

September 9, 2009

# The Asahi Glass Foundation Announces Results of the 18<sup>th</sup> Annual

### "Questionnaire on Environmental Problems and the Survival of Humankind"

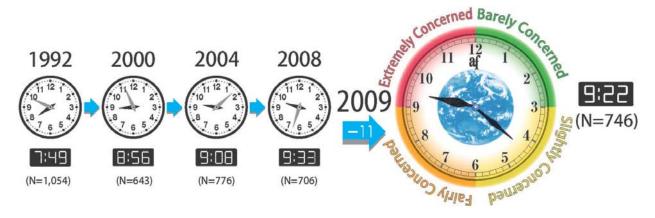
- The average time on the Environmental Doomsday Clock <u>retreated by 11 minutes</u> from last year to 9:22 p.m., still showing a high sense of crisis being the third most advanced time recorded.
- •Compared to last year, the needle retreated 34 minutes in Japan, the largest reversal of the clock since the survey started in 1992.
- •Respondents most often cited <u>global warming</u> as the main environmental concern in considering their response on the Environmental Doomsday Clock.
- •Responses on the breadth of emissions reduction by developed countries concentrated around a <u>"20% reduction" and</u> <u>"30% reduction."</u>
- •<u>Approximately 70% of Japanese respondents</u> were aware of the Sectoral Approach against global warming as proposed by Japan, but awareness was <u>less than 20% overseas</u>.
- The majority of respondents from all regions stated that U.S. participation in the post-2012 framework will "encourage the participation of developing countries to reduce  $CO_2$  emissions."
- •<u>More than 90%</u> of respondents stated their daily actions reflect either "consistently" or "to some degree" awareness towards global warming prevention.

The Asahi Glass Foundation (Chairman: Hiromichi Seya) has conducted surveys with environmental experts around the world each year since 1992. This year, the Foundation received 757 responses from 93 countries. The following are the major findings of the survey. (Please refer to the attached appendix for details on the survey and this year's results.)

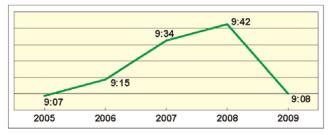
## 1. Awareness of the Crisis Facing Human Survival – The Environmental Doomsday Clock

- The average time for all respondents was 9:22. This represents an 11-minute reversal from last year, when the needle had shown the greatest advancement.
- While the needle advanced 6 minutes from last year among overseas respondents, it retreated by 34 minutes in Japan to 9:08.

## Movements in the Environmental Doomsday Clock (1992 – 2009, Overall)

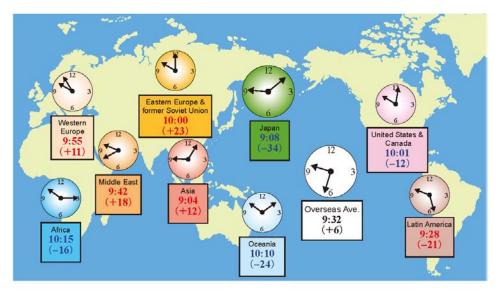


### Movements in the Environmental Doomsday Clock (2005 – 2009, Japan)



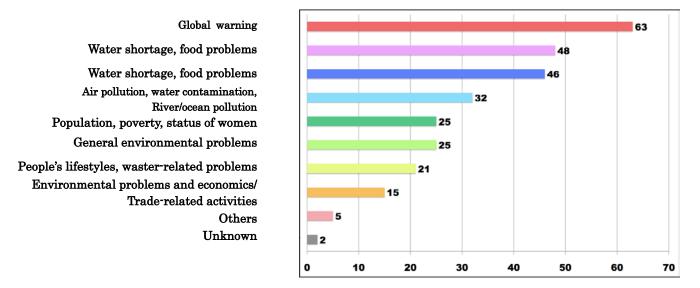
• By region, the needle advanced 10 - 20 minutes from last year in Western Europe, Eastern Europe & former Soviet Union, and Asia. In particular, the needle advanced past 10 o'clock for the first time in Eastern Europe & former Soviet Union.

• In contrast, the needle retreated by more than 10 minutes in the remaining regions. In particular, respondents in Japan, Latin America, and Oceania reported significant reversals ranging between 20 and 30 minutes.



#### Environmental Conditions of Concern

• "Global warming" was most frequently cited as the main environmental concern in determining the time on the Environmental Doomsday Clock, followed by "water shortage, food problems" and "deforestation, desertification, loss of biodiversity" at similar levels.



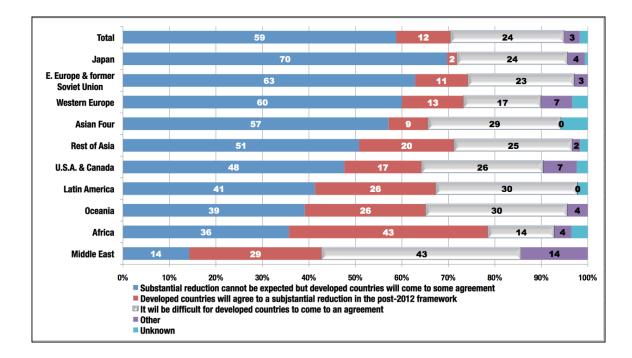
(See pages 6 - 8 of the report for further details on the Environmental Doomsday Clock)

(Points)

## 2. COP15 and the Post-2012 Framework

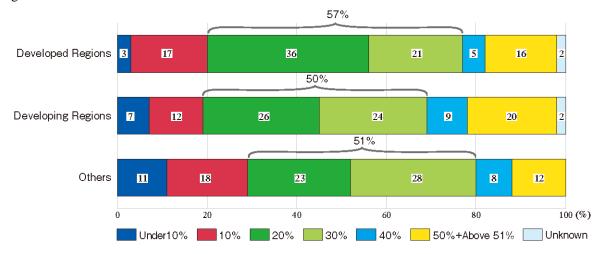
• The Outlook for COP15

• The majority of respondents overall stated "progress towards a substantial reduction cannot be expected, but there will be an agreement among developed countries," at more than twice the number of those who stated "it will be difficult for developed countries to come to an agreement."



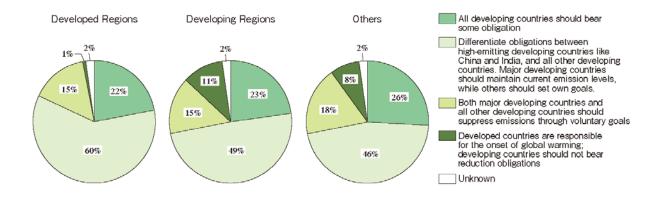
### The Breadth of Emissions Reduction by Developed Countries in 2020

• The responses to the breadth of emissions reduction showed a broad distribution curve. Nonetheless, they tended to cluster around "20%" and "30%" reductions, which comprised the majority of responses in all regions.



#### • The Response of Developing Countries

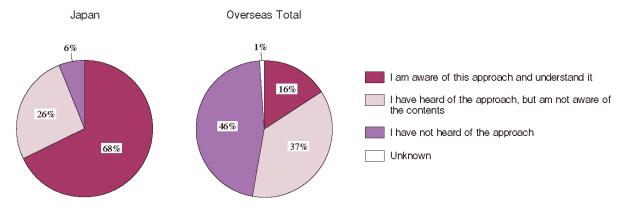
• In all regions, the most frequent response was "differentiate the obligations between high emitting major developing countries and all other developing countries. Major developing countries should bear the responsibility of maintaining emissions at current levels, whereas all other developing countries voluntarily establish their own goals."



### Sectoral Approach against Global Warming

• While 70% of Japanese respondents were aware of the Sectoral Approach against global warming as proposed by Japan, awareness was less than 20% overseas.

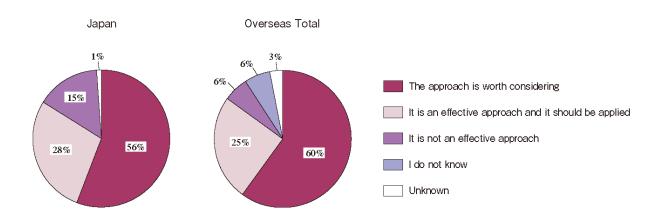
• Only 6% of respondents from Japan selected "I have not heard of the approach," while 46% from overseas made this selection, showing a striking contrast.



•Among those who selected "I am aware of this approach and understand its contents,"

• The majority of respondents, from both Japan and overseas, stated the sectoral approach was "worth considering."

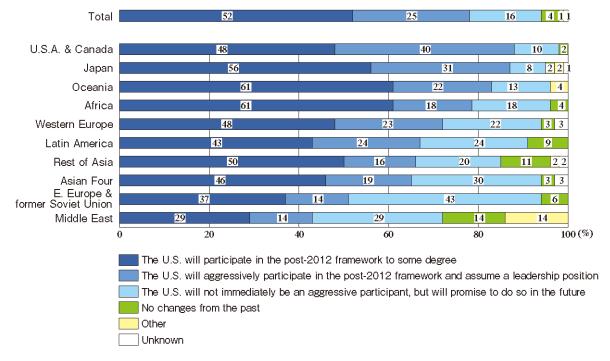
• Both respondents from Japan and overseas tended to select "it is an effective approach and it should be applied" at similar rates, at 28% and 25% respectively.



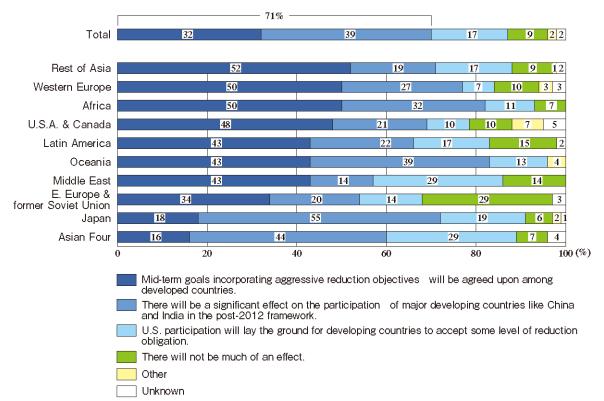
#### • Expectations for the New U.S. Administration,

• Respondents indicated high expectations for the new U.S. administration, with 52% overall selecting "the United States will participate in the post-2012 framework to some degree," followed by 25% who stated it "will aggressively participate in the post-2012 framework and assume a leadership position."

• In contrast, only 4% of respondents overall selected "there will be no changes from the past."



• Respondents indicated their expectation for U.S. participation in the post-2012 framework to encourage the participation of developing countries in  $CO_2$  emissions reduction. Those who selected "there will be a significant effect on the participation of major developing countries like China and India" and "it will lay the ground for developing countries to accept some level of reduction obligation" reached a combined total of more than 70%.



(See pages 12 - 18 of the report for further details on COP15 and the post-2012 framework)

## 3. Strategies to Suppress CO<sub>2</sub> Emissions

• Respondents in Oceania, Rest of Asia, Latin America, Japan, and Africa selected "shifting the energy supply to renewable sources, such as wind energy, solar power, geothermal energy, and bio energy" as the most effective strategy, while those in the Middle East, Asian Four, United States & Canada, Western Europe, and Eastern Europe & Soviet Union selected "improving energy efficiency and thus suppressing energy demand."

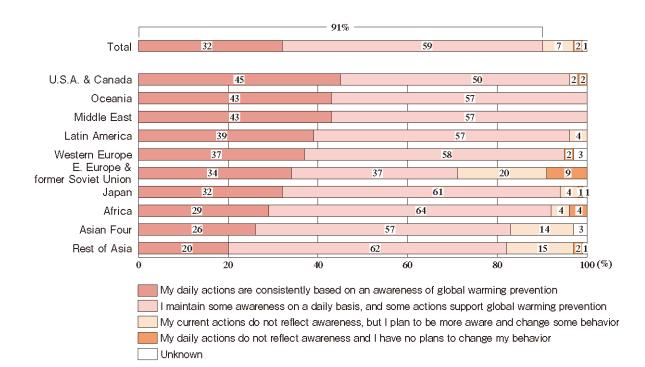
	Dedicate concerted efforts to shift energy supply to renewables, such as wind, solar, geothermal, and bio energy	Rather than focusing on the energy supply, improve energy efficiency and thus suppress energy demand	Dedicate efforts to absorb and capture CO <sub>2</sub> , thereby suppress its emission, including planting, prevention of deforestation and forest deterioration, carbon capture and storage	Other	Unknown	
Total	(43)	34	13	6	4	(%)
Oceania	57	35	0	9	0	]
Rest of Asia	(48)	25	22	2	2	1
Latin America	(46)	20	17	7	11	1
Japan	(46) (45)	35	10	8	2	1
Africa	(43)	14	25	14	4	1
Middle East	26	55	19	0	0	1
Asian Four	34	(49)	6	1	10	1
United States & Canada	37	(42)	14	2	5	1
Western Europe	38	40	11	5	7	1
Eastern Europe & former Soviet Union	29	37)	23	9	3	

(): Highest number of replies ): Second highest number of replies

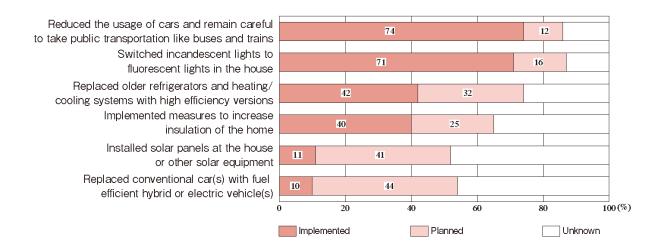
(See page 19 of the report for further details on CO<sub>2</sub> emissions strategies)

## 4. Awareness and Actions Concerning the Prevention of Global Warming

• Overall, more than 90% of respondents stated that their daily actions were "consistently based on awareness" or "some degree of awareness of global warming prevention."



• The endeavor most frequently cited as having been implemented was "reduced the usage of cars and take public transportation" and "switched incandescent lights to fluorescent lights in the home." Meanwhile, "installed solar panels at the house or other equipment to utilize solar power" and "shifted to fuel efficient vehicle(s)" lagged at approximately 10%.



(See pages 20-24 of the report for further details on awareness and actions concerning the prevention of global warming)

The survey also requested respondents to write comments on any topic related to environmental problems. This year we received 145 comments from 54 countries and 134 domestically from Japan, totaling 279. From among them, 47 comments from 27 countries and 34 from Japan are listed in the report.

\* Please refer to the report for the full results and details of the survey.

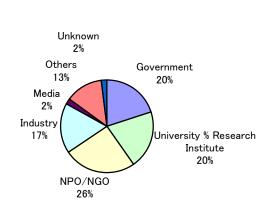
\* The results are also available at the Foundations website, at www.af-info.or.jp starting September 10<sup>th</sup>.

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### 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 those in universities and research institutions, nongovernmental organizations, and within industries, and is queried about various endeavors to counter environmental problems. (The survey is supervised by Professor Akio Morishima, Special Research Advisor of the Institute for Global Environmental Strategies and board member of the Foundation.) The questionnaires are sent out to approximately 4,000 respondents every April and collected by June. After the responses are compiled, compared, and analyzed, the survey results are announced in September. The questionnaires were sent in Japanese, English, Chinese, Korean and Spanish. The pie chart below shows the affiliation of the questionnaire respondents in descending order. The questionnaire has been sent to respondents in 199 countries (including Japan) since its inception in 1992, with responses returning from 156 countries.



	Number of	Number of
	countries	countries
	surveyed	responded
Asia	25	23
Africa	53	43
Oceania	15	9
Western Europe	24	19
Eastern Europe & former Soviet Union	27	20
Middle East	16	11
USA & Canada	2	2
Latin America	36	28
Total	198	155

#### • Topics Covered in This Year's Questionnaire

Repeat topics: "Awareness of the Crisis Facing Human Survival – The Environmental Doomsday Clock," Progress Toward "Agenda 21"

Main focus of this year's questionnaire: "COP15 and the Outlook for the Post-2012 Framework," "Strategies to Suppress  $CO_2$  Emissions," "Awareness and Actions Concerning the Prevention of Global Warming"

#### • Facts about This Year's Questionnaire

Survey period: Questionnaires were sent out in April 2009 with a return deadline of June 2009.

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

Questionnaires mailed: 4,255

Questionnaires returned: 757

Response rate: 17.8%

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

Region	umber of response	
Japan	324	42.8
United States & Canada	42	5.5
Western Europe	60	7.9
Asian Four	70	9.2
Developed Regions (Including Asian F	Four) 496	65.5
Rest of Asia (Excluding Japan, Asian F	Four) 122	16.1
Latin America	46	6.1
Africa	28	3.7
Developing Regions	196	25.9
Oceania	23	3.0
Eastern Europe & former Soviet Unior	n 35	4.6
Middle East	7	0.9
Others	65	8.6
Overseas Total	433	57.2
Total	757	100.0