

Low Environmental Impact Transportation Systems

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Our Goals

- Realize low environmental impact transportation systems to address the issue of CO₂ emissions that accounts for the largest proportion of world CO₂ emissions.
- Realize the transportation systems that harmonize the global systems centered around public transportations and the local systems that respond to local needs.
- Expected Achievements:
 - Cut the world CO₂ Emissions by 20%.
 - Minimize Transportation Energy Consumption.
 - Lower the Cost to Cope with Climate Change and Environmental Pollution.
 - Create a Market for Low Environmental Impact Vehicles.

International Scheme

We propose the formation of the following *Ba* (Interaction Field among key players) to promote R&D on CO₂ reduction and the diffusion of low environmental impact technologies to:

- Examine the grand design for global transportation systems.
- Support the framework facilitating international monitoring, collection and dissemination of environmental and traffic data.
- Review the roles of industry, academia and government in research, development and commercialization of key technologies.

Time Schedule

- Step 1. Propose a draft of the grand design for new transportation systems that take it into account national and urban development plans by 2015.
- Step 2. Finalize the grand design that reflects the trial results at model systems by 2025.
- Step 3. Introduce the new transportation systems in special experimental zones around the world by 2030.
- Step 4. Achieve the world-wide adoption of the new transportation systems by 2050.

Key Technologies

■ Electric Vehicle

- Rechargeable Battery Technology
- Electric Power Supply Technology
- Motor Technology
- Lightweight Materials Technologies

■ Fuel Cell Vehicle

- Fuel Cell Technology
- Hydrogen Transportation and Storage Technology

■ Transportation System Technologies

- Broad range of technologies such as traffic flow management system, wireless communication system, high-precision global positioning system, sensors and image processing technologies, etc.