



SF Group
**Climate Action
White Paper**



Foreword

Since the signing of the Paris Agreement in 2015, the logistics and supply chain industry has played an increasingly critical role in the global effort to address climate change. As a leading enterprise in China's logistics and supply chain industry, SF deeply recognizes that actively addressing climate change is not only an inevitable choice for fulfilling corporate responsibilities, but also a strategic measure for the enterprise to build core competitiveness for the future.

This Climate Action White Paper aims to demonstrate to stakeholders the practices and efforts made by SF Group in recent years to address climate change and promote green and low-carbon development: at the target level, we have become the first enterprise in China's express delivery and logistics industry to be validated by the Science Based Targets initiative (SBTi); at the technical level, we have independently developed the "Fenghe Sustainable Development Management Platform" and the industry's first waybill-level carbon accounting model, redefining the accuracy and depth of supply chain carbon management; at the industry client level, we have provided customized green and low-carbon logistics services for clients across various industries, including footwear and apparel, food, pharmaceuticals, and more.

SF is gradually deepening climate actions into quantifiable, replicable, and enabling green and low-carbon logistics and supply chain industry solutions; through the in-depth integration of carbon data management and green and low-carbon operations, while empowering clients' business growth, we help them achieve a continuous reduction in total carbon emissions and carbon intensity, and accelerate the achievement of climate change goals.

As an ancient Chinese saying goes, "The journey is long and arduous, but it will be reached if we keep moving forward." SF looks forward to taking this white paper as a fulcrum to explore in-depth with partners the implementation plans for climate transition—using technological innovation to unlock emission reduction potential and efficiency, transforming carbon management capabilities into business competitiveness, and further building a sustainable business model to address the challenges of climate change. SF is willing to join hands with all partners to create a low-carbon logistics future with the accumulated climate governance experience and green wisdom from practice. Every accurately calculated carbon footprint data is our most sincere commitment to safeguarding the Earth's climate!

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Global Vision and Industry Responsibility

Climate Change Challenges and Opportunities

In the context of accelerating global climate governance, the logistics and supply chain industry, as a critical link connecting production and consumption, faces the urgent challenge of emissions reduction, while possessing the potential to seize transition opportunities and drive industry upgrading.

Background and Urgency of Global Carbon Decarbonization

Since the industrial revolution, global temperatures have risen and extreme weather events have occurred frequently, posing severe challenges to infrastructure, energy supply, food security, and supply chain stability. The logistics and transportation sector has been particularly impacted, manifested in transportation disruptions, warehousing damage and escalating costs, forcing companies to accelerate green transition.

The 2015 Paris Agreement set global temperature control goals

To hold global temperature increase to well below
2°C above pre-industrial levels

And pursue efforts to limit it to
1.5°C above pre-industrial levels

The world's major developed economies and emerging markets are accelerating the construction of carbon-neutral policy systems. Although the paths are different, they all show policy continuity. Governments of various countries actively advocate the application and development of clean energy and technologies, including new energy vehicles, biofuels, and carbon capture technologies, and are committed to building and improving the carbon emissions trading systems to accelerate the realization of climate goals.

EU

Strict standards and industry focus, strengthening industry emission reduction through legislation, focusing on transportation.

The EU takes the *European Green Deal* (2019) as its core framework and aims to achieve climate-neutral by 2050 and reduce emissions by 55% by 2030 compared with 1990. Key logistics-related policies include:

Green Transportation

In December 2020, the European Commission released the *Sustainable and Smart Mobility Strategy*, aiming to have 80,000 zero-emission trucks in the EU by 2030. By 2050, the vast majority of cars, vans, buses and heavy vehicles will achieve zero emissions.

ReFuelEU Aviation Regulations

In October 2023, the European Council adopted the *ReFuelEU Aviation* Regulations, which put forward clear requirements for the mandatory blending ratio of sustainable aviation fuel (SAF) in aviation fuel: 2% by 2025, 6% by 2030, and 70% by 2050.

Expanding the Emissions Trading System (ETS)

The European Union Emissions Trading System (EU ETS) is one of the most mature carbon market in the world. In December 2022, the European Parliament and EU countries reached an agreement on the EU ETS reform package to gradually eliminate free quotas covering the aviation industry and include the maritime industry.

Carbon Border Adjustment Mechanism (CBAM)

In April 2023, the European Parliament passed the *Carbon Border Adjustment Mechanism (CBAM)* to impose carbon tariffs on imported high-carbon products such as cement and electricity, prompting carbon emission responsibilities in international trade to be linked to product production processes. The CBAM will be officially implemented on January 1, 2026.

New Battery Regulation

In July 2023, the European Council passed the *Regulation Concerning Batteries and Waste Batteries* to restrict lithium battery products in terms of battery carbon footprint and raw material recycling rate. However, the regulations have been slow to implement and are currently in a deferred state.

United States

Policy fluctuations and local governments first, federal and local policies are combined, driving corporate disclosure and technological innovation.

There are fluctuations in U.S. federal policies, and the positions of the federal and state governments are different. In January 2025, the United States announced its withdrawal from the *Paris Agreement* again and launched a series of policies to reduce investment in clean energy and return to traditional fossil fuels. At the state government level, California faces climate risks such as wildfires, water shortages, and rising sea levels, thus its climate policies and actions are relatively advanced, setting a model for other states. In 2023, the Governor of California signed the *Climate Corporate Data Accountability Act* (SB 253) and *Climate - Related Financial Risk Act* (SB 261) into law requiring businesses to disclose greenhouse gas emissions and climate risks; In 2024, the state's governor signed SB 219 into law, further clarifying the relevant requirements of SB 253 and SB 261 and promoting enterprises to implement emission reduction measures. At the same time, under the background that the United States has not yet formed a unified carbon market, the California carbon market is currently a representative regional carbon trading market in the United States and one of the first in the world to achieve cross-border linkage. It serves as a key policy tool for greenhouse gas emission control in the region. In addition, California is also actively exploring other ways to reduce emissions, promoting the green transformation of the transportation sector, and striving to reduce carbon emissions.

Southeast Asian countries

Carbon tax tools, low-carbon technologies and green infrastructure go hand in hand to accelerate the construction of green logistics networks.

Southeast Asian countries promote transformation through carbon taxes, renewable energy promotion, and cross-border green logistics policies. Typical measures include:

Singapore

In October 2022, Singapore announced the new *Long-Term Low-Emission Development Strategy (LEDS)*, which clearly defines the goal of achieving net-zero emissions by 2050 at the latest, and strives to be the first to achieve net-zero emissions by 2045. Singapore has implemented a carbon tax policy since 2019; In March 2023, the Singapore promulgated the *Carbon Pricing (Amendment) Act 2022*, which aims to increase carbon taxes year by year and encourage companies to reduce carbon emissions.

Thailand

The Thai government is drafting the *Climate Change Act* to promote low-carbon transformation of the socio-economy, and has approved the implementation of a carbon tax policy, levying carbon taxes on various petroleum products to further support the use of clean energy.

Vietnam

In October 2021, the Vietnamese government approved the *National Green Growth Strategy 2021-2030, vision to 2050*, with the goal of reducing carbon emission intensity per unit GDP and promoting the development of various economic industries in the direction of green growth, including promoting low-carbon logistics. At present, the government is improving the *Vietnam Logistics Service Industry Development Strategy 2025-2035*, aiming to reduce the proportion of logistics costs in gross domestic product (GDP) to 12%-15% by 2045, and achieve 30% of transportation vehicles using clean energy.

Malaysia

The Malaysian government released the *National Energy Transition Roadmap (NETR)* in July 2023, aiming to achieve 70% renewable energy capacity and completely phase out coal-fired power plants by 2050; At the same time, as a global shipping hub, Malaysia is optimizing its logistics system through sea-rail combined transport model and promoting the low-carbon transformation of ports.

Indonesia

As the world's largest palm oil producer, Indonesia has a rich base of biofuel raw materials. Indonesia mandates the B40 biofuels (biofuels made from 60% diesel and 40% palm oil) in 2025, and plans to implement a mandatory B50 plan in 2026 to phase out diesel imports.

China

Actively implementing a series of strategies and actions to address climate change, and gradually leading the forefront of global climate governance

In 2020, China announced that it would strive to achieve carbon peaking before 2030 and achieve carbon neutrality before 2060. This means that China will become the country with the largest reduction in carbon emission intensity globally and achieve the transition from carbon peaking to carbon neutrality in the shortest time in global history. At the top-level design, China has established a "1+N" policy framework for carbon peaking and carbon neutrality to promote sustainable economic and social development.

In the field of low-carbon transformation of the logistics and supply chain, relevant policies focus on transportation, green packaging, logistics carbon accounting, and other fields to promote carbon reduction across the entire chain. The core elements include:

Transportation

In May 2024, the State Council issued the *2024-2025 Energy Conservation and Carbon Reduction Action Plan*, proposing to optimize the transportation structure, accelerate the development of multimodal transport, promote clean transportation in key industries, and accelerate the green, low-carbon, intensive and efficient development of urban freight distribution. In July 2024, the Communist Party of China Central Committee and the State Council issued the *Opinions on Accelerating the Comprehensive Green Transformation of Economic and Social Development*, calling for strengthening the research and development and application of sustainable aviation fuel. In March 2025, ten departments including the Ministry of Transport and the National Development and Reform Commission jointly issued the *Guiding Opinions on Promoting the Integrated Development of Transportation and Energy*, proposing to continue to promote the use of new energy vehicles in urban public transportation, taxis, postal express, urban freight distribution, ports, airports and other fields, promote the large-scale application of new energy heavy trucks (trucks) according to local conditions, and develop zero-emission freight transportation.

Green Packaging

In December 2024, the Standardization Administration of China approved the release of the *Requirements for Restricting Excessive Packaging in Express Delivery (GB45186-2024)*, which establishes mandatory technical indicators for express packaging, including packaging box compatibility, number of packaging layers, and adhesive tape usage. On June 1, 2025, the revised *Interim Regulation on Express Delivery* were officially implemented, adding a special chapter on "Express Packaging". For the first time, "green and energy-saving" was included in the development principles of the express delivery industry, and it was clarified that express packaging must comply with mandatory national standards to promote greening, reduction, and recyclability, while encouraging enterprises and consumers to use environmentally friendly materials.

Logistics Carbon Accounting

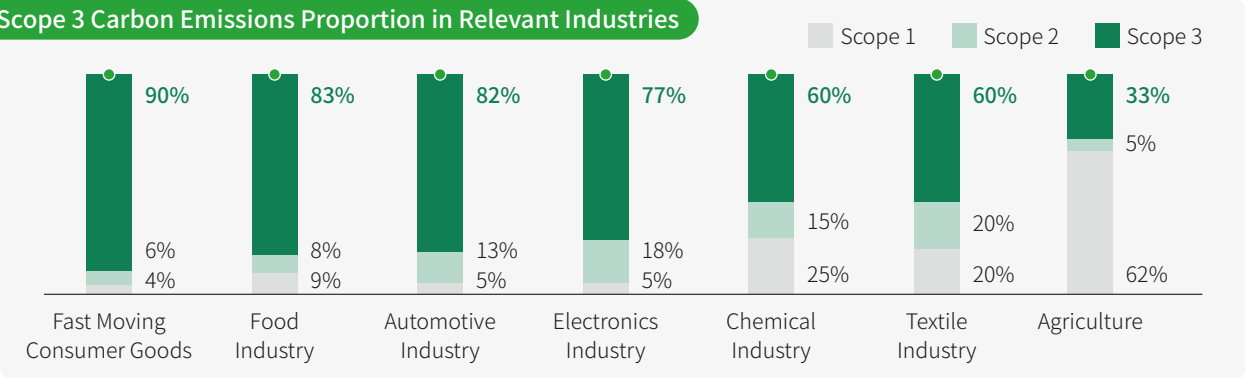
In May 2024, fifteen departments including the Ministry of Ecology and Environment issued the *Implementation Plan on Establishing a Carbon Footprint Management System*, aiming to establish a carbon footprint measurement, monitoring, accounting and certification system covering products, enterprises, and regions. By improving standards, measurement technology, infrastructure, etc., it promotes carbon footprint evaluation and certification and helps achieve the comprehensive green transformation of the economy and society and the goal of carbon peaking and carbon neutrality. In November 2024, the General Office of the Communist Party of China Central Committee and the General Office of the State Council issued the *Action Plan for Effectively Reducing Logistics Costs in the Whole Society*, proposing to support the development of carbon emission accounting and related certification work in the logistics field.

Decarbonization Challenges in the Logistics and Supply Chain Industry

As an important link connecting the production side and the consumer side, the low-carbon transformation of the third-party express delivery and logistics industry has an influence that cannot be ignored in the global carbon reduction process. We discuss the decarbonization challenges at the industry level from the demand side and the service side respectively.

Decarbonization Challenges on the Demand Side

Key industries such as fast-moving consumer goods, food, automobiles and electronics, account for more than 30%¹ of global carbon emissions. The low-carbon transformation of related industries is crucial to achieving global and Chinese climate goals. The study found² that Scope 3 emissions in the supply chain of the aforementioned industries account for a large proportion of the overall carbon footprint of enterprises (for example, more than 80% of the carbon footprints of fast-moving consumer goods, food and other industries come from Scope 3). At the same time, in the supply chain carbon emission structure of related sub-industries, logistics and transportation links contribute about 10%-25% of emissions on average³.



Driven by factors such as policy guidance and industry emission reduction pressure, the demand for low-carbon logistics solutions by cargo owners continues to grow. However, due to factors such as cost, technology and differences in industry characteristics, there is still a lot of room for growth in the actual application scale of low-carbon logistics solutions. Therefore, it is crucial to deeply analyze the differentiated needs and pain points of various industries in the transformation of green logistics. The characteristics of different industries determine that there are significant differences in the green logistics challenges they face, and these differences will directly affect the design and implementation effects of logistics carbon reduction paths.

Consumer Goods Industry

Footwear, Apparel, and Sports Industry

Challenge: Carbon emissions in the footwear, apparel, and sports industry primarily come from raw material production, manufacturing and processing, and logistics and transportation links. Meanwhile, growing consumer demand for sustainable products is driving the industry to accelerate low-carbon transformation across the entire supply chain. In the logistics and transportation links footwear, apparel, and sports industry, one of the characteristics is that the large volumes of scattered orders lead to complex transportation routes. Brand owners face practical problems such as scattered data and inconsistent accounting standards when tracking the carbon footprint of the entire link.



Luxury Goods Industry

Challenge: Major luxury goods groups are responding to the climate crisis through environmental protection measures across the entire value chain, and actively promoting circular economy and resource regeneration⁴. Due to the high value and high exposure characteristics of its products, the luxury goods industry has extremely high requirements for transportation safety and timeliness. The traditional high-carbon transportation mode conflicts with the carbon reduction needs of the value chain.



¹ Hannah Ritchie.(2020).Sector by sector: where do global greenhouse gas emissions come from?
²PricewaterhouseCoopers (2024). Green Supply Chain White Paper
³Wai-Shin Chan.(2022).Scope 3 emissions-The largest piece in the net zero jigsaw
⁴Achim Berg, Anna Granskog, Libbi Lee, & Karl-Hendrik Magnus.(2020).Fashion on climate

Food Industry

Challenge: The research and development, harvesting, processing, distribution, retail, and other links of the food industry all generate greenhouse gas emissions. For over 90% of food manufacturers, the majority of carbon emissions come from indirect sources, including raw materials, procurement, packaging, and logistics⁵. The industry faces special emission reduction challenges in the logistics and transportation links: Time-sensitive foods such as fresh food and dairy products rely on high-frequency urban distribution, and the emission problems of traditional fuel refrigerated trucks are prominent; Cold storage facilities consume high energy during long-term operation, and some refrigerants have potential environmental risks; In addition, food protective packaging is used in large quantities, resulting in considerable carbon emissions.



E-commerce Industry

Challenge: Although the e-commerce industry itself does not belong to the category of high-pollution and high-emission industries, it still produces certain carbon emissions in logistics, warehousing, data platform construction and operation, etc. Many domestic mainstream e-commerce platforms such as Alibaba and Vipshop have set carbon targets covering greenhouse gas scope 3 emissions. In the logistics and transportation link of this industry, due to consumers' demand for timeliness such as "Half-day delivery" and "Instant delivery", driving the high-frequency and fragmented operation of urban distribution networks; At the same time, there are common problems such as overfilling and non-degradable materials in E-commerce product packaging, which push up the carbon footprint of products.



High-Tech Manufacturing Industry

High-Tech Communications Industry

Challenge: Carbon emissions in the high-tech communications industry primarily stem from the telecommunications network, data centers, and user devices⁶. In the transportation of communication equipment and consumer electronics, the high precision and high value of these products necessitate robust anti-theft and shock-resistant packaging. However, traditional multi-layer composite plastic packaging is difficult to recycle and has a high carbon footprint. Additionally, sensitive components such as chips and OLED screens require strict temperature-controlled environments; reliance on inefficient fuel-powered temperature-controlled vehicles would further increase carbon emissions during transportation.

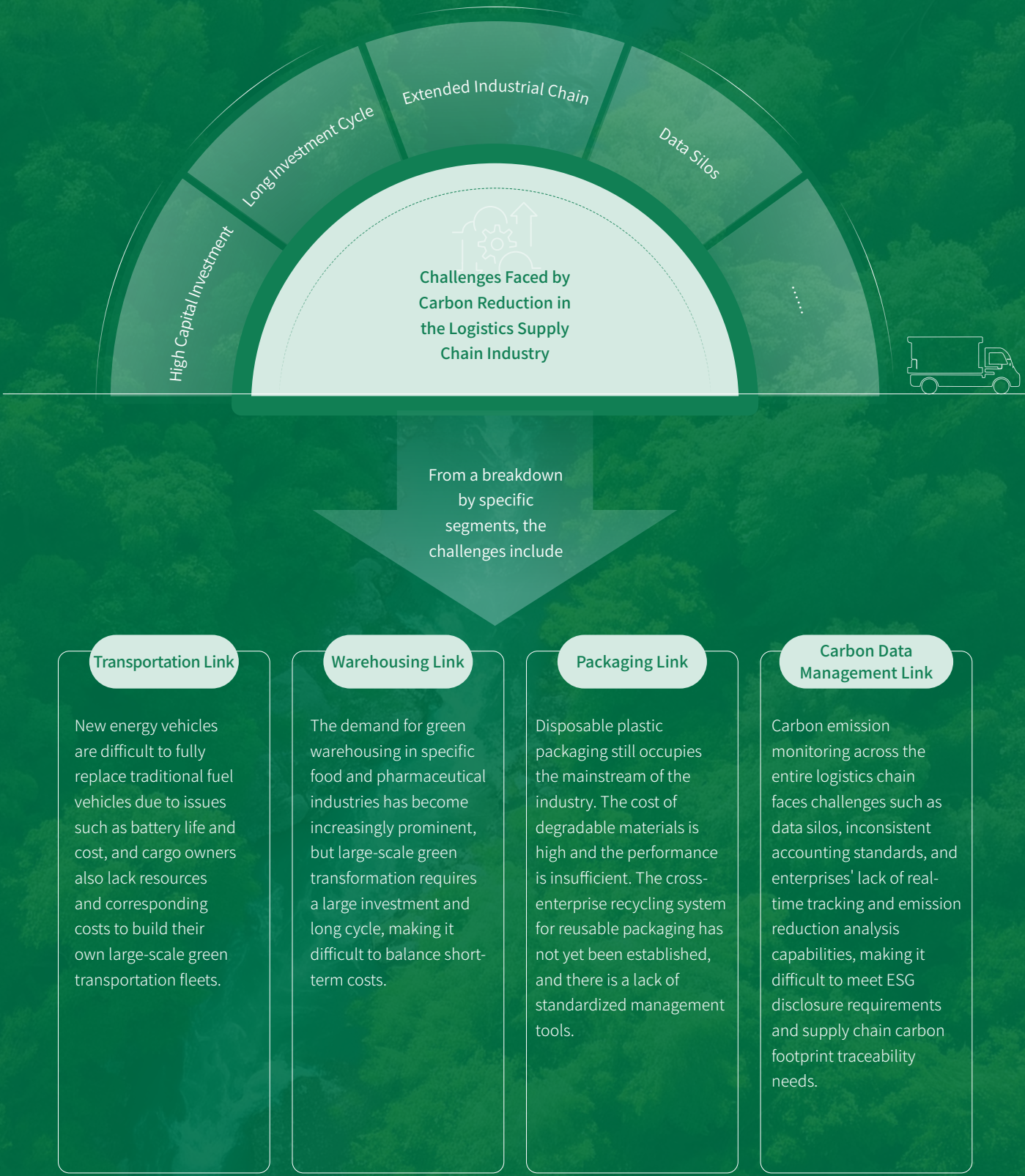


Pharmaceutical Industry

Challenge: The carbon emissions of the pharmaceutical industry mainly come from energy consumption in the process of R&D, production and distribution, while the carbon emissions in the supply chain of pharmaceutical companies account for more than 80%⁷. In the storage process, the strict requirements for temperature control of drugs and vaccines lead to long-term high-load operation of cold storage refrigeration equipment and high energy consumption; To mitigate risks such as vibration, compression, and temperature fluctuations during transportation, thicker and more durable packaging materials are often used, which can lead to issues like overpackaging.



Decarbonization Challenges and Transformation Opportunities on the Service Side



⁵ BSI. (2021). Insight | Green Transformation of the Food Industry under the Carbon Neutrality Context

⁶ Zhang Zhenzhen. (2021). In-depth research on the communications industry: Also discussing investment opportunities in the context of carbon neutrality in the communications sector-increasing revenue and reducing expenditure promote energy conservation and emission reduction, and technology helps dual carbon targets

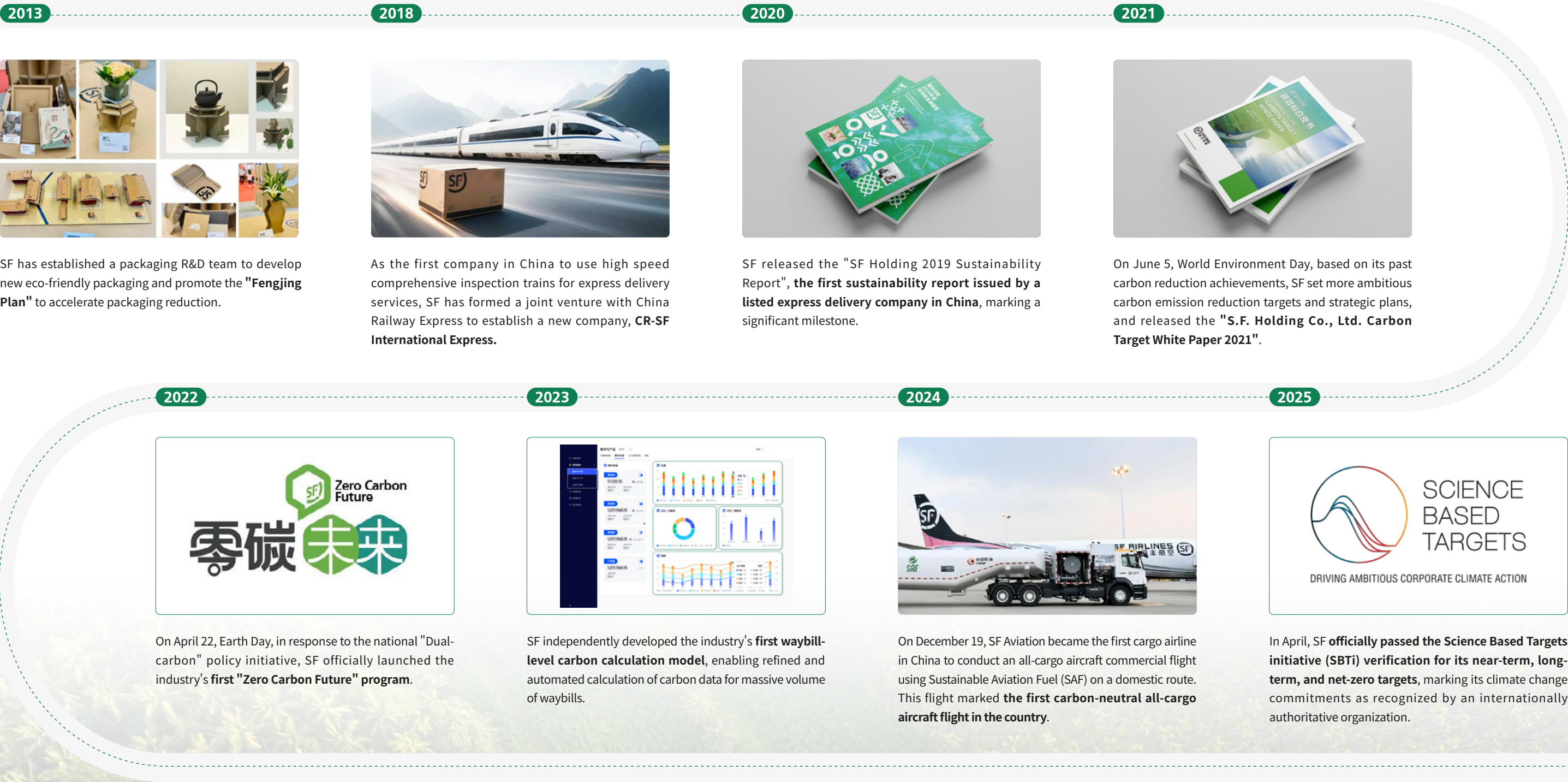
⁷ Wai-Shin Chan.(2022).Scope 3 emissions-The largest piece in the net zero jigsaw

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SF: Committed to Becoming a Leader in Low-carbon Transformation within Chinese Logistics and Supply Chain Industry

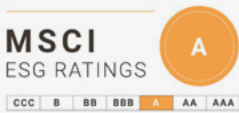
As the largest integrated logistics service provider in China and Asia, and the fourth largest globally, SF is firmly committed to sustainable development and continuously deepening its climate action. By systematically establishing science-based carbon targets and implementation paths, and leveraging its digital and intelligent carbon management platform—the "Fenghe Sustainable Development Management Platform" as the foundation, the company has deployed five core emission reduction pillars: green transportation, green industrial parks, green technology, green packaging, and circular supply chains, driving its own and the entire industrial chain's green transformation, with the goal of becoming a leader in low-carbon transformation within Chinese logistics and supply chain industry.

The Road of Sustainable Development



Latest ESG Performance⁸

International ESG Ratings



Latest MSCI ESG Rating is **A**

The MSCI ESG Rating is an internationally recognized and widely followed corporate ESG rating system. For SF's "Air Freight & Logistics" industry group, ESG issues such as carbon emissions management, health & safety, labor management, and corporate governance are assessed.



CDP Climate Change Questionnaire Rating **B** for three consecutive years (2022-2024)

CDP (Carbon Disclosure Project) is a leading international climate change rating system that comprehensively and systematically evaluates corporate performance in addressing climate change, including dimensions such as climate change governance, strategy, actions, carbon targets, and emissions data.



Sustainalytics' latest ESG Risk Rating is **"Low Risk"**

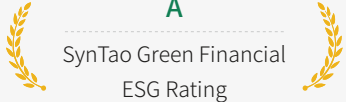
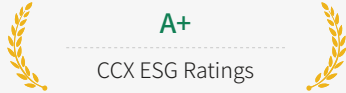
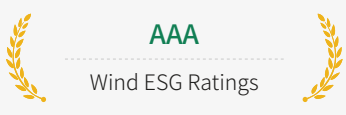
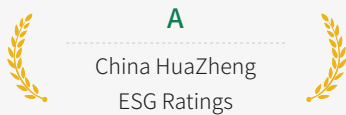
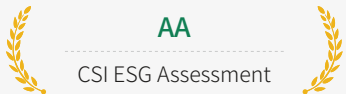
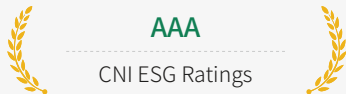
Sustainalytics is an enterprise ESG risk rating system launched by Morningstar, a renowned international investment data provider. The system clearly reflects ESG risks at the corporate level by measuring the scale of unmanaged ESG risks within an organization.



Included in the **FTSE ESG** Index series for four consecutive years (2021-2024)

The FTSE4Good Index is an ESG equity index launched by FTSE Russell, a company under the London Stock Exchange Group (LSEG). It is the world's longest-standing ESG index in capital markets, introduced in 2001, covering companies from major global capital markets. The index strictly selects enterprises that excel in both business value and ESG performance.

Domestic ESG Ratings



Decarbonization Achievements

By implementing a series of measures—including optimizing transportation networks, promoting new-energy vehicles, carrying out green retrofits of warehousing facilities, and transitioning to low-carbon packaging materials—SF has reduced its own carbon emissions while also providing customers with greener and more low-carbon logistics services. This helps customers accelerate the implementation of their climate goals, fully demonstrating the critical role of modern logistics enterprises in driving sustainable development across the entire industrial chain.

Since releasing its "Carbon Target White Paper" in 2021, SF has continuously deepened its efforts in green transportation, green industrial parks, green packaging, circular supply chains, and carbon reduction through technological innovation.



A total of
6,476,039.4 metric tons of carbon
dioxide equivalent (CO₂e) in greenhouse
gas emissions have been reduced.

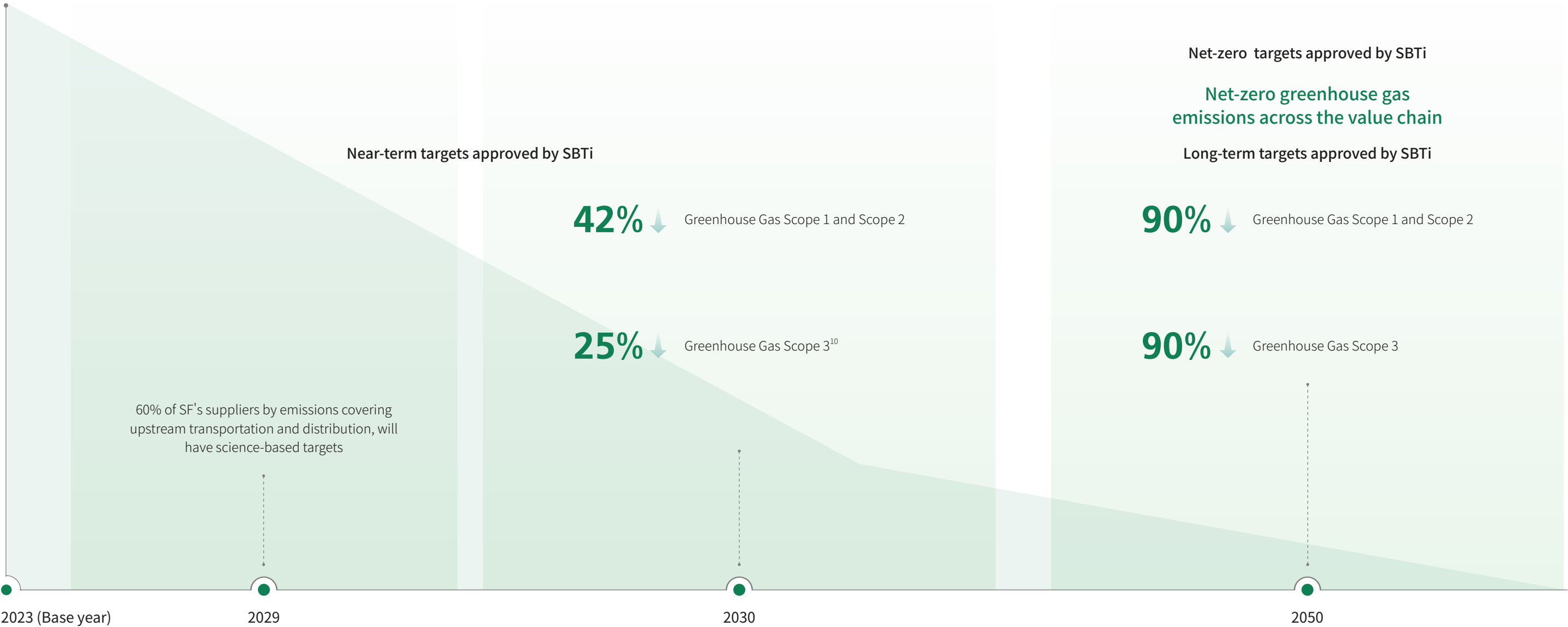


Equivalent to the amount of carbon
dioxide absorbed by approximately
360 million trees in one year.

⁸ Only the major international and domestic ratings are listed, with rating results as of September 2025. For a complete list of sustainability-related recognitions, please refer to Appendix II: SF 2024 Other Awards and Recognitions.

Climate Goals and Planning

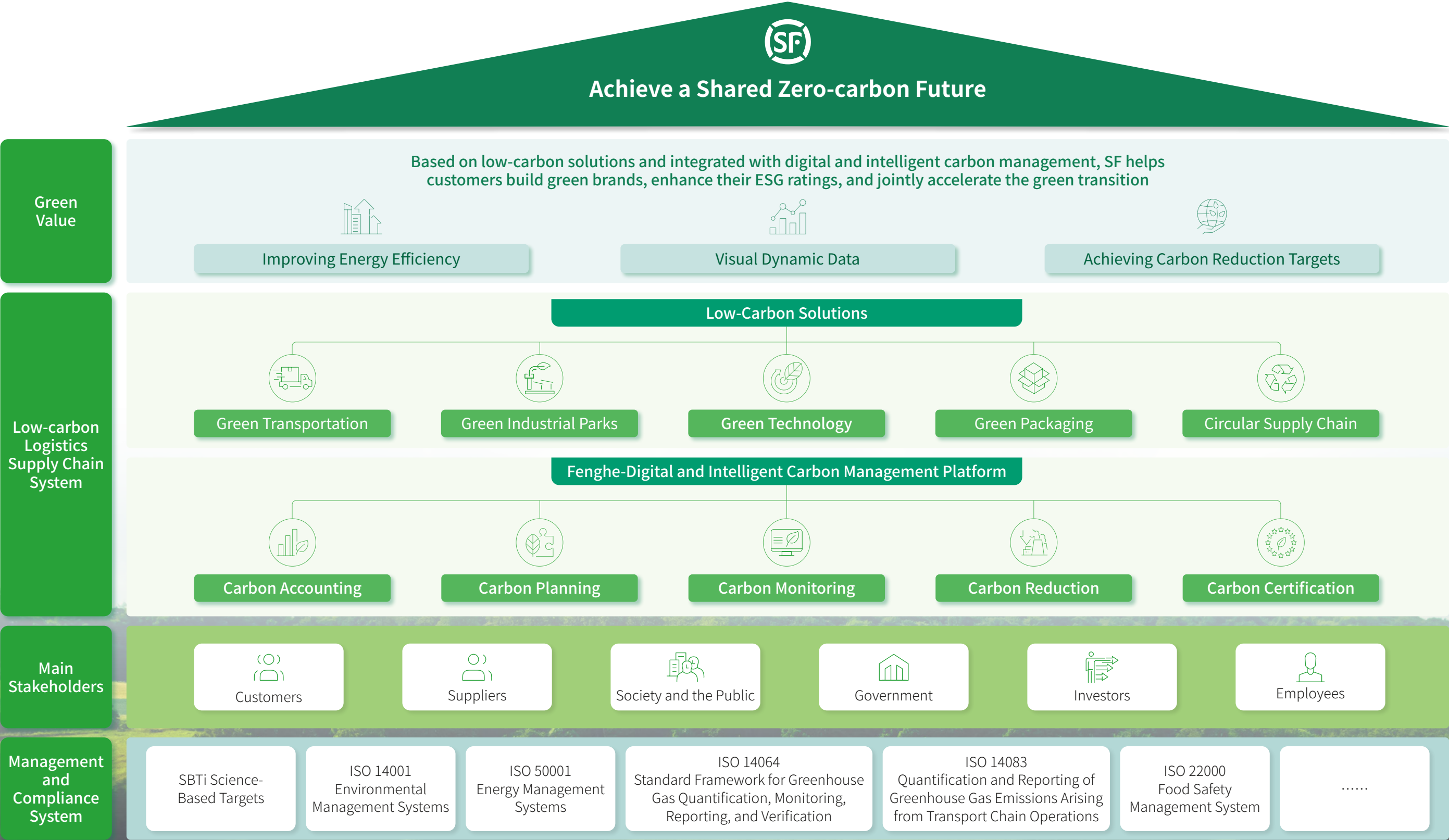
In November 2023, SF officially signed and submitted an application for the establishment of science-based carbon targets to the "Science-Based Targets initiative" (SBTi), and officially passed the target review⁹ in April 2025, strongly demonstrating SF's commitment to achieving science-based greenhouse gas emission reduction targets and strive to achieve net-zero emissions across the entire value chain by 2050.



⁹The target boundary includes land-related emissions and removals from bioenergy feedstocks

¹⁰From purchased goods and services, capital goods, and fuel- and energy-related activities

Leveraging its profound industry experience and innovative practices, SF is continuously driving the deep integration of cutting-edge technologies with logistics scenarios. Internally, the company strives to enhance the efficient operation of its logistics network, improve overall operational efficiency, and reduce carbon emissions during operations. Externally, based on its digital and intelligent carbon management platform, SF offers customers low-carbon solutions covering key areas such as transportation, parks, and packaging. With its professional capabilities, SF empowers sustainable development across various industries and collaborates with all stakeholders to achieve a shared zero-carbon future.



Digital and Intelligent Carbon Management

SF continues to strengthen technological innovation, build a standardized carbon management system, and independently develop a digital carbon management system for the supply chain-"Fenghe Sustainable Development Management Platform" (hereinafter referred to as "the Platform"). The platform integrates massive and real-time data by linking 12 SF's core business systems such as the Order Management System, the Network Planning System, the Land Transportation Management System, the Aviation Management System, the Railway Management System, the Packaging Management System and the Collection and Dispatch Management System. It has established the industry's first waybill-level carbon emission calculation model tailored to SF's operations. By accurately calculating the carbon emissions of each waybill, the platform enables digital management of emissions across multiple stages such as packaging, transportation, transit, and delivery. This effectively tracks progress toward carbon targets and supports customers in their low-carbon transition.

Core Highlights of the "Fenghe Sustainable Development Management Platform"

Industry's First Waybill-level Carbon Calculation Model

The platform can calculate carbon emissions from multiple dimensions such as waybills, products, customers, regional flows, and various phases in the supply chain:

- Support the accurate calculation of carbon dioxide emissions generated by various transportation modes used in each stage ("pickup, transit, transportation, and delivery") of every waybill, as well as the amount of CO₂ emissions reduced through various emission reduction measures;
- Can be connected to the third-party supply chain digital system to measure the carbon emissions of all suppliers in all scenarios;
- Provide standardized templates for submitting supplementary data, and carbon calculators for simulated calculation of carbon emissions.

Accurate Transportation Carbon Emission Factor Database

Combining international standards and actual transportation scenarios, use a more accurate transportation carbon emission factor database:

- Accounting based on logistics carbon accounting related standards such as ISO 14083 and GLEC 3.0;
- Based on actual transportation scenarios, more accurate and finer carbon emission factors are calculated to grasp the overall picture of carbon emissions more precisely and accurately;
- In addition to SF self-measured carbon emission factors, the database also incorporates national standards, policy documents and authoritative factors from domestic and international sources. According to customers' disclosure requirements, the most suitable factor calculation scheme can be formulated to meet diverse carbon emissions data management needs.



▲ The Platform's carbon emission factors database

Authoritative Organization Certification

The platform has been certified by a third-party authoritative organization, and complies with ISO14064, ISO14083, and GLEC 3.0 international greenhouse gas accounting standards in terms of carbon emission sources, emission coefficients, emission accounting, and carbon reduction accounting, and meets relevant, complete, reasonable, accurate, and rigorous requirements.

The Platform's certification ▶



Empowering Customers for Low-carbon Transformation

Based on the foundation of full-chain carbon data visualization, help customers formulate improvement goals and plans, and achieve closed-loop management from goal setting, to problem discovery and effect follow-up

- Support multi-dimensional monitoring of carbon emissions/emission reduction from time, products, phases, provinces and cities, drill down to subdivide scenarios, and explore carbon reduction opportunities;
- Support the setting of carbon baseline and monitor carbon emissions in real time to avoid the risk of excessive emissions;
- Generate logistics carbon emission management report, including key indicators of carbon emission management, as well as carbon emission analysis of transportation capacity structure and urban flow dimensions, and corresponding next-step emission reduction action suggestions.

The Fenghe Sustainable Development Management Platform covers **104** scenarios, **273** indicators, and **27** carbon emission accounting models in the supply chain, and has realized logistics carbon footprint accounting across all scenarios for SF's waybills, sites, and packaging.

By the first half of 2025, SF has provided over **80** globally renowned clients in industries such as new energy, high-tech, apparel and footwear, consumer goods, and luxury goods with customized green and low-carbon supply chain solutions, based on a standardized carbon management system and refined carbon calculation capabilities.

The Fenghe Sustainable Development Management Platform Dashboard

Key Metrics:

- Monitor emissions, emission reductions, carbon intensity, and order quantity in real time.
- Set carbon emission baselines to avoid the risk of exceeding limits.
- Year-on-year data reflects the effectiveness of emission management.

Real-time Monitoring:

- Monitor hotspots and top-emitting regions in real time with precise location tracking.
- Track emissions across logistics stages, providing clear visibility into emissions from pickup, transit, transportation, and delivery.
- Monitor logistics flows, displaying the top 5 shipment routes by emissions.

Data Comparison:

- Scenario comparison: Clear and intuitive visualization of emission reduction effectiveness across different logistics stages.
- Emission reduction overview: Scientific methodology to quantify emission reduction data.
- Carbon intensity monitoring: Real-time visibility of emission reduction performance.



Monthly carbon emission trend monitoring, with clear visibility into the carbon footprint of logistics products.

Comprehensive comparative analysis of the emission intensity of logistics products

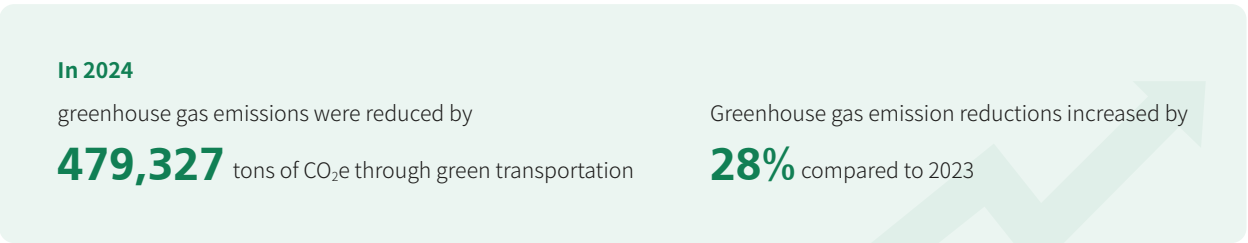
Visualization of logistics product emission structure

Monitoring of logistics product order quantity and carbon intensity

Core Emission Reduction Measures

Green Transportation

SF deeply integrates low-carbon concepts into daily operations and management practices, actively explores and promotes a variety of low-carbon transportation modes, vigorously promotes the application of various green logistics scenarios, and provides solid support for building a sustainable logistics system.

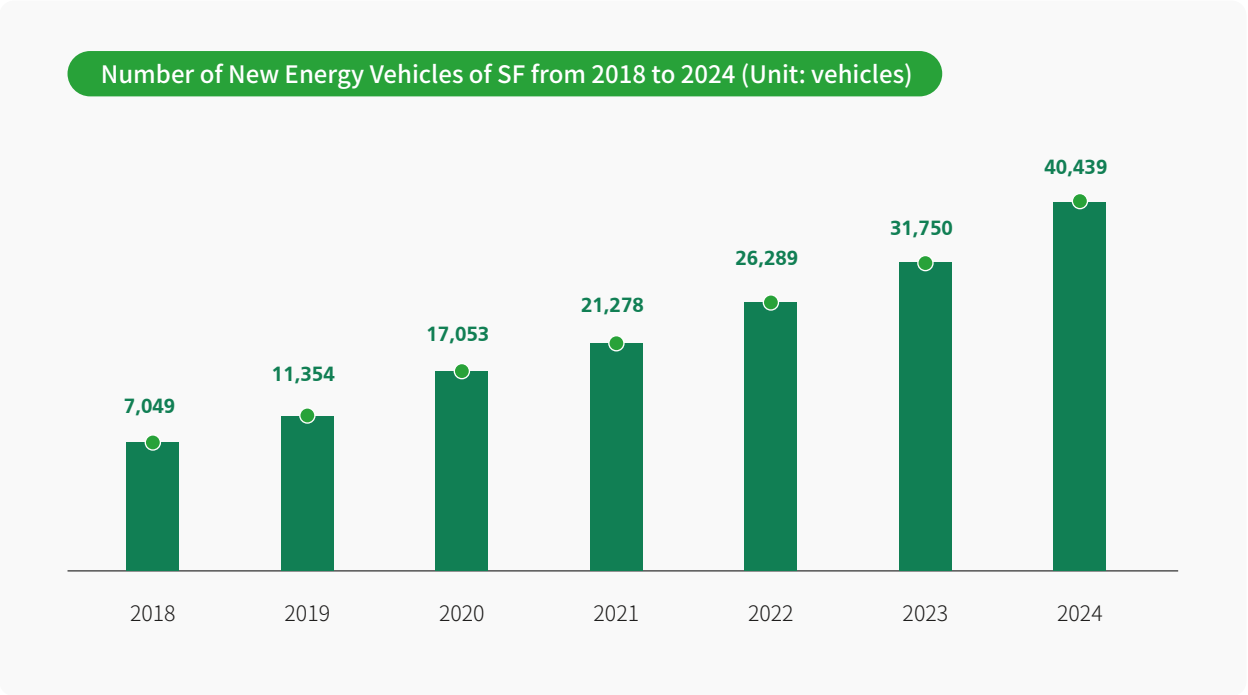


Green Land Transportation

In order to promote the all-round development of green ground transportation, SF continues to increase the launch of new energy vehicles, optimize the selection criteria of fuel vehicles, and empower vehicle energy consumption management and transportation route optimization through scientific and technological means, significantly reducing the air pollution and greenhouse gas emissions from land transportation.

Expand the "Green Fleet": Continuously Increase the Deployment of New Energy Vehicles

SF is steadily expanding the scale of its green fleet through various methods such as self-purchasing and leasing, gradually replacing traditional gasoline vehicles, and systematically advancing the green transformation and upgrading of its transportation capacity structure. By the end of 2024, SF had cumulatively deployed over 40,000 new energy vehicles, providing services across 253 cities.



SF continues to explore the application of clean energy such as hydrogen energy and liquefied natural gas in logistics and transportation, and carries out pilot operations of new energy vehicles such as methanol, liquefied natural gas and hydrogen fuel to accumulate experience for the large-scale promotion of new energy vehicles in the future. SF has partnered with hydrogen energy technology companies to successfully deploy hydrogen-powered trucks for customer's short-distance transport supply chains in the Shenzhen-Dongguan area. Compared to traditional fuel vehicles, each hydrogen truck can reduce carbon emissions by approximately 7 tons per month, helping the customer establish a benchmark for implementing green transportation solutions. In 2024, 10 LNG vehicles, 5 CNG vehicles and 5 methanol fuel vehicles was launched on a pilot basis in Shandong, Henan and other provinces; the number of LNG vehicles put into operation through the co-construction fleet collaborative operation model has exceeded 300. Meanwhile, SF is systematically phasing out vehicles that do not meet the standards of efficient, green operations and stringent environmental requirements.

Energy Consumption Management: Precisely Manage the Energy Usage of Transportation Vehicles

SF is deepening its commitment to green operations and promoting low-carbon transformation in logistics by focusing on vehicle energy replenishment management, fuel consumption control, and transportation route optimization.

Enhance the Energy Efficiency of New Energy Vehicles

- Establish a new energy vehicle system management platform, formulate scientific and reasonable new energy vehicle energy management strategies, and significantly improve vehicle operation efficiency and energy efficiency; continuously optimize the vehicle energy replenishment network. All new self-built charging pile resources in 2024 have been connected to the charging platform system.



Reduce Fuel Consumption per Traditional Energy Vehicle

- Scientifically set fuel consumption standards and targets, refine reward and punishment rules, and apply vehicle fuel systems to monitor the achievement of fuel consumption targets in real time.
- Build an intelligent fuel consumption management platform to comprehensively and accurately manage vehicle fuel consumption from multiple dimensions such as measured fuel consumption and driving behavior norms, and rectify abnormal high fuel consumption situations.



Innovative Initiative: SF Logistics Network Planning Intelligent Solution

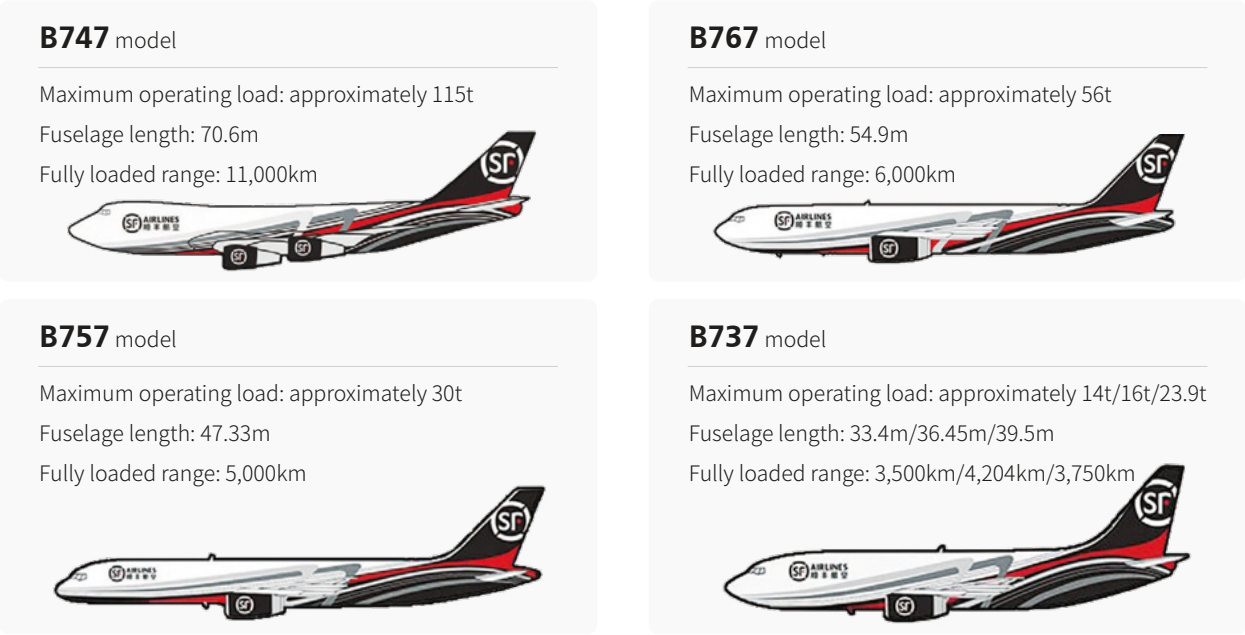
With the "SF Intelligent Solutions for Logistics Network Planning" project, SF became the only enterprise in China to win the Franz Edelman Finalist Award (known as the "Nobel Prize" of industrial engineering) in 2025. At present, the solutions have been fully implemented in SF, planning and optimizing more than 8,000 routes and more than 200 sites on average every day, improving the timeliness of more than one billion packages. The solutions monitor the operational status of transport vehicles in real time, optimize transportation routes, reduce vehicle empty-load rates and detour distances, and enable advanced intermodal transport management. As a result, the solutions significantly improve operational efficiency and greatly reduce carbon emissions in the logistics transportation process, contributing SF's expertise to the global advancement of smart and green logistics.

Green Aviation

SF Aviation actively implements the concept of "double control" of total energy consumption and energy consumption intensity, and steadily promotes the construction of green aviation. At present, it has obtained the dual certification of ISO 50001 Energy Management Systems and RB/T104-2013 Energy Management System for Transport Industry Enterprises, laying a solid foundation for the refined and standardized development of energy management.

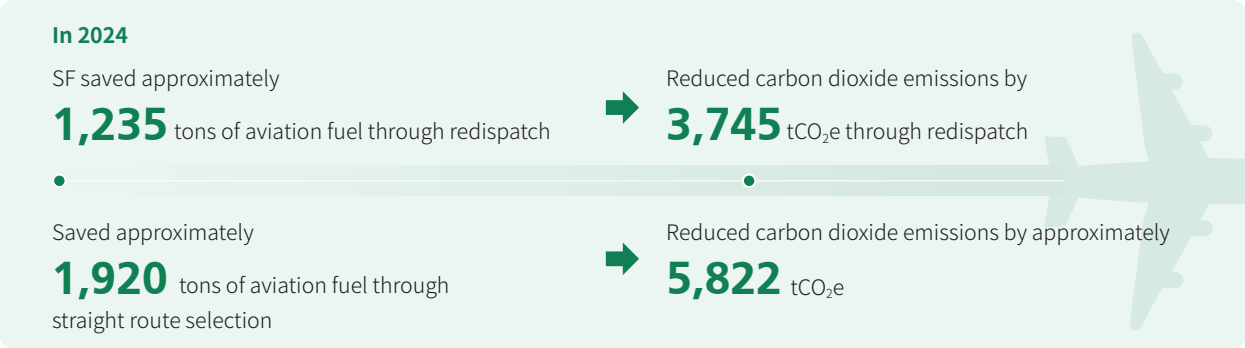
Building a "Green Air Fleet": Actively Introducing Large, All-Cargo Aircraft with High Energy Efficiency and Low Fuel Consumption

SF continues to build a "Green Air Fleet" with low energy consumption and high efficiency, and actively introduces large all-cargo aircraft such as 747, 757 and 767, demonstrating higher carbon emission efficiency and lower fuel consumption per ton of load per hour under full load conditions. As of the end of 2024, SF had a total of 89 owned all-cargo aircraft.



Fuel Consumption Management: Systematic Management Across Fuel Usage, Flight Routes, and Operating Bases

SF Airlines continues to explore and optimize fuel-saving technologies in the field of air transportation. A series of innovative fuel-saving measures such as optimizing flight altitude, refining load management, dynamically allocation of aircraft models based on payload forecast, redispach¹¹, straight route selection, and Auxiliary Power Units (APU) shutdown in a timely manner to reduce aviation fuel consumption.

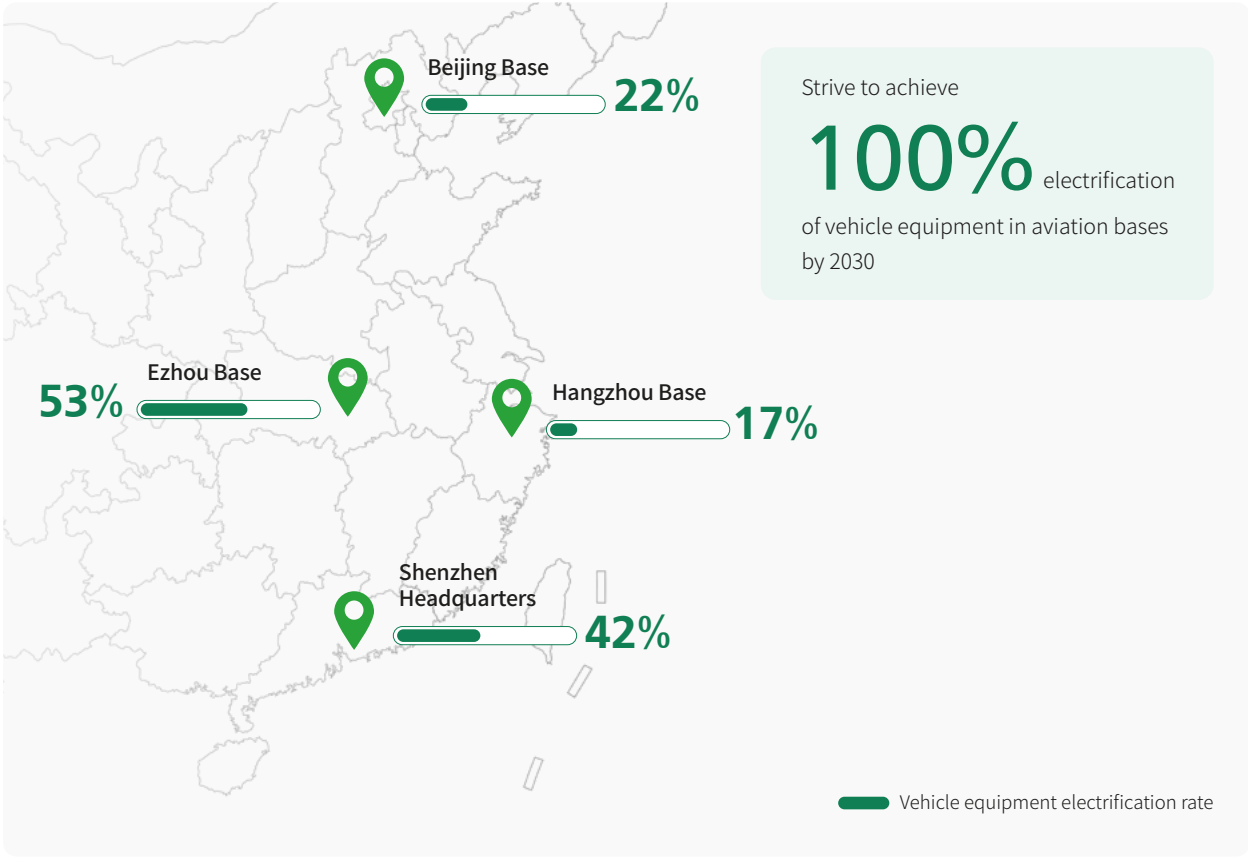


¹¹ Under the premise of ensuring the safe and normal operation of flights, SF Airlines rationally utilizes international route fuel policies and implements redispach strategies for flights to reduce aircraft refueling and lower fuel consumption.

In terms of fuel monitoring, an online fuel management system was established to dynamically monitor and manage the jet fuel consumption of each flight to improve fuel usage efficiency. In 2024, SF continued to enhance its system development by adding a profile optimization function. It has completed profile optimization for over 40 routes, enabling more accurate planned fuel consumption forecasting. In terms of fuel-saving incentives, SF sets up an assessment system for landing remaining oil index, developed an evaluation system for landing remaining fuel indicators, counted fuel savings and rankings every quarter, and awarded rewards to those with excellent landing remaining fuel control.

At the same time, SF Aviation set the goal of "100% electrification of vehicle equipment in aviation bases by 2030", continues to increase the purchase of new energy vehicle equipment, and accelerates the development of vehicle electrification at airports.

Progress of Vehicle Equipment Electrification at Various Aviation Bases in 2024



Innovative Initiative: SF Sustainable Aviation Fuel Acceleration Program

In the context of the world's active response to climate change and promoting the green transformation of the aviation industry, SF actively participates in the exploration and innovation in the field of green aviation, and works with partners to conduct in-depth research on the applicability and feasibility of Sustainable Aviation Fuel (SAF). SAF, as a direct-use liquid fuel alternative, can reduce carbon emissions by up to 85% compared to traditional aviation fuel. It is the decarbonization pathway for the aviation industry with the lowest current equipment retrofitting cost and the most significant emission reduction effectiveness.

In December 2024, an SF Airlines B737 all-cargo aircraft fueled with SAF successfully completed its first commercial flight using SAF, becoming the first cargo airline to conduct an independent all-cargo commercial flight using SAF on domestic routes in China. The use of domestically produced SAF (Sustainable Aviation Fuel) can reduce carbon emissions by 1.6 tons over its full life cycle. From March to June 2025, SF launched the Aviation Carbon Neutrality Acceleration (ANA) program, introducing a SAF digital monitoring platform and offering green services embedded with SAF. SF has provided a practical and feasible example for the sustainable development of the air cargo industry, supporting customers in steadily advancing their green transformation journey.

Green Industrial Park

SF actively builds a green and low-carbon industrial park, focusing on green infrastructure construction and carbon reduction technology innovation, and promoting the green operation of the industrial park from many aspects such as planning and design, warehouse construction, and operation management. SF Changsha, Foshan, Wuhu, Wuhan, Chongqing and Jinhua industrial parks were awarded the "Level 1 Green Warehouse" certification by China Warehousing and Distribution Association, Guizhou Industrial Park was awarded the "Guizhou Province Green Logistics Park" certification, and Shunxinhui Hubei Logistics Center achieving phase-one carbon neutrality certification.



Level 1 Green Warehouse
Certification (Wuhu)



Level 1 Green Warehouse
Certification (Wuhan)



Level 1 Green Warehouse
Certification (Chongqing)



Level 1 Green Warehouse
Certification (Jinhua)



Level 1 Green Warehouse
Certification (Changsha)



Level 1 Green Warehouse
Certification (Foshan)



Provincial Green Logistics Park
Certification (Guizhou)



Shunxinhui Carbon
Neutrality Certification

Industrial Park Photovoltaic Project

As of the end of 2024, SF has successfully advanced the construction of 35 photovoltaic (PV) projects in industrial parks. Among them, 24 PV projects have been put into operation, with the total installed capacity of the equipment reaching 111MW. The annual power generation from clean energy has exceeded 70 million kWh, further driving the transformation and upgrading of the company's energy structure.

As of the end of 2024

Advanced the construction of
35 photovoltaic (PV) projects
in industrial parks

The total installed capacity of
the equipment reaching
111 MW

The annual power generation
from clean energy has exceeded
70 million kWh

Green Operation of Industrial Park

SF deeply integrates institutional norms with digital technology, and comprehensively improves the industrial park environmental management capabilities from key dimensions such as operational efficiency improvement, smart energy consumption management and control, rainwater recycling, and energy-saving equipment installation.

Smart Energy Consumption Management and Control

Relying on the intelligent hydropower system, SF can achieve standardized management of public energy consumption and effectively improve the efficiency of resource use in the park. Through the monthly energy consumption review mechanism, the hydropower energy consumption in the public areas of the operating park has been reduced by 3% (water consumption) and 5% (electricity consumption) compared with 2023.

Improvement of Operational Efficiency

Build a property system, integrate core modules such as environmental greening, security and fire management, and maintenance and testing of facilities and equipment, and fully apply them to all operating parks.

Rainwater Recycling

Adopt permeable permeable concrete technology to collect and recycle rainwater in the park, and uses the recycled rainwater for greening irrigation, so as to improve water resources utilization efficiency and save water resources.

Installation of Energy-Saving Equipment

Continue to promote the installation of new energy charging stations. By the end of 2024, more than 300 charging equipment were installed and more than 600 charging parking spaces were provided.

Green Packaging

SF continues to deepen the field of green packaging, focusing on the cutting-edge packaging technology, and continuously increasing investment in research and development of sustainable packaging materials. By optimizing the performance of packaging materials, breaking through technical bottlenecks and expanding scenario applications, SF strives to build a full-link solution of packaging reduction, recycling, harmlessness and standardization, and set a benchmark in the green packaging industry.

Packaging Reduction

Focusing on the "Fengjing Plan", SF focuses on the reduction, standardization and scene-based innovative research and development of plastic films, tapes, paper, seals and other materials. Through reduction design and material structure optimization, SF significantly reduces the consumption of paper and adhesive tape.

At the same time, SF comprehensively upgrades the smart packaging service platform, relying on digital tools to efficiently link with the courier terminal, collects feedback from the courier in real time and optimize the packaging plan, and guides the courier in real time to implement standardized and rational packaging process for all kinds of consigned items through intelligent guidance, effectively avoiding the problem of over-packaging.

Downsizing Disposable Sealing Strips

The polypropylene (PP) disposable sealing strips used for bundling small express packages during transit originally measured 41 cm in length. SF reduced the total length of these strips to 38 cm by shrinking the size of the package label attachment area, thereby decreasing the weight of each strip by approximately 0.6 grams.



2024

Through a series of packaging reduction measures, SF reduces the use of base paper by approximately **42,000** tons, reduce the use of plastics by approximately **155,000** tons, and achieve carbon emission reductions by approximately **192,000** tons.

Recyclable Packaging

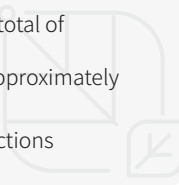
SF deeply integrates diversified business scenarios, continues to develop modular recycling packaging containers adapted to multiple scenarios, and gradually realizes the digital and intelligent management of the whole life cycle of recycling packaging materials. By introducing RFID (Radio Frequency Identification), building an intelligent allocation model, and exploring centralized cleaning mode and other measures to promote the overall improvement of internal management and recycling efficiency; the exit and disposal process is improved, and the recycled packaging materials can be recycled in an orderly manner after the end of their life cycle.

SF focuses on the diversified requirements of customers, industry characteristics and application scenarios, and develops and puts into use a variety of professional recycling packaging containers, including recycling woven bags, pharmaceutical temperature control boxes, Feng E recyclable boxes, recyclable pallet boxes, etc.

In 2024

SF invested a total of **19.18** million recyclable packaging containers, with a cumulative number of cycles exceeding **1** billion times.

By providing recyclable containers, SF served a total of **430,000** customers and contributed approximately **472,000** tons of carbon emission reductions



Recyclable Packaging for SF

Pharmaceutical Temperature-controlled Recyclable Box

SF has innovatively introduced a reusable temperature-controlled container in the pharmaceutical transportation sector, utilizing eco-friendly materials and advanced temperature control technology to achieve seamless and precise temperature management throughout the entire process. This solution successfully replaces single-use foam boxes, reducing approximately 207 grams of carbon emissions per use. In 2024, the pharmaceutical temperature-controlled recyclable boxes were cycled over 335,000 times in total, reducing carbon emissions by approximately 69.5 tons.



Feng E Recyclable Boxes

SF's Feng E recyclable boxes, with its lightweight, pressure-resistant, non-toxic, and eco-friendly characteristics, offers a superior alternative to traditional white foam boxes, providing a safer and more sustainable packaging solution for cold chain logistics. By the end of 2024, over 500,000 cold chain recyclable boxes had been deployed in cold chain transportation scenarios, achieving cumulative reuse of more than 4.51 million times and reducing carbon emissions by approximately 3,022 tons.



Recyclable Pallet Boxes

Made of 100% recyclable PP/PE material, it has strong pressure resistance and impact resistance. The nail-free design reduces the risk of work-related injuries and reduces the dependence of large industrial and irregular parts on traditional wooden frames, wooden boxes and wooden brackets. As of the end of 2024, a total of more than 370,000 recyclable pallet boxes have been put into operation, and the cumulative recycling has exceeded 6.94 million times.



Recyclable Honeycomb Panel

Made of 97% recyclable PP material, it has outstanding impact resistance and can replace air exhaust or honeycomb cardboard used for TV protection. As of the end of 2024, a total of more than 30,000 recyclable honeycomb panels have been put into operation, and a total of more than 460,000 recycling times have been used.



"π-Box" Recyclable Boxes

"π-Box" recyclable box developed by SF is made of environmentally friendly PP materials, and the whole box is 97% recyclable, eliminating the need for disposable consumables such as tapes and zippers. As of the end of 2024, a total of 345,000 units have been put into operation, covering 119 cities, and have been recycled more than 7.54 million times.



Recycling Woven Bags

SF actively promotes recycling woven bags to replace traditional disposable woven bags. At present, the average annual use of a single recycling woven bag reaches 54 times. In 2024, 6.34 million new recycling woven bags were put into operation, further expanding the scale of use of recycling woven bags.



Fully Biodegradable Packaging

SF actively deploys the research and development of biodegradable packaging materials, and cooperates with external scientific research institutions and universities to verify the practicality and feasibility of various biodegradable materials through multi-scenario pilot projects. As of the end of 2024, hundreds of millions of fully biodegradable packaging "Feng Bag" have been put in. In 2024, with its outstanding contributions in the field of biodegradable plastics, SF was awarded the certificate of "Quality User of Biodegradable Plastics" issued by the Degradable Plastics Committee of China Plastics Processing Industry Association.

Feng Bag ▶



Green Packaging Standard Construction

Standard Formulation

- As of the end of 2024, SF participated in the compilation and release of the *General Service Specifications for E-commerce Reverse Logistics* (GB/T 43290-2023), *Requirements for Restricting Excessive Packaging of Express Delivery* (GB 45186-2024), *Guidelines for the Use of Recycling Packaging of Express Mail* (GB/T 43805-2024), *Quality Control Requirements for Sales of Fruit and Vegetable Products* (20101215-T-442), and *Basic Requirements for Express Packaging of Fresh Products* (YZ/T 0194-2024) 5 national and industry standards.



Testing R&D

- SF's Packaging Laboratory and Testing Center possesses comprehensive testing capabilities, covering 45 packaging categories, over 140 testing standards, and 400 test items.
- SF Packaging Laboratory Testing Center has obtained the first batch of "Postal Industry Green Packaging Technology R&D Center" qualifications in the industry, and has passed ISTA (International Safe Transit Association) certification and CNAS (China National Accreditation Service for Conformity Assessment) certification.



Packaging Research

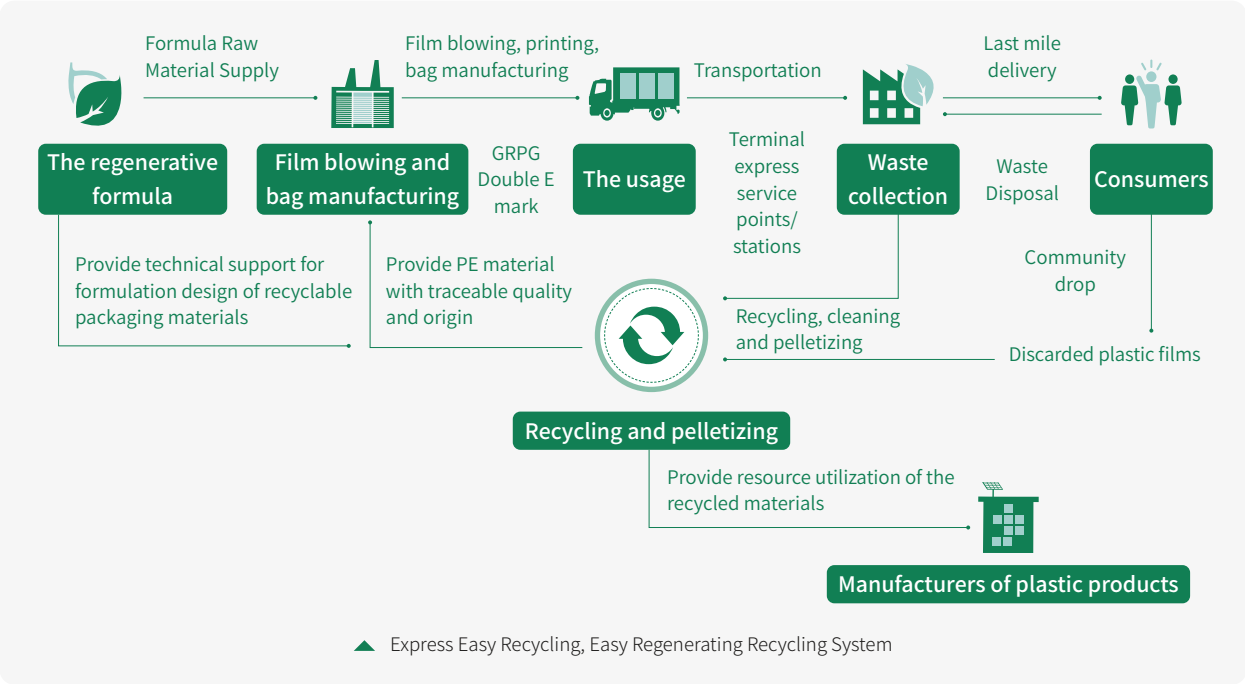
- SF and Zhejiang University were successfully approved for the "14th Five-Year Plan" national key project *Demonstration Application of Cold Chain Logistics and E-commerce Distribution of Fresh High-Value Agricultural Products*, focusing on related research such as agricultural product packaging reduction, and forming an industrialization demonstration.
- The "Fengtiao Box" jointly developed with Tsinghua University successfully replaced the foam box and was selected as a demonstration case of green express products by China Express Association.



Circular Supply Chain

SF collaborates with partners across the industry chain to build an efficiently coordinated recycling packaging system through initiatives such as resource sharing, technological collaboration, and information exchange.

In terms of the recycling of express packaging, SF comprehensively promotes the closed-loop chain verification and practice from formulating industry standards and carrying out technical research to realizing express packaging recycling, constantly optimizes the plastic recycling process, and is committed to building a full life cycle system of "plastic packaging design-production-consumption-recycling-regeneration-high-value application" to minimize the impact of waste on the environment.



SF, together with GRPG (Joint Working Group on Green Recycled Plastics Supply Chain) and upstream and downstream partners in the industrial chain, jointly formulated and published the group standard "Implementation Rules for Design Evaluation of Easy Recycling and Easy Recycling of Plastic Packaging-Plastic Film Express Packaging Bags and Inflatable Fillers", which stipulated the evaluation index system and evaluation method of plastic film express packaging bags in terms of easy recycling and easy recycling design, and provided clear and operable technical guidelines for the industry to produce and use plastic film express packaging bags.

At the same time, SF cooperated with upstream and downstream enterprises to overcome the technical problems in express packaging, and successfully developed "Double Easy" (easy to recycle, easy to regenerate) plastic bags. This bag maintains excellent mechanical properties while incorporating up to 30% post-consumer recycled resin (PCR), in compliance with the national standards for express bags, thereby realizing the value of single-material easy recycling. In 2024, SF successfully completed the batch replacement of approximately 47 million "Double Easy" packaging plastic bags in Beijing, promoting the large-scale implementation of circular economy.

SF's "Double Easy" Packaging bag Samples were Exhibited at the Fifth Meeting of the United Nations "Plastics Convention" in 2024 ▶



Industry-Wide Empowerment

Industry Cases of SF Green and Low-Carbon Logistics

Relying on the "Fenghe Sustainable Development Management Platform" and professional green logistics technology, SF provides customized green and low-carbon logistics solutions and services for key industries such as luxury goods, food, e-commerce, communications high-tech, and medical care, helping enterprises achieve scientific carbon goals, empower the low-carbon transformation of the industrial chain, and contribute industry practice to the national "Carbon Peak and Carbon Neutrality" strategy.

High-end Practice Under the " Carbon Peak And Carbon Neutrality " Strategy

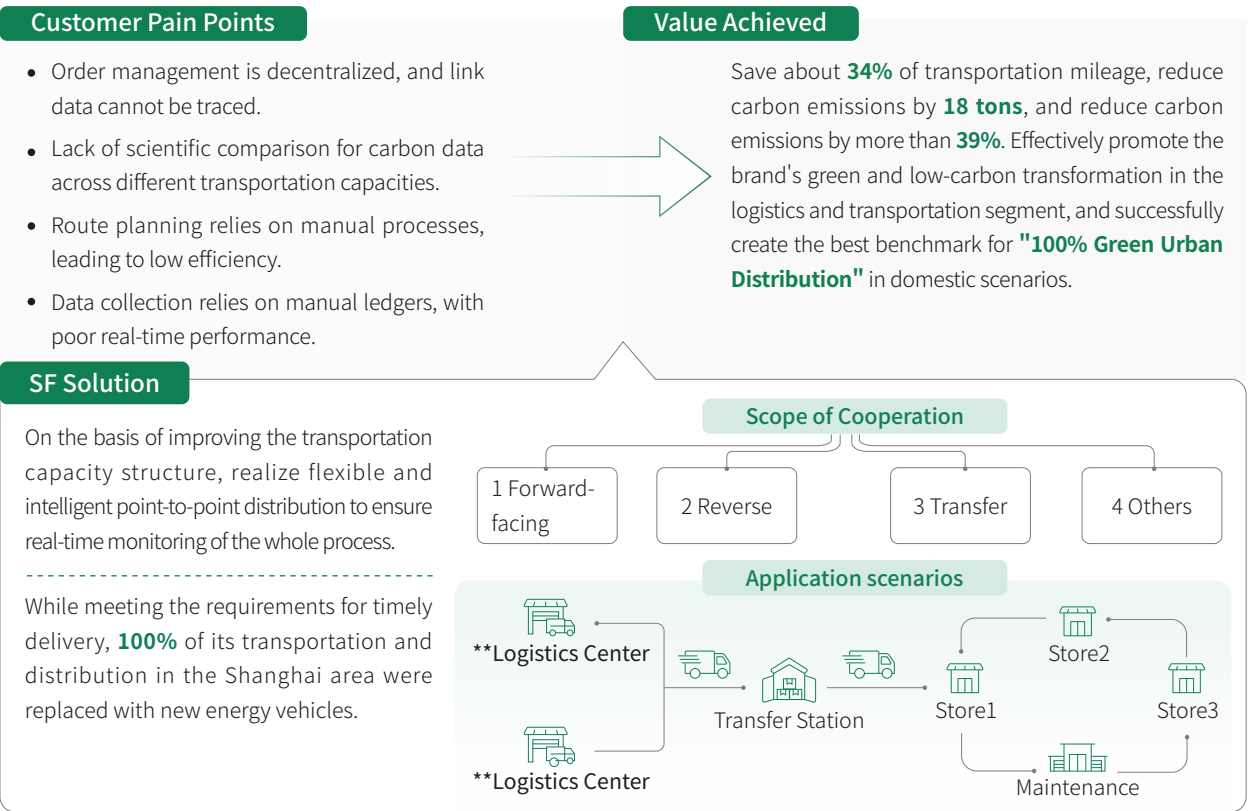
Partnering with Global luxury Brand to Create Benchmarks for Green Supply Chain Innovation

In the context of accelerating sustainable development in the global luxury goods industry, luxury brands are actively responding to the net-zero emission goal and deeply integrating sustainable concepts into the supply chain system. As a leading logistics service provider, SF has carried out in-depth green and low-carbon cooperation with several top global luxury brands across the entire supply chain. By promoting the upgrading of low-carbon operations and the transformation of digital supply chains, SF provides logistics solutions for the high-end consumer market that align with international low-carbon concepts and standards. While ensuring product safety and service quality, SF significantly reduces the carbon footprint across the entire chain, effectively promoting the luxury industry's development towards being green, innovative, and sustainable.

Green Urban Distribution Solutions Empower Luxury Brand Supply Chain Net-Zero Transformation Practices

A global luxury goods company has set the emission reduction targets of "achieving net-zero greenhouse gas emissions across the brand's value chain by 2040" and "reducing scope 3 GHG emissions 42% by 2030 and reducing absolute Scope 1, 2 and 3 GHG emissions 90% by 2040 from a 2021 base year."

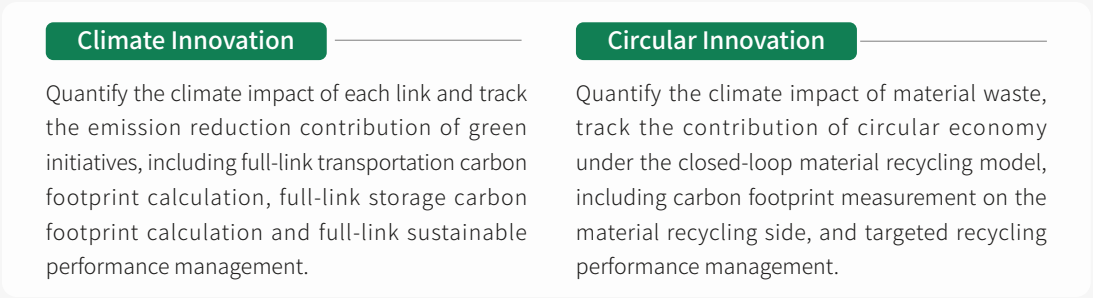
In order to deeply fulfill the goal commitment, the company hopes to build a 100% green distribution benchmark for its single city in the world, and solve the needs and pain points such as online integration of orders across multiple scenarios, traceability of logistics data across multiple links, and comparison and aggregation of carbon emission data under different transportation capacities. In March 2024, SF, leveraging its unique integrated solutions of transportation infrastructure, technological infrastructure, and green infrastructure, became the designated logistics distribution partner for the luxury goods company in China, jointly exploring new models of green commercial services for urban distribution.



Collaborated with a Leading Global Luxury Brand to Launch the "Supply Chain-level Sustainable Dual Innovation" Action in China

As a leading brand supporting climate action, a global luxury enterprise has established a full value chain climate strategy goals and clearly defined three strategic implementation targets based on the 2019 carbon emission values: to achieve a 50% absolute reduction in its own (scope 1 and 2) carbon emissions by 2026; to meet its own operational electricity needs with 100% renewable energy by the same year; and to achieve a 55% reduction of the supply chain (scope 3) carbon emission intensity by 2030.

In March 2024, SF signed a letter of intent for "Supply Chain-Level Full-Link Sustainable Strategic Services" with the luxury goods company to help it launch the "Supply Chain-Level Sustainable Dual Innovation" action in China, taking dual innovation of climate and circular economy as the improvement path. The purpose of this cooperation is to actively synchronize the accurate carbon information in the supply chain service scenario between brand owners and logistics providers, optimize the transportation mode of upstream and downstream logistics providers of brand owners, support their supply chain greenhouse gas emission reduction and offset actions, and reduce the company's environmental protection compliance costs and climate risks in operations, and enhance the green and low-carbon operational resilience of the entire logistics supply chain.



At present, SF has in-depth cooperation with this luxury goods company to release a closed-loop solution for digital carbon management, launching innovative green supply chain services for the luxury goods industry. Its core characteristics and functions include:

Function	Characteristics
Real-time visual	Real-time visualization of carbon data makes it easier for enterprises to promptly discover carbon target risks and adjust carbon strategies.
Multi-dimensional monitoring	Support for monitoring carbon emissions and reduction across multiple dimensions including time, products, processes, and provinces/cities.
Support carbon baseline setting	Support the setting of carbon emission baselines and monitor carbon emissions in real time to avoid the risk of excessive carbon emissions.

"Green Operation and Carbon Management Platform"

Empowering an e-commerce Company to Manage its Full-Link Logistics Carbon Footprint

With the rapid development of the e-commerce industry, the volume of express delivery business continues to surge, which directly leads to the rapid growth of logistics carbon emissions. Due to the numerous value chain links involved in e-commerce companies, their carbon emission management presents significant complexity and challenges. In the practice of carbon reduction, as a key emission reduction area in the e-commerce industry, the governance of Scope 3 GHG emissions often face special difficulties: on the one hand, e-commerce companies have limited control and dominance over such emissions; On the other hand, emission monitoring is difficult and the implementation of emission reduction is also challenging.

SF has long been committed to the accurate calculation of supply chain carbon emissions and actively explores effective decarbonization paths. Since 2019, SF has provided logistics and distribution services to a leading e-commerce company, and relies on the "Fenghe Sustainable Development Management Platform" to help the company achieve full-scene logistics carbon footprint accounting.

Optimize Transportation Modes

Improve Loading Rate

Adopt strategies such as combined goods departure and intensive distribution of orders to improve vehicle loading rate.



Routes Optimization

Streamline the logistics network, close inefficient distribution centers, optimize route design, and reduce ineffective transportation mileage.



Achieve Data Collection and Accurate Accounting of Carbon Emissions for Each Parcel

Through the "Fenghe Sustainable Development Management Platform", SF has built a full-link logistics carbon management system for the company around the four core scenarios of transportation, warehousing, packaging, and terminal distribution, realizing the collection and accurate accounting of carbon emission data throughout the life cycle of each parcel. In 2024, SF completed the carbon footprint accounting for over 1.05 billion waybills for the company. While meeting their high standards for the accuracy, granularity, and visual presentation of carbon emission data, SF also provided data support for developing scientific emission reduction strategies

Helping reduce Scope 3 logistics and transportation emissions by over 30,000 tons

In 2024, SF successfully facilitated the reduction of over 30,000 tons of greenhouse gas emissions in the logistics and transportation sector for the company, helping the company achieve its emission reduction target of "achieving carbon neutrality in its own operations and a 50% reduction in scope 3 carbon emission intensity by no later than 2030, based on 2022 as the base year."

"Green Transportation and Carbon Management Platform"

Promote Global Coffee Chain Brands to Accelerate the Realization of Carbon Neutrality in the Supply Chain

The food and retail industry is accelerating its green transformation, achieving efficient and low-carbon transportation and distribution models through clean energy delivery systems and full supply chain carbon management, ensuring that emission reduction targets are quantifiable and traceable. A globally renowned coffee retail chain has set ambitious sustainable development goals and has committed to achieving carbon neutrality in supply chain by 2030.

About 90% of the company's carbon footprint comes from the supply chain link, which involves a large number of indirect emissions from external suppliers and production processes. This type of carbon emission source has the characteristics of difficult control and long transformation cycle, necessitating a phased and continuous approach to the green transformation of the overall supply chain. Under this background, the logistics link has become an important breakthrough in supply chain emission reduction because of its high degree of standardization and strong feasibility of transformation. Since 2017, SF has cooperated with the company to implement in-depth measures such as green transportation and logistics carbon data management to help accelerate the realization of its supply chain carbon neutrality goal.

Green Upgrade of Distribution Vehicles

SF has fully replaced the fuel-powered vehicles used in the supply chain terminal and urban distribution with electric vehicles, significantly reducing carbon emissions compared with the traditional fossil energy vehicle transportation mode.

Visualization of the Carbon Footprint of the Entire Transportation Link

Based on the "Fenghe Sustainable Development Management Platform", SF has set up a carbon neutrality dashboard for the company, accurately calculating transportation carbon emissions, covering multiple stages such as packaging, transportation, transit, and delivery. This meets the company's requirements for the accuracy, granularity, and visualization of carbon footprint calculations, enabling digital control of its logistics carbon emission data.

Helping reduce carbon emission per parcel by nearly a quarter

Currently, SF has completed carbon footprint accounting for over 49,000 waybills for the company and, in combination with various green logistics transportation measures, has successfully reduced the company's carbon emission per parcel from 0.98 kgCO₂e per item (in 2023) to 0.74 kgCO₂e per item (in 2024), a decrease of nearly a quarter, helping the company achieving a reduction of approximately **16%** in scope 3 logistics and transportation emissions compared to the base year in 2024.

Carbon emission per parcel (kgCO₂e/ parcel)



"Green Formula"

Empowering the Net-Zero Transformation of the Supply Chain of World-Renowned Catering Chain Brands through Smart Zero-Carbon Parks and Clean Energy

The catering chain industry faces multiple challenges in the process of green and low-carbon transformation. As a key area for emission reduction in this industry, reducing emissions in the transportation segment requires balancing factors such as freshness, efficiency, and environmental protection. The core approach is to achieve sustainability through technological innovations like green cold chain and green warehousing, as well as optimizing supply chain models with shorter supply chains.

A world-renowned catering chain brand, has embedded climate goals into its own strategy globally, set the goal of "reaching net-zero GHG emissions across the value chain by 2050", and committed to reduce absolute scope 1 and 2 GHG emissions, and absolute scope 3 energy and industrial GHG emissions 50.4% by 2030 from a 2018 base year. At present, China is the second largest market for the catering chain brand's restaurants in the world and the fastest growing market. The catering chain brand in China region, as the franchisee of the brand in the Chinese market, is also actively taking actions to address climate issues, and is committed to achieving climate action goals by encouraging suppliers to reduce emissions in the supply chain and strengthen business resilience. As an important business member of SF's cold chain and supply chain segment, Shun Xinhui (and its predecessor) has cooperated with the catering chain brand in China region since 1990, providing it with integrated supply chain and comprehensive logistics solutions.

Create a Smart Zero-carbon Park

In June 2024, the catering chain brand's Supply Chain Hubei Smart Industrial Park was officially opened. As an important part of the industrial park, Shunxinhui supports the catering chain brand in China region to jointly build a panoramic automated smart zero-carbon park-Shunxinhui Hubei Logistics Center. It adheres to the green and smart supply chain design concept and integrates Shunxinhui's advanced technology systems and panoramic automation equipment ensures the high-standard, high-quality and high-efficiency operation of the supply chain. At the same time, it adopts a variety of energy-saving and emission reduction measures to successfully obtain the carbon neutral certification, providing strong support for carbon reduction in the company's supply chain.

Full scenario automated warehouse



"Dark Warehouse"

Create an integrated, high-efficiency, low-variance digital and intelligent warehouse operation solution, achieving uninterrupted 24-hour "dark operation", and it is expected to reduce carbon dioxide emissions by more **than 30,000kg annually**.

Use of Green Energy

The total installed capacity of photovoltaic power generation reaches 813.73kW, with over 90% of electricity generated being self-consumed. It is expected to reduce carbon dioxide emissions by more **than 13,000 tons** over the next twenty-five years.

Advanced Refrigeration System

Using an advanced refrigeration system with "leading refrigeration technology and automated intelligent control capability", achieving a reduction of energy consumption in the park's cold storage by **20%~30%** compared to traditional standard cold storage.

Infrastructure

Enhance the thermal insulation and heat resistance of buildings, reduce the consumption of heating and cooling sources, equip with new energy vehicle charging piles, and use LED lighting and intelligent lighting control systems to effectively reduce energy consumption in the park.

▲ Park's Emission Reduction Technologies and Highlights

Build a Smart Supply Chain

Starting from 2021, Shunxinhui cooperated with the catering chain brand in China region to build a "smart supply chain system". Through big data and operations research analysis, it created a dynamically optimized and more efficient supply chain network, and realize "visualization, perceptibility and adjustable" intelligent supply chain management capabilities of the entire link from farm to table. By using this platform, enterprises can rationally plan the location and layout of distribution centers, significantly reduce distribution mileage, improve distribution efficiency, and reduce carbon emissions from logistics and transportation.



▲ Smart supply chain system

Since 2022, the project has saved the catering chain brand in China region 's supply chain over \$60 million in investment, reduced annual transportation costs by nearly \$9 million, and decreased carbon emissions by 10.6% year-on-year. While effectively supporting the company's rapid increase in cargo volume and market expansion needs, it has also contributed to achieving carbon neutrality goals. At the 52nd Franz Edelman Award ceremony, the catering chain brand in China region was awarded the global final prize for optimizing supply chain network planning solutions with operations research techniques.



▲ Shunxinhui Helps Clients Win Global Technology Awards

Pilot New Clean Energy Sources

In October 2024, Shunxinhui and the catering chain brand in China region participated in the country's first closed-loop promotion and application pilot project of hydrocarbon-based biodiesel. The first batch of hydrocarbon-based biodiesel has been successfully filled into the company's transport vehicles. While reducing reliance on fossil fuels, the project strongly promotes the green circular development of "collection-transportation-pretreatment-production-reuse" of waste cooking oil.

"Hydrogen Energy Logistics and Green Park"

Create a New Paradigm of "Zero-Carbon Logistics" in the Supply Chain for a Communication High-Tech Company

The supply chain of the information, communications and electronics consumer industries is long and complex in structure, making the low-carbon transformation of the entire supply chain difficult. Taking the transportation link as an example, on the one hand, it is necessary to reduce the proportion of traditional fuel vehicles used; on the other hand, some new energy vehicles are limited by technical bottlenecks such as short driving range and insufficient load capacity, making it difficult to fully meet the special transportation requirements for high timeliness and large-scale of precision electronic components. At the same time, in the storage segment, the need to control the constant temperature and humidity storage environment for electronic components can lead to high energy consumption.

A leading multinational enterprise in the communications high-tech industry is a strategic partner of SF. The company has set carbon targets of "reducing scope 3 GHG emissions from global logistics operations by 25% per ton-kilometer of transported products by the fiscal year 2029/30 from a 2018/19 base fiscal year" and "reducing all GHG emissions by 90% (achieving absolute reductions in scope 1, 2 and 3 emissions) by the fiscal year 2049/50." On the basis of providing logistics solutions and services for this enterprise, SF actively explores solutions such as hydrogen energy logistics, smart warehousing and green logistics parks. Through the application of innovative technologies and green operation models, it effectively reduces carbon emissions in logistics links and enhances the sustainability of the supply chain.

Hydrogen Logistics Vehicles Contribute to "Net-zero" Emissions

SF cooperated with a smart supply chain company and a hydrogen energy technology company. Relying on the solution capabilities, supply chain management professionalism and hydrogen energy technology advantages of all parties, SF successfully launched a short barge supply chain hydrogen energy vehicle for the company in Shenzhen-Dongguan District, achieving an average daily operating mileage of 300 kilometers. It is calculated that compared with traditional fuel vehicles, a single vehicle can reduce emissions by about 7 tons per month, which is equivalent to planting more than 310 trees. This innovative practice has successfully achieved "net zero" emissions in the transportation link of the supply chain for the company, helping it create a greener landing benchmark in the B2B feeder transportation scenario.

Hydrogen Vehicle



Build an Intelligent Finished Goods Warehouse

The China-region intelligent finished goods warehouse project co-built by SF and this enterprise is SF's first automated warehouse featuring independent design, independent integration, self-developed systems, intelligent operations, and data visualization. It is also this enterprise's largest and most core central warehouse in the Greater China region, supporting its global smart manufacturing base and serving hundreds of millions of end-users worldwide.

This intelligent finished goods warehouse integrates the concept of "green, low-carbon, digital and intelligent", and combines high customization, high intelligence, and high adaptability. SF is fully responsible for the refined management of the entire process, ranging from the design and construction of the automated stereoscopic warehouse, the research and development of the Automated Warehouse Management System (WMS & WES), to the total integration of automated equipment and systems, engineering implementation, and delivery operations. During peak business periods, SF skillfully uses intelligent in-warehouse equipment and technological systems to closely connect all links such as receiving, warehousing, storage management,

automated sorting, outbound, loading and unloading, and distribution to achieve efficient operations, and improves the client-side logistics delivery experience through intelligent operations.

Intelligent Finished Goods Warehouse



Optimize the Construction of Green Logistics Parks

Park Rooftop Photovoltaic

It is planned to build a 3 megawatt (MW) rooftop photovoltaic project in the Dongguan regional logistics park that provides services for the enterprise in the second half of 2025. After completion, it is expected to produce approximately 3.2 million kilowatt hours (kWh) of clean electricity per year, equivalent to an annual emission reduction of approximately **1,700 tons**.

New Energy Electric Forklifts

100% coverage of new energy electric forklifts has been achieved in this logistics park. For every ton of diesel consumption replaced by electric forklifts, emissions can be reduced by approximately 3 tons.

Helping reduce Scope 3 logistics and transportation emissions by over 35 tons

In 2024, SF successfully reduced emissions by more than **35 tons** for the company in the Scope 3 logistics and transportation links.

"Smart Warehousing and Green Packaging"

Support a Medical Company to Accelerate the Implementation of Scientific Carbon Goals

The medical industry is facing severe challenges in green logistics transformation: on the one hand, the strict requirements for temperature control of drugs lead to the high annual power consumption of traditional cold storage; On the other hand, with the sharp increase in the number of medical supplies inventory units and orders, the smart warehousing system urgently needs to accelerate the replacement of the traditional picking mode that relies on manual labor, and promote the upgrading of warehousing management to high efficiency and precision. In addition, medicines may face risks such as vibration, extrusion, and temperature changes during transportation. Enterprises often use thicker and stronger packaging materials, which are prone to problems such as over-packaging.

A leading multinational enterprise in the medical industry has formulated the emission reduction goal of "achieving net-zero GHG emissions across the entire value chain by fiscal year 2045" and "based on 2019 as the base year, to reduce absolute GHG emissions of major Scope 3 by 30% by fiscal year 2030; and to reduce absolute GHG emissions of Scope 1, Scope 2 and Scope 3 by 90% by fiscal year 2045." The company aims to create a low-carbon value chain from manufacturing, supply chain to commercial operations. Since 2016, the company and SF have launched the pharmaceutical logistics center (hereinafter referred to as "Chengdu DC") project in Chengdu, and SF provides it with warehousing and cold chain transportation services related to drugs, vaccines, and biological products.

Upgrading Planning and Optimizing Energy Consumption Management

Through rational site planning and energy-saving upgrades of facilities and equipment, Chengdu DC has achieved an annual electricity savings of over **200,000 kWh**, an annual diesel consumption reduction of more than **44,000 liters**, and a carbon emission reduction of approximately **220 tons**.

The cold storage with stable energy consumption is planned on the south side, and the shade storage with fluctuating energy consumption is planned on the north side, and the whole warehouse is insulated.



All street lamps use LED energy-saving lamps; The park stores purified rainwater for firefighting and other purposes to improve water use efficiency.



Replace diesel-powered pre-cooling temperature-controlled vehicles with electric pre-cooling methods to eliminate diesel consumption and significantly reduce carbon emissions.



Intelligent Warehousing to Improve Operational Efficiency

All equipment in Chengdu DC warehouse is set to automatic start and stop, and innovatively introduces an automated vertical warehouse and a full-warehouse conveyor system, integrating advanced functions such as automatic film wrapping and intelligent warehousing. This has resulted in a 59% increase in storage capacity compared to traditional warehouses, a 100% increase in warehousing efficiency, a 140% increase in order picking efficiency.



Green, Reduced and Recyclable Packaging

In terms of greening, reducing and recycling logistics packaging of this enterprise:



Greening

Strictly select cartons with green product certification standards to reduce resource consumption.



Reduction

Reduction, standardization and scene-based management of packaging materials such as plastic bags, tape, stickers and seals.



Recyclable

Use reusable waterproof bags instead of disposable wrapping film for reinforcement, saving 120 rolls of wrapping film every year; Investing in vaccine-specific reusable packaging boxes, pharmaceutical precision temperature-controlled box, and new types of insulated boxes for last-mile delivery has enabled efficient reuse of packaging. The proportion of reusable packaging boxes used is about 95%, with over 7,400 uses per year, reducing carbon emissions by approximately 1.6 tons.

SF Pharmaceutical Precision Temperature-Controlled Box



Helping reduce Scope 3 logistics and transportation emissions by approximately 13%

With its professional pharmaceutical logistics solutions and end-to-end low-carbon logistics service system, SF has helped the enterprise successfully achieve an approximately 13% reduction in Scope 3 logistics and transportation emissions in 2023 compared to the base year, through comprehensive measures such as rational warehouse planning, intelligent warehouse upgrades, and sustainable packaging innovation.

" Feng E Recyclable Box "

Helping Quick-Frozen Food Company Achieve Green Upgrading of Cold Chain Logistics

The quick-frozen food industries have specific demands for logistics packaging: on one hand, they require the packaging to have excellent temperature-locking performance, ensuring stable temperature control throughout the journey by using insulating materials and refrigerants to avoid temperature fluctuations during transportation; on the other hand, they emphasize the resistance to damage to ensure the integrity and safety of the food during the transportation process. However, the traditional packaging materials currently used, such as white foam boxes and blue ice refrigerants, have obvious environmental shortcomings. The country is also actively introducing policies such as the "Interim Regulations on Express Delivery" and "Requirements for Limiting Excessive Packaging of Mail and Express Parcels," clearly setting the core direction for the transformation and upgrading of express packaging to be recyclable, reduced, and harmless.

Driven by policy and market, a new generation of Feng E Recyclable Box solutions developed by SF came into being. Through technological innovation, it effectively solves the environmental problems of traditional cold chain packaging and provides a practical implementation path for the green transformation of the industry.

Features of Feng E Recyclable Box

Environmental Protection

EPP material is decomposable and recyclable, allowing the insulation box to be reused.

Thermal Insulation

EPP particles have a thermal conductivity of 0.030 W/(m·K), superior to traditional foam boxes.

Safety

- Higher density than foam boxes, effectively reducing packaging damage.
- Food-grade EPP material, safe and odorless.
- Stringent cleaning processes are conducted to ensure safety and hygiene with each use.



The Operational Advantages of Feng E Recyclable Box

Collection

Clean and undamaged, providing stable protection for products

The color is dirt-resistant, and the thick and pressure-resistant material avoids damage, bringing better isolation and heat-preservation effects.

Opening

Easy to open, saving effort and worry

The opening method is more convenient, eliminating the trouble of foam, and shortening the opening time and the cumbersome process of subsequent cleaning.

Retrieval

Multiple protections, safely locking in the temperature until the last moment

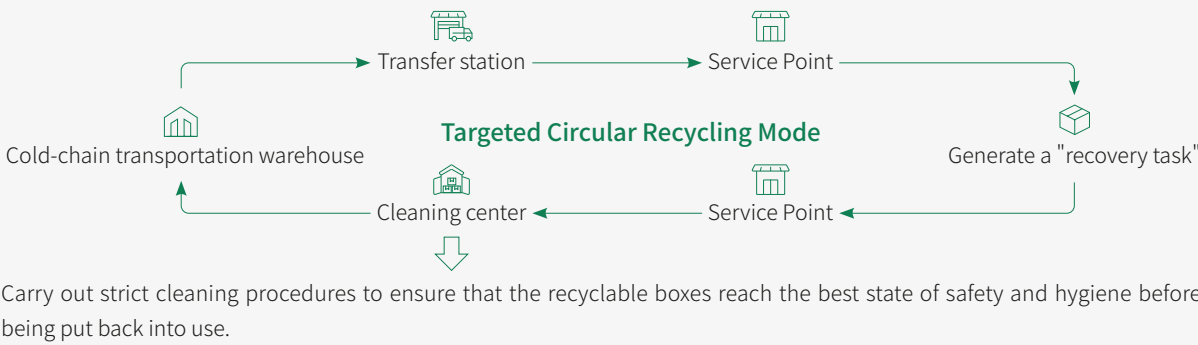
Food-grade materials will not contaminate food. The separate insulated inner bag avoids box contamination and provides an extra layer of heat-preservation.

Disposal

Free your hands, reduce the environmental burden

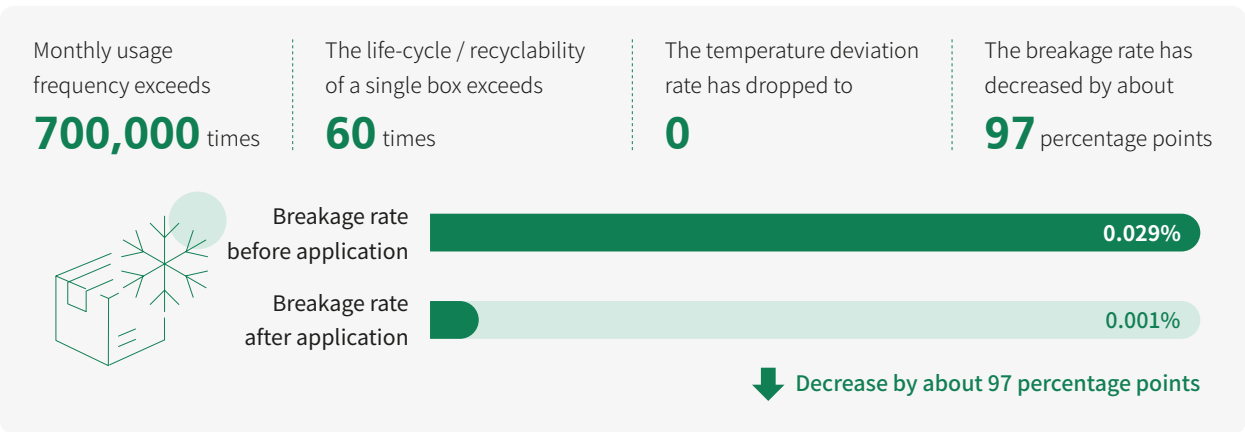
Door-to-door recycling, easily participate in the environmental protection cycle, gain a sense of honor while reducing the step of discarding.

The Circulation Mode Diagram of Feng E Recyclable Box



SF has implemented a full-chain Feng E Recyclable Box solution for a well-known quick-frozen food company, and the breakage rate and temperature deviation rate have been effectively improved after use. Due to the remarkable achievements in both carbon emission reduction efficiency and product transportation quality assurance, SF has successfully helped the client win domestic and international ESG honors such as the Forbes ESG Award and the Industry ESG Environmental Practice Brand, assisting the company in shaping a good brand image.

After using Feng E Recyclable Box, SF has helped the enterprise achieve:



"Recyclable Pallet Box"

Solving the Challenges of Safety and Carbon Reduction in Auto Parts Transportation

The logistics links of the automotive industry chain cover the entire process including raw material procurement, auto parts transportation, finished vehicle distribution, and reverse logistics, with its energy consumption and carbon emission issues becoming increasingly prominent. To address the challenges of climate change, leading automotive enterprises are accelerating the green transformation of their value chains, enhancing competitiveness while fulfilling their sustainable development commitments. A leading company in the automotive industry has achieved sustained business growth in the European market; it has put forward the medium-term target of "reducing the group's own operational carbon emission intensity by 50% by 2030 compared with 2023" and committed to achieving full value chain carbon neutrality by 2045.

As a key component material for electric vehicles, silicon carbide wafers need to follow strict protection requirements during transportation to ensure safety and maintain material properties. At the same time, the carbon-reduction goals of enterprises require a reduction in packaging carbon emissions. Since November 2022, in response to the company's needs, SF has customized the use of Recyclable Pallet Box for the transportation of battery packs and other products. On the basis of ensuring transportation safety, it further reduces packaging consumption and helps the company achieve its full value chain carbon reduction goals.

Reduce Resource Consumption

Recyclable Pallet Box reduce dependence on traditional wooden frames, wooden boxes and wooden brackets, and can be recycled to reduce resource consumption and waste.



Ensure Transportation Safety

Recyclable Pallet Box has strong compressive and impact resistance, effectively preventing products from being damaged by collisions and compression during transportation, achieving a zero damage rate during the cargo transportation process; The box adopts a nail-free design to reduce the risk of work-related injuries.



After using Recyclable Pallet Box, SF has helped the company achieve the following results:

An	The breakage rate reduced to	A reduction of over
80 % increase in operational efficiency	0 %	60 % in carbon emissions per parcel

"Recyclable Honeycomb Panels and Packaging Recycling"

Serving the Construction of "Waste-Free Supply Chain" of a Leading Home Appliance Brand

Home appliances are a core category in the home appliance industry. Due to their large size and high value, the damage rate during logistics and transportation has always been one of the key issues that the industry is eager to address. Traditional methods use one-time, non-degradable packaging materials such as foam boards and bubble wrap, which can alleviate to some extent the effects of vibration, collision, and moisture during transportation. However, these methods also have environmental drawbacks, increasing the environmental costs for companies and creating a clear gap with the increasing environmental awareness among consumers.

A leading brand in the home appliance industry is actively promoting the construction of a "waste-free group". Its TV business has put forward the goal of "achieving carbon peak no later than 2030 and achieving carbon neutrality no later than 2050" at the operational level, and continues to improve the greening level of the industrial chain to achieve green development. In the process of cooperation with this company, SF combined its green logistics needs and industry logistics and transportation pain points, and targeted recycling packaging solutions adapted to its transportation scenarios.

Recyclable Honeycomb Panels Help Reduce Losses and Consumption in Transportation

The Recyclable Honeycomb Panels made of 97% recyclable PP material developed by SF is used to replace the air exhaust or honeycomb cardboard used for TV protection for transportation and packaging. The Recyclable Honeycomb Panel also has excellent impact resistance, reducing the transportation damage rate by 20 %. While effectively controlling the damage of goods, the cost of packaging materials for a single transportation is significantly reduced through the recycling of packaging materials.



▲ Using Recyclable Honeycomb Panels for Transportation Packaging

Reduced Recycling of Packaging Materials

SF actively promotes the recycling and reuse of packaging materials such as packaging box covers, gaskets, pallets, etc. of the company's products, helping client to recycle 10,000 tons of packaging materials annually at the Shenzhen-Huizhou regional base, and achieve a recycling and reuse rate of Cell¹² packaging materials of 95% or more.

Helping reduce Scope 3 logistics and transportation emissions by over 55 tons

In 2024, SF successfully reduced emissions by more than 55 tons for the company in the Scope 3 logistics and transportation links.

¹² A Cell refers to a liquid crystal cell, which is the core component of a liquid crystal display (LCD).

"Green Aviation"

From SAF's First Flight to Application Services, Creating Green Aviation Solutions

The global aviation industry generates approximately 1 billion tons of carbon dioxide equivalent emissions annually, accounting for about 1.8%¹³ of the world's total carbon emissions. Currently, the electrification process of rail and road transportation is deepening, while the aviation industry faces challenges in changing its energy sources. The carbon emissions in aviation industry are mainly produced by burning aviation fuel, and the continuous growth trend of the aviation industry over the next few decades will ultimately lead to an increasing proportion of carbon emissions from aviation. The aviation industry has become a significant resistance to achieving the global carbon neutrality goal by 2050.

The International Civil Aviation Organization (ICAO) has set intermediate emission reduction targets of improving fuel efficiency by an average of 2% per year before 2035, and long-term emission reduction targets of reducing carbon emissions by 50% before 2050. The aviation industry urgently needs to build a low-carbon development model for the entire industry chain through systematic measures such as technological innovation, operational system optimization, and infrastructure upgrades.

Sustainable Aviation Fuel (SAF), as a direct-use liquid fuel alternative, can reduce carbon emissions by up to 85% compared to traditional aviation fuel. Research by the International Air Transport Association (IATA) shows that if the aviation industry carbon target in 2050 is to be successfully achieved, SAF will contribute 65% of the carbon emission reduction effect, which is the emission reduction path with the lowest cost of equipment modification and the most obvious emission reduction effect in the aviation industry.

The First Commercial Trial Flight of a Domestic All-cargo Aircraft Using Sustainable Aviation Fuel was Successful

SF actively participates in the exploration and innovation in the field of green aviation, and works with partners to conduct in-depth research on the applicability and feasibility of SAF, and deeply explore the potential value and emission reduction opportunities of SAF applications. In September 2024, SF Airlines was invited to participate in the sustainable aviation fuel application pilot project seminar held by the National Development and Reform Commission and the Civil Aviation Administration of China and accelerate the localized demonstration, promotion and application of sustainable aviation fuel scale.

On December 19, 2024, an SF Airlines B737 all-cargo aircraft refueled with SAF successfully completed its first commercial flight with sustainable aviation fuel. The refueled domestically produced SAF can be achieved under full life cycle scenarios. With 1,600 kilograms of carbon emissions reduced, SF Airlines has also become the first cargo airline to use SAF for autonomous commercial flights of all-cargo aircraft on domestic flights. In addition, the flight also offsets the carbon emissions generated during the combustion of aviation fuel by purchasing sufficient Verified Carbon Units (VCUs), becoming the first all-cargo flight in the country to achieve carbon neutrality, providing a practical basis for the sustainable development of the air cargo industry.



▲ SF Airlines' first trial flight using SAF

¹³ IPCC. (2022, April). *Mitigation of climate change 2022*

Launching the Aviation Neutrality Acceleration Program (ANA) to Provide Green Aviation Services

In March 2025, SF and Sinopec (Hong Kong) Aviation Fuel Co., Ltd. officially signed a letter of intention to subscribe cooperation for sustainable aviation fuel bulk. This cooperation not only provides a solid guarantee for SF's long-term and stable procurement of SAF that meets international sustainability certification standards, but also announces the official launch of the Aviation Neutrality Acceleration (ANA) program, led by SF.

In May 2025, SF independently developed the SAF digital monitoring platform, relying on blockchain technology to achieve data monitoring, traceability, and non-tampering.

In June 2025, SF officially provided green aviation services based on SAF embedded solutions, achieving:

Controllable Cost

Through large-scale procurement, digital management and SAF registration solutions, the comprehensive cost of using SAF for clients is significantly reduced.

Measurable Emission Reduction

SAF carbon footprint is tracked throughout the life cycle, and relevant emission reduction information is authoritatively reviewed by the Central Joint Certification Center, an independent third-party organization.

The Benefits are Visible

Issuing a "Sustainable Aviation Fuel (SAF) Freight Service Statement" for clients, helping them achieve zero carbon emissions in scope 3 when using SF air cargo.



◀ SF launches green aviation service

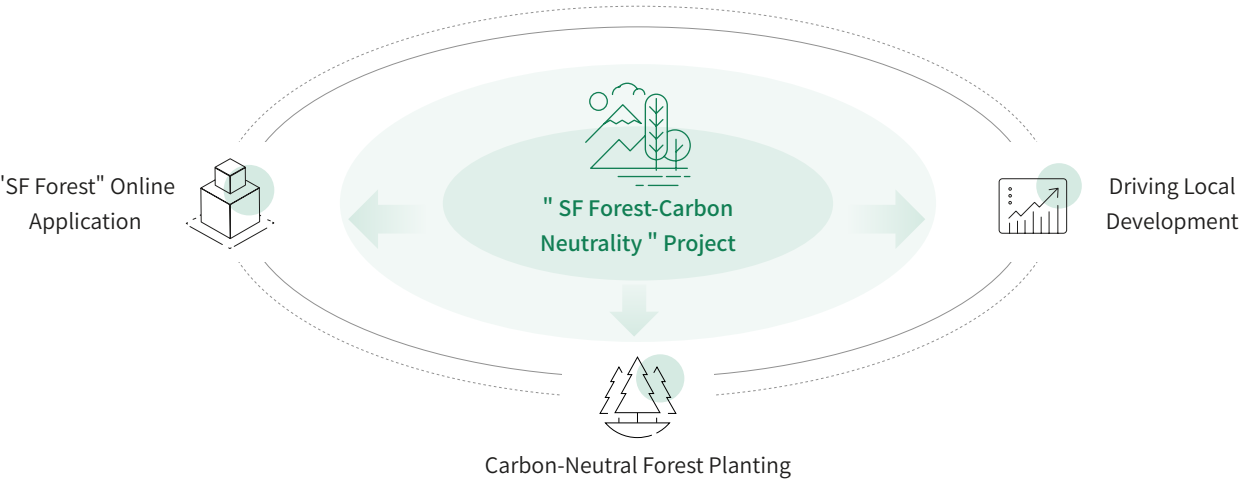
Ecological Synergy and Social Empowerment

Achieving a Shared Zero-carbon Future

In the global journey toward a net-zero future, SF actively practices the concepts of ecological synergy and social empowerment. It implements energy-saving and emission-reduction measures in its operations, leveraging its own strength to drive green and low-carbon transformation in the industry. Meanwhile, it extends green values to the social level by collaborating with governments, enterprises, social organizations, and other stakeholders. Through initiatives such as the "SF Forest-Carbon Neutrality" project, biodiversity conservation, and emergency responses to extreme climate, SF has explored a green development path characterized by multi-stakeholder participation, win-win innovation, and multiple benefits.

" SF Forest-Carbon Neutrality" Project

Launched officially in 2020, the "SF Forest-Carbon Neutrality" project actively explores new models for enterprises to participate in carbon neutrality. Through launching the "SF Forest" application online and planting carbon-neutral forests offline, the project promotes the sustainable development of the local environment and society, and facilitates the harmonious coexistence between humans and nature. The "SF Forest-Carbon Neutrality" project has been successfully selected into *the 2024 Selected Cases of Climate Philanthropy Impact* released by the Climate and Environment Grantmakers Alliance (CEGA), and also included in *the 2024 Typical Cases of Climate Action* by China Weather Network and Xinhua News Agency.



Carbon-Neutral Forest Planting

SF has successfully established a diversified participation model encompassing the Group's carbon-neutral forests, employees' carbon-neutral forests, and customers' carbon-neutral forests. While covering the company's own carbon reduction initiatives, it extends green concepts to a broader social level through extensive participation of employees, customers, and the public.

2020	The carbon-neutral forest for the 2019 annual meeting	The project in Shexian, Hebei Province, planted 4,000 <i>Platycladus orientalis</i> .
2021	SF employees' carbon-neutral forest	Phase I of the project in Jingxing, Hebei Province, planted 13,200 <i>Platycladus orientalis</i> , <i>Prunus davidiana</i> , and <i>Armeniaca vulgaris</i> .
2022		Phase II of the project in Jingxing, Hebei Province, planted 20,428 <i>Platycladus orientalis</i> , <i>Prunus davidiana</i> , and <i>Armeniaca vulgaris</i> .
2022	SF Group's carbon-neutral forest	Phase I of the project in Seda, Sichuan Province and the project in Laiyuan, Hebei Province, planted about 1 million <i>Picea crassifolia</i> , <i>Pinus tabuliformis</i> , and <i>Platycladus orientalis</i> .
2024	SF Group's carbon-neutral forest	Phase II of the project in Seda, Sichuan Province, planted about 253,000 <i>Picea crassifolia</i> .
	SF employees' carbon-neutral forest	Phase III of the project in Jingxing, Hebei Province, planted 71,183 <i>Platycladus orientalis</i> and <i>Prunus davidiana</i> .
2025	SF customers' carbon-neutral forest	The project in Jingxing, Hebei Province, planted 10,000 <i>Prunus davidiana</i> .

Carbon-Neutral Forest Planting Process

As of the end of 2024, SF has invested a total of over RMB **40 million** in its carbon-neutral forest module. The SF Group's carbon-neutral forests in Hebei and Sichuan Province have a afforestation area of over **1,647 acres** and a total of more than **1 million trees**, which are expected to absorb approximately **200,000 tons** of carbon dioxide from the atmosphere.



"SF Forest" Online Application

SF has deeply integrated green concepts with digital technology. Since 2021, it has launched an online application called "SF Forest," which is designed to promote green lifestyles and help individuals achieve carbon neutrality goals. Users can calculate their carbon emissions, receive saplings, and nurture them within the app. Once the saplings are fully grown in the app, the SF Foundation will carry out on-site planting. Users can also participate in environmental protection actions through online "cloud tree-planting" to offset their own carbon dioxide emissions.

"SF Forest" is open to groups such as SF Group employees, volunteers, college students supported by the SF Lotus Education Aid Program, and parents of children benefiting from the SF Care Project, spreading green and low-carbon concepts to more people. As of the first half of 2025, "SF Forest" has attracted over 140,000 users to participate, with more than 140,000 saplings adopted and donations exceeding RMB 1 million. Approximately 161 acres of land has been planted with 104,811 trees across three phases of on-site planting, which is expected to absorb over 4,100 tons of carbon dioxide from the atmosphere in the future.

The Interface of the "SF Forest" Application



Driving Local Development

While creating significant ecological and environmental value, the "SF Forest-Carbon Neutrality" project has made dual efforts in socioeconomic and people's wellbeing benefits. By promoting industrial development, providing employment opportunities, and other initiatives, it continues to support local development and effectively enhance people's wellbeing.

Forestry Carbon Sink

- The carbon sink increment generated by the project has both ecological and economic benefits, which can effectively offset the greenhouse gas emissions at the operational level of SF and help the enterprise achieve the carbon-neutral goal.

Skills Training

- Experts are hired to provide technical training and promotion support. A total of nearly 100 grassroots forestry workers have received special training on forestry carbon sinks, forest tending techniques, etc., to improve their professional capabilities.

Industrial Development

- The implementation of the project can increase the forest vegetation coverage rate in the local area, enhance biodiversity, enrich tourism resources, and bring additional tourism revenue to the project area.

Employment Promotion

- Purchase seedlings locally to promote the development of local related industries.
- It can create about 100-200 direct or indirect jobs for the local area and increase the income of farmers and herdsmen.
- Innovate the "ecological protection + skills training" model to form a sustainable employment mechanism.



Skills Training for Grassroots Forestry Workers



In addition, SF cares about villagers, children, the elderly, and forest rangers. It has successively carried out two phases of community care programs in Dema Village, Seda County, Sichuan Province, donating materials for people's livelihood and education. These efforts empower children's growth and local talent development, laying a solid foundation for the long-term development of the region.



Community Care Activities

Biodiversity Conservation

Climate change is one of the important driving factors leading to the sharp decline in biodiversity, and coordinated governance of climate change response and biodiversity conservation needs to be promoted. In addition to regular carbon-reduction actions, SF actively focuses on key ecological function areas and biodiversity conservation. It has jointly carried out the public welfare protection project for white-lipped deer in the Nianlong Nature Reserve in Seda, Sichuan Province, and the comprehensive pilot project for wildlife protection and ecological development in southeastern Tibet, laying a solid foundation for the smooth progress of scientific research and local ecological protection work.

Sichuan Seda Nianlong Nature Reserve White-Lipped Deer Public Welfare Protection Project

In 2023, the SF Foundation, in collaboration with the China Green Carbon Foundation, deployed biodiversity protection projects in Sichuan and Tibet. In July 2024, it launched the "White-lipped Deer Biodiversity Special Protection Project" in the Nianlong Provincial Nature Reserve of Ganzi Prefecture, Sichuan. Public welfare protection actions have been carried out in the habitats of national first-class key protected wild animals such as white-lipped deer.

The project focuses on carrying out systematic protection and monitoring work for plateau flagship species such as white-lipped deer and white-rumped deer, as well as their habitats. It conducts special surveys on population quantities and habitats, advances comprehensive scientific investigations on plant background, vegetation conditions, terrestrial vertebrate diversity, and landscape structure, evaluates ecosystem integrity, and formulates targeted protection strategies. The project has completed the first-phase investigation tasks, and through precise habitat protection and community collaboration mechanisms, it provides a model for the protection of rare species in alpine regions.



Field Investigation of Scientific Researchers

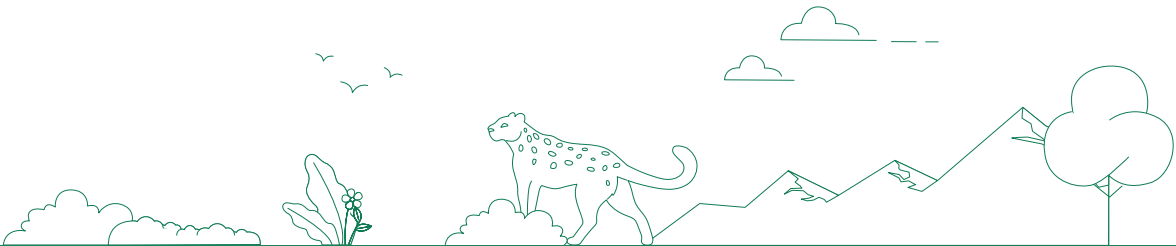




A First-Class Protected Animal, White-Lipped Deer, Photographed by Scientific Researchers



白唇鹿
Nianlong



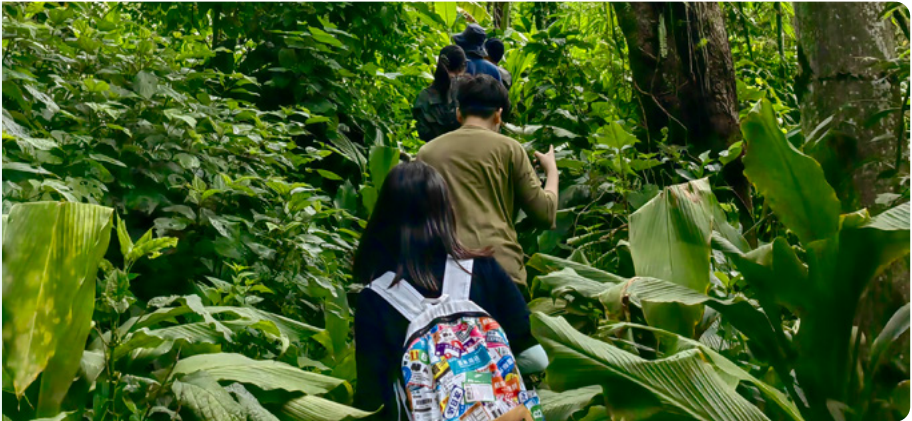
Comprehensive Pilot Project of Wildlife Protection and Ecological Development in Southeast Tibet

In 2024, the SF Foundation launched a partnership with the Shanshui Nature Conservation Center to initiate the "Comprehensive Pilot Project for Wildlife Protection and Ecological Development in Southeastern Tibet" in Medog County and Zayu County of the Tibet Autonomous Region.

The project conducts monitoring surveys of rare and endangered species and demonstration work on species protection sites. It carries out continuous monitoring of the diversity of rare and endangered animals such as Bengal tigers, clouded leopards, and capped langurs in the Yarlung Zangbo Grand Canyon, and conducts baseline surveys targeting rare and endangered species including clouded leopards, dholes, and takins. Meanwhile, through protection actions such as community patrols and pilot programs for human-wildlife conflict mitigation, as well as pilot nature education initiatives, the project enables communities to benefit from ecological protection. It strengthens on-site work for regional species protection and establishes a demonstration of the Dexing species protection site in Medog County.



The SF Team Inspecting the Project Area





A First-Class Protected Animal, the Clouded Leopard, Recorded by an Infrared Camera



Emergency Response to Extreme Climate

As a core force in the national emergency response system, logistics enterprises need to actively leverage their smart logistics networks and professional emergency rescue support capabilities. In extreme disasters, they should ensure the efficient allocation of materials and the stability of supply chains, providing crucial support for addressing climate challenges and maintaining social stability.

Emergency Preparedness

SF actively explores new models for emergency preparedness and disaster relief. In response to the characteristics of disasters in northern China, SF has built a comprehensive, systematic, and efficient emergency preparedness and disaster relief system through measures such as establishing emergency warehouses, special emergency funds, developing social force-based mechanisms for disaster preparedness and relief, and providing emergency empowerment. This system provides strong guarantees for future disaster response efforts.



Build Emergency Warehouses

- Build SF emergency supplies warehouses in Shijiazhuang, Hebei Province, and pre-store necessary disaster relief supplies in advance, such as mobile drainage pumps, quilts, generators, warm packs, etc.

Prepare Special Emergency Funds

- Prepare special emergency disaster relief funds to support social organizations in quickly responding to the diverse needs of disaster-stricken areas and provide effective support for the government's coordinated disaster relief operations.

Conduct Emergency Capacity Training

- Conduct emergency skills and team-building empowerment training for front-line SF couriers.
- Use SF service points as training bases and invite professional social rescue teams to teach emergency skills.
- Encourage front-line SF couriers and residents to participate in the online emergency education courses of the "One Foundation Safe Home" mini-program. Those who complete the courses will receive emergency equipment rewards.

Developing Social Force-Based Mechanisms for Disaster Preparedness and Relief

- Pre-store post-disaster supplies to quickly respond to the basic living needs of disaster-affected people in disaster-stricken areas after a disaster occurs.
- Assist in building a rescue and emergency response system that integrates flood control and emergency drainage, and power supply.

Action for Enhancing Disaster Preparedness and Relief Capabilities

Charity Transportation

The SF Charity Transportation Project, operated on a long-term basis by the SF Foundation, is a logistics-grant initiative that provides emergency freight support to government agencies and non-profit organizations. Leveraging SF's strong logistics network and professional transport capabilities, the program ensures that relief supplies are delivered rapidly and safely during natural disasters and other public emergencies. As of the first half of 2025, the project has invested nearly **RMB 60 million**.

Emergency Response

When a disaster occurs, SF will quickly activate the green channel, transport key rescue supplies for free, and allocate SF's national transportation resources (including aviation, land transportation, and warehousing). Plan the optimal route through the intelligent dispatching system to ensure the rapid arrival of supplies.

Full-cycle Support

In addition to emergency rescue, SF continuously participates in post-disaster reconstruction and provides long-term logistics assistance.

Collaborative Cooperation

Linkage the resources of the government, non-profit organizations and enterprises to build an integrated chain of "material dispatching-transportation-distribution" to improve rescue efficiency.



Logistics Support for Relief Materials in Response to Tingri County's "1.7" earthquake

While advancing its own comprehensive climate actions, SF continues to amplify its impact, driving industry-wide ecological collaboration and social empowerment. Through initiatives such as the "Zero Carbon Star Wish" public campaign, the Sustainable Development Youth Empowerment Program, and wetland conservation projects, SF guides the public to adopt greener lifestyles in everyday actions and strengthens society's environmental awareness. On the global stage, SF actively presents at international forums, showcasing innovative green-logistics solutions at the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP28). In doing so, it demonstrates the responsibility of Chinese enterprises and enhances China's engagement in global climate governance.

Moving forward, SF will intensify its climate efforts with unwavering resolve, systematically advancing a low-carbon transformation strategy and deepening collaborative innovation with value-chain partners and society at large. SF will continue to provide climate-friendly green and low-carbon logistics solutions, contribute expertise to propel the nation and society toward carbon neutrality, and join hands for achieving a shared zero-carbon future.



Scan the QR Code to Watch
The "Zero Carbon Star Wish"
Promotional Video



Appendix

- Appendix I : SF GHG Emissions
- Appendix II : SF 2024 Other Awards and Recognitions

Appendix

Appendix I : SF GHG Emissions¹⁴

Indicator		Unit	2022	2023	2024
GHG Emissions ¹⁵					
GHG Emissions	Total GHG Emissions	tCO ₂ e	11,658,310.1	12,104,050.6	12,450,832.5
	Scope 1	tCO ₂ e	3,466,005.0	2,874,104.1	3,162,013.0
	Scope 2	tCO ₂ e	1,884,791.5	1,545,437.8	1,407,378.1
	Scope 3 ¹⁶	tCO ₂ e	6,307,513.6	7,691,229.7	7,881,441.3
	—— Purchased Goods and Services	tCO ₂ e	2,522,391.5	775,202.1	841,927.1
	—— Capital Goods	tCO ₂ e	N/A	783,987.2	207,867.9
	—— Fuel and Energy-related Activities	tCO ₂ e	1,689,195.7	1,754,182.2	1,390,234.7
	—— Upstream Transportation and Distribution	tCO ₂ e	2,070,159.0	4,222,765.9	5,305,248.8
	—— Waste Generated in Operation	tCO ₂ e	1,492.1	3,303.1	1,053.5
	—— Business Trip	tCO ₂ e	N/A	20,721.2	41,120.5
	—— Employee Commuting	tCO ₂ e	24,275.3	25,070.6	25,339.4
	—— Upstream Leased Assets	tCO ₂ e	N/A	N/A	16,899.5
	—— End-of-life Treatment of Sold Products	tCO ₂ e	N/A	10,217.8	3,560.9
	—— Investment	tCO ₂ e	N/A	95,779.7	48,189.0

¹⁴To more comprehensively and accurately reflect the Company's key environmental performance, the Company will continuously improve the data collection scope and methodologies for each environmental performance indicator to ensure data reliability.

¹⁵The Company continues to improve the data statistics of GHG emissions in Scope 1, Scope 2 and Scope 3. In 2024, the Company expanded the scope of GHG emissions data statistics, including the carbon emissions data of subsidiaries (DSC, Shunxinhui) and the emissions data of categories 2, 6, 8, 12, and 15 of Scope 3. Meanwhile, the Company conducted a retrospective statistical analysis of the GHG emissions data for 2023 to ensure the comparability, completeness, and accuracy of the data.

¹⁶The Company continues to improve the statistical work on GHG emissions in each category of Scope 3. In 2024, emissions from categories 9, 10, 11, 13, and 14 of Scope 3 were not applicable to the main business operations of SF, and therefore are not presented in this environmental key performance indicator table.

In March 2025, SF Holding successfully underwent the verification conducted by SGS, a renowned international independent third-party inspection and verification organization. The Company completed the third-party certification of its greenhouse gas emissions for the year 2024 and obtained the Verification Statement on Greenhouse Gas Emissions.

Statement of Conformity CN25/00001737

Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in
01 Jan. 2024 to 31 Dec. 2024 of

**Shenzhen SF Taisen Holdings (Group)
Inc.**

Business address: 4301, 43/F, Shunfeng Headquarters Building, 3076 Xinghai Avenue,
Nanshan Street, Qianhai Shenzhen-Hong Kong Cooperation Zone, Shenzhen, Guangdong
Province, P.R. China
Organization boundary: Detail organization boundary information has been listed in Annex,
has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Direct Emissions
3,045,612.03 tonnes of CO₂e

Indirect Emissions
6,417,806.43 (Location-based) tonnes of CO₂e

Total Emissions Quantified
9,463,418.46 (Location-based) tonnes of CO₂e

The specific categories of indirect greenhouse gas emissions are detailed in the
appendix of this statement, which is an integral part of this statement



Authorised by
David Xin
Sr. Director - Business Assurance
DATE: 19 Mar. 2025

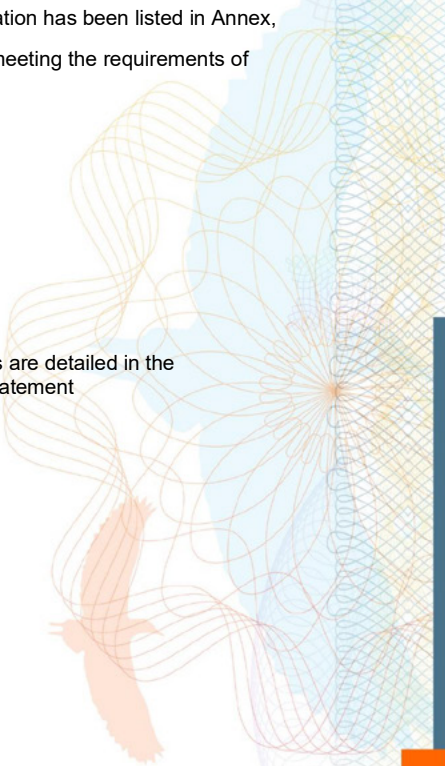
SGS-CSTC Standards Technical Services Co., Ltd.
16F Century YuHui Mansion, No. 73 Fucheng Road, Beijing, P.R. CHINA 100142
t +86 (0)10 58251188 www.sgsgroup.com.cn



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A stylized illustration of a globe centered on the Asian continent. A dashed line representing a flight path or shipping route circles the globe. An airplane is shown at the top left, and a cargo ship is at the bottom right, both following the path. The globe is rendered in a light green color with white outlines for continents.

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Appendix II : SF 2024 Other Awards and Recognitions

2024 Fortune **Global 500** (listed for 3 consecutive years)

Fortune

2024 Fortune **Most Admired Chinese Companies** (listed for 8 consecutive years)

2024 **China ESG Influential Listing** (listed for 3 consecutive years)

2024 Fortune **Global 500** (listed for 3 consecutive years)

Brand Finance

2024 Fortune **Most Admired Chinese Companies** (listed for 8 consecutive years)

2024 **China ESG Influential Listing** (listed for 3 consecutive years)

2024 Fortune **Global 500** (listed for 3 consecutive years)

Forbes

2024 Fortune **Most Admired Chinese Companies** (listed for 8 consecutive years)

2024 **China ESG Influential Listing** (listed for 3 consecutive years)

2024 Fortune **Global 500** (listed for 3 consecutive years)

State Post Bureau

2024 Fortune **Most Admired Chinese Companies** (listed for 8 consecutive years)

2024 **China ESG Influential Listing** (listed for 3 consecutive years)

2024 Fortune **Global 500** (listed for 3 consecutive years)

Philanthropist of China

2024 Fortune **Most Admired Chinese Companies** (listed for 8 consecutive years)

2024 **China ESG Influential Listing** (listed for 3 consecutive years)

2024 Fortune **Global 500** (listed for 3 consecutive years)

Hong Kong ESG Reporting Awards (HERA)

2024 Fortune **Most Admired Chinese Companies** (listed for 8 consecutive years)

2024 **China ESG Influential Listing** (listed for 3 consecutive years)

China Association for Public Companies

Best Practices for Sustainability of Listed Companies in 2024 (3 consecutive years)

Best Practices for Board of Directors of Listed Companies in 2024 (2 consecutive years)

China Communications and Transportation Association

Typical Cases of China's Green Logistics ESG Practice Pioneers for 2023-2024

Sina Finance

2024 China ESG "Golden Responsibility Award" – Best Corporate Governance (G) Responsibility Award

Securities Market Weekly

Best ESG-Managed Listed Companies in 2024

2024 ESG "Golden Dawn Corporate Governance Award"

2024 ESG "Golden Dawn Leadership Award"

Securities Star

2024 Most Socially Responsible Listed Company

2024 ESG New Benchmark Enterprise Award

2024 ESG Investment Value TOP 100 List

Gelonghui

The 6th Gelonghui Golden Award – Annual ESG Pioneer Award