Experience Sharing

Guangdong Green Freight Demonstration Project

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Sep. 7, 2015

Outline

1. Project Overview
2. Project Implementation
3. Project Experience

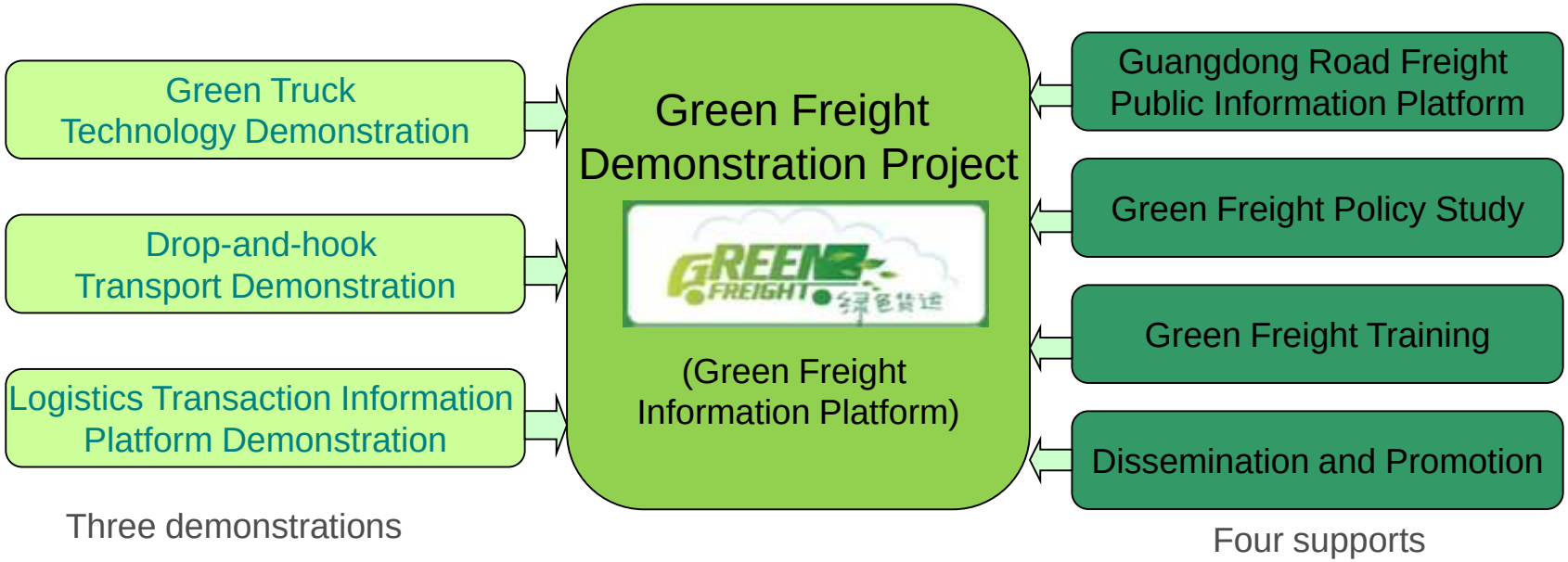
1. Project Overview

Guangdong Green Freight Demonstration Project

1	2	3
应用节能减排技术 energy efficient technologies	改进运输组织模式 logistics organization mode	提升信息化水平 improvement of informationalized standard

- To improve the level of energy conservation of the freight transport sector
- To reduce GHG emissions

Project Components



Project Organizational Structure

Project Launching Ceremony

2. Project Implementation

Green Truck Technology Demonstration

Green Truck Technology Demonstration is divided into two phases, i.e., Phase I and Phase II.

Phase I:

10 logistics companies with 145 pilot trucks in Guangdong Province were involved.

xb 新邦物流

城市之星物流 1992

GSD共速达

宝恒通集团 BHT SCM

海格物流 Hercules Logistics

海格捷顺

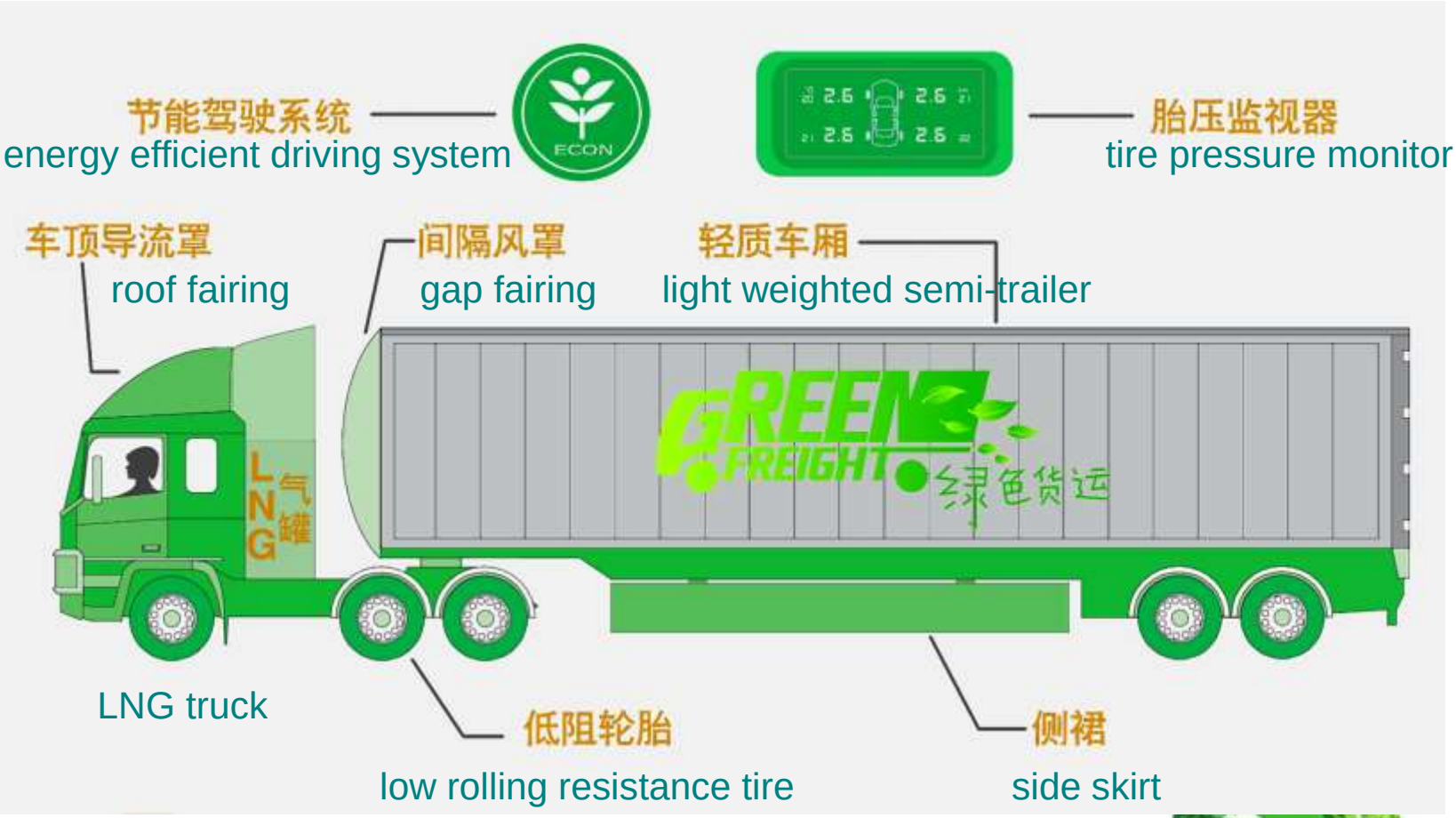
E-ROAD Logistics

捷顺行物流

深圳市安迅运输实业有限公司

广州市国营汽车集装箱运输公司

Energy Efficient Technologies



Fuel Saving Effect in Phase I Demonstration

Fuel saving ratio of large and heavy trucks based on Phase I statistics

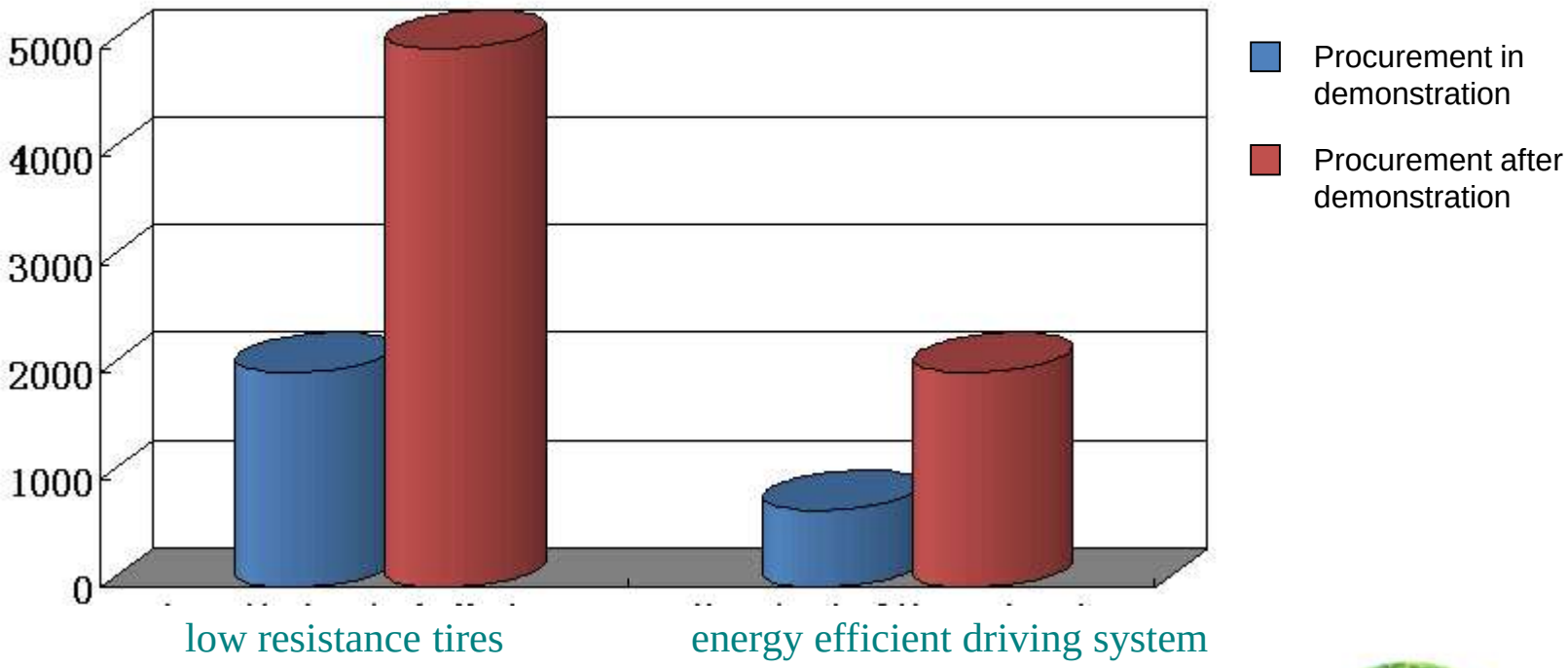
Low resistance tires	**3.91%**
Roof fairings	**2.86%**
Energy efficient driving system	**2.65%**

Phase II

11 logistics companies with 1200 pilot trucks in Guangdong Province

广州市国营汽车集装箱运输公司

Impacts of Demonstration



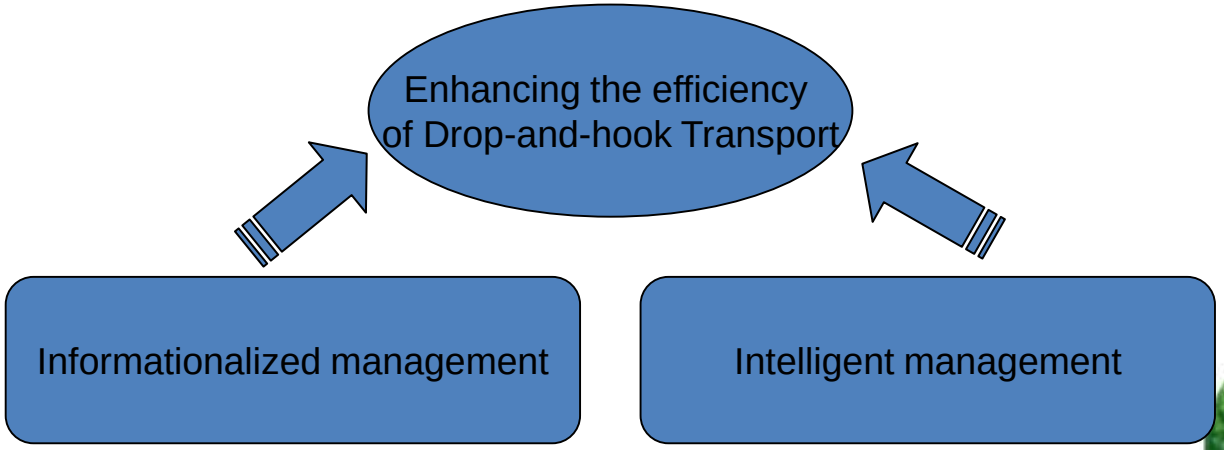
How did demonstration achieve technology transfer

- Provide subsidy at first to attract logistics companies to participate in the demonstration, then encouraged them to use energy efficient products, improve transport organization mode and informatization level.
- Publicize green freight concept and demonstration results through website, videos, posters and newspapers to expand the influence, making more people inside and outside the freight sector have a better understanding of green freight and energy conservation and emission reduction technologies.

Drop-and-hook Transport Demonstration

Pilot Company: Guangzhou City Star Transport Co., Ltd.

- In this demonstration, the pilot company's original drop-and-hook transport system is upgraded, thus improving the informationalized level and intelligence level for drop-and-hook transport, reducing the empty-load rate, and increasing the drop-and-hook transport efficiency.



Data provided by the pilot trucks during September, 2014 to June, 2015 shows:

Road haul of pilot trucks for the three demonstration routes: **3 million km**;

Freight volume: **53,000 tons**; Freight turnover: **85 million ton·km**;

Fuel consumption: **1.04 million L**;

Average fuel consumption per hundred ton-km: **1.22 L**.

Compared with the baseline period, the fuel consumption of drop-and-hook transport has been reduced by **43,700 L**, with the fuel saving rate of **4.15%.**

Logistics Transaction Information Platform Demonstration

Pilot Company: Guangdong Lin An Logistics Development Co., Ltd.

- Guangdong Lin An Logistics Development Co., Ltd., by using mobile internet technologies, innovates its service modes, and develops systems including prepayment system, qualification and credit verification system, and credit assessment system. It also establishes the first third-party transaction and payment platform for the national logistics sector, which significantly improves the levels of information distribution service and logistics organization of the platform.

Sample data collected during September, 2014 and May, 2015 shows:

Freight volume of pilot trucks: **90,000 tons**; Freight turnover: **46.7 million ton·km**;

Fuel consumption: **702,900 L**; Fuel consumption per hundred ton·km: **1.51 L**.

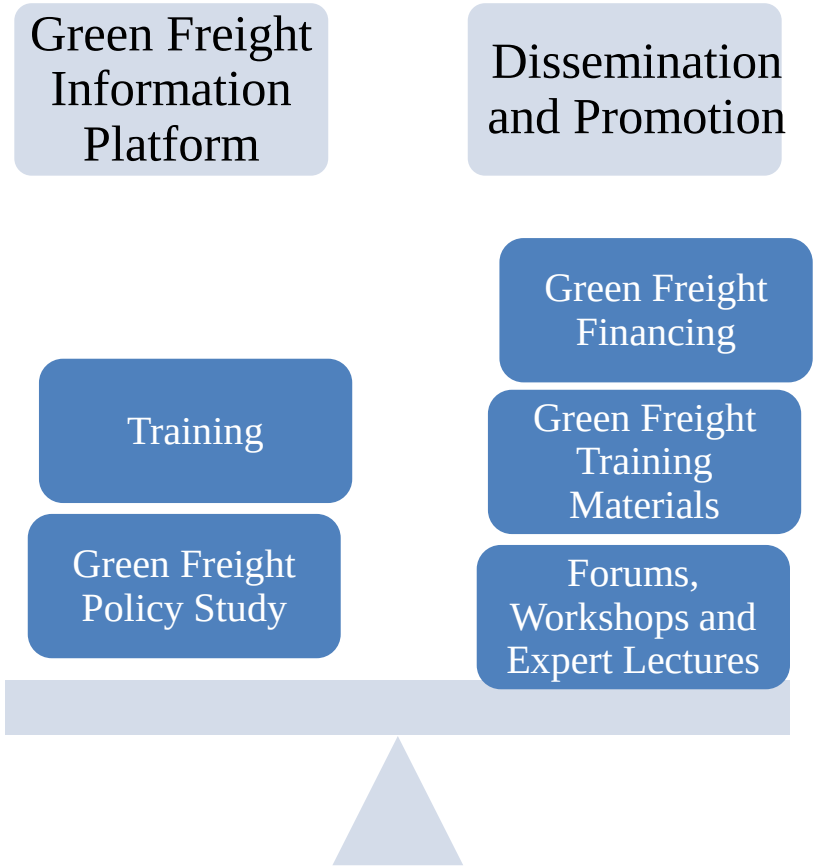
Therein, through the information platform:

Freight volume: **85,200 tons**, accounting for **95%** of total freight volume of pilot trucks Freight turnover: **42.36 million ton·km**, accounting **91%** of total freight turnover of pilot trucks

After the mobile APP put into use, the fuel consumption has been reduced by **24,400 L**, with the fuel saving rate of **3.2%**.

Interviewing truck drivers

Supporting Work



Materials for dissemination

Materials for Green Freight Training

Green Freight Policy Study

Operating Interface of Green Freight Information Platform

Left: Green Freight Forum;
Right: Guangdong Green Freight Management and Technical Training 2014

Green Freight Exhibition Booth in 2011;

Green Freight Exhibition Booth in 2014

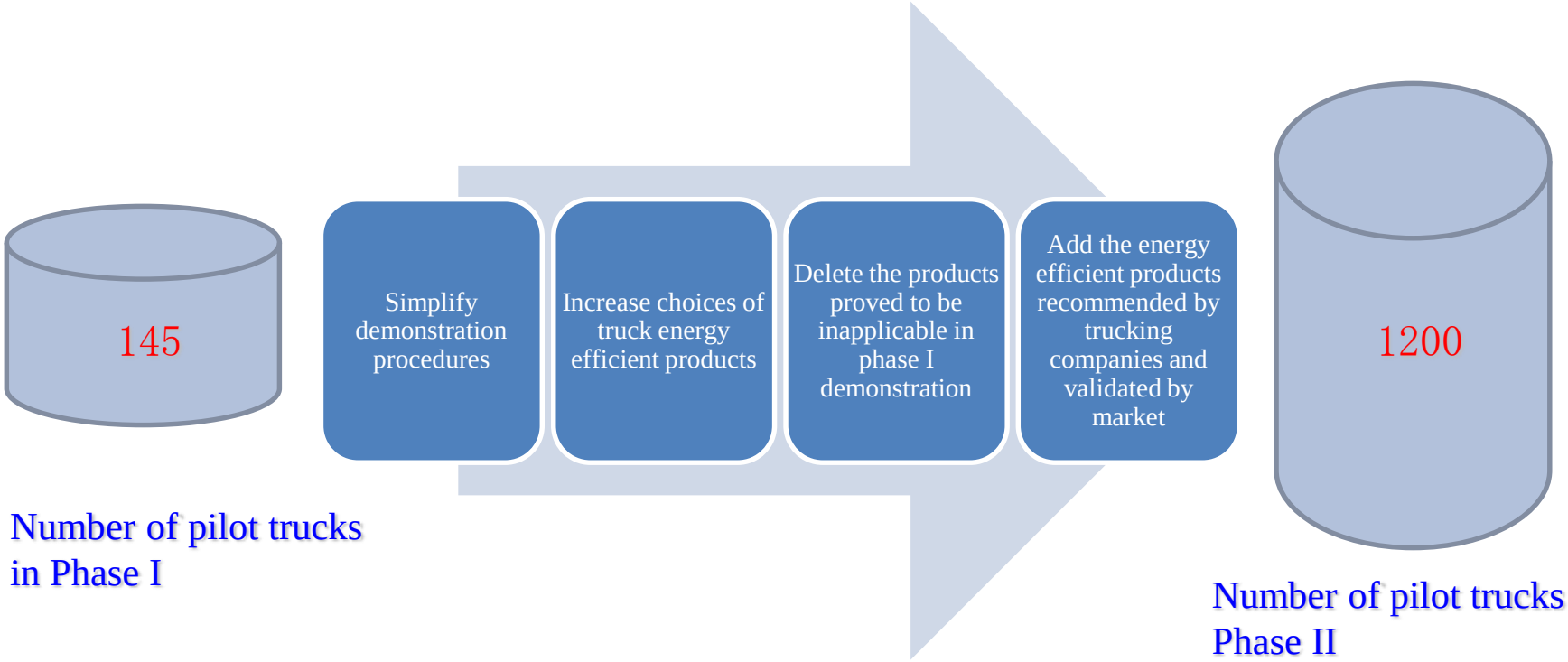
3. Project Experience

1

Make the demonstration based on local situation

Influencing factors for Phase I of Green Truck Technology Demonstration

1. Companies' environmental awareness
2. Companies’ knowledge on energy efficient truck technologies
3. Relatively low subsidy
4. Accuracy of monitoring and evaluation


145
Simplify demonstration procedures
Increase choices of truck energy efficient products
Delete the products proved to be inapplicable in phase I demonstration
Add the energy efficient products recommended by trucking companies and validated by market
1200
Number of pilot trucks in Phase I
Number of pilot trucks in Phase II

2

Develop a long-term policy-supported system

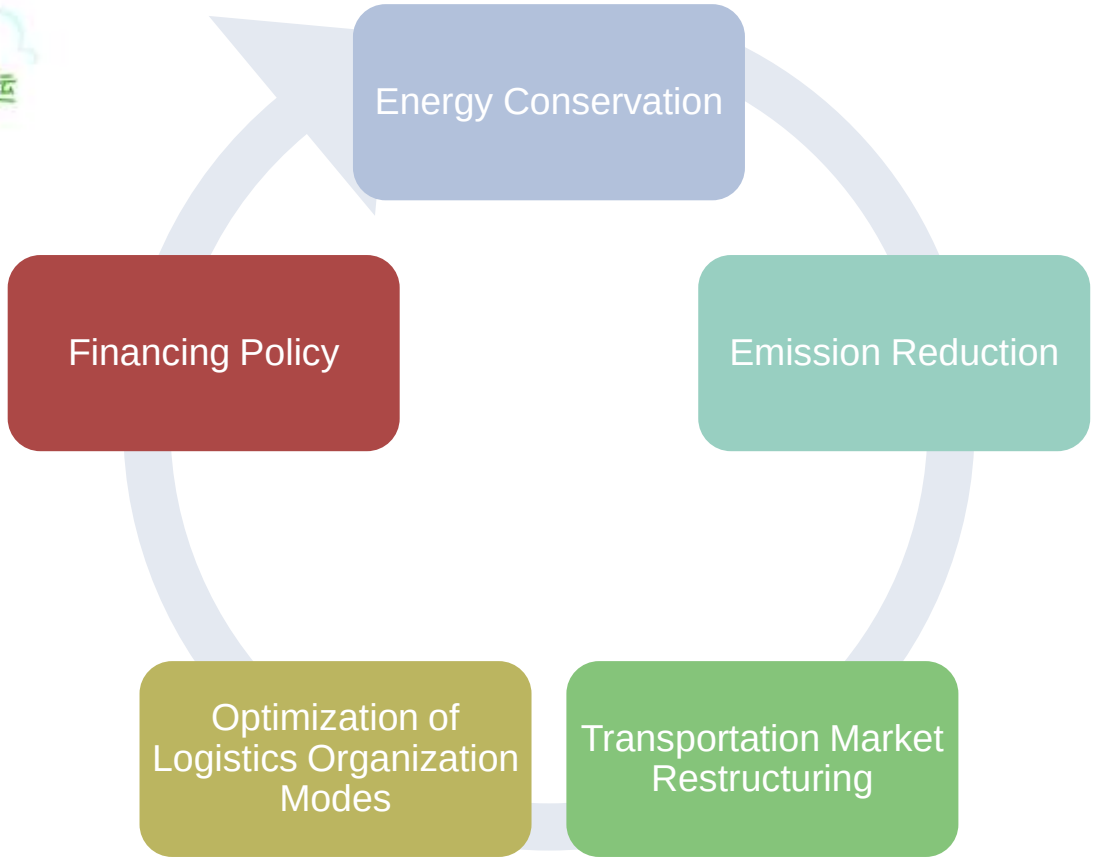
Stakeholders

- Government departments
- Logistics companies
- Cargo owners
- Third-party companies

Knowledge involved

- Economics
- Law
- Engineering

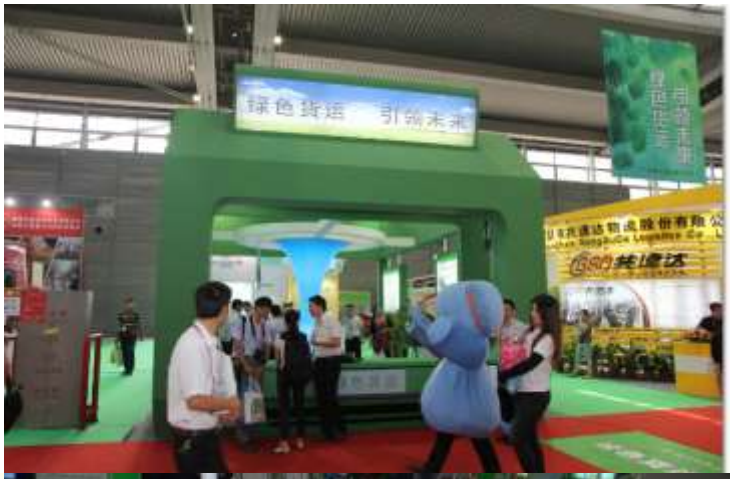
Energy Conservation and Emission Reduction in Freight Sector



Policy study：study on energy conservation, emission reduction, transportation market restructuring, optimization of logistics organization modes, financing policy, etc.

3

Strengthen the publicity and dissemination on green freight concept



Project posters and exhibitions

Green Freight requires not only the joint efforts of government departments, transport associations and institutions and companies, but also the participation of the whole society. For next step, we should strengthen the dissemination of green freight concept so that the public knows more about Green Freight and realize the significance of energy conservation and emission reduction. More people participate in green freight, jointly working for a greener and cleaner earth.

Green Freight stands for the future direction of freight sector.

It's becoming the benchmark for logistics companies.

GREEN FREIGHT 绿色货运

Thank you！