



Business Case for
Natural Refrigerants

11-12/04/2018 – Beijing



How Green Cold Chain Technology Improves Equipment Upgrade in Supermarket Sector?

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OUTLINE

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- Current Status of refrigerants in Supermarket Sector
- Actions & Trends in applying green cold chain technology
- Obstacles in Promoting Natural Refrigerants

About CCFA

China Chain Store & Franchise Association (CCFA) is the official representative of retailing & franchise industry in China.

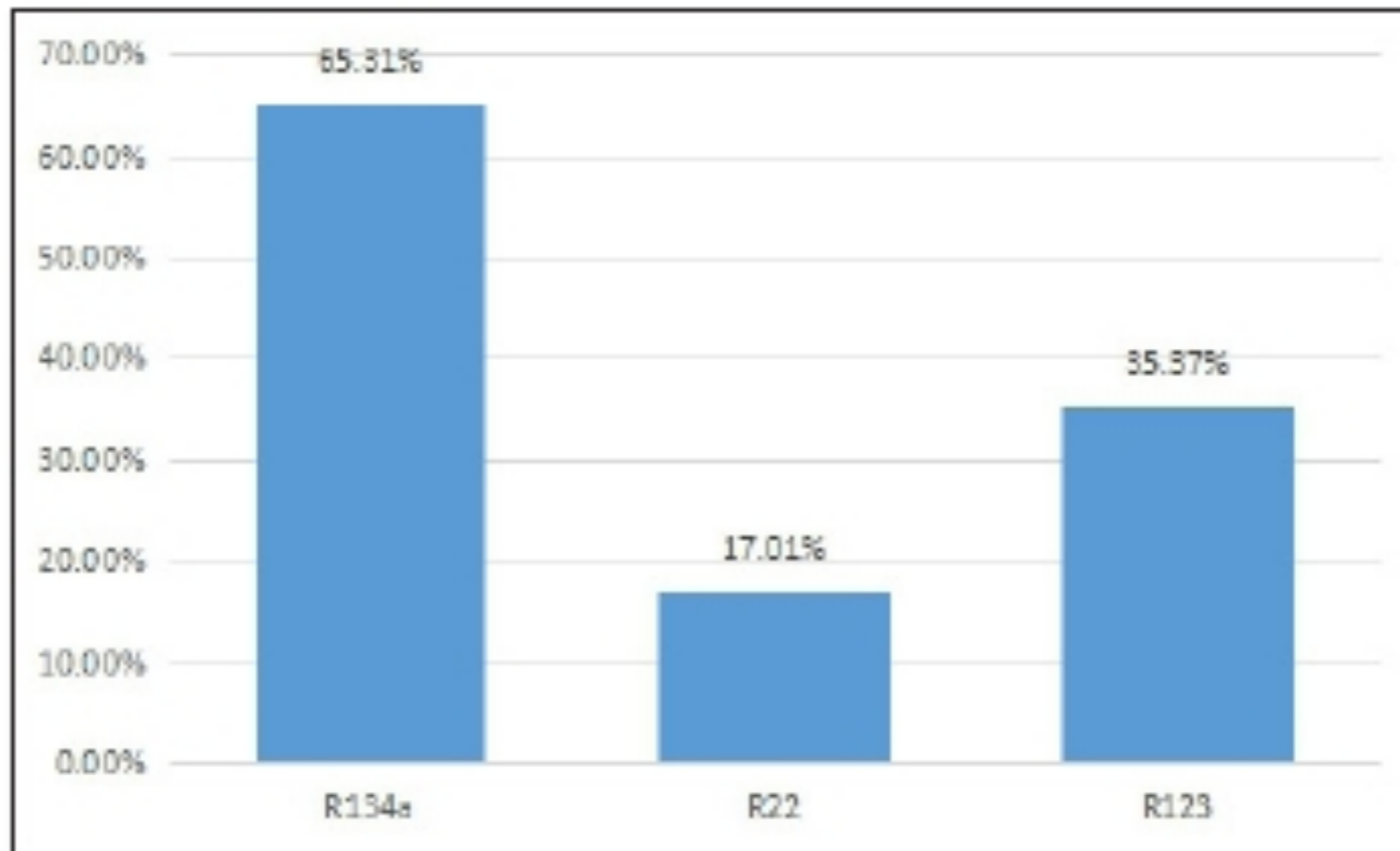




Current Status of refrigerants in Supermarket Sector

Refrigerants in Supermarket Sector

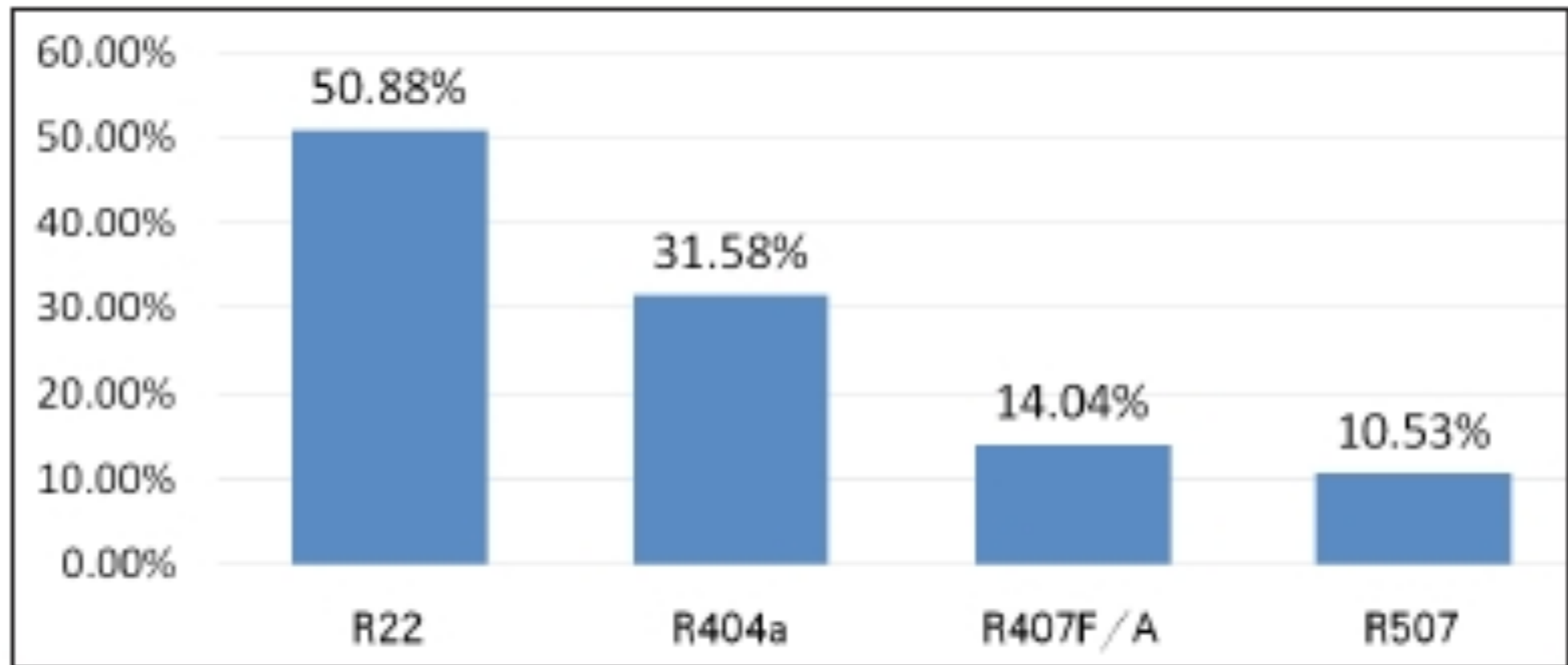
- Current Status (Air Conditioner)*



Data from MOFCOM 2017 Green Paper on Retail Energy-Saving

Refrigerants in Supermarket Sector

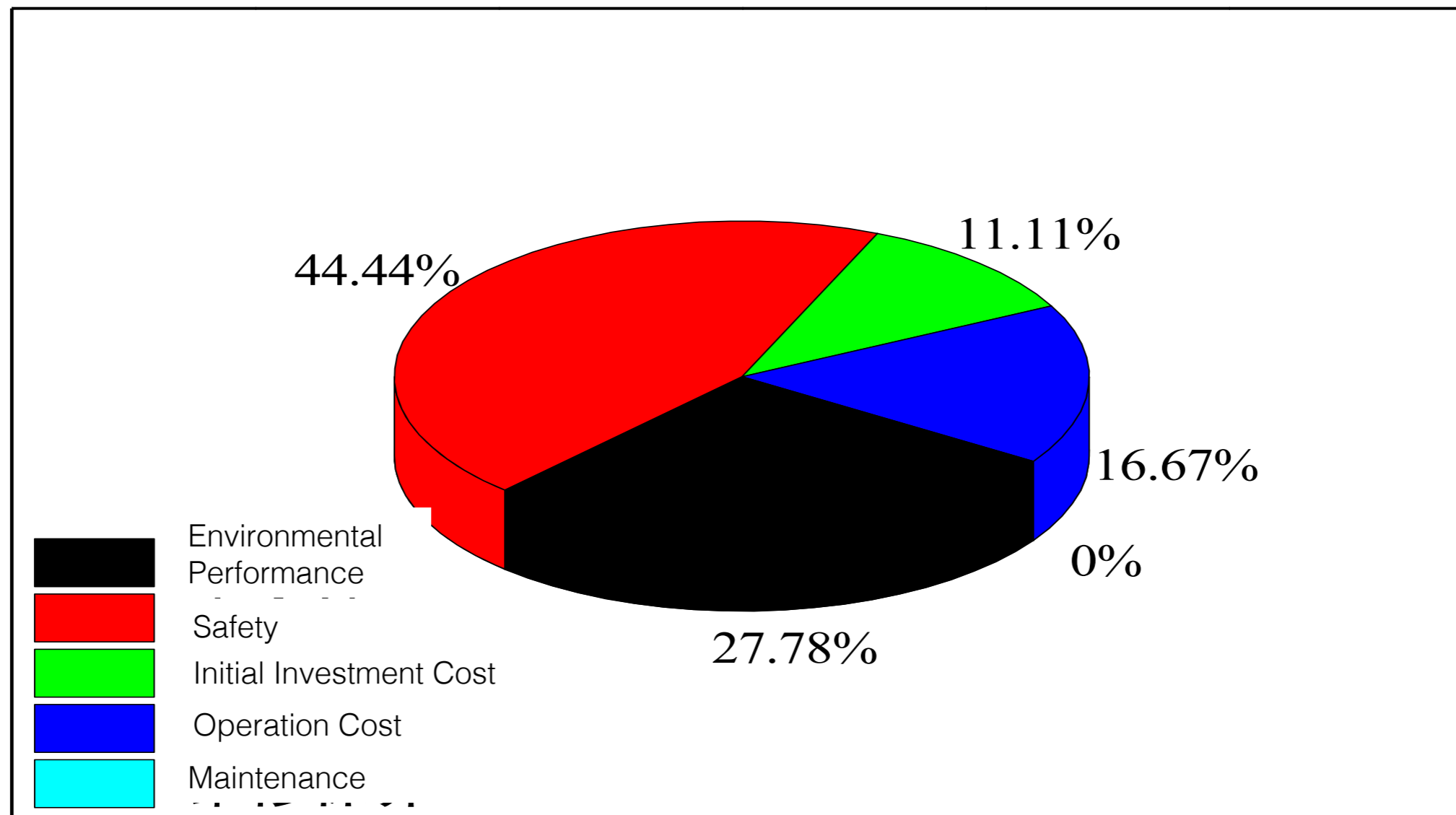
- Current Satus (Refrigeration System)*



Data from MOFCOM 2017 Green Paper on Retail Energy-Saving

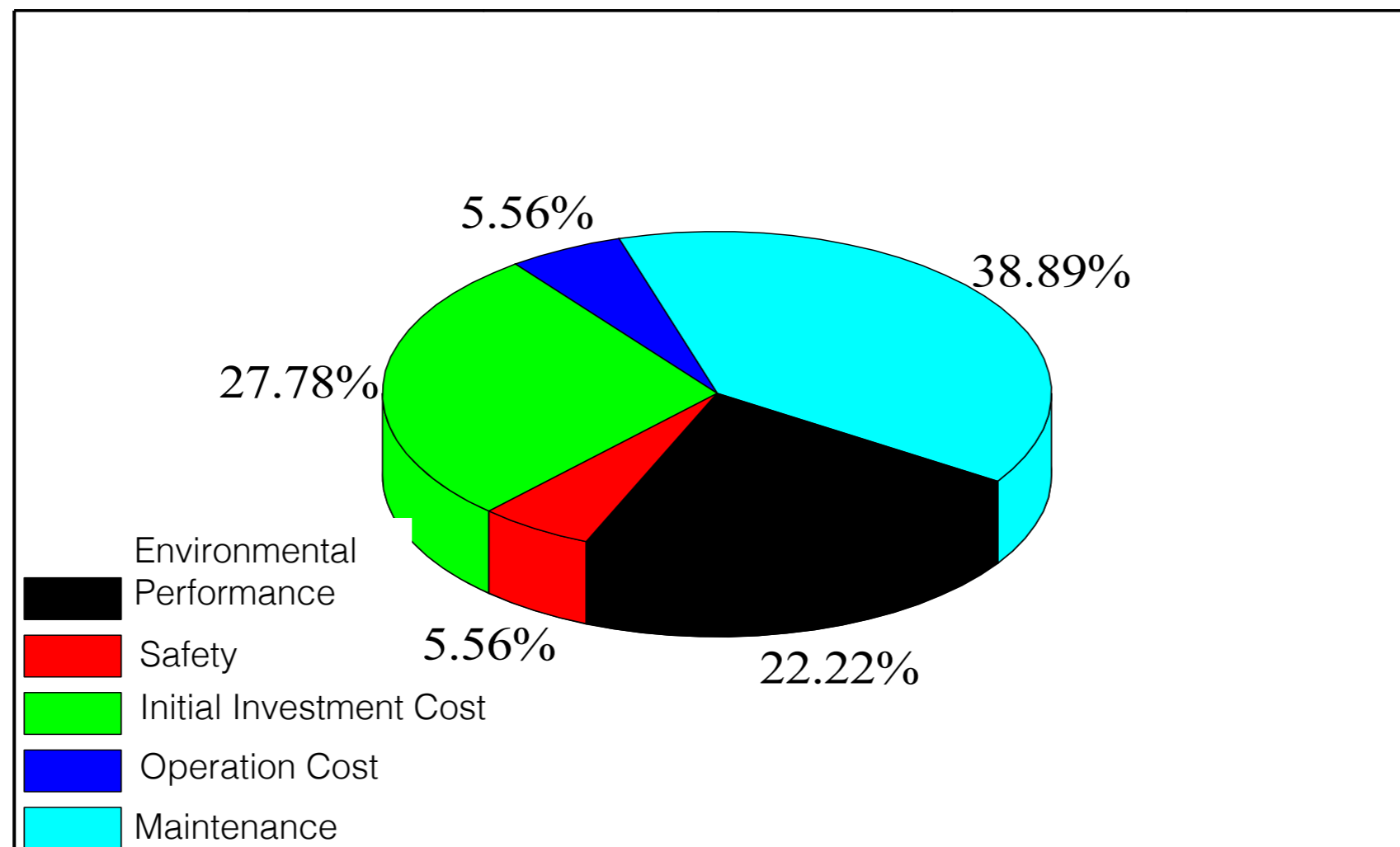
Refrigerants in Supermarket Sector

- Focus point on refrigeration system of supermarket enterprises within a year



Refrigerants in Supermarket Sector

- Focus point on refrigeration system of supermarket enterprises within 3 years



Problems on Refrigerants Leak Management

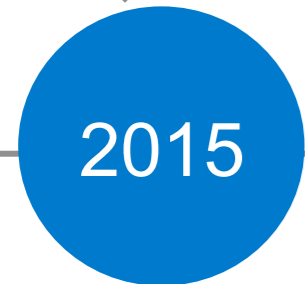
- Leakage rate is around 11%-15% per year, if maintained under a good management system.
- Lack of efficiency methods to control the risk of refrigerants leaks



Actions & Trends in applying green cold chain technology

Our Action

Keep following the application and design of the refrigeration equipment



*The pilot project and workshops of “CO2 Refrigeration Application in Supermarket” were implemented (Hongfu & Beijing Hualian)



Released the *Guidelines of Green Application of Cold Chain Technology in Supermarket Sector*



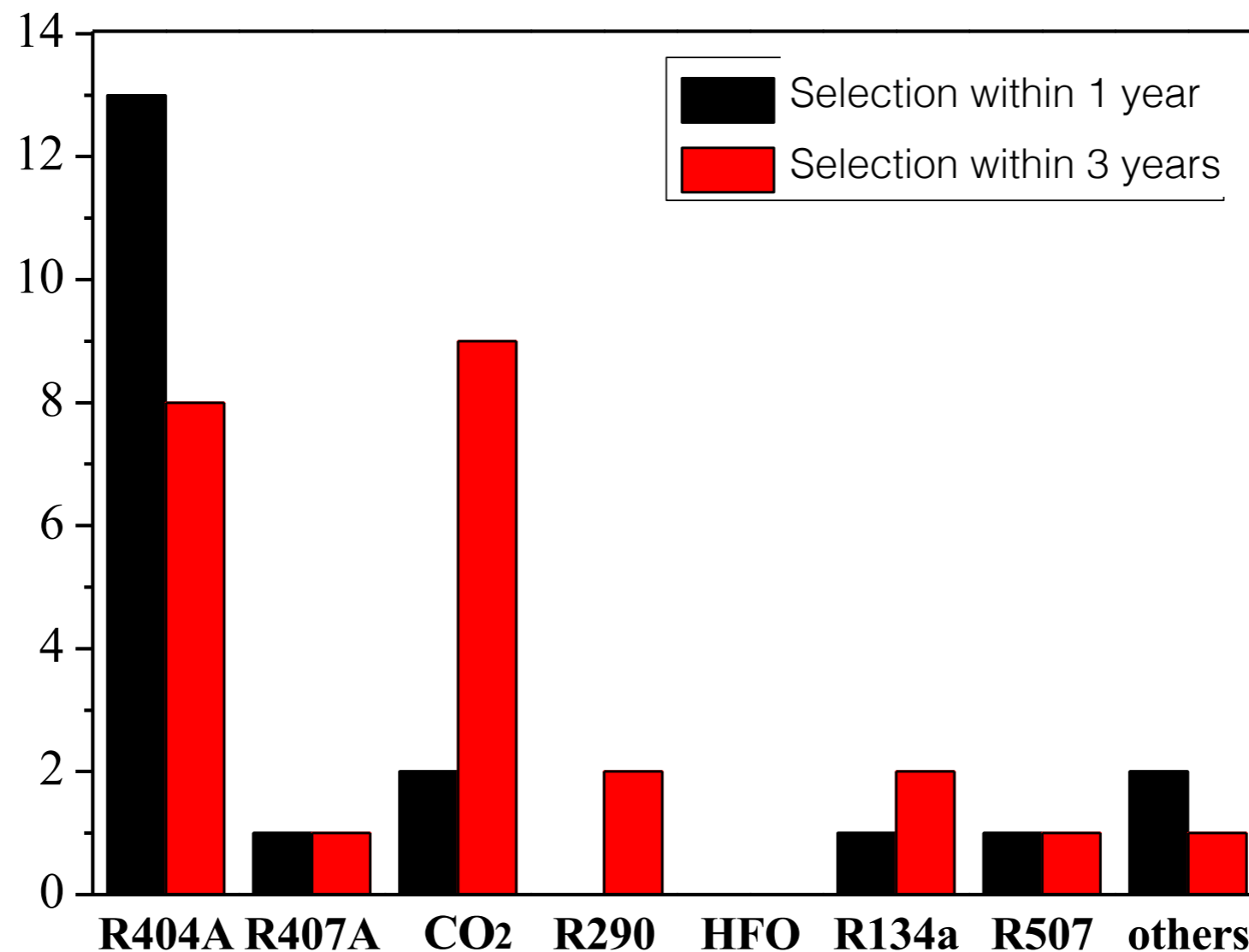
Initiative on Promoting the Application of Environmentally-friendly Refrigerant in China Retail Sector

More training & workshops are planned

*Supported by UN Environment, MEPFECO, MOFCOM, and CCFA

Trends of Refrigerants Application in Supermarket Sector

- Difference between refrigerants selection within one year and within three years.





Obstacles in Promoting Natural Refrigerants

Obstacles in Promoting Natural Refrigerants

- The limitations of the manufacturing process, the lack of domestic conditions for the production of transcritical compressors, high import costs, and limited application.
- The production of system components cannot catch up with that of ordinary Freon. Only a small number of enterprises have production capacity.
- The means for improving energy efficiency of the system are not perfected, and the optimal systems in different regions are not well integrated. Because of the special requirements of the transcritical cycle, there is an “equatorial” theory.
- Safety control technology still needs improvement.



Upcoming Event :
CHINASHOP 2018
Kunming
Nov. 2018



二十周年 春城有约

谢谢!



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Thank you very much!



China Retail Sustainable
Consumption Platform



China Chain Store &
Franchise Association