GEA International Conference 2007
Policy Approaches for Realizing a Sustainable Future
～ Building a New Framework on Climate Change ～

1. The GEA Conference on "Policy Approaches for Realizing a Sustainable Future: Building a New Framework on Climate Change" was organized by Global Environment Action (GEA) on October 19–20, 2007 in Tokyo, Japan with the participation of world leaders in relevant fields.
2. This was the eighth conference convened by GEA, co-organized with the United Nations University (UNU), United Nations Environment Programme (UNEP), as well as with the Japanese Ministry of Foreign Affairs, Ministry of Finance, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure and Transport, and Ministry of the Environment.
3. The world is moving actively on the issue of climate change. Following the results of the Heiligendamm Summit of June 2007, the High-Level Event on Climate Change hosted by the United Nations, and the Major Economies Meeting on Energy Security and Climate Change hosted by the United States, were held in September. Also, the Intergovernmental Panel on Climate Change and Mr. Al Gore were awarded the Nobel Peace Prize on October 12th for their work in combating climate change. In addition, with the 13th Conference of Parties to the United Nations Framework Convention on Climate Change to convene in December, individual countries are moving forward in their consideration of climate change mitigation measures. Furthermore, the world holds high expectations for leadership by Japan towards the success of the Hokkaido Toyako Summit, which will be held in July 2008. This conference attracted attention from various fields around the globe, having been held in October 2007, a time of heightened interest in global environmental issues, including climate change, and intense debates.
4. The opening ceremony of the conference was honored by the presence of His Imperial Highness Crown Prince Naruhito. His Imperial Highness welcomed the participants, emphasizing his concerns over recent extreme climate and weather events as well as the importance of conserving the sound, rich earth and passing it on to future generations. Touching on the IPCC's winning of the Nobel Peace Prize, His Imperial Highness stated his expectations for advancing concrete actions based on active discussions at the GEA international Conference 2007 to ensure a sustainable society through the participation and cooperation of all stakeholders.
5. At the opening ceremony, Prime Minister Yasuo Fukuda delivered a congratulatory address. He stated that climate change is the most significant issue that all countries face this century and

it is necessary to change drastically the current socioeconomic system of mass production and mass consumption to a sustainable one. He expressed a powerful message of Japan's commitment to asserting the leadership for creating "an international framework in which all major GHG emitting countries participate" as well as its commitment to making climate change matters a top-priority domestic policy issue, especially in the lead-up to the Hokkaido Toyako Summit in 2008, with a long-term target of halving global GHG emissions by 2050.

6. Moreover, through various events held along with this conference, relevant organizations within the Government of Japan conveyed their views. On October 18, the day before the conference opened, at "A Private Roundtable on Climate Change Policy and Japan" co-organized by GEA, the World Economic Forum (WEF, the executive office of the Davos Forum), and the World Business Conference on Sustainable Development (WBCSD), Minister of the Environment Mr. Ichiro Kamoshita delivered the opening address and Minister of Economy, Trade and Industry Mr. Akira Amari delivered the closing address. Minister of Agriculture, Forestry and Fisheries Mr. Masatoshi Wakabayashi also delivered remarks at the Roundtable's reception. Furthermore, Mr. Yoshitsugu Harada, Parliamentary Secretary for Education, Culture, Sports and Technology and Ms. Midori Matsushima, Senior Vice-Minister of Land, Infrastructure and Transport delivered remarks at a luncheon and Mr. Hitoshi Kimura, Senior Vice-Minister for Foreign Affairs and Mr. Ikuzo Sakurai, Senior Vice-Minister of the Environment delivered remarks at a reception of this conference.

The participation of such a large number of Cabinet members from the Government of Japan demonstrated the high political expectations for this conference.

7. In his keynote speech, Dr. Rajendra Kumar Pachauri, Chairman of the Intergovernmental Panel on Climate Change, which was awarded the 2007 Nobel Peace Prize, reported to the Conference on the IPCC Fourth Assessment Report. He expressed his gratitude on behalf of all the scientists of the IPCC to the participants for their congratulations and stated his appreciation for the contributions to the IPCC made by Japanese institutes such as the Meteorological Research Institute (MRI), National Institute for Environmental Studies (NIES) and Institute for Global Environment Strategies (IGES). The chairman said that climate change is unequivocal, that its impact has been threatening human life and natural ecosystems, and that it will be increasingly difficult for some people to access necessities such as water and food. Stressing that both adaptation and mitigation efforts are critical, Dr. Pachauri argued that the costs of advancing both adaptation and mitigation should not result in hesitation in addressing climate change, since over the long term, the effects on GDP will be relatively minor. He pointed out that sharing among the countries a long-term target to realize the ultimate goal as stated in Article 2 of the UNFCCC is very useful in combating climate change, and that ultimately, addressing climate change was a moral issue. He introduced several examples of Japan's

mitigation efforts, including its policies on solar roofs, its Cool Biz initiative, and its Comprehensive Assessment System for Building Environmental Efficiency (CASBEE).

He emphasized the importance of changing thinking on the demand side as well as the importance of a system for infrastructure development that avoids getting locked in to high GHG emissions. He concluded his speech with the words of Mahatma Gandhi, "Be the change you want to see in the world."

8. Mr. Hiroshi Ohki, Director General of GEA, assumed the role of conference chair and Ms. Julia Marton-Lefevre, Director General of the World Conservation Union (IUCN) was named the vice-chair. Mr. Ohki invited short remarks from Dr. Pachauri at the beginning of the session. Dr. Pachauri stated that knowledge on climate change is absolutely vital and he expressed his expectations towards Japan to demonstrate international leadership using its comparative advantage on sophisticated technologies.

9. Mr. Jürg Gerber, Managing Director of the World Business Council for Sustainable Development (WBCSD) delivered a report on the roundtable discussion, "A Private Roundtable on Climate Change Policy and Japan," which was co-hosted by GEA, WBCSD and WEF and held October 18 in Tokyo. He described this business roundtable as a unique opportunity at which senior executives of large Japanese and non-Japanese companies discussed in private with climate policy and economic experts the possible shape of future climate change policy frameworks and the role of business. Mr. Gerber noted the importance of the transfer of Japan's achievements in energy-efficient technology, and in terms of policy frameworks, the importance of using both top-down and bottom-up approaches as well as adopting both national and sectoral approaches. Mr. Gerber mentioned that the outline of a practical, flexible and multi-dimensional international framework for managing climate change post-2012 was discussed and the participants shared the recognition that in the run-up to the Hokkaido Toyako Summit to be held in Japan in 2008 it is necessary for businesses to provide a clear articulation of the way forward.

10. The conference included sessions on five topics as follows:

1. Fourth Assessment Report of IPCC and the Road to Low Carbon Society
2. Finance for Climate Change
3. Climate Change and Energy
4. Roles of Corporation in the Counter Measure for Climate Change
5. General Discussion and the Framework Direction beyond 2013

Major points of discussion within these sessions are summarized in the Annex. Participants engaged in enthusiastic discussions, introducing the latest knowledge and considerations in each session.

11. Based on these discussions, the participants shared the following views.

(1) Climate Change is the most serious challenge that human society now faces. It is necessary to implement prompt measures to mitigate climate change, based upon an agreement of long-term objectives, such as halving world emissions of greenhouse gases by 2050. However, it was recognized as unavoidable that climate change would occur to some extent. Taking this into account, it is necessary to draw a road map to realize a low-carbon society from the points of view of both mitigation and adaptation.

(2) In order to realize a low-carbon society on a global scale, it is necessary to develop innovative technologies while disseminating existing technologies. Moreover, drastic change in economic and social systems as a whole, including infrastructure, corporate activities, and lifestyles, is strongly needed for the realization of a low-carbon society.

(3) Adding to governmental policies and measures and direct emission reductions efforts underway, it is possible for investors to play a role of extreme significance in the preservation of the world environment by taking into account human long-term interests, such as climate change-related issues, when they make their investment decisions. Because the involvement of finance and investment in climate change mitigation still represents new ground in many ways, it is necessary to develop various measures to make use of the market mechanism.

(4) Private companies also play an extremely significant role in addressing climate change, since they possess many technologies and provide goods and services that can contribute to mitigation of and adaptation to climate change. Companies can change the behavior of consumers, while at the same time people are able to influence corporate activities through the market by means of consumer behavior. In order to enable long-term corporate activities to address climate change, legal frameworks and standards should be instituted appropriately. Governments should promote policies that shift corporate activities towards reductions in greenhouse gas emissions.

(5) Energy policies, which are closely related to emissions of greenhouse gases, should be promoted appropriately from both the supply and demand sides in accordance with the various conditions of each country, with flexible options, including the enhancement of energy efficiency, renewable energy and nuclear power that takes safety into account. Climate change is an issue that must be addressed by all humanity. In the post-2012 framework, it is of critical importance that all major emitters participate and that meaningful total emissions reductions going beyond those stipulated under the Kyoto Protocol be achieved.

(6) It is important for the international community to share a long-term goal that extends to the middle of the 21st century, in order to create a short- and mid-term framework. There are strong expectations that at the 13th conference of parties (COP13) of the UNFCCC to be convened in Bali, Indonesia in December 2007, parties will agree upon a road map for the negotiation of the next international framework.

(7) As Japan is hosting the Hokkaido Toyako Summit in July 2008, the Japanese government is expected to exercise strong leadership in the area of global environmental issues.

12. In order to realize such a future, conference participants expressed their great expectations to GEA with regard to follow-up activities. In particular, conference participants noted their strong desire for GEA to appeal strongly to the world at every possible opportunity with regard to the results of and the spirit of the conference. In keeping with these expectations from the participants to the conference, the GEA Secretariat will consider various means of disseminating the results of this GEA International Conference 2007.

13. As in previous years, the conference was characterized by active discussions by participants from a broad spectrum of countries and institutions. Participants urged GEA to consider inviting to its next conference participants from major GHG-emitting developing countries to bring about an even broader basis for discussions.

14. Participants expressed their congratulations regarding the awarding of the Nobel Peace Prize and also paid their respects to the leadership of GEA in the field of global environmental preservation. They also expressed their thanks to the UNU, UNEP and the Japanese government organizations that co-hosted this conference.

Annex

Summary of the Sessions

Session 1: Fourth Assessment Report of IPCC and the Road to Low Carbon Society

Ms. Julia Marton-Lefevre, Director General of the World Conservation Union (IUCN) was appointed moderator of Session 1 and facilitated its proceedings.

In his kickoff speech, Dr. Shuzo Nishioka, Councilor of the National Institute for Environmental Studies, Japan, stated that anthropogenic climate change is progressing and human beings have to take prompt action to create a low carbon society (LCS). He underscored the potential to achieve it, based on the latest report of the IPCC.

Dr. Nishioka emphasized that crucial elements for realizing an LCS are a structural change in society and technologies to halve global greenhouse gas emissions by 2050, as proposed in Japan's "Cool Earth 50" initiative. He then introduced his ongoing research, including overviews of two scenarios for achieving an LCS in Japan by 2050: "a vivid, technology-driven" society and "a slow, natural-oriented" society. The results of his research were that carbon dioxide emissions reductions of 70% are possible in either type of society. He further stated that, to achieve these 70% reductions in Japan, it is crucial to undertake emissions reduction efforts on both the energy demand side and the supply side, as well as to induce innovations in not only technology but also social, urban and industrial structures. Dr. Nishioka also referred to outcomes of the Japan-UK LCS joint research project in which he is involved and stated that for an LCS to be realized, there needs to be participation of all stakeholders, prompt action based on a roadmap, and the leadership of government to promote a common vision of an LCS while also providing incentives for private investment on low-carbon technologies and low-carbon infrastructures.

Through their discussions on this topic based on the presentation, the participants shared the following views:

・In order to realize a low carbon society and a drastic reduction of greenhouse gas emissions on a global scale, it is necessary to create a flexible and reliable framework with participation by major GHG-emitting countries that takes into account the diversity of situations across countries and regions.

・As pointed out in the IPCC Fourth Assessment Report, the effectiveness of the signal of

carbon pricing should be given proper attention. This would promote the implementation of climate change mitigation measures.

・In considering policy measures, a policy portfolio must include technology development and expanded renewable energy use.

・Early action enables significant cost reductions; thus, short-term burden sharing for such actions can be seen as profit sharing over the long term.

・Dialogue among the government, the private sector and citizens should be enhanced to foster common views on how to share the costs of countermeasures for climate change.

・With regard to technologies, demonstration of effectiveness is important, and, in order for dissemination to take place, it is necessary to take into account expected cost reductions while also assessing the potential for transfer to developing countries.

・In pursuing an LCS, a multi-dimensional perspective is necessary to realize simultaneously a recycling-based society, biodiversity conservation and increase of well-being in developing countries. Both developing and developed countries were recognized as having the right to increase and maximize their economic well-being.

・Though it is widely recognized that the impact of climate change on ecosystems is serious, the consequences of ecosystem degradation on human society are not well-understood. Further research is needed.

・For a certain period, some degree of warming is unavoidable. In addition, the economic growth of developing countries will continue. It is necessary to develop practical means of achieving the ideal of having an LCS, taking into account such realities.

・Current scientific knowledge on the earth's system is still limited. Basic research and observations should be continued as priorities with reassessment at regular intervals.

・Local efforts should be encouraged and their results shared and replicated where possible.

・It was agreed that pursuing "low-hanging fruit" would be practical and could result in concrete solutions that encourage further actions.

Session 2: Finance for Climate Change

Mr. Takejiro Sueyoshi, Special Advisor, UNEP Finance Initiative (UNEP FI), was appointed moderator of Session 2 and facilitated its proceedings.

In his kickoff speech, Mr. Donald MacDonald, Chair of the Board, Principles for Responsible Investment (PRI) by UNEP FI and member of the Board, British Telecom Pension Fund, stated that the investment sector needs to be more aware of the climate change issue and play a more positive role, and that the focus of investors should not be limited to short-term returns but

instead include an awareness of long-term issues such as the impacts of climate change. In this regard, PRI was established last year to develop and implement a set of global principles and to mainstream environmental, social and corporate governance (ESG) issues into investment. These principles address ownership policies and practices, including information disclosure by the entities in which investment occurs. Currently 250 institutions are signatories, with US$10 trillion funds under management. Mr. MacDonald explained the relation between fiduciary responsibility and long-term investment, which is one of PRI's areas of focus. The definition of fiduciary duty, under which earning money through short-term returns has been pursued historically, is in need of revision. He emphasized that long-term investors should look for long-term value and consider the impact of investment within the context of climate change. Therefore a fresh interpretation of fiduciary duty has been promulgated by UNEP FI as the result of advice from corporate lawyers. Changes in the nature of investments have been realized through positive investment in beneficial projects, collaborative engagement and disclosure.

The second speaker, Mr. Fumio Hoshi, Senior Executive Director of Japan Bank for International Cooperation (JBIC), introduced JBIC's activities and its future roles, overviewing a wind power project in Bulgaria as well as lessons learned from CDM projects. Based on JBIC's experiences, he emphasized three points to enable achievement of 50% GHG reductions by 2050. The first of these is technology, with the commercial use of carbon capture and storage (CCS) and a dramatic cost reduction in renewable energy being very important. However, technology currently available should be diffused as a priority. The second is the use of the market mechanism. From the point of view of economical rationality and cost effectiveness, finance should be conducted intensively in projects in which it is possible to maximize reductions at minimal costs. Emission credits constitute a major incentive for financial resource distribution through the market mechanism. The market expects signals of future frameworks to be presented early on. The third is the private sector's involvement. To enable this, the government has a role in fostering the investment environment, such as through incentives or standard setting. Public finance will serve as a catalyst for private capital. Through their discussions on this topic based on the presentations, the participants shared the following views:

・It has become obvious that an enormous amount of money is needed to address climate change. Therefore, the capital flow from private resources should play an essential role, beyond official aid. In particular, direct investment should be pursued in addition to loans in the area of private resources. In this regard, the financial sector should play a major role in addressing climate change. The activities of the financial sector were acknowledged and welcomed.

・Investors can play a substantial role in global environmental protection by engaging in actions

that take into account not only short-term returns but also long-term consequences for humanity, such as climate change.

・Many initiatives have emerged in both the private sector and multinational banks. PRI supports investors in looking at the impacts of climate change to enable them to revise their investment activities.

・The setting up of an advisory board for the environment in private companies is considered evidence of commitment to the environment.

・Participants noted that this conference was significant in having provided a session devoted exclusively to a discussion of finance and investment. Such discussion in the context of climate change is still relatively new and should be strengthened further.

・The power of social monetary flows should be increasingly utilized for addressing climate change.

・Collaboration between public and private finance is necessary. Public finance has the role of seed money, and when it addresses the most risky aspects, it encourages the participation of private finance.

・Private finance is unlikely to invest in new projects unless the time frame of government policies covers the entirety of a potential project's life span. Therefore, the government is expected to protect intellectual property rights, foster demand for carbon credits, and create appropriate frameworks with long-term time frames.

Session 3: Climate Change and Energy

Dr. Kimio Uno, National Program Director, LEAD JAPAN and Professor Emeritus of Keio University, served as the moderator of Session 3.

In his kickoff speech, Dr. Peter Hennicke, President of the Wuppertal Institute for Climate Environment and Energy, stated that what is needed for climate mitigation and adaptation has already become clear, yet there remains the question of how to scale up what we already know needs to be done. He addressed the necessity of establishing quantitative targets and strategic initiatives to diffuse and transfer energy-efficient technologies and renewable energies, and to construct networks and institutions to manage knowledge. Dr. Hennicke introduced a vision of a "2000 Watt per capita society", in which the per-capita energy consumption in OECD countries is reduced to one-third of the current EU level. He emphasized that an ambitious increase in energy efficiency and material productivity, a change in innovation systems, the exploitation of long reinvestment cycles and a structural change to more sustainable patterns of production and consumption are important preconditions for realizing a stable energy-efficient society.

In the session's second kickoff speech, Dr. Kenji Yamaji, Professor of the University of Tokyo, introduced two reports, "Lighting the Way" by the Inter Academy Council and "Energy and Global Warming" by the Science Council of Japan. He overviewed nine recommendations appearing in the IAC report, which deal with 1) basic energy needs for sustainable objectives, 2) improving energy efficiency and reducing carbon intensity through appropriate price signals, 3) technologies for capturing and sequestering carbon, particularly in combination with biomass fuels, 4) reducing the potential for geopolitical conflict, 5) nuclear power that addresses concerns of capital cost, safety and proliferation, 6) immense opportunities for renewable energy, 7) biomass fuels, in particular for the transportation sector, 8) innovative energy storage and distribution, and 9) the role of the science and technology community, including the necessity of adequate R&D budgets. He also mentioned the importance of equitable burden sharing.

In the third kickoff speech, Dr. Richard A. Bradley, Head of Energy Efficiency and Environment Division, International Energy Agency, introduced trends in energy consumption and related CO2 emissions, stating that, as a result of insufficiencies in current policy efforts and technology development, fossil fuels would dominate energy supply for the foreseeable future. Therefore he stressed the need for national policies to change emission trends in the short and medium terms, including through the use of carbon pricing, the development of new large-scale technologies and an international institutional framework that provides cost-effective incentives for emissions reductions and technology deployment. In terms of investment for energy generation, refurbishment of existing power plants after depreciation of the initial cost is an attractive option for increasing energy efficiency. Mr. Hashem Akbari, Group Leader, Heat Island Group, Lawrence Berkeley National Laboratory, pointed out in the session's fourth kickoff speech that conditions of land cover significantly affect the heat island phenomenon, and it is possible to directly lower temperatures of urban areas as well as the globe as a whole by increasing the solar reflectance of roofs and pavement. He overviewed the monetary and climate change related benefits of using reflective roofing and paving materials, and stressed the ease by which a cool roof initiative could be implemented in both developed and developing countries. He suggested a global action plan in which developed countries would offer financial assistance to cities in developing countries to undertake such an initiative. Through their discussions on this topic based on the presentations, the participants shared the following views:

・To combat climate change, it is important to have international agreement on increasing energy efficiency, as shown in the 16 recommendations of the IEA. However, to enable energy efficiency improvements to come about, what is effective is not political negotiations by national governments, which take a long time, but rather harnessing the market mechanism

through carbon-pricing signals. Furthermore, the expected increase of energy efficiency would produce economic benefits.

・In energy security, the "harmonization" of energy policies internationally is important, and would also complement international carbon management.

・Improvements are needed on both the demand and supply sides. Increasing energy efficiencies on the demand side is a commonly-held agenda item for each country and fits the context of international collaboration. Regarding measures on the energy supply side, it would be appropriate for each country to develop an energy mix policy with flexible options, including renewable energy and nuclear power that takes safety into account.

・Innovative technologies such as CCS and clean coal technology are indispensable, while conventional technologies also have large potential. Technology transfer to developing countries is quite important.

・In terms of investment for energy generation, refurbishment of existing power plants after depreciation of the initial cost is an attractive option for increasing energy efficiency.

・Increasing energy efficiency in one country could lead to leakage of demand for fossil fuels to another, and challenges exist for manufacturers in avoiding under- or over-capacity in the production of energy-efficient devices. It is necessary to optimize relevant systems.

・The "cool roofs" approach is unique, cost-efficient, and can be implemented immediately even in developing countries. It can also be used in combination with photovoltaic power generation.

Session 4: Roles of Corporation in the Counter Measure for Climate Change

Mr. Stuart Brooks, Special Advisor to the Chairman of Chevron Limited was appointed moderator of Session 4 and facilitated its proceedings.

In his kickoff speech, Dr. Graeme Sweeney, Executive Vice President, Future Fuels and CO2, Shell, mentioned that interest in climate change is intensifying to an unprecedented level, and that there is a need to reduce CO2 emissions despite rising global energy demand, requiring as a result increasing and expanding regulations worldwide. He presented a future vision that by the year 2015 the world will see expansion of the EU-ETS and the introduction of a wide variety of additional mechanisms, U.S. leadership in global emission reductions, and reduction efforts by China and India driven by market mechanisms. He emphasized the importance of CO2 management for businesses and a need for CO2 management strategies that incorporate four kinds of activities, namely activities to reduce, minimize, sequester and trade. Finally, he emphasized that all of these actions need to be taken as quickly as possible.

The session's second kickoff speaker, Prof. Ryoichi Yamamoto of the University of Tokyo, cautioned that climate change would become out of control, citing a number of severe problems already occurring as a result of this phenomenon. He introduced businesses in Japan, the U.S. and the EU that have set concrete quantitative targets for GHG emission reductions, and he argued for "Eco Innovation," in which businesses pursue not only product performance but also environmental performance. He provided multiple examples of eco-products and demonstrated that environmental business has already become significant in the market and will continue growing. He emphasized the important role of business in climate protection, such as through further advancing environmental business management, promoting Eco Innovation, developing sustainable business models, developing LCA-databases, and increasing green procurement.

Through their discussions on this topic based on these presentations, the participants shared the following views:

・It is important that companies that possess technology for GHG emissions reductions take the lead in combating climate change by providing low-carbon products and services to society. Dissemination of information about such products and services is effective.

・There are two main types of GHG emissions reduction efforts by companies, namely reductions achieved during production and reductions achieved during product use. Policy measures are necessary to lower GHG emissions in accordance with the lifecycles of products.

・Active promotion of green procurement by governments is very effective in promoting low-carbon products and services.

・Engagement of the financial sector has been accelerating recently because of anticipation of both new and strengthened policies to address climate change, as well as recognition of the fact that early investment will enhance business opportunities. Such investment trends are believed to influence the mindset and behaviors of both businesses and the people in the society.

・Voluntary approaches in Europe are thought to be ineffective, while emissions trading has been successful in reducing emissions. In order to facilitate business efforts, it will be necessary for governments to develop long-term policies and measures, especially with regard to pricing carbon.

・In developing countries, it is necessary to assist efforts of small- and medium-scale enterprises, which constitute the majority of businesses in those countries.

・Combating climate change in the vehicle transportation sector requires better fuel economy, alternative fuels, and shifts in behavior in vehicle use. While companies already possess technologies necessary for many related efforts, most of these technologies are not currently utilized due to high costs. Coordination between industry and government is necessary in order to overcome this problem.

Session 5: General Discussion and the Framework Direction beyond 2013.

Mr. Hiroshi Ohki, Director General of GEA, facilitated the proceedings of this session.
In this session, Mr. Kyoji Komachi, Ambassador for Global Environment, Ministry of Foreign Affairs, Japan, delivered a kickoff speech. He introduced efforts towards the international framework beyond 2013 at various multilateral forums, including the G8 summits, the APEC summits, and the UN High-Level Event on Climate Change, and the Major Economies Meeting on Energy Security and Climate Change held by the U.S. government. He mentioned that new proposals are being made from various countries such as the EU and the US, and that he also emphasized moves by developing countries, including China and India, to combat climate change. He introduced Japan's "Cool Earth 50" initiative and Japan's successful diplomatic efforts to gain support from other countries for the three basic principles related to long-term goals and a mid-term strategy. He stressed the importance of innovative technological development, development of a low carbon society and new funding mechanisms for achieving the target of halving global emissions by 2050. Many bilateral meetings such as those of US-Japan, China-Japan, and India-Japan were held in order to increase understanding regarding Japan's efforts. In addition, Mr. Komachi stated that the focus of the COP/MOP3 in Bali scheduled for this coming December would be whether a new negotiation process will be successfully launched, and that, for the success of the process, participation from all major emitting countries is a prerequisite and debates on one comprehensive track includes processes outside of the United Nations, such as the G8. He made it clear that in 2008 Japan will exercise leadership as it assumes the presidency of the G8 and achieve the maximum possible progress in building the post-2012 international framework.

In his kickoff speech, Mr. Halldor Thorgeirsson, Director of the Sustainable Development Mechanisms, UNFCCC, introduced the current situation of post-2012 discussions. He explained that the understanding about importance of climate mitigation is deepening and it is expected that the UNFCCC continues to play a central role in policy making based on the scientific evidence. He reported that a two-year dialogue under the UNFCCC has built trust among the governments. The dialogue has also resulted in finding shared long-term goals and principles and creating four building blocks: mitigation, adaptation, technology, and investment and finance. According to him, critical elements that would constitute a success in the COP/MOP3 in Bali are common understanding of the required building blocks; decision to negotiate a comprehensive post-2012 agreement; establishment of a negotiation process with clear tasks; and agreement on a timeframe.

Through their discussions on this topic based on the presentations, the participants shared the following views:

・Climate change is an issue that must be addressed by all humanity. In the post-2012 framework, all major GHG emitting countries must participate, and meaningful emissions reductions exceeding those stipulated under the Kyoto Protocol are a clear necessity.

・Shared long-term targets are a pre-requisite for the post-2012 framework. Critical elements for future discussions include mitigation, adaptation, technology and finance.

・A key issue in designing a future framework will be how the principle of equity is incorporated. Furthermore, it will be important that both top-down and bottom-up approaches are included when establishing targets.

・Technology support and intellectual property rights will be central issues in the future. While there is a tendency to focus on cutting-edge technology, the dissemination of existing technology is also of great importance.

・In the area of financial mechanisms, the growing need for not only mitigation but also adaptation measures must be recognized, since climate change is becoming increasingly serious.

・Insofar as infrastructure is utilized by society over many decades, it is necessary to give proper consideration to the long-term effects of this infrastructure and ensure that appropriate choices are made.

It is important that proper signals be sent to promote such choices.

・At the 13th COP to the UNFCCC to be held in Bali in December 2007, it is urged that the decision to negotiate a comprehensive post-2012 agreement be reached, along with the establishment of a negotiating process and the agreement on a timeframe for this process.

・As the post-2012 framework is being considered, attainment of the targets for the Kyoto Protocol's first commitment period is also of extreme importance.

・Japan's efforts towards the reduction of greenhouse gases, its Cool Earth 50 proposal to international society, and its assertive approach to other countries regarding climate change issues are deserving of great respect. The participants expressed their high expectations for Japan's continuing leadership.