

# **Proposal for the Establishment of an APP Road Transport Task Force**

## **1. Need for a Road Transport Task Force**

Energy, information, and mobility are the three basic factors underpinning societal welfare and advancement. Mobility, for the greater part, signifies road transport mobility, the demand for which is projected to surge sharply with continuing economic growth in the developing nations of the world. The road transport sector is, meanwhile, faced with three major challenges: improving air quality, securing the supply of alternative energy resources, and reducing CO<sub>2</sub> emissions.

The participation of road transport sector activities in the seven APP-participating countries will expand the coverage of CO<sub>2</sub> emissions under the APP framework from the current 60% to 80%. With the steel, cement and electrical power sectors yielding steady results under this framework, the addition of the road transport sector will thus enhance the effectiveness of APP. It should be noted here that APP has acknowledged from the very start, as stated in its vision statement, the importance of the road transport sector in reducing total CO<sub>2</sub> emissions.

## **2. Purpose of the Proposed Task Force**

In road transport sector, CO<sub>2</sub> emission reduction measures are simultaneously addressing the three aforementioned challenges. The distinguishing feature of such CO<sub>2</sub> emission reduction measures is that “integrated approach\*\*” is indispensable, in which not only automobile manufacturers and government but also all the relevant stakeholders have to fulfill their individual responsibilities in a framework of mutual cooperation.

Towards those ends, government and industry representatives should come together and launch the Road Transport Task Force under APP to promote the integrated approach which realizes the diversified and affluent mobile society, healthy development of automobile industry, and improvement of the three challenges at the same time. As a first step, we should start compiling of statistical data, sharing of best practices and performance indicators, and so on..

**“Integrated Approach” Objectives:**

- 1) improvement of vehicle fuel efficiency**
- 2) Diversification of automotive fuels (e.g. promotion of clean energy, namely low-carbon fuels)**
- 3) Improvement of traffic flow**
- 4) Effective utilization of motor vehicles**

**\*The cross-cutting issues can be addressed by the joint effort.**

**3. Action Plan (examples of immediate projects)**

- 1) Compiling of statistical data to develop performance indicators**
- 2) Sharing of best practices and performance indicators**
- 3) Survey of penetration of best practices, where applicable**

## **Appendix:**

### **[ Examples of specific projects]**

#### **1) For Improvement of Fuel Efficiency**

**Support the Introduction of measures to increase fuel efficiency adjusted to local conditions in countries that as yet have no such fuel efficiency standards.**

**(1) Data compilation: Fuel efficiency performance values of new vehicles**

**(2) Performance indicator: CO<sub>2</sub> emissions coefficient (km/L or mpg)**

**(3) Survey of penetration of best practices: Analysis of Fuel efficiency performance of new vehicles**

**(4) Formulation of candidate projects and assessment of CO<sub>2</sub> reduction potential:**

**Candidate projects—Trial introduction of measures to increase fuel efficiency in countries that do not as yet have fuel efficiency standards.**

**(5) Project selection and implementation: Carried out by the participating countries.**

#### **2) For the Promotion of Low-Carbon Fuels**

**The widespread use of biofuels and other low-carbon energy sources is encouraged to increase vehicle fuel efficiency.**

**(1) Data compilation: Data on the production/market sales volumes of biofuels**

**(2) Performance indicator: CO<sub>2</sub> emissions coefficient (g/MJ)**

**(3) Survey of penetration Promotion of best practices: Diffusion rate Introduction of biofuels**

**(4) Formulation of candidate projects and assessment of CO<sub>2</sub> reduction potential:**

**Candidate projects—Development of a biofuel supply infrastructure; Introduction of a test method**

**CO<sub>2</sub> reduction volume = Fuel consumption volume x CO<sub>2</sub> emissions coefficient [(non-biofuel) - (biofuel)]**

**(5) Project selection and implementation: Carried out by the participating countries.**

#### **3) For Improved Traffic Flow**

**Improved traffic flow through road network upgrades (infrastructure**

improvements) enables increased vehicle running speed and increased fuel efficiency, which in turn contributes to CO<sub>2</sub> reduction.

(1) Data compilation: Data on average vehicle speed and traffic volumes

(2) Performance indicator: Average vehicle speed (km/h)

(3) Survey Promotion of penetration of best practices: Availability Construction of bypass roads

(4) Formulation of candidate projects and assessment of CO<sub>2</sub> reduction potential:

Candidate projects--

i) Feasibility study and implementation of bypass road construction

ii) Development of Intelligent Transport Systems (ITS)

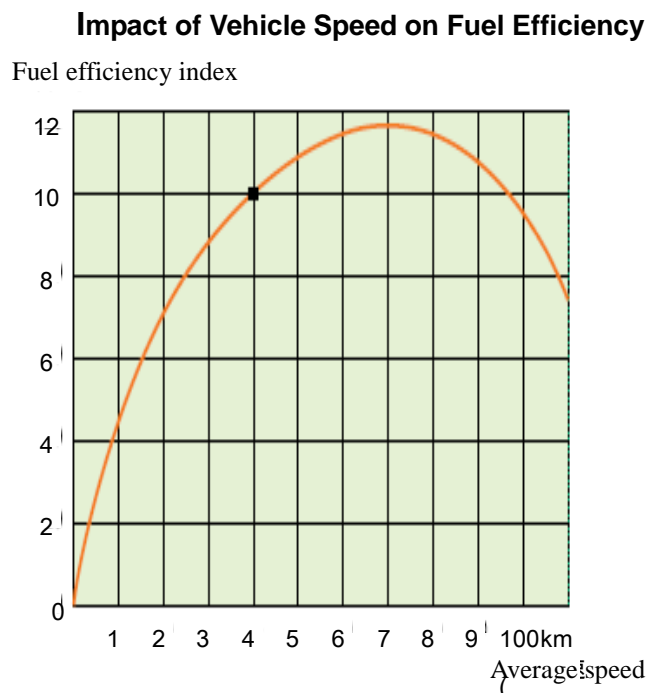
-Onboard inter-vehicle distance monitoring

-Advanced traffic signal systems using data obtained from road traffic monitoring sensors

CO<sub>2</sub> reduction volume = Average speed gain x Fuel efficiency improvement coefficient\*\* x Traffic volume

(e) Project selection and implementation: Carried out by the participating countries.

\*\*Fuel efficiency improvement coefficient: See chart below.



\*Fuel efficiency performance at 40 km/h indexed as 10

Source: Japan Automobile Research Institute