

# af News

THE ASAHI GLASS FOUNDATION

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## 2010 Blue Planet Prize Awards Ceremony and Congratulatory Party

The Asahi Glass Foundation awarded the 19<sup>th</sup> annual Blue Planet Prize at the ceremony held at Tokyo Kaikan on October 26, 2010. The recipients of the award this year were Dr. James Hansen of the United States and Dr. Robert Watson of the United Kingdom. One of the first scientists to predict global warming, Dr. Hansen has long warned that it would very probably cause destructive results for life on Earth. He has called on governments and the public to take immediate action to reduce and mitigate the impact of climate change. Dr. Watson organized the famous scientific project to derive scientific evidence on the depletion of the ozone layer, and ultimately endorsed the Montreal Protocol. Later, as Chair of the IPCC, he played a significant role in coordinating and bridging science and policy for protecting the world environment.

The ceremony was graced by Their Imperial Highnesses Prince and Princess Akishino, along with numerous distinguished guests, including ambassadors and representatives from government, academia, and business.

The ceremony opened with a video presentation. The film was created in the hope that it would remind viewers of the fulfillment that comes from preserving this

blue planet for future generations, by offering thoughts on the blessings of Earth, the planet of life. The presentation was followed by introductory remarks from Mr. Tetsuji Tanaka, Chairman of the Foundation, a report on the selection procedures, and an introduction of the award winners by Dr. Hiroyuki Yoshikawa, Chairman of the Selection Committee.

Remarks from Prince Akishino were followed by a congratulatory message from Prime Minister Naoto Kan, read by Mr. Kazuo Matsunaga, Vice-Minister of Economy, Trade and Industry. As representatives of the native countries of the recipients, Mr. James P. Zumwalt, Deputy Chief of Mission of the United States of America, and Ambassador David Warren of the United Kingdom also complimented the laureates on their dedication to environmental issues and their many accomplishments.

The Awards Ceremony was followed by a Congratulatory Party. Well-wishers surrounded Dr. Hansen and Dr. Watson throughout the evening, helping them celebrate the occasion, while toasts were proposed in recognition of their tremendous achievements.



Prince Akishino offers remarks at the Blue Planet Prize Awards Ceremony



Dr. James Hansen



Dr. Robert Watson

# The two scientists paved the way for the by plumbing the depths of their

## Remarks Made in Accepting the Blue Planet Prize

### Dr. James Hansen



**I**t is an honor to receive this award alongside my longtime colleague Bob Watson, and a pleasure to return to Japan, where I was a student when I began to study the atmospheres of planets.

**W**e scientists must admit that we have not yet informed the public well about climate change, nor have we stimulated governments to take the actions needed to preserve the blue planet.

**O**ur planet is dangerously close to tipping points. Ice is melting worldwide and many species are stressed by climate change and other factors. Global warming, if we allow it to continue, will cause sea level rise, species extinction and increasing climate extremes out of humanity's control.

**S**tewardship of life on our planet demands action to stabilize climate. Geophysics reveals the requirements: phase out coal, leave tar sands in the ground, do not pursue the last drops of oil.

**Y**et as long as fossil fuels are the cheapest energy we will burn them, an economic law as certain as the law of gravity. Solution therefore requires a rising fee on oil, gas and coal, collected from fossil fuel companies. All funds collected must be distributed to the public to allow lifestyle adjustments and stimulate clean energy innovations.

**Y**et our governments do little or nothing, unwilling to seriously confront the fossil fuel industry. My country was established on the principle that all people are created equal. That principle led to the concept of equal protection of the laws, a right that is guaranteed by our Constitution.

**T**oday we face a great moral crisis. Human-made climate change pits the rich and powerful against the young and unborn, against the defenseless, and against nature. The moral issue of intergenerational injustice is comparable to slavery and civil rights. Civil rights were gained when the people went to the streets and the courts backed the people, providing equal protection of the laws and ordering desegregation.

**C**limate can be stabilized and the remarkable life on our planet can be preserved. But we must demand that governments serve the public and preserve our blue planet.

### Dr. Robert Watson



**I** have been fortunate to have worked with many of the world's best scientists on issues such as stratospheric ozone depletion, climate change, and more recently loss of biodiversity, the degradation of ecosystems, and sustainable agriculture.

These issues are also of importance to poverty alleviation, economic development and food, water, energy and human security.

**T**hose international scientific programs and assessments have played a critical role in influencing national and international policies. Chairing and directing these assessments, and then translating their information for decision-makers in government and the private sector, as well as civil society, has been a stimulating, enjoyable and highly rewarding experience.

**B**y the late 1980s there was no doubt that human activities were destroying the ozone layer in the stratosphere, which can cause skin cancer. The Montreal Protocol and subsequent amendments and adjustments have been allowing the ozone layer to recover within the next 50 years.

**W**e now need governments to urgently negotiate an equitable, long-term agreement involving all countries to significantly reduce greenhouse gas emissions in order to limit the eventual increase in global mean surface temperatures to no more than 2 degrees Celsius above pre-industrial levels. Even if a 2 degree target is achieved, ecosystems, socio-economic sectors and human health will still be adversely affected in many parts of the world, where developing countries being the most vulnerable. It is vitally important that we recognize that the cost of action is less than the cost of inaction. Transitioning to a low-carbon economy presents major opportunities for developing new industries. Action is urgently needed to mitigate, and adapt, to climate change. Business-as-usual will not work and is no longer an acceptable option.

**E**qually important, is the need for action to protect biodiversity and the ecosystem services that are so critical to human well-being. Addressing the loss of biodiversity requires changing the economic background to decision-making by making sure the value of all ecosystem services. We need to remove subsidies to agriculture, fisheries, and energy, and we need to make payments to landowners in return for their management of their lands in ways that protect and enhance ecosystem services.

**I**n conclusion, if we act now we can leave a healthy and viable environment for future generations. If we don't, our children and grandchildren will look back and ask why we were so short-sighted and greedy in our use of cheap fossil fuel energy and our destruction of biodiversity - rather than being responsible - when we knew our actions would leave future generations, and especially the poor, in an unsustainable world.



### Selection Rationale

Dr. Hiroyuki Yoshikawa, Chairman of the Selection Committee

#### Dr. James Hansen

Dr. Hansen succeeded with his colleagues in developing a practical climate model that was proven by abundant weather observation data, and pioneered the understanding and forecasting of the Earth's climate system. Based on his climate model, he predicted future global warming. In 1988, he testified at the U.S. Senate and House of Representatives and provided the public with an early alert to the dangers of global warming and to call for action. Dr. Hansen warned that an average temperature increase of even a few degrees would very probably cause irreversible and unrecoverable climate change and produce destructive results for life on Earth. He called on governments and the public to take immediate action to reduce and mitigate the impact of climate change.



#### Dr. Robert Watson

Led by Dr. Watson, a team of scientists derived scientific evidence of the depletion of the ozone layer and endorsed the Montreal Protocol, which incorporated the reduction of ozone depleting substances. As Chair of the IPCC, Dr. Watson played a significant role in successfully completing the detailed review of the Third Assessment Report by national governments from around the world, coordinating and bridging science and policy for protecting the world environment. The contribution he has made to policymaking by national governments and international frameworks such as UNFCCC, an essential part of the foundation for the conservation of the global environment, is tremendous.

#### Dr. James Hansen



With Prof. Ueno of Kyoto University, as a short-term visiting student



1967: Received a PhD in Physics, elucidating the composition of clouds on Venus at the Goddard Institute



As well as urging the government to take action to alleviate the impact of climate change, actively promoted measures such as the reduction of CO<sub>2</sub> resulting mainly from coal



Following the birth of his grandchild became strongly aware of a responsibility to the next generation and published *Storms of My Grandchildren*

Recent photograph with his family



1988: Testified at the U.S. Congress that "within the next few years global warming will become apparent"

#### Dr. Robert Watson



1965 Entered University of London and majored in chemistry

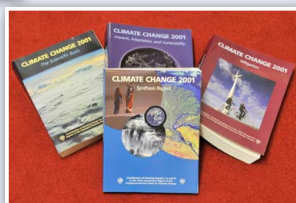
1987: Demonstrated that chlorofluorocarbons are the cause of the depletion of the ozone layer, leading to the signing of the Montreal Protocol



1993: Appointed Associate Director for Environment in the Science and Technology Policy Bureau of the Clinton Administration



2007 Awarded the Nobel Peace Prize as a member of IPCC



1998: Appointed Chair of the IPCC, and issued the first joint report for policy makers



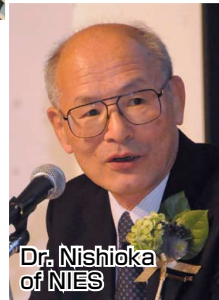
Recent photograph with his family

# Blue Planet Prize Commemorative Lectures

On October 27, the award recipients delivered commemorative lectures at U Thant International Conference Hall at the United Nations University in Tokyo. More than 320 people attended, filling the auditorium to capacity. Dr. Hansen gave his lecture in the first section of the program, which was followed by a question-and-answer period coordinated by Prof. Teruyuki Nakajima of The University of Tokyo. Dr. Watson presented his lecture



in the second half, with a question-and-answer period coordinated by Dr. Shuzo Nishioka, Senior Visiting Researcher, NIES. The coordinators'



skill in engaging participants in dialogue and advancing the discussion elicited many questions from the audience, resulting in a lively and content-rich question-and-answer session. The four-hour event was fruitful and productive, deepening understanding in respect of the accomplishments of the award recipients as well as providing a valuable opportunity to learn guiding principles for our actions.

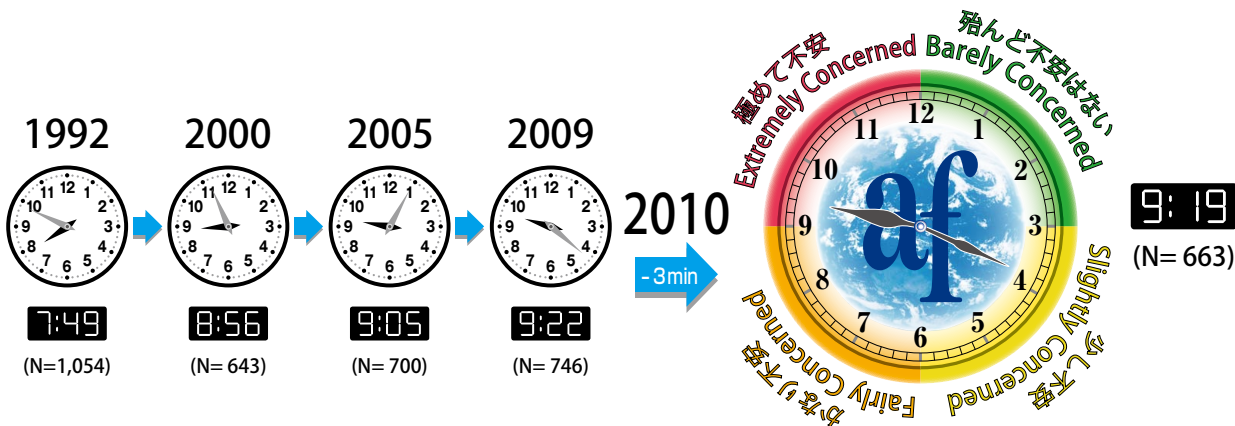
## Worldwide Poll of Environmental Practitioners

### Results of the 19th Annual Questionnaire on Environmental Problems and the Survival of Humankind

The questionnaire, which has surveyed experts in environmental issues across the world since 1992, has been intended for people worldwide to establish a common understanding and cooperative relationship to solve environmental problems, because it is imperative to have a global measure to conserve the global environment. We report on the Environmental Doomsday Clock from the questionnaire conducted between April and June 2010. You are urged to view the results of the questionnaire on the web site (<http://www.af-info.or.jp/>). We are indebted once again to Professor Akio Morishima, Special Research Advisor of the Institute for Global Environmental Strategies and a director of the Asahi Glass Foundation, for his assistance in formulating and compiling the survey. (Questionnaires returned 675 [Japan 292, Overseas 383], Response rate 15.7%)

### Environmental Doomsday Clock (Perception of the Crisis Facing Human Survival)

The average time on the Environmental Doomsday Clock retreated by 3 minutes from last year to 9:19, representing a retreat in the time for the second year in a row. The sense of crisis diminished for the second consecutive year. For Japan, the time was 9:09, an advancement of 1 minute compared with the previous year. For other countries, there was a reversal of the hands by a total of 5 minutes, to 9:27.



## Grantees Report

Some of the largest or more unique of the supported research projects currently active are listed below

### Task-Oriented Research Grants Adopted in FY2009

**Title:** Systematization of Laboratory Safety and Its Application to Educational Procedure for Young Researchers

**Recipient:** Prof. Yoshito Oshima, Department of Environment Systems, Graduate School of Frontier Sciences, The University of Tokyo, and two other parties (Total amount of grant: 20.5 million yen, Grant period: 3 years)



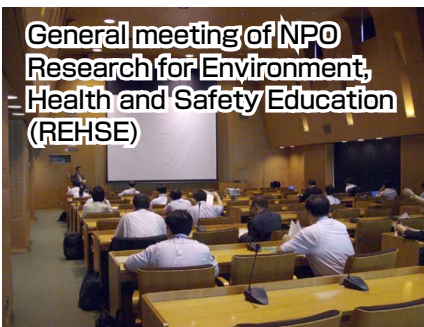
It goes without saying that ensuring the safety of experimental research sites is a prerequisite for the advancement of science and engineering research that supports the foundation of a science and technology oriented country. In particular, in research at universities, where novelty and originality are demanded, a great deal of research takes place that is valuable for the elucidation of unknown phenomena or for trial and error investigation in devising optimum methodology, and the question of how to ensure the safety in such leading-edge experiment sites is a difficult challenge that cannot be fully addressed by conventional methods of safety control such as those employed in industry.

This research topic aims to reach an essential understanding in respect of the safety framework of research experiments, and to extract the primary factors in stabilizing this framework, through various analyses, including analysis of accident cases, analysis of actions by videotaping experiments, and psychobehavioral analysis based on questionnaires and public hearings. This will enable to provide high-accuracy predictions of the dangers that are being overlooked by those conducting the experiments, and the detection of the risk factors present prior to commencing an untried experiment, and is expected to contribute to the control of risk and safety education at experiment sites.

The results of this research will be employed in actual safety education through the model laboratory set up at the Kashiwa campus of the University of Tokyo, as well as being widely deployed in the activities of NPOs that seek to ensure environmentally safe research experiments in universities.



Model laboratory for safety education (University of Tokyo, Kashiwa campus)



General meeting of NPO Research for Environment, Health and Safety Education (REHSE)

### Continuation Grants for Outstanding Projects Adopted in FY2009

**Title:** Establishing General Methods to Evaluate Urban Environmental Cultural Resources and Verifying the Circular Model: Their Application in All Indonesian Regions and Returning the Results to Japan

**Recipient:** Prof. Shin Muramatsu, The Research Institute for Humanity and Nature (RIHN, Total amount of grant: 8.0 million yen, Grant period: 3 years)



The problems faced by cities in developing countries are wide-ranging, from those that affect the global environment, to those related to housing, waste, and those specific to a particular city, and so forth. I am attempting to hone in on the elements creating urban environment from the perspective of my own specialized field, that of architectural history and urban history. Recognizing nature (water, air, food, etc.), buildings, and everything that binds people together and relates to the survival of mankind as urban environment cultural resources, the topic of my research is how to extract, analyze, evaluate and transmit [this information]. Specifically, I am conducting a fieldwork survey of environmental factors on Jakarta and other cities in Indonesia. This fieldwork starts

looking at all the buildings that exist in that city and surveying all building complexes. It is not rare for those to be lying idle or even to have been destroyed without their cultural value properly appreciated. While fieldwork in the tropics is tough, I would like to use the results that I obtain there to benefit not only Indonesia but Japan too, by understanding them in an integrated way from my own unique viewpoint of enhancing the sustainability of cities, and by using this understanding as a tool for social enlightenment.



Historical building in Jakarta



New housing complex in Jakarta

# Conditions for Survival Publication



The Asahi Glass Foundation formed the Round Table Conference of trustees and councilors of the Foundation to discuss the issues related to global environmental problems, which were held eight times from December 2006 to November 2009. The content of these meetings was compiled and issued as interim reports (① and ②) in Japanese and English in 2009. In 2010 the final report comprising a 2-volume set (③ and ④) as well as a summarized version (⑤) were issued in Japanese. The summarized version was made available in general bookstores through Shinzansha. The English version of the final report is now complete (⑥), with the Chinese version (simplified characters version ⑦) to follow. ①-④ and ⑥ can be downloaded from the Asahi Glass Foundation website, and ①, ②, and ⑥ are available in booklet form on request.



## New Year's Greetings from the Asahi Glass Foundation

With all of your support, the Asahi Glass Foundation will continue, through research grant and commendation programs, to contribute to the creation of a society that can transmit the genuine wealth of human civilization.



Miyazaki Masui Director  
 Suda Yamamoto Vice Secretary General  
 Tanaka Chairman  
 Samejima Senior Executive Director  
 Ohki Yasuda Secretary General  
 Seki  
 Sakamoto Auditor