

## **Jiro Hanyu:**

Good afternoon, ladies and gentlemen. As the host of this conference, I'd like to welcome all of you to this conference on The Development and Dissemination of Environmentally Friendly Vehicles. I would also like to express my deepest gratitude and respect toward all the keynote speakers and the panelists who are participating in this conference.

They are Dr. Alan C. Lloyd, chairman of the California Air Resources Board; Mr. Gregory Dana, vice president, environmental affairs, Alliance of Automobile Manufacturers; Mr. Kanji Nakayama, director general, Engineering and Safety Department, Ministry of Transport of Japan; Mr. Kenji Nagamatsu, senior representative, Japan International Transport Institute; Ms. Margo Oge, director, Office of Transportation and Air Quality, Environmental Protection Agency of the United States; Dr. Yasuhiro Daisho, professor, School of Engineering, Waseda University of Japan; Dr. Yoshio Kimura, senior staff engineer, Toyota Motor Corporation, also chairman of the Committee for Electric Propulsion Vehicle, Japan Automobile Manufacturers Association.

At this time, I would like to sincerely thank the major American and the Japanese automobile makers, namely Daimler Chrysler, Ford, General Motors, Honda,

Nissan and Toyota for their kind cooperation in exhibiting the latest environmentally friendly vehicles.

Now, please allow me to speak briefly regarding the problems of holding this seminar. As you know, automobile manufacturing technology has improved dramatically in various aspects in the past century. A succession of technological innovations have been achieved by the end of the 1980s, such as the establishment of mass production technology that enabled the cost reduction and quality control; the improvement in automobile performance in terms of speed and maneuverability; and the development of safety technology for accident prevention. However, recently since the 1990s, development of the new technology for manufacturing environmentally friendly vehicles, and in particular while eliminating toxic emissions from vehicles and the reductions of carbon dioxide, have seen rapid advances.

Reflecting these technological achievements, the rest of the emission reductions are being implemented or examined in Japan, the United States and Europe according to highly similar policies and issues. The reduction of the carbon dioxide, not strong regulatory instruments but standards and various incentives provided by the national and local governments, have brought significant improvement in fuel performance.

For instance, in Japan a number of the new types of vehicles, which have already obtained the fuel consumption standards for 2010, have been produced since the year 2000. And certain vehicles are even becoming popularized.

Furthermore, fuel cell technology has come on the scene as the most environmentally friendly and innovative technology, heralding the arrival of hydrogen energy-based society. As you know, the investment is being made all across the world with the aim of bringing about the development and commercialization of fuel cell vehicles.

I would say all these facts clearly suggest that it is crucially necessary to achieve the development and mass production of environmentally friendly vehicles for the future advancement of the automobile industry. For this reason, we have decided to hold this conference inviting experts of worldwide fame from governments, universities and automobile industries. These experts, who have great knowledge and experience concerning the environmental problems of automobiles, will discuss the future directions of the environmentally friendly vehicles. Not at the very near future, not of 5-10 years, but that in the distant future, 20 years or more from now.

Frankly speaking, I myself am highly interested in which of the three possible scenarios will be followed by fuel cells vehicles. First scenario is that by around 2020, fuel cell vehicles will become popularized in place of internal combustion vehicles.

Second scenario is that improve the versions of existing environmentally friendly vehicles, such as hybrid cars will take a leading role by around 2020 with the prevalence of fuel cell vehicles to come after 2020, such as 2030 or 2040.

The third is that due to the difficulty in solving technical and economical problems, the diffusion of fuel cell vehicles also cannot be expected until the even more distant future, such as 2050 or even later.

In this conference, we are very fortunate to be able to hear the discussion of the leading experts from Japan and the United States on these issues and others. It is my belief that these discussions will not only stimulate our intellectual curiosity but also will be highly beneficial to all of us in considering air pollution programs and environmental programs in the future.

I trust you will find the discussions you will hear in this conference both enjoyable and informative. And I am very pleased to exchange opinions with the keynote speakers and panelists at the subsequent reception.

Lastly, I'd like to state that we have received the full support for forwarding this seminar from The Nippon Foundation, which is renowned worldwide for supporting activities of public interest. I'd like to express my gratitude and respect for their support.

Thank you for your kind attention.