



# THE ASAHI GLASS FOUNDATION

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**For Immediate Release**

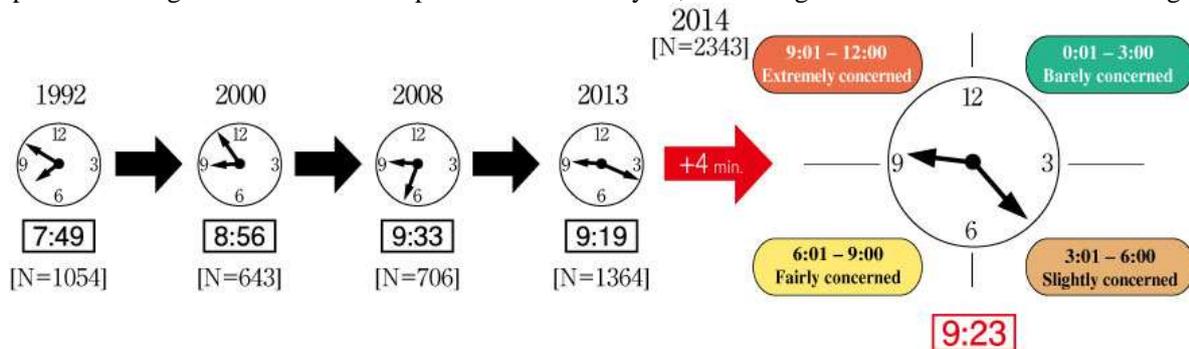
2014/9/17

- The average time on the Environmental Doomsday Clock for all respondents was 9:23, a 4-minute advancement from last year.
- Of the 9 regions surveyed, the needle on the clock advanced in only 3 regions, while it retreated in 6.
- Almost all the regions continued to be in the “Extremely Concerned” quadrant, as in previous years.
- Globally, the environmental condition of concern most frequently cited in determining the time on the Doomsday Clock was “Climate Change,” followed by “Pollution/Contamination” and “Biodiversity.”
- The number one reason for selecting “Climate Change,” which respondents most frequently identified as the most pressing issue, was “the number of observable cases (frequency) increased significantly.”
- When arranging the environmental issues by the times respondents assigned to them on the Doomsday Clock, “Population” had the most advanced time, at 9:42.

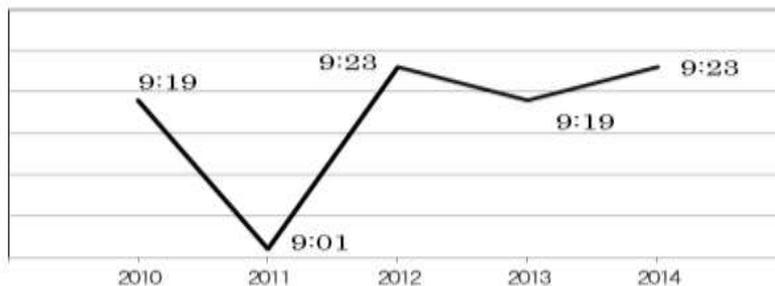
The Asahi Glass Foundation (Chairman: Tetsuji Tanaka) has conducted surveys with environmental experts around the world each year since 1992. This year, the survey was distributed in 210 counties and the Foundation received 2,343 responses from 155 countries. The following are the major findings of the survey. The results of the survey are detailed in the report, “Results of the 23<sup>rd</sup> Questionnaire on Environmental Problems and the Survival of Humankind,” which is mailed to all respondents, as well as made available on the Foundation’s web site soon.

## 1. Awareness of the Crisis Facing Human Survival - The Environmental Doomsday Clock

- The average time on the Environmental Doomsday Clock for all respondents advanced by 4 minutes to 9:19. Despite a doubling in the number of respondents from last year, the average time remained in a similar range.



Movements in the Environmental Doomsday Clock (Overall)

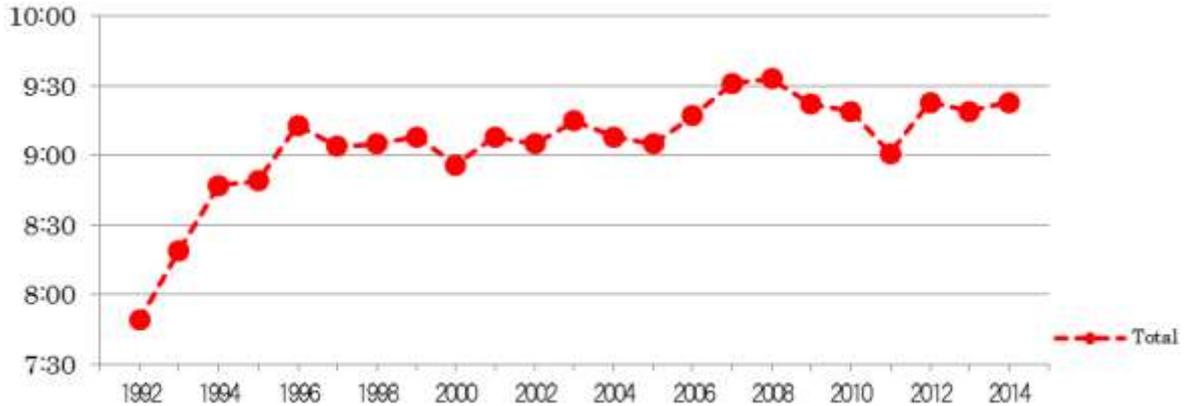


Movements in the Environmental Doomsday Clock (2009 – 2014, Overall)

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
7:49	8:19	8:47	8:49	9:13	9:04	9:05	9:08	8:56	9:06	9:05	9:15	9:06	9:05	9:17	9:31	9:33	9:22	9:19	9:01	9:23	9:19	9:23

(The time marked in blue represents the lowest sense of crisis since the inception of the survey in 1992; the red marks the highest)

### Movements in the Environmental Doomsday Clock since 1992 to 2014



### Movements in the Environmental Doomsday Clock since 1992 to 2014

- The region in which the time on the Environmental Doomsday Clock showed the greatest retreat from last year was Eastern Europe & the former Soviet Union, which went from 9:48 to 8:59.
- Of the 9 regions surveyed, the time retreated in 6, might be indicating a lowering of the sense of crisis among respondents in those regions.



(Red indicates the advancement in time from last year; green indicates reversal)

\* Central, Caribbean America and South America are comparisons with Latin America

## 2. Environmental Conditions of Concern in Determining the Doomsday Clock Time (Overall)

The questionnaire asked respondents to select and rank three issues from the following 11 categories of environmental problems that are the most pressing in the country or region where they resided. (See questionnaire report for further details.)

1. Climate Change; 2. Biodiversity; 3. Land Use; 4. Pollution/Contamination; 5. Water Resources; 6. Population; 7. Food; 8. Lifestyles; 9. Global Warming Measures; 10. Environment and Economy; 11. Environment and Society

### 2-1. Selection Rates of Environmental Condition of Concern

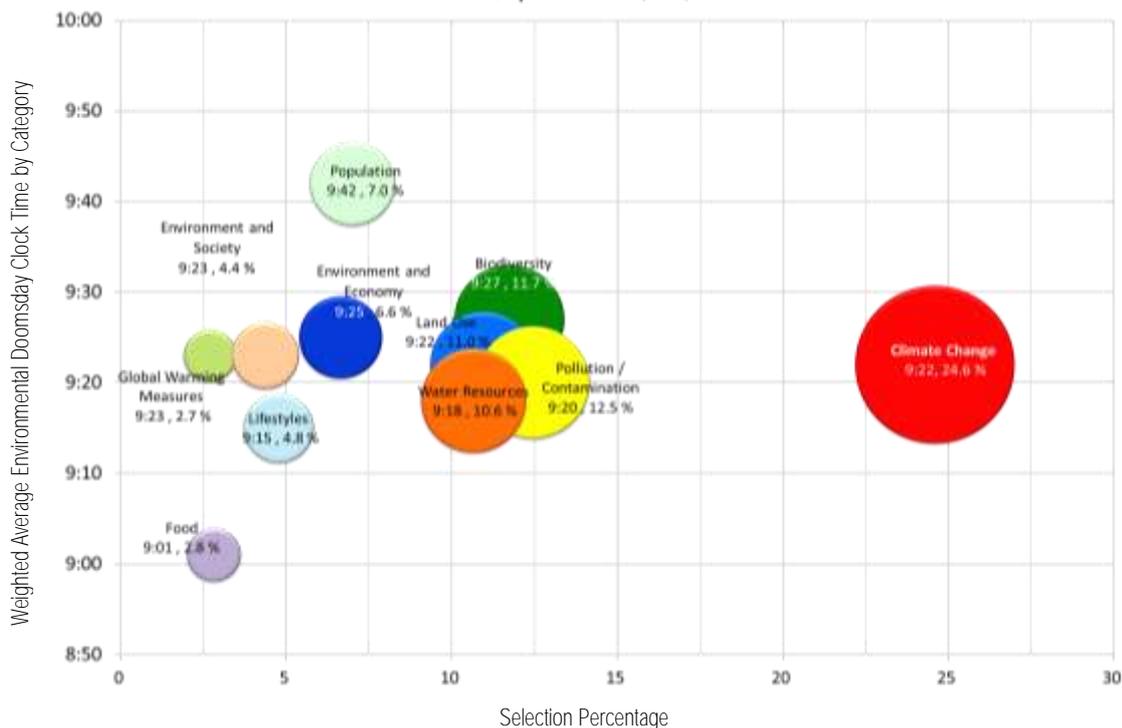
- Like last year, respondents overall most frequently selected “Climate Change” at 24.5% when considering the most pressing environmental issue in determining the time on the Environmental Doomsday Clock. This was followed by “Pollution/Contamination” at 12.5% and “Biodiversity” at 11.7%.

### 2-2. Ranking of Doomsday Clock Times for Environmental Conditions of Concern

- When arranging the environmental issues by the times respondents assigned to them on the Doomsday Clock, “Population” had the most advanced time at 9:42, replacing “Biodiversity” which was in that position last year.
- Led by “Biodiversity,” the issues “Global Warming Measures,” “Environment and Society,” “Environment and Economy,” “Land Use,” “Climate Change,” and “Pollution/Contamination” all had very similar times in the 9:20 range.
- All 11 issues, including “Food,” for which respondents indicated the lowest sense of crisis, all fell into the “Extremely Concerned” quadrant.

### 2-3. Regional Selection Patterns for Environment Conditions of Concern

- Overall, respondents from most regions most frequently selected “Climate Change,” at 25%. This was followed by “Pollution/Contamination” and “Biodiversity” at 12% each, and “Land Use” and “Water Resources” at 11% each.
- “Food,” “Lifestyles” (except South Korea), and “Global Warming Measures” were only selected in single-digit percentages in every region.



## 2-4. Selection Rationale for Most Pressing Environmental Condition

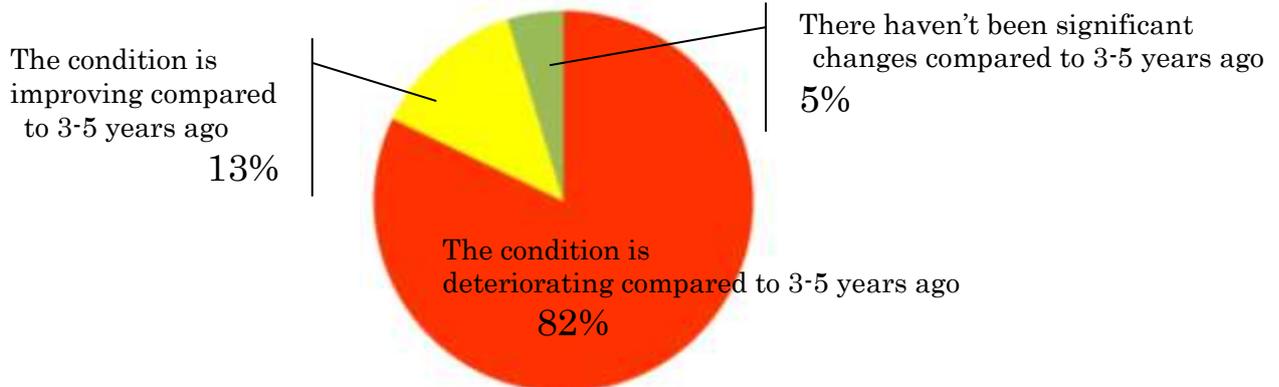
- The number one reason for selecting “Climate Change,” which respondents most frequently chose as the most pressing issue, was “the number of observable cases (frequency) increased significantly.” This was followed by “it is a fundamental problem with commonalities to many environmental issues.”
- The number one reason for selecting “Population,” which was assigned the most advanced time on the Doomsday Clock, was “it is a fundamental problem with commonalities to many environmental issues.”

Selection Rationale

		rationale for selecting #1 concern				
1-2		1. The number of observable cases (frequency) increased significantly	2. The level of deterioration (intensity) worsened significantly	3. The level affected (scale and cost of the damage) was most significant	4. It is a fundamental problem with commonalities to many environmental issues	5. It is the greatest factor slowing down the resolution of environmental problems
Total		1055	1126	990	1272	683
Environmental Condition of Concern	1. Climate Change	465	374	403	427	156
	2. Biodiversity	114	151	73	89	24
	3. Land Use	93	113	79	126	77
	4. Pollution/Contamination	178	239	203	204	136
	5. Water Resources	79	113	73	95	28
	6. Population	51	43	51	118	38
	7. Food	7	14	16	13	6
	8. Lifestyles	14	11	16	52	43
	9. Global Warming/Melting Icecaps	9	10	21	24	15
	10. Environment and Economy	32	38	44	74	71
	11. Environment and Society	13	20	11	49	39

## 2-5. The Current Condition of the Condition of Concern

- An overwhelming majority of respondents stated that the condition they chose as the most pressing environmental issue “is deteriorating compared to 3-5 years ago,” at 82%.



## 3. Responses Moving Forward (Analysis of Comments)

### 3-1. 10-Year Forecast If No Measures Are Implemented

A large majority of respondents, 1,304, stated that if no measures are implemented to address the environment in the country or region where they resided, there would be an “eruption of serious societal problems” in 10 years. This was followed by “rise in greenhouse gases, increase in weather abnormalities” at 1,208 responses.

Analysis of Comments for Question 2-1-1	Eruption of serious societal problems; migration, cost increases, epidemics, food problems, etc.	Increase in frequency and severity of weather abnormalities; rise in greenhouse gases	Increase in extreme phenomena and disasters; flooding, droughts, decrease in biodiversity, extinction of species, sea level rises, etc.	Reaching the tipping point; may surpass the point of no return
total number	1304	1208	912	47

### 3-2. Measures to Prevent Anticipated Conditions

The largest number of respondents, 940, wrote that “governments, international organizations, political decision-makers, and global action” were necessary to prevent the anticipated conditions. This was followed by 569 who expressed the need for “recognition for environmental problems and the improvement in awareness, education.”

Analysis of Comments for Question 2-1-1	Governments and international organizations; political decision-makers, global action	Recognition for environmental problems and the improvement in awareness; education	Transformation of the world economy; industrial production and consumption	Lifestyle changes; individual value systems	Suppression of greenhouse gases; increasing efficiency and reducing utilization of devices, like fossil fuel reduction vehicles
total number	940	569	439	396	360

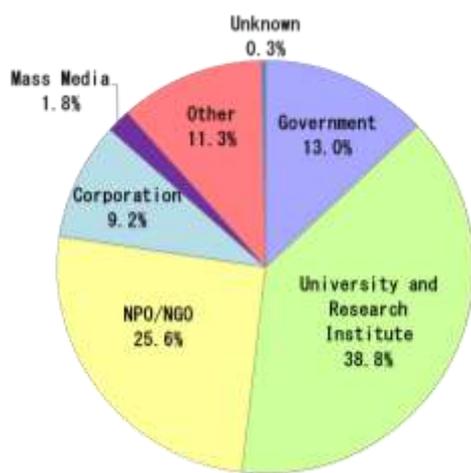
Societal responses, including nongovernmental organizations	Adaptation of regulatory and tax systems	Mitigation strategies	Technology; research, development, and transfers	Adaptation strategies	Implementation of renewable energies
346	344	153	152	149	141

The survey includes a Comments section in which respondents are invited to write about environmental problems in their countries, their opinions, and solutions. This year, we surpassed the record in the number of comments we received in the history of the survey, totaling 1,727 respondents in 155 countries around the world as well as 432 respondents in Japan, for a total of 2159. These comments are published with the full report, “Results of the 23<sup>rd</sup> Annual Questionnaire on Environmental Problems and the Survival of Humankind.” Respondents’ comments will be made also available on the Foundation’s web site (<http://www.af-info.or.jp>) on September 25<sup>th</sup> at 2 p.m. In addition, all of the responses, which were the bases of this analysis, are being compiled into a Databook and will also be made available on the web site.

## Appendix

### • About the “Questionnaire on Environmental Problems and the Survival of Humankind”

Since 1992, the Asahi Glass Foundation has conducted a survey each year with experts around the world who are knowledgeable and are involved in environmental issues. The respondent pool includes government officials and members of universities and research institutions, nongovernmental organizations, corporations and mass media. These experts are queried about various endeavors to counter environmental problems. The questionnaires are produced in 6 languages (English, Chinese, French, Japanese, Korean, and Spanish) and are sent out around April each year, and collected by June. After the responses are compiled, compared, and analyzed, the survey results are announced in September. The report is available in those six languages. The pie chart below shows the affiliation of the questionnaire respondents in descending order. The questionnaire was sent to respondents in 210 countries including Japan, with responses returning from 155 countries.



Number of Countries Surveyed

Region	Countries
Oceania	15
United States & Canada	2
Central America, Caribbean countries	30
South America	13
Western Europe	25
Africa	56
Middle East	16
Eastern Europe & former Soviet Union	28
Asian	25
Total	210

### • Facts about This Year's Questionnaire

Survey period: Questionnaires were sent out in April 2014 with a return deadline of June 2014

Questionnaire respondent pool: Environmental experts selected from members of government organizations, academic and research institutions, NGOs, corporations, and mass media. (based on the Asahi Glass Foundation database)

Questionnaires mailed: 23,953 (22,725 to 209 countries and 1,228 within Japan)

Questionnaires returned: 2,343

Response rate: 9.784%

Breakdown of respondents by region:

Oceania	98	4.2
United States & Canada	250	10.7
Central America, Caribbean countries	68	2.9
South America	144	6.2
Western Europe	277	11.8
Africa	215	9.2
Middle East	64	2.7
Eastern Europe & former Soviet Union	71	3
Asian	1156	49.3
<b>Total</b>	<b>2343</b>	<b>100</b>