

EXPO 2005 Aichi, Japan Environmental Issues Web Survey Results

Reference III-3



September 24, 2005

Japan Association for the 2005 World Exposition



Summary of Survey

Respondents: 1711 EXPO Visitors (as of Sep. 12)

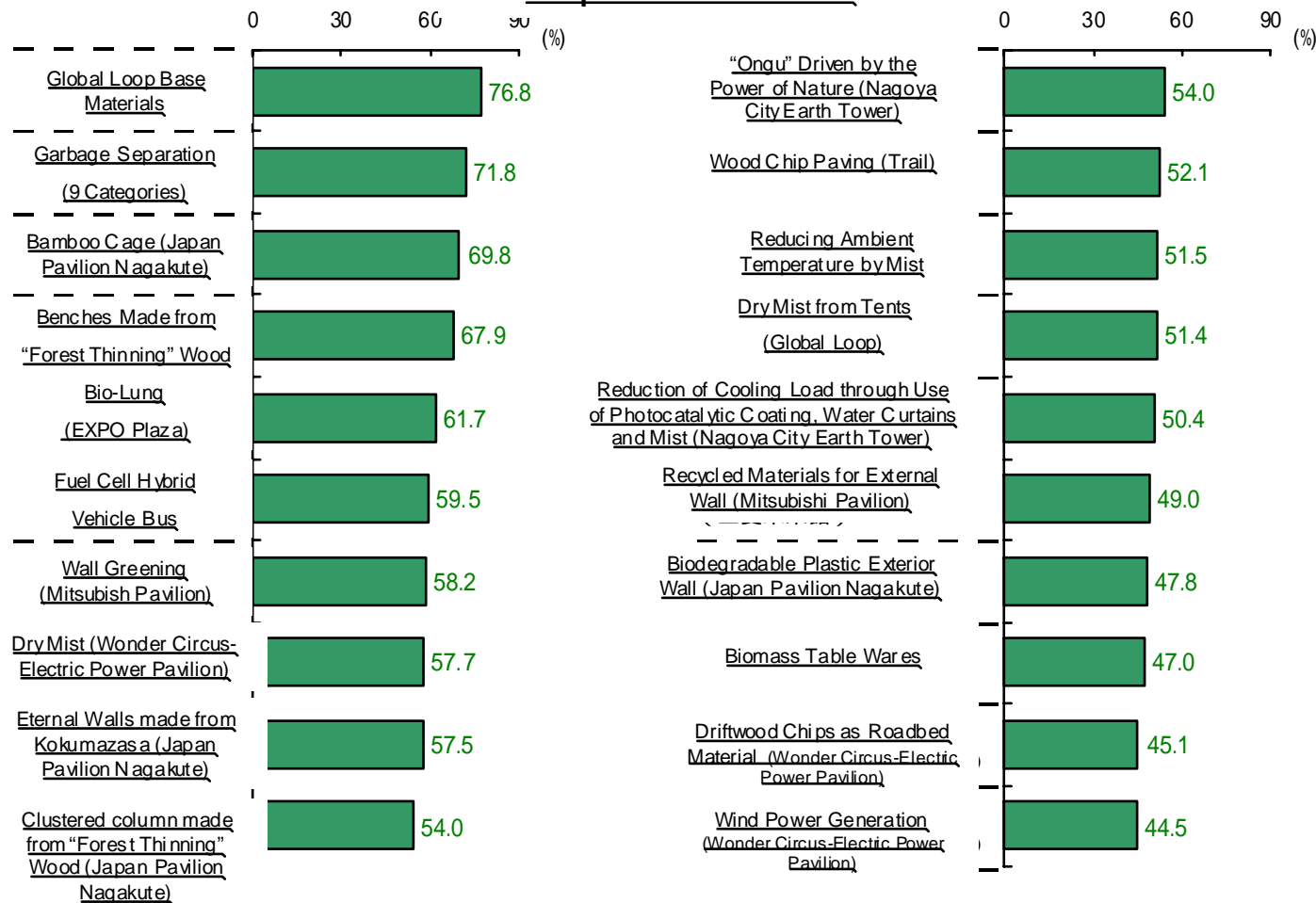
Method: Internet survey (accessible via a link on the Expo web site)

Duration: July 8, 2005 to September 30, 2005



【 1 】 Facilities appearing on the Eco - map

Top 20 Facilities



The above are not environmental technologies used within facilities, rather they are normal features of the Expo grounds or part of certain facilities' exterior design that nevertheless caught the attention of visitors.



【 1 】 Facilities appearing on the Eco - map

Solar Power Generation (Wonder Circus- Electric Power Pavilion)	43.8
Eco - Friendly Souvenirs	43.7
Roof Greening (Gas Pavilion)	43.2
Solar Cell and Wind Power Generation (EXPO Plaza)	41.3
Air- Conditioning Structure by Aqua Wall (Mitsui- Toshiba Pavilion)	39.0
Double - Sided Solar Panels (Hitachi Group Pavilion)	38.2
Roof Made of Photocatalytic Tiles (Japan Pavilion Nagakute)	36.9
Photocatalytic Tent (JR Central Pavilion)	35.6
Floor Made of Waste Mirror Glass (Italy Pavilion)	33.3
Wind Power Generation (Toyota Group Pavilion)	32.4
Fuel Cell Decorated with Ornaments (Global House)	32.3
Uniforms Made from Regenerated Fiber and Vegetable Fiber	31.7
Building with Bamboo and Tea Trees (NGO Global Village)	31.1
Wooden- Plastic Gears (Chubu Community for Millennial Symbiosis)	30.7
100% Natural Cork without Tree Trimming (Portugal Pavilion)	30.2
Solar Array Panel (Global Common 5)	30.2
Wind Power Generation (Aichi Pavilion Nagakute)	29.4
New Energy Facility (NEDO)	29.3

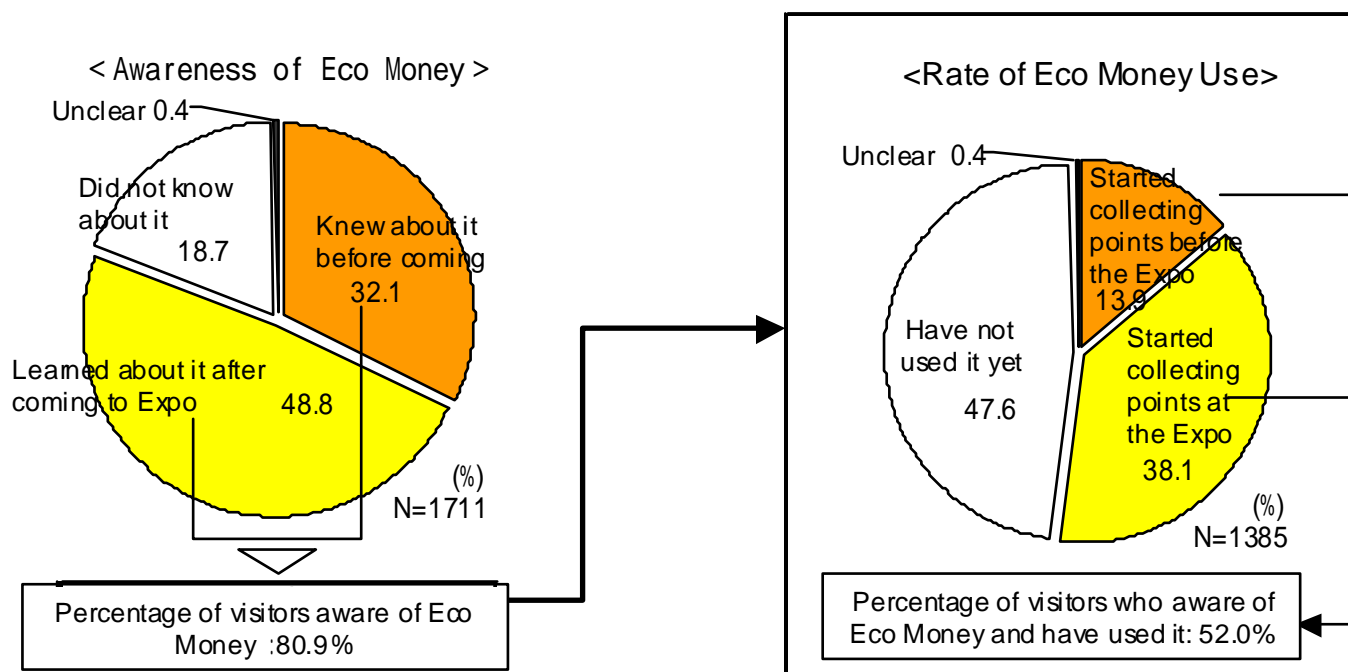


【 1 】 Facilities appearing on the Eco - map

Recycling Jellyfish that Drift Ashore at the Intakes of Thermal Power Stations (Wonder Circus-Electric Power Pavilions)	29.0
Paper Made from Banana Stems (Wanpaku Treasure Island)	28.9
Fountain Bowl Made from Waste Ceramic Ware	28.3
Organic Garden (NGO Global Village)	27.2
Recycling Gum Trees for Chairs (Mitsubishi Pavilion)	27.2
Biomass Banners and Signs	25.1
EXPO AMEDAS (Automated Meteorological Data Acquisition System)	24.4
Reusing Wood Building Materials (Aichi Pavilion Seto)	23.1
Wind Tower (Solar Chimney) and Air - conditioning System Using Soil Heat (Japan Pavilion Seto)	23.0
Wood Chip Paving (Seto Terminal)	22.7
Aggregation of Soil by Glass Cullet (EXPO Plaza)	22.5
Hydrogen Supply Facility (Seto Gate)	22.3
Using Lignin to Recycle Wood Materials (Chubu Community for Millennial Symbiosis)	20.7
Oil Palm Trees to Eliminate waste (Malaysia Pavilion)	20.7
Nature School Forest	20.3
Afforestation of Semiarid Areas through Use of Biomass Boards (Africa Pavilion - Ghana)	18.9
ECO LINK by Ministry of the Environment (Forest Visitor Center)	16.0
Reducing Cooling Load Through Use of Photocatalysts (Rest Stop)	15.4
Village Nature School	10.8



[2] Expo Visitors' Awareness of Eco Money



More than 80% of visitors were aware of Expo Eco Money.
Of these visitors, a solid 50% have used Eco Money, with a majority of users collecting points for the first time at the Expo.



【3】 Urgent Environmental Problems

Pressing Environmental Concerns
 Global warming

Global Warming	64.9%
The amount of waste created by modern lifestyles	37.6 %
Ozone-layer depletion	32.9 %
The “urban heat island” effect	28.3 %
Air and sound pollution caused by automobiles	25.7 %
Depletion of energy (oil, etc.) and natural resources	25.4 %
Industrial waste and toxic substances	24.4 %
Destruction of ecosystems and decreasing numbers of wildlife species	24.0 %
The amount of water used by humans on a daily basis	14.6 %
Destruction of rainforests	12.2 %
Marine pollution	11.7 %
Desertification	10.3 %
Acid rain’s effect on the environment	9.3 %
Other	2.6 %
Not sure/Unclear	0.3 %

Respondents expressed strong concern over global warming. Waste disposal and ozone depletion were also frequently cited as environmental problems in need of attention.



【 4 】 Remarkable Environment - friendly Activities at the Expo

Environmental-friendly Activities at the Expo that Left an Impression on Visitors

Garbage disposed of according to 9 categories, recycling	45.5%
Prevalent use of alternate energy sources (solar power, fuel cells, methane fermentation)	33.6%
Dry mist outdoor cooling systems	32.3%
Introduction of minimal environmental impact transportation (IMTS, Linimo, park and ride method, etc)	29.9%
The Bio-lung	25.7%
Global Loop (construction that preserves natural site conditions, barrier-free access)	24.4%
Prevalent use of bamboo and materials produced from forest thinning	19.8%
Country pavilions constructed according the concept of "reuse"	18.8%
Prevalent use of recycled materials, such as glass and tires, for construction purposes.	16.3%
Exhibits and displays that allow one to learn about environmental problems while having fun.	15.8%
Environment-conscious activities held by participating countries, businesses, and organizations.	10.3%
Use of biodegradable eating utensils, banners, information displays, exterior walls, etc.	9.1%
Use of optical catalyst-coated roofs and decrease air conditioning loads.	5.1%
Conservation of environment through environmental impact assessments and expo grounds maintenance.	2.7%
Efforts to create official Expo memorabilia that is environment-conscious (simple wrapping and packaging, etc.)	2.0%
Other	0.8%
Unclear/Not sure	0.8%



The Expo's recycling and garbage classification system made a strong impact on visitors. Many were also impressed by the extensive use of alternate energy sources and implementation of the dry mist outdoor cooling system.

[6] An Examination of Change in Environmental Awareness

1. Measuring change in an individual's environmental awareness.

<Awareness before Expo>					
	Almost always	Sometimes	Not much	Not at all	Not sure
I use public transportation as much as possible rather than driving my own car.	4	3	2	1	0
When purchasing electric appliances, I select energy-saving models.	4	3	2	1	0
I try to save energy (use less electricity, etc.) at home and at the workplace.	4	3	2	1	0
I reuse items, recycle, sort my trash, and try to reduce the amount of garbage I throw out.	4	3	2	1	0
					Total Score Before Expo () A

<Awareness after Expo>					
	Almost always	Sometimes	Not much	Not at all	Not sure
I use public transportation as much as possible rather than driving my own car.	4	3	2	1	0
When purchasing electric appliances, I select energy-saving models.	4	3	2	1	0
I try to save energy (use less electricity, etc.) at home and at the workplace.	4	3	2	1	0
I try to save energy (use less electricity, etc.) at home and at the workplace.	4	3	2	1	0
					Total Score After Expo () B

$$\text{Change in Individual's Awareness} = \text{Score after Expo (B)} - \text{Score before Expo (A)}$$

A Comparison of 3 Groups

