Climate
Action
Transparency
Index

2025

供应链气候行动指数

Supply Chain CATI Index

执行摘要

Executive Summary

IPE 公众环境研究中心
Institute of Public & Environmental Affairs

Executive Summary

I. Introduction: The Decarbonization Imperative for Global Supply Chains Amid the Climate Crisis

As the world marks the 10th anniversary of the Paris Agreement, collective international efforts have yielded encouraging progress. The rapid rise in global emissions has been partially contained, and the most catastrophic warming scenarios have been alleviated. Among these efforts, China has played a vital role by steadfastly advancing its "dual carbon" goals, accelerating the energy transition, and promoting green and low-carbon supply chain development. Despite a complex and evolving international landscape, China announced in September 2025 a more ambitious Nationally Determined Contribution (NDC)—a move that not only boosted global confidence but also brought greater certainty to international climate governance.

However, the global climate situation remains severe, with extreme weather events occurring more frequently. While the pace of emissions growth has slowed, total global greenhouse gas (GHG) emissions continue to rise. To date, 165 countries have pledged to achieve carbon neutrality,[1] yet even with updated NDCs, the world still faces an estimated emissions gap of over 25 gigatons of CO2e between current pledges and the 1.5°C temperature goal under the Paris Agreement.[2] [3] Meanwhile,

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[1] Tsinghua University. *2025 Global Carbon Neutrality Annual Progress Report* [EB/OL]. 2025 [cited 2025-10-27]. Available at: https://www.icon.tsinghua.edu.cn/__local/4/6C/2E/B8F269F9ABA2A584CCE2F6744B2_139D9B1D_1469ED3.pdf

[2] Climate Watch. *NDC Tracker* [EB/OL]. 2025 [cited 2025-10-28]. Available at: https://www.climatewatchdata.org/ndc-tracker

[3] The statistical scope does not include China's newly announced NDC.

intensifying geopolitical tensions and inconsistent climate policies among several major emitters have further complicated climate cooperation.

Given that emissions from industrial production and energy consumption account for the majority of global greenhouse gas emissions, corporate climate action plays a pivotal role in advancing global decarbonization efforts. To enhance public understanding of corporate climate performance and foster an enabling environment for low-carbon transformation, the Institute of Public & Environmental Affairs (IPE) launched the Corporate Climate Action Transparency Index (CATI) in 2018 and has conducted annual evaluations since then.

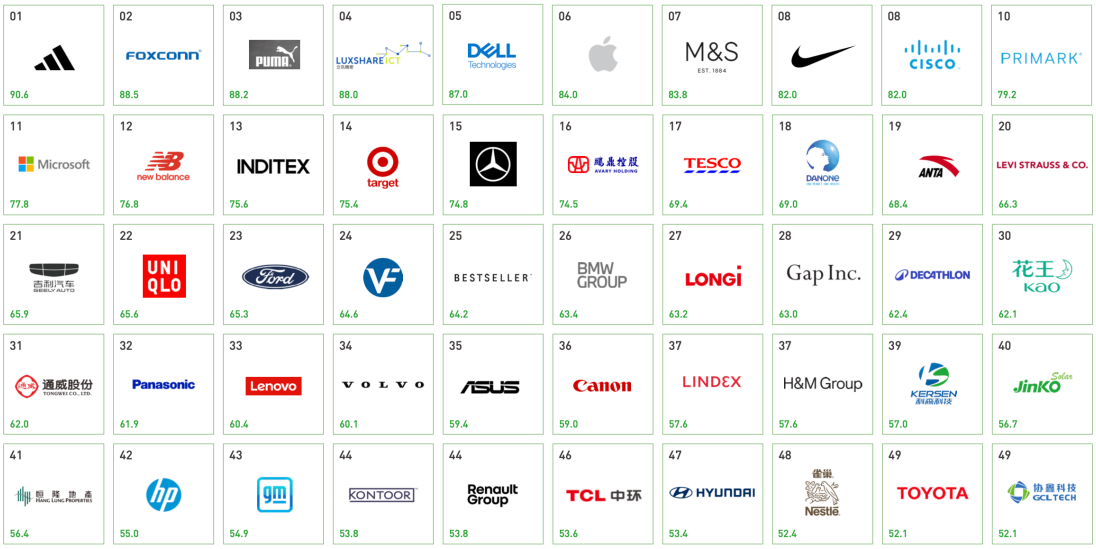
At this critical moment of heightened uncertainty in global climate governance, IPE believes that supply chain decarbonization is pivotal to sustaining progress toward global climate goals. In 2025, IPE once again conducted a quantitative evaluation of 800 Chinese and international companies across 23 industries, assessing their climate performance across five key dimensions—policy & governance, measurement & disclosure, carbon targets setting, performance towards targets, and emission reduction actions. The evaluation aims to identify and promote best practices, motivating companies across global supply chains to accelerate their low-carbon transformation.

II. Evaluation Results: Foundations Laid, Bottlenecks Remain

The 2025 CATI evaluation shows that both Chinese and international companies are actively participating in global climate governance. Among the 800 evaluated companies, Adidas, Foxconn, and PUMA ranked as the top three performers, followed by Luxshare Precision, Dell, Apple, Marks & Spencer, Nike, Cisco, and Primark in the top ten.

Companies from the Greater China region have made remarkable progress in advancing climate action. Fourteen companies — including Foxconn, Luxshare Precision, Avary Holding, Anta Sports, Geely Auto, LONGi Green Energy, Tongwei, Lenovo Group, ASUS, Kersen Technology, JinkoSolar, Hang Lung Properties, TCL Zhonghuan, and GCL Tech — entered the Top 50.

2025 CATI Index Top 50



(For full 2025 CATI Index scores and rankings, please visit the Blue Map website.)

Overall, while corporate accounting and disclosure of Scope 1 and 2 emissions have become common practice, Scope 3 emissions and product carbon footprints remain areas of weakness. More than 70% of evaluated companies have set quantitative climate targets, but implementation and performance tracking remain lagging in some cases. Most companies have taken steps to reduce emissions, yet supply chain decarbonization progress remains limited and often confined to pilot projects. Current low-carbon procurement efforts still fall short of the scale required to achieve net-zero value chain targets. In summary, while the foundations of corporate climate action have been laid, significant bottlenecks remain to be overcome.

III. Insights into Supply Chain Decarbonization: Current Status and Key Challenges across Five Evaluation Dimensions

Finding 1: New Disclosure Rules Drive the Mainstreaming of Climate Reporting, but Scope 3 Accounting and Target Implementation Lag Behind

In recent years, the growing convergence of global climate disclosure frameworks has driven large enterprises to mainstream climate reporting. The CATI Index average score increased by 167% over the past five years, reflecting significant progress in climate governance among both Chinese and international companies and a growing focus on value chain emissions.

The 2025 evaluation shows that:

- **Scope 1 & 2 disclosure has become standard practice:** 88% of evaluated companies have calculated and disclosed their Scope 1 and 2 (direct operational) emissions.
- **Scope 3 accounting has advanced but remains limited in depth:** 60% of companies conducted Scope 3 (value chain) accounting and disclosure, with 77% including supply chain emissions. Nevertheless, Scope 3 and supply chain carbon accounting continue to pose challenges for nearly half of all companies.
- **Product carbon footprints are emerging as a new focus:** 150 evaluated companies disclosed product carbon footprint data, more than 60% of which were Chinese companies — reflecting the impact of policies such as the *Implementation Plan for Establishing a Carbon Footprint Management System* that guide enterprises toward life-cycle carbon accounting.
- **Supplier carbon disclosure continues to expand:** Driven by 37 companies including Primark, Luxshare Precision, Foxconn, Anta Sports, Dell, and Target,

- 3,111 suppliers disclosed facility-level carbon data via the Blue Map platform, a 10% year-on-year increase, representing 69.25 million tonnes of CO_2e in combined Scope 1 & 2 emissions.

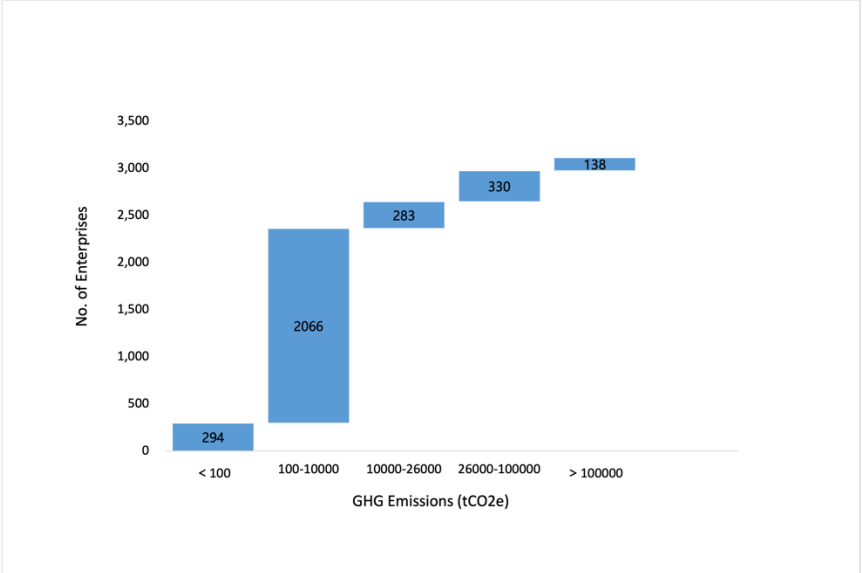


Figure 1. Distribution of Supplier Companies by Magnitude of Reported Carbon Emissions on the Blue Map Platform, 2025 Evaluation Period

- 385 suppliers disclosed Scope 3 emissions data, and 66 suppliers disclosed 96 third-party-verified product carbon footprints.
- 1,298 suppliers set carbon reduction targets, including 887 with absolute Scope 1 & 2 reduction targets, collectively pledging 8.58 million tonnes of CO_2e cuts.
- 94 suppliers disclosed efficiency improvement and renewable energy projects, achieving a total reduction of about 210,000 tonnes of CO_2e.

Current challenges remain: although more companies have established climate targets, fewer than half disclose progress toward achieving them. Over 60% of evaluated companies have yet to effectively drive carbon management across their supply chains, and only 5% promote supplier climate information disclosure. Measured supply chain data are still not being fully utilized by lead enterprises. Supplier carbon data further reveal that small and medium-sized enterprises still face

significant gaps in carbon accounting and disclosure capabilities, with emissions in some cases continuing to rise. Their targets often lack ambition, leaving considerable room for improvement in reduction outcomes. Lead enterprises urgently need to encourage suppliers to conduct carbon data accounting and disclosure, strengthen the data infrastructure for supply chain carbon management, establish baselines, and progressively implement emission reduction actions.

Finding 2: Five Photovoltaic Brands Enter the Leading Group, with Greater China Companies Narrowing the Gap with Global Leaders

In the 2025 evaluation, companies ranking in the Top 50 primarily came from the textile & leather, IT/ICT, automotive, and photovoltaic (PV) industries, while notable performers also emerged from the retail, food & beverage, dairy, home appliances, real estate, and household & personal care sectors:

- **Together, textile & leather and IT/ICT companies accounted for nearly half of the Top 50.** These leading enterprises were among the earliest to commit to net-zero targets. They have integrated supplier greenhouse gas (GHG) accounting and disclosure (or reporting) into procurement requirements, worked with key suppliers on renewable energy adoption, recycled metal and fabric utilization, and other low-carbon initiatives, and motivated their supply chains to conduct carbon accounting and target setting.
- **Nine automotive companies entered the Top 50.** Leading automakers have actively advanced electrification transitions. Most have published product carbon footprint reports, set reduction targets for materials such as steel, aluminum, and batteries, and launched pilot programs for sourcing low-carbon steel and aluminum. International automakers began climate action relatively earlier and demonstrate higher levels of climate disclosure. Geely

Auto, the only Chinese automaker in the Top 50, not only disclosed emission reduction targets for steel, aluminum, and plastics, but also included renewable electricity requirements in supplier qualification and performance assessments, while encouraging suppliers to use recycled materials.

- **Five photovoltaic companies joined the leading group.** Facing growing "green barriers" in international trade, Chinese PV enterprises have significantly strengthened their climate disclosure, expanded Scope 3 and product carbon footprint accounting, and reduced carbon intensity in energy- and emission-intensive polysilicon production. LONGi Green Energy, listed in the Top 50 for three consecutive years, has not only pledged to increase its renewable electricity share before 2030 but also encouraged key suppliers to carry out carbon accounting and disclosure.

From a regional perspective, the number of Greater China companies in the Top 50 increased from four in 2021 to fourteen in 2025. The region's overall average score also rose from 3.29 in 2021 to 20.44 in 2025, a 520% increase. This demonstrates that policies such as the *Guidelines for Self-Regulation of Listed Companies—Sustainability Report (Trial)* and the *Corporate Sustainability Disclosure Standards No.1 — Climate (Trial)* have provided clear guidance and policy direction, helping Greater China companies accelerate climate action and narrow the gap with leading regions such as Europe and North America.

As China announces a new round of enhanced Nationally Determined Contributions (NDCs), more companies in the Greater China region are expected to start by establishing clear carbon baselines, setting ambitious reduction targets, implementing energy efficiency and emission reduction measures, and joining the ranks of global climate leaders.

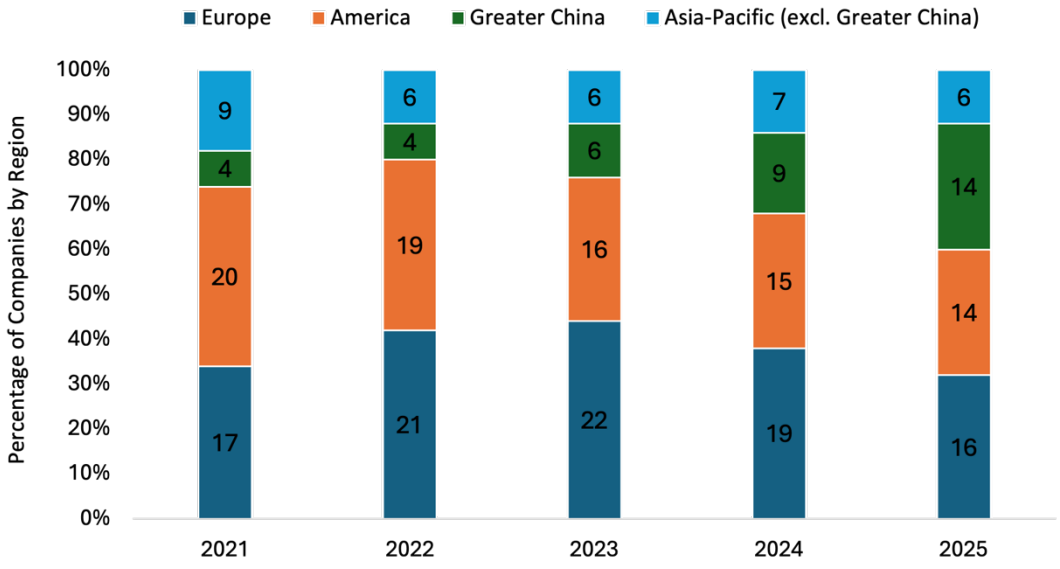


Figure 2. Regional Distribution of Top 50 Companies, 2021–2025

Finding 3: Corporate Renewable Electricity Use Rises with Renewable Expansion, but Supply Chain Procurement Incentives Remain Limited

The rapid expansion of global renewable energy capacity has provided a strong foundation for corporate decarbonization. In the first half of 2025, renewable energy accounted for 59.2% of China's total installed power generation capacity and 39.7% of total electricity generation. [4] China's continued growth in renewable energy installations is playing an increasingly vital role in supporting global supply chain decarbonization.

The 2025 evaluation shows that:

- **Clean energy adoption is widespread:** 88% of evaluated companies have adopted non-fossil energy substitution — a 151% increase from 2021. Among

[4] National Energy Administration. *Transcript of the National Energy Administration's Q3 2025 Press Conference* [EB/OL]. 2025 [cited 2025-10-22]. Available at: https://www.nea.gov.cn/20250731/83ffa46373ec42dd99e0e3271028c151/c.html

them, 15% reported that clean energy accounted for more than 40% of their total energy consumption, and over ten leading enterprises have achieved 100% renewable electricity use in their own operations.

- **Leading companies are driving renewable energy uptake across supply chains:** Companies such as Apple, Foxconn, Luxshare Precision, PUMA, and Anta Sports have actively encouraged suppliers to scale up renewable energy utilization. Data disclosed by 820 suppliers during the evaluation period show a total renewable electricity use of 6.08 million MWh, equivalent to 3.56 million tonnes of CO_2e reductions.[5]

Current challenges remain: Only a limited number of lead enterprises have incentivized suppliers to use or invest in renewable electricity through procurement mechanisms such as green order incentives, and the overall proportion of renewable energy consumption across supply chains remains low. Among suppliers that disclosed renewable electricity use, the associated emission reductions accounted for only 16.7% of their total Scope 1 and 2 emissions. The vast potential for scaling up renewable energy adoption within supply chains has yet to be fully unlocked.

Finding 4: Leading Enterprises Are Piloting Low-Carbon Material Procurement, Yet Scaling Up Is Essential to Achieve Net-Zero Goals

The production and manufacturing of upstream raw materials remain major emission hotspots across corporate value chains. Leading enterprises are beginning to identify high-emission segments through supply chain emission mapping and life-cycle

[5] Estimated based on the national average CO_2 emission factor for electricity generation in 2022 (0.5856 tCO_2/MWh), excluding non-fossil electricity from market-based transactions.

analysis, working with suppliers in carbon-intensive industries to develop emission reduction projects.

The 2025 evaluation shows that:

- **IT/ICT and textile sectors have articulated clear low-carbon material procurement needs.** About 25% of evaluated companies — including Apple and Adidas — have signaled demand-side commitments to promote the use of low-emission steel and aluminum, as well as recycled fibers and other materials, by their core suppliers, thereby encouraging accelerated emission reduction actions across the supply chain.

With support from Energy Foundation, IPE in 2025 launched a study on decarbonizing the steel and aluminum supply chains of the automotive and real estate sectors. The study aims to encourage companies to begin by measuring and disclosing GHG emissions along their steel and aluminum supply chains, setting and disclosing reduction targets, and gradually expanding the procurement of low-carbon steel and aluminum. The study **identified emerging practices of low-carbon procurement in both industries**:

- **Automotive sector:** Eleven companies — including Mercedes-Benz and Geely Auto — have set emission reduction targets for steel, while eight, including Polestar and General Motors, have established reduction targets for aluminum. Thirty automakers have launched pilot procurement programs for low-emission steel and aluminum.
- **Real estate sector:** Four developers, including Hang Lung Properties and Swire Properties, have begun prioritizing low-carbon construction materials in their demonstration projects.

Current challenges: 75% of companies have yet to collaborate with suppliers to reduce emissions in the production of raw materials. Most low-carbon procurement efforts by leading enterprises remain limited to pilot projects, with insufficient scale to

achieve net-zero value chain goals. Quantitative disclosure of emission reduction performance is still lacking, raising concerns over project sustainability. Moreover, the "green premium" continues to be a critical bottleneck for decarbonizing upstream high-emission segments. A coordinated mechanism for cost-sharing across the value chain is urgently needed to internalize negative externalities and jointly advance industrial decarbonization.

Finding 5: Green Logistics Practices Show Early Progress, Yet Most Companies Still Overlook Logistics-Related Emissions

Logistics activities are often among the major emission hotspots within corporate value chains and therefore warrant greater attention.

The 2025 evaluation reveals that:

- **Green logistics systems are gradually taking shape:** 35% of evaluated companies — including PUMA, Lenovo Group, and Apple — have begun collaborating with logistics providers to reduce emissions through measures such as adopting electric freight vehicles and optimizing transportation routes.

In 2025, with support from the International Council on Clean Transportation (ICCT), IPE built upon the CATI evaluation framework and extensive research to develop the **Shipper Company Green Logistics CATI Index**, designed to assess shipper companies' progress in advancing green logistics. The index aims to help companies more accurately account for logistics-related emissions within their value chains, set emission reduction targets for logistics activities, establish corporate green logistics systems, and implement emission reduction projects in partnership with logistics service providers.

The inaugural Shipper Company Green Logistics CATI Index evaluation focused on the progress in green logistics practices among 50 climate-leading companies.

- **Leading companies are taking multiple approaches to promote low-carbon logistics:**
    - Eleven companies, including PUMA, HP, and Tesco, have set specific targets for logistics activities, such as the share of electric vehicles in logistics operations.
    - Thirty-one companies have increased the use of new-energy trucks, while 38 companies have reduced emissions by improving transport efficiency through multimodal transport and reducing empty runs.
    - Twelve companies have encouraged or required suppliers to measure logistics-related emissions or disclose progress in emission reduction actions.

Current challenges: Most companies still pay limited attention to emissions from logistics operations. Among leading enterprises, green freight projects remain at the pilot stage, with limited large-scale emission reduction impact. Deeper collaboration between shippers and logistics service providers is needed, along with improved quantitative tracking and disclosure of logistics-related emission reduction performance.

IV. Outlook and Recommendations: Advancing Zero-Carbon Supply Chains through Multi-Stakeholder Collaboration

The 2025 CATI evaluation finds that corporate climate action has entered a pivotal phase of deep decarbonization, where capability in green supply chain management will increasingly define corporate competitiveness in the low-carbon economy.

Based on the findings, IPE calls for collective multi-stakeholder action to accelerate corporate and supply chain climate governance. This requires the continuous improvement of related standards, regulations, and digital tools, as well as addressing the persistent “green premium” challenge associated with low-carbon technologies and materials — ultimately advancing the construction of zero-carbon supply chains.

To this end, we recommend:

1. **Regulators:** Strengthen the top-level design of climate information disclosure systems and promote standardized, transparent corporate climate reporting to meet the needs of green supply chains, green finance, and public supervision. Create policy environments that facilitate coordinated decarbonization across upstream and downstream segments of industrial value chains. Expand carbon market mechanisms to include more high-emission upstream sectors, thereby internalizing negative externalities.

2. **Leading Enterprises and Industry Associations:** Strengthen focus on supply chain emissions and advance research on sectoral decarbonization pathways and technologies. Empower suppliers to take emission reduction actions and integrate supplier climate performance into procurement decisions. Encourage and guide suppliers to carry out carbon accounting and track their emissions reduction progress.

3. **Financial Institutions:** Refine requirements for financed enterprises to disclose supply chain climate information and integrate value chain carbon management performance into climate risk assessments. Provide financial support for large-scale, long-term decarbonization projects in high-emission industries to bridge funding gaps. Facilitate the scaling-up of low-carbon technologies and materials to reduce the green premium.

4. **Environmental Organizations, Research Institutions, and the Media:** Monitor and report progress on corporate emission reduction and carbon neutrality, and strengthen corporate accountability for pollution control and carbon

reduction responsibilities. Work collectively to establish robust incentive and accountability mechanisms that drive corporate climate action. Support the development of standardized tools to help small and medium-sized enterprises (SMEs) conduct GHG accounting, set emission reduction targets, and disclose progress—lowering barriers to participation. Identify and amplify best practices in supply chain decarbonization to inspire broader adoption.

5. **The Public and Consumers:** Pay attention to the full life-cycle carbon footprint of products—from production to disposal—and foster sustained public oversight. Support leading enterprises in implementing energy-saving and emission reduction measures through informed green choices, while encouraging companies lagging behind to accelerate their low-carbon transition.

About IPE

The Institute of Public & Environmental Affairs (IPE) is a non-profit environmental research organization registered in Beijing. Since its founding in 2006, IPE has developed and operated the Blue Map Database (http://wwwen.ipe.org.cn/) and, in 2014, launched the Blue Map App. Through promoting environmental information disclosure, IPE empowers green supply chains and green finance, supports corporate green transition and low-carbon development, and facilitates multi-stakeholder participation in environmental governance — working together to safeguard our shared planet.

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Note

1. The evaluation period for the 2025 report covers October 1, 2024 to September 30, 2025.
2. The information used for evaluation was obtained from corporate official websites; annual reports, CSR reports, ESG reports, sustainability reports, and other periodic disclosures; information released through publicly accessible channels such as official websites; credible data sources collected by the Blue Map Database; publicly disclosed CDP questionnaire responses; and environmental information and emission data disclosed by suppliers at the initiative of participating companies.
3. If any divergences arise between the English and the Chinese versions of this report, please refer to the Chinese version, which is the official version of the report.
4. Contact: gsc@ipe.org.cn