

2nd Floor, Science Plaza, 5-3, Yonbancho, Chiyoda-ku, Tokyo 102-0081, Japan  
Tel: +81 3 5275 0620 Fax: +81 3 5275 0871

URL <http://www.af-info.or.jp/en/index.html>  
E-MAIL [post@af-info.or.jp](mailto:post@af-info.or.jp)

## 2008 Blue Planet Prize Recipients Honored at the Awards Ceremony and the Congratulatory Party

The Foundation awarded the 17th annual Blue Planet Prize at the ceremony held at Tokyo Kaikan on November 12, 2008. This year's award recipients were Dr. Claude Lorius of the French Republic and Professor José Goldemberg of the Federative Republic of Brazil. Dr Lorius contributed in disclosing past climate change based on polar ice sheet core analysis and in discovering the relation between climate change and atmospheric concentrations of carbon dioxide during glacial and interglacial periods, indicating its current unprecedentedly high level and warning a consequent global warming. Professor Goldemberg made major contributions in formulating and implementing many policies associated with improvements on energy use and conservation, in devising a pioneering concept of "technological leapfrogging" for the developing countries for their sustainable development and in exhibiting strong leadership in preparation for the 1992 Rio Earth Summit.

The ceremony was graced by Their Imperial Highnesses Prince and Princess Akishino and numerous distinguished guests, including ambassadors of various countries and representatives of government, politics, academia, and business.

The ceremony opened with an audio-video presentation. The film was created with the hope that it may remind people of the wake of the "Ship of Life" Earth, and of the destination of This Blue Planet. The presentation was followed by introductory remarks from Mr. Hiromichi Seya, Chairman of the Foundation and the report on selection procedures and introduction of award winners from Dr. Hiroyuki Yoshikawa, Chairman of the Selection Committee.

Felicitations from Prince Akishino and a congratulatory message from Prime Minister Taro Aso read by Mr. Haruhumi Mochizuki Vice-Minister of Economy, Trade and Industry followed. As representatives of the native countries of the recipients, Ambassador Mr. Philippe Faure of the French Republic and Ambassador Mr. Luiz Augusto Castro Neves of the Federative Republic of Brazil also complimented the laureates for their dedication to environmental issues and their many accomplishments.

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



Dr. Claude Lorius



Prince Akishino offers remarks at the Blue Planet Prize Awards Ceremony



Professor José Goldemberg



# Human behavior is clearly impacting our It is high time we begin

## Remarks Made in Accepting the Blue Planet Prize

### Dr. Claude Lorius



It is a great honour for me to receive this year's prestigious Blue Planet Prize of the Asahi Glass Foundation and it is with great emotion that I stand in front of you.

Thirty years ago, deciphering the archives contained in polar ice

allowed us to discover the link between atmospheric greenhouse gases and climate, a link that gives us the key to understand the global warming that we experience today. After the recent Intergovernmental Panel on Climate Change report, which was prepared by experts from many countries, including of course Japan, and the alert message sent by the United Nations, we know that the global warming is a major challenge for our society.

But the degradation of the environment of our Earth is not limited to the climate and Nobel Laureate Paul Crutzen used concentrations of CO<sub>2</sub> - a gas representative of human activities since it is mainly due to energy production - measured in polar ice to describe the entry of Homo sapiens into a new era: the Anthropocene; an era when man becomes a major player in the health of the environment of his planet.

Environment is an issue that the Blue Planet Prize recognized since its creation in the year Rio Summit was held. This prize has greatly contributed to the current awareness of this dilemma by giving significant support to individuals and associations from all disciplines who have worked in the vision of a sustainable development that our societies are struggling to implement. Global warming, environmental degradation ... the social and economic impacts are numerous: health, poverty, famine, migrations of people.... They are so disturbing that the most pessimistic scientists and philosophers mention the possibility of a long-term disappearance of the human species.

More than ever the role of foundations such as Asahi's is highly important and urgent. While it may seem unrealistic to establish a right to the environment for every citizen of the world, everyone is aware that the global nature of the environment involves international governance beyond the interests of citizens, political and economic decision makers and governments. This is perhaps the only opportunity we have to leave the Earth hospitable for our descendants.

It is towards this idealistic aim that the prestige of the Foundation may be of considerable importance.

### Professor José Goldemberg



It is a great honor to accept the Blue Planet Prize 2008 because of its nature, created to "reward the efforts to contribute to the human-kind's pool of scientific knowledge as well as the conservation of the global environment and a harmonious coexistence of the people and nature".

As it happens with most of my colleagues, physicists, I started my career entirely dedicated to attempt to discover the inner workings of nature and in my case the workings of the nuclei of atoms. This led me, over time, to learn about nuclear energy as a source of energy for developing countries. In order to do that I had to broaden my interests to energy production and use in general and the fundamental role it plays in promoting human welfare.

Anyone involved in this field immediately finds out that most of the energy used today in the world originates in fossil fuels (coal, oil and gas) which gave rise to unanticipated problems which are becoming very serious, namely: the eventual exhaustion of fossil fuels resources, the geopolitical problem in accessing such resources since they are very unevenly distributed around the world and, most importantly, the negative environmental impacts they produce, particularly global warming.

All of my work in the last decades addresses such problems viewed from a developing country perspective which are latecomers in the development process. This is usually seen as an handicap but, on the other hand, it can also be seen as an advantage because they can adopt, early in the process of development, the modern efficient and non-polluting technologies used by today's developed countries. In other words, "leapfrog" stages in the development process.

I tried to identify in my work instances in which that could be done and promote them. The adoption of ethanol produced from sugarcane - and thus a renewable resource - as a fuel, replacing gasoline in Brazil, is an example of "technological leapfrogging".

There are many such examples and the emergence of Japan as a great nation in the 19th century in very few decades is one of them the Meiji Restoration Japan, adopted the best technologies available in the world at that time to develop and did not retrace the steps followed by the United Kingdom and Germany which took much longer to industrialize.

I'm thus very happy to see my efforts and of my colleagues and coworkers recognized by the award of the Blue Planet Prize by the Asahi Glass Foundation.



## Selection Rationale Dr. Hiroyuki Yoshikawa, Chairman of the Selection Committee

### Dr. Claude Lorius

Dr. Lorius has disclosed past climate change on earth based on analysis of polar ice sheet cores mainly obtained in Antarctica. At the ice bound Charcot station at an elevation of 2400 meters, he experienced his first overwintering in Antarctica, and since he was enamored with the fascination of the place. From that time on, he made a total of 22 expeditions mainly to Antarctica. He was able to set foot in Vostok station of USSR in the midst of cold war in 1984, and made the landmark discovery of the relationship between climate change during glacial and interglacial periods and atmospheric concentration of CO<sub>2</sub> and methane from the analysis of the ice sheet cores sampled there. Dr. Lorius reckons that the current 390ppm CO<sub>2</sub> concentration in the atmosphere is the result of human activity and believes that we now entered a new era, the “anthropocene”, in which humans control the environment of our planet.



### Professor José Goldemberg

Professor Goldemberg began making a thorough study on energy problems when Brazil decided to introduce nuclear power in the energy matrix of the country after the oil crisis in the 1970's. In the mid-80's he wrote a remarkable book: “Energy for a Sustainable World” and described the importance of a normative approach to energy planning by incorporating from the start, broad societal goals aimed at facilitating the achievement of a sustainable world. And he devised a pioneering concept of “technological leapfrogging” for the developing countries. In 1992 as the Environment Minister of Brazil, he took a very active role in the preparatory process of the Rio Earth Summit and the Climate Convention adopted.

Afterwards, he established the International Energy Initiative (IEI) and has made an influence on energy analysis, planning, and implementation in developing countries. Prof. Goldemberg continues to exhibit leadership in trying to find solutions from energy strategy's perspective on global climate change the biggest environmental threat the world faces today.

## Extracts from the Profile Film Shown at the Awards Ceremony

### Dr. Claude Lorius



As Football player when Dr. Lorius was at Besançon University

Dr. Lorius spent the winter at Charcot Station, 1957



With Russian Antarctic expedition at Vostok station in the midst of the cold war, 1984



Discovered the relation between climate change and atmospheric concentrations of carbon dioxide from a 420 thousand years old ice core, 1998



Ice sheet core



With fellow researchers

### Professor José Goldemberg



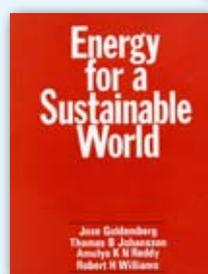
As a researcher in nuclear physics at University of São Paulo

Proposing a new vision on energy issues different from the past

As the president of the Energy Company of the State of São Paulo, 1982



From 1986 to 1990, served as Rector of University of São Paulo



Exhibited strong leadership in preparation for the 1992 Rio Earth Summit.



Surrounded by International Energy Initiative staffs

## Large Audience Gathers for Commemorative Lectures

On November 13, the award recipients delivered commemorative lectures in U Thant International Conference Hall at the United Nations University in Tokyo. Over 300 people attended, filling the auditorium to capacity. Dr. Lorius gave his lecture in the first section of the program, which was followed by a question-and-answer period coordinated by Dr. Okitsugu Watanabe, Auditor of the Graduate University for Advanced Studies, Professor Emeritus, National Institute of Polar Research. Professor Goldemberg presented his lecture in the second half, with a question-and-answer period coordinated by Dr.

Yoichi Kaya, Director-General, Research Institute of Innovative Technology for the Earth. The coordinator's skillful dialogue and progression of the question-and-answer period led to an enlivened session that attracted many questions from the audience, resulting in a rich and substantive discussion. The session gave the attendees a deeper understanding of the accomplishments of the recipients, as well as a valuable opportunity to reflect on the guiding principles of their own actions. The dynamic discussion made the four hours or less passing unnoticed.



### — Worldwide Poll of Environmental Practitioners —

#### Results of the 17th Annual Questionnaire on Environmental Problems and the Survival of Humankind

**The questionnaire, which has surveyed experts involved in environmental problems across the world since 1992, has been intended for people worldwide to establish a common understanding and cooperative relation to solve the environmental problems, because it is imperative to have a global measure to conserve the global environment. This year, the survey included the customary questions about the environmental doomsday clock and Agenda 21. In addition, it also focused on specific environmental problems and their priorities. The following is a report on the environmental doomsday clock, a subject regularly attracting a high level of interest. 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: 732 (Japan 314, overseas 418), response rate: 16.8%.)**

To see a more complete excerpt of the survey, please access the Foundation's web site (<http://www.af-info.or.jp/en/index.html>.)

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

The environmental doomsday clock shows the sense of crisis the respondents have on the survival of mankind by using the needles of a clock. The sense of crisis reported in 2008 was 9:33, which advanced 2 minutes from the previous year; marking the furthest advance of the clock, expressing a high sense of crisis. The result from overseas respondents was 9:26, retreated 2 minutes from the previous year, whereas Japanese respondents advanced 8 minutes from the previous year to 9:42.

