

21st Century World Exposition



By *Nakamura Toshio*

ON June 8, 1994, the General Assembly of the Bureau International des Expositions (BIE) adopted a resolution on the ideal form of World Expos for the 21st century. There it was determined that “As a fundamental condition, future World Expositions will be required to reflect the value that respect for nature and the environment is of the utmost importance for mankind.”

EXPO 2005 will be the first international exposition of the 21st century. The theme, “Nature’s Wisdom,” has been chosen for the event, and the concept for the event is “Applying nature’s wisdom for sustainable development.” Art of Life, Eco-communities and Nature’s Matrix are the three sub-themes that will be showcased during the Expo.

Traditionally, World Expos have been based on gathering rare and interesting things from around the world and putting them on display. However, we plan to take the “displays” to the next level through three fundamentals;

(1) Process-Driven Construction

Despite a temporary operation of six months, for EXPO 2005, we carried out an environmental assessment of unprecedented scope for an international exposition and worked to determine the ideal form for such an exposition in light of the coexistence of mankind and nature. The assessment enabled us to effectively handle a variety of issues that have arisen during the preparations for the EXPO. Among them, the selection of the size and location of the event site was the most difficult problem. In 1998, 540ha were planned to be used for the event in the Kaisho Forest of Seto city; however, there was a dramatic change in the final proposal. The area for the Kaisho Forest site was reduced to 15ha, with an additional 158ha appropriated for the Aichi Youth Park in adjacent Nagakute town for a total area of 173ha. The assessment also included studies on precious wildlife, and roughly half of the event sites have been left in their natural state.



(2) Pan-Global Viewpoint

When looking ahead at the 21st century, we face significant problems such as the depletion of fossil fuels and global warming. We are placing our hopes on clean and efficient electrical generating systems and fuel cell electrical generation technologies as possible solutions to these problems. EXPO 2005 will employ two autonomous distributed new energy technologies: a methane fermentation system combined with a fuel cell that utilizes gas produced from methane fermentation (MCFC) and a high temperature gasification system combined with a fuel cell that utilizes the gas produced from high temperature gasification. For the former, organic waste produced from visitors to restaurants in the venue and other sources will be fermented to produce methane gas, which will be used to power fuel cells. In the case of the latter, gases gathered by burning wood chips left over from the venue construction plastic waste like discarded bottles will be burned, and used as an energy source. The Japanese government pavilion, which is the biggest, at 5000m², is expected to host 4 million visitors during the EXPO. It will be powered solely by these two energy sources. These efforts are more than just a simple attempt, they are in fact a full scale experiment that will promote the use of these advanced energy technologies in our social infrastructure.

(3) Expo Encouraging Visitors to Take Action

Nations/international organizations and world enterprises/economic organizations are called the first and second engines respectively; however, when contemplating solutions for issues facing the world today, it is essential to have the participation of the world’s citizens in the form of NGOs and NPOs as the third engine. Along with venue services performed by volunteers, NGOs and NPOs will independently operate the “NGO Global Village” and the Citizen Participation Zone where the groups will show exhibits that inspire new thinking and propose action for building a better future. In the “NGO Global Village,” NGOs and NPOs from all over the world will produce a series of programs based on the established theme of sustainable development.

“From the Past to the Future, From the World to Aichi, and From Aichi to the World”

EXPO 2005, the Expo of the Forest, is a venue for visitors to experience the sensations of nature and the systems of environmental technologies and a recycling society for the first time. The event will be a mechanism for planting the seeds of a new world culture for the 21st century. **JS**

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