The Intergovernmental Panel on Climate Change (IPCC) has concluded in its 4th Assessment Report published in February 2007 that the global warming is steadily in progress and the cause of that is "very likely" to be human activities. At the G8 Summit held in Heiligendamm, Germany in June 2007, Japan proposed the "Cool Earth 50" Initiative aiming at 50% reduction of green house gas (GHG) emission by 2050. Furthermore, at the 13th Conference of Parties of the United Nations Framework Convention on Climate Change (COP13) held in Bali, Indonesia in December 2007, the GHG reduction of each country was seriously discussed. The climate change and the global warming problems are now highlighted as the important issues that should be steered internationally.

Under these circumstances, we held the 1st meeting of the Tsukuba 3E Forum in December 2007 and dared to declare 50% reduction of CO2 emission in Tsukuba by 2030, and we try to build up a low carbon society system, "3E City Tsukuba Model", that can be applied to any middle sized cities in Japan and overseas.

After the 1st meeting, we have discussed the availability of individual technologies and their integrated system for reducing GHG emission in several task forces created under the Tsukuba 3E Forum. In addition, we have also been discussing the transforming values and life-style, environmental education and establishing partnership between sectors comprising the City of Tsukuba to challenge the issues. In this 2nd Forum meeting, industries, academia, public administration and citizens gathered, identified important issues and deepened the discussion to create concrete action plan to achieve our goal.

We have invited guest speakers who are directly involved in tackling the global warming and environmental problems in cities outside Japan and asked them to share the history, present situation and future prospects. We have obtained valuable information for our future activities such as the content of the practice and the process of making measures, and have learned that strengthening international collaboration with these cities outside Japan will be quite useful for promoting activities and remedial measures to achieve low carbon society.

Based on the discussions and agreements made in the Forum meeting, following activities for creating the action plan will be promoted with the collaboration of universities, research institutes, organizations, industries and citizens related to Ibaraki prefecture, City of Tsukuba and Tsukuba Science City;

1. In order to achieve the high goal of carbon dioxide reduction, the technological innovations such as development in renewable energy sources and traffic systems are necessary in contributing to energy conservation and low carbon consumption. Since there exist accumulation of leading advanced technologies for each of these fields in Tsukuba, the universities and public/private research institutes that have close ties with Tsukuba Science City are strengthening the collaboration and promoting the further technological innovation.

2. With a view to realize low carbon society, it is important to systematically integrate individual technologies, and to proceed from experimental study towards the practical use in a broad perspective and on a public consensus. It is quite important to involve citizens in addition to industries, academia and government. Based on the activities of the Tsukuba 3E Forum and the Tsukuba Environmental City Promoting Committee, by which the "Tsukuba Environmental Style Plan" was compiled, we are establishing partnership between universities, public/private research institutes, industries, organizations, citizens, students and the municipality.
3. Under the partnership of industries, academia, government and citizens, we will create and carry out the concrete plan for a series of process ranging from the integration of various technologies, development of social systems, to demonstration, experiment and practical use in the field of the City of Tsukuba. We will lead our country and the world by establishing the model for application and promotion of environmental technologies and social systems that includes the cycle of monitoring, evaluation and review in their implementation process.

4. To realize low carbon society, like a social revolution, it is necessary to change people’s mind, and then promote various activities in energy savings, especially the nourishing of circular society and change of life-style, in parallel to the technical innovation. Together with the Tsukuba Environmental City Promotion Committee, we promote research activities to establish citizen's way of life pivoted on future as a philosophy, and present appropriate relationship between human beings and the nature, which is now being asked as the environmental problems are becoming more serious.

5. To realize circular society and low carbon society, we will develop environmental leaders capable of nourishing low carbon mind by exploiting intellectual resources of Tsukuba Science City, and actively and continuously promote activities to cultivate an awareness of the issue both in school and society. Furthermore, we extract points of argument and investigate the specific measures to achieve healthy and cultural life of citizens in low carbon society.

6. We will start planning a framework of biomass town that conducts sound utilization of biomass resources. On the other hand, it is important to raise self-sufficiency rate of food and to promote consuming locally produced food in view of reducing carbon dioxide emission along with transportation and securing safe and reliable food. We investigate practical ways of effective land use.

7. Since it takes decades to tackle global warming problems, each generation has to play its role steadily, and the collaboration beyond generation is necessary. We promote the collaboration among generations in addition to the collaboration between organizations conducting the program to realize low carbon society in Tsukuba.

8. To realize world scale low carbon society, it is important to promote collaboration among regions and cities at home and abroad, and to share the mind toward the future and the practical means of realizing low carbon society. We are aiming at the close collaboration among industries, academia, government and citizens developing in Tsukuba Science City as "Tsukuba Model". Then we will show it to all over the country and abroad, especially in Asian countries.

9. Cities highly concerned with environmental issues in the world are already actively conducting projects for global warming problems. We promote collaborations with these cities to share the information and the practical measures, and to disseminate the results cooperatively.

Building international network between cities as described in "9" above is quite useful for developing and promoting innovative technologies towards low carbon, safe and healthy environmental science city, and promoting environmental educations. Considering that this forum meeting is held as a related event of G8 Science and Technology Ministers Meeting to be held on June 15 in Okinawa, we take active steps to induce that the science and technology ministers participating in the meeting share the understanding of the usefulness of international network and hopefully forward this message to the G8 Hokkaido Toyako Summit.