

# Results of the 25th Annual "Questionnaire on Environmental Problems and the Survival of Humankind"

Report

## THE ASAHI GLASS FOUNDATION

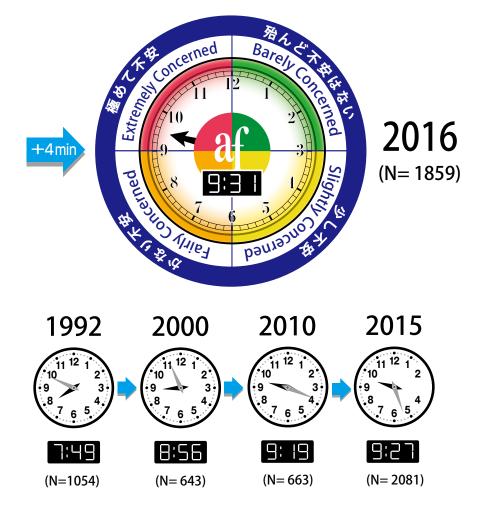
September 2016

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# The Environmental Doomsday Clock

the sense of crisis felt about the continuance of the human race



### **Foreword**

This report summarizes the results of the 2016 Questionnaire on Environmental Problems and the Survival of Humankind, a survey conducted annually by the Asahi Glass Foundation since 1992. As in previous years, the Asahi Glass Foundation wishes to continue communicating the current thoughts and opinions of environmental experts around the world on the state of the global environment to as many people as possible.

Thanks to the cooperation of the participants, we received 1,882 responses to the questionnaire this year. We would like to express our gratitude for the opportunity to report once again this year on an environmental survey covering most regions of the world.

This year, we started a new report on the respondent's choice of average time of the four quadrants of the Environmental Doomsday Clock. We continue to report on the correlations between the age of the respondents and the changes in time on the Environmental Doomsday Clock, an analysis that we began last year. In addition, we will also continue to report on the relationships between the "Environmental Condition of Concern" and the "Environmental Doomsday Clock" by region through the use of bubble charts, as well as on their changes from year to year.

And like last year, we have made available the comments the respondents have left on the Foundation's web site. As such, please visit the Asahi Glass Foundation online at <a href="http://www.af-info.or/questionnaire/result.html">http://www.af-info.or/questionnaire/result.html</a> for the responses to Question 2 (Comments).

At the Foundation, we sincerely hope that we can contribute to the resolution of environmental problems using this questionnaire to raising environmental interest among as many people as possible, not limited to environmental experts.

Once again, we extend our deepest gratitude to the respondents for taking the time to share their valuable opinions and experience through the survey. In closing, we appeal to readers of this report for advice on how to enhance the survey in the coming years.

The Asahi Glass Foundation September 2016

# I. Facts about the 25th Annual "Questionnaire on Environmental Problems and the Survival of Humankind"

Response period: Questionnaires were sent out in April 2016 with a return deadline of June 2016.

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

Questionnaires mailed: 26,690 Questionnaires returned: 1,882

Response rate: 7.1%

Breakdown of respondents by region, gender, and occupational affiliation:

Region	Number of responses	Percent of total
Oceania	76	4.0
United States & Canada	265	14.1
Central America, Caribbean countries	42	2.2
South America	70	3.7
Western Europe	235	12.5
Africa	91	4.8
Middle East	32	1.7
Eastern Europe & former Soviet Union	50	2.7
Asia	1021	54.3
Total (Including three area unknown response	es) 1882	100.0
Gender		
Male	1364	72.5
Female	514	27.3
No response	4	0.2
Total	1882	100.0
Occupational Affiliation		
National government, Local government	234	12.4
University or research institution	633	33.6
Nongovernmental organization	424	22.5
Corporation	301	16.0
Mass Media	40	2.1
Others	244	13.0
No response	6	0.3
Total	1882	100.0

<sup>\*1</sup> Unless otherwise noted, the questionnaire calculated as 100% the total number of responses received for questions where respondents were only asked to choose one item. For questions with multiple selections, the questionnaire calculated the percentages based on the number of times a valid response was given.

<sup>\*2</sup> Figures have been rounded to the first or second decimal places.

<sup>\*3</sup> Each question was calculated based on the number of responses to that question and not the number of questionnaires that were returned.

## **II. Summary of Questionnaire Results**

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

- The average time on the Environmental Doomsday Clock for all the world was 9:31, an advancement of 4 minutes from last year.
- Overall, "climate change" continued from last year to be the most frequently selected environmental condition of concern in determining the time on the Environmental Doomsday Clock. This was followed by "biodiversity," "pollution/contamination," "water resources," and "land use."
- Overall, when arranging the top-ranked environmental conditions of concern in descending order of severity on the Environmental Doomsday Clock, "biodiversity" and "pollution/contamination" had the most advanced time of 9:37. These were followed by "population," then "climate change" and "land use."

# 2. Shifts in the Environmental Doomsday Clock Based on Respondent Age (new Repeat Topics category starting last year)

We analyzed the shifts in the time on the Environmental Doomsday Clock from 2011 to 2016 as marked by respondents around the world, with a particular focus on the age of the respondents.

- Similar to last year, older respondents tended to report more advanced times on the Environmental Doomsday Clock.
- The time on the Environmental Doomsday Clock for respondents between ages 20 and 40 has been advancing since 2011, reaching nearly the same levels as their counterparts aged between 40 and 60.

# 3. The Selection Rates for the Four Quadrants of the Environmental Doomsday Clock and the Changes in the Average Time (Survey item starting this year)

- The percentage of respondents who selected the quadrant "Extremely Concerned" has been increasingly nearly across the board. On the other hand, the percentage of respondents who selected the other quadrants is clearly on the decline.
- With the exception of the quadrant "Barely Concerned," the average time on the Doomsday Clock has not had significant changes and have been relatively stable.

### **III. Questionnaire Results**

#### 1. AWARENESS OF THE CRISIS FACING HUMAN SURVIVAL (QUESTION 1)

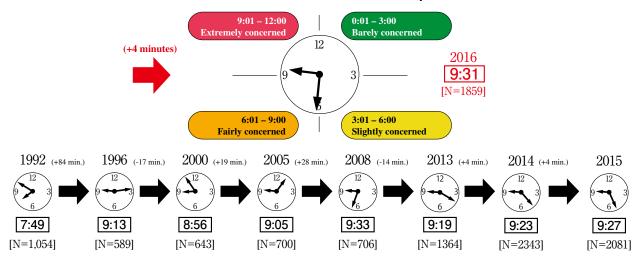
In Table 1, environmental issues to be taken into account are shown. Keeping in mind the problems that the environment faces at a global level, please select the three most pressing issues for the country or the region where you reside. Then, please rank them in the order of importance. Lastly, for each item, select a time using hours and minutes between 0:10 to 12:00, to indicate the level of crisis for that issue.

#### About the calculation of the time on the Environmental Doomsday Clock

The time on the Environmental Doomsday Clock will be determined by taking the weighted average of the data. The issue ranked in first place will be weighted at 50%, second place at 30%, and third place at 20%.

#### A-1. The Environmental Doomsday Clock

#### **Concern about Human Survival Prospects**

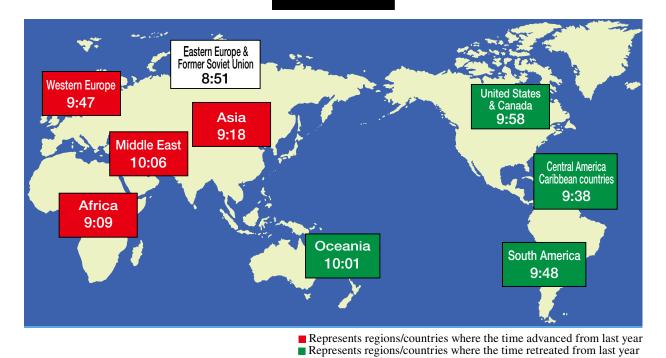


	Changes in time from year to year				ear	Changes in average time by region		
	'06	<b>→</b>	'15	<b>→</b>	'16	'06 → '16	'15 → '16	
Total	9:17	<b>→</b>	9:27	<b>→</b>	9:31	+14	+4	
Oceania	9:18	<b>→</b>	10:06	<b>→</b>	10:01	+43	-5	
United States & Canada	9:18	$\rightarrow$	10:01	<b>→</b>	9:58	+40	-3	
Central America, Caribbean countries	9:31*	$\rightarrow$	9:47	<b>→</b>	9:38	+7	-9	
South America	9:31*	$\rightarrow$	9:54	<b>→</b>	9:48	+17	-6	
Western Europe	9:08	$\rightarrow$	9:42	<b>→</b>	9:47	+39	+5	
Africa	9:32	$\rightarrow$	9:00	<b>→</b>	9:09	-23	+9	
Middle East	10:05	$\rightarrow$	9:10	<b>→</b>	10:06	+1	+56	
Eastern Europe & former Soviet Union	9:07	$\rightarrow$	8:51	<b>→</b>	8:51	-16	±0	
Asia	9:17	<b>→</b>	9:15	<b>→</b>	9:18	+1	+3	

(Red indicates the advancement in time from last year; green indicates a reversal) \*Central America, Caribbean countries and South America are comparisons with Latin America

• The average time on the Environmental Doomsday Clock for all respondents was 9:31, an advancement of 4 minutes from last year's time of 9:27.

# **Regional Times**

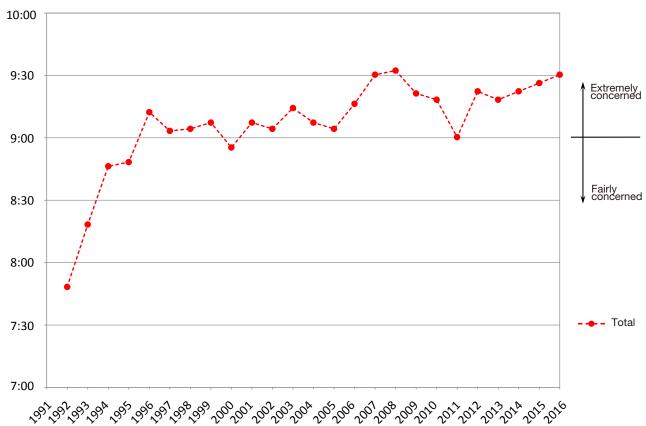


## Represents regions/countries where the time remained the same

#### **Changes in the Environmental Doomsday Clock (Overall)**

19	92	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
7:4	49	8:19	8:47	8:49	9:13	9:04	9:05	9:08	8:56	9:08	9:05	9:15	9:08	9:05	9:17	9:31	9:33	9:22	9:19	9:01	9:23	9:19	9:23	9:27	9:31

Since the inception of the survey, represents the lowest sense of crisis, while represents the highest.



#### A-2. Shifts in the Environmental Doomsday Clock Based on Respondent Age (2011 - 2016)

• The older the respondents were, the more they tended to report advanced times on the Environmental Doomsday Clock.

#### A-2-1. Shifts in the Environmental Doomsday Clock By Generation

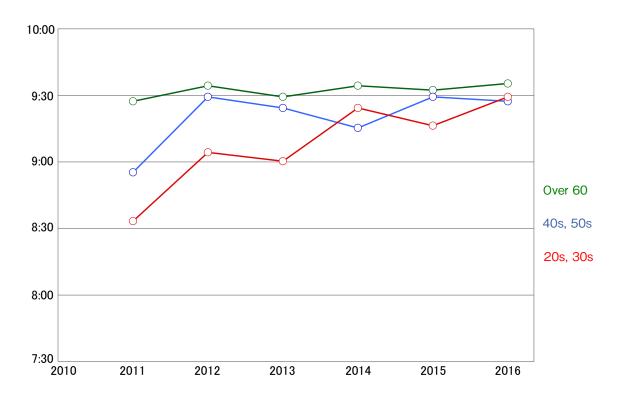
- Shifts in time on the Environmental Doomsday Clock for respondents over the age of 60 were relatively stable and were within the range of 9:28 to 9:36.
- For respondents of the age group of 40s, 50s, the Environmental Doomsday Clock advanced from 8:56 in 2011 to 9:30 one year later, but the times have remained relatively stable since then.
- The Environmental Doomsday Clock time for respondents between the ages of 20 and 40 has been advancing from 2011, when it was 8:34, to 2016. In 2016, respondents in this age group selected times that reached nearly the same levels as chosen by their counterparts, age group of 40s, 50s.

The Effects of Each Generation on the Environmental Doomsday Clock

• From 2015 to this year, the time on the Environmental Doomsday Clock advanced 4 minutes from 9:27 to 9:31. A large part of this movement can be attributed to respondents between the age group of 20s, 30s, and those over age 60.

#### Shifts in the Environmental Doomsday Clock by Generation

	2011	2012	2013	2014	2015	2016
Average Time	9:01	9:23	9:19	9:23	9:27	9:31
Over 60	9:28	9:35	9:30	9:35	9:33	9:36
40s, 50s	8:56	9:30	9:25	9:16	9:30	9:28
20s, 30s	8:34	9:05	9:01	9:25	9:17	9:30

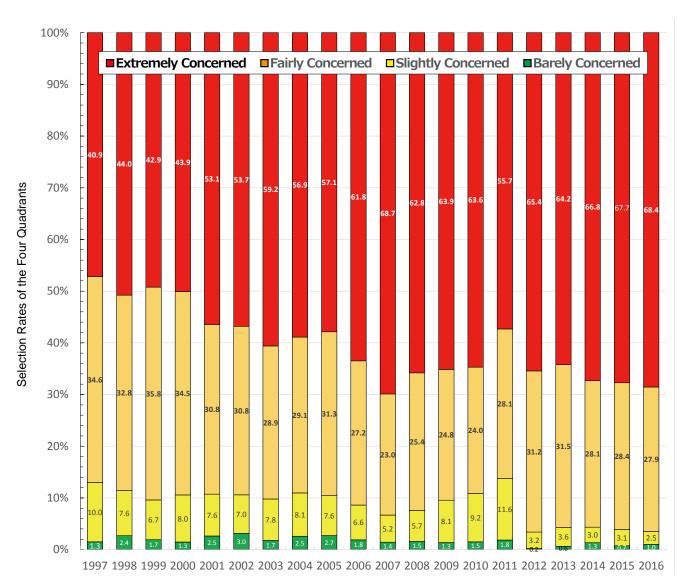


**A-3.** Starting this year, this report will include an analysis of the percentage of respondents who chose each of the four quadrants of the Environmental Doomsday Clock (0:01 – 3:00: "Barely Concerned," 3:01 – 6:00: "Slightly Concerned," 6:01 – 9:00: "Fairly Concerned," 9:01 – 12:00: "Extremely Concerned"), as well as the changes in the average time within each quadrant.

#### A-3-1. Changes in Selection Rates of the Four Quadrants (1997 – 2016)

- The percentage of respondents who selected the quadrant "Extremely Concerned" has been on a growth trajectory, from 40% in 1997 to just under 70% this year. The percentage of respondents who selected the other quadrants is clearly on the decline.
- The one notable exception took place in 2011, when the percentage of respondents who selected "Extremely Concerned" fell unequivocally, by 7.9% from the previous year. The average time on the Environmental Doomsday Clock that year was 9:01, a retreat of 18 minutes compared to the previous year.
- The combined percentages of respondents who selected "Fairly Concerned" and "Extremely Concerned" reached more than 95% after 2012, indicating a clear sense of concern among a large majority of respondents.
- Moreover, the combined percentages of respondents who selected "Barely Concerned" and "Slightly Concerned" have remained under 4% after 2012. This represents a clear decline compared to the years before 2011. Similarly, the quadrant "Barely Concerned" was selected by 1.3% to 3.0% of respondents before 2011, which has declined to between 0.2% 1.3% after 2012.

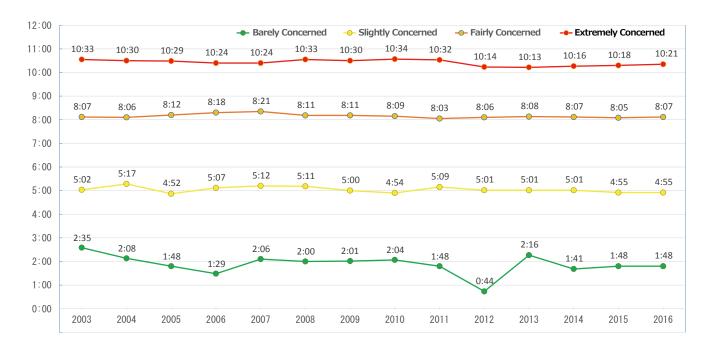
#### Changes in the Selection Rates of the Four Quadrants of the Environmental Doomsday Clock (%)



# A-3-2 Changes in the Average the Environmental Doomsday Clock Time in the Four Quadrants (2003 - 2016)

- Following the changes in each quadrant of the Environmental Doomsday Clock shows that the changes in the "Extremely Concerned," "Fairly Concerned," and "Slightly Concerned" quadrants have been stable. On the other hand, the "Barely Concerned" quadrant has showed a large retreat from 2011 to 2012, of 1 hour 4 minutes. Conversely, the quadrant recorded an extremely accelerated advancement of 1 hour 32 minutes from 2012 to 2013.
- The selection rate of the "Barely Concerned" category among all respondents remained between 1.3% to 3.0% until 2011, whereas the percentages varied from 0.2% to 1.3% after 2012. Because the small number of respondents does not offer a stable statistic data, we believe that the changes in the time are greater in this quadrant compared to the other three.

#### Changes in the Average the Environmental Doomsday Clock Time in the Four Quadrants



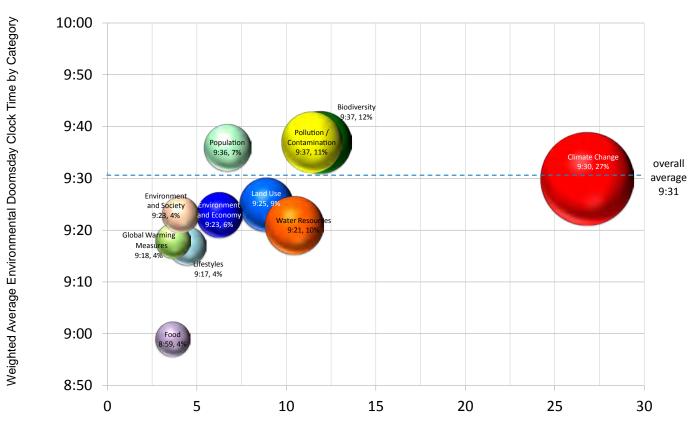
#### **B. Environmental Conditions of Concern**

	Category	Examples of Observable Changes in the Country or the Region in which You Reside
1.	Climate Change	Atmospheric concentration of CO <sub>2</sub> ; global warming; ocean acidification; climatic aberrations (droughts, torrential rains and flooding, severe storms, heavy snow, abnormal temperatures, drying of rivers and lakes, desertification, etc.)
2.	Biodiversity	Acceleration of species extinction rate; effects of contamination, climate change, land use
3.	Land Use	Expansion of cultivated land mass; destruction of forests due to excessive development; desertification caused by overgrazing; agriculture and land use without regard for the environment; urbanization
4.	Pollution / Contamination	River and ocean pollution: eutrophication caused by excessive <b>nitrogen</b> and <b>phosphorus</b> and contamination by chemical substances; <b>atmospheric pollution</b> : particulates suspended in the atmosphere, soot and <b>chemical substances</b>
5.	Water Resources	Diminution of usable fresh water resources (depletion, contamination)
6.	Population	Population growth beyond what the Earth can support; aging of the population
7.	Food	Diminution of food supply from land and oceans
8.	Lifestyles	Transformation of lifestyles away from excessive consumption of resources like energy
	Global Warming Measures	Progress of measures for mitigation and adaption
10.	Environment and Economy	Progress towards implementing an economic system to reflect environmental costs, the bearing of social costs: imposition of taxes for fossil fuels that emit CO <sub>2</sub> , which causes global warming-related damages; TEEB (The Economics of Ecosystems and Biodiversity), etc.  The operation of an environmentally conscious economy: the realization of a green economy, sustainable economic development, etc.
11.	Environment and Society	Environmental awareness at the individual and societal levels, progress of environmental education; <b>poverty</b> , <b>governance</b> ; the status of women
12.	Other	(

Terms in **blue** are categories listed in "Planetary Boundaries" (Johan Rockstrom, et al. : Ecology and Society 14 (2):32, 2009); those in **green** are the major categories of SDG(Sustainable Development Goals of United Nations).

#### 1. Overall Analysis of the Environmental Conditions of Concern (Categories Ranked 1 - 3)

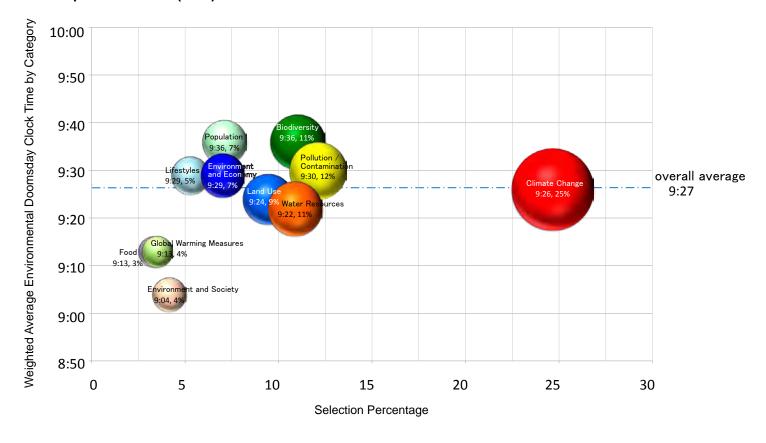
#### Graph 1. Overall (2016)



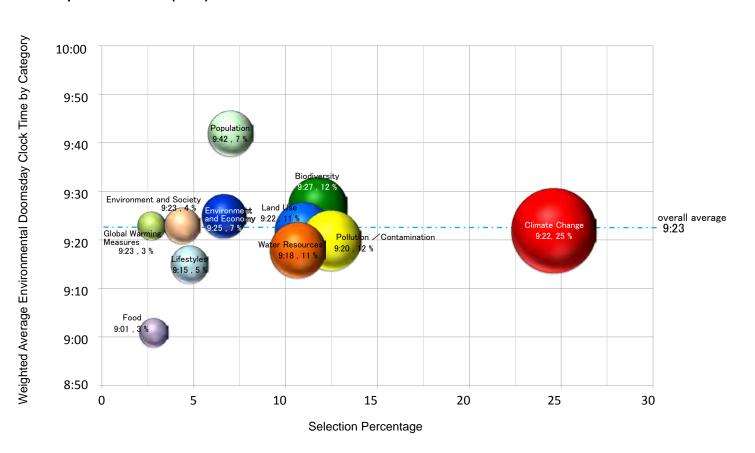
Selection Percentage

- Arranging the environmental conditions of concern in order of the selection rate showed that overall, "climate change" continued from last year to be the most frequently selected issue, at 27%. This was followed by "biodiversity" (12%), "pollution/contamination" (11%), "water resources" (10%), and "land use" (9%).
- "Biodiversity" and "pollution/contamination" had the most advanced time of 9:37. These were followed by "population" at 9:36, indicating a heightened sense of crisis. The distribution of the Doomsday Clock time for the other issues ranged between 8:59 and 9:30.

Graph 2. Reference (2015)

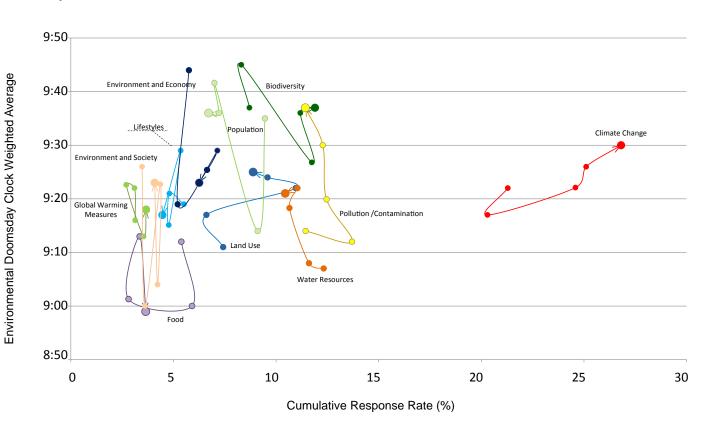


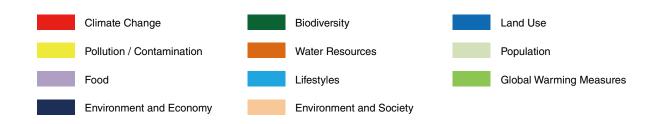
Graph 3. Reference (2014)



#### 2. Distribution of the Environmental Conditions of Concern (2012 - 2016)

#### Graph 4.





#### 3. Selection Patterns for Environmental Conditions of Concern By Region

	1.Climate Change	2.Biodiversity	3.Land use	4.Pollution/ Contami- nation	5.Water resources	6.Popula- tion	7.Food	8.Lifestyle	9.Global warming measures	10.Environment and economy	11.Envi- ronment and Society
Total	27%	12%	9%	11%	10%	7%	4%	4%	4%	6%	4%
Oceania	31%	16%	7%	4%	11%	10%	2%	3%	2%	6%	6%
Australia	32%	13%	5%	4%	10%	14%	2%	3%	3%	6%	7%
Oceania (except Australia)	29%	21%	11%	6%	15%	1%	1%	0%	0%	7%	3%
United States & Canada	34%	12%	7%	6%	13%	11%	1%	4%	2%	7%	3%
USA	33%	12%	7%	6%	14%	12%	1%	3%	2%	6%	3%
Canada	38%	13%	7%	5%	8%	6%	1%	6%	3%	9%	3%
Central America, Carribean countries	28%	13%	15%	5%	17%	6%	3%	4%	2%	3%	3%
South America	20%	18%	23%	5%	13%	3%	2%	2%	2%	5%	4%
Western Europe	26%	18%	15%	6%	5%	9%	1%	7%	1%	7%	4%
UK	26%	16%	14%	6%	2%	14%	1%	6%	2%	7%	5%
Western Europe (except UK)	25%	19%	15%	7%	7%	7%	1%	7%	1%	7%	4%
Africa	31%	16%	13%	8%	12%	5%	5%	1%	1%	3%	3%
Middle East	25%	17%	13%	3%	30%	4%	1%	3%	0%	3%	1%
Eastern Europe & former Soviet Union	14%	17%	14%	11%	12%	2%	2%	4%	1%	14%	8%
Asia	26%	9%	6%	16%	10%	6%	5%	5%	5%	6%	4%
India	21%	17%	12%	8%	15%	11%	2%	1%	2%	3%	6%
China	16%	3%	4%	29%	13%	4%	7%	5%	6%	7%	3%
Taiwan	25%	5%	13%	22%	10%	3%	4%	3%	6%	4%	4%
Republic of Korea	38%	16%	4%	10%	1%	5%	2%	16%	0%	6%	2%
Japan	33%	11%	4%	8%	5%	7%	6%	5%	7%	7%	6%
Asia*	26%	14%	13%	9%	17%	6%	3%	2%	3%	4%	3%

<sup>■</sup> Represents the most frequently selected item in the region/country, ■ represents the second most frequently selected item in the region/country

\*With the exception of India, China, Taiwan, Korea, and Japan

<sup>•</sup> Overall, "climate change" was the most frequently selected issue at 27%. This was followed by "biodiversity" (12%), "pollution/contamination" (11%), "water resources" (10%), and land use (9%)

<sup>•</sup> While "climate change" was the most frequently selected issue in a large majority of regions, respondents in China most frequently cited "pollution/contamination," respondents in South America selected "land use," respondents in the Middle East selected "water resources," and respondents in Eastern Europe and the former Soviet Union selected "biodiversity.

<sup>•</sup> In many regions, biodiversity was the second most frequently selected environmental condition of concern.

#### 4. Regional Distribution of the Environmental Doomsday Clock Time for Environmental Conditions of Concern

	Total	1.Climate Change	2.Biodiversity	3.Land use	4.Pollu- tion/ Contami- nation	5.Water resources	6.Popula- tion	7.Food	8.Lifestyle	9.Global warming measures	10.Envi- ronment and economy	11.Envi- ronment and Society
Total	9:31	9:30	9:37	9:25	9:37	9:21	9:36	8:59	9:17	9:18	9:23	9:23
Oceania	10:01	10:12	9:34	10:05	8:47	9:19	10:03	8:58	10:06	9:50	10:25	9:42
Australia	10:05	10:27	10:34	10:52	-	9:48	10:03	-	10:06	9:50	10:45	9:24
Oceania (except Australia)	9:52	8:46	9:08	9:36	9:18	8:19	-	-	-	-	9:57	-
United States & Canada	9:58	10:06	10:13	9:36	9:31	9:24	10:04	9:33	-	10:13	9:27	9:48
USA	10:03	10:06	10:18	9:36	9:44	9:26	10:13	9:48	-	10:15	9:28	9:51
Canada	9:41	10:17	10:09	9:43	8:54	8:42	9:05	-	-	10:06	8:32	-
Central America, Carribean countries	9:38	9:06	9:17	9:24	-	9:19	9:51	-	9:16	-	9:10	-
South America	9:48	9:56	9:56	9:50	10:07	10:09	6:29	8:53	-	-	10:23	9:47
Western Europe	9:47	9:47	9:53	9:59	9:19	9:40	9:49	8:24	9:32	-	9:19	10:01
UK	10:00	9:57	9:52	9:51	9:03	-	9:58	-	10:24	-	9:34	-
Western Europe (except UK)	9:42	9:44	9:53	10:02	9:32	9:37	9:43	8:19	9:16	-	9:05	9:53
Africa	9:09	9:10	9:06	8:24	9:15	9:32	9:53	9:34	-	-	-	9:55
Middle East	10:06	9:29	9:53	10:09	-	10:32	11:33	-	-	-	-	
Eastern Europe & former Soviet Union	8:51	8:32	9:18	8:19	9:41	8:40	-	-	9:12	-	8:38	9:29
Asia	9:18	9:14	9:19	9:15	9:35	9:11	9:11	8:54	8:57	9:09	9:17	9:09
India	9:36	9:33	8:54	9:46	9:20	9:34	10:21	9:40	-	-	10:55	9:30
China	9:39	9:47	9:23	9:34	10:02	9:22	8:55	9:14	8:33	9:45	9:26	9:28
Taiwan	8:53	8:45	8:44	9:04	8:50	9:07	9:32	7:56	9:44	9:42	9:35	9:15
Republic of Korea	9:47	9:40	9:45	-	9:41	-	10:20	-	9:45	-	-	10:27
Japan	9:03	9:03	9:19	8:33	8:59	8:02	9:16	8:45	9:05	8:56	9:03	9:01
Asia*	9:12	9:05	9:16	9:16	9:50	9:31	8:09	8:47	9:32	7:01	8:29	9:16

<sup>■</sup> Indicates the 11 o'clock hour,  $\blacksquare$  indicates the 10 o'clock hour,  $\blacksquare$  indicates the 8 o'clock hour , and  $\blacksquare$  the 7,6 o'clock hour)

• Overall, "biodiversity" and "pollution/contamination" were the issues with the highest sense of crisis at 9:37. These were followed by "population" (9:36), "climate change" (9:30), and "land use" (9:25). With the exception of "food problems" (8:59), all categories were distributed within a relatively narrow range of time between 9:17 and 9:37.

#### Regions and Countries Expressing a High Degree of Crisis

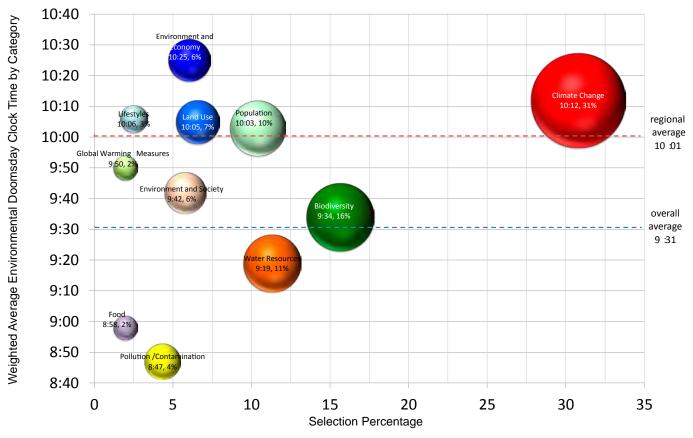
	Regions Indicating an Environmental Doomsday Clock Time Past 10 O'clock
1. Climate Change	Australia, United States & Canada
2. Biodiversity	Australia, United States & Canada
3. Land use	Australia, Western Europe (except UK), Middle East
4. Pollution/Contamination	China, South America
5. Water resources	South America, Middle East
6. Population	India, Korea, Australia, USA, Middle East
7. Food	
8. Lifestyle	Australia, UK
9. Global warming measures	United States & Canada
10. Environment and economy	India, Australia, South America
11. Environment and society	Korea, Western Europe

• While "climate change" was the most frequently cited condition of concern, its time on the Environmental Doomsday Clock was the fourth most advanced, at 9:30.

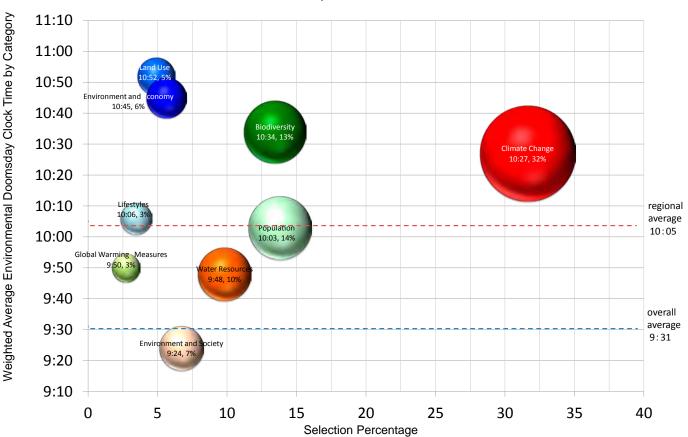
<sup>\*</sup>With the exception of India, China, Taiwan, Korea, and Japan

#### Reference)Distribution of the Environmental Conditions of Concerns by regions

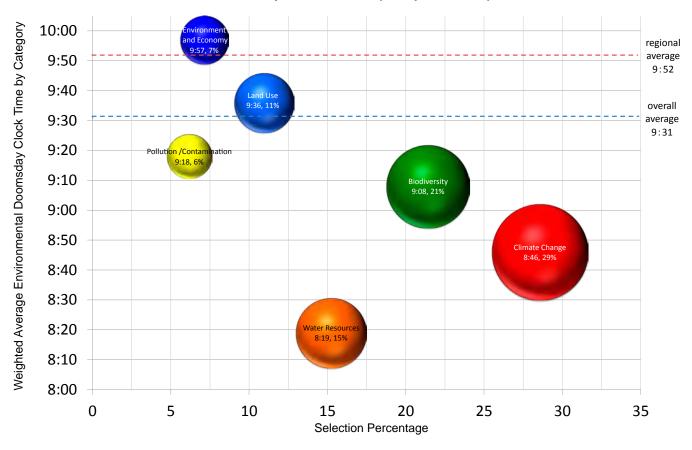
#### Graph 5-1. Oceania



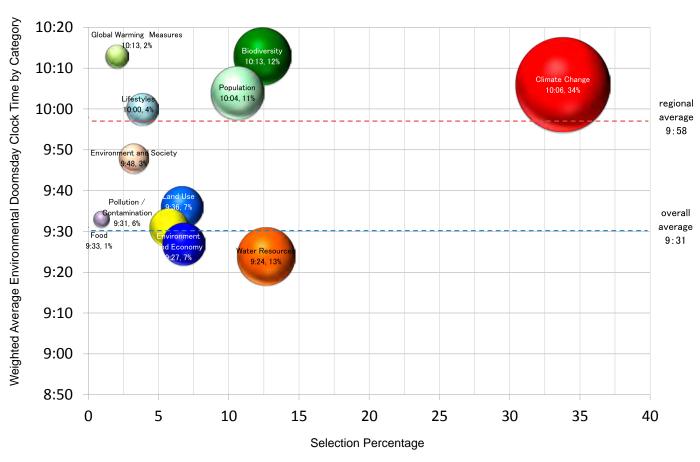
#### Graph 5-2. Australia



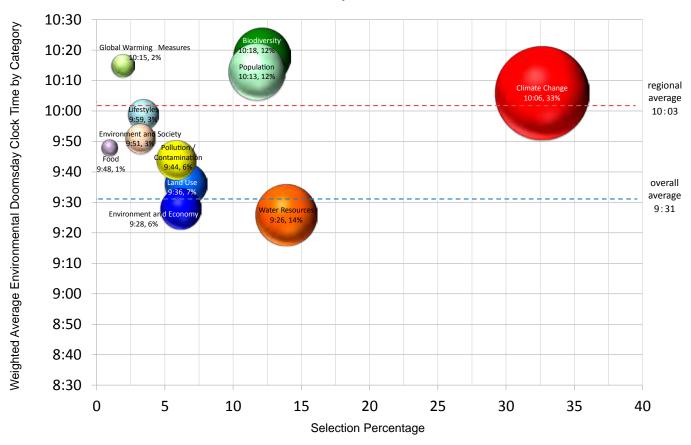
Graph 5-3. Oceania (Except Australia)



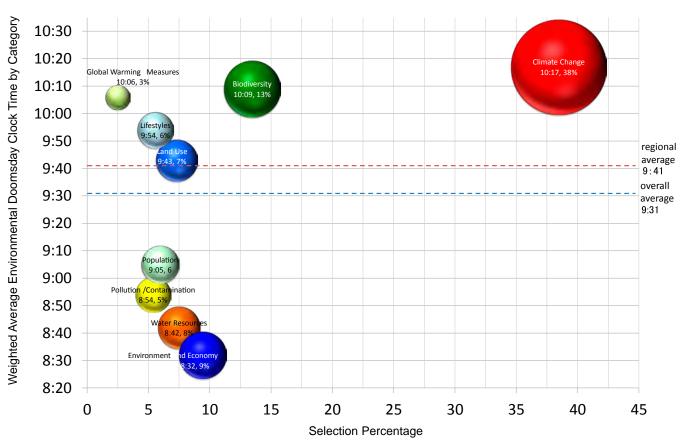
Graph 6-1. United States & Canada



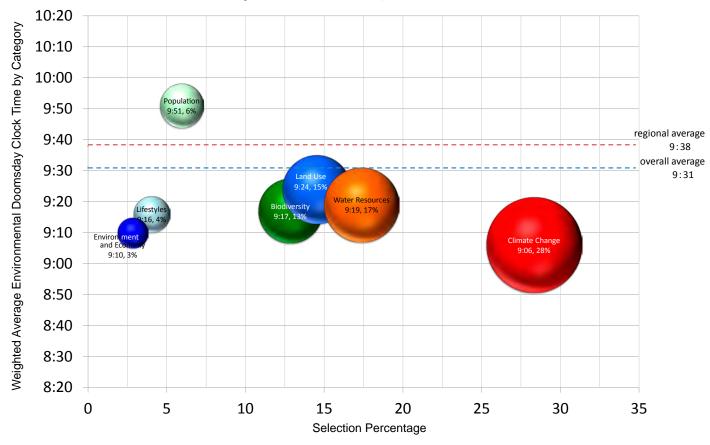
Graph 6-2. USA



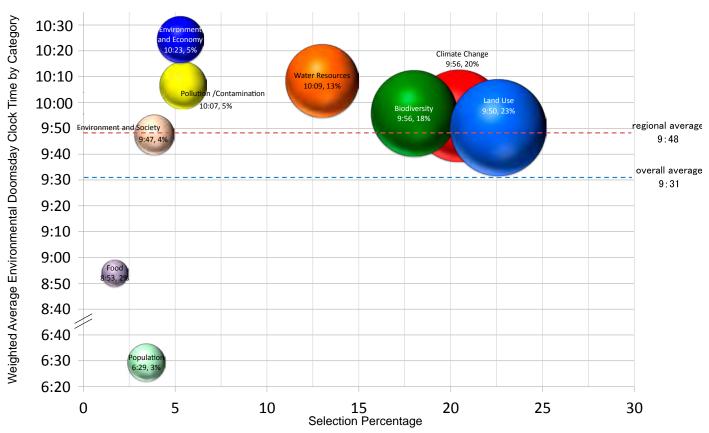
#### Graph 6-3. Canada



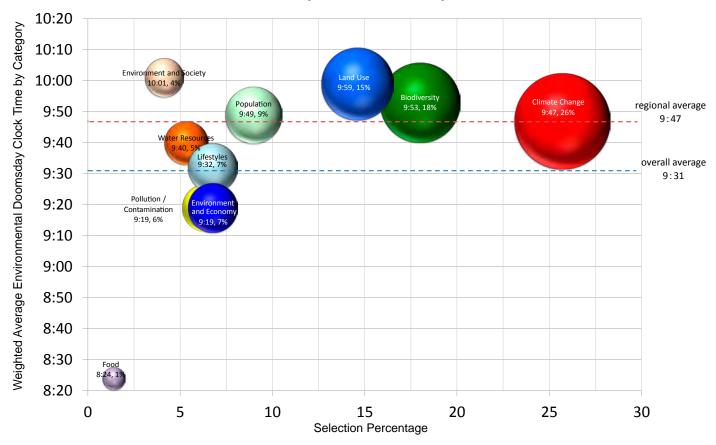
**Graph 7. Central America, Caribbean countries** 



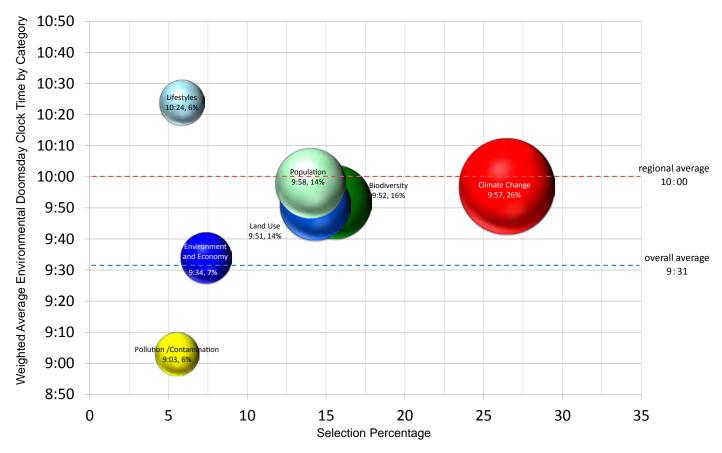




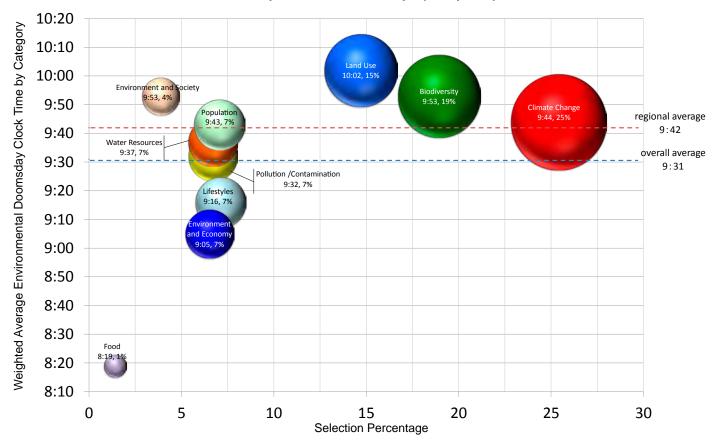
Graph 9-1. Western Europe



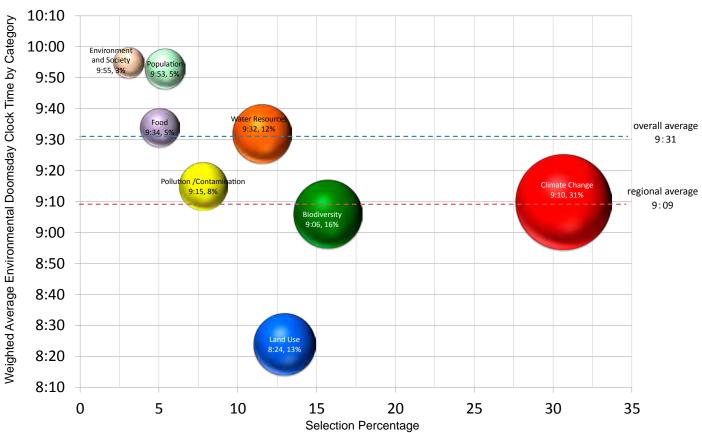
Graph 9-2. UK



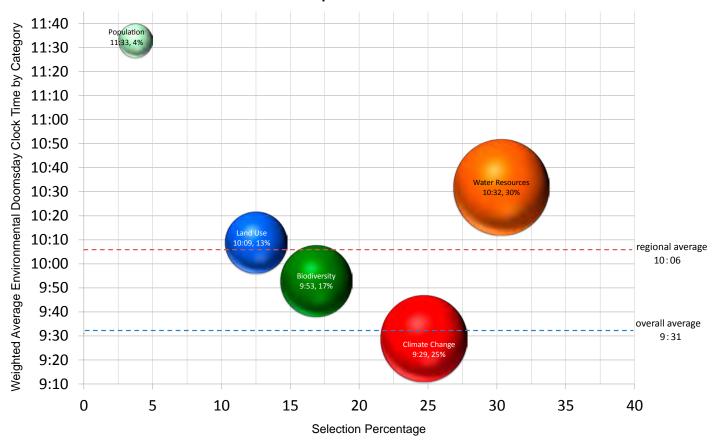
Graph 9-3. Western Europe (except UK)



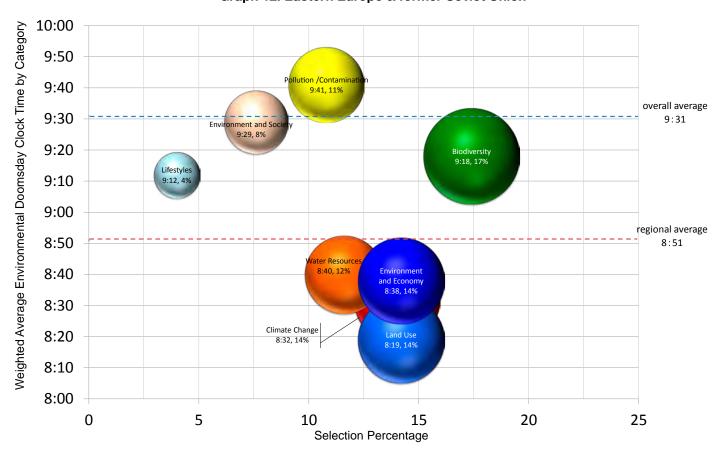


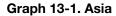


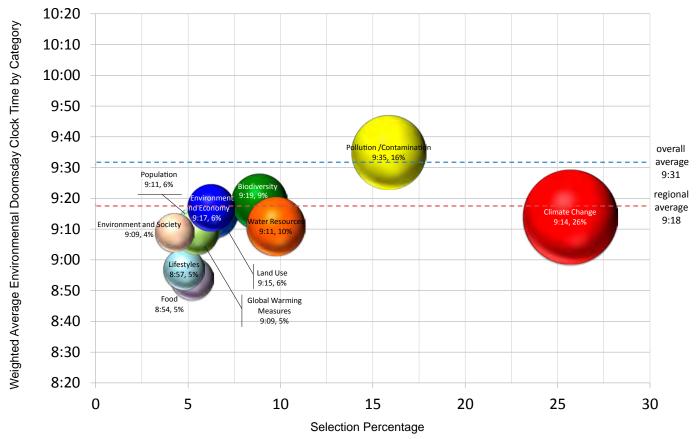




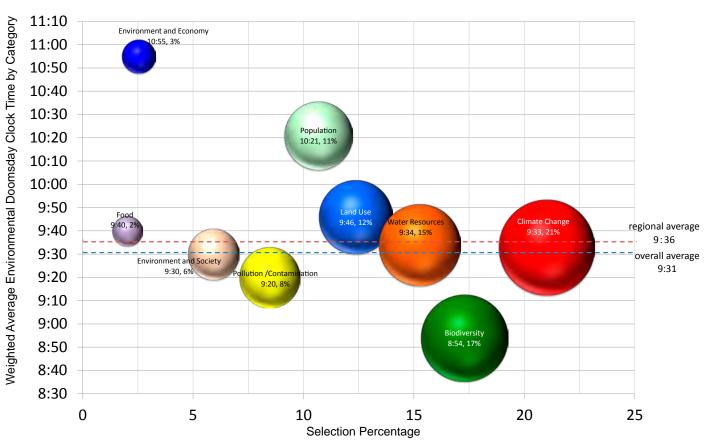
**Graph 12. Eastern Europe & former Soviet Union** 



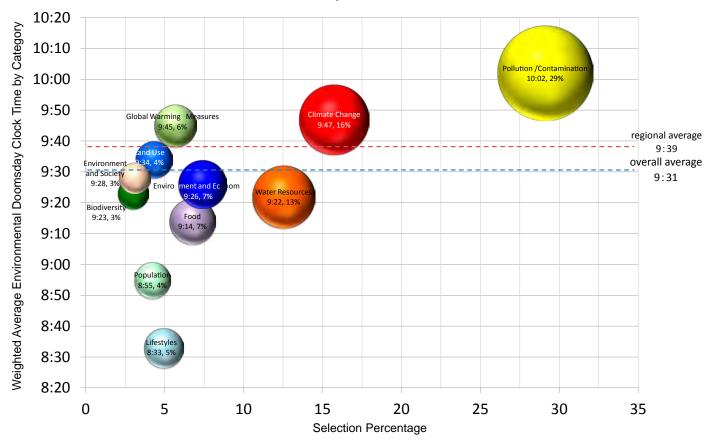




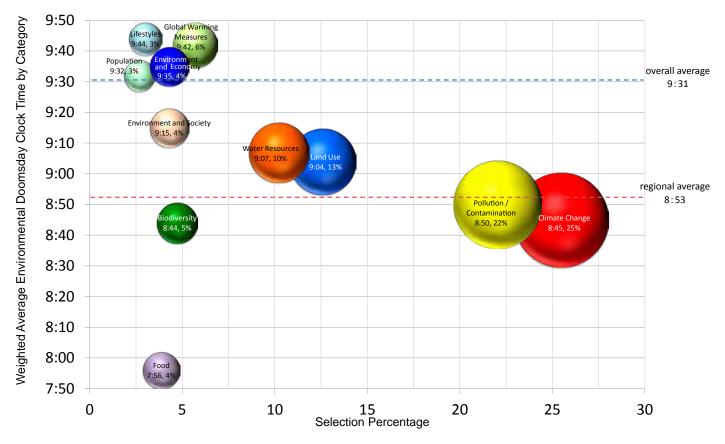
#### Graph 13-2. India

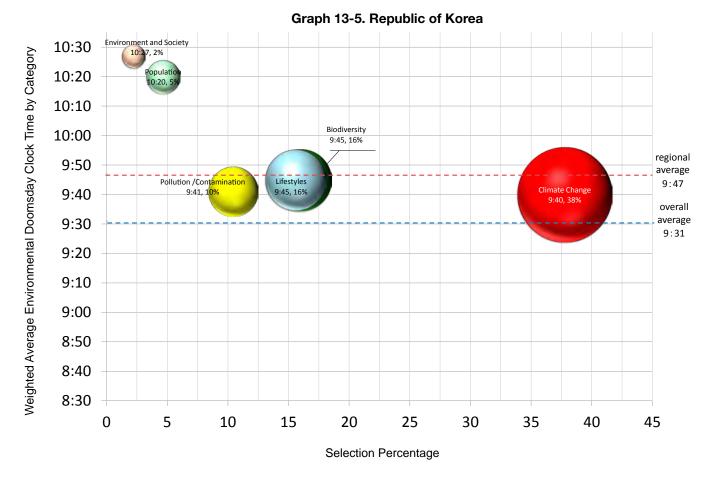


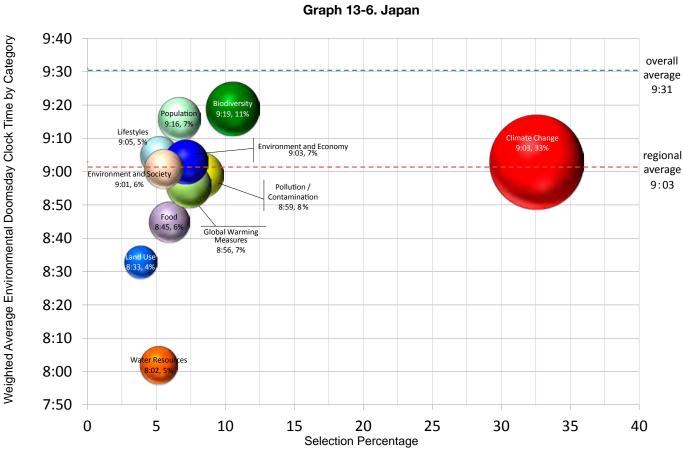
Graph 13-3. China

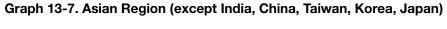


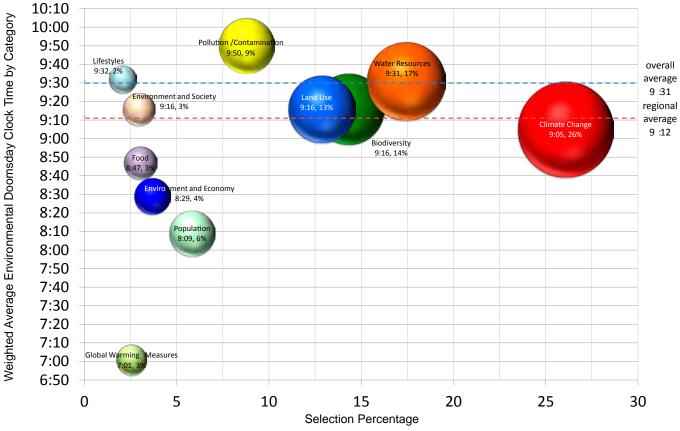
Graph 13-4. Taiwan











# IV. Data

### Number of Counties Surveyed

Region Africa	ALGERIA BENIN BOTSWANA BURKINA FASO	Total 2 3 3 3
, unde	BENIN BOTSWANA BURKINA FASO	3
	BOTSWANA BURKINA FASO	3
	BURKINA FASO	
		4
		1
	BURUNDI	_
	CAMEROON	7
	COTE D' IVOIRE	2
	CONGO	4
	EGYPT	3
	GHANA	4
	GUINEA	1
	GUINEA-BISSAU	1
	KENYA	7
	MADAGASCAR	7
	MALAWI	1
	MALI	2
	MAURITANIA	1
	MAURITIUS	4
	MOROCCO	3
	MOZAMBIQUE	1
1	NAMIBIA	2
	NIGER	1
	NIGERIA	2
	RWANDA	2
	SEYCHELLES	1
	SIERRA LEONE	1
	SOMALIA	1
	SOUTH AFRICA	8
	TANZANIA	2
	TOGO	1
	TUNISIA	2
	UGANDA	4
	ZAMBIA	2
	ZIMBABWE	1
Africa Total		91
Asia	AFGHANISTAN	1
	BANGLADESH	12
	BHUTAN	5
	CAMBODIA	5
	CHINA	304
	EAST TIMOR	1
		1
	HONG KONG	
	INDIA	59
	INDONESIA	8
	JAPAN	394
	KOREA	45
	LAOS	2
	MALAYSIA	18
	MONGOLIA	3
	MYANMAR	1
	NEPAL	6
	PAKISTAN	18
	PHILIPPINES	10
	SINGAPORE	3
		9
	SRI LANKA	
	TAIWAN	94
	THAILAND	18
	VIETNAM	4
Asia Total		1021

Oceania AUSTRALIA 5 COOK ISLANDS FIJI NEW CALEDONIA NEW ZEALAND PALAU SAMOA SOLOMON ISLANDS TONGA  Oceania Total Western Europe BELGIUM DENMARK FINLAND FRANCE ICELAND IRELAND IRELAND IRELAND IRELAND IRELAND IRELAND IRELAND ISWEDEN SWITZERLAND SWEDEN SWITZERLAND UK  Western Europe Total Eastern Europe & Former Soviet Union  Eastern Europe & Former Soviet Union  BULGARIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE	Region	Country	Total
COOK ISLANDS FIJI NEW CALEDONIA NEW ZEALAND PALAU SAMOA SOLOMON ISLANDS TONGA  Oceania Total Western Europe BELGIUM DENMARK FINLAND FRANCE ICELAND IRELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND IX SWEDEN SWITZERLAND UK  Western Europe Total  Eastern Europe & Former Soviet Union  Eastern Europe & FORMER BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE		<del>' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' </del>	55
FIJI NEW CALEDONIA NEW ZEALAND PALAU SAMOA SOLOMON ISLANDS TONGA  Oceania Total  Western Europe BELGIUM DENMARK FINLAND FRANCE GERMANY GREECE ICELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND ZTHE NETHERLANDS UK  Western Europe Total  Eastern Europe & FOrmer Soviet Union  RAMENIA BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			2
NEW CALEDONIA NEW ZEALAND PALAU SAMOA SOLOMON ISLANDS TONGA  Oceania Total  Western Europe BELGIUM DENMARK FINLAND FRANCE ICELAND IRELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND ZTHE NETHERLANDS UK  Western Europe Total  Eastern Europe & FOrmer Soviet Union  RELGIUM DENMARK FINLAND ITALY 2 LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND 22 THE NETHERLANDS UK 66  Western Europe Total BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			5
NEW ZEALAND PALAU SAMOA SOLOMON ISLANDS TONGA  Oceania Total  Western Europe BELGIUM DENMARK FINLAND FRANCE ICELAND IRELAND IR			2
PALAU SAMOA SOLOMON ISLANDS TONGA  Oceania Total  Western Europe BELGIUM DENMARK FINLAND FRANCE GERMANY GREECE ICELAND IRELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND THE NETHERLANDS UK  Western Europe Total  Eastern Europe & Former Soviet Union  BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			6
SAMOA SOLOMON ISLANDS TONGA  Oceania Total  Western Europe BELGIUM DENMARK FINLAND FRANCE ICELAND IRELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND THE NETHERLANDS UK  Western Europe Total  Eastern Europe & Former Soviet Union  EASTERN BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			1
SOLOMON ISLANDS TONGA  Oceania Total  Western Europe  BELGIUM DENMARK FINLAND FRANCE GERMANY GREECE ICELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWITZERLAND SWITZERLAND UK  Western Europe Total Eastern Europe & Former Soviet Union  Eastern Europe & Former Soviet Union  ALBANIA BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE		SAMOA	3
TONGA			1
Docania Total   Western   AUSTRIA   BELGIUM   DENMARK   FINLAND   FRANCE   GERMANY   GREECE   ICELAND   ITALY   2 LUXEMBOURG   MALTA   NORWAY   PORTUGAL   SPAIN   SWEDEN   SWITZERLAND   ITE NETHERLANDS   UK   60      Western Europe Total   23   ALBANIA   BOSNIA HERZEGOVINA   BULGARIA   CROATIA   CZECH   ESTONIA   GEORGIA   HUNGARY   KAZAKHSTAN   MOLDOVA   POLAND   ROMANIA   RUSSIA   SERBIA   SLOVAKIA   SLOVENIA   UKRAINE   MICANIC			1
Western   Europe   AUSTRIA   BELGIUM   DENMARK   FINLAND   FRANCE   11   GERMANY   31   GREECE   ICELAND   ITALY   2   LUXEMBOURG   MALTA   NORWAY   PORTUGAL   SPAIN   11   SWEDEN   SWITZERLAND   2   THE NETHERLANDS   UK   61   Western Europe Total   ALBANIA   BOSNIA HERZEGOVINA   BULGARIA   CROATIA   CZECH   ESTONIA   GEORGIA   HUNGARY   KAZAKHSTAN   MOLDOVA   POLAND   ROMANIA   RUSSIA   SERBIA   SLOVAKIA   SLOVENIA   UKRAINE   MICE   M	Oceania Tota		76
Europe  BELGIUM  DENMARK  FINLAND  FRANCE  GERMANY  GREECE  ICELAND  IRELAND  ITALY  LUXEMBOURG  MALTA  NORWAY  PORTUGAL  SPAIN  SWEDEN  SWITZERLAND  ITE NETHERLANDS  UK  Western Europe Total  Eastern Europe & Former Soviet Union  BULGARIA  CROATIA  CZECH ESTONIA  GEORGIA  HUNGARY  KAZAKHSTAN  MOLDOVA  POLAND  ROMANIA  RUSSIA  SERBIA  SLOVAKIA  SLOVENIA  UKRAINE		1	9
DENMARK FINLAND FRANCE GERMANY GREECE ICELAND IRELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND UK 60 Western Europe Total Eastern Europe & Former Soviet Union ARMENIA BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			6
FINLAND FRANCE GERMANY GREECE ICELAND IRELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND 2 THE NETHERLANDS UK 66  Western Europe Total Eastern Europe & Former Soviet Union ARMENIA BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE	·		6
FRANCE 11  GERMANY 31  GREECE  ICELAND  IRELAND  ITALY 2  LUXEMBOURG  MALTA  NORWAY  PORTUGAL  SPAIN 11  SWEDEN  SWITZERLAND 2  THE NETHERLANDS  UK 66  Western Europe Total 23:  ALBANIA  BOSNIA HERZEGOVINA  BULGARIA  CROATIA  CZECH  ESTONIA  GEORGIA  HUNGARY  KAZAKHSTAN  MOLDOVA  POLAND  ROMANIA  RUSSIA  SERBIA  SLOVAKIA  SLOVENIA  UKRAINE			7
GERMANY   3   GREECE   ICELAND   IRELAND   ITALY   2   LUXEMBOURG   MALTA   NORWAY   PORTUGAL   SPAIN   1   SWEDEN   SWITZERLAND   2   THE NETHERLANDS   UK   6   6   6   6   6   6   6   6   6			10
GREECE   ICELAND   IRELAND   ITALY   2   LUXEMBOURG   MALTA   NORWAY   PORTUGAL   SPAIN   1! SWEDEN   SWITZERLAND   2   THE NETHERLANDS   UK   6!			30
ICELAND IRELAND ITALY LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND 2 THE NETHERLANDS UK 6  Western Europe Total  Eastern Europe & Former Soviet Union BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			3
IRELAND  ITALY  LUXEMBOURG  MALTA  NORWAY  PORTUGAL  SPAIN  SWEDEN  SWITZERLAND  THE NETHERLANDS  UK  Western Europe Total  Eastern Europe & Former Soviet Union  ALBANIA  BOSNIA HERZEGOVINA  BULGARIA  CROATIA  CZECH ESTONIA  GEORGIA  HUNGARY  KAZAKHSTAN  MOLDOVA  POLAND  ROMANIA  RUSSIA  SERBIA  SLOVAKIA  SLOVENIA  UKRAINE			2
ITALY 2 LUXEMBOURG MALTA NORWAY PORTUGAL SPAIN 11 SWEDEN SWITZERLAND 2 THE NETHERLANDS UK 6  Western Europe Total 23  Eastern Europe & Former Soviet Union BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			1
LUXEMBOURG  MALTA  NORWAY  PORTUGAL  SPAIN  SWEDEN  SWITZERLAND  23  THE NETHERLANDS  UK  Western Europe Total  Eastern Europe & Former Soviet Union  ALBANIA  BOSNIA HERZEGOVINA  BULGARIA  CROATIA  CZECH ESTONIA  GEORGIA  HUNGARY  KAZAKHSTAN  MOLDOVA  POLAND  ROMANIA  RUSSIA  SERBIA  SLOVAKIA  SLOVENIA  UKRAINE			
MALTA NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND 2' THE NETHERLANDS UK  Western Europe Total  Eastern Europe & Former Soviet Union  ALBANIA BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			21
NORWAY PORTUGAL SPAIN SWEDEN SWITZERLAND 2' THE NETHERLANDS UK  Western Europe Total  Eastern Europe & Former Soviet Union  ALBANIA BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			1
PORTUGAL   SPAIN   1!   SWEDEN   SWITZERLAND   2   THE NETHERLANDS   UK   6!			2
SPAIN SWEDEN SWITZERLAND 22 THE NETHERLANDS UK  Western Europe Total  Eastern Europe & Former Soviet Union BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			2
SWEDEN   SWITZERLAND   2   THE NETHERLANDS   UK   6			9
SWITZERLAND   2   THE NETHERLANDS   9			19
THE NETHERLANDS  UK  Western Europe Total  Eastern Europe & Former Soviet Union  BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA  UK  68  ALBANIA ARMENIA BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			6
UK   68			27
Western Europe Total  Eastern Europe & Former Soviet Union  ALBANIA  ARMENIA  BOSNIA HERZEGOVINA  BULGARIA  CROATIA  CZECH  ESTONIA  GEORGIA  HUNGARY  KAZAKHSTAN  MOLDOVA  POLAND  ROMANIA  RUSSIA  SERBIA  SLOVAKIA  SLOVENIA  UKRAINE		THE NETHERLANDS	9
Eastern Europe & Former Soviet Union  BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE		UK	65
Europe & Former Soviet Union  ARMENIA  BOSNIA HERZEGOVINA  BULGARIA  CROATIA  CZECH  ESTONIA  GEORGIA  HUNGARY  KAZAKHSTAN  MOLDOVA  POLAND  ROMANIA  RUSSIA  SERBIA  SLOVAKIA  SLOVENIA  UKRAINE	Western Eur	ope Total	235
BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE	Eastern	ALBANIA	3
BOSNIA HERZEGOVINA BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE	Europe & Former So	- ARMENIA	2
BULGARIA CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE	viet Union		2
CROATIA CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			2
CZECH ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			1
ESTONIA GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			1
GEORGIA HUNGARY KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			1
HUNGARY  KAZAKHSTAN  MOLDOVA  POLAND  ROMANIA  RUSSIA  SERBIA  SLOVAKIA  SLOVENIA  UKRAINE			2
KAZAKHSTAN MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE		1	3
MOLDOVA POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			3
POLAND ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			1
ROMANIA RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			5
RUSSIA SERBIA SLOVAKIA SLOVENIA UKRAINE			4
SERBIA SLOVAKIA SLOVENIA UKRAINE			8
SLOVAKIA SLOVENIA UKRAINE			3
SLOVENIA UKRAINE			2
UKRAINE			1
			6
Lactor Laropo a formor soviot of flori fotal	Fastern Furon		50
	Lastorriculop	S & IST TICL SOVICE OF HOLF TOTAL	

Region	Country	Total
Middle East	BAHRAIN	4
	CYPRUS	1
	IRAN	4
	IRAQ	1
	ISRAEL	5
	JORDAN	3
	LEBANON	1
	OMAN	1
	PALESTINE	1
	QATAR	1
	SAUDI ARABIA	2
	SYRIA	1
	TURKEY	4
	UNITED ARAB EMIRATES	3
Middle East T		32
United States		52
& Canada	USA	213
United States	& Canada Total	265
Central America, Caribbe-	BRITISH VIRGIN IS- LANDS	1
an countries	COSTA RICA	8
	EL SALVADOR	2
	GRENADA	1
	GUATEMALA	3
	HONDURAS	2
	JAMAICA	2
	MEXICO	17
	PANAMA	3
	SAINT LUCIA	1
	TRINIDAD AND TO- BAGO	1
	UNITED STATES VIRGIN ISLANDS	1
Central Amer Total	ica, Caribbean countries	42
South	ARGENTINA	10
America	BOLIVIA	3
	BRAZIL	24
	CHILE	6
	COLOMBIA	6
	ECUADOR	5
	PARAGUAY	2
	PERU	8
	SURINAME	1
	URUGUAY	2
	VENEZUELA	3
South Americ	a Total	70

#### 1. AWARENESS OF THE CRISIS FACING HUMAN SURVIVAL—ENVIRONMENTAL DOOMSDAY CLOCK

In Table 1, environmental issues to be taken into account are shown. Keeping in mind the problems that the environment faces at a global level, please select the three most pressing issues for the country or the region where you reside. Then, please rank them in the order of importance. Lastly, for each item, select a time using hours and minutes between 0:10 to 12:00, to indicate the level of crisis for that issue. For the purposes of calculating results, please select your times in units of 10 minutes. If you wish to suggest another category, please do so under item "12. Others."

Ui	nıt:	%
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Rank 1 Category	Total	Oceania			USA.& C	anada		Central	South	Western	Europe		Africa	Middle	Eastern	Asia (A	II)					
			Oceania (Except Austra- lia)	Aust- ralia		Canada	USA	America, Carribean countries	America		UK	Western Europe (except UK)		East	Europe & former Soviet Union		Asian Region*	India	China	Taiwan	Korea	Japan
	[1882]	[76]	[21]	[55]	[265]	[52]	[213]	[42]	[70]	[235]	[65]	[170]	[91]	[32]	[50]	[1021]	[125]	[59]	[304]	[94]	[45]	[394]
Climate Change	41	53	52	53	55	69	52	45	29	36	42	34	48	34	14	39	41	25	16	38	62	55
2. Biodiversity	9	5	14	2	6	4	7	7	16	17	15	18	13	16	16	7	11	24	1	4	11	7
3. Land Use	7	5	10	4	4	6	4	12	21	12	9	13	14	6	18	5	14	8	3	10	0	3
4. Pollution/Contamination	12	1	5	0	4	6	3	0	4	4	5	4	4	3	8	20	6	7	46	28	9	5
5. Water Resources	7	4	5	4	8	2	9	19	13	3	0	4	8	34	14	6	10	14	9	5	0	3
6. Population	7	11	0	15	12	6	13	7	4	12	18	9	4	3	0	5	8	12	1	1	2	8
7. Food	2	3	0	4	0	0	0	2	1	0	0	1	2	0	0	3	1	2	6	2	0	2
8. Lifestyles	3	1	0	2	1	2	1	5	1	5	3	6	0	3	2	3	2	0	4	1	13	2
9. Global Warming Measures	3	3	0	4	2	2	1	0	0	0	0	0	0	0	2	5	2	2	5	4	0	6
10. Environment and Economy	5	5	5	5	6	4	6	2	4	7	6	7	0	0	18	4	4	2	6	2	0	4
11. Environment and Society	3	7	5	7	2	0	2	0	3	3	0	4	3	0	6	3	2	3	1	3	2	4
12. Other	1	0	0	0	1	0	1	0	1	1	2	1	0	0	2	2	0	0	3	0	0	2
No Response	0	3	5	2	0	0	0	0	1	0	0	0	2	0	0	0	0	2	0	1	0	0
Number of Responses	[1872]	[74]	[20]	[54]	[264]	[52]	[212]	[42]	[69]	[235]	[65]	[170]	[89]	[32]	[50]	[1017]	[125]	[58]	[303]	[92]	[45]	[394]
Time for Rank 1 Category	10:01	10:35	10:24	10:39	10:25	10:03	10:31	10:08	10:24	10:20	10:34	10:15	9:35	10:30	9:18	9:48	9:44	10:06	10:14	9:36	10:03	9:29

\*With the exception of India, China, Taiwan, Korea, and Japan

- Atmospheric concentration of CO2; global warming; ocean acidification; climatic aberrations (droughts, torrential rains and flooding, severe storms, heavy snow, abnormal temperatures, dry-1. Climate Change.
- ing of rivers and lakes, desertification, etc.)

  Acceleration of species extinction rate; effects of contamination, climate change, land use 2. Biodiversity...
- 3. Land Use Expansion of cultivated land mass; destruction of forests due to excessive development; desertification caused by overgrazing; agriculture and land use without regard for the environment; urbanization
- 4. Pollution/Contamination. River and ocean pollution: eutrophication caused by excessive nitrogen and phosphorus and contamination by chemical substances; atmospheric pollution: particulates suspended in the atmosphere, soot and chemical substances
- 5 Water Resources Diminution of usable fresh water resources (depletion, contamination)
- 6. Population... Population growth beyond what the Earth can support; aging of the population
- 7. Food ..... 8. Lifestyles Diminution of food supply from land and oceans

  Transformation of lifestyles away from excessive consumption of resources like energy
- 9. Global Warming Measures. Progress of measures for mitigation and adaption . Progress towards implementing an economic system to reflect environmental costs, the bearing of social costs: imposition of taxes for fossil fuels that emit CO2, which cause global warming-10. Environment and Economy
  - related damages; TEEB (The Economics of Ecosystems and Biodiversity), etc.

    The operation of an environmentally conscious economy: the realization of green economy, sustainable economic development, etc.
- 11 Environment and Society Environmental awareness at the individual and societal levels, progress of environmental education; poverty; the status of wome

Rank 2 Category

Unit:%

riarin L Galogory																						
3 ,	Total	Oceania			USA.& C	anada		Central	South	Western	Europe		Africa	Middle		Asia (A	II)					
			Oceania (Except Austra- lia)	Aust- ralia		Canada	USA	America, Carribean countries	America		UK	Western Europe (except UK)		East	Europe & former Soviet Union		Asian Region*	India	China	Taiwan	Korea	Japan
	[1882]	[76]	[21]	[55]	[265]	[52]	[213]	[42]	[70]	[235]	[65]	[170]	[132]	[41]	[58]	[1021]	[125]	[59]	[304]	[94]	[45]	[394]
1. Climate Change	15	11	5	13	14	8	15	10	13	17	14	18	14	7	9	15	14	22	18	15	18	13
2. Biodiversity	16	30	29	31	21	23	21	21	19	21	20	22	16	10	12	11	22	10	4	4	22	15
3. Land Use	10	5	14	2	6	6	6	19	30	19	20	19	17	15	17	7	10	17	4	17	7	5
4. Pollution/Contamination	11	8	10	7	6	6	6	10	7	8	5	9	5	20	17	14	10	10	15	18	16	13
5. Water Resources	15	17	24	15	21	12	23	21	14	7	2	9	20	24	21	15	28	17	20	17	0	7
6. Population	6	12	5	15	8	8	8	5	1	6	11	5	6	10	0	6	2	7	7	2	9	6
7. Food	5	1	0	2	2	2	1	0	1	2	2	2	5	5	2	7	4	2	7	4	2	9
8. Lifestyles	6	5	0	7	7	12	6	2	0	8	9	8	4	5	2	6	3	2	5	3	16	8
9. Global Warming Measures	5	1	0	2	3	4	3	7	3	2	2	2	2	2	3	6	2	0	6	8	0	10
10. Environment and Economy	6	5	10	4	7	17	5	2	6	6	9	4	7	0	12	7	1	3	8	6	9	8
11. Environment and Society	4	1	0	2	4	4	4	2	4	4	8	2	3	2	3	4	4	8	3	3	2	5
12. Other	1	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1	0	0	3	0	0	1
No Response	0	3	5	2	0	0	0	0	1	0	0	0	2	0	2	0	0	2	0	1	0	0
Number of Responses	[1871]	[74]	[20]	[54]	[264]	[52]	[212]	[42]	[69]	[235]	[65]	[170]	[126]	[41]	[57]	[1016]	[125]	[58]	[303]	[92]	[45]	[393]
Time for Rank 1 Category	9:14	9:41	9:32	9:45	9:44	9:31	9:47	9:27	9:28	9:29	9:43	9:23	8:43	8:52	8:29	9:01	8:48	9:14	9:19	8:48	9:48	8:47

\*With the exception of India, China, Taiwan, Korea, and Japan

Rank 3 Category Unit:%

nank 3 Calegory																						OTTIL. 7
	Total	Oceania	ı		USA.& C	anada		Central	South	Western	Europe		Africa	Middle		Asia (A	I)					
			Oceania (Except Austra- lia)	Aust- ralia		Canada	USA	America, Carribean countries	America		UK	Western Europe (except UK)		East	Europe & former Soviet Union		Asian Region*	India	China	Taiwan	Korea	Japan
	[1882]	[76]	[21]	[55]	[265]	[52]	[213]	[42]	[70]	[235]	[65]	[170]	[91]	[32]	[50]	[1021]	[125]	[59]	[304]	[94]	[45]	[394]
1. Climate Change	10	7	5	7	10	8	11	14	11	13	8	15	11	9	14	9	8	8	13	11	7	6
2. Biodiversity	13	20	29	16	15	23	13	14	23	14	9	16	14	3	20	10	11	12	6	6	18	12
3. Land Use	12	12	10	13	14	13	14	14	14	14	18	13	14	19	8	10	16	15	10	13	9	6
4. Pollution/Contamination	9	7	5	7	10	4	12	12	6	10	9	11	7	0	16	10	14	10	7	13	7	10
5. Water Resources	12	21	29	18	13	15	13	7	11	9	6	11	19	28	2	11	19	17	11	12	7	9
6. Population	7	8	0	11	11	4	13	5	4	6	8	5	11	6	2	6	6	14	7	8	4	5
7. Food	6	1	5	0	2	2	1	10	3	3	5	3	7	3	2	9	7	3	9	8	4	11
8. Lifestyles	7	1	0	2	6	6	6	5	7	9	8	9	2	6	6	7	2	3	7	8	22	9
9. Global Warming Measures	4	1	0	2	2	2	2	0	4	3	6	1	3	0	0	6	3	3	8	6	0	6
10. Environment and Economy	10	9	10	9	9	12	8	5	7	9	8	9	7	13	14	11	7	3	12	6	18	14
11. Environment and Society	8	11	5	13	7	12	6	10	6	9	12	7	2	3	14	8	5	8	7	9	2	9
12. Other	2	0	0	0	1	0	1	5	1	1	3	0	1	9	2	2	2	0	3	0	2	3
No Response	1	3	5	2	0	0	0	0	1	0	0	0	2	0	0	1	0	2	1	1	0	1
Number of Responses	[1866]	[74]	[20]	[54]	[264]	[52]	[212]	[42]	[69]	[235]	[65]	[170]	[89]	[32]	[50]	[1011]	[125]	[58]	[299]	[92]	[45]	[392]
Time for Rank 1 Category	8:39	9:07	9:03	9:09	9:13	9:01	9:16	8:39	8:49	8:53	9:01	8:50	8:23	9:11	8:03	8:26	8:31	8:51	8:40	7:14	9:02	8:22

\*With the exception of India, China, Taiwan, Korea, and Japan

#### 2. YOUR OPINIONS ON ENVIRONMENTAL PROBLEMS - FREE TEXT

Feel free to write comments on any topic of environmental problems. If there are any items that relate to your opinion in the list of "Environmental issues to be taken into account" below, please tick the box next to the item. You may select multiple items. If you select "12. Others," please write the details in the space below.

Unit:%

	Total	Oceania			USA.& C	anada		Central	South	Western	Europe		Africa			Asia (A	II)					
			Oceania (Except Austra- lia)	Aust- ralia		Canada	USA	America, Carribean countries	America		UK	Western Europe (except UK)		East	Europe & former Soviet Union		Asian Region*	India	China	Taiwan	Korea	Japan
	[1882]	[76]	[21]	[55]	[265]	[52]	[213]	[42]	[70]	[235]	[65]	[170]	[91]	[32]	[50]	[1021]	[125]	[59]	[304]	[94]	[45]	[394]
1. Climate Change	57	63	62	64	57	69	54	64	67	59	49	62	76	75	44	53	69	61	58	38	80	44
2. Biodiversity	40	57	67	53	40	48	38	60	60	54	40	60	63	72	64	30	64	66	31	9	40	16
3. Land Use	36	39	43	38	32	33	32	57	60	50	43	52	54	47	56	29	54	51	36	22	53	11
4. Pollution/Contamination	42	32	48	25	29	29	30	52	46	42	31	46	41	50	46	45	52	58	81	42	18	16
5. Water Resources	40	42	52	38	41	40	41	64	46	40	23	46	59	75	52	34	62	64	56	13	0	13
6. Population	27	42	24	49	34	37	33	31	23	37	38	37	30	38	20	22	38	47	25	10	2	15
7. Food	22	17	29	13	21	12	23	29	14	25	18	28	34	22	26	20	32	27	28	4	7	15
8. Lifestyles	25	14	5	18	25	33	23	36	33	37	28	40	22	41	38	21	27	32	25	6	33	16
9. Global Warming Measures	25	18	19	18	20	19	21	26	19	25	14	29	29	25	18	27	33	29	33	26	0	24
10. Environment and Economy	30	37	33	38	31	37	29	29	39	34	20	39	31	34	56	27	44	32	35	16	9	18
11. Environment and Society	27	33	19	38	24	25	24	19	40	31	26	32	31	44	44	24	44	41	26	19	13	16
12. Other	8	20	14	22	9	4	10	5	11	12	11	13	11	19	18	5	8	8	2	2	0	8
No Response	13	13	10	15	24	19	25	2	9	19	35	12	5	6	8	10	8	5	2	2	0	22

\*With the exception of India, China, Taiwan, Korea, and Japan

Atmospheric concentration of CO2; global warming; ocean acidification; climatic aberrations (droughts, torrential rains and flooding, severe storms, heavy snow, abnormal temperatures, dry-1. Climate Change ing of rivers and lakes, desertification, etc.)

Acceleration of species extinction rate; effects of contamination, climate change, land use 3. Land Use. Expansion of cultivated land mass; destruction of forests due to excessive development; desertification caused by overgrazing; agriculture and land use without regard for the environment;

urbanization River and ocean pollution: eutrophication caused by excessive nitrogen and phosphorus and contamination by chemical substances; atmospheric pollution: particulates suspended in the atmosphere, soot and chemical substances 4. Pollution/Contamination.

5. Water Resources . Diminution of usable fresh water resources (depletion, contamination)

Population growth beyond what the Earth can support; aging of the population

6. Population.. 7. Food ..

Diminution of food supply from land and oceans
Transformation of lifestyles away from excessive consumption of resources like energy 8. Lifestyles.

Global Warming Measures. Progress of measures for mitigation and adaption

Progress towards implementing an economic system to reflect environmental costs, the bearing of social costs: imposition of taxes for fossil fuels that emit CO2, which cause global warmingrelated damages; TEEB (The Economics of Ecosystems and Biodiversity), etc.

The operation of an environmentally conscious economy: the realization of green economy, sustainable economic development, etc.

11. Environment and Society... Environmental awareness at the individual and societal levels, progress of environmental education; poverty; the status of women

#### Respondent Affiliation

Unit:%

Employment	Total	Oceania	1		USA.& C	Canada				Western	Europe		Africa	Middle East	Eastern Europe	Asia (Al	II)					
			Oceania (Except Austra- lia)	Aust- ralia		Canada	USA	America, Carribean countries	America		UK	Western Europe (except UK)			& former Soviet Union		Asian Region*	India	China	Taiwan	Korea	Japan
	[1882]	[76]	[21]	[55]	[265]	[52]	[213]	[42]	[70]	[235]	[65]	[170]	[91]	[32]	[50]	[1021]	[125]	[59]	[304]	[94]	[45]	[394]
1. National government	6	9	5	11	8	10	7	19	9	6	5	7	9	3	4	5	11	17	1	18	2	3
2. Local government	6	0	0	0	3	0	3	5	10	3	0	5	2	3	2	8	2	3	8	19	11	9
University/research institution	34	53	48	55	35	35	35	33	34	33	32	34	30	50	50	31	21	32	19	26	22	45
Nongovernmental     Organization	23	20	33	15	25	19	26	33	39	30	31	29	38	28	36	17	52	37	7	15	44	8
5. Corporation	16	7	0	9	3	8	1	2	3	6	5	6	4	0	2	26	2	3	62	20	16	13
6. Mass Media	2	0	0	0	9	4	11	0	0	1	2	1	0	0	0	1	0	0	0	0	0	3
7. Other	13	11	10	11	18	25	16	7	6	20	26	18	16	16	6	11	13	7	3	1	4	20
No response	0	1	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

\*With the exception of India, China, Taiwan, Korea, and Japan

Gender																						Unit:%
	Total	Oceania	ı	_	USA.& C	anada			South America	Western	Europe		Africa	Middle East	Eastern Europe	Asia (Al	II)					
			Oceania (Except Austra- lia)	Aust- ralia		Canada	USA	Carribean countries	America		UK	Western Europe (except UK)			& former Soviet Union		Asian Region*	India	China	Taiwan	Korea	Japan
	[1882]	[76]	[21]	[55]	[265]	[52]	[213]	[42]	[70]	[235]	[65]	[170]	[91]	[32]	[50]	[1021]	[125]	[59]	[304]	[94]	[45]	[394]
Male	73	76	81	75	71	85	68	71	71	73	80	70	80	78	74	72	74	88	50	63	40	91
Female	27	24	19	25	29	15	32	29	29	27	20	29	19	22	26	28	26	12	50	37	60	9
No response	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0

\*With the exception of India, China, Taiwan, Korea, and Japan

U	r	1	Iţ	:	%	
					_	

Age	Total	Oceania	a		USA.& C	anada		Central	South	Western	Europe		Africa	Middle East	Eastern Europe	Asia (A	II)					
			Oceania (Except Austra- lia)	Aust- ralia		Canada	USA	America, Carribean countries			UK	Western Europe (except UK)			& former Soviet Union		Asian Region*	India	China	Taiwan	Korea	Japan
	[1882]	[76]	[21]	[55]	[265]	[52]	[213]	[42]	[70]	[235]	[65]	[170]	[91]	[32]	[50]	[1021]	[125]	[59]	[304]	[94]	[45]	[394]
20s	9	3	10	0	2	0	3	2	3	3	2	4	1	3	6	15	6	7	35	28	11	1
30s	21	11	14	9	9	12	9	14	27	15	14	16	23	16	22	26	27	27	47	34	53	4
40s	20	17	14	18	15	17	14	29	14	30	25	32	27	38	26	18	30	20	13	24	29	14
50s	22	26	24	27	24	27	23	31	29	25	26	25	32	22	24	18	22	24	4	8	7	31
60s	17	22	24	22	28	25	29	19	20	18	17	18	11	19	12	14	12	14	0	2	0	30
Over 70	10	20	10	24	22	19	23	5	7	9	17	5	5	3	10	8	2	8	1	2	0	19
No response	0	1	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0

\*With the exception of India, China, Taiwan, Korea, and Japan

About "Number of responses" and "no response"

Number of responses counted the number of valid responses, which consisted of either single answers or when the question asked for multiple responses, selections made under the requested number of choices. When there were more responses than the number requested, the response was invalidated.

No response: Respondent did not provide a selection.

## V. Questionnaire as Distributed to Respondents

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

In Table1, "environmental issues to be taken into account" are shown. Keeping in mind the problems that the environment faces at a global level, please select the three most pressing issues for the country or the region where you reside. Then, please rank them in the order of importance. Lastly, for each item, select a time using hours and minutes between 0:10 to 12:00, to indicate the level of crisis for that issue. For the purposes of calculating results, please select your times in units of 10 minutes. If you wish to suggest another category, please do so under item "12. Others."

Example		Answer
Category Number TIME	12	Category Number TIME
First (1.) 9 : 30	9:01~12:00 0:01~3:00	First ( ) :
(of the first magnitude)	Extremely Concerned Barely Concerned	(of the first magnitude)
Second ( 5. ) 7 : 40	9 3	Second ( ) :
(of the second magnitude)	6:01 ~ 9:00 3:01 ~ 6:00	(of the second magnitude)
Third (3.) 8 : 20	Fairly Concerned Slightly Concerned	Third ( ) :
(of the third magnitude)	6	(of the third magnitude)

#### About the calculation of the time on the Environmental Doomsday Clock

The time on the Environmental Doomsday Clock will be determined by taking the weighted average of the data. The issue ranked in first place will be weighted at 50%, second place at 30%, and third place at 20%. In the example shown, the time comes to 8:43.

Table 1. Environmental issues to be taken into account

No.	Category	Examples of Observable Changes in the Country or the Region in which You Reside
1.	Climate Change	Atmospheric <b>concentration of CO<sub>2</sub></b> ; global warming; <b>ocean acidification</b> ; climatic aberrations (droughts, torrential rains and flooding, severe storms, heavy snow, abnormal temperatures, drying of rivers and lakes, desertification, etc.)
2.	Biodiversity	Acceleration of species <b>extinction rate</b> ; effects of contamination, climate change, land use
3.	Land Use	Expansion of cultivated land mass; destruction of forests due to excessive development; desertification caused by overgrazing; agriculture and land use without regard for the environment; urbanization
4.	Pollution / Contamination	River and ocean pollution: eutrophication caused by excessive <b>nitrogen</b> and <b>phosphorus</b> and contamination by chemical substances; <b>atmospheric pollution</b> : particulates suspended in the atmosphere, soot and <b>chemical substances</b>
5.	Water Resources	Diminution of usable fresh water resources (depletion, contamination)
6.	Population	Population growth beyond what the Earth can support; aging of the population
7.	Food	Diminution of food supply from land and oceans
8.	Lifestyles	Transformation of lifestyles away from excessive consumption of resources like energy
9.	Global Warming Measures	Progress of measures for mitigation and adaption
10.	Environment and Economy	Progress towards implementing an economic system to reflect environmental costs, the bearing of social costs: imposition of taxes for fossil fuels that emit CO <sub>2</sub> , which causes global warming-related damages; TEEB (The Economics of Ecosystems and Biodiversity), etc. The operation of an environmentally conscious economy: the realization of a green economy, sustainable economic development, etc.
11.	Environment and Society	Environmental awareness at the individual and societal levels, progress of environmental education; poverty, governance; the status of women
12.	Others*	

<sup>\*</sup> Please write in a new category in the space provided above.

Terms in **bold** are categories listed in "Planetary Boundaries" (Johan Rockstrom, et al.,: Ecology and Society 14 (2):32, 2009); those in <u>underlined</u> are the major categories of SDGs (Sustainable Development Goals of United Nations).

#### 2. Your Opinions on Environmental Problems - Free text

1. Climate Change

Feel free to write comments on any topic of environmental problems. If there are any items that relate to your opinion in the list of "Environmental issues to be taken into account" below, please tick the box next to the item. You may select multiple items. If you select "12. Others," please write the details in the space below.

7. Food

10. Environment

and Economy

#### Environmental issues to be taken into account

4. Pollution /

Contamination

2. Biodiversity	5. Water Resources	8. Lifestyles	11. Environment and Society
3. Land Use	6. Population	9. Global Warming Measures	12. Others
"12. Others":			
Opinions:			

# Reference: Changes in the Environmental Doomsday Clock

		Asian Re	gion* (exce	pt India, China, Taiwan,	Korea, Japan
		United States & Canada	8:35	India	<b>-</b>
	11 12 1 10 2	Latin America (Central, Caribbean, South)	8:57	China Taiwan	-
1992	9 3 4.	Western Europe	8:54	Korea	
1992	7 6 5	Eastern Europe & Former Soviet Union	9:27	1	7:38
				Japan	1.30
		Africa	8:10	Asian Region*	-
		Middle East	8:10	Oceania	9:58
		United States & Canada	8:58	India	-
	11 <sup>12</sup> 1 10 2	Latin America (Central, Caribbean,	8:37	China	-
	9 3•	South)		Taiwan	-
1993	.8 4. 7 6 5.	Western Europe	9:02	Korea	-
	••••••	Eastern Europe & Former Soviet Union	7:02	Japan	7:33
	8: 19	Africa	8:43	Asian Region*	-
		Middle East	8:12	Oceania	23
		United States & Canada	9:07	India	-
	11 12 1 10 2 19 3 8 7 6 5	Latin America (Central, Caribbean, South)	9:37	China	-
				Taiwan	-
1994		Western Europe	9:35	Korea	-
1001		Eastern Europe & Former Soviet Union	8:10	Japan	8:01
		Africa	9:14	Asian Region*	-
		Middle East	-	Oceania	8:53
	11 12 1 10 2 9 3 8 4 7 6 5	United States & Canada	8:52	India	-
		Latin America		China	-
		(Central, Caribbean, South)	9:23	Taiwan	-
1995		Western Europe	9:02	Korea	-
		Eastern Europe & Former Soviet Union	9:29	Japan	8:08
		Africa	9:33	Asian Region*	-
		Middle East	9:09	Oceania	9:44
		United States & Canada	9:30	India	-
	11 12 1	Latin America		China	-
	11 12 1	(Central, Caribbean, South)	9:28	Taiwan	-
1996	8 4	Western Europe	9:46	Korea	-
. 555	6 3	Eastern Europe & Former Soviet Union	9:12	Japan	8:51
	9: 13	Africa	9:25	Asian Region*	-
		Middle East	8:30	Oceania	9:43
				<u> </u>	

		United States & Canada	9:09	India	-
	11 12 1 10 2	Latin America		China	-
		(Central, Caribbean, South)		Taiwan	-
1997	.8 4.	Western Europe	9:53	Korea	-
	., 6 3.	Eastern Europe & Former Soviet Union	9:37	Japan	7:38
	9:04	Africa	9:15	Asian Region*	-
		Middle East	9:33	Oceania	9:58
		United States & Canada	8:40	India	-
	11 12 1	Latin America		China	-
	10 2	(Central, Caribbean, South)	9:04	Taiwan	-
1998	.8 4.	Western Europe	9:37	Korea	-
	6 3.	Eastern Europe & Former Soviet Union	9:44	Japan	9:01
	9:05	Africa	9:08	Asian Region*	-
		Middle East	8:47	Oceania	9:34
		United States & Canada	9:03	India	-
	11 12 1	Latin America (Central, Caribbean, South)	9:14	China	-
	10 2			Taiwan	-
1999	9   8,7 6,5	Western Europe	8:46	Korea	-
.000		Eastern Europe & Former Soviet Union	9:21	Japan	9:07
		Africa	9:13	Asian Region*	-
		Middle East	9:32	Oceania	8:52
	11, 12 1 10 2 9 3 8 4 7 6 5	United States & Canada	8:49	India	-
		Latin America (Central, Caribbean, South)	8:52	China	-
				Taiwan	-
2000		Western Europe	8:46	Korea	-
2000		Eastern Europe & Former Soviet Union	8:21	Japan	8:56
		Africa	9:17	Asian Region*	-
		Middle East	9:38	Oceania	8:31
		United States & Canada	9:54	India	-
	11 12 1 10 2	Latin America		China	-
		(Central, Caribbean, South)	9:00	Taiwan	-
2001	.8 4.	Western Europe	8:58	Korea	-
	6 3	Eastern Europe & Former Soviet Union	8:17	Japan	9:04
	9:08	Africa	9:37	Asian Region*	-
		Middle East	9:01	Oceania	8:58

		United States & Canada	8:23	India	-
	11 12 1	Latin America		China	_
		(Central, Caribbean, South)	9:22	Taiwan	-
2002	.8 4.	Western Europe	8:44	Korea	-
2002	,7 6 5	Eastern Europe & Former Soviet Union	9:28	Japan	9:18
	9:05	Africa	9:29	Asian Region*	-
		Middle East	8:02	Oceania	9:22
		United States & Canada	9:03	India	-
	11 12 1	Latin America	0.10	China	-
	10 2	(Central, Caribbean, South)	9:19	Taiwan	-
2003	.8 4. 7 6 5	Western Europe	8:52	Korea	-
	•••••••	Eastern Europe & Former Soviet Union	9:02	Japan	9:20
	9: 15	Africa	9:22	Asian Region*	_
		Middle East	8:52	Oceania	9:37
		United States & Canada	9:14	India	_
	11 12 1 10 2 9 3 8 4 7 6 5	Latin America (Central, Caribbean, South)	9:12	China	_
				Taiwan	_
2004		Western Europe	8:56	Korea	-
		Eastern Europe & Former Soviet Union	8:30	Japan	9:06
		Africa	9:04	Asian Region*	_
		Middle East	8:41	Oceania	9:08
	11 12 1 10 2 9 3 8 4 7 6 5	United States & Canada	8:54	India	_
		Latin America (Central, Caribbean,	9:08	China	_
		South)	9.00	Taiwan	_
2005		Western Europe	8:43	Korea	-
		Eastern Europe & Former Soviet Union	8:26	Japan	9:07
		Africa	9:03	Asian Region*	_
		Middle East	9:18	Oceania	9:18
		United States & Canada	9:18	India	_
	11 12 1 10 2 19 3:	Latin America	0.21	China	_
		(Central, Caribbean, South)	9:31	Taiwan	_
2006	.8 4. 7 6 5	Western Europe	9:08	Korea	-
		Eastern Europe & Former Soviet Union	9:07	Japan	9:15
	9: 17	Africa	9:32	Asian Region*	-
		Middle East	10:05	Oceania	9:18

		United States & Canada	9:40	India	-
	11 12 1 10 2 19 3:	Latin America (Central, Caribbean, South)	•••••	China	-
			9:38	Taiwan	-
2007	.8 7 5 4.	Western Europe	9:23	Korea	-
	, b	Eastern Europe & Former Soviet Union	9:20	Japan	9:34
	9:31	Africa	10:02	Asian Region*	-
		Middle East	9:41	Oceania	10:27
		United States & Canada	10:13	India	10:05
	11 12 1	Latin America	0-40	China	8:03
	10 2	(Central, Caribbean, South)	9:49	Taiwan	8:03
2008	.8 4.	Western Europe	9:44	Korea	8:51
		Eastern Europe & Former Soviet Union	9:37	Japan	9:42
	9:33	Africa	10:31	Asian Region*	10:02
		Middle East	9:24	Oceania	10:34
	11 12 1 10 2 9 3 8 4 7 6 5	United States & Canada	10:01	India	9:45
		Latin America (Central, Caribbean, South)	9:28	China	8:26
				Taiwan	8:38
2009		Western Europe	9:55	Korea	9:53
		Eastern Europe & Former Soviet Union	10:00	Japan	9:08
		Africa	10:15	Asian Region*	9:29
		Middle East	9:42	Oceania	10:10
	11 12 1 10 2 19 3 8 7 6 5	United States & Canada	10:13	India	9:42
		Latin America	9:48	China	8:04
		(Central, Caribbean, South)	9.40	Taiwan	9:18
2010		Western Europe	9:45	Korea	9:35
		Eastern Europe & Former Soviet Union	9:47	Japan	9:09
		Africa	10:24	Asian Region*	9:40
		Middle East	10:47		10:29
		United States & Canada	9:35	India	9:31
	11 12 1 10 2 19 3:	Latin America (Central, Caribbean, South)	0-40	China	7:57
			9:18	Taiwan	8:42
2011	.8 4. 7 <sub>6</sub> 5	Western Europe	9:28	Korea	9:59
	9:01	Eastern Europe & Former Soviet Union	9:13	Japan	8:46
		Africa	9:09	Asian Region*	9:03
		Middle East	10:24	Oceania	10:06

		United States & Canada	9:54	India	9:10
	11 12 1	Latin America	40.00	China	8:49
	10 2 3	(Central, Caribbean, South)	10:00	Taiwan	8:57
2012	.8 7 6 5 4.	Western Europe	9:55	Korea	9:33
	•••••	Eastern Europe & Former Soviet Union	9:12	Japan	9:14
	9:23	Africa	10:04	Asian Region*	9:39
		Middle East	9:38	Oceania	10:14
		United States & Canada	10:16	India	9:27
	11 12 1	Latin America	0.46	China	9:16
	10 2	(Central, Caribbean, South)	9:46	Taiwan	8:39
2013	.8 4. 7 6 5	Western Europe	9:40	Korea	9:31
		Eastern Europe & Former Soviet Union	9:48	Japan	9:05
	9: 19	Africa	9:42	Asian Region*	9:29
		Middle East	9:08	Oceania	10:01
	11 12 1 10 2 9 3 8 7 6 5	Oceania	10:08	Africa	9:09
		United States & Canada	9:55	Eastern Europe	8:51
2014		Central, Caribbean America	9:12	& Former Soviet Union	
		South America	9:23	Middle East	9:21
		Western Europe	9:33	Asia	9:15
	11 12 1	Oceania	10:06	Africa	9:00
	9 3 8 7 6 5	United States & Canada	10:01	Eastern Europe	8:59
2015		Central, Caribbean America	9:47	& Former Soviet Union	
		South America	9:47	Middle East	9:10
		Western Europe	9:42	Asia	9:15
	11 12 1	Oceania	10:01	Africa	9:09
	9 3 3	United States & Canada	9:58	Eastern Europe	
2016		Central, Caribbean America	9:38	& Former Soviet Union	8:51
		South America	9:48	Middle East	10:06
		Western Europe	9:47	Asia	9:18

# Characters of the Environmental Doomsday Clock



#### Gring

Woodin's friend. Worryingly, Woodin had run out of energy for the global environment. To refresh Woodin, Gring has been traveling, looking for ways to protect our planet's environment. When Gring was on it journey, it carried Woodin as a pouch.



#### Woodin

A character associated with the Environmental Doosday Clock. Woodin's state changes with the four crisis levels of the environmental Doomsday Clock.



0:01~3:00 Okay



3:01~6:00 Concerned



6:01~9:00 Worried

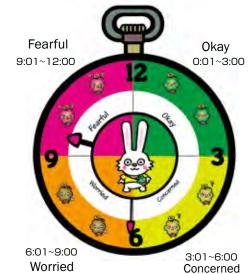


9:01~12:00 Fearful

# What is the Environmental Doomsday Clock

This is a clock that expresses how concerned we are about the global environment after having listened to the voices of people around the world. The greater our concern, the more time moves forward, and the closer it draws to 12 o'clock, the more dangerous the Earth becomes.





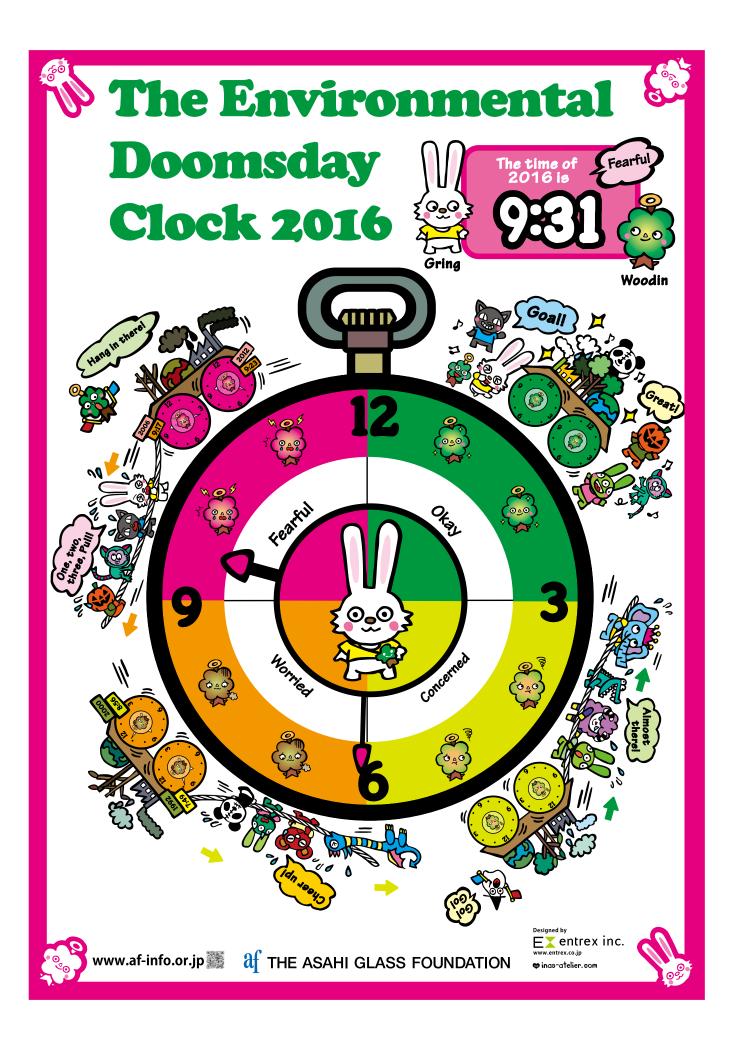


The comic "Gring and Woodin's Adventure in Water Kingdom" can be viewed on the foundation's website. Please come and see Gring and Woodin at our website below.

#### The Asahi Glass Foundation

http://www.af-info.or.jp/en/gw\_clock/adventure.html

Twitter: @clock\_gw Facebook: @gringandwoodin



# Results of the 25th Annual "Questionnaire on Environmental Problems and the Survival of Humankind"

# REPORT

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