MINISTERIAL PRESENTATION AT IPHE MEETING

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(Introduction)

Good morning ladies and gentlemen. On behalf of Minister of Economy, Trade and Industry Shouichi Nakagawa, who cannot attend this meeting due to a Special Diet session to nominate the prime minister and ministers following last week's general election, I have the honour of presenting Japan's activities on the development of fuel cell and hydrogen technologies.

(Japan's situation)

I would first like to mention why Japan is interested in fuel cells and hydrogen. Being poor in natural resources and depending heavily on other countries for energy, Japan is extremely vulnerable to supply interruptions and price fluctuations. Future increases in population and economic growth in developing countries will intensify the worldwide demand for oil, indicating that exhaustion of petroleum resources is a potentially realistic problem. In view of such a situation, one of the major tasks of Japan's energy policy is to secure a stable energy supply.

Another important issue that we must consider is environmental affairs. Climate change is a global problem and therefore Japan has been endeavouring to achieve her commitment set forth in the Kyoto Protocol. Since CO_2 emission from energy usage accounts for about 90% of greenhouse gases, compliance with the Kyoto Protocol is another important task of our energy policy.

Moreover, fuel cells and hydrogen are key technologies that are expected to contribute to stimulation of the economy and creation of new industries. Therefore,

we believe that development of fuel cell and hydrogen technologies will strengthen our economic and industrial base.

(Koizumi initiative)

Two years ago, Prime Minister Koizumi attended a demonstration of fuel cell vehicles held in Japan. Since then, activities relating to fuel cells and hydrogen have been accelerated by the Prime Minister's initiative.

In December 2002, Japanese auto manufacturers launched the first commercial fuel cell vehicles on the market and the Japanese government adopted five fuel cell vehicles for official use. The delivery ceremony for the fuel cell vehicles was held at the Prime Minister’s official residence with Prime Minister Koizumi in attendance. In order to support “refuelling” of the fuel cell vehicles, METI has installed a mobile hydrogen station in its courtyard.

(Goals and policies)

With the aim of attaining cost and performance competitive with those of conventional energy sources soon after 2010, we have been strategically conducting various policy measures such as technological development and demonstration tests of fuel cells.

However, since there are various issues in addition to cost competitiveness to be solved before the use of fuel cells can become widespread, it is our desire to realise commercialisation of fuel cells through cooperation with other countries.

(Demonstration project: JHFC)

Please allow me now to introduce some of Japan’s major activities relating to fuel cells. Concerning fuel cell vehicles, a demonstration project started last year presently involves 34 fuel cell vehicles, manufactured by domestic and overseas auto manufacturers, operating on public roads in Japan.

Moreover, we plan to build ten hydrogen stations in the Tokyo-Kanagawa area;

seven stations are already in operation. At these hydrogen stations, we obtain hydrogen from different means to deepen our technology options. We will strategically construct a hydrogen infrastructure in the future by measuring the total energy efficiency from hydrogen production to fuel cell vehicle operation, the so-called Well-to-Wheel efficiency, in this demonstration project.

(Stationary Fuel Cell Demonstration)

Japan has also been actively developing stationary fuel cells that supply electricity and hot water to residences and office buildings.

In the stationary fuel cell demonstration test, fuel cells were installed under different climatic and environmental conditions at 31 locations nationwide. From the operational data that has been collected through this demonstration test, we will identify various technological issues necessary for facilitating commercialisation of stationary fuel cells.

(Regulation Review)

It is indispensable to develop regulations and systems in order to put fuel cells and hydrogen to practical use. In particular, since hydrogen has been mainly used for industrial purposes and has not been used as an energy source, it is necessary to review the present regulations from the viewpoint of widespread use.

In order to encourage the private sector to diffuse their products throughout the market, it is necessary to review the regulations without delay. Therefore, in October 2002, the government decided to complete a review of 28 relevant items of six laws by 2004 in response to industry request.

In order to review the regulations, it is essential to collect fundamental data on hydrogen and to establish technologies to prevent accidents as well as to control any damage arising therefrom. Therefore, METI commenced this year a new project involving R&D on the safe use of hydrogen.

(Expectation of IPHE)

Fuel cell and hydrogen technologies will become treasures of all human beings. In order to protect the earth, it is important for the entire world to cooperate in the practical use of fuel cell and hydrogen technologies.

At the same time, private-sector firms are engaging in severe development competition in the fields of fuel cells and hydrogen. We are convinced that the role of government is to provide an environment that encourages active research and development in the private sector.

Therefore, it is important to promote global harmonisation of fuel cell and hydrogen related codes and standards, and to promote international cooperation including exchange of technological information and researchers in both fundamental and pre-competitive areas of research.

Some frameworks for international cooperation have already been constructed for fuel cells and hydrogen, such as within IEA. We highly anticipate that the IPHE will contribute to the realisation of hydrogen economies appropriate to its assigned roles.

Thank you very much for your kind attention.