



SERVICE GUIDE

NYK Automotive Logistics Group
Presentation





Bringing value to life.

C O N T E N T S

Introduction to The NYK Group

01 NYK Automotive Logistics Global Profile

- ❶ RoRo Ocean Transportation Services
- ❷ Portfolio of Land-Based Logistics Services

02 Quality Management

- ❶ NYK Quality Standard & KPIs
- ❷ NYK EV Handling Standard

03 NYK Integrated Finished Vehicle Logistics Solutions

- ❶ Flexible and Tailor-Made Solution Development – Key Elements
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- ❸ Tailor-Made Solution Development

The NYK Group is a trusted international mega-carrier for land, ocean and air transportation



<https://www.nyk.com/english/ir/library/fact/>



826
vessels

Includes vessels co-owned and LNG carriers and cruise ships that are owned by joint-venture companies as of the end of March 2021



135
years

Mitsubishi Mail Steamship Company and Kyodo Unyu Kaisha merged in 1885 to form Nippon Yusen Kaisha (NYK)



35,057
employees

Worldwide, as of March 2021

Car Transport Fleet

96
vessels

Global Car Transport Fleet Ranking

Rank	Operator	Vessels	Share (%)
1	NYK	96	15.0%
2	Hyundai Glovis	85	13.4%
3	Mitsui O.S.K. Line	81	11.6%
4	Eukor Car Carriers	73	10.8%
5	K-Line	62	9.9%
6	Grimaldi	58	8.6%
7	Wallenius Wilhelmsen	49	7.9%
8	Hoegh Autoliners	40	6.7%
9	Toyofuji	13	2.5%
10	Neptune	12	1.8%
-	Others	101	15.0%
Total		670	

Source : Hesnes Shipping AS. The Car Carrier Market 2020

Note : This table includes only vessels with a capacity of 2,000 vehicles or more.

Number of Automobile Logistics Business Sites

35
locations



Operator Capacity (Ocean Network Express)

1,487k
TEUs



NCA Network's Main Bases

16 cities
around the world



Number of Warehouses

348
locations



01

NYK Automotive Logistics Global Profile

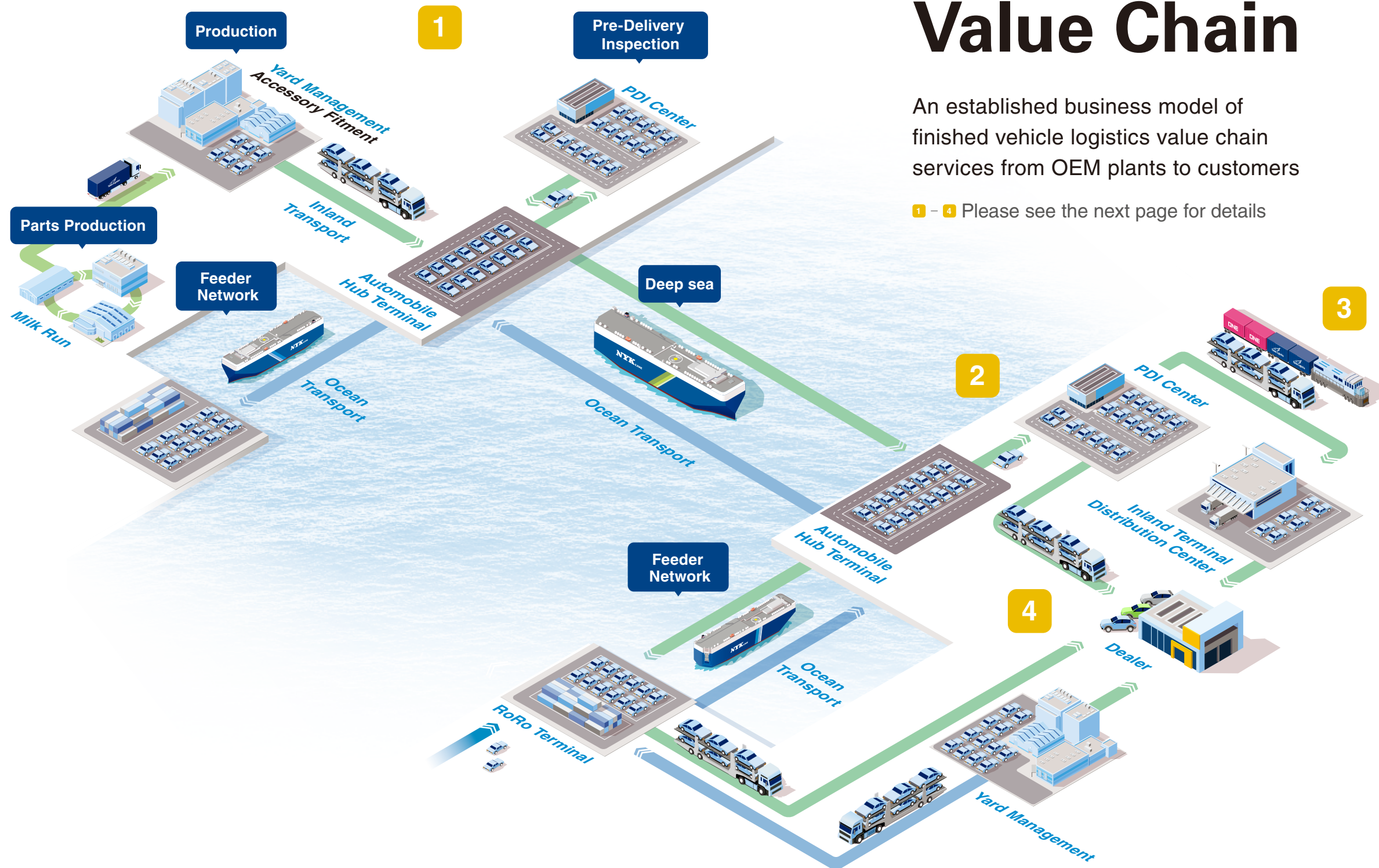




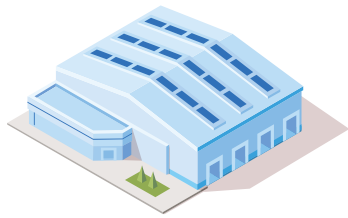
NYK Automotive Logistics Value Chain

An established business model of finished vehicle logistics value chain services from OEM plants to customers

1 - 4 Please see the next page for details



Portfolio of Land-Based Logistics Services



1 Plant Compound Management

Receiving / Handover Inspections

Vehicle Stockyard Management

Ageing Maintenance

Wrap guarding / Accessories

Dispatch Management



2 Terminal Services

Customs Clearance

Receiving and Delivery

Rail Handling

Storage / Distribution Hub

Stevedoring



3 Value-Added Services

Pre-Delivery Inspections

Accessory Fitments

Electric Vehicle Charging

Technical Consulting



4 Inland Transportation

Road & Rail Transportation

Route Survey & Planning

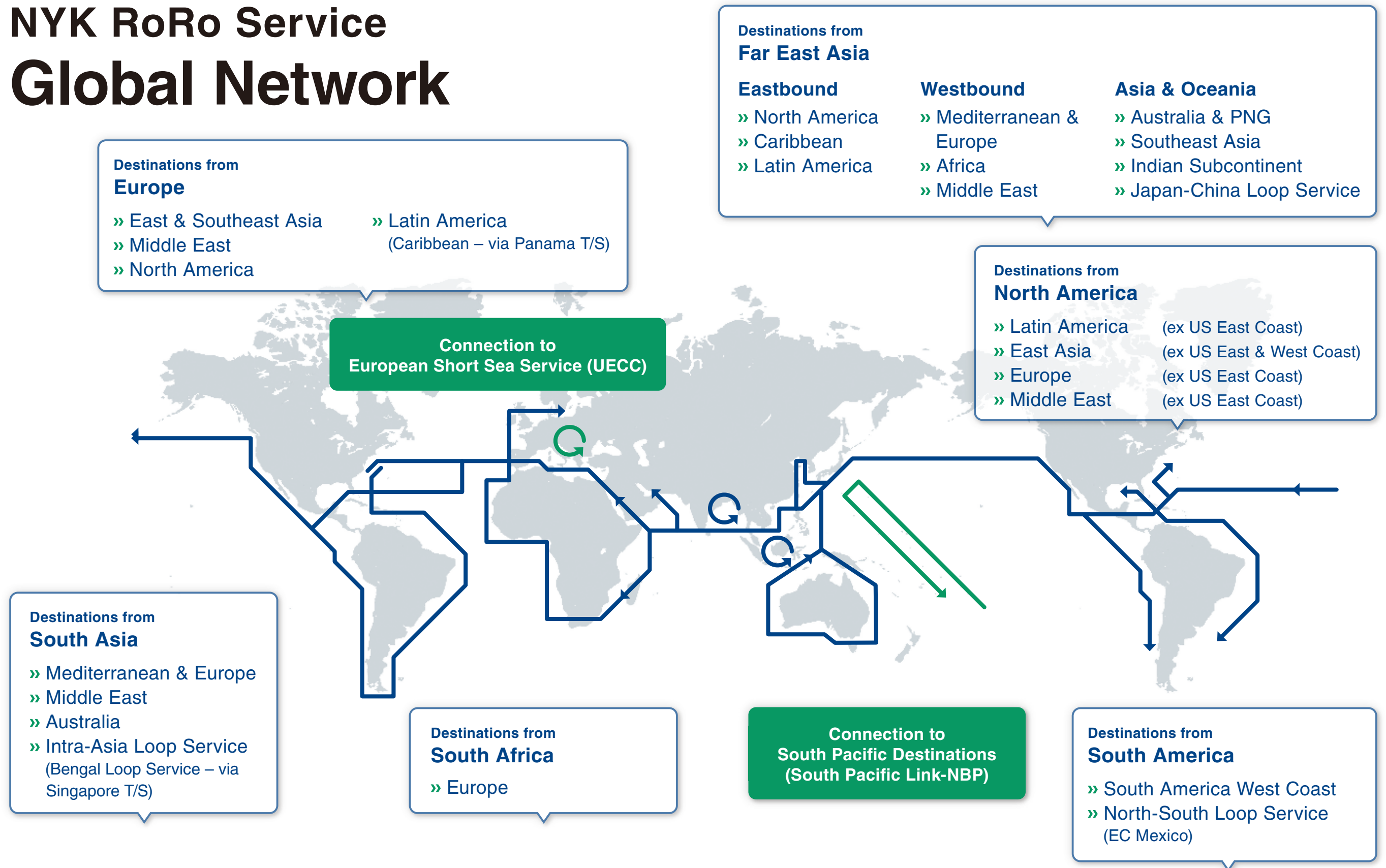
Track & Trace

Quality Management





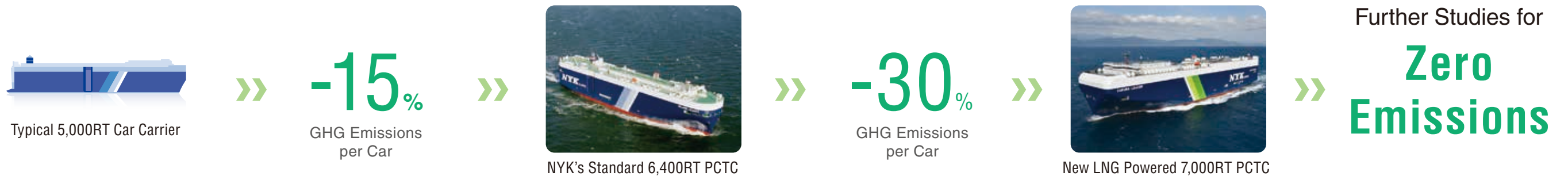
NYK RoRo Service Global Network



NYK Fleet Introduction A Greener Solution



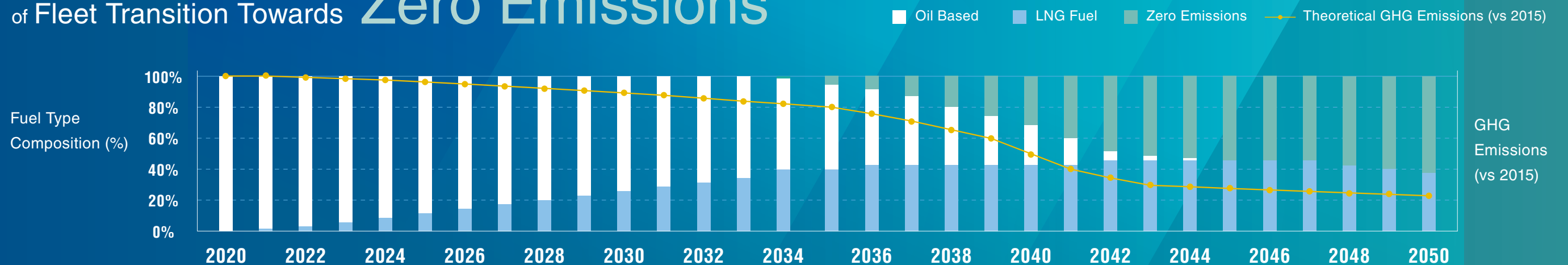
NYK offers high quality ocean transport service using a large, modern and environment-friendly fleet.



With our standard 6,400RT type vessels, we can provide an efficient ocean transport service with about 15% less GHG emissions per unit, compared to a typical 5,000RT sized car carrier.

We are now investing in modernizing our fleet to 7,000RT LNG powered PCTCs, which will further enable us in the future to provide a service with even 30% less GHG emissions compared to now.

Future Visions of Fleet Transition Towards Zero Emissions



*All figures are based on NYK internal calculation and assumptions. Plans may change in the future.



NYK Fleet Introduction A Greener Solution



28 October 2020

Delivery of NYK's first LNG-fueled PCTC Sakura Leader; second LNG-fueled PCTC planned for first half of 2022.



https://www.nyk.com/english/news/2020/20200203_01.html



12 February 2021

Announcement of ship-building contract for four LNG-fueled PCTCs to be built at China Merchants Jinling Shipyard (Nanjing) Co. Ltd. and planned for delivery between 2022 to 2023.

https://www.nyk.com/english/news/2021/20210212_01.html



15 June 2021

Announcement of agreement to build 12 LNG-fueled PCTCs to be delivered between 2025 and 2028 (six vessels at Shin Kurushima Dockyard Co. Ltd, and six vessels at Nihon Shipyard Co. Ltd.)

https://www.nyk.com/english/news/2021/20210615_01.html



NYK Environmental Target

Sail GREEN Project – Environment value chain model for finished vehicle logistics

NYK develops an environmental value chain model for finished-vehicle logistics from origin to destination.

As an example, a full service of environment-friendly transportation is available to deliver cargo between East Asia and Europe.

Example

Environmental Value Chain Model from China to Oslo via Transshipment at Zeebrugge

1 Loading Port: Major Chinese Ports

Eco-friendly solar-powered vehicle distribution centers in operation (example: Tianjin RoRo Terminal)



2 Ocean Transport Large LNG-Powered PCTC

Ocean transport from East Asia to Zeebrugge by our large LNG-powered PCTC Service



3 Discharge Port: ICO Terminal Zeebrugge

Powered by own wind power plant + environment measures such as water recycling at PDI facility



4 Short Sea Transport: Medium-Sized LNG-Powered PCTC by UECC

Transport from Zeebrugge to Oslo by LNG-powered PCTC operated by UECC



Short Movie

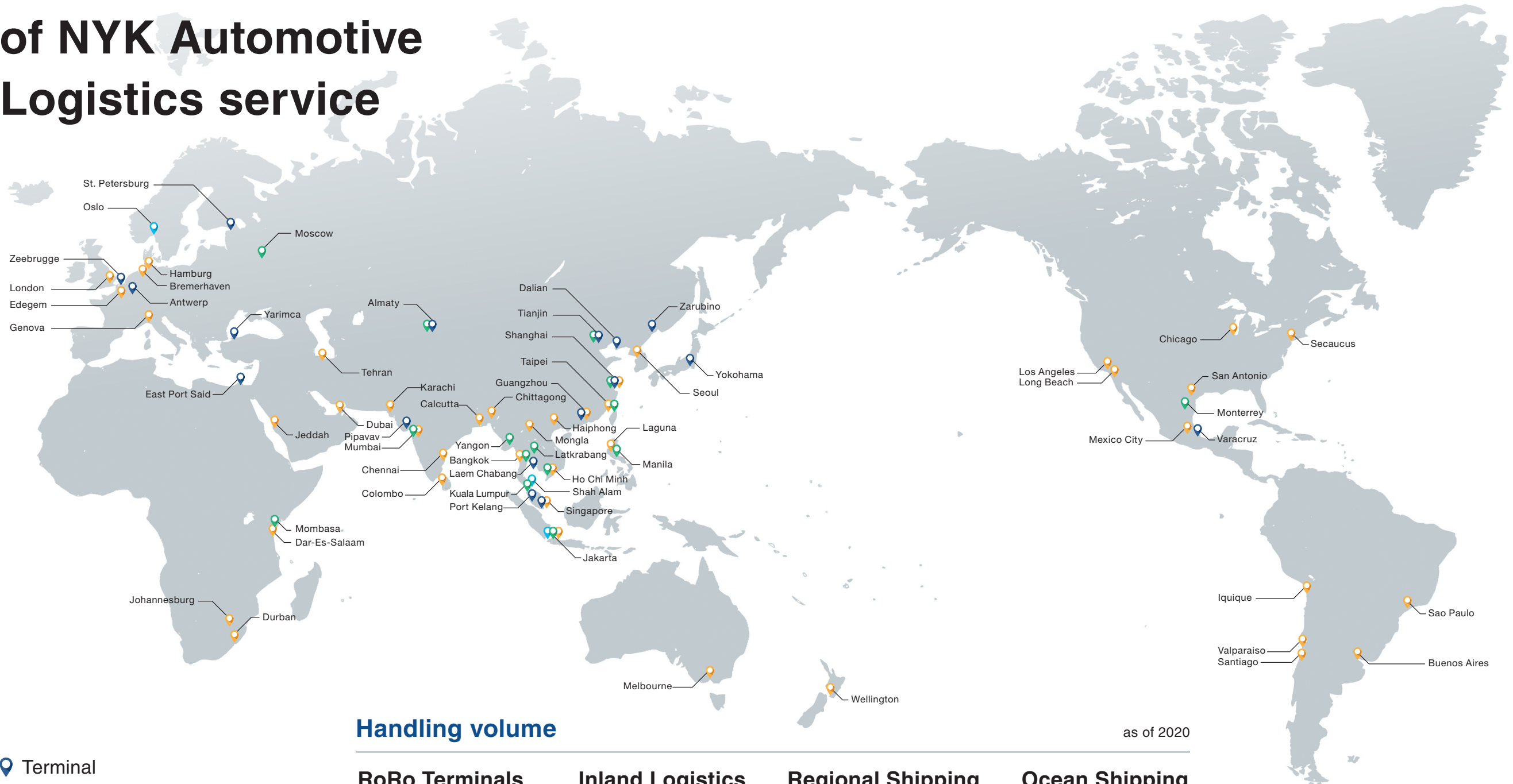
https://www.nyk.com/profile/video/12_jpn.htm



Photo courtesy of Central LNG Marine Fuel Japan Corporation



Global network of NYK Automotive Logistics service



Handling volume

as of 2020

- 📍 Terminal
- 📍 Inland Logistics
- 📍 Regional Shipping
- 📍 Office

RoRo Terminals
17 Locations
🚗 7.4 mil.

Inland Logistics
18 Companies
🚗 1.9 mil.

Regional Shipping
3 Companies
🚗 1.2 mil.

Ocean Shipping
41 Offices
🚗 2.4 mil.

02

Quality Management

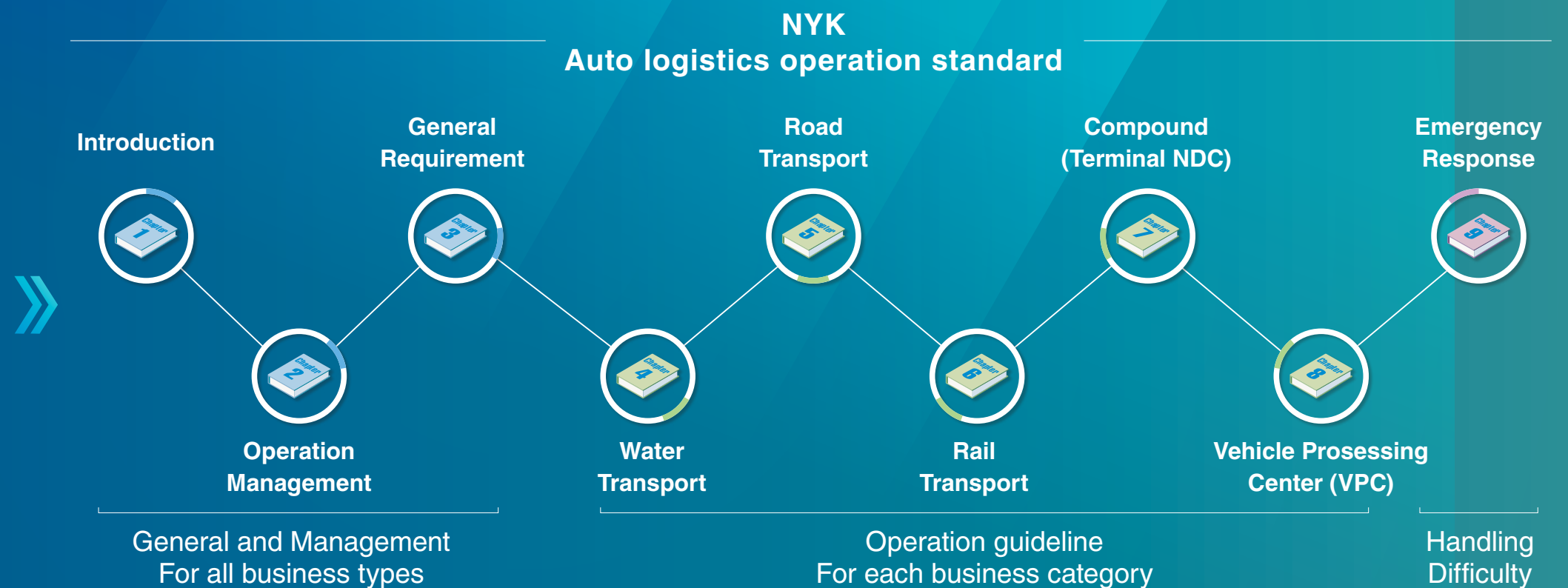


Quality and KPI Management Standard Operating Procedures

No Human Injury, Zero Damage

Quality Management

- 1 Standard Operating Procedures
- 2 Work Instructions (multilingual)
- 3 Operations Process Flow
- 4 Damage Prevention Handbook
- 5 Safety Instructions



Quality and KPI Management Activities and Prevention Plan in case of Accident

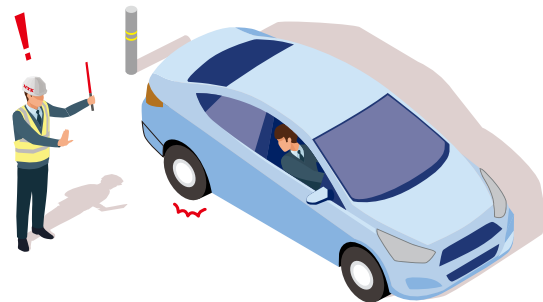


NYK Group Company >

PRISM >>

NYK Headquarters

Accident



NYK Incident Database
Monthly Report Data Analysis



Countermeasures to prevent
accidents; KPI measurement
Share monthly incident
report globally



NYK Electric Vehicle Handling Standards

EV-Ready Land-Based Logistics Infrastructure
Zeebrugge RoRo Terminal



Ⓢ Northern Inlet

1000 kVA Transformer available for EV zone

50 x 22kW charging zone

Ⓢ Southern Inlet

3780 kVA Transformer available for EV zone

308 x 11kW charging zone



Platform to make charge zone “intelligent”



Each charge connection variable
3 – 22 kW



Optimal use of each charge point



Fully programmable and measurable

03

**NYK Integrated
Finished Vehicle Logistics Solutions**





Why Choose NYK?

Key Elements



People

Global workforce of over 30,000 staff with solid skills and expertise

Quality Management Control Tower at HQ to monitor quality standards and KPIs



Processes

Standard Operating Procedures across all facilities and operating sites

Established training standards



Global Assets & Infrastructure

World largest fleet of 96 RoRo vessels

17 RoRo terminals at major ports

18 regional subsidiaries providing land-based logistics services



Technical and Operational Capabilities

Logistics expertise and knowhow by handling annual volume of 3 million vehicles on the ocean and 12 million on land

Proven quality services to all major OEM's across entire automotive logistics chain over last 50 years



NYK TAILOR-MADE SOLUTION DEVELOPMENT



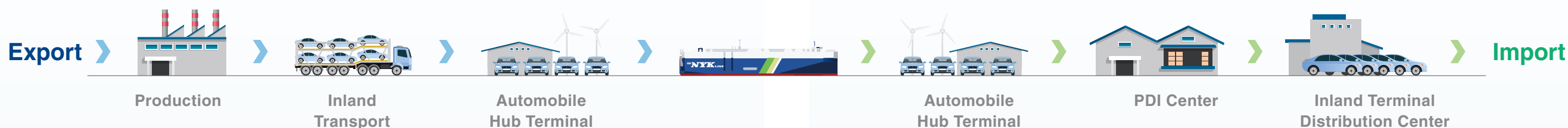
Tailor-Made Service

OEM Plant to RoRo Terminal Services

Import Port to Dealer Delivery

>> India Case

>> Kenya Case



SOLUTIONS

- > End-to-end logistics from Plant to Export Port
- > Global Standard Plant Yard Management Practices with SOP, staff training, and KPIs
- > Invested in 30 dedicated carriers with GPS and E-POD for transportation to port
- > IT system with EDI capabilities for visibility of vehicles across the supply chain
- > Inventory management through visibility across the entire logistics chain
- > Developed a Global Standard dedicated RoRo terminal to ensure quality of exports



SOLUTIONS

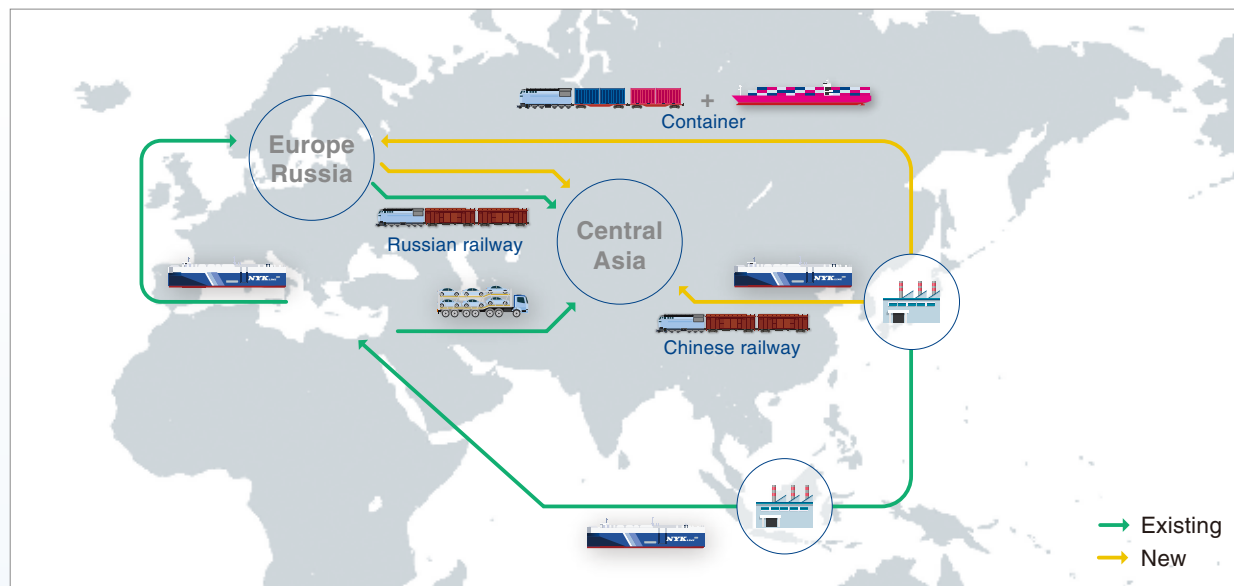


- > Designed the yard layout to expand the storage space and improve handling quality
- > Single window and accountability across the entire supply chain with agreed KPIs
- > Invested in mini-car carrier trucks for improvement in transportation quality and quick dispatch
- > Took over accountability of entire supply chain import logistics covering 4PL activities (supplier management, performance management, claims management, customs documentation, registration and delivery to dealers and customers)



Tailor-Made Service

Multi-modal Logistics Solution



SOLUTIONS

- › Established multi-modal solution by RoRo from Japan to Dalian and rail autowagon from Dalian to Kazakhstan
- › Reduction of lead time
- › Improvement of GHG emissions
- › Established two multi-modals
 1. By RoRo from Japan to Dalian and rail autowagon from Dalian to Moscow
 2. By container vessels from Japan to Vladivostok and rail autowagon from Vladivostok to Moscow

End-to-End Hub and Spoke Solution

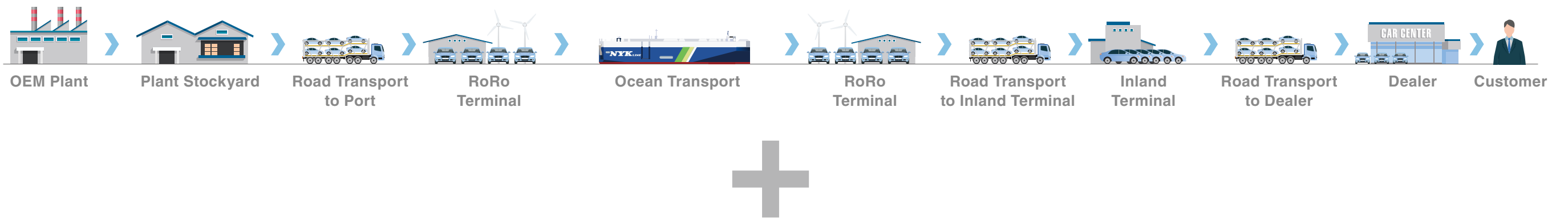


SOLUTIONS

- › Provided ocean transportation solution from China to Zeebrugge
- › Provided NYK RoRo Terminal at Zeebrugge as storage and distribution hub for Europe
- › Customs clearance service provided by NYK RoRo Terminal at Zeebrugge
- › PDI, accessory fitment and vehicle processing services provided by NYK RoRo Terminal at Zeebrugge
- › Last mile delivery to Drammen provided via NYK short sea service company UECC
- › Accountability, visibility and quality management across entire supply chain by NYK



NYK can offer tailor-made solutions for your supply chain!



4PL FOURTH PARTY LOGISTICS

Purchasing & Contracting

Operations Management

Information Management

Quality Management

Performance Management

Financial Management

Claims Management