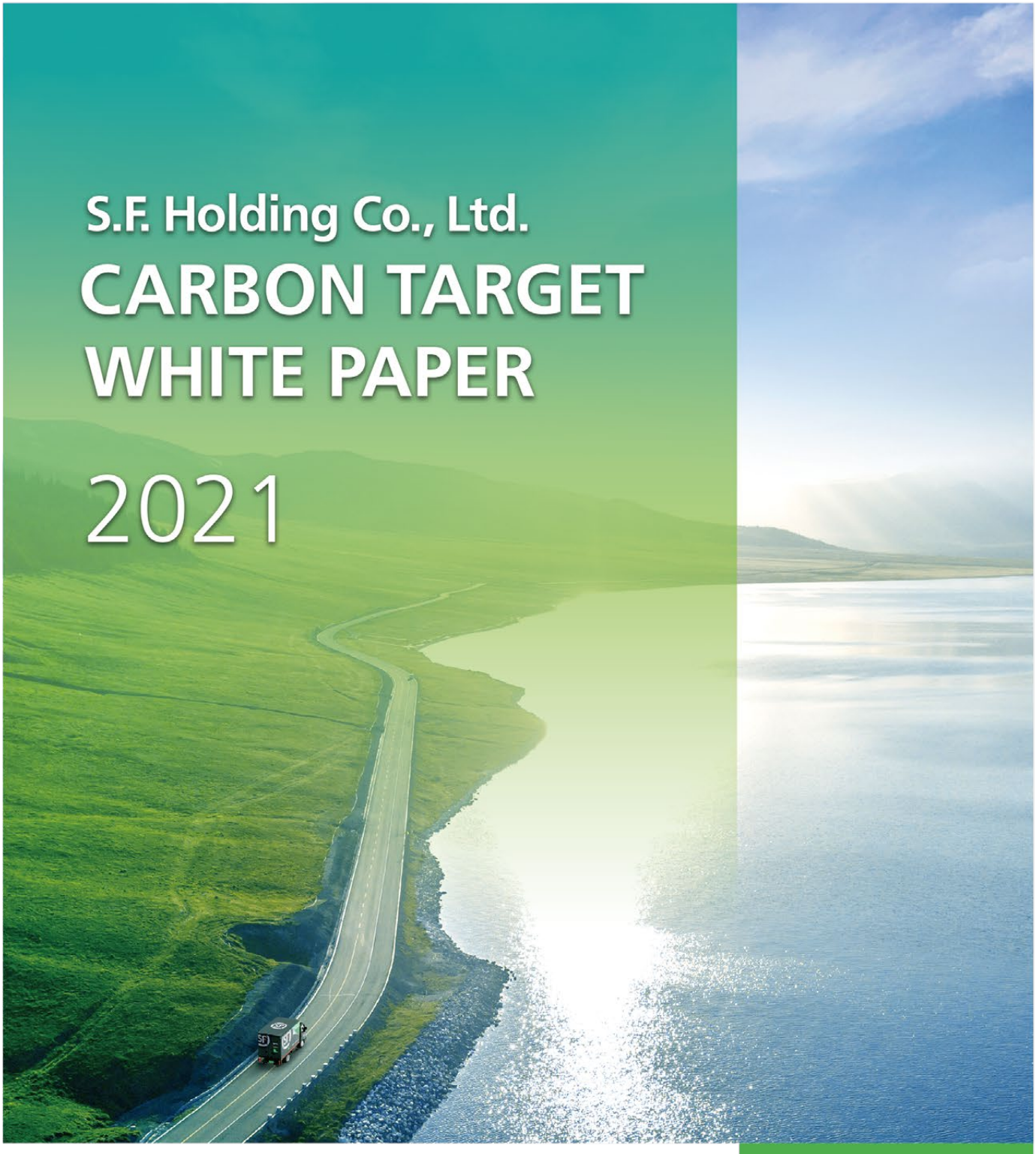
S.F. Holding Co., Ltd.

CARBON TARGET WHITE PAPER

2021



SF HOLDING 顺丰控股


OPENING

Foreword

In recent years, climate change has been a topic of global concern. The increasing frequency and intensity of extreme weather, and the heavy losses and damage they bring, are affecting humanity, economy and society.

To achieve the net-zero emissions goal of the Paris Agreement, the global blueprint for carbon neutrality is being laid out. In 2020, China has taken on the role of a great power and demonstrated unprecedented determination in a new journey to combat climate change, setting the great goal of achieving national carbon neutrality by 2060.

As a company with a sense of social responsibility, we understand the impact of our business on the environment and have been working hard to create sustainable supply chain services. We hope to lead by example and bring positive impact to the industry and society through the optimization of our business operations. Throughout our past practice, we have continued to integrate technology into our operations, using it to enhance and reshape our logistics processes of supply chain, achieving significant emission reductions in areas such as packaging, transportation and transshipment. With this momentum, we will embrace our sustainability strategy even further and put climate change at the forefront of our corporate vision. We plan to extend our green value to our supply chain, advocate and join hands with our partners and customers from upstream and downstream to become "partners on the road to zero carbon".

It is foreseeable that a sustainable future is approaching us. We will follow this green trend, ride the wave, accelerate the low-carbon transformation of our operations, and join hands with all stakeholders to drive our industry towards technology, efficiency, cleanliness and greenness.

The sky and the earth stay quiet, but the seasons alternate and all creatures flourish as usual. The earth is the only common home of human beings. SF Holding will take on the new mission entrusted by the era, deliver the green and beautiful life to thousands of households through every warm passage, and precipitate the belief of low-carbon development into the core of the enterprise through every firm step.

Our Commitment

We will leverage the power of technology to drive green, low-carbon renovation and achieve a 55% improvement in our own carbon efficiency in 2030 compared to 2021; meanwhile, to create climate-friendly express delivery, we will reduce the carbon footprint of each package by 70% in 2030 compared to 2021.

Facing the challenges brought by global climate change, as a responsible leader in the logistics industry, SF Holding has set a more ambitious carbon reduction target and strategic plan based on its past carbon reduction achievements. We will insist on technological innovation to continuously improve the efficiency of our own resource utilization and reduce carbon emissions in all business processes. We look forward to working with our partners to promote the green transformation and upgrade of the industry through technology empowerment and share the responsibility of protecting the earth.

2030

Improvement in Carbon Efficiency

55%

2030

Reduction in Carbon Footprint per Package

70%

Our Strategy

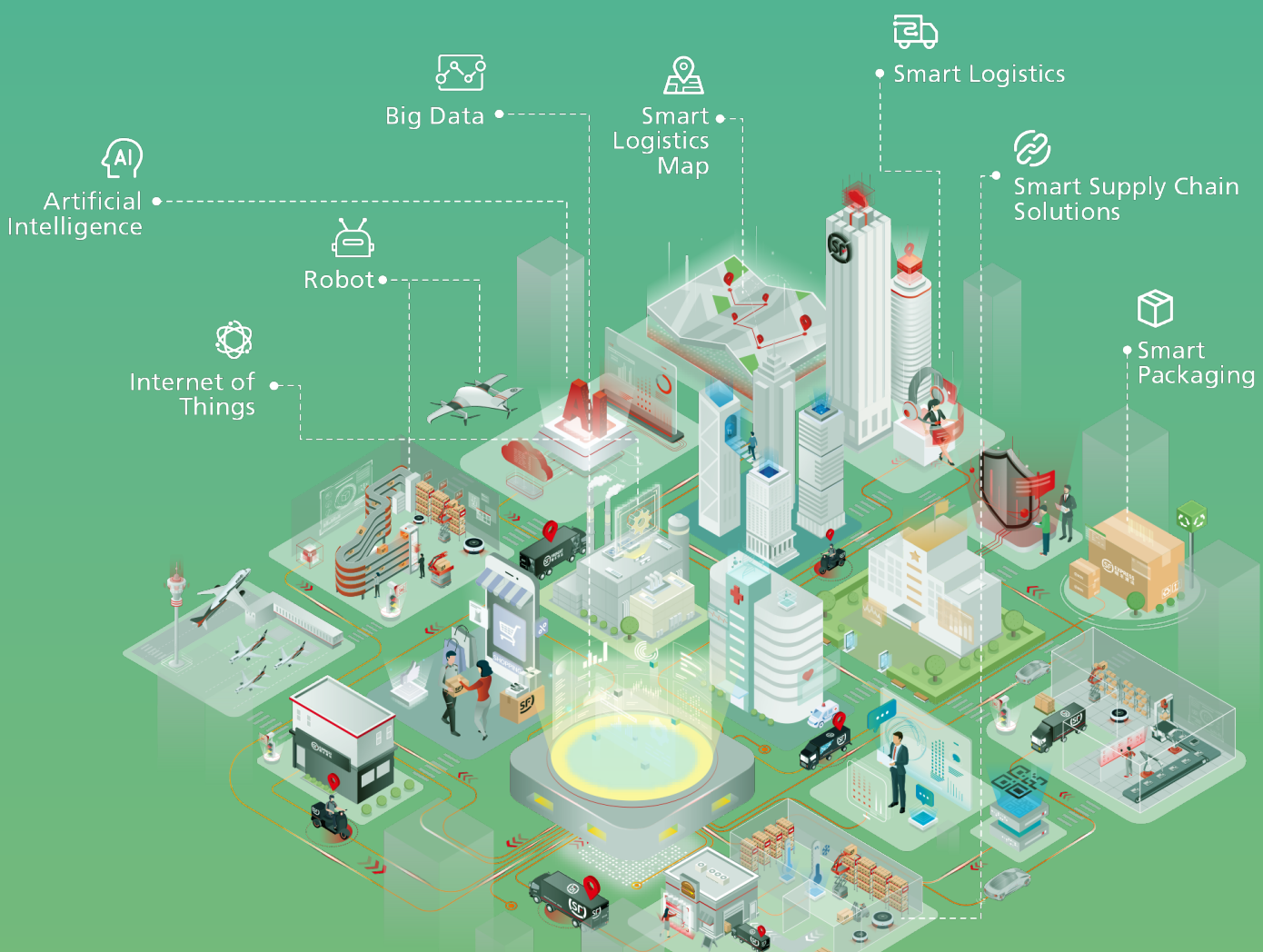
SF Holding is committed to becoming a data and technology-driven company providing independent third-party solutions. Based on its massive data and industrial experience acquired from diverse businesses, industry-leading intelligence and digital technology innovation, SF Holding empowers the transformation and upgrading of the industry's supply chain.

Cutting-edge technology capabilities construction

SF Holding has made a forward-looking layout in the frontier areas of science and technology such as artificial intelligence (AI), big data, robot, Internet of things (IoT) and logistics map, many of which are leading in the industry. Through leading technology means, we optimize or reshape supply chain process, reduce carbon emissions from energy consumption at source, improve carbon efficiency of operations, and realize green development of enterprises.

Technology-driven business development

We drive our internal business with the power of technology, focusing on smart packaging, smart logistics and smart supply chain solutions to achieve smart growth and sustainable development. Through the application of new energy, the upgrade of transportation mode, and the penetration of low-carbon technology services into all aspects of the industry supply chain, we achieve carbon footprint reduction of the end-to-end supply chain, helping our partners accelerate the low-carbon transition and build a zero-carbon business society.



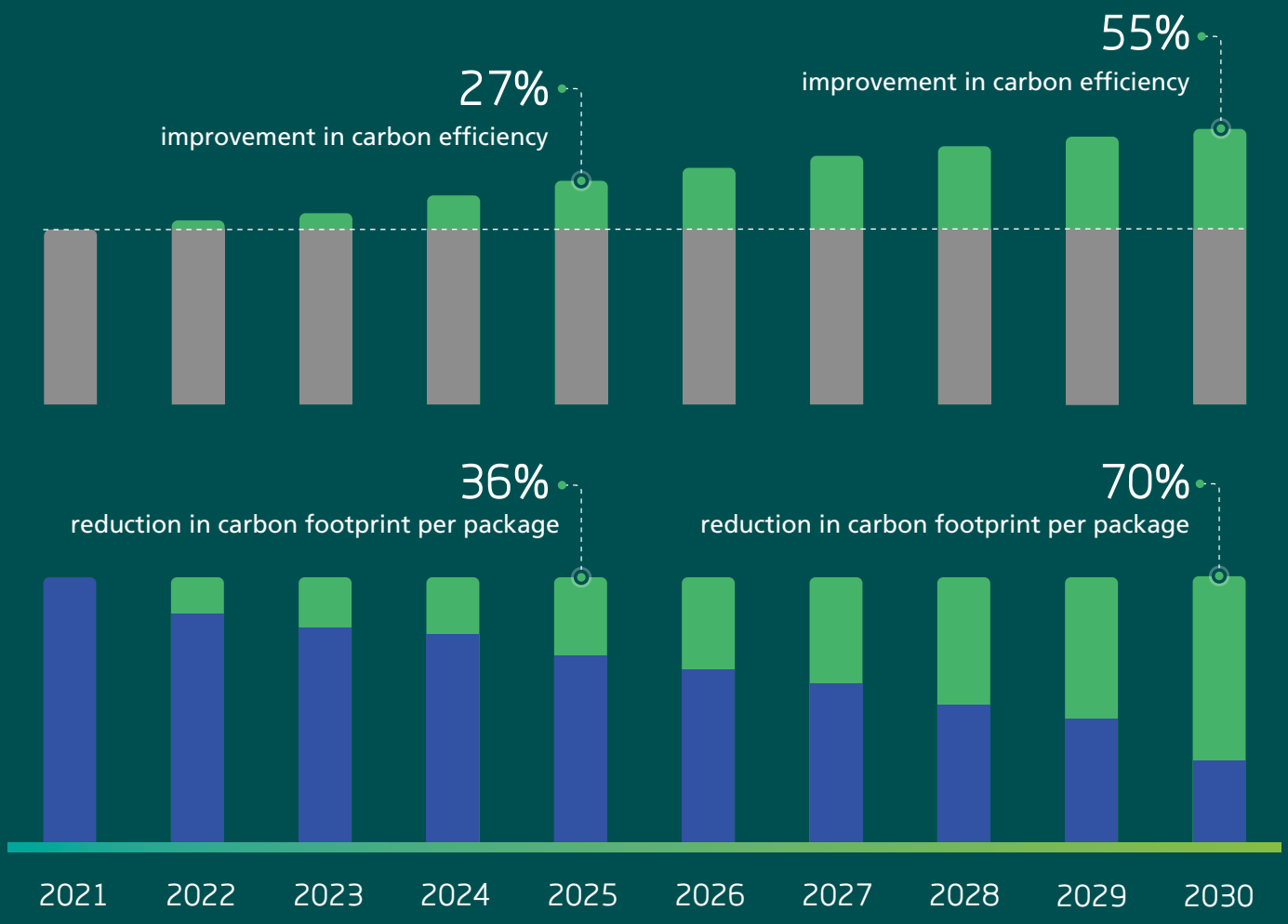

PATHWAY

Roadmap

At present, the world is in an unprecedented change of the century. On the road of national economic modernization, smooth economic circulation is the key to building a new development pattern. The four steps of production, distribution, circulation and consumption must be connected in an orderly manner.

In the current macro environment and economic situation, we will still be in a phase of rapid development, and the scale of business is expected to show significant growth in the future, thus carbon emissions will also be increasing.

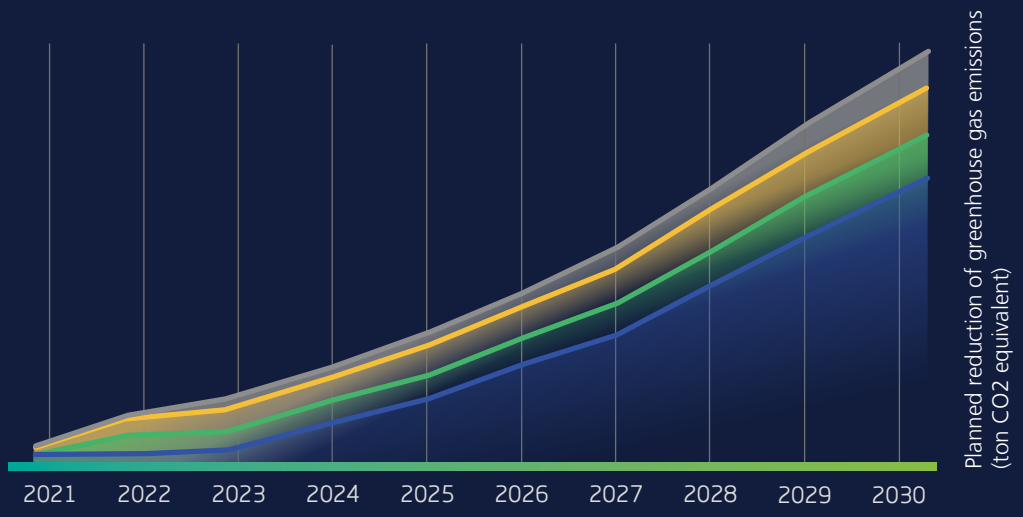
Our commitment to carbon reduction is not a stumbling block to the healthy growth of SF Holding, but a booster to the high-quality development of our business and a foundation to win the respect of the market and the trust of our customers. We have integrated carbon reduction targets into our strategic planning for corporate development and transformation. These targets are brought to the Board of Directors as key issues and will be followed up constantly. Additionally, by linking annual target review results to the management performance, we hope to promote the achievement of carbon reduction targets by 2030.



2021-2030 Carbon Target Achievement Process Map

Based on the current projected business growth pattern, the projected amount of carbon emissions reduction increases yearly.

According to SF Holding's carbon reduction action roadmap from 2021 to 2030, we need to achieve our carbon reduction targets by adjusting our energy use structure, upgrading our transportation and business models, in-depth application of technology, and other means such as forestry carbon sinks and carbon trading.



Adjusting the Structure of Energy Use

We will adopt renewable energy solutions, invest in photovoltaic in proper industrial parks, and gradually increase the number of new energy vehicles on the road to support the transformation of the energy use structure, and to significantly reduce carbon emissions from our business operations.

Applying Carbon Reduction Technology

We will build a carbon emission management platform step by step and employing low-carbon intelligent operations with the help of artificial intelligence, big data, IoTs, and other leading technologies to achieve low-carbon transformation.

Upgrading Transportation and Business Model

We will improve operational efficiency and reduce carbon emissions by promoting multimodal transportation, using cargo air hubs to improve routes, adopting green low-carbon packaging, applying smart enterprise management methodology, and utilizing “All Green” supply chain solutions, etc.

Others

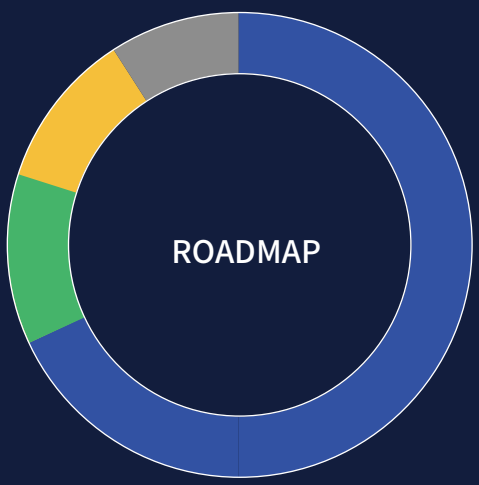
We will seek alternative approaches to offset unavoidable carbon emissions, such as contributing to the "SF Carbon Neutral Forests" by planting trees and purchasing carbon offset credits.

68% Adjusting the Structure of Energy Use

12% Applying Carbon Reduction Technology

11% Upgrading Transportation and Business Model

9% Others



Our Action

Powering Low-carbon Express Delivery with Technology

Through business accumulation and technological innovation, we integrate technologies such as Internet of Things, big data algorithms and artificial intelligence into actual business scenarios. Science and technology are widely utilized in the whole life cycle of express shipment, with which we hope to improve the quality and efficiency of our services, as well as reducing carbon emissions in the whole process.

Drones Cars	Self-developed large/small drones, using intelligent drone technology to expand business scope and provide efficient, highly economical and low-carbon logistics services.
Smart Packaging	Developing green packaging, promoting safe packaging, and providing scenario-based packaging solutions.
Smart Storage	With the help of big data algorithm, Smart Storage increases the warehouse space utilization and improves the efficiency of package transfer process by optimizing the allocation of storage and the package transfer route, which reduces the energy consumption and emission.
Automated guided transport vehicles/robots	Introducing fully automated picking and storage management to improve operational efficiency while reducing error rates.
AI Vision	The combination of cameras and artificial intelligence technology enables standardized business management of logistics networks, providing a solid foundation for smart logistics and energy saving and carbon reduction.
Smart Map	Through intelligent logic algorithm, the optimal path is used to plan the delivery routes by combining factors such as time and distance of express products to save fuel consumption.
Smart Transportation	Relying on big data analysis and deep learning technology, integrating freight routes and capacity resources, we improve ground transportation efficiency, realizes accurate matching of vehicles and cargo, and reduces waste of logistics resources. Utilizing geographic information to remind drivers to optimize driving habits; using PCC anticipatory navigation and fuel saving algorithms to save transportation fuel consumption.
Smart Wear	SF Wears are more portable than handheld devices. The embedded logistics map shows receiving and dispatching path planning immediately with the visualization of the entire process. The efficiency of the package pick-up is greatly improved.
Intelligent Delivery Locker	Through the interaction of hardware and software to reach a system of intelligent monitoring and management system; saving manpower and material resources; achieving full time coverage of end logistics services; providing customers with high quality services while achieving cost reduction and efficiency.

Our Action

Green Airport: From Design to Operation

Ezhou HuaHu Airport in Hubei is currently under construction and will be the first cargo airport in Asia, in which SF Holding plays an important role in promoting the green development of this project. To build a leading green airport, SF Holding focuses on the environmental impact and carbon footprint from project design, construction and operation. Upon completion, this new Airport will be an essential part of SF Holding's global supply chain, and "radiate" the green concept to the world.

Renewable energy
25.6%

Electric vehicles as a percentage of total ground vehicles purchased
80.35%

Over 26,200 tons of predicted carbon emission reduction per year after operation
26,200 tons

1 The Core Hub of International Aviation Logistics

Ezhou HuaHu Airport is the first professional cargo hub in Asia built by SF Holding in cooperation with Hubei province. Upon opening in 2022, it will be able to meet the passenger throughput demand of 1.5 million and 3.3 million tons of cargo and mail throughput per year.

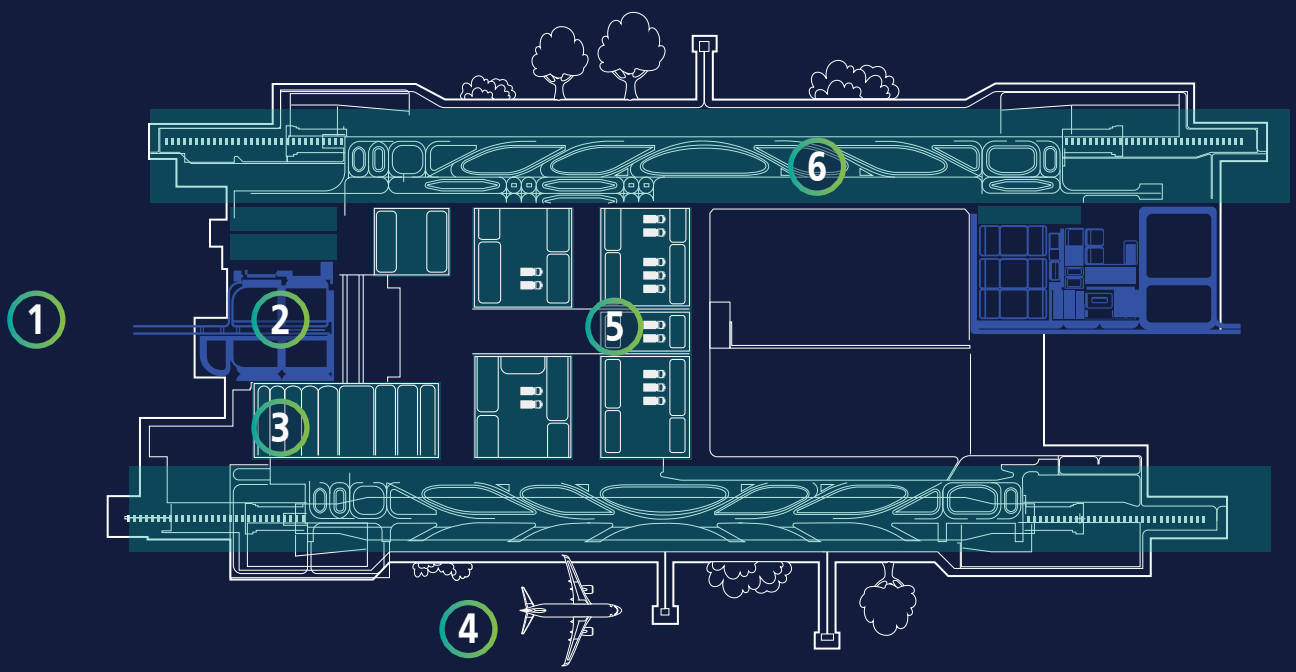
As the core hub of international aviation logistics, Ezhou Huahu Airport will be connected to ground highways and high-speed rail, which will help SF Holding to build a pivotal radial route network system, create a nationwide and global radiation logistics network, significantly improve SF Holding's transportation capacity and efficiency, and reduce carbon emissions.

2 Intelligent Energy Management Platform

After the airport is put into operation, the intelligent energy management platform can realize the whole process of energy control and management from the source to the end, and use the algorithm model to coordinate and optimize energy usage from different energy forms (photovoltaic power, charging pile, energy station, purchased power, etc.), which can improve the comprehensive energy consumption efficiency of the airport by 10%, the first of its kind in the industry.

3 Renewable Energy Utilization

25.6% of airport energy usage is from renewable sources: the photovoltaic power generation facility can provide 35.31 million kWh of electricity per year, reducing carbon emissions by 9,605 tons; and the installed load of ground source heat pumps is 12,362 kW, reducing carbon emissions by 1,063 tons per year.



4 APU Ground Power Replacement for Aircraft APUs

Traditionally, after flight landing, the auxiliary power unit (APU) in the aircraft's tail uses jet fuel to generate electricity, which is the traditional mode of energy supply in the aircraft on the ground. However, APU has high fuel consumption and low energy efficiency, causing noise and air pollution problems.

In the design phase, Ezhou Huahu Airport is deployed with ground power units to replace APU usage for the aircraft on the ground. It is estimated that during operation, with 67,000 takeoffs and landings annually, these measures can save 52,000 tons of jet fuel and reduce carbon emissions by 16,000 tons.

5 New Energy Electric Vehicles

511 new energy electric vehicles will be purchased and deployed in the airport, resulting in an electrification ratio of 80.35%. An Integration of photovoltaic power generation, power storage and charging pilot program will be carried out in the new airport.

"Integration of photovoltaic power generation, power storage and charging" program uses the batteries of electric vehicles to store excess power generation when the grid is under low load, while when the grid is under high load, the batteries send power to the grid to avoid waste. The use of new energy vehicles will reduce carbon emissions by 3,317 tons per year.

6 LED Lighting in the Flight Area

All navigation lights and high-pole lights in the airfield use LED light source, saving 2.9 million kWh of electricity and reducing carbon emissions by 789 tons per year.

SUPPLY CHAIN COOPERATION

Digital and Intelligent Logistics

To help the development of the new pattern of "Dual Circulation", SF Holding is actively promoting the innovation of its business model and empowering various industries. While promoting its own strategic transformation and upgrade, SF Holding is extending its technological accumulation and operational experience to more sectors, providing end-to-end supply chain solutions for the entire industry, and strongly supporting the whole society to move towards a low-carbon future.

The new economy needs Digital and Intelligent Logistics

Under the new economic model, customer experience and service quality become the most core elements again. Also, with the industrial upgrading of modern society, the complexity of business chains in high-end manufacturing industries such as electronics, automotive, and pharmaceuticals has increased. This trend has brought about the need for supply chain reforms and upgrades in various industries. The emphasis on the quality of transportation and the increasing demand of cost control have led companies to choose to outsource their logistics needs to external companies that are more efficient, thus bringing opportunities for the rapid development of third-party logistics. Based on product characteristics, customers in different industries have different needs for logistics supply chain, for example, the e-commerce industry requires small volume, high frequency and high timeliness transportation services, and the pharmaceutical industry has high requirements for end-to-end cold chain logistics and information system.

In this context, the "Digital and Intelligent Logistics", which provides diversified, flexible and customized services as well as maintain service quality, has become an indispensable circulation force for the sustainable development of the new economy. In order to fulfill the need of diverse, comprehensive and real-time changing logistics in enterprises' production and operation activities, digital and intelligent logistics brings good experience to customers through fast and timely cargo transportation and stable reliability.

"SF Interpretation" of Digital and Intelligent Logistics

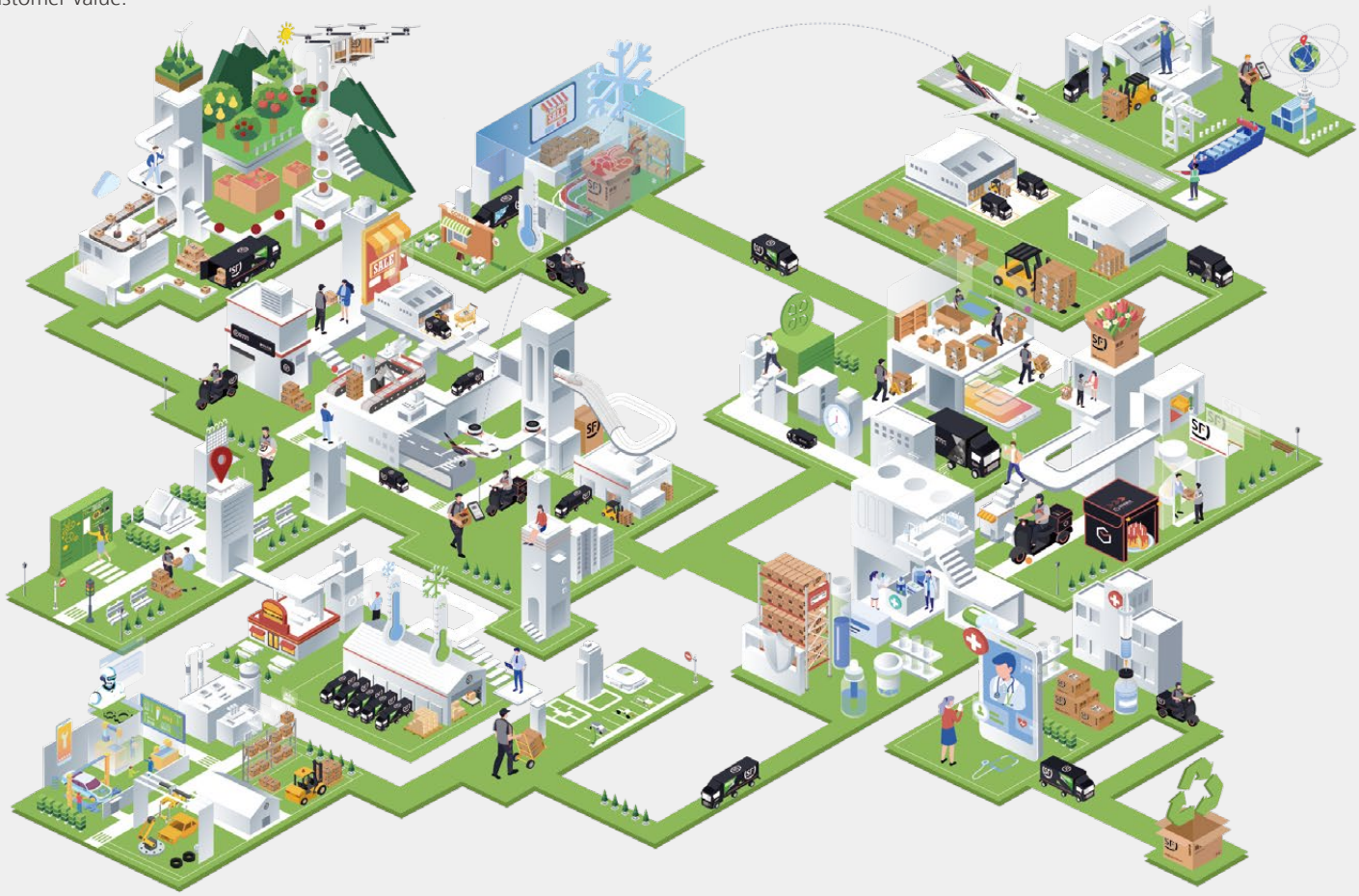
SF Holding has established industry-leading service standards and cultivated the capabilities of efficient, collaborative and integrated logistics operation. In addition, through the lens of deep customer insights, along with the diversified foundation capacity building and powerful technology empowerment, SF Holding provides customers with independent third-party, efficient and agile one-stop whole-cycle supply chain services, to showcase the "SF interpretation" of the Digital and Intelligent Logistics.

SF Holding continues to develop diversified businesses, including express shipping, cold chain logistics, pharmaceuticals shipping and crosstown delivery. We keep building our core capabilities of overseas network, customs clearance and multimodal transportation by ground, sea and air, and further enhances its cross-border and overseas service capabilities. On the basis of diversified services, , through the acquisition of leading supply chain enterprises in the industry, SF Holding has rapidly accumulated its understanding and experience in the supply chain service industry and formed complementary advantages to quickly cut into the pain points of users in multiple industries, continue to upgrade and iterate on products and services, and improve service quality and customer value.

Digital and Intelligent Logistics helps the industry to build a low-carbon supply chain

We believe that the Digital and Intelligent Logistics will be diverse, rich, flexible, and also smart, low-carbon and green. In addition to considerable business prospects, the continued growth in business demand also presents us with green opportunities to reduce carbon for our customers. Based on big data decision-making and the deep integration between the D2C business model and the industry, SF Holding has significantly improved the advanced deployment of commodity management and the accuracy of order fulfillment, reduced overproduction, ineffective transportation and stagnant inventory made customer operations more efficient. By optimizing the whole chain process, we reduce customers' carbon emissions at the source and realize lean management.

The growth of business scale will push up SF Holding's expected carbon emissions. However, we have gained massive business data and nurtured industry-based data technology capabilities to further understand the industry needs while exploring industry-specific supply chain carbon reduction solutions with customers, creating various low-carbon green supply chains, and creating a wider positive social impact.

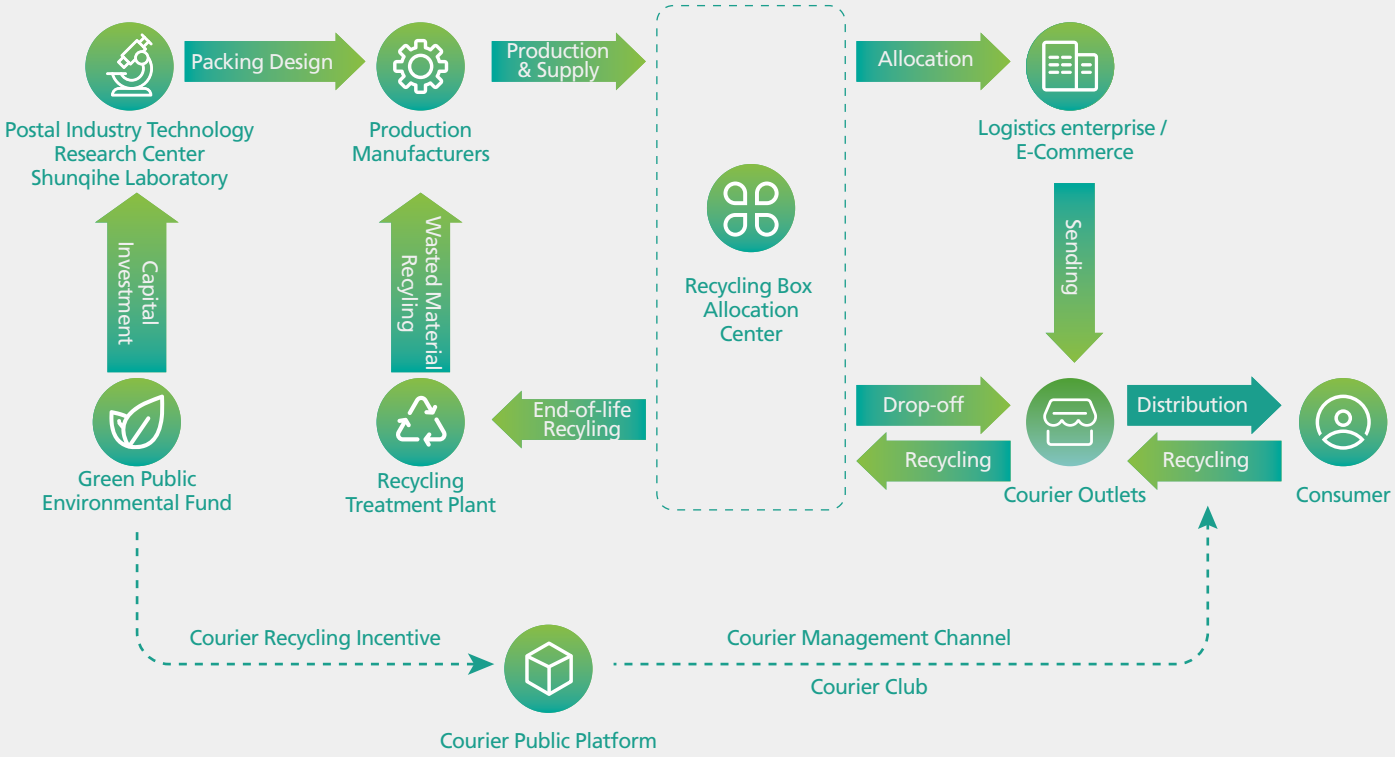


Our Solution

Leading Sustainable Packaging Innovation

Every day, hundreds of millions of parcels flow around the country, and the environmental impact caused by packaging cannot be underestimated. We deeply integrate innovation into all aspects of logistics packaging, starting from design, production and supply, distribution, recycling, intelligent management, and other aspects, leading the upstream and downstream industry chain to jointly promote the development process of sustainable packaging in an all-round and multi-business way to create a complete green packaging cycle ecosystem.

We unite all stakeholders to build an express packaging recycling ecosystem, actively cooperate with the upstream and downstream industry chain, from packaging material manufacturers to logistics enterprises, from consumers to recycling enterprises, and promote the recycling of green packaging in the entire society by connecting all the stages of production, supporting research on whole-life cycle green package design and green operation.



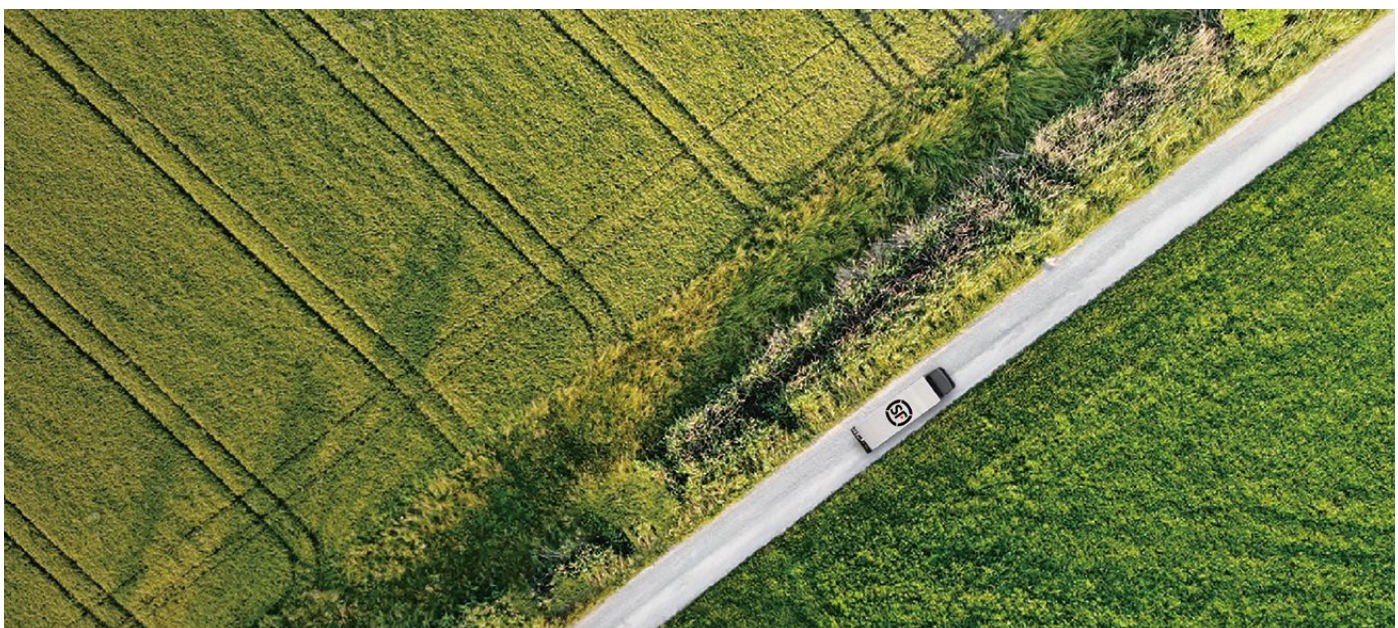
Packaging Development, Production and Supply

We adapt to the business scenario of transit and warehouse distribution, innovate and develop packaging containers to meet the whole scenario and multi-functional applications, and realize unitized adaptation between containers and carriers. At the same time, we are the first in the courier industry to create "inkless printing" cartons (i.e., using laser engraving process instead of traditional ink printing). Jointly with suppliers, we develop new biodegradable tape, biodegradable bags, second-use document seals, pulp molded cushioning materials and other environmentally friendly packaging materials.

Packaging Allocation and Recycling

In the allocation, we set up an intelligent recycling container allocation and maintenance center, develop an intelligent management and operation platform to monitor and realize data collection throughout the chain effectively, track the containers in transit in the warehouse for loss and scrapping, conduct real-time operation monitoring in a visual way, effectively link users, outlets and couriers, and improve management and operation efficiency by intelligent means.

At the end of the recycling process, we have developed recyclable packaging and built the SF recycling operation platform for data management to achieve multiple-time recycling of packaging materials. The main product "Express Standard Recycling Box" has a lifespan of up to 50 times, which carries out the concept of green recycling; we provide incentives for couriers' recycling behavior to further improve the packaging recycling rate.



Our Solution

Partners on the Road to Zero Carbon

We not only focus on the management of carbon emissions in our own operations but also hope that the green value extends to the supply chain, advocating and working with upstream and downstream partners and customers to become "partners on the road to zero carbon".

Green Supply Chain 1.0

Creating Carbon Emission Transparency in Logistics

We establish carbon emission calculation models for the whole end-to-end supply chain, including storage, packaging, transportation and delivery, aiming to help customers understand the greenhouse gas emissions in transportation and logistics-related activities, enhance the transparency of carbon emission data in supply chain logistics and achieve effective identification and control in the operation process.

Green Supply Chain 2.0

Shaping "All Green" Logistics

Business customers: We provide "All Green" service solution to help customers create green value by reducing their carbon emissions through the carbon reduction measures of SF in storage, packaging, transportation and delivery, etc. The low-carbon products will be marked with the "Green Chain" logo by SF Holding, so that customers can understand the low-carbon services they use and show their commitment to the environment.

Consumers: We provide low-carbon services for individual customers, advocate the use of sustainable packaging and recycled cartons, and implement an incentive mechanism to generate carbon points by quantifying the carbon reduction effect. Customers can use the carbon points to redeem "SF vouchers" or to redeem new trees from "SF Carbon Neutral Forest". We also plan to launch a "Zero-Carbon" express service option to help customers reduce their carbon footprint in the process of sending express shipments.

Green Supply Chain 3.0

Building a Zero-Carbon Business Society Together

In the blueprint of achieving global carbon neutrality, it is crucial to build a zero-carbon business society. SF Holding will share its own carbon management experience with business partners, participate in the establishment of carbon emission verification and carbon asset management-related standards in the logistics industry, and promote the financialization of carbon trading. In addition, we will invest in low-carbon technologies in support of the green investment principles to create value in sustainable development.

Epilogue

Today, every moment, there are countless customer consignments and expectations along the network of SF Holding, reaching all corners of the world. The completion of each entrustment is filled with the intelligent and caring service provided by SF for customers, the unremitting efforts made for environmental protection, and the sense of responsibility delivered for the development of the industry.

A bright future is on the road ahead. On a new journey to achieve the national carbon targets, we will create a better and greener service experience, provide customers with technology-driven green solutions, help promote a high level of green development system in the supply chain logistics, and assume responsibility for the sustainable development of society and our home – the earth.

Appendix

Accounting Boundaries

SF Holdings uses the operational control method to define the boundary of GHG emissions accounting. The current accounting scope includes SF Holding's express logistics and supply chain service businesses. According to whether SF Holding owns or controls emission sources, GHG emissions are divided into direct emissions and indirect emissions.

GHG emission accounting boundaries

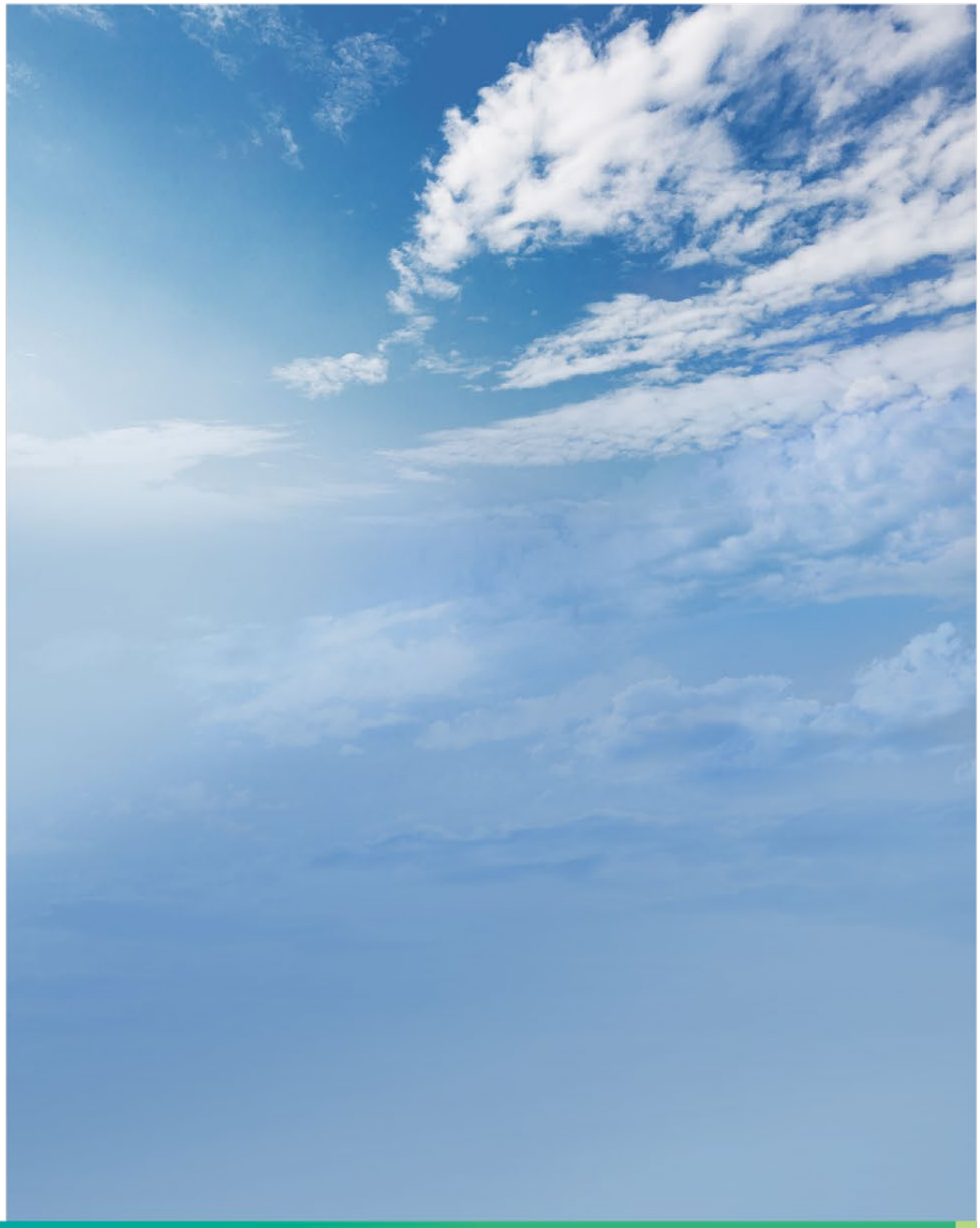
Direct Emissions	Scope 1	Direct emissions from sources controlled or owned by SF Holding, such as aviation, vehicles, sites, etc., due to fossil energy consumption	
Indirect Emissions	Scope 2	Indirect emissions from SF Holding's self-owned purchased electricity	
	Scope 3 ("Greenhouse gas protocol, Corporate value Chain (scope 3) accounting and reporting standard" specifies 15 categories of scope 3 emissions)	Category 1: Purchased Goods and Services	Included in Accounting
		Category 4: Upstream Transportation and Distribution	
		Category 5: Waste Generated in Operations	
		Category 7: Employee Commuting	
		Category 8: Upstream Leased Assets	
		Category 13: Downstream Leased Assets	
		Category 2: Capital Goods	Not Included in Accounting
		Category 3: Fuel- and Energy-Related Activities (Not Included in Scope 1 and Scope 2)	
		Category 6: Business Travel	
		Category 9: Downstream Transportation	
		Category 10: Processing of Sold Products	
		Category 11: Use of Sold Products	
		Category 12: End-of-Life Treatment of Sold Products	
		Category 14: Franchises	
		Category 15: Investments	

SF Holding will review the GHG emissions accounting boundary annually to continuously improve the completeness and accuracy of GHG accounting and reporting.

Accounting Methods

GHG emission accounting methods

Scope	Emission Sources	Activity Level	Methodology	Emission Factors
Scope 1	Owned vehicles	Vehicle fuel consumption	Calculation based on gasoline and diesel consumption data and corresponding emission factors	State Post Bureau of the People's Republic of China "Greenhouse Gas Emission Measurement Method for Express Industry"
	Owned full cargo machine	Aviation kerosene consumption	Calculation based on aviation kerosene consumption data and corresponding emission factors	Notice of the General Office of the Ministry of Ecology and Environment of the People's Republic of China on the Work Related to the 2019 Annual Carbon Emissions Report and Verification and the Submission of the List of Key Emission Units in the Power Generation Industry
	Owned cold storage	Refrigerant consumption	Calculation based on refrigerant consumption data and corresponding global warming potential values	CLECAT "Calculating GHG emissions for freight forwarding and logistics services in accordance with EN 16258"
Scope 2	Owned site	Site electricity consumption	Calculation based on electricity procurement data and corresponding emission factors	National Development and Reform Commission of China "2019 Annual Emission Reduction Project China Regional Grid Baseline Emission Factors" Notice of the General Office of the Ministry of Ecology and Environment of the People's Republic of China on the Work Related to the 2019 Annual Carbon Emissions Report and Verification and the Submission of the List of Key Emission Units in the Power Generation Industry
	Owned new energy vehicles	Electricity consumption for vehicles		
Scope 3	Category 1: Purchased Goods and Services	Weight of packaging materials purchased	Calculation based on packaging procurement data and corresponding emission factors	State Post Bureau of the People's Republic of China "Greenhouse Gas Emission Measurement Method for Express Industry" State Post Bureau of the People's Republic of China "Methodology for Measuring Energy Consumption and Pollutants in the Postal Industry"
	Category 4: Upstream Transportation and Distribution			
	Category 5: Waste Generated in Operations			
	Category 7: Employee Commuting	Number of employees	Calculation based on the number of employees, average city commuting distance, and emission factors for each type of commuting means	China Academy of Urban Planning and Design, "Monitoring Report on Commuting Time Consumption in Major Cities Across China"
	Category 8: Upstream Leased Assets	Vehicle fuel consumption Consumption of aviation kerosene Refrigerant consumption Electricity consumption	Calculation based on energy consumption data, electricity procurement data and corresponding emission factor	State Post Bureau of the People's Republic of China "Greenhouse Gas Emission Measurement Method for Express Industry" Notice of the General Office of the Ministry of Ecology and Environment of the People's Republic of China on the Work Related to the 2019 Annual Carbon Emissions Report and Verification and the Submission of the List of Key Emission Units in the Power Generation Industry National Development and Reform Commission of China "2019 Annual Emission Reduction Project China Regional Grid Baseline Emission Factors" CLECAT "Calculating GHG emissions for freight forwarding and logistics services in accordance with EN 16258"
	Category 13: Downstream Leased Assets			



S.F. HOLDING CO., LTD.

Zip Code：518084
Customer Service Hotline：95338
Website：http://www.sf-express.com
Address：Block B,TK Chuangzhi Tiandi Building, Keji South 1st Road,
Nanshan District, Shenzhen, Guangdong Province, P.R.China