



THE MINISTERIAL CONFERENCE ON
GLOBAL ENVIRONMENT AND
ENERGY IN TRANSPORT

Climate Change and Air Pollution in the Transport Sector: Measures and Messages of Japan

Ministry of Land, Infrastructure, Transport and Tourism

Government of Japan

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Ministry of Land, Infrastructure, Transport and Tourism

- 1. An Approach to Addressing Climate Change in the Transport Sector**
- 2. CO₂ Emissions, Measures and Best Practices in Japan**
- 3. Japan's Proposal for Supporting Efforts of Developing Countries**

1. An Approach to Addressing Climate Change in the Transport Sector

● Transport

- Foundation of economic development & major source of CO₂ emissions
- CO₂ emission reduction measures:
also effective as well for air pollution mitigation, congestion reduction, energy savings, etc.

● Share Long-term Global Vision

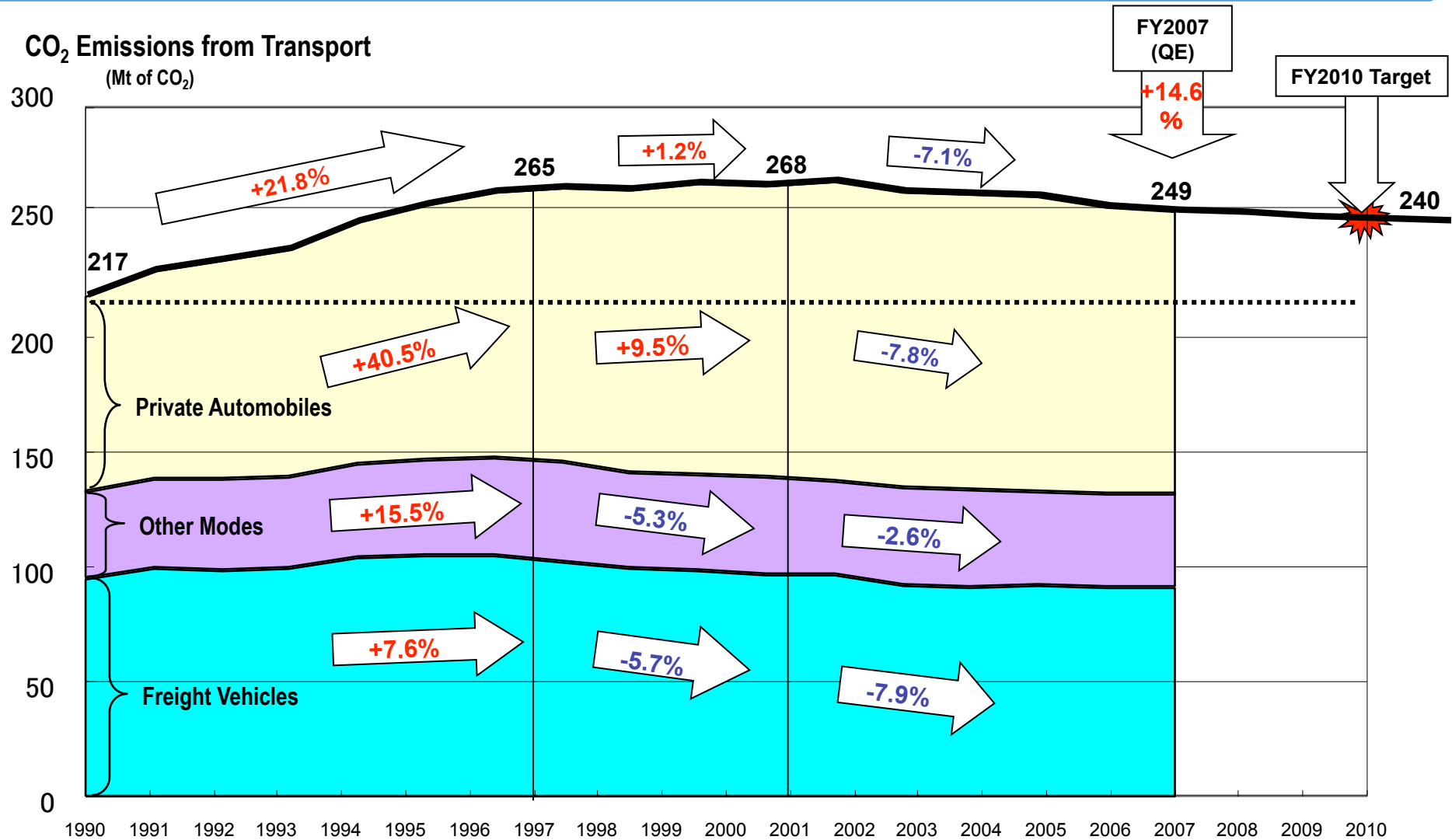
- **Realizing low-carbon & low-pollution transport systems**

● New Development Path for All Countries

- Leading efforts by developed countries
- Promotion efforts by developing countries & support for them

2-1. CO₂ Emissions in Japan's Transport Sector

- CO₂ emissions from transport have been decreasing after peaking in FY2001.
- Freight vehicles: Decreasing from FY1996; Private automobiles: Decreasing from FY2001.



* "Other Modes" includes emissions from buses, taxis, railways, ships and aircraft.

2-2. Measures & Best Practices in Japan

I. Formulation of Action Plan

- Government-wide & transport-specific action plans

II. System of Measures

- Measures for environmentally friendly vehicles
Top-runner approach for fuel efficiency regulations & promotion of low-pollution & energy efficient vehicles
- Traffic flow management
Promotion of Intelligent Transport Systems (ITS)
- Measures for more efficient logistics
- Measures to promote public transport etc.
Development of railway networks

(1) Measures for Environmentally Friendly Vehicles

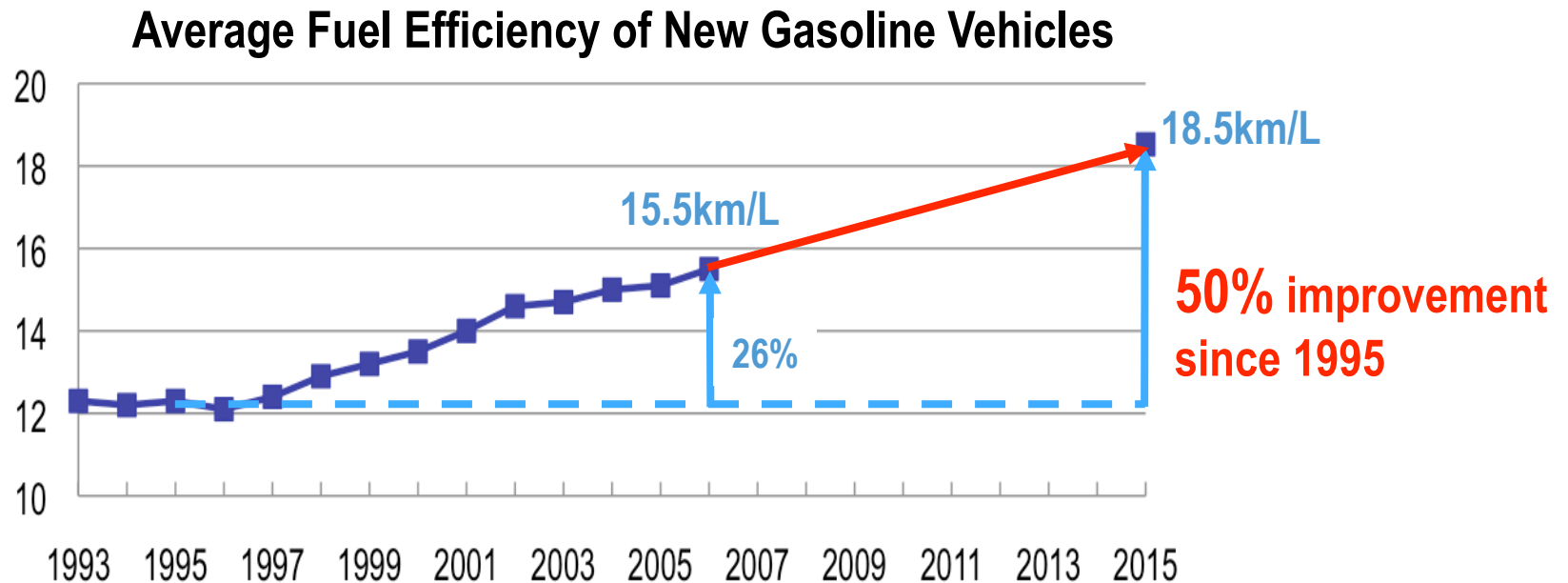
Top-runner Approach for Fuel efficiency Regulations

- **Top-runner Approach**: Setting standards higher than the performance of the best vehicles available in the market, taking technological improvements into account.
- Japan introduced a **Top-runner Approach** for fuel efficiency standards in 1999.

(1) Measures for Environmentally Friendly Vehicles

Top-runner Approach for Fuel efficiency Regulations

- **Current fuel efficiency standards (Target year: 2015)**
 - **March 2006: World's first standards for heavy-duty vehicles (trucks, buses etc.)**
 - **July 2007: Stricter standards for light-duty vehicles**



(1) Measures for Environmentally Friendly Vehicles

Promotion of Low-pollution & Energy-efficient Vehicles

- Subsidies for introduction of commercial vehicles such as CNG, hybrid & electric powered trucks, buses & taxis;
- Automobile Green Tax Scheme: tax breaks for the introduction of low-pollution & energy efficient vehicles.



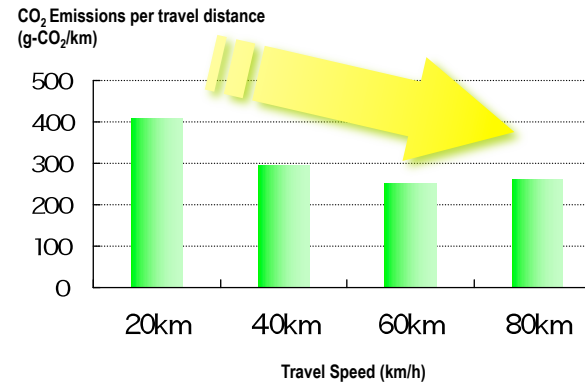
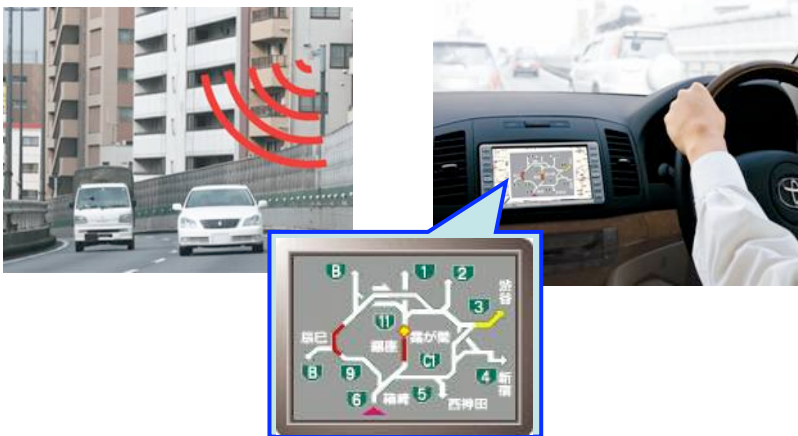
(2) Promotion of Intelligent Transport Systems (ITS)

■ **VICS**: Provides road traffic information in real time, realizing smooth traffic & higher travel speed, resulting in the improvement of actual fuel efficiency:

→ Reduce CO₂ emissions by 2.4 Mt in 2010.

VICS

(Vehicle Information and Communication System)



In 2010
Reduction of
2.4Mt-CO₂

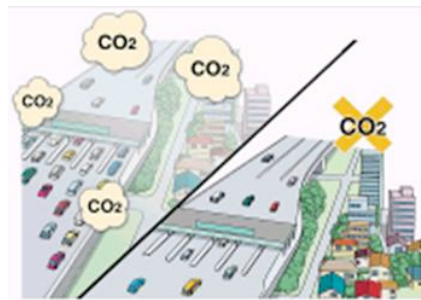
(2) Promotion of Intelligent Transport Systems (ITS)

■ **ETC**: Enables non-stop, cashless toll collection at expressway tollbooths, whose capacity shortage causes about a third of traffic jams on expressways:

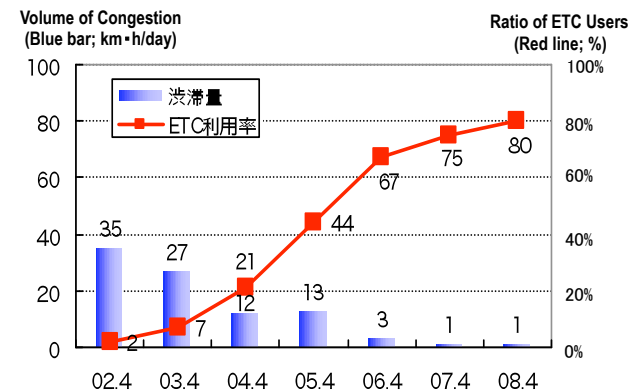
→ Reduce CO₂ emissions by 0.2 Mt in 2010.

ETC

(Electronic Toll Collection System)



ETC Decreases Volume of Congestion:
(18 Tollbooths of the Metropolitan Expressways)



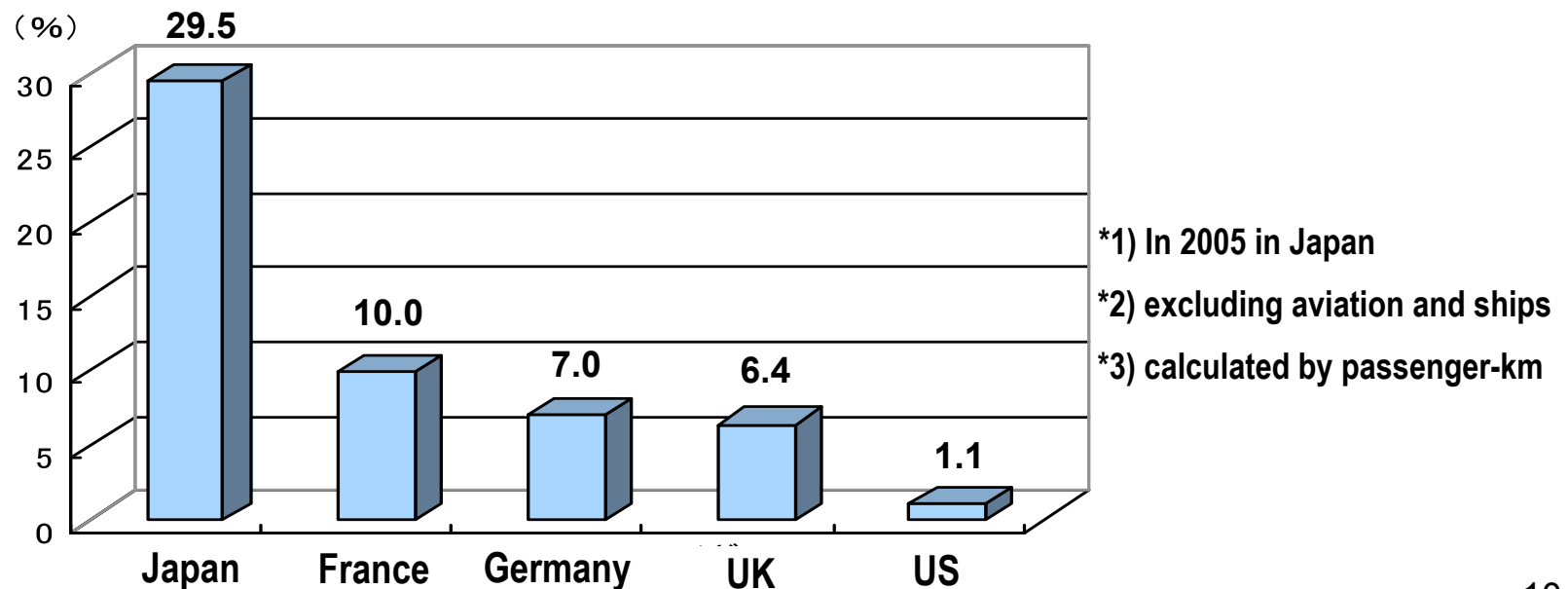
In 2010

Reduction of
0.2Mt-CO₂

(3) Development of Railway Networks

- Railways as environmentally friendly mode of transport:
CO₂ emissions per unit of transport in Japan
→ Passenger: 1/9 of personal automobiles; Freight: 1/7 of trucks
- Railways in Japan: **Punctual, densely networked & reliable**
- Share of passenger transport by rail: National 30%

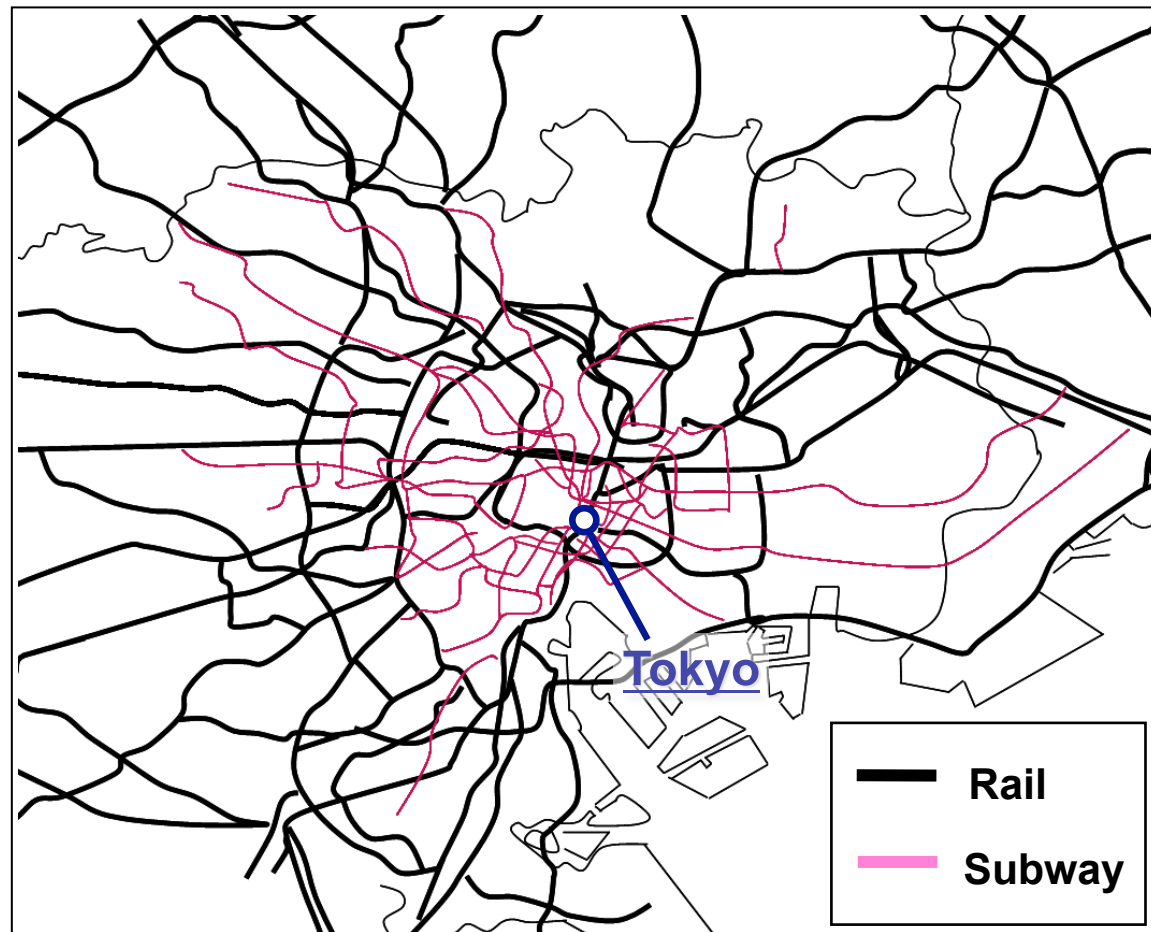
○ Share of Passenger Transport by Rail (in 2004)



(3) Development of Railway Networks

■ **Tokyo**: Share of passengers who traveled by rail **76%** (in 2005)

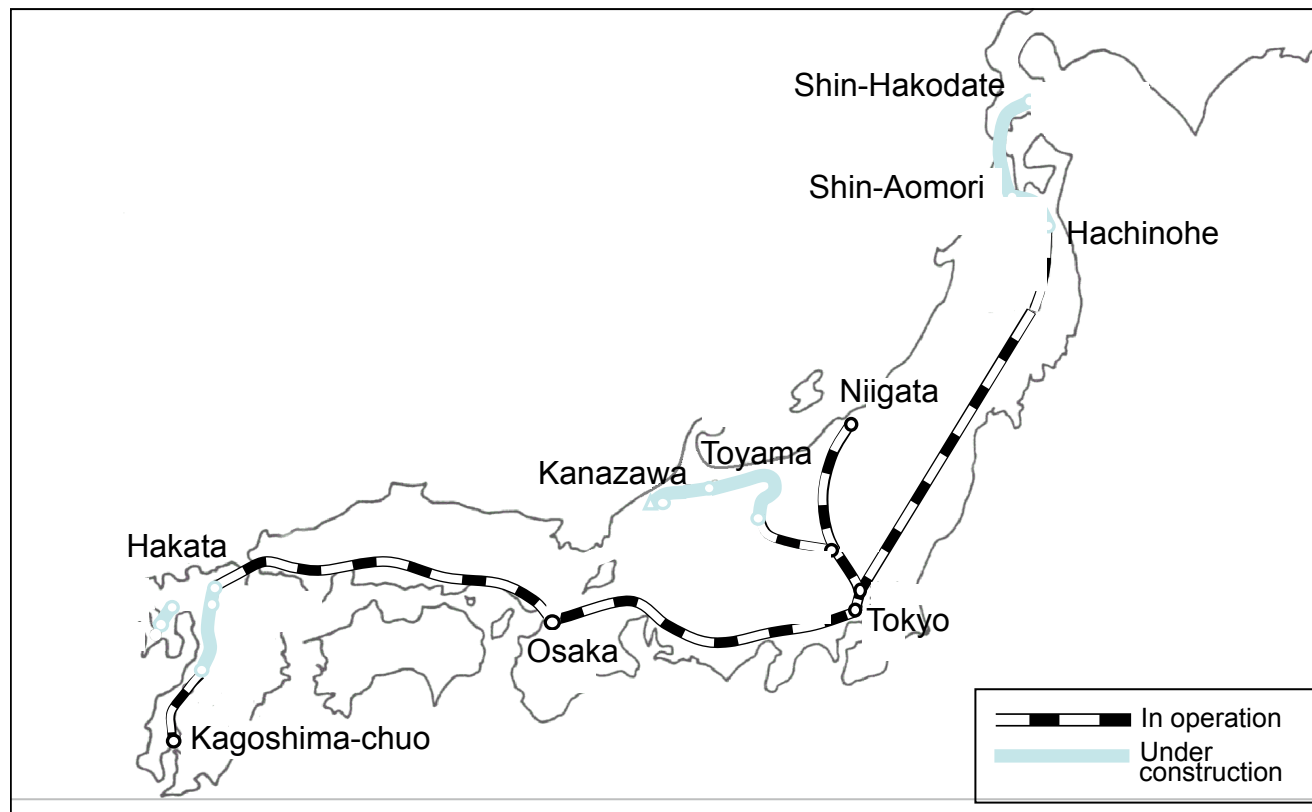
○ Railway Networks in Tokyo Metropolitan district



(3) Development of Railway Networks

■ Inter-urban railways: Outstandingly reliable Shinkansen network

○ Shinkansen Network in Japan



3. Japan's Proposal for Supporting Efforts of Developing Countries (1)

- **Systematic/well-organized Transport Measures**
 - Japan: Government-wide/transport-specific action plans
- **Multifaceted, Coordinated Support for Efforts by Developing Countries**
 - Support from developed countries
 - Utilization of Climate Investment Funds, etc.
- **Japan will Provide Support for:**
 - Formulation of action plans (e.g. ASEAN-Japan Environmental Action Plan)
 - Implementation of measures based on the action plans such as
 - Measures for automobiles (incl. fuel efficiency)
 - Measures for promotion of public transport & low-carbon logistics
 - Development of statistical data needed for policymaking & financing etc.

3. Japan's Proposal for Supporting Efforts of Developing Countries (2)

■ MEET Leading to Continue Dialogue among Countries and Organizations

→ As part of such dialogue,
Japan prepared to host a follow-up meeting
of senior-level officials this year