does it address topics beyond the environmental dimension involved in sustainable management.

Due to limited availability of data, the report may not fully incorporate all publicly-available environmental data of the companies between January 1, 2018 and December 20, 2021. We will continue to follow and track the climate action and environmental performance of retail e-commerce companies and to refine the assessment methodology in our future work.



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For nearly 50 years, Greenpeace has been sailing the world's oceans protecting our planet and fighting for environmental justice.

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