

Green Transport Strategy in Korea

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Ministry of Land, Transport and Maritime Affairs

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I . Background

**The 2nd biggest National energy consumer,
the biggest growth in GHG emissions**

➔ Need to reduce the figures to meet the greenhouse gas reduction target

- **Domestic energy consumption**
: industries(57%), transport(21%), households and retail stores(20%)
- **Greenhouse gas emissions of the transport sector**
: an average of 5% growth annually (1990~2007)

Korea's diverse efforts, somewhat insufficient

- **Enactment of 'Sustainable Transport and Logistics Development Act' (June 2009)**
- **But Korea's transport system mainly consists of roads and cars, which emit a lot of greenhouse gas emissions.**



**The whole transport system has to be transformed
to adjust to the low-carbon society**

II . Current Status of Korea's Transport System

Less energy-efficient transport system based on roads and cars

- Road transport carries 82 % and 73 % of passenger and freight traffic
- Road transport consumes 11 times more energy than railway



Continued rise of the number of cars that emit most of the GHG emissions

- Cars account for 94 % of carbon emissions of the transport sector
- Number of cars is expected to rise continuously ('09) 17.3 million → ('20) 21.9 million

Insufficient Investment Modal Split of Public Transport on the Decrease

- Roads and railway account for 50 % and 23 % of investment in the transport sector over the past 5 years.



Paradigm Shift to Green Transport

- Energy-intensive transport system based on roads and cars



- Human-friendly green transport system based on railway, ships and green cars



- Quantitative expansion
Focused on the expansion of facilities



- Improvement of connection between modes of transport, operational efficiency (Intermodalism)



Investment Strategy

- Increasing railway investment significantly
- Restricting new road investment and focusing on improving operational efficiency
- Reflecting green values on project feasibility studies

III . Green Transport Strategy

Vision

Realization of human - friendly, low - carbon, green transport focused on railway, ships and green cars

Goal

**Reduction of greenhouse gas emissions in the transport sector
By 34.3 % from the BAU by 2020**

BAU : Business as Usual

Five Major tasks

- 1. Traffic demand management policy**
- 2. Promotion of Eco-Bike and walking**
- 3. More safe and fast mass transit over cars**
- 4. Building rail and shipping oriented green logistics**
- 5. Development and promotion of green transport technology**

1. Traffic Demand Management Policy

Enhance Traffic Demand Management

Expand
Congestion charge

Introduce
Car-sharing

promote
Eco-driving

IT-based
Remote Working

Establish Low-carbon Smart Transport System

- **Use ITS for road**
- **Encourage hi-pass use**
- **Establish Intergrated transport Information center**

Create Green Transport Zone

Green Transport
Zone

Traffic Volume Cap
system by region

Public transport-
focused urban
development

2. Promotion of Eco-Bike and Walking

Strengthen Mass Transit and Bike / Build a safe bike path network

- Gradual Expansion of taking Bicycle on Train and Bus
- Build more bike parking lots on train and bus stations
- Build Daily safe bike path network

Improve pedestrian-oriented walking environment

- Gradually expand 「Pedestrian Priority Zones」, 「mass transit only districts」
- Designate “Day of Pedestrians” to promote pedestrian oriented transport culture

3. More safe and fast mass transit over cars

Secure bus service competitiveness

- Spread the use of M-Bus into Seoul Metropolitan Area (SMA)
- Build a bus transfer system in service areas on expressways
- Expand the use of BRT into the whole SMA and major cities



Expand urban and metropolitan rail service

- Expand a rail network in major cities now 830km to 1,054km by 2012



Create a national high speed rail network

- Early complete the construction of the 2nd phase of Honam High Speed Railway(HSR) by 2014
- Speed up existing railways or railways under construction



4. Building rail and shipping oriented green logistics system

Modal Shift toward Green Transport

- Provide subsidy to rail and coastal shipping transferred from road transport



Promote coastal shipping

- Provide financing with guarantee from Korea Credit Guarantee Fund in coastal ship building
- Constantly reduce rent fee of port facilities



Establish low carbon green logistics system

- Reorganize the sectoral logistics system for Door-to-Door
- Identify and spread exemplary cases of CO₂ reduction with Green Logistics Certification System
- Establish low carbon green ports



5. Development and Promotion of Green Transport Technology

Development and promotion of green cars

- **Support development of core technologies such as batteries**
- **Support standardization excellent technologies and parts**
- **Build more charging facilities, complement safety standards**
- **Purchasing incentives such as tax exemption will be provided to ordinary consumers**

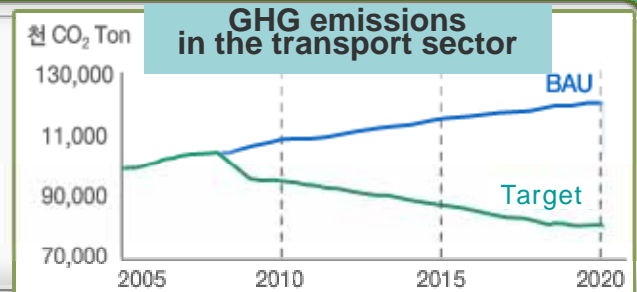
Develop cutting-edge green transport mode

- **Develop next generation high speed rail development, urban type maglev train and Bimodal Tram**

IV. Expected Effects (as of 2020)

CO₂ reduction

- 20~24% reduction compared to 2005
- 34.3% reduction against BAU by 2020



Energy import substitution

- around \$ 6 billion annually



Social cost reduction

- around \$ 22 billion annually



Job creation

- around 2.3 million (2010~2020)



Thank You

Transport will lead low carbon green growth

