



**CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM  
BỘ GIAO THÔNG VẬN TẢI**



## **THEMATIC REPORTS**

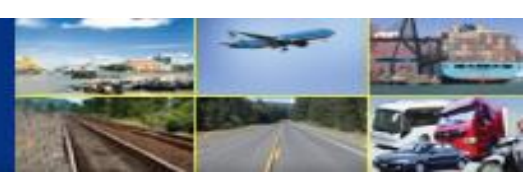
# **TRANSPORT SECTOR PLANNING ASSOCIATED WITH DEVELOPMENT AND OPERATION OF SUSTAINABLE INFRASTRUCTURE**

**(MARITIME, RAILWAY, AVIATION)**

**Transport Development and Strategy Institute**



*Ha Noi, 12/2023*



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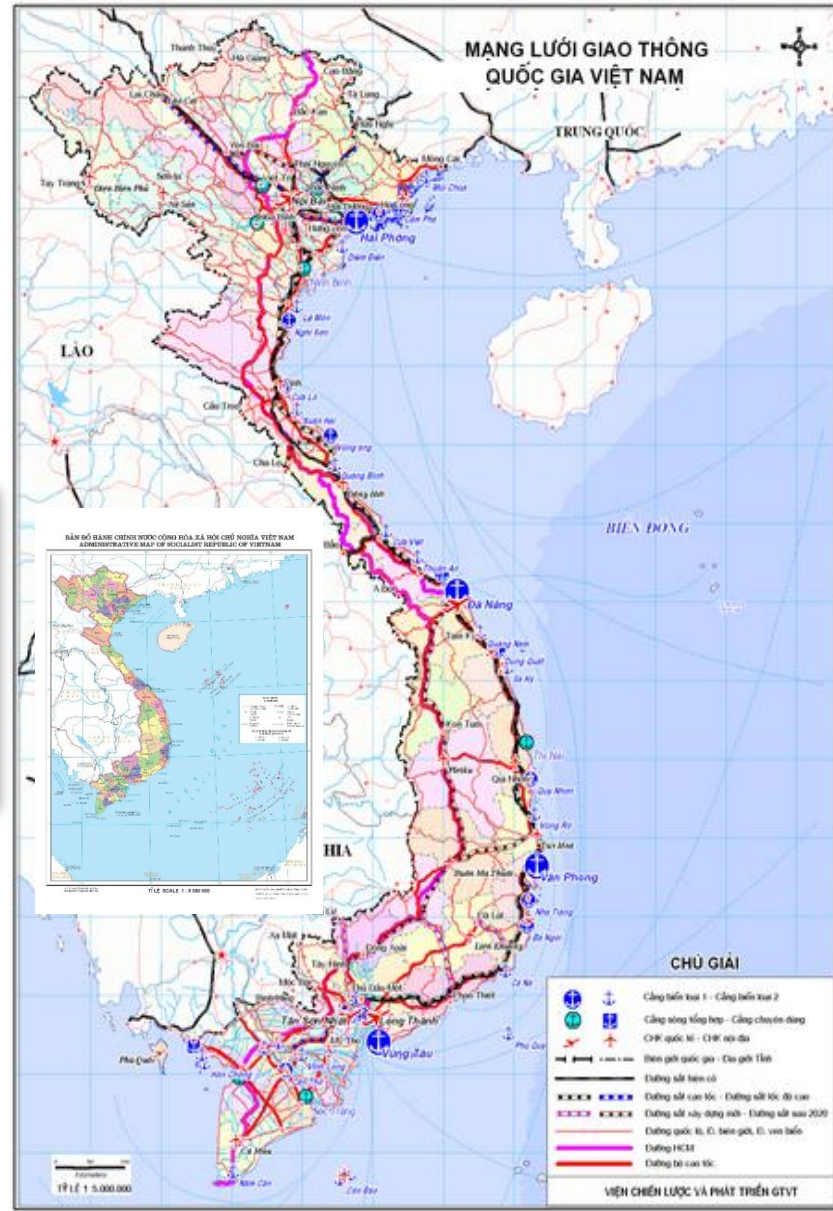
Master Plans on Transport Network in 2021 - 2030, vision to 2050: railway, maritime, aviation subsectors

3 Orientations and solutions for developing and operating sustainable transport infrastructure



# 1

## OVERVIEW OF TRANSPORT SECTOR PLANNING



# CONTEXT OF IMPLEMENTING TRANSPORT SECTOR PLANNING

The Resolution of the 13th Party Congress set the goal that by 2045, Vietnam will become a developed, **high-income country**. In which, **transportation infrastructure** is identified as one of the **strategic breakthroughs**.

Vietnam's GDP reached **409 billion USD**, the scale of the economy ranked **37th in the world**, export turnover reached **372 billion USD**, ranked **21st in the world**.

Vietnam's commitment at the COP26 conference to reduce **net - zero** by 2050 as well as the goal at the NDC (nationally determined contribution report) to reduce **greenhouse gas emissions by 43% by 2030**. (under the condition of international support)

Vietnam has entered the **top 10** of the 50 emerging logistics markets in the world and is considered the country with the **leading logistics development potential in Southeast Asia** (According to the Emerging Markets Index 2023)

# □ SOME CHARACTERISTICS OF DEVELOPMENT FOR THE TRANSPORT SECTOR

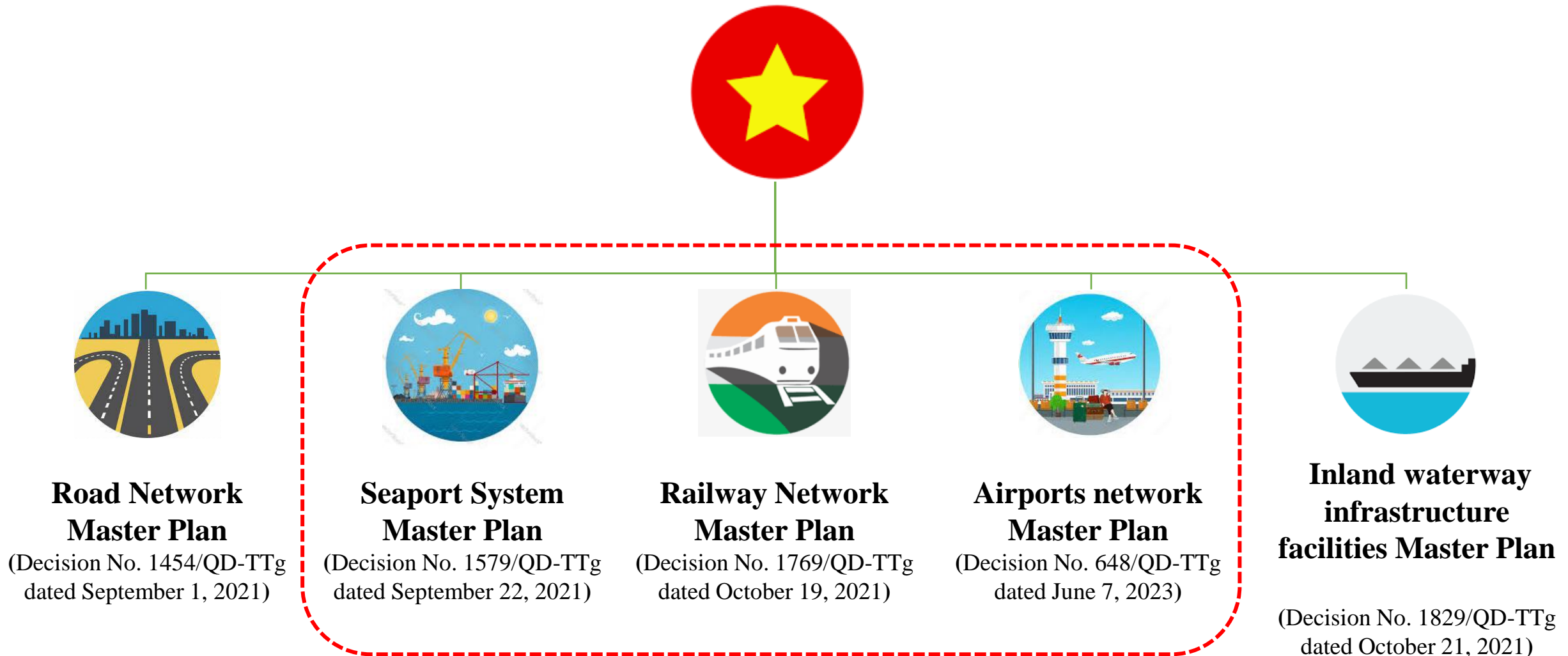
**The first time**, 05 Transport Sector Plans were implemented and built synchronously **at the same time**.

**Planning** has paid more attention to **the connection between modes of transport**, regions throughout the country to maximize the advantages of each mode and characteristics of each locality.

**Transport corridors** are planned to ensure intra-regional and inter-regional connectivity. For each corridor, based on the advantages of each mode, select and plan appropriate transport modes to meet the needs of transport and socio-economic development, especially the four key economic regions and the two important transport hubs in Hanoi and Ho Chi Minh City

# OVERVIEW OF TRANSPORT SECTOR PLANNING

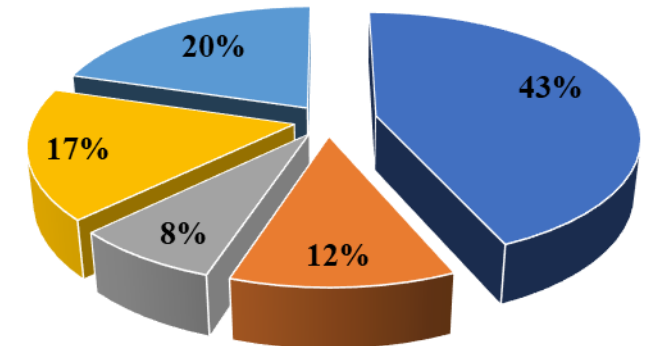
## NATIONAL MASTER PLAN (Resolution 81/2023/QH15 dated January 9, 2023)



# OVERVIEW OF TRANSPORT SECTOR PLANNING

The total investment capital needs for transport infrastructure by 2030 is about VND **2.069** trillion (excluding infrastructure maintenance costs). The investment capital needs for the maritime, railway, and aviation subsectors is about VND **1.011** trillion (accounting for 48.9%).

Subsector	Investment capital needs (billion VND)	Ratio
Road	900,000	43%
Railway	240,000	12%
Inland Waterway	157,533	8%
Maritime	351,000	17%
Aviation	420,472	20%
<b>Total</b>	<b>2,069,005</b>	<b>100%</b>



■ Road ■ Railway ■ Inland Waterway ■ Maritime ■ Aviation



2

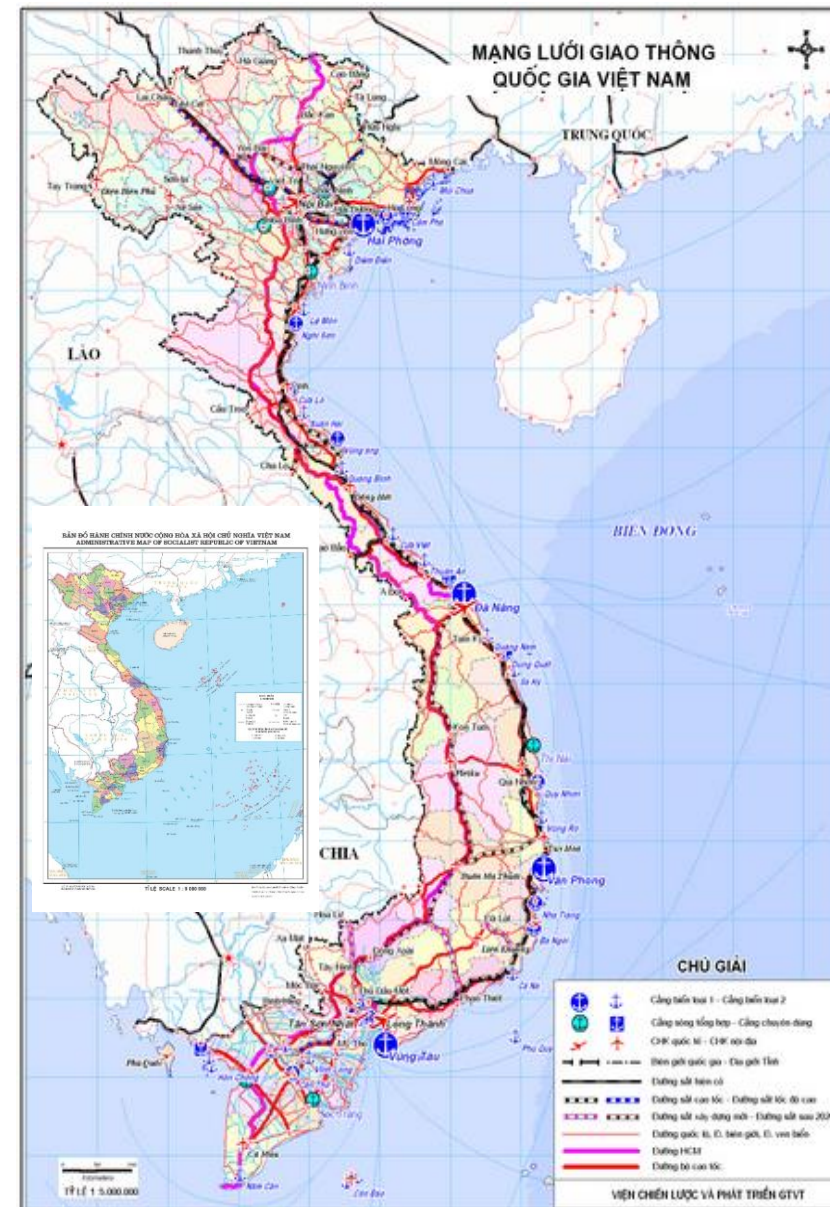
# MASTER PLANS ON TRANSPORT NETWORK DEVELOPMENT IN 2021 - 2030, VISION TO 2050: RAILWAY, MARITIME, AVIATION SUB-SECTORS.





2.1

# MARITIME SUB-SECTOR



VIỆN CHIẾN LƯỢC VÀ PHÁT TRIỂN GIAO THÔNG VẬN TẢI  
TRANSPORT DEVELOPMENT & STRATEGY INSTITUTE



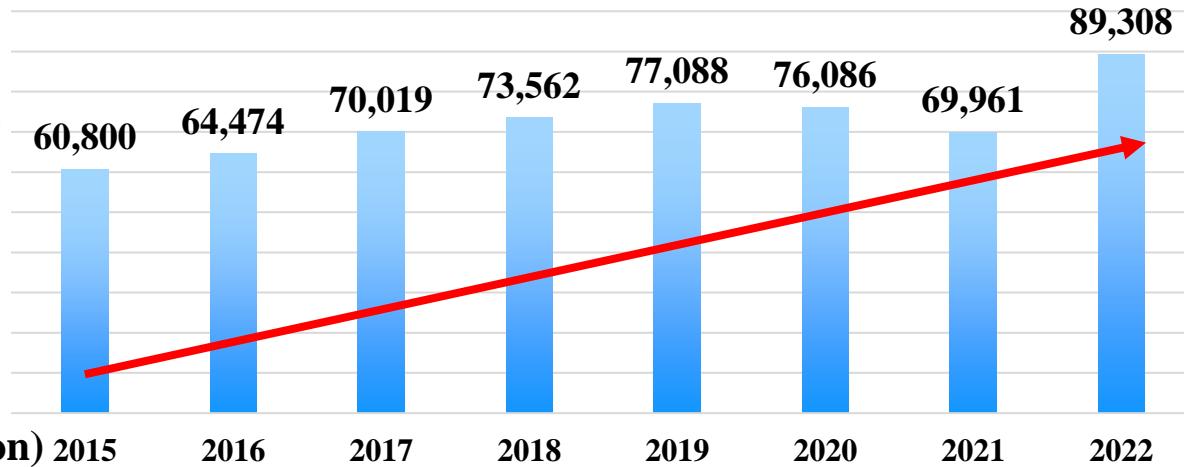
# ❑ CURRENT STATUS OF FLEET AND MARITIME TRANSPORTATION



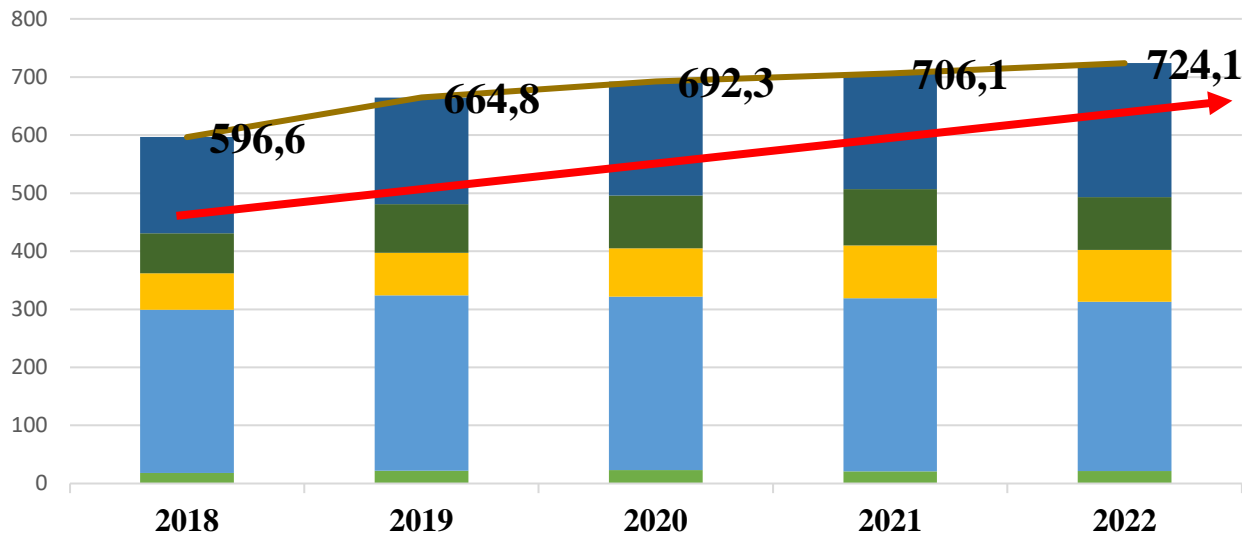
**1,477** vessels

**Viet Nam Oceangoing Vessel**  
(# 22 of the world)

Freight transport volume (Millions ton)



Freight throughput seaports (Millions ton)



■ Group 5    ■ Group 4    ■ Group 3  
■ Group 2    ■ Group 1    — Total



**Total weight: 11.6 millions DWT**  
**Total capacity: 7 millions GT**

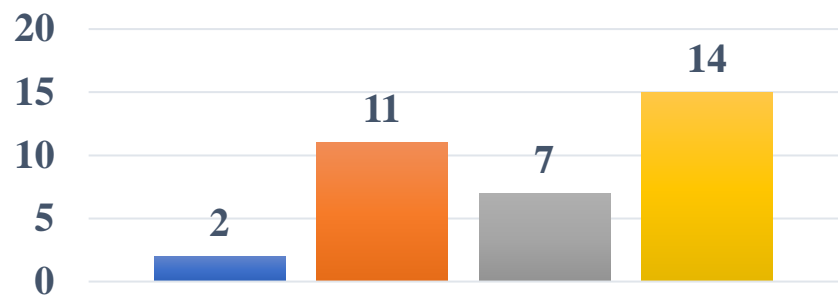


# □ CURRENT MARITIME INFRASTRUCTURE



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## HÀNG HẢI Maritime transport



Number of seaport

■ Special seaport    ■ Seaport Grade I  
■ Seaport Grade II   ■ Seaport Grade III



Cảng biển  
Seaport

34



Bến cảng  
Berth

296



Cầu cảng  
Quay

646



**28/63** provinces and cities have coastlines and **100%** with seaport systems to serve socio-economic development.



**80%** of Vietnam's import and export goods go through the seaport system.

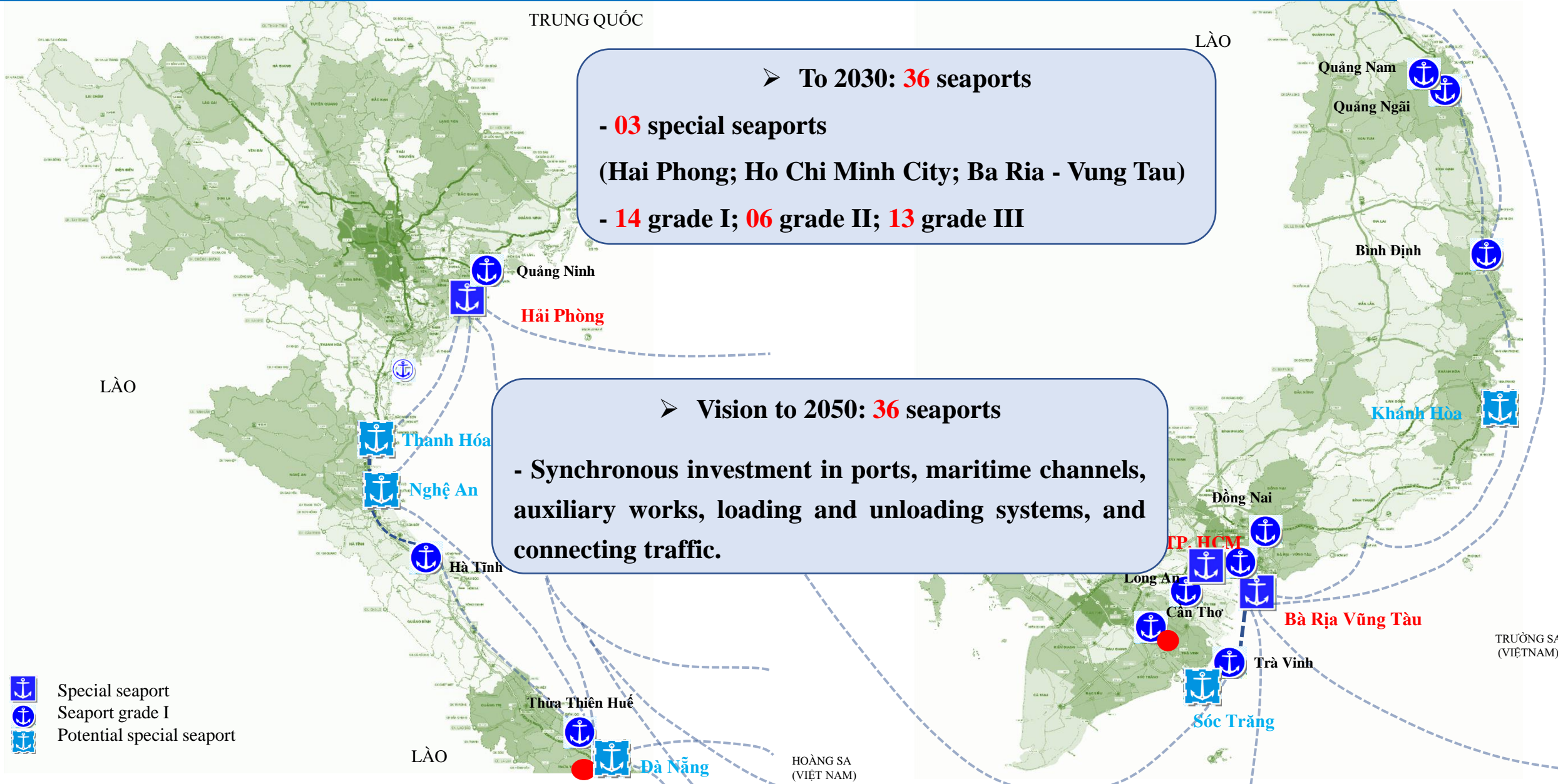


Ba Ria - Vung Tau, Hai Phong and Ho Chi Minh Seaports are in the **Top 100** largest container ports in the world at 32nd, 28th and 22nd ranked respectively.

# SEAPORT SYSTEM MASTER PLAN



BỘ GIAO THÔNG VẬN TẢI



# SEAPORT SYSTEM MASTER PLAN

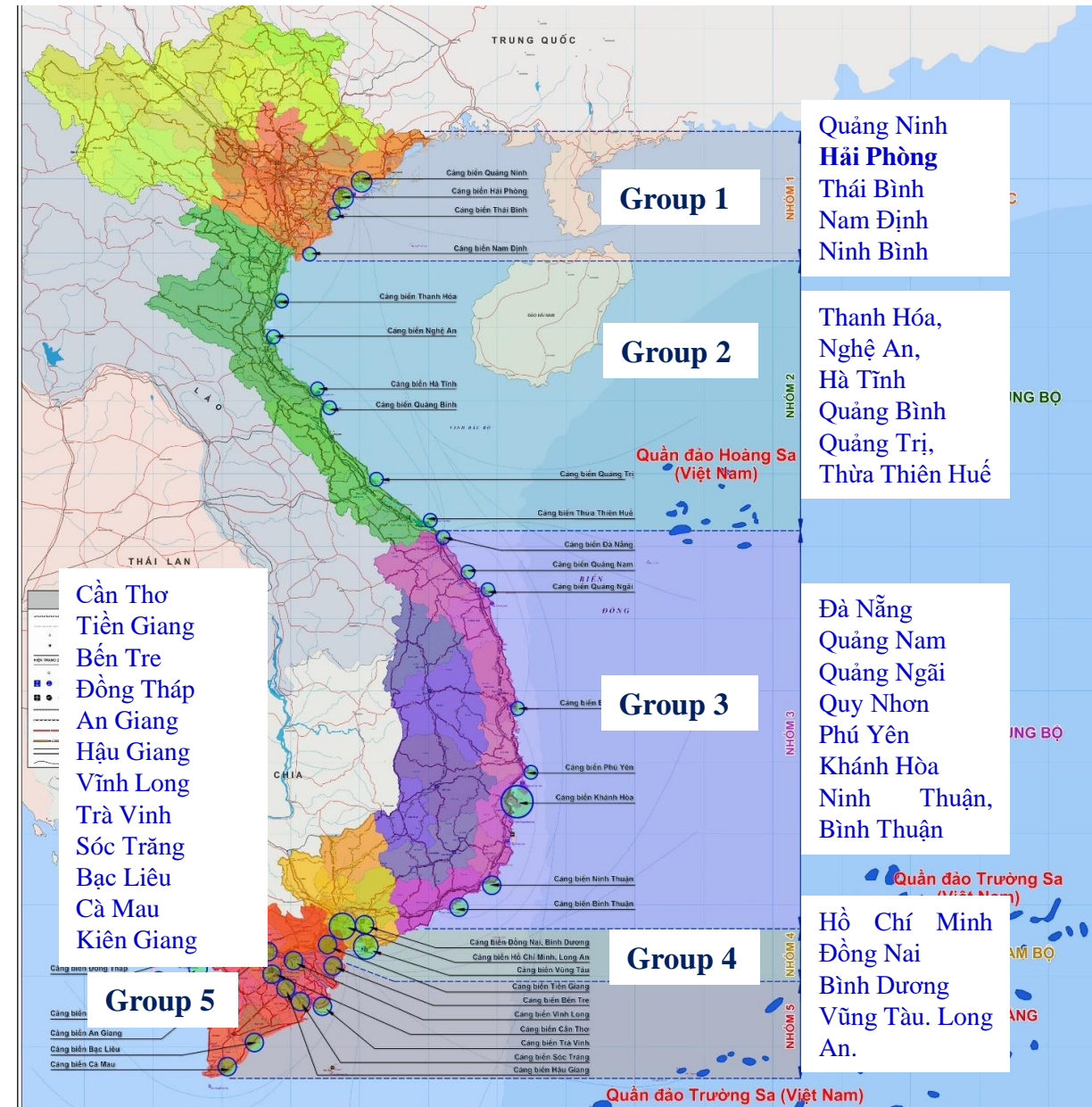


BỘ GIAO THÔNG VẬN TẢI

## Connecting transport orientation

Seaports have special location requirements and will be a passive method of connection, with priority in location selection. Proactively plan IWT, road, and railway modes connecting to seaports, playing the role of consolidating and releasing goods in accordance with the advantages of each type, quantity of goods through the port, type of goods, and distance, natural conditions.

The national railway system connects directly with Cai Lan port and two international gateway ports (Lach Huyen, South Do Son, and Cai Mep - Thi Vai), formulating specialized railway lines connecting seaports grade I on the North-South corridor, formulating wharves for inland waterway vehicles in seaport waters; Highway system connecting to international seaports.



2.2

# RAILWAY SUB-SECTOR



# □ CURRENT STATUS OF VEHICLES AND RAILWAY TRANSPORTATION

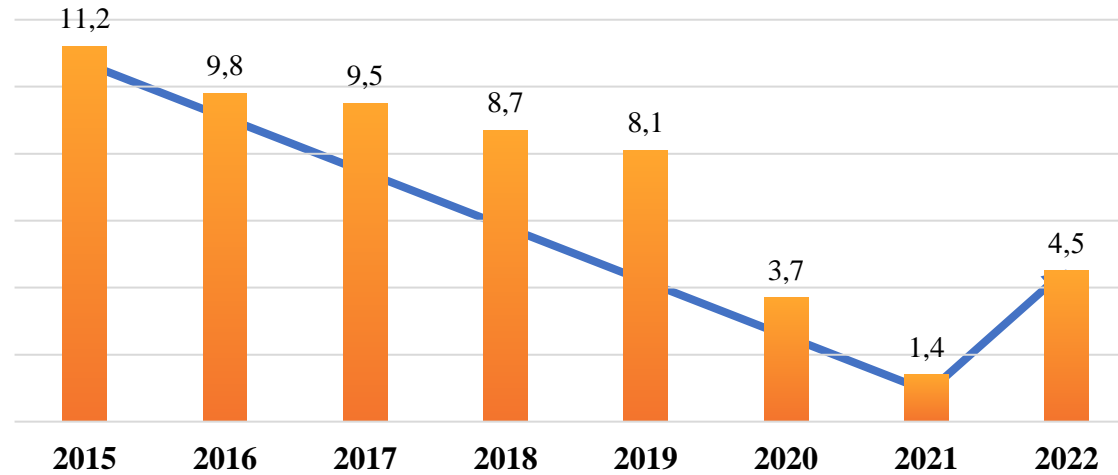


**191**  
Locomotive

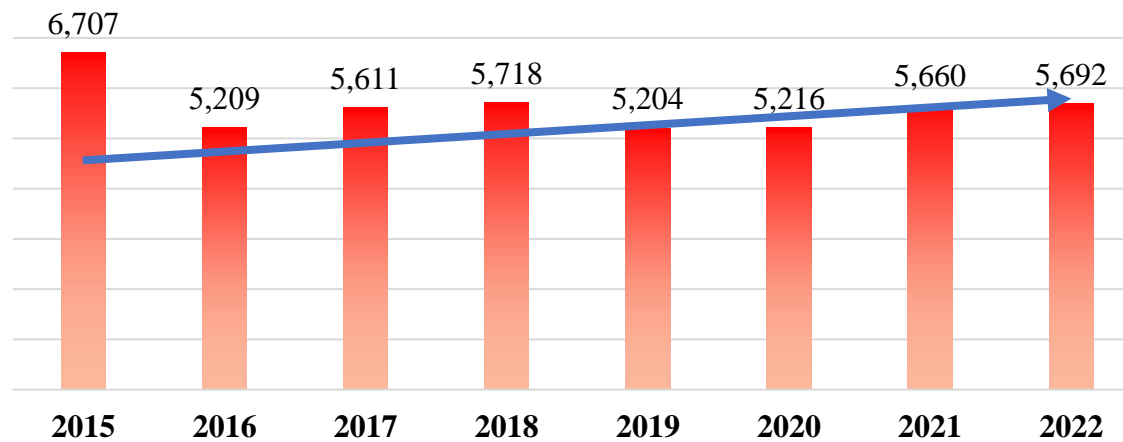


**3,122**  
Coach and Wagon

### Passenger traffic by rail (million passengers)



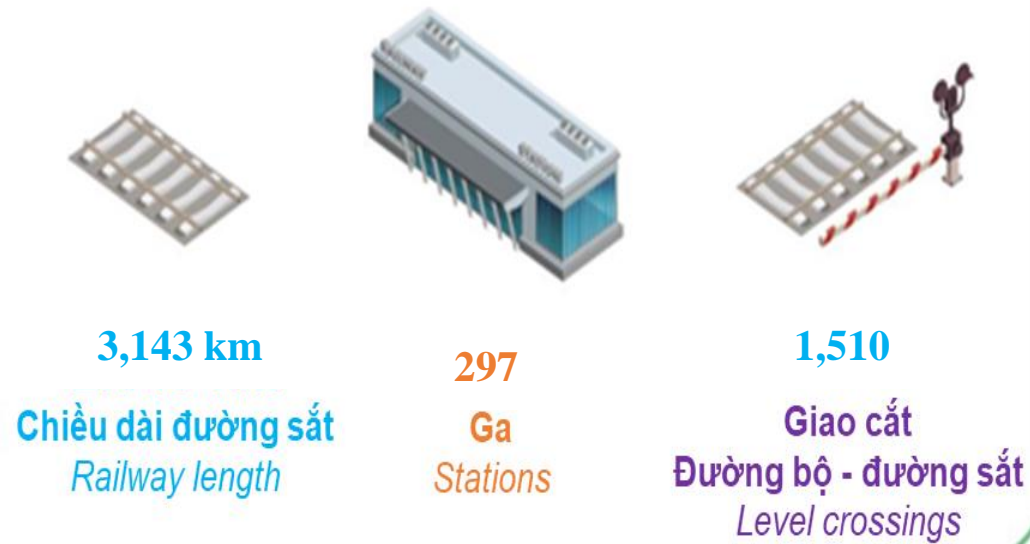
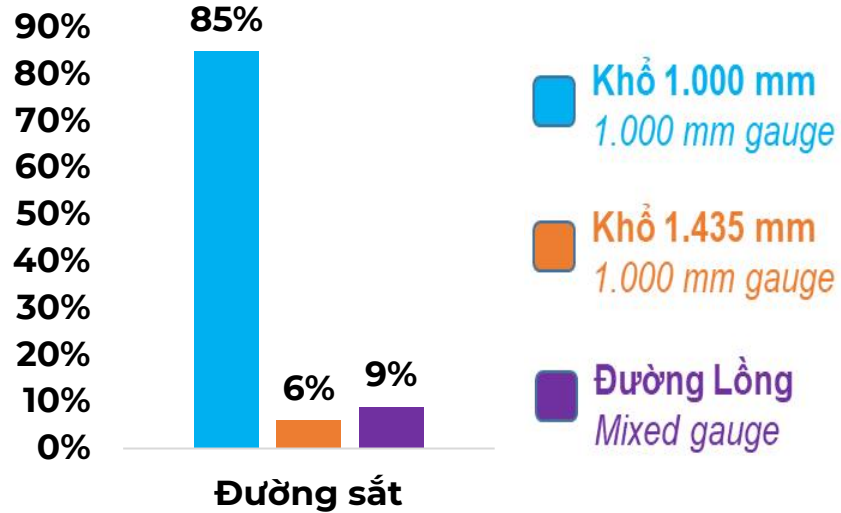
### Freight traffic by rail (million tons)



# □ CURRENT RAILWAY INFRASTRUCTURE

## ĐƯỜNG SẮT

Railway transport



Vietnam's railway network was invested in 1881 and up to now has **more than 100 years** of development and exploitation.



The national railway system includes **07 main lines** concentrated mainly in the **Northern region**.



The total length of the **specialized railway lines** is about 258 km to serve the specific transportation needs of businesses.

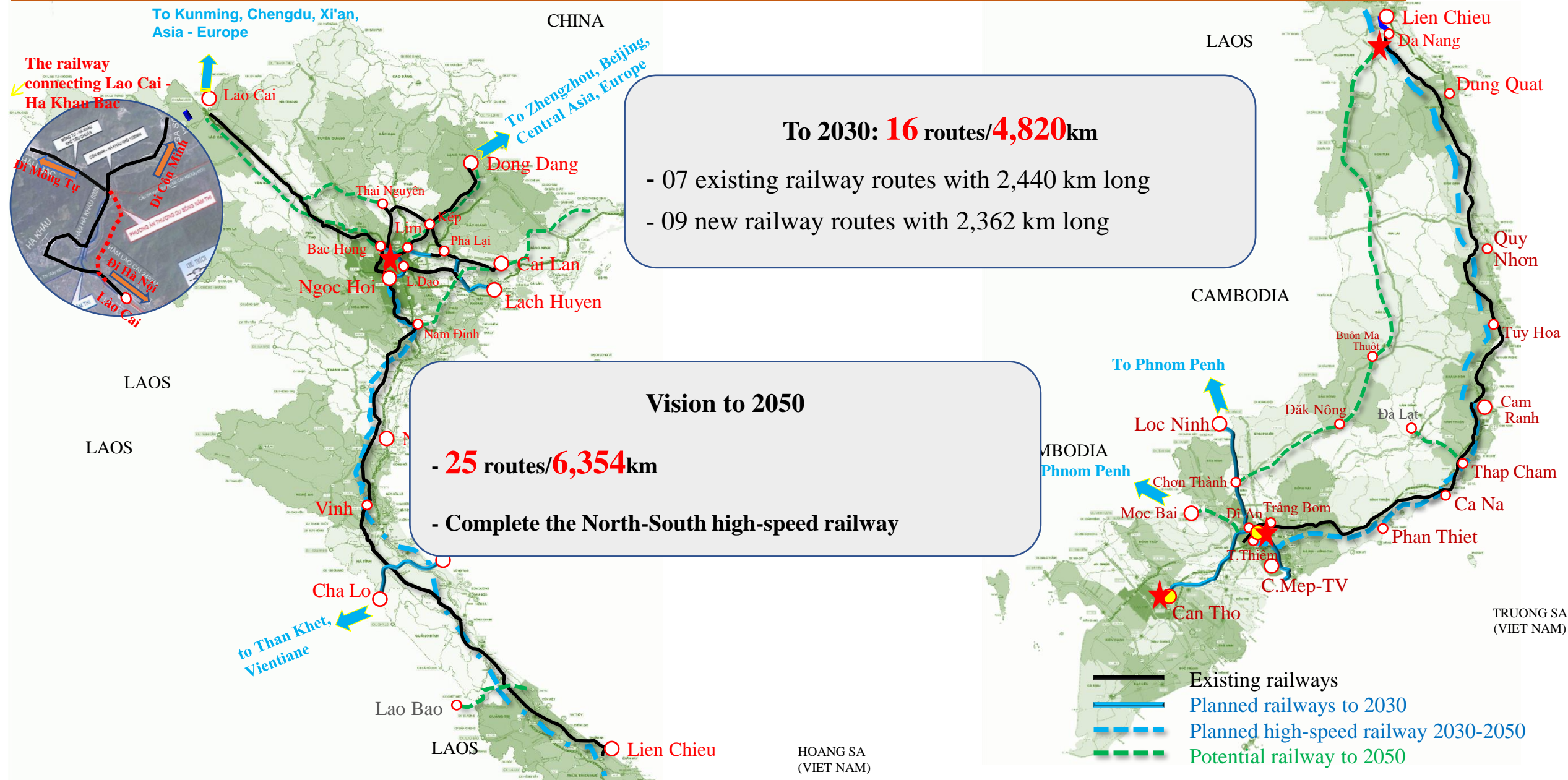




# RAILWAY NETWORK MASTER PLAN



BỘ GIAO THÔNG VẬN TẢI



**To 2030: 16 routes/4,820km**

- 07 existing railway routes with 2,440 km long
- 09 new railway routes with 2,362 km long

**Vision to 2050**

- 25 routes/6,354km
- Complete the North-South high-speed railway

HOANG SA (VIET NAM)

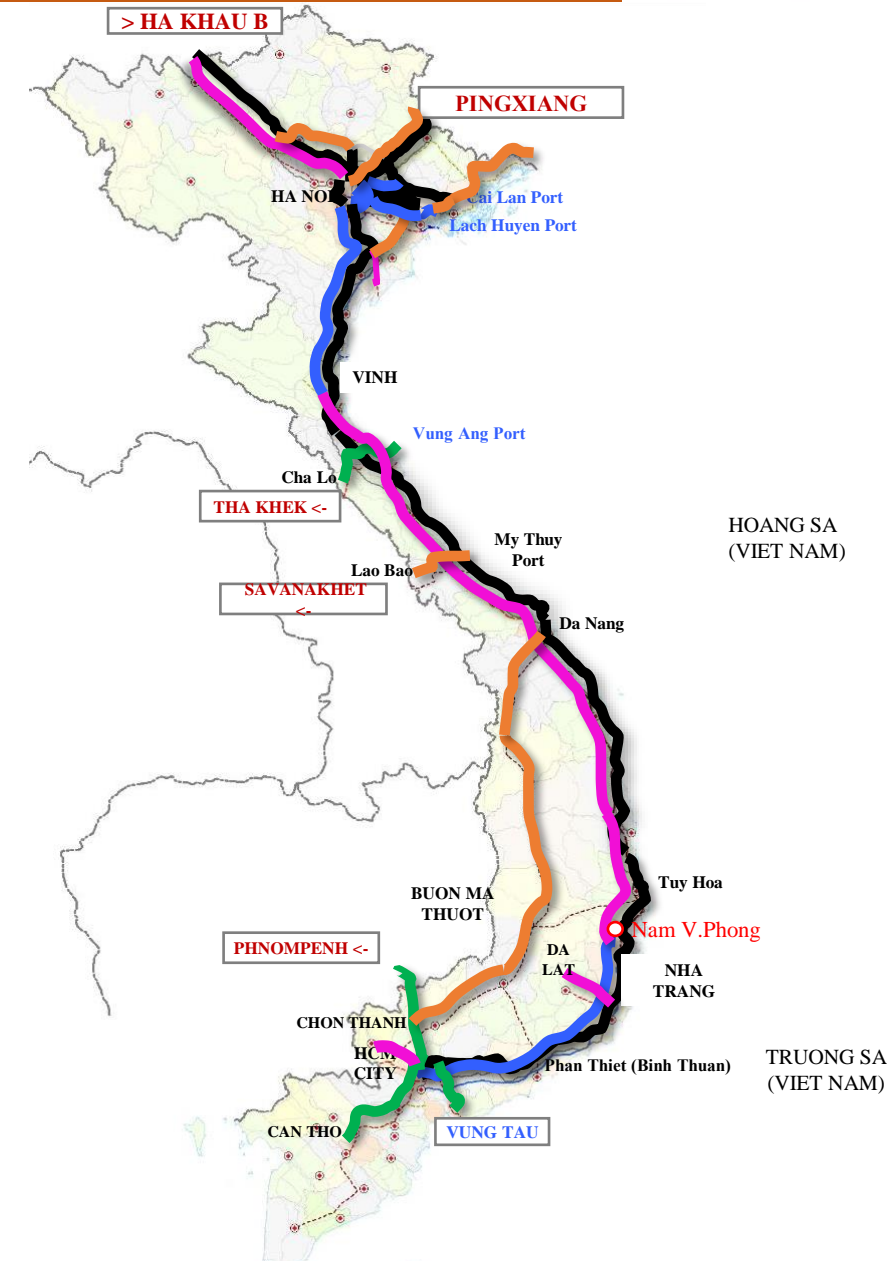
# RAILWAY NETWORK MASTER PLAN



BỘ GIAO THÔNG VẬN TẢI

## SPATIAL DISTRIBUTION OF RAILWAY NETWORK

- (1) The railway lines along the North-South axis: 2 routes;
- (2) Railway lines connecting the two railway hubs in Ha Noi and Ho Chi Minh City;
- (3) International railway connections with China, Laos, and Cambodia;
- (4) Railway along Central Highlands provinces;
- (5) Branches and specialized railway lines connecting to different transportation hubs (urban areas, seaports, inland waterway ports, ICDs, logistics centers, industrial zones, etc.);
- (6) Hub stations of the national railway network connecting with urban railway systems (planned in provincial and regional planning).



2.3

# AVIATION SUB-SECTOR



# □ CURRENT STATUS OF AIRCRAFT AND AIR TRANSPORTATION



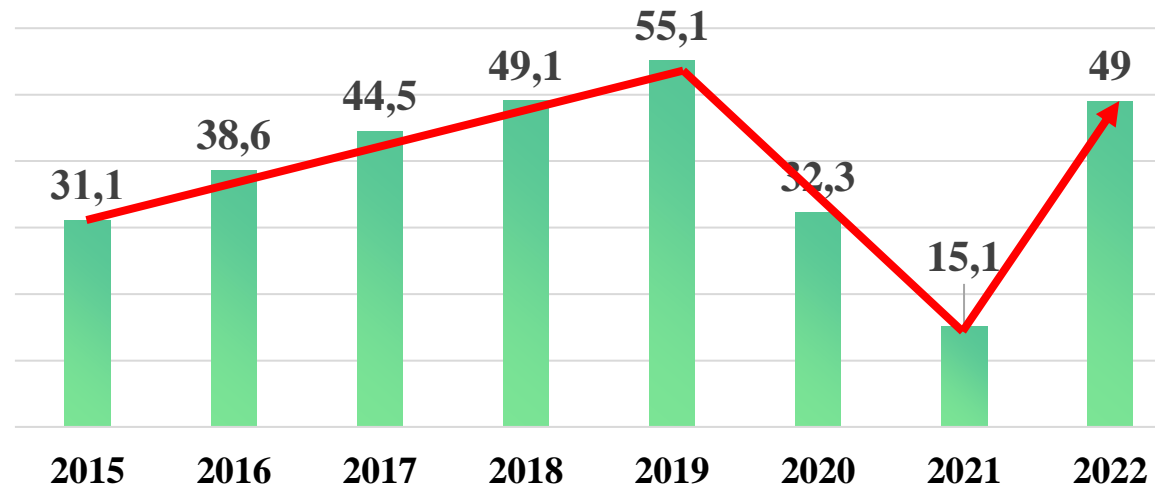
BỘ GIAO THÔNG VẬN TẢI



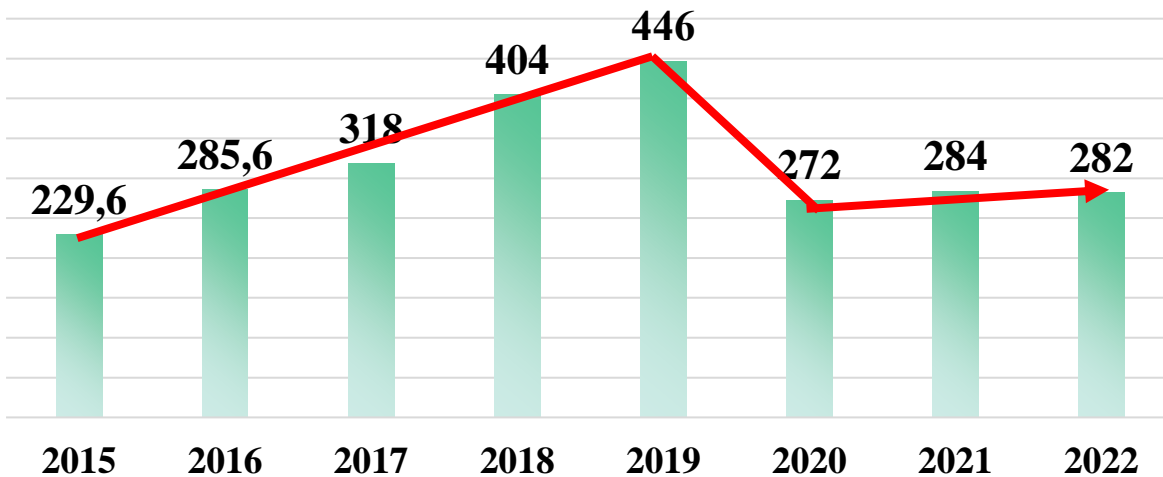
283

Passenger aircraft

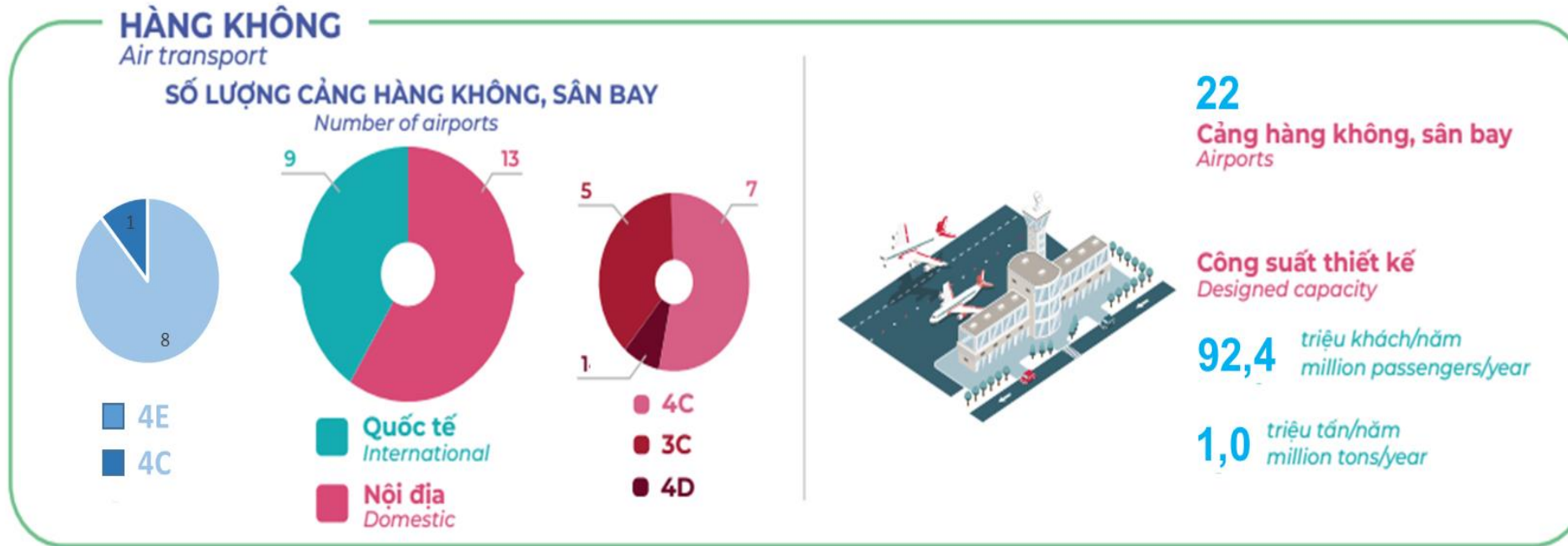
Number of passengers carried (million passengers)



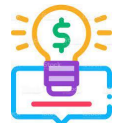
Volume of freight carried (thousand tons)



# □ CURRENT STATUS OF AIRPORTS



Developed from the perspective of taking the **spoke shaft structure model** as Ha Noi, Da Nang, and HCMC are 03 airport clusters.

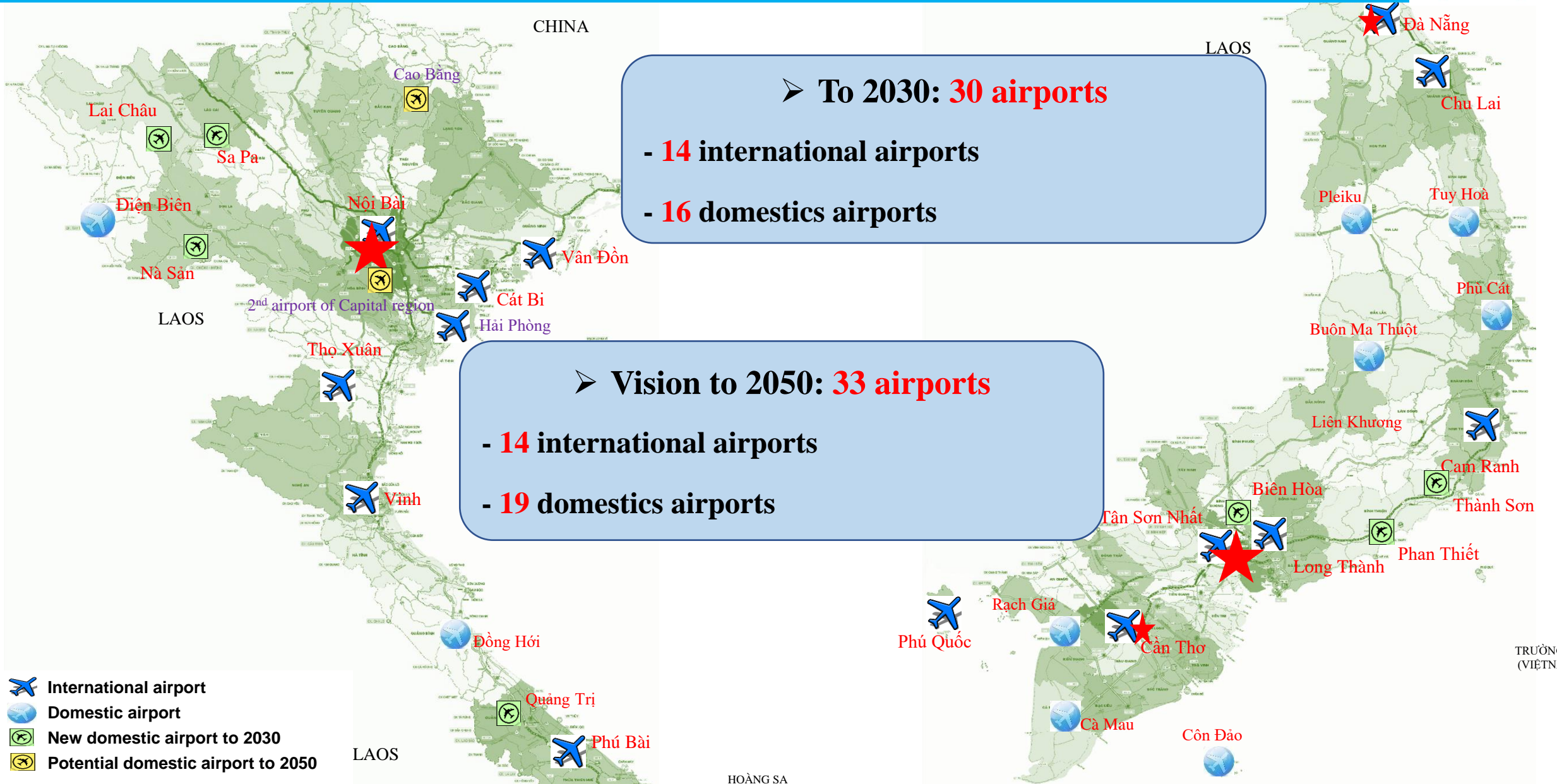


Distributed **harmoniously and reasonably** in 03 regions: Northern region (07 airports); Central region (07 airports), Southern region (08 airports).



**100% are joint-use airports** (civil aviation and military aviation), playing an important economic role and ensuring national security and defense.

# MASTER PLANS ON AIRPORT NETWORK DEVELOPMENT



2.4

# KEY NATIONAL PROJECTS



# □ MARITIME SUB-SECTOR



Lach Huyen Terminal, Hai Phong Seaport



Lien Chieu Terminal, Da Nang Seaport



Can Gio Terminal, HCMC Seaport



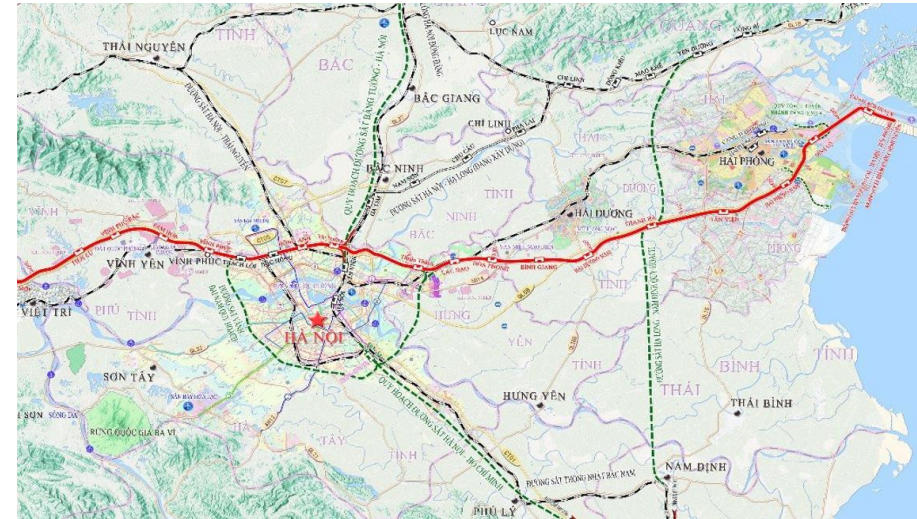
Cai Mep Terminal, Ba Ria – Vung Tau Seaport



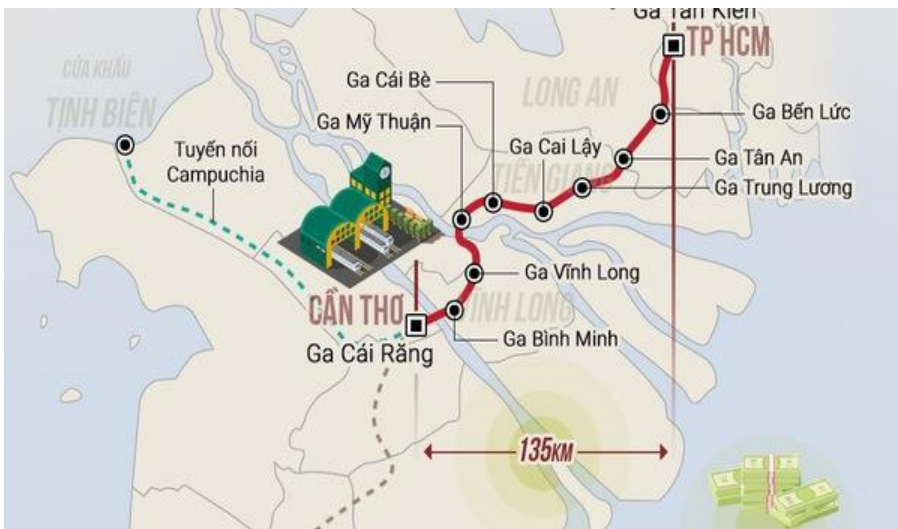
# RAILWAY SUB-SECTOR



North – South high-speed Railway



Lao Cai – Hai Phong – Ha Noi Railway

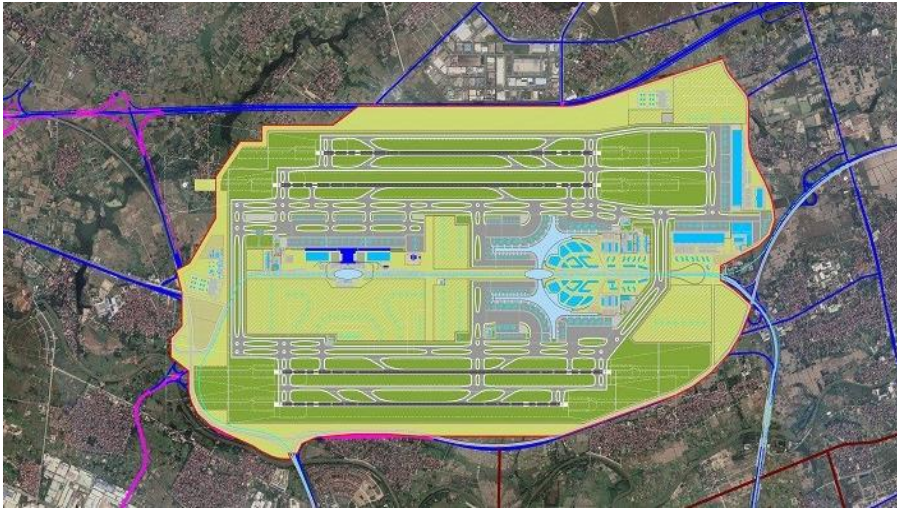


HCMC – Can Tho Railway



Thu Thiem – Long Thanh Railway

# AVIATION SUB-SECTOR



Noi Bai International Airport



Tan Son Nhat International Airport

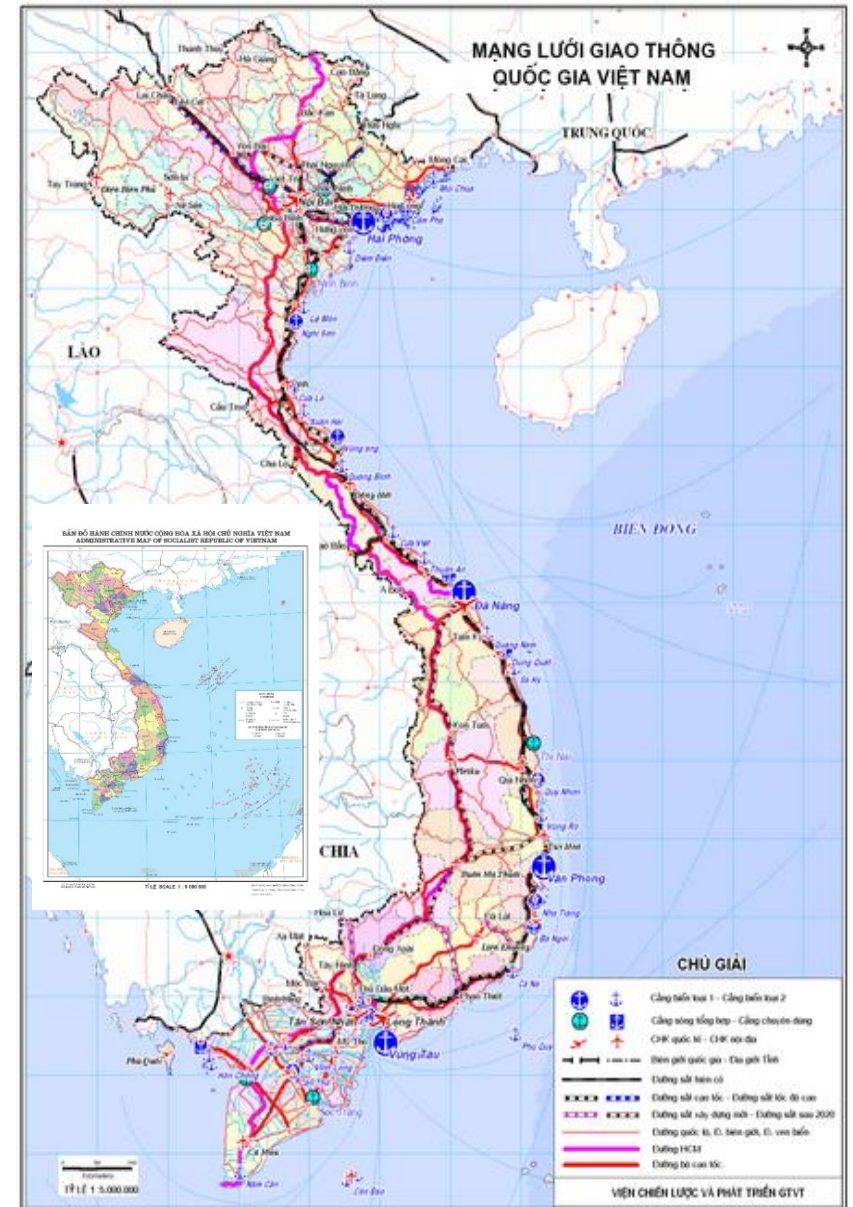


Long Thanh International Airport



3

# ORIENTATIONS & SOLUTIONS FOR SUSTAINABLE TRANSPORTATION INFRASTRUCTURE



# ORIENTATIONS FOR SUSTAINABLE DEVELOPMENT



Prioritize public investment in transport infrastructure networks that are inter-regional, inter-provincial and connect national dynamic regions and economic corridors; Invest in projects with high impact, solving essential needs and bottlenecks of the region, bringing high economic and social efficiency to the entire region.



Planning and developing transport infrastructure in harmonize with natural conditions, adapts to climate change and is suitable to the characteristics of each region in the country.



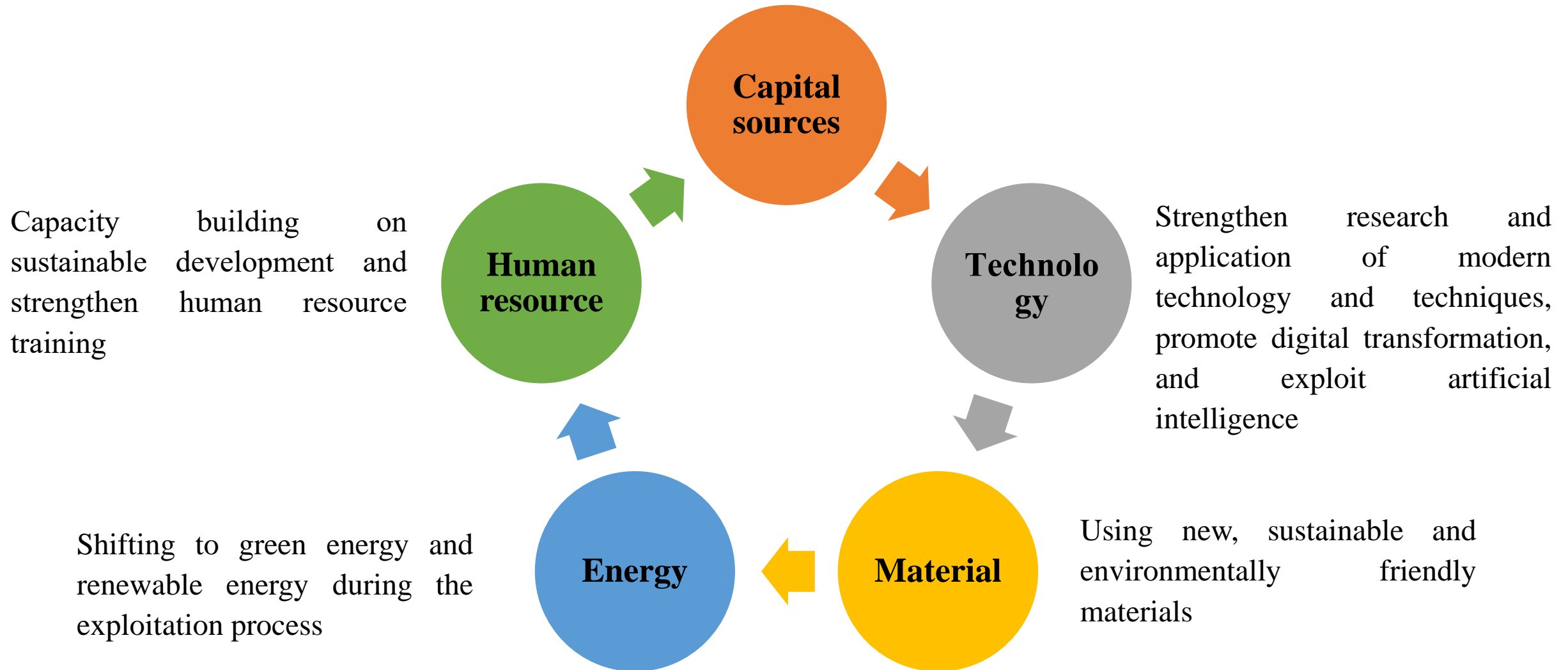
Develop and promulgate policy mechanisms to encourage investment, support investors, develop and exploit transportation infrastructure in a smart, green and clean direction to meet the requirements of sustainable development , protecting the environment and ecosystem, responding to climate change.



Apply advanced technologies, reduce greenhouse gas emissions according to a roadmap consistent with Decision No. 876/QĐ-TTg dated July 22, 2022 of the Prime Minister.

# ORIENTATIONS FOR SUSTAINABLE DEVELOPMENT

Balancing and properly allocating capital sources  
for transport infrastructure maintenance





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**THANK YOU  
FOR YOUR ATTENTION!**

