

## Executive Summary

### Introduction

In 2022, weather disasters due to climate change become more frequent. Heat waves swept many countries and regions around the world with severe drought and mountain fires. The Yangtze River basin in China experienced a rare phenomenon of drought in flood season. The water level of the middle and lower reaches of the Yangtze River, Dongting Lake, and Poyang Lake are the lowest in history in the same period. The extreme weather has put huge pressure on energy supply, food production, people's life and health, and also has a direct impact on the stability of the supply chains.

At the same time, global climate management is facing huge challenges, with global CO<sub>2</sub> emissions rebounding to record levels in 2021<sup>1</sup> and continuing the trend in 2022. As the COVID pandemic, energy shortages and geopolitical tensions continue to rise, major economies are releasing fossil energy capacity to enhance energy security, food security, and supply chain security. United Nations Environment Programme stated in the newly released *Emissions Gap Report 2022*<sup>2</sup> that if the current commitments and climate policies are fully implemented by their responsible nations, global greenhouse gas emissions will only reduce by 5% to 10% by 2030 compared to 2015. Progress on global climate management is seriously lacking, and the temperature control targets in the Paris Agreement are likely to fall short.

As major contributors to economic and social development, companies are important actors in achieving green and low-carbon development in China and around the world. Building on multilateral cooperation frameworks such as the Paris Agreement and the Glasgow Climate Convention, more companies and financial institutions have publicly disclosed climate and environmental commitments, with financial institutions holding USD 130 trillion<sup>3</sup> in assets pledged to fund climate action. A group of local and global companies also joined in China Green Supply Chain Alliance led by the Center for International Economic and Technological Cooperation of the Ministry of Industry and Information Technology and collectively explored green supply chain-related management optimization and technical innovation.

To guide and motivate Chinese and foreign enterprises to implement greenhouse gas emission reduction commitments for themselves and their supply chains, and to achieve synergy and efficiency in reducing pollution and carbon emission, this is the ninth consecutive year that IPE has conducted its Green Supply Chain CITI Index evaluation and the second consecutive year for its Corporate Climate Action CATI Index evaluation.

In this quantitative evaluation of 650 companies in 20 industries, we see that the progress of green supply chain and climate action of participating companies is remarkable under the context of the “dual carbon” strategy. Nearly one hundred participating companies use innovative solutions based on big data and the Internet to carry out efficient supply chain environmental and carbon management, promote the green and low-carbon transformation of their supply chains, and try to guide consumers to pay attention to the environmental

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<sup>1</sup> IEA, Global Energy Review: CO<sub>2</sub> Emissions in 2021

<sup>2</sup> UNEP, Emissions Gap Report 2022, <https://www.unep.org/resources/emissions-gap-report-2022>

<sup>3</sup> María Paula Rubiano A., Banks with \$130 trillion in assets pledge to fund climate action. Activists aren't impressed. <https://grist.org/cop26/financial-institutions-climate-promises-are-met-with-skepticism/>

impact and carbon footprint from product design to end-of-life disposal.

## CITI Highlights

- Overall
  - **Levi's, Inditex, Adidas, New Balance, M&S, C&A, Nike, Cisco, VF, Primark** ranked the TOP10 in the CITI Index evaluation.
  - **Apple** and **Dell** continued to uphold the CITI Master title.
  - **Foxconn, Avary Holding, LUXSHARE-ICT, Huawei, Lenovo, Li-Ning** take the lead in the greater China region.
- Promote Supply Chain Transparency
  - **Lindex, Lululemon, Target, PUMA, Lenovo** and 26 other companies disclosed the environmental performance of 2,609 suppliers in China through the Green Supply Chain Map.
- Promote suppliers to rectify, disclose and extend environmental management to upstream
  - **482 companies** publicly committed to green supply chain management.
  - 107 brand-name companies pushed **1,553 suppliers** to publicly disclose their explanations and/or corrective measures through the Blue Map website for 3,633 environmental violations, involving penalties of 197,590,000 RMB.
  - **Lululemon, Vitasoy, Polestar** and 66 other companies used automated tools such as the Blue EcoChain to carry out supply chain environment management, and cumulatively promoted **over 20,000 suppliers** to use Blue EcoChain to track their own environmental performance.
  - **Landsea Green Management** and 36 other real estate and construction companies have significantly increased the scale and impact of green procurement through centralized procurement.
  - **Microsoft, VF, Primark, Nike, Levi's, M&S, C&A** and others have extended their environmental management to suppliers providing chemicals, wastewater treatment, industrial solid waste and hazardous waste treatment and disposal, and logistics and transportation services.
  - **M&S** and other companies motivated shipping group **Maersk** to commit to green supply chain management by focusing on the environmental compliance performance of its subsidiaries and suppliers in China.
  - **417 supplier companies** independently carried out supply chain environmental management, of which nearly half are enterprises above designated size and 22 are A-share or H-share listed companies.
- Promote suppliers to calculate and disclose Pollutant Release and Transfer Register (PRTR) data
  - **PUMA, Foxconn, Target, Gap** and 29 other companies have incorporated the PRTR into their environmental management systems in China, and **Schaeffler** became the first company in the automotive industry to promote suppliers measure and disclose PRTR data.

- **Apple, Dell, Cisco, Levi's, Inditex, New Balance, M&S** and other companies promoted suppliers to carry out their own environmental management of their supply chains, and promoted more upstream suppliers to improve their ability to account for pollutants and disclose environmental information.
- **1,939 supplier companies** measured and disclosed pollutant emission and transfer data through the Blue Map website, including more than 50 substances listed in the Priority Controlled Chemicals List, Toxic and Hazardous Air Pollutants List, and Toxic and Hazardous Water Pollutants List. The **chemical oxygen demand (COD)** and **ammonia nitrogen** discharged in wastewater disclosed by these companies in 2021 accounted for about **8%** and **11%** of the national COD and ammonia nitrogen discharge from industrial wastewater, respectively. The disclosed **hexavalent chromium** accounts for about **11%** of the total discharge nationwide.
- Guide public green and low-carbon consumption
  - **Procter & Gamble, Adidas, KAO, Coca-Cola, Microsoft, Unilever, Vitasoy, Nestlé, Canon** and other companies conveyed the concept of low carbon and environmental protection to consumers and guided the public to make green choices by carrying out product eco-design and packaging reduction, displaying environmental labels, exploring recycling and reusing used products in production.

## CATI Highlights

- Overall
  - **Apple, Dell, Inditex, Cisco, Nike, PUMA, Adidas, Levi's, M&S, New Balance** ranked the TOP10 in CATI Index evaluation.
  - **Foxconn, LUXSHARE-ICT, Avary Holding, Lenovo, Huawei** take the lead in the Greater China region.
- Governance
  - 482 companies made climate commitments; more than 300 companies began to identify climate risks and integrate low-carbon issues into business decisions and board oversight responsibilities.
- Disclosure
  - **Target, Vitasoy, Landsea Green Management** and 403 other companies have calculated and disclosed their scope 1&2 carbon emissions, a total of **498 million** tonnes CO<sub>2</sub> equivalent.
  - **Microsoft, Danone, Schaeffler** and 243 other companies have calculated and disclosed their scope 3 carbon emissions.
- Targets
  - **Huawei, BASF, OJI** and 262 other companies have set scope 1&2 carbon reduction targets while **Primark, Lindex, Walmart** and 171 other companies have also set scope 3 carbon reduction targets.
  - **Lenovo, Amazon, Samsung** and 184 other companies have set carbon neutral

targets on their own operations (scope 1&2) while **Cisco, Uniqlo, Polestar** and 103 other companies have set carbon neutral targets on the entire value chain (scope 1&2&3).

- Progress
  - **Foxconn, LUXSHARE-ICT, Avary Holding, Bestseller, Lululemon** and 191 other companies are tracking and disclosing their progress made towards their scope 1&2 targets.
  - **VF, Tesco, HP, Canon, IKEA** and 88 other companies disclose their progress made towards their scope 3 targets.
  - **Microsoft, KAO, H&M, Suzano** and 22 other companies disclose their progress made towards carbon neutral.
- Carbon reduction
  - **Panasonic, Carrefour, Decathlon, Schaeffler** and over half of the companies in this round of evaluation reduce their carbon footprint through using renewable energy, increasing energy efficiency, and reducing dissipation. **Danone, C&A, Nike, Unilever** and other companies started to build zero-carbon factories.
  - **Gap, AEO, ASICS, Intel** and 131 other companies promote suppliers to increase energy efficiency and reduce their carbon emissions.
  - **Apple, Dell, Cisco, Levi's, Inditex, New Balance, M&S** and other companies promote suppliers to manage and calculate carbon footprint in their own supply chains.
  - **Apple, Dell, Inditex** and 35 other companies promoted 1,541 suppliers to disclose 2021 carbon emissions data. Total scope 1&2 emission amounted to 62.52 million tonnes CO<sub>2</sub>e, in which 1.03 million tonnes CO<sub>2</sub>e reduction was committed.

## Building Global Corporate Accountability

In spite of the highlights above, we saw a number of participating enterprises with high supply chain environmental impact, large resource and energy consumption, and high scope 3 emission ratio have yet to take practical actions to fulfill their commitments to address the environmental and climate crisis.

We believe that to promote enterprises to take the main responsibility of reducing pollution and carbon, and to curb "greenwashing" and "climate-washing", we must build a global corporate responsibility system. For this, IPE has developed and launched the "Global Business Accountability Map". The inaugural batch of companies on the Map includes 1,000 well-known brands, listed companies, and large companies in China and abroad which have publicly committed to tackling climate change, reducing pollution, and protecting biodiversity. The Map focuses on companies' progress towards achieving specific targets, disclosing greenhouse gas emissions, and implementing concrete actions to reduce emissions in their supply chains in China. The map not only presents the public commitments made by these enterprises in addressing climate change, reducing pollution emissions, and protecting biodiversity, but also shows the progress towards targets, greenhouse gas emission levels, and actions to promote emission reduction in their supply chains in China.

By September 2022, the publicly disclosed Scope 1 and Scope 2 (market-based) GHG emissions of the 1,000 companies showcased on the Map amount to a total of 2.964 billion tonnes of CO<sub>2</sub>e, accounting for 7.26%<sup>4</sup> of the global GHG emissions in 2021. The total reduction commitments publicly disclosed by these companies amount to more than 254 million tonnes of CO<sub>2</sub>e.

Rising geopolitical tensions and expanding de-globalization thinking has complicated the path forward for corporations motivated to reduce their environmental and carbon footprint while safeguarding the stability and security of key industry supply chains has become a key concern for all and the business community in particular. IPE hopes that this year's CITI and CATI evaluation and the launch of the Global Business Accountability Map will help build a global corporate accountability system, promote mutual trust, facilitate international cooperation, accelerate the green and low-carbon transformation, and contribute to China's "dual carbon" initiative and the global climate governance process.

The world is currently facing a severe climate situation, but global greenhouse gas emissions are far from the Paris Agreement goal<sup>5</sup>. As we look to 2030, businesses need to wake up to their responsibilities and growing expectations. As major emitters, companies must undertake their primary responsibilities to reduce energy and emissions while delivering social and environmental benefits such as clean air, green jobs, and energy inclusion.

**For this, we call for:**

- **Multi-partnership to build a global corporate responsibility mechanism**  
From Paris to Glasgow, more and more large companies are making carbon neutral commitments, and ESG reporting has become standard for many companies. However, "greenwashing" and "climate-washing" are commonplace and are among the factors that have slowed the progress. A global corporate accountability mechanism should not only record the climate and environmental commitments made by companies, but also their progress. It should not only record the statistics of their corporate headquarters, but also their actual actions to implement their commitments in the global production and procurement process.
- **The establishment of a green supply chain information disclosure platform**  
To accelerate the green and low-carbon transformation of supplier companies widely distributed in emerging markets and developing countries by gathering and sharing best practices of industry, brands and suppliers in green supply chain management, as well as low-carbon, environmental protection and integrated resource use technology solutions through greater information disclosure.
- **The establishment of green supply chain investment and financing mechanism**  
The global transition to a low-emissions economy is expected to require at least 4 to 6 trillion USD in annual investment. We call for financial institutions that have made commitments track the life cycle environmental impact and carbon footprint of projects or companies, identify and quantify the

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<sup>4</sup> There may be double counting involving the energy sector and other industrial sectors. 2021 global GHG emissions data comes from IEA's *Global Energy Review: CO<sub>2</sub> Emissions in 2021*

<sup>5</sup> UNEP. 2022. *The Closing Window: Climate crisis calls for rapid transformation of societies* [Online] Available at: <https://www.unep.org/resources/emissions-gap-report-2022> (30 October 2022)

environmental and climate risks of supply chains through specialized tools, and support companies in accelerating their green low-carbon transition through financing mechanisms and tools.

**We recommend:**

- **Chinese and foreign enterprises that produce or source in China:**
  - Improve green and low-carbon procurement mechanisms and requirements, and build smooth communication channels for stakeholder monitoring; continuously extend green and low-carbon procurement requirements upstream and downstream, and promote environmental compliance from raw material processing to end-of-pollutant treatment and product recycling and disposal; incentivize suppliers to carry out environmental information disclosure and control environmental and climate risks in their own supply chains.
  - Strengthen carbon data management and information disclosure capabilities, promote credible monitoring, reporting and verification (MRV) by itself, affiliated enterprises and suppliers; through carbon accounting, identify emission baseline, and then set science based carbon targets, efficiently carry out energy conservation and emission reduction based on industry characteristics, build trust with stakeholders through disclosure of emissions and performance, and drive supply chain upstream and downstream enterprises and cross-industry enterprises to collaborate in carbon and pollution reduction.
  - Conduct product designs that are easy to disassemble, sort and recycle; reduce packaging and printing; guide consumers to pay attention to the environmental impact and carbon footprint of products from production to end-of-life disposal; motivate consumers to participate in waste recycling; scale up standardized and clean utilization of recycled raw materials.
  
- **Policy makers and regulators:**
  - Guide enterprises to carry out green supply chain management, including strengthening product eco-design, accelerating energy-saving and carbon-reducing technology research and application, promoting green, reduced, and recycled packaging, building companies' own recycling networks or using existing recycling systems to improve the level of recycling.
  - On the basis of further improving environmental information disclosure, combining the initiatives of international institutions and the experience of climate information disclosure, develop a climate information disclosure framework and standards that are in line with international standards and suitable for Chinese enterprises to ensure that the disclosure requirements can reflect the efforts made by enterprises in climate governance. Promote regular mandatory disclosure of enterprise carbon data and empower enterprises to build their carbon management capacity.

- Accelerate the construction of a waste material recycling system, especially the waste material recycling network; promote the integration of waste material recycling outlets and domestic waste classification outlets; promote green and low-carbon lifestyles, advocate green consumption, and enhance the effectiveness of domestic waste classification through measures such as removing garbage bins and building garbage sorting stations, promoting regular drop-offs, improving supervision, and providing guidance, increasing its effectiveness.
- **Investors:**
  - Reduce the environmental impact and carbon emissions of owned operations on the basis of measurement and disclosure.
  - Develop investment and financing schemes for the corresponding production processes and emission characteristics of different industries; develop diversified financing mechanisms and tools to support enterprises to accelerate their green and low-carbon transformation.
- **Consumers:**
  - Pay attention to the environmental impact and life cycle carbon footprint of products from production to waste disposal and track the progress of the implementation of corporate environmental and climate commitments.
  - Chose products and services with product designs that are easy to disassemble, sort and recycle, reduced packaging and printing, and produced in green and low-carbon supply and transportation chains; push enterprises to accelerate green and low-carbon transformation through green choices; actively participate in waste sorting and help improve resource recycling rates.