

Promotion of Fuel Efficient Vehicles in Korea

March 17, 2010


Ministry of Knowledge Economy

Contents

- I*** Energy Consumption in Korea
- II*** Fuel Economy and Energy Efficiency Labeling Program
- III*** Average Fuel Economy Program
- IV*** Additional Policies for Energy Efficiency

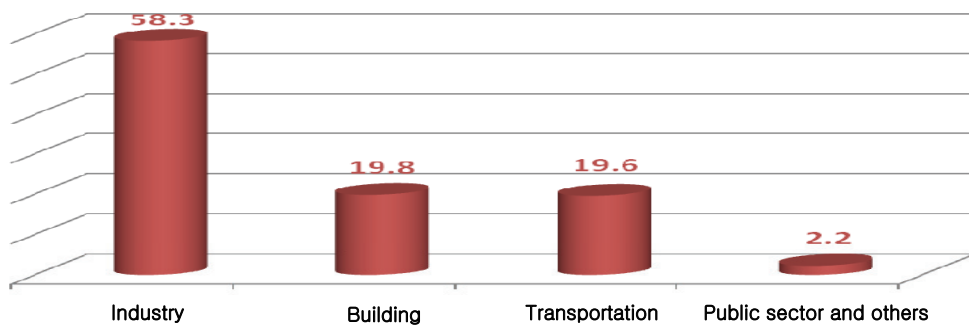


Energy Consumption in Korea

Energy Consumption in Korea

1) Total Consumption

- Korea is world's 9th energy consuming economy (240,752 Thousand TOE, 2008)
 - Persistent increase due to industrial production and economic activities
 - Poor energy independence (3.7%)
- Industrial sector dominates energy consumption



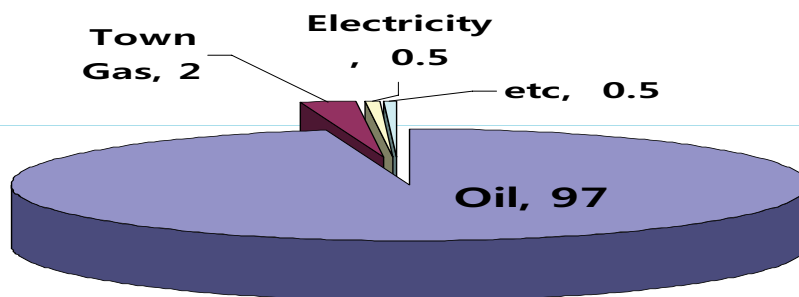
<Energy consumption, 2009 (%)>

※ Source : Korea Energy Economics Institute

Energy Consumption in Korea

2) Transportation

- Accounts for 19.6percent of final energy consumption in 2009
 - average growth rate ('90~'00) : 8.1%
 - average growth rate ('00~'08) : 1.7%
- More than 97percent of the fuel is oil



<Fuel for transportation(%)>

※Source : Korea Energy Economics Institute

Indications of Fuel Efficiency

- Low fuel economy
 - passenger car fuel economy 11.04('07)→11.47km/ℓ ('08)
 - Japan 15.5('06)→15.7km/ℓ ('07)
- Increase in share of large-sized cars
 - vehicle registraion(2008) : no exceeding 1,500cc cars 3.2%
 - over 1,500cc cars 6.9%
- Less interest in Eco driving
 - automatic transmission 96.2 %

Needs higher fuel efficiency standards &
Change of consumer preference and behaviors



Fuel Economy and Energy Efficiency Labeling Program

Fuel Economy and Energy Efficiency Labeling Program

1) Introduction

- Korea government introduced the fuel economy labeling program since 1989
 - to provide consumers with fuel efficiency information for their choices
 - to encourage automobile manufactures to spur the technological investment
- Rational Energy Utilization Act
- Regulation on Energy Efficiency Labeling and Standards
- (Notice of Minister of Knowledge Economy)

2) Fuel Economy and Grade

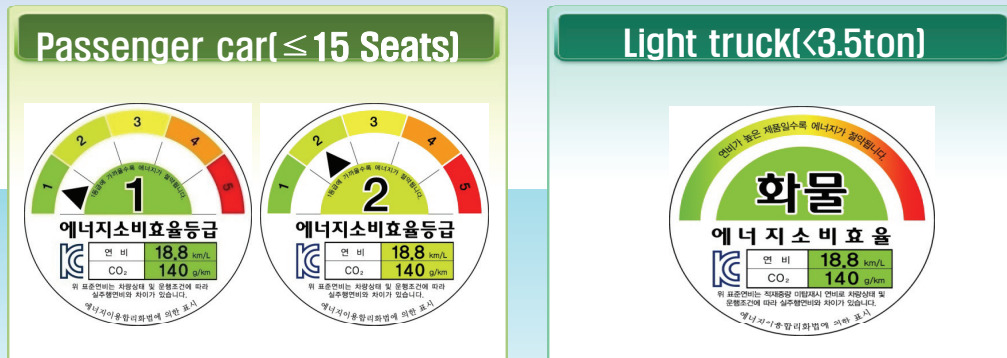
- According to its fuel economy, every single vehicle is required to designate its energy efficiency into five grades

| Grade | 1 | 2 | 3 | 4 | 5 |
|--------------------|---------|-----------|-----------|----------|----------|
| Fuel Economy(km/L) | above15 | 14.9~12.8 | 12.7~10.6 | 10.5~8.4 | under8.3 |

Fuel Economy and Energy Efficiency Labeling Program

3) Labeling

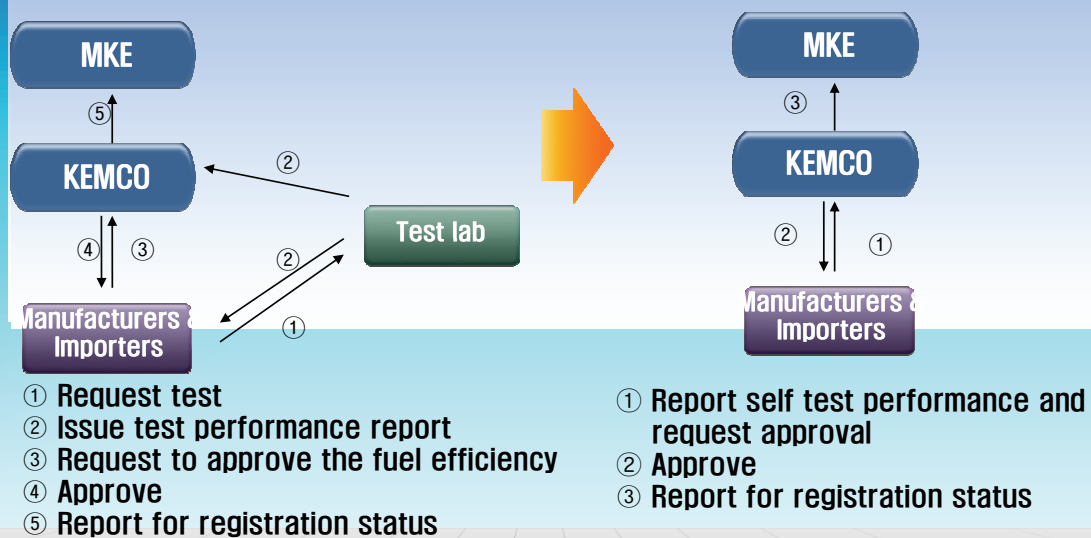
- Fuel economy and energy efficiency grade need to be appeared on the window stickers of all new cars and light trucks by the law



The label also provide carbon dioxide emission information since 2008

Fuel Economy and Energy Efficiency Labeling Program

4) Administrative procedure



Manufacturers can choose one of the procedures

※ MKE : Ministry of Knowledge Economy
 KEMCO : Korea Energy Management Corporation



Average Fuel Economy Program

Average Fuel Economy(AFE) Program

1) Introduction

- Korean government introduced mandatory AFE program in 2006
 - Automobile manufacturers and Importers need comply with AFE standards
- Rational Energy Utilization Act
 - Regulation on Energy Efficiency Labeling and Standards
 - (Notice of minister of Knowledge Economy)

2) Target Vehicles

- Passenger car not exceeding ten passenger seats including the driver

Average Fuel Economy(AFE) Program

3) Standards and Administrative Measures

- AFE is the sales-weighted average fuel economy of a manufacturer for the vehicles sold in Korea for a given model year

<AFE Standard>

| | | |
|---------------|-------------------------|---------|
| Below 1,600cc | 12.4km/l, Above 1,600cc | 9.6km/l |
|---------------|-------------------------|---------|

- A manufacturer can earn credit when its AFE exceeds the standards
 - Those credits can be transferred to the other group to meet the standard within a manufacturer
- Government can issue a corrective order a manufacturer to improve its fuel economy

Average Fuel Economy(AFE) Program

4) New AFE standards

- Korean government will apply a new AFE standards from the model year 2012

| | |
|----------------|---|
| present(~2011) | Under 1,600cc : 12.4km/l, above : 1,600cc 9.6km/l |
|----------------|---|

(2012~)

Fuel economy : above 17km/l,
CO2 emission : under 140g/km

New standard will come with various flexibility program

- * Phase-in approach : 30%('12) → 60%('13) → 80%('14) → 100%('15)
- * Adoption of a new test methodology
- * Credit carry-forward



Additional policies for Energy Efficiency

Additional Policies for Energy Efficiency

1) Incentives for Small-sized Vehicles

- Korean government provide various incentives for the consumers who buy the small-sized cars
 - * Acquisition and registration tax exemption
 - * Half discount for toll roads and public parking lot
- Below 800cc (L x W x H : 350 x 150 x 200 cm)
 - below 1,000cc (L x W x H : 360 x 160 x 200 cm) from 2008

2) Passenger and Freight Transports

- Designs a voluntary agreement with the transports
- Modal shift program

3) Ecodriving Practice

- Ecodriving school (driver' s license)
- Installation of ecodriving package

