

# Importance of Promoting Cold Chain Logistics Standards

**NL Cold Chain Network**  
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MS 2400-1:2010  
2/036-08/2013



MS 2400-2:2013  
2/035-06/2013



# Outline of Today's Presentation

## 1. About Us

Nichirei Group/Nichirei Logistics Group / NL Cold Chain Network

## 2. Significance of Cold Chain

## 3. Problems in Cold Chain Logistics in Malaysia

### Issue/Solution ①

- Quality of temperature control
- Positive pressure air conditioning system

### Issue/Solution ②

- Inefficiency of delivery
- Improvement by "Console delivery "

## 4. Conclusion and Future Prospects

# 1. About Us (Nichirei Group)

## Holding Company



**Established**

**December 1, 1945**

**Businesses**

**Processed Foods, Marine Products, Meat and Poultry Products, Logistics, Real Estate, Biosciences**

**Paid-in Capital**

**1,214M RM (30,359 Million Yen)**

**Net Sales** (consolidated)

**22,910M RM (572,757 Million Yen)**

*\*(fiscal year ended March 31, 2021)*

**Number of Employees**  
(consolidated)

**15,383** \*as of March 31,2021

### Nichirei Foods Inc.



**Processed Foods**

### Nichirei Fresh Inc.



**Marine & Meat & Poultry**

### Nichirei Logistics Group Inc.



**Logistics**

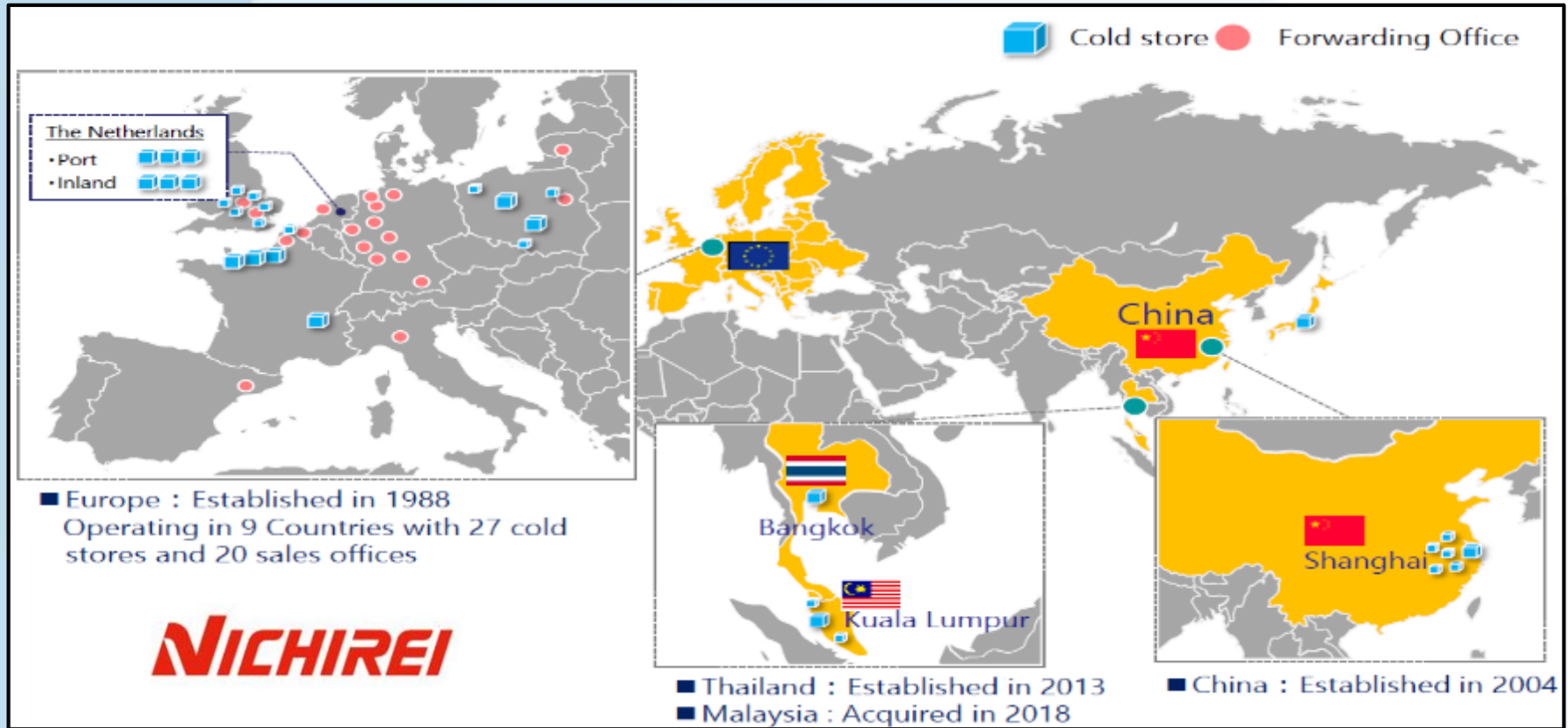
### Nichirei Biosciences Inc.



**Biosciences**



# 1. About Us (Nichirei Logistics Group Inc.[NLG])



Overseas businesses in  
**Europe, China and members of ASEAN**

“Coldstore Capacity” (m<sup>3</sup>)

**5<sup>th</sup>** in the world (5,186,000 m<sup>3</sup>)

※Source : Report by GCCA(Global Cold Chain Alliance) March.2020



# 1. About Us (NL Cold Chain Network Inc.)

## Company Overview

<b>Established</b>	2002
<b>Businesses</b>	Temperature-controlled Logistics (Specializing in halal foods)
<b>Base Location</b>	<b>Central DC</b> (Puchong) <b>North DC</b> (Penang) <b>South DC</b> (Johor)

	Capacity (m <sup>3</sup> )	Pallet
Central DC	102,419	20,031
North DC	17,124	1,548
South DC	1,891	306

## Business History in Malaysia

- 2002** Cold Chain Network (M) Sdn Bhd established.
- 2006** Acquired by Khazanah Nasional (100%)
- 2018** Nichirei Logistics acquired 40% of shares  
Puchong DC opened
- 2019** Johor South center opened
- 2020** Penang North center opened



# 1. About Us (NL Cold Chain Network Inc.)

## Halal certified logistics company

1<sup>st</sup> in Malaysia to obtain **JAKIM** certified **HALALAN-TOYYIBAN** Warehousing and Transportation services.



HALAL LOGISTICS Certified



Provide end to end Halal logistics services in Malaysia

## 2. Significance of Cold Chain

### Why is the cold chain necessary?

1. Keeping Perishable Foods' Quality Safety

= Improve Quality

Food Loss Reduction

2. Filling between Production area and Consumption area

= Widening Market

Geographic Shift

3. Filling between Supply and Demand Season

= Price Stabilization

Time Shift



Living and economic activities  
Essential Function (Infrastructure)



## 2. Significance of Cold Chain

### **Cold Chain Provides...**

- **Extended Shelf-Life** • **Better Appearance**
- **Good Freshness / Flavor** • **Reduced Deterioration**

<b>Effect of Temperature on the Deterioration of a Non-Chilling Sensitive Commodity</b>			
<b>Temperature(°C)</b>	<b>Relative Velocity of Deterioration</b>	<b>Relative Postharvest-Life</b>	<b>Loss per Day(%)</b>
<b>0</b>	<b>1</b>	<b>100</b>	<b>1</b>
<b>+10</b>	<b>3</b>	<b>33</b>	<b>3</b>
<b>+20</b>	<b>7.5</b>	<b>13</b>	<b>8</b>
<b>+30</b>	<b>15</b>	<b>7</b>	<b>14</b>
<b>+40</b>	<b>22.5</b>	<b>4</b>	<b>25</b>

By storing food at low temperatures, It becomes possible to...

**Maintain high quality in Long-term storage**

# 3. Problems in Cold Chain Logistics in Malaysia

## Issue ① Quality of temperature control

**Before**



**Poorly Lit** storage room ...

← **Slippery & Frosted** floors ...



**Damaged & Poorly Maintained** equipment ...

← **High Energy Loss** , **Warm** cargo handling area & **Wet** floors ...

**Inappropriate temperature control**  
**Low quality management**

### 3. Problems in Cold Chain Logistics in Malaysia

#### Solution ① Quality of temperature control

**After**



**Bright** storage room by LED lights

← **Clean & Dry** floors without frost



Implementation of **Regular Patrols**

← **Well-cooled** cargo handling space  
**Minimal Energy Loss**

**Appropriate temperature control**

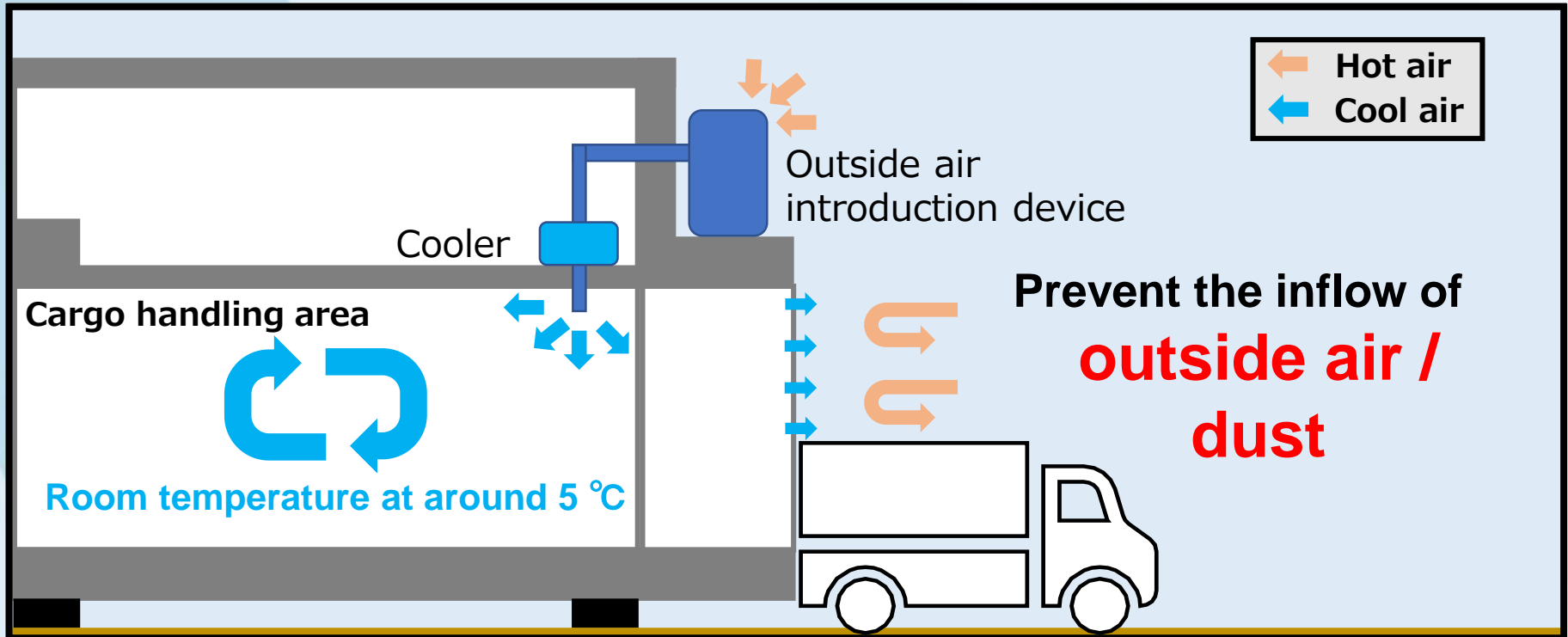
**Improving the quality of logistics management**

### 3. Problems in Cold Chain Logistics in Malaysia

#### Reference

## Positive pressure refrigeration system

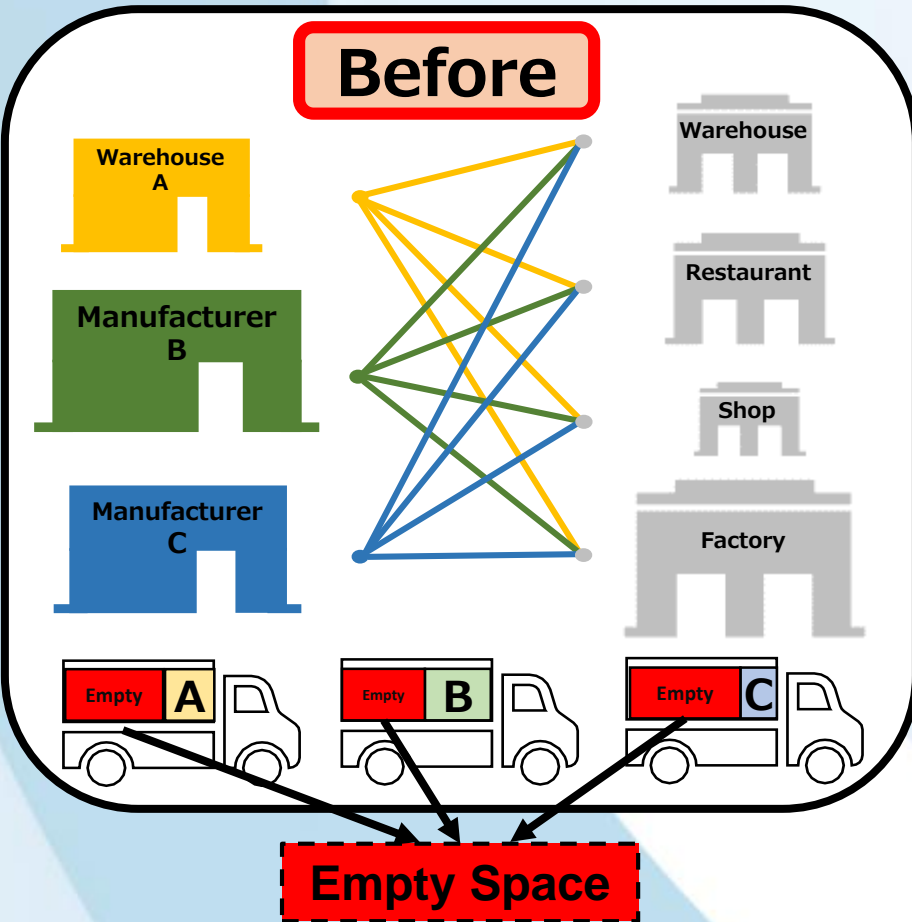
Countermeasures to prevent the inflow of hot outside air & dust into warehouse which causes condensation and energy loss



# 3. Problems in Cold Chain Logistics in Malaysia

## Issue ② Inefficiency of delivery

Delivery by many trucks but lower loading efficiency



Increasing costs

High carbon footprints

Non-core business activities

Increased workload

- Route planning
- Driver management
- Delivery monitoring
- Cost reduction

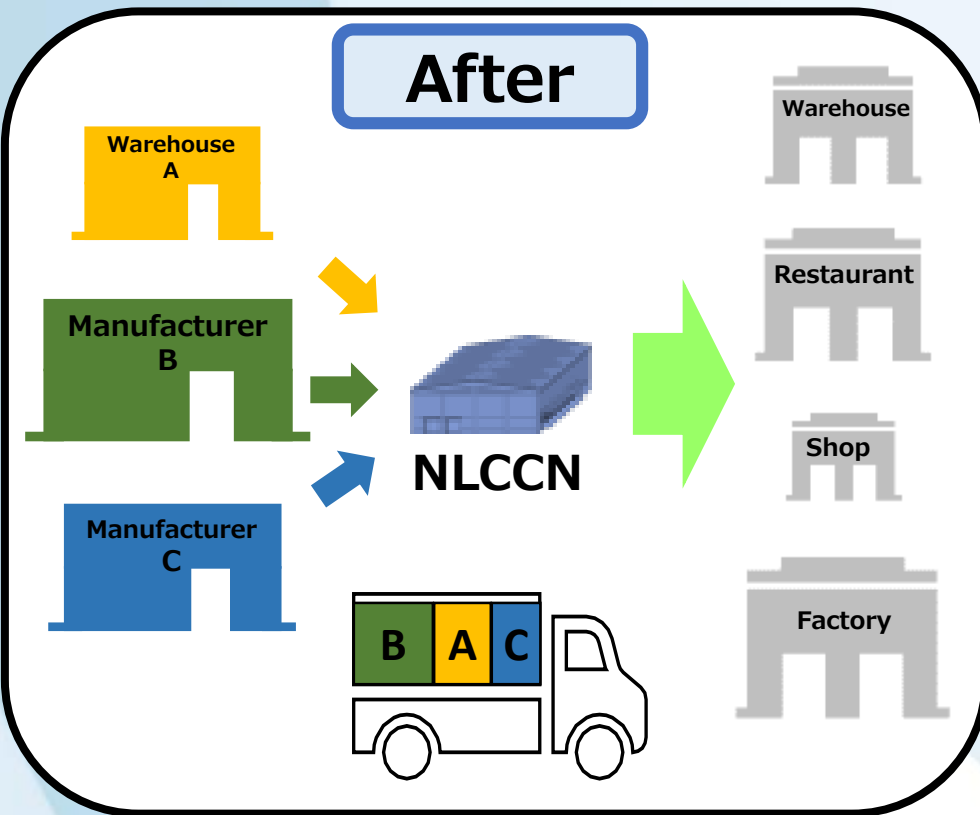
**“OWN delivery”** improvement is a limited



# 3. Problems in Cold Chain Logistics in Malaysia

## Solution ② Improvement by console delivery

Realize smooth cargo flow



Cost Reduction

Low carbon footprints

Concentrate on core business

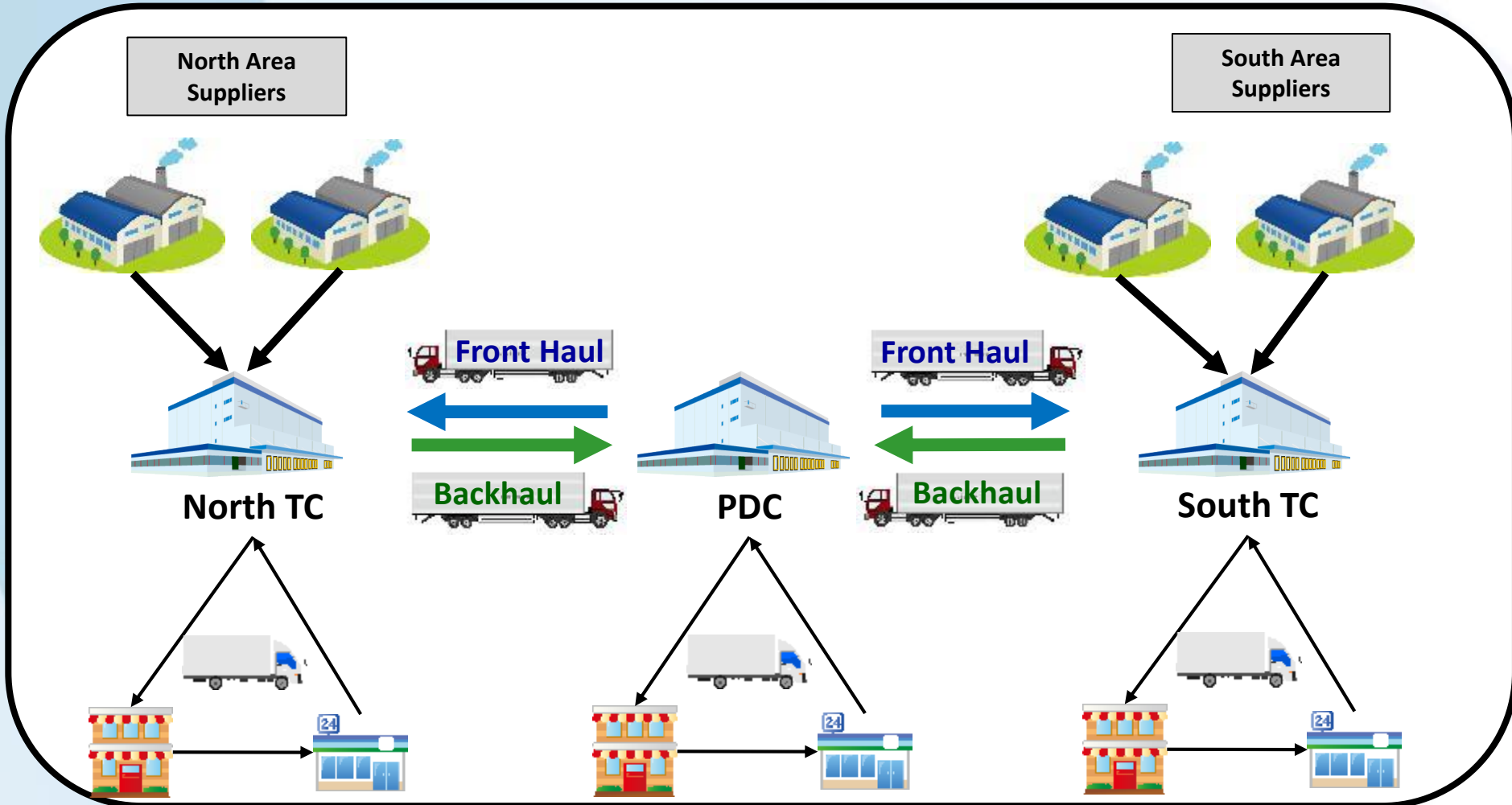
- Scheme Reconstruction**
- Efficient route planning
  - Reduction of trucks
  - Cost reduction-Shared resources

# Optimizing "CONSOLE Delivery"

# 3. Problems in Cold Chain Logistics in Malaysia

## Building a more ADVANCED COLD CHAIN

### Regional Hub and Spoke Delivery



## 4. Conclusion and Future Prospects

What is required ...

### **Construction of “Right” cold chain**

- └ Essential food safety compliance and reduction in food waste

### **More “Advanced” supply chain management**

- └ Versatile, cost-efficient capabilities with high-quality standards

### **Logistics outsourcing**

- └ Concentrate in core business activities, sustainable green logistics

### **Superior logistics company**

- └ Versatile capabilities in compliance with International standards and certifications (ISO, HALAL, HACCP, GWP, GDP ...etc )



# THANK YOU

